

PRELIMINARY SCHEME DESIGN (LOCAL HIGHWAY)



SYSTRA

HDC LOCAL PLAN TRANSPORT EVIDENCE BASE

PRELIMINARY SCHEME DESIGN (LOCAL HIGHWAY)

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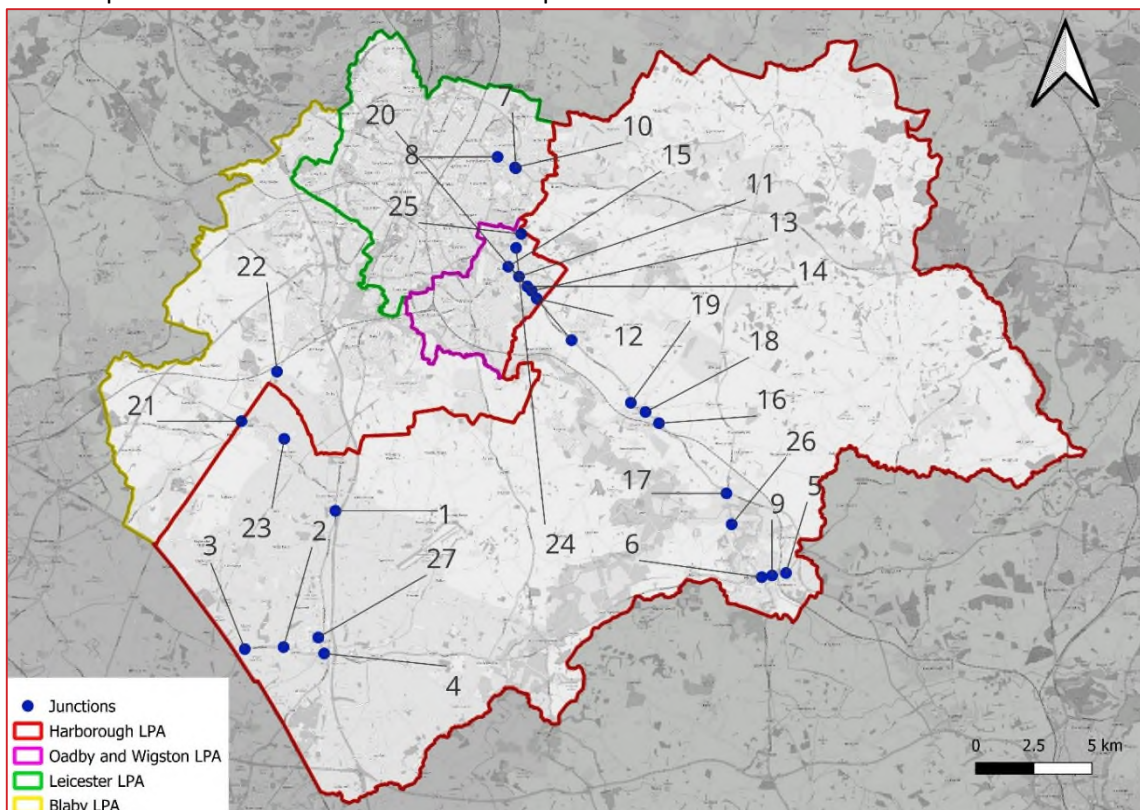


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1. EXECUTIVE SUMMARY

- 1.1.1 The report has been prepared by SYSTRA for Harborough District Council (HDC) to assess the cumulative residual impacts of the HDC Local Plan on the local road network and to demonstrate whether forecast growth can be mitigated to an acceptable and deliverable level. Building on earlier strategic assessment work undertaken by AECOM using the Joint Transport Evidence (JTE) and the 2019 Pan-Regional Transport Model (PRTM), the study provides more detailed stand-alone modelling of key junctions where Local Plan growth could have a significant effect. The work is intended to support agreement with Leicestershire County Council and to provide proportionate transport evidence for the Local Plan examination.
- 1.1.2 Traffic flows following the Vision-Led approach were derived from the PRTM and apportioned using observed turning count data from previous planning applications or, where such data was unavailable, TomTom Move data. Junction performance was tested for the 2041 Core Scenario and the 2041 Preferred Spatial Growth Option, both with and without mitigation.
- 1.1.3 Signalised junctions were modelled in LinSig v3 and priority junctions in Junctions 11, using standard industry measures of capacity, queueing and delay. The assessed locations are presented in the below overview map.



- 1.1.4 The overall conclusion of the study is that the impacts of the HDC Local Plan can, in most cases, be mitigated through targeted highway interventions. Several junctions are forecast to continue operating satisfactorily in 2041 without mitigation, meaning the mitigation previously assumed in the strategic model is not required (further context on



this point has been provided within Section 2.3: Assessment Context). These include Junction 4 (A4303 Lutterworth Road / A426 Rugby Road), Junction 9 (A508 Saint Mary's Road / A508 Springfield Street / A4304), Junction 13 (A6 Glen Road / Florence Wragg Way), Junction 14 (A6 Harborough Road / Ash Tree Road), Junction 21 (B4114 Coventry Road / B581 Coventry Road), and Junction 23 (B581 Broughton Way / Cosby Road). At these locations, Local Plan traffic is not forecast to materially alter junction operation.

- 1.1.5 A number of other junctions require mitigation, but the report demonstrates that workable solutions are available. Junction 1 can be mitigated through full optimised signalisation. Junction 2 can be mitigated through signalisation of the roundabout with lane widening, while Junction 3 can be mitigated through lane widening on the A4303 Coventry Road west arm. Junction 15 requires both signal optimisation and selective lane widening, and Junction 16 requires signalisation plus an additional lane on the A6. Junction 18 can be mitigated through full signalisation, Junction 20 through signalisation and lane widening, Junction 24 through a signalised crossroads with revised staging, Junction 25 through signalisation combined with a 50 metre flare lane, and Junction 26 through signalisation, widening, flare provision and revised staging arrangements. Junction 19 is also shown to be mitigable through widening and flare improvements to all arms.
- 1.1.6 The principal exception is Junction 17 (A6 Harborough Road / B6047 Melton Road), where the tested AECOM/PRTM mitigation does not fully resolve forecast capacity issues in 2041. The report notes that further discussion with Leicestershire County Council is needed to confirm whether additional survey information or changes associated with the service area arm may justify a revised model and potentially an alternative strategy.
- 1.1.7 An overview of the assessment result conclusions for each junction is presented below.

JUNCTION	LOCATION	SUMMARY OUTCOME
Junction 1	A426 Lutterworth Road / Gilmorton Lane / Church Lane	AECOM/PRTM mitigation recommended
Junction 2	A4303 / Coventry Road / Fairacres Coventry Road	No mitigation required
Junction 3	A4303 Coventry Road / Hunter Boulevard	AECOM/PRTM mitigation recommended
Junction 4	A4303 Lutterworth Road / A426 Rugby Road	No mitigation required
Junction 9	A508 Saint Mary's Road / A508 Springfield Street / A4304	No mitigation required
Junction 13	A6 Glen Road / Florence Wragg Way	No mitigation required
Junction 14	A6 Harborough Road / Ash Tree Road	No mitigation required



JUNCTION	LOCATION	SUMMARY OUTCOME
Junction 15	A6 Harborough Road / B582 New Street	SYSTRA mitigation recommended
Junction 16	A6 Harborough Road / New Road	SYSTRA mitigation recommended
Junction 17	A6 Harborough Road / B6047 Melton Road	AECOM/PRTM mitigation not sufficient; awaiting LCC feedback.
Junction 18	A6 Leicester Road / Marsh Drive / Church Road	AECOM/PRTM mitigation recommended
Junction 19	A6 Leicester Road / Wistow Road	AECOM/PRTM mitigation recommended
Junction 20	A6 / Station Road (Archers Roundabout)	AECOM/PRTM mitigation recommended
Junction 21	B4114 Coventry Road / B581 Coventry Road	No mitigation required
Junction 23	B581 Broughton Way / Cosby Road	No mitigation required
Junction 24	B582 / Manor Road / Manor Road Extension	SYSTRA mitigation recommended
Junction 25	B582 Gartree Road / Gartree Road / A582	SYSTRA mitigation recommended
Junction 26	B6047 / Leicester Lane / Gallow Field Road	SYSTRA mitigation recommended

1.1.8 In summary, the assessment finds that the forecasted Local Plan impacts on the local road network are either insignificant or can be addressed through feasible junction improvements. Subject to further work at Junction 17, the report provides strong evidence that **the HDC Local Plan is deliverable**, and that an appropriate package of mitigation can be developed to support planned growth while incorporating early consideration of pedestrian movement and active travel.

1.1.9 This report is based on the existing PRTM traffic flows and is therefore aligned with the current strategic modelling evidence. The approach of using strategic modelling to identify cumulative network impacts and potential mitigation locations, followed by detailed junction modelling to test those locations more accurately and define any site-specific mitigation, is both valid and consistent with established transport assessment practice. Strategic modelling is appropriately used to understand plan-wide patterns and



cumulative effects, but it is not designed to determine the detailed form or necessity of mitigation at individual junctions. This report therefore sets out the approach and findings of location-specific modelling, providing a robust basis for assessing operational performance and refining mitigation requirements. It is therefore entirely appropriate that these detailed assessments may reach different conclusions from the strategic model. These refinements should be regarded as a normal and necessary progression in the evidence base rather than as an inconsistency.



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2. INTRODUCTION

2.1 General

2.1.1 SYSTRA has been commissioned by Harborough District Council to assess the cumulative residual impacts of the Council's Local Plan on the Local Road Network. The purpose of these assessments are as follows:

- To develop on the existing strategic assessments, through the Joint Transport Evidence (JTE) and the 2019 Pan-Regional Transport Model (PRTM). (undertaken by AECOM) to provide further evidence which can demonstrate the Local Plan's deliverability;
- To help reach agreement with Leicestershire County Council (LCC) Highways that the planned Local Plan growth within the Harborough District can be mitigated to an acceptable degree; and
- To demonstrate that the planned growth is deliverable; and that the transport evidence base has been developed to a level which is proportionate to the plan-making stage.

2.1.2 From a strategic perspective, the purpose of these assessments is to inform HDC's Local Plan Infrastructure Delivery Plan by ensuring the schemes on the LRN are necessary to support the delivery of planned growth. In doing so, this evidence is also considered to assist in demonstrating the viability and deliverability of the Local Plan.

2.2 Scoping

2.2.1 SYSTRA and HDC have engaged collaboratively with LCC during the scoping stage of this project, to ensure that this further work is consistent with LCC's expectations. A record of our scoping engagement is summarised below:

- **11/02/2026:** Discussion with LCC (Strategic Transport Planning) on data requests and availability in relation to the PRTM;
- **19/02/2026:** Scoping meeting with LCC (Strategic Transport Planning) to discuss initial methodology for assessments;
- **13/04/2026:** Submission of Scoping Note to LCC (Strategic Transport Planning)
- **21/04/2026:** Scoping Workshop with LCC (Strategic Transport Planning) and the wider LCC Development Management Team, to collaboratively discuss each junction included in the Scoping Note, covering:
 - Initial thoughts on the JTE/STIA schemes and potential alternatives
 - Any known / existing junction modelling files
 - Any committed and/or proposed improvement schemes
 - Any local issues / opportunities / constraints

2.2.2 Following submission of the Scoping Note and discussions during the Scoping Workshop, LCC (Strategic Transport Planning) confirmed that it was broadly supportive of the proposed methodology, noting that:



- It is important for any schemes to consider pedestrian movements and active travel within their design and assessment and that this should be early in the process to ensure a vision-led approach is being followed; and
- The results of these LRN assessments should be used to inform a further strategic highways assessments (using LCC's PRTM), to assess the overall implications of the various junction improvement schemes that are identified.

2.2.3 Further commentary on these two points is provided in Section 2.4 and 2.3 accordingly.

2.3 Assessment context

2.3.1 The assessments presented in this report build on a substantial body of transport evidence that has previously been prepared and agreed with LCC. Further detail is set out in the Transport Topic Paper; this section provides a concise summary of how the present report fits within the wider evidence base supporting the HDC Local Plan.

2.3.2 It is important to note at the outset that this report draws on traffic flows and assessment parameters previously used by AECOM, and agreed with LCC, through the Joint Transport Evidence (JTE) and the 2019 Pan-Regional Transport Model (PRTM).

2.3.3 The 2019 PRTM is an update to LCC's strategic transport modelling tools and forms part of the wider PRTM 2019 model suite. AECOM has previously explained that the model was developed to represent a typical weekday (Monday to Thursday) in the 2019 base year, using data from April to June 2019, and is capable of forecasting future conditions up to 2051. We understand that 2019 was selected as the base year in order to avoid the abnormal travel patterns associated with Covid-related disruption between 2020 and 2022.

2.3.4 The JTE was commissioned in December 2021 following the signing of the South Leicestershire Local Plan Making Statement of Common Ground (SoCG). The SoCG records agreement between LCC, HDC, Oadby and Wigston District Council (OWDC), Blaby District Council (BDC), and Hinckley and Bosworth District Council (HBDC) to prepare "...a consistent and joint transport evidence" base. SYSTRA understands that LCC has been closely involved in the preparation of both the JTE and the PRTM and, on that basis, accepts that the inputs and outputs of the JTE are robust and justified. AECOM has also consistently stated that the purpose of the JTE is to support plan-making.

2.3.5 Separately from the JTE, HDC previously prepared its own Highways Strategic Transport Impact Assessment (HSTIA). However, in March 2025, LCC reviewed the HSTIA and raised concerns regarding both its methodology and its validity.

2.3.6 In light of LCC's support for the 2019 PRTM and JTE, and its concerns regarding the HSTIA, SYSTRA has intentionally undertaken the present assessments using an approach that is consistent with the 2019 PRTM and JTE, rather than the HSTIA. The only aspect of the HSTIA taken into account in this report is its identified study area; that is, locations previously identified through the HSTIA as being subject to potential impacts have been included within the scope of this assessment. However, all assessment work has been undertaken using the JTE methodology, not the HSTIA methodology. This is considered to represent the most robust approach, as it ensures that all previously identified junctions

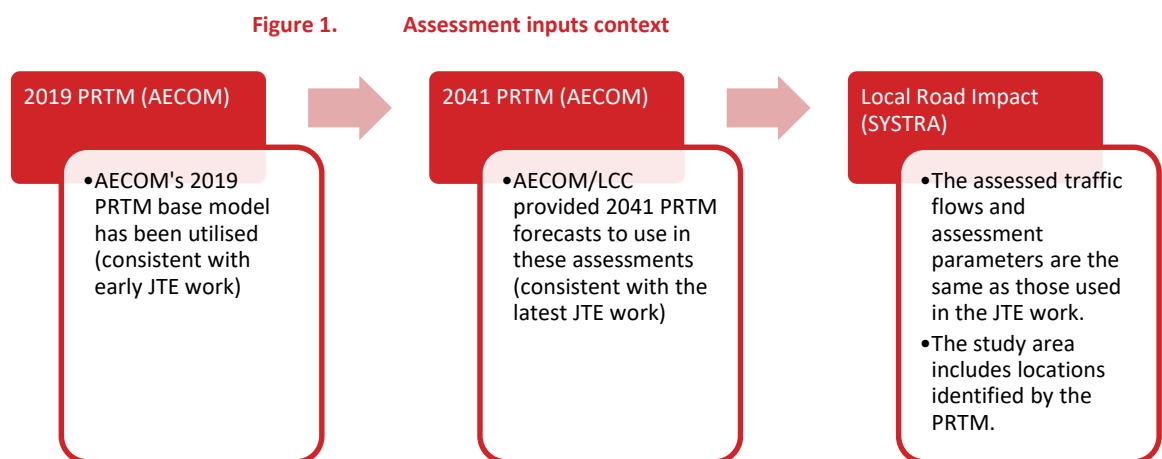


are considered while maintaining consistency with the evidence base that LCC has already supported.

2.3.7 The traffic flows and assessment scenarios used in this report are fully aligned with those applied in the most recent JTE work. The assessed traffic flows were provided to SYSTRA and HDC by AECOM in its capacity as LCC's consultant for the JTE and PRTM. By adopting an approach consistent with the JTE, it is considered that the concerns previously raised by LCC regarding the validity of forecast results for the A6 corridor are addressed. LCC has already confirmed its support for the validity of the same PRTM traffic flows used in the JTE. Accordingly, LCC's comments on the HSTIA, namely that congestion on the A6 corridor through Kibworth and Oadby creates a "haloing effect" such that the assessment results are invalid, are not considered to apply to the results presented in this report. The traffic flows assessed here are derived from the PRTM, the same strategic highway model used for the JTE and accepted by LCC as robust. That model would have taken account of both existing and forecast pressures on the A6 corridor, including any redistribution of trips arising from congestion.

2.3.8 The detailed junction assessments have been undertaken to refine the higher-level findings of the strategic modelling and to provide a more robust understanding of site-specific impacts and mitigation requirements. While the strategic model is appropriate for identifying broad patterns of impact across the network and for highlighting locations where mitigation may be needed, it does not provide the same level of detail as bespoke junction modelling. The latter has been informed by more location-specific assumptions, more detailed network coding, and more precise interrogation of operational performance at individual junctions. In that context, it is entirely reasonable, and indeed to be expected, that the detailed assessments reach different conclusions from the strategic model as to whether particular interventions are required, or what form they should take.

2.3.9 **Figure 1** summarises the assessment inputs context.



2.3.10 Accordingly, the assessment approach adopted in this report is considered to provide a robust, proportionate and policy-relevant basis for evaluating the transport effects of the HDC Local Plan.



2.4 Vision-led planning

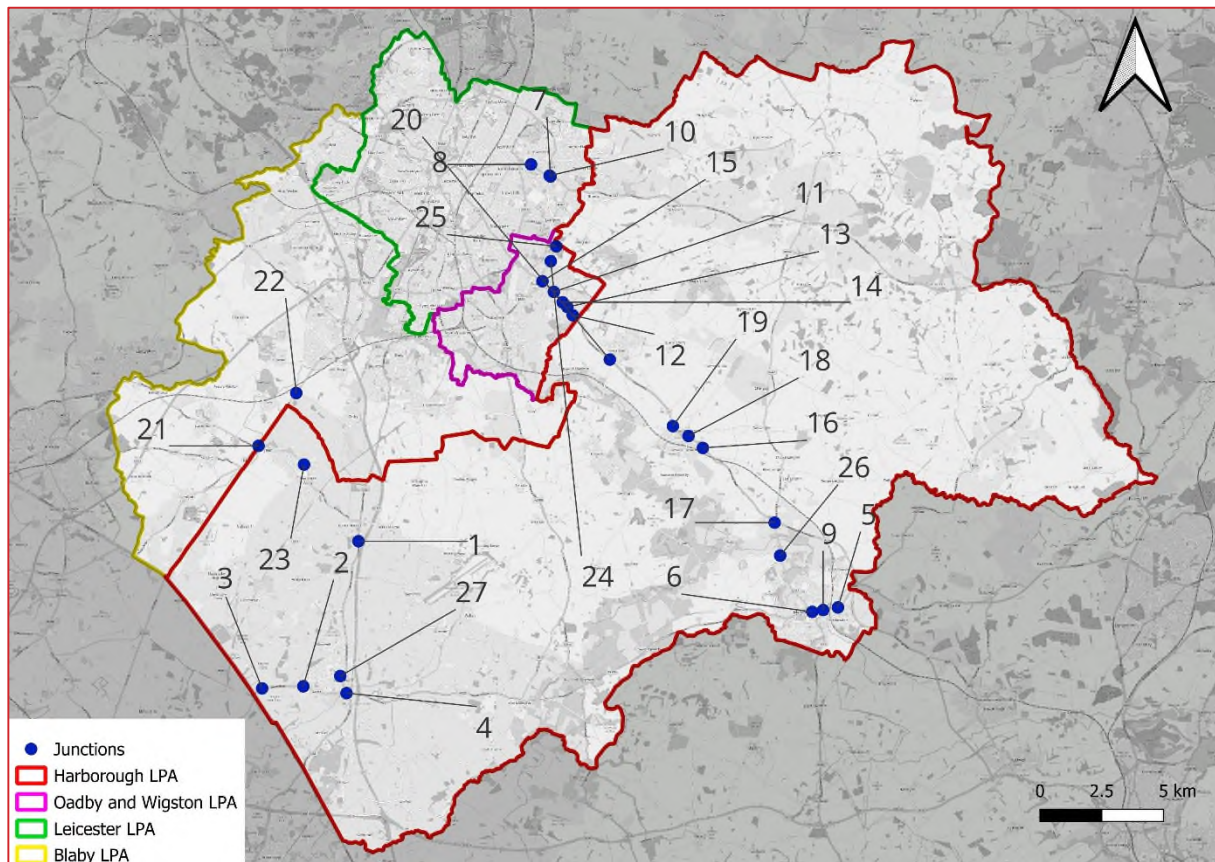
- 2.4.1 The approach adopted in this report is inherently vision-led, as it relies on the LCC/AECOM PRTM traffic flows for the 2041 Local Plan Preferred Spatial Growth Option Scenario and compares these with the 2041 Core Scenario. This approach is compliant with DfT Circular 01/2022. It is acknowledged that the 2023 NPPF did not require a vision-led approach to be adopted and we would therefore note that whilst a vision-led approach has been followed, this does not mean that the assessment approach is not policy compliant with the 2023 NPPF; the principles of the assessment method are essentially compliant with both the 2023 NPPF and the current version of the NPPF.
- 2.4.2 AECOM explains in Appendix C, Approach to Modelling Mitigation Measures, of the South Leicestershire Joint Transport Evidence – Stage 2 report dated 23 July 2025 that the traffic flows for the Preferred Growth Option Scenario were derived using vision-led assumptions. These assumptions incorporate the forecast modal shift associated with the Local Plan’s sustainable transport mitigation measures.
- 2.4.3 SYSTRA’s approach to the local road schemes was developed to align with the objectives of the Local Plan by prioritising sustainable transport accessibility at the outset of scheme design. The method began from the principle that highway interventions should not be conceived as standalone road capacity projects, but as part of an integrated movement strategy intended to support access by walking, cycling, public transport and other sustainable modes. This ensured that the schemes were shaped first around improving connectivity to key destinations, enabling modal shift, and supporting the creation of accessible and well-connected places.
- 2.4.4 In practical terms, the initial stage of design focused on identifying barriers to sustainable travel, and establishing opportunities to improve access for non-car users. This included consideration of how the local road schemes could connect with wider active travel and public transport networks, improve links between new and existing communities, and contribute to a transport system capable of supporting growth in a more sustainable way. The design process therefore embedded sustainable transport principles from the beginning, rather than treating them as secondary enhancements to a highway-led solution.
- 2.4.5 Accordingly, the methodology applied in this report is fully consistent with the vision-led basis of the JTE and should be regarded as an appropriate and robust approach for informing the HDC Local Plan evidence base.

2.5 Study area

- 2.5.1 As presented in Figure 2, the Scoping Note identifies 27 junctions which would be considered for assessment.



Figure 2. Study Area



2.5.2 The following junctions have been excluded from the assessments as during the Scoping Workshop it was confirmed that these junctions fall outside of LCC's authority and that Leicester City Council are the Local Highways Authority in these locations.

- Junction 7 (A47 / Colchester Road / Goodwood Road);
- Junction 8 (A47 Uppingham Road / Scraftoft Lane); and,
- Junction 10 (A563 / Colchester Road).

Furthermore, Leicester City Council has not raised any significant concerns with the transport evidence, including the JTE work which is consistent with this report.

2.5.3 Junction 22 (B4114 Coventry Road / Croft Road) has also been excluded from the assessment as during the Scoping Workshop, LCC advised that there is limited scope for physical capacity enhancements at the junction; and therefore, there is not a cost-effective or deliverable scheme at this location (this has since been confirmed by SYSTRA through a high-level design review).

2.5.4 Furthermore, the PRTM strategic model traffic flows provided by LCC did not include the above three junctions. Consequently, to remain consistent with the scope agreed with LCC as part of the Joint Transport Evidence, the above three locations have not been assessed.



- 2.5.5 The National Planning Policy Framework (NPPF) is clear that Local Plan assessments for transport must assess the impacts of the Local Plan at locations where “*significant impacts from the development on the transport network*” are forecasted (NPPF, paragraph 115d). Consequently, several junctions have also been excluded from the assessments due to the insignificant magnitude of change caused by the HDC Local Plan at these locations (i.e. the impact of the Local Plan at these locations – as forecasted by the PRTM – does not demonstrate a significant change). The excluded junctions are as follows:
- Junction 5 (A4304 Rockingham Road / Gores Lane);
 - Junction 6 (A4304 Saint Mary's Road/ High Street/ Northampton Road);
 - Junction 11 (A6 / London Road / Waldron Drive);
 - Junction 12 (A6 / Woodside Road); and
 - Junction 27 (Coventry Road / Bitteswell Road).
- 2.5.6 It should be noted that Junction 5 and Junction 6 are subject to capacity improvement schemes due to be implemented shortly by Leicestershire County Council.
- 2.5.7 This approach ensures that the assessment is focused on locations relevant to the Local Plan and that the evidence remains proportionate to the plan-making stage. It is also consistent with the JTE which does not identify any LRN mitigation at these junctions.
- 2.5.8 This approach is also consistent with the fact that this evidence must be proportionate to the plan-making stage, and an assessment of these junctions would only demonstrate that the change created by the Local Plan are anticipated to be within recognised and typical daily variations of traffic flows which are generally accepted to vary by around 5% to 10% on comparable neutral weekdays.



3. JUNCTION MODELLING METHODOLOGIES

3.1 Flow Apportionment

- 3.1.1 The PRTM strategic model reports two-way link flows for each arm of any given junction, therefore there is a need to apportion these flows for use in stand-alone modelling.
- 3.1.2 For the majority of junctions, Junction Turning Count (JTC) surveys undertaken to support previous planning applications have been extracted from relevant planning submissions. In a handful of cases, JTC data was supplied by LCC. Separate JTCs were extracted for the AM and PM peak hours.
- 3.1.3 In order to synthesise an origin-destination (OD) matrix for the strategic flows, the proportions of all possible turning movements from a given arm were calculated. Take for example the following OD matrix (**Table 1**) for a 4-arm junction; the 'per arm' proportions have been calculated and are shown in brackets.

Table 1. Example Origin Destination Matrix

FROM / TO	A	B	C	D
A	0 (0%)	35 (23%)	98 (64%)	19 (13%)
B	5 (1%)	0 (0%)	206 (41%)	288 (58%)
C	73 (16%)	249 (53%)	0 (0%)	148 (31%)
D	4 (2%)	138 (82%)	27 (16%)	0 (0%)

- 3.1.4 The turning proportions for each arm were then used to factor that arm's inbound flow from the PRTM strategic model scenarios. The strategic model reports in vehicle flows and disaggregates between Heavy Goods Vehicles (HGV), Light Goods Vehicles (LGV) and cars. A PCU factor of 2.3 was used to convert HGV vehicle values into PCU values. A factor of 1.0 was used for LGVs and cars.
- 3.1.5 This methodology preserves the turning proportions from the observed flows as well as the inbound vehicle flows from the PRTM. However, as the observed turning proportions and the PRTM turning proportions do not necessarily align, the calculated outbound flows on a given arm do not necessarily align with the outbound flows calculated by the PRTM.
- 3.1.6 A process such as the Furness Method could have been used to further augment the matrix in order to reduce the outbound arm variance, however doing so would introduce variance in the inbound arm flows. In line with industry standards, SYSTRA finds that inbound flows to a junction are most critical in understanding junction performance with



outbound arms conventionally assumed to have unconstrained capacity and therefore unaffected by variations in vehicle flow.

- 3.1.7 The robustness and appropriateness of this traffic flow apportionment method are further supported by its use of the strategic traffic flows prepared for the Joint Transport Evidence, ensuring consistency with earlier work agreed with LCC. Moreover, the approach has been successfully used in other Local Plan assessments (Including those tested at EiP) and is considered proportionate to the plan-making stage of transport evidence. SYSTRA considers that re-running the PRTM strategic model is not necessary to validate this report's findings, as the assessment is already based on PRTM traffic flows and is therefore aligned with the existing strategic modelling. The main potential difference would relate to the apportionment of PRTM traffic flows, which could lead to some variation if the model were re-run. However, any such variation should be considered in the context of the plan-making stage, where the supporting evidence need only be proportionate, and where more detailed assessments will be undertaken later through the planning application process.

TomTom Data

- 3.1.8 There were three junctions for which JTC data was unavailable. These were Junction 1 (A426 Lutterworth Road / Gilmorton Lane), Junction 16 (A6 Harborough Road / New Road), and Junction 18 (A6 Leicester Road / Marsh Drive / Church Road).
- 3.1.9 To avoid the need to undertake JTC surveys (due to challenging timeframes associated with the upcoming EiP), SYSTRA is able to make use of TomTom Move traffic data. This anonymised data is collected from in-vehicle navigation units. TomTom report that their dataset represents approximately 30% of all vehicle movements on the road network. SYSTRA has previously undertaken spot checks of this sample and have confirmed that this value is accurate. It should be noted that data is gathered from navigation units even if they are not necessarily in use. Data can be extracted for extended periods of time and therefore enable collection of a more representative sample. In this case SYSTRA extracted data for all neutral weekdays (Tuesday to Thursday) in May. Separate datasets for the AM peak period (07:00-10:00) and PM peak period (16:00-19:00) were extracted.
- 3.1.10 The Move dataset includes origin / destination information. When interrogating this dataset a given link on the road network can be selected and TomTom will report on the number of vehicles which funnel into and branch out from this link and where they came from.
- 3.1.11 Take for example a 4-arm crossroad junction with arms labelled A to D. By selecting the Arm A road link TomTom would report that, of all the vehicles which pass through this road section, X turn onto Arm B, Y turn onto Arm C and Z turn onto Arm D. The data set also reports on the number of vehicles which have turned into Arm A from all other arms. From this a per arm turning proportion could reasonably be calculated and the methodology described previously used to apportion the PRTM flows.

3.2 Stand-Alone Junction Modelling

- 3.2.1 SYSTRA has undertaken stand-alone junction modelling for the remaining 18 junctions identified. For signalised junctions JCT's LinSig v3 has been utilised and for all priority



junctions (roundabouts, crossroads, T-junctions, etc.) TRL's Junction 11 package has been used. These are industry standard software packages.

- 3.2.2 Full junction modelling outputs for each of the assessed locations are presented in **Appendix A** of this report. The model files themselves will be provided to LCC via a 'file transfer' due to file size limitations.

LinSig V3

- 3.2.3 LinSig results refer to the Degree of Saturation (DoS) and Mean Maximum Queue (MMQ) predicted for each lane at the junction. A DoS of 100% indicates that the lane in question is operating at its theoretical capacity (point of saturation), whilst a DoS of 90% or less indicates that the lane is operating within its practical capacity.
- 3.2.4 The MMQ represents the maximum queue (in PCUs) within a typical cycle averaged over all the cycles within the modelled time period.
- 3.2.5 The minimum green time (α) for pedestrian crossings has been calculated using the formula set out in TAL 5/05, which is:

$$\alpha = \frac{\text{Length of Crossing (m)}}{1.2} + 2$$

- 3.2.6 Intergreens have been calculated as per the guidance set out in *Traffic Sign Manual Chapter 6*, published by the Department of Transport

Junctions 11

- 3.2.7 The Junctions 11 transport planning software is the industry standard tool for assessing the capacity of priority junctions and been used to assess the performance of relevant junctions.
- 3.2.8 The Junctions 11 analysis reports the Ratio of Flow to Capacity (RFC) and maximum forecast queue for each movement within the junction. The RFC of an arm of a junction is one of the principal factors in influencing queues and delays. General engineering design principles as set out in the DMRB are that when assessing a priority junction or roundabout, RFC levels should not exceed 0.85 in order for the arm of a junction to operate within '*practical capacity*'. Should the RFC level exceed 1.0 then the junction is operating above '*theoretical capacity*'.
- 3.2.9 When the performance of an arm exceeds 1.0 RFC, the subsequent queue and delay information increases exponentially. For these instances, queue and delay values should not be compared, only simply agreed that the junction is performing significantly over capacity.
- 3.2.10 Queuing is reported in terms of Passenger Car Units (PCUs) whereby 1 PCU is equal to 5.75m (i.e. the average passenger car length including vehicle spacing). PCUs are an industry standard unit of measurement of vehicle stacking, particularly for the assessment of junction queueing. Delays will be reported in seconds.



- 3.2.11 In line with national policy and industry standards, whilst junction modelling results are useful in determining the need for (and sufficiency of) any mitigation, there does remain a need to consider severity and safety on a case-by-case basis; and this approach has therefore been considered within this report.



4. MODELLING AND SCHEME DESIGN

4.1 Modelling

4.1.1 The following chapter presents the results of SYSTRA's LRN assessments¹ and is structured by junction. For each junction, the following scenarios have been assessed (in line with the approach adopted previously for the JTE work):

- Base models (existing / committed junction layouts):
 - 2041 Core Scenario
 - 2041 Preferred Spatial Growth Option' scenario
- Mitigation models (with the PRTM / AECOM schemes from the JTE / STIA):
 - 2041 Core Scenario
 - 2041 Preferred Spatial Growth Option' scenario

4.1.2 AECOM's JTE has previously assessed the impact of the Local Plan by comparing of the forecast Local Plan 'Preferred Spatial Growth Option' scenario to the 'Core scenario'. SYSTRA has adopted a consistent approach with this method.

4.1.3 If the "2041 Core Scenario + 'Preferred Spatial Growth Option' scenario (with AECOM / PRTM mitigation options)" scenario demonstrated that the AECOM / PRTM mitigation schemes were insufficient, a further scenario has been assessed which replaces the AECOM / PRTM mitigation schemes with SYSTRA's alternative recommended mitigation schemes.

4.1.4 An interim assessment year has not been assessed as the JTE work previously demonstrated that the impacts of the Local Plan were triggered in 2041 and not the interim year of 2036. Further details for the assessment method are presented in the Scoping Report (**Appendix A**).

4.1.5 We would also note that the schemes which are identified within this report are proportionate to plan-making. The exact design, timescales for delivery, and delivery for each scheme will be confirmed through the planning application process and scheme delivery is therefore subject to the scale and location of development.

4.2 Scheme design

4.2.1 As is demonstrated in the following section, there are 11 Local Road Improvement Schemes which SYSTRA would suggest are integral to the delivery of HDC's Local Plan.

4.2.2 SYSTRA's approach to the local road schemes was developed to align with the objectives of the Local Plan by prioritising sustainable transport accessibility at the outset of scheme design. The method began from the principle that highway interventions should not be conceived as standalone road capacity projects, but as part of an integrated movement strategy intended to support access by walking, cycling, public transport and other

¹ All location maps have been sourced using Google Maps (2026)



sustainable modes. This ensured that the schemes were shaped first around improving connectivity to key destinations, enabling modal shift, and supporting the creation of accessible and well-connected places.

4.2.3 In practical terms, the initial stage of design focused on identifying barriers to sustainable travel, and establishing opportunities to improve access for non-car users. This included consideration of how the local road schemes could connect with wider active travel and public transport networks, improve links between new and existing communities, and contribute to a transport system capable of supporting growth in a more sustainable way. The design process therefore embedded sustainable transport principles from the beginning, rather than treating them as secondary enhancements to a highway-led solution.

4.2.4 Preliminary scheme designs for the integral LRN mitigation schemes are provided in **Appendix B** and our corresponding cost estimates are provided in **Appendix C**. The purpose of these designs is to further demonstrate the deliverability of the Local Plan; it is expected that more detailed designs and cost estimates will be developed through the planning application process (and agreed with LCC at the appropriate stage).

4.3 Junction 1 – A426 Lutterworth Road / Gilmorton Lane / Church Lane

4.3.1 The A426 Lutterworth Road / Gilmorton Lane / Church Lane staggered crossroads is located approximately 14km south of Leicester. **Figure 3** indicates the existing layout of Junction 1.

Figure 3. Junction 1: A426 Lutterworth Road / Gilmorton Lane / Church Lane



4.3.2 In the absence of a model from a previous Application, the base model in this case was built by SYSTRA in Junctions 11 as an uncontrolled staggered crossroads. This model has



been built in accordance with the Junctions 11 user guide. Geometric parameters were measured from ariel mapping in order to build the model.

4.3.3 Due to a lack of JTC data at this junction, SYSTRA has utilised the TomTom-based methodology outlined in **Section 2.1** to obtain equivalent OD matrices for the junction.

4.3.4 The results of the base model are indicated by **Table 2** below.

Table 2. Junction 1: Base Model Results

	AM			PM		
	Queue (PCU)	Delay (s)	RFC	Queue (PCU)	Delay (s)	RFC
	2041 Core					
Church Lane	18.2	404	1.33	34.1	3668	5.52
A426 South	0	10	0	0	10	0.01
Gilmorton Lane	4.7	1763	1.78	15.5	3584	2.78
A426 North	0	9	0.04	0.1	19	0.11
2041 Preferred						
Church Lane	202.4	8432	5.81	68.5	7888	1E+10
A426 South	0	14	0	0	10	0.01
Gilmorton Lane	15.5	9116	6.64	18.3	4702	3.31
A426 North	0.1	13	0.05	0.1	24	0.13

4.3.5 **Table 2** demonstrates that without any mitigation measures, Junction 1 (A426 Lutterworth Road / Gilmorton Lane / Church Lane) is forecasted to operate over capacity in both 2041 scenarios.

4.3.6 AECOM's previously identified mitigation at Junction 1 included a full signalisation of the staggered crossroads, with lane widening on one of the arms (assumed to be Gilmorton Lane). SYSTRA has assessed AECOM's proposed mitigation, and the results of the signalisation are presented in **Table 3**.

Table 3. Junction 1 (with the AECOM / PRTM mitigation scheme)

	AM		PM	
	DoS (%)	MMQ (PCU)	DoS (%)	MMQ (PCU)
	2041 Core			
Church Lane	47.60%	5.5	16.60%	2.4
A426 South	46.20%	9.3	57.20%	14.2
Gilmorton Lane	68.80%	9	80.10%	15.9
A426 North	69.20%	19.2	82.00%	27.8
2041 Pref				
Church Lane	74.50%	11.5	19.00%	2.7
A426 South	50.90%	11.4	57.20%	14.2
Gilmorton Lane	70.10%	10.8	83.20%	17.1
A426 North	74.00%	22.3	85.30%	30.5



4.3.7 **Table 3** demonstrates that the mitigation scheme identified through the PRTM sufficiently mitigates the impacts of HDC's Local Plan. The indicative design for this scheme is presented in **Appendix B**, and the estimated cost is presented in **Appendix C**.

4.4 Junction 2 – A4303 / Coventry Road / Fairacres Coventry Road

4.4.1 The A4303 / Coventry Road / Fairacres Coventry Road is located to the west of Lutterworth. **Figure 4** shows the existing layout of Junction 2.

Figure 4. Junction 2: A4303 / Coventry Road / Fairacres Coventry Road



4.4.2 The base model geometry was sourced from the Transport Assessment (TA) which accompanies planning application reference: 19/00250/OUT.

4.4.3 Two-way link flows were extracted from the PRTM strategic model for all arms of the junction and apportioned by OD flows extracted from the above TA, as per the methodology outlined in Section 2.1.

4.4.4 The base model results are indicated by **Table 4** below.



Table 4. Junction 2: Base Model results

	AM			PM		
	Queue (PCU)	Delay (s)	RFC	Queue (PCU)	Delay (s)	RFC
	2041 Core					
A4303 Lutterworth Road East	2.4	5.95	0.68	0.8	2.93	0.42
Fairacres Coventry Road	1	22.32	0.48	0.8	10.36	0.44
A4303 Coventry Road	1.2	3.53	0.52	3.7	7.7	0.78
Coventry Road	1.6	8.71	0.61	0.9	7.22	0.48
2041 Pref						
A4303 Lutterworth Road East	3.3	7.85	0.75	0.8	3.01	0.43
Fairacres Coventry Road	1.8	43.15	0.65	0.9	11.02	0.46
A4303 Coventry Road	1	3.25	0.48	9.9	18.43	0.91
Coventry Road	2.6	11.79	0.72	1.2	9.04	0.54

4.4.5 As indicated by **Table 5** above, the existing junction layout is forecasted to operate within both capacity for both 2041 scenarios.

4.4.6 The previously identified mitigation from AECOM was to fully signalise the roundabout, as well as lane widening on one of the arms. SYSTRA has built a LinSig model of the A4303 / Coventry Road / Fairacres Coventry Road roundabout which incorporates the mitigation previously identified within the PRTM (assumed to be Coventry Road, with a 15m length flare); the results are presented in **Table 5**.

Table 5. Junction 2 (with the AECOM / PRTM mitigation scheme)

	AM		PM	
	DoS (%)	MMQ (PCU)	DoS (%)	MMQ (PCU)
	2041 Core			
A4303 Lutterworth Road	55.60%	6.9	33.60%	3.3
Fairacres Coventry Road	25.40%	0.8	31.60%	0.7
A4303 Coventry Road	45.80%	5.1	67.90%	9.7
Coventry Road	65.10%	5.8	69.50%	4.8
2041 Pref				
A4303 Lutterworth Road	62.40%	8.5	35.40%	3.6
Fairacres Coventry Road	28.40%	0.9	32.60%	0.8
A4303 Coventry Road	40.90%	4.3	74.90%	11.8
Coventry Road	70%	7.5	76.40%	5.7

4.4.7 The results presented in **Table 5** demonstrate that the implementation of lane widening on all arms would have an immaterial impact in terms of improving the operation of Junction 2. Furthermore, as shown in **Table 6**, the junction is forecasted to operate within capacity in both 2041 scenarios and the impact of the HDC Local Plan is not forecasted to materially change the operation of the junction. Consequently, **it is clear that the mitigation identified by AECOM through the PRTM is not required to mitigate the impact of the HDC Local Plan.**



4.5 Junction 3 – A4303 Coventry Road / Hunter Boulevard

4.5.1 The A4303 / Coventry Road / Fairacres Coventry Road is located to the west of Lutterworth. **Figure 5** presents the existing layout of Junction 3.

Figure 5. Junction 3: A4303 Coventry Road / Hunter Boulevard



4.5.2 The base model geometry was sourced from TA which accompanies planning application reference: 19/00250/OUT. Two-way link flows were extracted from the PRTM strategic model for all arms of the junction and apportioned by OD flows extracted from the above TA, as per the methodology outlined in **Section 2.1**.

4.5.3 The base model results are indicated by **Table 6**.

Table 6. Junction 3: Base Model results

	AM			PM		
	Queue (PCU)	Delay (s)	RFC	Queue (PCU)	Delay (s)	RFC
	2041 Core					
A4303 Coventry Road	3	5.55	0.73	0.8	2.49	0.42
Coventry Road (S)	0.8	6.35	0.41	1	5.33	0.5
A4303 Coventry Road (W)	56.9	91.44	1.04	3	6.62	0.74
Hunter Boulevard	0.2	2.91	0.14	0.5	3.83	0.35
2041 Pref						
A4303 Coventry Road	4	6.92	0.79	1	2.85	0.49
Coventry Road (S)	1.1	8.23	0.51	1.7	7.7	0.63
A4303 Coventry Road (W)	112.4	168.74	1.11	4.8	9.87	0.82
Hunter Boulevard	0.2	2.89	0.14	0.6	4.3	0.37



4.5.4 As shown in **Table 6**, the A4303 Coventry Road (W) arm is forecasted to operate over capacity in both 2041 scenarios; and the addition of the Local Plan traffic is forecasted to worsen this operation with additional queuing and delays.

4.5.5 AECOM's previously identified mitigation from PRTM was to provide lane widening on one arm of the roundabout, in this case the A4303 Coventry Road (W). To assess this scheme, SYSTRA has made the following adjustments to the A4303 Coventry Road (W) arm in the base model:

- Increased entry width from 9.5m – 10m
- Increased approach half width from 7.7m - 9m
- Increased flare length from 6m – 30m

4.5.6 The results of the 'with mitigation' scenario are presented in **Table 7**.

Table 7. Junction 3 (with the AECOM / PRTM mitigation scheme)

	AM			PM		
	Queue (PCU)	Delay (s)	RFC	Queue (PCU)	Delay (s)	RFC
2041 Core						
A4303 Coventry Road	3	5.58	0.74	0.8	2.49	0.42
Coventry Road (S)	0.8	6.35	0.41	1	5.33	0.5
A4303 Coventry Road (W)	7.4	13.55	0.88	1.8	3.96	0.63
Hunter Boulevard	0.2	3.01	0.15	0.5	3.83	0.35
2041 Pref						
A4303 Coventry Road	4.1	7.02	0.79	1	2.85	0.49
Coventry Road (S)	1.1	8.23	0.51	1.7	7.7	0.63
A4303 Coventry Road (W)	12.9	23.43	0.93	2.4	4.99	0.7
Hunter Boulevard	0.2	3.12	0.15	0.6	4.3	0.37

4.5.7 Table 8 demonstrates that the mitigation scheme identified through the PRTM significantly reduces the queues and delays on the A4303 Coventry Road (W). The RFC is also forecasted to reduce from 1.11 to under 1.0 (0.93) therefore demonstrating that the junction would operate within theoretical capacity in all scenarios.

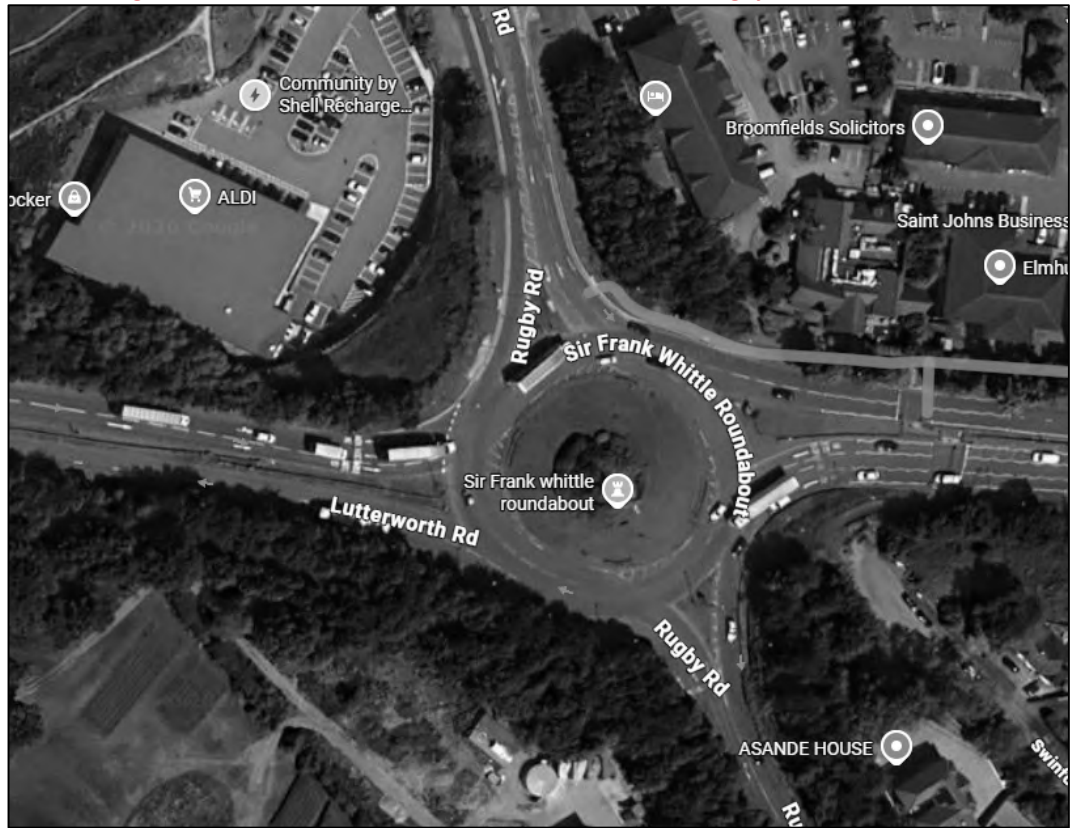
4.5.8 Consequently, **the impacts of HDC's Local Plan at Junction 3 can be mitigated through lane widening on the A4303 Coventry Road (W) arm**. The indicative design for this scheme is presented in **Appendix B**, and the estimated cost is presented in **Appendix C**.

4.6 Junction 4 – A4303 Lutterworth Road / A426 Rugby Road

4.6.1 The A4303 / Coventry Road / Fairacres Coventry Road is located to the west of Lutterworth. **Figure 6** presents the existing layout at Junction 4.



Figure 6. Junction 4: A4303 Lutterworth Road / A426 Rugby Road



4.6.2 The base model geometry was sourced from the Transport Assessment which accompanies planning application reference: 19/00250/OUT. Two-way link flows were extracted from the PRTM strategic model for all arms of the junction and apportioned by OD flows extracted from the above TA, as per the methodology outlined in Section 2.1.

4.6.3 The base model results are presented in **Table 8**.

Table 8. Junction 4: Base Model results

	AM			PM		
	Queue (PCU)	Delay (s)	RFC	Queue (PCU)	Delay (s)	RFC
	2041 Core					
A4303 Lutterworth Road East	4.4	6.79	0.8	2.6	4.35	0.71
A426 South	2.3	10.06	0.69	1.3	5.79	0.56
A4303 Lutterworth Road West	1	3.33	0.49	3	6.17	0.74
A426 North	1	4.06	0.48	1	4.8	0.49
2041 Pref						
A4303 Lutterworth Road East	5.1	7.85	0.83	2.8	4.6	0.73
A426 South	2.3	10.17	0.68	1.5	6.34	0.6
A4303 Lutterworth Road West	1	3.21	0.47	5.6	10.49	0.85
A426 North	1.2	4.47	0.53	0.9	5.09	0.47



- 4.6.4 As indicated by **Table 8** above, Junction 4 operates within both theoretical and practical capacity in all scenarios. The highest RFC value is 0.85 on the A4303 Lutterworth Road West in the 2041 Preferred PM scenario.
- 4.6.5 AECOM's previously identified mitigation from the PRTM was to provide lane widening on all arms of the roundabout. SYSTRA has adjusted the base model to reflect this scheme, by increasing lane widths on all arms.
- 4.6.6 The results of the AECOM / PRTM mitigation are presented in **Table 9**.

Table 9. Junction 4 (with the AECOM / PRTM mitigation scheme)

	AM			PM		
	Queue (PCU)	Delay (s)	RFC	Queue (PCU)	Delay (s)	RFC
	2041 Core					
A4303 Lutterworth Road East	4.2	6.47	0.79	2.5	4.21	0.71
A426 South	2	8.66	0.65	1.2	5.24	0.54
A4303 Lutterworth Road West	1	3.23	0.48	2.8	5.8	0.73
A426 North	0.9	3.83	0.46	0.9	4.51	0.47
2041 Pref						
A4303 Lutterworth Road East	4.8	7.43	0.82	2.7	4.43	0.72
A426 South	2	8.76	0.65	1.4	5.69	0.57
A4303 Lutterworth Road West	1	3.12	0.46	5	9.5	0.83
A426 North	1.2	4.19	0.52	0.9	4.78	0.46

- 4.6.7 The results presented in **Table 9** demonstrate that the implementation of lane widening on all arms would have an immaterial impact in terms of improving the operation of Junction 4. Furthermore, as shown in **Table 9**, the junction is forecasted to operate within capacity in both 2041 scenarios and the impact of the HDC Local Plan is not forecasted to materially change the operation of the junction. Consequently, **it is clear that the mitigation identified by AECOM through the PRTM is not required to mitigate the impact of the HDC Local Plan.**

4.7 Junction 9 – A508 Saint Mary's Road/A508 Springfield Street/A4304

- 4.7.1 The A508 Saint Mary's Road/A508 Springfield Street/A4304 signalised crossroads is located in Market Harborough town centre. The existing layout is shown in **Figure 7** below.



Figure 7. Junction 9: A508 Saint Mary's Road/A508 Springfield Street/A4304



- 4.7.2 In the absence of a model from a previously approved planning application, the base model in this case was built by SYSTRA in LinSig V3 as a signalised crossroads. This model has been built in accordance with the LinSig V3 user guide. Geometric parameters were measured from aerial mapping in order to build the model. The scheme (upgrading the junctions at St Mary's Road and Clarence Street, and at Rockingham Road and Gores Lane) provided by LCC has been assumed to be committed and included in the modelling (scheme context: <https://www.bbc.co.uk/news/articles/clye81lez4ko>).
- 4.7.3 In absence of signal timing information, SYSTRA has assessed a single pedestrian cycle and a double pedestrian cycle. Given the town centre location, we would expect that the pedestrian cycle would typically be somewhere between these positions.
- 4.7.4 Two-way link flows were extracted from the PRTM strategic model for all arms of the junction and apportioned by OD flows extracted from a Junction Turning Count (JTC) survey (carried out by LCC on 02/12/2025), as per the methodology outlined in Section 2.1.
- 4.7.5 The base model results are presented in **Table 10**.



Table 10. Junction 9: Base Model results

	AM		PM	
	DoS (%)	MMQ (PCU)	DoS (%)	MMQ (PCU)
	2041 Core (single ped' cycle)			
A508	99.1%	21.5	95.1%	15.8
St Mary's Road East	101.0%	29.8	98.8%	21.8
St Mary's Road West	26.9%	3.1	46.7%	5.5
Clarence Street	Outbound only due to committed scheme			
2041 Pref (single ped' cycle)				
A508	103.4%	27.6	98.2	18.6
St Mary's Road East	103.4%	37.8	98.8	25.4
St Mary's Road West	23.4%	2.6	50.7	6.1
Clarence Street	Outbound only due to committed scheme			
	2041 Core (double ped' cycle)			
A508	84.9%	14.6	81.5%	12.7
St Mary's Road East	84.1%	15.8	81.0%	13.5
St Mary's Road West	22.7%	2.9	39.7	4.8
Clarence Street	Outbound only due to committed scheme			
	2041 Pref (double ped' cycle)			
A508	86.5%	15.4	82.5%	13.4
St Mary's Road East	87.6%	17.7	83.6%	14.4
St Mary's Road West	20.1%	2.5	42.5%	5.2
Clarence Street	Outbound only due to committed scheme			

4.7.6 As shown in **Table 10**, the A508 Saint Mary's Road/A508 Springfield Street/A4304 signalised crossroads is forecasted to operate over capacity in both the 2041 Core and 2041 Preferred scenarios, when assuming a single pedestrian cycle. When assessing a double pedestrian cycle, the junction is forecasted to operate within capacity in both the 2041 Core and 2041 Preferred scenarios. Regardless of the pedestrian cycle which is assessed, **it is clear that the HDC Local Plan is not forecasted to materially change the operation of the junction.**

4.7.7 AECOM's previously identified PRTM mitigation included lane widening on one of the arms, in this case St Mary's Road east (assumed to be increased lane widths on the St Mary's Lane E (A427) arm by 0.75m to 3.5m). The results of this mitigation is presented in **Table 11.**



Table 11. Junction 9 (with AECOM / PRTM mitigation)

	AM		PM	
	DoS (%)	MMQ (PCU)	DoS (%)	MMQ (PCU)
	2041 Core (single ped' cycle)			
A508	99.1%	14.2	95.1%	9.8
St Mary's Road East	99.0%	17.7	95.0%	12.3
St Mary's Road West	26.9%	1.4	46.7%	2.9
Clarence Street	Outbound only due to committed scheme			
	2041 Pref (single ped' cycle)			
A508	103.4%	20.3	98.2%	12.3
St Mary's Road East	101.4%	23.1	97.0%	14.5
St Mary's Road West	23.4%	1.2	49.5%	3.2
Clarence Street	Outbound only due to committed scheme			
	2041 Core (double ped' cycle)			
A508	83.5%	14.1	79.9%	12.4
St Mary's Road East	83.3%	15.5	80.1%	13.2
St Mary's Road West	23.0%	2.9	20.0%	4.8
Clarence Street	Outbound only due to committed scheme			
	2041 Pref (double ped' cycle)			
A508	86.5%	15.4	82.5%	13.4
St Mary's Road East	85.6%	17.0	81.8%	14.0
St Mary's Road West	20.1%	2.5	42.5%	5.2
Clarence Street	Outbound only due to committed scheme			

4.7.8 The results presented in **Table 11** demonstrate that the implementation of AECOM's PRTM mitigation scheme would have an immaterial impact in terms of improving the operation of Junction 4. Furthermore, as shown in **Table 10**, the impact of the HDC Local Plan is not forecasted to materially change the operation of the junction. Consequently, **it is clear that the mitigation identified by AECOM through the PRTM is not required to mitigate the impact of the HDC Local Plan.**

4.8 Junction 13 – A6 Glen Road / Florence Wragg Way

4.8.1 The A6 Glen Road / Florence Wragg Way partially signalised roundabout is located in Market Harborough. The location is shown in **Figure 8** below.



Figure 8. Junction 13: A6 Glen Road / Florence Wragg Way



4.8.2 The base model geometry was sourced from 'Appendix I – Capacity Outputs Assessment' of the Transport Assessment dated (28/11/22) from Oadby & Wigston Borough Council planning reference number: 22/00448/OUT. Two-way link flows were extracted from the PRTM strategic model for all arms of the junction and apportioned by OD flows extracted from the above TA Appendix, as per the methodology outlined in **Section 2.1**.

4.8.3 The base model results are presented in **Table 12**.

Table 12. Junction 13: Base Model results

	AM		PM	
	DoS (%)	MMQ (PCU)	DoS (%)	MMQ (PCU)
	2041 Core			
A6 Glen Road North	46.70%	0.4	51.40%	0.5
A6 Glen Road South	55.30%	7.1	55.40%	7.1
Florence Wragg Way	36.70%	0.3	26.70%	0.2
2041 Pref				
A6 Glen Road North	50.20%	0.5	62.70%	0.8
A6 Glen Road South	72.10%	10.9	63.90%	9.0
Florence Wragg Way	55.60%	0.6	39.50%	0.3

4.8.4 As shown in **Table 12**, the A6 Glen Road / Florence Wragg Way roundabout is forecasted to operate within capacity on all arms for all scenarios. There is some queuing with the highest occurring on the A6 Glen Road from the south of 10.9 PCU. The highest Degree of Saturation (DoS) also occurs on the A6 Glen Road from the south with a maximum of 72.1%, which is under the 90% threshold which determines if a junction is at maximum capacity. AECOM's previously identified mitigation from the PRTM was to provide lane



widening on all arms of the roundabout. SYSTRA has adjusted the model to reflect AECOM's mitigation scheme.

4.8.5 The results of the above mitigation are presented in **Table 13**.

Table 13. Junction 13 (with AECOM / PRTM mitigation)

	AM		PM	
	DoS (%)	MMQ (PCU)	DoS (%)	MMQ (PCU)
	2041 Core			
Glen Road North	46.70%	0.4	51.40%	0.5
Glen Road South	51.50%	10.1	51.40%	9.8
Florence Wragg Way	36.70%	0.3	26.70%	0.2
2041 Pref				
Glen Road North	50.20%	0.5	62.70%	0.8
Glen Road South	70.40%	11.0	63.40%	9.3
Florence Wragg Way	55.60%	0.6	39.50%	0.3

4.8.6 The results presented in **Table 13** demonstrate that the implementation of AECOM's PRTM mitigation scheme would have an immaterial impact in terms of improving the operation of Junction 4. Furthermore, as shown in **Table 12**, the junction is forecasted to operate within capacity in both 2041 scenarios and the impact of the HDC Local Plan is not forecasted to materially change the operation of the junction. Consequently, **it is clear that the mitigation identified by AECOM through the PRTM is not required to mitigate the impact of the HDC Local Plan.**

4.9 Junction 14 – A6 Harborough Road / Ash Tree Road

4.9.1 The A6 Harborough Road / Ash Tree Road partially signalised roundabout is located in Market Harborough town centre. The existing layout is shown in **Figure 9**.



Figure 9. Junction 13: A6 Glen Road / Florence Wragg Way



- 4.9.2 In the absence of a model from a previously approved planning application, the base model in this case was built by SYSTRA in LinSig V3 as a signalised T-junction. This model has been built in accordance with the LinSig V3 user guide. Geometric parameters were measured from ariel mapping in order to build the model.
- 4.9.3 Two-way link flows were extracted from the PRTM strategic model for all arms of the junction and apportioned by OD flows extracted from a Junction Turning Count (JTC) survey (carried out by LCC on 14/05/2025), as per the methodology outlined in Section 2.1. The base model results are indicated by **Table 14**.

Table 14. Junction 14: Base Model results

	AM		PM	
	DoS (%)	MMQ (PCU)	DoS (%)	MMQ (PCU)
	2041 Core			
A6 North	56.70%	9.0	63.30%	11.4
A6 South	60.80%	8.2	61.70%	10.0
Ash Tree Road	60.60%	3.7	53.90%	2.8
2041 Pref				
A6 North	59.40%	9.7	71.00%	14.4
A6 South	71.90%	11.8	64.70%	10.9
Ash Tree Road	68.50%	4.1	54.50%	2.8

- 4.9.4 As shown in **Table 14**, the A6 Harborough Road / Ash Tree Road junction is forecasted to operate within capacity on all arms for all scenarios. There is some queuing with the highest occurring on the A6 from the north of 14.4 PCU. The highest Degree of Saturation



(DoS) also occurs on the A6, but from the south with a maximum of 71.9%, which is under the 90% threshold which determines if a junction is at maximum capacity.

4.9.5 AECOM's previously identified mitigation from the PRTM was to provide lane widening on one arm of the junction. Despite the junction already operating within capacity the lane width of the A6 northern arm was marginally increased to improve junction performance.

4.9.6 The results of the above mitigation are presented in **Table 15**.

Table 15. Junction 14 (with AECOM / PRTM mitigation)

	AM		PM	
	DoS (%)	MMQ (PCU)	DoS (%)	MMQ (PCU)
	2041 Core			
A6 North	56.10%	9.0	62.70%	11.4
A6 South	61.20%	8.2	62.00%	9.7
Ash Tree Road	60.60%	3.7	53.90%	2.8
2041 Pref				
A6 North	58.70%	9.7	70.30%	14.1
A6 South	72.30%	11.5	65.10%	10.8
Ash Tree Road	68.50%	4.1	54.50%	2.8

4.9.7 The slight increase in lane width on the A6 from the north marginally improves the performance of the junction. There is approximately 1% extra spare capacity and very minimal reduction in queuing.

4.9.8 The results presented in **Table 15** demonstrate that the implementation of AECOM's PRTM mitigation scheme would have an immaterial impact in terms of improving the operation of Junction 4. Furthermore, as shown in **Table 14**, the junction is forecasted to operate within capacity in both 2041 scenarios and the impact of the HDC Local Plan is not forecasted to materially change the operation of the junction. Consequently, **it is clear that the mitigation identified by AECOM through the PRTM is not required to mitigate the impact of the HDC Local Plan.**

4.10 Junction 15 – A6 Harbrough Road / B582 New Street

4.10.1 The A6 Harbrough Road / B582 New Street signalised crossroads is located in Market Harbrough town centre. The existing layout is shown in **Figure 10**.



Figure 10. Junction 15: A6 Harbrough Road / B582 New Street



4.10.2 The LinSig model was provided by LCC for this junction. Two-way link flows were extracted from the PRTM strategic model for all arms of the junction and apportioned by OD flows extracted from a Junction Turning Count (JTC) survey (carried out by LCC on 29/10/2025), as per the methodology outlined in **Section 2.1**.

4.10.3 The base model results are indicated by **Table 16** below.

Table 16. Junction 15: Base Model results

	AM		PM	
	DoS (%)	MMQ (PCU)	DoS (%)	MMQ (PCU)
	2041 Core			
A6 West	75.50%	14.1	95.60%	24.1
A6 East	52.60%	10.5	46.90%	9.1
New Street South	77.50%	8.7	96.60%	15.5
New Street North	77.50%	8.5	94.70%	15.0
Uplands Road	34.00%	3.3	25.60%	2.3
2041 Pref				
A6 West	80.60%	15.3	109.00%	53.1
A6 East	57.50%	11.6	46.90%	9.4
New Street South	81.70%	9.2	108.10%	30.4
New Street North	79.70%	9.7	107.10%	30.8
Uplands Road	33.70%	3.1	26.00%	2.3

4.10.4 As shown in **Table 16** above, the A6 Harbrough Road / B582 New Street signalised crossroads works within theoretical capacity on all arms for both 2041 Core scenarios. The DoS on the A6 West, New Street North, and New Street South are all approximately 95%.



However, for the 2041 Preferred Scenario (i.e. with the Local Plan traffic), the same three arms as above exceed 100%, with the maximum occurring on the A6 from west at 109%. The queue also reaches 53.1 PCU, equivalent to approximately 305m.

4.10.5 AECOM's previously identified PRTM mitigation was for lane widening on one or more arms. Consequently, SYSTRA has made the following amendments to the base model:

- The lane widths on the A6 west were increased from 3.25m to 3.5m
- The lane widths on the A6 east were increased from 3.25m to 3.5m
- The lane widths on New Street north were increased from 3.5m to 4m

4.10.6 The results of the above mitigation are presented in **Table 17**.

Table 17. Junction 15 (AECOM / PRTM mitigation)

	AM		PM	
	DoS (%)	MMQ (PCU)	DoS (%)	MMQ (PCU)
	2041 Core			
A6 West	72.80%	14.3	91.70%	22.3
A6 East	48.80%	10.2	43.60%	8.9
New Street South	73.50%	8.3	91.20%	12.7
New Street North	74.50%	8.3	90.70%	13.2
Uplands Road	32.40%	3.2	24.30%	2.3
2041 Pref				
A6 West	77.70%	15.5	104.60%	43.8
A6 East	53.40%	11.3	42.80%	9.3
New Street South	77.20%	8.7	102.10%	24.4
New Street North	76.10%	9.4	103.00%	22.1
Uplands Road	32.00%	3.0	24.70%	2.3

4.10.7 **Table 17** highlights that even with the lane widening mitigation, the junction is forecasted to operate over capacity in the 2041 Preferred Scenario.

Further Mitigation

4.10.8 SYSTRA would recommend a change of staging that would allow for a left turn only lane to run from New Street from the north, while the opposing right turns on the A6 Harborough Street are also running. This allows for more green time for the junction in general, and also provides additional green time every cycle on New Road.

4.10.9 The results of this further mitigation are presented in **Table 18**.



Table 18. Junction 15 (SYSTRA mitigation)

	AM		PM	
	DoS (%)	MMQ (PCU)	DoS (%)	MMQ (PCU)
	2041 Core			
A6 West	62.70%	13.4	78.80%	18.8
A6 East	56.60%	11.3	50.40%	9.7
New Street South	60.70%	7.5	75.00%	9.7
New Street North	61.00%	7.4	75.30%	10.3
Uplands Road	29.60%	3.1	22.10%	2.2
2041 Pref				
A6 West	66.60%	14.3	87.70%	23.9
A6 East	63.60%	12.9	49.40%	9.9
New Street South	63.70%	8.4	88.40%	12.8
New Street North	63.50%	7.6	84.40%	12.1
Uplands Road	29.10%	3.0	23.50%	2.3

4.10.10 As indicated by **Table 18**, changing the junction's signal staging has addressed the capacity issues which were forecasted for the 2041 Preferred Scenario. With this scheme, all arms for all scenarios operate within both theoretical and practical capacity, with the highest DoS of 88.4% occurring on New Street from the south in the 2041 PM Preferred scenario.

4.10.11 Consequently, the impacts of HDC's Local Plan at Junction 15 can be mitigated through signal optimisation and the following lane widening:

- The lane widths on the A6 west increased from 3.25m to 3.5m
- The lane widths on the A6 east increased from 3.25m to 3.5m
- The lane widths on New Street north increased from 3.5m to 4m

4.10.12 The indicative design for this scheme is presented in **Appendix B**, and the estimated cost is presented in **Appendix C**.

4.11 Junction 16 – A6 Harborough Road / New Road

4.11.1 The A6 Harborough Road / New Road priority junction is located to the south east of Leicester. The existing layout is shown in **Figure 11** below.



Figure 11. Junction 16: A6 Harbrough Road / New Road



4.11.2 In the absence of a model from a previously approved planning application, the base model in this case was built by SYSTRA in Junctions 11 as an uncontrolled T-junction. This model has been built in accordance with the Junctions 11 user guide. Geometric parameters were measured from ariel mapping in order to build the model.

4.11.3 The base model results are presented in **Table 19**.

Table 19. Junction 16: Base Model results

	AM			PM		
	Queue (PCU)	Delay (s)	RFC	Queue (PCU)	Delay (s)	RFC
	2041 Core					
A6 South	0	0	0	0	0	0
New Road	83	2681	1.52	26.4	732	1.1
A6 North	0.1	10.89	0.07	0.2	9.83	0.15
2041 Pref						
A6 South	0	0	0	0	0	0
New Road	105.4	3684	1.73	40.7	1201	1.21
A6 North	0.1	10.95	0.07	0.2	10.34	0.16

4.11.4 **Table 19** shows that the junction is significantly over capacity on New Road with significant queues and delays in both 2041 scenarios. The A6 from the south has a left turn on to New Road which bypasses the junction.

4.11.5 AECOM's suggested mitigation from the PRTM was to signalise the junction. The results of the new signalised T-junction are presented in **Table 20**.



Table 20. Junction 16: After Mitigation results

	AM		PM	
	DoS (%)	MMQ (PCU)	DoS (%)	MMQ (PCU)
	2041 Core			
A6 South	109.40%	109.9	83.2%	27.6
New Road	108.20%	19.2	91.10%	9.8
A6 North	69.90%	20.4	90.60%	38.8
2041 Pref				
A6 South	111.00%	119.2	89.90%	33.9
New Road	103.60%	16.6	84.10%	8.4
A6 North	73.80%	22.8	88.70%	36.2

4.11.6 **Table 20** shows that the signalisation of the A6 / New Road junction has improved the performance of the junction. For both PM scenarios the junction works within capacity, however, for the AM scenarios the junction is forecasted to operate over capacity with the highest DoS (111%) occurring on the A6 from the south. There is also a queue of 119pcu, which equates to approximately 685m, on this arm for the 2041 Preferred scenario. Consequently, additional/alternative mitigation is required.

Further Mitigation

4.11.7 SYSTRA has assessed a scheme which incorporates an additional lane on the A6 South (width increased to 2 lanes as 3.25m widths and with a length of 345m), as this would allow a higher saturation flow on the A6, and for the side arm (New Road) to get more green time. The proposed 2-lane approach for the A6 south is feasible due to the existing 1-lane approach being wider than necessary, which facilitates the potential to deliver a 2-lane approach without excessive widening of the overall approach.

4.11.8 The results of the further mitigation are presented in **Table 21**.

Table 21. Junction 16 (SYSTRA mitigation)

	AM		PM	
	DoS (%)	MMQ (PCU)	DoS (%)	MMQ (PCU)
	2041 Core			
A6 South	54.50%	13.1	39.10%	8.6
New Road	66.30%	5.9	80.80%	6.5
A6 North	67.10%	19.1	81.20%	33.7
2041 Pref				
A6 South	54.60%	13.1	41.70%	9.3
New Road	69.30%	6.6	78.10%	6.3
A6 North	69.90%	20.9	78.90%	31.0

4.11.9 As seen in **Table 21**, the additional lane on the A6 improves the performance of the junction and allows it to operate within capacity for all scenarios.

4.11.10 Consequently, **the impacts of HDC's Local Plan at Junction 15 can be mitigated through the signalisation of the junction and an additional lane on the A6.** The indicative design



for this scheme is presented in **Appendix B**, and the estimated cost is presented in **Appendix C**.

4.12 Junction 17 – A6 Harbrough Road / B6047 Melton Road

- 4.12.1 The A6 Harbrough Road / B6047 Melton Road roundabout is located approximately 3.5km north of Market Harbrough town centre. The existing layout is shown in **Figure 12**.

Figure 12. Junction 17: A6 Harbrough Road / B6047 Melton Road



- 4.12.2 The base model geometry was sourced from 'Transport Assessment Appendix F – Junction Capacity Assessment Outputs' dated (03/07/12) from the HDC Planning Portal, reference number: 11/00112/OUT. There were no changes made to any of the geometry.
- 4.12.3 Two-way link flows were extracted from the PRTM strategic model for all arms of the junction and apportioned by OD flows extracted from the above TA Appendix, as per the methodology outlined in **Section 2.1**. It is worth noting the model was built with flows from 2008, and therefore the service area has zero flows in any scenarios. This is not considered to be a material concern, however, because the PRTM and the approved TA also did not include for any traffic flows using the service area arm of the roundabout.
- 4.12.4 The base model results are presented in **Table 22**.



Table 22. Junction 17: Base Model results

	AM			PM		
	Queue (PCU)	Delay (s)	RFC	Queue (PCU)	Delay (s)	RFC
	2041 Core					
Melton Road	74.6	274.79	1.18	4.8	33.72	0.84
A6 East	2.4	7.54	0.7	2.7	7.92	0.73
B6047	2.9	9.73	0.74	4	12.81	0.8
A6 West	3.1	8.35	0.75	8.3	19.38	0.9
Service Area	0	0	0	0	0	0
2041 Pref						
Melton Road	77.9	304.98	1.2	9.6	58.59	0.94
A6 East	2.3	7.38	0.69	3.5	9.79	0.78
B6047	4.5	13.77	0.82	6.6	20.57	0.88
A6 West	5.1	12.6	0.83	6.8	16.44	0.88
Service Area	0	0	0	0	0	0

4.12.5 As indicated by **Table 22**, Junction 17 is forecasted to operate over both theoretical and practical capacity for the AM peak period for both the 2041 Core and 2041 Pref. For the PM peak scenario, the junction is forecasted to operate in theoretical capacity, with the highest RFC of 0.94 on B6047 Melton Road in the 2041 Pref scenario.

4.12.6 AECOM's previously identified mitigation from PRTM was to fully signalise the roundabout. SYSTRA has built a LinSig model to test this mitigation scheme and the results are presented in **Table 23**.

Table 23. Junction 17 (AECOM / PRTM mitigation)

	AM		PM	
	DoS (%)	MMQ (PCU)	DoS (%)	MMQ (PCU)
	2041 Core			
Melton Road	93.10%	27.3	93.50%	14.8
A6 East	87.70%	17.9	87.40%	11.7
B6047	88.30%	20.8	91.40%	17.9
A6 West	92.30%	27.3	104.50%	61.8
Service Area	0.00%	0.0	0.00%	0.0
2041 Preferred				
Melton Road	93.10%	25.0	85.50%	14.3
A6 East	87.70%	17.9	102.70%	48.6
B6047	88.30%	20.8	90.90%	24.4
A6 West	92.30%	27.3	105.30%	81.1
Service Area	0.00%	0.0	0.00%	0.0

4.12.7 As indicated by **Table 23**, even with the AECOM/PRTM mitigation, the junction is still forecasted to operate over capacity in both 2041 scenarios.

4.12.8 SYSTRA has engaged with LCC to understand whether there is any survey data or known improvements at this junctions which are associated with the service arm of the roundabout; as a revised model may be required.



4.13 Junction 18 – A6 Leicester Road / Marsh Drive / Church Road

4.13.1 The A6 Leicester Road / Marsh Drive / Church Road staggered crossroads is located within Kibworth Harcourt. The existing layout is shown in **Figure 13**.

Figure 13. Junction 18: A6 Leicester Road / Marsh Drive / Church Road



4.13.2 In the absence of a model from a previously approved planning application, the base model in this case was built by SYSTRA in Junctions 11 as an uncontrolled staggered crossroads. This model has been built in accordance with the Junctions 11 user guide. Geometric parameters were measured from ariel mapping in order to build the model.

4.13.3 The base model results are presented in **Table 24**.

Table 24. Junction 18: Base Model Results

	AM			PM		
	Queue (PCU)	Delay (s)	RFC	Queue (PCU)	Delay (s)	RFC
	2041 Core					
A6 West	1.5	19.73	0.56	1.4	16.44	0.55
Marsh Drive	28.6	1112.11	1.34	18.9	754.16	1.28
A6 East	0.1	10.35	0.09	0.1	12.05	0.09
Church Road	260.6	16970	4.91	410.2	8217.49	2.72
2041 Pref						
A6 West	1.9	20.6	0.6	1.8	18.89	0.6
Marsh Drive	45.7	2122.23	1.68	53.5	2866.15	2.1
A6 East	0.1	11.11	0.1	0.1	13.47	0.1
Church Road	342.2	244241.1	60.3	599.9	19371.26	5.32



- 4.13.4 As indicated by **Table 24**, Junction 18 is forecasted to operate over both theoretical and practical capacity in all scenarios. There is significant queuing and delays on both Marsh Drive and Church Road with vehicles being unable to turn out on to the major road due to the high flow on the A6 in both directions.
- 4.13.5 AECOM's suggested PRTM mitigation to address this was a full signalisation of the staggered crossroads. The results of this scheme are presented in **Table 25**.

Table 25. Junction 18 (AECOM / PRTM mitigation)

	AM		PM	
	DoS (%)	MMQ (PCU)	DoS (%)	MMQ (PCU)
	2041 Core			
A6 West	74.40%	18.3	81.90%	24.7
Marsh Drive	15.10%	1	12.20%	0.9
A6 East	81.00%	18.3	81.10%	27
Church Road	79.20%	9.7	79.80%	15.6
2041 Pref				
A6 West	77.10%	20.5	79.10%	21.8
Marsh Drive	16.40%	1.2	13.40%	1
A6 East	81.80%	29.5	89.50%	33.1
Church Road	80.20%	10.6	88.80%	20.5

- 4.13.6 **Table 25** shows that AECOM's PRTM signalisation scheme mitigates the impact of the development and existing traffic flows, bringing all arms within their practical capacity for all scenarios. Consequently, **the impacts of HDC's Local Plan at Junction 18 can be mitigated through the signalisation of the junction**. The indicative design for this scheme is presented in **Appendix B**, and the estimated cost is presented in **Appendix C**.

4.14 Junction 19 – A6 Leicester Road / Wistow Road

- 4.14.1 The A6 Leicester Road / Wistow Road roundabout is located approximately 3.5km north of Market Harborough town centre. The existing layout is shown in **Figure 14**.



Figure 14. Junction 19: A6 Leicester Road / Wistow Road



- 4.14.2 A LinSig model was provided by LCC for this junction.
- 4.14.3 Two-way link flows were extracted from the PRTM strategic model for all arms of the junction and apportioned by OD flows extracted from the model SYSTRA were provided from LCC, as per the methodology outlined in **Section 2.1**. No physical changes were made to any of the geometry within the model.
- 4.14.4 The base model results are presented in **Table 26**.

Table 26. Junction 19: Base Model Results

	AM			PM		
	Queue (PCU)	Delay (s)	RFC	Queue (PCU)	Delay (s)	RFC
2041 Core						
A6 North	9.9	28.86	0.92	19.2	55.6	0.98
A6 South	5.9	14.55	0.85	7.9	20.66	0.90
Wistow Road	1.3	7.4	0.56	3.6	16.66	0.79
2041 Pref						
A6 North	14.7	42.05	0.95	13.2	38.47	0.95
A6 South	6	14.65	0.86	25.1	56.96	0.99
Wistow Road	1.6	8.65	0.62	2.2	12.28	0.69

- 4.14.5 As seen in **Table 26**, the junction is forecasted to operate over practical capacity (0.85) in both 2041 scenarios.



4.14.6 AECOM's previously identified mitigation from PRTM was to provide lane widening on all arms of the roundabout. SYSTRA has made slight increases to entry widths, approach half widths, and effective flare lanes on all arms, assumed to be:

- A6 North – approach half width increased to 4.5m, entry width increased to 7m, effective flares increased to 30m;
- A6 South – approach half width increased to 4.5m, entry width increased to 9m, effective flares increased to 24m; and,
- Wistow Road – approach half width increased to 4.5m, entry width increased to 8.5m, effective flares increased to 30m.

4.14.7 The results of the mitigation are presented in **Table 27**.

Table 27. Junction 19 (AECOM / PRTM mitigation)

	AM			PM		
	Queue (PCU)	Delay (s)	RFC	Queue (PCU)	Delay (s)	RFC
	2041 Core					
A6 North	3.2	8.88	0.75	4	11.35	0.8
A6 South	2	4.86	0.66	2.2	5.48	0.68
Wistow Road	0.9	5.17	0.47	1.9	8.65	0.66
2041 Preferred						
A6 North	3.7	10.24	0.78	3.5	9.76	0.78
A6 South	2	4.87	0.66	3.1	7.12	0.76
Wistow Road	1.1	5.76	0.52	1.4	7.59	0.58

4.14.8 As seen in **Table 27**, the increases to entry widths, approach half widths, and effective flare lanes on each of the arms is forecasted to make a significant difference to the performance of the junction with all arms within practical capacity.

4.14.9 Consequently, **the impacts of HDC's Local Plan at Junction 19 can be mitigated through the mitigation scheme summarised in section 4.13.6**. The indicative design for this scheme is presented in **Appendix B**, and the estimated cost is presented in **Appendix C**.

4.15 Junction 20 – A6/Station Road (Archers Roundabout)

4.15.1 The A6 / Station Road roundabout is located on the southern boundary of Great Glen, approximately 10km to the south east of Leicester. The existing layout is shown in **Figure 15**.



Figure 15. Junction 20: A6 / Station Road



- 4.15.2 The base model geometry was sourced from 'Transport Assessment Appendix K – Capacity Assessment' dated (12/11/2025) from the Harborough District Council Planning Portal, reference number: (25/01564/OUT). There were no changes made to any of the geometry.
- 4.15.3 Two-way link flows were extracted from the PRTM strategic model for all arms of the junction and apportioned by OD flows extracted from the above TA Appendix, as per the methodology outlined in **Section 2.1**.
- 4.15.4 The base model results are presented in **Table 28**.

Table 28. Junction 20: Base Model results

	AM			PM		
	Queue (PCU)	Delay (s)	RFC	Queue (PCU)	Delay (s)	RFC
	2041 Core					
A6 East	2.7	8.59	0.72	5.7	15.42	0.86
Station Road South	2.2	10.98	0.69	14.2	54.36	0.96
A6 West	2.8	8.33	0.74	2.9	9.19	0.74
Station Road North	2.5	13.21	0.72	1.7	10	0.63
2041 Pref						
A6 East	3.4	10.83	0.77	12.8	32.49	0.94
Station Road South	3.6	16.47	0.79	57.8	173.09	1.1
A6 West	3.3	9.61	0.77	3	9.71	0.75
Station Road North	10.1	44.32	0.93	2.5	13.32	0.72



- 4.15.5 **Table 28** highlights that there are significant delays and queues on multiple arms of the junction. Station Road South experiences the worst delay (173.09s), and queuing (57.8 PCU) in the 2041 Pref PM scenario. It is clear that the Local Plan's traffic flows worsen the operation of the junction and create a need for mitigation.
- 4.15.6 AECOM's previously identified mitigation from PRTM was to fully signalise the roundabout, as well as lane widening on one of the arms (assumed to be Station Road South – 5PCU flare lane). The results of LinSig model after mitigation are presented in **Table 29**.

Table 29. Junction 20: After Mitigation results

	AM		PM	
	DoS (%)	MMQ (PCU)	DoS (%)	MMQ (PCU)
	2041 Core			
A6 East	59.40%	11.2	73.90%	15.9
Station Road South	69.70%	11.2	78.90%	17.4
A6 West	57%	11	63.60%	11.8
Station Road North	70.00%	12.8	68.20%	10.6
2041 Pref				
A6 East	61.40%	7.9	78.00%	12.1
Station Road South	79.40%	9.3	88.90%	16.2
A6 West	64.60%	8.8	69.10%	8.6
Station Road North	81.90%	12.5	71.70%	8

- 4.15.7 As seen in **Table 29**, signalising the roundabout (and adding a 5 PCU flare on Station Road South) has made a significant difference to the performance of the junction with all arms forecasted to operate within practical capacity.
- 4.15.8 Consequently, **the impacts of HDC's Local Plan at Junction 20 can be mitigated through junction signalisation and lane widening on Station Road South**. The indicative design for this scheme is presented in **Appendix B**, and the estimated cost is presented in **Appendix C**.

4.16 Junction 21 – B41114 Coventry Road / B581 Coventry Road

- 4.16.1 The B41114 Coventry Road / B581 Coventry Road signalised junction is located on the southern boundary of Great Glen, approximately 10km to the south east of Leicester. The existing layout is shown in **Figure 16** below.



Figure 16. Junction 21: B41114 Coventry Road / B581 Coventry Road



4.16.2 The base model geometry was built from Drawing F18027/03 C and modelled as a T-junction as per 'TA Addendum Appendix G dated 31/05/19' from the Harborough District Council Planning Portal, reference number: 19/00856/OUT. Two-way link flows were extracted from the PRTM strategic model for all arms of the junction and apportioned by OD flows extracted from the above TA Appendix, as per the methodology outlined in **Section 2.1**. The base model results from LinSig are indicated by **Table 30**.

Table 30. Junction 21: Base Model results

	AM		PM	
	DoS (%)	MMQ (PCU)	DoS (%)	MMQ (PCU)
	2041 Core			
B4114 North	75.5%	9.7	70.30%	8.1
B581	73%	6.9	70.80%	8.6
B4114 South	74.10%	7.4	64.40%	6.6
2041 Pref				
B4114 North	77.00%	10	73.60%	8.5
B581	77.90%	7.6	68.40%	8.9
B4114 South	75.20%	7.6	67.70%	6.8

4.16.3 As shown in **Table 30**, the B4114 / B581 junction is forecasted to operate within capacity on all arms for all scenarios.

4.16.4 The previously identified mitigation from PRTM was to provide lane widening on one or more arms of the junction, in this case the following was carried out:



- All lanes on all arms were widened to 3.5m

4.16.5 The results of LinSig model after mitigation are presented in **Table 31**.

Table 31. Junction 21 (AECOM / PRTM mitigation)

	AM		PM	
	DoS (%)	MMQ (PCU)	DoS (%)	MMQ (PCU)
	2041 Core			
B4114 North	75.30%	9.7	71.50%	8.1
B581	72%	6.9	69.90%	8.2
B4114 South	72.20%	7.2	62.60%	6.5
2041 Pref				
B4114 North	76.60%	12.9	75.60%	11.2
B581	77.00%	11.6	74.70%	12.7
B4114 South	77.10%	10.8	67.90%	9.4

4.16.6 The results presented in **Table 31** demonstrate that the implementation of AECOM's PRTM mitigation scheme would have an immaterial impact in terms of improving the operation of Junction 21. Furthermore, as shown in **Table 30**, the junction is forecasted to operate within capacity in both 2041 scenarios and the impact of the HDC Local Plan is not forecasted to materially change the operation of the junction. Consequently, **it is clear that the mitigation identified by AECOM through the PRTM is not required to mitigate the impact of the HDC Local Plan.**

4.17 Junction 23 – B581 Broughton Way / Cosby Road

4.17.1 The B581 Broughton Way / Cosby Road signalised crossroads is located in north Primethorpe. The existing layout is shown in **Figure 17**.



Figure 17. Junction 23: B581 Broughton Way / Cosby Road



4.17.2 A LinSig model was provided by LCC for this junction. Two-way link flows were extracted from the PRTM strategic model for all arms of the junction and apportioned by OD flows extracted from the model SYSTRA were provided from LCC, as per the methodology outlined in Section 2.1.

4.17.3 The base model results are presented in **Table 32**.

Table 32. Junction 23: Base Model results

	AM		PM	
	DoS (%)	MMQ (PCU)	DoS (%)	MMQ (PCU)
	2041 Core			
Broughton Way East	54.60%	7.6	40.00%	5.5
Broughton Way West	53.80%	6.8	65.00%	12.7
Cosby Road North	41.40%	4.2	53.80%	7
Cosby Road South	52.80%	3.7	64.20%	6
2041 Pref				
Broughton Way East	58.50%	8.4	44.40%	6.1
Broughton Way West	58.00%	7.7	70.10%	13.1
Cosby Road North	40.80%	5	56.30%	7.2
Cosby Road South	58.70%	5	69.30%	6.4

4.17.4 As shown in **Table 32**, the B581 Broughton Way / Cosby Road junction works within capacity on all arms for all scenarios.

4.17.5 The previously identified mitigation from PRTM was to provide lane widening on one or more arms of the roundabout, in this case the following was carried out:

- All lanes on all arms were widened to 3.5m



4.17.6 The results of LinSig model after mitigation are indicated by **Table 33** below.

Table 33. Junction 23 (AECOM / PRTM mitigation)

	AM		PM	
	DoS (%)	MMQ (PCU)	DoS (%)	MMQ (PCU)
	2041 Core			
Broughton Way East	52.60%	7.4	38.60%	5.6
Broughton Way West	51.50%	6.7	62.60%	12.6
Cosby Road North	40.80%	4.2	52.20%	6.9
Cosby Road South	52.10%	3.7	61.90%	5.8
2041 Pref				
Broughton Way East	56.30%	7.9	42.80%	6.7
Broughton Way West	57.90%	7.9	67.20%	12.2
Cosby Road North	40.20%	5.6	54.50%	7.1
Cosby Road South	58.00%	5.6	67.10%	6.3

4.17.7 The results presented in **Table 33** demonstrate that the implementation of AECOM's PRTM mitigation scheme would have an immaterial impact in terms of improving the operation of Junction 23. Furthermore, as shown in **Table 32**, the junction is forecasted to operate within capacity in both 2041 scenarios and the impact of the HDC Local Plan is not forecasted to materially change the operation of the junction. Consequently, **it is clear that the mitigation identified by AECOM through the PRTM is not required to mitigate the impact of the HDC Local Plan.**

4.18 Junction 24 – B582 / Manor Road / Manor Road Extension

4.18.1 The B582 / Manor Road / Manor Road Extension is a double mini roundabout, which is located at the north eastern boundary of Oadby. The location is shown in **Figure 18** below.



Figure 18. Junction 24: B582 / Manor Road / Manor Road Extension



- 4.18.2 The base model geometry was sourced from 'Transport Assessment Addendum Appendix 13 – ARCADY Output – B582 Stoughton Road/Manor Road/Manor Road Extension' dated (07/02/19) from the Oadby and Wigston Borough Council Planning Portal, reference number: 18/00178/OUT. The only change SYSTRA made was by modelling as "Closely Spaced" junctions as recommended in the Junctions 11 user guide.
- 4.18.3 Two-way link flows were extracted from the PRTM strategic model for all arms of the junction and apportioned by OD flows extracted from the above TA Appendix, as per the methodology outlined in **Section 2.1**.



4.18.4 The base model results are presented in **Table 34**.

Table 34. Junction 24: Base Model results

	AM			PM		
	Queue (PCU)	Delay (s)	RFC	Queue (PCU)	Delay (s)	RFC
	2041 Core					
Northern Mini - 1 - Manor Road	0.2	6.41	0.17	1.5	14.57	0.6
Northern Mini - 2 - Stoughton Road (N)	9.1	42.05	0.92	10.9	56.82	0.94
Northern Mini - 3 - Internal	0	7.61	0.64	0	11.67	0.72
Southern Mini - 1 - Internal	0	10.05	0.72	0	20.72	0.89
Southern Mini - 2 - Manor Road Extension	0.8	9.29	0.46	0.5	9.54	0.32
Southern Mini - 3 - Stoughton Road (S)	1.8	13.21	0.65	4.6	28.96	0.84
2041 Pref						
Northern Mini - 1 - Manor Road	0.6	8.67	0.36	11.7	79.68	0.97
Northern Mini - 2 - Stoughton Road (N)	113.7	473.1	1.24	94.9	468.94	1.25
Northern Mini - 3 - Internal	0	8.69	0.69	0	16.23	0.81
Southern Mini - 1 - Internal	0	14.53	0.82	0	36.58	0.99
Southern Mini - 2 - Manor Road Extension	1.3	12.06	0.56	0.8	12.49	0.44
Southern Mini - 3 - Stoughton Road (S)	2.2	15.79	0.7	12.4	70.34	0.96

4.18.5 As indicated by **Table 34**, the double mini roundabout is forecasted to be significantly over capacity for both the AM and PM period for the 2041 Preferred scenario. The Stoughton Road arm has an RFC of 1.24, and queues of up to 113.7 PCU.

4.18.6 AECOM's suggested mitigation from PRTM was the creation of a signalised crossroads. The LinSig results for this signalised junction are presented in **Table 35**.

Table 35. Junction 24 (AECOM / PRTM mitigation)

	AM		PM	
	DoS (%)	MMQ (PCU)	DoS (%)	MMQ (PCU)
	2041 Core			
Stoughton Road North	76.50%	20.5	77.40%	20.1
Manor Road Extension	76.90%	11	76.40%	6.5
Stoughton Road South	39.60%	7.8	52.80%	11.9
Manor Road	72.10%	4.5	76.90%	12.1
2041 Pref				
Stoughton Road North	100.40%	47.2	99.40%	38.6
Manor Road Extension	96.20%	17.8	97.20%	24.6
Stoughton Road South	42.60%	8.7	62.90%	15.1
Manor Road	96.90%	12.8	97.90%	12.8

4.18.7 **Table 35** shows that all arms, with the exception of the Stoughton Road from the north (100.4%), are forecasted to operate within theoretical capacity with the AECOM/PRTM mitigation. However, for the 2041 Preferred scenario, three of the four arms are over practical capacity.

Further Mitigation

4.18.8 SYSTRA would suggest that the stage sequencing is revised to allow both Manor Road arms to run simultaneously. In the suggested mitigation they are running separately and



the junction is losing green time every cycle. The results of the rearranged staging is presented in **Table 36**.

Table 36. Junction 24 (SYSTRA mitigation)

	AM		PM	
	DoS (%)	MMQ (PCU)	DoS (%)	MMQ (PCU)
	2041 Core			
Stoughton Road North	67.10%	16.8	66.70%	16.8
Manor Road Extension	65.80%	9.9	46.80%	4.3
Stoughton Road South	35.40%	6.2	46.50%	9.8
Manor Road	26.00%	3	65.30%	10.9
2041 Pref				
Stoughton Road North	85.90%	28	84.50%	24.9
Manor Road Extension	84.10%	13.2	85.00%	7.4
Stoughton Road South	37.40%	6.9	54.90%	12.7
Manor Road	50.20%	6.7	84.40%	18

4.18.9 As indicated by **Table 36**, the results of the rearranged staging allow the junction to operate within capacity. The highest DoS anticipated is 85.9% on the Stoughton Road arm from the north, during the 2041 Pref AM peak scenario.

4.18.10 Consequently, the impacts of HDC's Local Plan at Junction 24 can be mitigated through the creation of a signalised crossroads (with stage sequencing revised to allow both Manor Road arms to run simultaneously). The indicative design for this scheme is presented in **Appendix B**, and the estimated cost is presented in **Appendix C**.

4.19 Junction 25 – B582 Gartree Road / Gartree Road

4.19.1 The B582 Gartree Road / Gartree Road roundabout, which is located at the eastern boundary of Leicester. The existing layout is shown in **Figure 19**.

Figure 19. Junction 25: B582 Gartree Road / Gartree Road / A582





- 4.19.2 The base model geometry was sourced from 'Transport Assessment Addendum Appendix 11 – ARCADY Output – B582 Gartree Road/Stoughton Drive South' dated (07/02/19) from the Oadby and Wigston Borough Council Planning Portal, reference number: 18/00178/OUT. The only change SYSTRA made was by modelling as "Closely Spaced" junctions.
- 4.19.3 Two-way link flows were extracted from the PRTM strategic model for all arms of the junction and apportioned by OD flows extracted from the above TA Appendix, as per the methodology outlined in **Section 2.1**.
- 4.19.4 **Table 37** presents the results of the base model.

Table 37. Junction 25: Base Model results

	AM			PM		
	Queue (PCU)	Delay (s)	RFC	Queue (PCU)	Delay (s)	RFC
	2041 Core					
Gartree Road East	77.3	305.32	1.18	35.2	147.61	1.06
Stoughton Drive South	3.7	19.02	0.79	6.2	29.41	0.87
Gartree Road West	1.9	10.99	0.67	4.3	21.45	0.82
2041 Pref						
Gartree Road East	128.7	571.01	1.31	112.9	482	1.26
Stoughton Drive South	7.9	36.82	0.9	14.3	61.72	0.97
Gartree Road West	2.4	13.07	0.71	3.5	18.56	0.79

- 4.19.5 As indicated by **Table 37**, the B582/ Gartree Road roundabout is forecasted to operate over capacity for both the AM and PM period for the 2041 Core and 2041 Preferred scenario. The Gartree Road East arm has an RFC of 1.31, and queues of up to 128.7 PCU.
- 4.19.6 AECOM's suggested mitigation from the PRTM was a full signalisation of the roundabout. A new model was built in LinSig, and the results are presented in **Table 38**.

Table 38. Junction 25 (AECOM / PRTM mitigation)

	AM		PM	
	DoS (%)	MMQ (PCU)	DoS (%)	MMQ (PCU)
	2041 Core			
Gartree Road East	88.80%	20.1	86.90%	19.9
Stoughton Drive South	89%	17.3	85.30%	19.2
Gartree Road West	64.40%	10.9	81.80%	17.2
2041 Pref				
Gartree Road East	92.30%	32.7	100.10%	37.5
Stoughton Drive South	92.20%	28.8	98.60%	31.4
Gartree Road West	64.80%	16.4	73.20%	14.6

- 4.19.7 **Table 38** shows that with the scheme, for the 2041 Core scenario the junction is forecasted to operate within capacity for both the AM Peak and the PM peak. However, for the 2041 Preferred scenario, the junction is only within capacity in the AM peak, and the Gartree Road East arm is above practical capacity (100.1%) in PM peak period.



Further Mitigation

- 4.19.8 As the junction is still over capacity further mitigation is recommended to allow the junction to operate safely and efficiently. The introduction of a 50m flare lane on Gartree Road, east of the junction allows a higher saturation flow to move through the junction.
- 4.19.9 The results of this scheme are presented in **Table 39**.

Table 39. Junction 25 (SYSTRA mitigation)

	AM		PM	
	DoS (%)	MMQ (PCU)	DoS (%)	MMQ (PCU)
	2041 Core			
Gartree Road East	77.80%	12.9	73.40%	10.7
Stoughton Drive South	77%	17	81.80%	19.8
Gartree Road West	67.70%	14	82.30%	19
2041 Pref				
Gartree Road East	86.10%	17.3	89.00%	19.5
Stoughton Drive South	85.80%	21.6	89.70%	24.4
Gartree Road West	72.80%	15.4	77.40%	16.9

- 4.19.10 As indicated by **Table 39**, the results of the signalisation and flare on Gartree Road allow the junction to operate within capacity in the 2041 Preferred Scenario.
- 4.19.11 Consequently, **the impacts of HDC's Local Plan at Junction 25 can be mitigated through the signalisation of the roundabout, combined with a 50m flare lane on Gartree Road.** The indicative design for this scheme is presented in **Appendix B**, and the estimated cost is presented in **Appendix C**.

4.20 Junction 26 – B6047/Leicester Lane/Gallow Field Road

- 4.20.1 The B6047/Leicester Lane/Gallow Field Road, which is located to the north of Market Harborough. The existing layout is shown in **Figure 20**.

Figure 20. Junction 26: B6047/Leicester Lane/Gallow Field Road





- 4.20.2 In the absence of a model from a previously approved application, the base model in this case was built by SYSTRA in Junctions 11 as an uncontrolled staggered crossroads. This model has been built in accordance with the Junctions 11 user guide. Geometric parameters were measured from ariel mapping in order to build the model.
- 4.20.3 Two-way link flows were extracted from the PRTM strategic model for all arms of the junction and apportioned by OD flows extracted from a Junction Turning Count (JTC) survey (carried out by LCC on 21/05/2024), as per the methodology outlined in **Section 2.1**.
- 4.20.4 The results of the base model are indicated by **Table 40**.

Table 40. Junction 26: Base Model results

	AM			PM		
	Queue (PCU)	Delay (s)	RFC	Queue (PCU)	Delay (s)	RFC
	2041 Core					
Leicester Lane	156	2744.62	2.67	121.1	2768.29	3.03
B6047 North	0.5	12.99	0.33	0.4	12.16	0.27
Gallow Field Road	46.5	1732.88	1E+10	96.4	3453.7	4.08
B6047 South	0	8.34	0.04	0	7.64	0.04
2041 Pref						
Leicester Lane	371.9	22941.99	1E+10	355.9	59999940	1E+10
B6047 North	0.5	12.86	0.34	0.4	13.3	0.3
Gallow Field Road	207.1	59999940	1E+10	257.4	59999940	1E+10
B6047 South	0	8.49	0.05	0	8.02	0.04

- 4.20.5 As seen in **Table 40**, the junction is forecasted to operate significantly over capacity for all scenarios.
- 4.20.6 AECOM's mitigation from the PRTM was to signalise the crossroads. The results of the signalisation are shown in **Table 41**.

Table 41. Junction 26 (AECOM / PRTM mitigation)

	AM		PM	
	DoS (%)	MMQ (PCU)	DoS (%)	MMQ (PCU)
	2041 Core			
Leicester Lane	104.20%	24.7	113.90%	29.8
B6047 North	100.10%	39.1	76.30%	22.4
Gallow Field Road	102.60%	11.4	117.70%	39.9
B6047 South	107.80%	86.9	116.70%	130.3
2041 Pref				
Leicester Lane	122.10%	53.6	127.10%	55.11
B6047 North	93.80%	38.5	85.90%	28.6
Gallow Field Road	120.00%	43.1	125.50%	51.8
B6047 South	122.90%	148.9	128.70%	187.1



4.20.7 **Table 41** indicates that even after signalisation, the junctions is still forecasted to operate over capacity.

Further Mitigation

4.20.8 SYSTRA would suggest further mitigation is required to ensure the junction works within capacity. The following changes were made to the LinSig model:

- Lane width on B6047 north increased by 1m from 3.5m to 4.5m;
- Lane width on B6047 north increased by 1m from 3.5m to 4.5m;
- Flare lane extended on B6047 north from 2pcu to 6pcu;
- Flare lane extended on B6047 south from 4pcu to 6pcu;
- 50m flare lane added to Gallow field Road;
- 50m flare lane added to Leicester Lane; and
- Gallow field Road and Leicester Lane arms running simultaneously, opposed to running separately.

4.20.9 The results of the updated model are indicated by **Table 42**.

Table 42. Junction 26 (SYSTRA mitigation)

	AM		PM	
	DoS (%)	MMQ (PCU)	DoS (%)	MMQ (PCU)
	2041 Core			
Leicester Lane	82.20%	9.7	80.20%	8.3
B6047 North	63.90%	14.6	56.20%	10.8
Gallow Field Road	33.80%	2.4	66.30%	7
B6047 South	82.00%	29.1	81.60%	29
2041 Pref				
Leicester Lane	83.40%	11.1	87.10%	11.4
B6047 North	68.50%	17.7	63.40%	14.7
Gallow Field Road	67.20%	6.1	62.50%	7.1
B6047 South	84.70%	31.2	89.90%	37.4

4.20.10 **Table 42** indicates that the recommended mitigation would ensure that the junction can operate within practical capacity.

4.20.11 The indicative design for this scheme is presented in **Appendix B**, and the estimated cost is presented in **Appendix C**. SYSTRA would, however, welcome a discussion on the preferred mitigation layout at this location, as we understand from the Scoping Workshop that emerging development proposals are assessing this junction; and there are site allocations located in close proximity which may influence the scheme design. Furthermore, there may be a need to discuss the landownership for the junction, given the likelihood that third party land may be need for scheme delivery.



5. SUMMARY AND CONCLUSION

5.1 Summary

5.1.1 This report assesses whether forecast 2041 Local Plan growth in Harborough District can be accommodated on the local road network and, where necessary, mitigated through junction improvements. It uses stand-alone modelling of 18 junctions, drawing on PRTM flows, turning count data and, in some cases, TomTom data.

5.1.2 Overall, the assessment shows that several junctions are expected to continue operating acceptably without mitigation, while others require targeted interventions such as signalisation, lane widening, flare improvements, or signal staging optimisation. In most cases, the report finds that suitable and proportionate mitigation can be identified to address Local Plan impacts.

5.2 Conclusion

5.2.1 The HDC Local Plan is deliverable on the local road network, because the impacts at most assessed junctions can either be accommodated without change or mitigated through feasible improvement measures. The only exception (at the time of writing) is Junction 17, where the tested AECOM/PRTM mitigation is forecasted to be insufficient and further discussion or revised modelling is needed.



Appendix A: Junction modelling outputs

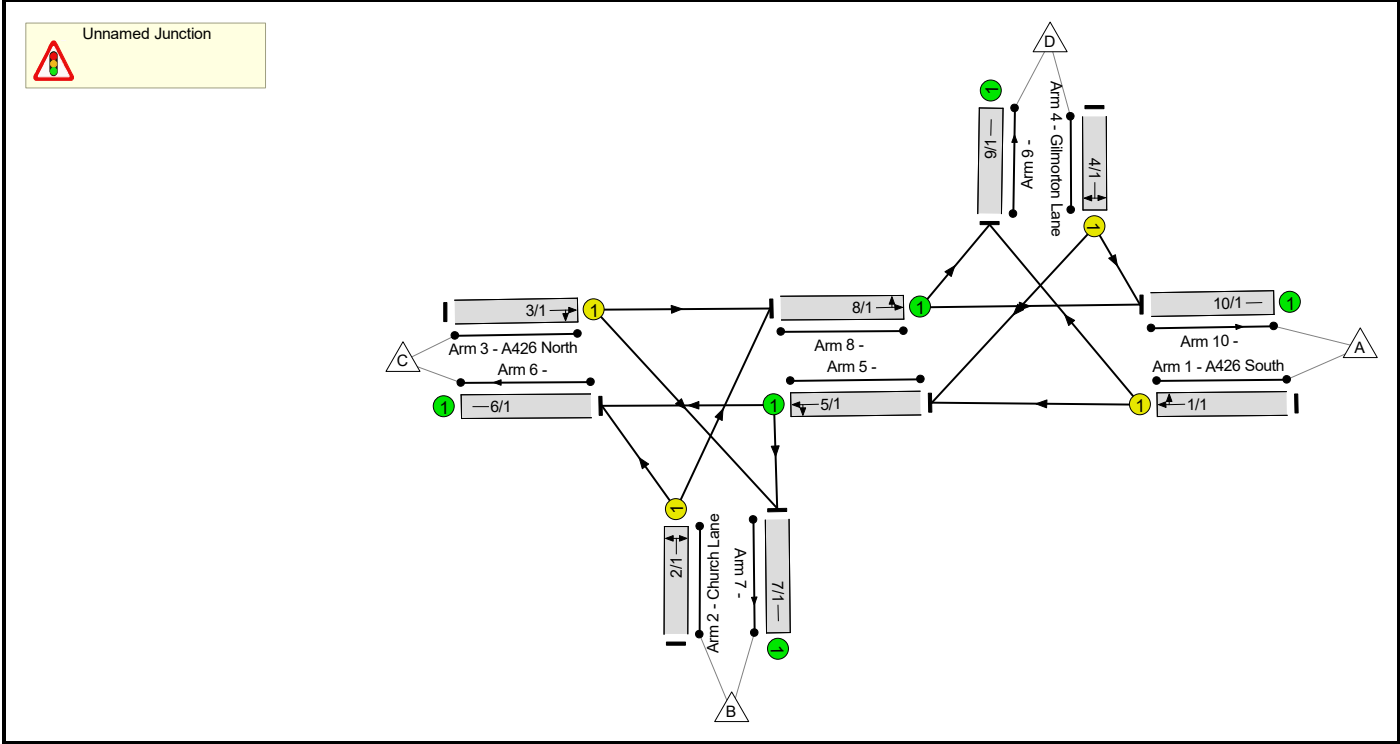
Full Input Data And Results

Full Input Data And Results

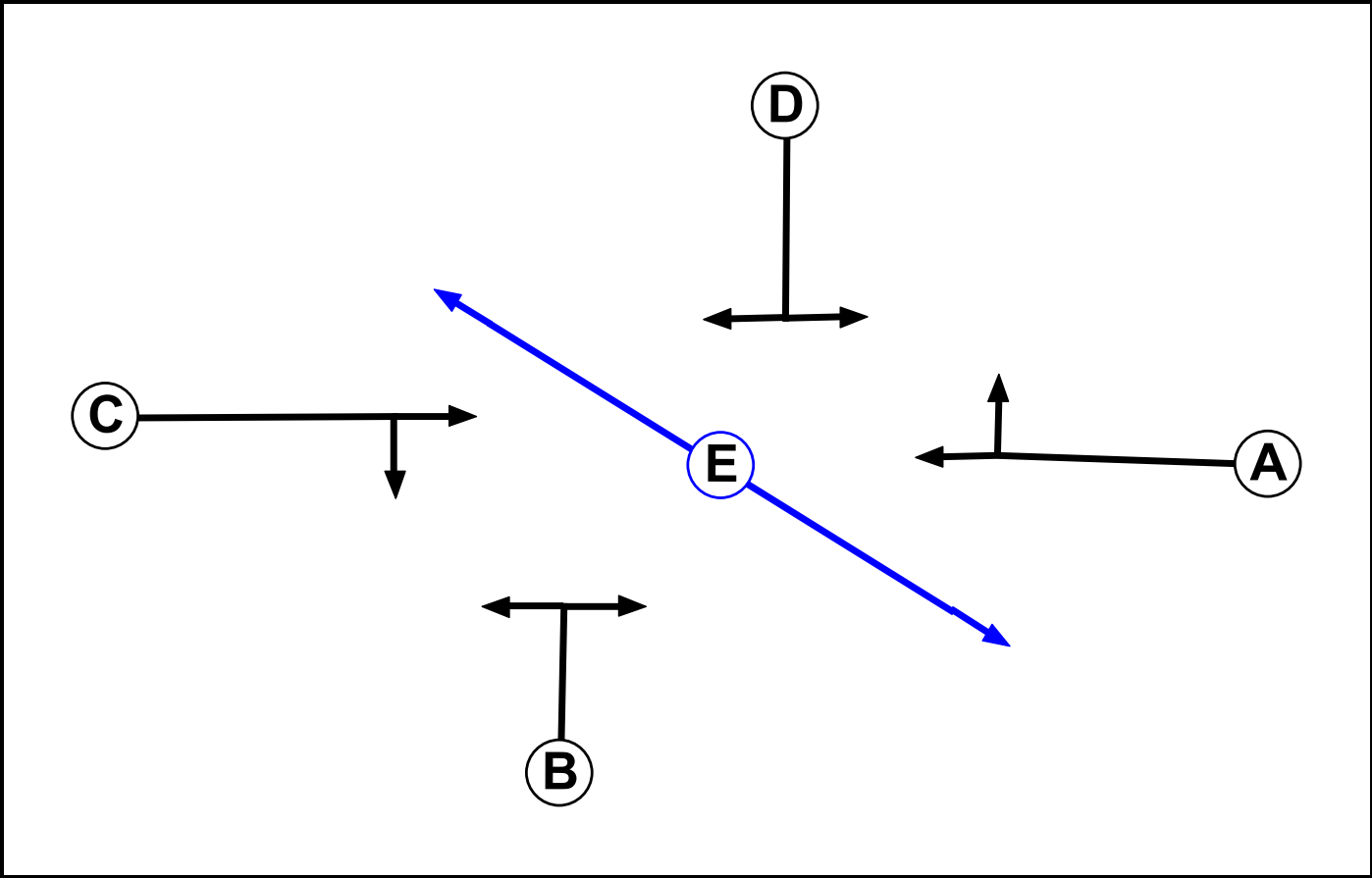
User and Project Details

Project:	
Title:	
Location:	
Additional detail:	
File name:	A426_Gilmorton Lane.lsg3x
Author:	
Company:	
Address:	

Network Layout Diagram



Phase Diagram



Phase Input Data

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

Full Input Data And Results

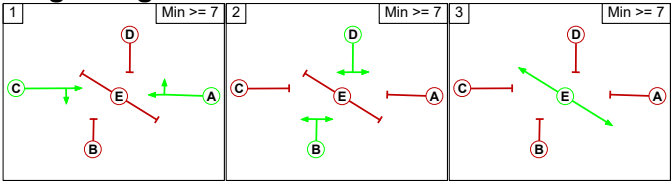
Phase Intergreens Matrix

Terminating Phase	Starting Phase					
		A	B	C	D	E
	A		11	-	6	-
	B	-		-	-	10
	C	-	6		11	-
	D	-	-	-		10
	E	7	-	7	-	

Phases in Stage

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

Stage Diagram



Phase Delays

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

Prohibited Stage Change

From Stage	To Stage			
		1	2	3
	1		11	0
	2	2		10
	3	7	2	

Full Input Data And Results

Give-Way Lane Input Data

Junction: Unnamed Junction
There are no Opposed Lanes in this Junction

Full Input Data And Results

Lane Input Data

Junction: Unnamed Junction												
Lane	Lane Type	Phases	Start Disp.	End Disp.	Physical Length (PCU)	Sat Flow Type	Def User Saturation Flow (PCU/Hr)	Lane Width (m)	Gradient	Nearside Lane	Turns	Turning Radius (m)
1/1 (A426 South)	U	A	2	3	60.0	Geom	-	3.25	0.00	Y	Arm 5 Ahead	Inf
											Arm 9 Right	Inf
2/1 (Church Lane)	U	B	2	3	60.0	Geom	-	3.00	0.00	Y	Arm 6 Left	16.00
											Arm 8 Right	Inf
3/1 (A426 North)	U	C	2	3	60.0	Geom	-	3.40	0.00	Y	Arm 7 Right	Inf
											Arm 8 Ahead	Inf
4/1 (Gilmorton Lane)	U	D	2	3	60.0	Geom	-	3.50	0.00	Y	Arm 5 Right	Inf
											Arm 10 Left	20.00
5/1	U		2	3	3.5	Geom	-	3.50	0.00	Y	Arm 6 Ahead	Inf
											Arm 7 Left	Inf
6/1	U		2	3	60.0	Inf	-	-	-	-	-	-
7/1	U		2	3	60.0	Inf	-	-	-	-	-	-
8/1	U		2	3	3.5	Inf	-	-	-	-	-	-
9/1	U		2	3	60.0	Inf	-	-	-	-	-	-
10/1	U		2	3	60.0	Inf	-	-	-	-	-	-

Traffic Flow Groups

Flow Group	Start Time	End Time	Duration	Formula
1: '2041 Core AM'	08:00	09:00	01:00	
2: '2041 Core PM'	17:00	18:00	01:00	
3: '2041 Pref AM'	08:00	09:00	01:00	
4: '2041 Pref PM'	17:00	18:00	01:00	

Scenario 1: '2041 Core AM' (FG1: '2041 Core AM', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired

Desired Flow :

	Destination					
Origin		A	B	C	D	Tot.
	A	0	46	595	1	642
	B	123	0	28	21	172
	C	917	16	0	37	970
	D	15	47	196	0	258
	Tot.	1055	109	819	59	2042

Traffic Lane Flows

Lane	Scenario 1: 2041 Core AM
Junction: Unnamed Junction	
1/1	642
2/1	172
3/1	970
4/1	258
5/1	884
6/1	819
7/1	109
8/1	1098
9/1	59
10/1	1055

Lane Saturation Flows

Junction: Unnamed Junction								
Lane	Lane Width (m)	Gradient	Nearside Lane	Allowed Turns	Turning Radius (m)	Turning Prop.	Sat Flow (PCU/Hr)	Flared Sat Flow (PCU/Hr)
1/1 (A426 South)	3.25	0.00	Y	Arm 5 Ahead	Inf	99.8 %	1940	1940
				Arm 9 Right	Inf	0.2 %		
2/1 (Church Lane)	3.00	0.00	Y	Arm 6 Left	16.00	16.3 %	1886	1886
				Arm 8 Right	Inf	83.7 %		
3/1 (A426 North)	3.40	0.00	Y	Arm 7 Right	Inf	1.6 %	1955	1955
				Arm 8 Ahead	Inf	98.4 %		
4/1 (Gilmorton Lane)	3.50	0.00	Y	Arm 5 Right	Inf	94.2 %	1956	1956
				Arm 10 Left	20.00	5.8 %		
5/1	3.50	0.00	Y	Arm 6 Ahead	Inf	89.5 %	1965	1965
				Arm 7 Left	Inf	10.5 %		
6/1	Infinite Saturation Flow						Inf	Inf
7/1	Infinite Saturation Flow						Inf	Inf
8/1	Infinite Saturation Flow						Inf	Inf
9/1	Infinite Saturation Flow						Inf	Inf
10/1	Infinite Saturation Flow						Inf	Inf

Scenario 2: '2041 Core PM' (FG2: '2041 Core PM', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired

Desired Flow :

	Destination					
	A	B	C	D	Tot.	
Origin	A	0	111	570	3	684
	B	62	0	9	21	92
	C	886	24	0	79	989
	D	25	181	251	0	457
	Tot.	973	316	830	103	2222

Traffic Lane Flows

Lane	Scenario 2: 2041 Core PM
Junction: Unnamed Junction	
1/1	684
2/1	92
3/1	989
4/1	457
5/1	1113
6/1	830
7/1	316
8/1	1048
9/1	103
10/1	973

Lane Saturation Flows

Junction: Unnamed Junction								
Lane	Lane Width (m)	Gradient	Nearside Lane	Allowed Turns	Turning Radius (m)	Turning Prop.	Sat Flow (PCU/Hr)	Flared Sat Flow (PCU/Hr)
1/1 (A426 South)	3.25	0.00	Y	Arm 5 Ahead	Inf	99.6 %	1940	1940
				Arm 9 Right	Inf	0.4 %		
2/1 (Church Lane)	3.00	0.00	Y	Arm 6 Left	16.00	9.8 %	1898	1898
				Arm 8 Right	Inf	90.2 %		
3/1 (A426 North)	3.40	0.00	Y	Arm 7 Right	Inf	2.4 %	1955	1955
				Arm 8 Ahead	Inf	97.6 %		
4/1 (Gilmorton Lane)	3.50	0.00	Y	Arm 5 Right	Inf	94.5 %	1957	1957
				Arm 10 Left	20.00	5.5 %		
5/1	3.50	0.00	Y	Arm 6 Ahead	Inf	73.8 %	1965	1965
				Arm 7 Left	Inf	26.2 %		
6/1	Infinite Saturation Flow					Inf	Inf	
7/1	Infinite Saturation Flow					Inf	Inf	
8/1	Infinite Saturation Flow					Inf	Inf	
9/1	Infinite Saturation Flow					Inf	Inf	
10/1	Infinite Saturation Flow					Inf	Inf	

Full Input Data And Results

Scenario 3: '2041 Pref AM' (FG3: '2041 Pref AM', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired

Desired Flow :

	Destination					
Origin		A	B	C	D	Tot.
	A	0	47	618	1	666
	B	234	0	54	40	328
	C	923	16	0	38	977
	D	19	58	243	0	320
	Tot.	1176	121	915	79	2291

Traffic Lane Flows

Lane	Scenario 3: 2041 Pref AM
Junction: Unnamed Junction	
1/1	666
2/1	328
3/1	977
4/1	320
5/1	966
6/1	915
7/1	121
8/1	1235
9/1	79
10/1	1176

Lane Saturation Flows

Junction: Unnamed Junction								
Lane	Lane Width (m)	Gradient	Nearside Lane	Allowed Turns	Turning Radius (m)	Turning Prop.	Sat Flow (PCU/Hr)	Flared Sat Flow (PCU/Hr)
1/1 (A426 South)	3.25	0.00	Y	Arm 5 Ahead	Inf	99.8 %	1940	1940
				Arm 9 Right	Inf	0.2 %		
2/1 (Church Lane)	3.00	0.00	Y	Arm 6 Left	16.00	16.5 %	1886	1886
				Arm 8 Right	Inf	83.5 %		
3/1 (A426 North)	3.40	0.00	Y	Arm 7 Right	Inf	1.6 %	1955	1955
				Arm 8 Ahead	Inf	98.4 %		
4/1 (Gilmorton Lane)	3.50	0.00	Y	Arm 5 Right	Inf	94.1 %	1956	1956
				Arm 10 Left	20.00	5.9 %		
5/1	3.50	0.00	Y	Arm 6 Ahead	Inf	89.1 %	1965	1965
				Arm 7 Left	Inf	10.9 %		
6/1	Infinite Saturation Flow						Inf	Inf
7/1	Infinite Saturation Flow						Inf	Inf
8/1	Infinite Saturation Flow						Inf	Inf
9/1	Infinite Saturation Flow						Inf	Inf
10/1	Infinite Saturation Flow						Inf	Inf

Scenario 4: '2041 Pref PM' (FG4: '2041 Pref PM', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired

Desired Flow :

	Destination					
	A	B	C	D	Tot.	
Origin	A	0	111	570	3	684
	B	70	0	11	24	105
	C	921	25	0	82	1028
	D	26	188	261	0	475
	Tot.	1017	324	842	109	2292

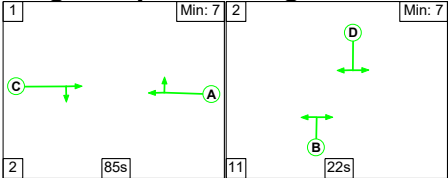
Traffic Lane Flows

Lane	Scenario 4: 2041 Pref PM
Junction: Unnamed Junction	
1/1	684
2/1	105
3/1	1028
4/1	475
5/1	1130
6/1	842
7/1	324
8/1	1097
9/1	109
10/1	1017

Lane Saturation Flows

Junction: Unnamed Junction								
Lane	Lane Width (m)	Gradient	Nearside Lane	Allowed Turns	Turning Radius (m)	Turning Prop.	Sat Flow (PCU/Hr)	Flared Sat Flow (PCU/Hr)
1/1 (A426 South)	3.25	0.00	Y	Arm 5 Ahead	Inf	99.6 %	1940	1940
				Arm 9 Right	Inf	0.4 %		
2/1 (Church Lane)	3.00	0.00	Y	Arm 6 Left	16.00	10.5 %	1896	1896
				Arm 8 Right	Inf	89.5 %		
3/1 (A426 North)	3.40	0.00	Y	Arm 7 Right	Inf	2.4 %	1955	1955
				Arm 8 Ahead	Inf	97.6 %		
4/1 (Gilmorton Lane)	3.50	0.00	Y	Arm 5 Right	Inf	94.5 %	1957	1957
				Arm 10 Left	20.00	5.5 %		
5/1	3.50	0.00	Y	Arm 6 Ahead	Inf	73.5 %	1965	1965
				Arm 7 Left	Inf	26.5 %		
6/1	Infinite Saturation Flow						Inf	Inf
7/1	Infinite Saturation Flow						Inf	Inf
8/1	Infinite Saturation Flow						Inf	Inf
9/1	Infinite Saturation Flow						Inf	Inf
10/1	Infinite Saturation Flow						Inf	Inf

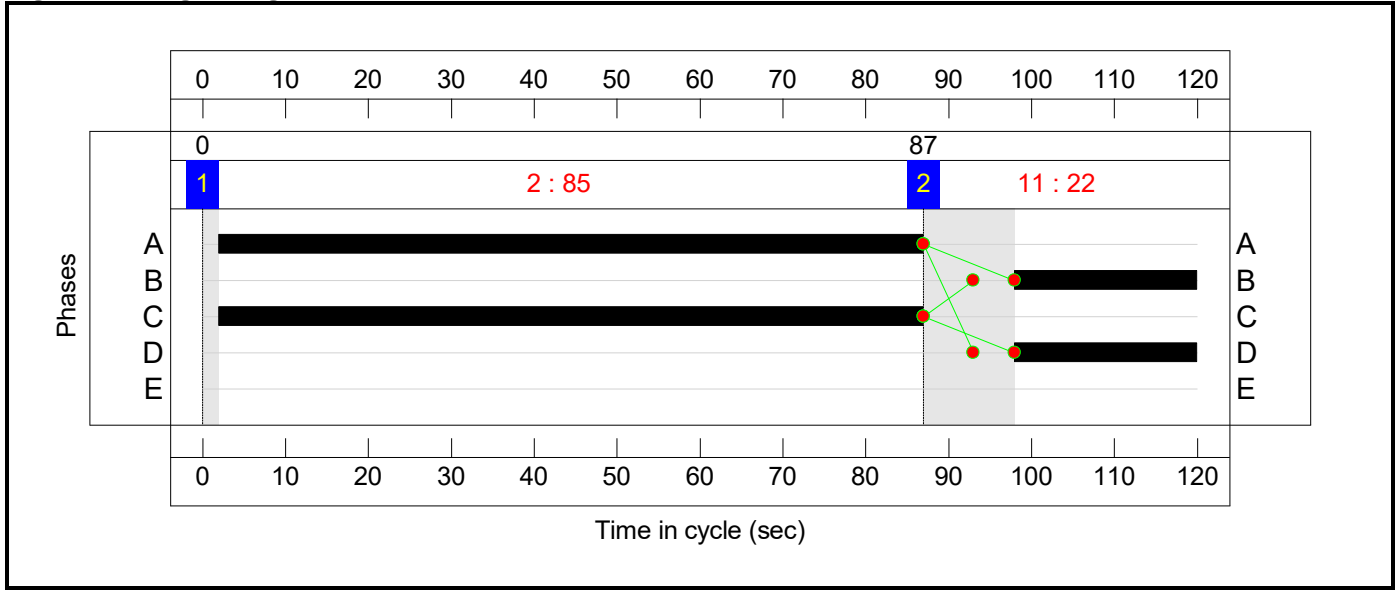
Scenario 1: '2041 Core AM' (FG1: '2041 Core AM', Plan 1: 'Network Control Plan 1')
Stage Sequence Diagram



Stage Timings

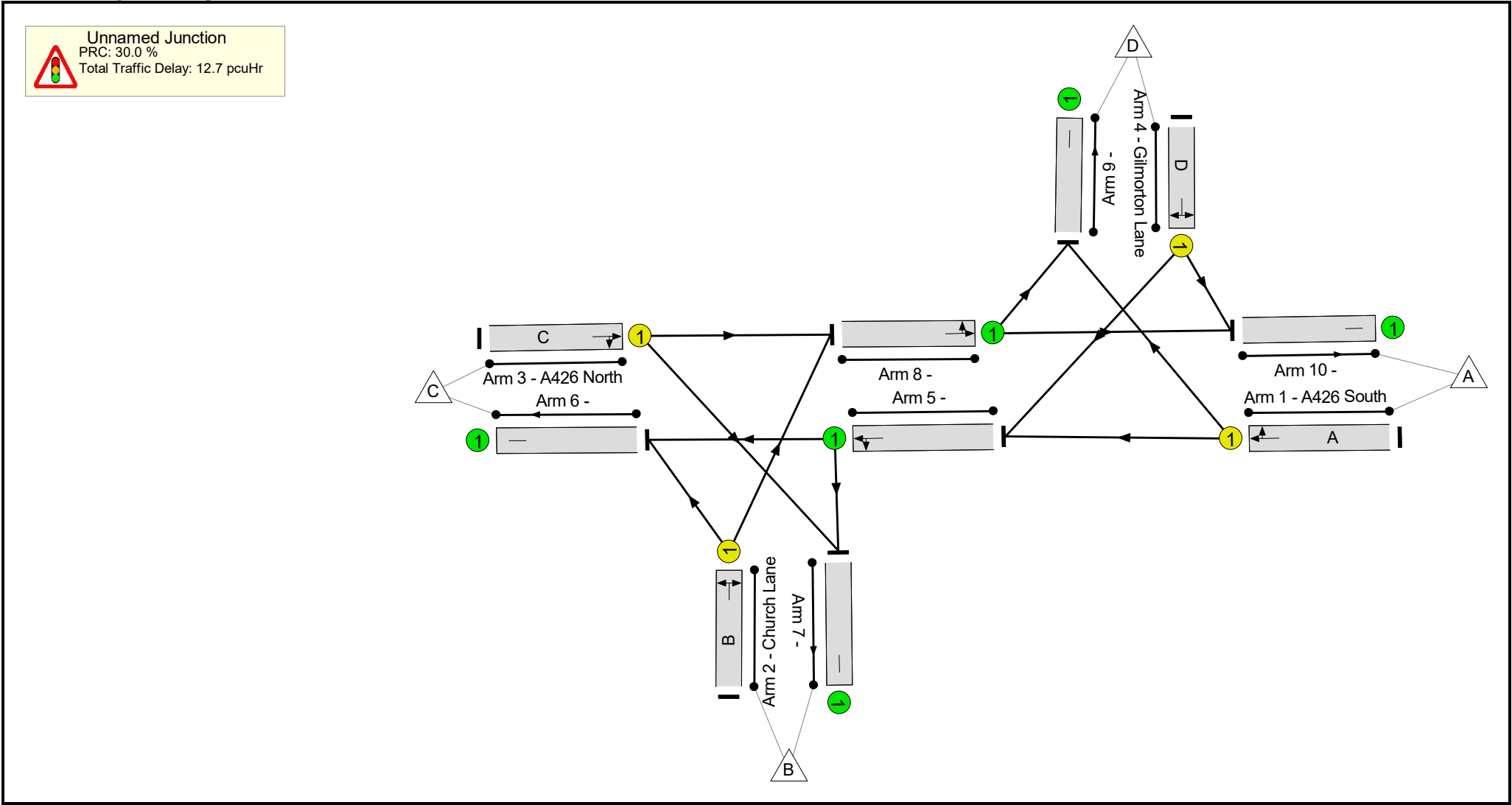
Stage	1	2
Duration	85	22
Change Point	0	87

Signal Timings Diagram



Full Input Data And Results

Network Layout Diagram



Full Input Data And Results

Network Results

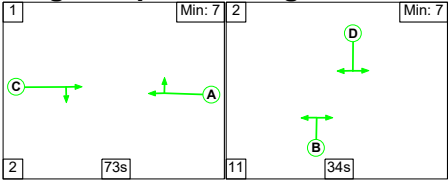
Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network	-	-	N/A	-	-		-	-	-	-	-	-	69.2%
Unnamed Junction	-	-	N/A	-	-		-	-	-	-	-	-	69.2%
1/1	A426 South Ahead Right	U	N/A	N/A	A		1	85	-	642	1940	1390	46.2%
2/1	Church Lane Left Right	U	N/A	N/A	B		1	22	-	172	1886	361	47.6%
3/1	A426 North Right Ahead	U	N/A	N/A	C		1	85	-	970	1955	1401	69.2%
4/1	Gilmorton Lane Right Left	U	N/A	N/A	D		1	22	-	258	1956	375	68.8%
5/1	Ahead Left	U	N/A	N/A	-		-	-	-	884	1965	1965	45.0%
6/1		U	N/A	N/A	-		-	-	-	819	Inf	Inf	0.0%
7/1		U	N/A	N/A	-		-	-	-	109	Inf	Inf	0.0%
8/1	Left Ahead	U	N/A	N/A	-		-	-	-	1098	Inf	Inf	0.0%
9/1		U	N/A	N/A	-		-	-	-	59	Inf	Inf	0.0%
10/1		U	N/A	N/A	-		-	-	-	1055	Inf	Inf	0.0%

Full Input Data And Results

Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network	-	-	0	0	0	9.2	3.5	0.0	12.7	-	-	-	-
Unnamed Junction	-	-	0	0	0	9.2	3.5	0.0	12.7	-	-	-	-
1/1	642	642	-	-	-	1.3	0.4	-	1.7	9.6	8.9	0.4	9.3
2/1	172	172	-	-	-	2.1	0.5	-	2.5	52.6	5.1	0.5	5.5
3/1	970	970	-	-	-	2.6	1.1	-	3.7	13.7	18.1	1.1	19.2
4/1	258	258	-	-	-	3.2	1.1	-	4.3	60.3	8.0	1.1	9.0
5/1	884	884	-	-	-	0.0	0.4	-	0.4	1.7	0.0	0.4	0.4
6/1	819	819	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
7/1	109	109	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
8/1	1098	1098	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
9/1	59	59	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
10/1	1055	1055	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
C1 PRC for Signalled Lanes (%): 30.0 Total Delay for Signalled Lanes (pcuHr): 12.24 Cycle Time (s): 120 PRC Over All Lanes (%): 30.0 Total Delay Over All Lanes(pcuHr): 12.65													

Full Input Data And Results
Scenario 2: '2041 Core PM' (FG2: '2041 Core PM', Plan 1: 'Network Control Plan 1')

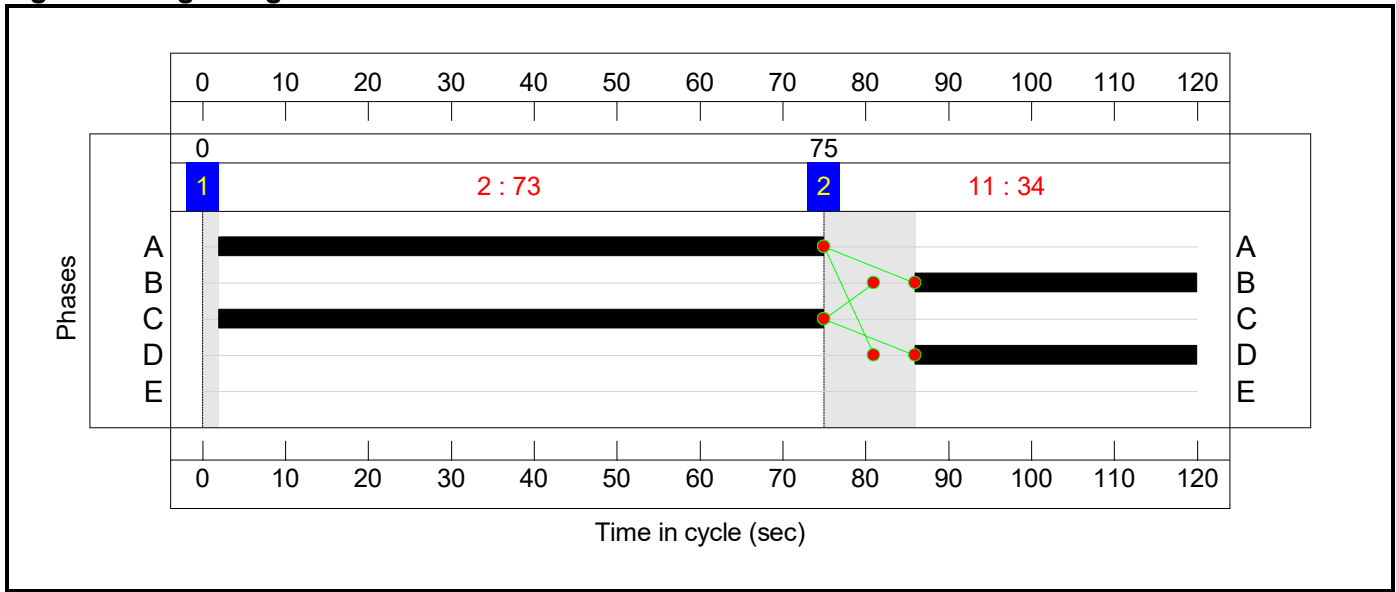
Stage Sequence Diagram



Stage Timings

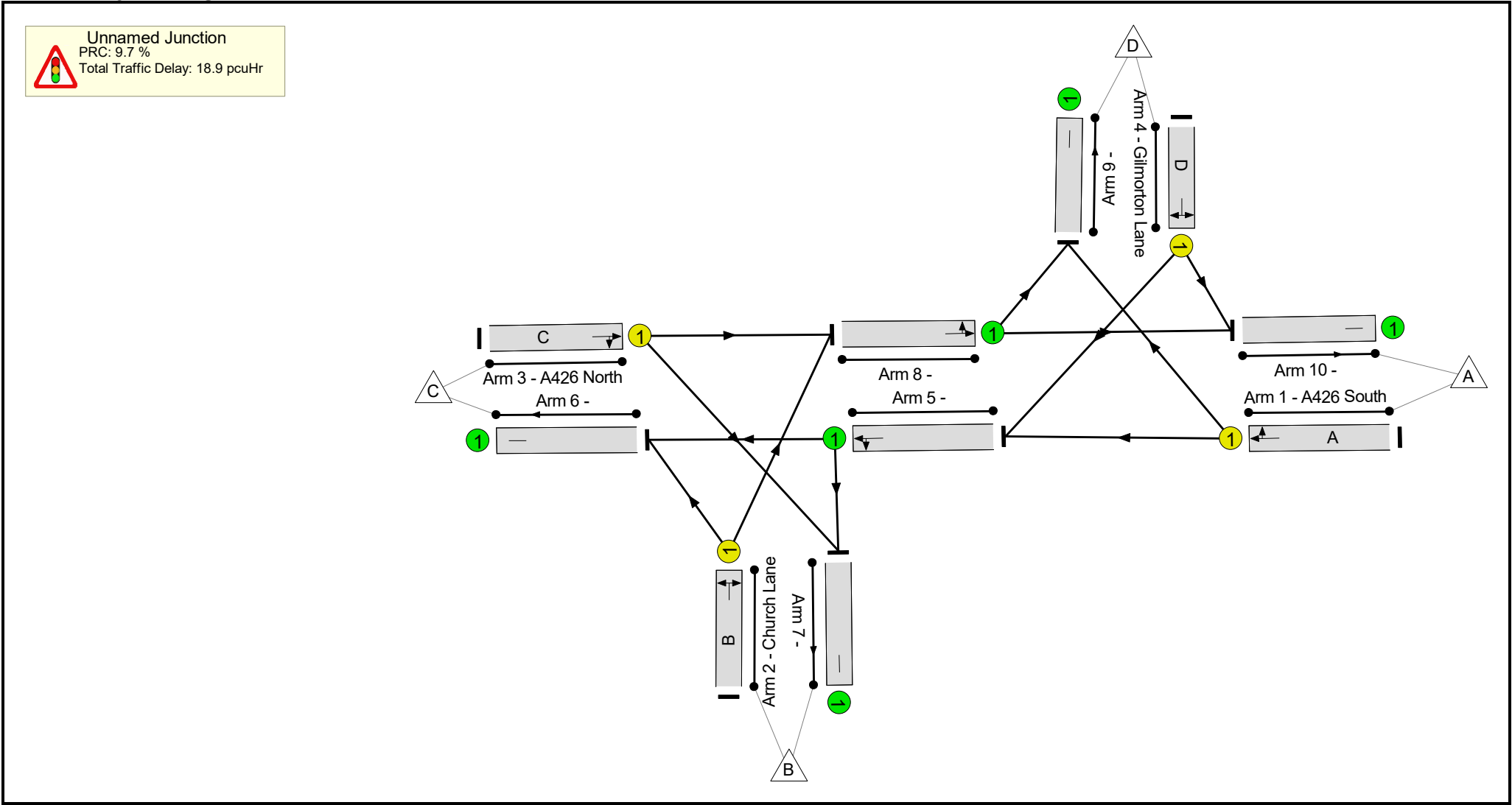
Stage	1	2
Duration	73	34
Change Point	0	75

Signal Timings Diagram



Full Input Data And Results

Network Layout Diagram



Full Input Data And Results

Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network	-	-	N/A	-	-		-	-	-	-	-	-	82.0%
Unnamed Junction	-	-	N/A	-	-		-	-	-	-	-	-	82.0%
1/1	A426 South Ahead Right	U	N/A	N/A	A		1	73	-	684	1940	1196	57.2%
2/1	Church Lane Left Right	U	N/A	N/A	B		1	34	-	92	1898	554	16.6%
3/1	A426 North Right Ahead	U	N/A	N/A	C		1	73	-	989	1955	1206	82.0%
4/1	Gilmorton Lane Right Left	U	N/A	N/A	D		1	34	-	457	1957	571	80.1%
5/1	Ahead Left	U	N/A	N/A	-		-	-	-	1113	1965	1965	56.6%
6/1		U	N/A	N/A	-		-	-	-	830	Inf	Inf	0.0%
7/1		U	N/A	N/A	-		-	-	-	316	Inf	Inf	0.0%
8/1	Left Ahead	U	N/A	N/A	-		-	-	-	1048	Inf	Inf	0.0%
9/1		U	N/A	N/A	-		-	-	-	103	Inf	Inf	0.0%
10/1		U	N/A	N/A	-		-	-	-	973	Inf	Inf	0.0%

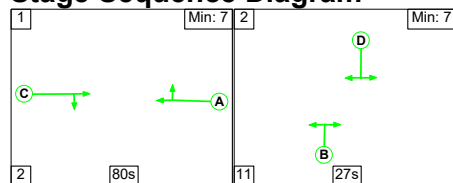
Full Input Data And Results

Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network	-	-	0	0	0	13.3	5.6	0.0	18.9	-	-	-	-
Unnamed Junction	-	-	0	0	0	13.3	5.6	0.0	18.9	-	-	-	-
1/1	684	684	-	-	-	2.6	0.7	-	3.3	17.1	13.5	0.7	14.2
2/1	92	92	-	-	-	0.8	0.1	-	0.9	35.6	2.3	0.1	2.4
3/1	989	989	-	-	-	4.9	2.2	-	7.1	26.0	25.5	2.2	27.8
4/1	457	457	-	-	-	5.0	1.9	-	6.9	54.6	14.0	1.9	15.9
5/1	1113	1113	-	-	-	0.0	0.7	-	0.7	2.1	0.0	0.7	0.7
6/1	830	830	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
7/1	316	316	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
8/1	1048	1048	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
9/1	103	103	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
10/1	973	973	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
C1 PRC for Signalled Lanes (%): 9.7 Total Delay for Signalled Lanes (pcuHr): 18.23 Cycle Time (s): 120 PRC Over All Lanes (%): 9.7 Total Delay Over All Lanes(pcuHr): 18.88													

Full Input Data And Results

Scenario 3: '2041 Pref AM' (FG3: '2041 Pref AM', Plan 1: 'Network Control Plan 1')

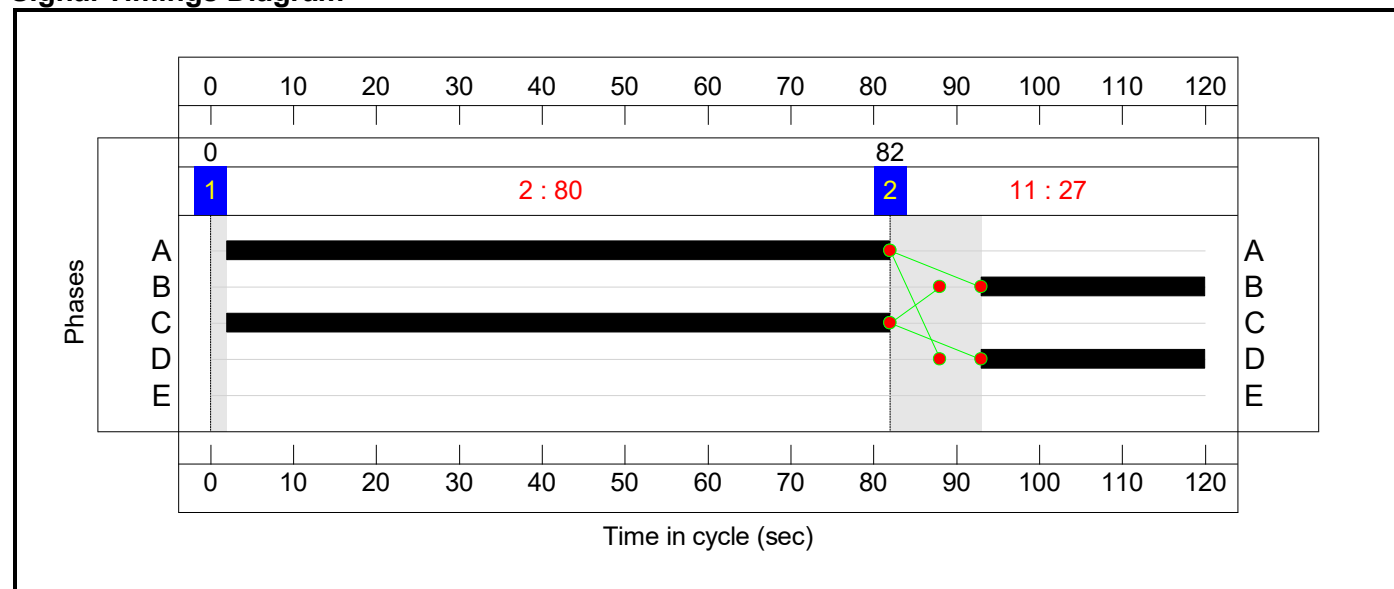
Stage Sequence Diagram



Stage Timings

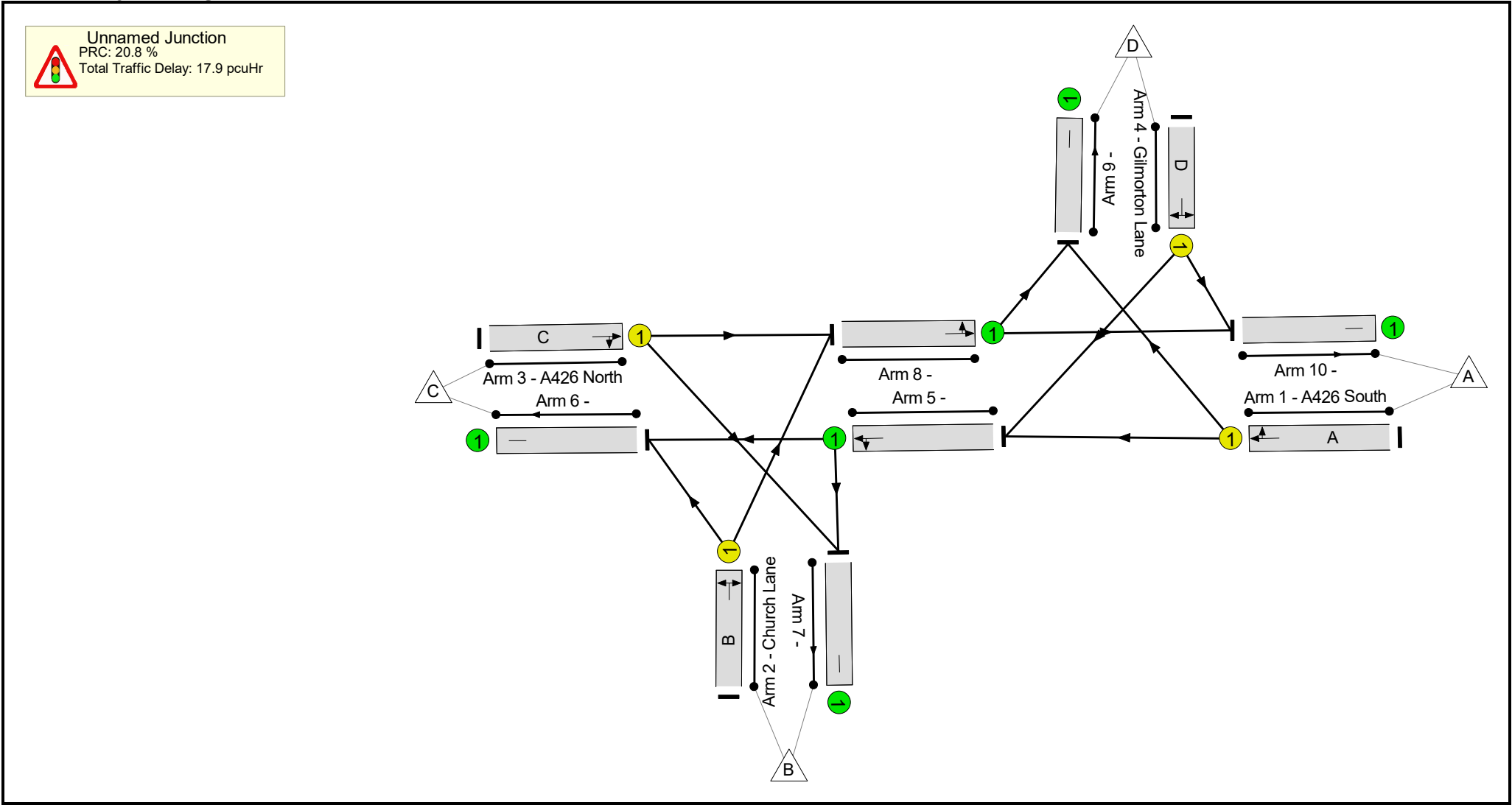
Stage	1	2
Duration	80	27
Change Point	0	82

Signal Timings Diagram



Full Input Data And Results

Network Layout Diagram



Full Input Data And Results

Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network	-	-	N/A	-	-		-	-	-	-	-	-	74.5%
Unnamed Junction	-	-	N/A	-	-		-	-	-	-	-	-	74.5%
1/1	A426 South Ahead Right	U	N/A	N/A	A		1	80	-	666	1940	1310	50.9%
2/1	Church Lane Left Right	U	N/A	N/A	B		1	27	-	328	1886	440	74.5%
3/1	A426 North Right Ahead	U	N/A	N/A	C		1	80	-	977	1955	1320	74.0%
4/1	Gilmorton Lane Right Left	U	N/A	N/A	D		1	27	-	320	1956	456	70.1%
5/1	Ahead Left	U	N/A	N/A	-		-	-	-	966	1965	1965	49.2%
6/1		U	N/A	N/A	-		-	-	-	915	Inf	Inf	0.0%
7/1		U	N/A	N/A	-		-	-	-	121	Inf	Inf	0.0%
8/1	Left Ahead	U	N/A	N/A	-		-	-	-	1235	Inf	Inf	0.0%
9/1		U	N/A	N/A	-		-	-	-	79	Inf	Inf	0.0%
10/1		U	N/A	N/A	-		-	-	-	1176	Inf	Inf	0.0%

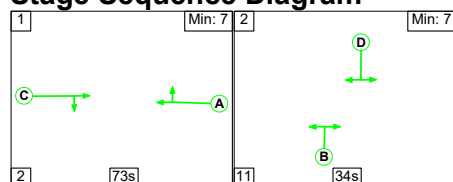
Full Input Data And Results

Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network	-	-	0	0	0	12.9	5.0	0.0	17.9	-	-	-	-
Unnamed Junction	-	-	0	0	0	12.9	5.0	0.0	17.9	-	-	-	-
1/1	666	666	-	-	-	1.8	0.5	-	2.3	12.4	10.9	0.5	11.4
2/1	328	328	-	-	-	3.9	1.4	-	5.3	58.4	10.1	1.4	11.5
3/1	977	977	-	-	-	3.4	1.4	-	4.9	17.9	20.9	1.4	22.3
4/1	320	320	-	-	-	3.7	1.2	-	4.9	55.1	9.7	1.2	10.8
5/1	966	966	-	-	-	0.0	0.5	-	0.5	1.8	0.0	0.5	0.5
6/1	915	915	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
7/1	121	121	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
8/1	1235	1235	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
9/1	79	79	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
10/1	1176	1176	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
C1 PRC for Signalled Lanes (%): 20.8 Total Delay for Signalled Lanes (pcuHr): 17.37 Cycle Time (s): 120 PRC Over All Lanes (%): 20.8 Total Delay Over All Lanes(pcuHr): 17.86													

Full Input Data And Results

Scenario 4: '2041 Pref PM' (FG4: '2041 Pref PM', Plan 1: 'Network Control Plan 1')

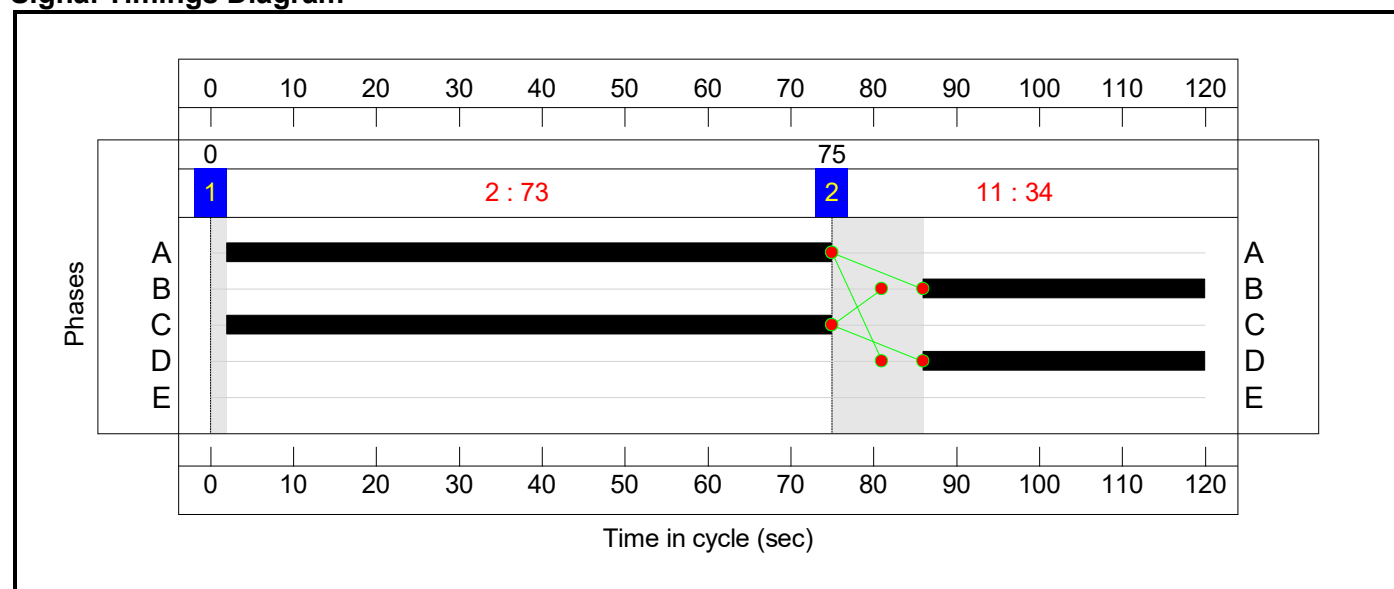
Stage Sequence Diagram



Stage Timings

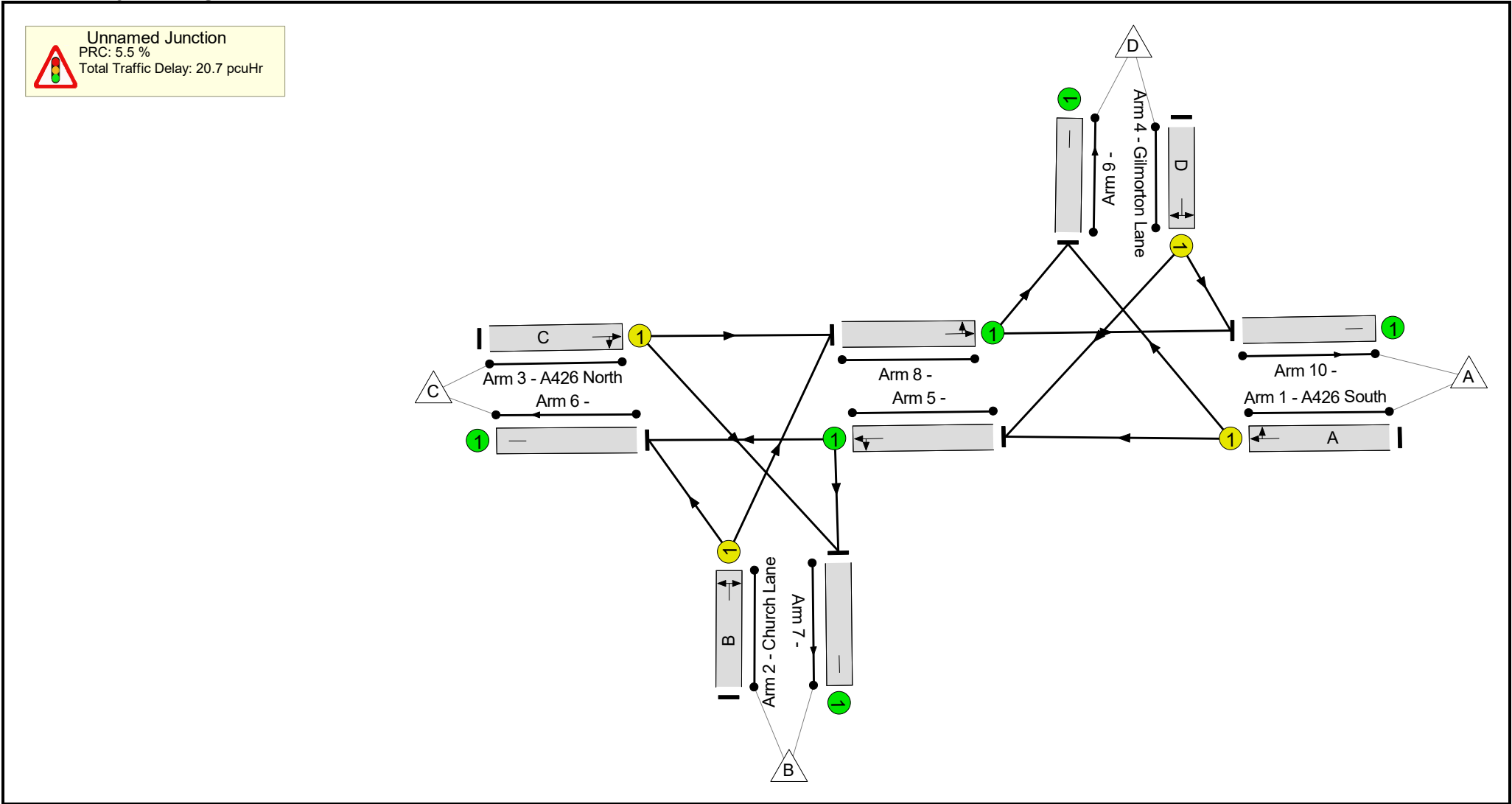
Stage	1	2
Duration	73	34
Change Point	0	75

Signal Timings Diagram



Full Input Data And Results

Network Layout Diagram



Full Input Data And Results

Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network	-	-	N/A	-	-		-	-	-	-	-	-	85.3%
Unnamed Junction	-	-	N/A	-	-		-	-	-	-	-	-	85.3%
1/1	A426 South Ahead Right	U	N/A	N/A	A		1	73	-	684	1940	1196	57.2%
2/1	Church Lane Left Right	U	N/A	N/A	B		1	34	-	105	1896	553	19.0%
3/1	A426 North Right Ahead	U	N/A	N/A	C		1	73	-	1028	1955	1206	85.3%
4/1	Gilmorton Lane Right Left	U	N/A	N/A	D		1	34	-	475	1957	571	83.2%
5/1	Ahead Left	U	N/A	N/A	-		-	-	-	1130	1965	1965	57.5%
6/1		U	N/A	N/A	-		-	-	-	842	Inf	Inf	0.0%
7/1		U	N/A	N/A	-		-	-	-	324	Inf	Inf	0.0%
8/1	Left Ahead	U	N/A	N/A	-		-	-	-	1097	Inf	Inf	0.0%
9/1		U	N/A	N/A	-		-	-	-	109	Inf	Inf	0.0%
10/1		U	N/A	N/A	-		-	-	-	1017	Inf	Inf	0.0%

Full Input Data And Results

Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network	-	-	0	0	0	14.1	6.6	0.0	20.7	-	-	-	-
Unnamed Junction	-	-	0	0	0	14.1	6.6	0.0	20.7	-	-	-	-
1/1	684	684	-	-	-	2.6	0.7	-	3.3	17.1	13.5	0.7	14.2
2/1	105	105	-	-	-	0.9	0.1	-	1.0	35.9	2.6	0.1	2.7
3/1	1028	1028	-	-	-	5.3	2.8	-	8.1	28.4	27.7	2.8	30.5
4/1	475	475	-	-	-	5.2	2.4	-	7.6	57.7	14.8	2.4	17.1
5/1	1130	1130	-	-	-	0.0	0.7	-	0.7	2.2	1.1	0.7	1.8
6/1	842	842	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
7/1	324	324	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
8/1	1097	1097	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
9/1	109	109	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
10/1	1017	1017	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
C1 PRC for Signalled Lanes (%): 5.5 Total Delay for Signalled Lanes (pcuHr): 20.02 Cycle Time (s): 120 PRC Over All Lanes (%): 5.5 Total Delay Over All Lanes(pcuHr): 20.70													

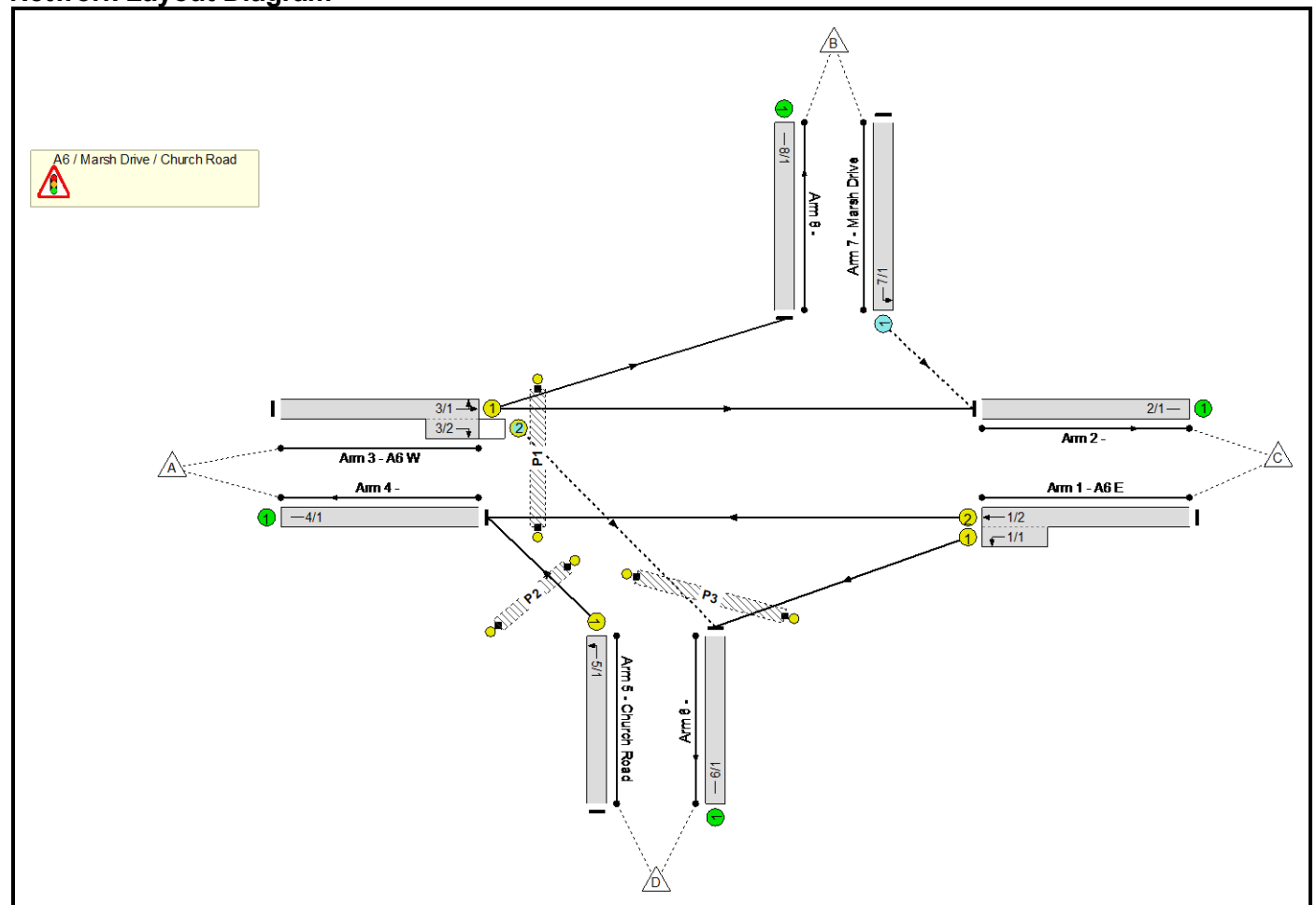
Full Input Data And Results

Full Input Data And Results

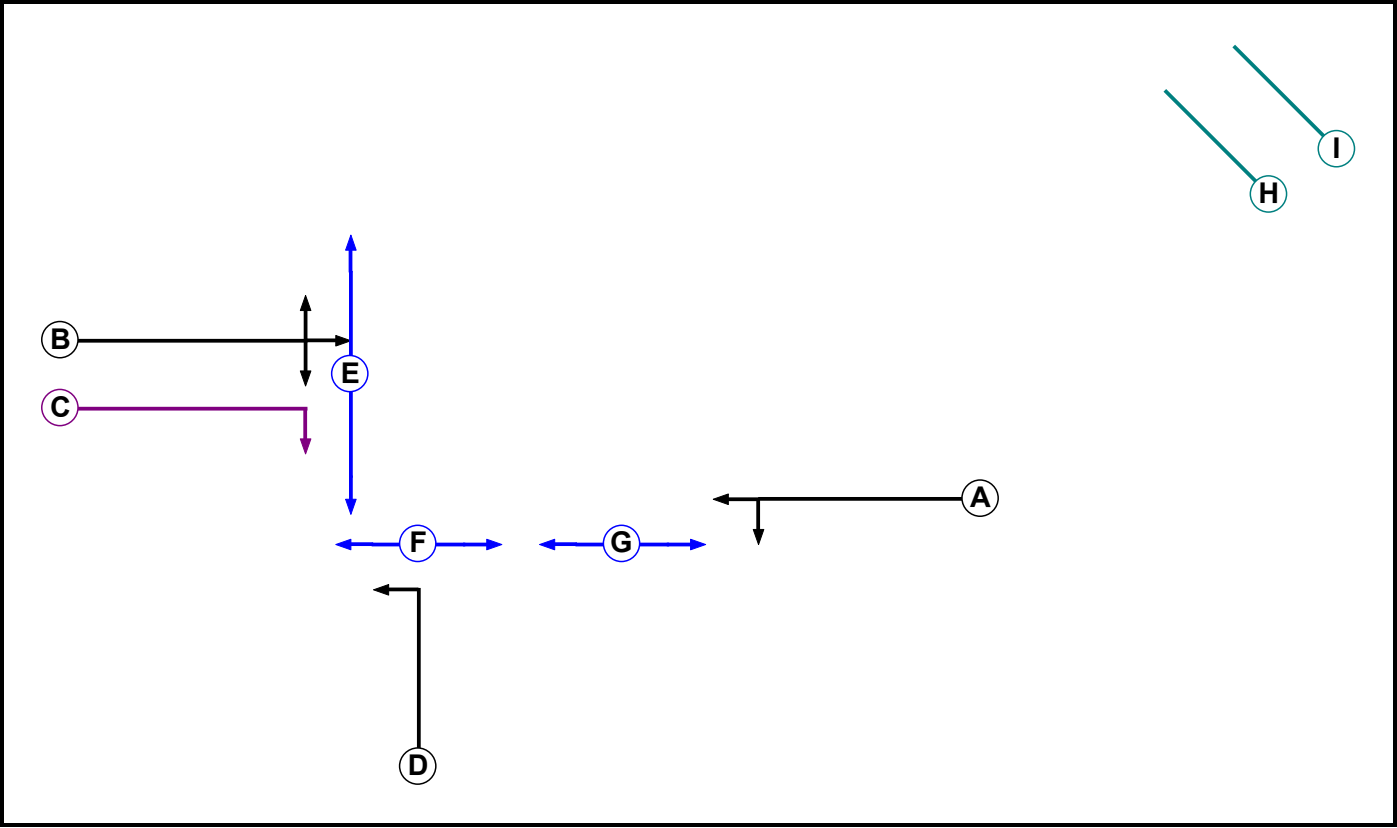
User and Project Details

Project:	
Title:	
Location:	
Additional detail:	
File name:	18_Mitigation - A6 x Marsh Dr x Church Rd.lsg3x
Author:	
Company:	
Address:	

Network Layout Diagram



Phase Diagram



Phase Input Data

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

Full Input Data And Results

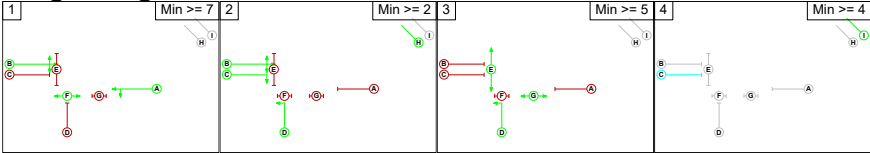
Phase Intergreens Matrix

Terminating Phase	Starting Phase									
		A	B	C	D	E	F	G	H	I
	A		-	5	7	7	-	6	-	-
	B	-		-	-	5	-	7	-	-
	C	5	-		-	5	-	7	-	-
	D	5	-	-		-	5	-	-	-
	E	11	11	11	-		-	-	-	-
	F	-	-	-	7	-		-	-	-
	G	10	10	10	-	-	-		-	-
	H	-	-	-	-	-	-	-		-
	I	-	-	-	-	-	-	-	-	

Phases in Stage

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

Stage Diagram



Phase Delays

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

Prohibited Stage Change

From Stage	To Stage				
		1	2	3	4
	1		7	7	0
	2	5		7	0
	3	11	11		0
	4	2	X	2	

Full Input Data And Results

Give-Way Lane Input Data

Junction: A6 / Marsh Drive / Church 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)
3/2 (A6 W)	6/1 (Right)	1439	0	1/1	1.09	All	2.00	-	0.50	2	2.00
				2/1	1.09	All					
7/1 (Marsh Drive)	2/1 (Left)	1439	0	3/1	1.09	To 2/1 (Ahead)	-	-	-	-	-

Full Input Data And Results

Lane Input Data

Junction: A6 / Marsh Drive / Church 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 (A6 E)	U	A	2	3	5.0	Geom	-	3.10	0.00	Y	Arm 6 Left	6.50
1/2 (A6 E)	U	A	2	3	60.0	Geom	-	3.10	0.00	N	Arm 4 Ahead	Inf
2/1	U		2	3	60.0	Inf	-	-	-	-	-	-
3/1 (A6 W)	U	B	2	3	60.0	Geom	-	3.35	0.00	Y	Arm 2 Ahead	Inf
											Arm 8 Left	10.00
3/2 (A6 W)	O	B C	2	3	4.0	Geom	-	3.00	0.00	N	Arm 6 Right	7.00
4/1	U		2	3	60.0	Inf	-	-	-	-	-	-
5/1 (Church Road)	U	D	2	3	60.0	Geom	-	3.50	0.00	Y	Arm 4 Left	30.00
6/1	U		2	3	60.0	Inf	-	-	-	-	-	-
7/1 (Marsh Drive)	O		2	3	60.0	Geom	-	3.00	0.00	Y	Arm 2 Left	12.00
8/1	U		2	3	60.0	Inf	-	-	-	-	-	-

Traffic Flow Groups

Flow Group	Start Time	End Time	Duration	Formula
1: '2041 Pref AM'	08:00	09:00	01:00	
2: '2041 Pref PM'	17:00	18:00	01:00	
3: '2041 Core AM'	08:00	09:00	01:00	
4: '2041 Core PM'	17:00	18:00	01:00	

Scenario 1: '2041 Pref AM' (FG1: '2041 Pref AM', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired

Desired Flow :

Origin	Destination					
		A	B	C	D	Tot.
	A	0	8	994	196	1198
	B	32	0	85	85	202
	C	1125	35	0	21	1181
	D	275	27	35	0	337
	Tot.	1432	70	1114	302	2918

Full Input Data And Results

Traffic Lane Flows

Lane	Scenario 1: 2041 Pref AM
Junction: A6 / Marsh Drive / Church Road	
1/1 (short)	21
1/2 (with short)	1146(In) 1125(Out)
2/1	1079
3/1 (with short)	1198(In) 1002(Out)
3/2 (short)	196
4/1	1400
5/1	275
6/1	217
7/1	85
8/1	8

Lane Saturation Flows

Junction: A6 / Marsh Drive / Church 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 (A6 E)	3.10	0.00	Y	Arm 6 Left	6.50	100.0 %	1564	1564
1/2 (A6 E)	3.10	0.00	N	Arm 4 Ahead	Inf	100.0 %	2065	2065
2/1	Infinite Saturation Flow						Inf	Inf
3/1 (A6 W)	3.35	0.00	Y	Arm 2 Ahead	Inf	99.2 %	1948	1948
				Arm 8 Left	10.00	0.8 %		
3/2 (A6 W)	3.00	0.00	N	Arm 6 Right	7.00	100.0 %	1692	1692
4/1	Infinite Saturation Flow						Inf	Inf
5/1 (Church Road)	3.50	0.00	Y	Arm 4 Left	30.00	100.0 %	1871	1871
6/1	Infinite Saturation Flow						Inf	Inf
7/1 (Marsh Drive)	3.00	0.00	Y	Arm 2 Left	12.00	100.0 %	1702	1702
8/1	Infinite Saturation Flow						Inf	Inf

Full Input Data And Results

Scenario 2: '2041 Pref PM' (FG2: '2041 Pref PM', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired

Desired Flow :

	Destination					
Origin		A	B	C	D	Tot.
	A	0	8	1005	216	1229
	B	41	0	68	82	191
	C	963	29	0	30	1022
	D	540	62	56	0	658
	Tot.	1544	99	1129	328	3100

Traffic Lane Flows

Lane	Scenario 2: 2041 Pref PM
Junction: A6 / Marsh Drive / Church Road	
1/1 (short)	30
1/2 (with short)	993(In) 963(Out)
2/1	1073
3/1 (with short)	1229(In) 1013(Out)
3/2 (short)	216
4/1	1503
5/1	540
6/1	246
7/1	68
8/1	8

Full Input Data And Results

Lane Saturation Flows

Junction: A6 / Marsh Drive / Church 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 (A6 E)	3.10	0.00	Y	Arm 6 Left	6.50	100.0 %	1564	1564
1/2 (A6 E)	3.10	0.00	N	Arm 4 Ahead	Inf	100.0 %	2065	2065
2/1	Infinite Saturation Flow						Inf	Inf
3/1 (A6 W)	3.35	0.00	Y	Arm 2 Ahead	Inf	99.2 %	1948	1948
				Arm 8 Left	10.00	0.8 %		
3/2 (A6 W)	3.00	0.00	N	Arm 6 Right	7.00	100.0 %	1692	1692
4/1	Infinite Saturation Flow						Inf	Inf
5/1 (Church Road)	3.50	0.00	Y	Arm 4 Left	30.00	100.0 %	1871	1871
6/1	Infinite Saturation Flow						Inf	Inf
7/1 (Marsh Drive)	3.00	0.00	Y	Arm 2 Left	12.00	100.0 %	1702	1702
8/1	Infinite Saturation Flow						Inf	Inf

Scenario 3: '2041 Core AM' (FG3: '2041 Core AM', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired

Desired Flow :

	Destination					
		A	B	C	D	Tot.
Origin	A	0	7	959	189	1155
	B	31	0	83	83	197
	C	1142	36	0	21	1199
	D	247	25	31	0	303
	Tot.	1420	68	1073	293	2854

Full Input Data And Results

Traffic Lane Flows

Lane	Scenario 3: 2041 Core AM
Junction: A6 / Marsh Drive / Church Road	
1/1 (short)	21
1/2 (with short)	1163(In) 1142(Out)
2/1	1042
3/1 (with short)	1155(In) 966(Out)
3/2 (short)	189
4/1	1389
5/1	247
6/1	210
7/1	83
8/1	7

Lane Saturation Flows

Junction: A6 / Marsh Drive / Church 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 (A6 E)	3.10	0.00	Y	Arm 6 Left	6.50	100.0 %	1564	1564
1/2 (A6 E)	3.10	0.00	N	Arm 4 Ahead	Inf	100.0 %	2065	2065
2/1	Infinite Saturation Flow						Inf	Inf
3/1 (A6 W)	3.35	0.00	Y	Arm 2 Ahead	Inf	99.3 %	1948	1948
				Arm 8 Left	10.00	0.7 %		
3/2 (A6 W)	3.00	0.00	N	Arm 6 Right	7.00	100.0 %	1692	1692
4/1	Infinite Saturation Flow						Inf	Inf
5/1 (Church Road)	3.50	0.00	Y	Arm 4 Left	30.00	100.0 %	1871	1871
6/1	Infinite Saturation Flow						Inf	Inf
7/1 (Marsh Drive)	3.00	0.00	Y	Arm 2 Left	12.00	100.0 %	1702	1702
8/1	Infinite Saturation Flow						Inf	Inf

Full Input Data And Results

Scenario 4: '2041 Core PM' (FG4: '2041 Core PM', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired

Desired Flow :

	Destination					
Origin		A	B	C	D	Tot.
	A	0	8	1040	224	1272
	B	35	0	58	71	164
	C	912	28	0	29	969
	D	448	51	46	0	545
	Tot.	1395	87	1144	324	2950

Traffic Lane Flows

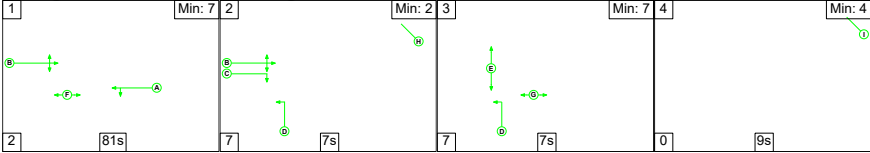
Lane	Scenario 4: 2041 Core PM
Junction: A6 / Marsh Drive / Church Road	
1/1 (short)	29
1/2 (with short)	941(In) 912(Out)
2/1	1098
3/1 (with short)	1272(In) 1048(Out)
3/2 (short)	224
4/1	1360
5/1	448
6/1	253
7/1	58
8/1	8

Lane Saturation Flows

Junction: A6 / Marsh Drive / Church 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 (A6 E)	3.10	0.00	Y	Arm 6 Left	6.50	100.0 %	1564	1564
1/2 (A6 E)	3.10	0.00	N	Arm 4 Ahead	Inf	100.0 %	2065	2065
2/1	Infinite Saturation Flow						Inf	Inf
3/1 (A6 W)	3.35	0.00	Y	Arm 2 Ahead	Inf	99.2 %	1948	1948
				Arm 8 Left	10.00	0.8 %		
3/2 (A6 W)	3.00	0.00	N	Arm 6 Right	7.00	100.0 %	1692	1692
4/1	Infinite Saturation Flow						Inf	Inf
5/1 (Church Road)	3.50	0.00	Y	Arm 4 Left	30.00	100.0 %	1871	1871
6/1	Infinite Saturation Flow						Inf	Inf
7/1 (Marsh Drive)	3.00	0.00	Y	Arm 2 Left	12.00	100.0 %	1702	1702
8/1	Infinite Saturation Flow						Inf	Inf

Scenario 1: '2041 Pref AM' (FG1: '2041 Pref AM', Plan 1: 'Network Control Plan 1')

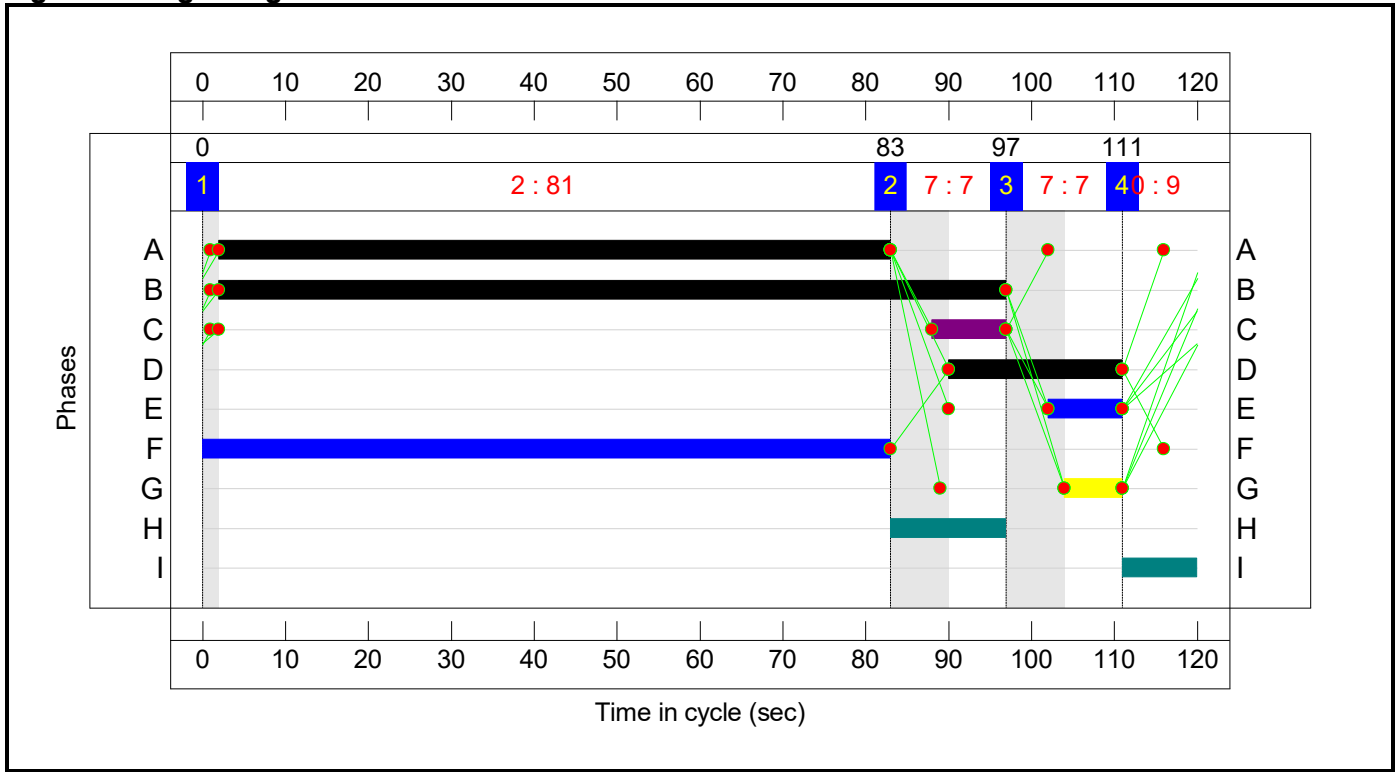
Stage Sequence Diagram



Stage Timings

Stage	1	2	3	4
Duration	81	7	7	9
Change Point	0	83	97	111

Signal Timings Diagram



Full Input Data And Results

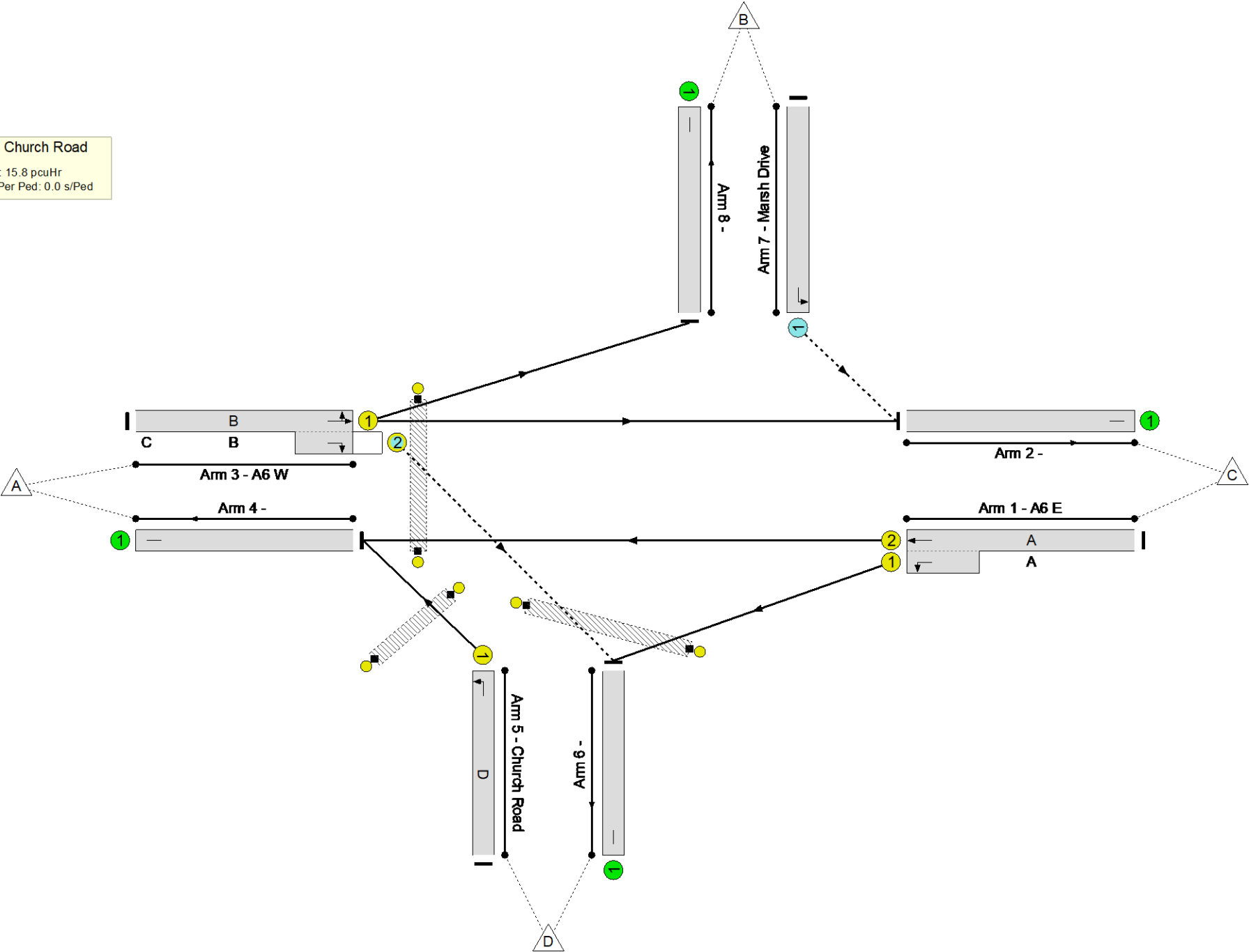


A6 / Marsh Drive / Church Road

PRC: 10.1 %

Total Traffic Delay: 15.8 pcuHr

Ave. Route Delay Per Ped: 0.0 s/Ped



Full Input Data And Results

Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network	-	-	N/A	-	-		-	-	-	-	-	-	81.8%
A6 / Marsh Drive / Church Road	-	-	N/A	-	-		-	-	-	-	-	-	81.8%
1/2+1/1	A6 E Ahead Left	U	N/A	N/A	A		1	81	-	1146	2065:1564	1376+26	81.8 : 81.8%
2/1		U	N/A	N/A	-		-	-	-	1079	Inf	Inf	0.0%
3/1+3/2	A6 W Ahead Right Left	U+O	N/A	N/A	B	C	1	95	9	1198	1948:1692	1299+254	77.1 : 77.1%
4/1		U	N/A	N/A	-		-	-	-	1400	Inf	Inf	0.0%
5/1	Church Road Left	U	N/A	N/A	D		1	21	-	275	1871	343	80.2%
6/1		U	N/A	N/A	-		-	-	-	217	Inf	Inf	0.0%
7/1	Marsh Drive Left	O	N/A	N/A	-		-	-	-	85	1702	519	16.4%
8/1		U	N/A	N/A	-		-	-	-	8	Inf	Inf	0.0%
Ped Link: P1	Unnamed Ped Link	-	N/A	-	E		1	9	-	0	-	0	0.0%
Ped Link: P2	Unnamed Ped Link	-	N/A	-	F		1	83	-	0	-	0	0.0%
Ped Link: P3	Unnamed Ped Link	-	N/A	-	G		1	7	-	0	-	0	0.0%

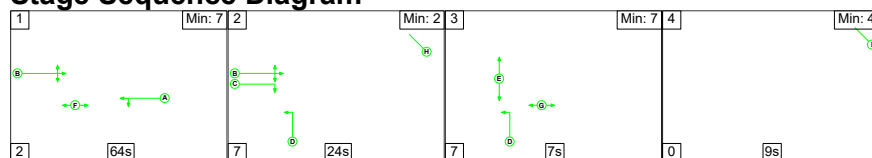
Full Input Data And Results

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Full Input Data And Results

Scenario 2: '2041 Pref PM' (FG2: '2041 Pref PM', Plan 1: 'Network Control Plan 1')

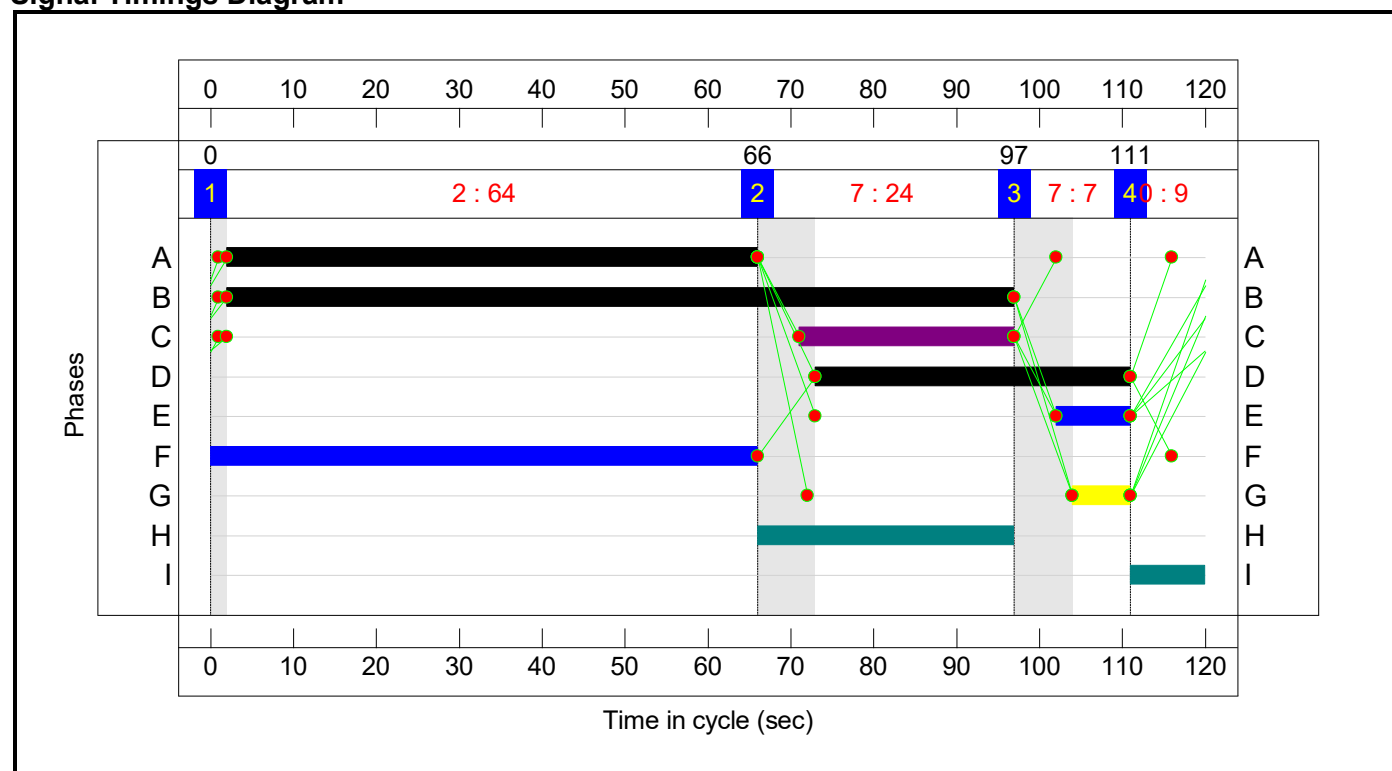
Stage Sequence Diagram



Stage Timings

Stage	1	2	3	4
Duration	64	24	7	9
Change Point	0	66	97	111

Signal Timings Diagram



Full Input Data And Results

Network Layout Diagram

Full Input Data And Results

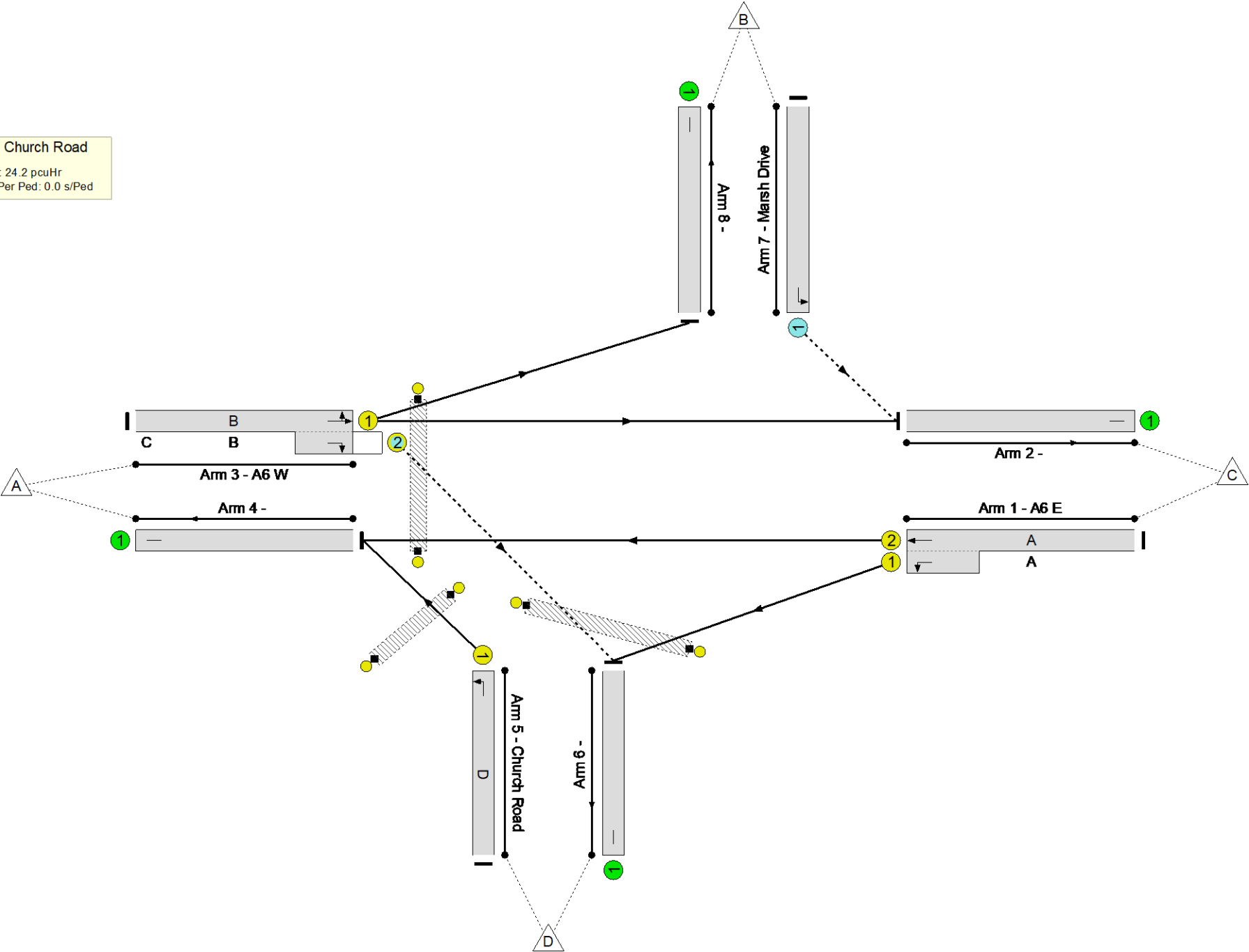


A6 / Marsh Drive / Church Road

PRC: 0.5 %

Total Traffic Delay: 24.2 pcuHr

Ave. Route Delay Per Ped: 0.0 s/Ped



Full Input Data And Results

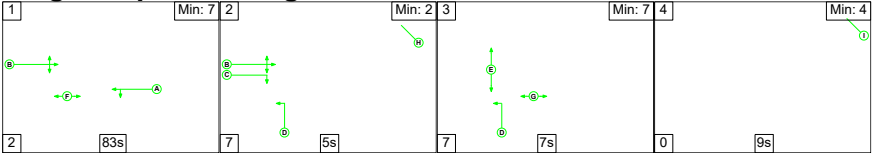
Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network	-	-	N/A	-	-		-	-	-	-	-	-	89.5%
A6 / Marsh Drive / Church Road	-	-	N/A	-	-		-	-	-	-	-	-	89.5%
1/2+1/1	A6 E Ahead Left	U	N/A	N/A	A		1	64	-	993	2065:1564	1076+34	89.5 : 89.5%
2/1		U	N/A	N/A	-		-	-	-	1073	Inf	Inf	0.0%
3/1+3/2	A6 W Ahead Right Left	U+O	N/A	N/A	B	C	1	95	26	1229	1948:1692	1280+273	79.1 : 79.1%
4/1		U	N/A	N/A	-		-	-	-	1503	Inf	Inf	0.0%
5/1	Church Road Left	U	N/A	N/A	D		1	38	-	540	1871	608	88.8%
6/1		U	N/A	N/A	-		-	-	-	246	Inf	Inf	0.0%
7/1	Marsh Drive Left	O	N/A	N/A	-		-	-	-	68	1702	506	13.4%
8/1		U	N/A	N/A	-		-	-	-	8	Inf	Inf	0.0%
Ped Link: P1	Unnamed Ped Link	-	N/A	-	E		1	9	-	0	-	0	0.0%
Ped Link: P2	Unnamed Ped Link	-	N/A	-	F		1	66	-	0	-	0	0.0%
Ped Link: P3	Unnamed Ped Link	-	N/A	-	G		1	7	-	0	-	0	0.0%

Full Input Data And Results

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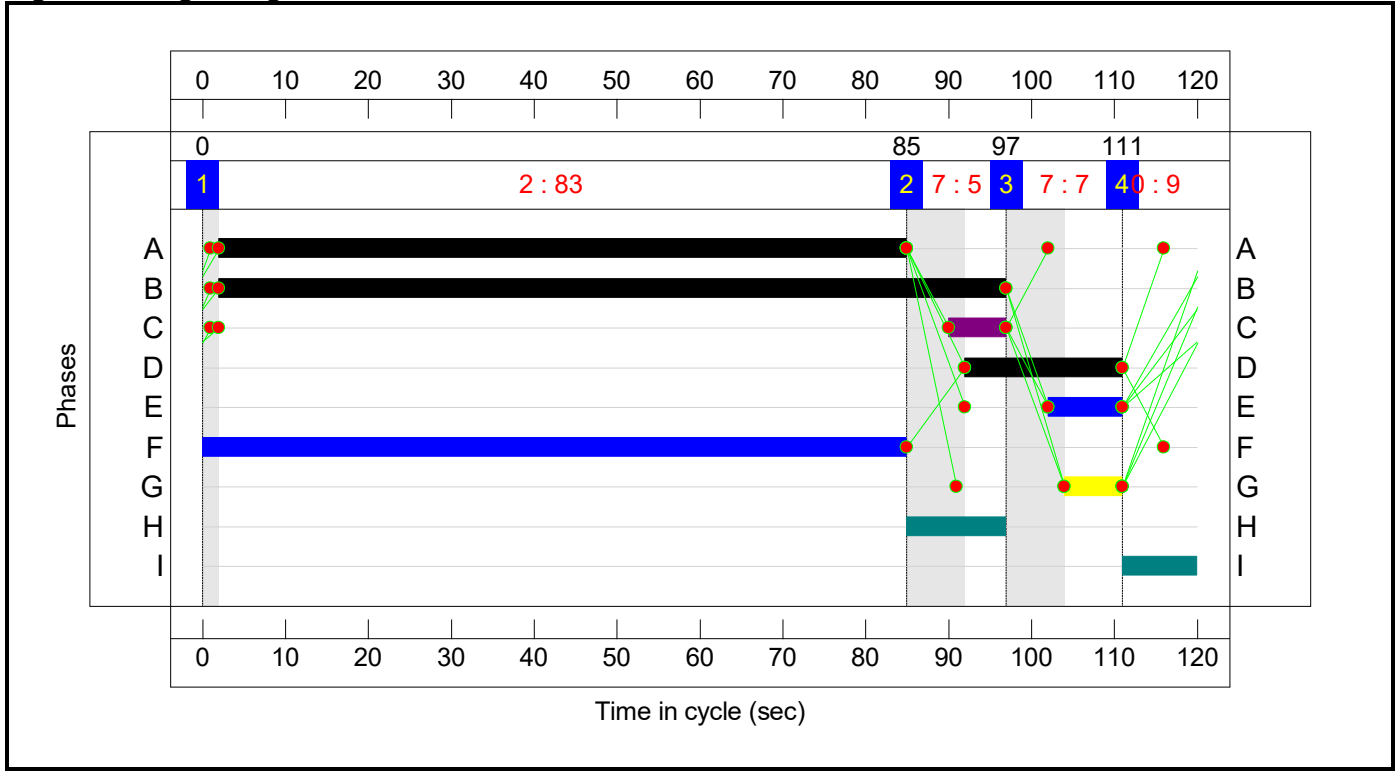
Stage Sequence Diagram



Stage Timings

Stage	1	2	3	4
Duration	83	5	7	9
Change Point	0	85	97	111

Signal Timings Diagram



Full Input Data And Results

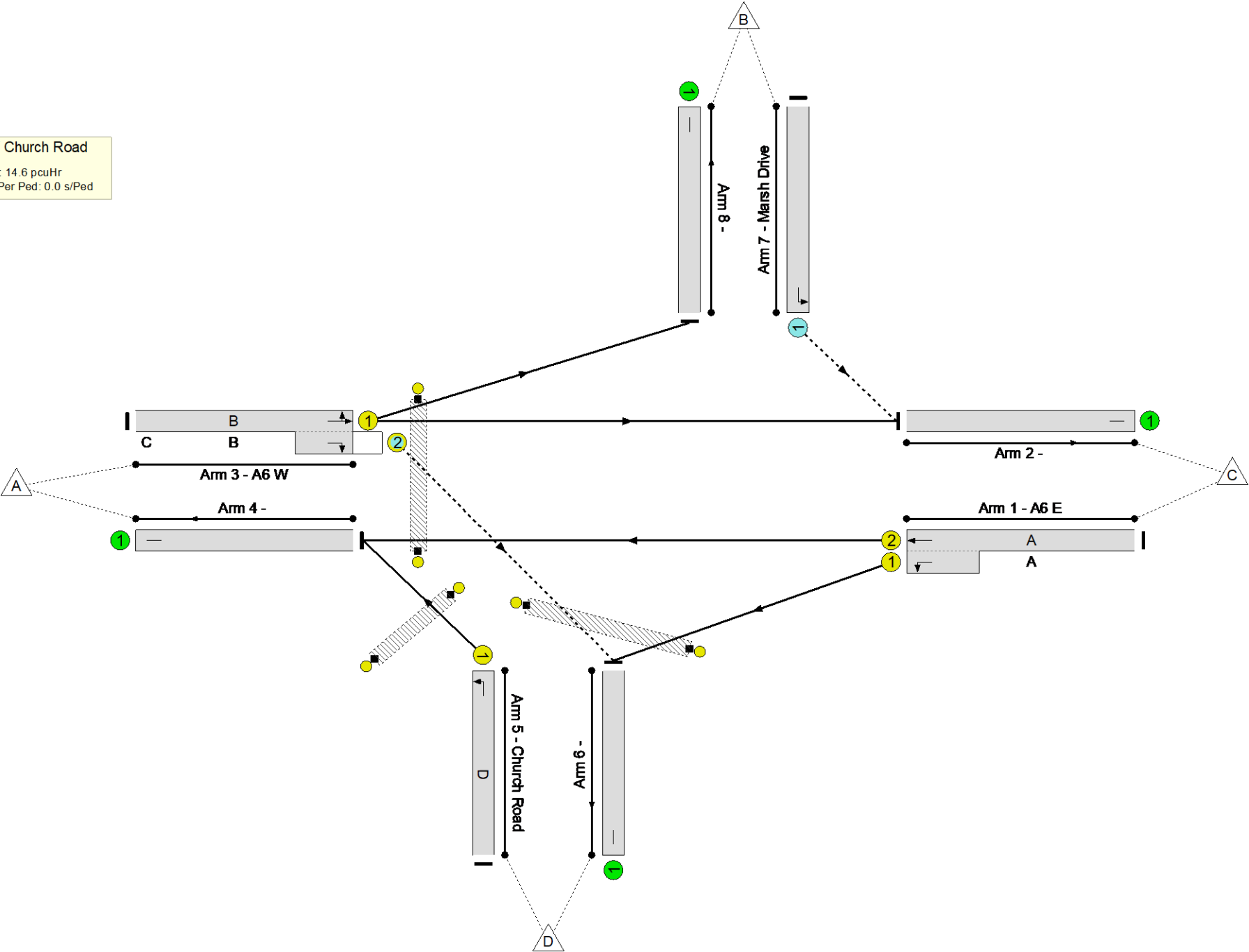


A6 / Marsh Drive / Church Road

PRC: 11.1 %

Total Traffic Delay: 14.6 pcuHr

Ave. Route Delay Per Ped: 0.0 s/Ped



Full Input Data And Results

Network Results

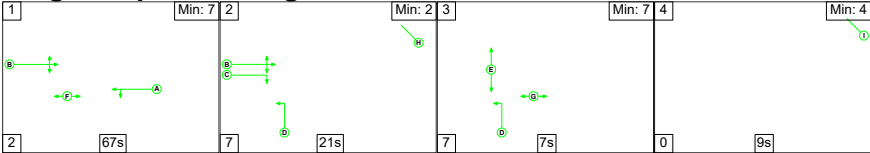
Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network	-	-	N/A	-	-		-	-	-	-	-	-	81.0%
A6 / Marsh Drive / Church Road	-	-	N/A	-	-		-	-	-	-	-	-	81.0%
1/2+1/1	A6 E Ahead Left	U	N/A	N/A	A		1	83	-	1163	2065:1564	1410+26	81.0 : 81.0%
2/1		U	N/A	N/A	-		-	-	-	1042	Inf	Inf	0.0%
3/1+3/2	A6 W Ahead Right Left	U+O	N/A	N/A	B	C	1	95	7	1155	1948:1692	1299+254	74.4 : 74.4%
4/1		U	N/A	N/A	-		-	-	-	1389	Inf	Inf	0.0%
5/1	Church Road Left	U	N/A	N/A	D		1	19	-	247	1871	312	79.2%
6/1		U	N/A	N/A	-		-	-	-	210	Inf	Inf	0.0%
7/1	Marsh Drive Left	O	N/A	N/A	-		-	-	-	83	1702	550	15.1%
8/1		U	N/A	N/A	-		-	-	-	7	Inf	Inf	0.0%
Ped Link: P1	Unnamed Ped Link	-	N/A	-	E		1	9	-	0	-	0	0.0%
Ped Link: P2	Unnamed Ped Link	-	N/A	-	F		1	85	-	0	-	0	0.0%
Ped Link: P3	Unnamed Ped Link	-	N/A	-	G		1	7	-	0	-	0	0.0%

Full Input Data And Results

[illegible]

Full Input Data And Results
Scenario 4: '2041 Core PM' (FG4: '2041 Core PM', Plan 1: 'Network Control Plan 1')

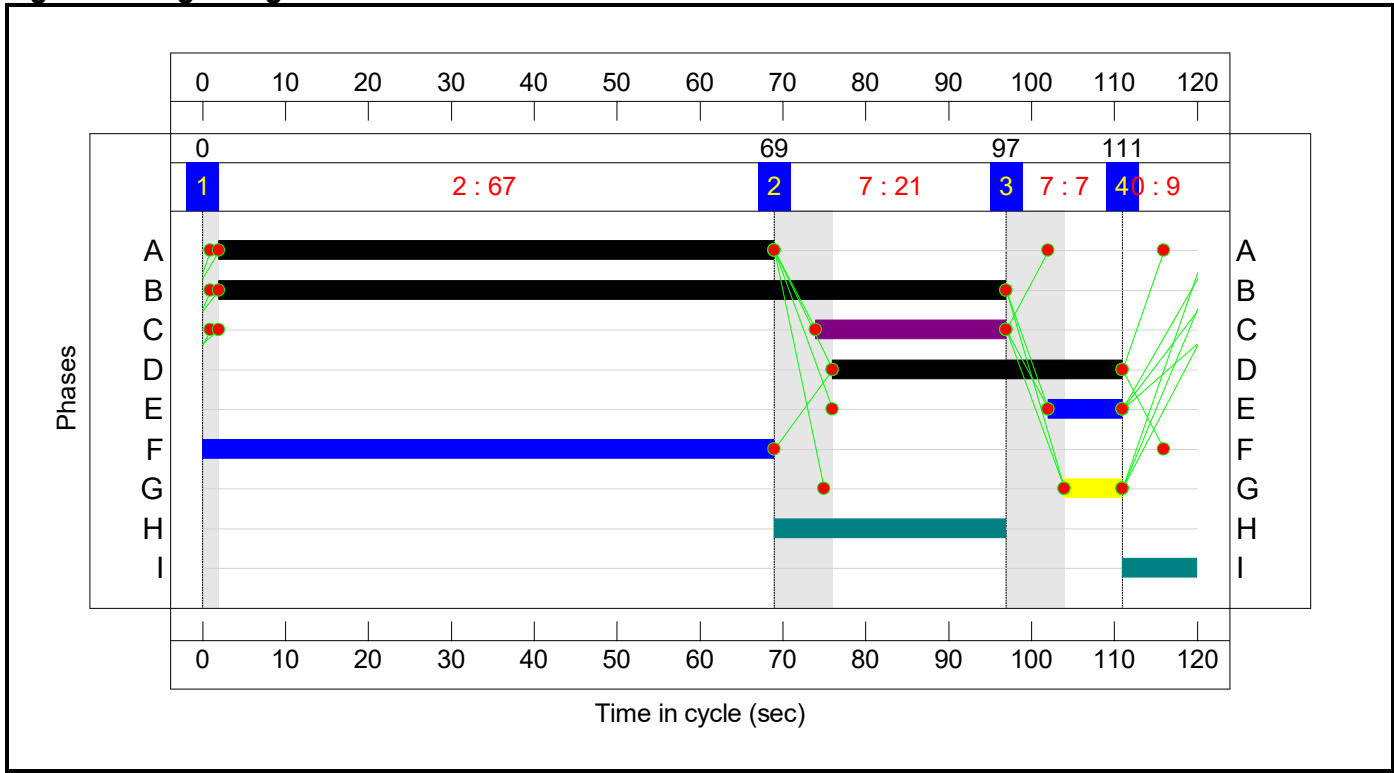
Stage Sequence Diagram



Stage Timings

Stage	1	2	3	4
Duration	67	21	7	9
Change Point	0	69	97	111

Signal Timings Diagram



Full Input Data And Results

Network Layout Diagram

Full Input Data And Results

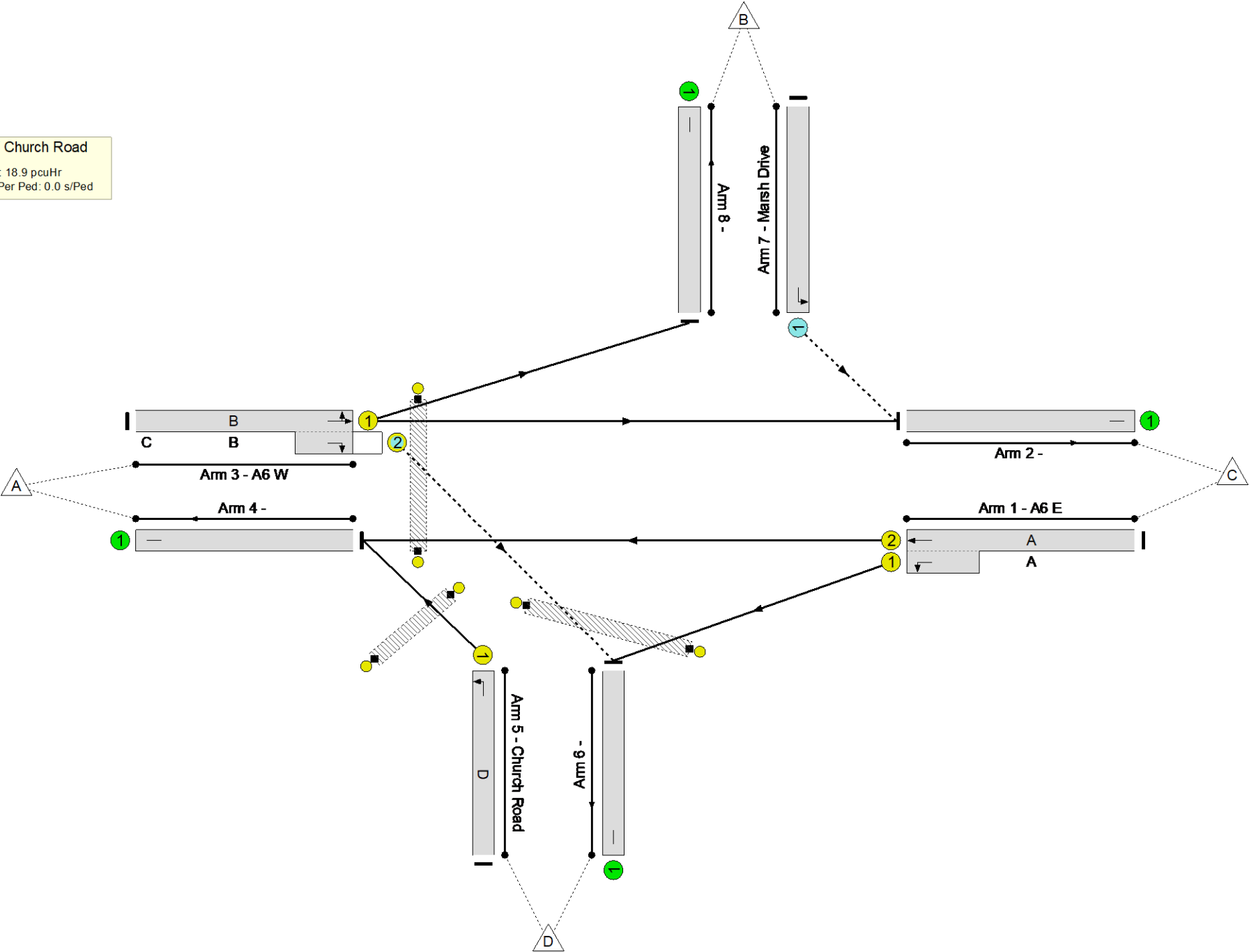


A6 / Marsh Drive / Church Road

PRC: 9.9 %

Total Traffic Delay: 18.9 pcuHr

Ave. Route Delay Per Ped: 0.0 s/Ped



Full Input Data And Results

Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network	-	-	N/A	-	-		-	-	-	-	-	-	81.9%
A6 / Marsh Drive / Church Road	-	-	N/A	-	-		-	-	-	-	-	-	81.9%
1/2+1/1	A6 E Ahead Left	U	N/A	N/A	A		1	67	-	941	2065:1564	1124+36	81.1 : 81.1%
2/1		U	N/A	N/A	-		-	-	-	1098	Inf	Inf	0.0%
3/1+3/2	A6 W Ahead Right Left	U+O	N/A	N/A	B	C	1	95	23	1272	1948:1692	1279+273	81.9 : 81.9%
4/1		U	N/A	N/A	-		-	-	-	1360	Inf	Inf	0.0%
5/1	Church Road Left	U	N/A	N/A	D		1	35	-	448	1871	561	79.8%
6/1		U	N/A	N/A	-		-	-	-	253	Inf	Inf	0.0%
7/1	Marsh Drive Left	O	N/A	N/A	-		-	-	-	58	1702	477	12.2%
8/1		U	N/A	N/A	-		-	-	-	8	Inf	Inf	0.0%
Ped Link: P1	Unnamed Ped Link	-	N/A	-	E		1	9	-	0	-	0	0.0%
Ped Link: P2	Unnamed Ped Link	-	N/A	-	F		1	69	-	0	-	0	0.0%
Ped Link: P3	Unnamed Ped Link	-	N/A	-	G		1	7	-	0	-	0	0.0%

Full Input Data And Results

[illegible]

Junctions 11

ARCADY 11 - Roundabout Module

Version: 11.1.1.2424

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Filename: Wistow Road_A6 after mitigation.j11

Path: \\sysstra.info\UK_DFS\LEEDSFILE\ProjectData\GB01T26B01 Harborough Local Plan - Local Road Assessments\5. Technical\3. Modelling\Junction Models\19 - A6 x Wistow Road\Mitigation

Report generation date: 14/07/2026 15:35:32

»D1 - 2041 | Core | AM

»D2 - 2041 | Core | PM

»D3 - 2041 | Pref | AM

»D4 - 2041 | Pref | PM

Summary of junction performance

	AM					PM				
	Set ID	Queue (PCU)	Delay (s)	RFC	LOS	Set ID	Queue (PCU)	Delay (s)	RFC	LOS
	2041 - Core									
1 - A6 N	D1	3.2	8.88	0.75	A	D2	4.0	11.35	0.80	B
2 - A6 S		2.0	4.86	0.66	A		2.2	5.48	0.68	A
3 - Wistow		0.9	5.17	0.47	A		1.9	8.65	0.66	A
	2041 - Pref									
1 - A6 N	D3	3.7	10.24	0.78	B	D4	3.5	9.76	0.78	A
2 - A6 S		2.0	4.87	0.66	A		3.1	7.12	0.76	A
3 - Wistow		1.1	5.76	0.52	A		1.4	7.59	0.58	A

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

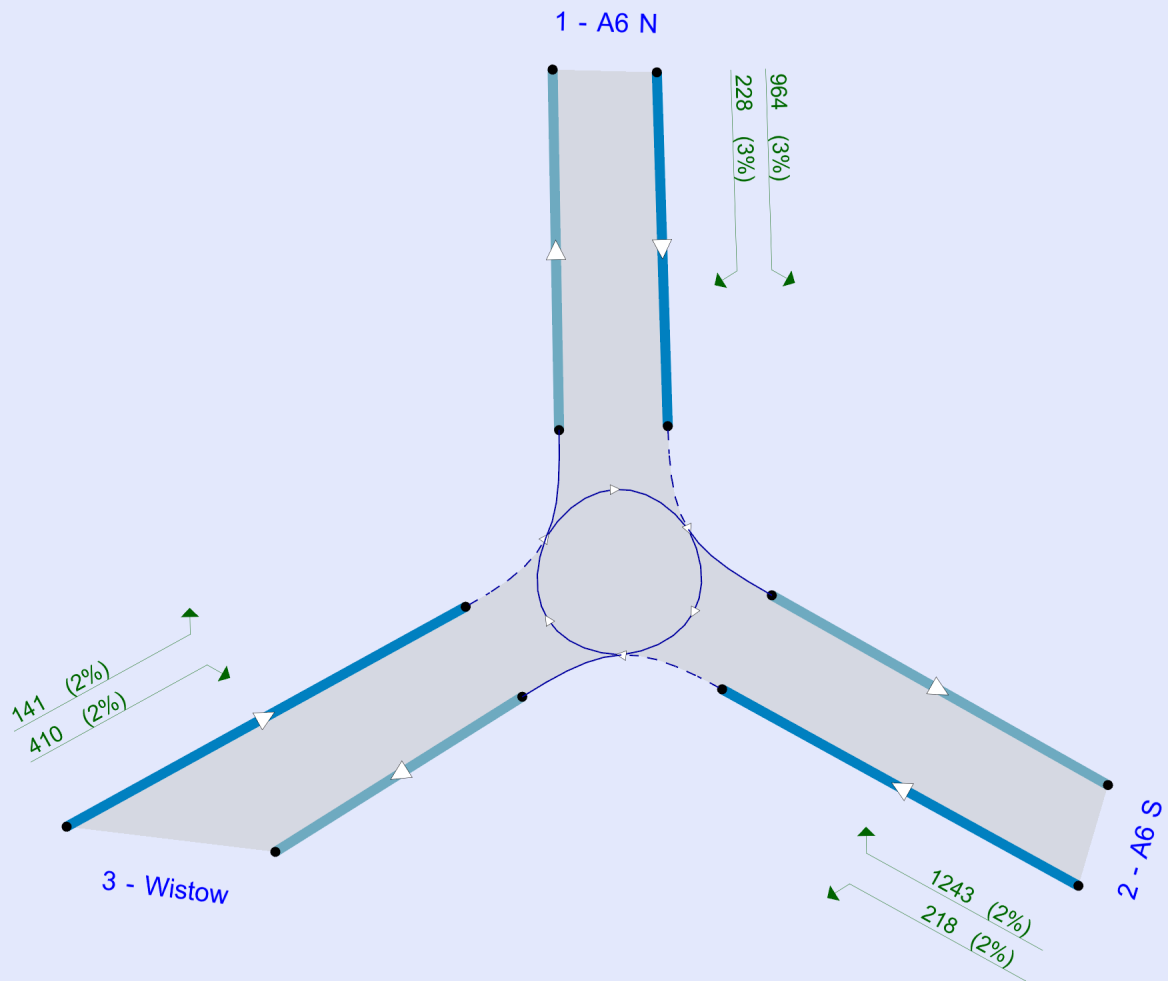
File summary

File Description

Title	
Location	
Site number	
Date	17/11/2021
Version	
Status	(new file)
Identifier	
Client	
Jobnumber	
Enumerator	LCCADlastinson
Description	

Units

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



Flows show original traffic demand (PCU/hr) with (HV %)

The junction diagram reflects the last run of Junctions.

Analysis Options

Vehicle length (m)	Calculate Queue Percentiles	Calculate detailed queueing delay	Show lane queues in feet / metres	Show all PICADY stream intercepts	Calculate residual capacity	RFC Threshold	Average Delay threshold (s)	Queue threshold (PCU)	Use simulation for HCM roundabouts	Use iterations for HCM roundabouts
5.75						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)	Run automatically
D1	2041	Core	AM	ONE HOUR	08:00	09:30	15	✓
D2	2041	Core	PM	ONE HOUR	17:00	18:30	15	✓
D3	2041	Pref	AM	ONE HOUR	08:00	09:30	15	✓
D4	2041	Pref	PM	ONE HOUR	17:00	18:30	15	✓

Analysis Set Details

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

D1 - 2041 | Core | AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout	1, 2, 3	6.45	A

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	6.45	A

Arms

Arms

Arm	Name	Description	No give-way line
1	A6 N	A6 North	
2	A6 S		
3	Wistow		

Roundabout Geometry

Arm	V - Approach road half-width (m)	E - Entry width (m)	I' - Effective flare length (m)	R - Entry radius (m)	D - Inscribed circle diameter (m)	PHI - Conflict (entry) angle (deg)	Entry only	Exit only
1 - A6 N	4.50	7.00	30.0	25.0	45.0	21.0		
2 - A6 S	4.50	9.00	24.0	23.0	45.0	19.0		
3 - Wistow	4.50	8.50	30.0	20.5	45.0	46.0		

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Arm	Final slope	Final intercept (PCU/hr)
1 - A6 N	0.707	2042
2 - A6 S	0.761	2314
3 - Wistow	0.688	2093

The slope and intercept shown above include any corrections and adjustments.

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)	Run automatically
D1	2041	Core	AM	ONE HOUR	08:00	09:30	15	✓

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1 - A6 N		ONE HOUR	✓	1194	100.000
2 - A6 S		ONE HOUR	✓	1380	100.000
3 - Wistow		ONE HOUR	✓	511	110.000

Origin-Destination Data

Demand (PCU/hr)

	To			
		1 - A6 N	2 - A6 S	3 - Wistow
	1 - A6 N	0	1183	11
	2 - A6 S	1008	0	372
	3 - Wistow	162	349	0

Vehicle Mix

HV data entry mode	PCU Factor for a HV (PCU)
HV Percentages	2.00

Heavy Vehicle %

	To			
		1 - A6 N	2 - A6 S	3 - Wistow
	1 - A6 N	0	6	6
	2 - A6 S	6	0	6
	3 - Wistow	2	2	0

Results**Results Summary for whole modelled period**

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
1 - A6 N	0.75	8.88	3.2	A	1096	1643
2 - A6 S	0.66	4.86	2.0	A	1266	1899
3 - Wistow	0.47	5.17	0.9	A	516	774

Main Results for each time segment**08:00 - 08:15**

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A6 N	899	225	288	1838	0.489	895	890	0.0	1.0	4.028	A
2 - A6 S	1039	260	8	2308	0.450	1035	1175	0.0	0.9	2.991	A
3 - Wistow	423	106	756	1572	0.269	422	287	0.0	0.4	3.187	A

08:15 - 08:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A6 N	1073	268	345	1798	0.597	1071	1065	1.0	1.5	5.232	A
2 - A6 S	1241	310	10	2307	0.538	1239	1406	0.9	1.2	3.569	A
3 - Wistow	505	126	905	1470	0.344	505	344	0.4	0.5	3.803	A

08:30 - 08:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A6 N	1315	329	422	1744	0.754	1308	1303	1.5	3.1	8.635	A
2 - A6 S	1519	380	12	2305	0.659	1516	1718	1.2	2.0	4.817	A
3 - Wistow	619	155	1108	1330	0.465	617	421	0.5	0.9	5.143	A

08:45 - 09:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A6 N	1315	329	423	1743	0.754	1314	1306	3.1	3.2	8.884	A
2 - A6 S	1519	380	12	2305	0.659	1519	1725	2.0	2.0	4.855	A
3 - Wistow	619	155	1110	1329	0.466	619	422	0.9	0.9	5.172	A

09:00 - 09:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A6 N	1073	268	346	1797	0.597	1080	1069	3.2	1.6	5.365	A
2 - A6 S	1241	310	10	2307	0.538	1244	1416	2.0	1.2	3.602	A
3 - Wistow	505	126	908	1467	0.344	507	345	0.9	0.5	3.829	A

09:15 - 09:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A6 N	899	225	289	1837	0.489	901	894	1.6	1.0	4.087	A
2 - A6 S	1039	260	8	2308	0.450	1040	1182	1.2	0.9	3.013	A
3 - Wistow	423	106	760	1570	0.270	424	289	0.5	0.4	3.205	A

D2 - 2041 | Core | PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout	1, 2, 3	8.33	A

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	8.33	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)	Run automatically
D2	2041	Core	PM	ONE HOUR	17:00	18:30	15	✓

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1 - A6 N		ONE HOUR	✓	1170	100.000
2 - A6 S		ONE HOUR	✓	1323	100.000
3 - Wistow		ONE HOUR	✓	674	110.000

Origin-Destination Data

Demand (PCU/hr)

	To			
		1 - A6 N	2 - A6 S	3 - Wistow
	1 - A6 N	0	946	224
	2 - A6 S	1125	0	198
	3 - Wistow	173	501	0

Vehicle Mix

HV data entry mode	PCU Factor for a HV (PCU)
HV Percentages	2.00

Heavy Vehicle %

	To			
		1 - A6 N	2 - A6 S	3 - Wistow
	1 - A6 N	0	3	3
	2 - A6 S	2	0	2
	3 - Wistow	2	2	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
1 - A6 N	0.80	11.35	4.0	B	1074	1610
2 - A6 S	0.68	5.48	2.2	A	1214	1821
3 - Wistow	0.66	8.65	1.9	A	680	1020

Main Results for each time segment

17:00 - 17:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A6 N	881	220	413	1750	0.503	877	987	0.0	1.0	4.227	A
2 - A6 S	996	249	168	2187	0.456	993	1122	0.0	0.8	3.066	A
3 - Wistow	558	140	844	1512	0.369	556	316	0.0	0.6	3.832	A

17:15 - 17:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A6 N	1052	263	494	1693	0.621	1049	1181	1.0	1.7	5.741	A
2 - A6 S	1189	297	201	2162	0.550	1188	1343	0.8	1.2	3.764	A
3 - Wistow	667	167	1010	1397	0.477	665	379	0.6	0.9	5.005	A

17:30 - 17:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A6 N	1288	322	604	1615	0.798	1280	1444	1.7	3.8	10.775	B
2 - A6 S	1457	364	245	2128	0.685	1453	1638	1.2	2.2	5.409	A
3 - Wistow	816	204	1235	1242	0.657	812	462	0.9	1.9	8.465	A

17:45 - 18:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A6 N	1288	322	607	1613	0.799	1288	1448	3.8	4.0	11.347	B
2 - A6 S	1457	364	247	2127	0.685	1457	1648	2.2	2.2	5.476	A
3 - Wistow	816	204	1239	1240	0.658	816	465	1.9	1.9	8.655	A

18:00 - 18:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A6 N	1052	263	498	1690	0.622	1061	1187	4.0	1.7	5.975	A
2 - A6 S	1189	297	203	2160	0.551	1193	1356	2.2	1.3	3.811	A
3 - Wistow	667	167	1015	1394	0.478	670	382	1.9	0.9	5.101	A

18:15 - 18:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A6 N	881	220	416	1748	0.504	884	992	1.7	1.1	4.303	A
2 - A6 S	996	249	169	2186	0.456	998	1130	1.3	0.9	3.096	A
3 - Wistow	558	140	848	1509	0.370	560	318	0.9	0.6	3.875	A

D3 - 2041 | Pref | AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout	1, 2, 3	7.07	A

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	7.07	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)	Run automatically
D3	2041	Pref	AM	ONE HOUR	08:00	09:30	15	✓

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1 - A6 N		ONE HOUR	✓	1215	100.000
2 - A6 S		ONE HOUR	✓	1381	100.000
3 - Wistow		ONE HOUR	✓	570	110.000

Origin-Destination Data

Demand (PCU/hr)

	To			
		1 - A6 N	2 - A6 S	3 - Wistow
	1 - A6 N	0	1203	12
	2 - A6 S	1009	0	372
	3 - Wistow	181	389	0

Vehicle Mix

HV data entry mode	PCU Factor for a HV (PCU)
HV Percentages	2.00

Heavy Vehicle %

	To			
		1 - A6 N	2 - A6 S	3 - Wistow
	1 - A6 N	0	6	6
	2 - A6 S	6	0	6
	3 - Wistow	2	2	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
1 - A6 N	0.78	10.24	3.7	B	1115	1672
2 - A6 S	0.66	4.87	2.0	A	1267	1901
3 - Wistow	0.52	5.76	1.1	A	575	863

Main Results for each time segment

08:00 - 08:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A6 N	915	229	321	1815	0.504	910	906	0.0	1.1	4.199	A
2 - A6 S	1040	260	9	2308	0.451	1036	1222	0.0	0.9	2.995	A
3 - Wistow	472	118	757	1572	0.300	470	288	0.0	0.4	3.328	A

08:15 - 08:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A6 N	1092	273	384	1770	0.617	1090	1085	1.1	1.7	5.586	A
2 - A6 S	1241	310	11	2306	0.538	1240	1463	0.9	1.2	3.574	A
3 - Wistow	564	141	906	1469	0.384	563	345	0.4	0.6	4.049	A

08:30 - 08:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A6 N	1338	334	470	1710	0.782	1330	1327	1.7	3.6	9.844	A
2 - A6 S	1521	380	13	2304	0.660	1517	1787	1.2	2.0	4.829	A
3 - Wistow	690	173	1109	1330	0.519	689	422	0.6	1.1	5.712	A

08:45 - 09:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A6 N	1338	334	471	1709	0.783	1337	1330	3.6	3.7	10.241	B
2 - A6 S	1521	380	13	2304	0.660	1520	1795	2.0	2.0	4.867	A
3 - Wistow	690	173	1111	1328	0.520	690	423	1.1	1.1	5.757	A

09:00 - 09:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A6 N	1092	273	386	1769	0.617	1100	1089	3.7	1.7	5.771	A
2 - A6 S	1241	310	11	2306	0.538	1245	1475	2.0	1.2	3.604	A
3 - Wistow	564	141	909	1467	0.384	565	346	1.1	0.6	4.082	A

09:15 - 09:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A6 N	915	229	323	1814	0.504	917	911	1.7	1.1	4.268	A
2 - A6 S	1040	260	9	2307	0.451	1041	1231	1.2	0.9	3.016	A
3 - Wistow	472	118	761	1569	0.301	473	290	0.6	0.4	3.353	A

D4 - 2041 | Pref | PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout	1, 2, 3	8.17	A

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	8.17	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)	Run automatically
D4	2041	Pref	PM	ONE HOUR	17:00	18:30	15	✓

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1 - A6 N		ONE HOUR	✓	1192	100.000
2 - A6 S		ONE HOUR	✓	1461	100.000
3 - Wistow		ONE HOUR	✓	551	110.000

Origin-Destination Data

Demand (PCU/hr)

	To			
From		1 - A6 N	2 - A6 S	3 - Wistow
	1 - A6 N	0	964	228
	2 - A6 S	1243	0	218
	3 - Wistow	141	410	0

Vehicle Mix

HV data entry mode	PCU Factor for a HV (PCU)
HV Percentages	2.00

Heavy Vehicle %

	To			
From		1 - A6 N	2 - A6 S	3 - Wistow
	1 - A6 N	0	3	3
	2 - A6 S	2	0	2
	3 - Wistow	2	2	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
1 - A6 N	0.78	9.76	3.5	A	1094	1641
2 - A6 S	0.76	7.12	3.1	A	1341	2011
3 - Wistow	0.58	7.59	1.4	A	556	834

Main Results for each time segment

17:00 - 17:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A6 N	897	224	338	1803	0.498	893	1049	0.0	1.0	4.059	A
2 - A6 S	1100	275	171	2184	0.504	1096	1061	0.0	1.0	3.361	A
3 - Wistow	456	114	932	1451	0.314	454	334	0.0	0.5	3.679	A

17:15 - 17:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A6 N	1072	268	405	1756	0.610	1069	1255	1.0	1.6	5.381	A
2 - A6 S	1313	328	205	2159	0.608	1311	1269	1.0	1.6	4.321	A
3 - Wistow	545	136	1116	1325	0.411	544	400	0.5	0.7	4.696	A

17:30 - 17:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A6 N	1312	328	495	1692	0.775	1305	1533	1.6	3.4	9.402	A
2 - A6 S	1609	402	250	2124	0.757	1603	1550	1.6	3.1	6.956	A
3 - Wistow	667	167	1363	1154	0.578	665	489	0.7	1.4	7.461	A

17:45 - 18:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A6 N	1312	328	496	1691	0.776	1312	1539	3.4	3.5	9.761	A
2 - A6 S	1609	402	251	2123	0.758	1608	1558	3.1	3.1	7.123	A
3 - Wistow	667	167	1368	1151	0.580	667	491	1.4	1.4	7.592	A

18:00 - 18:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A6 N	1072	268	407	1754	0.611	1079	1263	3.5	1.6	5.550	A
2 - A6 S	1313	328	206	2157	0.609	1320	1280	3.1	1.6	4.413	A
3 - Wistow	545	136	1123	1320	0.413	548	403	1.4	0.7	4.769	A

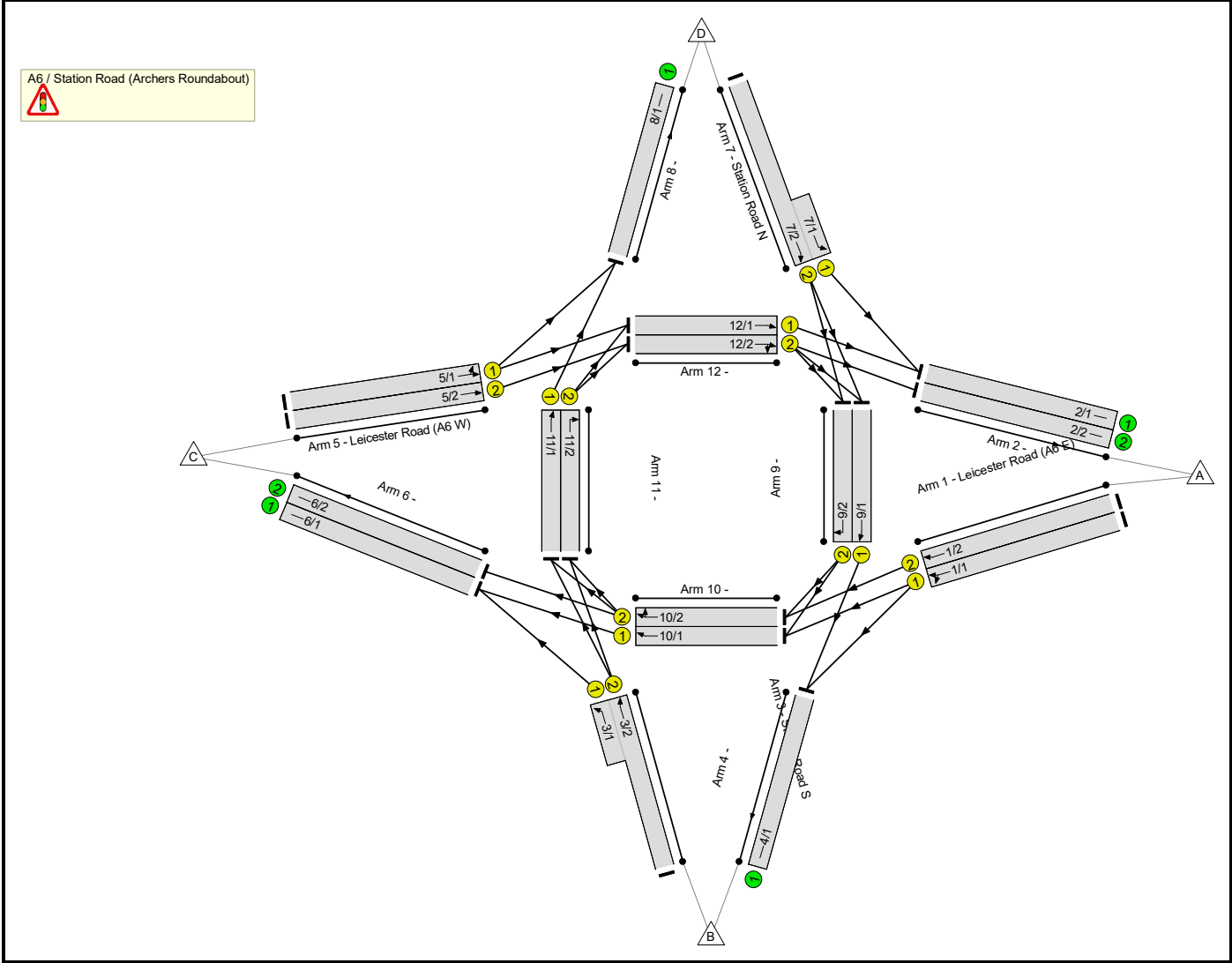
18:15 - 18:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A6 N	897	224	340	1801	0.498	900	1055	1.6	1.0	4.124	A
2 - A6 S	1100	275	172	2183	0.504	1102	1068	1.6	1.0	3.402	A
3 - Wistow	456	114	938	1447	0.315	457	337	0.7	0.5	3.712	A

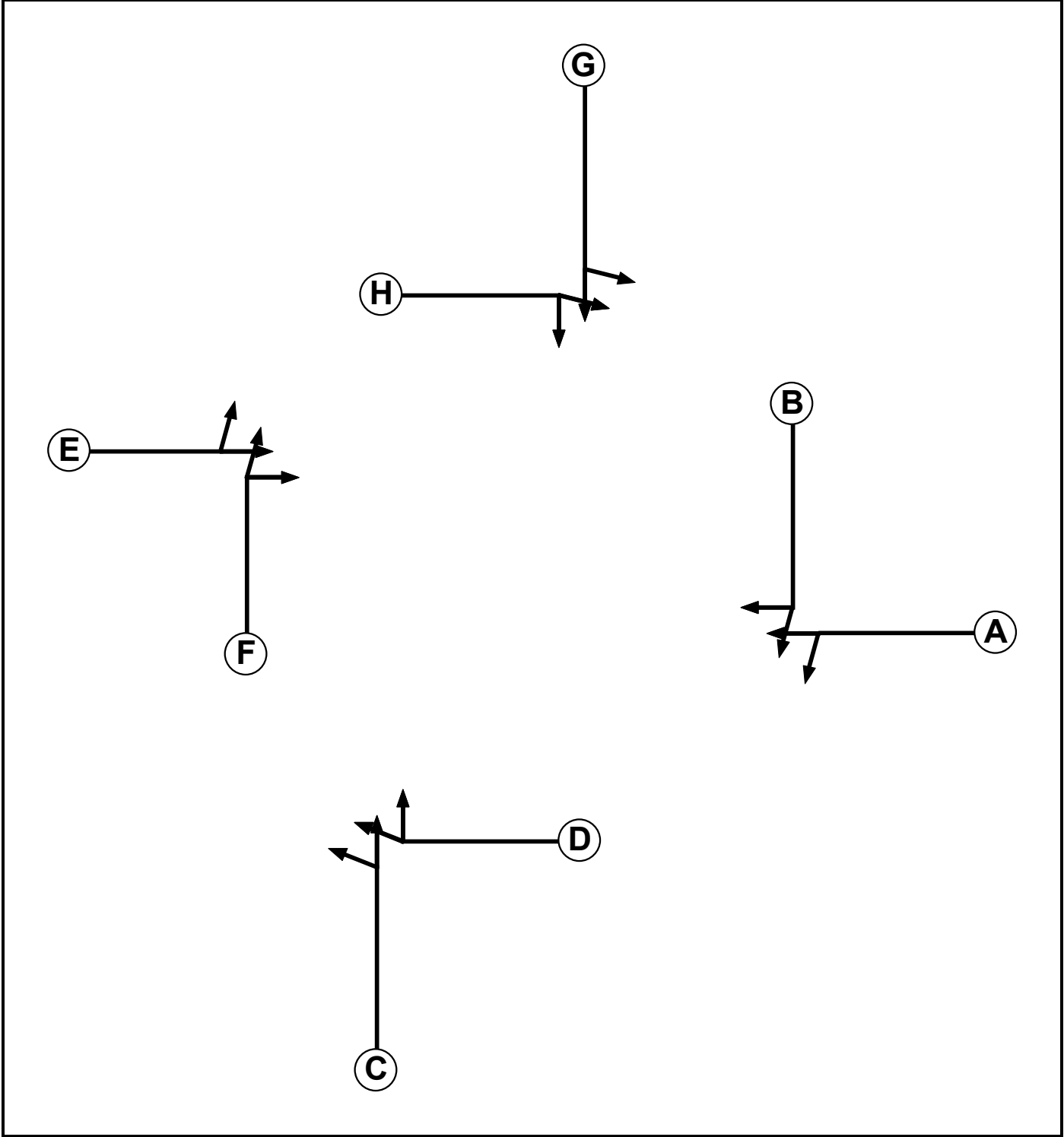
User and Project Details

Project:	
Title:	
Location:	
Additional detail:	
File name:	20_Mitigation - A6 x Station Road (Archers Roundabout).lsg3x
Author:	
Company:	
Address:	

Network Layout Diagram



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	2		7	7
D	Traffic	2		7	7
E	Traffic	3		7	7
F	Traffic	3		7	7
G	Traffic	4		7	7
H	Traffic	4		7	7

Phase Intergreens Matrix

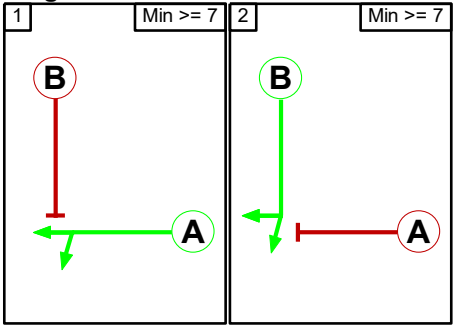
Terminating Phase	Starting Phase								
		A	B	C	D	E	F	G	H
	A		5	-	-	-	-	-	-
	B	5		-	-	-	-	-	-
	C	-	-		5	-	-	-	-
	D	-	-	5		-	-	-	-
	E	-	-	-	-		5	-	-
	F	-	-	-	-	5		-	-
	G	-	-	-	-	-	-		5
	H	-	-	-	-	-	-	5	

Phases in Stage

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

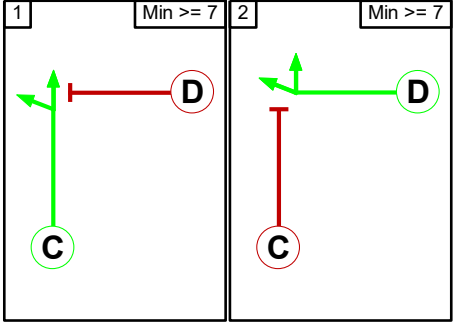
Stage Diagram

Stage Stream: 1

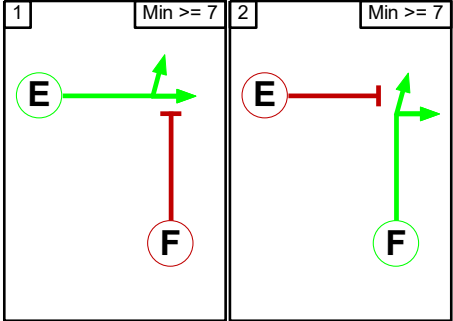


Full Input Data And Results

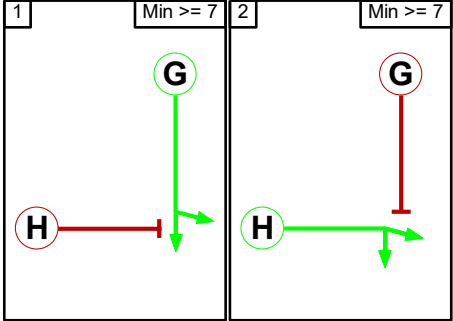
Stage Stream: 2



Stage Stream: 3



Stage Stream: 4



Phase Delays

Stage Stream: 1

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

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					

Stage Stream: 4

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

Prohibited Stage Change

Stage Stream: 1

	To Stage		
From Stage		1	2
	1		5
	2	5	

Stage Stream: 2

	To Stage		
From Stage		1	2
	1		5
	2	5	

Stage Stream: 3

	To Stage		
From Stage		1	2
	1		5
	2	5	

Stage Stream: 4

	To Stage		
From Stage		1	2
	1		5
	2	5	

Full Input Data And Results

Give-Way Lane Input Data

Junction: A6 / Station Road (Archers Roundabout)
There are no Opposed Lanes in this Junction

Lane Input Data

Junction: A6 / Station Road (Archers Roundabout)												
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 (Leicester Road (A6 E))	U	A	2	3	60.0	Geom	-	4.00	0.00	N	Arm 4 Left	20.00
											Arm 10 Ahead	Inf
1/2 (Leicester Road (A6 E))	U	A	2	3	60.0	Geom	-	4.00	0.00	N	Arm 10 Ahead	Inf
2/1	U		2	3	60.0	Inf	-	-	-	-	-	-
2/2	U		2	3	60.0	Inf	-	-	-	-	-	-
3/1 (Station Road S)	U	C	2	3	5.0	Geom	-	3.25	0.00	Y	Arm 6 Left	17.50
3/2 (Station Road S)	U	C	2	3	60.0	Geom	-	3.25	0.00	N	Arm 11 Ahead	Inf
4/1	U		2	3	60.0	Inf	-	-	-	-	-	-
5/1 (Leicester Road (A6 W))	U	E	2	3	60.0	Geom	-	4.00	0.00	Y	Arm 8 Left	15.00
											Arm 12 Ahead	Inf
5/2 (Leicester Road (A6 W))	U	E	2	3	60.0	Geom	-	4.00	0.00	N	Arm 12 Ahead	Inf
6/1	U		2	3	60.0	Inf	-	-	-	-	-	-
6/2	U		2	3	60.0	Inf	-	-	-	-	-	-
7/1 (Station Road N)	U	G	2	3	5.0	Geom	-	3.50	0.00	Y	Arm 2 Left	20.00
7/2 (Station Road N)	U	G	2	3	60.0	Geom	-	3.50	0.00	N	Arm 9 Ahead	Inf
8/1	U		2	3	60.0	Inf	-	-	-	-	-	-
9/1	U	B	2	3	4.0	User	1900	-	-	-	-	-
9/2	U	B	2	3	4.0	User	1900	-	-	-	-	-
10/1	U	D	2	3	4.0	User	1900	-	-	-	-	-
10/2	U	D	2	3	4.0	User	1900	-	-	-	-	-
11/1	U	F	2	3	4.0	User	1900	-	-	-	-	-
11/2	U	F	2	3	4.0	User	1900	-	-	-	-	-
12/1	U	H	2	3	4.0	User	1900	-	-	-	-	-
12/2	U	H	2	3	4.0	User	1900	-	-	-	-	-

Full Input Data And Results

Traffic Flow Groups

Flow Group	Start Time	End Time	Duration	Formula
1: '2041 Pref AM'	08:00	09:00	01:00	
2: '2041 Pref PM'	17:00	18:00	01:00	
3: '2041 Core AM'	08:00	09:00	01:00	
4: '2041 Core PM'	17:00	18:00	01:00	

Scenario 1: '2041 Pref AM' (FG1: '2041 Pref AM', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired

Desired Flow :

Origin	Destination					
		A	B	C	D	Tot.
	A	1	123	701	224	1049
	B	210	1	261	262	734
	C	968	142	3	50	1163
	D	135	448	214	3	800
	Tot.	1314	714	1179	539	3746

Full Input Data And Results

Traffic Lane Flows

Lane	Scenario 1: 2041 Pref AM
Junction: A6 / Station Road (Archers Roundabout)	
1/1	542
1/2	507
2/1	790
2/2	524
3/1 (short)	261
3/2 (with short)	734(In) 473(Out)
4/1	714
5/1	559
5/2	604
6/1	813
6/2	366
7/1 (short)	135
7/2 (with short)	800(In) 665(Out)
8/1	539
9/1	591
9/2	220
10/1	552
10/2	594
11/1	489
11/2	212
12/1	655
12/2	670

Full Input Data And Results

Scenario 2: '2041 Pref PM' (FG2: '2041 Pref PM', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired

Desired Flow :

	Destination					
Origin		A	B	C	D	Tot.
	A	0	183	876	310	1369
	B	266	0	268	452	986
	C	866	163	1	18	1048
	D	175	409	51	0	635
	Tot.	1307	755	1196	780	4038

Traffic Lane Flows

Lane	Scenario 2: 2041 Pref PM
Junction: A6 / Station Road (Archers Roundabout)	
1/1	743
1/2	626
2/1	812
2/2	495
3/1 (short)	268
3/2 (with short)	986(In) 718(Out)
4/1	755
5/1	509
5/2	539
6/1	879
6/2	317
7/1 (short)	175
7/2 (with short)	635(In) 460(Out)
8/1	780
9/1	572
9/2	52
10/1	611
10/2	627
11/1	762
11/2	266
12/1	637
12/2	659

Full Input Data And Results

Scenario 3: '2041 Core AM' (FG3: '2041 Core AM', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired

Desired Flow :

	Destination					
Origin		A	B	C	D	Tot.
	A	1	121	688	220	1030
	B	188	1	234	235	658
	C	943	139	3	49	1134
	D	106	354	169	2	631
	Tot.	1238	615	1094	506	3453

Traffic Lane Flows

Lane	Scenario 3: 2041 Core AM
Junction: A6 / Station Road (Archers Roundabout)	
1/1	560
1/2	470
2/1	749
2/2	489
3/1 (short)	234
3/2 (with short)	658(In) 424(Out)
4/1	615
5/1	560
5/2	574
6/1	777
6/2	317
7/1 (short)	106
7/2 (with short)	631(In) 525(Out)
8/1	506
9/1	494
9/2	174
10/1	543
10/2	540
11/1	457
11/2	190
12/1	643
12/2	632

Full Input Data And Results

Scenario 4: '2041 Core PM' (FG4: '2041 Core PM', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired

Desired Flow :

	Destination					
Origin		A	B	C	D	Tot.
	A	0	170	811	287	1268
	B	242	0	244	412	898
	C	860	162	1	18	1041
	D	153	358	45	0	556
	Tot.	1255	690	1101	717	3763

Traffic Lane Flows

Lane	Scenario 4: 2041 Core PM
Junction: A6 / Station Road (Archers Roundabout)	
1/1	713
1/2	555
2/1	802
2/2	453
3/1 (short)	244
3/2 (with short)	898(In) 654(Out)
4/1	690
5/1	493
5/2	548
6/1	817
6/2	284
7/1 (short)	153
7/2 (with short)	556(In) 403(Out)
8/1	717
9/1	520
9/2	46
10/1	573
10/2	571
11/1	699
11/2	242
12/1	649
12/2	616

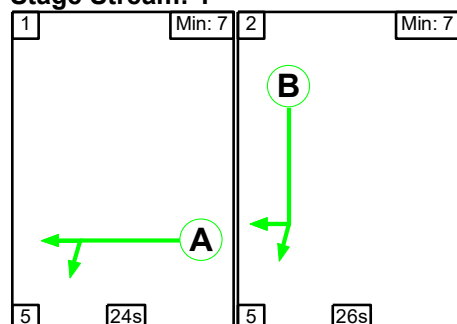
Lane Saturation Flows

Junction: A6 / Station Road (Archers Roundabout)								
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 (Leicester Road (A6 E))	4.00	0.00	N	Arm 4 Left	20.00	23.8 %	2117	2117
				Arm 10 Ahead	Inf	76.2 %		
1/2 (Leicester Road (A6 E))	4.00	0.00	N	Arm 10 Ahead	Inf	100.0 %	2155	2155
2/1	Infinite Saturation Flow						Inf	Inf
2/2	Infinite Saturation Flow						Inf	Inf
3/1 (Station Road S)	3.25	0.00	Y	Arm 6 Left	17.50	100.0 %	1787	1787
3/2 (Station Road S)	3.25	0.00	N	Arm 11 Ahead	Inf	100.0 %	2080	2080
4/1	Infinite Saturation Flow						Inf	Inf
5/1 (Leicester Road (A6 W))	4.00	0.00	Y	Arm 8 Left	15.00	3.7 %	2008	2008
				Arm 12 Ahead	Inf	96.3 %		
5/2 (Leicester Road (A6 W))	4.00	0.00	N	Arm 12 Ahead	Inf	100.0 %	2155	2155
6/1	Infinite Saturation Flow						Inf	Inf
6/2	Infinite Saturation Flow						Inf	Inf
7/1 (Station Road N)	3.50	0.00	Y	Arm 2 Left	20.00	100.0 %	1828	1828
7/2 (Station Road N)	3.50	0.00	N	Arm 9 Ahead	Inf	100.0 %	2105	2105
8/1	Infinite Saturation Flow						Inf	Inf
9/1	This lane uses a directly entered Saturation Flow						1900	1900
9/2	This lane uses a directly entered Saturation Flow						1900	1900
10/1	This lane uses a directly entered Saturation Flow						1900	1900
10/2	This lane uses a directly entered Saturation Flow						1900	1900
11/1	This lane uses a directly entered Saturation Flow						1900	1900
11/2	This lane uses a directly entered Saturation Flow						1900	1900
12/1	This lane uses a directly entered Saturation Flow						1900	1900
12/2	This lane uses a directly entered Saturation Flow						1900	1900

Scenario 1: '2041 Pref AM' (FG1: '2041 Pref AM', Plan 1: 'Network Control Plan 1')

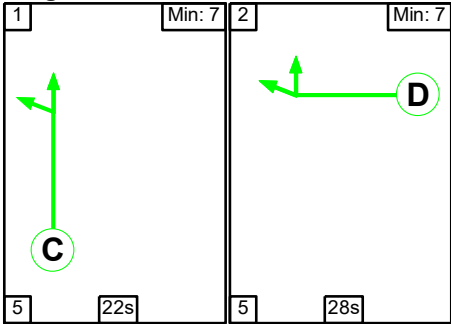
Stage Sequence Diagram

Stage Stream: 1

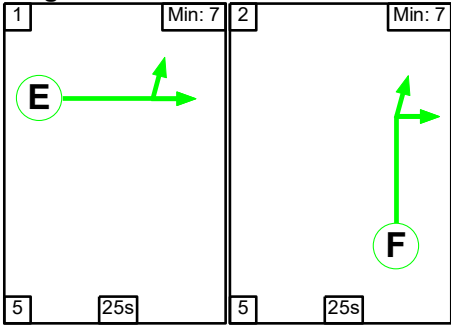


Full Input Data And Results

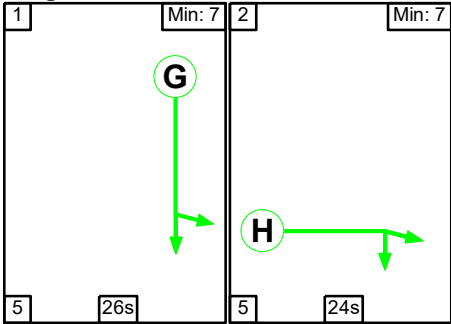
Stage Stream: 2



Stage Stream: 3



Stage Stream: 4



Stage Timings

Stage Stream: 1

Stage	1	2
Duration	24	26
Change Point	0	29

Stage Stream: 2

Stage	1	2
Duration	22	28
Change Point	31	58

Stage Stream: 3

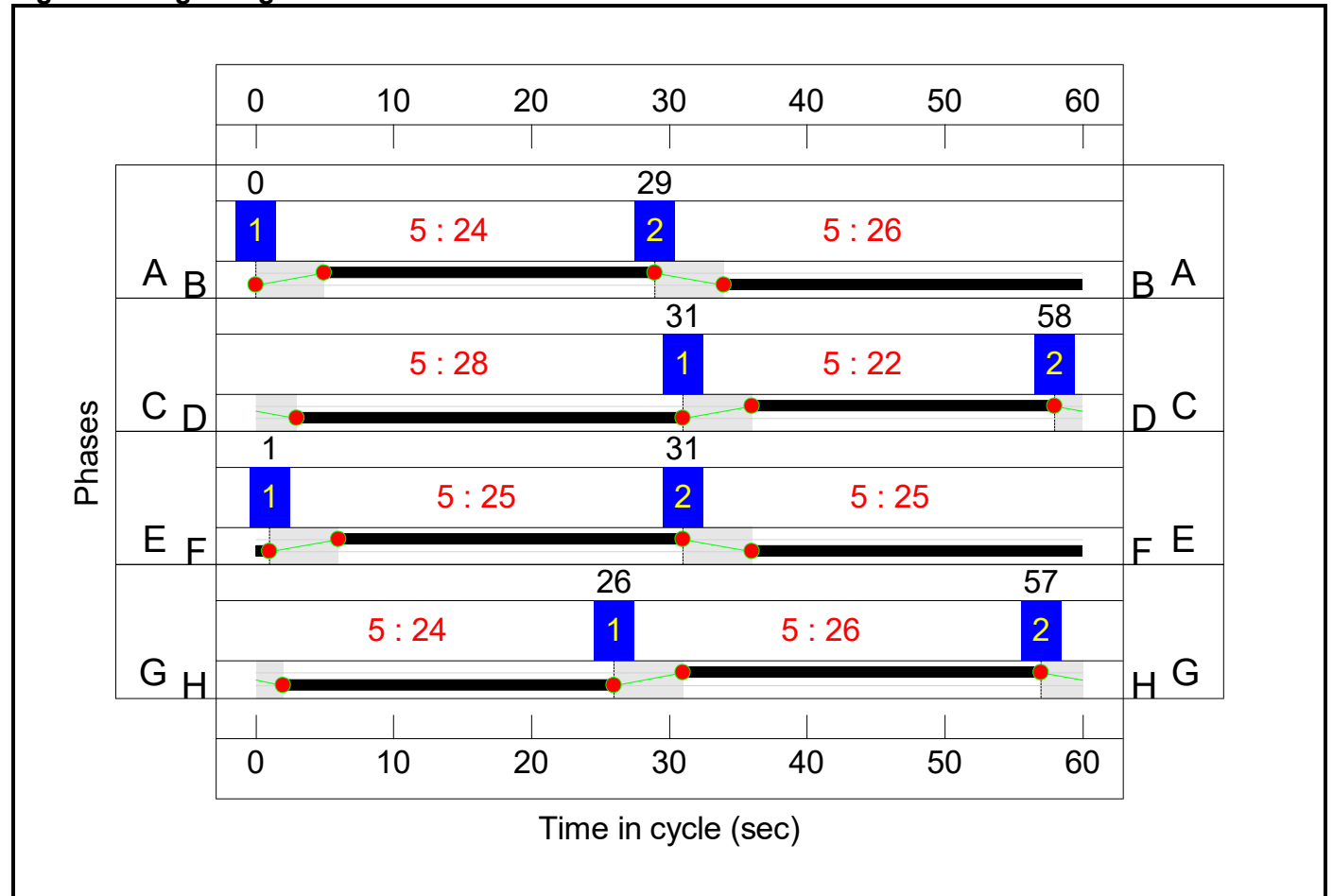
Stage	1	2
Duration	25	25
Change Point	1	31

Full Input Data And Results

Stage Stream: 4

Stage	1	2
Duration	26	24
Change Point	26	57

Signal Timings Diagram



Full Input Data And Results

Network Layout Diagram

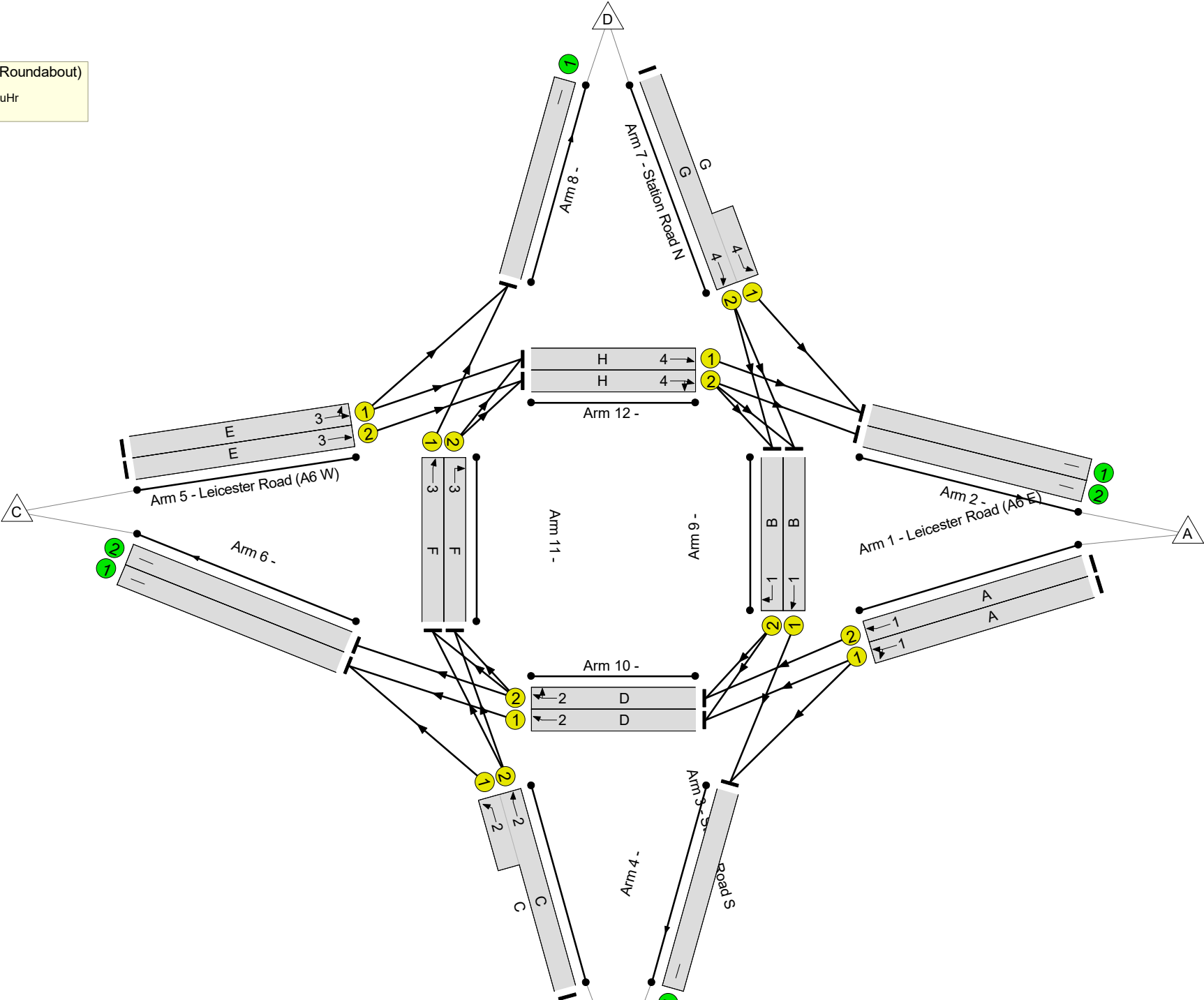
Full Input Data And Results



A6 / Station Road (Archers Roundabout)

PRC: 6.3 %

Total Traffic Delay: 36.6 pcuHr



Full Input Data And Results

Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network	-	-	N/A	-	-		-	-	-	-	-	-	84.6%
A6 / Station Road (Archers Roundabout)	-	-	N/A	-	-		-	-	-	-	-	-	84.6%
1/1	Leicester Road (A6 E) Left Ahead	U	1	N/A	A		1	24	-	542	2119	883	61.4%
1/2	Leicester Road (A6 E) Ahead	U	1	N/A	A		1	24	-	507	2155	898	56.5%
2/1		U	N/A	N/A	-		-	-	-	790	Inf	Inf	0.0%
2/2		U	N/A	N/A	-		-	-	-	524	Inf	Inf	0.0%
3/2+3/1	Station Road S Left Ahead	U	2	N/A	C		1	22	-	734	2080:1787	596+329	79.4 : 79.4%
4/1		U	N/A	N/A	-		-	-	-	714	Inf	Inf	0.0%
5/1	Leicester Road (A6 W) Left Ahead	U	3	N/A	E		1	25	-	559	1997	865	64.6%
5/2	Leicester Road (A6 W) Ahead	U	3	N/A	E		1	25	-	604	2155	934	64.7%
6/1		U	N/A	N/A	-		-	-	-	813	Inf	Inf	0.0%
6/2		U	N/A	N/A	-		-	-	-	366	Inf	Inf	0.0%
7/2+7/1	Station Road N Left Ahead	U	4	N/A	G		1	26	-	800	2105:1828	812+165	81.9 : 81.9%
8/1		U	N/A	N/A	-		-	-	-	539	Inf	Inf	0.0%
9/1	Ahead	U	1	N/A	B		1	26	-	591	1900	855	69.1%
9/2	Right	U	1	N/A	B		1	26	-	220	1900	855	25.7%
10/1	Ahead	U	2	N/A	D		1	28	-	552	1900	918	60.1%
10/2	Ahead Right	U	2	N/A	D		1	28	-	594	1900	918	64.7%
11/1	Ahead	U	3	N/A	F		1	25	-	489	1900	823	59.4%
11/2	Right	U	3	N/A	F		1	25	-	212	1900	823	25.7%
12/1	Ahead	U	4	N/A	H		1	24	-	655	1900	792	82.7%

Full Input Data And Results

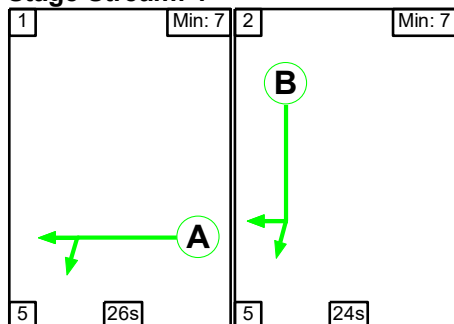
12/2	Ahead Right	U	4	N/A	H		1	24	-	670	1900	792	84.6%
Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network	-	-	0	0	0	20.4	16.2	0.0	36.6	-	-	-	-
A6 / Station Road (Archers Roundabout)	-	-	0	0	0	20.4	16.2	0.0	36.6	-	-	-	-
1/1	542	542	-	-	-	2.1	0.8	-	2.9	19.0	7.1	0.8	7.9
1/2	507	507	-	-	-	1.9	0.6	-	2.5	17.9	6.3	0.6	7.0
2/1	790	790	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
2/2	524	524	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
3/2+3/1	734	734	-	-	-	3.0	1.9	-	4.9	24.0	7.4	1.9	9.3
4/1	714	714	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/1	559	559	-	-	-	2.1	0.9	-	3.0	19.2	7.3	0.9	8.2
5/2	604	604	-	-	-	2.2	0.9	-	3.2	18.8	7.9	0.9	8.8
6/1	813	813	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/2	366	366	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
7/2+7/1	800	800	-	-	-	3.0	2.2	-	5.2	23.5	10.3	2.2	12.5
8/1	539	539	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
9/1	591	591	-	-	-	1.0	1.1	-	2.1	12.9	7.5	1.1	8.6
9/2	220	220	-	-	-	0.0	0.2	-	0.2	3.2	0.2	0.2	0.4
10/1	552	552	-	-	-	0.7	0.8	-	1.5	9.6	2.3	0.8	3.0
10/2	594	594	-	-	-	0.5	0.9	-	1.4	8.7	5.6	0.9	6.5
11/1	489	489	-	-	-	1.5	0.7	-	2.2	16.2	6.6	0.7	7.3
11/2	212	212	-	-	-	0.0	0.2	-	0.2	3.2	0.0	0.2	0.2
12/1	655	655	-	-	-	1.3	2.3	-	3.6	19.8	4.2	2.3	6.6
12/2	670	670	-	-	-	1.1	2.6	-	3.7	20.0	7.4	2.6	10.0
C1 Stream: 1 PRC for Signalled Lanes (%): 30.2 Total Delay for Signalled Lanes (pcuHr): 7.70 Cycle Time (s): 60 C1 Stream: 2 PRC for Signalled Lanes (%): 13.3 Total Delay for Signalled Lanes (pcuHr): 7.79 Cycle Time (s): 60 C1 Stream: 3 PRC for Signalled Lanes (%): 39.1 Total Delay for Signalled Lanes (pcuHr): 8.53 Cycle Time (s): 60 C1 Stream: 4 PRC for Signalled Lanes (%): 6.3 Total Delay for Signalled Lanes (pcuHr): 12.53 Cycle Time (s): 60 PRC Over All Lanes (%): 6.3 Total Delay Over All Lanes(pcuHr): 36.55													

Full Input Data And Results

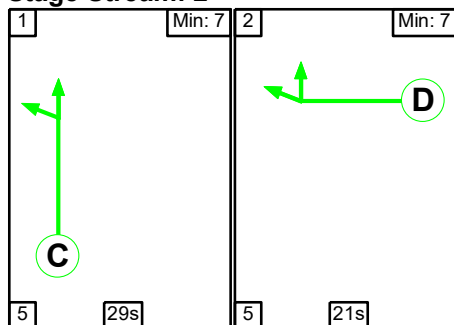
Scenario 2: '2041 Pref PM' (FG2: '2041 Pref PM', Plan 1: 'Network Control Plan 1')

Stage Sequence Diagram

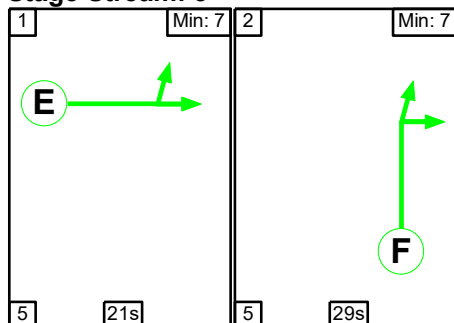
Stage Stream: 1



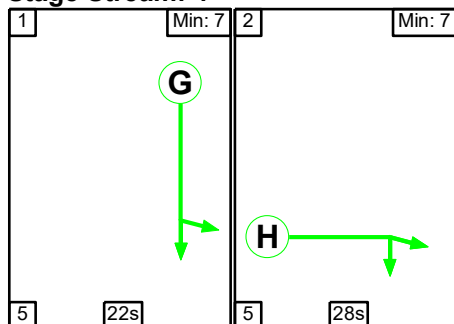
Stage Stream: 2



Stage Stream: 3



Stage Stream: 4



Stage Timings

Stage Stream: 1

Stage	1	2
Duration	26	24
Change Point	0	31

Full Input Data And Results

Stage Stream: 2

Stage	1	2
Duration	29	21
Change Point	25	59

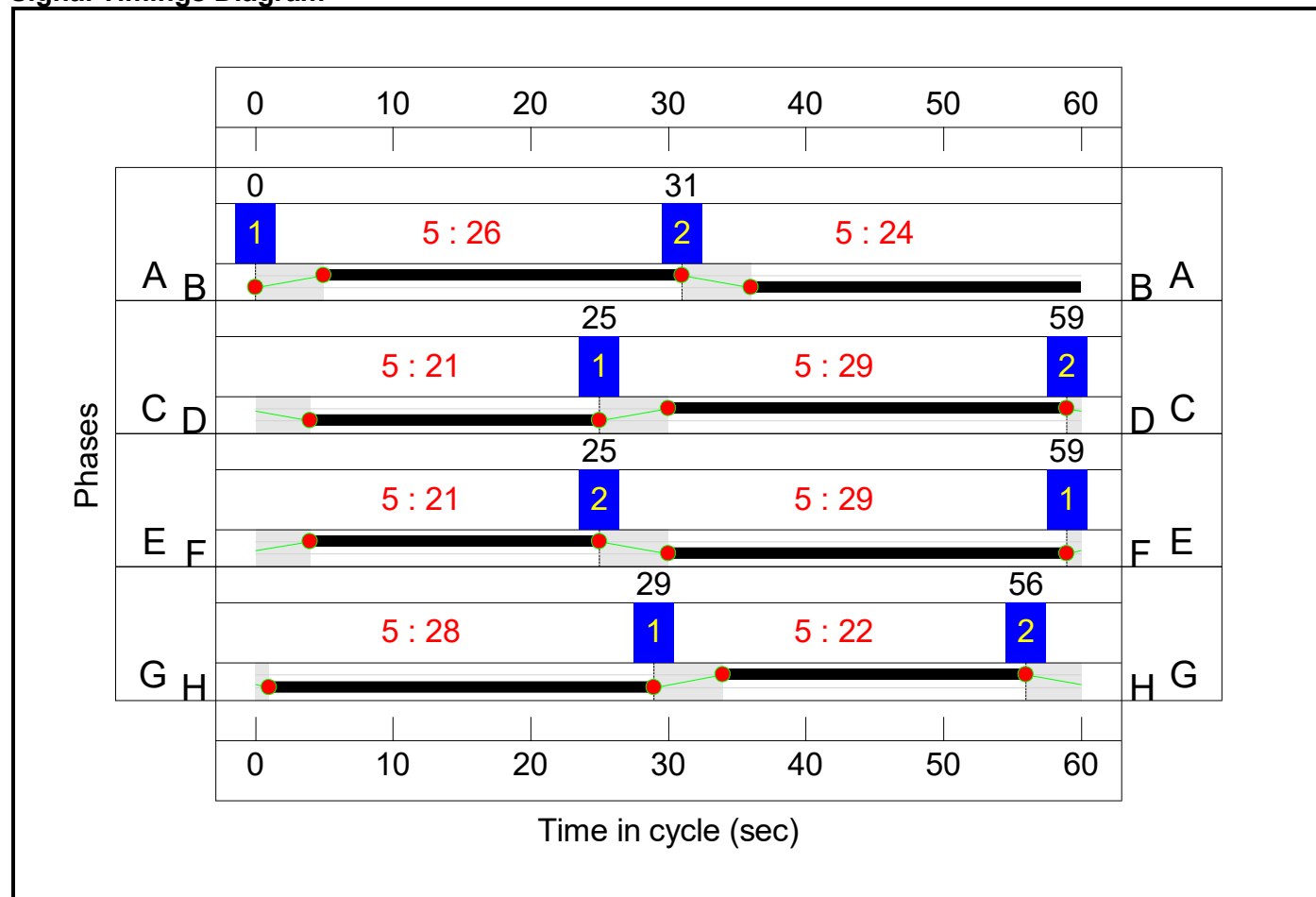
Stage Stream: 3

Stage	1	2
Duration	21	29
Change Point	59	25

Stage Stream: 4

Stage	1	2
Duration	22	28
Change Point	29	56

Signal Timings Diagram

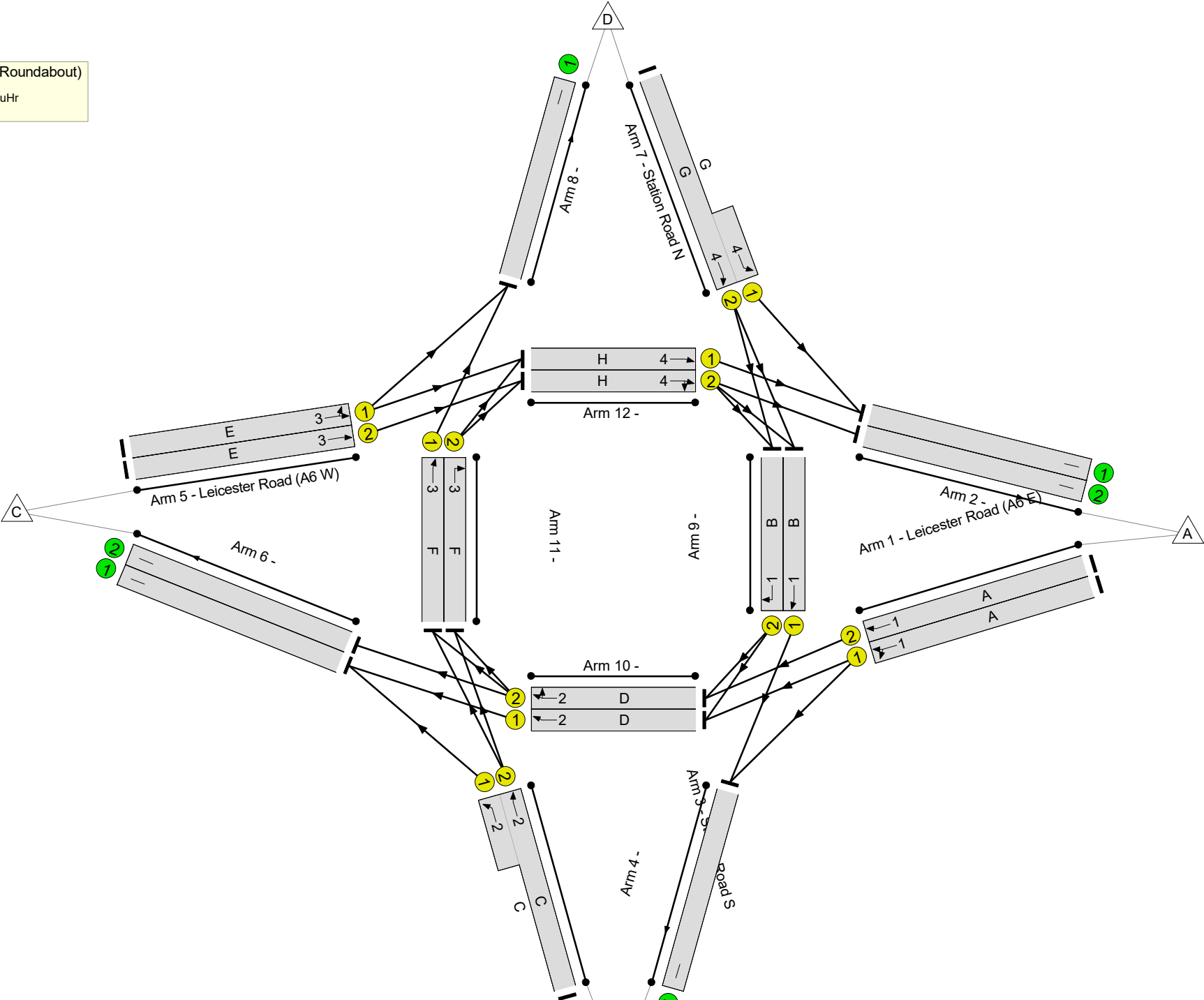


Full Input Data And Results

A6 / Station Road (Archers Roundabout)

PRC: -0.0 %

Total Traffic Delay: 45.8 pcuHr



Full Input Data And Results

Network Results

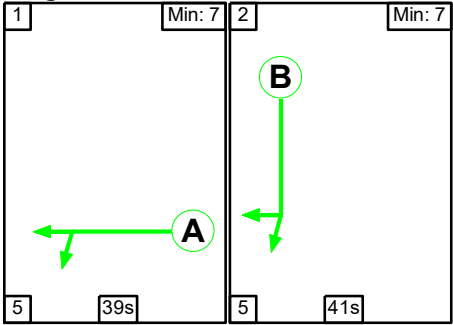
Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network	-	-	N/A	-	-		-	-	-	-	-	-	90.0%
A6 / Station Road (Archers Roundabout)	-	-	N/A	-	-		-	-	-	-	-	-	90.0%
1/1	Leicester Road (A6 E) Left Ahead	U	1	N/A	A		1	26	-	743	2116	952	78.0%
1/2	Leicester Road (A6 E) Ahead	U	1	N/A	A		1	26	-	626	2155	970	64.6%
2/1		U	N/A	N/A	-		-	-	-	812	Inf	Inf	0.0%
2/2		U	N/A	N/A	-		-	-	-	495	Inf	Inf	0.0%
3/2+3/1	Station Road S Left Ahead	U	2	N/A	C		1	29	-	986	2080:1787	808+301	88.9 : 88.9%
4/1		U	N/A	N/A	-		-	-	-	755	Inf	Inf	0.0%
5/1	Leicester Road (A6 W) Left Ahead	U	3	N/A	E		1	21	-	509	2008	736	69.1%
5/2	Leicester Road (A6 W) Ahead	U	3	N/A	E		1	21	-	539	2155	790	68.2%
6/1		U	N/A	N/A	-		-	-	-	879	Inf	Inf	0.0%
6/2		U	N/A	N/A	-		-	-	-	317	Inf	Inf	0.0%
7/2+7/1	Station Road N Left Ahead	U	4	N/A	G		1	22	-	635	2105:1828	642+244	71.7 : 71.7%
8/1		U	N/A	N/A	-		-	-	-	780	Inf	Inf	0.0%
9/1	Ahead	U	1	N/A	B		1	24	-	572	1900	792	72.3%
9/2	Right	U	1	N/A	B		1	24	-	52	1900	792	6.6%
10/1	Ahead	U	2	N/A	D		1	21	-	611	1900	697	87.7%
10/2	Ahead Right	U	2	N/A	D		1	21	-	627	1900	697	90.0%
11/1	Ahead	U	3	N/A	F		1	29	-	762	1900	950	80.2%
11/2	Right	U	3	N/A	F		1	29	-	266	1900	950	28.0%
12/1	Ahead	U	4	N/A	H		1	28	-	637	1900	918	69.4%

Full Input Data And Results

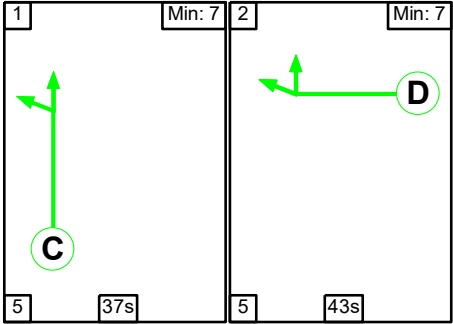
12/2	Ahead Right	U	4	N/A	H		1	28	-	659	1900	918	71.8%
Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network	-	-	0	0	0	22.7	23.1	0.0	45.8	-	-	-	-
A6 / Station Road (Archers Roundabout)	-	-	0	0	0	22.7	23.1	0.0	45.8	-	-	-	-
1/1	743	743	-	-	-	2.9	1.7	-	4.6	22.5	10.3	1.7	12.1
1/2	626	626	-	-	-	2.2	0.9	-	3.1	18.0	8.0	0.9	8.9
2/1	812	812	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
2/2	495	495	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
3/2+3/1	986	986	-	-	-	3.3	3.8	-	7.1	25.9	12.4	3.8	16.2
4/1	755	755	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/1	509	509	-	-	-	2.3	1.1	-	3.4	24.0	7.1	1.1	8.2
5/2	539	539	-	-	-	2.4	1.1	-	3.5	23.2	7.5	1.1	8.6
6/1	879	879	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/2	317	317	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
7/2+7/1	635	635	-	-	-	2.5	1.3	-	3.8	21.4	6.7	1.3	8.0
8/1	780	780	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
9/1	572	572	-	-	-	1.3	1.3	-	2.6	16.6	8.7	1.3	10.0
9/2	52	52	-	-	-	0.0	0.0	-	0.0	2.9	0.0	0.0	0.1
10/1	611	611	-	-	-	1.1	3.3	-	4.5	26.2	3.8	3.3	7.1
10/2	627	627	-	-	-	1.0	4.0	-	5.0	28.8	7.5	4.0	11.5
11/1	762	762	-	-	-	2.2	2.0	-	4.2	19.7	10.8	2.0	12.7
11/2	266	266	-	-	-	0.1	0.2	-	0.3	3.9	0.2	0.2	0.4
12/1	637	637	-	-	-	0.7	1.1	-	1.8	10.3	4.8	1.1	5.9
12/2	659	659	-	-	-	0.6	1.3	-	1.9	10.3	6.9	1.3	8.2
C1 Stream: 1 PRC for Signalled Lanes (%): 15.3 Total Delay for Signalled Lanes (pcuHr): 10.44 Cycle Time (s): 60 C1 Stream: 2 PRC for Signalled Lanes (%): -0.0 Total Delay for Signalled Lanes (pcuHr): 16.55 Cycle Time (s): 60 C1 Stream: 3 PRC for Signalled Lanes (%): 12.2 Total Delay for Signalled Lanes (pcuHr): 11.31 Cycle Time (s): 60 C1 Stream: 4 PRC for Signalled Lanes (%): 25.4 Total Delay for Signalled Lanes (pcuHr): 7.50 Cycle Time (s): 60 PRC Over All Lanes (%): -0.0 Total Delay Over All Lanes(pcuHr): 45.80													

Stage Sequence Diagram

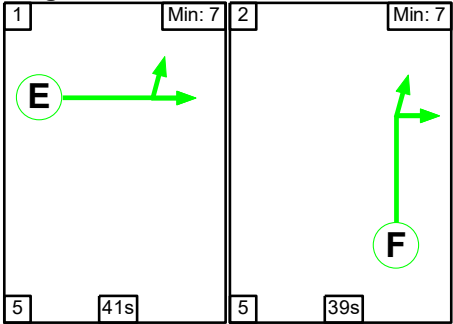
Stage Stream: 1



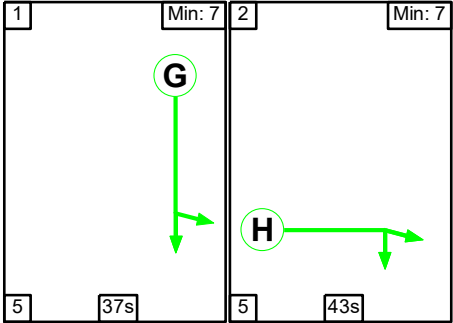
Stage Stream: 2



Stage Stream: 3



Stage Stream: 4



Stage Timings

Stage Stream: 1

Stage	1	2
Duration	39	41
Change Point	0	44

Full Input Data And Results

Stage Stream: 2

Stage	1	2
Duration	37	43
Change Point	46	88

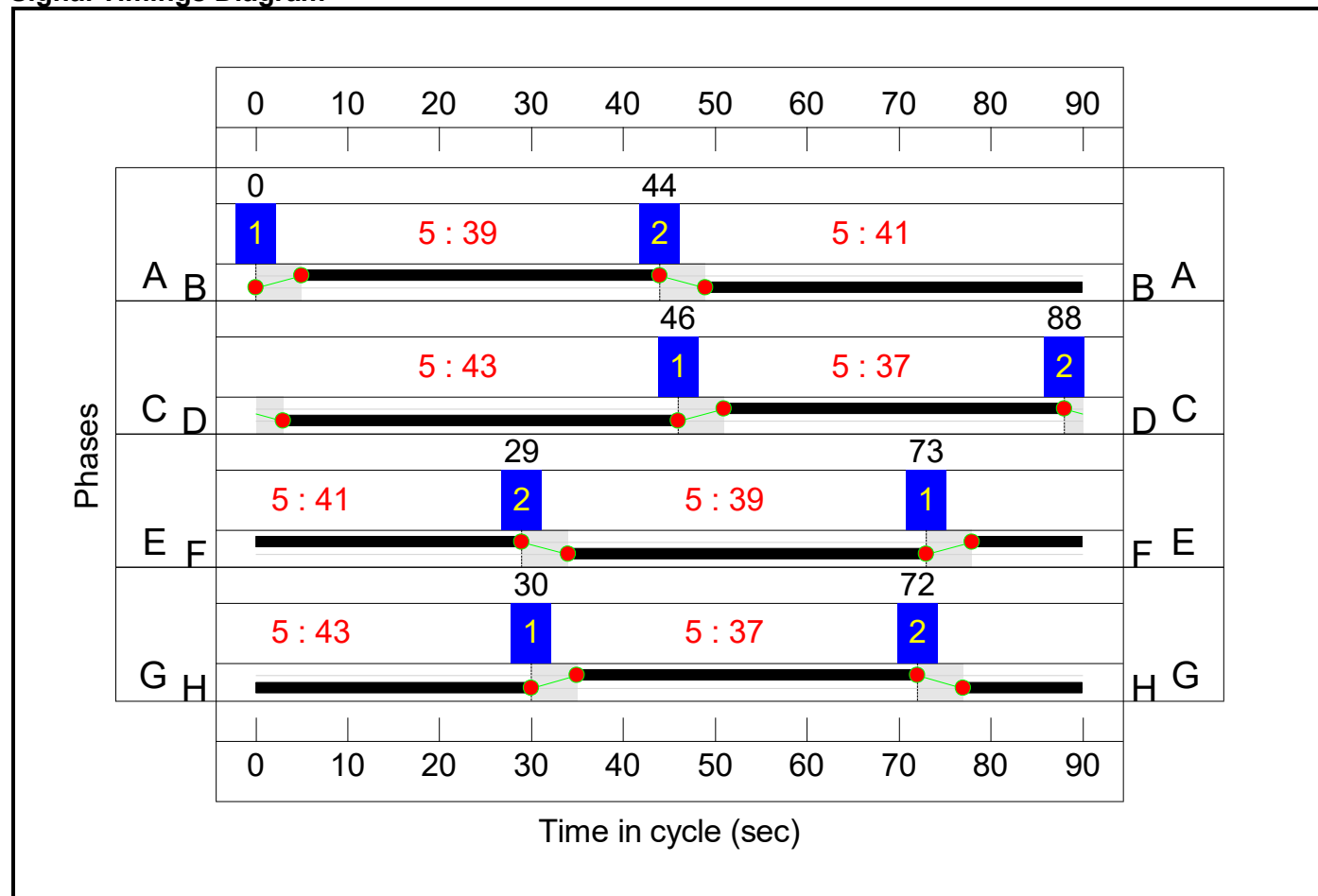
Stage Stream: 3

Stage	1	2
Duration	41	39
Change Point	73	29

Stage Stream: 4

Stage	1	2
Duration	37	43
Change Point	30	72

Signal Timings Diagram



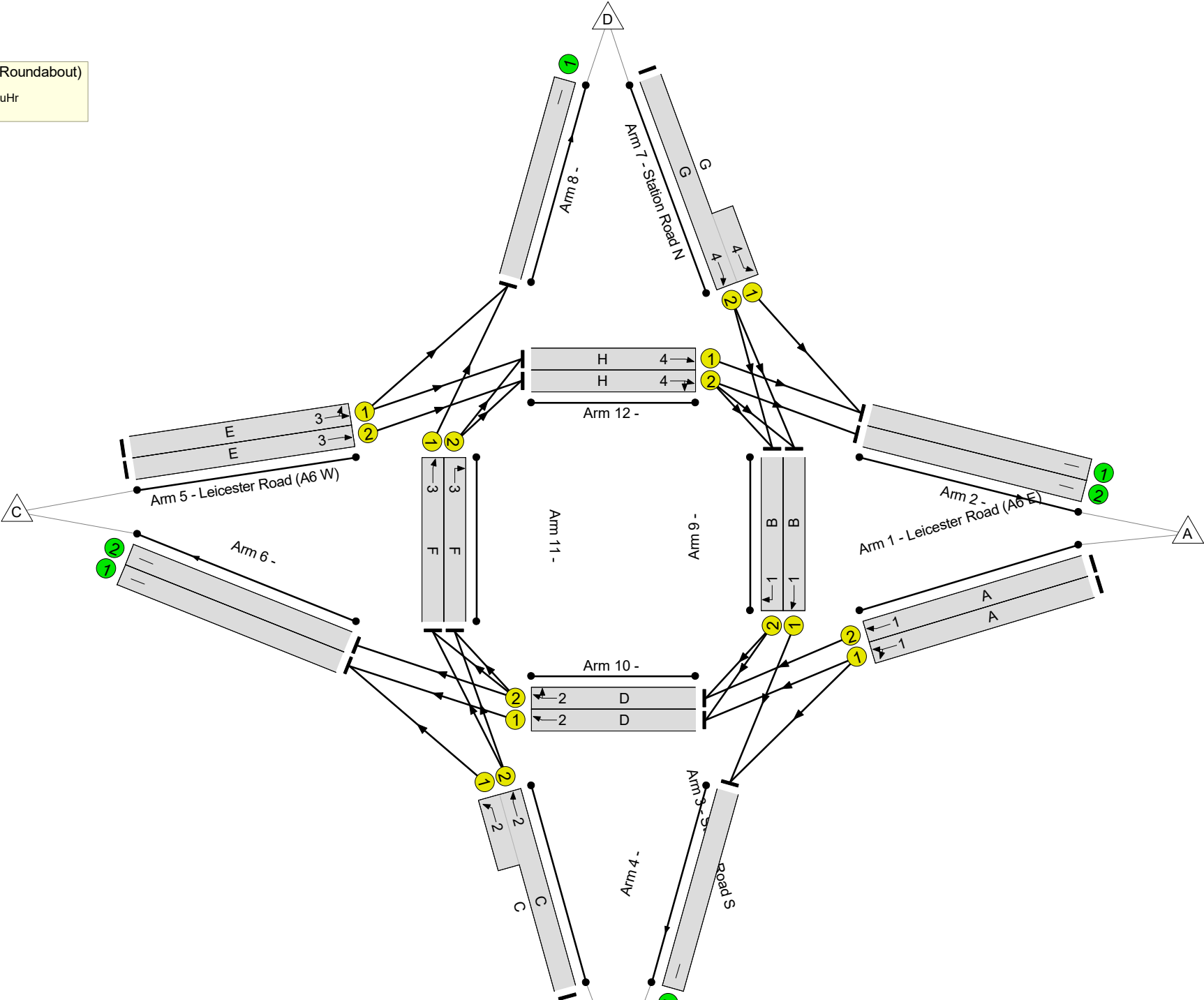
Full Input Data And Results



A6 / Station Road (Archers Roundabout)

PRC: 28.6 %

Total Traffic Delay: 36.0 pcuHr



Full Input Data And Results

Network Results

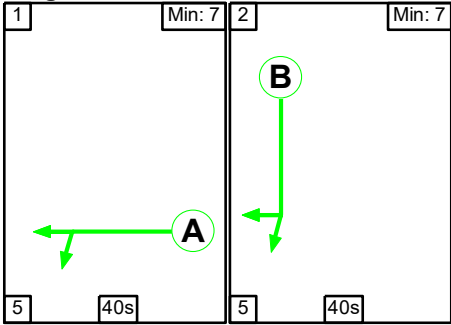
Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network	-	-	N/A	-	-		-	-	-	-	-	-	70.0%
A6 / Station Road (Archers Roundabout)	-	-	N/A	-	-		-	-	-	-	-	-	70.0%
1/1	Leicester Road (A6 E) Left Ahead	U	1	N/A	A		1	39	-	560	2121	943	59.4%
1/2	Leicester Road (A6 E) Ahead	U	1	N/A	A		1	39	-	470	2155	958	49.1%
2/1		U	N/A	N/A	-		-	-	-	749	Inf	Inf	0.0%
2/2		U	N/A	N/A	-		-	-	-	489	Inf	Inf	0.0%
3/2+3/1	Station Road S Left Ahead	U	2	N/A	C		1	37	-	658	2080:1787	608+336	69.7 : 69.7%
4/1		U	N/A	N/A	-		-	-	-	615	Inf	Inf	0.0%
5/1	Leicester Road (A6 W) Left Ahead	U	3	N/A	E		1	41	-	560	1998	932	60.1%
5/2	Leicester Road (A6 W) Ahead	U	3	N/A	E		1	41	-	574	2155	1006	57.1%
6/1		U	N/A	N/A	-		-	-	-	777	Inf	Inf	0.0%
6/2		U	N/A	N/A	-		-	-	-	317	Inf	Inf	0.0%
7/2+7/1	Station Road N Left Ahead	U	4	N/A	G		1	37	-	631	2105:1828	750+151	70.0 : 70.0%
8/1		U	N/A	N/A	-		-	-	-	506	Inf	Inf	0.0%
9/1	Ahead	U	1	N/A	B		1	41	-	494	1900	887	55.7%
9/2	Right	U	1	N/A	B		1	41	-	174	1900	887	19.6%
10/1	Ahead	U	2	N/A	D		1	43	-	543	1900	929	58.5%
10/2	Ahead Right	U	2	N/A	D		1	43	-	540	1900	929	58.1%
11/1	Ahead	U	3	N/A	F		1	39	-	457	1900	844	54.1%
11/2	Right	U	3	N/A	F		1	39	-	190	1900	844	22.5%
12/1	Ahead	U	4	N/A	H		1	43	-	643	1900	929	69.2%

Full Input Data And Results

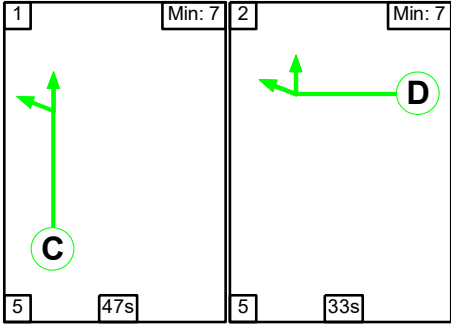
12/2	Ahead Right	U	4	N/A	H		1	43	-	632	1900	929	68.0%
Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network	-	-	0	0	0	26.0	10.0	0.0	36.0	-	-	-	-
A6 / Station Road (Archers Roundabout)	-	-	0	0	0	26.0	10.0	0.0	36.0	-	-	-	-
1/1	560	560	-	-	-	2.9	0.7	-	3.7	23.6	10.4	0.7	11.2
1/2	470	470	-	-	-	2.3	0.5	-	2.8	21.4	8.2	0.5	8.7
2/1	749	749	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
2/2	489	489	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
3/2+3/1	658	658	-	-	-	3.5	1.1	-	4.7	25.5	10.0	1.1	11.2
4/1	615	615	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/1	560	560	-	-	-	2.8	0.7	-	3.5	22.6	10.3	0.7	11.0
5/2	574	574	-	-	-	2.8	0.7	-	3.4	21.6	10.4	0.7	11.0
6/1	777	777	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/2	317	317	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
7/2+7/1	631	631	-	-	-	3.6	1.2	-	4.7	27.1	11.6	1.2	12.8
8/1	506	506	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
9/1	494	494	-	-	-	2.1	0.6	-	2.7	19.8	10.6	0.6	11.2
9/2	174	174	-	-	-	0.2	0.1	-	0.3	7.0	2.8	0.1	2.9
10/1	543	543	-	-	-	1.1	0.7	-	1.8	12.1	3.8	0.7	4.5
10/2	540	540	-	-	-	0.8	0.7	-	1.5	10.1	7.6	0.7	8.3
11/1	457	457	-	-	-	1.7	0.6	-	2.3	17.9	6.5	0.6	7.1
11/2	190	190	-	-	-	0.4	0.1	-	0.6	11.1	1.0	0.1	1.1
12/1	643	643	-	-	-	1.2	1.1	-	2.3	12.9	13.4	1.1	14.5
12/2	632	632	-	-	-	0.6	1.1	-	1.6	9.2	9.8	1.1	10.9
C1 Stream: 1 PRC for Signalled Lanes (%): 51.5 Total Delay for Signalled Lanes (pcuHr): 9.52 Cycle Time (s): 90 C1 Stream: 2 PRC for Signalled Lanes (%): 29.1 Total Delay for Signalled Lanes (pcuHr): 8.00 Cycle Time (s): 90 C1 Stream: 3 PRC for Signalled Lanes (%): 49.9 Total Delay for Signalled Lanes (pcuHr): 9.82 Cycle Time (s): 90 C1 Stream: 4 PRC for Signalled Lanes (%): 28.6 Total Delay for Signalled Lanes (pcuHr): 8.66 Cycle Time (s): 90 PRC Over All Lanes (%): 28.6 Total Delay Over All Lanes(pcuHr): 36.00													

Stage Sequence Diagram

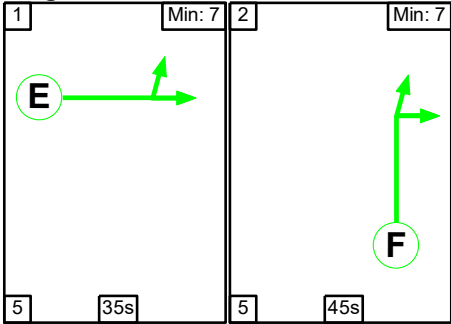
Stage Stream: 1



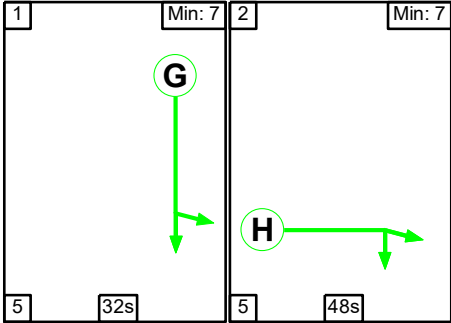
Stage Stream: 2



Stage Stream: 3



Stage Stream: 4



Stage Timings

Stage Stream: 1

Stage	1	2
Duration	40	40
Change Point	0	45

Full Input Data And Results

Stage Stream: 2

Stage	1	2
Duration	47	33
Change Point	36	88

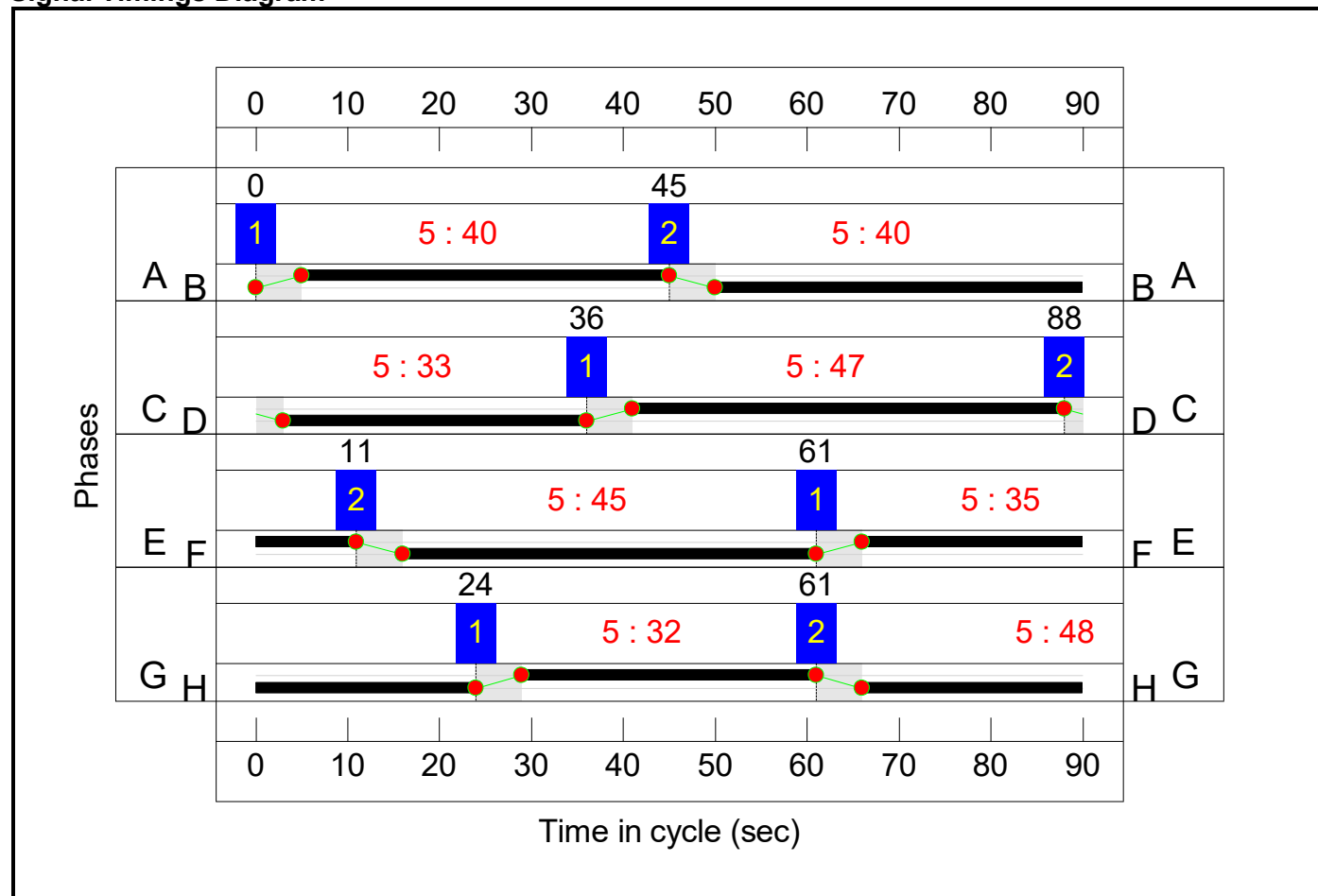
Stage Stream: 3

Stage	1	2
Duration	35	45
Change Point	61	11

Stage Stream: 4

Stage	1	2
Duration	32	48
Change Point	24	61

Signal Timings Diagram



Full Input Data And Results

Network Layout Diagram

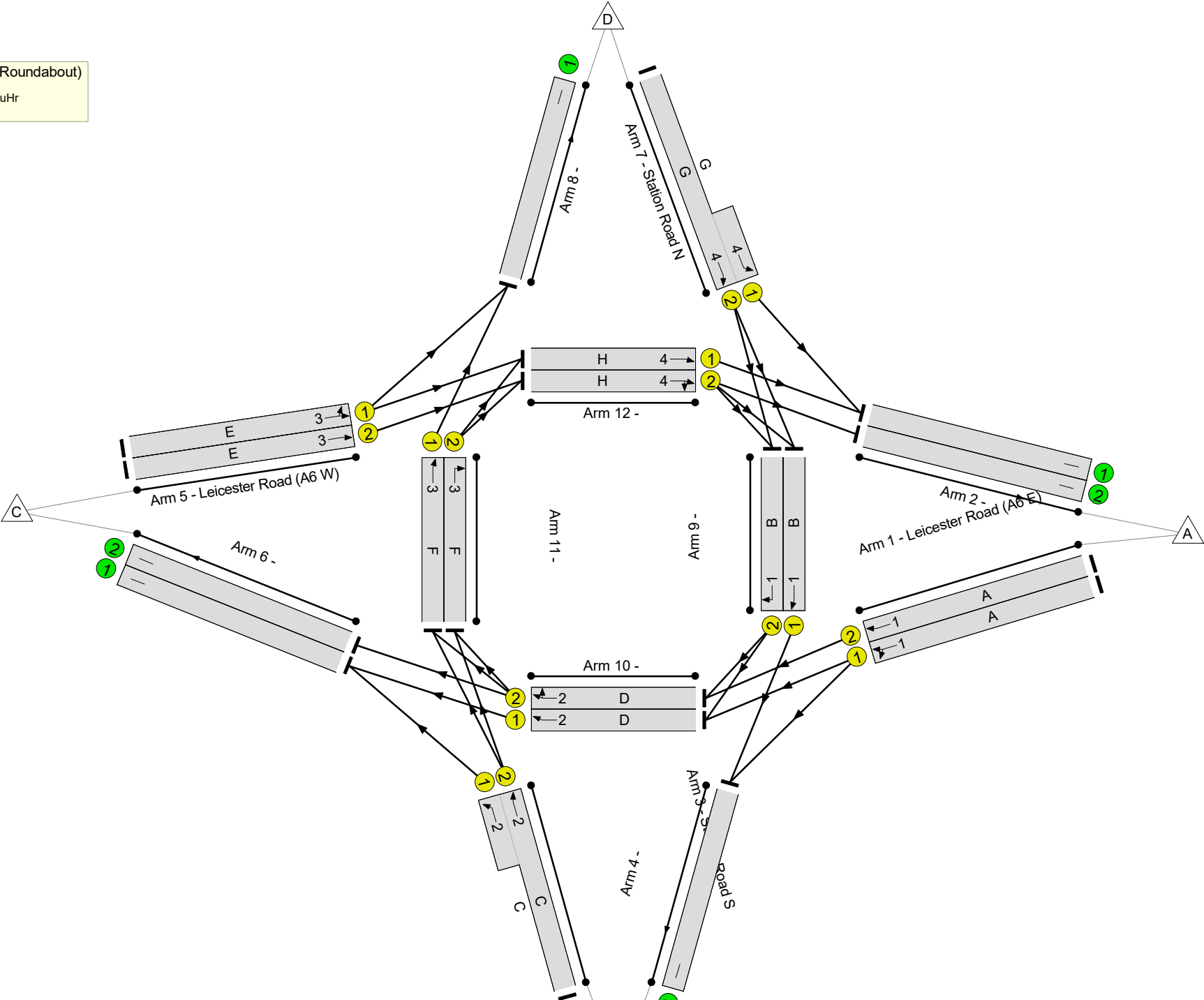
Full Input Data And Results



A6 / Station Road (Archers Roundabout)

PRC: 12.7 %

Total Traffic Delay: 44.4 pcuHr



Full Input Data And Results

Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network	-	-	N/A	-	-		-	-	-	-	-	-	79.8%
A6 / Station Road (Archers Roundabout)	-	-	N/A	-	-		-	-	-	-	-	-	79.8%
1/1	Leicester Road (A6 E) Left Ahead	U	1	N/A	A		1	40	-	713	2117	964	73.9%
1/2	Leicester Road (A6 E) Ahead	U	1	N/A	A		1	40	-	555	2155	982	56.5%
2/1		U	N/A	N/A	-		-	-	-	802	Inf	Inf	0.0%
2/2		U	N/A	N/A	-		-	-	-	453	Inf	Inf	0.0%
3/2+3/1	Station Road S Left Ahead	U	2	N/A	C		1	47	-	898	2080:1787	828+309	78.9 : 78.9%
4/1		U	N/A	N/A	-		-	-	-	690	Inf	Inf	0.0%
5/1	Leicester Road (A6 W) Left Ahead	U	3	N/A	E		1	35	-	493	2008	803	61.4%
5/2	Leicester Road (A6 W) Ahead	U	3	N/A	E		1	35	-	548	2155	862	63.6%
6/1		U	N/A	N/A	-		-	-	-	817	Inf	Inf	0.0%
6/2		U	N/A	N/A	-		-	-	-	284	Inf	Inf	0.0%
7/2+7/1	Station Road N Left Ahead	U	4	N/A	G		1	32	-	556	2105:1828	591+224	68.2 : 68.2%
8/1		U	N/A	N/A	-		-	-	-	717	Inf	Inf	0.0%
9/1	Ahead	U	1	N/A	B		1	40	-	520	1900	866	60.1%
9/2	Right	U	1	N/A	B		1	40	-	46	1900	866	5.3%
10/1	Ahead	U	2	N/A	D		1	33	-	573	1900	718	79.8%
10/2	Ahead Right	U	2	N/A	D		1	33	-	571	1900	718	79.6%
11/1	Ahead	U	3	N/A	F		1	45	-	699	1900	971	72.0%
11/2	Right	U	3	N/A	F		1	45	-	242	1900	971	24.9%
12/1	Ahead	U	4	N/A	H		1	48	-	649	1900	1034	62.7%

Full Input Data And Results

12/2	Ahead Right	U	4	N/A	H		1	48	-	616	1900	1034	59.5%
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	-	-	0	0	0	30.2	14.2	0.0	44.4	-	-	-	-
A6 / Station Road (Archers Roundabout)	-	-	0	0	0	30.2	14.2	0.0	44.4	-	-	-	-
1/1	713	713	-	-	-	4.0	1.4	-	5.4	27.2	14.5	1.4	15.9
1/2	555	555	-	-	-	2.8	0.6	-	3.4	22.2	10.0	0.6	10.7
2/1	802	802	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
2/2	453	453	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
3/2+3/1	898	898	-	-	-	3.8	1.8	-	5.7	22.8	15.6	1.8	17.4
4/1	690	690	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/1	493	493	-	-	-	2.9	0.8	-	3.7	27.2	9.7	0.8	10.5
5/2	548	548	-	-	-	3.3	0.9	-	4.2	27.4	11.0	0.9	11.8
6/1	817	817	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/2	284	284	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
7/2+7/1	556	556	-	-	-	3.5	1.1	-	4.5	29.4	9.5	1.1	10.6
8/1	717	717	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
9/1	520	520	-	-	-	2.2	0.7	-	3.0	20.5	9.9	0.7	10.6
9/2	46	46	-	-	-	0.1	0.0	-	0.1	11.7	1.0	0.0	1.0
10/1	573	573	-	-	-	1.4	1.9	-	3.3	20.7	2.8	1.9	4.7
10/2	571	571	-	-	-	1.3	1.9	-	3.2	20.3	9.7	1.9	11.6
11/1	699	699	-	-	-	2.9	1.3	-	4.2	21.4	11.8	1.3	13.1
11/2	242	242	-	-	-	1.1	0.2	-	1.2	18.6	2.8	0.2	3.0
12/1	649	649	-	-	-	0.6	0.8	-	1.4	8.0	12.2	0.8	13.0
12/2	616	616	-	-	-	0.3	0.7	-	1.0	5.8	10.6	0.7	11.3
		C1	Stream: 1 PRC for Signalled Lanes (%):		21.7	Total Delay for Signalled Lanes (pcuHr):		11.92	Cycle Time (s): 90				
		C1	Stream: 2 PRC for Signalled Lanes (%):		12.7	Total Delay for Signalled Lanes (pcuHr):		12.20	Cycle Time (s): 90				
		C1	Stream: 3 PRC for Signalled Lanes (%):		25.0	Total Delay for Signalled Lanes (pcuHr):		13.32	Cycle Time (s): 90				
		C1	Stream: 4 PRC for Signalled Lanes (%):		31.9	Total Delay for Signalled Lanes (pcuHr):		6.97	Cycle Time (s): 90				
			PRC Over All Lanes (%):		12.7	Total Delay Over All Lanes(pcuHr):		44.41					

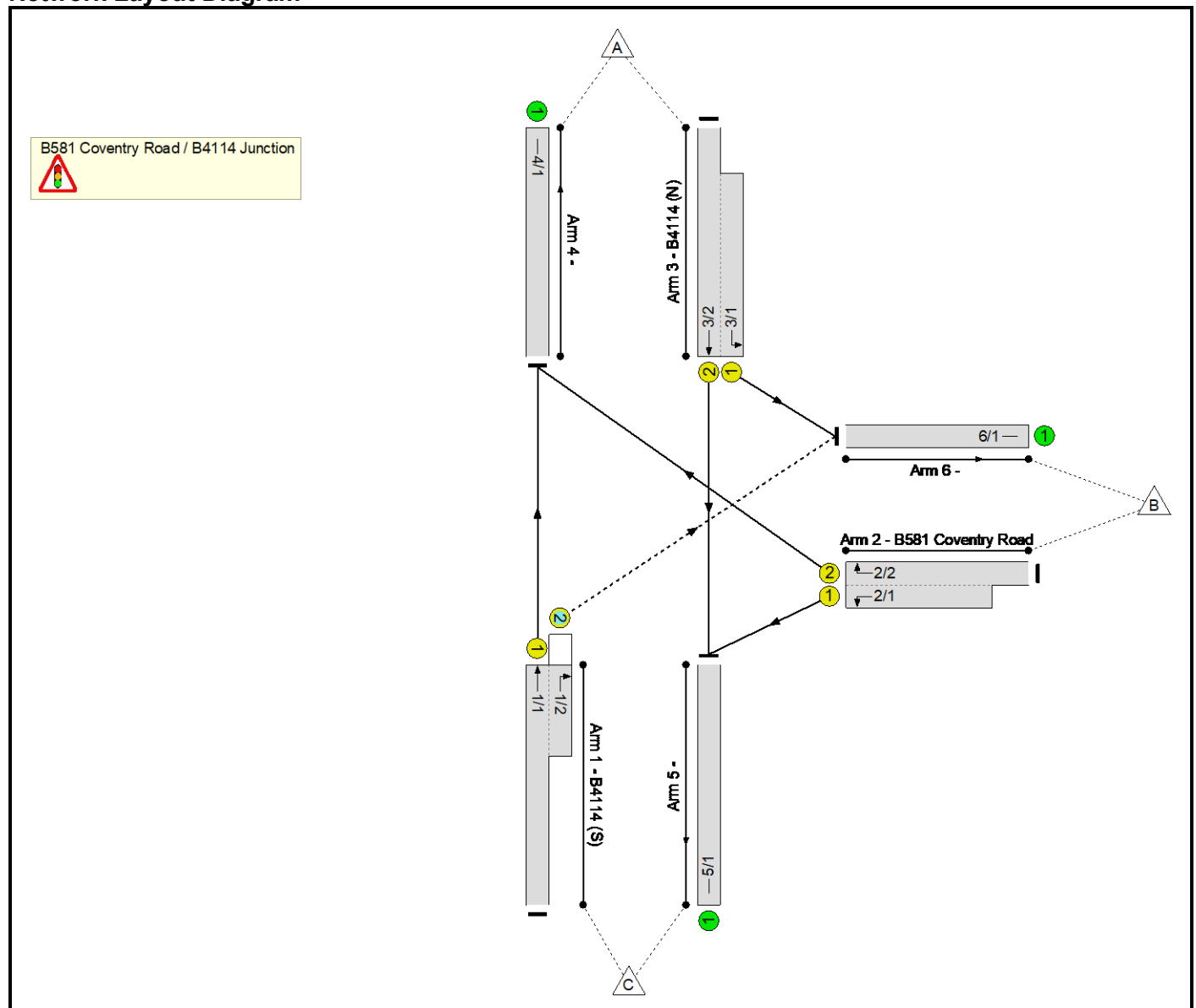
Full Input Data And Results

Full Input Data And Results

User and Project Details

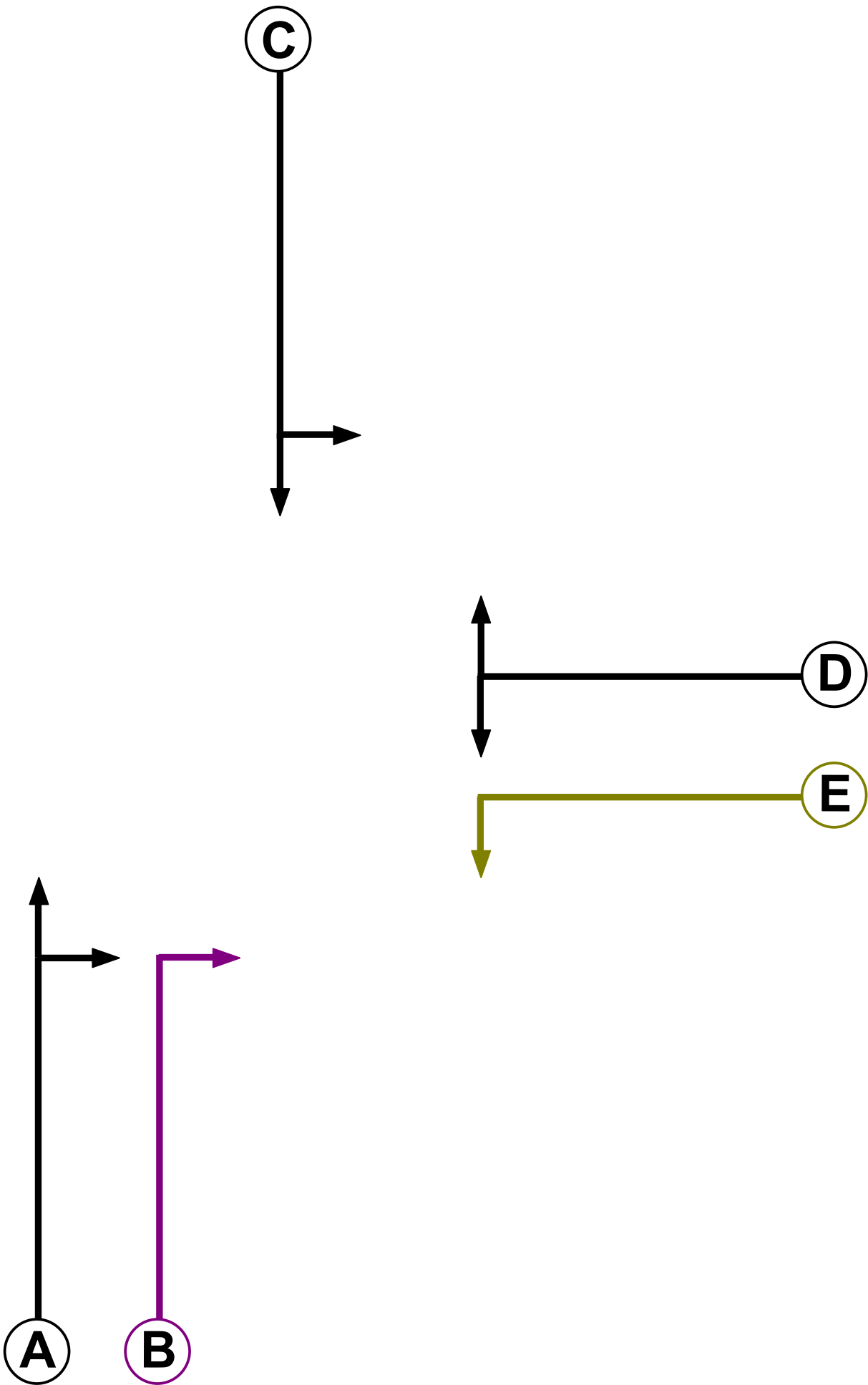
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Location:	
Additional detail:	
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Author:	
Company:	
Address:	

Network Layout Diagram



Full Input Data And Results

Phase Diagram



Full Input Data And Results

Phase Input Data

Phase Name	Phase Type	Assoc. Phase	Street Min	Cont Min
A	Traffic	A	7	7
B	Ind. Arrow		4	4
C	Traffic		7	7
D	Traffic	D	7	7
E	Filter		4	0

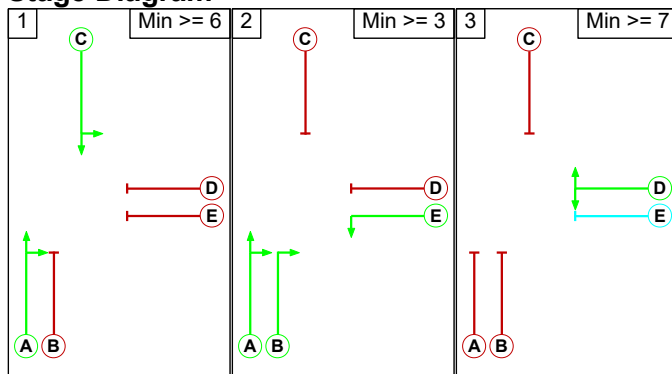
Phase Intergreens Matrix

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

Phases in Stage

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

Stage Diagram



Phase Delays

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

Prohibited Stage Change

From Stage	To Stage			
		1	2	3
	1		7	7
	2	X		5
	3	6	6	

Full Input Data And Results

Give-Way Lane Input Data

Junction: B581 Coventry Road / B4114 Junction											
Lane	Movement	Max Flow when Giving Way (PCU/Hr)	Min Flow when Giving Way (PCU/Hr)	Opposing Lane	Opp. Lane Coeff.	Opp. Mvmnts.	Right Turn Storage (PCU)	Non-Blocking Storage (PCU)	RTF	Right Turn Move up (s)	Max Turns in Intergreen (PCU)
1/2 (B4114 (S))	6/1 (Right)	1439	0	3/1	1.09	All	2.00	-	0.50	2	2.00
				3/2	1.09	All					

Lane Input Data

Junction: B581 Coventry Road / B4114 Junction												
Lane	Lane Type	Phases	Start Disp.	End Disp.	Physical Length (PCU)	Sat Flow Type	Def User Saturation Flow (PCU/Hr)	Lane Width (m)	Gradient	Nearside Lane	Turns	Turning Radius (m)
1/1 (B4114 (S))	U	A	2	3	60.0	Geom	-	3.50	0.00	Y	Arm 4 Ahead	Inf
1/2 (B4114 (S))	O	A B	2	3	6.0	Geom	-	3.50	0.00	N	Arm 6 Right	Inf
2/1 (B581 Coventry Road)	U	D E	2	3	17.0	Geom	-	3.50	0.00	Y	Arm 5 Left	12.00
2/2 (B581 Coventry Road)	U	D	2	3	60.0	Geom	-	3.50	0.00	N	Arm 4 Right	Inf
3/1 (B4114 (N))	U	C	2	3	12.0	Geom	-	3.50	0.00	Y	Arm 6 Left	18.00
3/2 (B4114 (N))	U	C	2	3	60.0	Geom	-	3.50	0.00	N	Arm 5 Ahead	Inf
4/1	U		2	3	60.0	Inf	-	-	-	-	-	-
5/1	U		2	3	60.0	Inf	-	-	-	-	-	-
6/1	U		2	3	60.0	Inf	-	-	-	-	-	-

Traffic Flow Groups

Flow Group	Start Time	End Time	Duration	Formula
1: '2041 AM Core'	08:00	09:00	01:00	
2: '2041 PM Core'	17:00	18:00	01:00	
3: '2041 AM Pref'	08:00	09:00	01:00	
4: '2041 PM Pref'	17:00	18:00	01:00	

Scenario 1: '2041 AM Core' (FG1: '2041 AM Core', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired

Desired Flow :

	Destination				
Origin		A	B	C	Tot.
	A	0	303	592	895
	B	403	0	394	797
	C	469	394	0	863
	Tot.	872	697	986	2555

Full Input Data And Results

Traffic Lane Flows

Lane	Scenario 1: 2041 AM Core
Junction: B581 Coventry Road / B4114 Junction	
1/1 (with short)	863(In) 469(Out)
1/2 (short)	394
2/1 (short)	394
2/2 (with short)	797(In) 403(Out)
3/1 (short)	303
3/2 (with short)	895(In) 592(Out)
4/1	872
5/1	986
6/1	697

Lane Saturation Flows

Junction: B581 Coventry Road / B4114 Junction								
Lane	Lane Width (m)	Gradient	Nearside Lane	Allowed Turns	Turning Radius (m)	Turning Prop.	Sat Flow (PCU/Hr)	Flared Sat Flow (PCU/Hr)
1/1 (B4114 (S))	3.50	0.00	Y	Arm 4 Ahead	Inf	100.0 %	1965	1965
1/2 (B4114 (S))	3.50	0.00	N	Arm 6 Right	Inf	100.0 %	2105	2105
2/1 (B581 Coventry Road)	3.50	0.00	Y	Arm 5 Left	12.00	100.0 %	1747	1747
2/2 (B581 Coventry Road)	3.50	0.00	N	Arm 4 Right	Inf	100.0 %	2105	2105
3/1 (B4114 (N))	3.50	0.00	Y	Arm 6 Left	18.00	100.0 %	1814	1814
3/2 (B4114 (N))	3.50	0.00	N	Arm 5 Ahead	Inf	100.0 %	2105	2105
4/1	Infinite Saturation Flow						Inf	Inf
5/1	Infinite Saturation Flow						Inf	Inf
6/1	Infinite Saturation Flow						Inf	Inf

Scenario 2: '2041 PM Core' (FG2: '2041 PM Core', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired

Desired Flow :

	Destination				
Origin		A	B	C	Tot.
	A	0	497	392	889
	B	319	0	542	861
	C	495	405	0	900
	Tot.	814	902	934	2650

Full Input Data And Results

Traffic Lane Flows

Lane	Scenario 2: 2041 PM Core
Junction: B581 Coventry Road / B4114 Junction	
1/1 (with short)	900(In) 495(Out)
1/2 (short)	405
2/1 (short)	542
2/2 (with short)	861(In) 319(Out)
3/1 (short)	497
3/2 (with short)	889(In) 392(Out)
4/1	814
5/1	934
6/1	902

Lane Saturation Flows

Junction: B581 Coventry Road / B4114 Junction								
Lane	Lane Width (m)	Gradient	Nearside Lane	Allowed Turns	Turning Radius (m)	Turning Prop.	Sat Flow (PCU/Hr)	Flared Sat Flow (PCU/Hr)
1/1 (B4114 (S))	3.50	0.00	Y	Arm 4 Ahead	Inf	100.0 %	1965	1965
1/2 (B4114 (S))	3.50	0.00	N	Arm 6 Right	Inf	100.0 %	2105	2105
2/1 (B581 Coventry Road)	3.50	0.00	Y	Arm 5 Left	12.00	100.0 %	1747	1747
2/2 (B581 Coventry Road)	3.50	0.00	N	Arm 4 Right	Inf	100.0 %	2105	2105
3/1 (B4114 (N))	3.50	0.00	Y	Arm 6 Left	18.00	100.0 %	1814	1814
3/2 (B4114 (N))	3.50	0.00	N	Arm 5 Ahead	Inf	100.0 %	2105	2105
4/1	Infinite Saturation Flow						Inf	Inf
5/1	Infinite Saturation Flow						Inf	Inf
6/1	Infinite Saturation Flow						Inf	Inf

Scenario 3: '2041 AM Pref' (FG3: '2041 AM Pref', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired

Desired Flow :

	Destination				
Origin		A	B	C	Tot.
	A	0	309	604	913
	B	432	0	422	854
	C	474	398	0	872
	Tot.	906	707	1026	2639

Full Input Data And Results

Traffic Lane Flows

Lane	Scenario 3: 2041 AM Pref
Junction: B581 Coventry Road / B4114 Junction	
1/1 (with short)	872(In) 474(Out)
1/2 (short)	398
2/1 (short)	422
2/2 (with short)	854(In) 432(Out)
3/1 (short)	309
3/2 (with short)	913(In) 604(Out)
4/1	906
5/1	1026
6/1	707

Lane Saturation Flows

Junction: B581 Coventry Road / B4114 Junction								
Lane	Lane Width (m)	Gradient	Nearside Lane	Allowed Turns	Turning Radius (m)	Turning Prop.	Sat Flow (PCU/Hr)	Flared Sat Flow (PCU/Hr)
1/1 (B4114 (S))	3.50	0.00	Y	Arm 4 Ahead	Inf	100.0 %	1965	1965
1/2 (B4114 (S))	3.50	0.00	N	Arm 6 Right	Inf	100.0 %	2105	2105
2/1 (B581 Coventry Road)	3.50	0.00	Y	Arm 5 Left	12.00	100.0 %	1747	1747
2/2 (B581 Coventry Road)	3.50	0.00	N	Arm 4 Right	Inf	100.0 %	2105	2105
3/1 (B4114 (N))	3.50	0.00	Y	Arm 6 Left	18.00	100.0 %	1814	1814
3/2 (B4114 (N))	3.50	0.00	N	Arm 5 Ahead	Inf	100.0 %	2105	2105
4/1	Infinite Saturation Flow						Inf	Inf
5/1	Infinite Saturation Flow						Inf	Inf
6/1	Infinite Saturation Flow						Inf	Inf

Scenario 4: '2041 PM Pref' (FG4: '2041 PM Pref', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired

Desired Flow :

	Destination				
Origin		A	B	C	Tot.
	A	0	499	393	892
	B	332	0	564	896
	C	496	406	0	902
	Tot.	828	905	957	2690

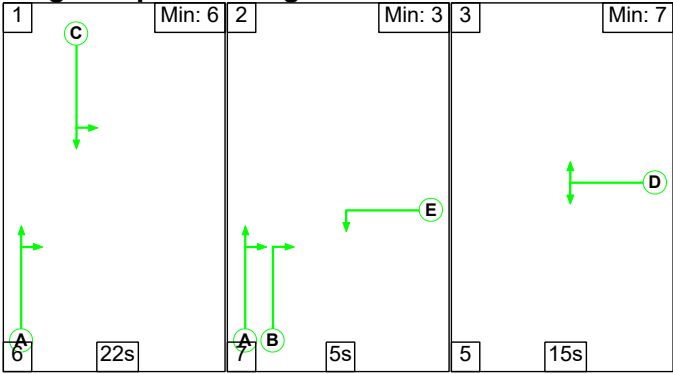
Traffic Lane Flows

Lane Saturation Flows

Junction: B581 Coventry Road / B4114 Junction								
Lane	Lane Width (m)	Gradient	Nearside Lane	Allowed Turns	Turning Radius (m)	Turning Prop.	Sat Flow (PCU/Hr)	Flared Sat Flow (PCU/Hr)
1/1 (B4114 (S))	3.50	0.00	Y	Arm 4 Ahead	Inf	100.0 %	1965	1965
1/2 (B4114 (S))	3.50	0.00	N	Arm 6 Right	Inf	100.0 %	2105	2105
2/1 (B581 Coventry Road)	3.50	0.00	Y	Arm 5 Left	12.00	100.0 %	1747	1747
2/2 (B581 Coventry Road)	3.50	0.00	N	Arm 4 Right	Inf	100.0 %	2105	2105
3/1 (B4114 (N))	3.50	0.00	Y	Arm 6 Left	18.00	100.0 %	1814	1814
3/2 (B4114 (N))	3.50	0.00	N	Arm 5 Ahead	Inf	100.0 %	2105	2105
4/1	Infinite Saturation Flow						Inf	Inf
5/1	Infinite Saturation Flow						Inf	Inf
6/1	Infinite Saturation Flow						Inf	Inf

Scenario 1: '2041 AM Core' (FG1: '2041 AM Core', Plan 1: 'Network Control Plan 1')

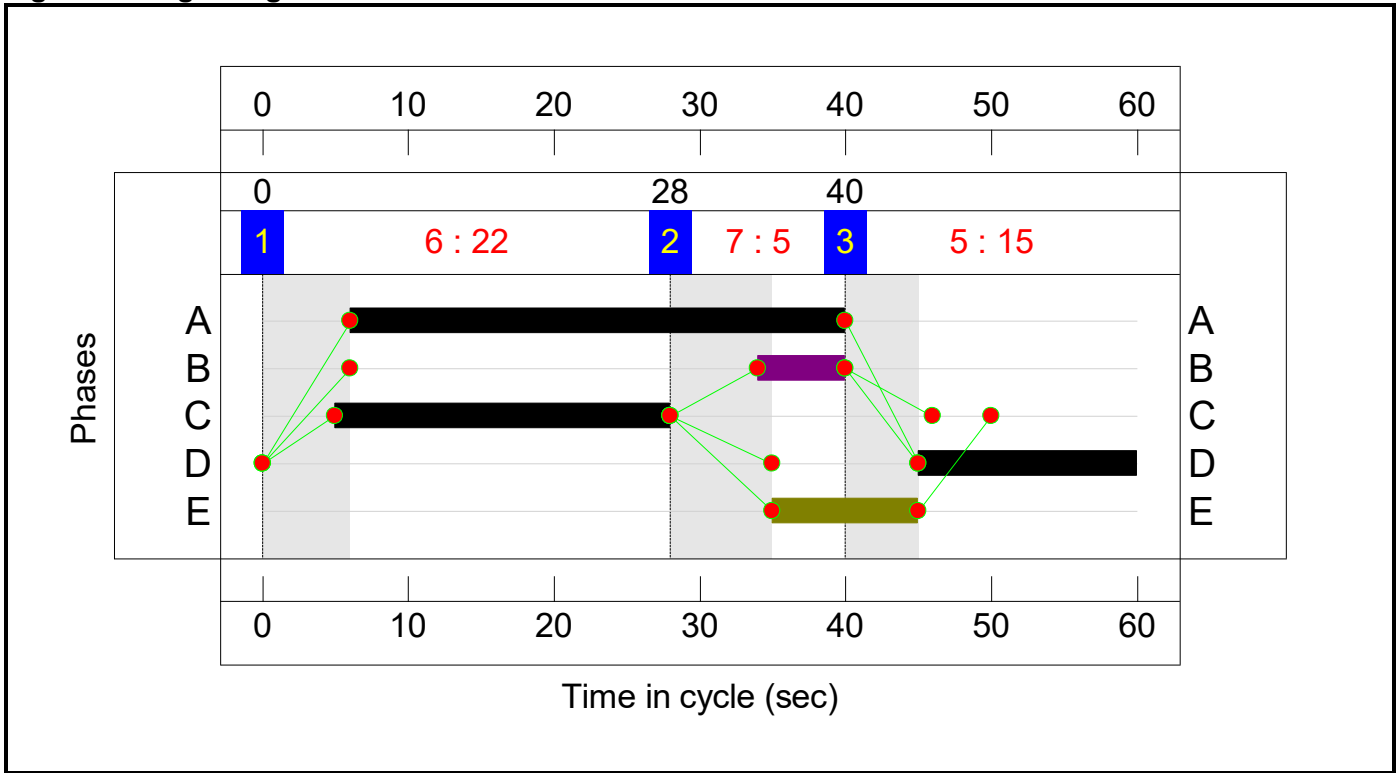
Stage Sequence Diagram



Stage Timings

Stage	1	2	3
Duration	22	5	15
Change Point	0	28	40

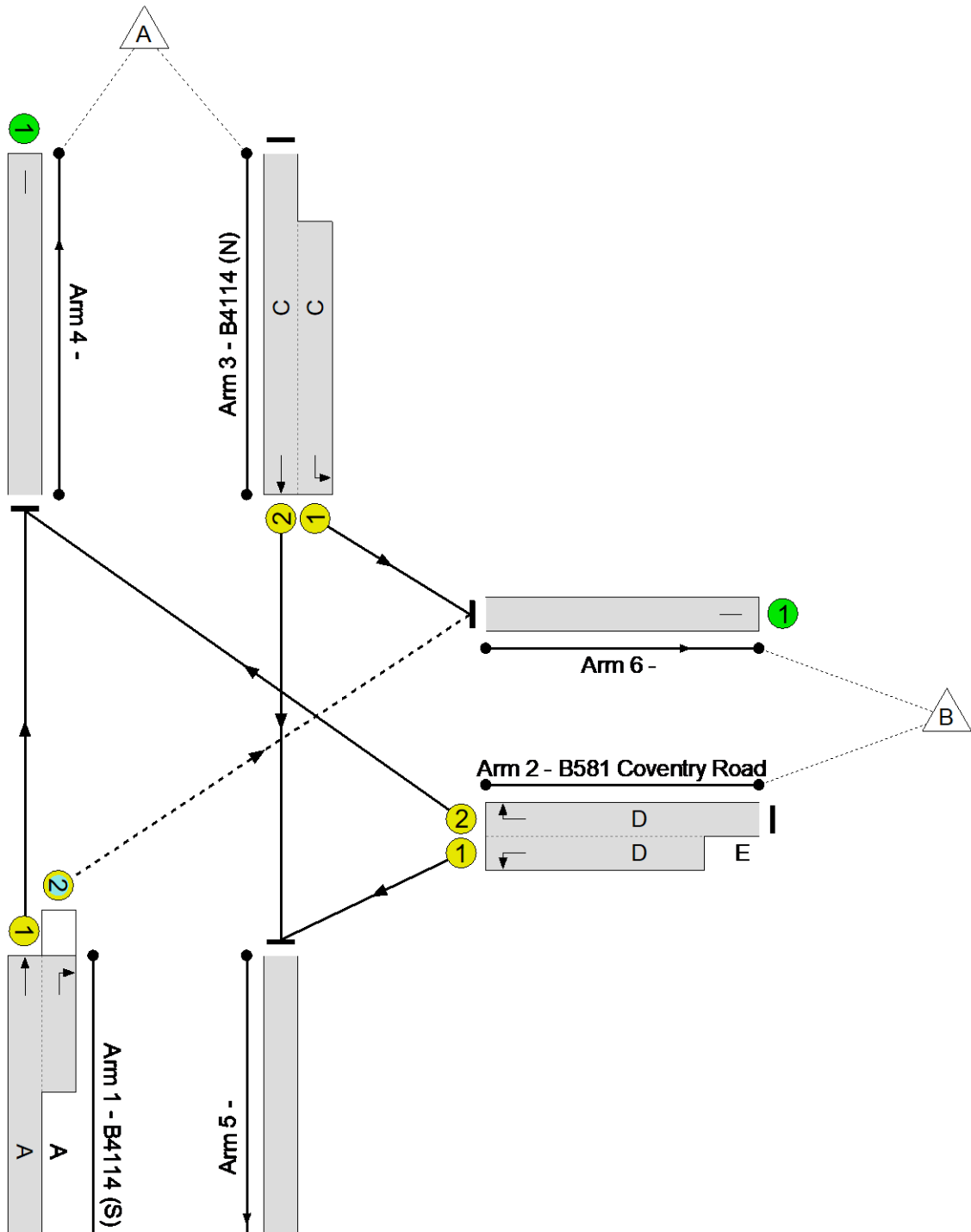
Signal Timings Diagram



B581 Coventry Road / B4114 Junction

PRC: 19.5 %

Total Traffic Delay: 14.0 pcuHr



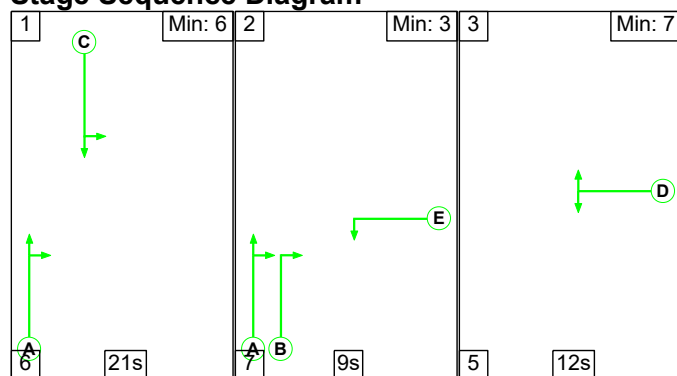
Network Results

Network Results

Full Input Data And Results

Scenario 2: '2041 PM Core' (FG2: '2041 PM Core', Plan 1: 'Network Control Plan 1')

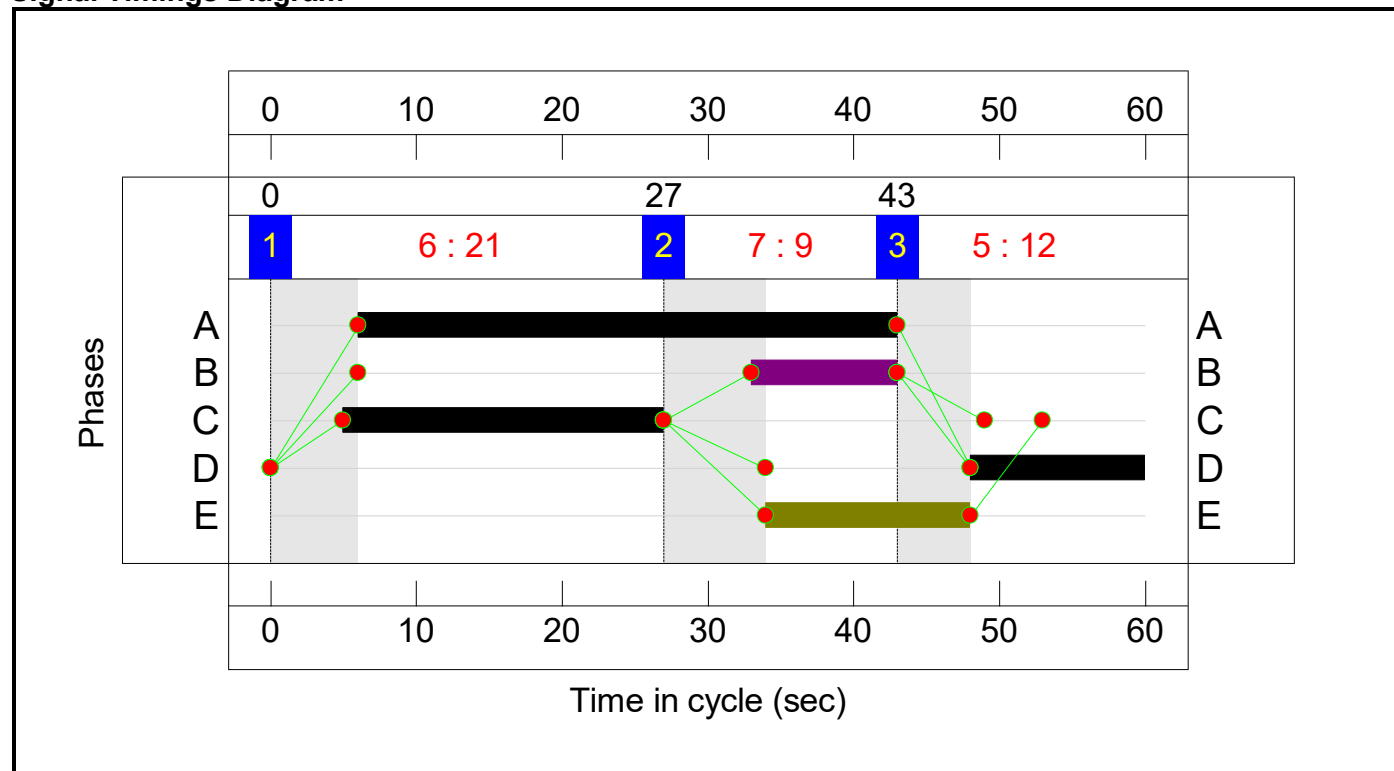
Stage Sequence Diagram



Stage Timings

Stage	1	2	3
Duration	21	9	12
Change Point	0	27	43

Signal Timings Diagram



Full Input Data And Results

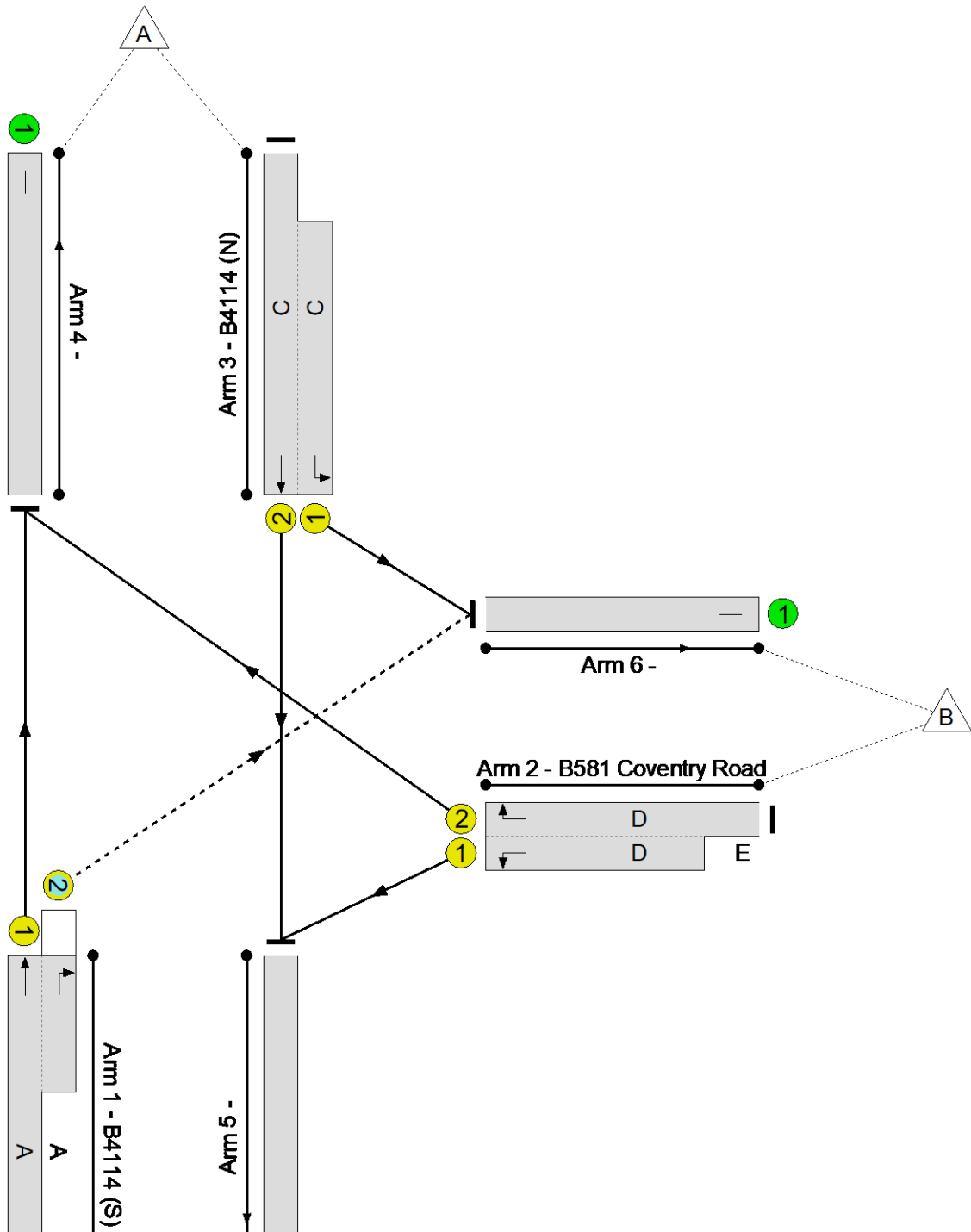
Network Layout Diagram



B581 Coventry Road / B4114 Junction

PRC: 25.9 %

Total Traffic Delay: 13.5 pcuHr



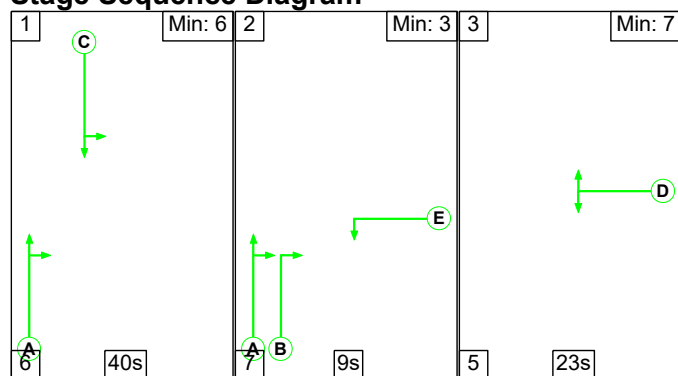
Network Results

Network Results

Full Input Data And Results

Scenario 3: '2041 AM Pref' (FG3: '2041 AM Pref', Plan 1: 'Network Control Plan 1')

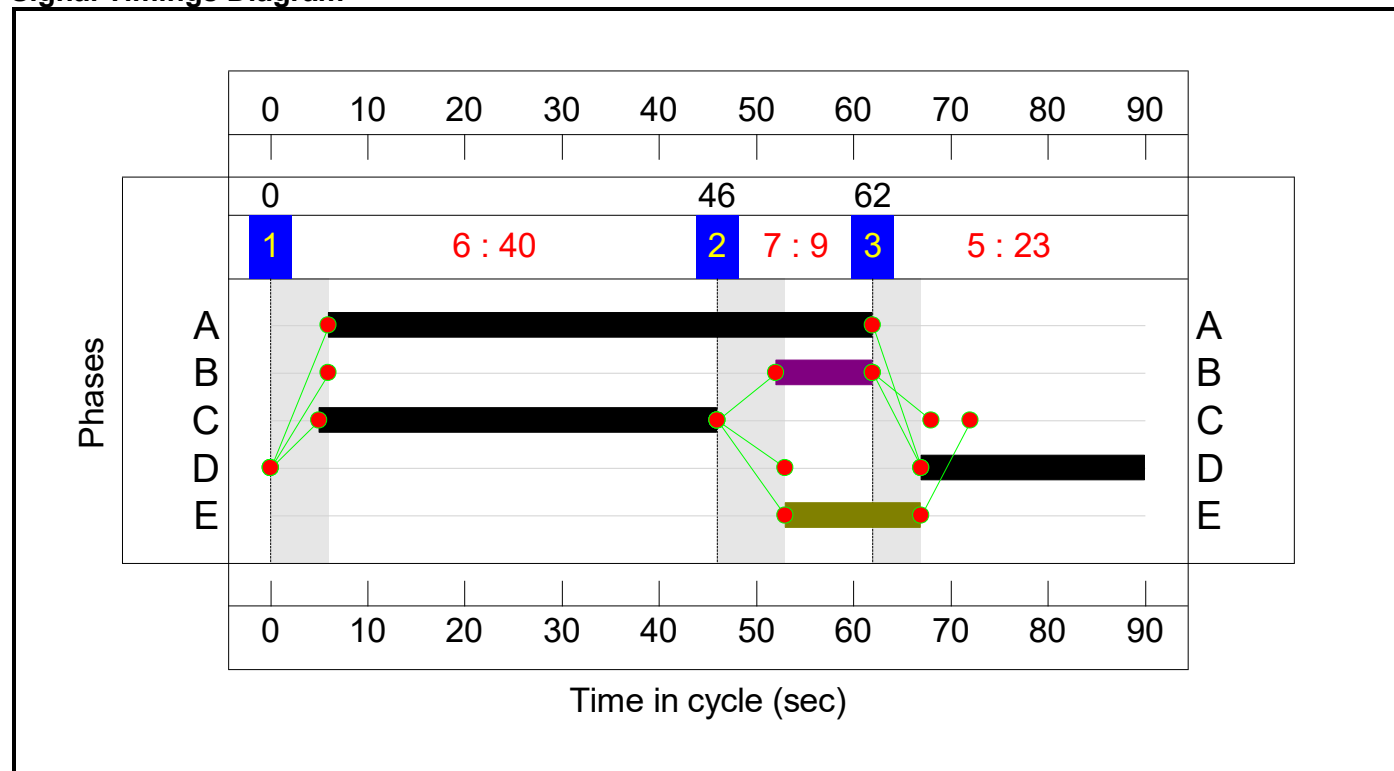
Stage Sequence Diagram



Stage Timings

Stage	1	2	3
Duration	40	9	23
Change Point	0	46	62

Signal Timings Diagram



Full Input Data And Results

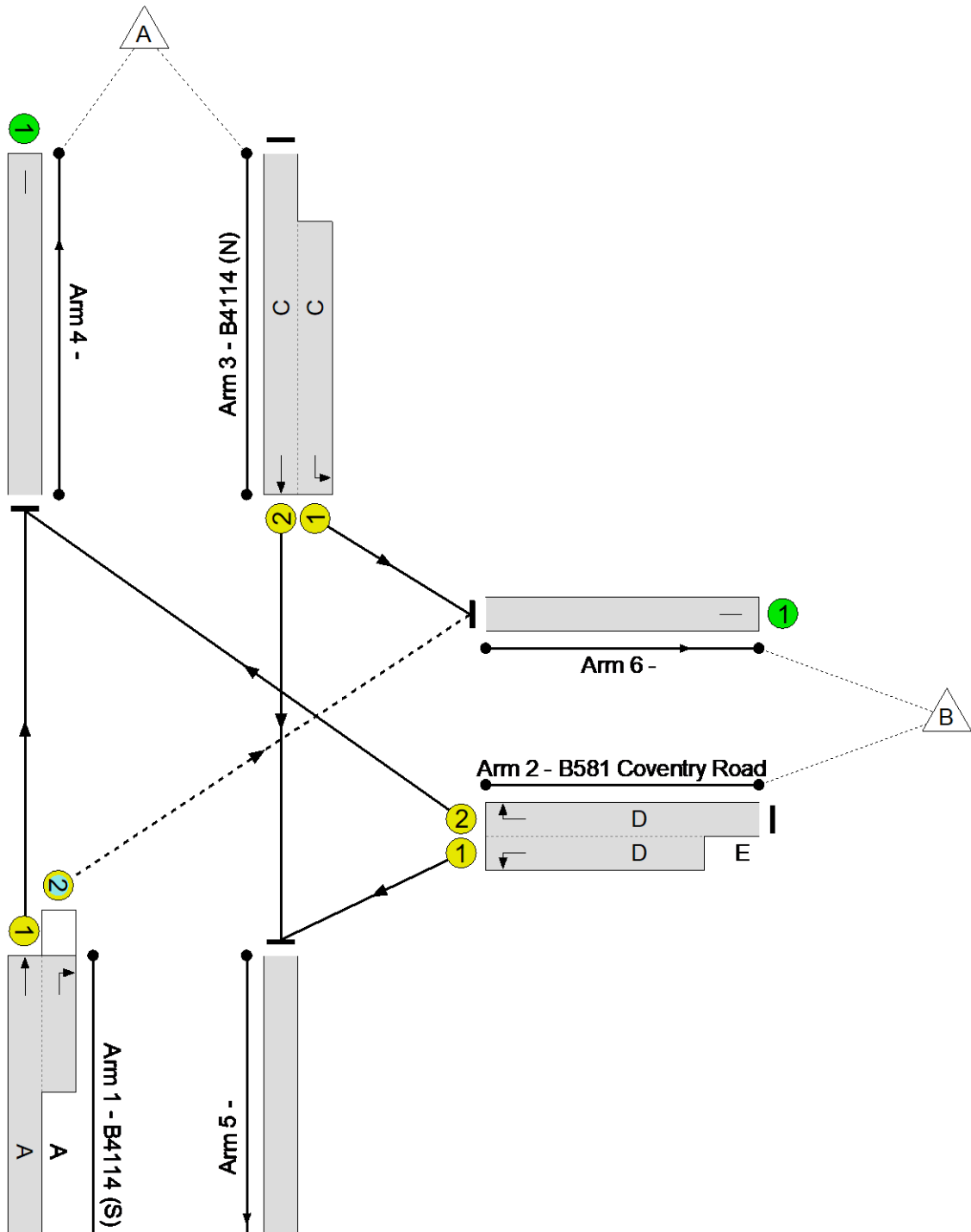
Network Layout Diagram



B581 Coventry Road / B4114 Junction

PRC: 16.7 %

Total Traffic Delay: 19.7 pcuHr



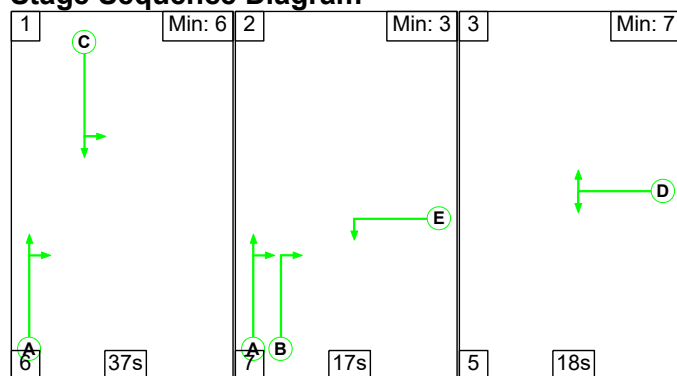
Network Results

Network Results

Full Input Data And Results

Scenario 4: '2041 PM Pref' (FG4: '2041 PM Pref', Plan 1: 'Network Control Plan 1')

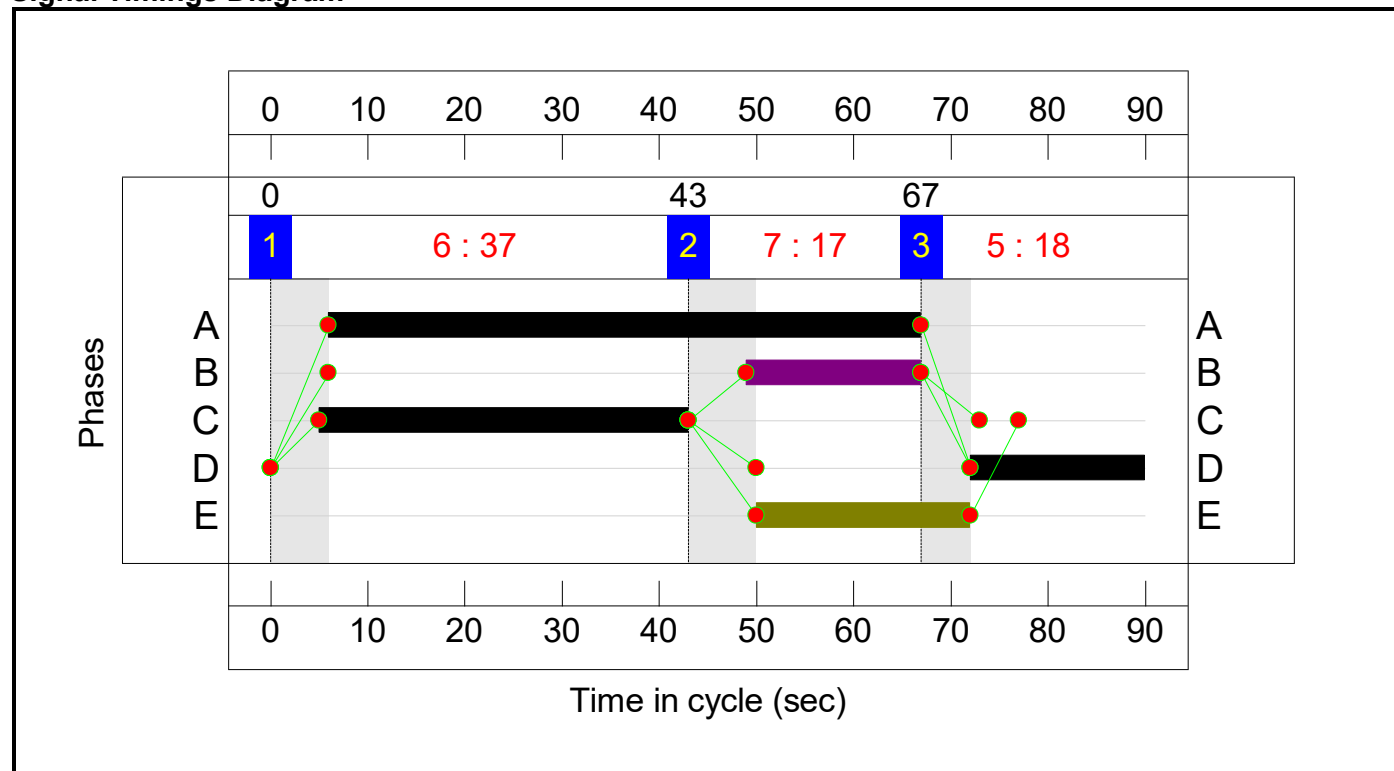
Stage Sequence Diagram



Stage Timings

Stage	1	2	3
Duration	37	17	18
Change Point	0	43	67

Signal Timings Diagram



Full Input Data And Results

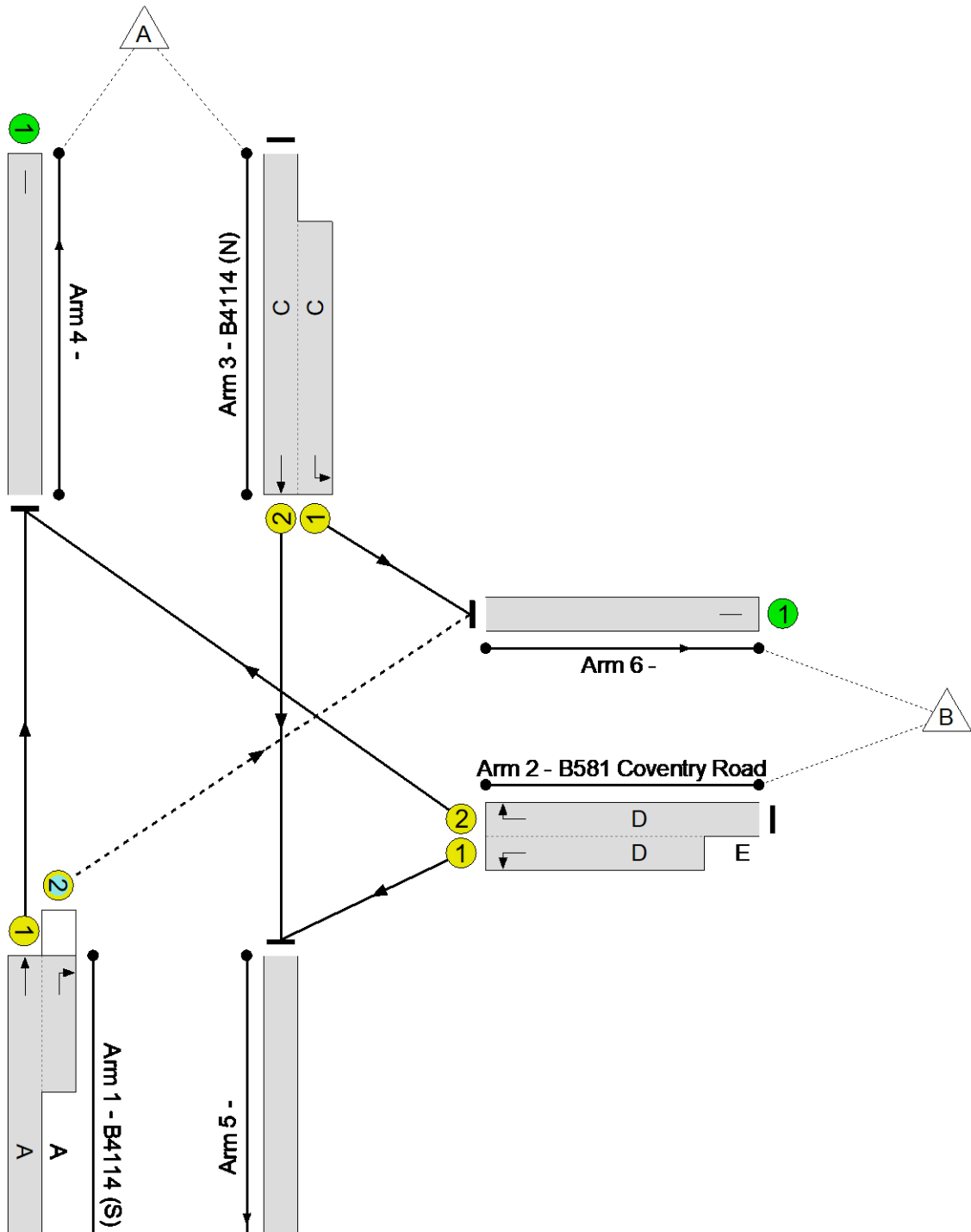
Network Layout Diagram



B581 Coventry Road / B4114 Junction

PRC: 19.1 %

Total Traffic Delay: 18.5 pcuHr



Network Results

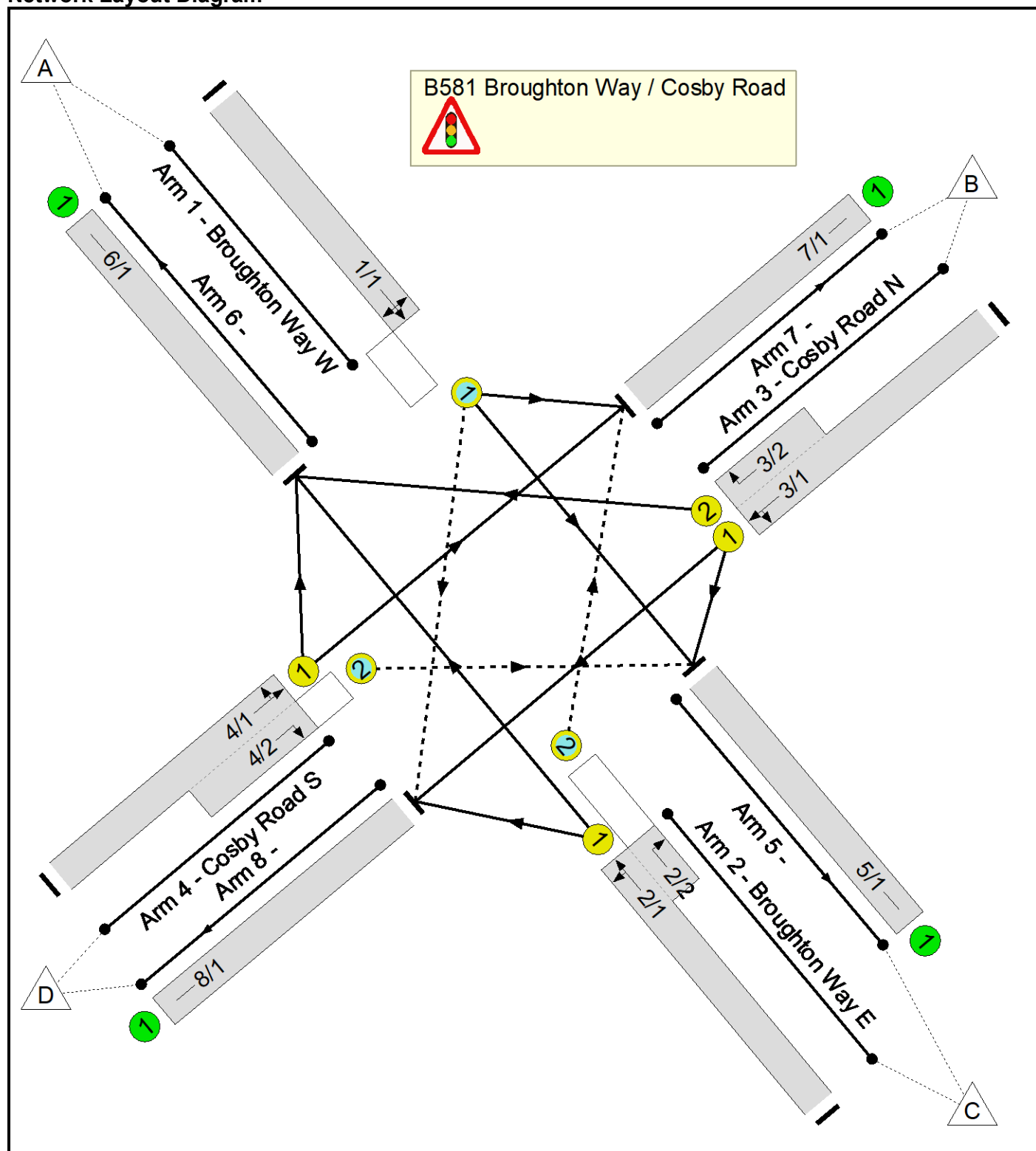
Network Results

Full Input Data And Results

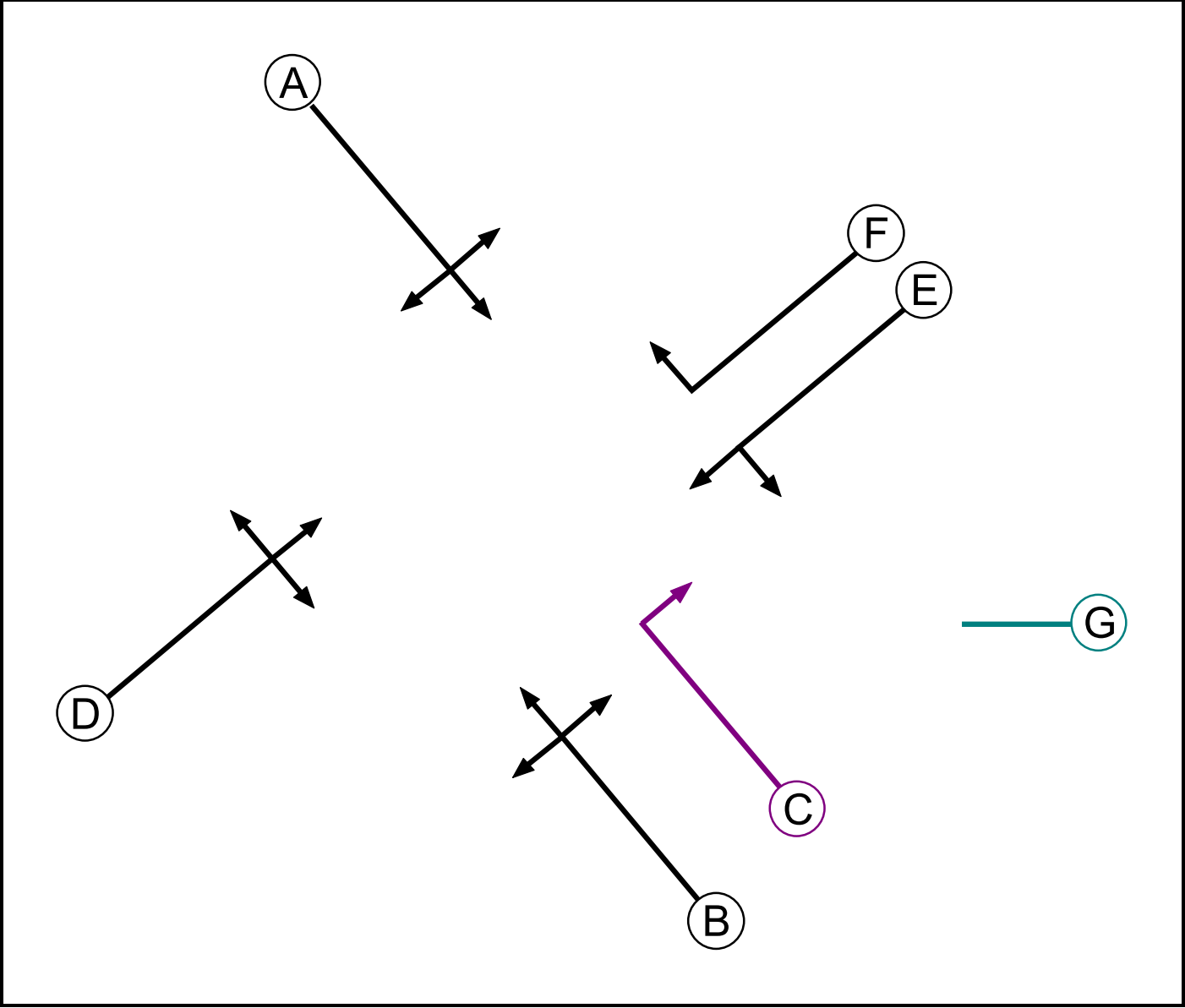
User and Project Details

Project:	
Title:	
Location:	
Additional detail:	
File name:	J23_Mitigation - B581 Broughton Way_Cosby Road.lsg3x
Author:	
Company:	
Address:	

Network Layout Diagram



Phase Diagram



Phase Input Data

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

Full Input Data And Results

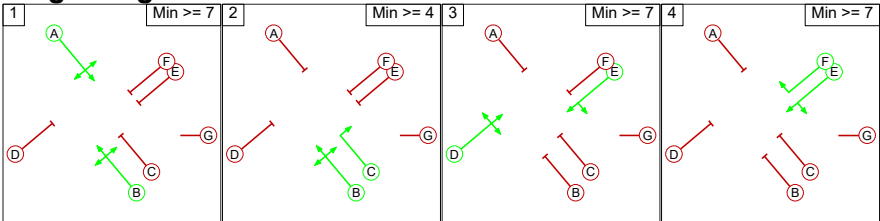
Phase Intergreens Matrix

Terminating Phase	Starting Phase							
		A	B	C	D	E	F	G
	A		-	6	8	8	8	3
	B	-		-	7	6	6	3
	C	6	-		6	6	6	3
	D	5	6	6		-	6	3
	E	7	7	7	-		-	3
	F	7	7	7	7	-		3
	G	2	2	2	2	2	2	

Phases in Stage

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

Stage Diagram



Phase Delays

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

Prohibited Stage Change

From Stage	To Stage				
		1	2	3	4
	1		6	8	8
	2	6		7	6
	3	7	7		6
	4	7	7	7	

Full Input Data And Results

Give-Way Lane Input Data

Junction: B581 Broughton Way / Cosby Road											
Lane	Movement	Max Flow when Giving Way (PCU/Hr)	Min Flow when Giving Way (PCU/Hr)	Opposing Lane	Opp. Lane Coeff.	Opp. Mvmnts.	Right Turn Storage (PCU)	Non-Blocking Storage (PCU)	RTF	Right Turn Move up (s)	Max Turns in Intergreen (PCU)
1/1 (Broughton Way W)	8/1 (Right)	1400	0	2/1	1.10	All	3.00	3.00	0.50	3	2.00
2/2 (Broughton Way E)	7/1 (Right)	1400	0	1/1	1.10	All	4.00	-	0.50	4	2.00
4/2 (Cosby Road S)	5/1 (Right)	1400	0	3/1	1.10	All	2.00	-	0.50	2	2.00

Lane Input Data

Junction: B581 Broughton Way / Cosby 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 (Broughton Way W)	O	A	2	3	60.0	Geom	-	3.50	0.00	Y	Arm 5 Ahead	Inf
											Arm 7 Left	15.00
											Arm 8 Right	Inf
2/1 (Broughton Way E)	U	B	2	3	60.0	Geom	-	3.50	0.00	Y	Arm 6 Ahead	Inf
											Arm 8 Left	12.00
2/2 (Broughton Way E)	O	B C	2	3	3.0	Geom	-	3.50	0.00	N	Arm 7 Right	12.00
3/1 (Cosby Road N)	U	E	2	3	60.0	Geom	-	3.50	0.00	Y	Arm 5 Left	12.00
											Arm 8 Ahead	Inf
3/2 (Cosby Road N)	U	F	2	3	5.0	Geom	-	3.50	0.00	N	Arm 6 Right	12.00
4/1 (Cosby Road S)	U	D	2	3	60.0	Geom	-	3.50	0.00	Y	Arm 6 Left	12.00
											Arm 7 Ahead	Inf
4/2 (Cosby Road S)	O	D	2	3	6.0	Geom	-	3.50	0.00	N	Arm 5 Right	12.00
5/1	U		2	3	60.0	Inf	-	-	-	-	-	-
6/1	U		2	3	60.0	Inf	-	-	-	-	-	-
7/1	U		2	3	60.0	Inf	-	-	-	-	-	-
8/1	U		2	3	60.0	Inf	-	-	-	-	-	-

Traffic Flow Groups

Flow Group	Start Time	End Time	Duration	Formula
1: '2041 AM Core'	07:45	08:45	01:00	
2: '2041 PM Core'	16:45	17:45	01:00	
3: '2041 AM Pref'	07:45	08:45	01:00	
4: '2041 PM Pref'	16:45	17:45	01:00	

Full Input Data And Results

Scenario 1: '2041 AM Pref' (FG3: '2041 AM Pref', Plan 2: 'S2 Double Cycled (typical)')

Traffic Flows, Desired

Desired Flow :

	Destination					
Origin		A	B	C	D	Tot.
	A	0	103	174	149	426
	B	48	0	14	235	297
	C	290	59	0	172	521
	D	43	149	19	0	211
	Tot.	381	311	207	556	1455

Traffic Lane Flows

Lane	Scenario 1: 2041 AM Pref
Junction: B581 Broughton Way / Cosby Road	
1/1	426
2/1 (with short)	521(In) 462(Out)
2/2 (short)	59
3/1 (with short)	297(In) 249(Out)
3/2 (short)	48
4/1 (with short)	211(In) 192(Out)
4/2 (short)	19
5/1	207
6/1	381
7/1	311
8/1	556

Lane Saturation Flows

Junction: B581 Broughton Way / Cosby 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 (Broughton Way W)	3.50	0.00	Y	Arm 5 Ahead	Inf	40.8 %	1919	1919
				Arm 7 Left	15.00	24.2 %		
				Arm 8 Right	Inf	35.0 %		
2/1 (Broughton Way E)	3.50	0.00	Y	Arm 6 Ahead	Inf	62.8 %	1878	1878
				Arm 8 Left	12.00	37.2 %		
2/2 (Broughton Way E)	3.50	0.00	N	Arm 7 Right	12.00	100.0 %	1871	1871
3/1 (Cosby Road N)	3.50	0.00	Y	Arm 5 Left	12.00	5.6 %	1951	1951
				Arm 8 Ahead	Inf	94.4 %		
3/2 (Cosby Road N)	3.50	0.00	N	Arm 6 Right	12.00	100.0 %	1871	1871
4/1 (Cosby Road S)	3.50	0.00	Y	Arm 6 Left	12.00	22.4 %	1911	1911
				Arm 7 Ahead	Inf	77.6 %		
4/2 (Cosby Road S)	3.50	0.00	N	Arm 5 Right	12.00	100.0 %	1871	1871
5/1	Infinite Saturation Flow						Inf	Inf
6/1	Infinite Saturation Flow						Inf	Inf
7/1	Infinite Saturation Flow						Inf	Inf
8/1	Infinite Saturation Flow						Inf	Inf

Scenario 2: '2041 PM Pref' (FG4: '2041 PM Pref', Plan 2: 'S2 Double Cycled (typical)')**Traffic Flows, Desired****Desired Flow :**

	Destination					
		A	B	C	D	Tot.
Origin	A	0	205	63	284	552
	B	55	0	18	296	369
	C	213	96	0	135	444
	D	45	181	17	0	243
	Tot.	313	482	98	715	1608

Traffic Lane Flows

Lane	Scenario 2: 2041 PM Pref
Junction: B581 Broughton Way / Cosby Road	
1/1	552
2/1 (with short)	444(In) 348(Out)
2/2 (short)	96
3/1 (with short)	369(In) 314(Out)
3/2 (short)	55
4/1 (with short)	243(In) 226(Out)
4/2 (short)	17
5/1	98
6/1	313
7/1	482
8/1	715

Lane Saturation Flows

Junction: B581 Broughton Way / Cosby 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 (Broughton Way W)	3.50	0.00	Y	Arm 5 Ahead	Inf	11.4 %	1895	1895
				Arm 7 Left	15.00	37.1 %		
				Arm 8 Right	Inf	51.4 %		
2/1 (Broughton Way E)	3.50	0.00	Y	Arm 6 Ahead	Inf	61.2 %	1874	1874
				Arm 8 Left	12.00	38.8 %		
2/2 (Broughton Way E)	3.50	0.00	N	Arm 7 Right	12.00	100.0 %	1871	1871
3/1 (Cosby Road N)	3.50	0.00	Y	Arm 5 Left	12.00	5.7 %	1951	1951
				Arm 8 Ahead	Inf	94.3 %		
3/2 (Cosby Road N)	3.50	0.00	N	Arm 6 Right	12.00	100.0 %	1871	1871
4/1 (Cosby Road S)	3.50	0.00	Y	Arm 6 Left	12.00	19.9 %	1917	1917
				Arm 7 Ahead	Inf	80.1 %		
4/2 (Cosby Road S)	3.50	0.00	N	Arm 5 Right	12.00	100.0 %	1871	1871
5/1			Infinite Saturation Flow				Inf	Inf
6/1			Infinite Saturation Flow				Inf	Inf
7/1			Infinite Saturation Flow				Inf	Inf
8/1			Infinite Saturation Flow				Inf	Inf

Full Input Data And Results

Scenario 3: '2041 AM Core' (FG1: '2041 AM Core', Plan 2: 'S2 Double Cycled (typical)')

Traffic Flows, Desired

Desired Flow :

	Destination					
Origin		A	B	C	D	Tot.
	A	0	94	159	136	389
	B	48	0	14	234	296
	C	274	56	0	163	493
	D	37	129	16	0	182
	Tot.	359	279	189	533	1360

Traffic Lane Flows

Lane	Scenario 3: 2041 AM Core
Junction: B581 Broughton Way / Cosby Road	
1/1	389
2/1 (with short)	493(In) 437(Out)
2/2 (short)	56
3/1 (with short)	296(In) 248(Out)
3/2 (short)	48
4/1 (with short)	182(In) 166(Out)
4/2 (short)	16
5/1	189
6/1	359
7/1	279
8/1	533

Lane Saturation Flows

Junction: B581 Broughton Way / Cosby 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 (Broughton Way W)	3.50	0.00	Y	Arm 5 Ahead	Inf	40.9 %	1919	1919
				Arm 7 Left	15.00	24.2 %		
				Arm 8 Right	Inf	35.0 %		
2/1 (Broughton Way E)	3.50	0.00	Y	Arm 6 Ahead	Inf	62.7 %	1877	1877
				Arm 8 Left	12.00	37.3 %		
2/2 (Broughton Way E)	3.50	0.00	N	Arm 7 Right	12.00	100.0 %	1871	1871
3/1 (Cosby Road N)	3.50	0.00	Y	Arm 5 Left	12.00	5.6 %	1951	1951
				Arm 8 Ahead	Inf	94.4 %		
3/2 (Cosby Road N)	3.50	0.00	N	Arm 6 Right	12.00	100.0 %	1871	1871
4/1 (Cosby Road S)	3.50	0.00	Y	Arm 6 Left	12.00	22.3 %	1912	1912
				Arm 7 Ahead	Inf	77.7 %		
4/2 (Cosby Road S)	3.50	0.00	N	Arm 5 Right	12.00	100.0 %	1871	1871
5/1	Infinite Saturation Flow						Inf	Inf
6/1	Infinite Saturation Flow						Inf	Inf
7/1	Infinite Saturation Flow						Inf	Inf
8/1	Infinite Saturation Flow						Inf	Inf

Scenario 4: '2041 PM Core' (FG2: '2041 PM Core', Plan 2: 'S2 Double Cycled (typical)')**Traffic Flows, Desired****Desired Flow :**

	Destination					
		A	B	C	D	Tot.
Origin	A	0	192	59	267	518
	B	54	0	18	292	364
	C	189	85	0	119	393
	D	44	177	17	0	238
	Tot.	287	454	94	678	1513

Traffic Lane Flows

Lane	Scenario 4: 2041 PM Core
Junction: B581 Broughton Way / Cosby Road	
1/1	518
2/1 (with short)	393(In) 308(Out)
2/2 (short)	85
3/1 (with short)	364(In) 310(Out)
3/2 (short)	54
4/1 (with short)	238(In) 221(Out)
4/2 (short)	17
5/1	94
6/1	287
7/1	454
8/1	678

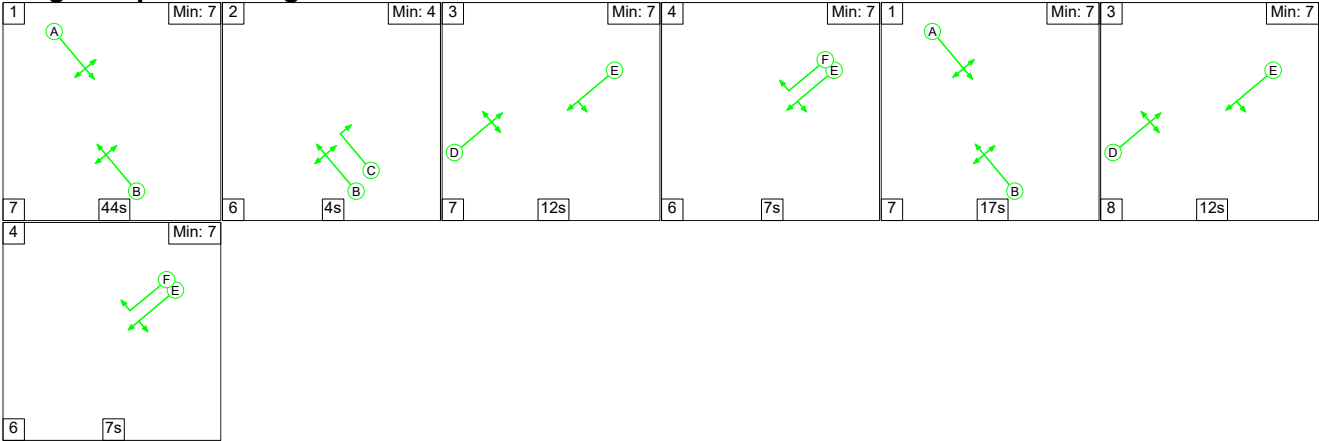
Lane Saturation Flows

Junction: B581 Broughton Way / Cosby 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 (Broughton Way W)	3.50	0.00	Y	Arm 5 Ahead	Inf	11.4 %	1895	1895
				Arm 7 Left	15.00	37.1 %		
				Arm 8 Right	Inf	51.5 %		
2/1 (Broughton Way E)	3.50	0.00	Y	Arm 6 Ahead	Inf	61.4 %	1874	1874
				Arm 8 Left	12.00	38.6 %		
2/2 (Broughton Way E)	3.50	0.00	N	Arm 7 Right	12.00	100.0 %	1871	1871
3/1 (Cosby Road N)	3.50	0.00	Y	Arm 5 Left	12.00	5.8 %	1951	1951
				Arm 8 Ahead	Inf	94.2 %		
3/2 (Cosby Road N)	3.50	0.00	N	Arm 6 Right	12.00	100.0 %	1871	1871
4/1 (Cosby Road S)	3.50	0.00	Y	Arm 6 Left	12.00	19.9 %	1917	1917
				Arm 7 Ahead	Inf	80.1 %		
4/2 (Cosby Road S)	3.50	0.00	N	Arm 5 Right	12.00	100.0 %	1871	1871
5/1			Infinite Saturation Flow				Inf	Inf
6/1			Infinite Saturation Flow				Inf	Inf
7/1			Infinite Saturation Flow				Inf	Inf
8/1			Infinite Saturation Flow				Inf	Inf

Full Input Data And Results

Scenario 1: '2041 AM Pref' (FG3: '2041 AM Pref', Plan 2: 'S2 Double Cycled (typical)')

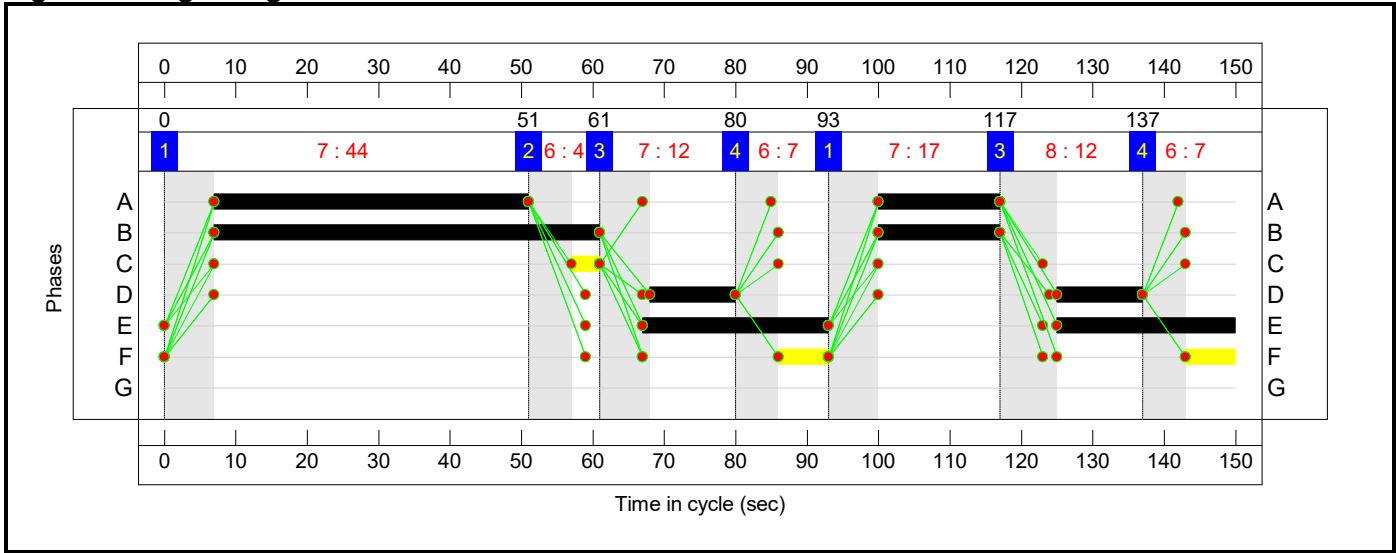
Stage Sequence Diagram



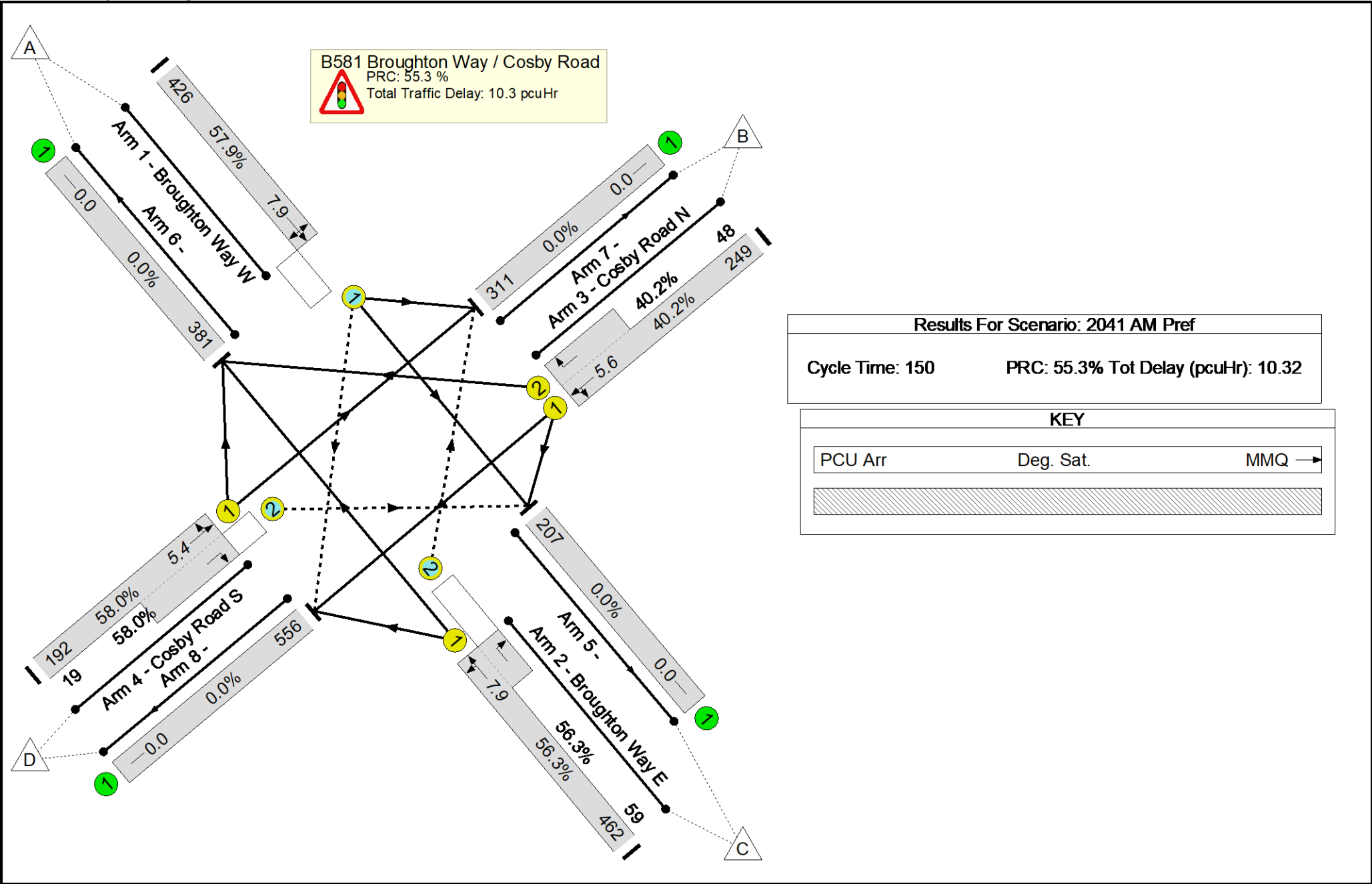
Stage Timings

Stage	1	2	3	4	1	3	4
Duration	44	4	12	7	17	12	7
Change Point	0	51	61	80	93	117	137

Signal Timings Diagram



Full Input Data And Results
Network Layout Diagram



Full Input Data And Results

Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network	-	-	N/A	-	-		-	-	-	-	-	-	58.0%
B581 Broughton Way / Cosby Road	-	-	N/A	-	-		-	-	-	-	-	-	58.0%
1/1	Broughton Way W Ahead Left Right	O	N/A	N/A	A		2	61	-	426	1919	736	57.9%
2/1+2/2	Broughton Way E Ahead Right Left	U+O	N/A	N/A	B	C	2	71	4	521	1878:1871	821+105	56.3 : 56.3%
3/1+3/2	Cosby Road N Left Right Ahead	U	N/A	N/A	E F		2	51:14	-	297	1951:1871	619+119	40.2 : 40.2%
4/1+4/2	Cosby Road S Right Left Ahead	U+O	N/A	N/A	D		2	24	-	211	1911:1871	331+33	58.0 : 58.0%
5/1		U	N/A	N/A	-		-	-	-	207	Inf	Inf	0.0%
6/1		U	N/A	N/A	-		-	-	-	381	Inf	Inf	0.0%
7/1		U	N/A	N/A	-		-	-	-	311	Inf	Inf	0.0%
8/1		U	N/A	N/A	-		-	-	-	556	Inf	Inf	0.0%

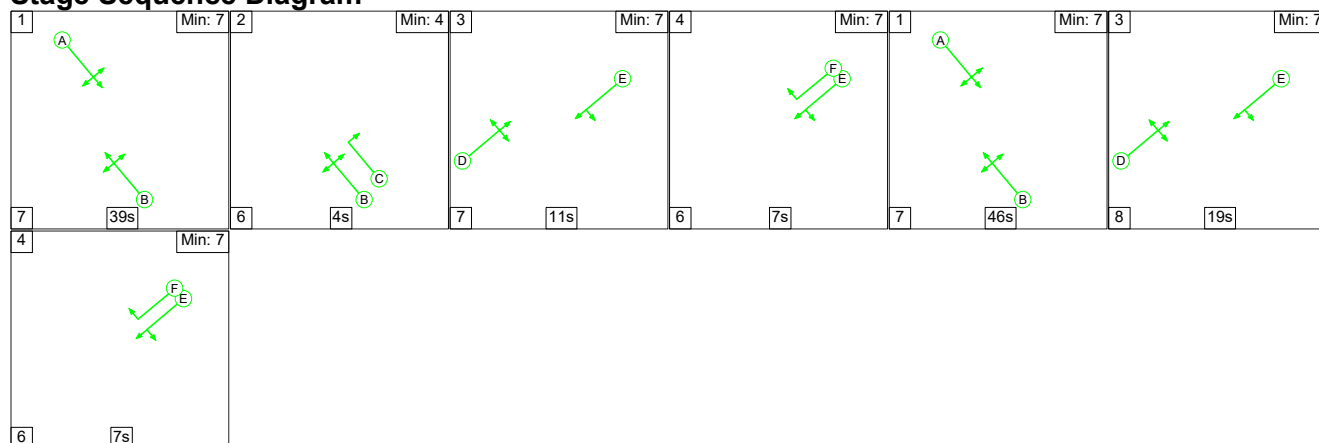
Full Input Data And Results

Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network	-	-	179	3	45	7.5	2.3	0.5	10.3	-	-	-	-
B581 Broughton Way / Cosby Road	-	-	179	3	45	7.5	2.3	0.5	10.3	-	-	-	-
1/1	426	426	107	0	42	1.9	0.7	0.4	3.0	25.3	7.2	0.7	7.9
2/1+2/2	521	521	53	3	3	1.9	0.6	0.1	2.6	18.2	7.3	0.6	7.9
3/1+3/2	297	297	-	-	-	1.8	0.3	-	2.2	26.4	5.2	0.3	5.6
4/1+4/2	211	211	19	0	0	1.8	0.7	0.0	2.5	42.9	4.7	0.7	5.4
5/1	207	207	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/1	381	381	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
7/1	311	311	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
8/1	556	556	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
C1 PRC for Signalled Lanes (%): 55.3 Total Delay for Signalled Lanes (pcuHr): 10.32 Cycle Time (s): 150 PRC Over All Lanes (%): 55.3 Total Delay Over All Lanes(pcuHr): 10.32													

Full Input Data And Results

Scenario 2: '2041 PM Pref' (FG4: '2041 PM Pref', Plan 2: 'S2 Double Cycled (typical)')

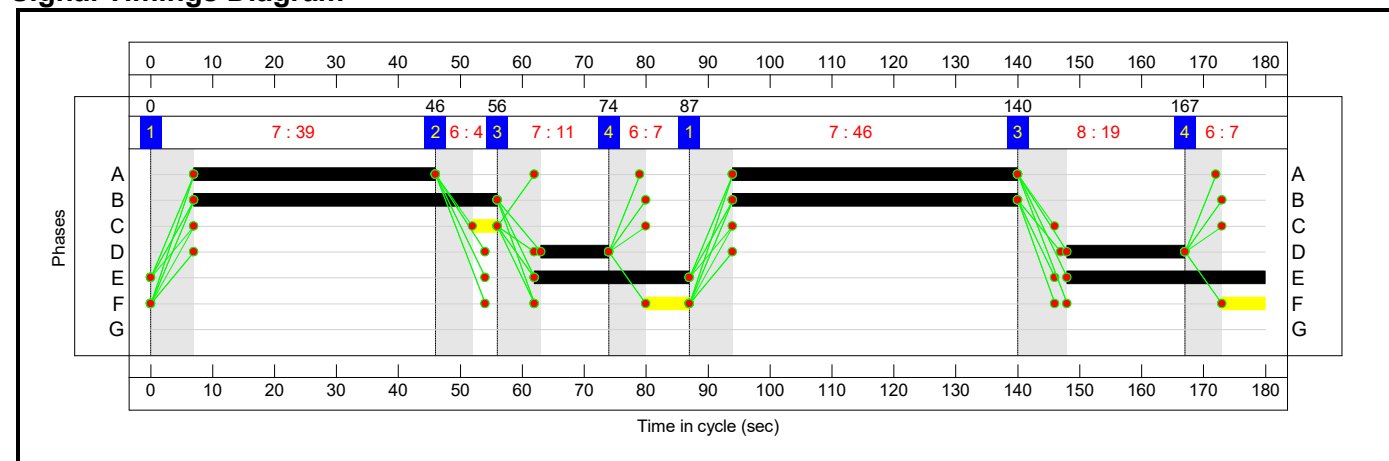
Stage Sequence Diagram



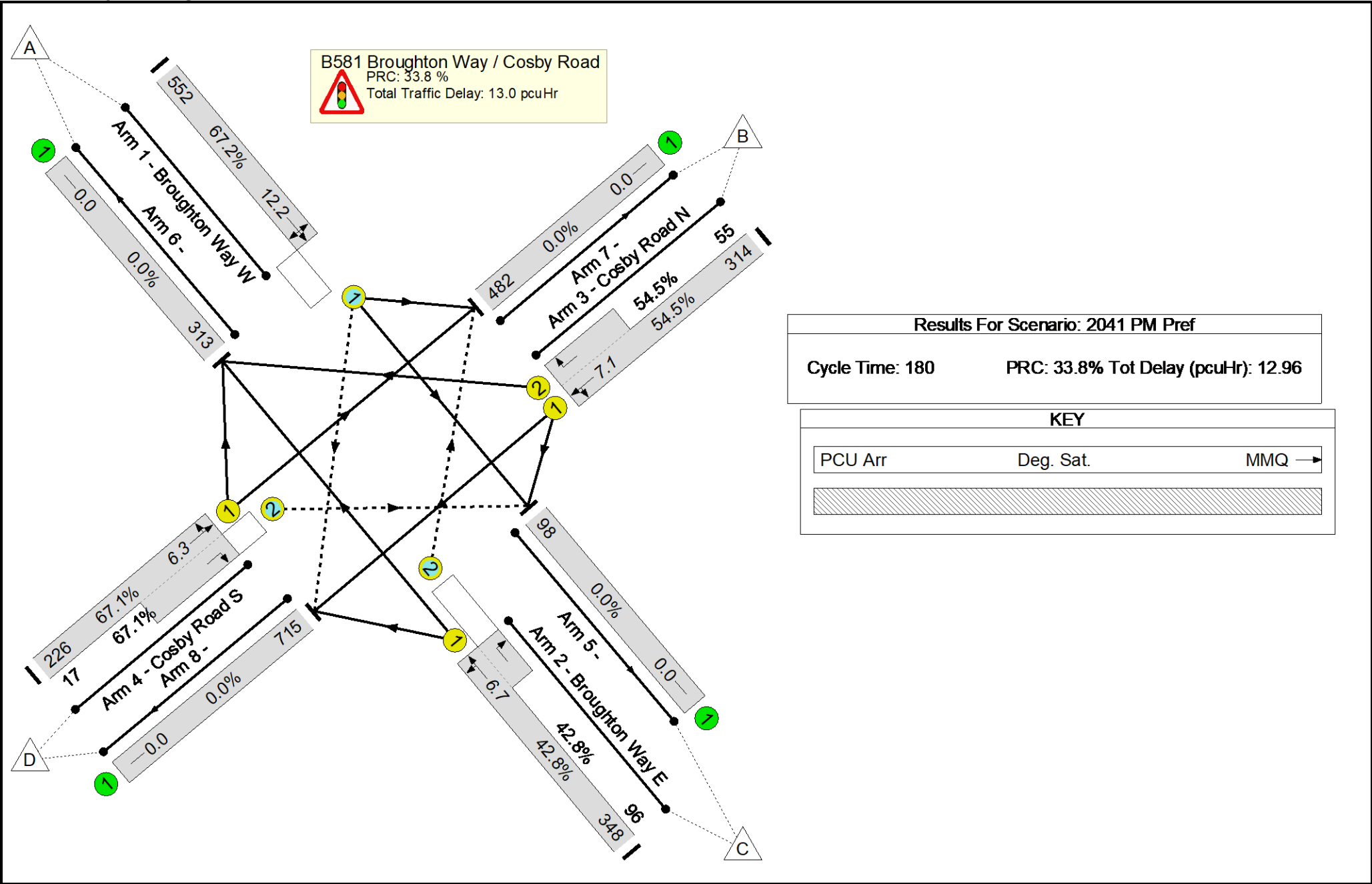
Stage Timings

Stage	1	2	3	4	1	3	4
Duration	39	4	11	7	46	19	7
Change Point	0	46	56	74	87	140	167

Signal Timings Diagram



Full Input Data And Results
Network Layout Diagram



Full Input Data And Results

Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network	-	-	N/A	-	-		-	-	-	-	-	-	67.2%
B581 Broughton Way / Cosby Road	-	-	N/A	-	-		-	-	-	-	-	-	67.2%
1/1	Broughton Way W Ahead Left Right	O	N/A	N/A	A		2	85	-	552	1895	821	67.2%
2/1+2/2	Broughton Way E Ahead Right Left	U+O	N/A	N/A	B	C	2	95	4	444	1874:1871	813+224	42.8 : 42.8%
3/1+3/2	Cosby Road N Left Right Ahead	U	N/A	N/A	E F		2	57:14	-	369	1951:1871	576+101	54.5 : 54.5%
4/1+4/2	Cosby Road S Right Left Ahead	U+O	N/A	N/A	D		2	30	-	243	1917:1871	337+25	67.1 : 67.1%
5/1		U	N/A	N/A	-		-	-	-	98	Inf	Inf	0.0%
6/1		U	N/A	N/A	-		-	-	-	313	Inf	Inf	0.0%
7/1		U	N/A	N/A	-		-	-	-	482	Inf	Inf	0.0%
8/1		U	N/A	N/A	-		-	-	-	715	Inf	Inf	0.0%

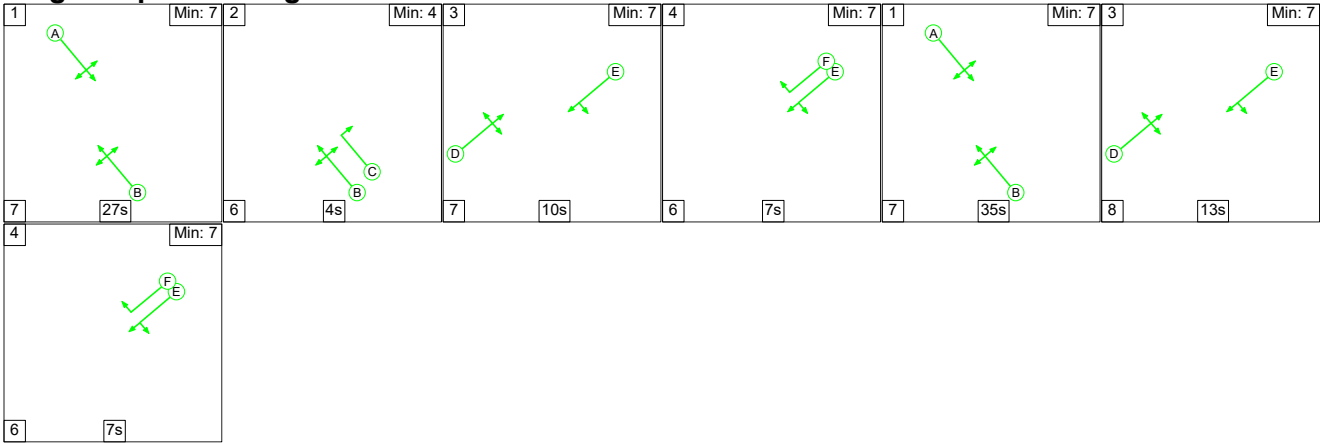
Full Input Data And Results

Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network	-	-	388	4	5	9.3	3.0	0.6	13.0	-	-	-	-
B581 Broughton Way / Cosby Road	-	-	388	4	5	9.3	3.0	0.6	13.0	-	-	-	-
1/1	552	552	282	0	2	2.8	1.0	0.5	4.4	28.4	11.2	1.0	12.2
2/1+2/2	444	444	89	4	3	1.5	0.4	0.1	1.9	15.8	6.3	0.4	6.7
3/1+3/2	369	369	-	-	-	2.7	0.6	-	3.3	32.2	6.5	0.6	7.1
4/1+4/2	243	243	17	0	0	2.3	1.0	0.0	3.4	49.8	5.3	1.0	6.3
5/1	98	98	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/1	313	313	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
7/1	482	482	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
8/1	715	715	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
C1 PRC for Signalled Lanes (%): 33.8 Total Delay for Signalled Lanes (pcuHr): 12.96 Cycle Time (s): 180 PRC Over All Lanes (%): 33.8 Total Delay Over All Lanes(pcuHr): 12.96													

Full Input Data And Results

Scenario 3: '2041 AM Core' (FG1: '2041 AM Core', Plan 2: 'S2 Double Cycled (typical)')

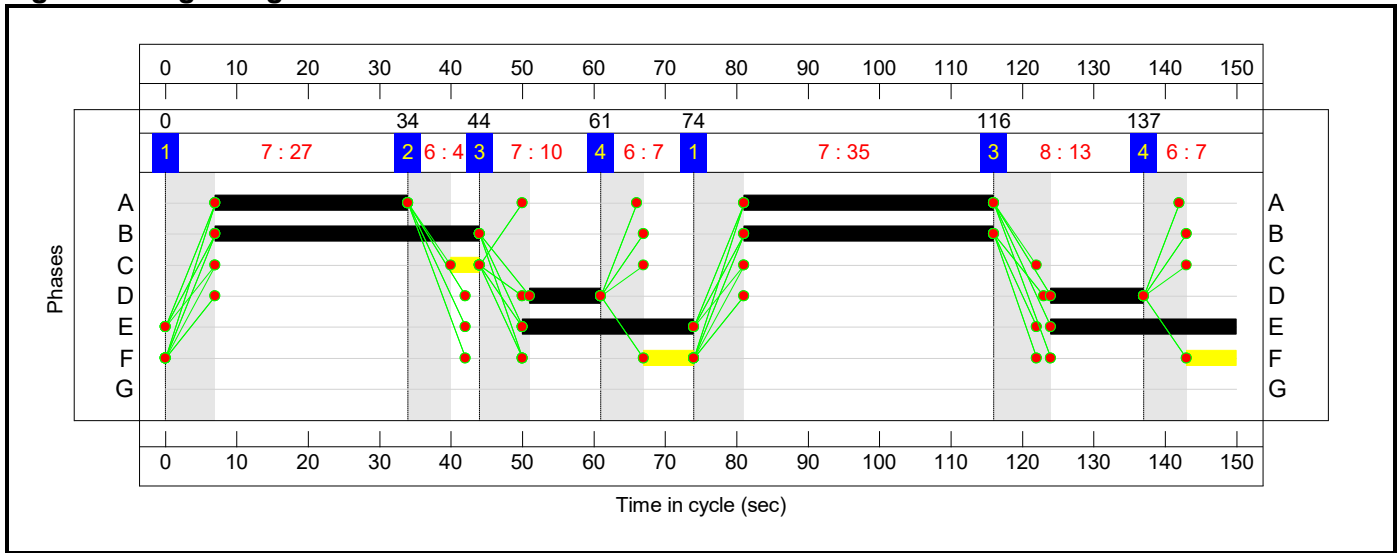
Stage Sequence Diagram



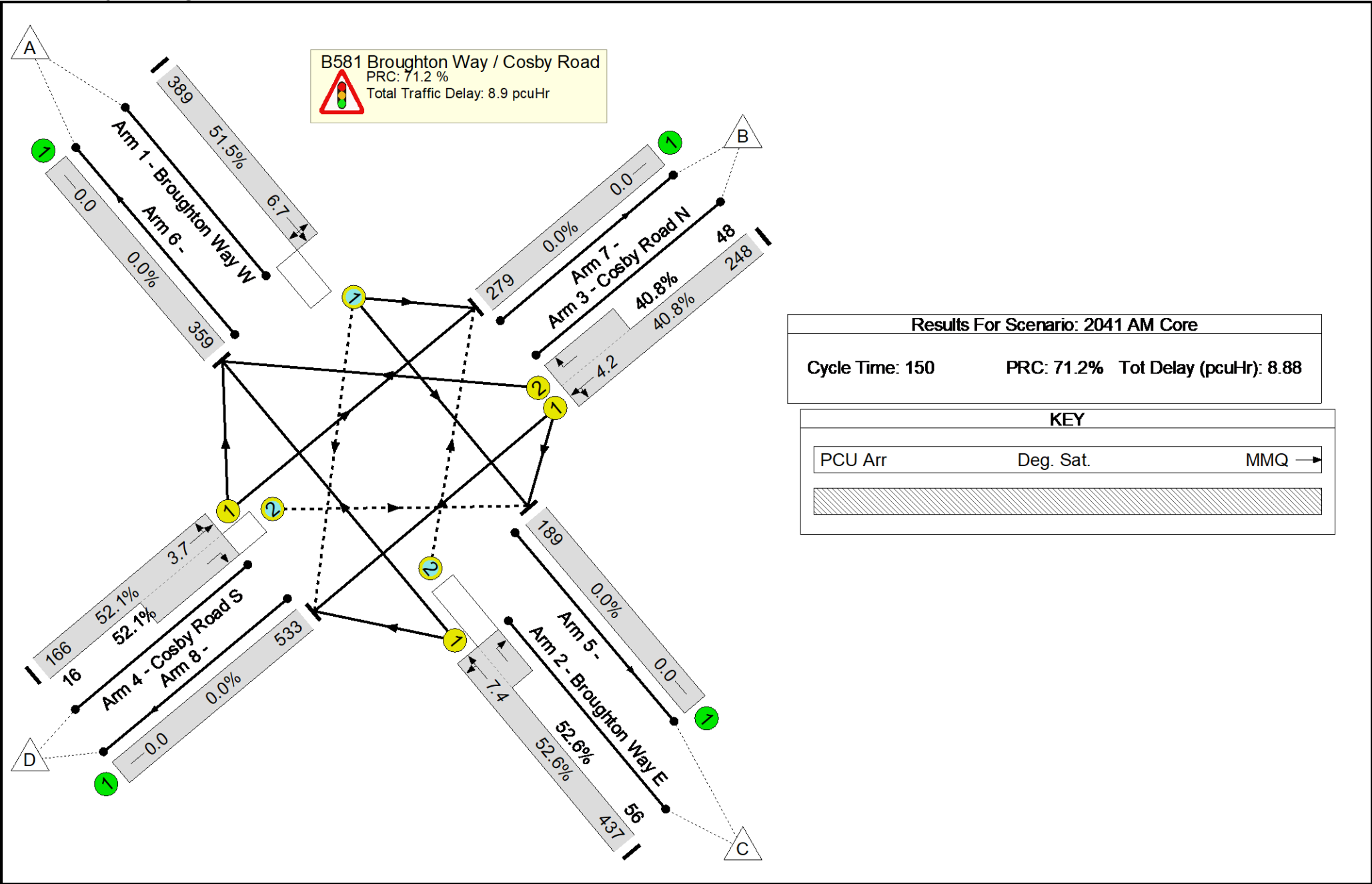
Stage Timings

Stage	1	2	3	4	1	3	4
Duration	27	4	10	7	35	13	7
Change Point	0	34	44	61	74	116	137

Signal Timings Diagram



Full Input Data And Results
Network Layout Diagram



Full Input Data And Results

Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network	-	-	N/A	-	-		-	-	-	-	-	-	52.6%
B581 Broughton Way / Cosby Road	-	-	N/A	-	-		-	-	-	-	-	-	52.6%
1/1	Broughton Way W Ahead Left Right	O	N/A	N/A	A		2	62	-	389	1919	755	51.5%
2/1+2/2	Broughton Way E Ahead Right Left	U+O	N/A	N/A	B	C	2	72	4	493	1877:1871	831+107	52.6 : 52.6%
3/1+3/2	Cosby Road N Left Right Ahead	U	N/A	N/A	E F		2	50:14	-	296	1951:1871	608+118	40.8 : 40.8%
4/1+4/2	Cosby Road S Right Left Ahead	U+O	N/A	N/A	D		2	23	-	182	1912:1871	319+31	52.1 : 52.1%
5/1		U	N/A	N/A	-		-	-	-	189	Inf	Inf	0.0%
6/1		U	N/A	N/A	-		-	-	-	359	Inf	Inf	0.0%
7/1		U	N/A	N/A	-		-	-	-	279	Inf	Inf	0.0%
8/1		U	N/A	N/A	-		-	-	-	533	Inf	Inf	0.0%

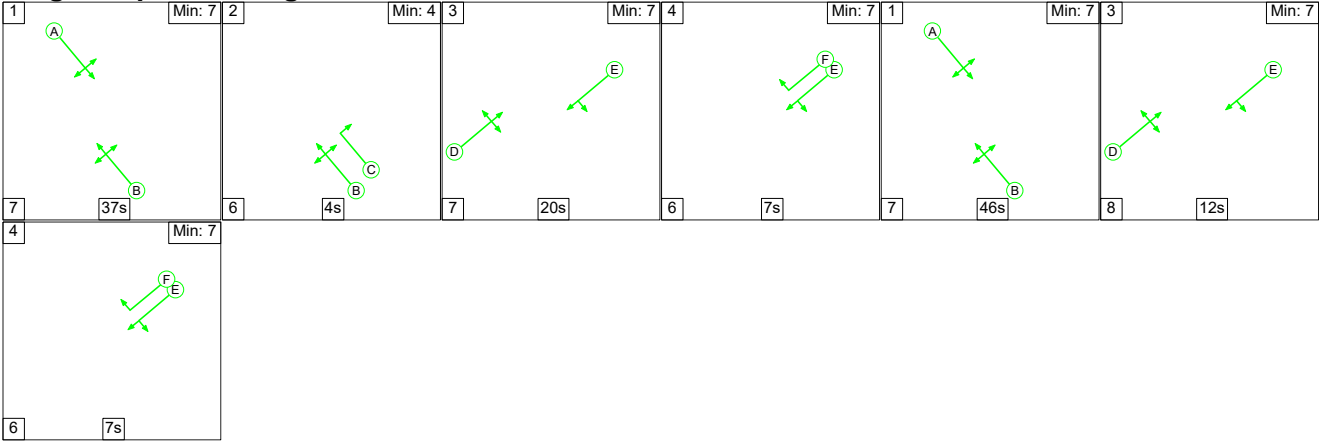
Full Input Data And Results

Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network	-	-	202	3	3	6.5	2.0	0.4	8.9	-	-	-	-
B581 Broughton Way / Cosby Road	-	-	202	3	3	6.5	2.0	0.4	8.9	-	-	-	-
1/1	389	389	135	0	1	1.7	0.5	0.3	2.5	23.3	6.2	0.5	6.7
2/1+2/2	493	493	51	3	2	1.7	0.6	0.0	2.3	17.1	6.9	0.6	7.4
3/1+3/2	296	296	-	-	-	1.7	0.3	-	2.0	24.5	3.9	0.3	4.2
4/1+4/2	182	182	16	0	0	1.4	0.5	0.0	2.0	39.5	3.1	0.5	3.7
5/1	189	189	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/1	359	359	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
7/1	279	279	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
8/1	533	533	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
C1 PRC for Signalled Lanes (%): 71.2 Total Delay for Signalled Lanes (pcuHr): 8.88 Cycle Time (s): 150 PRC Over All Lanes (%): 71.2 Total Delay Over All Lanes(pcuHr): 8.88													

Full Input Data And Results

Scenario 4: '2041 PM Core' (FG2: '2041 PM Core', Plan 2: 'S2 Double Cycled (typical)')

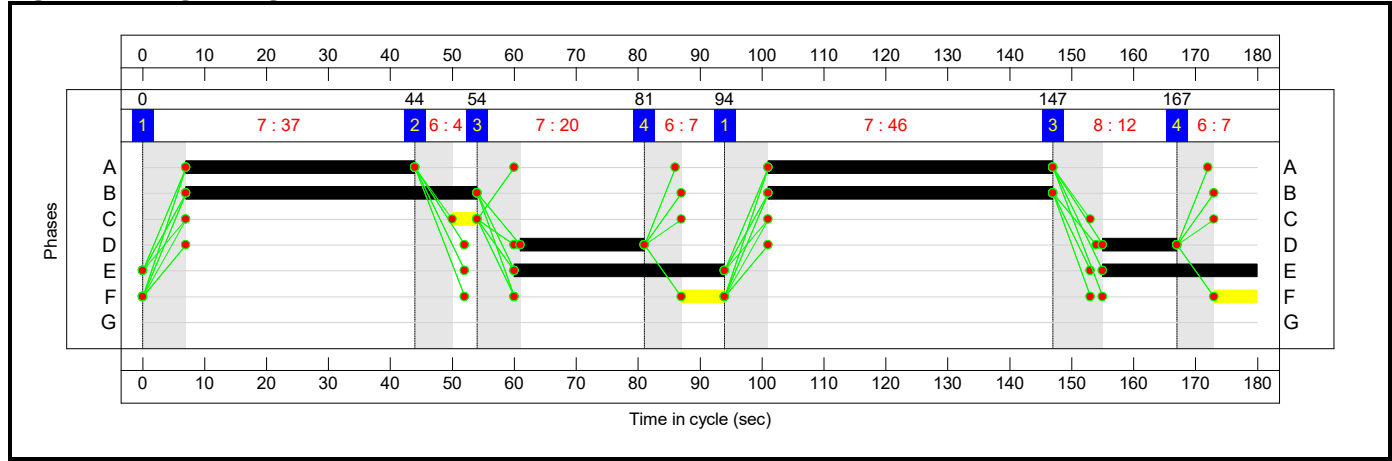
Stage Sequence Diagram



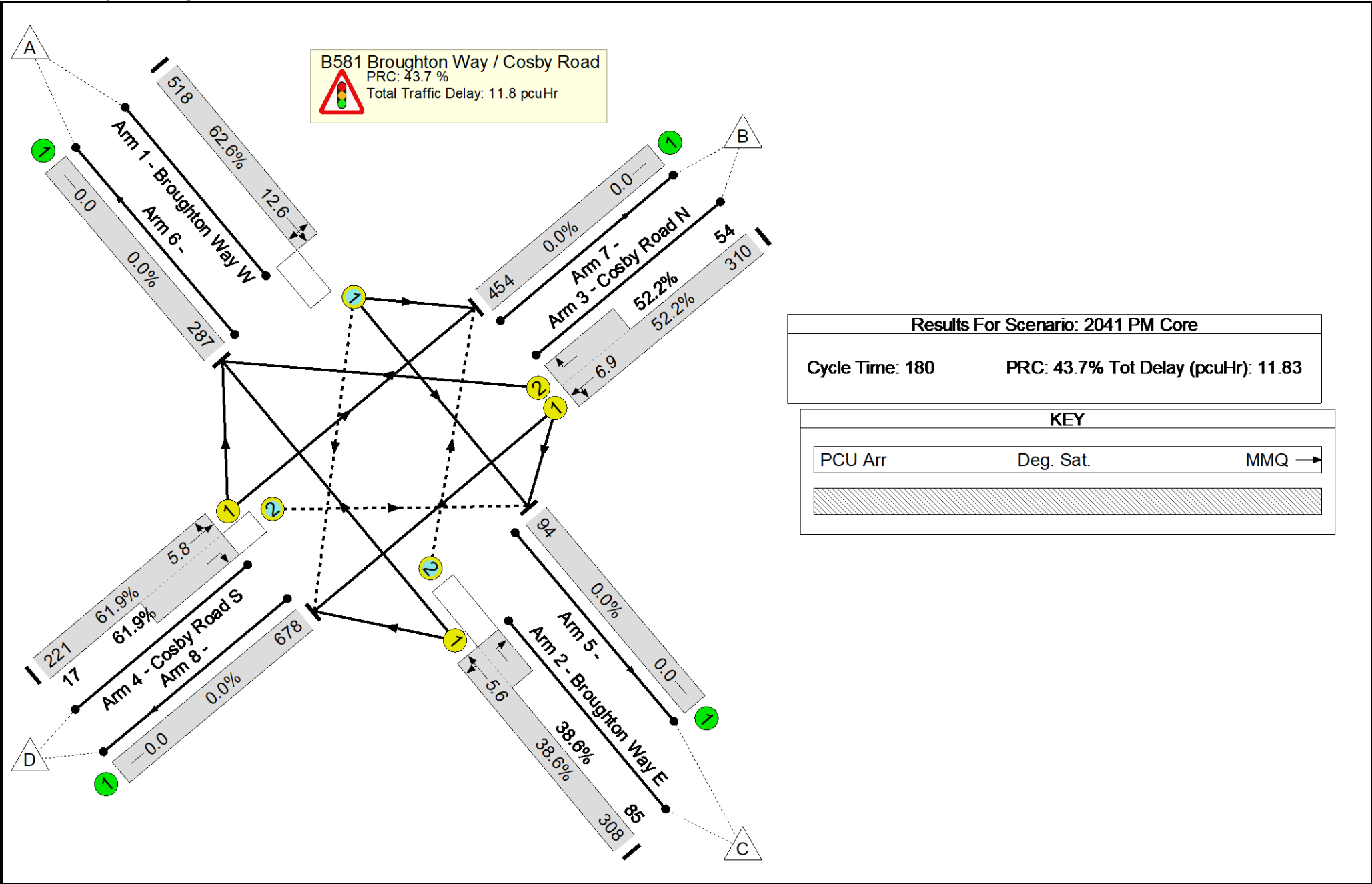
Stage Timings

Stage	1	2	3	4	1	3	4
Duration	37	4	20	7	46	12	7
Change Point	0	44	54	81	94	147	167

Signal Timings Diagram



Full Input Data And Results
Network Layout Diagram



Full Input Data And Results

Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network	-	-	N/A	-	-		-	-	-	-	-	-	62.6%
B581 Broughton Way / Cosby Road	-	-	N/A	-	-		-	-	-	-	-	-	62.6%
1/1	Broughton Way W Ahead Left Right	O	N/A	N/A	A		2	83	-	518	1895	827	62.6%
2/1+2/2	Broughton Way E Ahead Right Left	U+O	N/A	N/A	B	C	2	93	4	393	1874:1871	797+220	38.6 : 38.6%
3/1+3/2	Cosby Road N Left Right Ahead	U	N/A	N/A	E F		2	59:14	-	364	1951:1871	594+104	52.2 : 52.2%
4/1+4/2	Cosby Road S Right Left Ahead	U+O	N/A	N/A	D		2	32	-	238	1917:1871	357+27	61.9 : 61.9%
5/1		U	N/A	N/A	-		-	-	-	94	Inf	Inf	0.0%
6/1		U	N/A	N/A	-		-	-	-	287	Inf	Inf	0.0%
7/1		U	N/A	N/A	-		-	-	-	454	Inf	Inf	0.0%
8/1		U	N/A	N/A	-		-	-	-	678	Inf	Inf	0.0%

Full Input Data And Results

Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network	-	-	361	4	4	8.8	2.5	0.5	11.8	-	-	-	-
B581 Broughton Way / Cosby Road	-	-	361	4	4	8.8	2.5	0.5	11.8	-	-	-	-
1/1	518	518	266	0	1	2.7	0.8	0.4	3.9	27.4	11.8	0.8	12.6
2/1+2/2	393	393	78	4	3	1.3	0.3	0.1	1.7	15.7	5.3	0.3	5.6
3/1+3/2	364	364	-	-	-	2.6	0.5	-	3.1	31.0	6.3	0.5	6.9
4/1+4/2	238	238	17	0	0	2.2	0.8	0.0	3.0	46.1	5.0	0.8	5.8
5/1	94	94	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/1	287	287	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
7/1	454	454	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
8/1	678	678	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
C1 PRC for Signalled Lanes (%): 43.7 Total Delay for Signalled Lanes (pcuHr): 11.83 Cycle Time (s): 180 PRC Over All Lanes (%): 43.7 Total Delay Over All Lanes(pcuHr): 11.83													

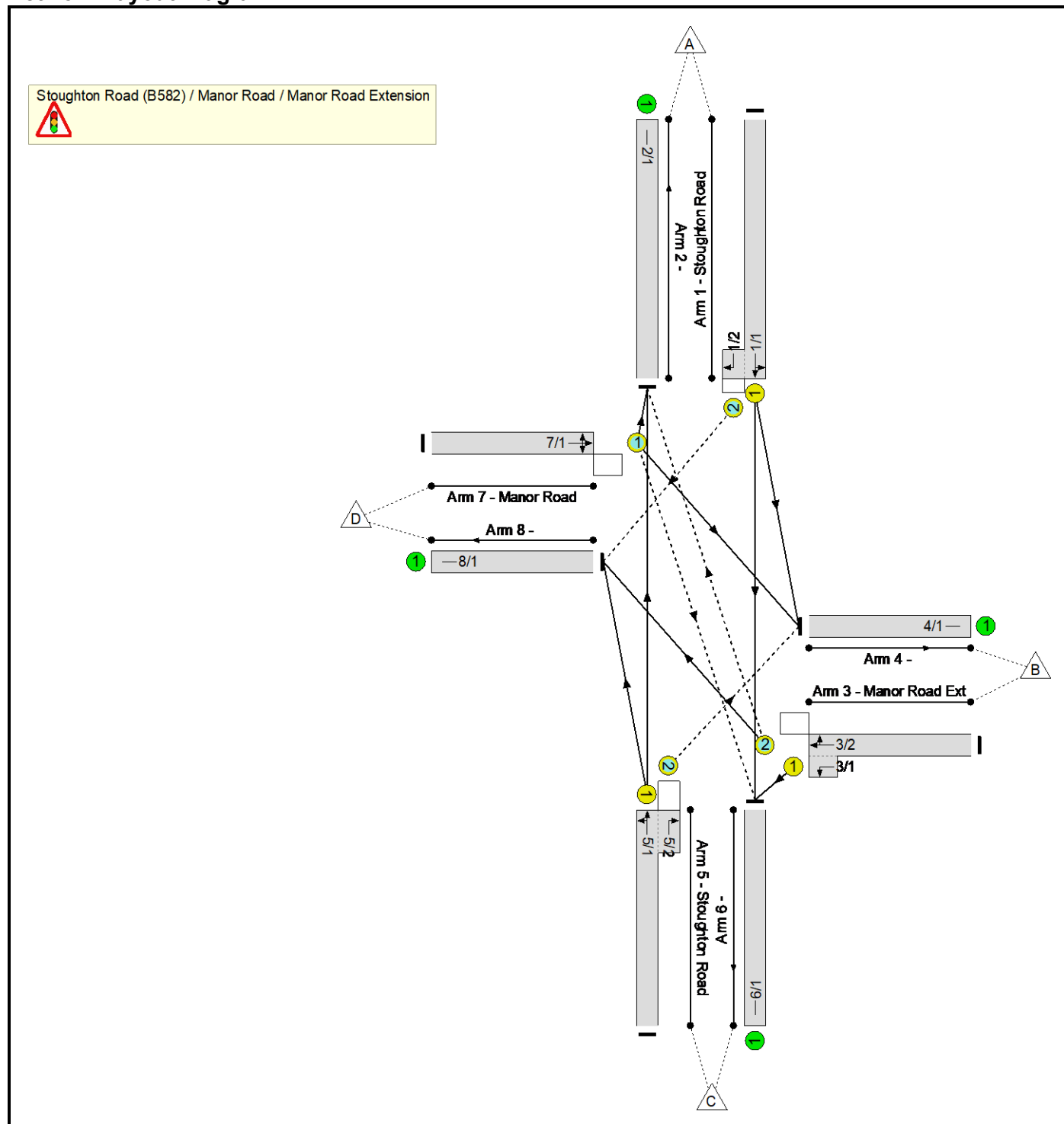
Full Input Data And Results

Full Input Data And Results

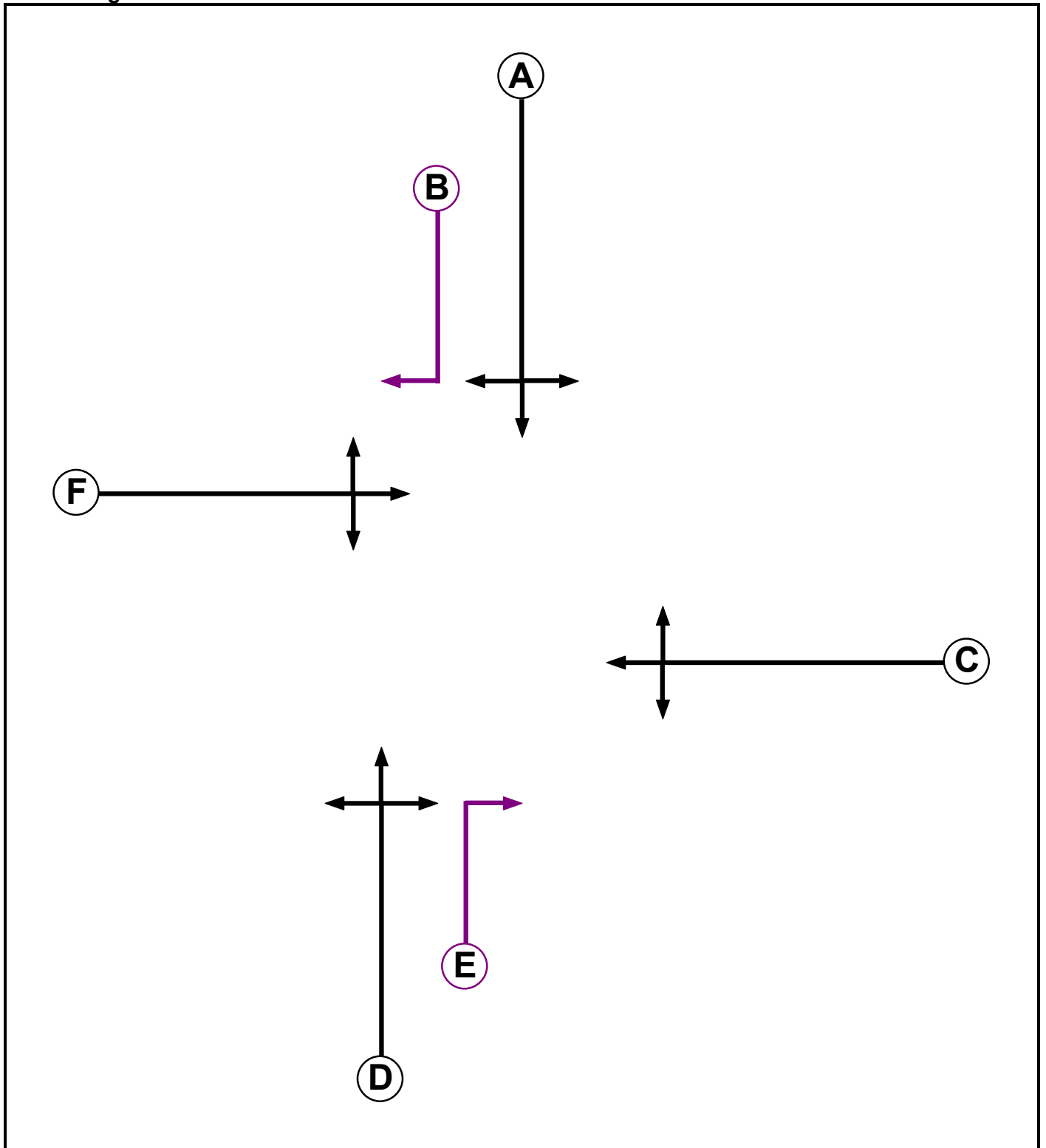
User and Project Details

Project:	
Title:	
Location:	
Additional detail:	
File name:	24_Further_Mitigation - B582 x Manor Rd x Manor Rd Ext.lsg3x
Author:	
Company:	
Address:	

Network Layout Diagram



Phase Diagram



Full Input Data And Results

Phase Input Data

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

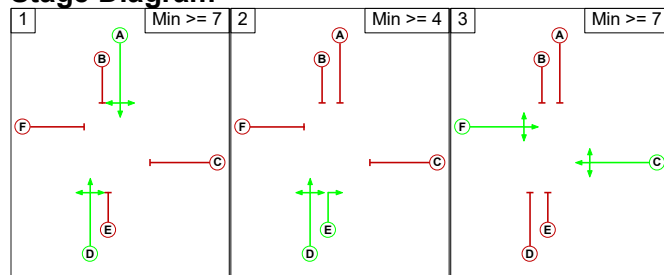
Phase Intergreens Matrix

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

Phases in Stage

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

Stage Diagram



Phase Delays

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

Prohibited Stage Change

From Stage	To Stage			
		1	2	3
	1		7	8
	2	5		8
	3	5	5	

Full Input Data And Results

Give-Way Lane Input Data

Junction: Stoughton Road (B582) / Manor Road / Manor Road Extension											
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 (Stoughton Road)	8/1 (Right)	1439	0	5/1	1.09	All	1.00	-	0.50	1	1.00
3/2 (Manor Road Ext)	2/1 (Right)	1439	0	7/1	1.09	To 2/1 (Left) To 4/1 (Ahead)	2.00	2.00	0.50	2	2.00
5/2 (Stoughton Road)	4/1 (Right)	1439	0	1/1	1.09	All	2.00	-	0.50	2	2.00
7/1 (Manor Road)	6/1 (Right)	1439	0	3/1	1.09	All	2.00	2.00	0.50	2	2.00
				3/2	1.09	To 8/1 (Ahead)					

Full Input Data And Results

Lane Input Data

Junction: Stoughton Road (B582) / Manor Road / Manor Road Extension												
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 (Stoughton Road)	U	A	2	3	60.0	Geom	-	3.50	0.00	Y	Arm 4 Left	8.00
											Arm 6 Ahead	Inf
1/2 (Stoughton Road)	O	A B	2	3	2.0	Geom	-	3.25	0.00	N	Arm 8 Right	8.00
2/1	U		2	3	60.0	Inf	-	-	-	-	-	-
3/1 (Manor Road Ext)	U	C	2	3	2.0	Geom	-	3.25	0.00	Y	Arm 6 Left	7.50
3/2 (Manor Road Ext)	O	C	2	3	60.0	Geom	-	3.25	0.00	N	Arm 2 Right	12.50
											Arm 8 Ahead	Inf
4/1	U		2	3	60.0	Inf	-	-	-	-	-	-
5/1 (Stoughton Road)	U	D	2	3	60.0	Geom	-	3.50	0.00	Y	Arm 2 Ahead	Inf
											Arm 8 Left	6.50
5/2 (Stoughton Road)	O	D E	2	3	3.0	Geom	-	3.25	0.00	N	Arm 4 Right	8.00
6/1	U		2	3	60.0	Inf	-	-	-	-	-	-
7/1 (Manor Road)	O	F	2	3	60.0	Geom	-	3.50	0.00	Y	Arm 2 Left	7.50
											Arm 4 Ahead	Inf
											Arm 6 Right	12.50
8/1	U		2	3	60.0	Inf	-	-	-	-	-	-

Traffic Flow Groups

Flow Group	Start Time	End Time	Duration	Formula
1: '2041 Pref AM'	08:00	09:00	01:00	
2: '2041 Pref PM'	17:00	18:00	01:00	
3: '2041 Core AM'	08:00	09:00	01:00	
4: '2041 Core PM'	17:00	18:00	01:00	

Scenario 1: '2041 Pref AM' (FG1: '2041 Pref AM', Plan 1: 'Network Control Plan 1')**Traffic Flows, Desired****Desired Flow :**

	Destination					
Origin		A	B	C	D	Tot.
	A	0	230	484	230	944
	B	122	0	14	209	345
	C	359	17	0	101	477
	D	16	148	49	0	213
	Tot.	497	395	547	540	1979

Traffic Lane Flows

Lane	Scenario 1: 2041 Pref AM
Junction: Stoughton Road (B582) / Manor Road / Manor Road Extension	
1/1 (with short)	944(In) 714(Out)
1/2 (short)	230
2/1	497
3/1 (short)	14
3/2 (with short)	345(In) 331(Out)
4/1	395
5/1 (with short)	477(In) 460(Out)
5/2 (short)	17
6/1	547
7/1	213
8/1	540

Lane Saturation Flows

Junction: Stoughton Road (B582) / Manor Road / Manor Road Extension								
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 (Stoughton Road)	3.50	0.00	Y	Arm 4 Left	8.00	32.2 %	1853	1853
				Arm 6 Ahead	Inf	67.8 %		
1/2 (Stoughton Road)	3.25	0.00	N	Arm 8 Right	8.00	100.0 %	1752	1752
2/1	Infinite Saturation Flow						Inf	Inf
3/1 (Manor Road Ext)	3.25	0.00	Y	Arm 6 Left	7.50	100.0 %	1617	1617
3/2 (Manor Road Ext)	3.25	0.00	N	Arm 2 Right	12.50	36.9 %	1992	1992
				Arm 8 Ahead	Inf	63.1 %		
4/1	Infinite Saturation Flow						Inf	Inf
5/1 (Stoughton Road)	3.50	0.00	Y	Arm 2 Ahead	Inf	78.0 %	1870	1870
				Arm 8 Left	6.50	22.0 %		
5/2 (Stoughton Road)	3.25	0.00	N	Arm 4 Right	8.00	100.0 %	1752	1752
6/1	Infinite Saturation Flow						Inf	Inf
7/1 (Manor Road)	3.50	0.00	Y	Arm 2 Left	7.50	7.5 %	1885	1885
				Arm 4 Ahead	Inf	69.5 %		
				Arm 6 Right	12.50	23.0 %		
8/1	Infinite Saturation Flow						Inf	Inf

Scenario 2: '2041 Pref PM' (FG2: '2041 Pref PM', Plan 1: 'Network Control Plan 1')**Traffic Flows, Desired****Desired Flow :**

	Destination					
		A	B	C	D	Tot.
Origin	A	0	254	490	36	780
	B	94	0	13	98	205
	C	475	25	0	110	610
	D	47	342	113	0	502
	Tot.	616	621	616	244	2097

Full Input Data And Results

Traffic Lane Flows

Lane	Scenario 2: 2041 Pref PM
Junction: Stoughton Road (B582) / Manor Road / Manor Road Extension	
1/1 (with short)	780(In) 744(Out)
1/2 (short)	36
2/1	616
3/1 (short)	13
3/2 (with short)	205(In) 192(Out)
4/1	621
5/1 (with short)	610(In) 585(Out)
5/2 (short)	25
6/1	616
7/1	502
8/1	244

Lane Saturation Flows

Junction: Stoughton Road (B582) / Manor Road / Manor Road Extension								
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 (Stoughton Road)	3.50	0.00	Y	Arm 4 Left Arm 6 Ahead	8.00 Inf	34.1 % 65.9 %	1847	1847
1/2 (Stoughton Road)	3.25	0.00	N	Arm 8 Right	8.00	100.0 %	1752	1752
2/1	Infinite Saturation Flow						Inf	Inf
3/1 (Manor Road Ext)	3.25	0.00	Y	Arm 6 Left	7.50	100.0 %	1617	1617
3/2 (Manor Road Ext)	3.25	0.00	N	Arm 2 Right Arm 8 Ahead	12.50 Inf	49.0 % 51.0 %	1965	1965
4/1	Infinite Saturation Flow						Inf	Inf
5/1 (Stoughton Road)	3.50	0.00	Y	Arm 2 Ahead Arm 8 Left	Inf 6.50	81.2 % 18.8 %	1883	1883
5/2 (Stoughton Road)	3.25	0.00	N	Arm 4 Right	8.00	100.0 %	1752	1752
6/1	Infinite Saturation Flow						Inf	Inf
7/1 (Manor Road)	3.50	0.00	Y	Arm 2 Left Arm 4 Ahead Arm 6 Right	7.50 Inf 12.50	9.4 % 68.1 % 22.5 %	1879	1879
8/1	Infinite Saturation Flow						Inf	Inf

Scenario 3: '2041 Core AM' (FG3: '2041 Core AM', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired

Desired Flow :

	Destination					
Origin		A	B	C	D	Tot.
	A	0	185	388	185	758
	B	107	0	12	182	301
	C	348	17	0	97	462
	D	7	71	24	0	102
	Tot.	462	273	424	464	1623

Traffic Lane Flows

Lane	Scenario 3: 2041 Core AM
Junction: Stoughton Road (B582) / Manor Road / Manor Road Extension	
1/1 (with short)	758(In) 573(Out)
1/2 (short)	185
2/1	462
3/1 (short)	12
3/2 (with short)	301(In) 289(Out)
4/1	273
5/1 (with short)	462(In) 445(Out)
5/2 (short)	17
6/1	424
7/1	102
8/1	464

Lane Saturation Flows

Junction: Stoughton Road (B582) / Manor Road / Manor Road Extension								
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 (Stoughton Road)	3.50	0.00	Y	Arm 4 Left	8.00	32.3 %	1853	1853
				Arm 6 Ahead	Inf	67.7 %		
1/2 (Stoughton Road)	3.25	0.00	N	Arm 8 Right	8.00	100.0 %	1752	1752
2/1	Infinite Saturation Flow						Inf	Inf
3/1 (Manor Road Ext)	3.25	0.00	Y	Arm 6 Left	7.50	100.0 %	1617	1617
3/2 (Manor Road Ext)	3.25	0.00	N	Arm 2 Right	12.50	37.0 %	1992	1992
				Arm 8 Ahead	Inf	63.0 %		
4/1	Infinite Saturation Flow						Inf	Inf
5/1 (Stoughton Road)	3.50	0.00	Y	Arm 2 Ahead	Inf	78.2 %	1871	1871
				Arm 8 Left	6.50	21.8 %		
5/2 (Stoughton Road)	3.25	0.00	N	Arm 4 Right	8.00	100.0 %	1752	1752
6/1	Infinite Saturation Flow						Inf	Inf
7/1 (Manor Road)	3.50	0.00	Y	Arm 2 Left	7.50	6.9 %	1886	1886
				Arm 4 Ahead	Inf	69.6 %		
				Arm 6 Right	12.50	23.5 %		
8/1	Infinite Saturation Flow						Inf	Inf

Scenario 4: '2041 Core PM' (FG4: '2041 Core PM', Plan 1: 'Network Control Plan 1')**Traffic Flows, Desired****Desired Flow :**

	Destination					
		A	B	C	D	Tot.
Origin	A	0	217	420	30	667
	B	73	0	10	77	160
	C	430	23	0	100	553
	D	32	229	76	0	337
	Tot.	535	469	506	207	1717

Full Input Data And Results

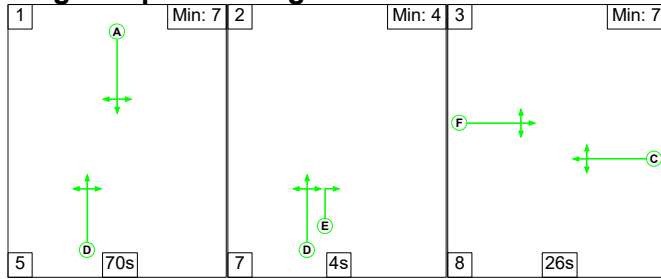
Traffic Lane Flows

Lane	Scenario 4: 2041 Core PM
Junction: Stoughton Road (B582) / Manor Road / Manor Road Extension	
1/1 (with short)	667(In) 637(Out)
1/2 (short)	30
2/1	535
3/1 (short)	10
3/2 (with short)	160(In) 150(Out)
4/1	469
5/1 (with short)	553(In) 530(Out)
5/2 (short)	23
6/1	506
7/1	337
8/1	207

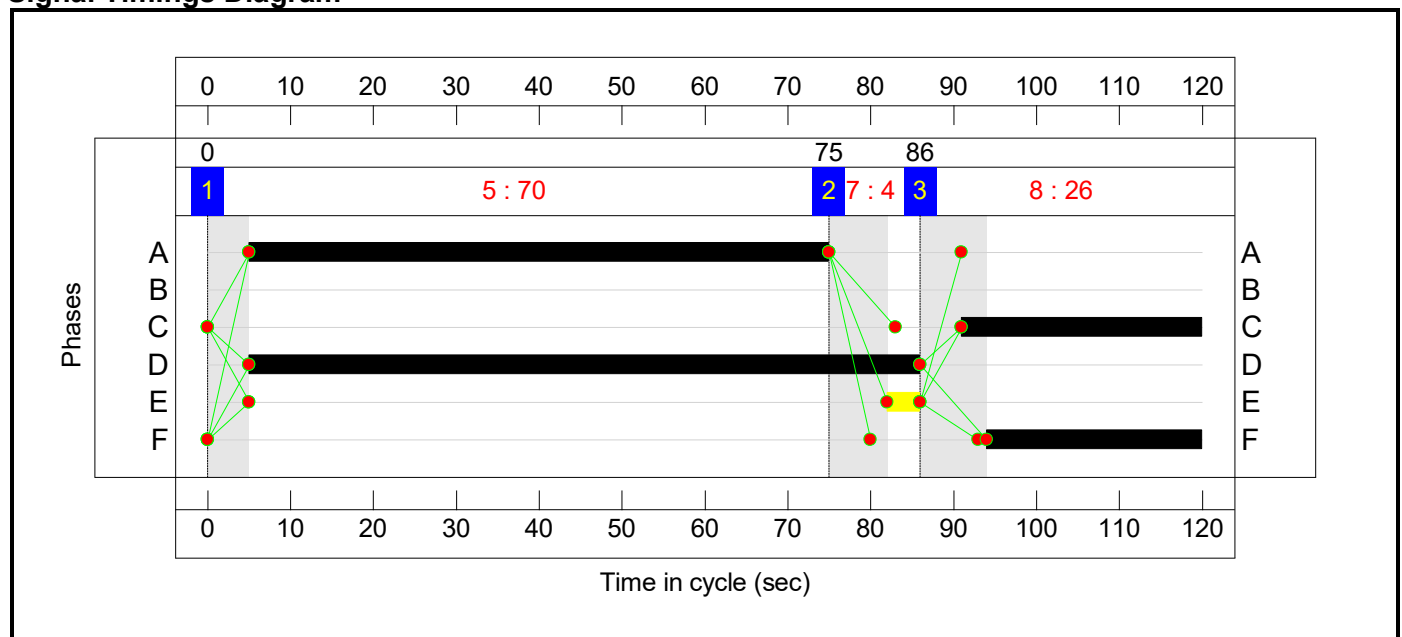
Lane Saturation Flows

Junction: Stoughton Road (B582) / Manor Road / Manor Road Extension								
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 (Stoughton Road)	3.50	0.00	Y	Arm 4 Left Arm 6 Ahead	8.00 Inf	34.1 % 65.9 %	1847	1847
1/2 (Stoughton Road)	3.25	0.00	N	Arm 8 Right	8.00	100.0 %	1752	1752
2/1	Infinite Saturation Flow						Inf	Inf
3/1 (Manor Road Ext)	3.25	0.00	Y	Arm 6 Left	7.50	100.0 %	1617	1617
3/2 (Manor Road Ext)	3.25	0.00	N	Arm 2 Right Arm 8 Ahead	12.50 Inf	48.7 % 51.3 %	1965	1965
4/1	Infinite Saturation Flow						Inf	Inf
5/1 (Stoughton Road)	3.50	0.00	Y	Arm 2 Ahead Arm 8 Left	Inf 6.50	81.1 % 18.9 %	1883	1883
5/2 (Stoughton Road)	3.25	0.00	N	Arm 4 Right	8.00	100.0 %	1752	1752
6/1	Infinite Saturation Flow						Inf	Inf
7/1 (Manor Road)	3.50	0.00	Y	Arm 2 Left Arm 4 Ahead Arm 6 Right	7.50 Inf 12.50	9.5 % 68.0 % 22.6 %	1878	1878
8/1	Infinite Saturation Flow						Inf	Inf

Stage Sequence Diagram



Stage	1	2	3
Duration	70	4	26
Change Point	0	75	86

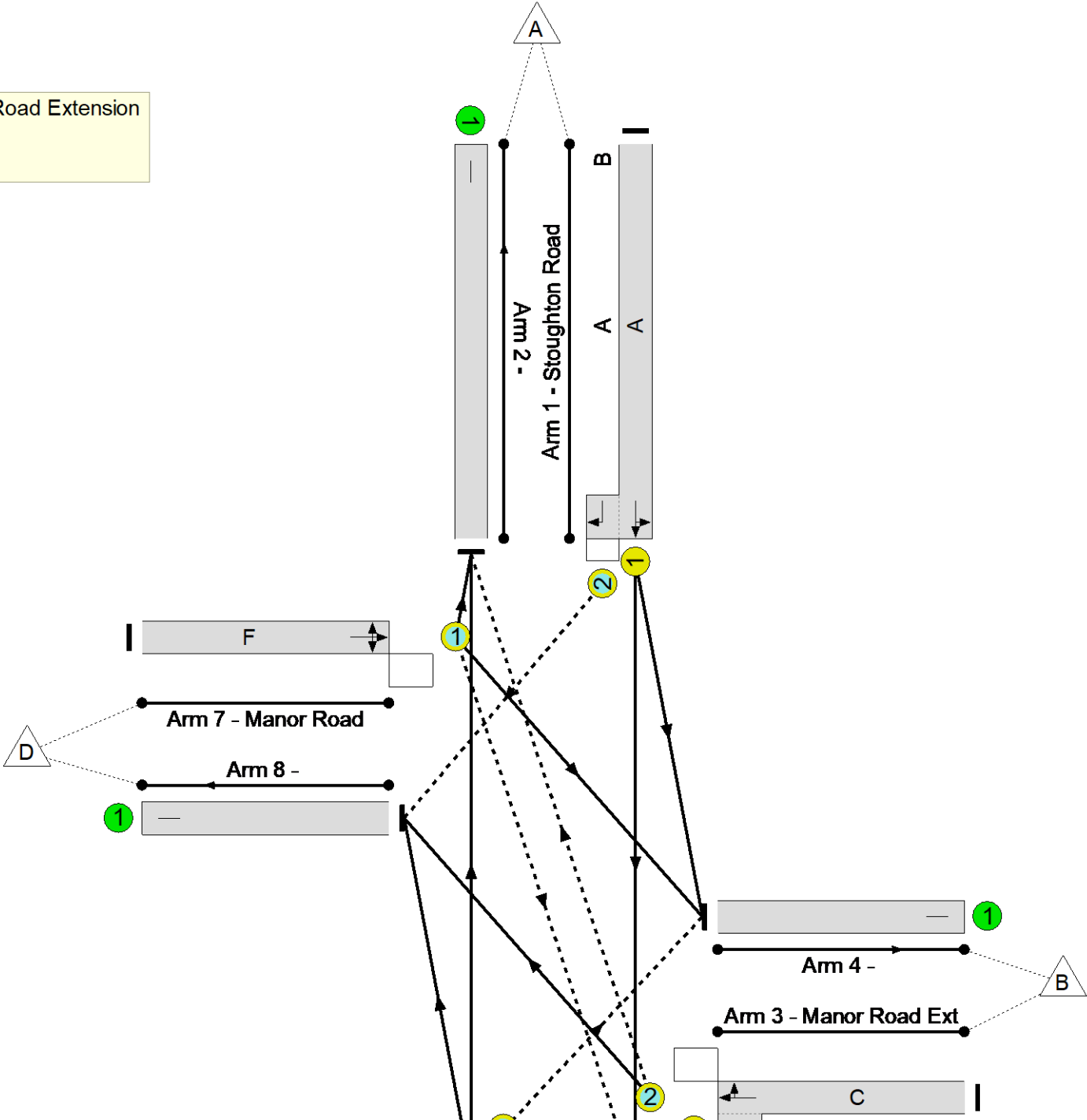




Stoughton Road (B582) / Manor Road / Manor Road Extension

PRC: 4.8 %

Total Traffic Delay: 19.6 pcuHr



Full Input Data And Results

Network Results

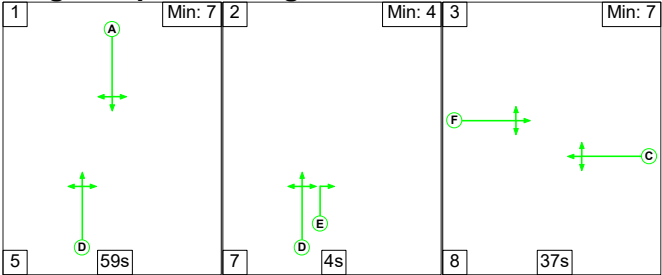
Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network	-	-	N/A	-	-		-	-	-	-	-	-	85.9%
Stoughton Road (B582) / Manor Road / Manor Road Extension	-	-	N/A	-	-		-	-	-	-	-	-	85.9%
1/1+1/2	Stoughton Road Left Ahead Right	U+O	N/A	N/A	A	B	1	70	0	944	1853:1752	832+268	85.9 : 85.9%
2/1		U	N/A	N/A	-		-	-	-	497	Inf	Inf	0.0%
3/2+3/1	Manor Road Ext Right Left Ahead	O+U	N/A	N/A	C		1	29	-	345	1992:1617	394+17	84.1 : 84.1%
4/1		U	N/A	N/A	-		-	-	-	395	Inf	Inf	0.0%
5/1+5/2	Stoughton Road Ahead Right Left	U+O	N/A	N/A	D	E	1	81	4	477	1870:1752	1229+45	37.4 : 37.4%
6/1		U	N/A	N/A	-		-	-	-	547	Inf	Inf	0.0%
7/1	Manor Road Left Ahead Right	O	N/A	N/A	F		1	26	-	213	1885	424	50.2%
8/1		U	N/A	N/A	-		-	-	-	540	Inf	Inf	0.0%

Full Input Data And Results

Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network	-	-	410	7	0	12.8	6.2	0.5	19.6	-	-	-	-
Stoughton Road (B582) / Manor Road / Manor Road Extension	-	-	410	7	0	12.8	6.2	0.5	19.6	-	-	-	-
1/1+1/2	944	944	230	0	0	5.2	2.9	0.2	8.3	31.7	25.1	2.9	28.0
2/1	497	497	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
3/2+3/1	345	345	116	6	0	4.1	2.5	0.2	6.8	71.0	10.7	2.5	13.2
4/1	395	395	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/1+5/2	477	477	15	1	0	1.1	0.3	0.1	1.5	11.2	6.6	0.3	6.9
6/1	547	547	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
7/1	213	213	49	0	0	2.4	0.5	0.0	2.9	49.7	6.2	0.5	6.7
8/1	540	540	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
C1 PRC for Signalled Lanes (%): 4.8 Total Delay for Signalled Lanes (pcuHr): 19.56 Cycle Time (s): 120 PRC Over All Lanes (%): 4.8 Total Delay Over All Lanes(pcuHr): 19.56													

Full Input Data And Results
Scenario 2: '2041 Pref PM' (FG2: '2041 Pref PM', Plan 1: 'Network Control Plan 1')

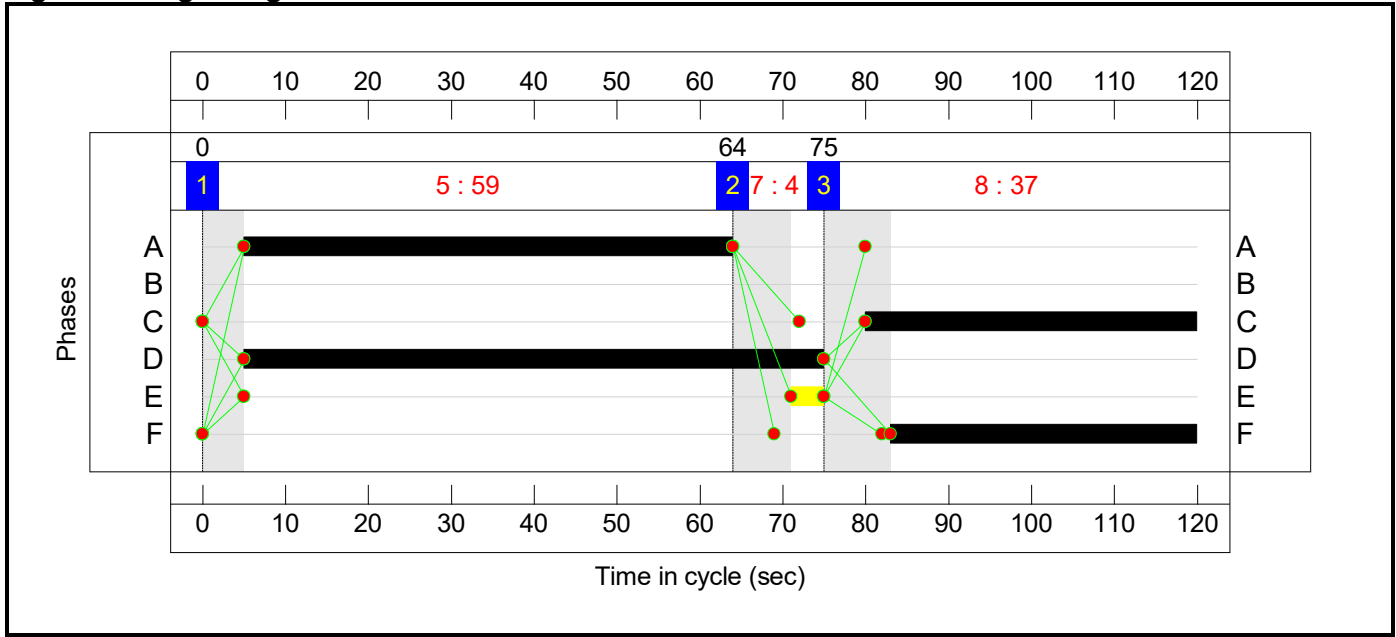
Stage Sequence Diagram



Stage Timings

Stage	1	2	3
Duration	59	4	37
Change Point	0	64	75

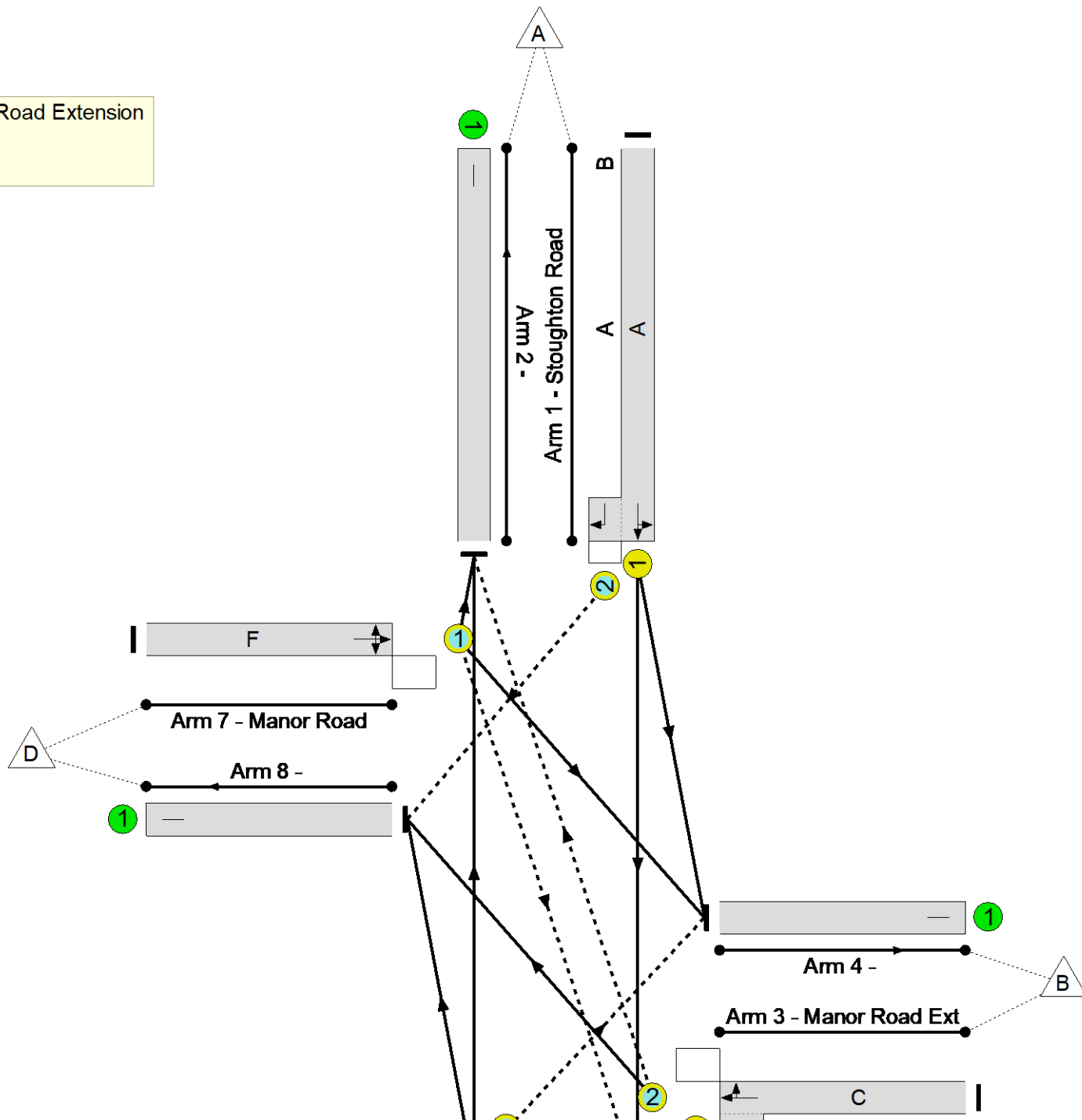
Signal Timings Diagram



Stoughton Road (B582) / Manor Road / Manor Road Extension



PRC: 5.9 %
Total Traffic Delay: 24.4 pcuHr



Full Input Data And Results

Network Results

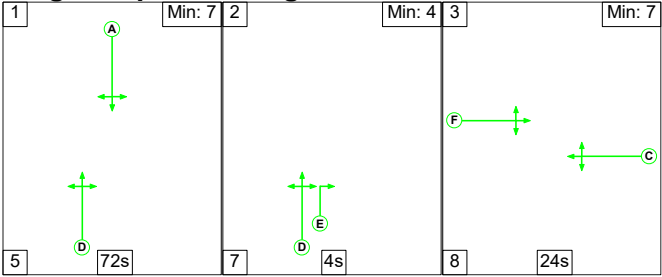
Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network	-	-	N/A	-	-		-	-	-	-	-	-	85.0%
Stoughton Road (B582) / Manor Road / Manor Road Extension	-	-	N/A	-	-		-	-	-	-	-	-	85.0%
1/1+1/2	Stoughton Road Left Ahead Right	U+O	N/A	N/A	A	B	1	59	0	780	1847:1752	880+43	84.5 : 84.5%
2/1		U	N/A	N/A	-		-	-	-	616	Inf	Inf	0.0%
3/2+3/1	Manor Road Ext Right Left Ahead	O+U	N/A	N/A	C		1	40	-	205	1965:1617	226+15	85.0 : 85.0%
4/1		U	N/A	N/A	-		-	-	-	621	Inf	Inf	0.0%
5/1+5/2	Stoughton Road Ahead Right Left	U+O	N/A	N/A	D	E	1	70	4	610	1883:1752	1065+46	54.9 : 54.9%
6/1		U	N/A	N/A	-		-	-	-	616	Inf	Inf	0.0%
7/1	Manor Road Left Ahead Right	O	N/A	N/A	F		1	37	-	502	1879	595	84.4%
8/1		U	N/A	N/A	-		-	-	-	244	Inf	Inf	0.0%

Full Input Data And Results

Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network	-	-	239	10	19	15.3	8.3	0.8	24.4	-	-	-	-
Stoughton Road (B582) / Manor Road / Manor Road Extension	-	-	239	10	19	15.3	8.3	0.8	24.4	-	-	-	-
1/1+1/2	780	780	36	0	0	5.6	2.6	0.1	8.3	38.4	22.2	2.6	24.9
2/1	616	616	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
3/2+3/1	205	205	68	8	18	1.8	2.5	0.6	4.9	85.8	4.9	2.5	7.4
4/1	621	621	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/1+5/2	610	610	23	2	0	2.5	0.6	0.2	3.3	19.3	12.1	0.6	12.7
6/1	616	616	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
7/1	502	502	113	0	0	5.3	2.6	0.0	7.9	56.6	15.5	2.6	18.0
8/1	244	244	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
C1 PRC for Signalled Lanes (%): 5.9 Total Delay for Signalled Lanes (pcuHr): 24.37 Cycle Time (s): 120 PRC Over All Lanes (%): 5.9 Total Delay Over All Lanes(pcuHr): 24.37													

Full Input Data And Results
Scenario 3: '2041 Core AM' (FG3: '2041 Core AM', Plan 1: 'Network Control Plan 1')

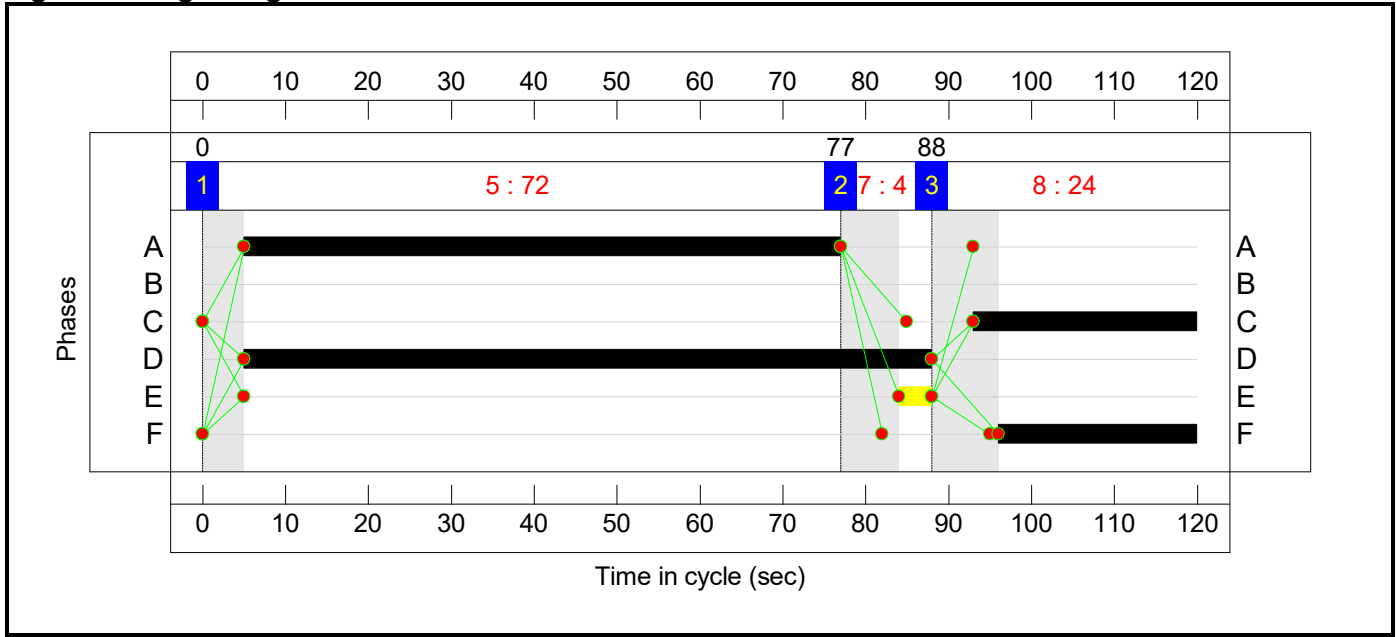
Stage Sequence Diagram



Stage Timings

Stage	1	2	3
Duration	72	4	24
Change Point	0	77	88

Signal Timings Diagram



Full Input Data And Results

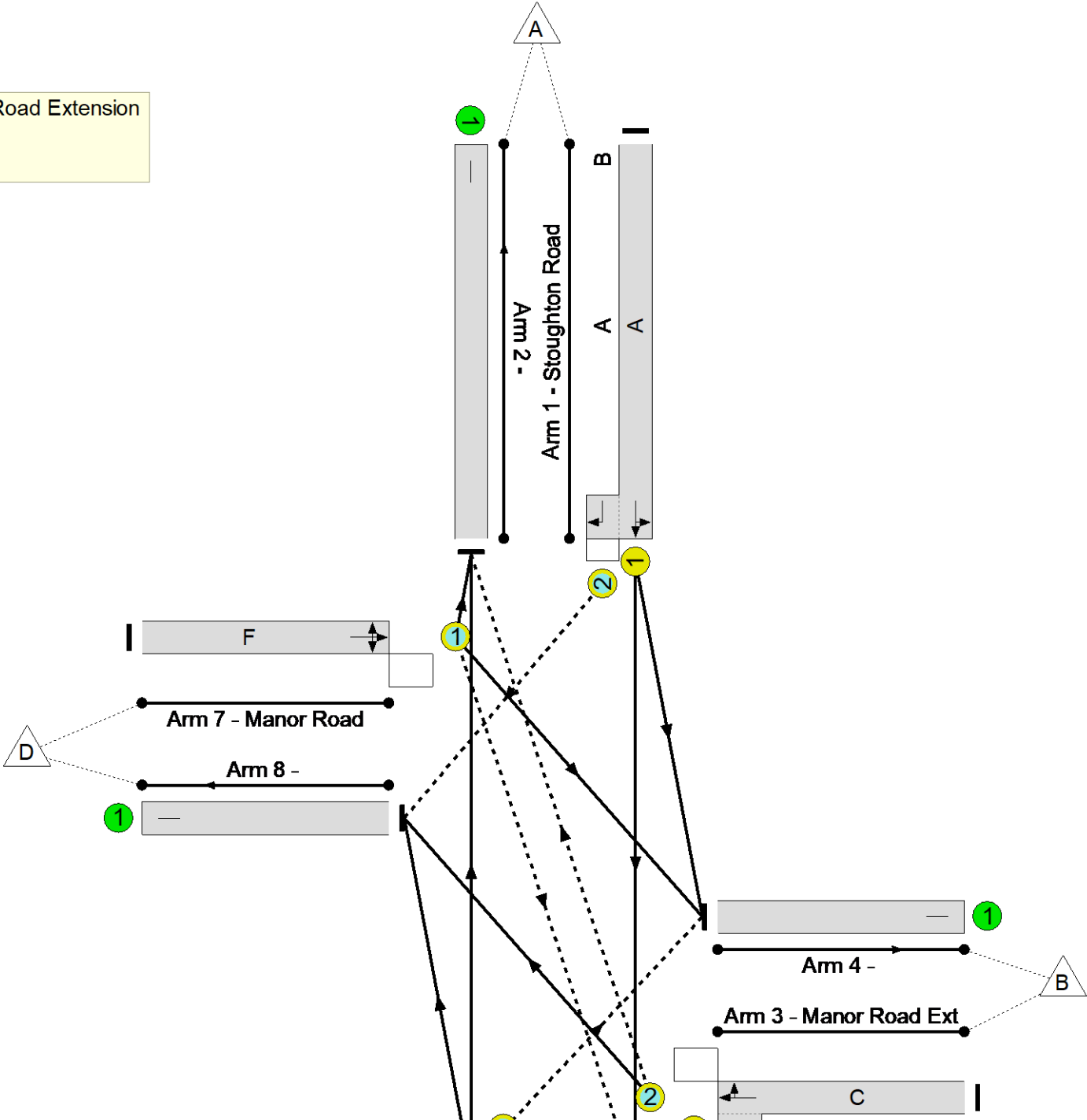
Network Layout Diagram



Stoughton Road (B582) / Manor Road / Manor Road Extension

PRC: 34.2 %

Total Traffic Delay: 11.5 pcuHr



Full Input Data And Results

Network Results

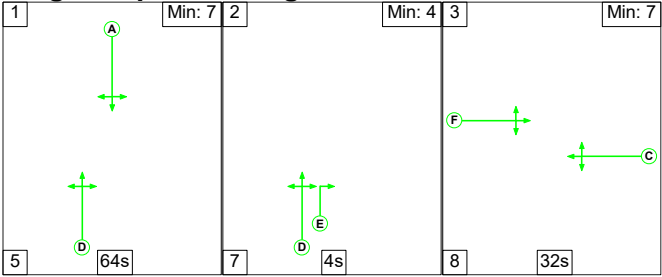
Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network	-	-	N/A	-	-		-	-	-	-	-	-	67.1%
Stoughton Road (B582) / Manor Road / Manor Road Extension	-	-	N/A	-	-		-	-	-	-	-	-	67.1%
1/1+1/2	Stoughton Road Left Ahead Right	U+O	N/A	N/A	A	B	1	72	0	758	1853:1752	854+276	67.1 : 67.1%
2/1		U	N/A	N/A	-		-	-	-	462	Inf	Inf	0.0%
3/2+3/1	Manor Road Ext Right Left Ahead	O+U	N/A	N/A	C		1	27	-	301	1992:1617	439+18	65.8 : 65.8%
4/1		U	N/A	N/A	-		-	-	-	273	Inf	Inf	0.0%
5/1+5/2	Stoughton Road Ahead Right Left	U+O	N/A	N/A	D	E	1	83	4	462	1871:1752	1258+48	35.4 : 35.4%
6/1		U	N/A	N/A	-		-	-	-	424	Inf	Inf	0.0%
7/1	Manor Road Left Ahead Right	O	N/A	N/A	F		1	24	-	102	1886	393	26.0%
8/1		U	N/A	N/A	-		-	-	-	464	Inf	Inf	0.0%

Full Input Data And Results

[illegible]

Full Input Data And Results
Scenario 4: '2041 Core PM' (FG4: '2041 Core PM', Plan 1: 'Network Control Plan 1')

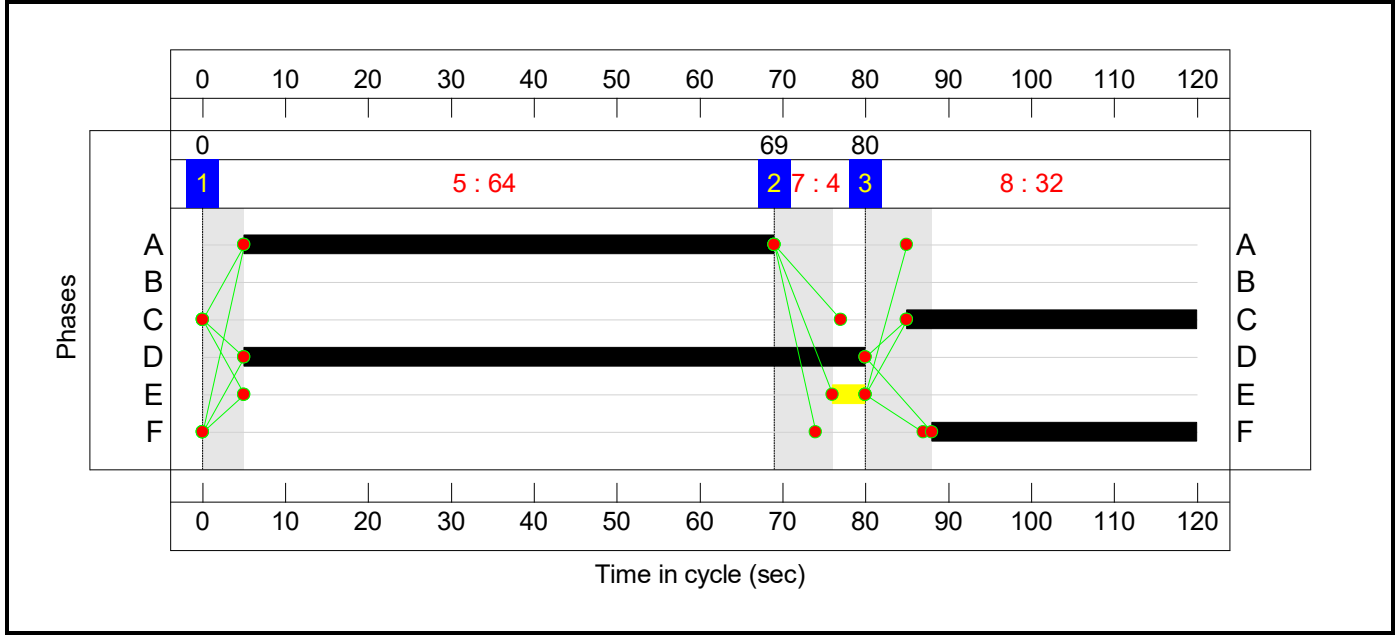
Stage Sequence Diagram



Stage Timings

Stage	1	2	3
Duration	64	4	32
Change Point	0	69	80

Signal Timings Diagram

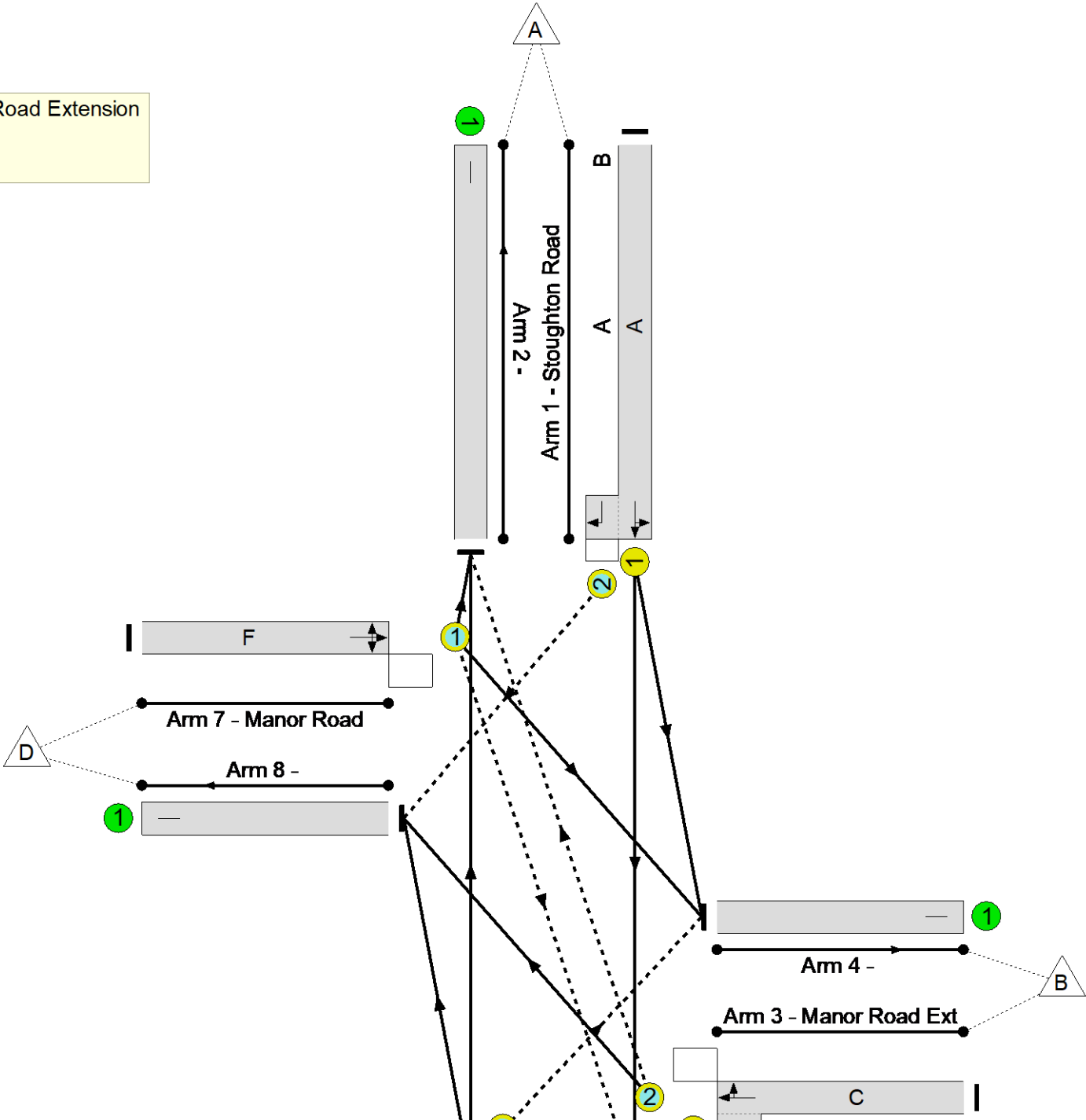




Stoughton Road (B582) / Manor Road / Manor Road Extension

PRC: 34.9 %

Total Traffic Delay: 13.6 pcuHr



Full Input Data And Results

Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network	-	-	N/A	-	-		-	-	-	-	-	-	66.7%
Stoughton Road (B582) / Manor Road / Manor Road Extension	-	-	N/A	-	-		-	-	-	-	-	-	66.7%
1/1+1/2	Stoughton Road Left Ahead Right	U+O	N/A	N/A	A	B	1	64	0	667	1847:1752	954+45	66.7 : 66.7%
2/1		U	N/A	N/A	-		-	-	-	535	Inf	Inf	0.0%
3/2+3/1	Manor Road Ext Right Left Ahead	O+U	N/A	N/A	C		1	35	-	160	1965:1617	321+21	46.8 : 46.8%
4/1		U	N/A	N/A	-		-	-	-	469	Inf	Inf	0.0%
5/1+5/2	Stoughton Road Ahead Right Left	U+O	N/A	N/A	D	E	1	75	4	553	1883:1752	1139+49	46.5 : 46.5%
6/1		U	N/A	N/A	-		-	-	-	506	Inf	Inf	0.0%
7/1	Manor Road Left Ahead Right	O	N/A	N/A	F		1	32	-	337	1878	516	65.3%
8/1		U	N/A	N/A	-		-	-	-	207	Inf	Inf	0.0%

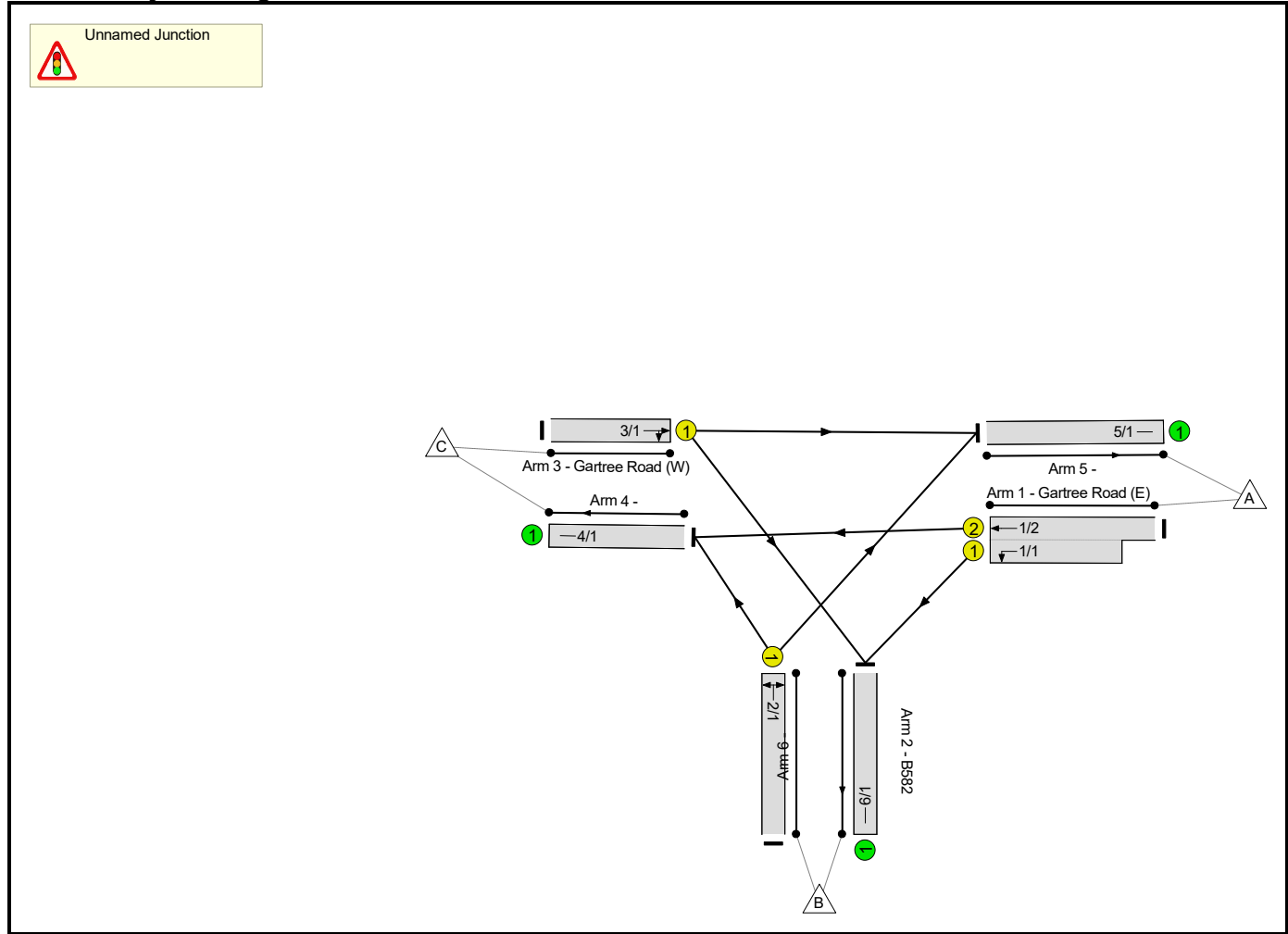
Full Input Data And Results

Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network	-	-	192	10	0	10.4	2.8	0.4	13.6	-	-	-	-
Stoughton Road (B582) / Manor Road / Manor Road Extension	-	-	192	10	0	10.4	2.8	0.4	13.6	-	-	-	-
1/1+1/2	667	667	30	0	0	3.6	1.0	0.0	4.7	25.3	15.8	1.0	16.8
2/1	535	535	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
3/2+3/1	160	160	65	8	0	1.4	0.4	0.3	2.2	48.6	3.9	0.4	4.3
4/1	469	469	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/1+5/2	553	553	21	2	0	1.8	0.4	0.1	2.3	14.8	9.4	0.4	9.8
6/1	506	506	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
7/1	337	337	76	0	0	3.6	0.9	0.0	4.5	48.4	9.9	0.9	10.9
8/1	207	207	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
C1 PRC for Signalled Lanes (%): 34.9 Total Delay for Signalled Lanes (pcuHr): 13.65 Cycle Time (s): 120 PRC Over All Lanes (%): 34.9 Total Delay Over All Lanes(pcuHr): 13.65													

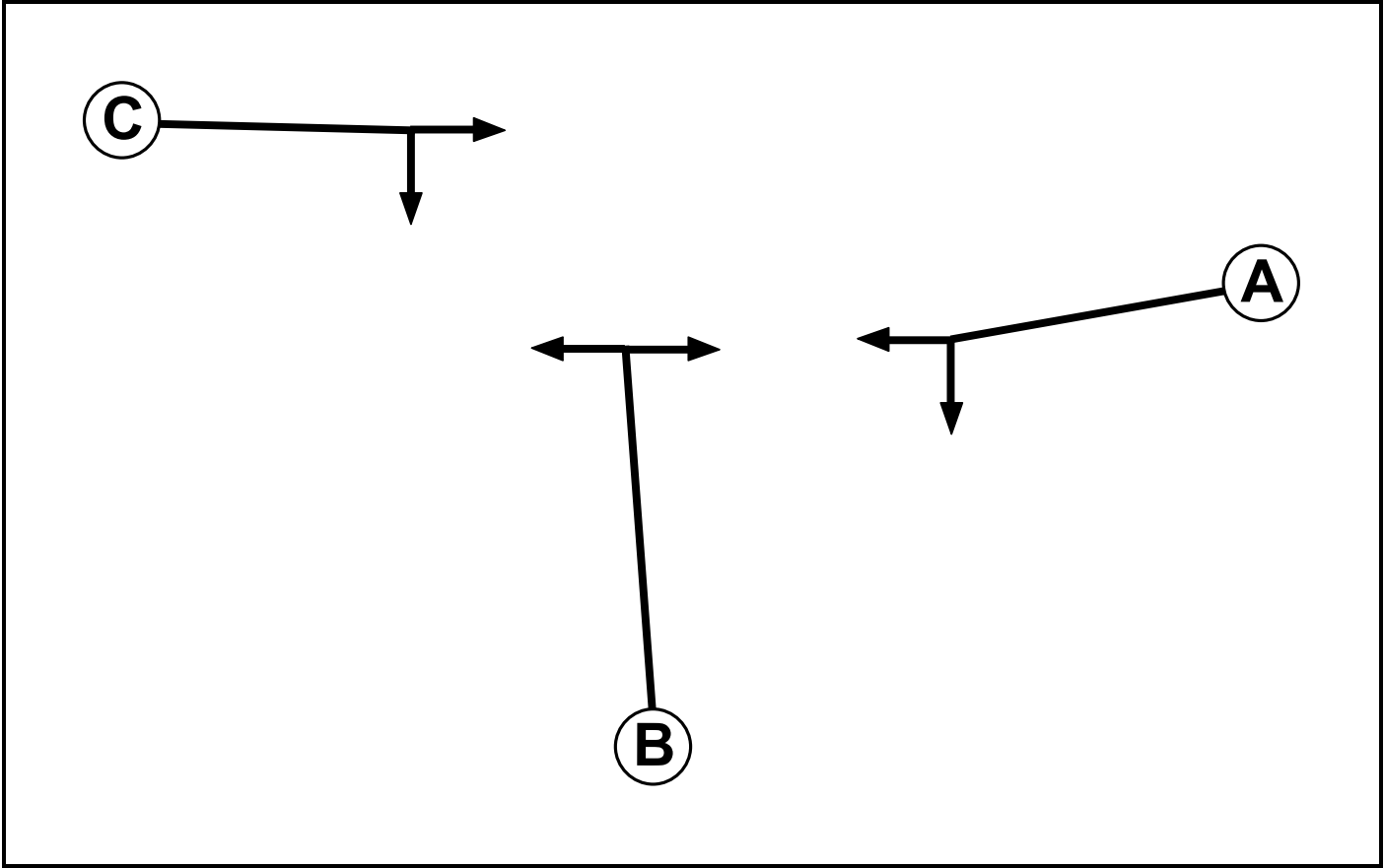
User and Project Details

Project:	
Title:	
Location:	
Additional detail:	
File name:	B582 Gartree Road_A582 signalised.lsg3x
Author:	
Company:	
Address:	

Network Layout Diagram



Phase Diagram



Phase Input Data

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

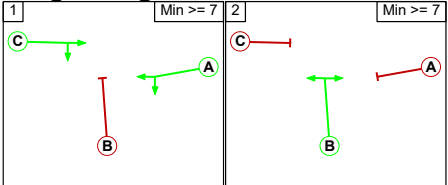
Phase Intergreens Matrix

Terminating Phase	Starting Phase			
	A	B	C	
	A	8	-	
	B	8	8	
	C	-	8	

Phases in Stage

Stage No.	Phases in Stage
1	A C
2	B

Stage Diagram



Phase Delays

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

Prohibited Stage Change

	To Stage		
From Stage		1	2
	1		8
	2	8	

Full Input Data And Results

Give-Way Lane Input Data

Junction: Unnamed Junction
There are no Opposed Lanes in this Junction

Lane Input Data

Junction: Unnamed Junction												
Lane	Lane Type	Phases	Start Disp.	End Disp.	Physical Length (PCU)	Sat Flow Type	Def User Saturation Flow (PCU/Hr)	Lane Width (m)	Gradient	Nearside Lane	Turns	Turning Radius (m)
1/1 (Gartree Road (E))	U	A	2	3	8.7	Geom	-	3.50	0.00	Y	Arm 6 Left	12.00
1/2 (Gartree Road (E))	U	A	2	3	60.0	Geom	-	3.85	0.00	Y	Arm 4 Ahead	Inf
2/1 (B582)	U	B	2	3	60.0	Geom	-	4.10	0.00	Y	Arm 4 Left	Inf
											Arm 5 Right	Inf
3/1 (Gartree Road (W))	U	C	2	3	60.0	Geom	-	3.65	0.00	Y	Arm 5 Ahead	Inf
											Arm 6 Right	Inf
4/1	U		2	3	60.0	Inf	-	-	-	-	-	-
5/1	U		2	3	60.0	Inf	-	-	-	-	-	-
6/1	U		2	3	60.0	Inf	-	-	-	-	-	-

Traffic Flow Groups

Flow Group	Start Time	End Time	Duration	Formula
1: '2041 Core AM'	08:00	09:00	01:00	
2: '2041 Core PM'	17:00	18:00	01:00	
3: '2041 Pref AM'	08:00	09:00	01:00	
4: '2041 Pref PM'	17:00	18:00	01:00	

Scenario 1: '2041 Core AM' (FG1: '2041 Core AM', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired

Desired Flow :

	Destination				
Origin	A	B	C	Tot.	
	A	0	469	352	821
	B	196	0	457	653
	C	190	400	0	590
	Tot.	386	869	809	2064

Traffic Lane Flows

Lane	Scenario 1: 2041 Core AM
Junction: Unnamed Junction	
1/1 (short)	469
1/2 (with short)	821(In) 352(Out)
2/1	653
3/1	590
4/1	809
5/1	386
6/1	869

Lane Saturation Flows

Junction: Unnamed Junction								
Lane	Lane Width (m)	Gradient	Nearside Lane	Allowed Turns	Turning Radius (m)	Turning Prop.	Sat Flow (PCU/Hr)	Flared Sat Flow (PCU/Hr)
1/1 (Gartree Road (E))	3.50	0.00	Y	Arm 6 Left	12.00	100.0 %	1747	1747
1/2 (Gartree Road (E))	3.85	0.00	Y	Arm 4 Ahead	Inf	100.0 %	2000	2000
2/1 (B582)	4.10	0.00	Y	Arm 4 Left	Inf	70.0 %	2025	2025
				Arm 5 Right	Inf	30.0 %		
3/1 (Gartree Road (W))	3.65	0.00	Y	Arm 5 Ahead	Inf	32.2 %	1980	1980
				Arm 6 Right	Inf	67.8 %		
4/1	Infinite Saturation Flow						Inf	Inf
5/1	Infinite Saturation Flow						Inf	Inf
6/1	Infinite Saturation Flow						Inf	Inf

Scenario 2: '2041 Core PM' (FG2: '2041 Core PM', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired

Desired Flow :

	Destination				
		A	B	C	Tot.
Origin	A	0	432	302	734
	B	279	0	450	729
	C	274	410	0	684
	Tot.	553	842	752	2147

Traffic Lane Flows

Lane	Scenario 2: 2041 Core PM
Junction: Unnamed Junction	
1/1 (short)	432
1/2 (with short)	734(In) 302(Out)
2/1	729
3/1	684
4/1	752
5/1	553
6/1	842

Lane Saturation Flows

Junction: Unnamed Junction								
Lane	Lane Width (m)	Gradient	Nearside Lane	Allowed Turns	Turning Radius (m)	Turning Prop.	Sat Flow (PCU/Hr)	Flared Sat Flow (PCU/Hr)
1/1 (Gartree Road (E))	3.50	0.00	Y	Arm 6 Left	12.00	100.0 %	1747	1747
1/2 (Gartree Road (E))	3.85	0.00	Y	Arm 4 Ahead	Inf	100.0 %	2000	2000
2/1 (B582)	4.10	0.00	Y	Arm 4 Left	Inf	61.7 %	2025	2025
				Arm 5 Right	Inf	38.3 %		
3/1 (Gartree Road (W))	3.65	0.00	Y	Arm 5 Ahead	Inf	40.1 %	1980	1980
				Arm 6 Right	Inf	59.9 %		
4/1	Infinite Saturation Flow						Inf	Inf
5/1	Infinite Saturation Flow						Inf	Inf
6/1	Infinite Saturation Flow						Inf	Inf

Scenario 3: '2041 Pref AM' (FG3: '2041 Pref AM', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired

Desired Flow :

	Destination				
		A	B	C	Tot.
Origin	A	0	510	382	892
	B	224	0	523	747
	C	200	420	0	620
	Tot.	424	930	905	2259

Traffic Lane Flows

Lane	Scenario 3: 2041 Pref AM
Junction: Unnamed Junction	
1/1 (short)	510
1/2 (with short)	892(In) 382(Out)
2/1	747
3/1	620
4/1	905
5/1	424
6/1	930

Lane Saturation Flows

Junction: Unnamed Junction								
Lane	Lane Width (m)	Gradient	Nearside Lane	Allowed Turns	Turning Radius (m)	Turning Prop.	Sat Flow (PCU/Hr)	Flared Sat Flow (PCU/Hr)
1/1 (Gartree Road (E))	3.50	0.00	Y	Arm 6 Left	12.00	100.0 %	1747	1747
1/2 (Gartree Road (E))	3.85	0.00	Y	Arm 4 Ahead	Inf	100.0 %	2000	2000
2/1 (B582)	4.10	0.00	Y	Arm 4 Left	Inf	70.0 %	2025	2025
				Arm 5 Right	Inf	30.0 %		
3/1 (Gartree Road (W))	3.65	0.00	Y	Arm 5 Ahead	Inf	32.3 %	1980	1980
				Arm 6 Right	Inf	67.7 %		
4/1	Infinite Saturation Flow						Inf	Inf
5/1	Infinite Saturation Flow						Inf	Inf
6/1	Infinite Saturation Flow						Inf	Inf

Scenario 4: '2041 Pref PM' (FG4: '2041 Pref PM', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired

Desired Flow :

		Destination			
Origin		A	B	C	Tot.
	A	0	524	366	890
	B	306	0	493	799
	C	258	386	0	644
	Tot.	564	910	859	2333

Traffic Lane Flows

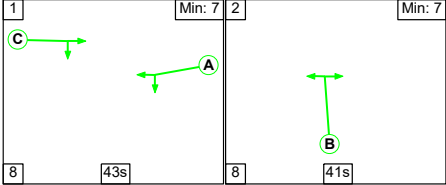
Lane	Scenario 4: 2041 Pref PM
Junction: Unnamed Junction	
1/1 (short)	524
1/2 (with short)	890(In) 366(Out)
2/1	799
3/1	644
4/1	859
5/1	564
6/1	910

Lane Saturation Flows

Junction: Unnamed Junction								
Lane	Lane Width (m)	Gradient	Nearside Lane	Allowed Turns	Turning Radius (m)	Turning Prop.	Sat Flow (PCU/Hr)	Flared Sat Flow (PCU/Hr)
1/1 (Gartree Road (E))	3.50	0.00	Y	Arm 6 Left	12.00	100.0 %	1747	1747
1/2 (Gartree Road (E))	3.85	0.00	Y	Arm 4 Ahead	Inf	100.0 %	2000	2000
2/1 (B582)	4.10	0.00	Y	Arm 4 Left	Inf	61.7 %	2025	2025
				Arm 5 Right	Inf	38.3 %		
3/1 (Gartree Road (W))	3.65	0.00	Y	Arm 5 Ahead	Inf	40.1 %	1980	1980
				Arm 6 Right	Inf	59.9 %		
4/1	Infinite Saturation Flow						Inf	Inf
5/1	Infinite Saturation Flow						Inf	Inf
6/1	Infinite Saturation Flow						Inf	Inf

Scenario 1: '2041 Core AM' (FG1: '2041 Core AM', Plan 1: 'Network Control Plan 1')

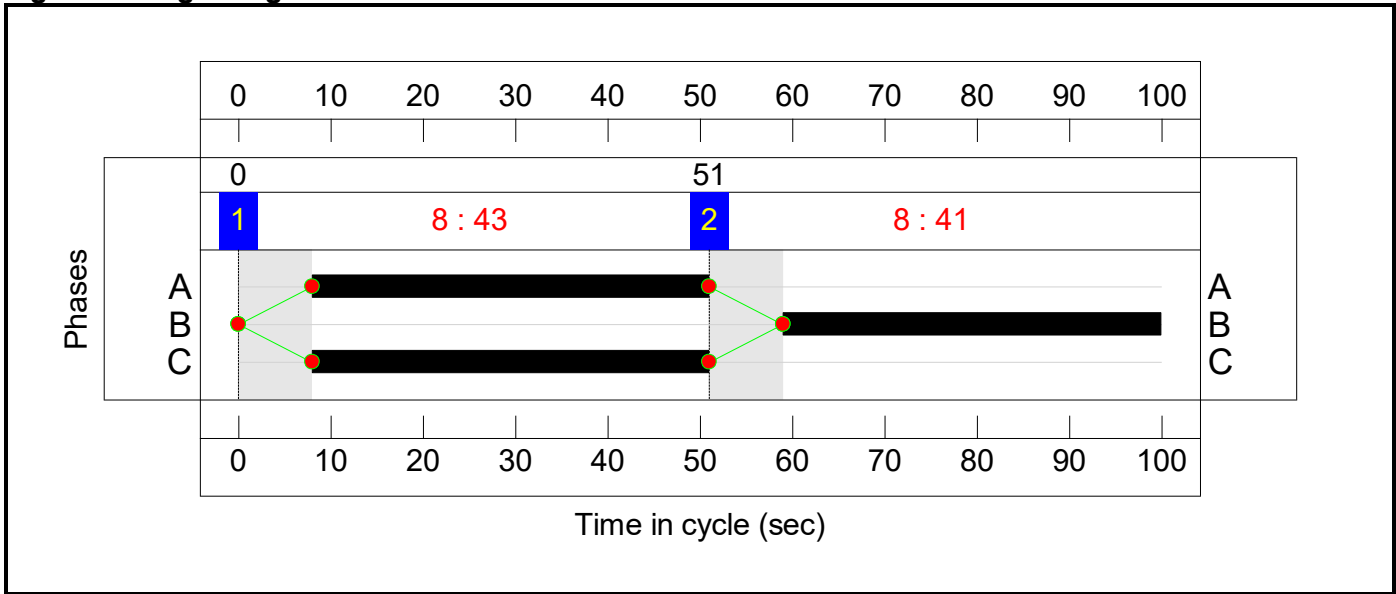
Stage Sequence Diagram



Stage Timings

Stage	1	2
Duration	43	41
Change Point	0	51

Signal Timings Diagram



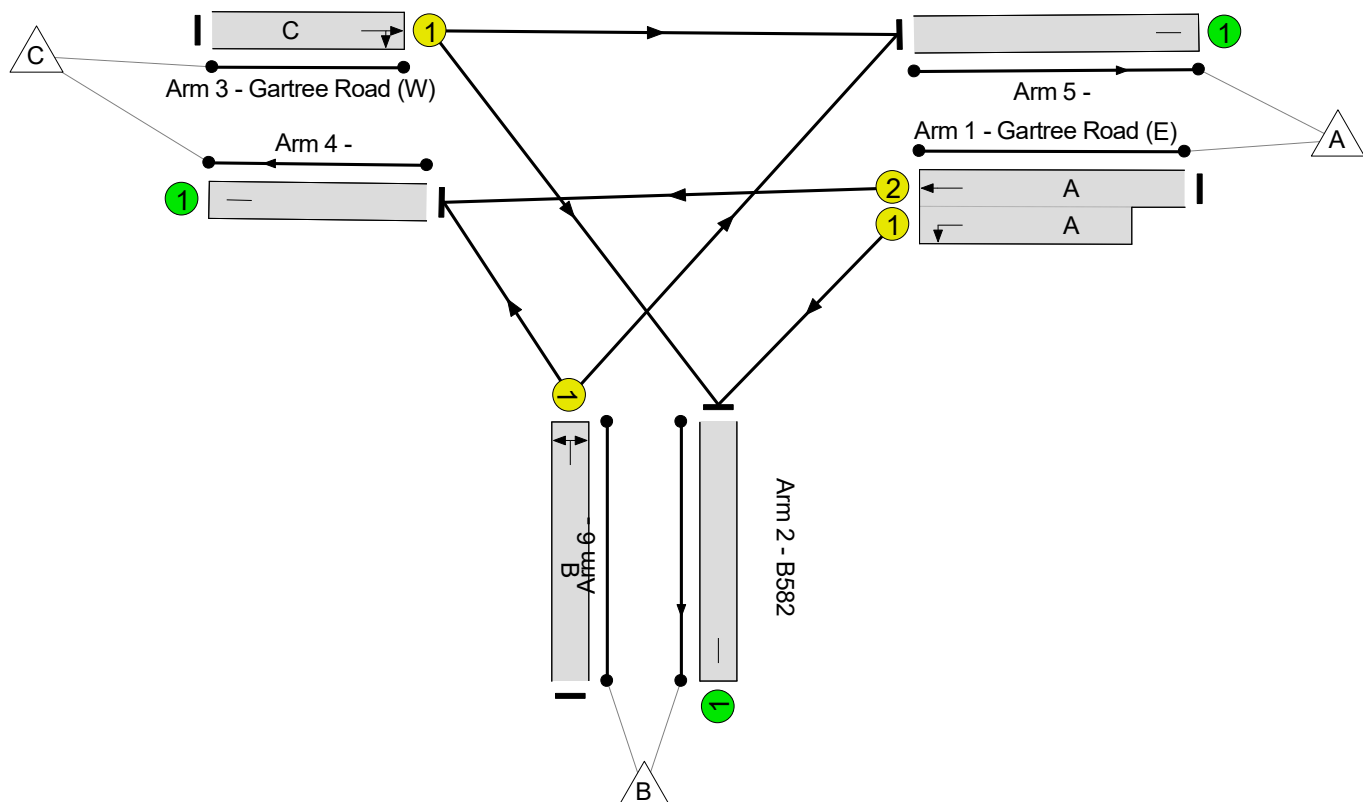
Full Input Data And Results



Unnamed Junction

PRC: 15.6 %

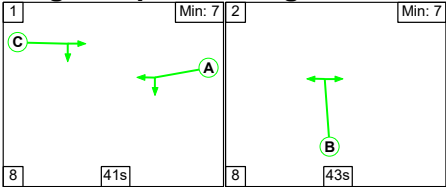
Total Traffic Delay: 17.2 pcuHr



Network Results

Network Results

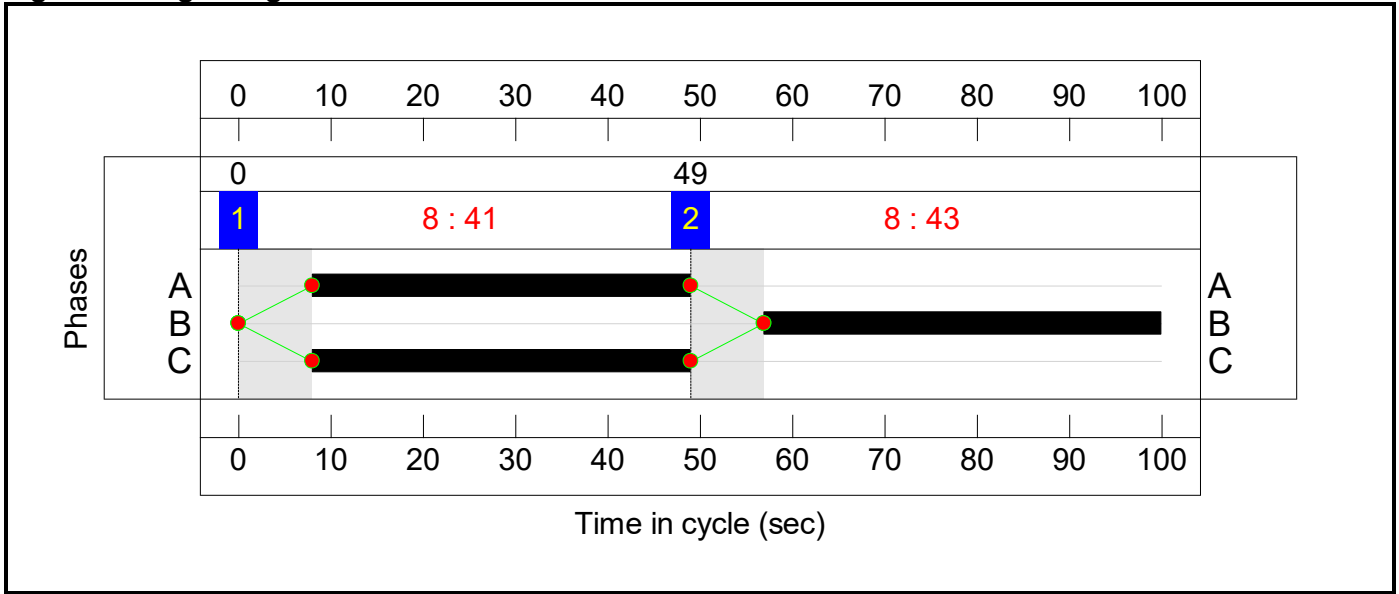
Stage Sequence Diagram



Stage Timings

Stage	1	2
Duration	41	43
Change Point	0	49

Signal Timings Diagram



Full Input Data And Results

Network Layout Diagram

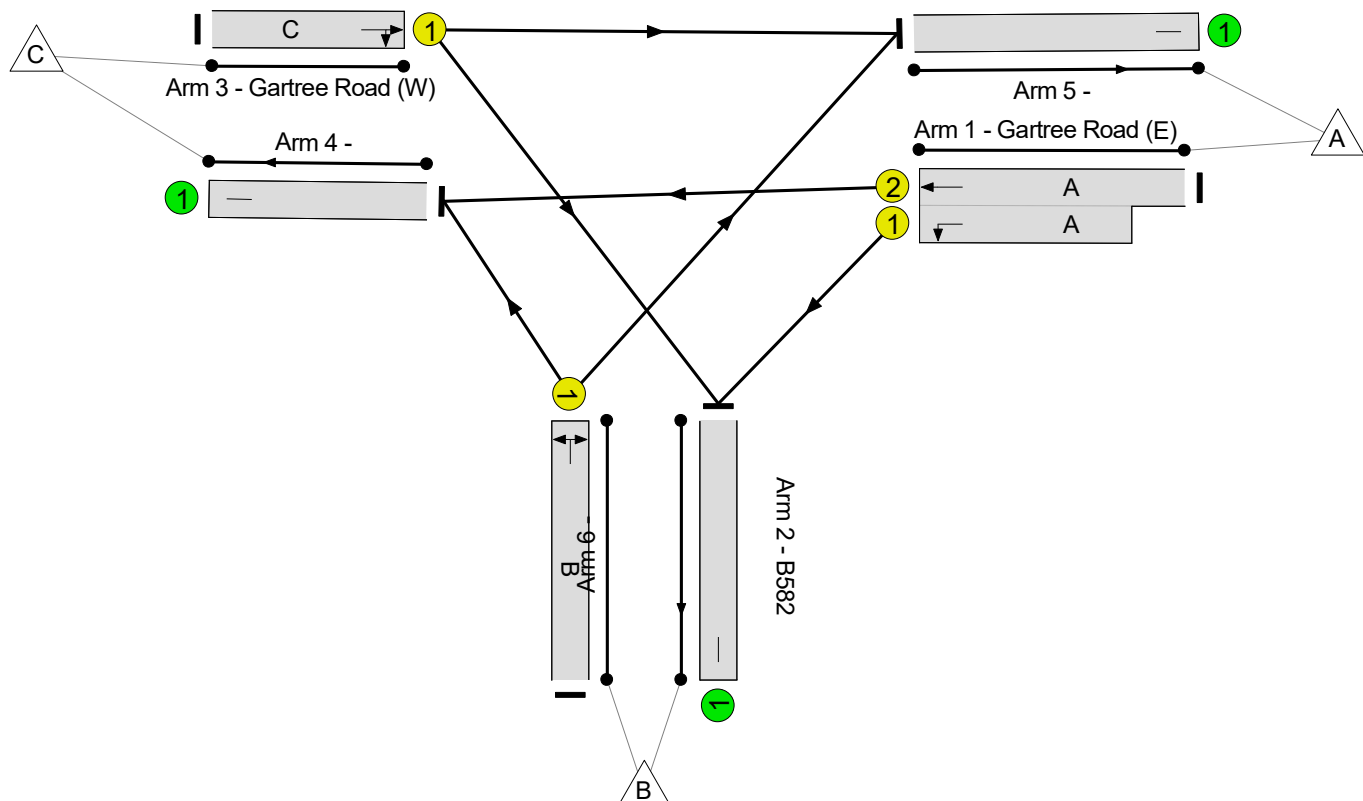
Full Input Data And Results



Unnamed Junction

PRC: 9.4 %

Total Traffic Delay: 20.0 pcuHr



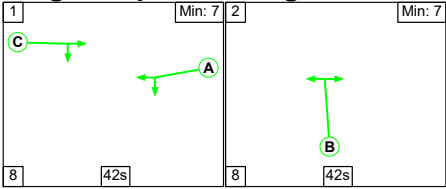
Full Input Data And Results

Network Results

Network Results													
Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network	-	-	N/A	-	-		-	-	-	-	-	-	82.3%
Unnamed Junction	-	-	N/A	-	-		-	-	-	-	-	-	82.3%
1/2+1/1	Gartree Road (E) Ahead Left	U	N/A	N/A	A		1	41	-	734	2000:1747	412+589	73.4 : 73.4%
2/1	B582 Left Right	U	N/A	N/A	B		1	43	-	729	2025	891	81.8%
3/1	Gartree Road (W) Ahead Right	U	N/A	N/A	C		1	41	-	684	1980	832	82.3%
4/1		U	N/A	N/A	-		-	-	-	752	Inf	Inf	0.0%
5/1		U	N/A	N/A	-		-	-	-	553	Inf	Inf	0.0%
6/1		U	N/A	N/A	-		-	-	-	842	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	-	-	0	0	0	14.2	5.8	0.0	20.0	-	-	-	-
Unnamed Junction	-	-	0	0	0	14.2	5.8	0.0	20.0	-	-	-	-
1/2+1/1	734	734	-	-	-	4.3	1.4	-	5.7	28.0	9.3	1.4	10.7
2/1	729	729	-	-	-	5.0	2.2	-	7.2	35.3	17.6	2.2	19.8
3/1	684	684	-	-	-	4.9	2.2	-	7.1	37.5	16.7	2.2	19.0
4/1	752	752	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/1	553	553	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/1	842	842	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
C1 PRC for Signalled Lanes (%): 9.4 Total Delay for Signalled Lanes (pcuHr): 19.99 Cycle Time (s): 100 PRC Over All Lanes (%): 9.4 Total Delay Over All Lanes(pcuHr): 19.99													

Full Input Data And Results
Scenario 3: '2041 Pref AM' (FG3: '2041 Pref AM', Plan 1: 'Network Control Plan 1')

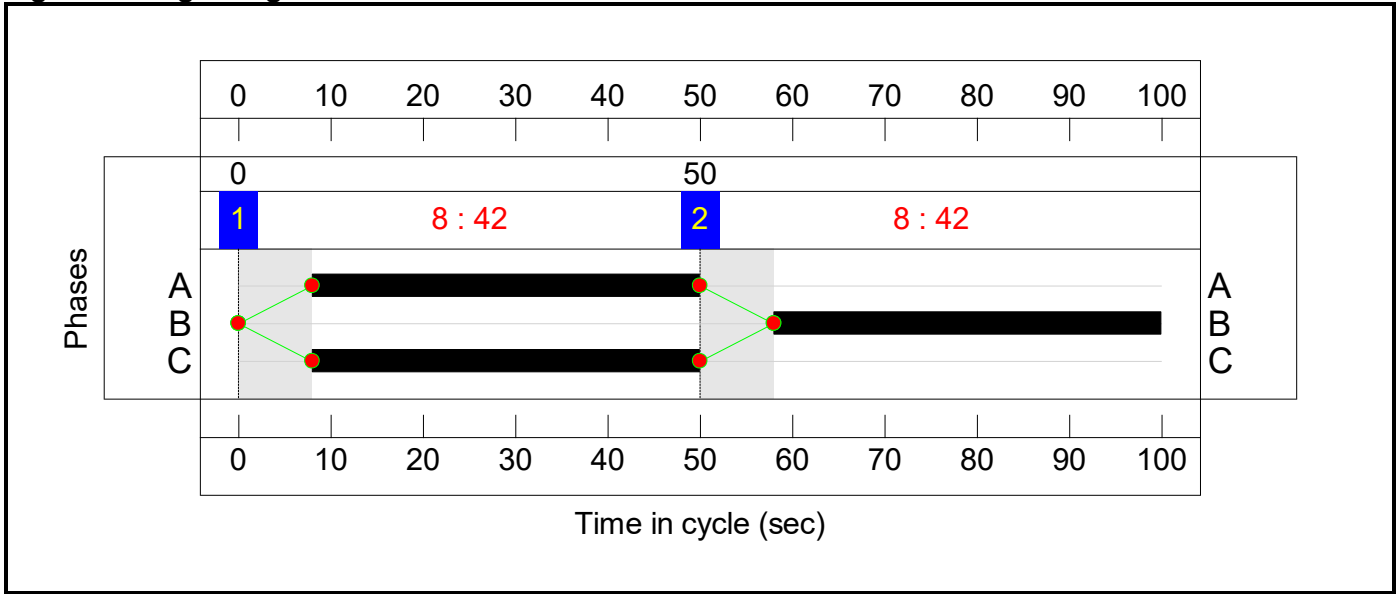
Stage Sequence Diagram



Stage Timings

Stage	1	2
Duration	42	42
Change Point	0	50

Signal Timings Diagram



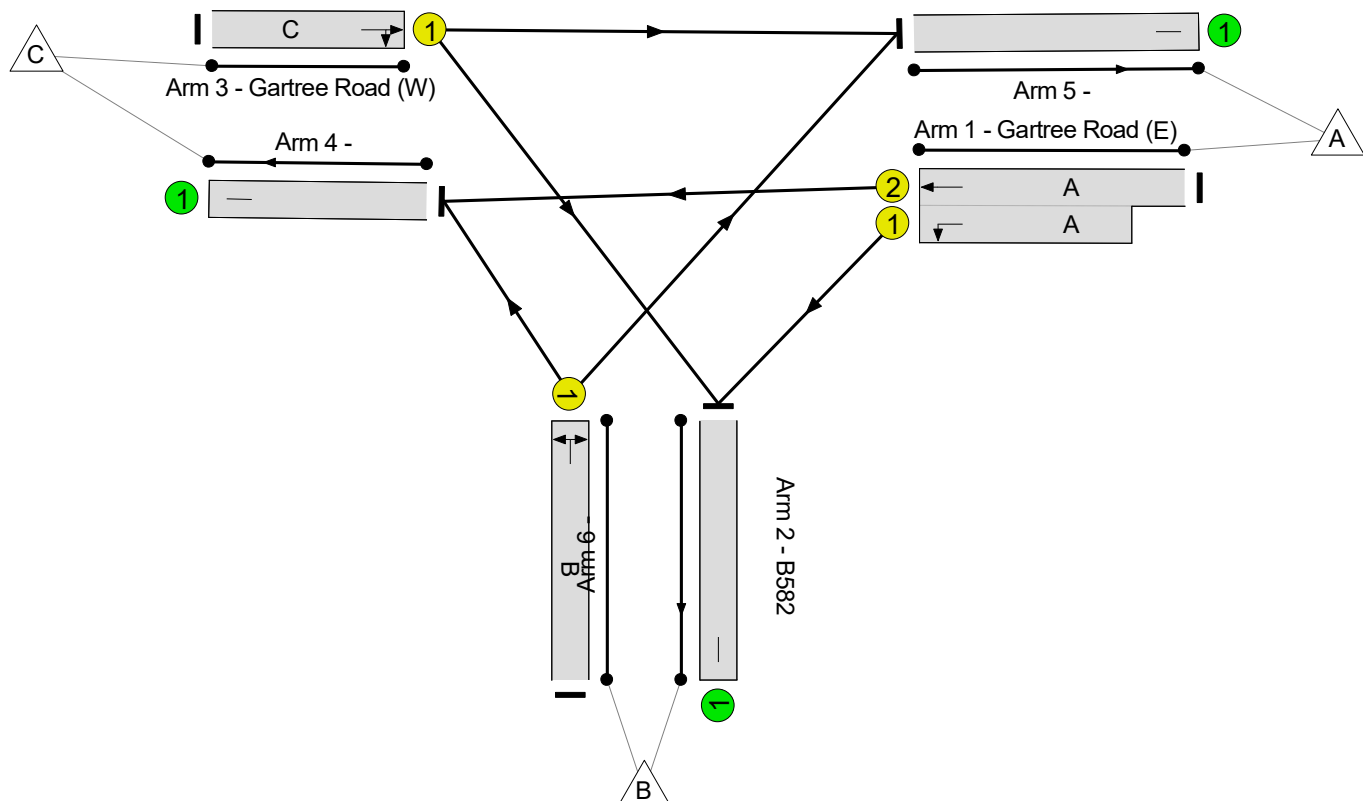
Full Input Data And Results



Unnamed Junction

PRC: 4.5 %

Total Traffic Delay: 22.1 pcuHr



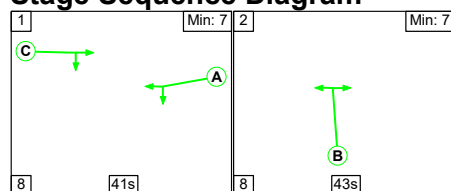
Network Results

Network Results

Full Input Data And Results

Scenario 4: '2041 Pref PM' (FG4: '2041 Pref PM', Plan 1: 'Network Control Plan 1')

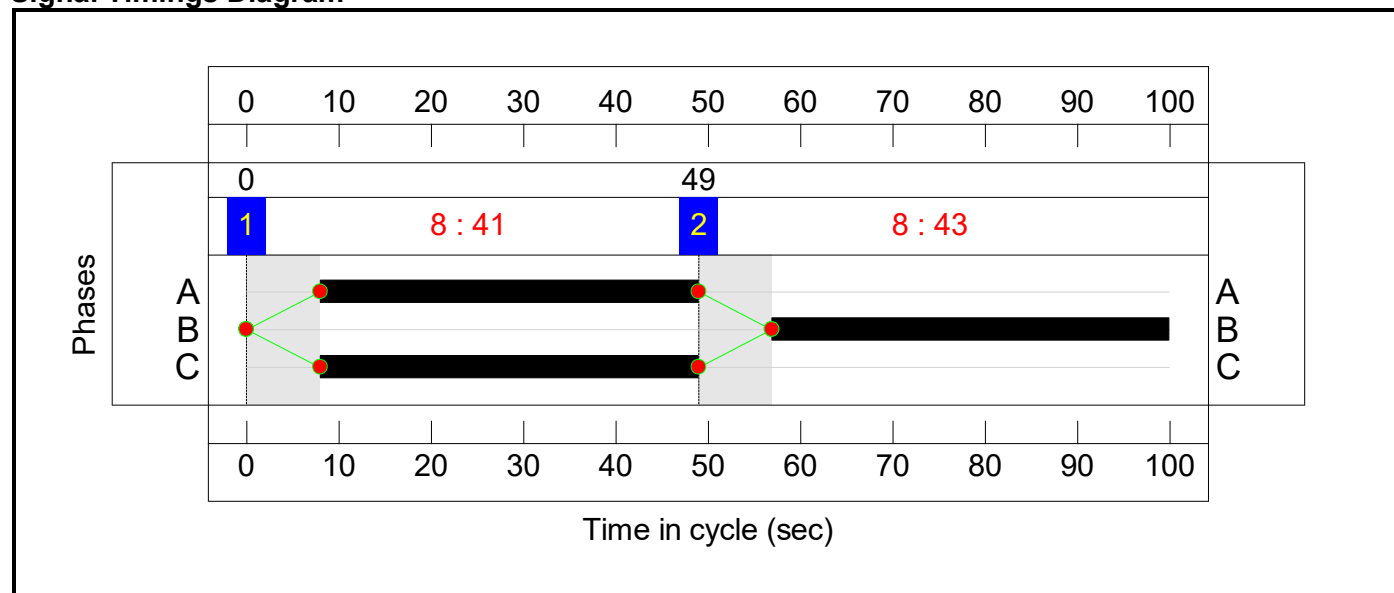
Stage Sequence Diagram



Stage Timings

Stage	1	2
Duration	41	43
Change Point	0	49

Signal Timings Diagram



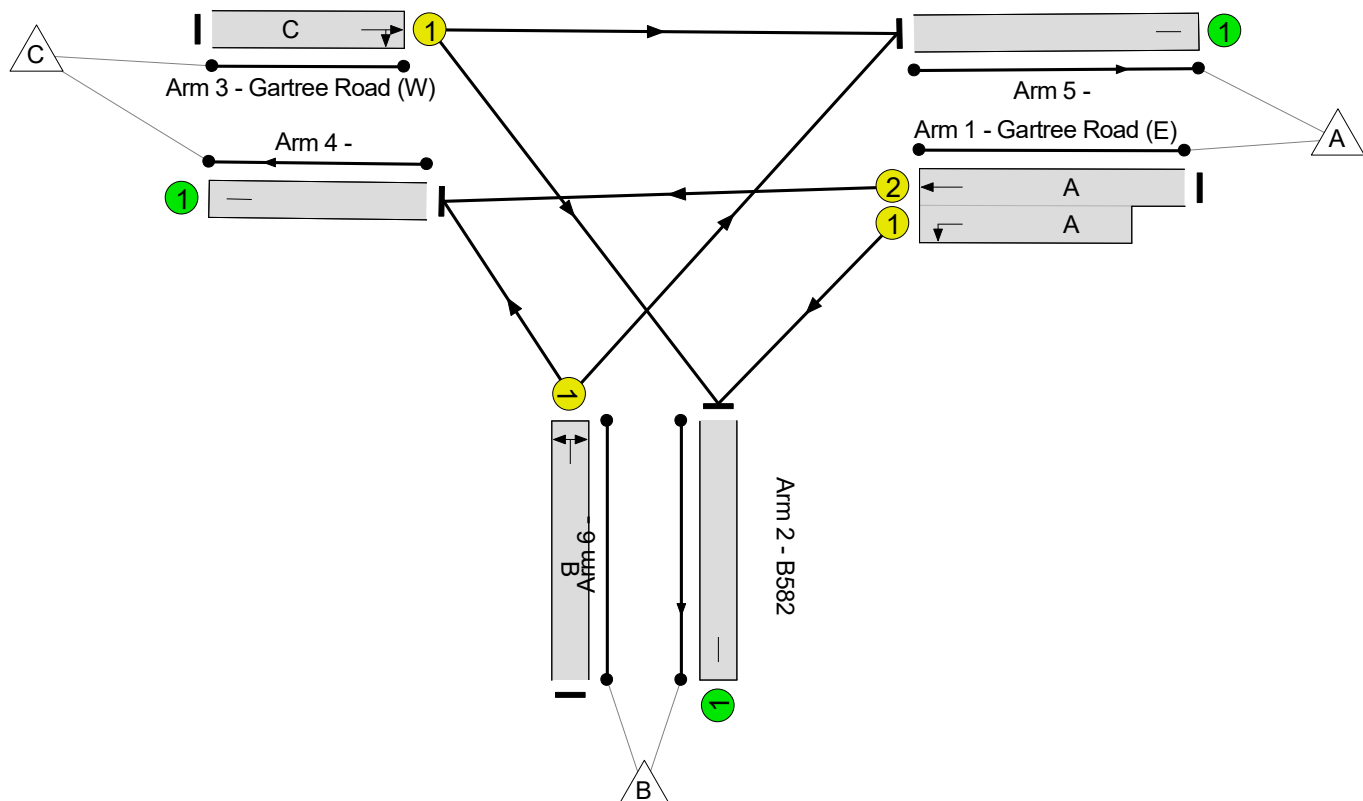
Full Input Data And Results



Unnamed Junction

PRC: 0.4 %

Total Traffic Delay: 25.4 pcuHr



Network Results

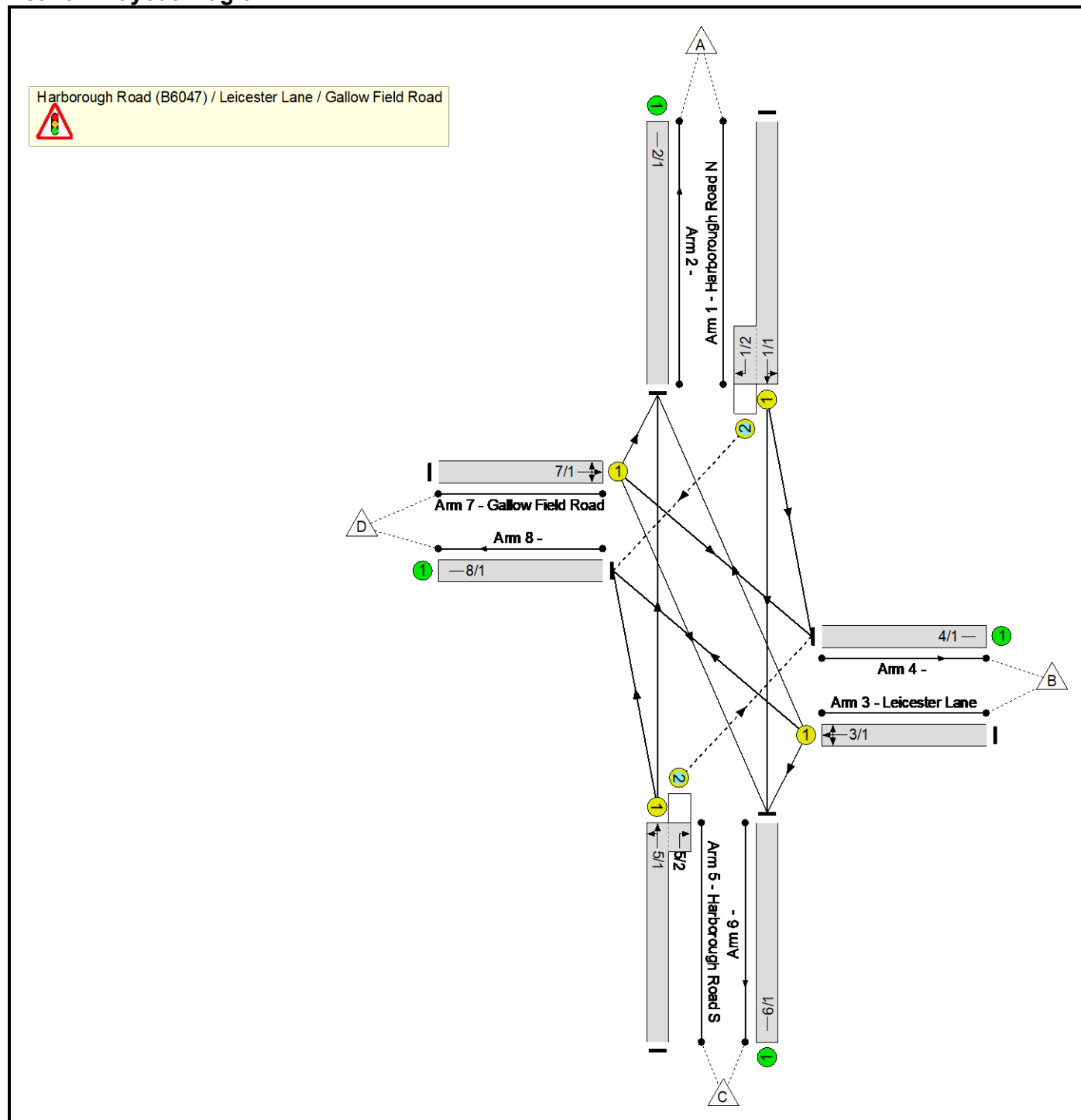
Network Results

Full Input Data And Results

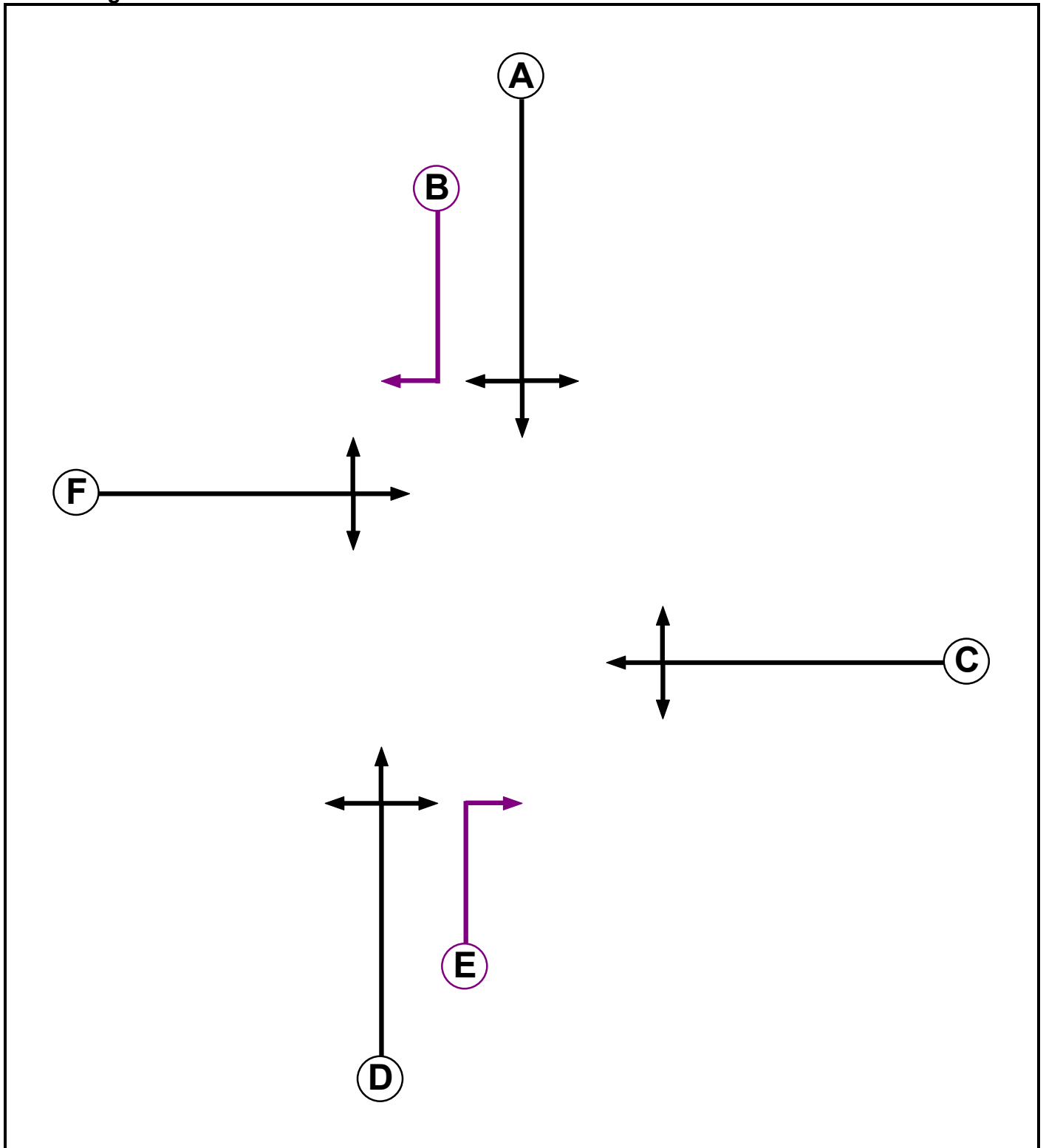
User and Project Details

Project:	
Title:	
Location:	
Additional detail:	
File name:	26_Mitigation - B6047 x Leicester Ln x Gallow Field Rd.lsg3x
Author:	
Company:	
Address:	

Network Layout Diagram



Phase Diagram



Full Input Data And Results

Phase Input Data

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

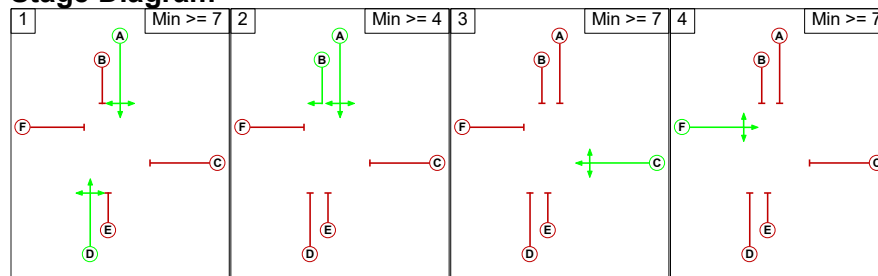
Phase Intergreens Matrix

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

Phases in Stage

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

Stage Diagram



Phase Delays

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

Prohibited Stage Change

From Stage	To Stage				
		1	2	3	4
	1		5	8	8
	2	5		8	5
	3	5	5		5
	4	5	5	5	

Full Input Data And Results

Give-Way Lane Input Data

Junction: Harborough Road (B6047) / Leicester Lane / Gallow Field 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 (Harborough Road N)	8/1 (Right)	1439	0	5/1	1.09	All	2.00	-	0.50	2	2.00
5/2 (Harborough Road S)	4/1 (Right)	1439	0	1/1	1.09	All	2.00	-	0.50	2	2.00

Lane Input Data

Junction: Harborough Road (B6047) / Leicester Lane / Gallow Field 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 (Harborough Road N)	U	A	2	3	60.0	Geom	-	3.50	0.00	Y	Arm 4 Left	8.00
1/2 (Harborough Road N)	O	A B	2	3	4.0	Geom	-	3.50	0.00	N	Arm 6 Ahead	Inf
											Arm 8 Right	5.50
2/1	U		2	3	60.0	Inf	-	-	-	-	-	-
3/1 (Leicester Lane)	U	C	2	3	60.0	Geom	-	3.25	0.00	Y	Arm 2 Right	12.50
											Arm 6 Left	6.50
											Arm 8 Ahead	Inf
4/1	U		2	3	60.0	Inf	-	-	-	-	-	-
5/1 (Harborough Road S)	U	D	2	3	60.0	Geom	-	3.50	0.00	Y	Arm 2 Ahead	Inf
											Arm 8 Left	6.50
5/2 (Harborough Road S)	O	D E	2	3	2.0	Geom	-	3.50	0.00	N	Arm 4 Right	7.00
6/1	U		2	3	60.0	Inf	-	-	-	-	-	-
7/1 (Gallow Field Road)	U	F	2	3	60.0	Geom	-	3.50	0.00	Y	Arm 2 Left	15.00
											Arm 4 Ahead	Inf
											Arm 6 Right	8.00
8/1	U		2	3	60.0	Inf	-	-	-	-	-	-

Traffic Flow Groups

Flow Group	Start Time	End Time	Duration	Formula
1: '2041 Pref AM'	08:00	09:00	01:00	
2: '2041 Pref PM'	17:00	18:00	01:00	
3: '2041 Core AM'	08:00	09:00	01:00	
4: '2041 Core PM'	17:00	18:00	01:00	

Scenario 1: '2041 Pref AM' (FG1: '2041 Pref AM', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired

Desired Flow :

	Destination					
Origin		A	B	C	D	Tot.
	A	0	86	767	132	985
	B	138	0	115	138	391
	C	974	19	0	104	1097
	D	146	60	112	0	318
	Tot.	1258	165	994	374	2791

Traffic Lane Flows

Lane	Scenario 1: 2041 Pref AM
Junction: Harborough Road (B6047) / Leicester Lane / Gallow Field Road	
1/1 (with short)	985(In) 853(Out)
1/2 (short)	132
2/1	1258
3/1	391
4/1	165
5/1 (with short)	1097(In) 1078(Out)
5/2 (short)	19
6/1	994
7/1	318
8/1	374

Lane Saturation Flows

Junction: Harborough Road (B6047) / Leicester Lane / Gallow Field 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 (Harborough Road N)	3.50	0.00	Y	Arm 4 Left	8.00	10.1 %	1929	1929
				Arm 6 Ahead	Inf	89.9 %		
1/2 (Harborough Road N)	3.50	0.00	N	Arm 8 Right	5.50	100.0 %	1654	1654
2/1	Infinite Saturation Flow						Inf	Inf
3/1 (Leicester Lane)	3.25	0.00	Y	Arm 2 Right	12.50	35.3 %	1747	1747
				Arm 6 Left	6.50	29.4 %		
				Arm 8 Ahead	Inf	35.3 %		
4/1	Infinite Saturation Flow						Inf	Inf
5/1 (Harborough Road S)	3.50	0.00	Y	Arm 2 Ahead	Inf	90.4 %	1922	1922
				Arm 8 Left	6.50	9.6 %		
5/2 (Harborough Road S)	3.50	0.00	N	Arm 4 Right	7.00	100.0 %	1734	1734
6/1	Infinite Saturation Flow						Inf	Inf
7/1 (Gallow Field Road)	3.50	0.00	Y	Arm 2 Left	15.00	45.9 %	1767	1767
				Arm 4 Ahead	Inf	18.9 %		
				Arm 6 Right	8.00	35.2 %		
8/1	Infinite Saturation Flow						Inf	Inf

Scenario 2: '2041 Pref PM' (FG2: '2041 Pref PM', Plan 1: 'Network Control Plan 1')**Traffic Flows, Desired****Desired Flow :**

	Destination					
		A	B	C	D	Tot.
Origin	A	0	87	746	109	942
	B	114	0	94	147	355
	C	1081	19	0	111	1211
	D	208	51	76	0	335
	Tot.	1403	157	916	367	2843

Lane Saturation Flows

Junction: Harborough Road (B6047) / Leicester Lane / Gallow Field 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 (Harborough Road N)	3.50	0.00	Y	Arm 4 Left	8.00	10.4 %	1927	1927
				Arm 6 Ahead	Inf	89.6 %		
1/2 (Harborough Road N)	3.50	0.00	N	Arm 8 Right	5.50	100.0 %	1654	1654
2/1	Infinite Saturation Flow						Inf	Inf
3/1 (Leicester Lane)	3.25	0.00	Y	Arm 2 Right	12.50	32.1 %	1764	1764
				Arm 6 Left	6.50	26.5 %		
				Arm 8 Ahead	Inf	41.4 %		
4/1	Infinite Saturation Flow						Inf	Inf
5/1 (Harborough Road S)	3.50	0.00	Y	Arm 2 Ahead	Inf	90.7 %	1924	1924
				Arm 8 Left	6.50	9.3 %		
5/2 (Harborough Road S)	3.50	0.00	N	Arm 4 Right	7.00	100.0 %	1734	1734
6/1	Infinite Saturation Flow						Inf	Inf
7/1 (Gallow Field Road)	3.50	0.00	Y	Arm 2 Left	15.00	62.1 %	1779	1779
				Arm 4 Ahead	Inf	15.2 %		
				Arm 6 Right	8.00	22.7 %		
8/1	Infinite Saturation Flow						Inf	Inf

Scenario 3: '2041 Core AM' (FG3: '2041 Core AM', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired

Desired Flow :

	Destination					
Origin		A	B	C	D	Tot.
	A	0	84	748	129	961
	B	118	0	98	118	334
	C	992	19	0	106	1117
	D	62	26	48	0	136
	Tot.	1172	129	894	353	2548

Traffic Lane Flows

Lane	Scenario 3: 2041 Core AM
Junction: Harborough Road (B6047) / Leicester Lane / Gallow Field Road	
1/1 (with short)	961(In) 832(Out)
1/2 (short)	129
2/1	1172
3/1	334
4/1	129
5/1 (with short)	1117(In) 1098(Out)
5/2 (short)	19
6/1	894
7/1	136
8/1	353

Lane Saturation Flows

Junction: Harborough Road (B6047) / Leicester Lane / Gallow Field 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 (Harborough Road N)	3.50	0.00	Y	Arm 4 Left	8.00	10.1 %	1928	1928
				Arm 6 Ahead	Inf	89.9 %		
1/2 (Harborough Road N)	3.50	0.00	N	Arm 8 Right	5.50	100.0 %	1654	1654
2/1	Infinite Saturation Flow						Inf	Inf
3/1 (Leicester Lane)	3.25	0.00	Y	Arm 2 Right	12.50	35.3 %	1748	1748
				Arm 6 Left	6.50	29.3 %		
				Arm 8 Ahead	Inf	35.3 %		
4/1	Infinite Saturation Flow						Inf	Inf
5/1 (Harborough Road S)	3.50	0.00	Y	Arm 2 Ahead	Inf	90.3 %	1922	1922
				Arm 8 Left	6.50	9.7 %		
5/2 (Harborough Road S)	3.50	0.00	N	Arm 4 Right	7.00	100.0 %	1734	1734
6/1	Infinite Saturation Flow						Inf	Inf
7/1 (Gallow Field Road)	3.50	0.00	Y	Arm 2 Left	15.00	45.6 %	1767	1767
				Arm 4 Ahead	Inf	19.1 %		
				Arm 6 Right	8.00	35.3 %		
8/1	Infinite Saturation Flow						Inf	Inf

Scenario 4: '2041 Core PM' (FG4: '2041 Core PM', Plan 1: 'Network Control Plan 1')**Traffic Flows, Desired****Desired Flow :**

	Destination					
		A	B	C	D	Tot.
Origin	A	0	81	691	101	873
	B	86	0	71	111	268
	C	1029	19	0	106	1154
	D	195	48	71	0	314
	Tot.	1310	148	833	318	2609

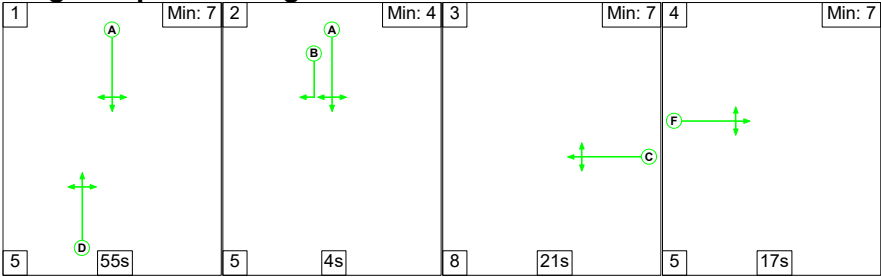
Lane Saturation Flows

Junction: Harborough Road (B6047) / Leicester Lane / Gallow Field 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 (Harborough Road N)	3.50	0.00	Y	Arm 4 Left	8.00	10.5 %	1927	1927
				Arm 6 Ahead	Inf	89.5 %		
1/2 (Harborough Road N)	3.50	0.00	N	Arm 8 Right	5.50	100.0 %	1654	1654
2/1	Infinite Saturation Flow						Inf	Inf
3/1 (Leicester Lane)	3.25	0.00	Y	Arm 2 Right	12.50	32.1 %	1764	1764
				Arm 6 Left	6.50	26.5 %		
				Arm 8 Ahead	Inf	41.4 %		
4/1	Infinite Saturation Flow						Inf	Inf
5/1 (Harborough Road S)	3.50	0.00	Y	Arm 2 Ahead	Inf	90.7 %	1924	1924
				Arm 8 Left	6.50	9.3 %		
5/2 (Harborough Road S)	3.50	0.00	N	Arm 4 Right	7.00	100.0 %	1734	1734
6/1	Infinite Saturation Flow						Inf	Inf
7/1 (Gallow Field Road)	3.50	0.00	Y	Arm 2 Left	15.00	62.1 %	1779	1779
				Arm 4 Ahead	Inf	15.3 %		
				Arm 6 Right	8.00	22.6 %		
8/1	Infinite Saturation Flow						Inf	Inf

Full Input Data And Results

Scenario 1: '2041 Pref AM' (FG1: '2041 Pref AM', Plan 1: 'Network Control Plan 1')

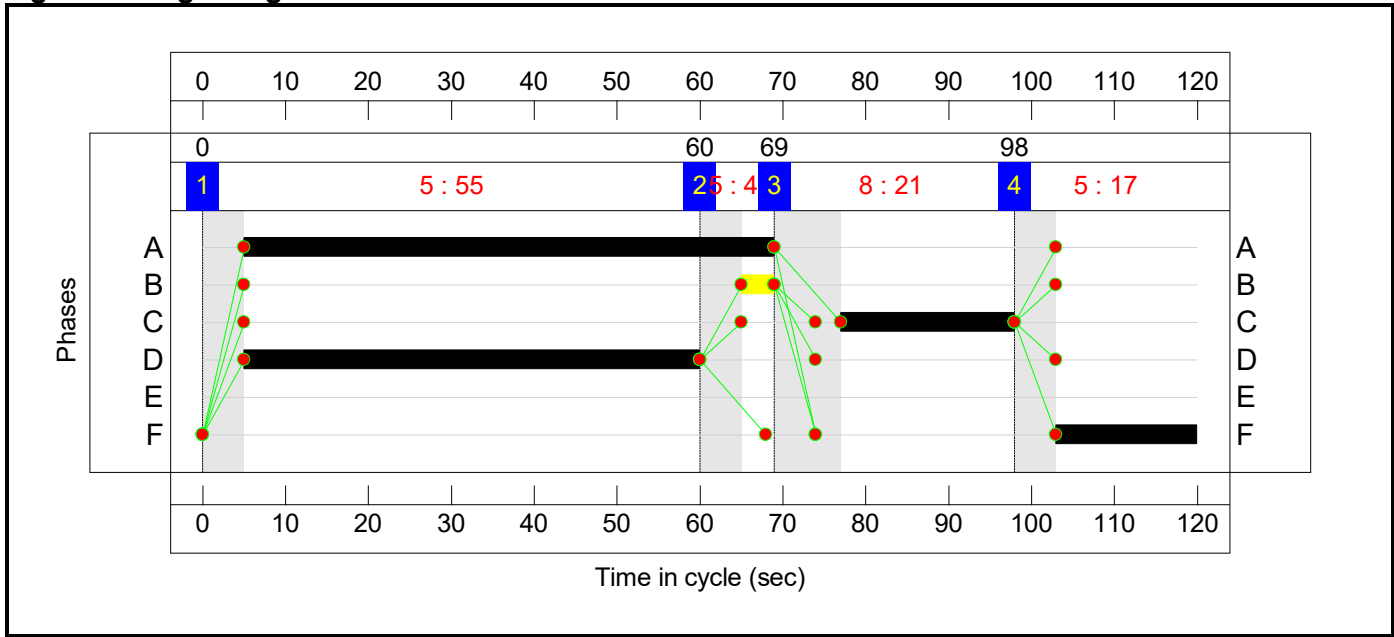
Stage Sequence Diagram



Stage Timings

Stage	1	2	3	4
Duration	55	4	21	17
Change Point	0	60	69	98

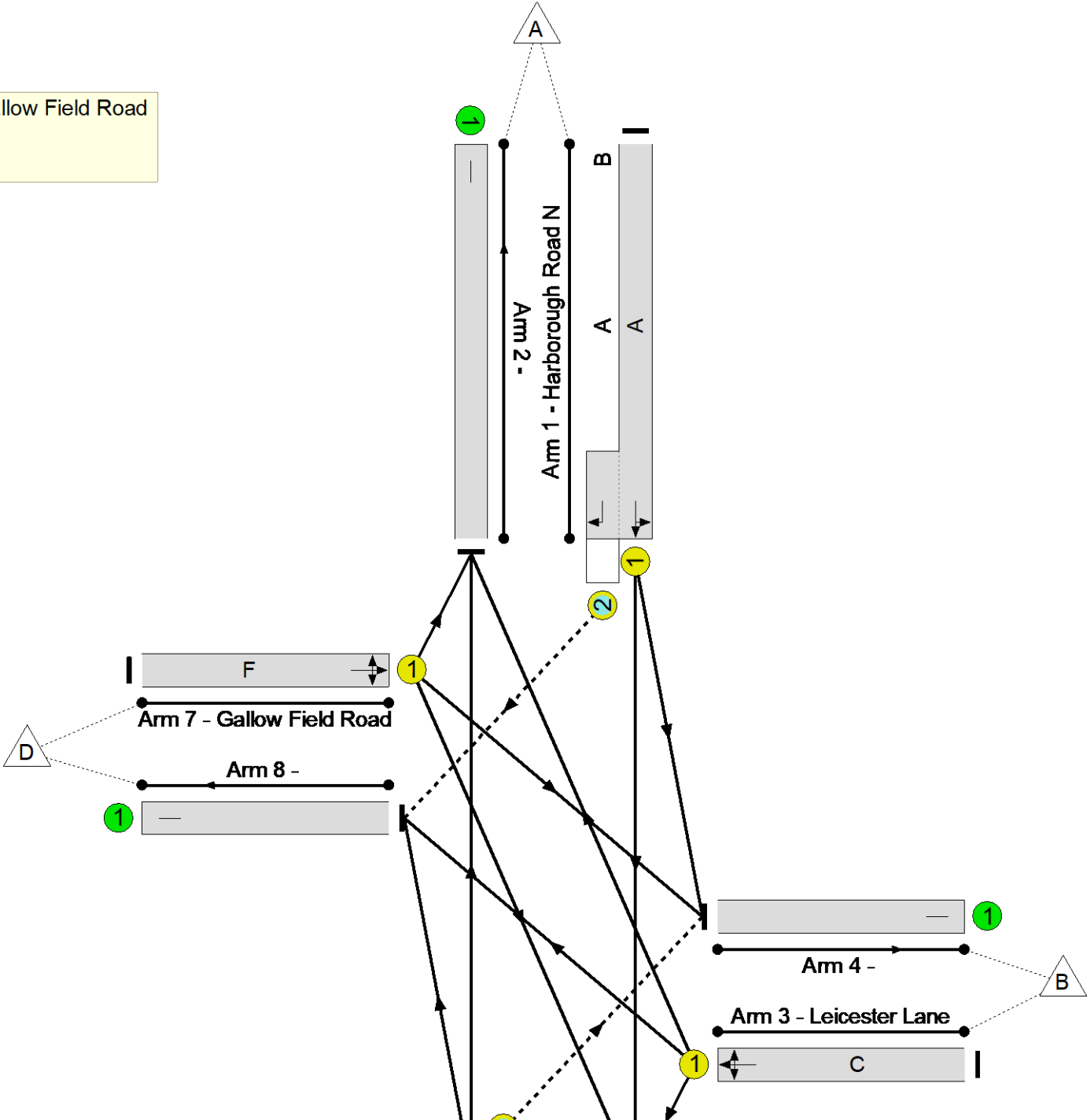
Signal Timings Diagram



Harborough Road (B6047) / Leicester Lane / Gallow Field Road

PRC: -36.6 %

Total Traffic Delay: 227.2 pcuHr



Full Input Data And Results

Network Results

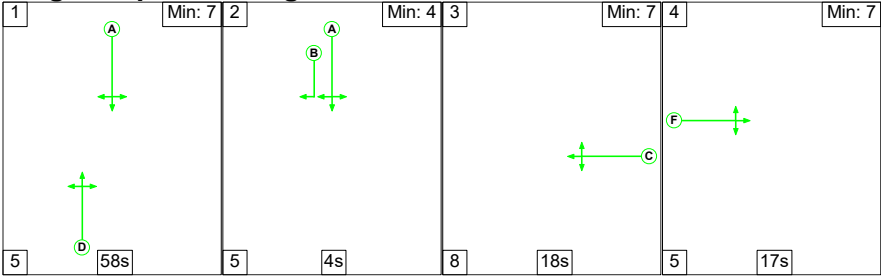
Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network	-	-	N/A	-	-		-	-	-	-	-	-	122.9%
Harborough Road (B6047) / Leicester Lane / Gallow Field Road	-	-	N/A	-	-		-	-	-	-	-	-	122.9%
1/1+1/2	Harborough Road N Left Ahead Right	U+O	N/A	N/A	A	B	1	64	4	985	1929:1654	910+129	93.8 : 102.4%
2/1		U	N/A	N/A	-		-	-	-	1258	Inf	Inf	0.0%
3/1	Leicester Lane Right Left Ahead	U	N/A	N/A	C		1	21	-	391	1747	320	122.1%
4/1		U	N/A	N/A	-		-	-	-	165	Inf	Inf	0.0%
5/1+5/2	Harborough Road S Ahead Right Left	U+O	N/A	N/A	D	E	1	55	0	1097	1922:1734	877+15	122.9 : 122.9%
6/1		U	N/A	N/A	-		-	-	-	994	Inf	Inf	0.0%
7/1	Gallow Field Road Left Ahead Right	U	N/A	N/A	F		1	17	-	318	1767	265	120.0%
8/1		U	N/A	N/A	-		-	-	-	374	Inf	Inf	0.0%

Full Input Data And Results

Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network	-	-	15	96	32	45.4	180.8	0.9	227.2	-	-	-	-
Harborough Road (B6047) / Leicester Lane / Gallow Field Road	-	-	15	96	32	45.4	180.8	0.9	227.2	-	-	-	-
1/1+1/2	985	982	0	96	32	7.3	8.8	0.8	16.8	61.5	29.8	8.8	38.5
2/1	1027	1027	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
3/1	391	320	-	-	-	8.6	37.9	-	46.5	428.2	15.7	37.9	53.6
4/1	151	151	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/1+5/2	1097	892	15	0	0	21.5	104.9	0.1	126.5	415.2	44.0	104.9	148.9
6/1	955	955	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
7/1	318	265	-	-	-	8.1	29.2	-	37.3	422.6	13.9	29.2	43.1
8/1	327	327	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
C1 PRC for Signalled Lanes (%): -36.6 Total Delay for Signalled Lanes (pcuHr): 227.19 Cycle Time (s): 120 PRC Over All Lanes (%): -36.6 Total Delay Over All Lanes(pcuHr): 227.19													

Full Input Data And Results
Scenario 2: '2041 Pref PM' (FG2: '2041 Pref PM', Plan 1: 'Network Control Plan 1')

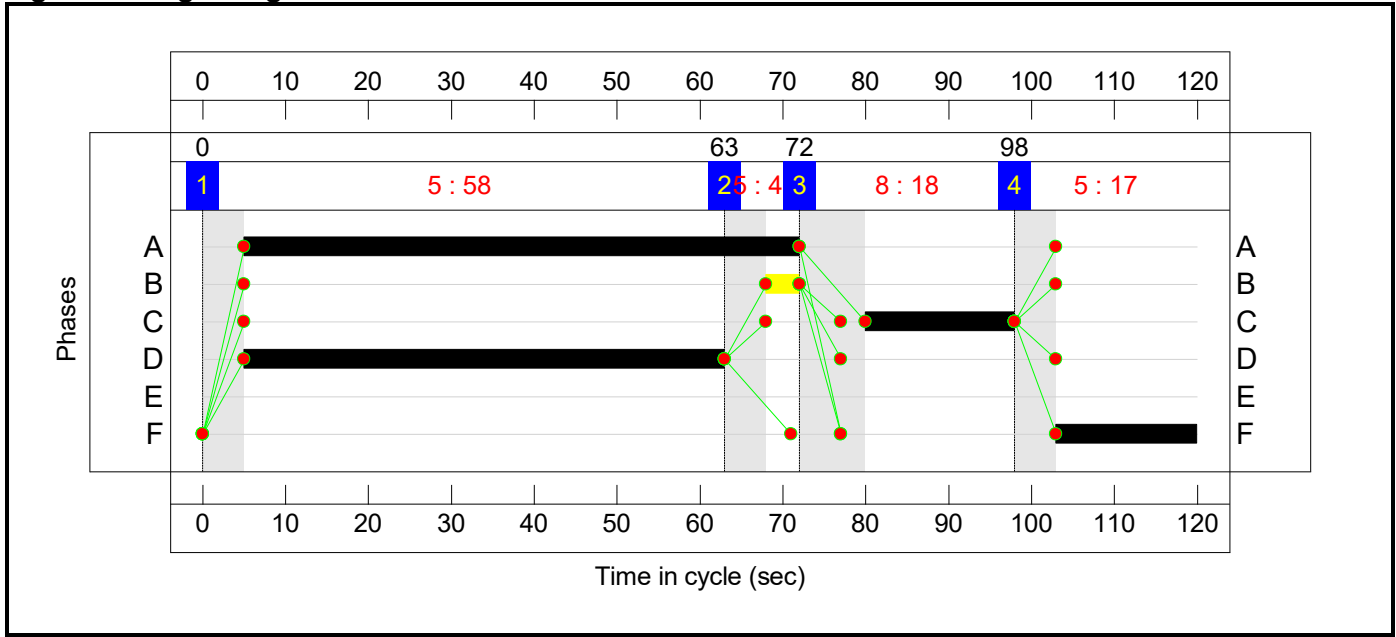
Stage Sequence Diagram



Stage Timings

Stage	1	2	3	4
Duration	58	4	18	17
Change Point	0	63	72	98

Signal Timings Diagram

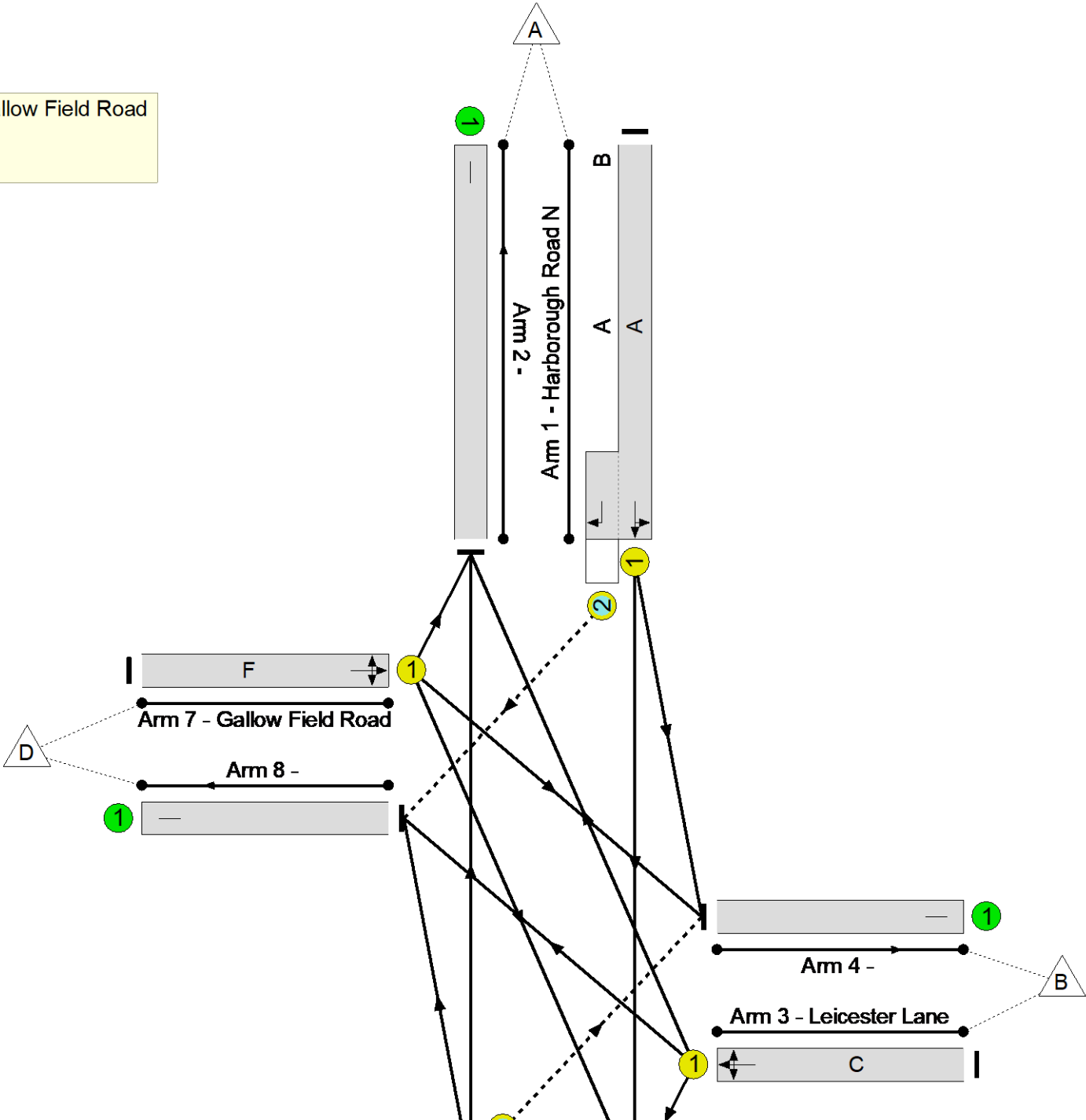




Harborough Road (B6047) / Leicester Lane / Gallow Field Road

PRC: -43.0 %

Total Traffic Delay: 266.9 pcuHr



Full Input Data And Results

Network Results

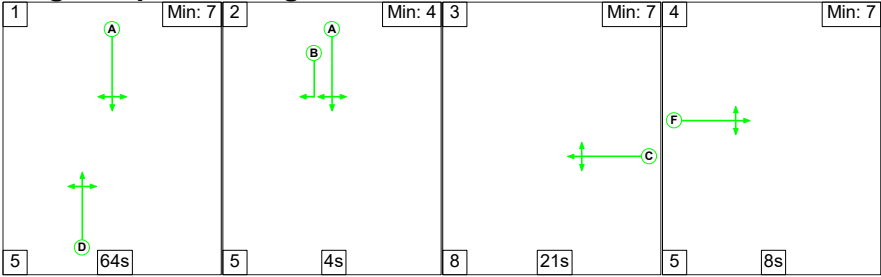
Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network	-	-	N/A	-	-		-	-	-	-	-	-	128.7%
Harborough Road (B6047) / Leicester Lane / Gallow Field Road	-	-	N/A	-	-		-	-	-	-	-	-	128.7%
1/1+1/2	Harborough Road N Left Ahead Right	U+O	N/A	N/A	A	B	1	67	4	942	1927:1654	970+127	85.9 : 85.9%
2/1		U	N/A	N/A	-		-	-	-	1403	Inf	Inf	0.0%
3/1	Leicester Lane Right Left Ahead	U	N/A	N/A	C		1	18	-	355	1764	279	127.1%
4/1		U	N/A	N/A	-		-	-	-	157	Inf	Inf	0.0%
5/1+5/2	Harborough Road S Ahead Right Left	U+O	N/A	N/A	D	E	1	58	0	1211	1924:1734	927+15	128.7 : 128.7%
6/1		U	N/A	N/A	-		-	-	-	916	Inf	Inf	0.0%
7/1	Gallow Field Road Left Ahead Right	U	N/A	N/A	F		1	17	-	335	1779	267	125.5%
8/1		U	N/A	N/A	-		-	-	-	367	Inf	Inf	0.0%

Full Input Data And Results

Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network	-	-	15	96	13	49.5	216.4	0.9	266.9	-	-	-	-
Harborough Road (B6047) / Leicester Lane / Gallow Field Road	-	-	15	96	13	49.5	216.4	0.9	266.9	-	-	-	-
1/1+1/2	942	942	0	96	13	5.8	2.9	0.8	9.5	36.3	25.6	2.9	28.6
2/1	1096	1096	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
3/1	355	279	-	-	-	8.8	40.1	-	48.8	495.2	15.0	40.1	55.1
4/1	142	142	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/1+5/2	1211	941	15	0	0	25.6	137.1	0.1	162.7	483.7	50.0	137.1	187.1
6/1	880	880	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
7/1	335	267	-	-	-	9.4	36.4	-	45.8	492.1	15.4	36.4	51.8
8/1	311	311	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
C1 PRC for Signalled Lanes (%): -43.0 Total Delay for Signalled Lanes (pcuHr): 266.85 Cycle Time (s): 120 PRC Over All Lanes (%): -43.0 Total Delay Over All Lanes(pcuHr): 266.85													

Full Input Data And Results
Scenario 3: '2041 Core AM' (FG3: '2041 Core AM', Plan 1: 'Network Control Plan 1')

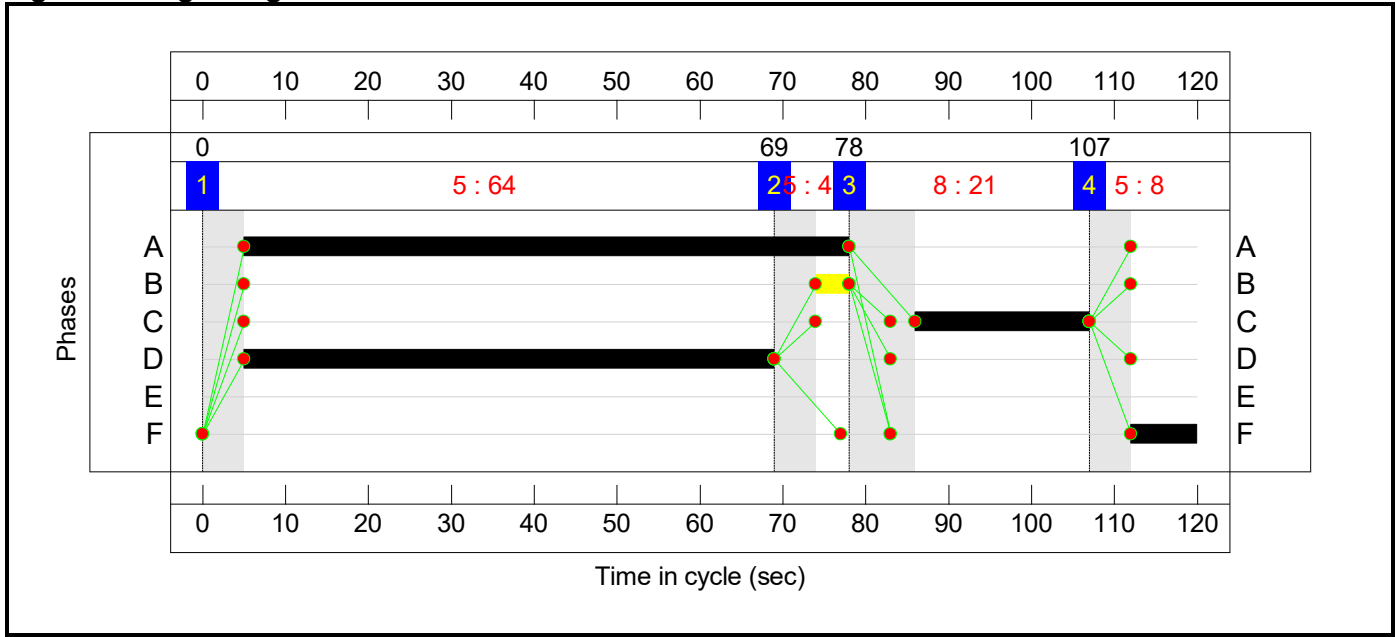
Stage Sequence Diagram



Stage Timings

Stage	1	2	3	4
Duration	64	4	21	8
Change Point	0	69	78	107

Signal Timings Diagram

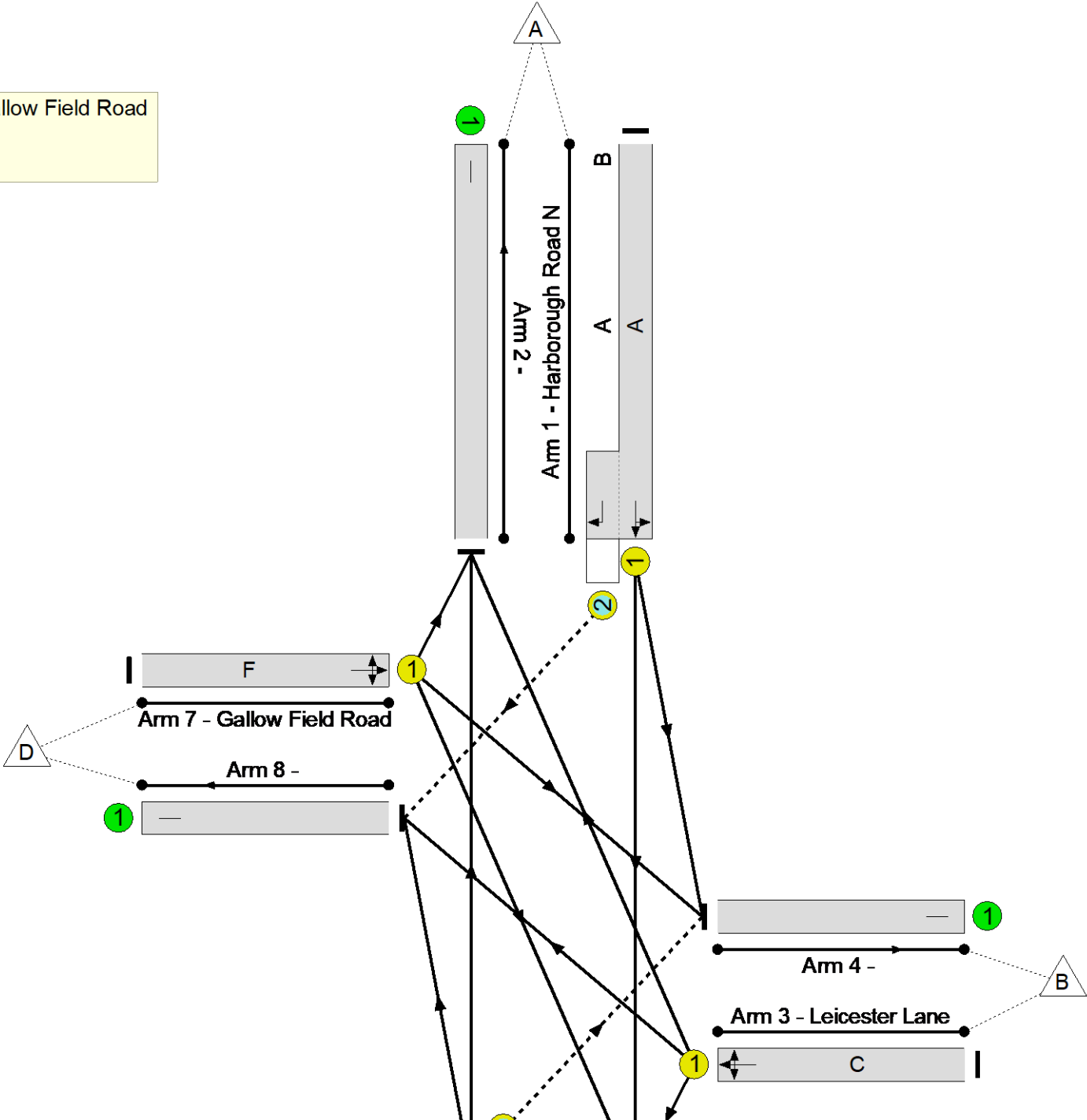




Harborough Road (B6047) / Leicester Lane / Gallow Field Road

PRC: -19.8 %

Total Traffic Delay: 108.4 pcuHr



Full Input Data And Results

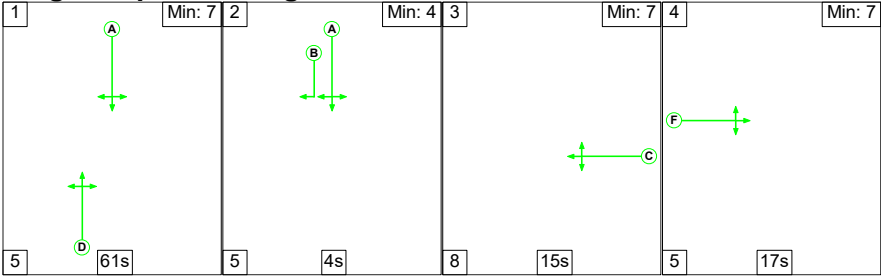
Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network	-	-	N/A	-	-		-	-	-	-	-	-	107.8%
Harborough Road (B6047) / Leicester Lane / Gallow Field Road	-	-	N/A	-	-		-	-	-	-	-	-	107.8%
1/1+1/2	Harborough Road N Left Ahead Right	U+O	N/A	N/A	A	B	1	73	4	961	1928:1654	831+129	100.1 : 100.1%
2/1		U	N/A	N/A	-		-	-	-	1172	Inf	Inf	0.0%
3/1	Leicester Lane Right Left Ahead	U	N/A	N/A	C		1	21	-	334	1748	320	104.2%
4/1		U	N/A	N/A	-		-	-	-	129	Inf	Inf	0.0%
5/1+5/2	Harborough Road S Ahead Right Left	U+O	N/A	N/A	D	E	1	64	0	1117	1922:1734	1019+18	107.8 : 107.8%
6/1		U	N/A	N/A	-		-	-	-	894	Inf	Inf	0.0%
7/1	Gallow Field Road Left Ahead Right	U	N/A	N/A	F		1	8	-	136	1767	133	102.6%
8/1		U	N/A	N/A	-		-	-	-	353	Inf	Inf	0.0%

Full Input Data And Results

[illegible]

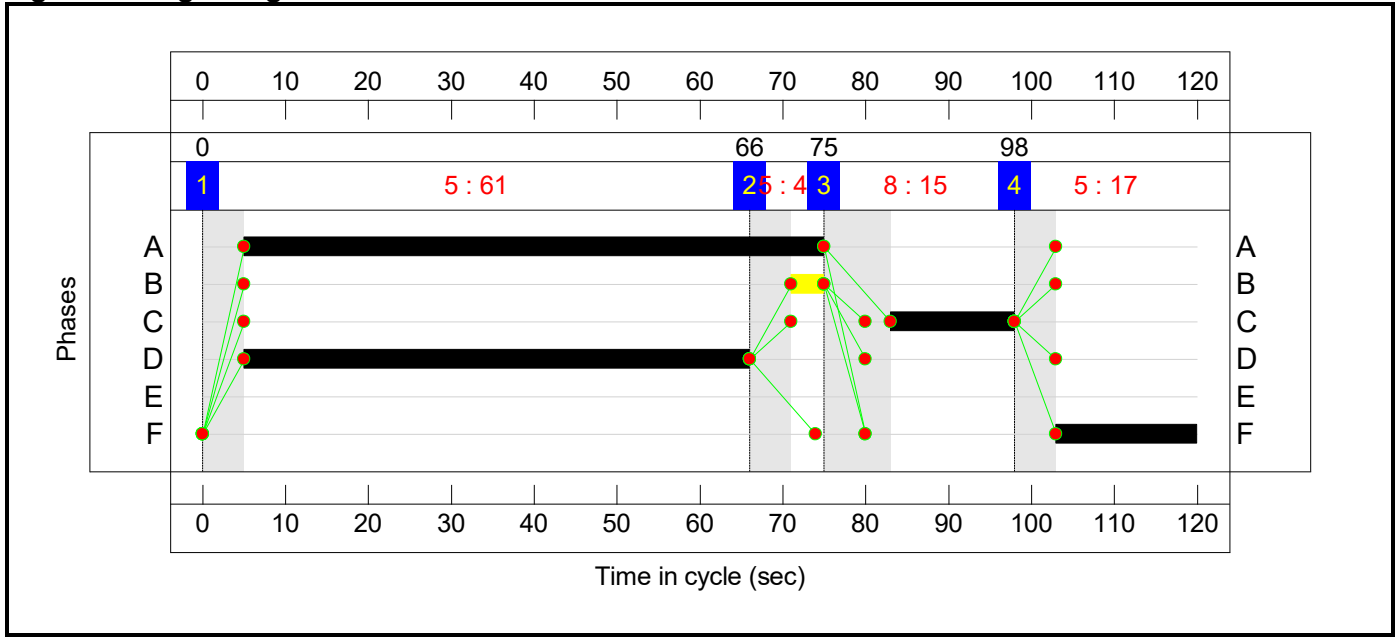
Stage Sequence Diagram



Stage Timings

Stage	1	2	3	4
Duration	61	4	15	17
Change Point	0	66	75	98

Signal Timings Diagram

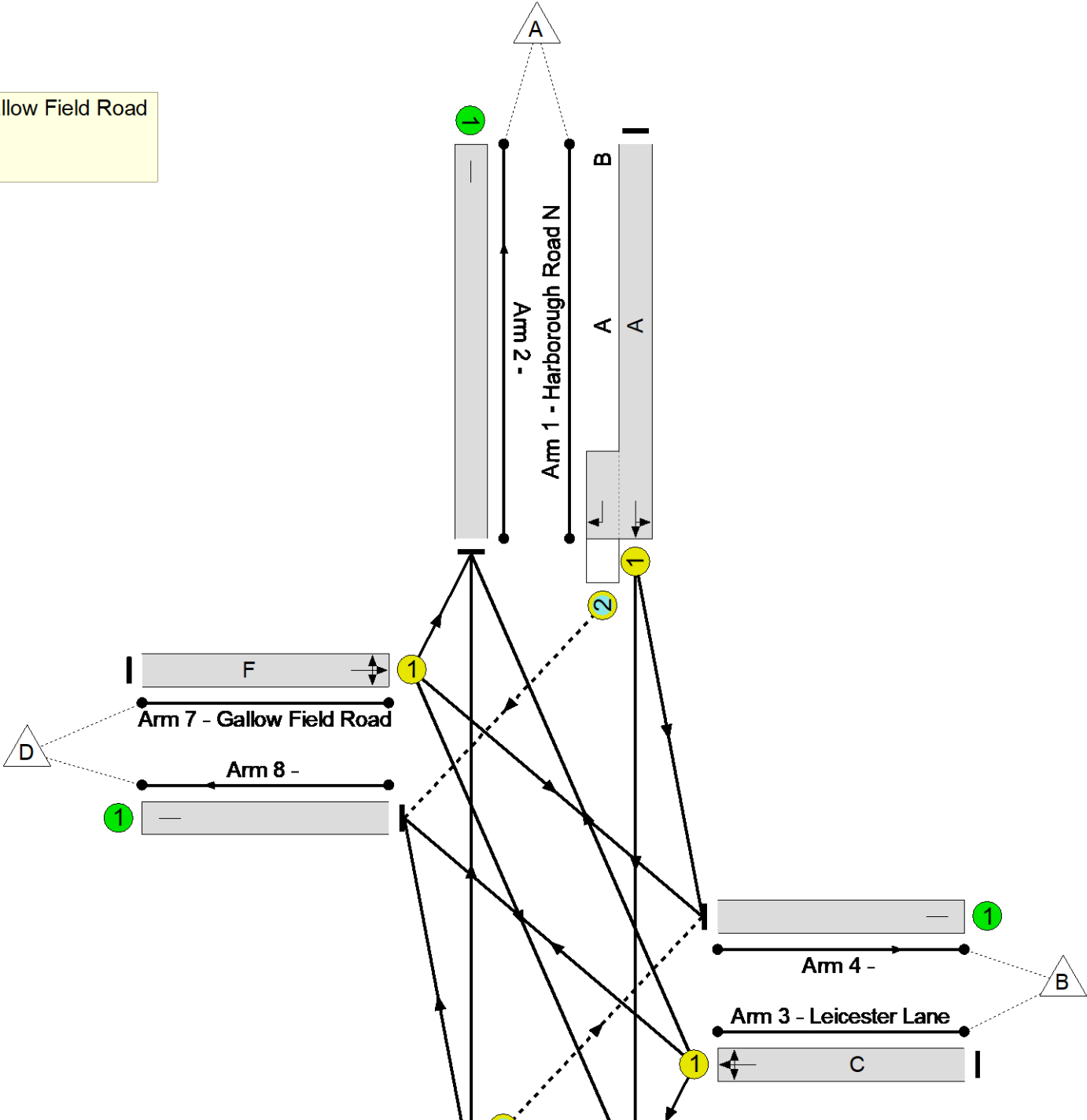




Harborough Road (B6047) / Leicester Lane / Gallow Field Road

PRC: -30.7 %

Total Traffic Delay: 170.5 pcuHr



Full Input Data And Results

Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network	-	-	N/A	-	-		-	-	-	-	-	-	117.7%
Harborough Road (B6047) / Leicester Lane / Gallow Field Road	-	-	N/A	-	-		-	-	-	-	-	-	117.7%
1/1+1/2	Harborough Road N Left Ahead Right	U+O	N/A	N/A	A	B	1	70	4	873	1927:1654	1012+129	76.3 : 78.3%
2/1		U	N/A	N/A	-		-	-	-	1310	Inf	Inf	0.0%
3/1	Leicester Lane Right Left Ahead	U	N/A	N/A	C		1	15	-	268	1764	235	113.9%
4/1		U	N/A	N/A	-		-	-	-	148	Inf	Inf	0.0%
5/1+5/2	Harborough Road S Ahead Right Left	U+O	N/A	N/A	D	E	1	61	0	1154	1924:1734	973+16	116.7 : 116.7%
6/1		U	N/A	N/A	-		-	-	-	833	Inf	Inf	0.0%
7/1	Gallow Field Road Left Ahead Right	U	N/A	N/A	F		1	17	-	314	1779	267	117.7%
8/1		U	N/A	N/A	-		-	-	-	318	Inf	Inf	0.0%

Full Input Data And Results

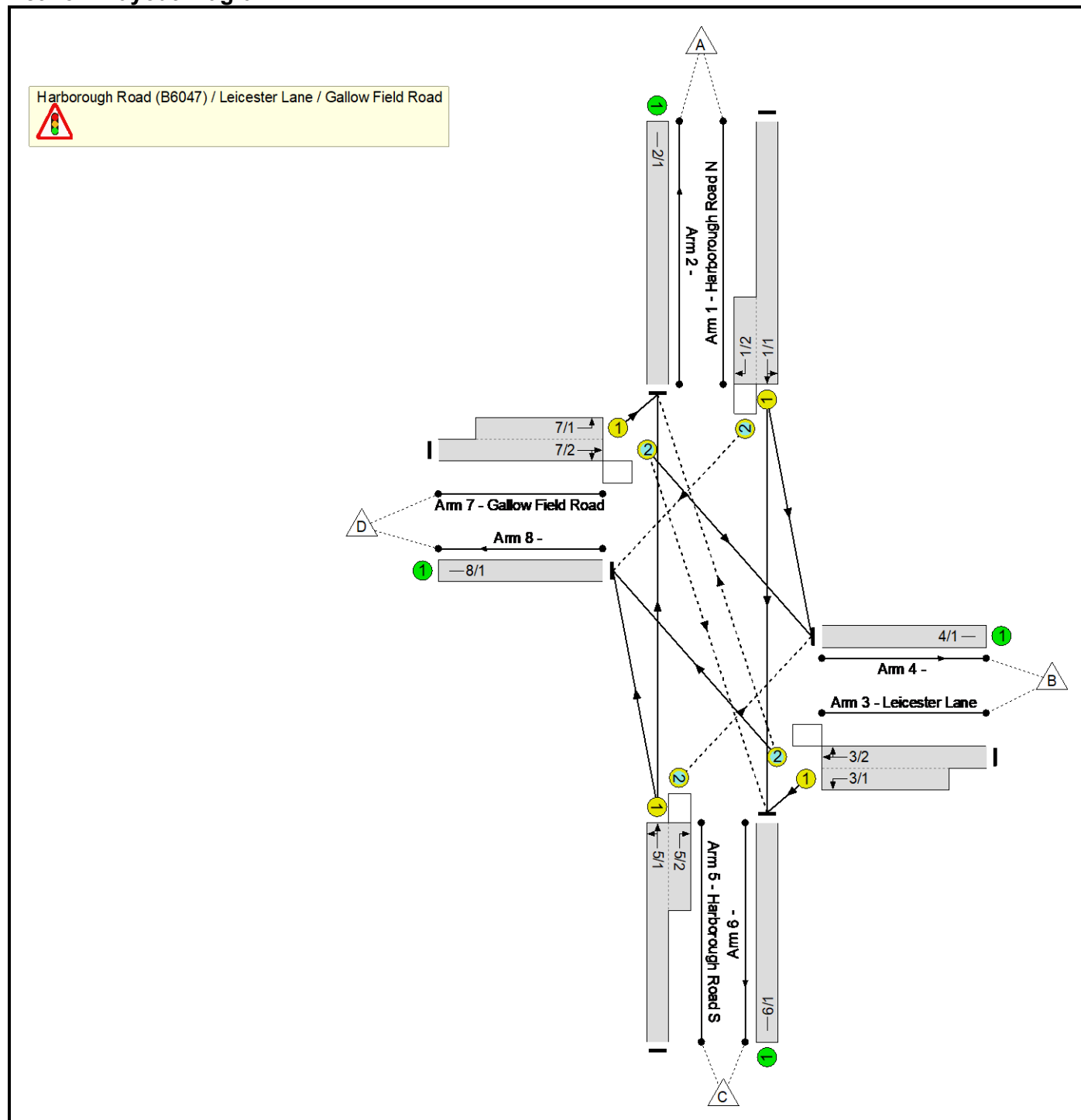
Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network	-	-	16	96	5	36.0	133.7	0.9	170.5	-	-	-	-
Harborough Road (B6047) / Leicester Lane / Gallow Field Road	-	-	16	96	5	36.0	133.7	0.9	170.5	-	-	-	-
1/1+1/2	873	873	0	96	5	4.5	1.6	0.8	6.9	28.5	20.8	1.6	22.4
2/1	1123	1123	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
3/1	268	235	-	-	-	5.2	19.8	-	25.0	335.8	10.0	19.8	29.8
4/1	138	138	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/1+5/2	1154	989	16	0	0	18.6	85.7	0.1	104.4	325.6	44.6	85.7	130.3
6/1	814	814	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
7/1	314	267	-	-	-	7.7	26.5	-	34.2	392.2	13.3	26.5	39.9
8/1	289	289	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
C1 PRC for Signalled Lanes (%): -30.7 Total Delay for Signalled Lanes (pcuHr): 170.50 Cycle Time (s): 120 PRC Over All Lanes (%): -30.7 Total Delay Over All Lanes(pcuHr): 170.50													

Full Input Data And Results

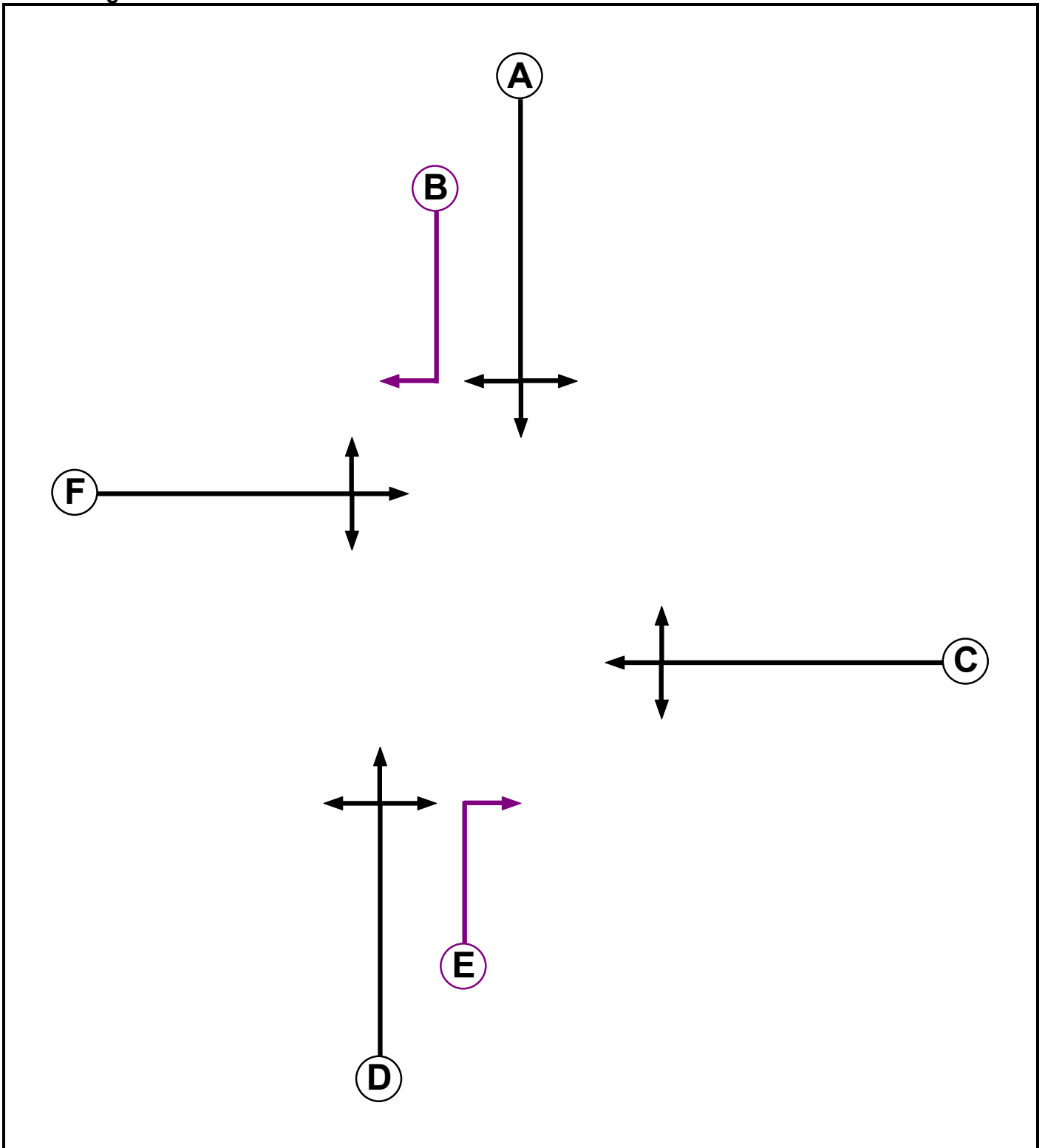
User and Project Details

Project:	
Title:	
Location:	
Additional detail:	
File name:	26_Further_Mitigation - B6047 x Leicester Ln x Gallow Field Rd.lsg3x
Author:	
Company:	
Address:	

Network Layout Diagram



Phase Diagram



Full Input Data And Results

Phase Input Data

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

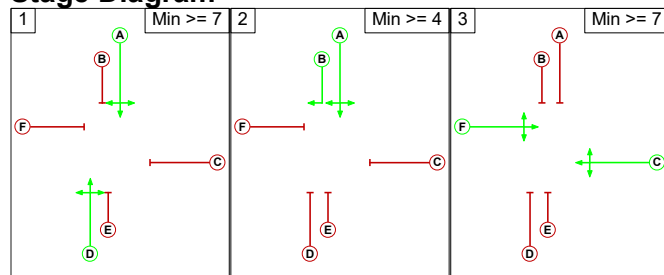
Phase Intergreens Matrix

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

Phases in Stage

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

Stage Diagram



Phase Delays

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

Prohibited Stage Change

From Stage	To Stage			
		1	2	3
	1			
	2			
	3			

Full Input Data And Results

Give-Way Lane Input Data

Junction: Harborough Road (B6047) / Leicester Lane / Gallow Field 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 (Harborough Road N)	8/1 (Right)	1439	0	5/1	1.09	All	2.00	-	0.50	2	2.00
3/2 (Leicester Lane)	2/1 (Right)	1439	0	7/2	1.09	To 4/1 (Ahead) To 6/1 (Right)	2.00	2.00	0.50	2	2.00
5/2 (Harborough Road S)	4/1 (Right)	1439	0	1/1	1.09	All	2.00	-	0.50	2	2.00
7/2 (Gallow Field Road)	6/1 (Right)	1439	0	3/2	1.09	To 8/1 (Ahead)	2.00	2.00	0.50	2	2.00

Full Input Data And Results

Lane Input Data

Junction: Harborough Road (B6047) / Leicester Lane / Gallow Field 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 (Harborough Road N)	U	A	2	3	60.0	Geom	-	4.50	0.00	Y	Arm 4 Left	8.00
											Arm 6 Ahead	Inf
1/2 (Harborough Road N)	O	A B	2	3	6.0	Geom	-	3.50	0.00	N	Arm 8 Right	5.50
2/1	U		2	3	60.0	Inf	-	-	-	-	-	-
3/1 (Leicester Lane)	U	C	2	3	8.7	Geom	-	3.25	0.00	Y	Arm 6 Left	Inf
3/2 (Leicester Lane)	O	C	2	3	60.0	Geom	-	3.25	0.00	Y	Arm 2 Right	12.50
											Arm 8 Ahead	Inf
4/1	U		2	3	60.0	Inf	-	-	-	-	-	-
5/1 (Harborough Road S)	U	D	2	3	60.0	Geom	-	4.50	0.00	Y	Arm 2 Ahead	Inf
											Arm 8 Left	8.00
5/2 (Harborough Road S)	O	D E	2	3	6.0	Geom	-	3.50	0.00	N	Arm 4 Right	7.00
6/1	U		2	3	60.0	Inf	-	-	-	-	-	-
7/1 (Gallow Field Road)	U	F	2	3	8.7	Geom	-	3.25	0.00	Y	Arm 2 Left	Inf
7/2 (Gallow Field Road)	O	F	2	3	60.0	Geom	-	3.50	0.00	Y	Arm 4 Ahead	Inf
											Arm 6 Right	8.00
8/1	U		2	3	60.0	Inf	-	-	-	-	-	-

Traffic Flow Groups

Flow Group	Start Time	End Time	Duration	Formula
1: '2041 Pref AM'	08:00	09:00	01:00	
2: '2041 Pref PM'	17:00	18:00	01:00	
3: '2041 Core AM'	08:00	09:00	01:00	
4: '2041 Core PM'	17:00	18:00	01:00	

Scenario 1: '2041 Pref AM' (FG1: '2041 Pref AM', Plan 1: 'Network Control Plan 1')**Traffic Flows, Desired****Desired Flow :**

	Destination					
Origin		A	B	C	D	Tot.
	A	0	86	767	132	985
	B	138	0	115	138	391
	C	974	19	0	104	1097
	D	146	60	112	0	318
	Tot.	1258	165	994	374	2791

Traffic Lane Flows

Lane	Scenario 1: 2041 Pref AM
Junction: Harborough Road (B6047) / Leicester Lane / Gallow Field Road	
1/1 (with short)	985(In) 853(Out)
1/2 (short)	132
2/1	1258
3/1 (short)	115
3/2 (with short)	391(In) 276(Out)
4/1	165
5/1 (with short)	1097(In) 1078(Out)
5/2 (short)	19
6/1	994
7/1 (short)	146
7/2 (with short)	318(In) 172(Out)
8/1	374

Lane Saturation Flows

Junction: Harborough Road (B6047) / Leicester Lane / Gallow Field 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 (Harborough Road N)	4.50	0.00	Y	Arm 4 Left	8.00	10.1 %	2027	2027
				Arm 6 Ahead	Inf	89.9 %		
1/2 (Harborough Road N)	3.50	0.00	N	Arm 8 Right	5.50	100.0 %	1654	1654
2/1	Infinite Saturation Flow						Inf	Inf
3/1 (Leicester Lane)	3.25	0.00	Y	Arm 6 Left	Inf	100.0 %	1940	1940
3/2 (Leicester Lane)	3.25	0.00	Y	Arm 2 Right	12.50	50.0 %	1830	1830
				Arm 8 Ahead	Inf	50.0 %		
4/1	Infinite Saturation Flow						Inf	Inf
5/1 (Harborough Road S)	4.50	0.00	Y	Arm 2 Ahead	Inf	90.4 %	2028	2028
				Arm 8 Left	8.00	9.6 %		
5/2 (Harborough Road S)	3.50	0.00	N	Arm 4 Right	7.00	100.0 %	1734	1734
6/1	Infinite Saturation Flow						Inf	Inf
7/1 (Gallow Field Road)	3.25	0.00	Y	Arm 2 Left	Inf	100.0 %	1940	1940
7/2 (Gallow Field Road)	3.50	0.00	Y	Arm 4 Ahead	Inf	34.9 %	1751	1751
				Arm 6 Right	8.00	65.1 %		
8/1	Infinite Saturation Flow						Inf	Inf

Scenario 2: '2041 Pref PM' (FG2: '2041 Pref PM', Plan 1: 'Network Control Plan 1')**Traffic Flows, Desired****Desired Flow :**

Origin	Destination					
		A	B	C	D	Tot.
	A	0	87	746	109	942
	B	114	0	94	147	355
	C	1081	19	0	111	1211
	D	208	51	76	0	335
	Tot.	1403	157	916	367	2843

Traffic Lane Flows

Lane	Scenario 2: 2041 Pref PM
Junction: Harborough Road (B6047) / Leicester Lane / Gallow Field Road	
1/1 (with short)	942(In) 833(Out)
1/2 (short)	109
2/1	1403
3/1 (short)	94
3/2 (with short)	355(In) 261(Out)
4/1	157
5/1 (with short)	1211(In) 1192(Out)
5/2 (short)	19
6/1	916
7/1 (short)	208
7/2 (with short)	335(In) 127(Out)
8/1	367

Lane Saturation Flows

Junction: Harborough Road (B6047) / Leicester Lane / Gallow Field 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 (Harborough Road N)	4.50	0.00	Y	Arm 4 Left	8.00	10.4 %	2025	2025
				Arm 6 Ahead	Inf	89.6 %		
1/2 (Harborough Road N)	3.50	0.00	N	Arm 8 Right	5.50	100.0 %	1654	1654
2/1	Infinite Saturation Flow						Inf	Inf
3/1 (Leicester Lane)	3.25	0.00	Y	Arm 6 Left	Inf	100.0 %	1940	1940
3/2 (Leicester Lane)	3.25	0.00	Y	Arm 2 Right	12.50	43.7 %	1843	1843
				Arm 8 Ahead	Inf	56.3 %		
4/1	Infinite Saturation Flow						Inf	Inf
5/1 (Harborough Road S)	4.50	0.00	Y	Arm 2 Ahead	Inf	90.7 %	2030	2030
				Arm 8 Left	8.00	9.3 %		
5/2 (Harborough Road S)	3.50	0.00	N	Arm 4 Right	7.00	100.0 %	1734	1734
6/1	Infinite Saturation Flow						Inf	Inf
7/1 (Gallow Field Road)	3.25	0.00	Y	Arm 2 Left	Inf	100.0 %	1940	1940
7/2 (Gallow Field Road)	3.50	0.00	Y	Arm 4 Ahead	Inf	40.2 %	1767	1767
				Arm 6 Right	8.00	59.8 %		
8/1	Infinite Saturation Flow						Inf	Inf

Scenario 3: '2041 Core AM' (FG3: '2041 Core AM', Plan 1: 'Network Control Plan 1')**Traffic Flows, Desired****Desired Flow :**

	Destination					
		A	B	C	D	Tot.
Origin	A	0	84	748	129	961
	B	118	0	98	118	334
	C	992	19	0	106	1117
	D	62	26	48	0	136
	Tot.	1172	129	894	353	2548

Traffic Lane Flows

Lane	Scenario 3: 2041 Core AM
Junction: Harborough Road (B6047) / Leicester Lane / Gallow Field Road	
1/1 (with short)	961(In) 832(Out)
1/2 (short)	129
2/1	1172
3/1 (short)	98
3/2 (with short)	334(In) 236(Out)
4/1	129
5/1 (with short)	1117(In) 1098(Out)
5/2 (short)	19
6/1	894
7/1 (short)	62
7/2 (with short)	136(In) 74(Out)
8/1	353

Lane Saturation Flows

Junction: Harborough Road (B6047) / Leicester Lane / Gallow Field 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 (Harborough Road N)	4.50	0.00	Y	Arm 4 Left	8.00	10.1 %	2027	2027
				Arm 6 Ahead	Inf	89.9 %		
1/2 (Harborough Road N)	3.50	0.00	N	Arm 8 Right	5.50	100.0 %	1654	1654
2/1	Infinite Saturation Flow						Inf	Inf
3/1 (Leicester Lane)	3.25	0.00	Y	Arm 6 Left	Inf	100.0 %	1940	1940
3/2 (Leicester Lane)	3.25	0.00	Y	Arm 2 Right	12.50	50.0 %	1830	1830
				Arm 8 Ahead	Inf	50.0 %		
4/1	Infinite Saturation Flow						Inf	Inf
5/1 (Harborough Road S)	4.50	0.00	Y	Arm 2 Ahead	Inf	90.3 %	2028	2028
				Arm 8 Left	8.00	9.7 %		
5/2 (Harborough Road S)	3.50	0.00	N	Arm 4 Right	7.00	100.0 %	1734	1734
6/1	Infinite Saturation Flow						Inf	Inf
7/1 (Gallow Field Road)	3.25	0.00	Y	Arm 2 Left	Inf	100.0 %	1940	1940
7/2 (Gallow Field Road)	3.50	0.00	Y	Arm 4 Ahead	Inf	35.1 %	1752	1752
				Arm 6 Right	8.00	64.9 %		
8/1	Infinite Saturation Flow						Inf	Inf

Scenario 4: '2041 Core PM' (FG4: '2041 Core PM', Plan 1: 'Network Control Plan 1')**Traffic Flows, Desired****Desired Flow :**

Origin	Destination					
		A	B	C	D	Tot.
	A	0	81	691	101	873
	B	86	0	71	111	268
	C	1029	19	0	106	1154
	D	195	48	71	0	314
	Tot.	1310	148	833	318	2609

Traffic Lane Flows

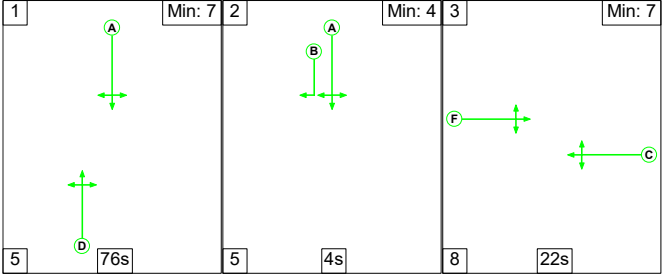
Lane	Scenario 4: 2041 Core PM
Junction: Harborough Road (B6047) / Leicester Lane / Gallow Field Road	
1/1 (with short)	873(In) 772(Out)
1/2 (short)	101
2/1	1310
3/1 (short)	71
3/2 (with short)	268(In) 197(Out)
4/1	148
5/1 (with short)	1154(In) 1135(Out)
5/2 (short)	19
6/1	833
7/1 (short)	195
7/2 (with short)	314(In) 119(Out)
8/1	318

Lane Saturation Flows

Junction: Harborough Road (B6047) / Leicester Lane / Gallow Field 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 (Harborough Road N)	4.50	0.00	Y	Arm 4 Left	8.00	10.5 %	2025	2025
				Arm 6 Ahead	Inf	89.5 %		
1/2 (Harborough Road N)	3.50	0.00	N	Arm 8 Right	5.50	100.0 %	1654	1654
2/1	Infinite Saturation Flow						Inf	Inf
3/1 (Leicester Lane)	3.25	0.00	Y	Arm 6 Left	Inf	100.0 %	1940	1940
3/2 (Leicester Lane)	3.25	0.00	Y	Arm 2 Right	12.50	43.7 %	1843	1843
				Arm 8 Ahead	Inf	56.3 %		
4/1	Infinite Saturation Flow						Inf	Inf
5/1 (Harborough Road S)	4.50	0.00	Y	Arm 2 Ahead	Inf	90.7 %	2029	2029
				Arm 8 Left	8.00	9.3 %		
5/2 (Harborough Road S)	3.50	0.00	N	Arm 4 Right	7.00	100.0 %	1734	1734
6/1	Infinite Saturation Flow						Inf	Inf
7/1 (Gallow Field Road)	3.25	0.00	Y	Arm 2 Left	Inf	100.0 %	1940	1940
7/2 (Gallow Field Road)	3.50	0.00	Y	Arm 4 Ahead	Inf	40.3 %	1767	1767
				Arm 6 Right	8.00	59.7 %		
8/1	Infinite Saturation Flow						Inf	Inf

Scenario 1: '2041 Pref AM' (FG1: '2041 Pref AM', Plan 1: 'Network Control Plan 1')

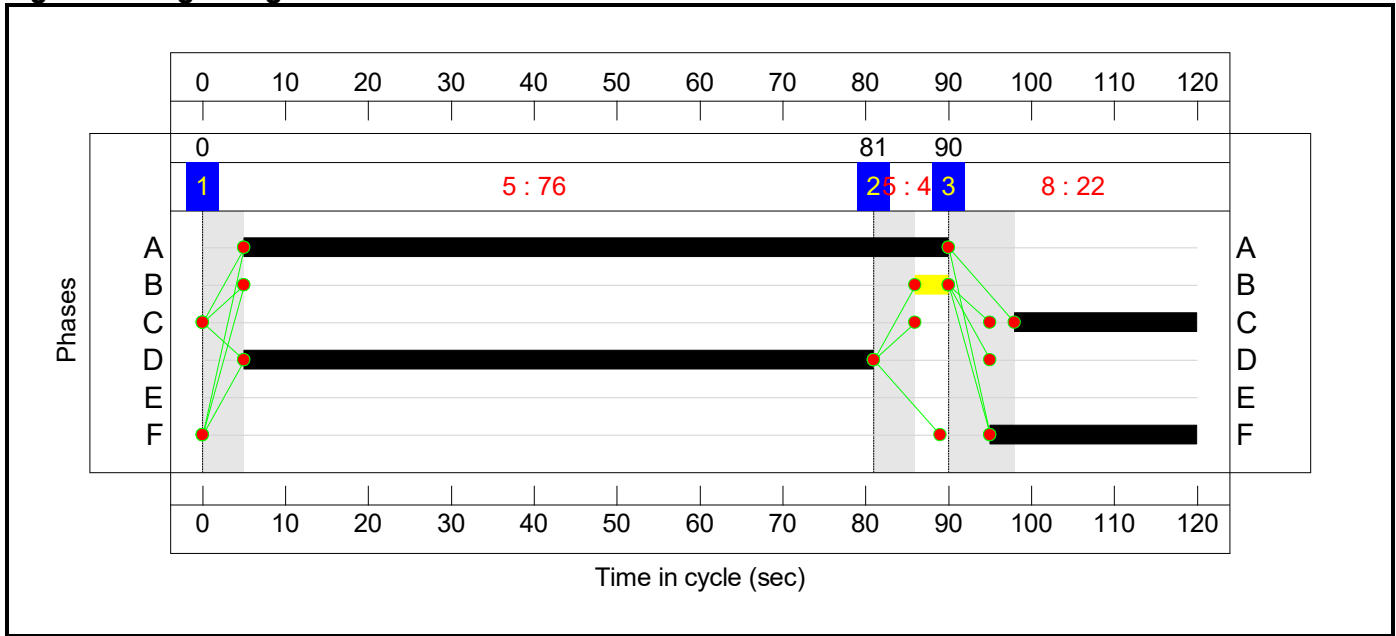
Stage Sequence Diagram



Stage Timings

Stage	1	2	3
Duration	76	4	22
Change Point	0	81	90

Signal Timings Diagram

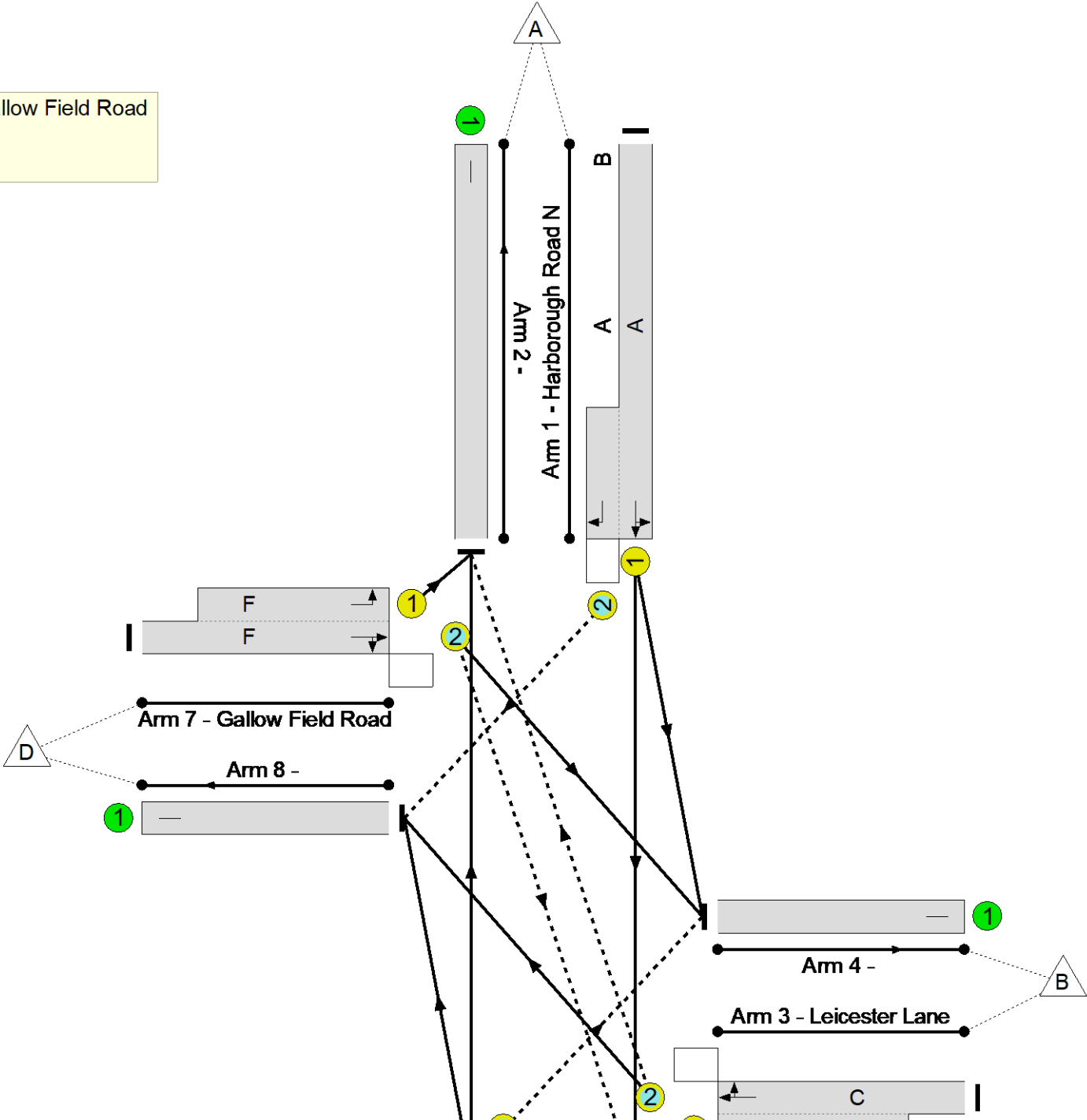




Harborough Road (B6047) / Leicester Lane / Gallow Field Road

PRC: 6.3 %

Total Traffic Delay: 25.0 pcuHr



Full Input Data And Results

Network Results

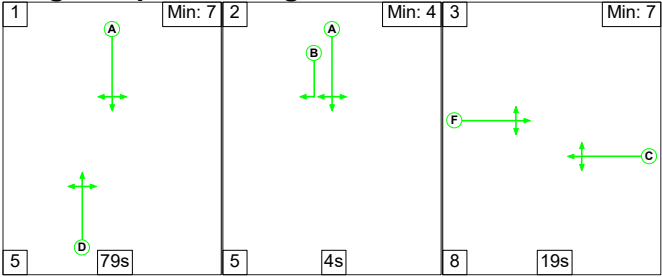
Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network	-	-	N/A	-	-		-	-	-	-	-	-	84.7%
Harborough Road (B6047) / Leicester Lane / Gallow Field Road	-	-	N/A	-	-		-	-	-	-	-	-	84.7%
1/1+1/2	Harborough Road N Left Ahead Right	U+O	N/A	N/A	A	B	1	85	4	985	2027:1654	1245+193	68.5 : 68.5%
2/1		U	N/A	N/A	-		-	-	-	1258	Inf	Inf	0.0%
3/2+3/1	Leicester Lane Right Left Ahead	O+U	N/A	N/A	C		1	22	-	391	1830:1940	331+138	83.4 : 83.4%
4/1		U	N/A	N/A	-		-	-	-	165	Inf	Inf	0.0%
5/1+5/2	Harborough Road S Ahead Right Left	U+O	N/A	N/A	D	E	1	76	0	1097	2028:1734	1273+22	84.7 : 84.7%
6/1		U	N/A	N/A	-		-	-	-	994	Inf	Inf	0.0%
7/2+7/1	Gallow Field Road Left Ahead Right	O+U	N/A	N/A	F		1	25	-	318	1751:1940	256+217	67.2 : 67.2%
8/1		U	N/A	N/A	-		-	-	-	374	Inf	Inf	0.0%

Full Input Data And Results

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Full Input Data And Results
Scenario 2: '2041 Pref PM' (FG2: '2041 Pref PM', Plan 1: 'Network Control Plan 1')

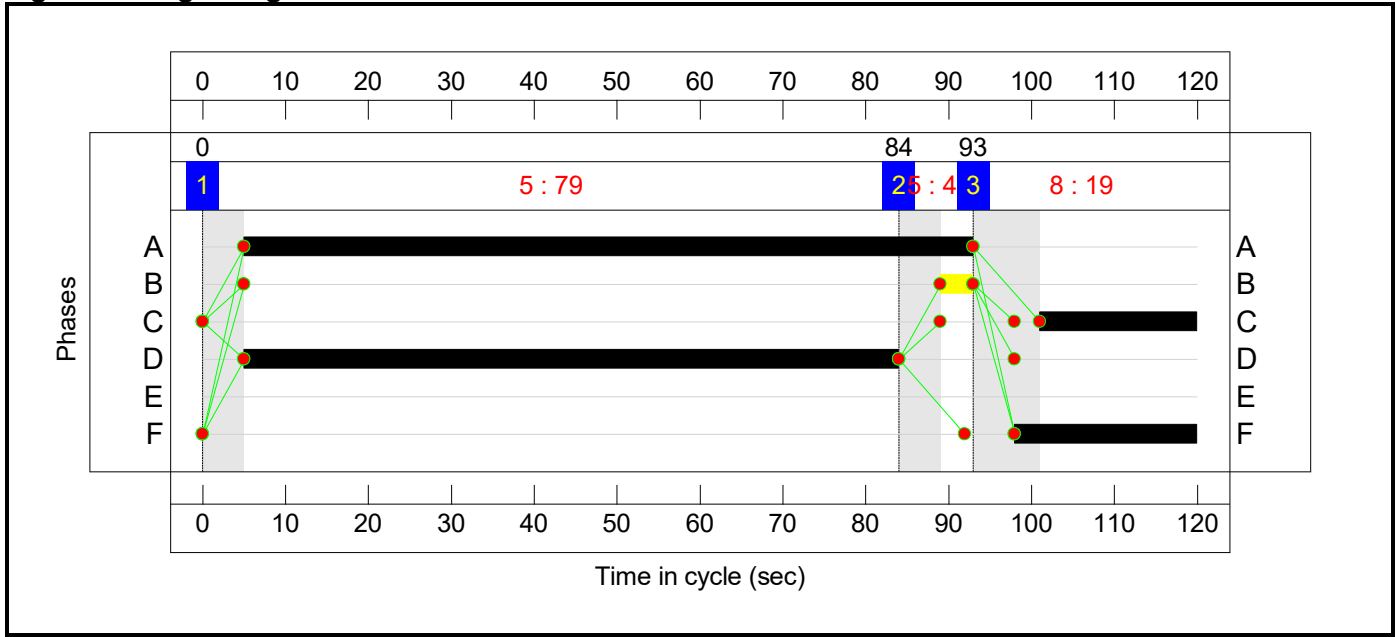
Stage Sequence Diagram



Stage Timings

Stage	1	2	3
Duration	79	4	19
Change Point	0	84	93

Signal Timings Diagram

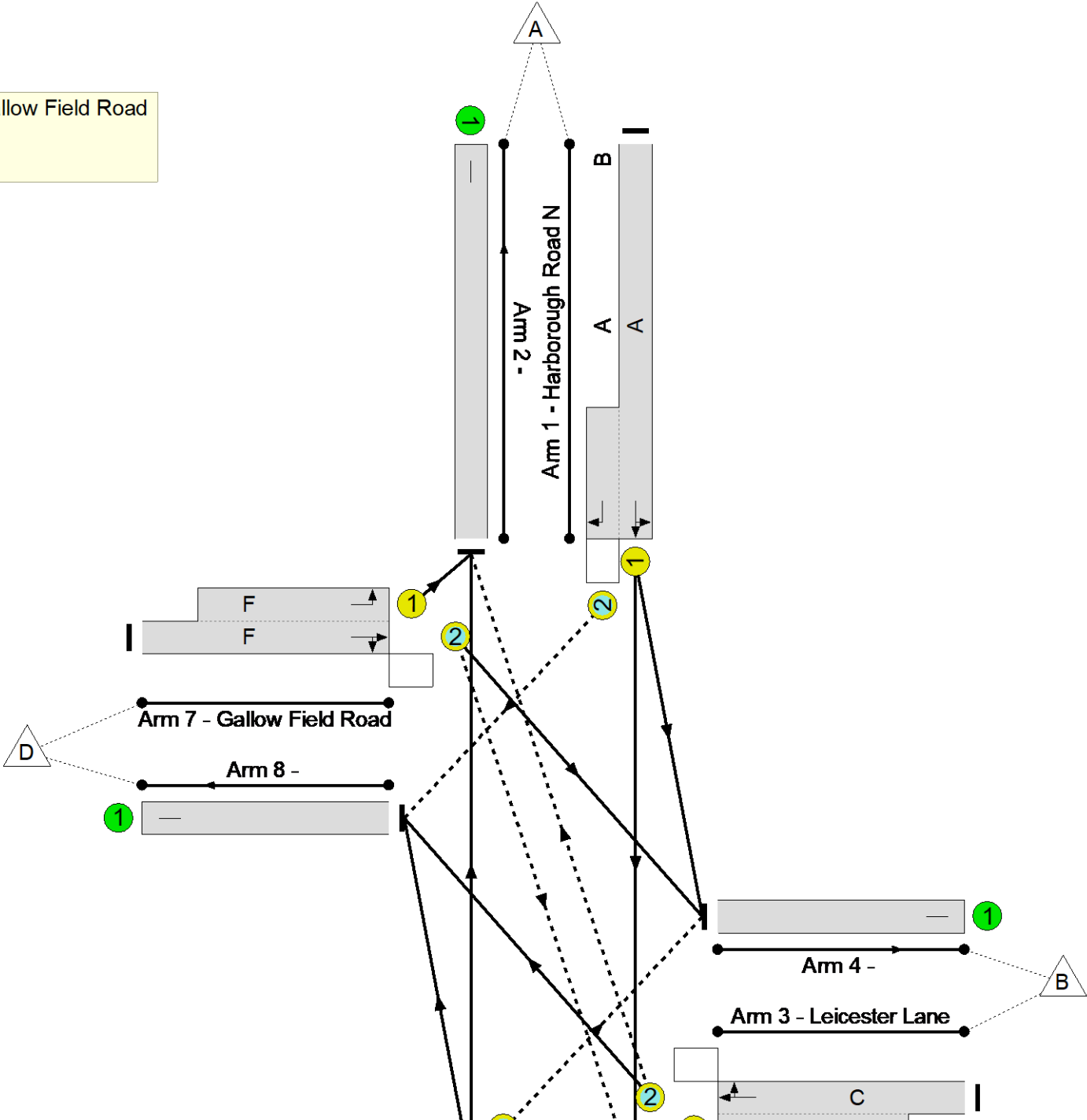




Harborough Road (B6047) / Leicester Lane / Gallow Field Road

PRC: 0.1 %

Total Traffic Delay: 26.6 pcuHr



Full Input Data And Results

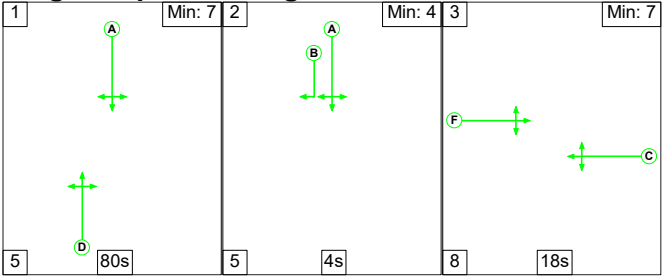
Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network	-	-	N/A	-	-		-	-	-	-	-	-	89.9%
Harborough Road (B6047) / Leicester Lane / Gallow Field Road	-	-	N/A	-	-		-	-	-	-	-	-	89.9%
1/1+1/2	Harborough Road N Left Ahead Right	U+O	N/A	N/A	A	B	1	88	4	942	2025:1654	1314+172	63.4 : 63.4%
2/1		U	N/A	N/A	-		-	-	-	1403	Inf	Inf	0.0%
3/2+3/1	Leicester Lane Right Left Ahead	O+U	N/A	N/A	C		1	19	-	355	1843:1940	300+108	87.1 : 87.1%
4/1		U	N/A	N/A	-		-	-	-	157	Inf	Inf	0.0%
5/1+5/2	Harborough Road S Ahead Right Left	U+O	N/A	N/A	D	E	1	79	0	1211	2030:1734	1326+21	89.9 : 89.9%
6/1		U	N/A	N/A	-		-	-	-	916	Inf	Inf	0.0%
7/2+7/1	Gallow Field Road Left Ahead Right	O+U	N/A	N/A	F		1	22	-	335	1767:1940	203+333	62.5 : 62.5%
8/1		U	N/A	N/A	-		-	-	-	367	Inf	Inf	0.0%

Full Input Data And Results

Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network	-	-	223	93	3	16.4	8.9	1.4	26.6	-	-	-	-
Harborough Road (B6047) / Leicester Lane / Gallow Field Road	-	-	223	93	3	16.4	8.9	1.4	26.6	-	-	-	-
1/1+1/2	942	942	23	84	2	2.1	0.9	1.1	4.1	15.5	13.9	0.9	14.7
2/1	1403	1403	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
3/2+3/1	355	355	113	0	1	4.7	3.0	0.0	7.7	78.2	8.4	3.0	11.4
4/1	157	157	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/1+5/2	1211	1211	19	0	0	5.6	4.2	0.0	9.8	29.2	33.2	4.2	37.4
6/1	916	916	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
7/2+7/1	335	335	67	9	0	4.0	0.8	0.2	5.0	54.0	6.2	0.8	7.1
8/1	367	367	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
C1 PRC for Signalled Lanes (%): 0.1 Total Delay for Signalled Lanes (pcuHr): 26.63 Cycle Time (s): 120 PRC Over All Lanes (%): 0.1 Total Delay Over All Lanes(pcuHr): 26.63													

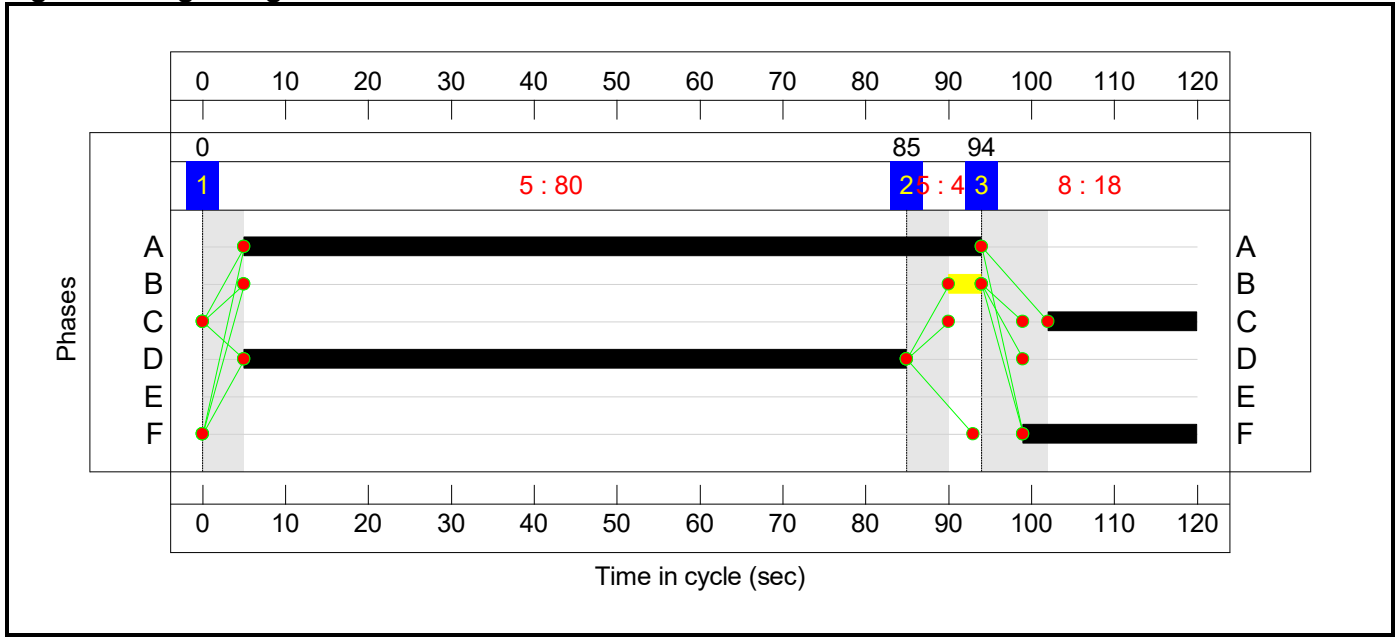
Stage Sequence Diagram



Stage Timings

Stage	1	2	3
Duration	80	4	18
Change Point	0	85	94

Signal Timings Diagram



Full Input Data And Results

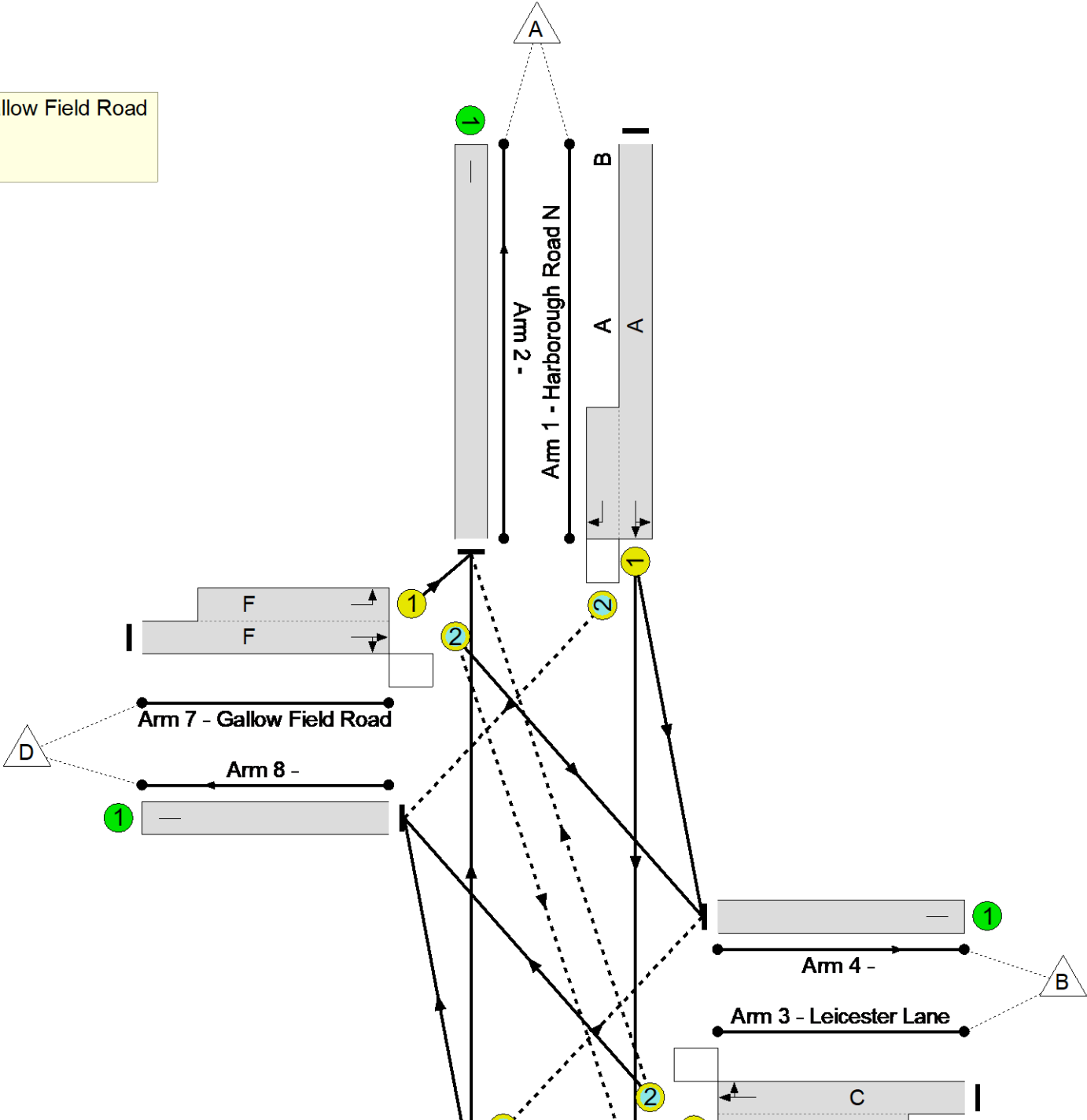
Network Layout Diagram



Harborough Road (B6047) / Leicester Lane / Gallow Field Road

PRC: 9.5 %

Total Traffic Delay: 19.2 pcuHr



Full Input Data And Results

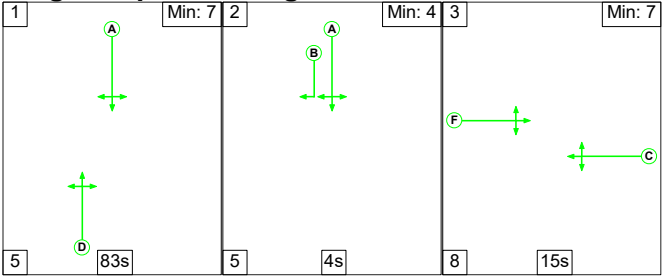
Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network	-	-	N/A	-	-		-	-	-	-	-	-	82.2%
Harborough Road (B6047) / Leicester Lane / Gallow Field Road	-	-	N/A	-	-		-	-	-	-	-	-	82.2%
1/1+1/2	Harborough Road N Left Ahead Right	U+O	N/A	N/A	A	B	1	89	4	961	2027:1654	1301+202	63.9 : 63.9%
2/1		U	N/A	N/A	-		-	-	-	1172	Inf	Inf	0.0%
3/2+3/1	Leicester Lane Right Left Ahead	O+U	N/A	N/A	C		1	18	-	334	1830:1940	287+119	82.2 : 82.2%
4/1		U	N/A	N/A	-		-	-	-	129	Inf	Inf	0.0%
5/1+5/2	Harborough Road S Ahead Right Left	U+O	N/A	N/A	D	E	1	80	0	1117	2028:1734	1340+23	82.0 : 82.0%
6/1		U	N/A	N/A	-		-	-	-	894	Inf	Inf	0.0%
7/2+7/1	Gallow Field Road Left Ahead Right	O+U	N/A	N/A	F		1	21	-	136	1752:1940	219+183	33.8 : 33.8%
8/1		U	N/A	N/A	-		-	-	-	353	Inf	Inf	0.0%

Full Input Data And Results

[illegible]

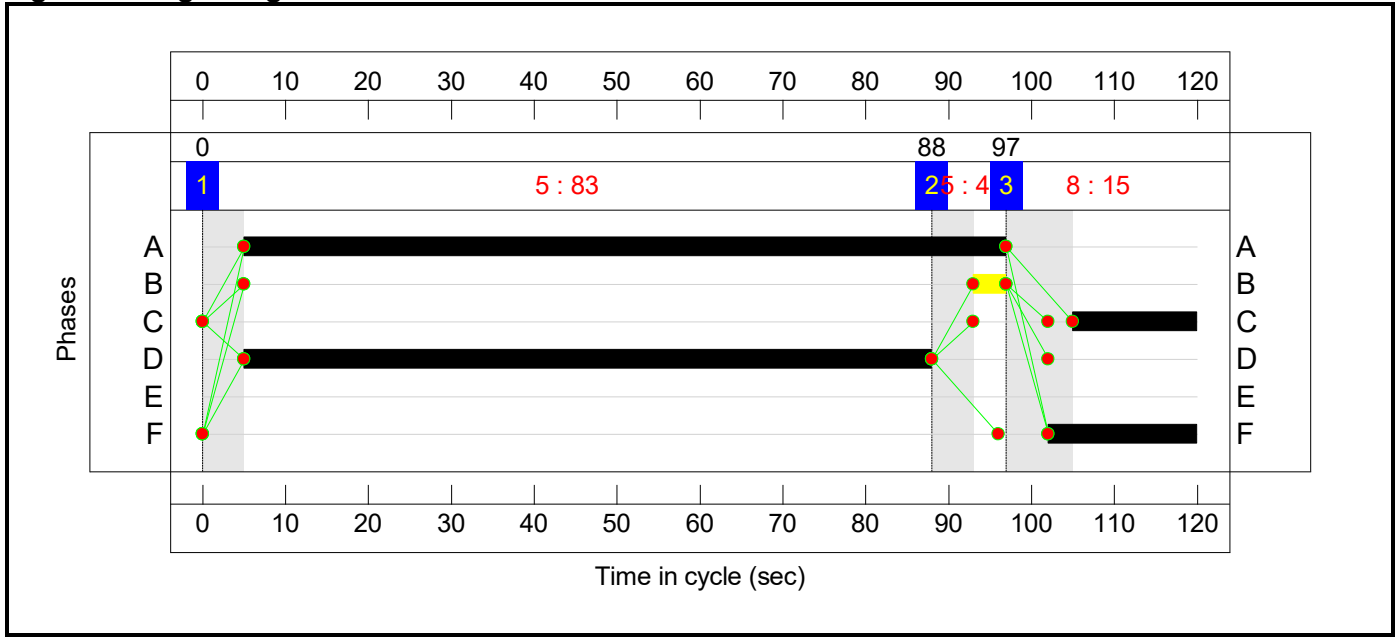
Stage Sequence Diagram



Stage Timings

Stage	1	2	3
Duration	83	4	15
Change Point	0	88	97

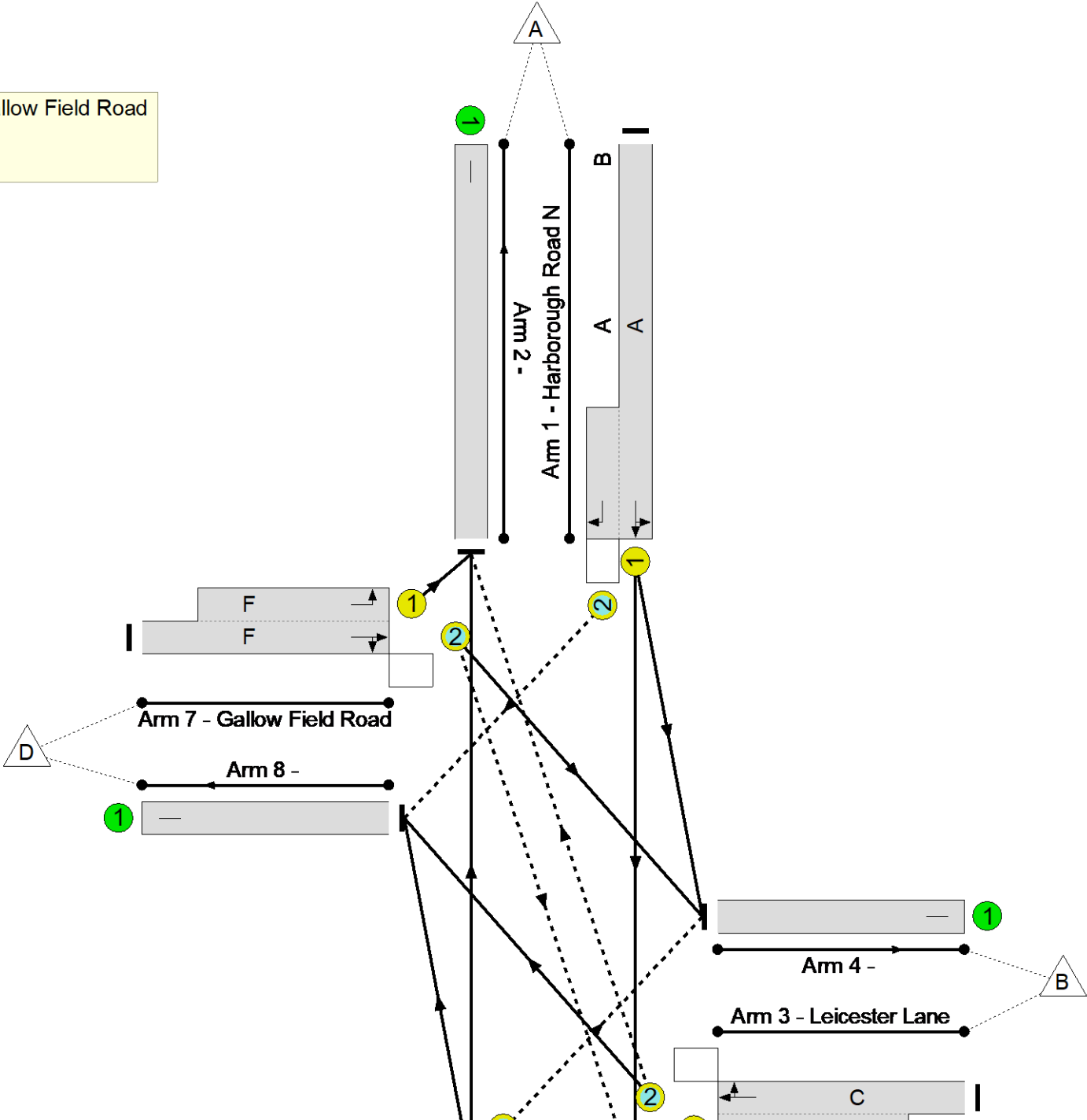
Signal Timings Diagram



Harborough Road (B6047) / Leicester Lane / Gallow Field Road

PRC: 10.3 %

Total Traffic Delay: 19.9 pcuHr



Full Input Data And Results

Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network	-	-	N/A	-	-		-	-	-	-	-	-	81.6%
Harborough Road (B6047) / Leicester Lane / Gallow Field Road	-	-	N/A	-	-		-	-	-	-	-	-	81.6%
1/1+1/2	Harborough Road N Left Ahead Right	U+O	N/A	N/A	A	B	1	92	4	873	2025:1654	1373+180	56.2 : 56.2%
2/1		U	N/A	N/A	-		-	-	-	1310	Inf	Inf	0.0%
3/2+3/1	Leicester Lane Right Left Ahead	O+U	N/A	N/A	C		1	15	-	268	1843:1940	246+89	80.2 : 80.2%
4/1		U	N/A	N/A	-		-	-	-	148	Inf	Inf	0.0%
5/1+5/2	Harborough Road S Ahead Right Left	U+O	N/A	N/A	D	E	1	83	0	1154	2029:1734	1391+23	81.6 : 81.6%
6/1		U	N/A	N/A	-		-	-	-	833	Inf	Inf	0.0%
7/2+7/1	Gallow Field Road Left Ahead Right	O+U	N/A	N/A	F		1	18	-	314	1767:1940	179+294	66.3 : 66.3%
8/1		U	N/A	N/A	-		-	-	-	318	Inf	Inf	0.0%

Full Input Data And Results

Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network	-	-	226	48	2	13.0	5.7	1.2	19.9	-	-	-	-
Harborough Road (B6047) / Leicester Lane / Gallow Field Road	-	-	226	48	2	13.0	5.7	1.2	19.9	-	-	-	-
1/1+1/2	873	873	60	40	2	1.2	0.6	1.0	2.9	11.9	10.1	0.6	10.8
2/1	1310	1310	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
3/2+3/1	268	268	85	0	1	3.7	1.9	0.0	5.6	75.4	6.3	1.9	8.3
4/1	148	148	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/1+5/2	1154	1154	19	0	0	4.0	2.2	0.0	6.2	19.5	26.8	2.2	29.0
6/1	833	833	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
7/2+7/1	314	314	62	9	0	4.1	1.0	0.1	5.2	59.3	6.1	1.0	7.0
8/1	318	318	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
C1 PRC for Signalled Lanes (%): 10.3 Total Delay for Signalled Lanes (pcuHr): 19.91 Cycle Time (s): 120 PRC Over All Lanes (%): 10.3 Total Delay Over All Lanes(pcuHr): 19.91													

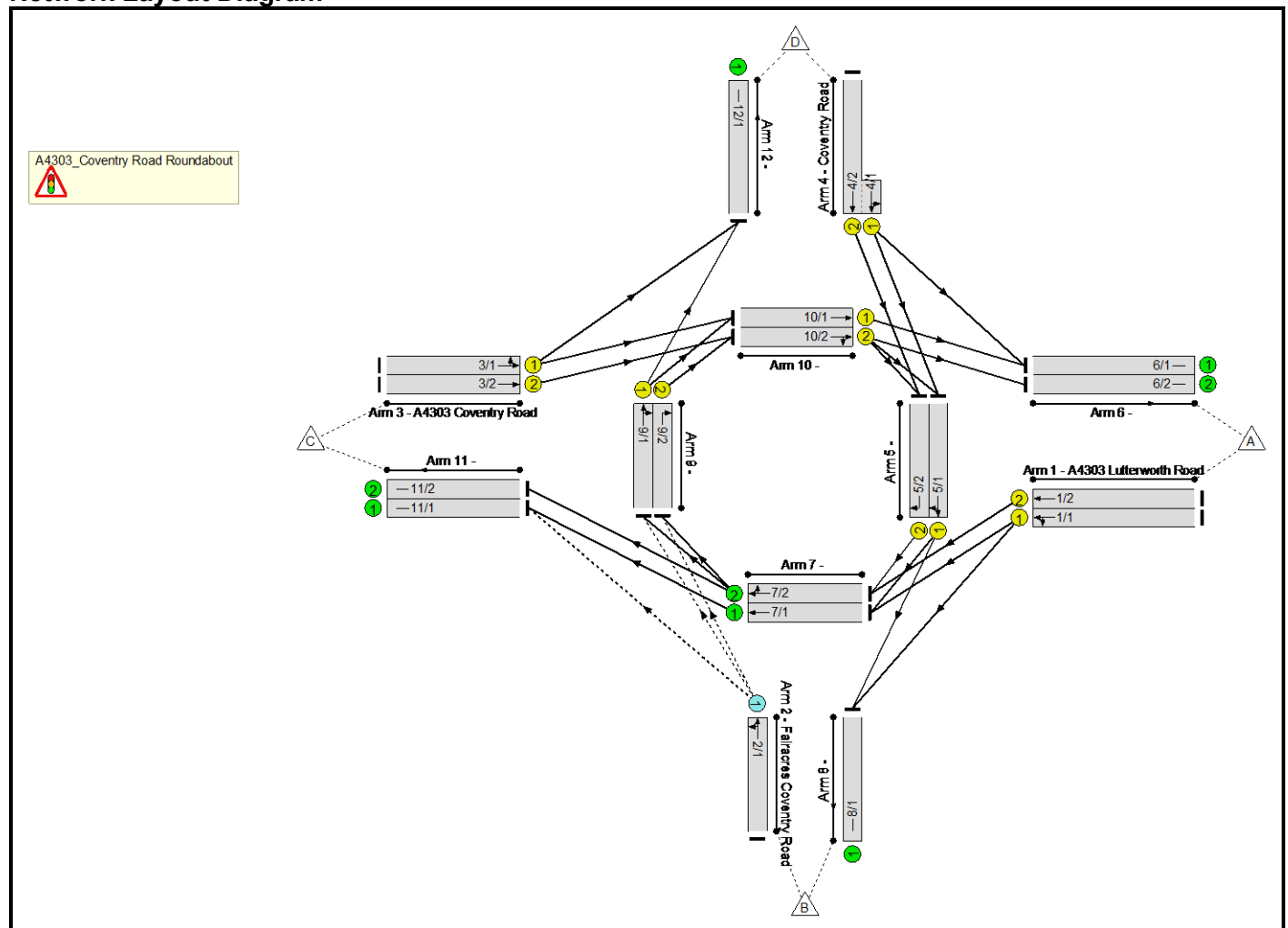
Full Input Data And Results

Full Input Data And Results

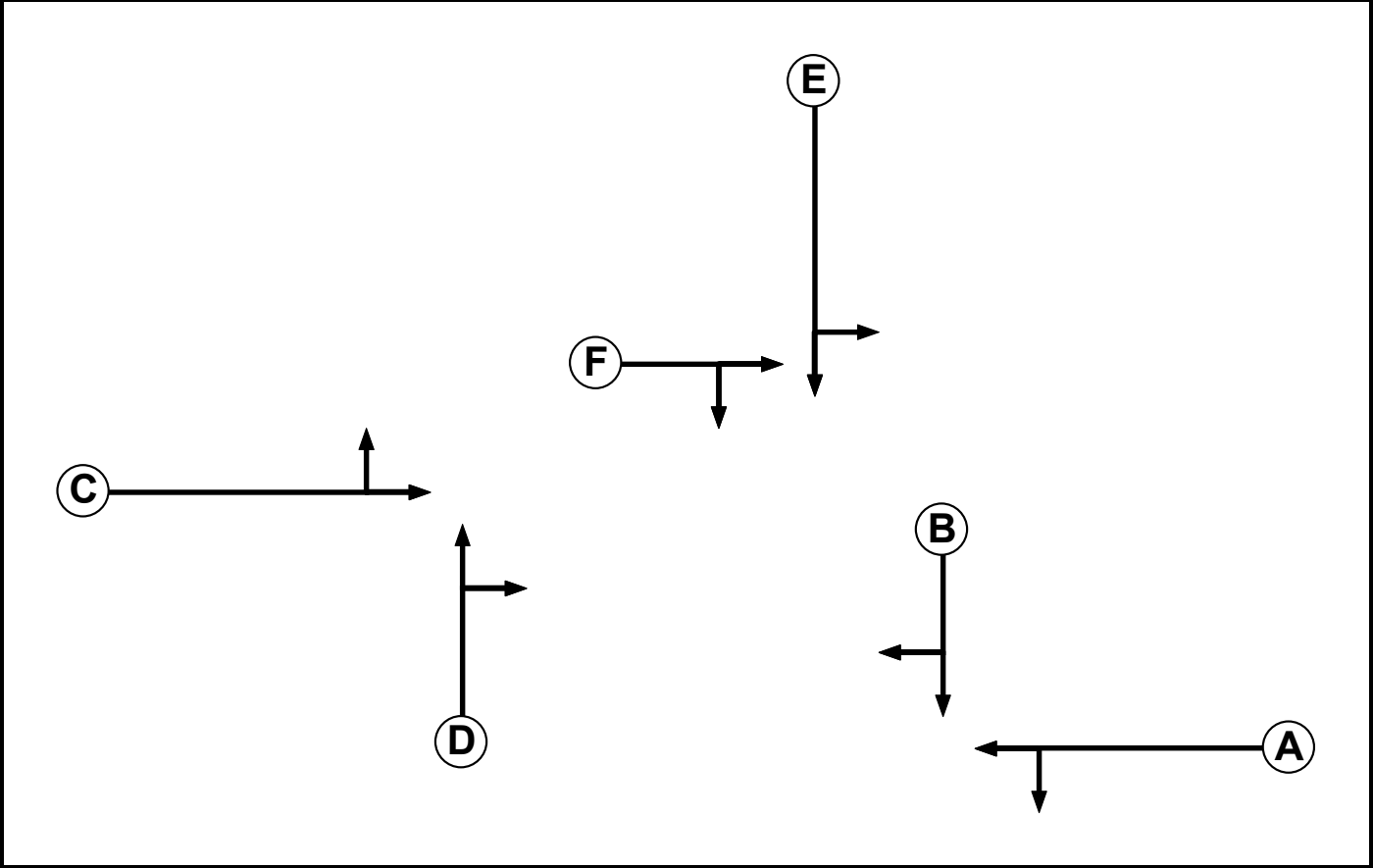
User and Project Details

Project:	
Title:	
Location:	
Additional detail:	
File name:	A4303_Coventry Road signalised roundabout.lsg3x
Author:	
Company:	
Address:	

Network Layout Diagram



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	2		7	7
D	Traffic	2		7	7
E	Traffic	3		7	7
F	Traffic	3		7	7

Phase Intergreens Matrix

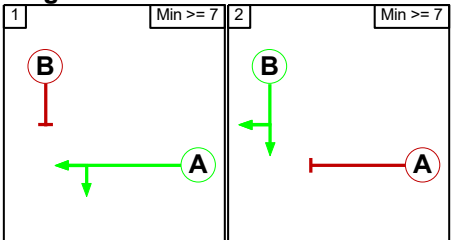
Terminating Phase	Starting Phase						
		A	B	C	D	E	F
	A		5	-	-	-	-
	B	5		-	-	-	-
	C	-	-		5	-	-
	D	-	-	5		-	-
	E	-	-	-	-		5
	F	-	-	-	-	5	

Phases in Stage

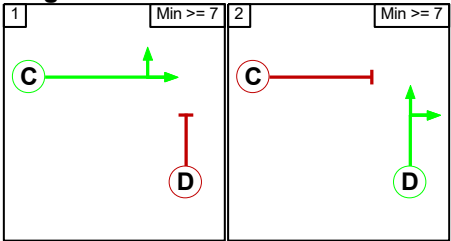
Stream	Stage No.	Phases in Stage
1	1	A
1	2	B
2	1	C
2	2	D
3	1	E
3	2	F

Stage Diagram

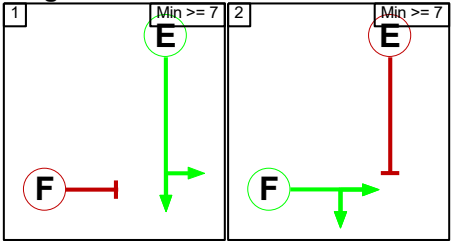
Stage Stream: 1



Stage Stream: 2



Stage Stream: 3



Phase Delays

Stage Stream: 1

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

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

	To Stage		
From Stage		1	2
	1		5
	2	5	

Stage Stream: 2

	To Stage		
From Stage		1	2
	1		5
	2	5	

Stage Stream: 3

	To Stage		
From Stage		1	2
	1		5
	2	5	

Full Input Data And Results

Give-Way Lane Input Data

Junction: A4303_Coventry Road Roundabout											
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 (Fairacres Coventry Road)	9/1 (Ahead)	1154	0	7/1	0.45	All	-	-	-	-	-
				8/1	0.45	All					
	9/2 (Ahead)	1154	0	7/1	0.45	All					
				7/2	0.45	All					
	11/1 (Left)	1154	0	7/1	0.45	All					
				7/2	0.45	All					

Full Input Data And Results

Lane Input Data

Junction: A4303_Coventry Road Roundabout												
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 (A4303 Lutterworth Road)	U	A	2	3	60.0	Geom	-	3.25	0.00	Y	Arm 7 Ahead	Inf
											Arm 8 Left	45.00
1/2 (A4303 Lutterworth Road)	U	A	2	3	60.0	Geom	-	3.25	0.00	N	Arm 7 Ahead	Inf
2/1 (Fairacres Coventry Road)	O		2	3	60.0	Geom	-	3.50	0.00	Y	Arm 9 Ahead	Inf
											Arm 11 Left	40.00
3/1 (A4303 Coventry Road)	U	C	2	3	60.0	Geom	-	3.50	0.00	Y	Arm 10 Ahead	Inf
											Arm 12 Left	50.00
3/2 (A4303 Coventry Road)	U	C	2	3	60.0	Geom	-	3.50	0.00	N	Arm 10 Ahead	Inf
4/1 (Coventry Road)	U	E	2	3	2.6	Geom	-	3.00	0.00	Y	Arm 5 Ahead	Inf
											Arm 6 Left	20.00
4/2 (Coventry Road)	U	E	2	3	60.0	Geom	-	3.25	0.00	N	Arm 5 Ahead	Inf
5/1	U	B	2	3	3.0	User	1900	-	-	-	-	-
5/2	U	B	2	3	3.0	User	1900	-	-	-	-	-
6/1	U		2	3	60.0	Inf	-	-	-	-	-	-
6/2	U		2	3	60.0	Inf	-	-	-	-	-	-
7/1	U		2	3	3.0	User	1900	-	-	-	-	-
7/2	U		2	3	3.0	User	1900	-	-	-	-	-
8/1	U		2	3	60.0	Inf	-	-	-	-	-	-
9/1	U	D	2	3	3.0	User	1900	-	-	-	-	-
9/2	U	D	2	3	3.0	User	1900	-	-	-	-	-
10/1	U	F	2	3	3.0	User	1900	-	-	-	-	-
10/2	U	F	2	3	3.0	User	1900	-	-	-	-	-
11/1	U		2	3	60.0	Inf	-	-	-	-	-	-
11/2	U		2	3	60.0	Inf	-	-	-	-	-	-
12/1	U		2	3	60.0	Inf	-	-	-	-	-	-

Full Input Data And Results

Traffic Flow Groups

Flow Group	Start Time	End Time	Duration	Formula
1: '2041 Core AM'	08:00	09:00	01:00	
2: '2041 Core PM'	17:00	18:00	01:00	
3: '2041 Pref AM'	08:00	09:00	01:00	
4: '2041 Pref PM'	17:00	18:00	01:00	

Scenario 1: '2041 Core AM' (FG1: '2041 Core AM', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired

Desired Flow :

Origin	Destination					
		A	B	C	D	Tot.
	A	0	52	1153	122	1327
	B	59	0	39	47	145
	C	767	32	0	321	1120
	D	166	25	405	0	596
	Tot.	992	109	1597	490	3188

Full Input Data And Results

Traffic Lane Flows

Lane	Scenario 1: 2041 Core AM
Junction: A4303_Coventry Road Roundabout	
1/1	663
1/2	664
2/1	145
3/1	560
3/2	560
4/1 (short)	298
4/2 (with short)	596(In) 298(Out)
5/1	164
5/2	298
6/1	435
6/2	557
7/1	718
7/2	962
8/1	109
9/1	199
9/2	29
10/1	269
10/2	589
11/1	757
11/2	840
12/1	490

Lane Saturation Flows

Junction: A4303_Coventry Road Roundabout								
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 (A4303 Lutterworth Road)	3.25	0.00	Y	Arm 7 Ahead	Inf	92.2 %	1935	1935
				Arm 8 Left	45.00	7.8 %		
1/2 (A4303 Lutterworth Road)	3.25	0.00	N	Arm 7 Ahead	Inf	100.0 %	2080	2080
2/1 (Fairacres Coventry Road)	3.50	0.00	Y	Arm 9 Ahead	Inf	73.1 %	1945	1945
				Arm 11 Left	40.00	26.9 %		
3/1 (A4303 Coventry Road)	3.50	0.00	Y	Arm 10 Ahead	Inf	42.7 %	1932	1932
				Arm 12 Left	50.00	57.3 %		
3/2 (A4303 Coventry Road)	3.50	0.00	N	Arm 10 Ahead	Inf	100.0 %	2105	2105
4/1 (Coventry Road)	3.00	0.00	Y	Arm 5 Ahead	Inf	44.3 %	1838	1838
				Arm 6 Left	20.00	55.7 %		
4/2 (Coventry Road)	3.25	0.00	N	Arm 5 Ahead	Inf	100.0 %	2080	2080
5/1	This lane uses a directly entered Saturation Flow						1900	1900
5/2	This lane uses a directly entered Saturation Flow						1900	1900
6/1	Infinite Saturation Flow						Inf	Inf
6/2	Infinite Saturation Flow						Inf	Inf
7/1	This lane uses a directly entered Saturation Flow						1900	1900
7/2	This lane uses a directly entered Saturation Flow						1900	1900
8/1	Infinite Saturation Flow						Inf	Inf
9/1	This lane uses a directly entered Saturation Flow						1900	1900
9/2	This lane uses a directly entered Saturation Flow						1900	1900
10/1	This lane uses a directly entered Saturation Flow						1900	1900
10/2	This lane uses a directly entered Saturation Flow						1900	1900
11/1	Infinite Saturation Flow						Inf	Inf
11/2	Infinite Saturation Flow						Inf	Inf
12/1	Infinite Saturation Flow						Inf	Inf

Scenario 2: '2041 Core PM' (FG2: '2041 Core PM', Plan 1: 'Network Control Plan 1')**Traffic Flows, Desired****Desired Flow :**

	Destination					
		A	B	C	D	Tot.
Origin	A	0	41	666	160	867
	B	102	0	51	104	257
	C	862	22	0	718	1602
	D	157	44	230	0	431
	Tot.	1121	107	947	982	3157

Full Input Data And Results

Traffic Lane Flows

Lane	Scenario 2: 2041 Core PM
Junction: A4303_Coventry Road Roundabout	
1/1	433
1/2	434
2/1	257
3/1	801
3/2	801
4/1 (short)	216
4/2 (with short)	431(In) 215(Out)
5/1	81
5/2	215
6/1	291
6/2	830
7/1	407
7/2	649
8/1	107
9/1	315
9/2	51
10/1	134
10/2	852
11/1	458
11/2	489
12/1	982

Lane Saturation Flows

Junction: A4303_Coventry Road Roundabout								
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 (A4303 Lutterworth Road)	3.25	0.00	Y	Arm 7 Ahead	Inf	90.5 %	1934	1934
				Arm 8 Left	45.00	9.5 %		
1/2 (A4303 Lutterworth Road)	3.25	0.00	N	Arm 7 Ahead	Inf	100.0 %	2080	2080
2/1 (Fairacres Coventry Road)	3.50	0.00	Y	Arm 9 Ahead	Inf	80.2 %	1950	1950
				Arm 11 Left	40.00	19.8 %		
3/1 (A4303 Coventry Road)	3.50	0.00	Y	Arm 10 Ahead	Inf	10.4 %	1914	1914
				Arm 12 Left	50.00	89.6 %		
3/2 (A4303 Coventry Road)	3.50	0.00	N	Arm 10 Ahead	Inf	100.0 %	2105	2105
4/1 (Coventry Road)	3.00	0.00	Y	Arm 5 Ahead	Inf	27.3 %	1816	1816
				Arm 6 Left	20.00	72.7 %		
4/2 (Coventry Road)	3.25	0.00	N	Arm 5 Ahead	Inf	100.0 %	2080	2080
5/1	This lane uses a directly entered Saturation Flow						1900	1900
5/2	This lane uses a directly entered Saturation Flow						1900	1900
6/1	Infinite Saturation Flow						Inf	Inf
6/2	Infinite Saturation Flow						Inf	Inf
7/1	This lane uses a directly entered Saturation Flow						1900	1900
7/2	This lane uses a directly entered Saturation Flow						1900	1900
8/1	Infinite Saturation Flow						Inf	Inf
9/1	This lane uses a directly entered Saturation Flow						1900	1900
9/2	This lane uses a directly entered Saturation Flow						1900	1900
10/1	This lane uses a directly entered Saturation Flow						1900	1900
10/2	This lane uses a directly entered Saturation Flow						1900	1900
11/1	Infinite Saturation Flow						Inf	Inf
11/2	Infinite Saturation Flow						Inf	Inf
12/1	Infinite Saturation Flow						Inf	Inf

Scenario 3: '2041 Pref AM' (FG3: '2041 Pref AM', Plan 1: 'Network Control Plan 1')**Traffic Flows, Desired****Desired Flow :**

	Destination					
		A	B	C	D	Tot.
Origin	A	0	55	1223	130	1408
	B	59	0	40	47	146
	C	702	29	0	294	1025
	D	204	30	498	0	732
	Tot.	965	114	1761	471	3311

Full Input Data And Results

Traffic Lane Flows

Lane	Scenario 3: 2041 Pref AM
Junction: A4303_Coventry Road Roundabout	
1/1	704
1/2	704
2/1	146
3/1	513
3/2	512
4/1 (short)	366
4/2 (with short)	732(In) 366(Out)
5/1	191
5/2	366
6/1	453
6/2	512
7/1	781
7/2	1070
8/1	114
9/1	207
9/2	29
10/1	249
10/2	541
11/1	821
11/2	940
12/1	471

Lane Saturation Flows

Junction: A4303_Coventry Road Roundabout								
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 (A4303 Lutterworth Road)	3.25	0.00	Y	Arm 7 Ahead	Inf	92.2 %	1935	1935
				Arm 8 Left	45.00	7.8 %		
1/2 (A4303 Lutterworth Road)	3.25	0.00	N	Arm 7 Ahead	Inf	100.0 %	2080	2080
2/1 (Fairacres Coventry Road)	3.50	0.00	Y	Arm 9 Ahead	Inf	72.6 %	1945	1945
				Arm 11 Left	40.00	27.4 %		
3/1 (A4303 Coventry Road)	3.50	0.00	Y	Arm 10 Ahead	Inf	42.7 %	1932	1932
				Arm 12 Left	50.00	57.3 %		
3/2 (A4303 Coventry Road)	3.50	0.00	N	Arm 10 Ahead	Inf	100.0 %	2105	2105
4/1 (Coventry Road)	3.00	0.00	Y	Arm 5 Ahead	Inf	44.3 %	1838	1838
				Arm 6 Left	20.00	55.7 %		
4/2 (Coventry Road)	3.25	0.00	N	Arm 5 Ahead	Inf	100.0 %	2080	2080
5/1	This lane uses a directly entered Saturation Flow						1900	1900
5/2	This lane uses a directly entered Saturation Flow						1900	1900
6/1	Infinite Saturation Flow						Inf	Inf
6/2	Infinite Saturation Flow						Inf	Inf
7/1	This lane uses a directly entered Saturation Flow						1900	1900
7/2	This lane uses a directly entered Saturation Flow						1900	1900
8/1	Infinite Saturation Flow						Inf	Inf
9/1	This lane uses a directly entered Saturation Flow						1900	1900
9/2	This lane uses a directly entered Saturation Flow						1900	1900
10/1	This lane uses a directly entered Saturation Flow						1900	1900
10/2	This lane uses a directly entered Saturation Flow						1900	1900
11/1	Infinite Saturation Flow						Inf	Inf
11/2	Infinite Saturation Flow						Inf	Inf
12/1	Infinite Saturation Flow						Inf	Inf

Scenario 4: '2041 Pref PM' (FG4: '2041 Pref PM', Plan 1: 'Network Control Plan 1')**Traffic Flows, Desired****Desired Flow :**

	Destination					
		A	B	C	D	Tot.
Origin	A	0	42	684	164	890
	B	104	0	52	106	262
	C	1003	26	0	835	1864
	D	164	45	240	0	449
	Tot.	1271	113	976	1105	3465

Full Input Data And Results

Traffic Lane Flows

Lane	Scenario 4: 2041 Pref PM
Junction: A4303_Coventry Road Roundabout	
1/1	445
1/2	445
2/1	262
3/1	932
3/2	932
4/1 (short)	225
4/2 (with short)	449(In) 224(Out)
5/1	87
5/2	224
6/1	313
6/2	958
7/1	419
7/2	669
8/1	113
9/1	322
9/2	52
10/1	149
10/2	984
11/1	471
11/2	505
12/1	1105

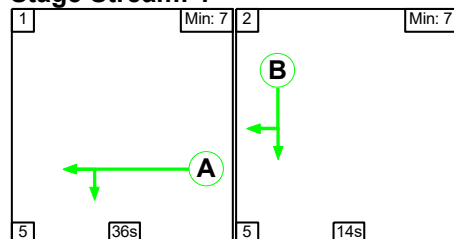
Lane Saturation Flows

Junction: A4303_Coventry Road Roundabout								
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 (A4303 Lutterworth Road)	3.25	0.00	Y	Arm 7 Ahead	Inf	90.6 %	1934	1934
				Arm 8 Left	45.00	9.4 %		
1/2 (A4303 Lutterworth Road)	3.25	0.00	N	Arm 7 Ahead	Inf	100.0 %	2080	2080
2/1 (Fairacres Coventry Road)	3.50	0.00	Y	Arm 9 Ahead	Inf	80.2 %	1950	1950
				Arm 11 Left	40.00	19.8 %		
3/1 (A4303 Coventry Road)	3.50	0.00	Y	Arm 10 Ahead	Inf	10.4 %	1914	1914
				Arm 12 Left	50.00	89.6 %		
3/2 (A4303 Coventry Road)	3.50	0.00	N	Arm 10 Ahead	Inf	100.0 %	2105	2105
4/1 (Coventry Road)	3.00	0.00	Y	Arm 5 Ahead	Inf	27.1 %	1816	1816
				Arm 6 Left	20.00	72.9 %		
4/2 (Coventry Road)	3.25	0.00	N	Arm 5 Ahead	Inf	100.0 %	2080	2080
5/1	This lane uses a directly entered Saturation Flow						1900	1900
5/2	This lane uses a directly entered Saturation Flow						1900	1900
6/1	Infinite Saturation Flow						Inf	Inf
6/2	Infinite Saturation Flow						Inf	Inf
7/1	This lane uses a directly entered Saturation Flow						1900	1900
7/2	This lane uses a directly entered Saturation Flow						1900	1900
8/1	Infinite Saturation Flow						Inf	Inf
9/1	This lane uses a directly entered Saturation Flow						1900	1900
9/2	This lane uses a directly entered Saturation Flow						1900	1900
10/1	This lane uses a directly entered Saturation Flow						1900	1900
10/2	This lane uses a directly entered Saturation Flow						1900	1900
11/1	Infinite Saturation Flow						Inf	Inf
11/2	Infinite Saturation Flow						Inf	Inf
12/1	Infinite Saturation Flow						Inf	Inf

Scenario 1: '2041 Core AM' (FG1: '2041 Core AM', Plan 1: 'Network Control Plan 1')

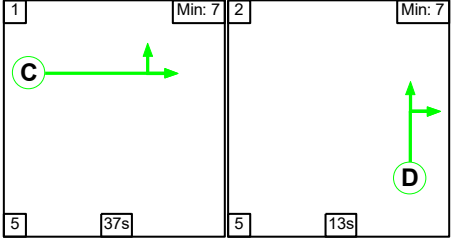
Stage Sequence Diagram

Stage Stream: 1

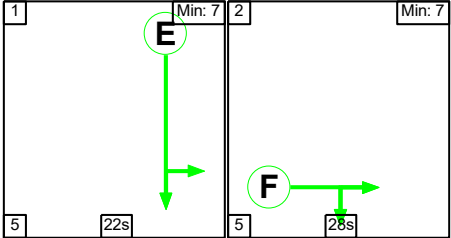


Full Input Data And Results

Stage Stream: 2



Stage Stream: 3



Stage Timings

Stage Stream: 1

Stage	1	2
Duration	36	14
Change Point	0	41

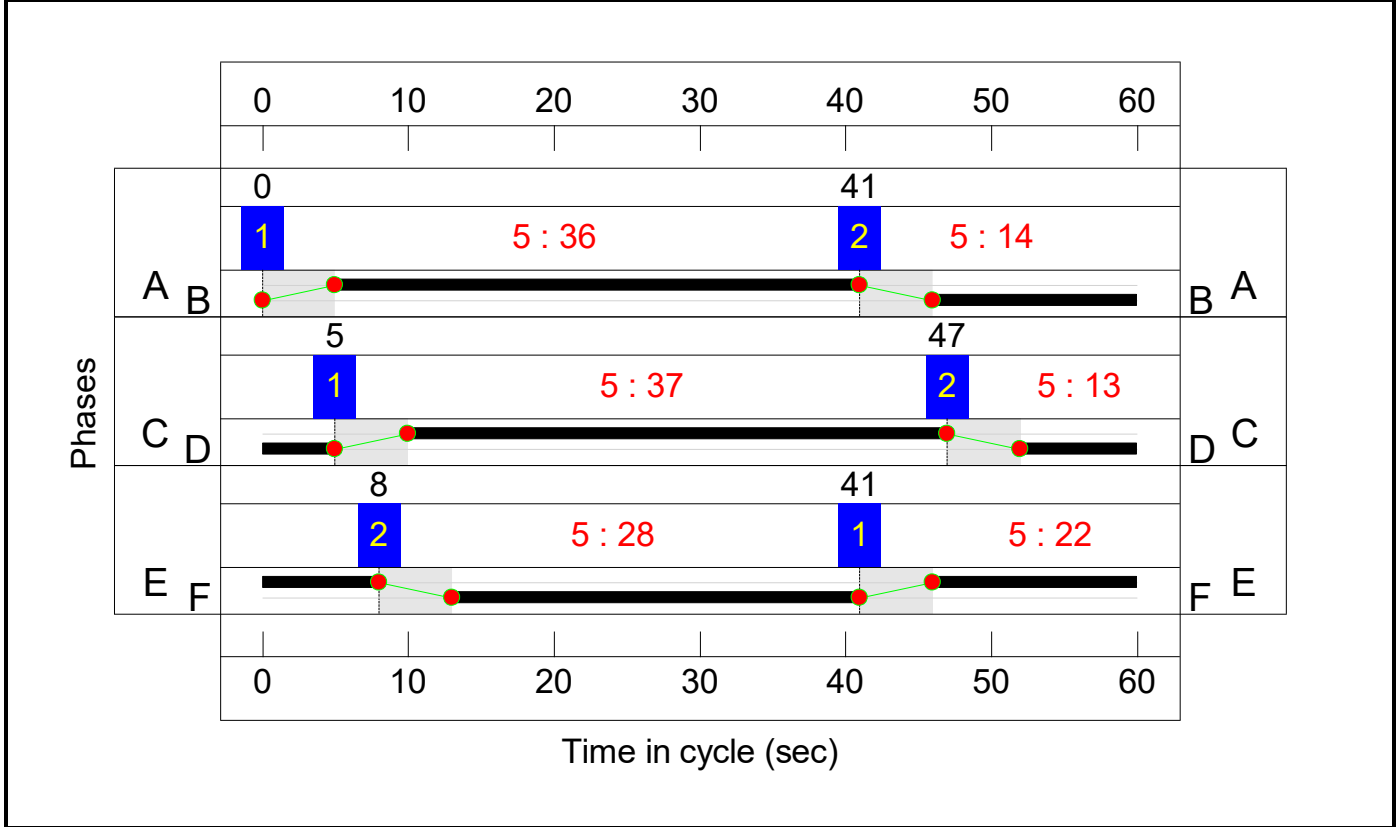
Stage Stream: 2

Stage	1	2
Duration	37	13
Change Point	5	47

Stage Stream: 3

Stage	1	2
Duration	22	28
Change Point	41	8

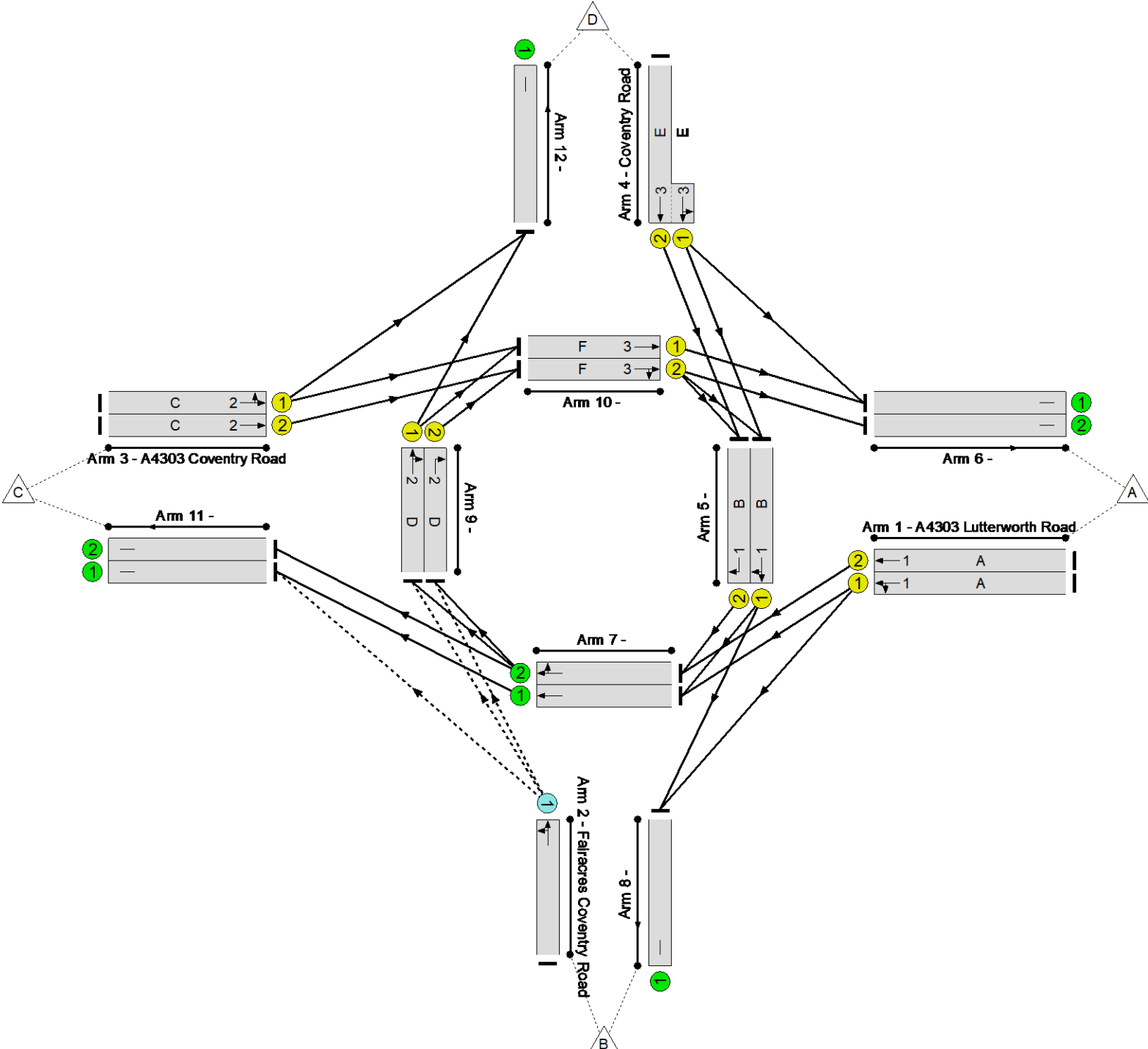
Signal Timings Diagram



A4303 Coventry Road Roundabout

PRC: 38.3 %

Total Traffic Delay: 17.2 pcuHr



Full Input Data And Results

Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network	-	-	N/A	-	-		-	-	-	-	-	-	65.1%
A4303_Coventry Road Roundabout	-	-	N/A	-	-		-	-	-	-	-	-	65.1%
1/1	A4303 Lutterworth Road Ahead Left	U	1	N/A	A		1	36	-	663	1935	1193	55.6%
1/2	A4303 Lutterworth Road Ahead	U	1	N/A	A		1	36	-	664	2080	1283	51.8%
2/1	Fairacres Coventry Road Ahead Left	O	N/A	N/A	-		-	-	-	145	1945	571	25.4%
3/1	A4303 Coventry Road Ahead Left	U	2	N/A	C		1	37	-	560	1932	1224	45.8%
3/2	A4303 Coventry Road Ahead	U	2	N/A	C		1	37	-	560	2105	1333	42.0%
4/2+4/1	Coventry Road Ahead Left	U	3	N/A	E		1	22	-	596	2080:1838	458+458	65.1 : 65.1%
5/1	Right Ahead	U	1	N/A	B		1	14	-	164	1900	475	34.5%
5/2	Right	U	1	N/A	B		1	14	-	298	1900	475	62.7%
6/1		U	N/A	N/A	-		-	-	-	435	Inf	Inf	0.0%
6/2		U	N/A	N/A	-		-	-	-	557	Inf	Inf	0.0%
7/1	Ahead	U	N/A	N/A	-		-	-	-	718	1900	1900	37.8%
7/2	Right Ahead	U	N/A	N/A	-		-	-	-	962	1900	1900	50.6%
8/1		U	N/A	N/A	-		-	-	-	109	Inf	Inf	0.0%
9/1	Right Ahead	U	2	N/A	D		1	13	-	199	1900	443	44.9%
9/2	Right	U	2	N/A	D		1	13	-	29	1900	443	6.5%
10/1	Ahead	U	3	N/A	F		1	28	-	269	1900	918	29.3%
10/2	Right Ahead	U	3	N/A	F		1	28	-	589	1900	918	64.1%
11/1		U	N/A	N/A	-		-	-	-	757	Inf	Inf	0.0%

Full Input Data And Results

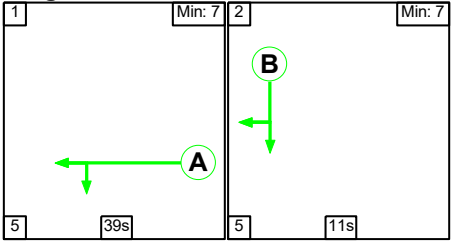
11/2		U	N/A	N/A	-		-	-	-	840	Inf	Inf	0.0%
12/1		U	N/A	N/A	-		-	-	-	490	Inf	Inf	0.0%
Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network	-	-	145	0	0	10.7	6.5	0.0	17.2	-	-	-	-
A4303_Coventry Road Roundabout	-	-	145	0	0	10.7	6.5	0.0	17.2	-	-	-	-
1/1	663	663	-	-	-	1.2	0.6	-	1.9	10.1	6.3	0.6	6.9
1/2	664	664	-	-	-	1.2	0.5	-	1.7	9.4	6.1	0.5	6.6
2/1	145	145	145	0	0	0.1	0.2	-	0.2	5.8	0.6	0.2	0.8
3/1	560	560	-	-	-	0.9	0.4	-	1.3	8.4	4.7	0.4	5.1
3/2	560	560	-	-	-	0.9	0.4	-	1.2	7.8	4.5	0.4	4.9
4/2+4/1	596	596	-	-	-	2.2	0.9	-	3.2	19.2	4.9	0.9	5.8
5/1	164	164	-	-	-	0.4	0.3	-	0.7	15.6	0.9	0.3	1.2
5/2	298	298	-	-	-	0.6	0.8	-	1.4	17.3	1.7	0.8	2.5
6/1	435	435	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/2	557	557	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
7/1	718	718	-	-	-	0.0	0.3	-	0.3	1.5	0.0	0.3	0.3
7/2	962	962	-	-	-	0.0	0.5	-	0.5	2.0	5.4	0.5	5.9
8/1	109	109	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
9/1	199	199	-	-	-	1.4	0.4	-	1.8	33.4	3.1	0.4	3.5
9/2	29	29	-	-	-	0.1	0.0	-	0.2	20.8	0.4	0.0	0.4
10/1	269	269	-	-	-	0.4	0.2	-	0.6	8.2	1.8	0.2	2.0
10/2	589	589	-	-	-	1.2	0.9	-	2.0	12.5	7.5	0.9	8.4
11/1	757	757	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
11/2	840	840	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
12/1	490	490	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0

Full Input Data And Results

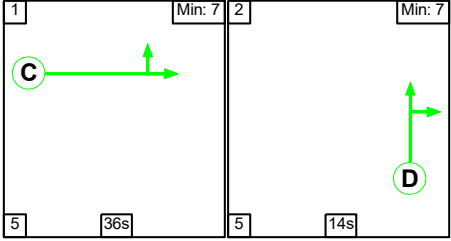
C1	Stream: 1	PRC for Signalled Lanes (%)	43.5	Total Delay for Signalled Lanes (pcuHr)	5.73	Cycle Time (s)	60
C1	Stream: 2	PRC for Signalled Lanes (%)	96.7	Total Delay for Signalled Lanes (pcuHr)	4.54	Cycle Time (s)	60
C1	Stream: 3	PRC for Signalled Lanes (%)	38.3	Total Delay for Signalled Lanes (pcuHr)	5.83	Cycle Time (s)	60
		PRC Over All Lanes (%)	38.3	Total Delay Over All Lanes(pcuHr)	17.18		

Stage Sequence Diagram

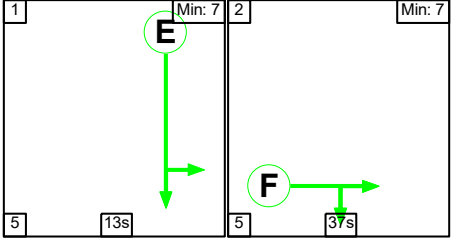
Stage Stream: 1



Stage Stream: 2



Stage Stream: 3



Stage Timings

Stage Stream: 1

Stage	1	2
Duration	39	11
Change Point	0	44

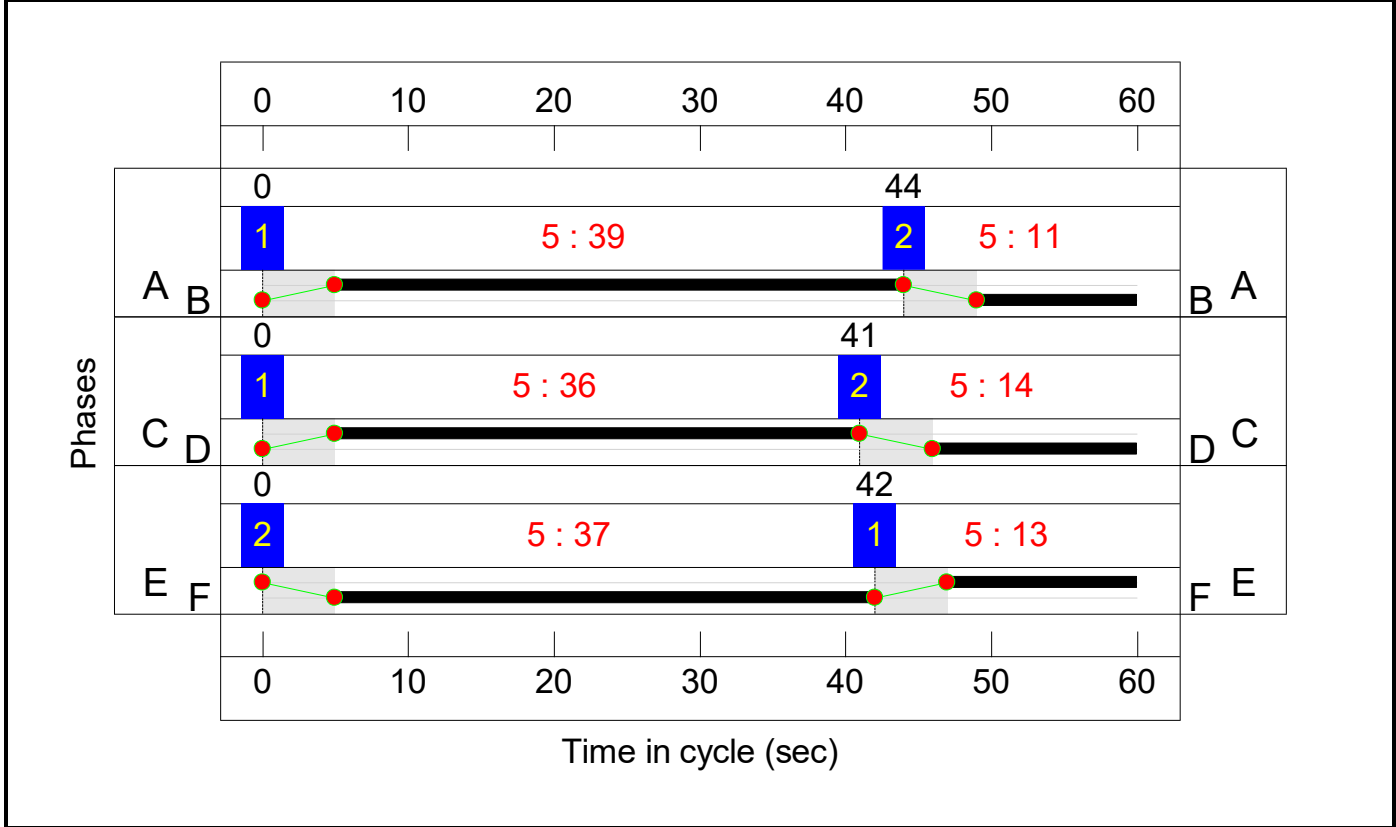
Stage Stream: 2

Stage	1	2
Duration	36	14
Change Point	0	41

Stage Stream: 3

Stage	1	2
Duration	13	37
Change Point	42	0

Signal Timings Diagram



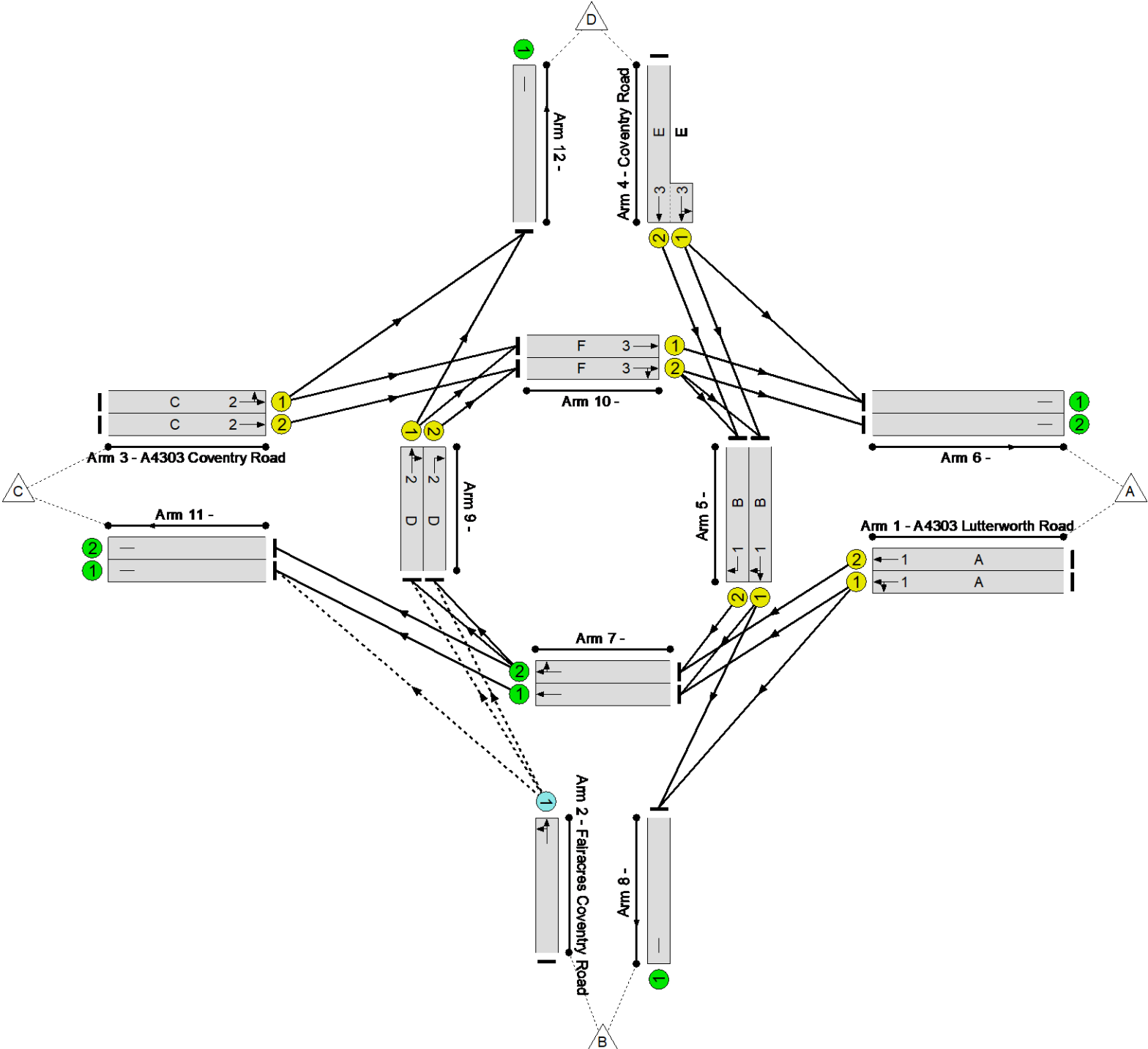
Full Input Data And Results

Network Layout Diagram

A4303 Coventry Road Roundabout

PRC: 27.1 %

Total Traffic Delay: 17.1 pcuHr



Full Input Data And Results

Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network	-	-	N/A	-	-		-	-	-	-	-	-	70.8%
A4303_Coventry Road Roundabout	-	-	N/A	-	-		-	-	-	-	-	-	70.8%
1/1	A4303 Lutterworth Road Ahead Left	U	1	N/A	A		1	39	-	433	1934	1289	33.6%
1/2	A4303 Lutterworth Road Ahead	U	1	N/A	A		1	39	-	434	2080	1387	31.3%
2/1	Fairacres Coventry Road Ahead Left	O	N/A	N/A	-		-	-	-	257	1950	813	31.6%
3/1	A4303 Coventry Road Ahead Left	U	2	N/A	C		1	36	-	801	1914	1180	67.9%
3/2	A4303 Coventry Road Ahead	U	2	N/A	C		1	36	-	801	2105	1298	61.7%
4/2+4/1	Coventry Road Ahead Left	U	3	N/A	E		1	13	-	431	2080:1816	309+311	69.5 : 69.5%
5/1	Right Ahead	U	1	N/A	B		1	11	-	81	1900	380	21.3%
5/2	Right	U	1	N/A	B		1	11	-	215	1900	380	56.6%
6/1		U	N/A	N/A	-		-	-	-	291	Inf	Inf	0.0%
6/2		U	N/A	N/A	-		-	-	-	830	Inf	Inf	0.0%
7/1	Ahead	U	N/A	N/A	-		-	-	-	407	1900	1900	21.4%
7/2	Right Ahead	U	N/A	N/A	-		-	-	-	649	1900	1900	34.2%
8/1		U	N/A	N/A	-		-	-	-	107	Inf	Inf	0.0%
9/1	Right Ahead	U	2	N/A	D		1	14	-	315	1900	475	66.3%
9/2	Right	U	2	N/A	D		1	14	-	51	1900	475	10.7%
10/1	Ahead	U	3	N/A	F		1	37	-	134	1900	1203	11.1%
10/2	Right Ahead	U	3	N/A	F		1	37	-	852	1900	1203	70.8%
11/1		U	N/A	N/A	-		-	-	-	458	Inf	Inf	0.0%

Full Input Data And Results

11/2		U	N/A	N/A	-		-	-	-	489	Inf	Inf	0.0%
12/1		U	N/A	N/A	-		-	-	-	982	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	-	-	257	0	0	9.9	7.2	0.0	17.1	-	-	-	-
A4303_Coventry Road Roundabout	-	-	257	0	0	9.9	7.2	0.0	17.1	-	-	-	-
1/1	433	433	-	-	-	0.5	0.3	-	0.8	6.4	3.0	0.3	3.3
1/2	434	434	-	-	-	0.5	0.2	-	0.7	6.1	3.0	0.2	3.2
2/1	257	257	257	0	0	0.0	0.2	-	0.3	3.6	0.5	0.2	0.7
3/1	801	801	-	-	-	1.7	1.1	-	2.7	12.3	8.7	1.1	9.7
3/2	801	801	-	-	-	1.6	0.8	-	2.4	10.7	8.2	0.8	9.0
4/2+4/1	431	431	-	-	-	2.4	1.1	-	3.5	29.3	3.6	1.1	4.8
5/1	81	81	-	-	-	0.2	0.1	-	0.3	14.6	0.4	0.1	0.5
5/2	215	215	-	-	-	0.1	0.6	-	0.8	13.0	1.7	0.6	2.3
6/1	291	291	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/2	830	830	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
7/1	407	407	-	-	-	0.0	0.1	-	0.1	1.2	0.0	0.1	0.1
7/2	649	649	-	-	-	0.0	0.3	-	0.3	1.5	1.7	0.3	1.9
8/1	107	107	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
9/1	315	315	-	-	-	2.0	1.0	-	3.0	34.3	5.0	1.0	6.0
9/2	51	51	-	-	-	0.2	0.1	-	0.3	21.3	0.7	0.1	0.7
10/1	134	134	-	-	-	0.2	0.1	-	0.2	6.4	0.9	0.1	1.0
10/2	852	852	-	-	-	0.4	1.2	-	1.6	6.9	7.6	1.2	8.8
11/1	458	458	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
11/2	489	489	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
12/1	982	982	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0

Full Input Data And Results

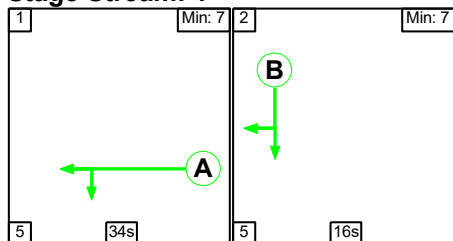
C1	Stream: 1	PRC for Signalled Lanes (%)	59.1	Total Delay for Signalled Lanes (pcuHr)	2.61	Cycle Time (s)	60
C1	Stream: 2	PRC for Signalled Lanes (%)	32.6	Total Delay for Signalled Lanes (pcuHr)	8.43	Cycle Time (s)	60
C1	Stream: 3	PRC for Signalled Lanes (%)	27.1	Total Delay for Signalled Lanes (pcuHr)	5.37	Cycle Time (s)	60
		PRC Over All Lanes (%)	27.1	Total Delay Over All Lanes(pcuHr)	17.06		

Full Input Data And Results

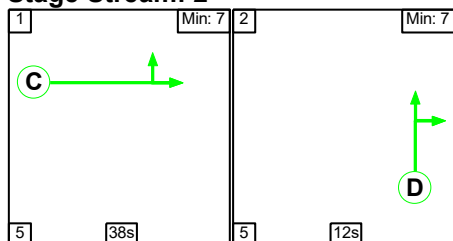
Scenario 3: '2041 Pref AM' (FG3: '2041 Pref AM', Plan 1: 'Network Control Plan 1')

Stage Sequence Diagram

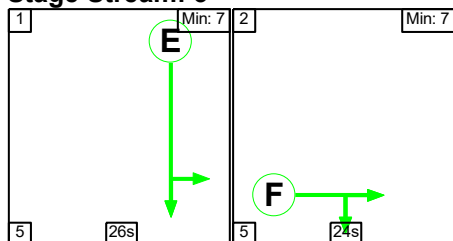
Stage Stream: 1



Stage Stream: 2



Stage Stream: 3



Stage Timings

Stage Stream: 1

Stage	1	2
Duration	34	16
Change Point	0	39

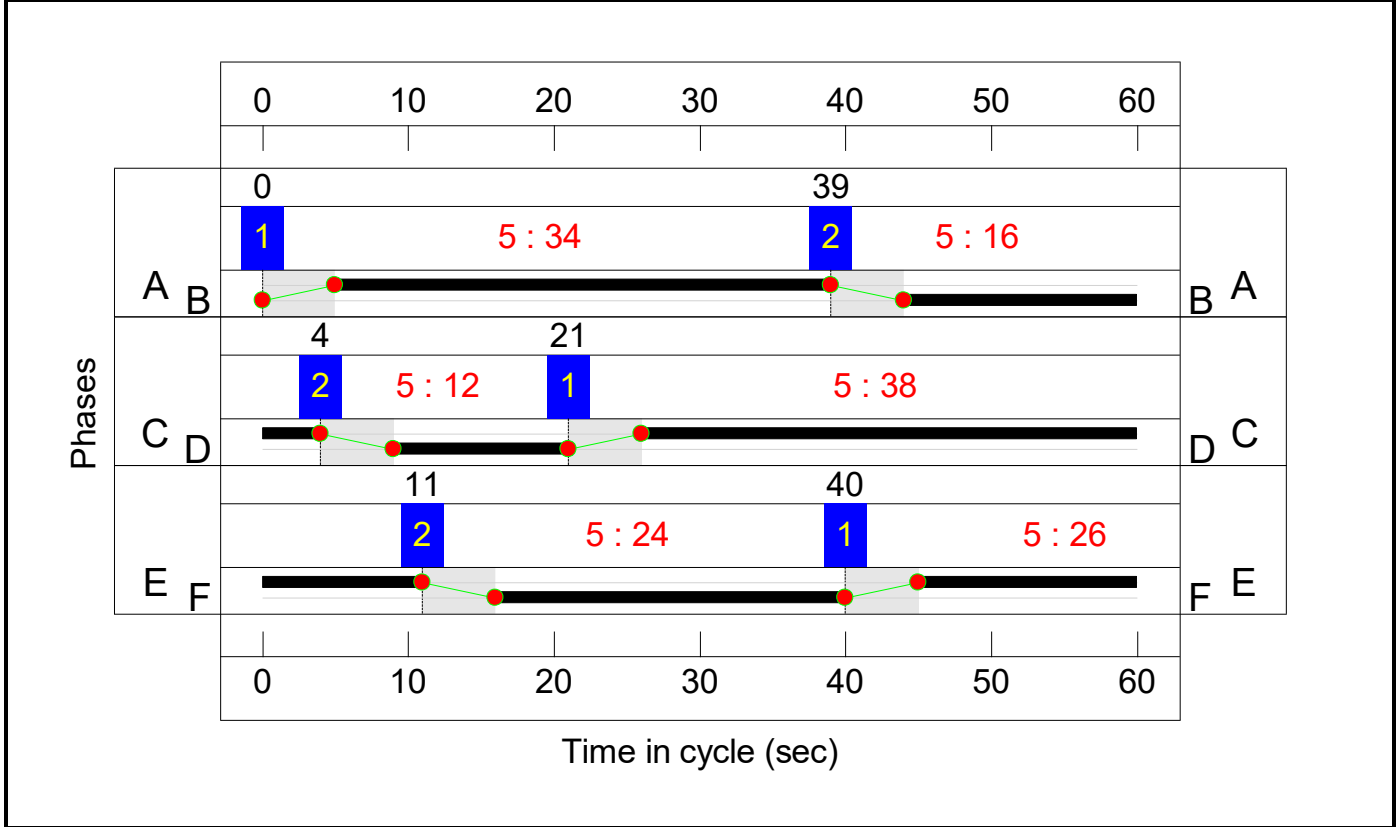
Stage Stream: 2

Stage	1	2
Duration	38	12
Change Point	21	4

Stage Stream: 3

Stage	1	2
Duration	26	24
Change Point	40	11

Signal Timings Diagram



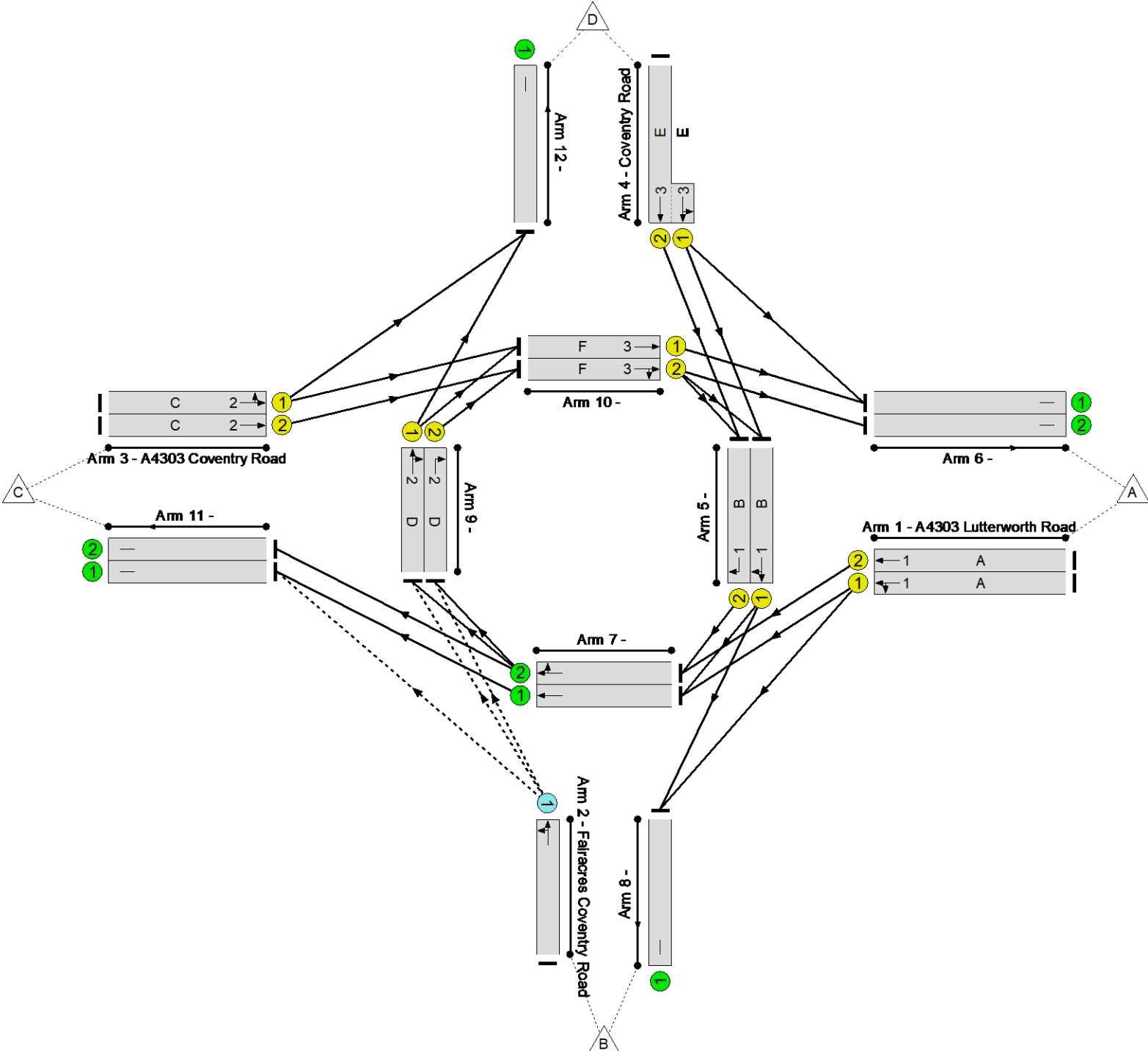
Full Input Data And Results

Network Layout Diagram

A4303 Coventry Road Roundabout

PRC: 28.6 %

Total Traffic Delay: 19.9 pcuHr



Full Input Data And Results

Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network	-	-	N/A	-	-		-	-	-	-	-	-	70.0%
A4303_Coventry Road Roundabout	-	-	N/A	-	-		-	-	-	-	-	-	70.0%
1/1	A4303 Lutterworth Road Ahead Left	U	1	N/A	A		1	34	-	704	1935	1129	62.4%
1/2	A4303 Lutterworth Road Ahead	U	1	N/A	A		1	34	-	704	2080	1213	58.0%
2/1	Fairacres Coventry Road Ahead Left	O	N/A	N/A	-		-	-	-	146	1945	515	28.4%
3/1	A4303 Coventry Road Ahead Left	U	2	N/A	C		1	38	-	513	1932	1256	40.9%
3/2	A4303 Coventry Road Ahead	U	2	N/A	C		1	38	-	512	2105	1368	37.4%
4/2+4/1	Coventry Road Ahead Left	U	3	N/A	E		1	26	-	732	2080:1838	523+523	70.0 : 70.0%
5/1	Right Ahead	U	1	N/A	B		1	16	-	191	1900	538	35.5%
5/2	Right	U	1	N/A	B		1	16	-	366	1900	538	68.0%
6/1		U	N/A	N/A	-		-	-	-	453	Inf	Inf	0.0%
6/2		U	N/A	N/A	-		-	-	-	512	Inf	Inf	0.0%
7/1	Ahead	U	N/A	N/A	-		-	-	-	781	1900	1900	41.1%
7/2	Right Ahead	U	N/A	N/A	-		-	-	-	1070	1900	1900	56.3%
8/1		U	N/A	N/A	-		-	-	-	114	Inf	Inf	0.0%
9/1	Right Ahead	U	2	N/A	D		1	12	-	207	1900	412	50.3%
9/2	Right	U	2	N/A	D		1	12	-	29	1900	412	7.0%
10/1	Ahead	U	3	N/A	F		1	24	-	249	1900	792	31.5%
10/2	Right Ahead	U	3	N/A	F		1	24	-	541	1900	792	68.3%
11/1		U	N/A	N/A	-		-	-	-	821	Inf	Inf	0.0%

Full Input Data And Results

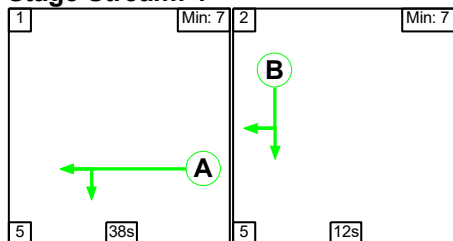
11/2		U	N/A	N/A	-		-	-	-	940	Inf	Inf	0.0%
12/1		U	N/A	N/A	-		-	-	-	471	Inf	Inf	0.0%
Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network	-	-	146	0	0	12.2	7.7	0.0	19.9	-	-	-	-
A4303_Coventry Road Roundabout	-	-	146	0	0	12.2	7.7	0.0	19.9	-	-	-	-
1/1	704	704	-	-	-	1.6	0.8	-	2.4	12.4	7.6	0.8	8.5
1/2	704	704	-	-	-	1.5	0.7	-	2.2	11.4	7.2	0.7	7.9
2/1	146	146	146	0	0	0.1	0.2	-	0.3	7.1	0.7	0.2	0.9
3/1	513	513	-	-	-	0.7	0.3	-	1.1	7.4	4.0	0.3	4.3
3/2	512	512	-	-	-	0.7	0.3	-	1.0	7.0	3.8	0.3	4.1
4/2+4/1	732	732	-	-	-	2.3	1.2	-	3.5	17.2	6.3	1.2	7.5
5/1	191	191	-	-	-	0.5	0.3	-	0.8	14.8	1.1	0.3	1.4
5/2	366	366	-	-	-	0.9	1.0	-	1.9	18.9	1.7	1.0	2.7
6/1	453	453	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/2	512	512	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
7/1	781	781	-	-	-	0.0	0.3	-	0.3	1.6	0.0	0.3	0.3
7/2	1070	1070	-	-	-	0.0	0.6	-	0.7	2.3	6.6	0.6	7.2
8/1	114	114	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
9/1	207	207	-	-	-	1.2	0.5	-	1.7	30.2	2.7	0.5	3.2
9/2	29	29	-	-	-	0.2	0.0	-	0.2	29.4	0.5	0.0	0.5
10/1	249	249	-	-	-	0.7	0.2	-	0.9	13.0	2.1	0.2	2.4
10/2	541	541	-	-	-	1.7	1.1	-	2.8	18.4	4.3	1.1	5.4
11/1	821	821	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
11/2	940	940	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
12/1	471	471	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0

Full Input Data And Results

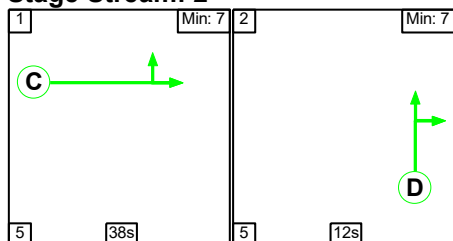
C1	Stream: 1	PRC for Signalled Lanes (%)	32.4	Total Delay for Signalled Lanes (pcuHr)	7.37	Cycle Time (s)	60
C1	Stream: 2	PRC for Signalled Lanes (%)	79.0	Total Delay for Signalled Lanes (pcuHr)	4.02	Cycle Time (s)	60
C1	Stream: 3	PRC for Signalled Lanes (%)	28.6	Total Delay for Signalled Lanes (pcuHr)	7.16	Cycle Time (s)	60
		PRC Over All Lanes (%)	28.6	Total Delay Over All Lanes(pcuHr)	19.87		

Stage Sequence Diagram

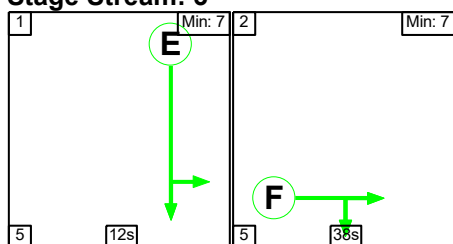
Stage Stream: 1



Stage Stream: 2



Stage Stream: 3



Stage Timings

Stage Stream: 1

Stage	1	2
Duration	38	12
Change Point	0	43

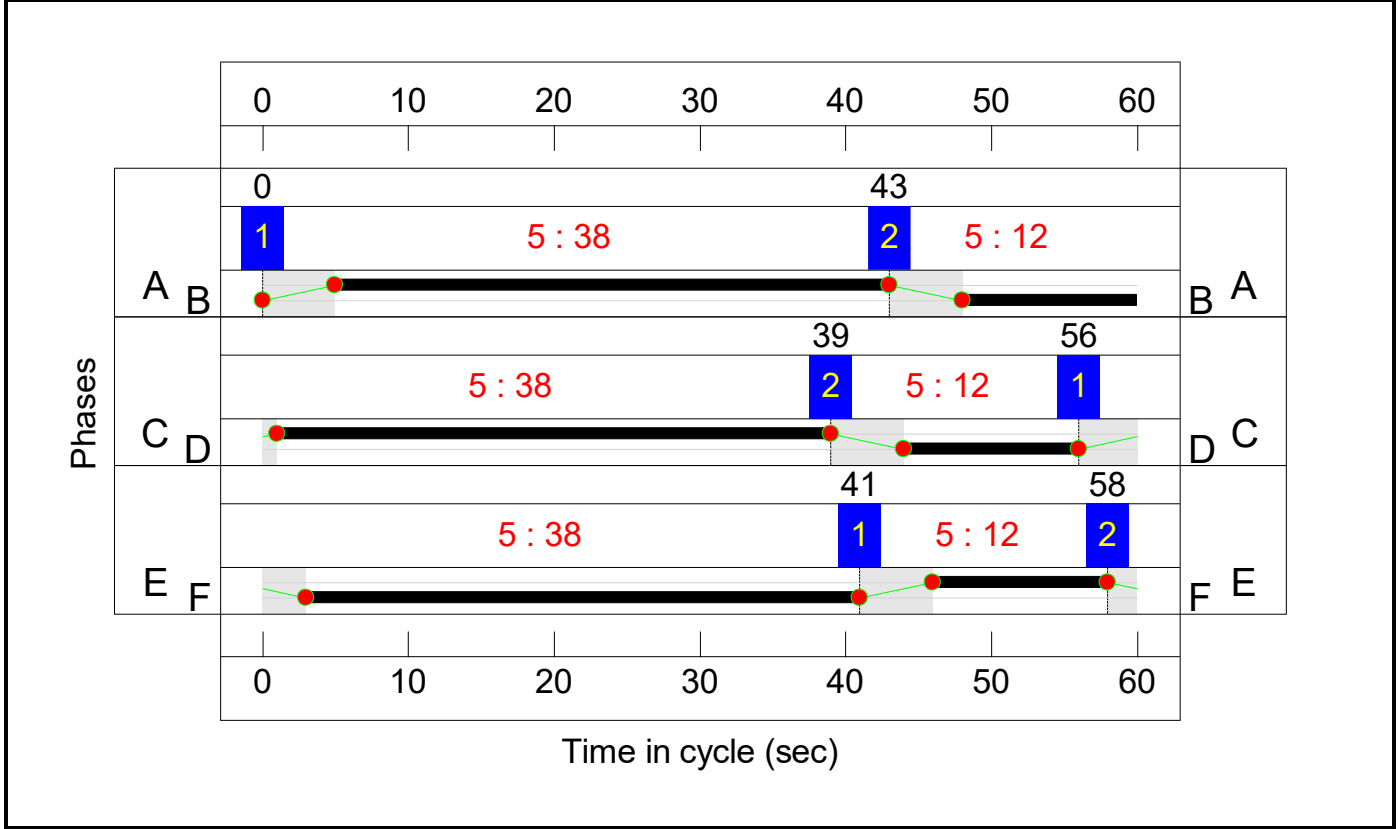
Stage Stream: 2

Stage	1	2
Duration	38	12
Change Point	56	39

Stage Stream: 3

Stage	1	2
Duration	12	38
Change Point	41	58

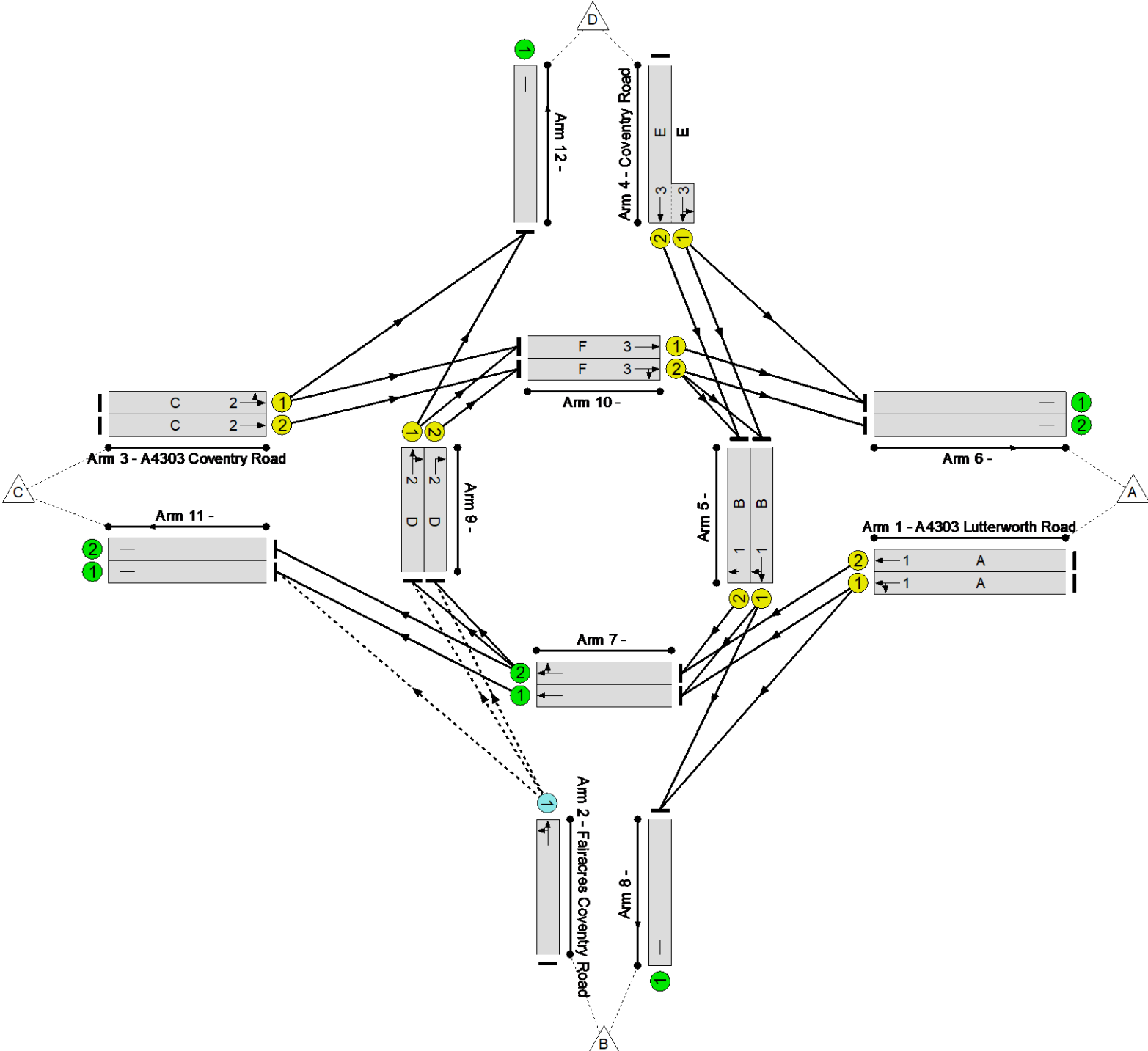
Signal Timings Diagram



A4303 Coventry Road Roundabout

PRC: 13.0 %

Total Traffic Delay: 20.6 pcuHr



Full Input Data And Results

Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network	-	-	N/A	-	-		-	-	-	-	-	-	79.7%
A4303_Coventry Road Roundabout	-	-	N/A	-	-		-	-	-	-	-	-	79.7%
1/1	A4303 Lutterworth Road Ahead Left	U	1	N/A	A		1	38	-	445	1934	1257	35.4%
1/2	A4303 Lutterworth Road Ahead	U	1	N/A	A		1	38	-	445	2080	1352	32.9%
2/1	Fairacres Coventry Road Ahead Left	O	N/A	N/A	-		-	-	-	262	1950	803	32.6%
3/1	A4303 Coventry Road Ahead Left	U	2	N/A	C		1	38	-	932	1914	1244	74.9%
3/2	A4303 Coventry Road Ahead	U	2	N/A	C		1	38	-	932	2105	1368	68.1%
4/2+4/1	Coventry Road Ahead Left	U	3	N/A	E		1	12	-	449	2080:1816	293+295	76.4 : 76.4%
5/1	Right Ahead	U	1	N/A	B		1	12	-	87	1900	412	21.1%
5/2	Right	U	1	N/A	B		1	12	-	224	1900	412	54.4%
6/1		U	N/A	N/A	-		-	-	-	313	Inf	Inf	0.0%
6/2		U	N/A	N/A	-		-	-	-	958	Inf	Inf	0.0%
7/1	Ahead	U	N/A	N/A	-		-	-	-	419	1900	1900	22.1%
7/2	Right Ahead	U	N/A	N/A	-		-	-	-	669	1900	1900	35.2%
8/1		U	N/A	N/A	-		-	-	-	113	Inf	Inf	0.0%
9/1	Right Ahead	U	2	N/A	D		1	12	-	322	1900	412	78.2%
9/2	Right	U	2	N/A	D		1	12	-	52	1900	412	12.6%
10/1	Ahead	U	3	N/A	F		1	38	-	149	1900	1235	12.1%
10/2	Right Ahead	U	3	N/A	F		1	38	-	984	1900	1235	79.7%
11/1		U	N/A	N/A	-		-	-	-	471	Inf	Inf	0.0%

Full Input Data And Results

11/2		U	N/A	N/A	-		-	-	-	505	Inf	Inf	0.0%
12/1		U	N/A	N/A	-		-	-	-	1105	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	-	-	262	0	0	10.8	9.8	0.0	20.6	-	-	-	-
A4303_Coventry Road Roundabout	-	-	262	0	0	10.8	9.8	0.0	20.6	-	-	-	-
1/1	445	445	-	-	-	0.6	0.3	-	0.9	7.0	3.3	0.3	3.6
1/2	445	445	-	-	-	0.6	0.2	-	0.8	6.7	3.2	0.2	3.5
2/1	262	262	262	0	0	0.0	0.2	-	0.3	3.8	0.6	0.2	0.8
3/1	932	932	-	-	-	1.9	1.5	-	3.3	12.9	10.4	1.5	11.8
3/2	932	932	-	-	-	1.7	1.1	-	2.8	10.7	9.6	1.1	10.6
4/2+4/1	449	449	-	-	-	2.6	1.6	-	4.2	33.6	4.1	1.6	5.7
5/1	87	87	-	-	-	0.2	0.1	-	0.3	13.5	0.4	0.1	0.6
5/2	224	224	-	-	-	0.0	0.6	-	0.6	10.1	1.7	0.6	2.3
6/1	313	313	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/2	958	958	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
7/1	419	419	-	-	-	0.0	0.1	-	0.1	1.2	0.0	0.1	0.1
7/2	669	669	-	-	-	0.0	0.3	-	0.3	1.5	2.2	0.3	2.4
8/1	113	113	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
9/1	322	322	-	-	-	2.1	1.7	-	3.8	42.7	5.2	1.7	6.9
9/2	52	52	-	-	-	0.3	0.1	-	0.3	23.6	0.7	0.1	0.8
10/1	149	149	-	-	-	0.2	0.1	-	0.2	5.9	0.9	0.1	1.0
10/2	984	984	-	-	-	0.7	1.9	-	2.6	9.6	12.3	1.9	14.2
11/1	471	471	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
11/2	505	505	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
12/1	1105	1105	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0

Full Input Data And Results

C1	Stream: 1	PRC for Signalled Lanes (%)	65.4	Total Delay for Signalled Lanes (pcuHr)	2.64	Cycle Time (s)	60
C1	Stream: 2	PRC for Signalled Lanes (%)	15.1	Total Delay for Signalled Lanes (pcuHr)	10.27	Cycle Time (s)	60
C1	Stream: 3	PRC for Signalled Lanes (%)	13.0	Total Delay for Signalled Lanes (pcuHr)	7.04	Cycle Time (s)	60
		PRC Over All Lanes (%)	13.0	Total Delay Over All Lanes(pcuHr)	20.64		

Junctions 11									
ARCADY 11 - Roundabout Module									
Version: 11.1.1.2424 © Copyright TRL Software Limited, 2026									
For sales and distribution information, program advice and maintenance, contact TRL Software: +44 (0)1344 379777 software@trl.co.uk trlsoftware.com									
The users of this computer program for the solution of an engineering problem are in no way relieved of their responsibility for the correctness of the solution									

Filename: A4303_Hunter Boulevard after mitigation.j11

Path: \\systra.info\UK_DFS\LEEDSFILE\ProjectData\GB01T26B01 Harborough Local Plan - Local Road Assessments\5. Technical\3. Modelling\Junction Models\03 - A4303 x Hunter Blvd\Mitigation

Report generation date: 14/07/2026 15:17:21

»D1 - 2041 | Core | AM
 »D2 - 2041 | Core | PM
 »D3 - 2041 | Pref | AM
 »D4 - 2041 | Pref | PM

Summary of junction performance

	AM					PM				
	Set ID	Queue (PCU)	Delay (s)	RFC	LOS	Set ID	Queue (PCU)	Delay (s)	RFC	LOS
	2041 - Core									
1 - A4303 Coventry Road (E)	D1	3.0	5.58	0.74	A	D2	0.8	2.49	0.42	A
2 - Coventry Road (S)		0.8	6.35	0.41	A		1.0	5.33	0.50	A
3 - A4303 Coventry Road (W)		7.4	13.55	0.88	B		1.8	3.96	0.63	A
4 - Hunter Boulevard		0.2	3.01	0.15	A		0.5	3.83	0.35	A
	2041 - Pref									
1 - A4303 Coventry Road (E)	D3	4.1	7.02	0.79	A	D4	1.0	2.85	0.49	A
2 - Coventry Road (S)		1.1	8.23	0.51	A		1.7	7.70	0.63	A
3 - A4303 Coventry Road (W)		12.9	23.43	0.93	C		2.4	4.99	0.70	A
4 - Hunter Boulevard		0.2	3.12	0.15	A		0.6	4.30	0.37	A

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

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

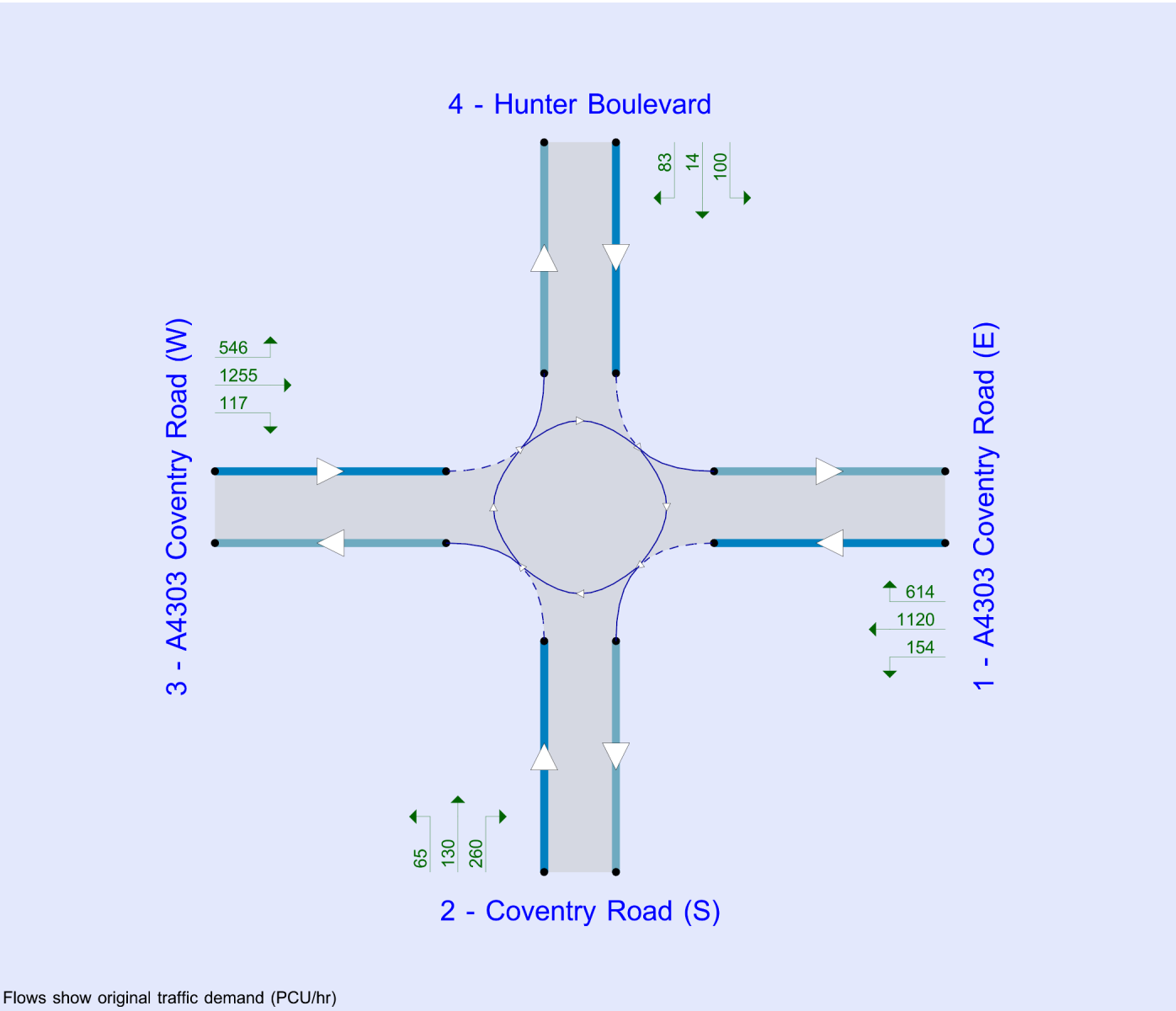
File summary

File Description

Title	
Location	
Site number	
Date	21/05/2026
Version	
Status	(new file)
Identifier	
Client	
Jobnumber	
Enumerator	ADSYSTRA\cgow
Description	

Units

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



Analysis Options

Calculate Queue Percentiles	Calculate residual capacity	RFC Threshold	Average Delay threshold (s)	Queue threshold (PCU)
		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)
D1	2041	Core	AM	ONE HOUR	00:00	01:30	15
D2	2041	Core	PM	ONE HOUR	00:00	01:30	15
D3	2041	Pref	AM	ONE HOUR	00:00	01:30	15
D4	2041	Pref	PM	ONE HOUR	00:00	01:30	15

Analysis Set Details

ID	Network flow scaling factor (%)
A1	100.000

D1 - 2041 | Core | AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	1 - A4303 Coventry Road (E) - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Geometry	4 - Hunter Boulevard - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.

Junction Network

Junctions

Junction	Name	Junction type	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout	1, 2, 3, 4	9.03	A

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	9.03	A

Arms

Arms

Arm	Name	Description	No give-way line
1	A4303 Coventry Road (E)		
2	Coventry Road (S)		
3	A4303 Coventry Road (W)		
4	Hunter Boulevard		

Roundabout Geometry

Arm	V - Approach road half-width (m)	E - Entry width (m)	I' - Effective flare length (m)	R - Entry radius (m)	D - Inscribed circle diameter (m)	PHI - Conflict (entry) angle (deg)	Entry only	Exit only
1 - A4303 Coventry Road (E)	7.18	9.76	30.5	33.0	67.0	30.0		
2 - Coventry Road (S)	7.48	7.48	0.0	20.0	67.0	40.0		
3 - A4303 Coventry Road (W)	9.00	10.00	30.0	38.0	67.0	24.0		
4 - Hunter Boulevard	7.33	9.38	30.2	23.0	67.0	39.0		

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Arm	Final slope	Final intercept (PCU/hr)
1 - A4303 Coventry Road (E)	0.709	2845
2 - Coventry Road (S)	0.590	2188
3 - A4303 Coventry Road (W)	0.762	3133
4 - Hunter Boulevard	0.669	2663

The slope and intercept shown above include any corrections and adjustments.

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)
D1	2041	Core	AM	ONE HOUR	00:00	01:30	15

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1 - A4303 Coventry Road (E)		✓	1788	100.000
2 - Coventry Road (S)		✓	396	100.000
3 - A4303 Coventry Road (W)		✓	1868	100.000
4 - Hunter Boulevard		✓	201	100.000

Origin-Destination Data

Demand (PCU/hr)

	To				
		1 - A4303 Coventry Road (E)	2 - Coventry Road (S)	3 - A4303 Coventry Road (W)	4 - Hunter Boulevard
From	1 - A4303 Coventry Road (E)	31	144	1042	571
	2 - Coventry Road (S)	226	0	57	113
	3 - A4303 Coventry Road (W)	1222	114	0	532
	4 - Hunter Boulevard	102	15	84	0

Vehicle Mix

Heavy Vehicle %

	To				
		1 - A4303 Coventry Road (E)	2 - Coventry Road (S)	3 - A4303 Coventry Road (W)	4 - Hunter Boulevard
From	1 - A4303 Coventry Road (E)	10	10	10	10
	2 - Coventry Road (S)	11	0	11	11
	3 - A4303 Coventry Road (W)	10	10	0	10
	4 - Hunter Boulevard	6	6	6	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
1 - A4303 Coventry Road (E)	0.74	5.58	3.0	A
2 - Coventry Road (S)	0.41	6.35	0.8	A
3 - A4303 Coventry Road (W)	0.88	13.55	7.4	B
4 - Hunter Boulevard	0.15	3.01	0.2	A

Main Results for each time segment

00:00 - 00:15

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A4303 Coventry Road (E)	1346	160	2731	0.493	1342	1.1	2.842	A
2 - Coventry Road (S)	298	1297	1423	0.210	297	0.3	3.546	A
3 - A4303 Coventry Road (W)	1406	706	2595	0.542	1401	1.3	3.304	A
4 - Hunter Boulevard	151	1195	1864	0.081	151	0.1	2.227	A

00:15 - 00:30

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A4303 Coventry Road (E)	1607	191	2709	0.593	1605	1.6	3.582	A
2 - Coventry Road (S)	356	1551	1273	0.280	355	0.4	4.354	A
3 - A4303 Coventry Road (W)	1679	845	2489	0.675	1675	2.2	4.836	A
4 - Hunter Boulevard	181	1429	1707	0.106	181	0.1	2.499	A

00:30 - 00:45

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A4303 Coventry Road (E)	1969	233	2679	0.735	1963	3.0	5.488	A
2 - Coventry Road (S)	436	1897	1069	0.408	435	0.8	6.292	A
3 - A4303 Coventry Road (W)	2057	1033	2346	0.877	2037	7.0	12.160	B
4 - Hunter Boulevard	221	1739	1499	0.148	221	0.2	2.984	A

00:45 - 01:00

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A4303 Coventry Road (E)	1969	234	2678	0.735	1968	3.0	5.577	A
2 - Coventry Road (S)	436	1902	1066	0.409	436	0.8	6.347	A
3 - A4303 Coventry Road (W)	2057	1036	2343	0.878	2055	7.4	13.555	B
4 - Hunter Boulevard	221	1753	1490	0.148	221	0.2	3.006	A

01:00 - 01:15

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A4303 Coventry Road (E)	1607	193	2708	0.594	1613	1.6	3.634	A
2 - Coventry Road (S)	356	1559	1268	0.281	357	0.4	4.392	A
3 - A4303 Coventry Road (W)	1679	849	2486	0.676	1700	2.3	5.165	A
4 - Hunter Boulevard	181	1448	1695	0.107	181	0.1	2.522	A

01:15 - 01:30

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A4303 Coventry Road (E)	1346	161	2731	0.493	1348	1.1	2.868	A
2 - Coventry Road (S)	298	1303	1419	0.210	299	0.3	3.567	A
3 - A4303 Coventry Road (W)	1406	710	2592	0.543	1410	1.3	3.361	A
4 - Hunter Boulevard	151	1203	1859	0.081	151	0.1	2.235	A

D2 - 2041 | Core | PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	1 - A4303 Coventry Road (E) - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Geometry	4 - Hunter Boulevard - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.

Junction Network

Junctions

Junction	Name	Junction type	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout	1, 2, 3, 4	3.78	A

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	3.78	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)
D2	2041	Core	PM	ONE HOUR	00:00	01:30	15

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1 - A4303 Coventry Road (E)		✓	1012	100.000
2 - Coventry Road (S)		✓	644	100.000
3 - A4303 Coventry Road (W)		✓	1508	100.000
4 - Hunter Boulevard		✓	454	100.000

Origin-Destination Data

Demand (PCU/hr)

From	To				
		1 - A4303 Coventry Road (E)	2 - Coventry Road (S)	3 - A4303 Coventry Road (W)	4 - Hunter Boulevard
	1 - A4303 Coventry Road (E)	15	42	777	178
	2 - Coventry Road (S)	341	0	231	72
	3 - A4303 Coventry Road (W)	1275	18	0	215
	4 - Hunter Boulevard	215	14	225	0

Vehicle Mix

Heavy Vehicle %

	To				
		1 - A4303 Coventry Road (E)	2 - Coventry Road (S)	3 - A4303 Coventry Road (W)	4 - Hunter Boulevard
From	1 - A4303 Coventry Road (E)	6	6	6	6
	2 - Coventry Road (S)	4	0	4	4
	3 - A4303 Coventry Road (W)	6	6	0	6
	4 - Hunter Boulevard	1	1	1	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
1 - A4303 Coventry Road (E)	0.42	2.49	0.8	A
2 - Coventry Road (S)	0.50	5.33	1.0	A
3 - A4303 Coventry Road (W)	0.63	3.96	1.8	A
4 - Hunter Boulevard	0.35	3.83	0.5	A

Main Results for each time segment

00:00 - 00:15

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A4303 Coventry Road (E)	762	193	2708	0.281	760	0.4	1.957	A
2 - Coventry Road (S)	485	898	1658	0.292	483	0.4	3.182	A
3 - A4303 Coventry Road (W)	1135	455	2786	0.407	1132	0.7	2.303	A
4 - Hunter Boulevard	342	1238	1835	0.186	341	0.2	2.432	A

00:15 - 00:30

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A4303 Coventry Road (E)	910	231	2681	0.339	909	0.5	2.154	A
2 - Coventry Road (S)	579	1074	1554	0.372	578	0.6	3.833	A
3 - A4303 Coventry Road (W)	1356	544	2718	0.499	1354	1.0	2.795	A
4 - Hunter Boulevard	408	1481	1672	0.244	408	0.3	2.875	A

00:30 - 00:45

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A4303 Coventry Road (E)	1114	282	2644	0.421	1113	0.8	2.491	A
2 - Coventry Road (S)	709	1314	1412	0.502	707	1.0	5.297	A
3 - A4303 Coventry Road (W)	1660	666	2625	0.632	1657	1.8	3.930	A
4 - Hunter Boulevard	500	1812	1451	0.345	499	0.5	3.816	A

00:45 - 01:00

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A4303 Coventry Road (E)	1114	283	2644	0.421	1114	0.8	2.494	A
2 - Coventry Road (S)	709	1316	1412	0.502	709	1.0	5.328	A
3 - A4303 Coventry Road (W)	1660	667	2624	0.633	1660	1.8	3.957	A
4 - Hunter Boulevard	500	1816	1448	0.345	500	0.5	3.831	A

01:00 - 01:15

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A4303 Coventry Road (E)	910	231	2680	0.339	911	0.5	2.157	A
2 - Coventry Road (S)	579	1076	1553	0.373	581	0.6	3.855	A
3 - A4303 Coventry Road (W)	1356	546	2717	0.499	1359	1.1	2.817	A
4 - Hunter Boulevard	408	1486	1669	0.245	409	0.3	2.886	A

01:15 - 01:30

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A4303 Coventry Road (E)	762	194	2707	0.281	762	0.4	1.962	A
2 - Coventry Road (S)	485	900	1657	0.293	486	0.4	3.200	A
3 - A4303 Coventry Road (W)	1135	457	2785	0.408	1137	0.7	2.316	A
4 - Hunter Boulevard	342	1243	1832	0.187	342	0.2	2.443	A

D3 - 2041 | Pref | AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	1 - A4303 Coventry Road (E) - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Geometry	4 - Hunter Boulevard - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.

Junction Network

Junctions

Junction	Name	Junction type	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout	1, 2, 3, 4	13.98	B

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	13.98	B

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)
D3	2041	Pref	AM	ONE HOUR	00:00	01:30	15

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1 - A4303 Coventry Road (E)		✓	1921	100.000
2 - Coventry Road (S)		✓	455	100.000
3 - A4303 Coventry Road (W)		✓	1918	100.000
4 - Hunter Boulevard		✓	197	100.000

Origin-Destination Data

Demand (PCU/hr)

From	To				
		1 - A4303 Coventry Road (E)	2 - Coventry Road (S)	3 - A4303 Coventry Road (W)	4 - Hunter Boulevard
	1 - A4303 Coventry Road (E)	33	154	1120	614
	2 - Coventry Road (S)	260	0	65	130
	3 - A4303 Coventry Road (W)	1255	117	0	546
	4 - Hunter Boulevard	100	14	83	0

Vehicle Mix

Heavy Vehicle %

	To				
		1 - A4303 Coventry Road (E)	2 - Coventry Road (S)	3 - A4303 Coventry Road (W)	4 - Hunter Boulevard
	From				
	1 - A4303 Coventry Road (E)	10	10	10	10
	2 - Coventry Road (S)	11	0	11	11
	3 - A4303 Coventry Road (W)	10	10	0	10
	4 - Hunter Boulevard	6	6	6	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
1 - A4303 Coventry Road (E)	0.79	7.02	4.1	A
2 - Coventry Road (S)	0.51	8.23	1.1	A
3 - A4303 Coventry Road (W)	0.93	23.43	12.9	C
4 - Hunter Boulevard	0.15	3.12	0.2	A

Main Results for each time segment

00:00 - 00:15

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A4303 Coventry Road (E)	1446	161	2731	0.530	1441	1.2	3.060	A
2 - Coventry Road (S)	343	1388	1369	0.250	341	0.4	3.882	A
3 - A4303 Coventry Road (W)	1444	778	2540	0.568	1438	1.4	3.574	A
4 - Hunter Boulevard	148	1248	1828	0.081	148	0.1	2.271	A

00:15 - 00:30

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A4303 Coventry Road (E)	1727	192	2708	0.638	1724	1.9	4.012	A
2 - Coventry Road (S)	409	1661	1208	0.339	408	0.6	4.989	A
3 - A4303 Coventry Road (W)	1724	931	2424	0.711	1719	2.7	5.583	A
4 - Hunter Boulevard	177	1493	1664	0.106	177	0.1	2.565	A

00:30 - 00:45

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A4303 Coventry Road (E)	2115	233	2679	0.790	2107	4.0	6.823	A
2 - Coventry Road (S)	501	2029	991	0.506	499	1.1	8.086	A
3 - A4303 Coventry Road (W)	2112	1137	2266	0.932	2077	11.4	18.278	C
4 - Hunter Boulevard	217	1807	1454	0.149	217	0.2	3.083	A

00:45 - 01:00

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A4303 Coventry Road (E)	2115	235	2678	0.790	2115	4.1	7.024	A
2 - Coventry Road (S)	501	2037	986	0.508	501	1.1	8.228	A
3 - A4303 Coventry Road (W)	2112	1142	2263	0.933	2106	12.9	23.428	C
4 - Hunter Boulevard	217	1829	1440	0.151	217	0.2	3.120	A

01:00 - 01:15

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A4303 Coventry Road (E)	1727	195	2706	0.638	1735	2.0	4.114	A
2 - Coventry Road (S)	409	1671	1202	0.340	411	0.6	5.066	A
3 - A4303 Coventry Road (W)	1724	937	2419	0.713	1765	2.8	6.416	A
4 - Hunter Boulevard	177	1527	1641	0.108	177	0.1	2.608	A

01:15 - 01:30

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A4303 Coventry Road (E)	1446	162	2730	0.530	1449	1.2	3.097	A
2 - Coventry Road (S)	343	1395	1365	0.251	343	0.4	3.917	A
3 - A4303 Coventry Road (W)	1444	782	2537	0.569	1449	1.5	3.661	A
4 - Hunter Boulevard	148	1258	1822	0.081	148	0.1	2.280	A

D4 - 2041 | Pref | PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	1 - A4303 Coventry Road (E) - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Geometry	4 - Hunter Boulevard - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.

Junction Network

Junctions

Junction	Name	Junction type	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout	1, 2, 3, 4	4.78	A

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	4.78	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)
D4	2041	Pref	PM	ONE HOUR	00:00	01:30	15

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1 - A4303 Coventry Road (E)		✓	1187	100.000
2 - Coventry Road (S)		✓	744	100.000
3 - A4303 Coventry Road (W)		✓	1615	100.000
4 - Hunter Boulevard		✓	449	100.000

Origin-Destination Data

Demand (PCU/hr)

From	To				
		1 - A4303 Coventry Road (E)	2 - Coventry Road (S)	3 - A4303 Coventry Road (W)	4 - Hunter Boulevard
	1 - A4303 Coventry Road (E)	18	50	911	208
	2 - Coventry Road (S)	394	0	267	83
	3 - A4303 Coventry Road (W)	1365	20	0	230
	4 - Hunter Boulevard	213	14	222	0

Vehicle Mix

Heavy Vehicle %

	To				
		1 - A4303 Coventry Road (E)	2 - Coventry Road (S)	3 - A4303 Coventry Road (W)	4 - Hunter Boulevard
From	1 - A4303 Coventry Road (E)	6	6	6	6
	2 - Coventry Road (S)	4	0	4	4
	3 - A4303 Coventry Road (W)	6	6	0	6
	4 - Hunter Boulevard	1	1	1	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
1 - A4303 Coventry Road (E)	0.49	2.85	1.0	A
2 - Coventry Road (S)	0.63	7.70	1.7	A
3 - A4303 Coventry Road (W)	0.70	4.99	2.4	A
4 - Hunter Boulevard	0.37	4.30	0.6	A

Main Results for each time segment

00:00 - 00:15

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A4303 Coventry Road (E)	894	192	2708	0.330	892	0.5	2.099	A
2 - Coventry Road (S)	560	1021	1586	0.353	558	0.6	3.635	A
3 - A4303 Coventry Road (W)	1216	527	2731	0.445	1212	0.8	2.508	A
4 - Hunter Boulevard	338	1349	1761	0.192	337	0.2	2.553	A

00:15 - 00:30

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A4303 Coventry Road (E)	1067	230	2681	0.398	1066	0.7	2.361	A
2 - Coventry Road (S)	669	1221	1468	0.456	668	0.9	4.674	A
3 - A4303 Coventry Road (W)	1452	631	2652	0.547	1450	1.3	3.171	A
4 - Hunter Boulevard	404	1613	1584	0.255	403	0.3	3.080	A

00:30 - 00:45

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A4303 Coventry Road (E)	1307	281	2645	0.494	1306	1.0	2.846	A
2 - Coventry Road (S)	819	1495	1306	0.627	816	1.7	7.582	A
3 - A4303 Coventry Road (W)	1778	772	2545	0.699	1774	2.4	4.918	A
4 - Hunter Boulevard	494	1973	1343	0.368	493	0.6	4.274	A

00:45 - 01:00

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A4303 Coventry Road (E)	1307	282	2645	0.494	1307	1.0	2.852	A
2 - Coventry Road (S)	819	1496	1305	0.628	819	1.7	7.699	A
3 - A4303 Coventry Road (W)	1778	774	2543	0.699	1778	2.4	4.986	A
4 - Hunter Boulevard	494	1978	1339	0.369	494	0.6	4.301	A

01:00 - 01:15

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A4303 Coventry Road (E)	1067	231	2681	0.398	1068	0.7	2.369	A
2 - Coventry Road (S)	669	1223	1466	0.456	672	0.9	4.736	A
3 - A4303 Coventry Road (W)	1452	634	2649	0.548	1456	1.3	3.212	A
4 - Hunter Boulevard	404	1621	1579	0.256	405	0.3	3.099	A

01:15 - 01:30

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A4303 Coventry Road (E)	894	193	2708	0.330	894	0.5	2.104	A
2 - Coventry Road (S)	560	1024	1584	0.354	561	0.6	3.668	A
3 - A4303 Coventry Road (W)	1216	530	2729	0.446	1218	0.9	2.529	A
4 - Hunter Boulevard	338	1355	1757	0.192	338	0.2	2.566	A

Junctions 11									
ARCADY 11 - Roundabout Module									
Version: 11.1.1.2424 © Copyright TRL Software Limited, 2026									
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Filename: A4303_A426 roundabout after mitigation.j11
Path: \\sysstra.info\UK_DFS\LEEDSFILE\ProjectData\GB01T26B01 Harborough Local Plan - Local Road Assessments\5. Technical\3. Modelling\Junction Models\04 - A4303 x A426\Mitigation
Report generation date: 25/08/2026 09:31:31

- »D1 - 2041 | Core | AM
- »D2 - 2041 | Core | PM
- »D3 - 2041 | Pref | AM
- »D4 - 2041 | Pref | PM

Summary of junction performance

	AM					PM				
	Set ID	Queue (PCU)	Delay (s)	RFC	LOS	Set ID	Queue (PCU)	Delay (s)	RFC	LOS
	2041 - Core									
1 - A4303 Lutterworth Road East	D1	4.2	6.47	0.79	A	D2	2.5	4.21	0.71	A
2 - A426 South		2.0	8.66	0.65	A		1.2	5.24	0.54	A
3 - A4303 Lutterworth Road West		1.0	3.23	0.48	A		2.8	5.80	0.73	A
4 - A426 (N)		0.9	3.83	0.46	A		0.9	4.51	0.47	A
	2041 - Pref									
1 - A4303 Lutterworth Road East	D3	4.8	7.43	0.82	A	D4	2.7	4.43	0.72	A
2 - A426 South		2.0	8.76	0.65	A		1.4	5.69	0.57	A
3 - A4303 Lutterworth Road West		1.0	3.12	0.46	A		5.0	9.50	0.83	A
4 - A426 (N)		1.2	4.19	0.52	A		0.9	4.78	0.46	A

There are warnings associated with one or more model runs - see the 'Data Errors and Warnings' tables for each Analysis or Demand Set.
Values shown are the highest values encountered over all time segments. Delay is the maximum value of average delay per arriving vehicle.

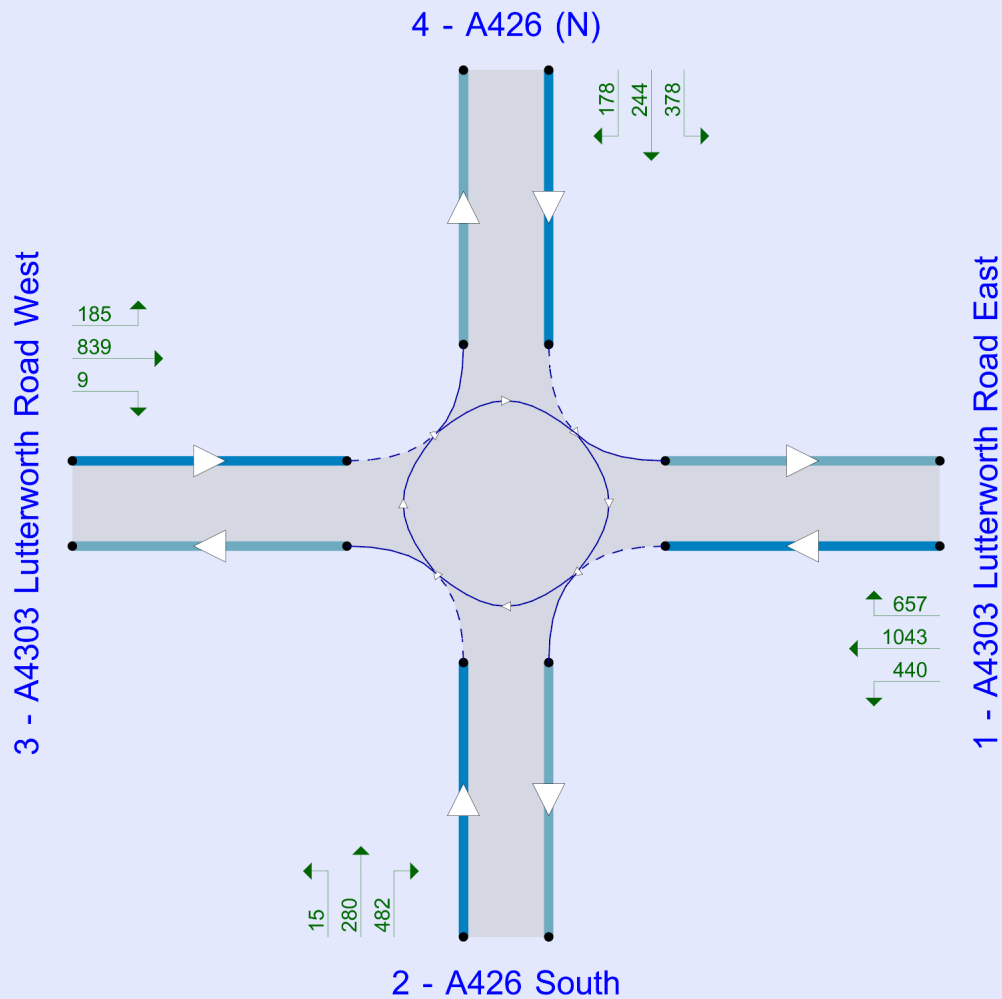
File summary

File Description

Title	
Location	
Site number	
Date	21/05/2026
Version	
Status	(new file)
Identifier	
Client	
Jobnumber	
Enumerator	ADSYSTRA\cgow
Description	

Units

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



Flows show original traffic demand (PCU/hr)

The junction diagram reflects the last run of Junctions.

Analysis Options

Calculate Queue Percentiles	Calculate residual capacity	RFC Threshold	Average Delay threshold (s)	Queue threshold (PCU)
		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)
D1	2041	Core	AM	ONE HOUR	00:00	01:30	15
D2	2041	Core	PM	ONE HOUR	00:00	01:30	15
D3	2041	Pref	AM	ONE HOUR	00:00	01:30	15
D4	2041	Pref	PM	ONE HOUR	00:00	01:30	15

Analysis Set Details

ID	Network flow scaling factor (%)
A1	100.000

D1 - 2041 | Core | AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	1 - A4303 Lutterworth Road East - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Geometry	2 - A426 South - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Geometry	3 - A4303 Lutterworth Road West - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Geometry	4 - A426 (N) - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.

Junction Network

Junctions

Junction	Name	Junction type	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout	1, 2, 3, 4	5.68	A

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	5.68	A

Arms

Arms

Arm	Name	Description	No give-way line
1	A4303 Lutterworth Road East		
2	A426 South		
3	A4303 Lutterworth Road West		
4	A426 (N)		

Roundabout Geometry

Arm	V - Approach road half-width (m)	E - Entry width (m)	I' - Effective flare length (m)	R - Entry radius (m)	D - Inscribed circle diameter (m)	PHI - Conflict (entry) angle (deg)	Entry only	Exit only
1 - A4303 Lutterworth Road East	8.50	12.00	90.6	25.0	74.0	50.0		
2 - A426 South	4.50	12.00	36.0	25.0	74.0	50.0		
3 - A4303 Lutterworth Road West	9.50	13.00	50.0	24.0	74.0	46.0		
4 - A426 (N)	4.50	12.00	60.0	22.0	74.0	44.0		

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Arm	Final slope	Final intercept (PCU/hr)
1 - A4303 Lutterworth Road East	0.721	3310
2 - A426 South	0.608	2564
3 - A4303 Lutterworth Road West	0.763	3568
4 - A426 (N)	0.655	2855

The slope and intercept shown above include any corrections and adjustments.

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)
D1	2041	Core	AM	ONE HOUR	00:00	01:30	15

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1 - A4303 Lutterworth Road East		✓	2140	100.000
2 - A426 South		✓	777	100.000
3 - A4303 Lutterworth Road West		✓	1033	100.000
4 - A426 (N)		✓	800	100.000

Origin-Destination Data

Demand (PCU/hr)

	To				
		1 - A4303 Lutterworth Road East	2 - A426 South	3 - A4303 Lutterworth Road West	4 - A426 (N)
From	1 - A4303 Lutterworth Road East	0	440	1043	657
	2 - A426 South	482	0	15	280
	3 - A4303 Lutterworth Road West	839	9	0	185
	4 - A426 (N)	378	244	178	0

Vehicle Mix

Heavy Vehicle %

	To				
		1 - A4303 Lutterworth Road East	2 - A426 South	3 - A4303 Lutterworth Road West	4 - A426 (N)
From	1 - A4303 Lutterworth Road East	0	10	10	10
	2 - A426 South	9	0	9	9
	3 - A4303 Lutterworth Road West	11	11	0	11
	4 - A426 (N)	8	8	8	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
1 - A4303 Lutterworth Road East	0.79	6.47	4.2	A
2 - A426 South	0.65	8.66	2.0	A
3 - A4303 Lutterworth Road West	0.48	3.23	1.0	A
4 - A426 (N)	0.46	3.83	0.9	A

Main Results for each time segment

00:00 - 00:15

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A4303 Lutterworth Road East	1611	324	3076	0.524	1606	1.2	2.685	A
2 - A426 South	585	1410	1708	0.343	583	0.6	3.480	A
3 - A4303 Lutterworth Road West	778	1065	2755	0.282	776	0.4	2.017	A
4 - A426 (N)	602	998	2200	0.274	601	0.4	2.428	A

00:15 - 00:30

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A4303 Lutterworth Road East	1924	387	3030	0.635	1921	1.9	3.561	A
2 - A426 South	699	1686	1540	0.454	697	0.9	4.648	A
3 - A4303 Lutterworth Road West	929	1274	2596	0.358	928	0.6	2.395	A
4 - A426 (N)	719	1194	2072	0.347	719	0.6	2.870	A

00:30 - 00:45

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A4303 Lutterworth Road East	2356	474	2968	0.794	2347	4.1	6.293	A
2 - A426 South	855	2060	1312	0.652	851	2.0	8.427	A
3 - A4303 Lutterworth Road West	1137	1555	2380	0.478	1136	1.0	3.206	A
4 - A426 (N)	881	1460	1898	0.464	879	0.9	3.813	A

00:45 - 01:00

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A4303 Lutterworth Road East	2356	475	2967	0.794	2356	4.2	6.468	A
2 - A426 South	855	2067	1308	0.654	855	2.0	8.658	A
3 - A4303 Lutterworth Road West	1137	1562	2375	0.479	1137	1.0	3.227	A
4 - A426 (N)	881	1464	1895	0.465	881	0.9	3.832	A

01:00 - 01:15

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A4303 Lutterworth Road East	1924	388	3030	0.635	1933	1.9	3.638	A
2 - A426 South	699	1696	1534	0.455	703	0.9	4.745	A
3 - A4303 Lutterworth Road West	929	1283	2588	0.359	930	0.6	2.411	A
4 - A426 (N)	719	1200	2069	0.348	721	0.6	2.886	A

01:15 - 01:30

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A4303 Lutterworth Road East	1611	325	3075	0.524	1614	1.2	2.716	A
2 - A426 South	585	1416	1704	0.343	586	0.6	3.517	A
3 - A4303 Lutterworth Road West	778	1071	2750	0.283	778	0.4	2.026	A
4 - A426 (N)	602	1003	2198	0.274	603	0.4	2.438	A

D2 - 2041 | Core | PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	1 - A4303 Lutterworth Road East - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Geometry	2 - A426 South - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Geometry	3 - A4303 Lutterworth Road West - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Geometry	4 - A426 (N) - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.

Junction Network

Junctions

Junction	Name	Junction type	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout	1, 2, 3, 4	4.91	A

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	4.91	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)
D2	2041	Core	PM	ONE HOUR	00:00	01:30	15

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1 - A4303 Lutterworth Road East		✓	1968	100.000
2 - A426 South		✓	764	100.000
3 - A4303 Lutterworth Road West		✓	1591	100.000
4 - A426 (N)		✓	675	100.000

Origin-Destination Data

Demand (PCU/hr)

From	To				
		1 - A4303 Lutterworth Road East	2 - A426 South	3 - A4303 Lutterworth Road West	4 - A426 (N)
	1 - A4303 Lutterworth Road East	0	569	770	629
	2 - A426 South	417	0	7	340
	3 - A4303 Lutterworth Road West	1358	12	0	221
	4 - A426 (N)	378	199	98	0

Vehicle Mix

Heavy Vehicle %

	To				
		1 - A4303 Lutterworth Road East	2 - A426 South	3 - A4303 Lutterworth Road West	4 - A426 (N)
	1 - A4303 Lutterworth Road East	0	5	5	5
	2 - A426 South	5	0	5	5
	3 - A4303 Lutterworth Road West	5	5	0	5
	4 - A426 (N)	3	3	3	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
1 - A4303 Lutterworth Road East	0.71	4.21	2.5	A
2 - A426 South	0.54	5.24	1.2	A
3 - A4303 Lutterworth Road West	0.73	5.80	2.8	A
4 - A426 (N)	0.47	4.51	0.9	A

Main Results for each time segment

00:00 - 00:15

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A4303 Lutterworth Road East	1482	232	3142	0.472	1478	0.9	2.266	A
2 - A426 South	575	1124	1881	0.306	573	0.5	2.886	A
3 - A4303 Lutterworth Road West	1198	1040	2773	0.432	1195	0.8	2.389	A
4 - A426 (N)	508	1342	1976	0.257	507	0.4	2.522	A

00:15 - 00:30

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A4303 Lutterworth Road East	1769	277	3109	0.569	1767	1.4	2.813	A
2 - A426 South	687	1344	1748	0.393	686	0.7	3.557	A
3 - A4303 Lutterworth Road West	1430	1245	2618	0.546	1428	1.3	3.175	A
4 - A426 (N)	607	1604	1803	0.337	606	0.5	3.095	A

00:30 - 00:45

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A4303 Lutterworth Road East	2167	339	3065	0.707	2162	2.5	4.168	A
2 - A426 South	841	1645	1565	0.538	839	1.2	5.193	A
3 - A4303 Lutterworth Road West	1752	1522	2405	0.728	1746	2.8	5.679	A
4 - A426 (N)	743	1961	1569	0.474	742	0.9	4.471	A

00:45 - 01:00

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A4303 Lutterworth Road East	2167	340	3064	0.707	2167	2.5	4.211	A
2 - A426 South	841	1648	1563	0.538	841	1.2	5.236	A
3 - A4303 Lutterworth Road West	1752	1526	2403	0.729	1752	2.8	5.800	A
4 - A426 (N)	743	1967	1565	0.475	743	0.9	4.509	A

01:00 - 01:15

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A4303 Lutterworth Road East	1769	279	3109	0.569	1774	1.4	2.842	A
2 - A426 South	687	1349	1745	0.394	689	0.7	3.589	A
3 - A4303 Lutterworth Road West	1430	1250	2614	0.547	1436	1.3	3.228	A
4 - A426 (N)	607	1613	1798	0.338	608	0.5	3.121	A

01:15 - 01:30

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A4303 Lutterworth Road East	1482	233	3142	0.472	1483	0.9	2.281	A
2 - A426 South	575	1128	1879	0.306	576	0.5	2.905	A
3 - A4303 Lutterworth Road West	1198	1045	2770	0.432	1200	0.8	2.411	A
4 - A426 (N)	508	1347	1972	0.258	509	0.4	2.535	A

D3 - 2041 | Pref | AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	1 - A4303 Lutterworth Road East - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Geometry	2 - A426 South - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Geometry	3 - A4303 Lutterworth Road West - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Geometry	4 - A426 (N) - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.

Junction Network

Junctions

Junction	Name	Junction type	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout	1, 2, 3, 4	6.14	A

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	6.14	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)
D3	2041	Pref	AM	ONE HOUR	00:00	01:30	15

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1 - A4303 Lutterworth Road East		✓	2173	100.000
2 - A426 South		✓	752	100.000
3 - A4303 Lutterworth Road West		✓	1004	100.000
4 - A426 (N)		✓	905	100.000

Origin-Destination Data

Demand (PCU/hr)

		To			
From		1 - A4303 Lutterworth Road East	2 - A426 South	3 - A4303 Lutterworth Road West	4 - A426 (N)
	1 - A4303 Lutterworth Road East	0	447	1059	667
	2 - A426 South	467	0	14	271
	3 - A4303 Lutterworth Road West	815	9	0	180
	4 - A426 (N)	428	276	201	0

Vehicle Mix

Heavy Vehicle %

From	To				
		1 - A4303 Lutterworth Road East	2 - A426 South	3 - A4303 Lutterworth Road West	4 - A426 (N)
	1 - A4303 Lutterworth Road East	0	10	10	10
	2 - A426 South	9	0	9	9
	3 - A4303 Lutterworth Road West	11	11	0	11
	4 - A426 (N)	8	8	8	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
1 - A4303 Lutterworth Road East	0.82	7.43	4.8	A
2 - A426 South	0.65	8.76	2.0	A
3 - A4303 Lutterworth Road West	0.46	3.12	1.0	A
4 - A426 (N)	0.52	4.19	1.2	A

Main Results for each time segment

00:00 - 00:15

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A4303 Lutterworth Road East	1636	365	3046	0.537	1631	1.3	2.787	A
2 - A426 South	566	1446	1686	0.336	564	0.5	3.493	A
3 - A4303 Lutterworth Road West	756	1054	2763	0.274	754	0.4	1.987	A
4 - A426 (N)	681	969	2220	0.307	679	0.5	2.521	A

00:15 - 00:30

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A4303 Lutterworth Road East	1953	436	2995	0.652	1950	2.0	3.781	A
2 - A426 South	676	1730	1513	0.447	675	0.9	4.672	A
3 - A4303 Lutterworth Road West	903	1261	2605	0.346	902	0.6	2.344	A
4 - A426 (N)	814	1159	2095	0.388	813	0.7	3.030	A

00:30 - 00:45

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A4303 Lutterworth Road East	2393	534	2924	0.818	2382	4.7	7.156	A
2 - A426 South	828	2113	1281	0.647	824	1.9	8.507	A
3 - A4303 Lutterworth Road West	1105	1539	2393	0.462	1104	0.9	3.099	A
4 - A426 (N)	996	1418	1926	0.517	995	1.1	4.167	A

00:45 - 01:00

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A4303 Lutterworth Road East	2393	535	2924	0.818	2392	4.8	7.434	A
2 - A426 South	828	2121	1275	0.649	828	2.0	8.758	A
3 - A4303 Lutterworth Road West	1105	1547	2387	0.463	1105	1.0	3.117	A
4 - A426 (N)	996	1421	1923	0.518	996	1.2	4.194	A

01:00 - 01:15

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A4303 Lutterworth Road East	1953	438	2994	0.653	1965	2.1	3.887	A
2 - A426 South	676	1741	1506	0.449	680	0.9	4.777	A
3 - A4303 Lutterworth Road West	903	1271	2598	0.347	904	0.6	2.361	A
4 - A426 (N)	814	1164	2092	0.389	815	0.7	3.050	A

01:15 - 01:30

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A4303 Lutterworth Road East	1636	366	3045	0.537	1639	1.3	2.824	A
2 - A426 South	566	1453	1681	0.337	568	0.6	3.529	A
3 - A4303 Lutterworth Road West	756	1060	2758	0.274	757	0.4	1.998	A
4 - A426 (N)	681	973	2217	0.307	682	0.5	2.536	A

D4 - 2041 | Pref | PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	1 - A4303 Lutterworth Road East - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Geometry	2 - A426 South - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Geometry	3 - A4303 Lutterworth Road West - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Geometry	4 - A426 (N) - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.

Junction Network

Junctions

Junction	Name	Junction type	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout	1, 2, 3, 4	6.40	A

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	6.40	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)
D4	2041	Pref	PM	ONE HOUR	00:00	01:30	15

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1 - A4303 Lutterworth Road East		✓	2033	100.000
2 - A426 South		✓	795	100.000
3 - A4303 Lutterworth Road West		✓	1784	100.000
4 - A426 (N)		✓	597	100.000

Origin-Destination Data

Demand (PCU/hr)

From	To				
		1 - A4303 Lutterworth Road East	2 - A426 South	3 - A4303 Lutterworth Road West	4 - A426 (N)
	1 - A4303 Lutterworth Road East	0	588	795	650
	2 - A426 South	434	0	8	353
	3 - A4303 Lutterworth Road West	1523	13	0	248
	4 - A426 (N)	334	176	87	0

Vehicle Mix

Heavy Vehicle %

	To				
		1 - A4303 Lutterworth Road East	2 - A426 South	3 - A4303 Lutterworth Road West	4 - A426 (N)
	1 - A4303 Lutterworth Road East	0	5	5	5
	2 - A426 South	5	0	5	5
	3 - A4303 Lutterworth Road West	5	5	0	5
	4 - A426 (N)	3	3	3	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
1 - A4303 Lutterworth Road East	0.72	4.43	2.7	A
2 - A426 South	0.57	5.69	1.4	A
3 - A4303 Lutterworth Road West	0.83	9.50	5.0	A
4 - A426 (N)	0.46	4.78	0.9	A

Main Results for each time segment

00:00 - 00:15

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A4303 Lutterworth Road East	1531	207	3160	0.484	1527	1.0	2.308	A
2 - A426 South	599	1150	1865	0.321	597	0.5	2.976	A
3 - A4303 Lutterworth Road West	1343	1079	2744	0.489	1339	1.0	2.682	A
4 - A426 (N)	449	1479	1886	0.238	448	0.3	2.577	A

00:15 - 00:30

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A4303 Lutterworth Road East	1828	248	3131	0.584	1826	1.5	2.893	A
2 - A426 South	715	1376	1728	0.413	714	0.7	3.721	A
3 - A4303 Lutterworth Road West	1604	1290	2583	0.621	1601	1.7	3.839	A
4 - A426 (N)	537	1768	1696	0.316	536	0.5	3.195	A

00:30 - 00:45

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A4303 Lutterworth Road East	2238	303	3091	0.724	2233	2.7	4.383	A
2 - A426 South	875	1683	1542	0.568	873	1.4	5.628	A
3 - A4303 Lutterworth Road West	1964	1578	2363	0.831	1951	4.9	8.922	A
4 - A426 (N)	657	2157	1441	0.456	656	0.9	4.712	A

00:45 - 01:00

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A4303 Lutterworth Road East	2238	304	3090	0.724	2238	2.7	4.434	A
2 - A426 South	875	1687	1540	0.569	875	1.4	5.690	A
3 - A4303 Lutterworth Road West	1964	1582	2360	0.832	1964	5.0	9.496	A
4 - A426 (N)	657	2168	1434	0.459	657	0.9	4.776	A

01:00 - 01:15

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A4303 Lutterworth Road East	1828	249	3130	0.584	1833	1.5	2.926	A
2 - A426 South	715	1381	1725	0.414	717	0.7	3.757	A
3 - A4303 Lutterworth Road West	1604	1296	2578	0.622	1617	1.7	3.984	A
4 - A426 (N)	537	1784	1686	0.318	538	0.5	3.234	A

01:15 - 01:30

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A4303 Lutterworth Road East	1531	208	3159	0.484	1533	1.0	2.327	A
2 - A426 South	599	1155	1863	0.321	600	0.5	2.996	A
3 - A4303 Lutterworth Road West	1343	1083	2741	0.490	1346	1.0	2.715	A
4 - A426 (N)	449	1486	1881	0.239	450	0.3	2.592	A

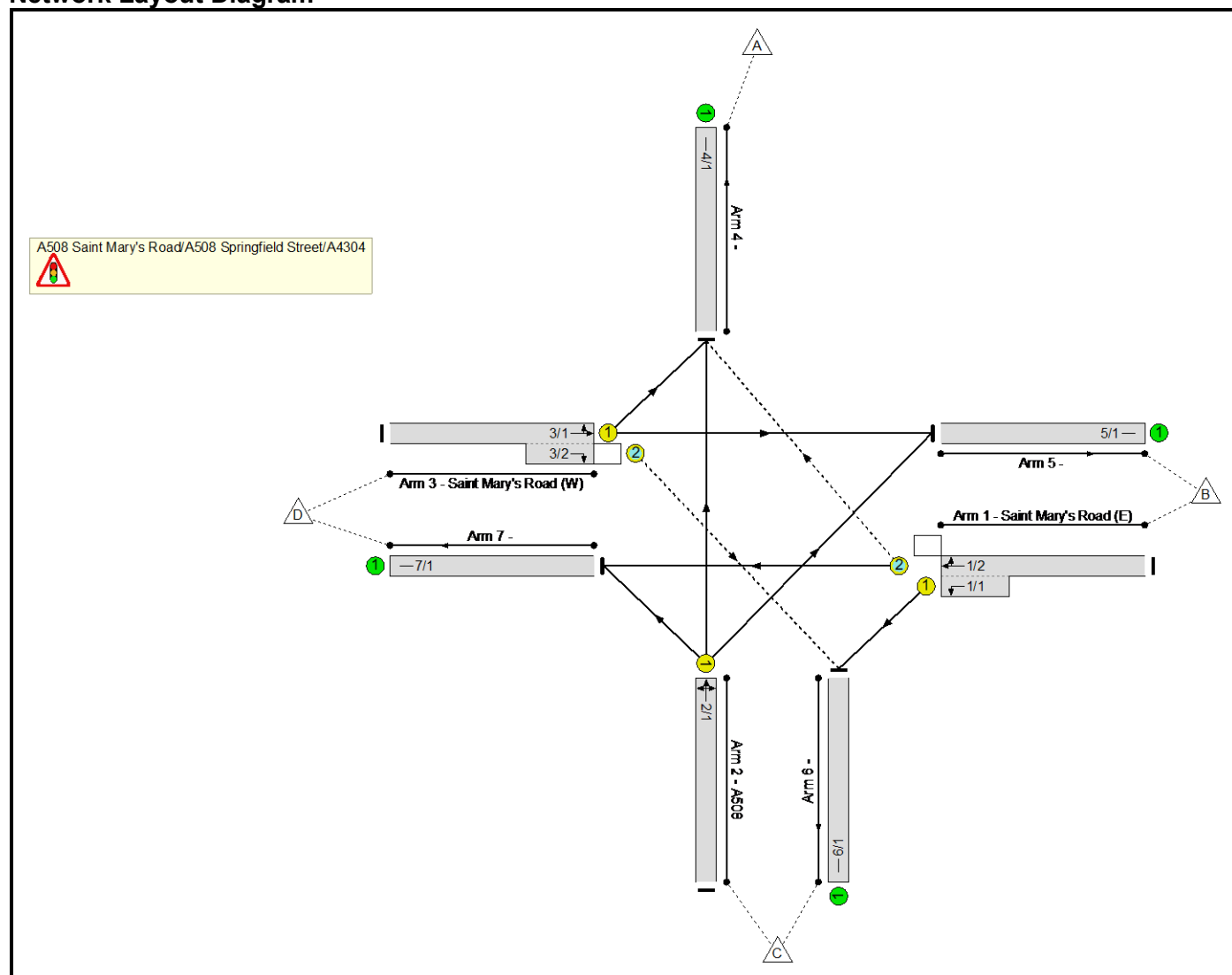
Full Input Data And Results

Full Input Data And Results

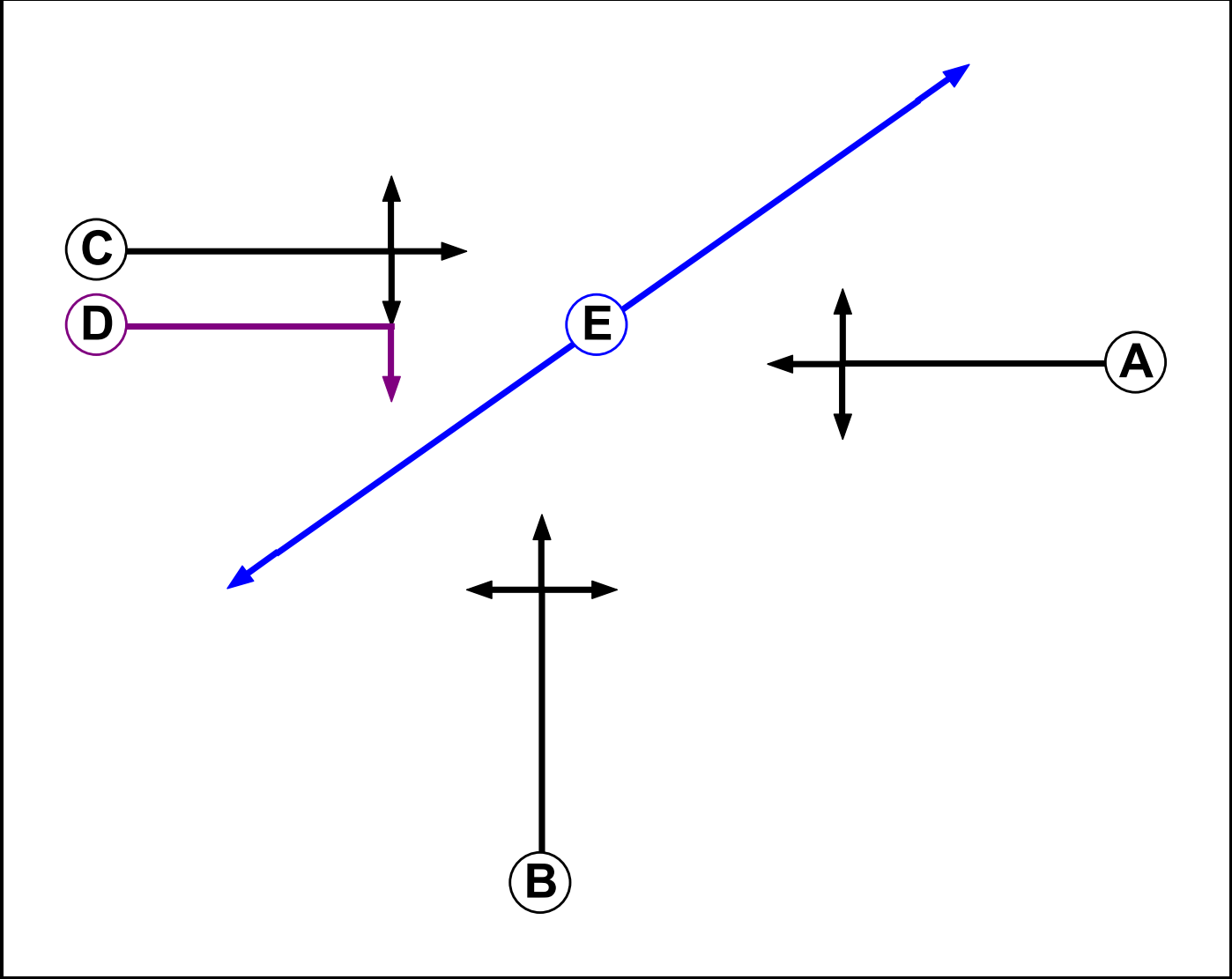
User and Project Details

Project:	
Title:	
Location:	
Additional detail:	
File name:	09_Mitigation - A508 x A4304_Peds_DoubleCycle.lsg3x
Author:	
Company:	
Address:	

Network Layout Diagram



Phase Diagram



Phase Input Data

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

Full Input Data And Results

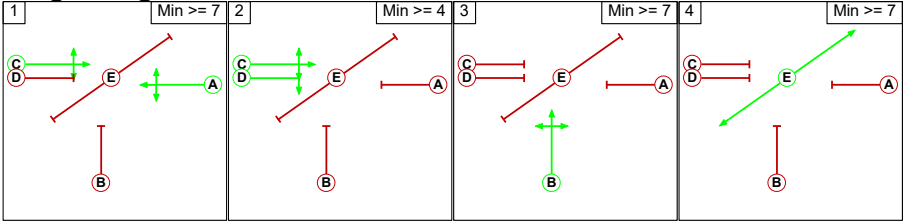
Phase Intergreens Matrix

Terminating Phase	Starting Phase					
		A	B	C	D	E
	A		5	-	5	8
	B	5		5	5	8
	C	-	5		-	8
	D	5	5	-		8
	E	12	12	12	12	

Phases in Stage

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

Stage Diagram



Phase Delays

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

Prohibited Stage Change

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

Full Input Data And Results

Give-Way Lane Input Data

Junction: A508 Saint Mary's Road/A508 Springfield Street/A4304											
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 (Saint Mary's Road (E))	4/1 (Right)	1439	0	3/1	1.09	All	2.00	2.00	0.50	2	2.00
3/2 (Saint Mary's Road (W))	6/1 (Right)	1439	0	1/1	1.09	All	2.00	-	0.50	2	2.00
				1/2	1.09	To 7/1 (Ahead)					

Full Input Data And Results

Lane Input Data

Junction: A508 Saint Mary's Road/A508 Springfield Street/A4304												
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 (Saint Mary's Road (E))	U	A	2	3	5.0	Geom	-	3.50	0.00	Y	Arm 6 Left	7.50
1/2 (Saint Mary's Road (E))	O	A	2	3	60.0	Geom	-	3.50	0.00	N	Arm 4 Right	12.00
											Arm 7 Ahead	Inf
2/1 (A508)	U	B	2	3	60.0	Geom	-	3.50	0.00	Y	Arm 4 Ahead	Inf
											Arm 5 Right	15.00
											Arm 7 Left	10.00
3/1 (Saint Mary's Road (W))	U	C	2	3	60.0	Geom	-	2.75	0.00	Y	Arm 4 Left	7.00
											Arm 5 Ahead	Inf
3/2 (Saint Mary's Road (W))	O	C D	2	3	5.0	Geom	-	3.00	0.00	N	Arm 6 Right	10.00
4/1	U		2	3	60.0	Inf	-	-	-	-	-	-
5/1	U		2	3	60.0	Inf	-	-	-	-	-	-
6/1	U		2	3	60.0	Inf	-	-	-	-	-	-
7/1	U		2	3	60.0	Inf	-	-	-	-	-	-

Traffic Flow Groups

Flow Group	Start Time	End Time	Duration	Formula
1: '2041 Core AM'	08:00	09:00	01:00	
2: '2041 Core PM'	17:00	18:00	01:00	
3: '2041 Pref AM'	08:00	09:00	01:00	
4: '2041 Pref PM'	17:00	18:00	01:00	
5: '2025 AM'	08:00	09:00	01:00	
6: '2025 PM'	17:00	18:00	01:00	

Scenario 1: '2041 Core AM' (FG1: '2041 Core AM', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired

Desired Flow :

	Destination					
Origin		A	B	C	D	Tot.
	A	0	0	0	0	0
	B	7	0	293	410	710
	C	73	250	0	149	472
	D	5	171	33	0	209
	Tot.	85	421	326	559	1391

Traffic Lane Flows

Lane	Scenario 1: 2041 Core AM
Junction: A508 Saint Mary's Road/A508 Springfield Street/A4304	
1/1 (short)	293
1/2 (with short)	710(In) 417(Out)
2/1	472
3/1 (with short)	209(In) 176(Out)
3/2 (short)	33
4/1	85
5/1	421
6/1	326
7/1	559

Lane Saturation Flows

Junction: A508 Saint Mary's Road/A508 Springfield Street/A4304								
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 (Saint Mary's Road (E))	3.50	0.00	Y	Arm 6 Left	7.50	100.0 %	1638	1638
1/2 (Saint Mary's Road (E))	3.50	0.00	N	Arm 4 Right	12.00	1.7 %	2101	2101
				Arm 7 Ahead	Inf	98.3 %		
2/1 (A508)	3.50	0.00	Y	Arm 4 Ahead	Inf	15.5 %	1786	1786
				Arm 5 Right	15.00	53.0 %		
				Arm 7 Left	10.00	31.6 %		
3/1 (Saint Mary's Road (W))	2.75	0.00	Y	Arm 4 Left	7.00	2.8 %	1879	1879
				Arm 5 Ahead	Inf	97.2 %		
3/2 (Saint Mary's Road (W))	3.00	0.00	N	Arm 6 Right	10.00	100.0 %	1787	1787
4/1	Infinite Saturation Flow						Inf	Inf
5/1	Infinite Saturation Flow						Inf	Inf
6/1	Infinite Saturation Flow						Inf	Inf
7/1	Infinite Saturation Flow						Inf	Inf

Scenario 2: '2041 Core PM' (FG2: '2041 Core PM', Plan 1: 'Network Control Plan 1')**Traffic Flows, Desired****Desired Flow :**

Origin	Destination					
		A	B	C	D	Tot.
	A	0	0	0	0	0
	B	25	0	384	314	723
	C	68	231	0	99	398
	D	33	264	105	0	402
	Tot.	126	495	489	413	1523

Full Input Data And Results

Traffic Lane Flows

Lane	Scenario 2: 2041 Core PM
Junction: A508 Saint Mary's Road/A508 Springfield Street/A4304	
1/1 (short)	384
1/2 (with short)	723(In) 339(Out)
2/1	398
3/1 (with short)	402(In) 297(Out)
3/2 (short)	105
4/1	126
5/1	495
6/1	489
7/1	413

Lane Saturation Flows

Junction: A508 Saint Mary's Road/A508 Springfield Street/A4304								
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 (Saint Mary's Road (E))	3.50	0.00	Y	Arm 6 Left	7.50	100.0 %	1638	1638
1/2 (Saint Mary's Road (E))	3.50	0.00	N	Arm 4 Right	12.00	7.4 %	2086	2086
				Arm 7 Ahead	Inf	92.6 %		
2/1 (A508)	3.50	0.00	Y	Arm 4 Ahead	Inf	17.1 %	1794	1794
				Arm 5 Right	15.00	58.0 %		
				Arm 7 Left	10.00	24.9 %		
3/1 (Saint Mary's Road (W))	2.75	0.00	Y	Arm 4 Left	7.00	11.1 %	1846	1846
				Arm 5 Ahead	Inf	88.9 %		
3/2 (Saint Mary's Road (W))	3.00	0.00	N	Arm 6 Right	10.00	100.0 %	1787	1787
4/1	Infinite Saturation Flow						Inf	Inf
5/1	Infinite Saturation Flow						Inf	Inf
6/1	Infinite Saturation Flow						Inf	Inf
7/1	Infinite Saturation Flow						Inf	Inf

Full Input Data And Results

Scenario 3: '2041 Pref AM' (FG3: '2041 Pref AM', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired

Desired Flow :

	Destination					
Origin		A	B	C	D	Tot.
	A	0	0	0	0	0
	B	7	0	309	432	748
	C	73	250	0	149	472
	D	4	153	30	0	187
	Tot.	84	403	339	581	1407

Traffic Lane Flows

Lane	Scenario 3: 2041 Pref AM
Junction: A508 Saint Mary's Road/A508 Springfield Street/A4304	
1/1 (short)	309
1/2 (with short)	748(In) 439(Out)
2/1	472
3/1 (with short)	187(In) 157(Out)
3/2 (short)	30
4/1	84
5/1	403
6/1	339
7/1	581

Lane Saturation Flows

Junction: A508 Saint Mary's Road/A508 Springfield Street/A4304								
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 (Saint Mary's Road (E))	3.50	0.00	Y	Arm 6 Left	7.50	100.0 %	1638	1638
1/2 (Saint Mary's Road (E))	3.50	0.00	N	Arm 4 Right	12.00	1.6 %	2101	2101
				Arm 7 Ahead	Inf	98.4 %		
2/1 (A508)	3.50	0.00	Y	Arm 4 Ahead	Inf	15.5 %	1786	1786
				Arm 5 Right	15.00	53.0 %		
				Arm 7 Left	10.00	31.6 %		
3/1 (Saint Mary's Road (W))	2.75	0.00	Y	Arm 4 Left	7.00	2.5 %	1880	1880
				Arm 5 Ahead	Inf	97.5 %		
3/2 (Saint Mary's Road (W))	3.00	0.00	N	Arm 6 Right	10.00	100.0 %	1787	1787
4/1	Infinite Saturation Flow						Inf	Inf
5/1	Infinite Saturation Flow						Inf	Inf
6/1	Infinite Saturation Flow						Inf	Inf
7/1	Infinite Saturation Flow						Inf	Inf

Scenario 4: '2041 Pref PM' (FG4: '2041 Pref PM', Plan 1: 'Network Control Plan 1')**Traffic Flows, Desired****Desired Flow :**

Origin	Destination					
		A	B	C	D	Tot.
	A	0	0	0	0	0
	B	25	0	392	321	738
	C	71	238	0	102	411
	D	35	280	111	0	426
	Tot.	131	518	503	423	1575

Full Input Data And Results

Traffic Lane Flows

Lane	Scenario 4: 2041 Pref PM
Junction: A508 Saint Mary's Road/A508 Springfield Street/A4304	
1/1 (short)	392
1/2 (with short)	738(In) 346(Out)
2/1	411
3/1 (with short)	426(In) 315(Out)
3/2 (short)	111
4/1	131
5/1	518
6/1	503
7/1	423

Lane Saturation Flows

Junction: A508 Saint Mary's Road/A508 Springfield Street/A4304								
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 (Saint Mary's Road (E))	3.50	0.00	Y	Arm 6 Left	7.50	100.0 %	1638	1638
1/2 (Saint Mary's Road (E))	3.50	0.00	N	Arm 4 Right	12.00	7.2 %	2086	2086
				Arm 7 Ahead	Inf	92.8 %		
2/1 (A508)	3.50	0.00	Y	Arm 4 Ahead	Inf	17.3 %	1794	1794
				Arm 5 Right	15.00	57.9 %		
				Arm 7 Left	10.00	24.8 %		
3/1 (Saint Mary's Road (W))	2.75	0.00	Y	Arm 4 Left	7.00	11.1 %	1846	1846
				Arm 5 Ahead	Inf	88.9 %		
3/2 (Saint Mary's Road (W))	3.00	0.00	N	Arm 6 Right	10.00	100.0 %	1787	1787
4/1	Infinite Saturation Flow						Inf	Inf
5/1	Infinite Saturation Flow						Inf	Inf
6/1	Infinite Saturation Flow						Inf	Inf
7/1	Infinite Saturation Flow						Inf	Inf

Full Input Data And Results

Scenario 5: '2025 AM' (FG5: '2025 AM', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired

Desired Flow :

	Destination					
Origin		A	B	C	D	Tot.
	A	0	0	0	0	0
	B	5	0	288	206	499
	C	73	249	0	148	470
	D	4	138	27	0	169
	Tot.	82	387	315	354	1138

Traffic Lane Flows

Lane	Scenario 5: 2025 AM
Junction: A508 Saint Mary's Road/A508 Springfield Street/A4304	
1/1 (short)	288
1/2 (with short)	499(In) 211(Out)
2/1	470
3/1 (with short)	169(In) 142(Out)
3/2 (short)	27
4/1	82
5/1	387
6/1	315
7/1	354

Lane Saturation Flows

Junction: A508 Saint Mary's Road/A508 Springfield Street/A4304								
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 (Saint Mary's Road (E))	3.50	0.00	Y	Arm 6 Left	7.50	100.0 %	1638	1638
1/2 (Saint Mary's Road (E))	3.50	0.00	N	Arm 4 Right	12.00	2.4 %	2099	2099
				Arm 7 Ahead	Inf	97.6 %		
2/1 (A508)	3.50	0.00	Y	Arm 4 Ahead	Inf	15.5 %	1786	1786
				Arm 5 Right	15.00	53.0 %		
				Arm 7 Left	10.00	31.5 %		
3/1 (Saint Mary's Road (W))	2.75	0.00	Y	Arm 4 Left	7.00	2.8 %	1879	1879
				Arm 5 Ahead	Inf	97.2 %		
3/2 (Saint Mary's Road (W))	3.00	0.00	N	Arm 6 Right	10.00	100.0 %	1787	1787
4/1	Infinite Saturation Flow						Inf	Inf
5/1	Infinite Saturation Flow						Inf	Inf
6/1	Infinite Saturation Flow						Inf	Inf
7/1	Infinite Saturation Flow						Inf	Inf

Scenario 6: '2025 PM' (FG6: '2025 PM', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired

Desired Flow :

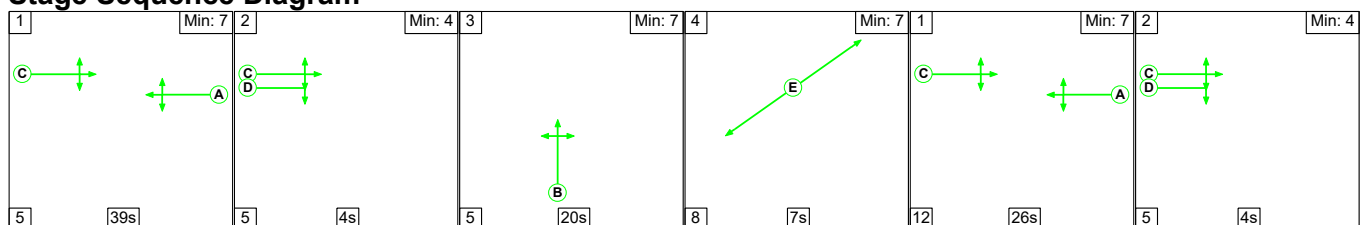
Origin	Destination					
		A	B	C	D	Tot.
	A	0	0	0	0	0
	B	20	0	309	253	582
	C	65	219	0	94	378
	D	23	184	73	0	280
	Tot.	108	403	382	347	1240

Traffic Lane Flows

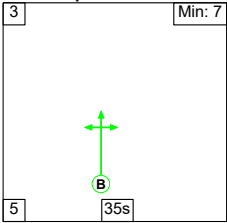
Lane	Scenario 6: 2025 PM
Junction: A508 Saint Mary's Road/A508 Springfield Street/A4304	
1/1 (short)	309
1/2 (with short)	582(In) 273(Out)
2/1	378
3/1 (with short)	280(In) 207(Out)
3/2 (short)	73
4/1	108
5/1	403
6/1	382
7/1	347

Lane Saturation Flows

Junction: A508 Saint Mary's Road/A508 Springfield Street/A4304								
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 (Saint Mary's Road (E))	3.50	0.00	Y	Arm 6 Left	7.50	100.0 %	1638	1638
1/2 (Saint Mary's Road (E))	3.50	0.00	N	Arm 4 Right	12.00	7.3 %	2086	2086
				Arm 7 Ahead	Inf	92.7 %		
2/1 (A508)	3.50	0.00	Y	Arm 4 Ahead	Inf	17.2 %	1794	1794
				Arm 5 Right	15.00	57.9 %		
				Arm 7 Left	10.00	24.9 %		
3/1 (Saint Mary's Road (W))	2.75	0.00	Y	Arm 4 Left	7.00	11.1 %	1846	1846
				Arm 5 Ahead	Inf	88.9 %		
3/2 (Saint Mary's Road (W))	3.00	0.00	N	Arm 6 Right	10.00	100.0 %	1787	1787
4/1				Infinite Saturation Flow			Inf	Inf
5/1				Infinite Saturation Flow			Inf	Inf
6/1				Infinite Saturation Flow			Inf	Inf
7/1				Infinite Saturation Flow			Inf	Inf

Scenario 1: '2041 Core AM' (FG1: '2041 Core AM', Plan 1: 'Network Control Plan 1')**Stage Sequence Diagram**

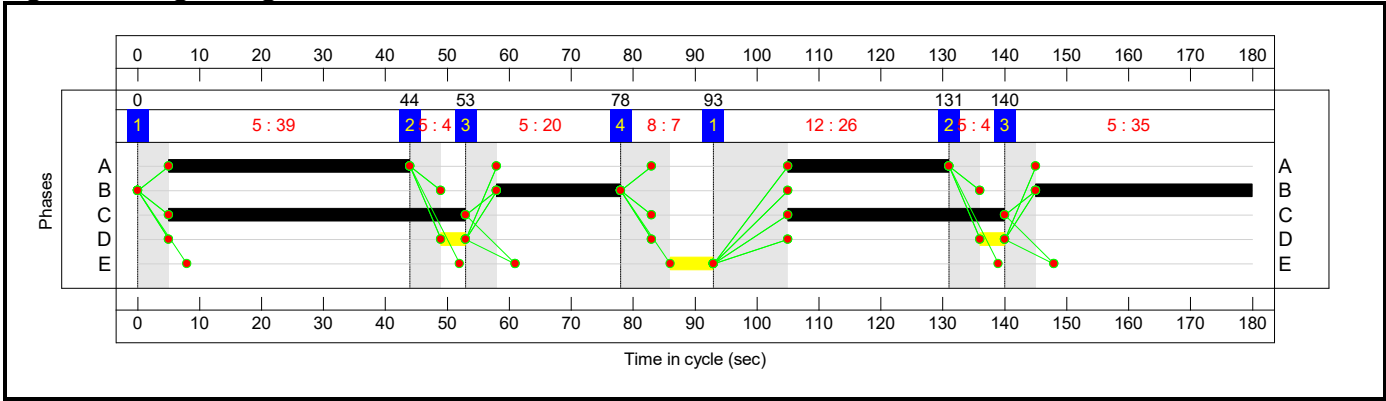
Full Input Data And Results



Stage Timings

Stage	1	2	3	4	1	2	3
Duration	39	4	20	7	26	4	35
Change Point	0	44	53	78	93	131	140

Signal Timings Diagram



Full Input Data And Results

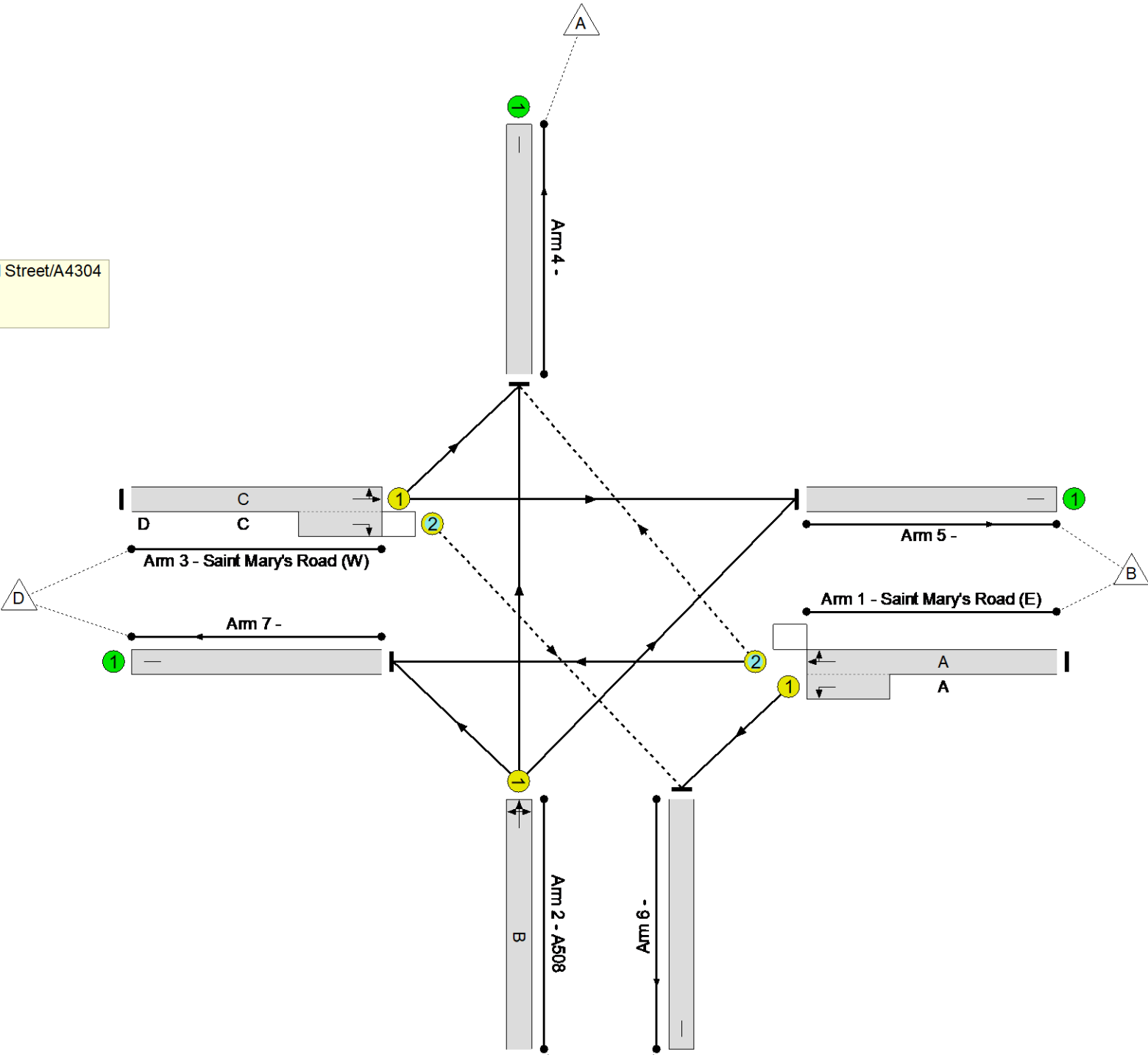
Network Layout Diagram



A508 Saint Mary's Road/A508 Springfield Street/A4304

PRC: 7.8 %

Total Traffic Delay: 14.3 pcuHr



Full Input Data And Results

Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network	-	-	N/A	-	-		-	-	-	-	-	-	83.5%
A508 Saint Mary's Road/A508 Springfield Street/A4304	-	-	N/A	-	-		-	-	-	-	-	-	83.5%
1/2+1/1	Saint Mary's Road (E) Right Left Ahead	O+U	N/A	N/A	A		2	65	-	710	2101:1638	501+352	83.3 : 83.3%
2/1	A508 Ahead Right Left	U	N/A	N/A	B		2	55	-	472	1786	566	83.5%
3/1+3/2	Saint Mary's Road (W) Left Ahead Right	U+O	N/A	N/A	C	D	2	83	8	209	1879:1787	767+144	23.0 : 23.0%
4/1		U	N/A	N/A	-		-	-	-	85	Inf	Inf	0.0%
5/1		U	N/A	N/A	-		-	-	-	421	Inf	Inf	0.0%
6/1		U	N/A	N/A	-		-	-	-	326	Inf	Inf	0.0%
7/1		U	N/A	N/A	-		-	-	-	559	Inf	Inf	0.0%

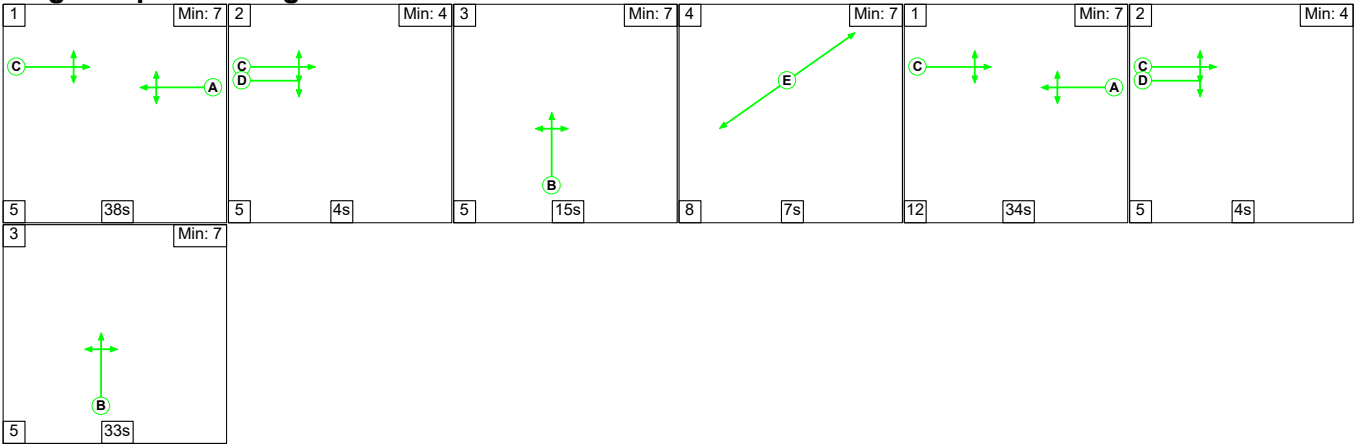
Full Input Data And Results

Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network	-	-	28	11	1	9.2	5.0	0.1	14.3	-	-	-	-
A508 Saint Mary's Road/A508 Springfield Street/A4304	-	-	28	11	1	9.2	5.0	0.1	14.3	-	-	-	-
1/2+1/1	710	710	7	0	0	4.6	2.4	0.0	7.0	35.7	13.1	2.4	15.5
2/1	472	472	-	-	-	3.8	2.4	-	6.2	47.0	11.7	2.4	14.1
3/1+3/2	209	209	21	11	1	0.8	0.1	0.1	1.1	18.5	2.7	0.1	2.9
4/1	85	85	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/1	421	421	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/1	326	326	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
7/1	559	559	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
C1 PRC for Signalled Lanes (%): 7.8 Total Delay for Signalled Lanes (pcuHr): 14.28 Cycle Time (s): 180 PRC Over All Lanes (%): 7.8 Total Delay Over All Lanes(pcuHr): 14.28													

Full Input Data And Results

Scenario 2: '2041 Core PM' (FG2: '2041 Core PM', Plan 1: 'Network Control Plan 1')

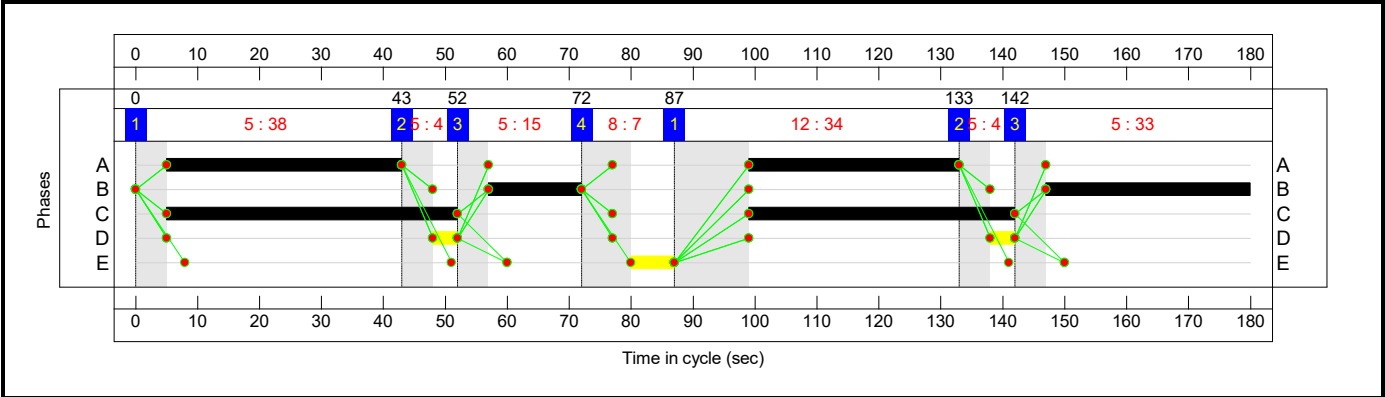
Stage Sequence Diagram



Stage Timings

Stage	1	2	3	4	1	2	3
Duration	38	4	15	7	34	4	33
Change Point	0	43	52	72	87	133	142

Signal Timings Diagram



Full Input Data And Results

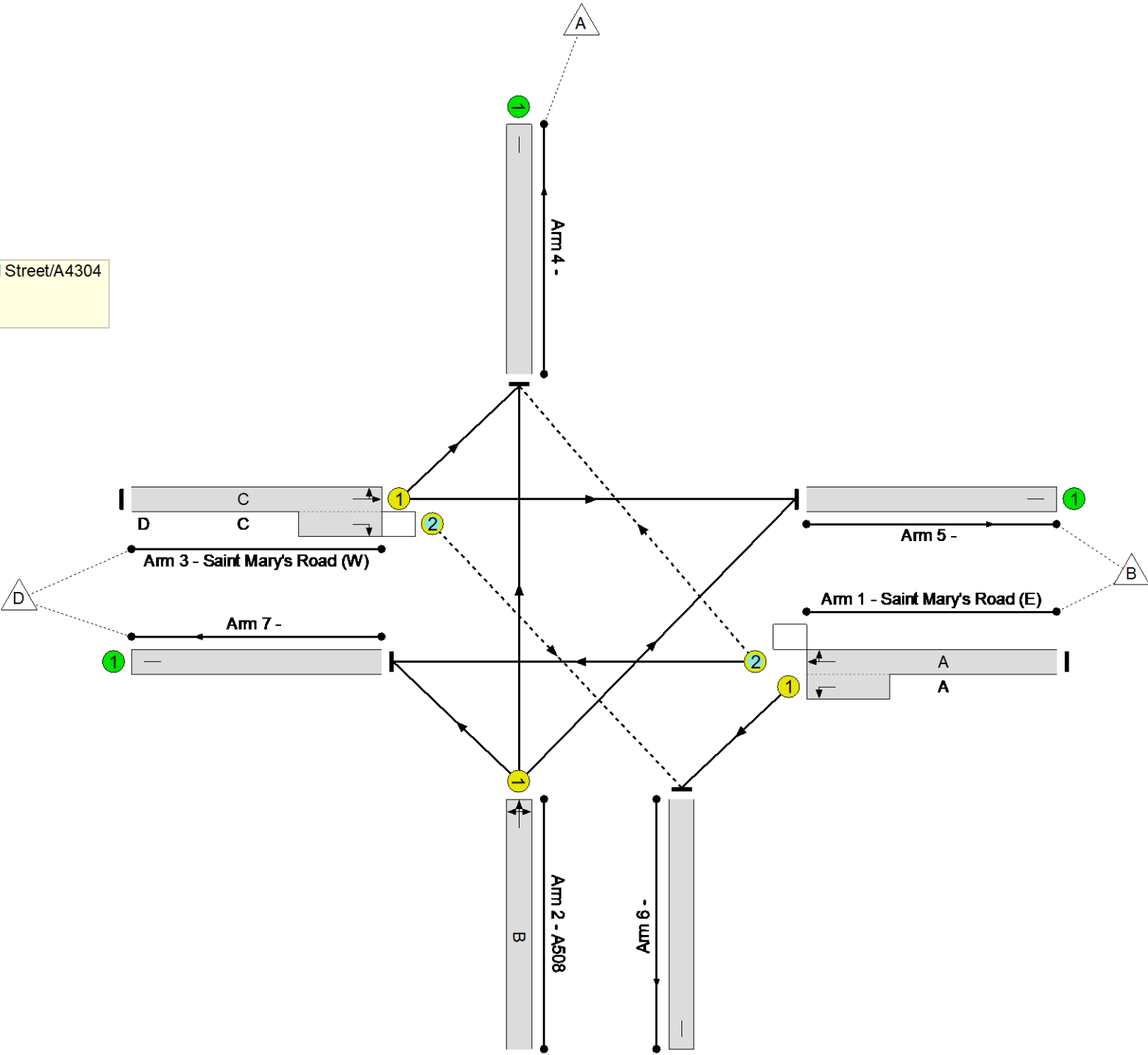
Network Layout Diagram



A508 Saint Mary's Road/A508 Springfield Street/A4304

PRC: 12.4 %

Total Traffic Delay: 13.6 pcuHr



Full Input Data And Results

Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network	-	-	N/A	-	-		-	-	-	-	-	-	80.1%
A508 Saint Mary's Road/A508 Springfield Street/A4304	-	-	N/A	-	-		-	-	-	-	-	-	80.1%
1/2+1/1	Saint Mary's Road (E) Right Left Ahead	O+U	N/A	N/A	A		2	72	-	723	2086:1638	423+479	80.1 : 80.1%
2/1	A508 Ahead Right Left	U	N/A	N/A	B		2	48	-	398	1794	498	79.9%
3/1+3/2	Saint Mary's Road (W) Left Ahead Right	U+O	N/A	N/A	C	D	2	90	8	402	1846:1787	741+262	40.1 : 40.1%
4/1		U	N/A	N/A	-		-	-	-	126	Inf	Inf	0.0%
5/1		U	N/A	N/A	-		-	-	-	495	Inf	Inf	0.0%
6/1		U	N/A	N/A	-		-	-	-	489	Inf	Inf	0.0%
7/1		U	N/A	N/A	-		-	-	-	413	Inf	Inf	0.0%

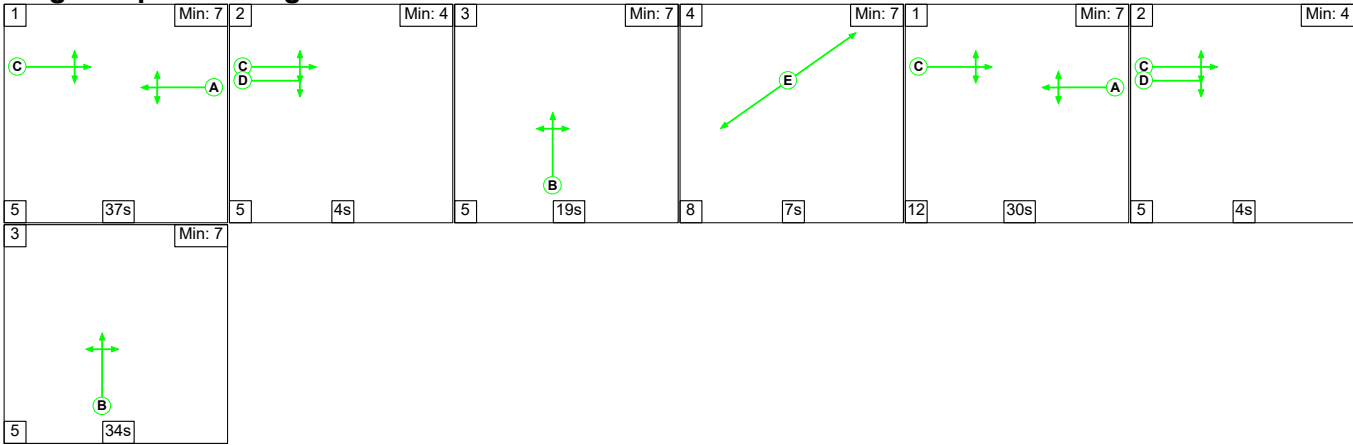
Full Input Data And Results

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Full Input Data And Results

Scenario 3: '2041 Pref AM' (FG3: '2041 Pref AM', Plan 1: 'Network Control Plan 1')

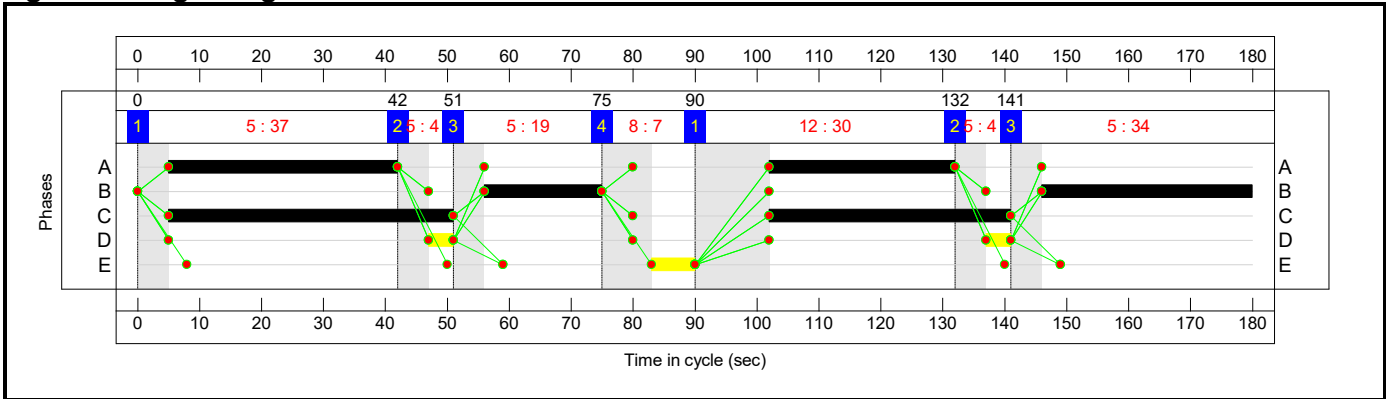
Stage Sequence Diagram



Stage Timings

Stage	1	2	3	4	1	2	3
Duration	37	4	19	7	30	4	34
Change Point	0	42	51	75	90	132	141

Signal Timings Diagram



Full Input Data And Results

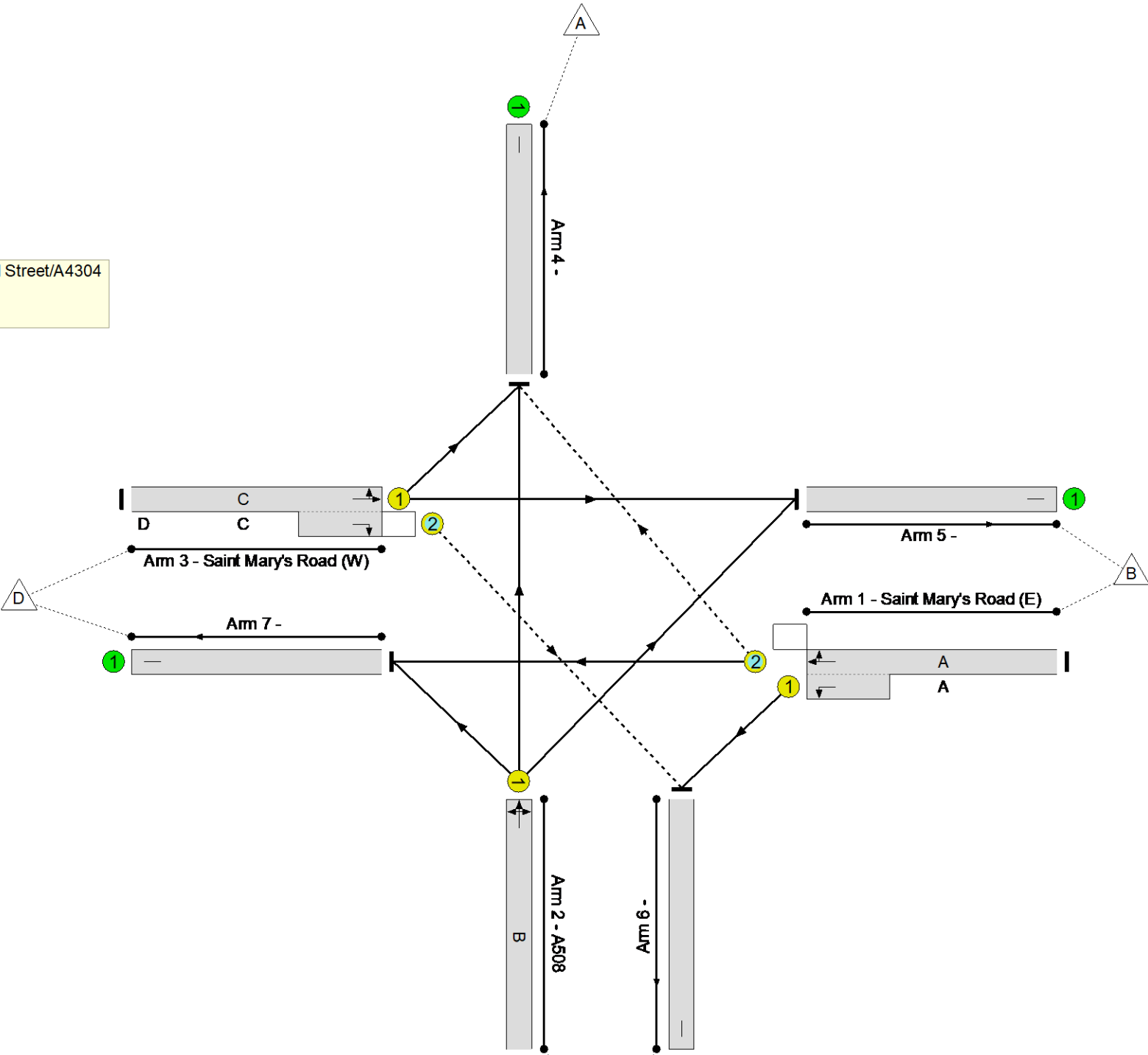
Network Layout Diagram



A508 Saint Mary's Road/A508 Springfield Street/A4304

PRC: 4.1 %

Total Traffic Delay: 15.5 pcuHr



Full Input Data And Results

Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network	-	-	N/A	-	-		-	-	-	-	-	-	86.5%
A508 Saint Mary's Road/A508 Springfield Street/A4304	-	-	N/A	-	-		-	-	-	-	-	-	86.5%
1/2+1/1	Saint Mary's Road (E) Right Left Ahead	O+U	N/A	N/A	A		2	67	-	748	2101:1638	513+361	85.6 : 85.6%
2/1	A508 Ahead Right Left	U	N/A	N/A	B		2	53	-	472	1786	546	86.5%
3/1+3/2	Saint Mary's Road (W) Left Ahead Right	U+O	N/A	N/A	C	D	2	85	8	187	1880:1787	783+150	20.1 : 20.1%
4/1		U	N/A	N/A	-		-	-	-	84	Inf	Inf	0.0%
5/1		U	N/A	N/A	-		-	-	-	403	Inf	Inf	0.0%
6/1		U	N/A	N/A	-		-	-	-	339	Inf	Inf	0.0%
7/1		U	N/A	N/A	-		-	-	-	581	Inf	Inf	0.0%

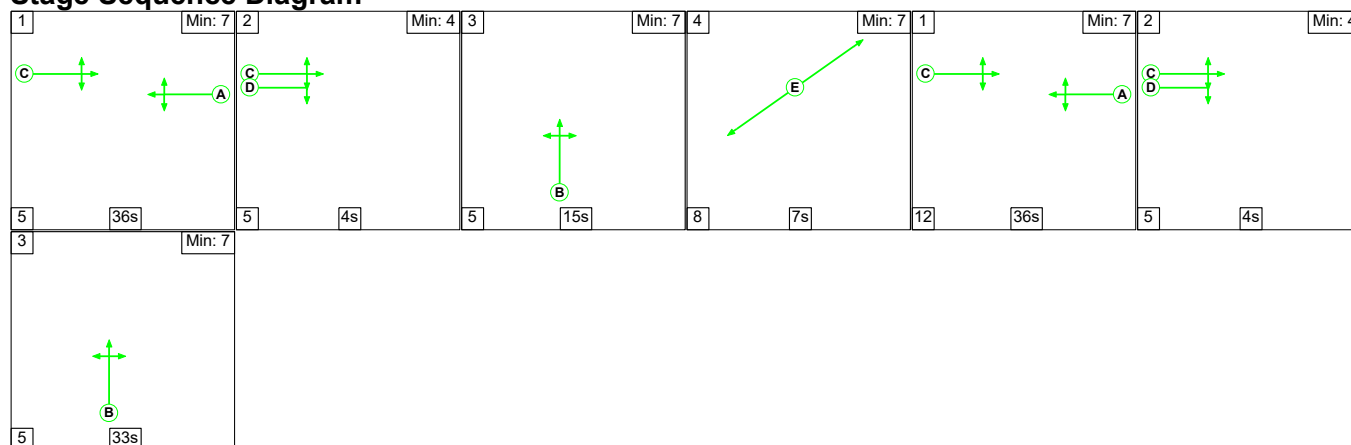
Full Input Data And Results

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Full Input Data And Results

Scenario 4: '2041 Pref PM' (FG4: '2041 Pref PM', Plan 1: 'Network Control Plan 1')

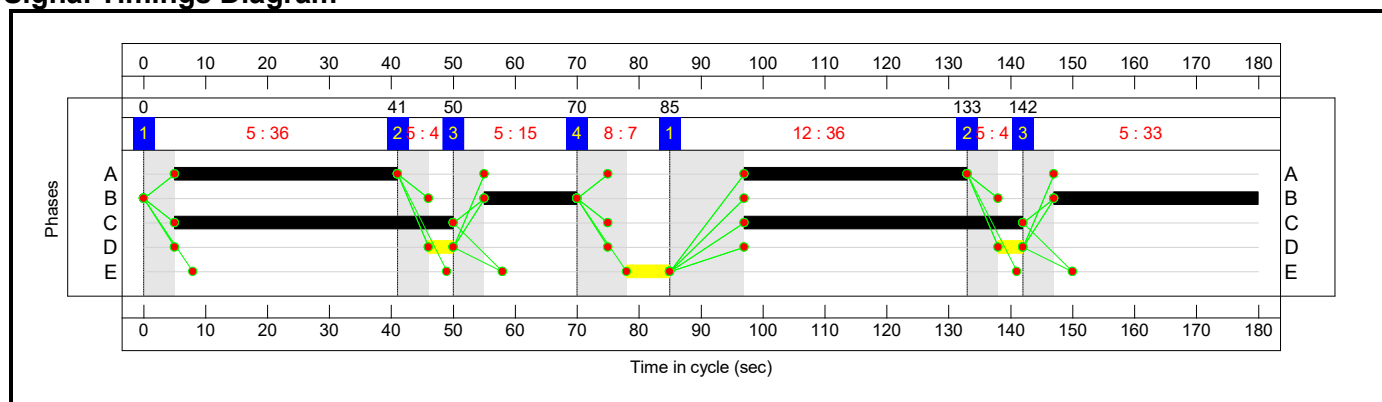
Stage Sequence Diagram



Stage Timings

Stage	1	2	3	4	1	2	3
Duration	36	4	15	7	36	4	33
Change Point	0	41	50	70	85	133	142

Signal Timings Diagram



Full Input Data And Results

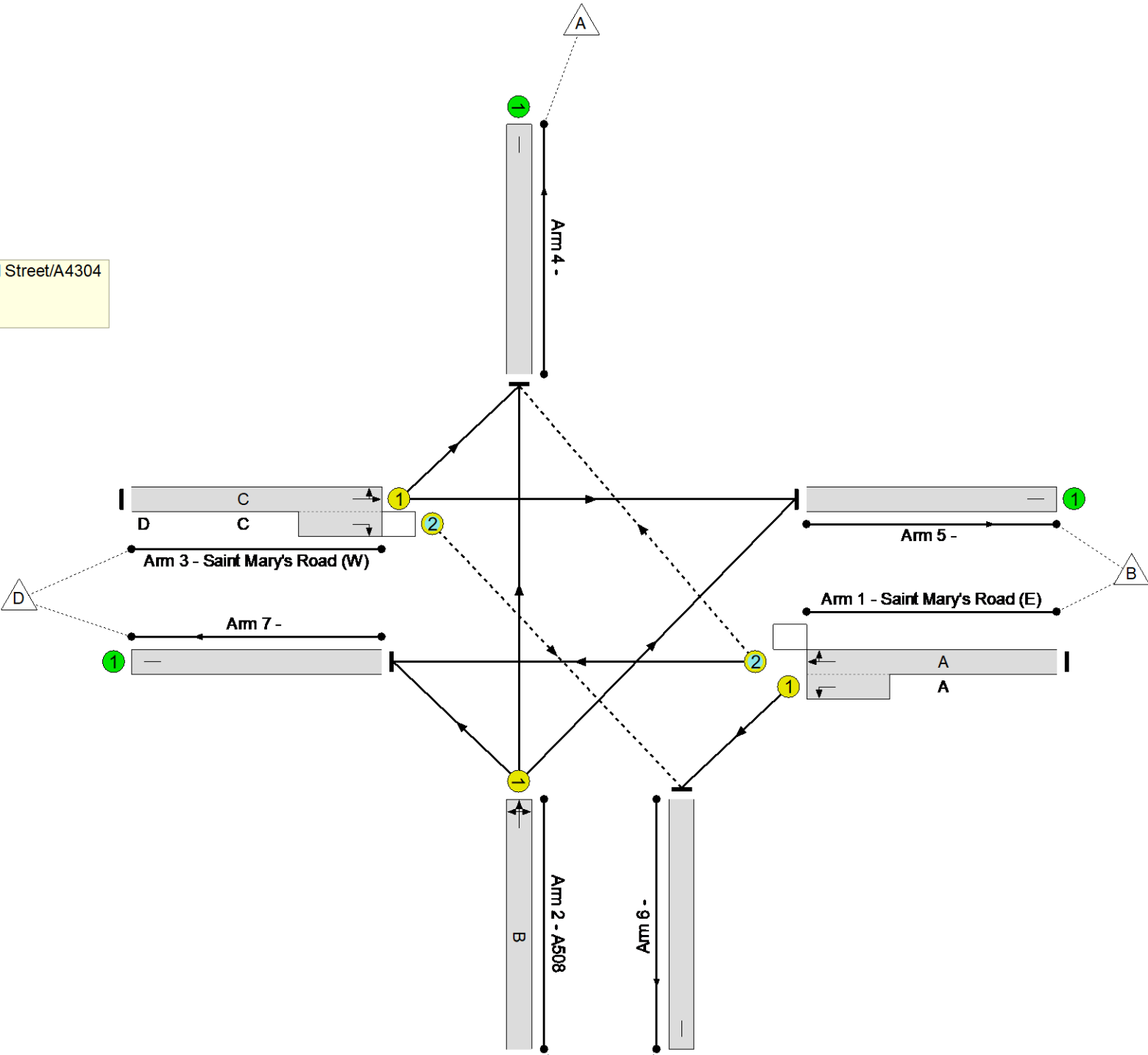
Network Layout Diagram



A508 Saint Mary's Road/A508 Springfield Street/A4304

PRC: 9.1 %

Total Traffic Delay: 14.7 pcuHr



Full Input Data And Results

Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network	-	-	N/A	-	-		-	-	-	-	-	-	82.5%
A508 Saint Mary's Road/A508 Springfield Street/A4304	-	-	N/A	-	-		-	-	-	-	-	-	82.5%
1/2+1/1	Saint Mary's Road (E) Right Left Ahead	O+U	N/A	N/A	A		2	72	-	738	2086:1638	423+479	81.8 : 81.8%
2/1	A508 Ahead Right Left	U	N/A	N/A	B		2	48	-	411	1794	498	82.5%
3/1+3/2	Saint Mary's Road (W) Left Ahead Right	U+O	N/A	N/A	C	D	2	90	8	426	1846:1787	741+261	42.5 : 42.5%
4/1		U	N/A	N/A	-		-	-	-	131	Inf	Inf	0.0%
5/1		U	N/A	N/A	-		-	-	-	518	Inf	Inf	0.0%
6/1		U	N/A	N/A	-		-	-	-	503	Inf	Inf	0.0%
7/1		U	N/A	N/A	-		-	-	-	423	Inf	Inf	0.0%

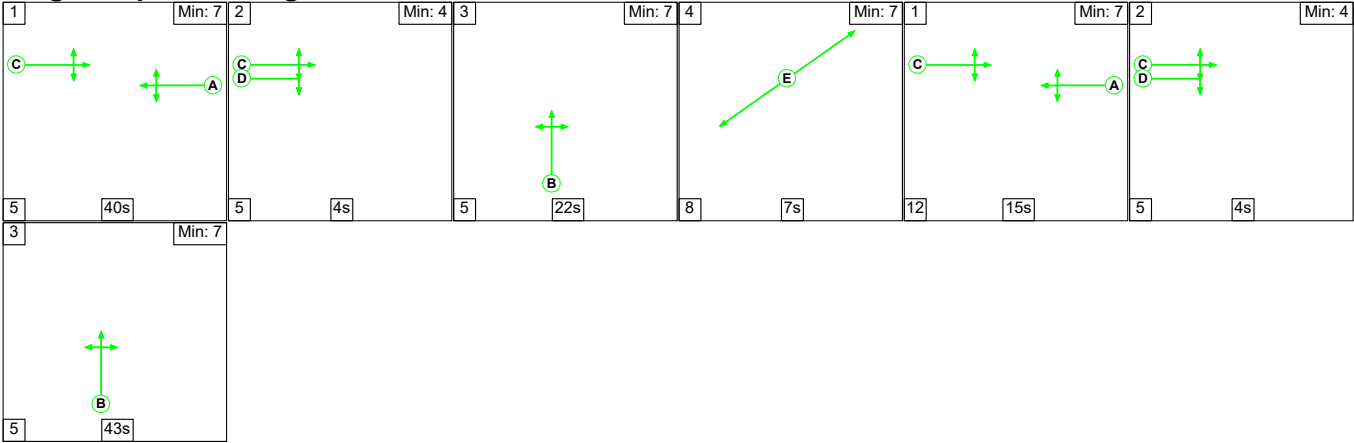
Full Input Data And Results

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Full Input Data And Results

Scenario 5: '2025 AM' (FG5: '2025 AM', Plan 1: 'Network Control Plan 1')

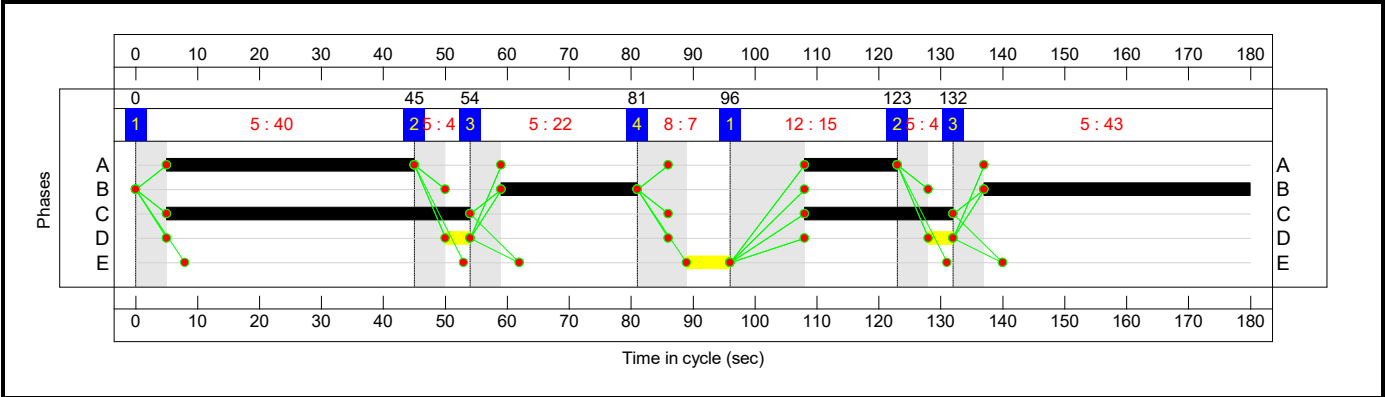
Stage Sequence Diagram



Stage Timings

Stage	1	2	3	4	1	2	3
Duration	40	4	22	7	15	4	43
Change Point	0	45	54	81	96	123	132

Signal Timings Diagram

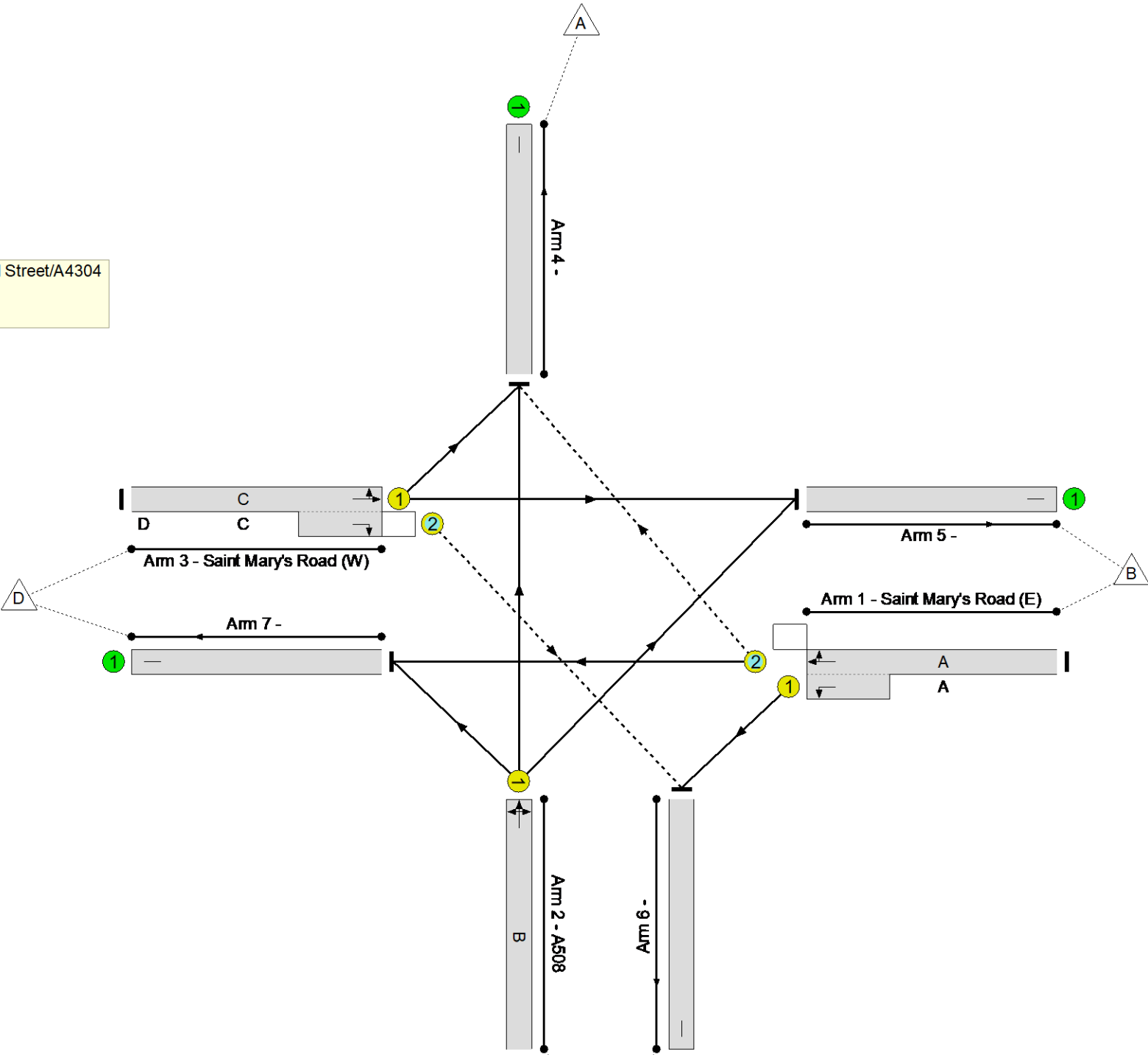




A508 Saint Mary's Road/A508 Springfield Street/A4304

PRC: 25.8 %

Total Traffic Delay: 10.0 pcuHr



Full Input Data And Results

Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network	-	-	N/A	-	-		-	-	-	-	-	-	71.5%
A508 Saint Mary's Road/A508 Springfield Street/A4304	-	-	N/A	-	-		-	-	-	-	-	-	71.5%
1/2+1/1	Saint Mary's Road (E) Right Left Ahead	O+U	N/A	N/A	A		2	55	-	499	2099:1638	295+403	71.5 : 71.5%
2/1	A508 Ahead Right Left	U	N/A	N/A	B		2	65	-	470	1786	665	70.7%
3/1+3/2	Saint Mary's Road (W) Left Ahead Right	U+O	N/A	N/A	C	D	2	73	8	169	1879:1787	678+129	20.9 : 20.9%
4/1		U	N/A	N/A	-		-	-	-	82	Inf	Inf	0.0%
5/1		U	N/A	N/A	-		-	-	-	387	Inf	Inf	0.0%
6/1		U	N/A	N/A	-		-	-	-	315	Inf	Inf	0.0%
7/1		U	N/A	N/A	-		-	-	-	354	Inf	Inf	0.0%

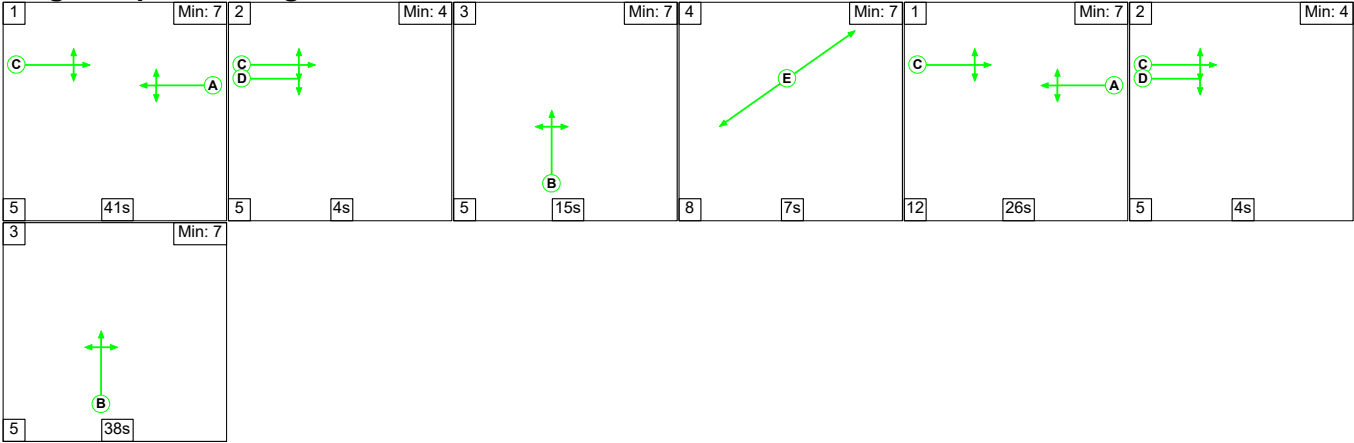
Full Input Data And Results

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Full Input Data And Results

Scenario 6: '2025 PM' (FG6: '2025 PM', Plan 1: 'Network Control Plan 1')

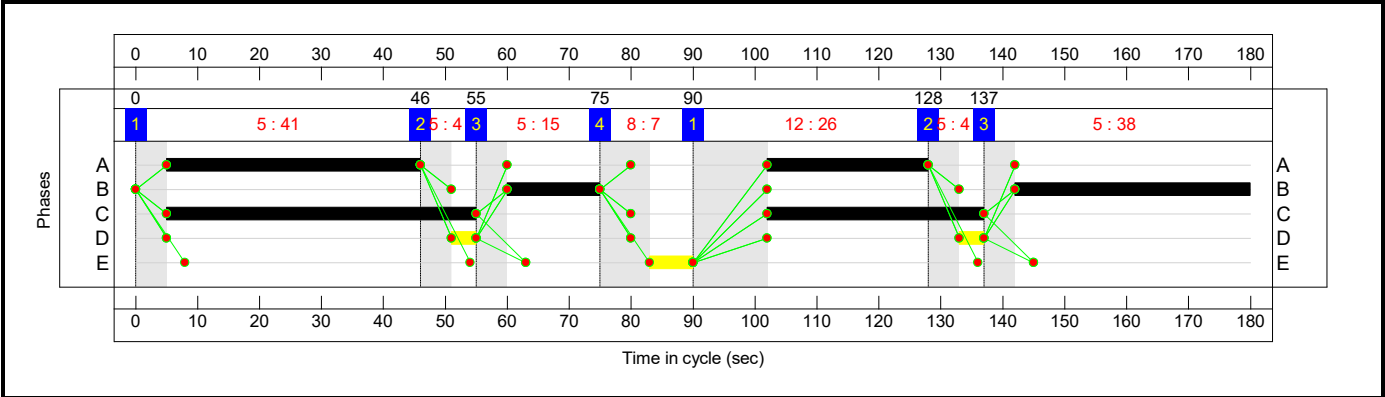
Stage Sequence Diagram



Stage Timings

Stage	1	2	3	4	1	2	3
Duration	41	4	15	7	26	4	38
Change Point	0	46	55	75	90	128	137

Signal Timings Diagram

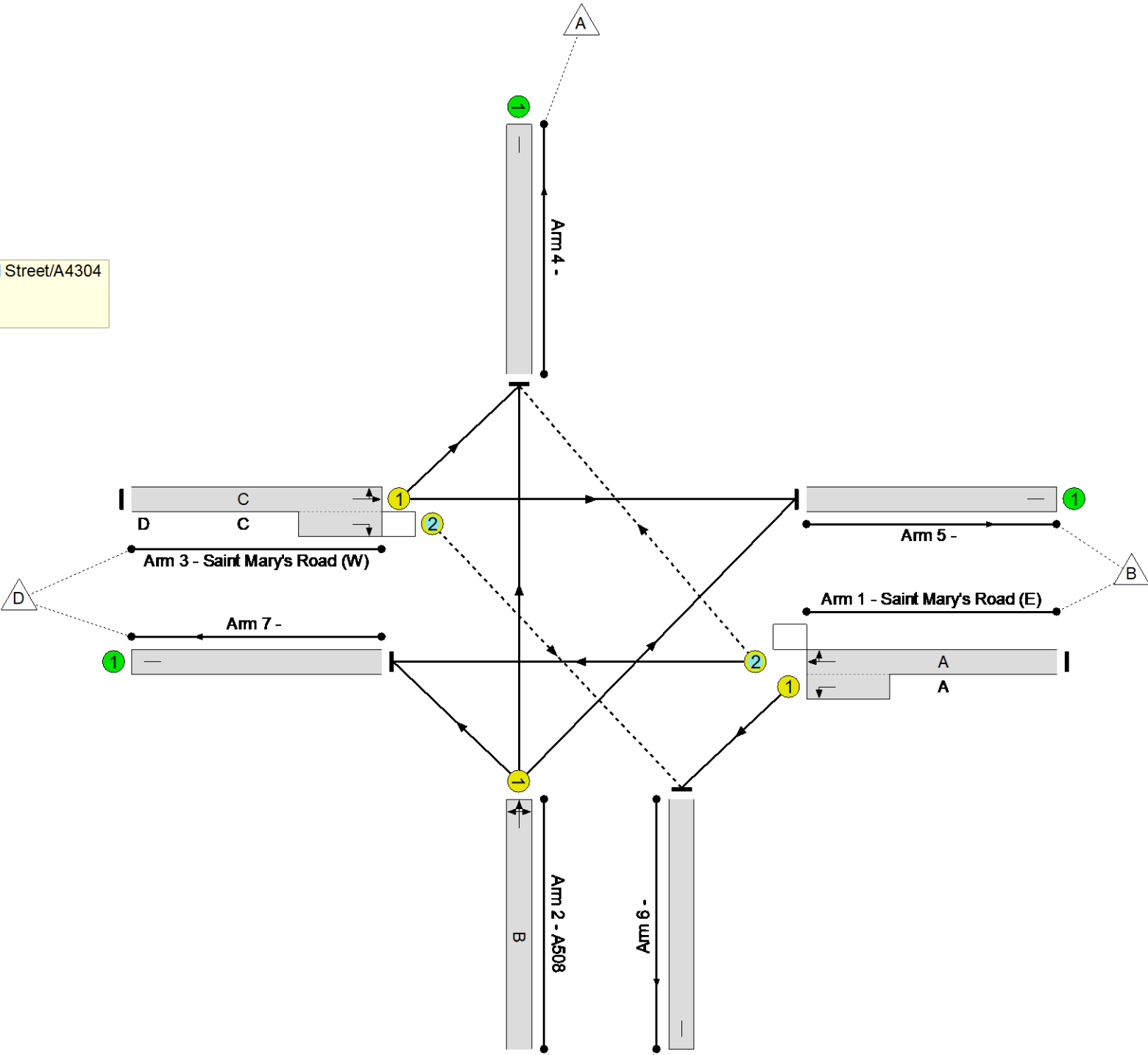




A508 Saint Mary's Road/A508 Springfield Street/A4304

PRC: 30.5 %

Total Traffic Delay: 9.9 pcuHr



Full Input Data And Results

Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network	-	-	N/A	-	-		-	-	-	-	-	-	69.0%
A508 Saint Mary's Road/A508 Springfield Street/A4304	-	-	N/A	-	-		-	-	-	-	-	-	69.0%
1/2+1/1	Saint Mary's Road (E) Right Left Ahead	O+U	N/A	N/A	A		2	67	-	582	2086:1638	400+453	68.3 : 68.3%
2/1	A508 Ahead Right Left	U	N/A	N/A	B		2	53	-	378	1794	548	69.0%
3/1+3/2	Saint Mary's Road (W) Left Ahead Right	U+O	N/A	N/A	C	D	2	85	8	280	1846:1787	704+248	29.4 : 29.4%
4/1		U	N/A	N/A	-		-	-	-	108	Inf	Inf	0.0%
5/1		U	N/A	N/A	-		-	-	-	403	Inf	Inf	0.0%
6/1		U	N/A	N/A	-		-	-	-	382	Inf	Inf	0.0%
7/1		U	N/A	N/A	-		-	-	-	347	Inf	Inf	0.0%

Full Input Data And Results

Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network	-	-	86	6	2	7.3	2.4	0.2	9.9	-	-	-	-
A508 Saint Mary's Road/A508 Springfield Street/A4304	-	-	86	6	2	7.3	2.4	0.2	9.9	-	-	-	-
1/2+1/1	582	582	20	0	0	3.3	1.1	0.0	4.4	27.3	7.1	1.1	8.1
2/1	378	378	-	-	-	2.9	1.1	-	4.0	38.0	8.7	1.1	9.8
3/1+3/2	280	280	66	6	2	1.0	0.2	0.2	1.4	18.6	3.0	0.2	3.2
4/1	108	108	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/1	403	403	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/1	382	382	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
7/1	347	347	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
C1 PRC for Signalled Lanes (%): 30.5 Total Delay for Signalled Lanes (pcuHr): 9.85 Cycle Time (s): 180 PRC Over All Lanes (%): 30.5 Total Delay Over All Lanes(pcuHr): 9.85													

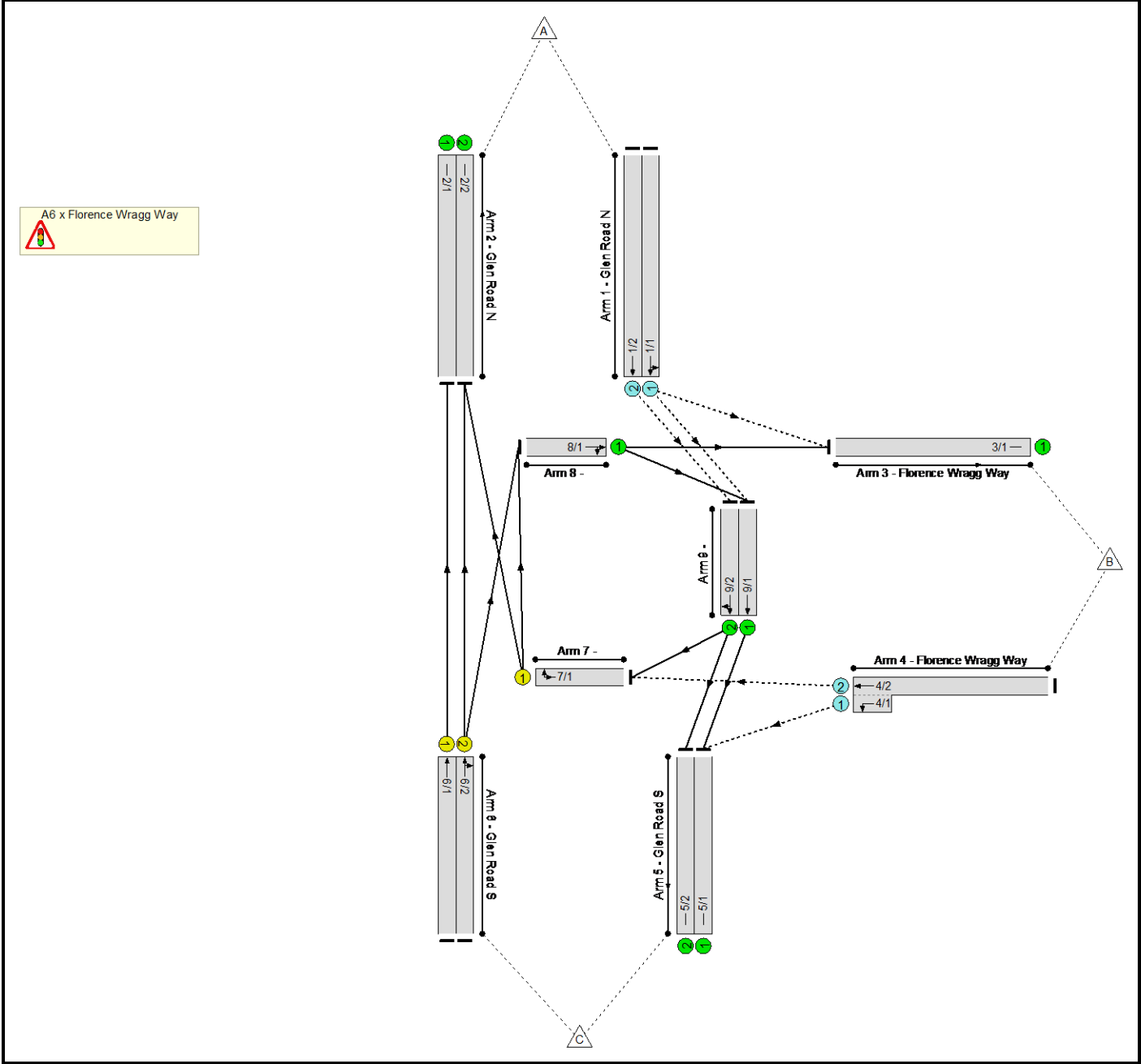
Full Input Data And Results

Full Input Data And Results

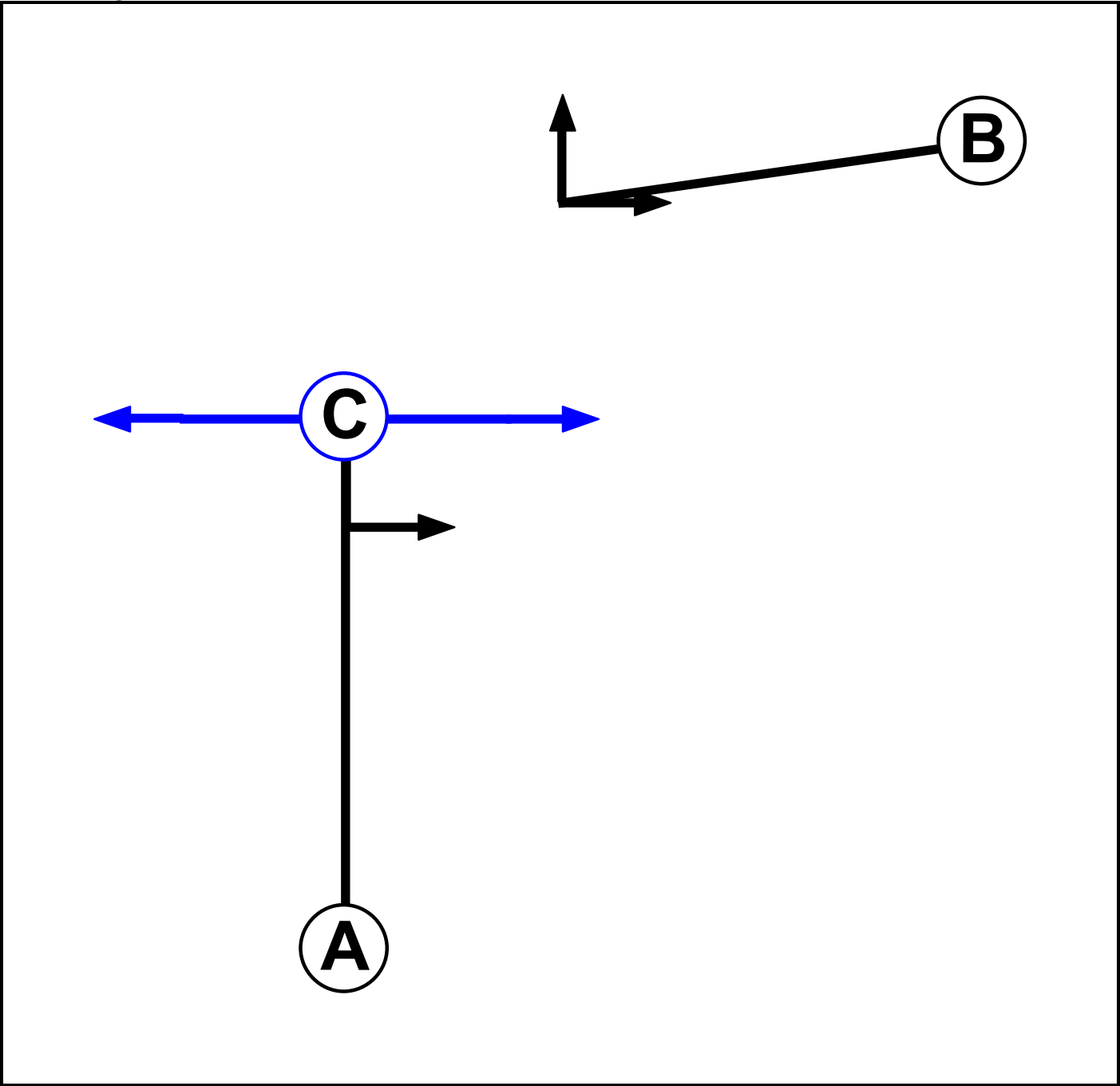
User and Project Details

Project:	
Title:	
Location:	
Additional detail:	
File name:	13_Mitigation - A6 x Florence Wragg Way.lsg3x
Author:	
Company:	
Address:	

Network Layout Diagram



Phase Diagram



Phase Input Data

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

Full Input Data And Results

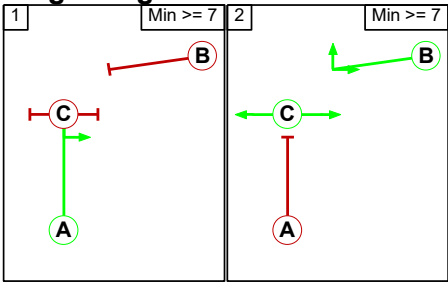
Phase Intergreens Matrix

Terminating Phase	Starting Phase			
		A	B	C
	A		5	5
	B	5		-
	C	9	-	

Phases in Stage

Stage No.	Phases in Stage
1	A
2	B C

Stage Diagram



Phase Delays

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

Prohibited Stage Change

From Stage	To Stage		
		1	2
	1		5
	2	9	

Full Input Data And Results

Give-Way Lane Input Data

Junction: A6 x Florence Wragg Way											
Lane	Movement	Max Flow when Giving Way (PCU/Hr)	Min Flow when Giving Way (PCU/Hr)	Opposing Lane	Opp. Lane Coeff.	Opp. Mvmnts.	Right Turn Storage (PCU)	Non-Blocking Storage (PCU)	RTF	Right Turn Move up (s)	Max Turns in Intergreen (PCU)
1/1 (Glen Road N)	3/1 (Left)	1439	0	8/1	0.43	All	-	-	-	-	-
	9/1 (Ahead)	1439	0	8/1	0.43	All					
1/2 (Glen Road N)	9/2 (Ahead)	1439	0	8/1	0.43	All	-	-	-	-	-
4/1 (Florence Wragg Way)	5/1 (Left)	906	0	9/1	0.32	All	-	-	-	-	-
				9/2	0.32	All					
4/2 (Florence Wragg Way)	7/1 (Ahead)	906	0	9/1	0.32	All	-	-	-	-	-
				9/2	0.32	All					

Full Input Data And Results

Lane Input Data

Junction: A6 x Florence Wragg Way												
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 (Glen Road N)	O		2	3	60.0	Geom	-	3.50	0.00	Y	Arm 3 Left	45.00
											Arm 9 Ahead	Inf
1/2 (Glen Road N)	O		2	3	60.0	Geom	-	4.00	0.00	N	Arm 9 Ahead	Inf
2/1 (Glen Road N)	U		2	3	60.0	Inf	-	-	-	-	-	-
2/2 (Glen Road N)	U		2	3	60.0	Inf	-	-	-	-	-	-
3/1 (Florence Wragg Way)	U		2	3	60.0	Inf	-	-	-	-	-	-
4/1 (Florence Wragg Way)	O		2	3	3.2	Geom	-	2.75	0.00	Y	Arm 5 Left	60.00
4/2 (Florence Wragg Way)	O		2	3	60.0	Geom	-	2.75	0.00	N	Arm 7 Ahead	Inf
5/1 (Glen Road S)	U		2	3	60.0	Inf	-	-	-	-	-	-
5/2 (Glen Road S)	U		2	3	60.0	Inf	-	-	-	-	-	-
6/1 (Glen Road S)	U	A	2	3	60.0	Geom	-	4.00	0.00	Y	Arm 2 Ahead	Inf
6/2 (Glen Road S)	U	A	2	3	60.0	Geom	-	4.00	0.00	N	Arm 2 Ahead	Inf
											Arm 8 Right	Inf
7/1	U	B	2	3	2.0	User	1900	-	-	-	-	-
8/1	U		2	3	5.0	User	1900	-	-	-	-	-
9/1	U		2	3	5.0	User	1900	-	-	-	-	-
9/2	U		2	3	5.0	User	1900	-	-	-	-	-

Traffic Flow Groups

Flow Group	Start Time	End Time	Duration	Formula
1: '2041 Core AM'	08:00	09:00	01:00	
2: '2041 Core PM'	17:00	18:00	01:00	
3: '2041 Pref AM'	08:00	09:00	01:00	
4: '2041 Pref PM'	17:00	18:00	01:00	

Scenario 1: '2041 Pref AM' (FG3: '2041 Pref AM', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired

Desired Flow :

	Destination				
Origin		A	B	C	Tot.
	A	107	67	1225	1399
	B	262	0	114	376
	C	1421	57	25	1503
	Tot.	1790	124	1364	3278

Traffic Lane Flows

Lane	Scenario 1: 2041 Pref AM
Junction: A6 x Florence Wragg Way	
1/1	705
1/2	694
2/1	719
2/2	1071
3/1	124
4/1 (short)	114
4/2 (with short)	376(In) 262(Out)
5/1	777
5/2	587
6/1	719
6/2	784
7/1	369
8/1	82
9/1	663
9/2	694

Lane Saturation Flows

Junction: A6 x Florence Wragg Way								
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 (Glen Road N)	3.50	0.00	Y	Arm 3 Left	45.00	9.5 %	1959	1959
				Arm 9 Ahead	Inf	90.5 %		
1/2 (Glen Road N)	4.00	0.00	N	Arm 9 Ahead	Inf	100.0 %	2155	2155
2/1 (Glen Road N Lane 1)	Infinite Saturation Flow						Inf	Inf
2/2 (Glen Road N Lane 2)	Infinite Saturation Flow						Inf	Inf
3/1 (Florence Wragg Way Lane 1)	Infinite Saturation Flow						Inf	Inf
4/1 (Florence Wragg Way)	2.75	0.00	Y	Arm 5 Left	60.00	100.0 %	1844	1844
4/2 (Florence Wragg Way)	2.75	0.00	N	Arm 7 Ahead	Inf	100.0 %	2030	2030
5/1 (Glen Road S Lane 1)	Infinite Saturation Flow						Inf	Inf
5/2 (Glen Road S Lane 2)	Infinite Saturation Flow						Inf	Inf
6/1 (Glen Road S)	4.00	0.00	Y	Arm 2 Ahead	Inf	100.0 %	2015	2015
6/2 (Glen Road S)	4.00	0.00	N	Arm 2 Ahead	Inf	89.5 %	2155	2155
				Arm 8 Right	Inf	10.5 %		
7/1	This lane uses a directly entered Saturation Flow						1900	1900
8/1	This lane uses a directly entered Saturation Flow						1900	1900
9/1	This lane uses a directly entered Saturation Flow						1900	1900
9/2	This lane uses a directly entered Saturation Flow						1900	1900

Scenario 2: '2041 Pref PM' (FG4: '2041 Pref PM', Plan 1: 'Network Control Plan 1')**Traffic Flows, Desired****Desired Flow :**

	Destination				
		A	B	C	Tot.
Origin	A	81	177	1450	1708
	B	159	1	72	232
	C	1411	98	34	1543
	Tot.	1651	276	1556	3483

Traffic Lane Flows

Lane	Scenario 2: 2041 Pref PM
Junction: A6 x Florence Wragg Way	
1/1	867
1/2	841
2/1	736
2/2	915
3/1	276
4/1 (short)	72
4/2 (with short)	232(In) 160(Out)
5/1	796
5/2	760
6/1	736
6/2	807
7/1	241
8/1	133
9/1	724
9/2	841

Lane Saturation Flows

Junction: A6 x Florence Wragg Way								
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 (Glen Road N)	3.50	0.00	Y	Arm 3 Left	45.00	20.4 %	1952	1952
				Arm 9 Ahead	Inf	79.6 %		
1/2 (Glen Road N)	4.00	0.00	N	Arm 9 Ahead	Inf	100.0 %	2155	2155
2/1 (Glen Road N Lane 1)	Infinite Saturation Flow						Inf	Inf
2/2 (Glen Road N Lane 2)	Infinite Saturation Flow						Inf	Inf
3/1 (Florence Wragg Way Lane 1)	Infinite Saturation Flow						Inf	Inf
4/1 (Florence Wragg Way)	2.75	0.00	Y	Arm 5 Left	60.00	100.0 %	1844	1844
4/2 (Florence Wragg Way)	2.75	0.00	N	Arm 7 Ahead	Inf	100.0 %	2030	2030
5/1 (Glen Road S Lane 1)	Infinite Saturation Flow						Inf	Inf
5/2 (Glen Road S Lane 2)	Infinite Saturation Flow						Inf	Inf
6/1 (Glen Road S)	4.00	0.00	Y	Arm 2 Ahead	Inf	100.0 %	2015	2015
6/2 (Glen Road S)	4.00	0.00	N	Arm 2 Ahead	Inf	83.6 %	2155	2155
				Arm 8 Right	Inf	16.4 %		
7/1	This lane uses a directly entered Saturation Flow						1900	1900
8/1	This lane uses a directly entered Saturation Flow						1900	1900
9/1	This lane uses a directly entered Saturation Flow						1900	1900
9/2	This lane uses a directly entered Saturation Flow						1900	1900

Scenario 3: '2041 Core AM' (FG1: '2041 Core AM', Plan 1: 'Network Control Plan 1')**Traffic Flows, Desired****Desired Flow :**

	Destination				
		A	B	C	Tot.
Origin	A	100	62	1144	1306
	B	184	0	80	264
	C	1123	45	19	1187
	Tot.	1407	107	1243	2757

Full Input Data And Results

Traffic Lane Flows

Lane	Scenario 3: 2041 Core AM
Junction: A6 x Florence Wragg Way	
1/1	659
1/2	647
2/1	558
2/2	849
3/1	107
4/1 (short)	80
4/2 (with short)	264(In) 184(Out)
5/1	696
5/2	547
6/1	558
6/2	629
7/1	284
8/1	64
9/1	616
9/2	647

Lane Saturation Flows

Junction: A6 x Florence Wragg Way								
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 (Glen Road N)	3.50	0.00	Y	Arm 3 Left	45.00	9.4 %	1959	1959
				Arm 9 Ahead	Inf	90.6 %		
1/2 (Glen Road N)	4.00	0.00	N	Arm 9 Ahead	Inf	100.0 %	2155	2155
2/1 (Glen Road N Lane 1)	Infinite Saturation Flow						Inf	Inf
2/2 (Glen Road N Lane 2)	Infinite Saturation Flow						Inf	Inf
3/1 (Florence Wragg Way Lane 1)	Infinite Saturation Flow						Inf	Inf
4/1 (Florence Wragg Way)	2.75	0.00	Y	Arm 5 Left	60.00	100.0 %	1844	1844
4/2 (Florence Wragg Way)	2.75	0.00	N	Arm 7 Ahead	Inf	100.0 %	2030	2030
5/1 (Glen Road S Lane 1)	Infinite Saturation Flow						Inf	Inf
5/2 (Glen Road S Lane 2)	Infinite Saturation Flow						Inf	Inf
6/1 (Glen Road S)	4.00	0.00	Y	Arm 2 Ahead	Inf	100.0 %	2015	2015
6/2 (Glen Road S)	4.00	0.00	N	Arm 2 Ahead	Inf	89.8 %	2155	2155
				Arm 8 Right	Inf	10.2 %		
7/1	This lane uses a directly entered Saturation Flow						1900	1900
8/1	This lane uses a directly entered Saturation Flow						1900	1900
9/1	This lane uses a directly entered Saturation Flow						1900	1900
9/2	This lane uses a directly entered Saturation Flow						1900	1900

Scenario 4: '2041 Core PM' (FG2: '2041 Core PM', Plan 1: 'Network Control Plan 1')**Traffic Flows, Desired****Desired Flow :**

	Destination				
		A	B	C	Tot.
Origin	A	66	145	1191	1402
	B	131	1	59	191
	C	1259	87	30	1376
	Tot.	1456	233	1280	2969

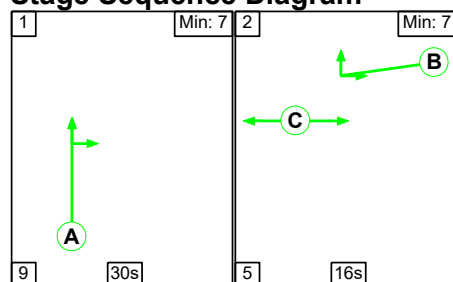
Full Input Data And Results

Traffic Lane Flows

Lane	Scenario 4: 2041 Core PM
Junction: A6 x Florence Wragg Way	
1/1	714
1/2	688
2/1	650
2/2	806
3/1	233
4/1 (short)	59
4/2 (with short)	191(In) 132(Out)
5/1	658
5/2	622
6/1	650
6/2	726
7/1	198
8/1	118
9/1	599
9/2	688

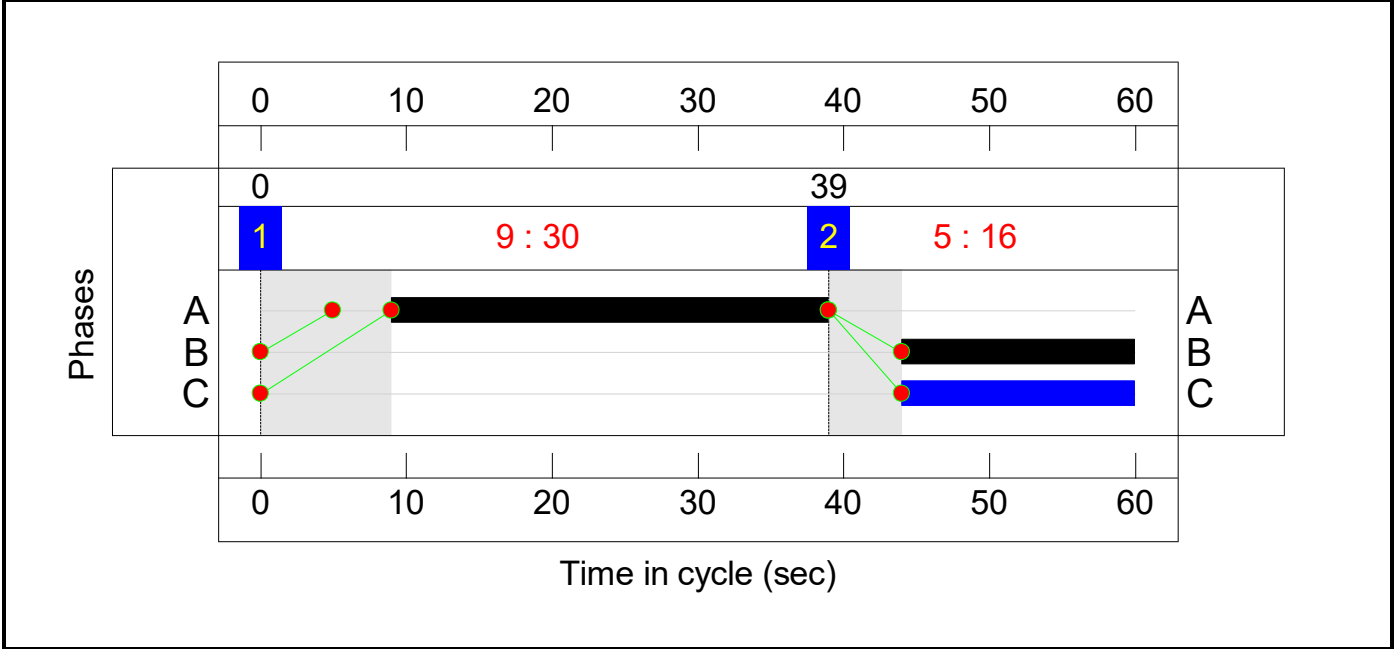
Lane Saturation Flows

Junction: A6 x Florence Wragg Way								
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 (Glen Road N)	3.50	0.00	Y	Arm 3 Left	45.00	20.3 %	1952	1952
				Arm 9 Ahead	Inf	79.7 %		
1/2 (Glen Road N)	4.00	0.00	N	Arm 9 Ahead	Inf	100.0 %	2155	2155
2/1 (Glen Road N Lane 1)	Infinite Saturation Flow						Inf	Inf
2/2 (Glen Road N Lane 2)	Infinite Saturation Flow						Inf	Inf
3/1 (Florence Wragg Way Lane 1)	Infinite Saturation Flow						Inf	Inf
4/1 (Florence Wragg Way)	2.75	0.00	Y	Arm 5 Left	60.00	100.0 %	1844	1844
4/2 (Florence Wragg Way)	2.75	0.00	N	Arm 7 Ahead	Inf	100.0 %	2030	2030
5/1 (Glen Road S Lane 1)	Infinite Saturation Flow						Inf	Inf
5/2 (Glen Road S Lane 2)	Infinite Saturation Flow						Inf	Inf
6/1 (Glen Road S)	4.00	0.00	Y	Arm 2 Ahead	Inf	100.0 %	2015	2015
6/2 (Glen Road S)	4.00	0.00	N	Arm 2 Ahead	Inf	83.9 %	2155	2155
				Arm 8 Right	Inf	16.1 %		
7/1	This lane uses a directly entered Saturation Flow						1900	1900
8/1	This lane uses a directly entered Saturation Flow						1900	1900
9/1	This lane uses a directly entered Saturation Flow						1900	1900
9/2	This lane uses a directly entered Saturation Flow						1900	1900

Scenario 1: '2041 Pref AM' (FG3: '2041 Pref AM', Plan 1: 'Network Control Plan 1')**Stage Sequence Diagram****Stage Timings**

Stage	1	2
Duration	30	16
Change Point	0	39

Signal Timings Diagram

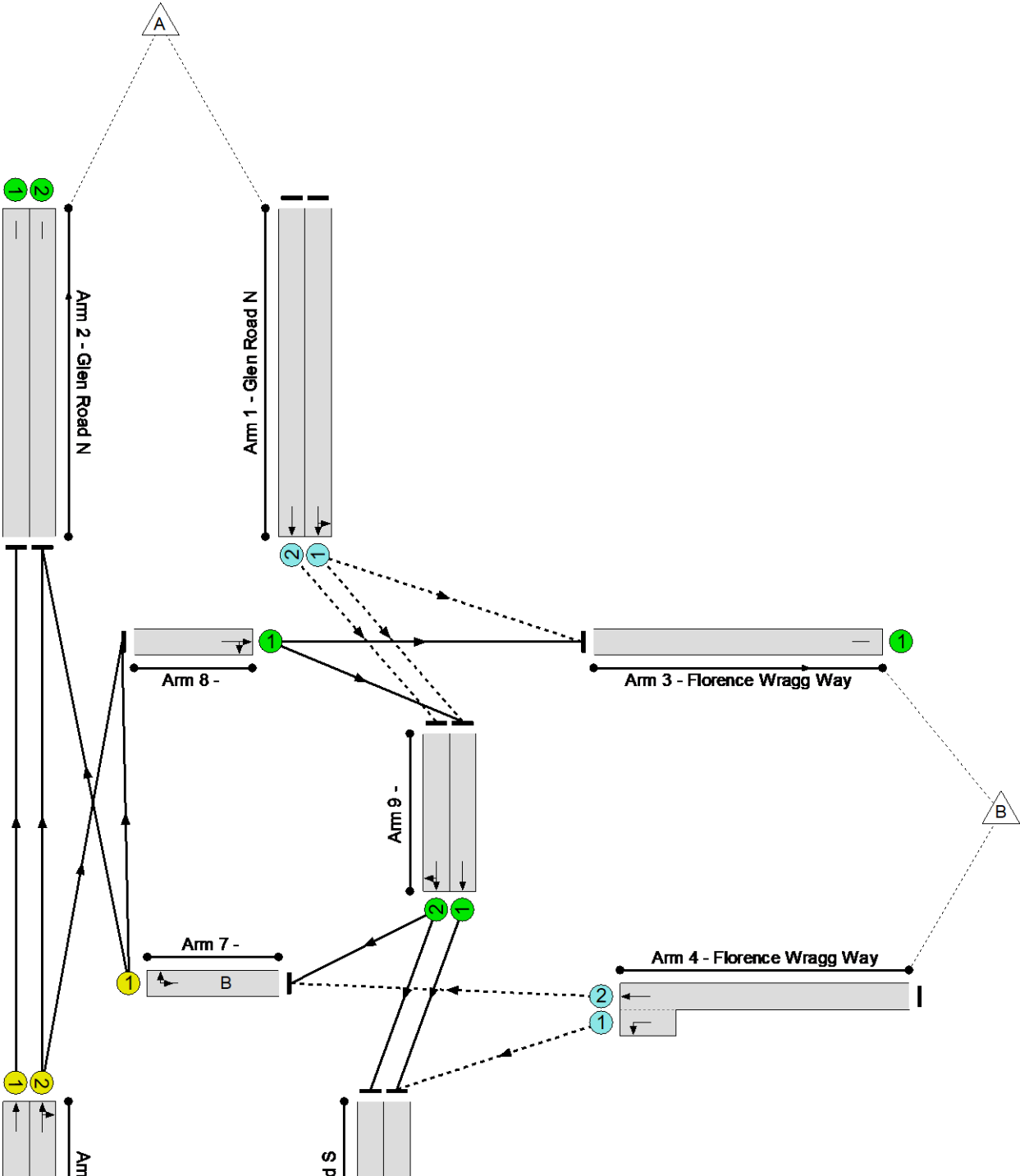




A6 x Florence Wragg Way

PRC: 27.8 %

Total Traffic Delay: 12.1 pcuHr



Full Input Data And Results

Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network	-	-	N/A	-	-		-	-	-	-	-	-	70.4%
A6 x Florence Wragg Way	-	-	N/A	-	-		-	-	-	-	-	-	70.4%
1/1	Glen Road N Left Ahead	O	N/A	N/A	-		-	-	-	705	1959	1404	50.2%
1/2	Glen Road N Ahead	O	N/A	N/A	-		-	-	-	694	2155	1404	49.4%
2/1	Glen Road N	U	N/A	N/A	-		-	-	-	719	Inf	Inf	0.0%
2/2	Glen Road N	U	N/A	N/A	-		-	-	-	1071	Inf	Inf	0.0%
3/1	Florence Wragg Way	U	N/A	N/A	-		-	-	-	124	Inf	Inf	0.0%
4/2+4/1	Florence Wragg Way Left Ahead	O	N/A	N/A	-		-	-	-	376	2030:1844	472+205	55.6 : 55.6%
5/1	Glen Road S	U	N/A	N/A	-		-	-	-	777	Inf	Inf	0.0%
5/2	Glen Road S	U	N/A	N/A	-		-	-	-	587	Inf	Inf	0.0%
6/1	Glen Road S Ahead	U	N/A	N/A	A		1	30	-	719	2015	1041	69.1%
6/2	Glen Road S Ahead Right	U	N/A	N/A	A		1	30	-	784	2155	1113	70.4%
7/1	Right U-Turn	U	N/A	N/A	B		1	16	-	369	1900	538	68.5%
8/1	Ahead Right	U	N/A	N/A	-		-	-	-	82	1900	1900	4.3%
9/1	Ahead	U	N/A	N/A	-		-	-	-	663	1900	1900	34.9%
9/2	Ahead Right	U	N/A	N/A	-		-	-	-	694	1900	1900	36.5%

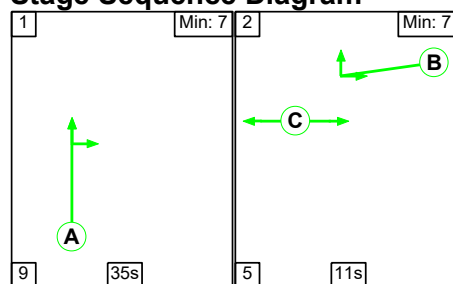
Full Input Data And Results

Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network	-	-	2151	0	0	6.5	5.6	0.0	12.1	-	-	-	-
A6 x Florence Wragg Way	-	-	2151	0	0	6.5	5.6	0.0	12.1	-	-	-	-
1/1	705	705	705	0	0	0.0	0.5	-	0.5	2.6	0.0	0.5	0.5
1/2	694	694	694	0	0	0.0	0.5	-	0.5	2.5	0.0	0.5	0.5
2/1	719	719	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
2/2	1071	1071	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
3/1	124	124	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
4/2+4/1	376	376	752	0	0	0.0	0.6	-	0.6	6.0	0.0	0.6	0.6
5/1	777	777	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/2	587	587	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/1	719	719	-	-	-	2.2	1.1	-	3.3	16.4	9.0	1.1	10.1
6/2	784	784	-	-	-	2.4	1.2	-	3.6	16.4	9.8	1.2	11.0
7/1	369	369	-	-	-	2.0	1.1	-	3.0	29.6	5.4	1.1	6.5
8/1	82	82	-	-	-	0.0	0.0	-	0.0	1.0	0.0	0.0	0.0
9/1	663	663	-	-	-	0.0	0.3	-	0.3	1.5	0.0	0.3	0.3
9/2	694	694	-	-	-	0.0	0.3	-	0.3	1.5	0.0	0.3	0.3
C1 PRC for Signalled Lanes (%): 27.8 Total Delay for Signalled Lanes (pcuHr): 9.90 Cycle Time (s): 60 PRC Over All Lanes (%): 27.8 Total Delay Over All Lanes(pcuHr): 12.10													

Full Input Data And Results

Scenario 2: '2041 Pref PM' (FG4: '2041 Pref PM', Plan 1: 'Network Control Plan 1')

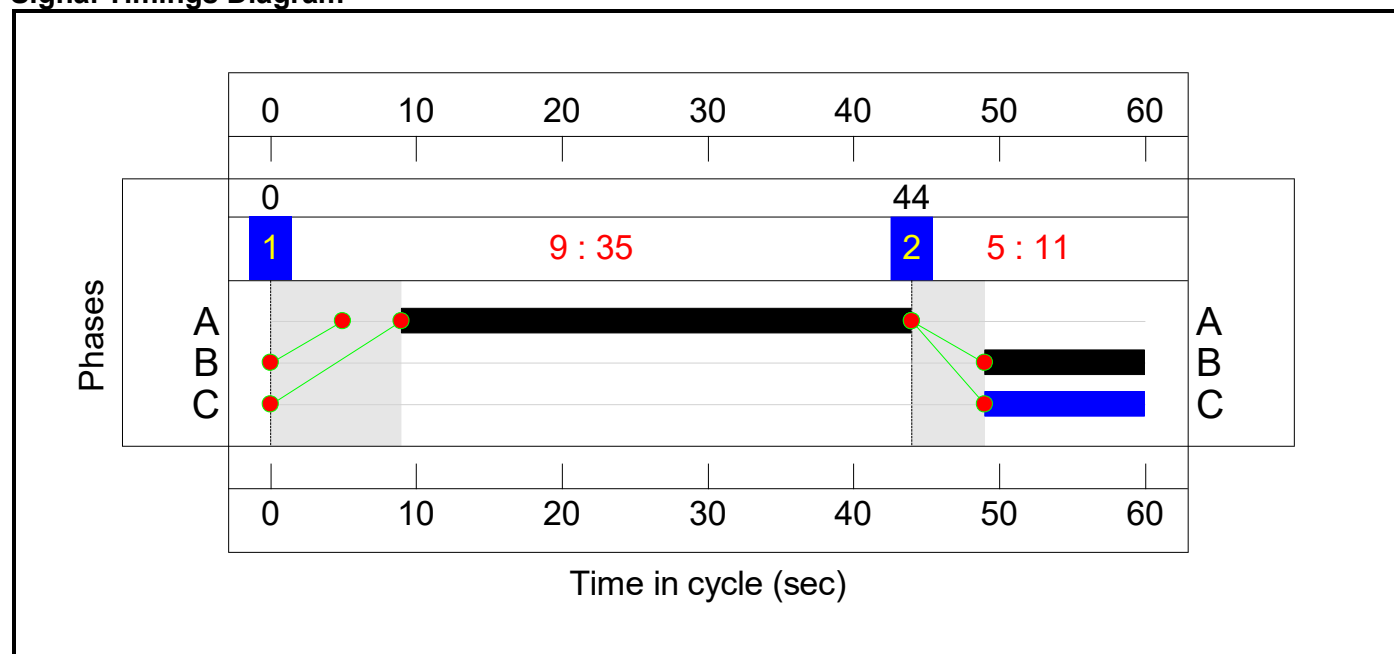
Stage Sequence Diagram



Stage Timings

Stage	1	2
Duration	35	11
Change Point	0	44

Signal Timings Diagram

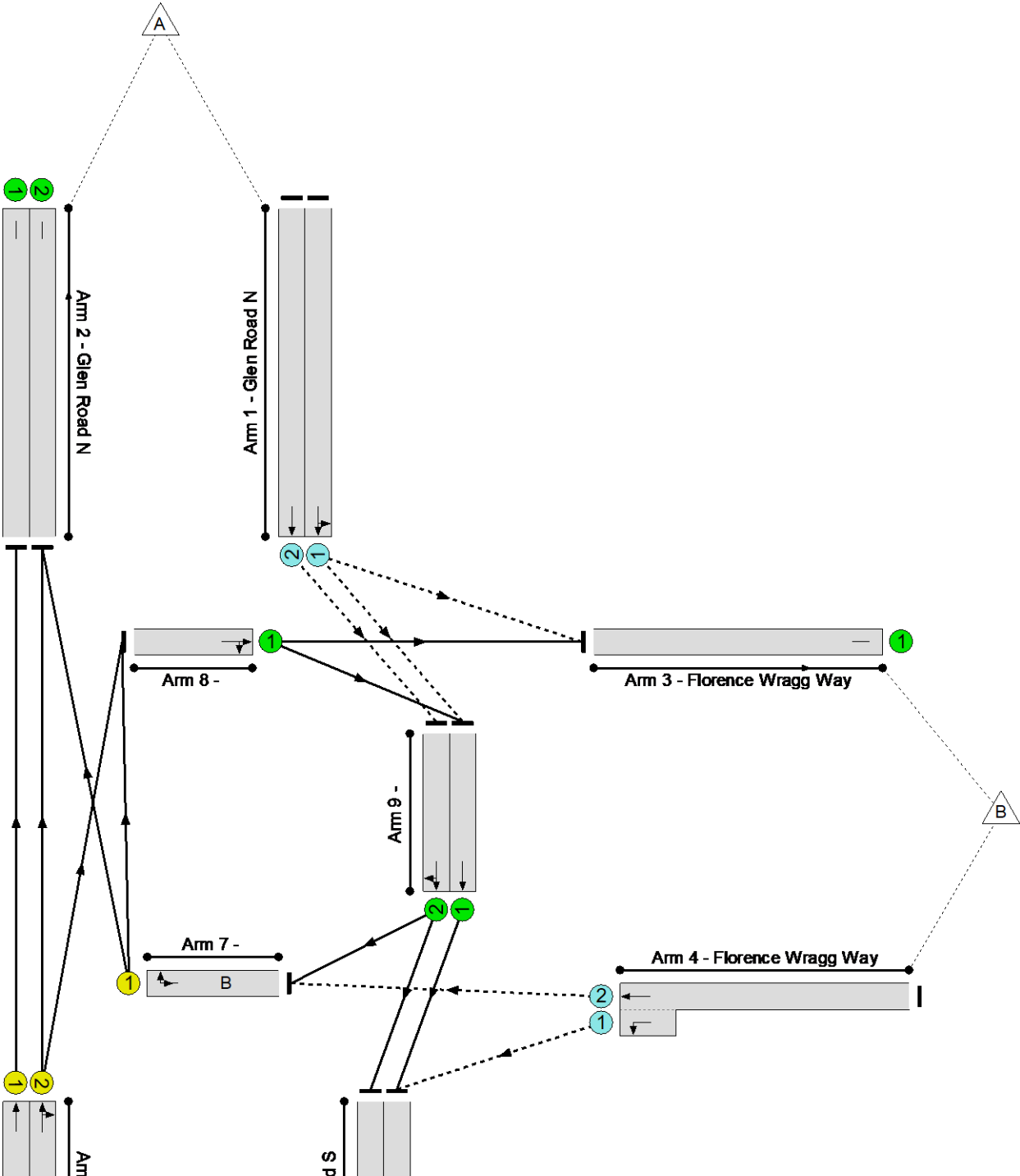




A6 x Florence Wragg Way

PRC: 41.9 %

Total Traffic Delay: 9.9 pcuHr



Full Input Data And Results

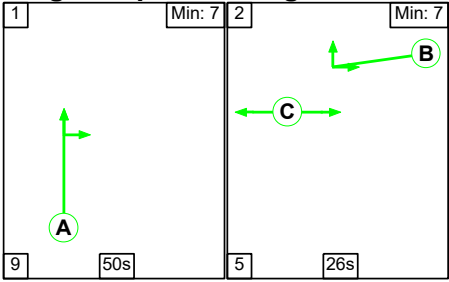
Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network	-	-	N/A	-	-		-	-	-	-	-	-	63.4%
A6 x Florence Wragg Way	-	-	N/A	-	-		-	-	-	-	-	-	63.4%
1/1	Glen Road N Left Ahead	O	N/A	N/A	-		-	-	-	867	1952	1382	62.7%
1/2	Glen Road N Ahead	O	N/A	N/A	-		-	-	-	841	2155	1382	60.9%
2/1	Glen Road N	U	N/A	N/A	-		-	-	-	736	Inf	Inf	0.0%
2/2	Glen Road N	U	N/A	N/A	-		-	-	-	915	Inf	Inf	0.0%
3/1	Florence Wragg Way	U	N/A	N/A	-		-	-	-	276	Inf	Inf	0.0%
4/2+4/1	Florence Wragg Way Left Ahead	O	N/A	N/A	-		-	-	-	232	2030:1844	405+182	39.5 : 39.5%
5/1	Glen Road S	U	N/A	N/A	-		-	-	-	796	Inf	Inf	0.0%
5/2	Glen Road S	U	N/A	N/A	-		-	-	-	760	Inf	Inf	0.0%
6/1	Glen Road S Ahead	U	N/A	N/A	A		1	35	-	736	2015	1209	60.9%
6/2	Glen Road S Ahead Right	U	N/A	N/A	A		1	35	-	807	2155	1293	62.4%
7/1	Right U-Turn	U	N/A	N/A	B		1	11	-	241	1900	380	63.4%
8/1	Ahead Right	U	N/A	N/A	-		-	-	-	133	1900	1900	7.0%
9/1	Ahead	U	N/A	N/A	-		-	-	-	724	1900	1900	38.1%
9/2	Ahead Right	U	N/A	N/A	-		-	-	-	841	1900	1900	44.3%

Full Input Data And Results

Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network	-	-	2172	0	0	4.7	5.1	0.0	9.9	-	-	-	-
A6 x Florence Wragg Way	-	-	2172	0	0	4.7	5.1	0.0	9.9	-	-	-	-
1/1	867	867	867	0	0	0.0	0.8	-	0.8	3.5	0.0	0.8	0.8
1/2	841	841	841	0	0	0.0	0.8	-	0.8	3.3	0.0	0.8	0.8
2/1	736	736	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
2/2	915	915	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
3/1	276	276	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
4/2+4/1	232	232	464	0	0	0.0	0.3	-	0.3	5.1	0.0	0.3	0.3
5/1	796	796	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/2	760	760	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/1	736	736	-	-	-	1.5	0.8	-	2.3	11.4	7.6	0.8	8.3
6/2	807	807	-	-	-	1.7	0.8	-	2.5	11.4	8.5	0.8	9.3
7/1	241	241	-	-	-	1.5	0.9	-	2.3	34.8	3.6	0.9	4.5
8/1	133	133	-	-	-	0.0	0.0	-	0.0	1.0	0.0	0.0	0.0
9/1	724	724	-	-	-	0.0	0.3	-	0.3	1.5	0.0	0.3	0.3
9/2	841	841	-	-	-	0.0	0.4	-	0.4	1.7	0.0	0.4	0.4
C1 PRC for Signalled Lanes (%): 41.9 Total Delay for Signalled Lanes (pcuHr): 7.20 Cycle Time (s): 60 PRC Over All Lanes (%): 41.9 Total Delay Over All Lanes(pcuHr): 9.88													

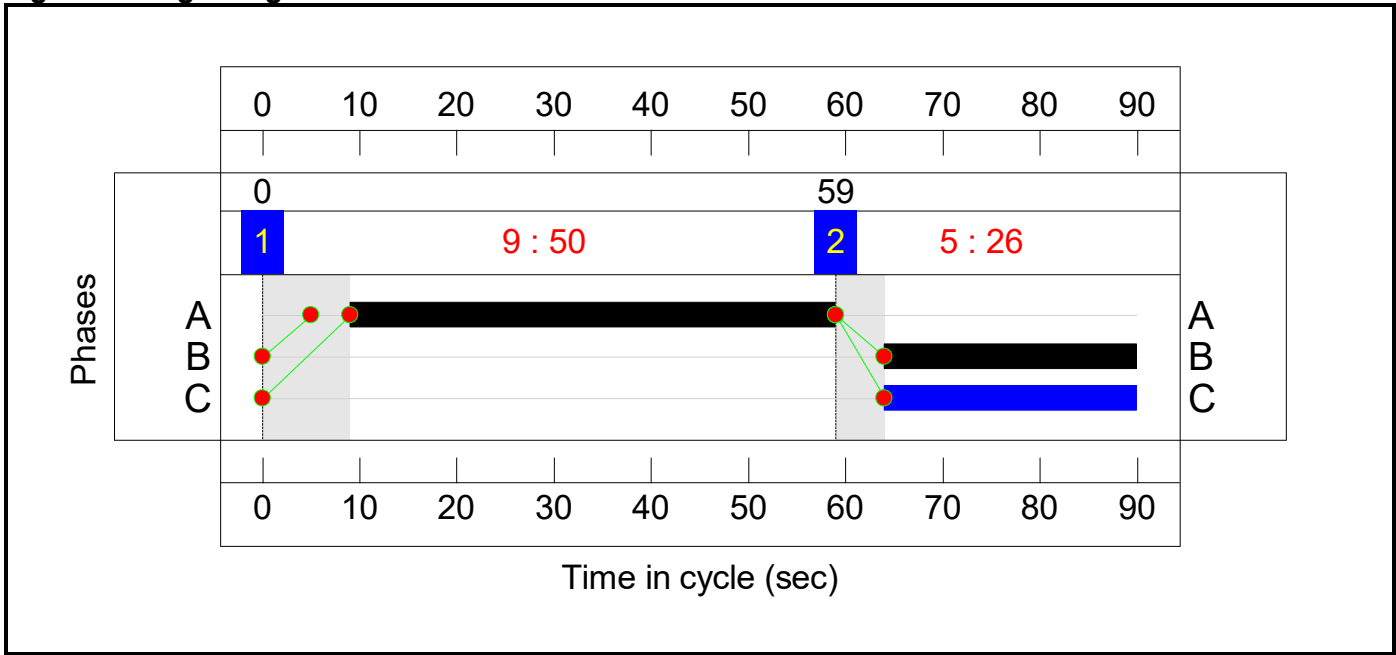
Stage Sequence Diagram



Stage Timings

Stage	1	2
Duration	50	26
Change Point	0	59

Signal Timings Diagram



Full Input Data And Results

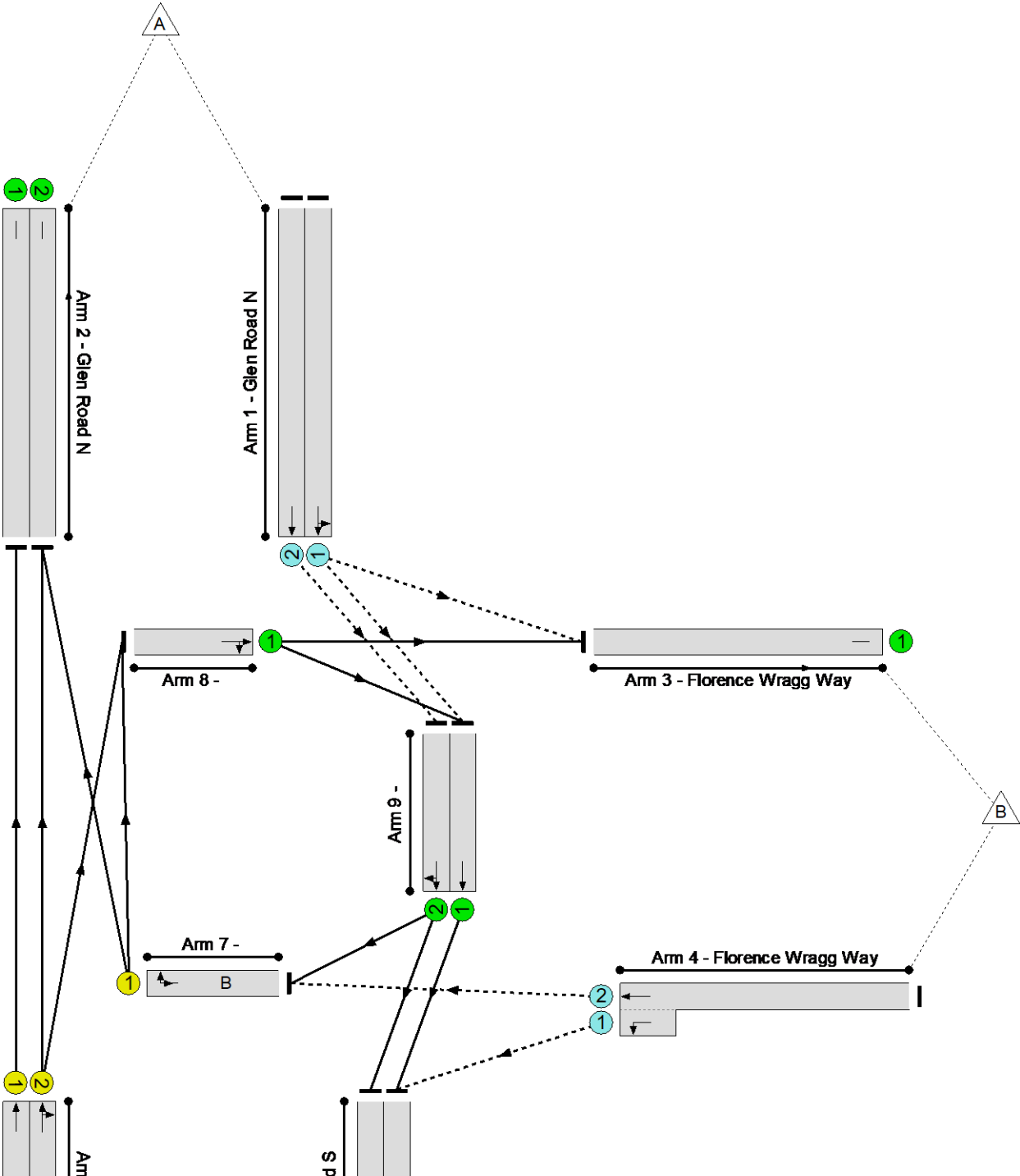
Network Layout Diagram



A6 x Florence Wragg Way

PRC: 74.7 %

Total Traffic Delay: 9.1 pcuHr



Full Input Data And Results

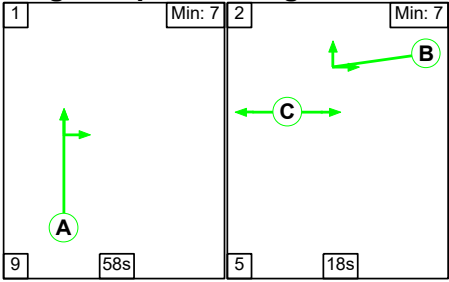
Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network	-	-	N/A	-	-		-	-	-	-	-	-	51.5%
A6 x Florence Wragg Way	-	-	N/A	-	-		-	-	-	-	-	-	51.5%
1/1	Glen Road N Left Ahead	O	N/A	N/A	-		-	-	-	659	1959	1411	46.7%
1/2	Glen Road N Ahead	O	N/A	N/A	-		-	-	-	647	2155	1411	45.8%
2/1	Glen Road N	U	N/A	N/A	-		-	-	-	558	Inf	Inf	0.0%
2/2	Glen Road N	U	N/A	N/A	-		-	-	-	849	Inf	Inf	0.0%
3/1	Florence Wragg Way	U	N/A	N/A	-		-	-	-	107	Inf	Inf	0.0%
4/2+4/1	Florence Wragg Way Left Ahead	O	N/A	N/A	-		-	-	-	264	2030:1844	502+218	36.7 : 36.7%
5/1	Glen Road S	U	N/A	N/A	-		-	-	-	696	Inf	Inf	0.0%
5/2	Glen Road S	U	N/A	N/A	-		-	-	-	547	Inf	Inf	0.0%
6/1	Glen Road S Ahead	U	N/A	N/A	A		1	50	-	558	2015	1142	48.9%
6/2	Glen Road S Ahead Right	U	N/A	N/A	A		1	50	-	629	2155	1221	51.5%
7/1	Right U-Turn	U	N/A	N/A	B		1	26	-	284	1900	570	49.8%
8/1	Ahead Right	U	N/A	N/A	-		-	-	-	64	1900	1900	3.4%
9/1	Ahead	U	N/A	N/A	-		-	-	-	616	1900	1900	32.4%
9/2	Ahead Right	U	N/A	N/A	-		-	-	-	647	1900	1900	34.1%

Full Input Data And Results

[illegible]

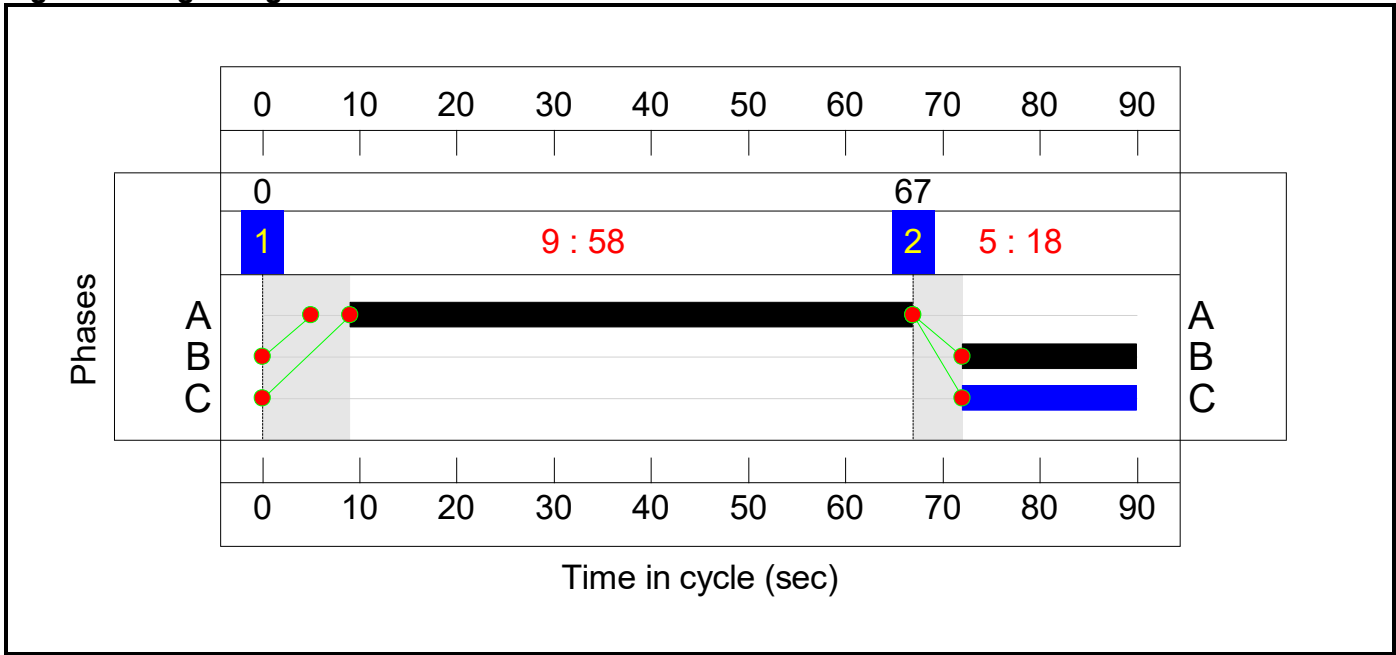
Stage Sequence Diagram



Stage Timings

Stage	1	2
Duration	58	18
Change Point	0	67

Signal Timings Diagram



Full Input Data And Results

Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network	-	-	N/A	-	-		-	-	-	-	-	-	51.4%
A6 x Florence Wragg Way	-	-	N/A	-	-		-	-	-	-	-	-	51.4%
1/1	Glen Road N Left Ahead	O	N/A	N/A	-		-	-	-	714	1952	1388	51.4%
1/2	Glen Road N Ahead	O	N/A	N/A	-		-	-	-	688	2155	1388	49.6%
2/1	Glen Road N	U	N/A	N/A	-		-	-	-	650	Inf	Inf	0.0%
2/2	Glen Road N	U	N/A	N/A	-		-	-	-	806	Inf	Inf	0.0%
3/1	Florence Wragg Way	U	N/A	N/A	-		-	-	-	233	Inf	Inf	0.0%
4/2+4/1	Florence Wragg Way Left Ahead	O	N/A	N/A	-		-	-	-	191	2030:1844	494+221	26.7 : 26.7%
5/1	Glen Road S	U	N/A	N/A	-		-	-	-	658	Inf	Inf	0.0%
5/2	Glen Road S	U	N/A	N/A	-		-	-	-	622	Inf	Inf	0.0%
6/1	Glen Road S Ahead	U	N/A	N/A	A		1	58	-	650	2015	1321	49.2%
6/2	Glen Road S Ahead Right	U	N/A	N/A	A		1	58	-	726	2155	1413	51.4%
7/1	Right U-Turn	U	N/A	N/A	B		1	18	-	198	1900	401	49.4%
8/1	Ahead Right	U	N/A	N/A	-		-	-	-	118	1900	1900	6.2%
9/1	Ahead	U	N/A	N/A	-		-	-	-	599	1900	1900	31.5%
9/2	Ahead Right	U	N/A	N/A	-		-	-	-	688	1900	1900	36.2%

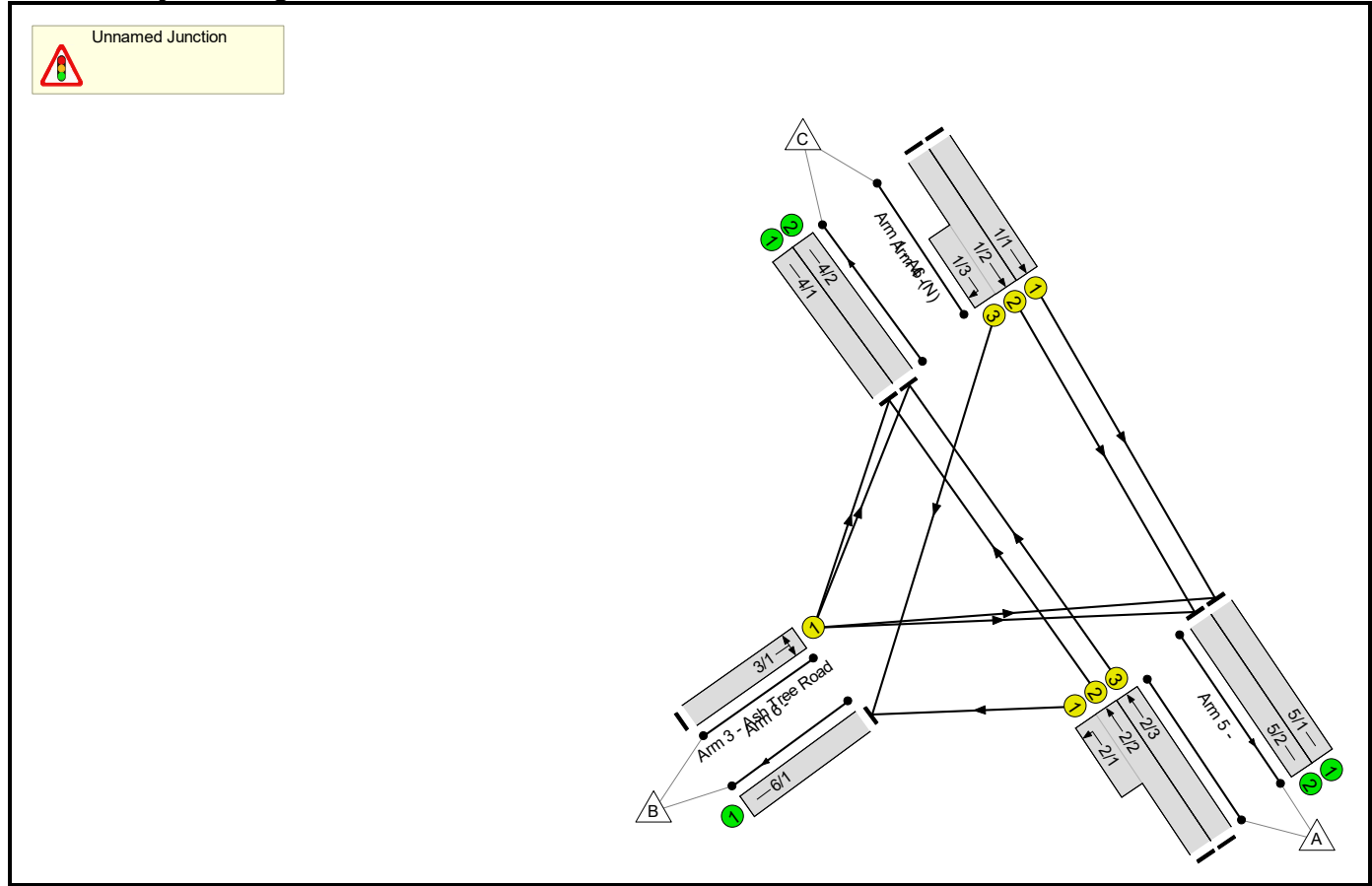
Full Input Data And Results

Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network	-	-	1784	0	0	4.8	3.2	0.0	8.0	-	-	-	-
A6 x Florence Wragg Way	-	-	1784	0	0	4.8	3.2	0.0	8.0	-	-	-	-
1/1	714	714	714	0	0	0.0	0.5	-	0.5	2.7	0.0	0.5	0.5
1/2	688	688	688	0	0	0.0	0.5	-	0.5	2.6	0.0	0.5	0.5
2/1	650	650	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
2/2	806	806	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
3/1	233	233	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
4/2+4/1	191	191	382	0	0	0.0	0.2	-	0.2	3.4	0.0	0.2	0.2
5/1	658	658	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/2	622	622	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/1	650	650	-	-	-	1.4	0.5	-	1.9	10.6	8.1	0.5	8.6
6/2	726	726	-	-	-	1.6	0.5	-	2.2	10.7	9.3	0.5	9.8
7/1	198	198	-	-	-	1.7	0.5	-	2.2	40.1	4.3	0.5	4.8
8/1	118	118	-	-	-	0.0	0.0	-	0.0	1.0	0.0	0.0	0.0
9/1	599	599	-	-	-	0.0	0.2	-	0.2	1.4	0.0	0.2	0.2
9/2	688	688	-	-	-	0.0	0.3	-	0.3	1.5	0.0	0.3	0.3
C1 PRC for Signalled Lanes (%): 75.1 Total Delay for Signalled Lanes (pcuHr): 6.26 Cycle Time (s): 90 PRC Over All Lanes (%): 75.0 Total Delay Over All Lanes(pcuHr): 8.01													

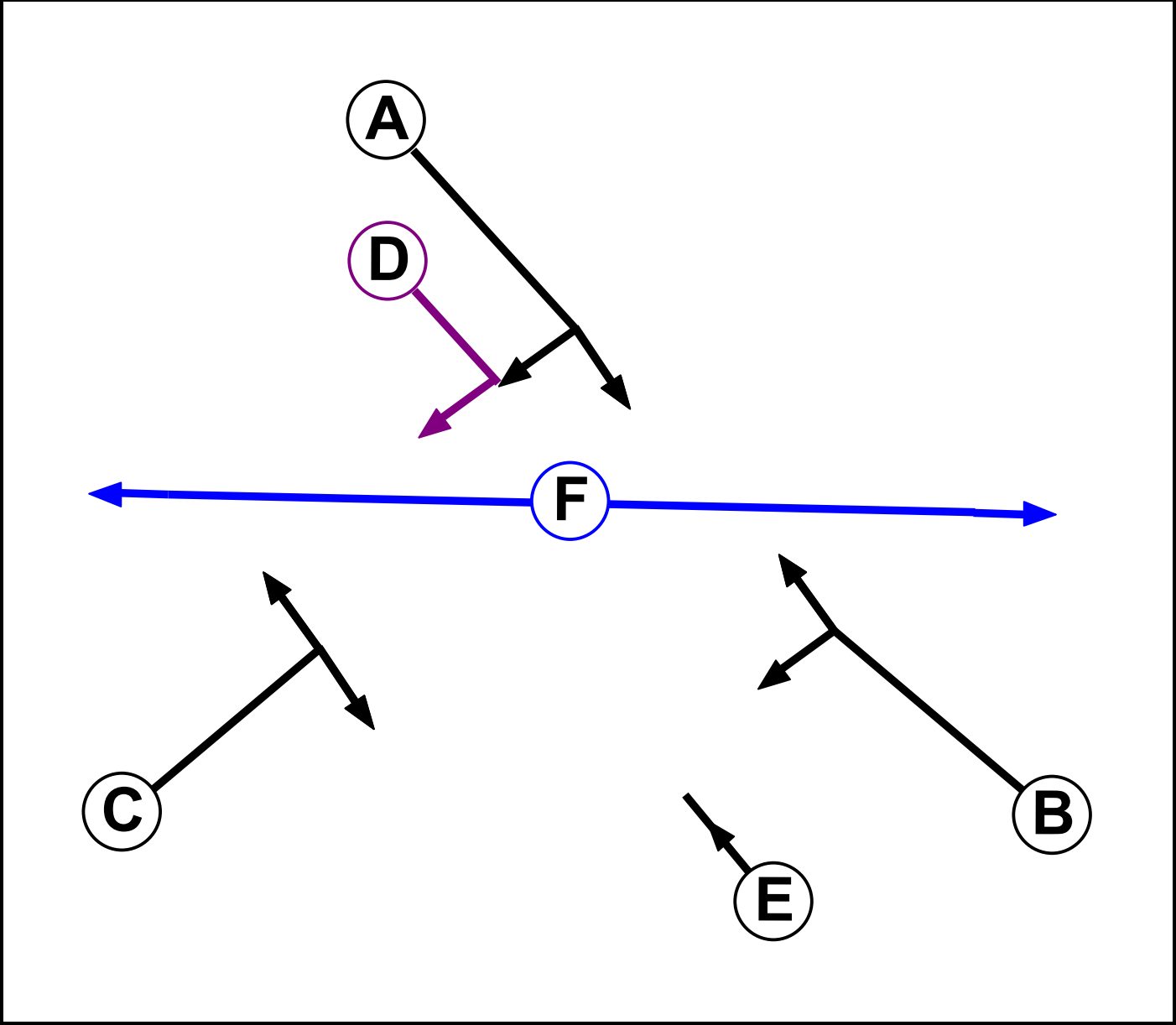
User and Project Details

Project:	
Title:	
Location:	
Additional detail:	
File name:	A6 Ash Tree signalised junction mitigation.lsg3x
Author:	
Company:	
Address:	

Network Layout Diagram



Phase Diagram



Phase Input Data

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

Full Input Data And Results

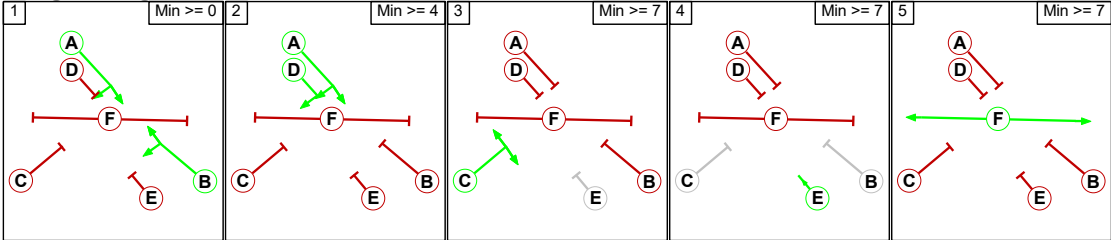
Phase Intergreens Matrix

Terminating Phase	Starting Phase						
		A	B	C	D	E	F
	A		-	12	-	12	10
	B	-		12	8	-	10
	C	11	11		8	-	10
	D	-	8	8		11	10
	E	10	-	-	11		10
	F	10	10	10	10	10	

Phases in Stage

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

Stage Diagram



Phase Delays

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

Prohibited Stage Change

From Stage	To Stage					
		1	2	3	4	5
	1		8	12	12	10
	2	8		12	12	10
	3	11	X		2	10
	4	10	11	2		10
	5	10	10	10	10	

Full Input Data And Results

Give-Way Lane Input Data

Junction: Unnamed Junction
There are no Opposed Lanes in this Junction

Lane Input Data

Junction: Unnamed Junction												
Lane	Lane Type	Phases	Start Disp.	End Disp.	Physical Length (PCU)	Sat Flow Type	Def User Saturation Flow (PCU/Hr)	Lane Width (m)	Gradient	Nearside Lane	Turns	Turning Radius (m)
1/1 (A6 (N))	U	A	2	3	60.0	Geom	-	3.70	0.00	Y	Arm 5 Ahead	Inf
1/2 (A6 (N))	U	A	2	3	60.0	Geom	-	3.70	0.00	Y	Arm 5 Ahead	Inf
1/3 (A6 (N))	U	A D	2	3	5.0	Geom	-	3.70	0.00	Y	Arm 6 Right	Inf
2/1 (A6 (S))	U	B	2	3	5.0	Geom	-	3.30	0.00	Y	Arm 6 Left	10.00
2/2 (A6 (S))	U	B	2	3	60.0	Geom	-	3.65	0.00	Y	Arm 4 Ahead	Inf
2/3 (A6 (S))	U	B	2	3	60.0	Geom	-	3.65	0.00	Y	Arm 4 Ahead	Inf
3/1 (Ash Tree Road)	U	C	2	3	60.0	Geom	-	3.65	0.00	Y	Arm 4 Left	10.00
											Arm 5 Right	Inf
4/1	U		2	3	60.0	Inf	-	-	-	-	-	-
4/2	U		2	3	60.0	Inf	-	-	-	-	-	-
5/1	U		2	3	60.0	Inf	-	-	-	-	-	-
5/2	U		2	3	60.0	Inf	-	-	-	-	-	-
6/1	U		2	3	60.0	Inf	-	-	-	-	-	-

Traffic Flow Groups

Flow Group	Start Time	End Time	Duration	Formula
1: '2041 Core AM'	08:00	09:00	01:00	
2: '2041 Core PM'	17:00	18:00	01:00	
3: '2041 Pref AM'	08:00	09:00	01:00	
4: '2041 Pref PM'	17:00	18:00	01:00	

Scenario 1: '2041 Core AM' (FG1: '2041 Core AM', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired

Desired Flow :

	Destination				
Origin		A	B	C	Tot.
	A	0	305	876	1181
	B	69	0	56	125
	C	1051	172	0	1223
	Tot.	1120	477	932	2529

Full Input Data And Results

Traffic Lane Flows

Lane	Scenario 1: 2041 Core AM
Junction: Unnamed Junction	
1/1	552
1/2 (with short)	671(In) 499(Out)
1/3 (short)	172
2/1 (short)	305
2/2 (with short)	694(In) 389(Out)
2/3	487
3/1	125
4/1	417
4/2	515
5/1	587
5/2	533
6/1	477

Lane Saturation Flows

Junction: Unnamed Junction								
Lane	Lane Width (m)	Gradient	Nearside Lane	Allowed Turns	Turning Radius (m)	Turning Prop.	Sat Flow (PCU/Hr)	Flared Sat Flow (PCU/Hr)
1/1 (A6 (N))	3.70	0.00	Y	Arm 5 Ahead	Inf	100.0 %	1985	1985
1/2 (A6 (N))	3.70	0.00	Y	Arm 5 Ahead	Inf	100.0 %	1985	1985
1/3 (A6 (N))	3.70	0.00	Y	Arm 6 Right	Inf	100.0 %	1985	1985
2/1 (A6 (S))	3.30	0.00	Y	Arm 6 Left	10.00	100.0 %	1691	1691
2/2 (A6 (S))	3.65	0.00	Y	Arm 4 Ahead	Inf	100.0 %	1980	1980
2/3 (A6 (S))	3.65	0.00	Y	Arm 4 Ahead	Inf	100.0 %	1980	1980
3/1 (Ash Tree Road)	3.65	0.00	Y	Arm 4 Left	10.00	44.8 %	1855	1855
				Arm 5 Right	Inf	55.2 %		
4/1	Infinite Saturation Flow						Inf	Inf
4/2	Infinite Saturation Flow						Inf	Inf
5/1	Infinite Saturation Flow						Inf	Inf
5/2	Infinite Saturation Flow						Inf	Inf
6/1	Infinite Saturation Flow						Inf	Inf

Full Input Data And Results

Scenario 2: '2041 Core PM' (FG2: '2041 Core PM', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired

Desired Flow :

	Destination				
Origin		A	B	C	Tot.
	A	0	211	1065	1276
	B	65	0	26	91
	C	1268	170	0	1438
	Tot.	1333	381	1091	2805

Traffic Lane Flows

Lane	Scenario 2: 2041 Core PM
Junction: Unnamed Junction	
1/1	669
1/2 (with short)	769(In) 599(Out)
1/3 (short)	170
2/1 (short)	211
2/2 (with short)	697(In) 486(Out)
2/3	579
3/1	91
4/1	499
4/2	592
5/1	702
5/2	631
6/1	381

Lane Saturation Flows

Junction: Unnamed Junction								
Lane	Lane Width (m)	Gradient	Nearside Lane	Allowed Turns	Turning Radius (m)	Turning Prop.	Sat Flow (PCU/Hr)	Flared Sat Flow (PCU/Hr)
1/1 (A6 (N))	3.70	0.00	Y	Arm 5 Ahead	Inf	100.0 %	1985	1985
1/2 (A6 (N))	3.70	0.00	Y	Arm 5 Ahead	Inf	100.0 %	1985	1985
1/3 (A6 (N))	3.70	0.00	Y	Arm 6 Right	Inf	100.0 %	1985	1985
2/1 (A6 (S))	3.30	0.00	Y	Arm 6 Left	10.00	100.0 %	1691	1691
2/2 (A6 (S))	3.65	0.00	Y	Arm 4 Ahead	Inf	100.0 %	1980	1980
2/3 (A6 (S))	3.65	0.00	Y	Arm 4 Ahead	Inf	100.0 %	1980	1980
3/1 (Ash Tree Road)	3.65	0.00	Y	Arm 4 Left Arm 5 Right	10.00 Inf	28.6 % 71.4 %	1899	1899
4/1	Infinite Saturation Flow						Inf	Inf
4/2	Infinite Saturation Flow						Inf	Inf
5/1	Infinite Saturation Flow						Inf	Inf
5/2	Infinite Saturation Flow						Inf	Inf
6/1	Infinite Saturation Flow						Inf	Inf

Scenario 3: '2041 Pref AM' (FG3: '2041 Pref AM', Plan 1: 'Network Control Plan 1')**Traffic Flows, Desired****Desired Flow :**

	Destination				
		A	B	C	Tot.
Origin	A	0	381	1094	1475
	B	70	0	57	127
	C	1126	184	0	1310
	Tot.	1196	565	1151	2912

Full Input Data And Results

Traffic Lane Flows

Lane	Scenario 3: 2041 Pref AM
Junction: Unnamed Junction	
1/1	595
1/2 (with short)	715(In) 531(Out)
1/3 (short)	184
2/1 (short)	381
2/2 (with short)	840(In) 459(Out)
2/3	635
3/1	127
4/1	488
4/2	663
5/1	630
5/2	566
6/1	565

Lane Saturation Flows

Junction: Unnamed Junction								
Lane	Lane Width (m)	Gradient	Nearside Lane	Allowed Turns	Turning Radius (m)	Turning Prop.	Sat Flow (PCU/Hr)	Flared Sat Flow (PCU/Hr)
1/1 (A6 (N))	3.70	0.00	Y	Arm 5 Ahead	Inf	100.0 %	1985	1985
1/2 (A6 (N))	3.70	0.00	Y	Arm 5 Ahead	Inf	100.0 %	1985	1985
1/3 (A6 (N))	3.70	0.00	Y	Arm 6 Right	Inf	100.0 %	1985	1985
2/1 (A6 (S))	3.30	0.00	Y	Arm 6 Left	10.00	100.0 %	1691	1691
2/2 (A6 (S))	3.65	0.00	Y	Arm 4 Ahead	Inf	100.0 %	1980	1980
2/3 (A6 (S))	3.65	0.00	Y	Arm 4 Ahead	Inf	100.0 %	1980	1980
3/1 (Ash Tree Road)	3.65	0.00	Y	Arm 4 Left	10.00	44.9 %	1855	1855
				Arm 5 Right	Inf	55.1 %		
4/1	Infinite Saturation Flow						Inf	Inf
4/2	Infinite Saturation Flow						Inf	Inf
5/1	Infinite Saturation Flow						Inf	Inf
5/2	Infinite Saturation Flow						Inf	Inf
6/1	Infinite Saturation Flow						Inf	Inf

Full Input Data And Results

Scenario 4: '2041 Pref PM' (FG4: '2041 Pref PM', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired

Desired Flow :

	Destination				
Origin		A	B	C	Tot.
	A	0	223	1127	1350
	B	66	0	26	92
	C	1439	193	0	1632
	Tot.	1505	416	1153	3074

Traffic Lane Flows

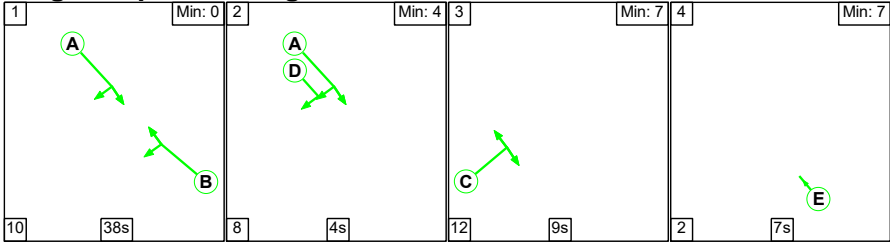
Lane	Scenario 4: 2041 Pref PM
Junction: Unnamed Junction	
1/1	769
1/2 (with short)	863(In) 670(Out)
1/3 (short)	193
2/1 (short)	223
2/2 (with short)	732(In) 509(Out)
2/3	618
3/1	92
4/1	522
4/2	631
5/1	802
5/2	703
6/1	416

Lane Saturation Flows

Junction: Unnamed Junction								
Lane	Lane Width (m)	Gradient	Nearside Lane	Allowed Turns	Turning Radius (m)	Turning Prop.	Sat Flow (PCU/Hr)	Flared Sat Flow (PCU/Hr)
1/1 (A6 (N))	3.70	0.00	Y	Arm 5 Ahead	Inf	100.0 %	1985	1985
1/2 (A6 (N))	3.70	0.00	Y	Arm 5 Ahead	Inf	100.0 %	1985	1985
1/3 (A6 (N))	3.70	0.00	Y	Arm 6 Right	Inf	100.0 %	1985	1985
2/1 (A6 (S))	3.30	0.00	Y	Arm 6 Left	10.00	100.0 %	1691	1691
2/2 (A6 (S))	3.65	0.00	Y	Arm 4 Ahead	Inf	100.0 %	1980	1980
2/3 (A6 (S))	3.65	0.00	Y	Arm 4 Ahead	Inf	100.0 %	1980	1980
3/1 (Ash Tree Road)	3.65	0.00	Y	Arm 4 Left Arm 5 Right	10.00 Inf	28.3 % 71.7 %	1899	1899
4/1	Infinite Saturation Flow						Inf	Inf
4/2	Infinite Saturation Flow						Inf	Inf
5/1	Infinite Saturation Flow						Inf	Inf
5/2	Infinite Saturation Flow						Inf	Inf
6/1	Infinite Saturation Flow						Inf	Inf

Scenario 1: '2041 Core AM' (FG1: '2041 Core AM', Plan 1: 'Network Control Plan 1')

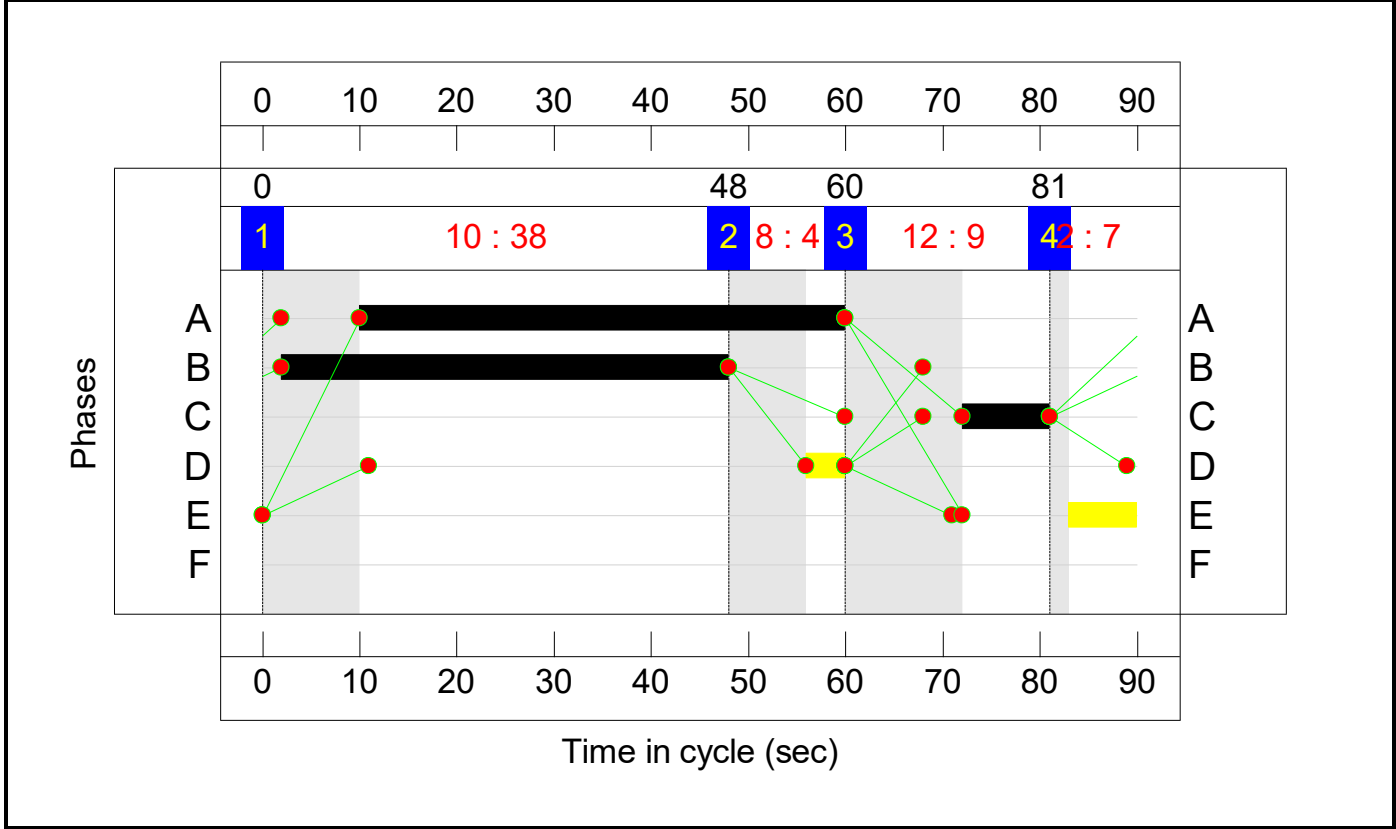
Stage Sequence Diagram



Stage Timings

Stage	1	2	3	4
Duration	38	4	9	7
Change Point	0	48	60	81

Signal Timings Diagram



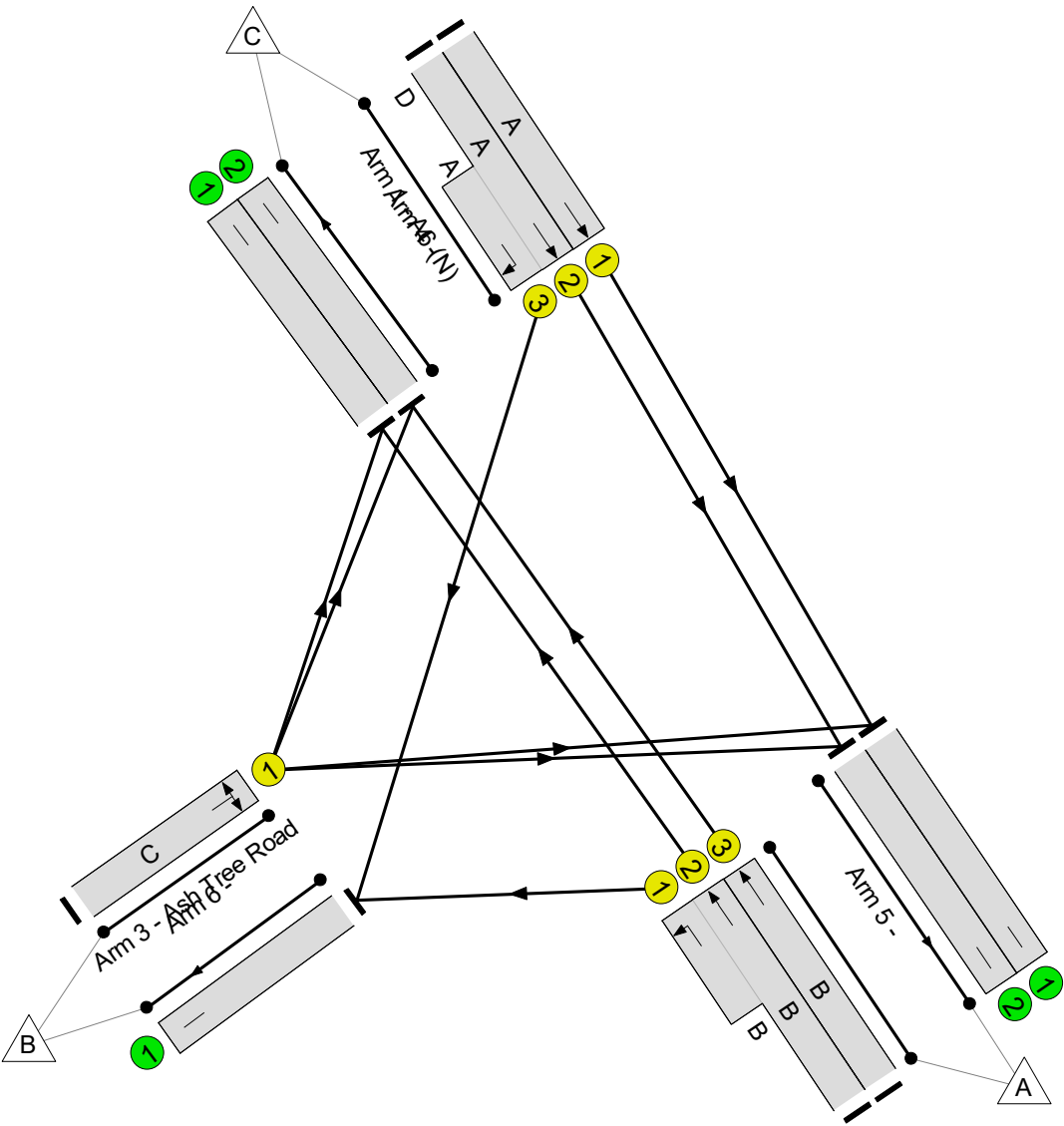
Network Layout Diagram



Unnamed Junction

PRC: 47.1 %

Total Traffic Delay: 12.6 pcuHr



Full Input Data And Results

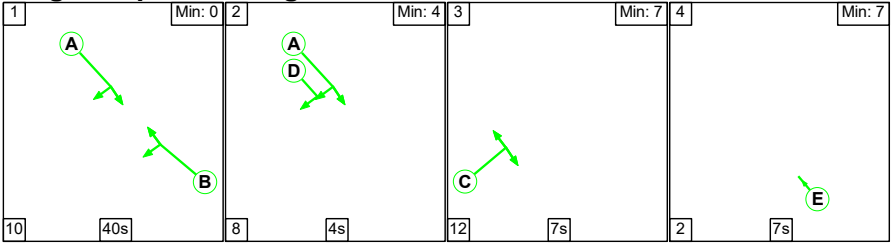
Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network	-	-	N/A	-	-		-	-	-	-	-	-	61.2%
Unnamed Junction	-	-	N/A	-	-		-	-	-	-	-	-	61.2%
1/1	A6 (N) Ahead	U	N/A	N/A	A		1	50	-	552	1985	1125	49.1%
1/2+1/3	A6 (N) Ahead Right	U	N/A	N/A	A	D	1	50	4	671	1985:1985	889+306	56.1 : 56.1%
2/2+2/1	A6 (S) Ahead Left	U	N/A	N/A	B		1	46	-	694	1980:1691	636+499	61.2 : 61.2%
2/3	A6 (S) Ahead	U	N/A	N/A	B		1	46	-	487	1980	1034	47.1%
3/1	Ash Tree Road Left Right	U	N/A	N/A	C		1	9	-	125	1855	206	60.6%
4/1		U	N/A	N/A	-		-	-	-	417	Inf	Inf	0.0%
4/2		U	N/A	N/A	-		-	-	-	515	Inf	Inf	0.0%
5/1		U	N/A	N/A	-		-	-	-	587	Inf	Inf	0.0%
5/2		U	N/A	N/A	-		-	-	-	533	Inf	Inf	0.0%
6/1		U	N/A	N/A	-		-	-	-	477	Inf	Inf	0.0%

Full Input Data And Results

Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network	-	-	0	0	0	9.5	3.1	0.0	12.6	-	-	-	-
Unnamed Junction	-	-	0	0	0	9.5	3.1	0.0	12.6	-	-	-	-
1/1	552	552	-	-	-	1.8	0.5	-	2.3	14.8	8.3	0.5	8.8
1/2+1/3	671	671	-	-	-	2.1	0.6	-	2.7	14.5	8.3	0.6	9.0
2/2+2/1	694	694	-	-	-	2.5	0.8	-	3.3	16.9	6.7	0.8	7.5
2/3	487	487	-	-	-	1.8	0.4	-	2.3	16.9	7.7	0.4	8.2
3/1	125	125	-	-	-	1.3	0.8	-	2.1	59.9	3.0	0.8	3.7
4/1	417	417	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
4/2	515	515	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/1	587	587	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/2	533	533	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/1	477	477	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
C1 PRC for Signalled Lanes (%): 47.1 Total Delay for Signalled Lanes (pcuHr): 12.61 Cycle Time (s): 90 PRC Over All Lanes (%): 47.1 Total Delay Over All Lanes(pcuHr): 12.61													

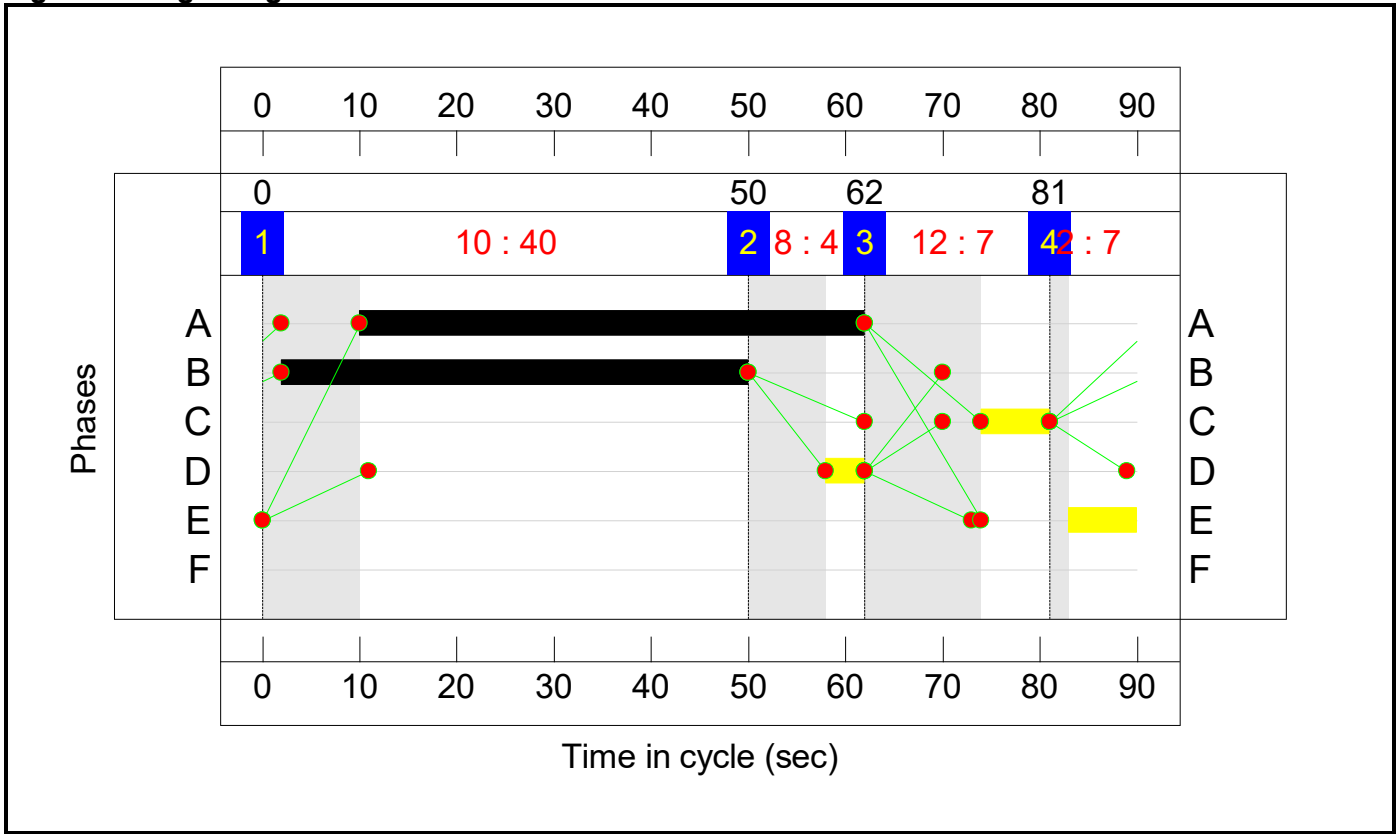
Stage Sequence Diagram



Stage Timings

Stage	1	2	3	4
Duration	40	4	7	7
Change Point	0	50	62	81

Signal Timings Diagram



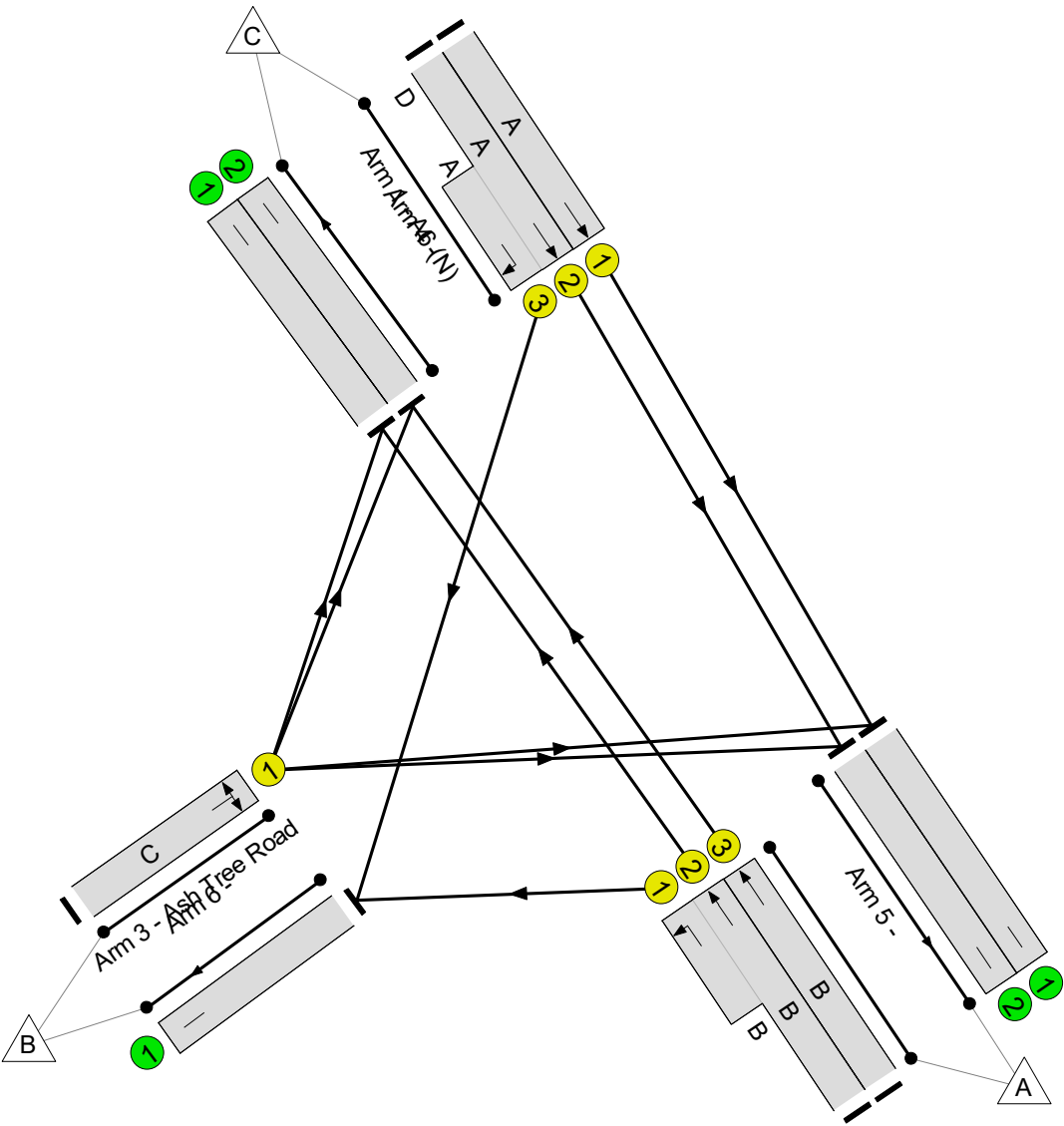
Network Layout Diagram



Unnamed Junction

PRC: 43.6 %

Total Traffic Delay: 13.5 pcuHr



Full Input Data And Results

Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network	-	-	N/A	-	-		-	-	-	-	-	-	62.7%
Unnamed Junction	-	-	N/A	-	-		-	-	-	-	-	-	62.7%
1/1	A6 (N) Ahead	U	N/A	N/A	A		1	52	-	669	1985	1169	57.2%
1/2+1/3	A6 (N) Ahead Right	U	N/A	N/A	A	D	1	52	4	769	1985:1985	956+271	62.7 : 62.7%
2/2+2/1	A6 (S) Ahead Left	U	N/A	N/A	B		1	48	-	697	1980:1691	783+340	62.0 : 62.0%
2/3	A6 (S) Ahead	U	N/A	N/A	B		1	48	-	579	1980	1078	53.7%
3/1	Ash Tree Road Left Right	U	N/A	N/A	C		1	7	-	91	1899	169	53.9%
4/1		U	N/A	N/A	-		-	-	-	499	Inf	Inf	0.0%
4/2		U	N/A	N/A	-		-	-	-	592	Inf	Inf	0.0%
5/1		U	N/A	N/A	-		-	-	-	702	Inf	Inf	0.0%
5/2		U	N/A	N/A	-		-	-	-	631	Inf	Inf	0.0%
6/1		U	N/A	N/A	-		-	-	-	381	Inf	Inf	0.0%

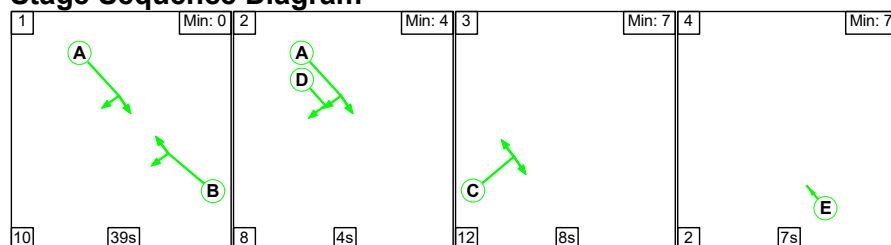
Full Input Data And Results

Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network	-	-	0	0	0	10.0	3.5	0.0	13.5	-	-	-	-
Unnamed Junction	-	-	0	0	0	10.0	3.5	0.0	13.5	-	-	-	-
1/1	669	669	-	-	-	2.1	0.7	-	2.8	15.1	10.2	0.7	10.9
1/2+1/3	769	769	-	-	-	2.3	0.8	-	3.2	14.8	10.5	0.8	11.4
2/2+2/1	697	697	-	-	-	2.4	0.8	-	3.2	16.6	8.9	0.8	9.7
2/3	579	579	-	-	-	2.1	0.6	-	2.7	16.8	9.2	0.6	9.7
3/1	91	91	-	-	-	1.0	0.6	-	1.6	62.0	2.2	0.6	2.8
4/1	499	499	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
4/2	592	592	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/1	702	702	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/2	631	631	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/1	381	381	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
C1 PRC for Signalled Lanes (%): 43.6 Total Delay for Signalled Lanes (pcuHr): 13.45 Cycle Time (s): 90 PRC Over All Lanes (%): 43.6 Total Delay Over All Lanes(pcuHr): 13.45													

Full Input Data And Results

Scenario 3: '2041 Pref AM' (FG3: '2041 Pref AM', Plan 1: 'Network Control Plan 1')

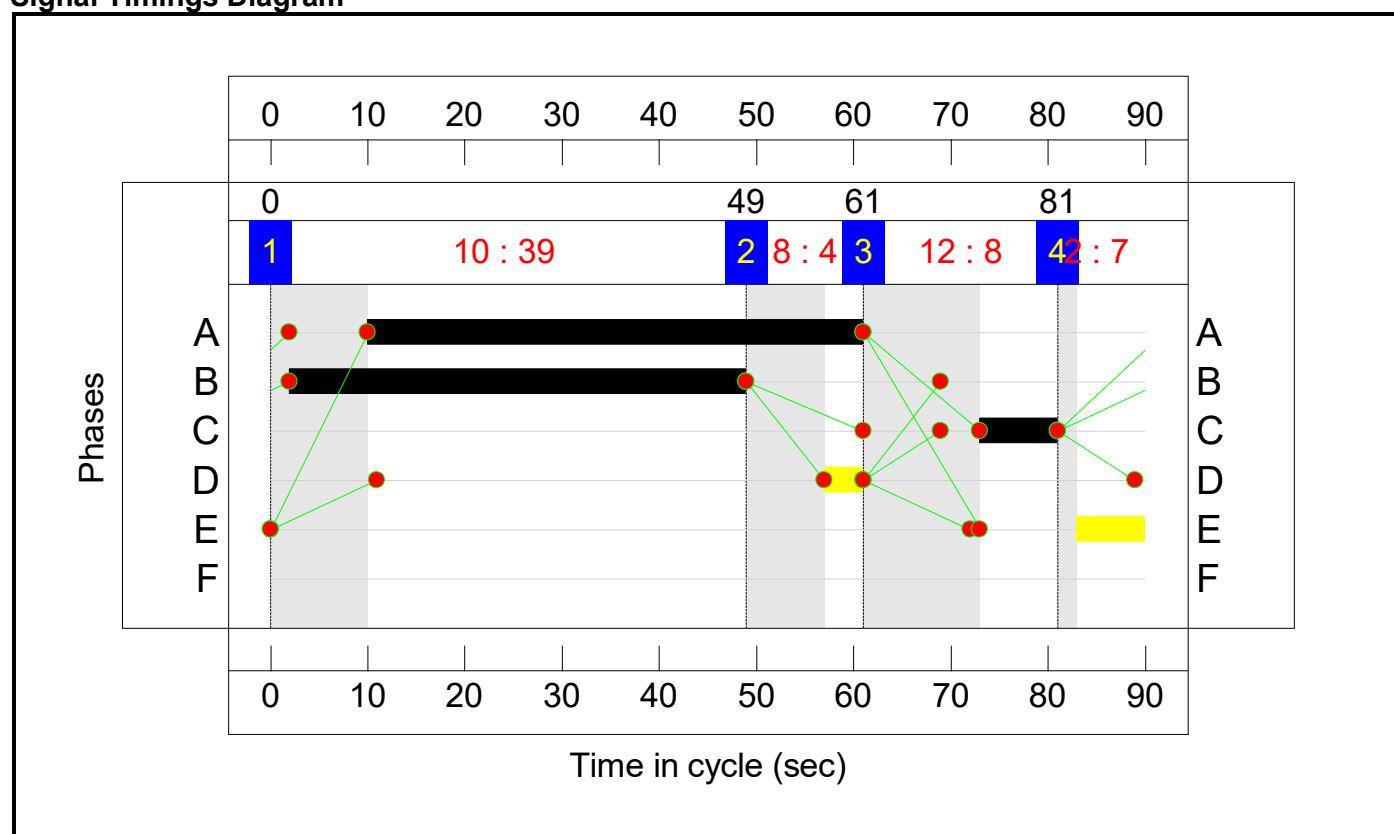
Stage Sequence Diagram



Stage Timings

Stage	1	2	3	4
Duration	39	4	8	7
Change Point	0	49	61	81

Signal Timings Diagram



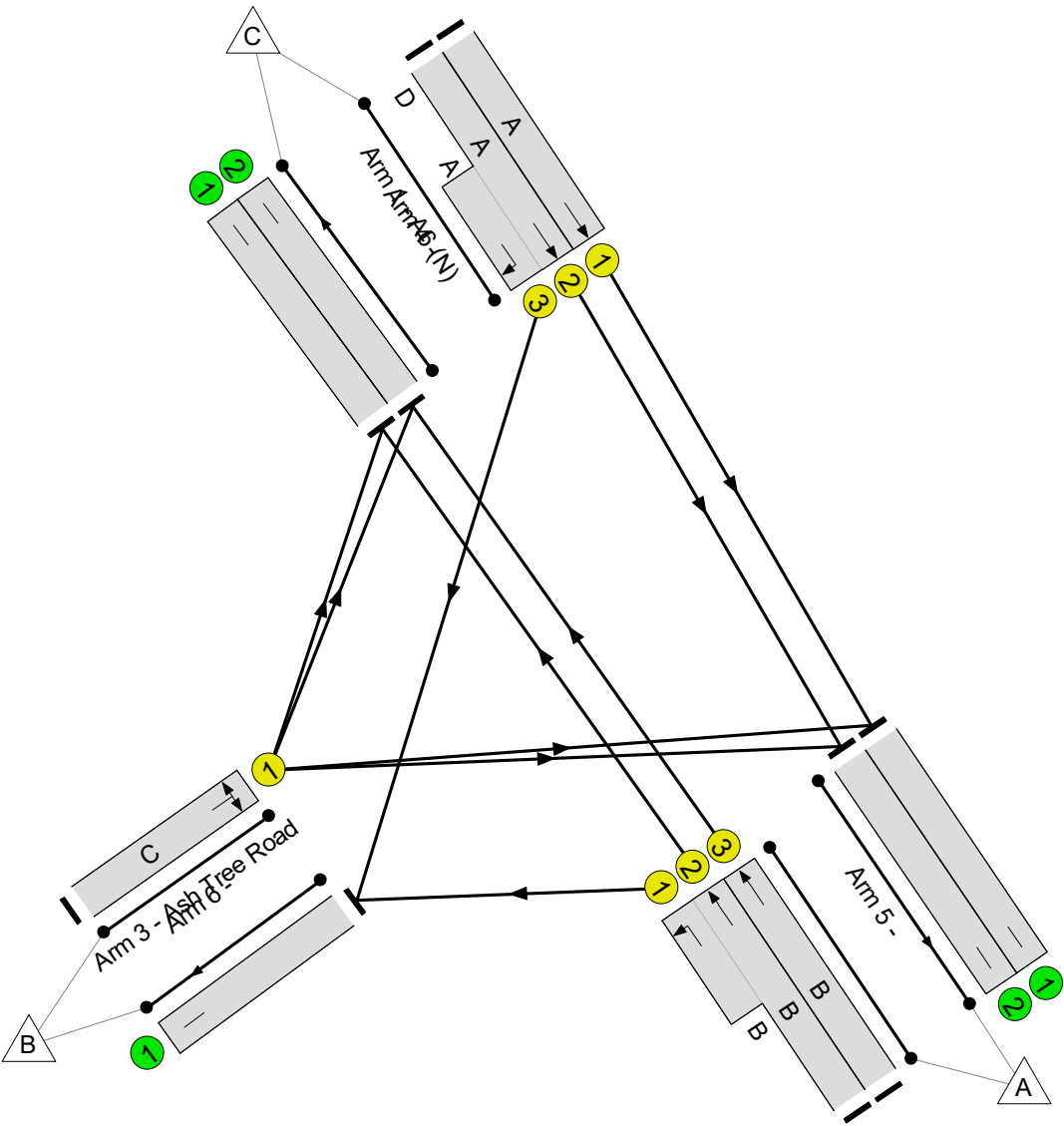
Network Layout Diagram



Unnamed Junction

PRC: 24.5 %

Total Traffic Delay: 15.4 pcuHr



Full Input Data And Results

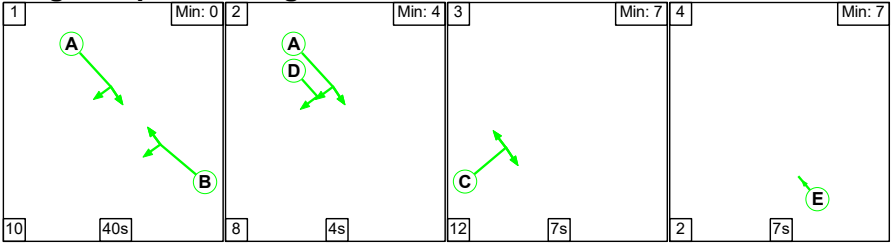
Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network	-	-	N/A	-	-		-	-	-	-	-	-	72.3%
Unnamed Junction	-	-	N/A	-	-		-	-	-	-	-	-	72.3%
1/1	A6 (N) Ahead	U	N/A	N/A	A		1	51	-	595	1985	1147	51.9%
1/2+1/3	A6 (N) Ahead Right	U	N/A	N/A	A	D	1	51	4	715	1985:1985	904+313	58.7 : 58.7%
2/2+2/1	A6 (S) Ahead Left	U	N/A	N/A	B		1	47	-	840	1980:1691	635+527	72.3 : 72.3%
2/3	A6 (S) Ahead	U	N/A	N/A	B		1	47	-	635	1980	1056	60.1%
3/1	Ash Tree Road Left Right	U	N/A	N/A	C		1	8	-	127	1855	186	68.5%
4/1		U	N/A	N/A	-		-	-	-	488	Inf	Inf	0.0%
4/2		U	N/A	N/A	-		-	-	-	663	Inf	Inf	0.0%
5/1		U	N/A	N/A	-		-	-	-	630	Inf	Inf	0.0%
5/2		U	N/A	N/A	-		-	-	-	566	Inf	Inf	0.0%
6/1		U	N/A	N/A	-		-	-	-	565	Inf	Inf	0.0%

Full Input Data And Results

Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network	-	-	0	0	0	11.1	4.3	0.0	15.4	-	-	-	-
Unnamed Junction	-	-	0	0	0	11.1	4.3	0.0	15.4	-	-	-	-
1/1	595	595	-	-	-	1.9	0.5	-	2.4	14.7	8.9	0.5	9.5
1/2+1/3	715	715	-	-	-	2.2	0.7	-	2.9	14.4	9.0	0.7	9.7
2/2+2/1	840	840	-	-	-	3.1	1.3	-	4.4	18.8	9.8	1.3	11.1
2/3	635	635	-	-	-	2.5	0.8	-	3.3	18.7	10.8	0.8	11.5
3/1	127	127	-	-	-	1.4	1.0	-	2.4	68.8	3.0	1.0	4.1
4/1	488	488	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
4/2	663	663	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/1	630	630	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/2	566	566	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/1	565	565	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
C1 PRC for Signalled Lanes (%): 24.5 Total Delay for Signalled Lanes (pcuHr): 15.40 Cycle Time (s): 90 PRC Over All Lanes (%): 24.5 Total Delay Over All Lanes(pcuHr): 15.40													

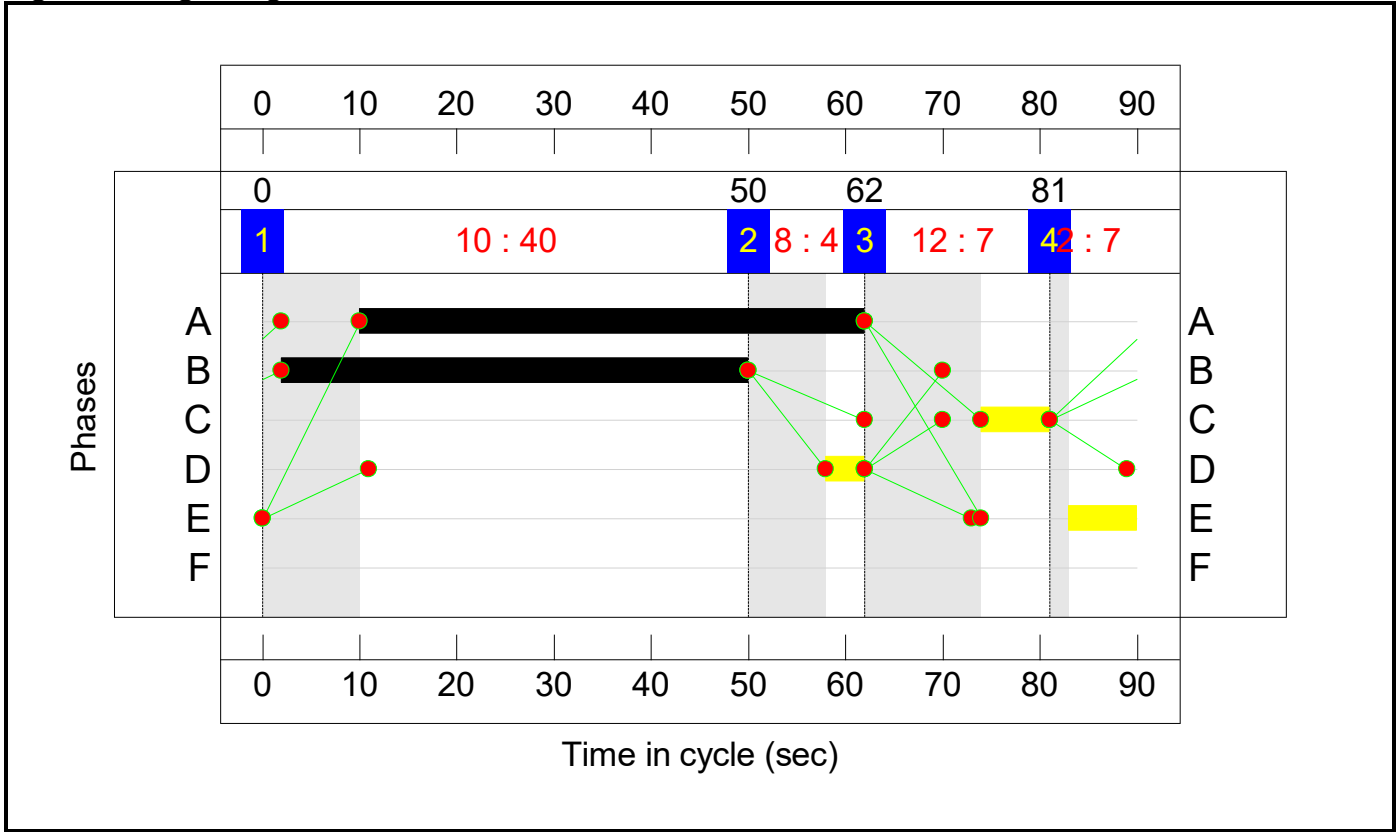
Stage Sequence Diagram



Stage Timings

Stage	1	2	3	4
Duration	40	4	7	7
Change Point	0	50	62	81

Signal Timings Diagram



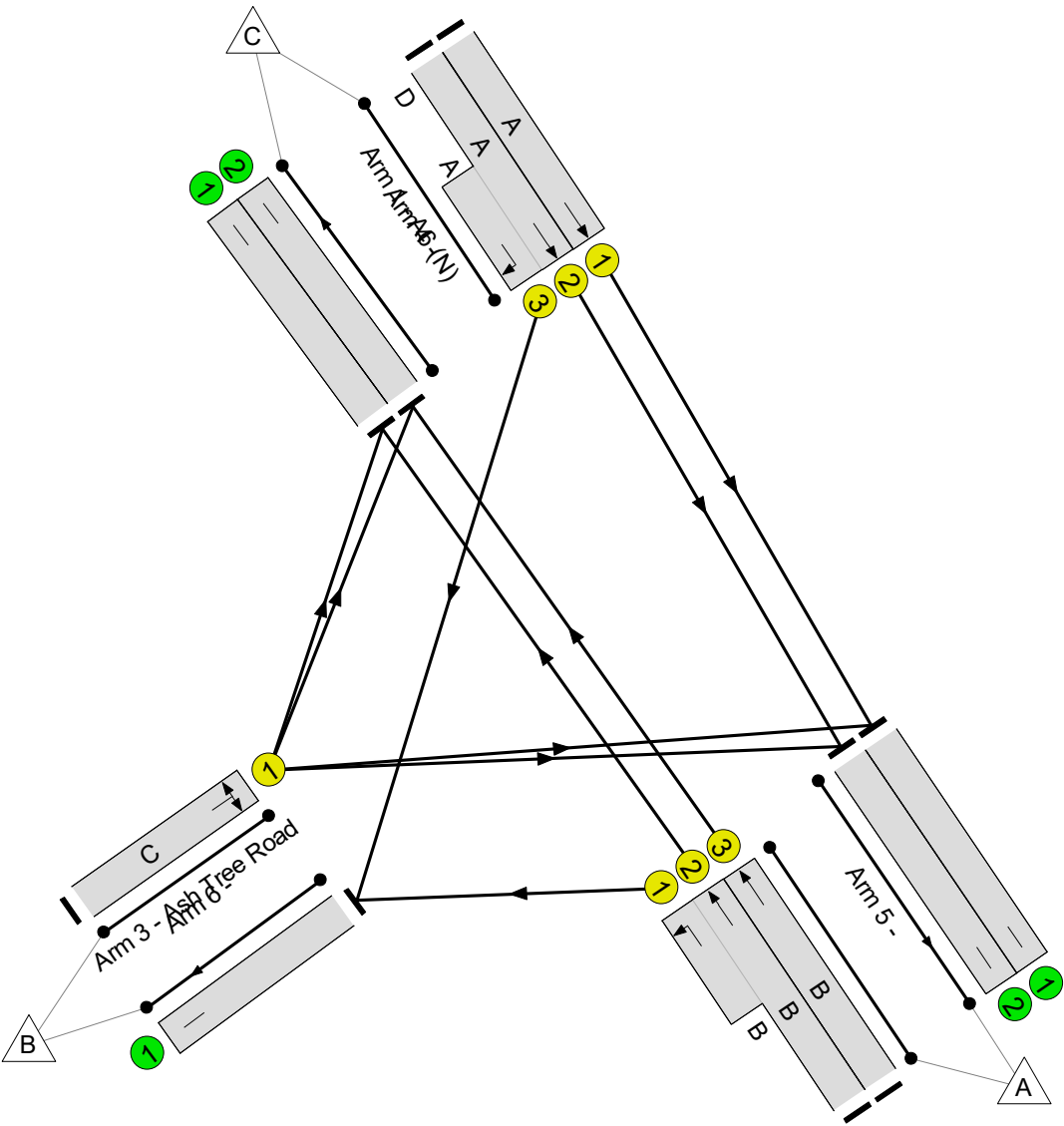
Network Layout Diagram



Unnamed Junction

PRC: 28.1 %

Total Traffic Delay: 15.7 pcuHr



Full Input Data And Results

Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network	-	-	N/A	-	-		-	-	-	-	-	-	70.3%
Unnamed Junction	-	-	N/A	-	-		-	-	-	-	-	-	70.3%
1/1	A6 (N) Ahead	U	N/A	N/A	A		1	52	-	769	1985	1169	65.8%
1/2+1/3	A6 (N) Ahead Right	U	N/A	N/A	A	D	1	52	4	863	1985:1985	953+275	70.3 : 70.3%
2/2+2/1	A6 (S) Ahead Left	U	N/A	N/A	B		1	48	-	732	1980:1691	782+342	65.1 : 65.1%
2/3	A6 (S) Ahead	U	N/A	N/A	B		1	48	-	618	1980	1078	57.3%
3/1	Ash Tree Road Left Right	U	N/A	N/A	C		1	7	-	92	1899	169	54.5%
4/1		U	N/A	N/A	-		-	-	-	522	Inf	Inf	0.0%
4/2		U	N/A	N/A	-		-	-	-	631	Inf	Inf	0.0%
5/1		U	N/A	N/A	-		-	-	-	802	Inf	Inf	0.0%
5/2		U	N/A	N/A	-		-	-	-	703	Inf	Inf	0.0%
6/1		U	N/A	N/A	-		-	-	-	416	Inf	Inf	0.0%

Full Input Data And Results

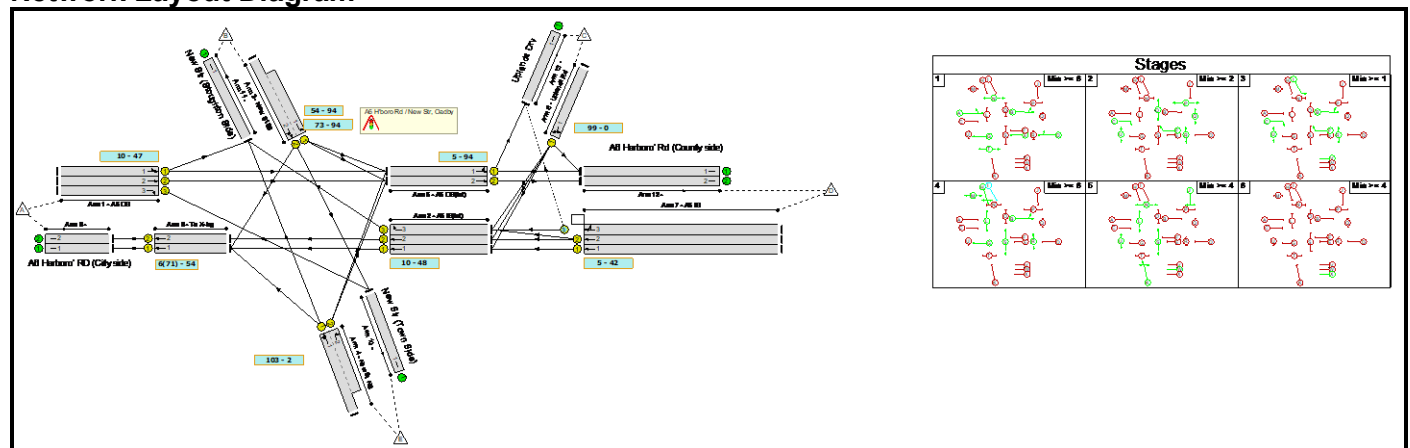
Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network	-	-	0	0	0	11.4	4.3	0.0	15.7	-	-	-	-
Unnamed Junction	-	-	0	0	0	11.4	4.3	0.0	15.7	-	-	-	-
1/1	769	769	-	-	-	2.7	1.0	-	3.6	16.9	12.8	1.0	13.8
1/2+1/3	863	863	-	-	-	2.8	1.2	-	4.0	16.7	12.9	1.2	14.1
2/2+2/1	732	732	-	-	-	2.6	0.9	-	3.5	17.3	9.8	0.9	10.7
2/3	618	618	-	-	-	2.3	0.7	-	3.0	17.5	10.1	0.7	10.8
3/1	92	92	-	-	-	1.0	0.6	-	1.6	62.4	2.2	0.6	2.8
4/1	522	522	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
4/2	631	631	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/1	802	802	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/2	703	703	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/1	416	416	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
C1 PRC for Signalled Lanes (%): 28.1 Total Delay for Signalled Lanes (pcuHr): 15.71 Cycle Time (s): 90 PRC Over All Lanes (%): 28.1 Total Delay Over All Lanes(pcuHr): 15.71													

Full Input Data And Results

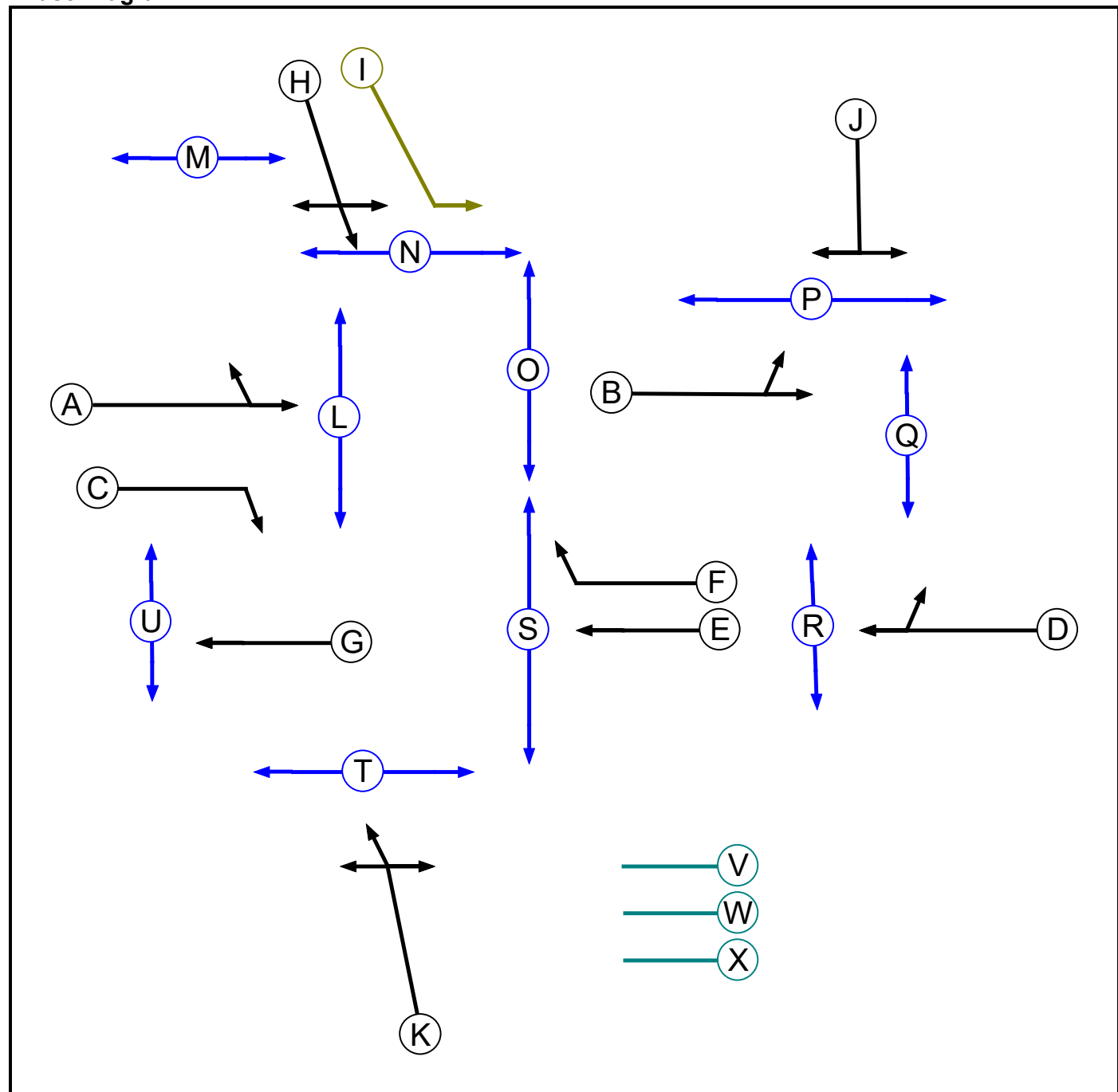
User and Project Details

Project:	
Title:	
Location:	
Additional detail:	
File name:	15 - A6 x B582 further Mitigation.lsg3x
Author:	Matt Smith
Company:	Leicestershire County Council - Engineering Design 1
Address:	County Hall, Glenfield, Leicester. LE3 8RJ

Network Layout Diagram



Phase Diagram



Full Input Data And Results

Phase Input Data

Phase Name	Phase Type	Assoc. Phase	Street Min	Cont Min
A	Traffic		7	7
B	Traffic		7	7
C	Traffic		5	5
D	Traffic		7	7
E	Traffic		1	1
F	Traffic		1	1
G	Traffic		7	7
H	Traffic		7	7
I	Filter	H	1	0
J	Traffic		4	4
K	Traffic		5	5
L	Pedestrian		6	6
M	Pedestrian		6	6
N	Pedestrian		6	6
O	Pedestrian		6	6
P	Pedestrian		6	6
Q	Pedestrian		5	5
R	Pedestrian		6	6
S	Pedestrian		6	6
T	Pedestrian		6	6
U	Pedestrian		6	6
V	Dummy		4	4
W	Dummy		4	4
X	Dummy		4	4

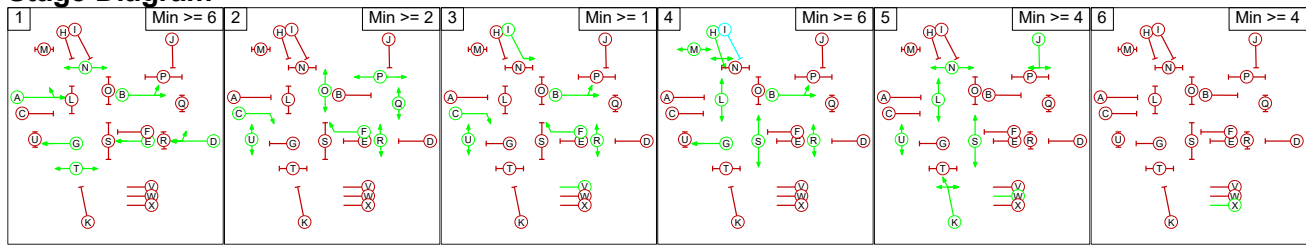
Phase Intergreens Matrix

	Starting Phase																			
		A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S
Terminating Phase	A		-	-	-	-	5	-	7	7	-	7	5	7	-	11	-	-	-	-
	B	-		-	-	-	-	-	-	-	5	-	-	-	-	-	6	8	-	-
	C	-	-		-	8	-	-	6	-	-	8	5	-	-	-	-	-	-	11
	D	-	-	-		-	-	-	-	-	5	-	-	-	-	-	-	5	-	-
	E	-	-	5	-		-	-	7	-	-	6	-	-	-	-	-	-	5	-
	F	9	-	-	-	-		-	8	-	-	5	-	11	-	-	-	-	5	-
	G	-	-	-	-	-	-		-	-	-	-	-	-	-	-	-	-	-	5
	H	5	-	5	-	7	5	-		-	-	5	-	-	5	9	-	-	-	10
	I	5	-	-	-	-	-	-	-		-	5	-	-	5	9	-	-	-	-
	J	-	5	-	5	-	-	-	-	-		-	-	-	-	-	5	7	-	-
	K	8	-	5	-	5	5	-	7	5	-		-	11	-	9	-	-	-	6
	L	10	-	10	-	-	-	-	-	-	-	-		-	-	-	-	-	-	-
	M	9	-	-	-	-	9	-	-	-	-	9	-		-	-	-	-	-	-
	N	-	-	-	-	-	-	-	6	6	-	-	-	-		-	-	-	-	-
	O	6	-	-	-	-	-	-	6	6	-	6	-	-	-		-	-	-	-
	P	-	9	-	-	-	-	-	-	-	9	-	-	-	-	-		-	-	-
	Q	-	6	-	-	-	-	-	-	-	6	-	-	-	-	-	-		-	-
	R	-	-	-	8	-	-	-	-	-	-	-	-	-	-	-	-	-		-
	S	-	-	-	-	10	10	-	-	-	-	-	-	-	-	-	-	-	-	
	T	-	-	9	-	-	-	-	9	-	-	9	-	-	-	-	-	-	-	-
	U	-	-	-	-	-	-	6	-	-	-	-	-	-	-	-	-	-	-	-
	V	2	-	-	2	2	-	2	2	-	2	2	2	2	2	2	2	2	-	2
	W	2	2	2	2	2	2	-	2	2	-	-	-	2	-	2	2	2	2	-
	X	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2

Phases in Stage

Stage No.	Phases in Stage
1	ABDEGNT
2	CFOPQRU
3	BCFIRUV
4	BGHLMRS
5	JKLNSUW
6	X

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	C	Gaining absolute	17	17
1	2	D	Losing	6	6
1	2	E	Losing	12	12
1	2	G	Losing	11	11
1	2	N	Losing	11	11
1	2	T	Losing	8	8
1	3	A	Losing	5	5
1	3	E	Losing	6	6
1	3	G	Losing	12	12
1	3	N	Losing	6	6
1	3	T	Losing	2	2
2	1	O	Losing	3	3
2	1	Q	Losing	3	3
2	3	Q	Losing	3	3
2	4	C	Losing	2	2
2	4	O	Losing	2	2
2	4	Q	Losing	3	3
2	5	F	Losing	4	4
2	5	O	Losing	3	3
2	5	Q	Losing	3	3
2	5	R	Losing	4	4
3	4	C	Losing	2	2
4	1	M	Losing	1	1
4	2	B	Losing	2	2
4	2	G	Losing	5	5
4	3	G	Losing	5	5
4	3	H	Losing	5	5
4	3	M	Losing	1	1
4	5	R	Losing	8	8
5	1	K	Losing	2	2
5	2	J	Losing	4	4
5	2	K	Losing	2	2
5	2	N	Losing	9	9
5	3	K	Losing	1	1
5	4	K	Losing	1	1
5	4	N	Losing	2	2

Prohibited Stage Change

From Stage	To Stage						
		1	2	3	4	5	6
	1		17	17	9	9	3
	2	11		9	11	9	3
	3	X	X		11	X	X
	4	10	10	10		11	3
	5	10	11	10	12		3
	6	2	2	2	2	2	

Full Input Data And Results

Give-Way Lane Input Data

Junction: A6 H'boro Rd / New Str, Oadby											
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)
7/3 (A6 IB)	13/1 (Right)	1440	0	5/1	1.09	All	2.00	2.00	0.50	2	3.00
				5/2	1.09	All					

Full Input Data And Results

Lane Input Data

Junction: A6 H'boro Rd / New Str, Oadby												
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 (A6 OB)	U	A	2	3	60.0	Geom	-	4.50	0.00	N	Arm 5 Ahead	Inf
											Arm 11 Left	Inf
1/2 (A6 OB)	U	A	2	3	60.0	Geom	-	3.50	0.00	Y	Arm 5 Ahead	Inf
1/3 (A6 OB)	U	C	2	3	60.0	Geom	-	3.50	0.00	Y	Arm 10 Right	Inf
2/1 (A6 IB(int))	U	E	2	3	60.0	Geom	-	3.50	0.00	N	Arm 8 Ahead	Inf
2/2 (A6 IB(int))	U	E	2	3	60.0	Geom	-	3.50	0.00	N	Arm 8 Ahead	Inf
2/3 (A6 IB(int))	U	F	2	3	60.0	Geom	-	3.50	0.00	N	Arm 11 Right	Inf
3/1 (New St SB)	U	H I	2	3	13.0	Geom	-	3.50	0.00	N	Arm 5 Left	Inf
3/2 (New St SB)	U	H	2	3	60.0	Geom	-	3.50	0.00	N	Arm 8 Right	Inf
											Arm 10 Ahead	Inf
4/1 (New St NB)	U	K	2	3	60.0	Geom	-	3.25	0.00	N	Arm 8 Left	Inf
											Arm 11 Ahead	Inf
4/2 (New St NB)	U	K	2	3	14.0	Geom	-	3.25	0.00	N	Arm 5 Right	Inf
5/1 (A6 OB(int))	U	B	2	3	60.0	Geom	-	3.50	0.00	N	Arm 12 Ahead	Inf
											Arm 13 Left	Inf
5/2 (A6 OB(int))	U	B	2	3	60.0	Geom	-	3.50	0.00	N	Arm 12 Ahead	Inf
6/1 (Uplands Rd)	U	J	2	3	60.0	User	1800	-	-	-	-	-
7/1 (A6 IB)	U	D	2	3	60.0	Geom	-	3.50	0.00	N	Arm 2 Ahead	Inf
7/2 (A6 IB)	U	D	2	3	60.0	Geom	-	3.50	0.00	N	Arm 2 Ahead	Inf
7/3 (A6 IB)	O	D	2	3	60.0	Geom	-	3.50	0.00	N	Arm 2 Ahead	Inf
											Arm 13 Right	Inf
8/1 (To X-ing)	U	G	2	3	6.0	User	1950	-	-	-	-	-

Full Input Data And Results

8/2 (To X-ing)	U	G	2	3	60.0	User	1950	-	-	-	-	-
9/1	U		2	3	60.0	Inf	-	-	-	-	-	-
9/2	U		2	3	60.0	Inf	-	-	-	-	-	-
10/1	U		2	3	60.0	Inf	-	-	-	-	-	-
11/1	U		2	3	60.0	Inf	-	-	-	-	-	-
12/1	U		2	3	60.0	Inf	-	-	-	-	-	-
12/2	U		2	3	60.0	Inf	-	-	-	-	-	-
13/1	U		2	3	60.0	Inf	-	-	-	-	-	-

Traffic Flow Groups

Flow Group	Start Time	End Time	Duration	Formula
1: '2041 AM Core'	07:45	08:45	01:00	
2: '2041 PM Core'	16:45	17:45	01:00	
3: '2041 AM Pref'	07:45	08:45	01:00	
4: '2041 PM Pref'	16:45	17:45	01:00	

Scenario 1: '2041 AM Core no left filter' (FG1: '2041 AM Core', Plan 1: 'no left filter')

Traffic Flows, Desired

Desired Flow :

	Destination						
		A	B	C	D	E	Tot.
Origin	A	0	46	71	715	83	915
	B	48	0	10	132	166	356
	C	54	5	0	43	0	102
	D	733	128	20	0	0	881
	E	44	177	69	13	0	303
	Tot.	879	356	170	903	249	2557

Full Input Data And Results

Traffic Lane Flows

Lane	Scenario 1: 2041 AM Core no left filter
Junction: A6 H'boro Rd / New Str, Oadby	
1/1	447
1/2	385
1/3	83
2/1	397
2/2	390
2/3	133
3/1 (short)	142
3/2 (with short)	356(In) 214(Out)
4/1 (with short)	303(In) 221(Out)
4/2 (short)	82
5/1	499
5/2	511
6/1	102
7/1	379
7/2	384
7/3	118
8/1	489
8/2	390
9/1	489
9/2	390
10/1	249
11/1	356
12/1	392
12/2	511
13/1	170

Full Input Data And Results

Lane Saturation Flows

Junction: A6 H'boro Rd / New Str, Oadby								
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 (A6 OB)	4.50	0.00	N	Arm 5 Ahead	Inf	89.7 %	2205	2205
				Arm 11 Left	Inf	10.3 %		
1/2 (A6 OB)	3.50	0.00	Y	Arm 5 Ahead	Inf	100.0 %	1965	1965
1/3 (A6 OB)	3.50	0.00	Y	Arm 10 Right	Inf	100.0 %	1965	1965
2/1 (A6 IB(int))	3.50	0.00	N	Arm 8 Ahead	Inf	100.0 %	2105	2105
2/2 (A6 IB(int))	3.50	0.00	N	Arm 8 Ahead	Inf	100.0 %	2105	2105
2/3 (A6 IB(int))	3.50	0.00	N	Arm 11 Right	Inf	100.0 %	2105	2105
3/1 (New St SB)	3.50	0.00	N	Arm 5 Left	Inf	100.0 %	2105	2105
3/2 (New St SB)	3.50	0.00	N	Arm 8 Right	Inf	22.4 %	2105	2105
				Arm 10 Ahead	Inf	77.6 %		
4/1 (New St NB)	3.25	0.00	N	Arm 8 Left	Inf	19.9 %	2080	2080
				Arm 11 Ahead	Inf	80.1 %		
4/2 (New St NB)	3.25	0.00	N	Arm 5 Right	Inf	100.0 %	2080	2080
5/1 (A6 OB(int))	3.50	0.00	N	Arm 12 Ahead	Inf	69.9 %	2105	2105
				Arm 13 Left	Inf	30.1 %		
5/2 (A6 OB(int))	3.50	0.00	N	Arm 12 Ahead	Inf	100.0 %	2105	2105
6/1 (Uplands Rd Lane 1)	This lane uses a directly entered Saturation Flow						1800	1800
7/1 (A6 IB)	3.50	0.00	N	Arm 2 Ahead	Inf	100.0 %	2105	2105
7/2 (A6 IB)	3.50	0.00	N	Arm 2 Ahead	Inf	100.0 %	2105	2105
7/3 (A6 IB)	3.50	0.00	N	Arm 2 Ahead	Inf	83.1 %	2105	2105
				Arm 13 Right	Inf	16.9 %		
8/1 (To X-ing Lane 1)	This lane uses a directly entered Saturation Flow						1950	1950
8/2 (To X-ing Lane 2)	This lane uses a directly entered Saturation Flow						1950	1950
9/1	Infinite Saturation Flow						Inf	Inf
9/2	Infinite Saturation Flow						Inf	Inf
10/1	Infinite Saturation Flow						Inf	Inf
11/1	Infinite Saturation Flow						Inf	Inf
12/1	Infinite Saturation Flow						Inf	Inf
12/2	Infinite Saturation Flow						Inf	Inf

Full Input Data And Results

13/1	Infinite Saturation Flow	Inf	Inf
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Scenario 2: '2041 PM Core no left filter' (FG2: '2041 PM Core', Plan 1: 'no left filter')

Traffic Flows, Desired

Desired Flow :

	Destination						
		A	B	C	D	E	Tot.
Origin	A	0	49	101	905	48	1103
	B	70	0	4	134	207	415
	C	40	2	0	31	0	73
	D	654	150	16	0	0	820
	E	51	209	79	25	0	364
	Tot.	815	410	200	1095	255	2775

Full Input Data And Results

Traffic Lane Flows

Lane	Scenario 2: 2041 PM Core no left filter
Junction: A6 H'boro Rd / New Str, Oadby	
1/1	562
1/2	493
1/3	48
2/1	352
2/2	342
2/3	152
3/1 (short)	138
3/2 (with short)	415(In) 277(Out)
4/1 (with short)	364(In) 260(Out)
4/2 (short)	104
5/1	607
5/2	641
6/1	73
7/1	347
7/2	337
7/3	136
8/1	473
8/2	342
9/1	473
9/2	342
10/1	255
11/1	410
12/1	454
12/2	641
13/1	200

Lane Saturation Flows

Junction: A6 H'boro Rd / New Str, Oadby								
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 (A6 OB)	4.50	0.00	N	Arm 5 Ahead	Inf	91.3 %	2205	2205
				Arm 11 Left	Inf	8.7 %		
1/2 (A6 OB)	3.50	0.00	Y	Arm 5 Ahead	Inf	100.0 %	1965	1965
1/3 (A6 OB)	3.50	0.00	Y	Arm 10 Right	Inf	100.0 %	1965	1965
2/1 (A6 IB(int))	3.50	0.00	N	Arm 8 Ahead	Inf	100.0 %	2105	2105
2/2 (A6 IB(int))	3.50	0.00	N	Arm 8 Ahead	Inf	100.0 %	2105	2105
2/3 (A6 IB(int))	3.50	0.00	N	Arm 11 Right	Inf	100.0 %	2105	2105
3/1 (New St SB)	3.50	0.00	N	Arm 5 Left	Inf	100.0 %	2105	2105
3/2 (New St SB)	3.50	0.00	N	Arm 8 Right	Inf	25.3 %	2105	2105
				Arm 10 Ahead	Inf	74.7 %		
4/1 (New St NB)	3.25	0.00	N	Arm 8 Left	Inf	19.6 %	2080	2080
				Arm 11 Ahead	Inf	80.4 %		
4/2 (New St NB)	3.25	0.00	N	Arm 5 Right	Inf	100.0 %	2080	2080
5/1 (A6 OB(int))	3.50	0.00	N	Arm 12 Ahead	Inf	69.7 %	2105	2105
				Arm 13 Left	Inf	30.3 %		
5/2 (A6 OB(int))	3.50	0.00	N	Arm 12 Ahead	Inf	100.0 %	2105	2105
6/1 (Uplands Rd Lane 1)	This lane uses a directly entered Saturation Flow						1800	1800
7/1 (A6 IB)	3.50	0.00	N	Arm 2 Ahead	Inf	100.0 %	2105	2105
7/2 (A6 IB)	3.50	0.00	N	Arm 2 Ahead	Inf	100.0 %	2105	2105
7/3 (A6 IB)	3.50	0.00	N	Arm 2 Ahead	Inf	88.2 %	2105	2105
				Arm 13 Right	Inf	11.8 %		
8/1 (To X-ing Lane 1)	This lane uses a directly entered Saturation Flow						1950	1950
8/2 (To X-ing Lane 2)	This lane uses a directly entered Saturation Flow						1950	1950
9/1	Infinite Saturation Flow						Inf	Inf
9/2	Infinite Saturation Flow						Inf	Inf
10/1	Infinite Saturation Flow						Inf	Inf
11/1	Infinite Saturation Flow						Inf	Inf
12/1	Infinite Saturation Flow						Inf	Inf
12/2	Infinite Saturation Flow						Inf	Inf

Full Input Data And Results

13/1	Infinite Saturation Flow	Inf	Inf
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Scenario 3: '2041 AM Pref no left filter' (FG3: '2041 AM Pref', Plan 1: 'no left filter')

Traffic Flows, Desired

Desired Flow :

	Destination						
		A	B	C	D	E	Tot.
Origin	A	0	48	73	742	86	949
	B	55	0	11	152	191	409
	C	51	5	0	40	0	96
	D	813	142	22	0	0	977
	E	44	176	69	13	0	302
	Tot.	963	371	175	947	277	2733

Full Input Data And Results

Traffic Lane Flows

Lane	Scenario 3: 2041 AM Pref no left filter
Junction: A6 H'boro Rd / New Str, Oadby	
1/1	463
1/2	400
1/3	86
2/1	430
2/2	434
2/3	147
3/1 (short)	163
3/2 (with short)	409(In) 246(Out)
4/1 (with short)	302(In) 220(Out)
4/2 (short)	82
5/1	524
5/2	536
6/1	96
7/1	413
7/2	400
7/3	164
8/1	529
8/2	434
9/1	529
9/2	434
10/1	277
11/1	371
12/1	411
12/2	536
13/1	175

Full Input Data And Results

Lane Saturation Flows

Junction: A6 H'boro Rd / New Str, Oadby								
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 (A6 OB)	4.50	0.00	N	Arm 5 Ahead	Inf	89.6 %	2205	2205
				Arm 11 Left	Inf	10.4 %		
1/2 (A6 OB)	3.50	0.00	Y	Arm 5 Ahead	Inf	100.0 %	1965	1965
1/3 (A6 OB)	3.50	0.00	Y	Arm 10 Right	Inf	100.0 %	1965	1965
2/1 (A6 IB(int))	3.50	0.00	N	Arm 8 Ahead	Inf	100.0 %	2105	2105
2/2 (A6 IB(int))	3.50	0.00	N	Arm 8 Ahead	Inf	100.0 %	2105	2105
2/3 (A6 IB(int))	3.50	0.00	N	Arm 11 Right	Inf	100.0 %	2105	2105
3/1 (New St SB)	3.50	0.00	N	Arm 5 Left	Inf	100.0 %	2105	2105
3/2 (New St SB)	3.50	0.00	N	Arm 8 Right	Inf	22.4 %	2105	2105
				Arm 10 Ahead	Inf	77.6 %		
4/1 (New St NB)	3.25	0.00	N	Arm 8 Left	Inf	20.0 %	2080	2080
				Arm 11 Ahead	Inf	80.0 %		
4/2 (New St NB)	3.25	0.00	N	Arm 5 Right	Inf	100.0 %	2080	2080
5/1 (A6 OB(int))	3.50	0.00	N	Arm 12 Ahead	Inf	70.8 %	2105	2105
				Arm 13 Left	Inf	29.2 %		
5/2 (A6 OB(int))	3.50	0.00	N	Arm 12 Ahead	Inf	100.0 %	2105	2105
6/1 (Uplands Rd Lane 1)	This lane uses a directly entered Saturation Flow						1800	1800
7/1 (A6 IB)	3.50	0.00	N	Arm 2 Ahead	Inf	100.0 %	2105	2105
7/2 (A6 IB)	3.50	0.00	N	Arm 2 Ahead	Inf	100.0 %	2105	2105
7/3 (A6 IB)	3.50	0.00	N	Arm 2 Ahead	Inf	86.6 %	2105	2105
				Arm 13 Right	Inf	13.4 %		
8/1 (To X-ing Lane 1)	This lane uses a directly entered Saturation Flow						1950	1950
8/2 (To X-ing Lane 2)	This lane uses a directly entered Saturation Flow						1950	1950
9/1	Infinite Saturation Flow						Inf	Inf
9/2	Infinite Saturation Flow						Inf	Inf
10/1	Infinite Saturation Flow						Inf	Inf
11/1	Infinite Saturation Flow						Inf	Inf
12/1	Infinite Saturation Flow						Inf	Inf
12/2	Infinite Saturation Flow						Inf	Inf

Full Input Data And Results

13/1	Infinite Saturation Flow	Inf	Inf
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Scenario 4: '2041 PM Pref no left filter' (FG4: '2041 PM Pref', Plan 1: 'no left filter')

Traffic Flows, Desired

Desired Flow :

	Destination						
		A	B	C	D	E	Tot.
Origin	A	0	57	119	1064	56	1296
	B	75	0	5	143	221	444
	C	41	2	0	31	0	74
	D	672	154	16	0	0	842
	E	57	234	88	28	0	407
	Tot.	845	447	228	1266	277	3063

Full Input Data And Results

Traffic Lane Flows

Lane	Scenario 4: 2041 PM Pref no left filter
Junction: A6 H'boro Rd / New Str, Oadby	
1/1	657
1/2	583
1/3	56
2/1	357
2/2	356
2/3	156
3/1 (short)	148
3/2 (with short)	444(In) 296(Out)
4/1 (with short)	407(In) 291(Out)
4/2 (short)	116
5/1	703
5/2	744
6/1	74
7/1	350
7/2	322
7/3	170
8/1	489
8/2	356
9/1	489
9/2	356
10/1	277
11/1	447
12/1	522
12/2	744
13/1	228

Lane Saturation Flows

Junction: A6 H'boro Rd / New Str, Oadby								
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 (A6 OB)	4.50	0.00	N	Arm 5 Ahead	Inf	91.3 %	2205	2205
				Arm 11 Left	Inf	8.7 %		
1/2 (A6 OB)	3.50	0.00	Y	Arm 5 Ahead	Inf	100.0 %	1965	1965
1/3 (A6 OB)	3.50	0.00	Y	Arm 10 Right	Inf	100.0 %	1965	1965
2/1 (A6 IB(int))	3.50	0.00	N	Arm 8 Ahead	Inf	100.0 %	2105	2105
2/2 (A6 IB(int))	3.50	0.00	N	Arm 8 Ahead	Inf	100.0 %	2105	2105
2/3 (A6 IB(int))	3.50	0.00	N	Arm 11 Right	Inf	100.0 %	2105	2105
3/1 (New St SB)	3.50	0.00	N	Arm 5 Left	Inf	100.0 %	2105	2105
3/2 (New St SB)	3.50	0.00	N	Arm 8 Right	Inf	25.3 %	2105	2105
				Arm 10 Ahead	Inf	74.7 %		
4/1 (New St NB)	3.25	0.00	N	Arm 8 Left	Inf	19.6 %	2080	2080
				Arm 11 Ahead	Inf	80.4 %		
4/2 (New St NB)	3.25	0.00	N	Arm 5 Right	Inf	100.0 %	2080	2080
5/1 (A6 OB(int))	3.50	0.00	N	Arm 12 Ahead	Inf	69.8 %	2105	2105
				Arm 13 Left	Inf	30.2 %		
5/2 (A6 OB(int))	3.50	0.00	N	Arm 12 Ahead	Inf	100.0 %	2105	2105
6/1 (Uplands Rd Lane 1)	This lane uses a directly entered Saturation Flow						1800	1800
7/1 (A6 IB)	3.50	0.00	N	Arm 2 Ahead	Inf	100.0 %	2105	2105
7/2 (A6 IB)	3.50	0.00	N	Arm 2 Ahead	Inf	100.0 %	2105	2105
7/3 (A6 IB)	3.50	0.00	N	Arm 2 Ahead	Inf	90.6 %	2105	2105
				Arm 13 Right	Inf	9.4 %		
8/1 (To X-ing Lane 1)	This lane uses a directly entered Saturation Flow						1950	1950
8/2 (To X-ing Lane 2)	This lane uses a directly entered Saturation Flow						1950	1950
9/1	Infinite Saturation Flow						Inf	Inf
9/2	Infinite Saturation Flow						Inf	Inf
10/1	Infinite Saturation Flow						Inf	Inf
11/1	Infinite Saturation Flow						Inf	Inf
12/1	Infinite Saturation Flow						Inf	Inf
12/2	Infinite Saturation Flow						Inf	Inf

Full Input Data And Results

13/1	Infinite Saturation Flow	Inf	Inf
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Scenario 5: '2041 AM Core with left filter' (FG1: '2041 AM Core', Plan 2: 'with left filter')

Traffic Flows, Desired

Desired Flow :

	Destination						
		A	B	C	D	E	Tot.
Origin	A	0	46	71	715	83	915
	B	48	0	10	132	166	356
	C	54	5	0	43	0	102
	D	733	128	20	0	0	881
	E	44	177	69	13	0	303
	Tot.	879	356	170	903	249	2557

Full Input Data And Results

Traffic Lane Flows

Lane	Scenario 5: 2041 AM Core with left filter
Junction: A6 H'boro Rd / New Str, Oadby	
1/1	449
1/2	383
1/3	83
2/1	397
2/2	390
2/3	133
3/1 (short)	142
3/2 (with short)	356(In) 214(Out)
4/1 (with short)	303(In) 221(Out)
4/2 (short)	82
5/1	495
5/2	515
6/1	102
7/1	379
7/2	384
7/3	118
8/1	489
8/2	390
9/1	489
9/2	390
10/1	249
11/1	356
12/1	388
12/2	515
13/1	170

Full Input Data And Results

Lane Saturation Flows

Junction: A6 H'boro Rd / New Str, Oadby								
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 (A6 OB)	4.50	0.00	N	Arm 5 Ahead	Inf	89.8 %	2205	2205
				Arm 11 Left	Inf	10.2 %		
1/2 (A6 OB)	3.50	0.00	Y	Arm 5 Ahead	Inf	100.0 %	1965	1965
1/3 (A6 OB)	3.50	0.00	Y	Arm 10 Right	Inf	100.0 %	1965	1965
2/1 (A6 IB(int))	3.50	0.00	N	Arm 8 Ahead	Inf	100.0 %	2105	2105
2/2 (A6 IB(int))	3.50	0.00	N	Arm 8 Ahead	Inf	100.0 %	2105	2105
2/3 (A6 IB(int))	3.50	0.00	N	Arm 11 Right	Inf	100.0 %	2105	2105
3/1 (New St SB)	3.50	0.00	N	Arm 5 Left	Inf	100.0 %	2105	2105
3/2 (New St SB)	3.50	0.00	N	Arm 8 Right	Inf	22.4 %	2105	2105
				Arm 10 Ahead	Inf	77.6 %		
4/1 (New St NB)	3.25	0.00	N	Arm 8 Left	Inf	19.9 %	2080	2080
				Arm 11 Ahead	Inf	80.1 %		
4/2 (New St NB)	3.25	0.00	N	Arm 5 Right	Inf	100.0 %	2080	2080
5/1 (A6 OB(int))	3.50	0.00	N	Arm 12 Ahead	Inf	69.7 %	2105	2105
				Arm 13 Left	Inf	30.3 %		
5/2 (A6 OB(int))	3.50	0.00	N	Arm 12 Ahead	Inf	100.0 %	2105	2105
6/1 (Uplands Rd Lane 1)	This lane uses a directly entered Saturation Flow						1800	1800
7/1 (A6 IB)	3.50	0.00	N	Arm 2 Ahead	Inf	100.0 %	2105	2105
7/2 (A6 IB)	3.50	0.00	N	Arm 2 Ahead	Inf	100.0 %	2105	2105
7/3 (A6 IB)	3.50	0.00	N	Arm 2 Ahead	Inf	83.1 %	2105	2105
				Arm 13 Right	Inf	16.9 %		
8/1 (To X-ing Lane 1)	This lane uses a directly entered Saturation Flow						1950	1950
8/2 (To X-ing Lane 2)	This lane uses a directly entered Saturation Flow						1950	1950
9/1	Infinite Saturation Flow						Inf	Inf
9/2	Infinite Saturation Flow						Inf	Inf
10/1	Infinite Saturation Flow						Inf	Inf
11/1	Infinite Saturation Flow						Inf	Inf
12/1	Infinite Saturation Flow						Inf	Inf
12/2	Infinite Saturation Flow						Inf	Inf

Full Input Data And Results

13/1	Infinite Saturation Flow	Inf	Inf
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Scenario 6: '2041 PM Core with left filter' (FG2: '2041 PM Core', Plan 2: 'with left filter')

Traffic Flows, Desired

Desired Flow :

	Destination						
		A	B	C	D	E	Tot.
Origin	A	0	49	101	905	48	1103
	B	70	0	4	134	207	415
	C	40	2	0	31	0	73
	D	654	150	16	0	0	820
	E	51	209	79	25	0	364
	Tot.	815	410	200	1095	255	2775

Full Input Data And Results

Traffic Lane Flows

Lane	Scenario 6: 2041 PM Core with left filter
Junction: A6 H'boro Rd / New Str, Oadby	
1/1	565
1/2	490
1/3	48
2/1	351
2/2	343
2/3	152
3/1 (short)	138
3/2 (with short)	415(In) 277(Out)
4/1 (with short)	364(In) 260(Out)
4/2 (short)	104
5/1	615
5/2	633
6/1	73
7/1	345
7/2	339
7/3	136
8/1	472
8/2	343
9/1	472
9/2	343
10/1	255
11/1	410
12/1	462
12/2	633
13/1	200

Lane Saturation Flows

Junction: A6 H'boro Rd / New Str, Oadby								
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 (A6 OB)	4.50	0.00	N	Arm 5 Ahead	Inf	91.3 %	2205	2205
				Arm 11 Left	Inf	8.7 %		
1/2 (A6 OB)	3.50	0.00	Y	Arm 5 Ahead	Inf	100.0 %	1965	1965
1/3 (A6 OB)	3.50	0.00	Y	Arm 10 Right	Inf	100.0 %	1965	1965
2/1 (A6 IB(int))	3.50	0.00	N	Arm 8 Ahead	Inf	100.0 %	2105	2105
2/2 (A6 IB(int))	3.50	0.00	N	Arm 8 Ahead	Inf	100.0 %	2105	2105
2/3 (A6 IB(int))	3.50	0.00	N	Arm 11 Right	Inf	100.0 %	2105	2105
3/1 (New St SB)	3.50	0.00	N	Arm 5 Left	Inf	100.0 %	2105	2105
3/2 (New St SB)	3.50	0.00	N	Arm 8 Right	Inf	25.3 %	2105	2105
				Arm 10 Ahead	Inf	74.7 %		
4/1 (New St NB)	3.25	0.00	N	Arm 8 Left	Inf	19.6 %	2080	2080
				Arm 11 Ahead	Inf	80.4 %		
4/2 (New St NB)	3.25	0.00	N	Arm 5 Right	Inf	100.0 %	2080	2080
5/1 (A6 OB(int))	3.50	0.00	N	Arm 12 Ahead	Inf	70.1 %	2105	2105
				Arm 13 Left	Inf	29.9 %		
5/2 (A6 OB(int))	3.50	0.00	N	Arm 12 Ahead	Inf	100.0 %	2105	2105
6/1 (Uplands Rd Lane 1)	This lane uses a directly entered Saturation Flow						1800	1800
7/1 (A6 IB)	3.50	0.00	N	Arm 2 Ahead	Inf	100.0 %	2105	2105
7/2 (A6 IB)	3.50	0.00	N	Arm 2 Ahead	Inf	100.0 %	2105	2105
7/3 (A6 IB)	3.50	0.00	N	Arm 2 Ahead	Inf	88.2 %	2105	2105
				Arm 13 Right	Inf	11.8 %		
8/1 (To X-ing Lane 1)	This lane uses a directly entered Saturation Flow						1950	1950
8/2 (To X-ing Lane 2)	This lane uses a directly entered Saturation Flow						1950	1950
9/1	Infinite Saturation Flow						Inf	Inf
9/2	Infinite Saturation Flow						Inf	Inf
10/1	Infinite Saturation Flow						Inf	Inf
11/1	Infinite Saturation Flow						Inf	Inf
12/1	Infinite Saturation Flow						Inf	Inf
12/2	Infinite Saturation Flow						Inf	Inf

13/1	Infinite Saturation Flow	Inf	Inf
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Scenario 7: '2041 AM Pref with left filter' (FG3: '2041 AM Pref', Plan 2: 'with left filter')

Traffic Flows, Desired

Desired Flow :

Origin	Destination						
		A	B	C	D	E	Tot.
	A	0	48	73	742	86	949
	B	55	0	11	152	191	409
	C	51	5	0	40	0	96
	D	813	142	22	0	0	977
	E	44	176	69	13	0	302
	Tot.	963	371	175	947	277	2733

Full Input Data And Results

Traffic Lane Flows

Lane	Scenario 7: 2041 AM Pref with left filter
Junction: A6 H'boro Rd / New Str, Oadby	
1/1	465
1/2	398
1/3	86
2/1	435
2/2	429
2/3	147
3/1 (short)	163
3/2 (with short)	409(In) 246(Out)
4/1 (with short)	302(In) 220(Out)
4/2 (short)	82
5/1	517
5/2	543
6/1	96
7/1	419
7/2	424
7/3	134
8/1	534
8/2	429
9/1	534
9/2	429
10/1	277
11/1	371
12/1	404
12/2	543
13/1	175

Full Input Data And Results

Lane Saturation Flows

Junction: A6 H'boro Rd / New Str, Oadby								
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 (A6 OB)	4.50	0.00	N	Arm 5 Ahead	Inf	89.7 %	2205	2205
				Arm 11 Left	Inf	10.3 %		
1/2 (A6 OB)	3.50	0.00	Y	Arm 5 Ahead	Inf	100.0 %	1965	1965
1/3 (A6 OB)	3.50	0.00	Y	Arm 10 Right	Inf	100.0 %	1965	1965
2/1 (A6 IB(int))	3.50	0.00	N	Arm 8 Ahead	Inf	100.0 %	2105	2105
2/2 (A6 IB(int))	3.50	0.00	N	Arm 8 Ahead	Inf	100.0 %	2105	2105
2/3 (A6 IB(int))	3.50	0.00	N	Arm 11 Right	Inf	100.0 %	2105	2105
3/1 (New St SB)	3.50	0.00	N	Arm 5 Left	Inf	100.0 %	2105	2105
3/2 (New St SB)	3.50	0.00	N	Arm 8 Right	Inf	22.4 %	2105	2105
				Arm 10 Ahead	Inf	77.6 %		
4/1 (New St NB)	3.25	0.00	N	Arm 8 Left	Inf	20.0 %	2080	2080
				Arm 11 Ahead	Inf	80.0 %		
4/2 (New St NB)	3.25	0.00	N	Arm 5 Right	Inf	100.0 %	2080	2080
5/1 (A6 OB(int))	3.50	0.00	N	Arm 12 Ahead	Inf	70.4 %	2105	2105
				Arm 13 Left	Inf	29.6 %		
5/2 (A6 OB(int))	3.50	0.00	N	Arm 12 Ahead	Inf	100.0 %	2105	2105
6/1 (Uplands Rd Lane 1)	This lane uses a directly entered Saturation Flow						1800	1800
7/1 (A6 IB)	3.50	0.00	N	Arm 2 Ahead	Inf	100.0 %	2105	2105
7/2 (A6 IB)	3.50	0.00	N	Arm 2 Ahead	Inf	100.0 %	2105	2105
7/3 (A6 IB)	3.50	0.00	N	Arm 2 Ahead	Inf	83.6 %	2105	2105
				Arm 13 Right	Inf	16.4 %		
8/1 (To X-ing Lane 1)	This lane uses a directly entered Saturation Flow						1950	1950
8/2 (To X-ing Lane 2)	This lane uses a directly entered Saturation Flow						1950	1950
9/1	Infinite Saturation Flow						Inf	Inf
9/2	Infinite Saturation Flow						Inf	Inf
10/1	Infinite Saturation Flow						Inf	Inf
11/1	Infinite Saturation Flow						Inf	Inf
12/1	Infinite Saturation Flow						Inf	Inf
12/2	Infinite Saturation Flow						Inf	Inf

Full Input Data And Results

13/1	Infinite Saturation Flow	Inf	Inf
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Scenario 8: '2041 PM Pref with left filter' (FG4: '2041 PM Pref', Plan 2: 'with left filter')

Traffic Flows, Desired

Desired Flow :

	Destination						
		A	B	C	D	E	Tot.
Origin	A	0	57	119	1064	56	1296
	B	75	0	5	143	221	444
	C	41	2	0	31	0	74
	D	672	154	16	0	0	842
	E	57	234	88	28	0	407
	Tot.	845	447	228	1266	277	3063

Full Input Data And Results

Traffic Lane Flows

Lane	Scenario 8: 2041 PM Pref with left filter
Junction: A6 H'boro Rd / New Str, Oadby	
1/1	661
1/2	579
1/3	56
2/1	361
2/2	352
2/3	156
3/1 (short)	148
3/2 (with short)	444(In) 296(Out)
4/1 (with short)	407(In) 291(Out)
4/2 (short)	116
5/1	709
5/2	738
6/1	74
7/1	355
7/2	347
7/3	140
8/1	493
8/2	352
9/1	493
9/2	352
10/1	277
11/1	447
12/1	528
12/2	738
13/1	228

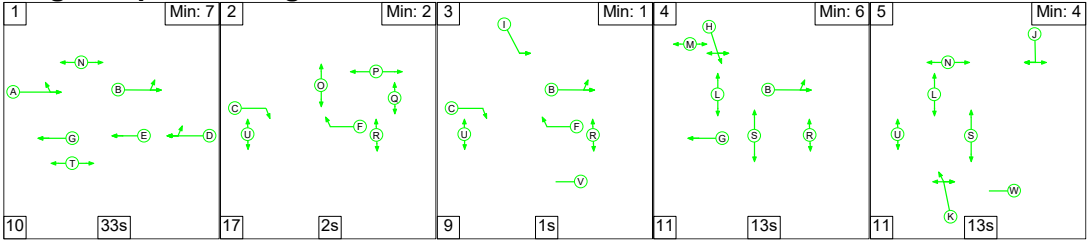
Full Input Data And Results

Lane Saturation Flows

Junction: A6 H'boro Rd / New Str, Oadby								
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 (A6 OB)	4.50	0.00	N	Arm 5 Ahead	Inf	91.4 %	2205	2205
				Arm 11 Left	Inf	8.6 %		
1/2 (A6 OB)	3.50	0.00	Y	Arm 5 Ahead	Inf	100.0 %	1965	1965
1/3 (A6 OB)	3.50	0.00	Y	Arm 10 Right	Inf	100.0 %	1965	1965
2/1 (A6 IB(int))	3.50	0.00	N	Arm 8 Ahead	Inf	100.0 %	2105	2105
2/2 (A6 IB(int))	3.50	0.00	N	Arm 8 Ahead	Inf	100.0 %	2105	2105
2/3 (A6 IB(int))	3.50	0.00	N	Arm 11 Right	Inf	100.0 %	2105	2105
3/1 (New St SB)	3.50	0.00	N	Arm 5 Left	Inf	100.0 %	2105	2105
3/2 (New St SB)	3.50	0.00	N	Arm 8 Right	Inf	25.3 %	2105	2105
				Arm 10 Ahead	Inf	74.7 %		
4/1 (New St NB)	3.25	0.00	N	Arm 8 Left	Inf	19.6 %	2080	2080
				Arm 11 Ahead	Inf	80.4 %		
4/2 (New St NB)	3.25	0.00	N	Arm 5 Right	Inf	100.0 %	2080	2080
5/1 (A6 OB(int))	3.50	0.00	N	Arm 12 Ahead	Inf	70.1 %	2105	2105
				Arm 13 Left	Inf	29.9 %		
5/2 (A6 OB(int))	3.50	0.00	N	Arm 12 Ahead	Inf	100.0 %	2105	2105
6/1 (Uplands Rd Lane 1)	This lane uses a directly entered Saturation Flow						1800	1800
7/1 (A6 IB)	3.50	0.00	N	Arm 2 Ahead	Inf	100.0 %	2105	2105
7/2 (A6 IB)	3.50	0.00	N	Arm 2 Ahead	Inf	100.0 %	2105	2105
7/3 (A6 IB)	3.50	0.00	N	Arm 2 Ahead	Inf	88.6 %	2105	2105
				Arm 13 Right	Inf	11.4 %		
8/1 (To X-ing Lane 1)	This lane uses a directly entered Saturation Flow						1950	1950
8/2 (To X-ing Lane 2)	This lane uses a directly entered Saturation Flow						1950	1950
9/1	Infinite Saturation Flow						Inf	Inf
9/2	Infinite Saturation Flow						Inf	Inf
10/1	Infinite Saturation Flow						Inf	Inf
11/1	Infinite Saturation Flow						Inf	Inf
12/1	Infinite Saturation Flow						Inf	Inf
12/2	Infinite Saturation Flow						Inf	Inf

13/1	Infinite Saturation Flow	Inf	Inf
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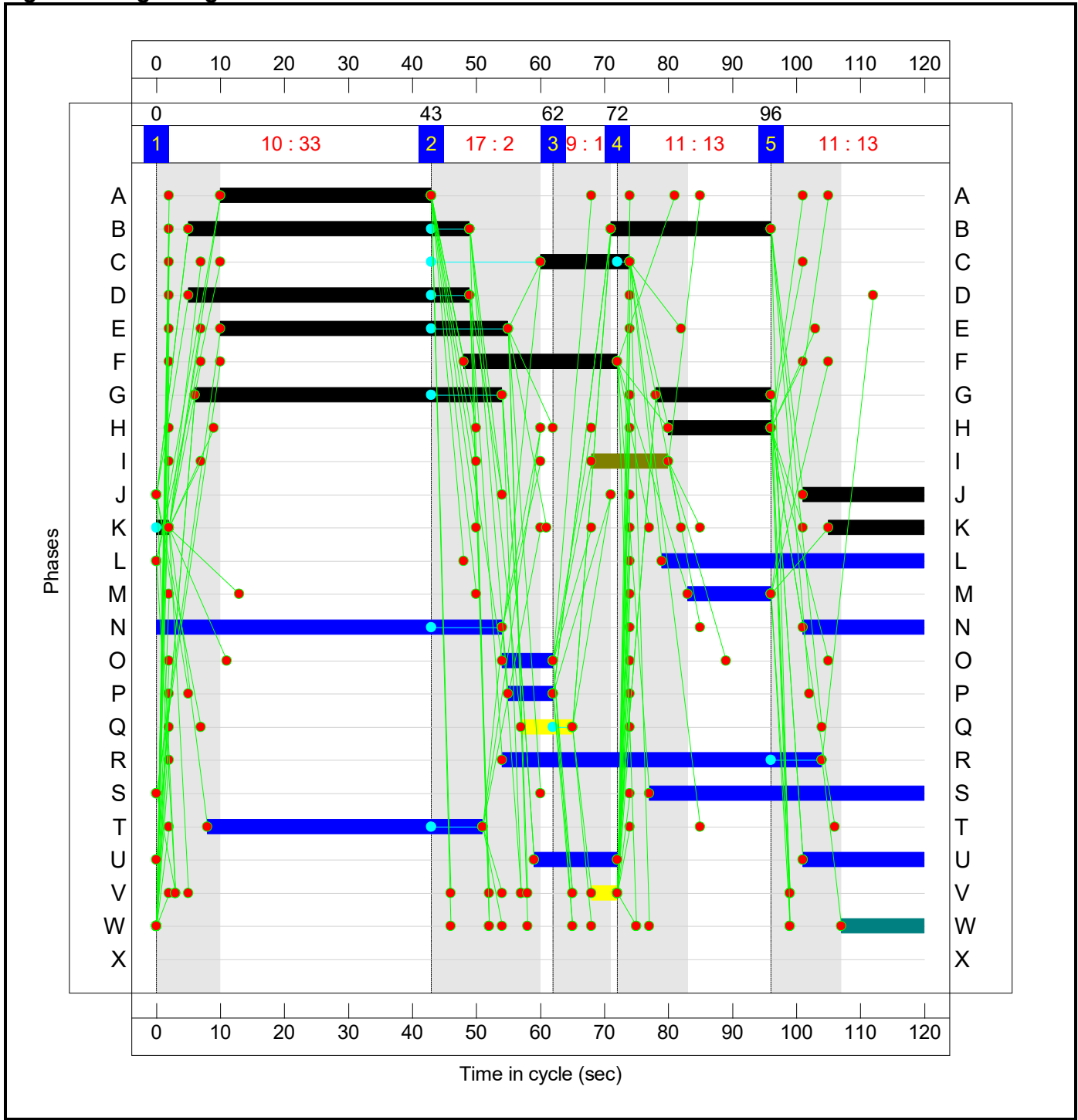
Scenario 1: '2041 AM Core no left filter' (FG1: '2041 AM Core', Plan 1: 'no left filter')
Stage Sequence Diagram



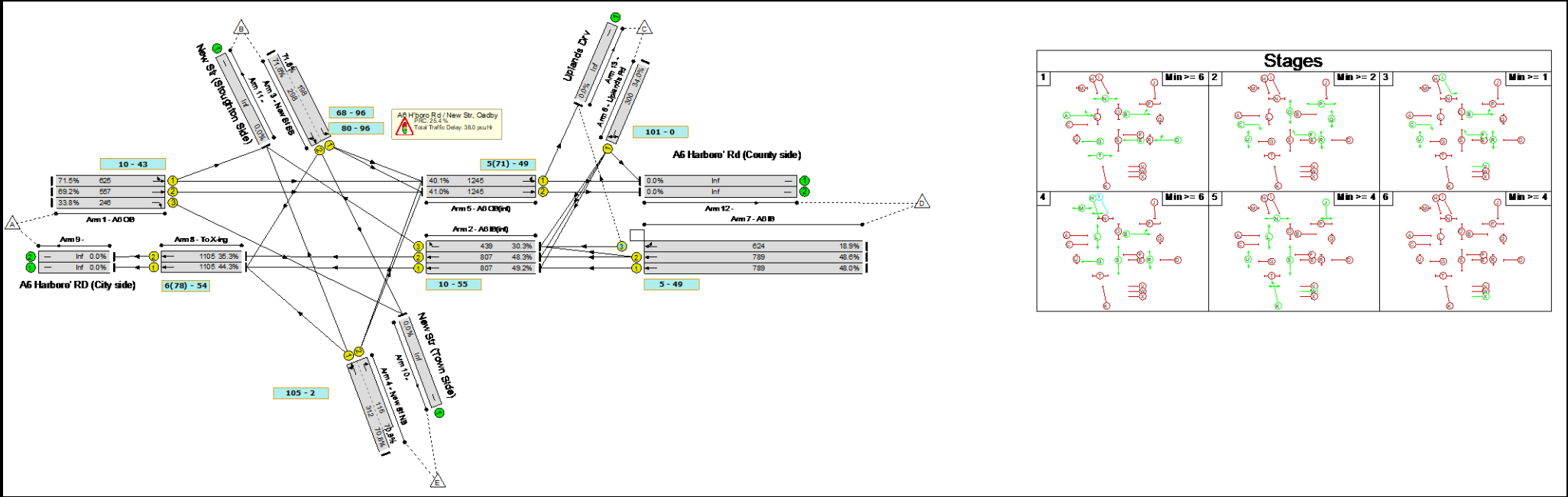
Stage Timings

Stage	1	2	3	4	5
Duration	33	2	1	13	13
Change Point	0	43	62	72	96

Signal Timings Diagram



Full Input Data And Results
Network Layout Diagram



Full Input Data And Results

Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network	-	-	N/A	-	-		-	-	-	-	-	-	71.8%
A6 H'boro Rd / New Str, Oadby	-	-	N/A	-	-		-	-	-	-	-	-	71.8%
1/1	A6 OB Ahead Left	U	N/A	N/A	A		1	33	-	447	2205	625	71.5%
1/2	A6 OB Ahead	U	N/A	N/A	A		1	33	-	385	1965	557	69.2%
1/3	A6 OB Right	U	N/A	N/A	C		1	14	-	83	1965	246	33.8%
2/1	A6 IB(int) Ahead	U	N/A	N/A	E		1	45	-	397	2105	807	49.2%
2/2	A6 IB(int) Ahead	U	N/A	N/A	E		1	45	-	390	2105	807	48.3%
2/3	A6 IB(int) Right	U	N/A	N/A	F		1	24	-	133	2105	439	30.3%
3/2+3/1	New St SB Left Right Ahead	U	N/A	N/A	H	I	1	16:28	12	356	2105:2105	298+198	71.8 : 71.8%
4/1+4/2	New St NB Right Left Ahead	U	N/A	N/A	K		1	17	-	303	2080:2080	312+116	70.8 : 70.8%
5/1	A6 OB(int) Ahead Left	U	N/A	N/A	B		2	69	-	499	2105	1245	40.1%
5/2	A6 OB(int) Ahead	U	N/A	N/A	B		2	69	-	511	2105	1245	41.0%
6/1	Uplands Rd Right Left	U	N/A	N/A	J		1	19	-	102	1800	300	34.0%
7/1	A6 IB Ahead	U	N/A	N/A	D		1	44	-	379	2105	789	48.0%
7/2	A6 IB Ahead	U	N/A	N/A	D		1	44	-	384	2105	789	48.6%
7/3	A6 IB Ahead Right	O	N/A	N/A	D		1	44	-	118	2105	624	18.9%
8/1	To X-ing Ahead	U	N/A	N/A	G		2	66	-	489	1950	1105	44.3%
8/2	To X-ing Ahead	U	N/A	N/A	G		2	66	-	390	1950	1105	35.3%
9/1		U	N/A	N/A	-		-	-	-	489	Inf	Inf	0.0%

Full Input Data And Results

9/2		U	N/A	N/A	-		-	-	-	390	Inf	Inf	0.0%
10/1		U	N/A	N/A	-		-	-	-	249	Inf	Inf	0.0%
11/1		U	N/A	N/A	-		-	-	-	356	Inf	Inf	0.0%
12/1		U	N/A	N/A	-		-	-	-	392	Inf	Inf	0.0%
12/2		U	N/A	N/A	-		-	-	-	511	Inf	Inf	0.0%
13/1		U	N/A	N/A	-		-	-	-	170	Inf	Inf	0.0%

Full Input Data And Results

Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network	-	-	20	0	0	29.1	8.9	0.0	38.0	-	-	-	-
A6 H'boro Rd / New Str, Oadby	-	-	20	0	0	29.1	8.9	0.0	38.0	-	-	-	-
1/1	447	447	-	-	-	4.8	1.2	-	6.0	48.6	13.3	1.2	14.5
1/2	385	385	-	-	-	4.1	1.1	-	5.2	48.7	11.3	1.1	12.4
1/3	83	83	-	-	-	1.1	0.3	-	1.4	59.0	2.5	0.3	2.8
2/1	397	397	-	-	-	0.2	0.5	-	0.7	6.1	10.0	0.5	10.5
2/2	390	390	-	-	-	0.3	0.5	-	0.8	7.3	9.6	0.5	10.1
2/3	133	133	-	-	-	1.2	0.2	-	1.4	37.7	4.4	0.2	4.6
3/2+3/1	356	356	-	-	-	4.4	1.2	-	5.6 (3.7+2.0)	57.0 (61.8:49.6)	6.8	1.2	8.0
4/1+4/2	303	303	-	-	-	4.0	1.2	-	5.2 (3.8+1.4)	61.8 (62.7:59.3)	7.0	1.2	8.2
5/1	499	499	-	-	-	0.3	0.3	-	0.6	4.3	2.3	0.3	2.7
5/2	511	511	-	-	-	0.1	0.3	-	0.4	3.2	0.6	0.3	1.0
6/1	102	102	-	-	-	1.3	0.3	-	1.5	53.2	3.0	0.3	3.3
7/1	379	379	-	-	-	3.0	0.5	-	3.5	33.0	9.6	0.5	10.0
7/2	384	384	-	-	-	3.1	0.5	-	3.5	33.1	9.7	0.5	10.2
7/3	118	118	20	0	0	0.8	0.1	0.0	1.0	29.2	2.6	0.1	2.7
8/1	489	489	-	-	-	0.4	0.4	-	0.8	5.7	7.8	0.4	8.1
8/2	390	390	-	-	-	0.1	0.3	-	0.4	3.7	7.7	0.3	8.0
9/1	489	489	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
9/2	390	390	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
10/1	249	249	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
11/1	356	356	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
12/1	392	392	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
12/2	511	511	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
13/1	170	170	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0

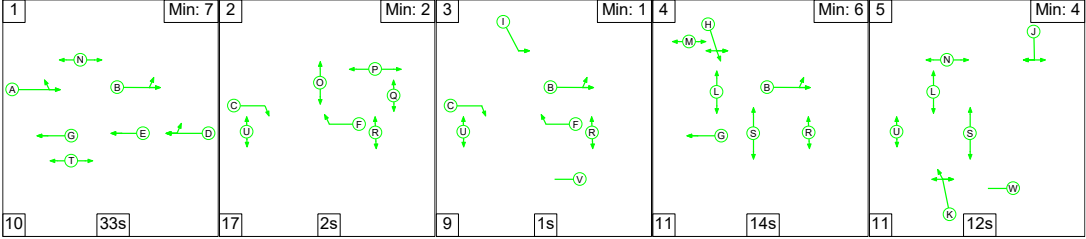
Full Input Data And Results

C1	PRC for Signalled Lanes (%):	25.4	Total Delay for Signalled Lanes (pcuHr):	37.98	Cycle Time (s):	120
	PRC Over All Lanes (%):	25.4	Total Delay Over All Lanes(pcuHr):	37.98		

Full Input Data And Results

Scenario 2: '2041 PM Core no left filter' (FG2: '2041 PM Core', Plan 1: 'no left filter')

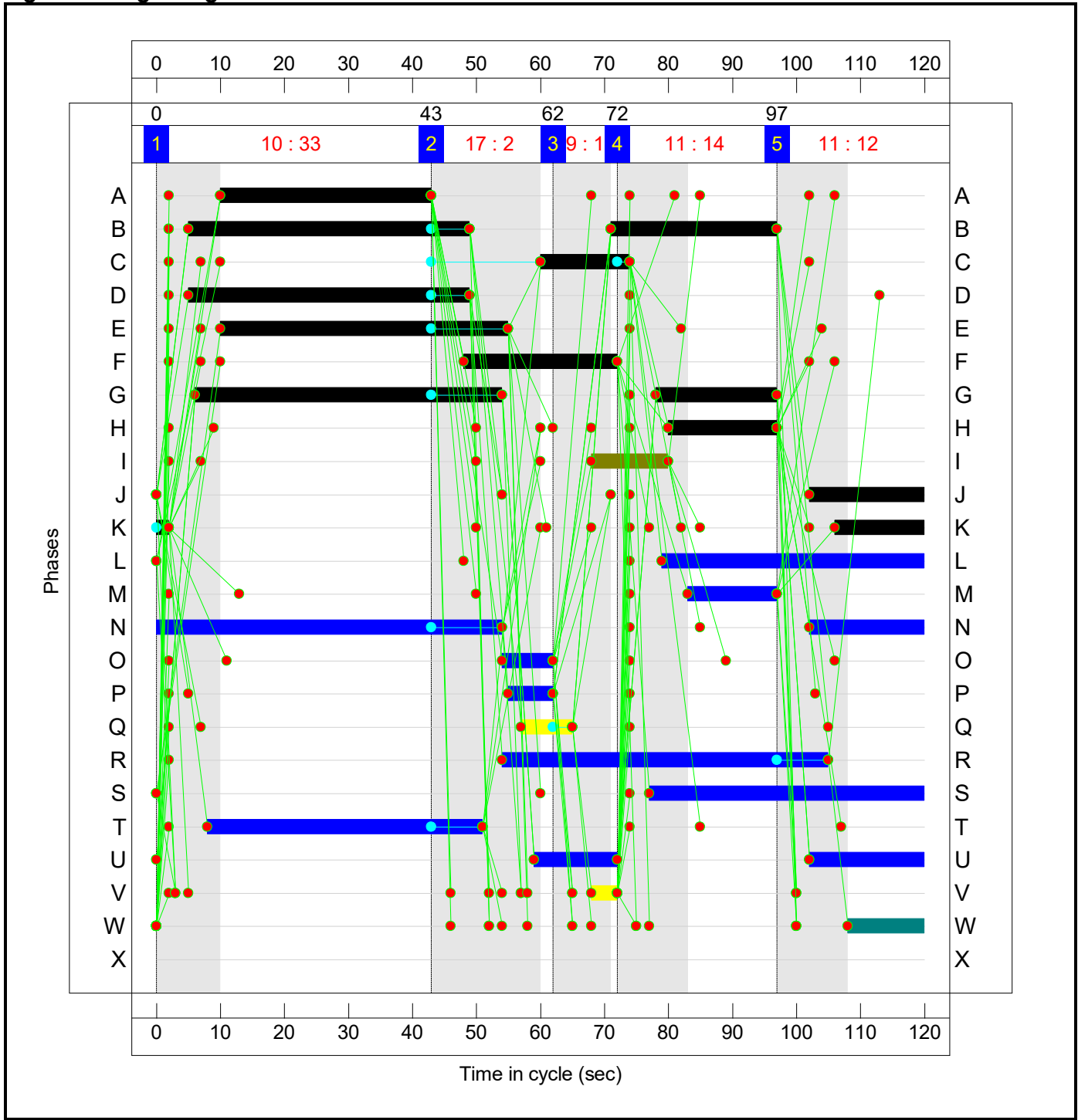
Stage Sequence Diagram



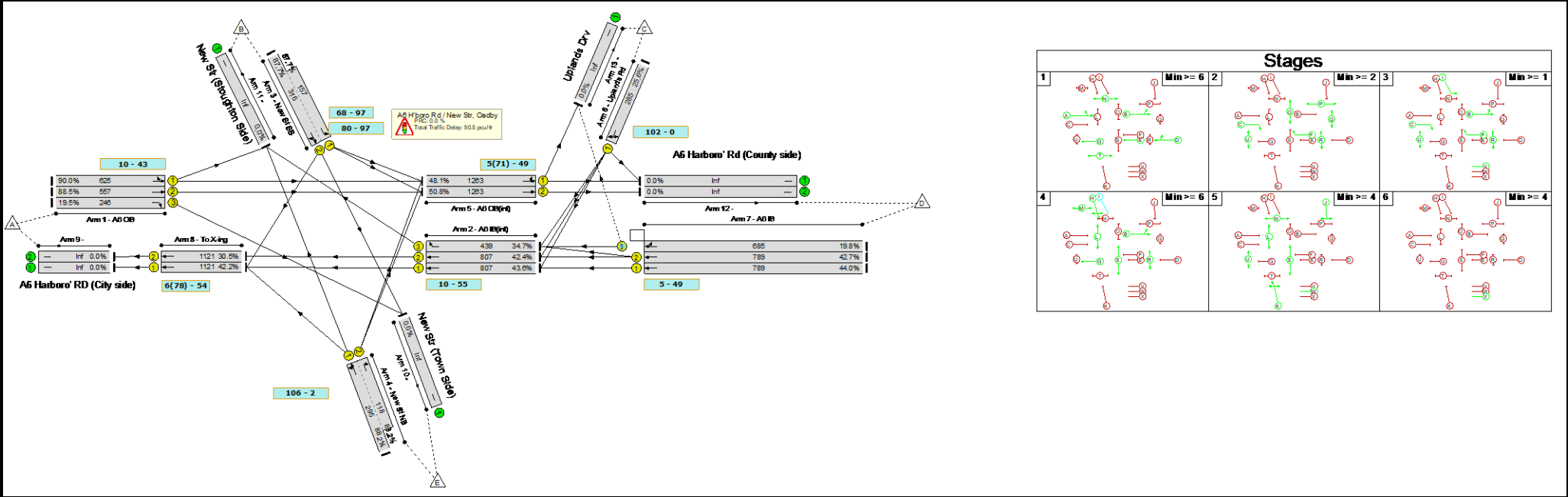
Stage Timings

Stage	1	2	3	4	5
Duration	33	2	1	14	12
Change Point	0	43	62	72	97

Signal Timings Diagram



Full Input Data And Results
Network Layout Diagram



Full Input Data And Results

Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network	-	-	N/A	-	-		-	-	-	-	-	-	90.0%
A6 H'boro Rd / New Str, Oadby	-	-	N/A	-	-		-	-	-	-	-	-	90.0%
1/1	A6 OB Ahead Left	U	N/A	N/A	A		1	33	-	562	2205	625	90.0%
1/2	A6 OB Ahead	U	N/A	N/A	A		1	33	-	493	1965	557	88.5%
1/3	A6 OB Right	U	N/A	N/A	C		1	14	-	48	1965	246	19.5%
2/1	A6 IB(int) Ahead	U	N/A	N/A	E		1	45	-	352	2105	807	43.6%
2/2	A6 IB(int) Ahead	U	N/A	N/A	E		1	45	-	342	2105	807	42.4%
2/3	A6 IB(int) Right	U	N/A	N/A	F		1	24	-	152	2105	439	34.7%
3/2+3/1	New St SB Left Right Ahead	U	N/A	N/A	H	I	1	17:29	12	415	2105:2105	316+157	87.7 : 87.7%
4/1+4/2	New St NB Right Left Ahead	U	N/A	N/A	K		1	16	-	364	2080:2080	295+118	88.2 : 88.2%
5/1	A6 OB(int) Ahead Left	U	N/A	N/A	B		2	70	-	607	2105	1263	48.1%
5/2	A6 OB(int) Ahead	U	N/A	N/A	B		2	70	-	641	2105	1263	50.8%
6/1	Uplands Rd Right Left	U	N/A	N/A	J		1	18	-	73	1800	285	25.6%
7/1	A6 IB Ahead	U	N/A	N/A	D		1	44	-	347	2105	789	44.0%
7/2	A6 IB Ahead	U	N/A	N/A	D		1	44	-	337	2105	789	42.7%
7/3	A6 IB Ahead Right	O	N/A	N/A	D		1	44	-	136	2105	685	19.8%
8/1	To X-ing Ahead	U	N/A	N/A	G		2	67	-	473	1950	1121	42.2%
8/2	To X-ing Ahead	U	N/A	N/A	G		2	67	-	342	1950	1121	30.5%
9/1		U	N/A	N/A	-		-	-	-	473	Inf	Inf	0.0%

Full Input Data And Results

9/2		U	N/A	N/A	-		-	-	-	342	Inf	Inf	0.0%
10/1		U	N/A	N/A	-		-	-	-	255	Inf	Inf	0.0%
11/1		U	N/A	N/A	-		-	-	-	410	Inf	Inf	0.0%
12/1		U	N/A	N/A	-		-	-	-	454	Inf	Inf	0.0%
12/2		U	N/A	N/A	-		-	-	-	641	Inf	Inf	0.0%
13/1		U	N/A	N/A	-		-	-	-	200	Inf	Inf	0.0%

Full Input Data And Results

Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network	-	-	16	0	0	32.8	17.7	0.0	50.5	-	-	-	-
A6 H'boro Rd / New Str, Oadby	-	-	16	0	0	32.8	17.7	0.0	50.5	-	-	-	-
1/1	562	562	-	-	-	6.5	4.0	-	10.4	66.8	18.0	4.0	21.9
1/2	493	493	-	-	-	5.6	3.5	-	9.1	66.6	15.6	3.5	19.1
1/3	48	48	-	-	-	0.6	0.1	-	0.7	56.2	1.4	0.1	1.5
2/1	352	352	-	-	-	0.1	0.4	-	0.4	4.6	2.9	0.4	3.3
2/2	342	342	-	-	-	0.3	0.4	-	0.7	7.0	8.3	0.4	8.7
2/3	152	152	-	-	-	1.3	0.3	-	1.6	38.0	5.0	0.3	5.3
3/2+3/1	415	415	-	-	-	5.2	3.2	-	8.4 (6.0+2.5)	73.2 (77.8:64.0)	9.0	3.2	12.2
4/1+4/2	364	364	-	-	-	5.0	3.3	-	8.3 (6.0+2.3)	82.0 (83.2:79.2)	8.4	3.3	11.8
5/1	607	607	-	-	-	0.3	0.5	-	0.7	4.4	2.6	0.5	3.1
5/2	641	641	-	-	-	0.1	0.5	-	0.7	3.7	1.0	0.5	1.5
6/1	73	73	-	-	-	0.9	0.2	-	1.1	52.8	2.1	0.2	2.3
7/1	347	347	-	-	-	2.7	0.4	-	3.1	32.1	8.6	0.4	9.0
7/2	337	337	-	-	-	2.6	0.4	-	3.0	31.9	8.3	0.4	8.7
7/3	136	136	16	0	0	0.9	0.1	0.0	1.1	29.1	3.0	0.1	3.1
8/1	473	473	-	-	-	0.4	0.4	-	0.8	6.2	6.0	0.4	6.4
8/2	342	342	-	-	-	0.1	0.2	-	0.3	3.4	6.1	0.2	6.3
9/1	473	473	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
9/2	342	342	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
10/1	255	255	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
11/1	410	410	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
12/1	454	454	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
12/2	641	641	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
13/1	200	200	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0

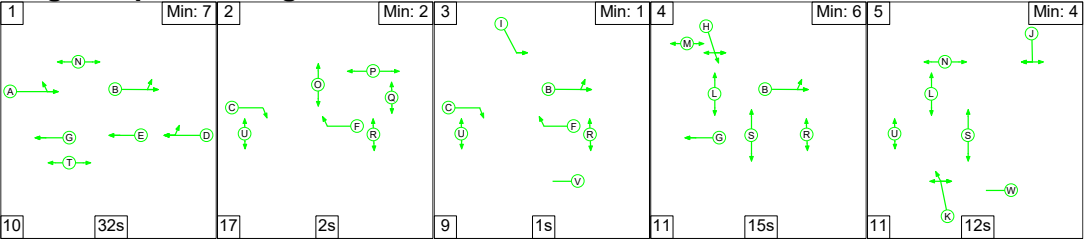
Full Input Data And Results

C1	PRC for Signalled Lanes (%):	0.0	Total Delay for Signalled Lanes (pcuHr):	50.55	Cycle Time (s):	120
	PRC Over All Lanes (%):	0.0	Total Delay Over All Lanes(pcuHr):	50.55		

Full Input Data And Results

Scenario 3: '2041 AM Pref no left filter' (FG3: '2041 AM Pref', Plan 1: 'no left filter')

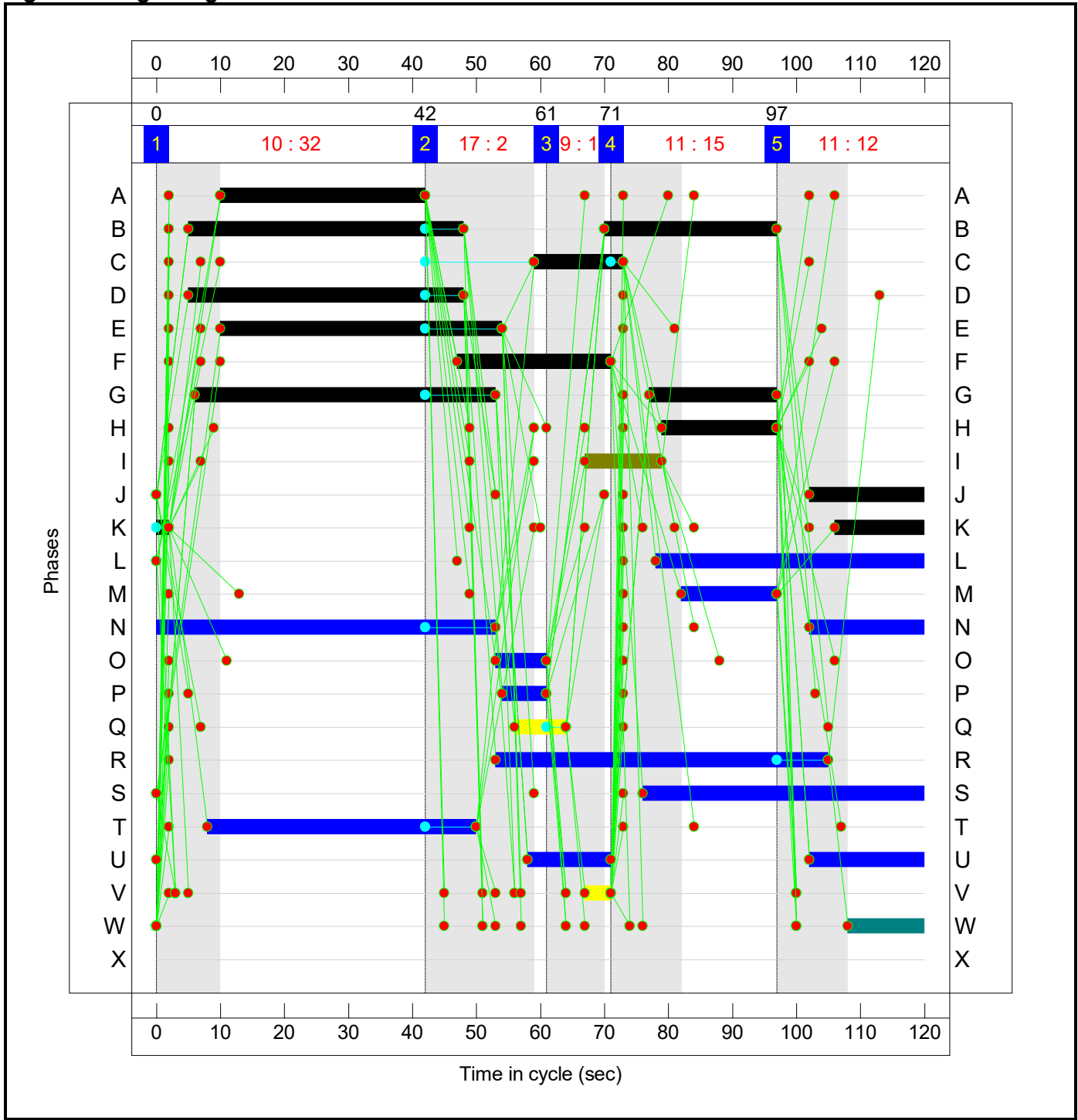
Stage Sequence Diagram



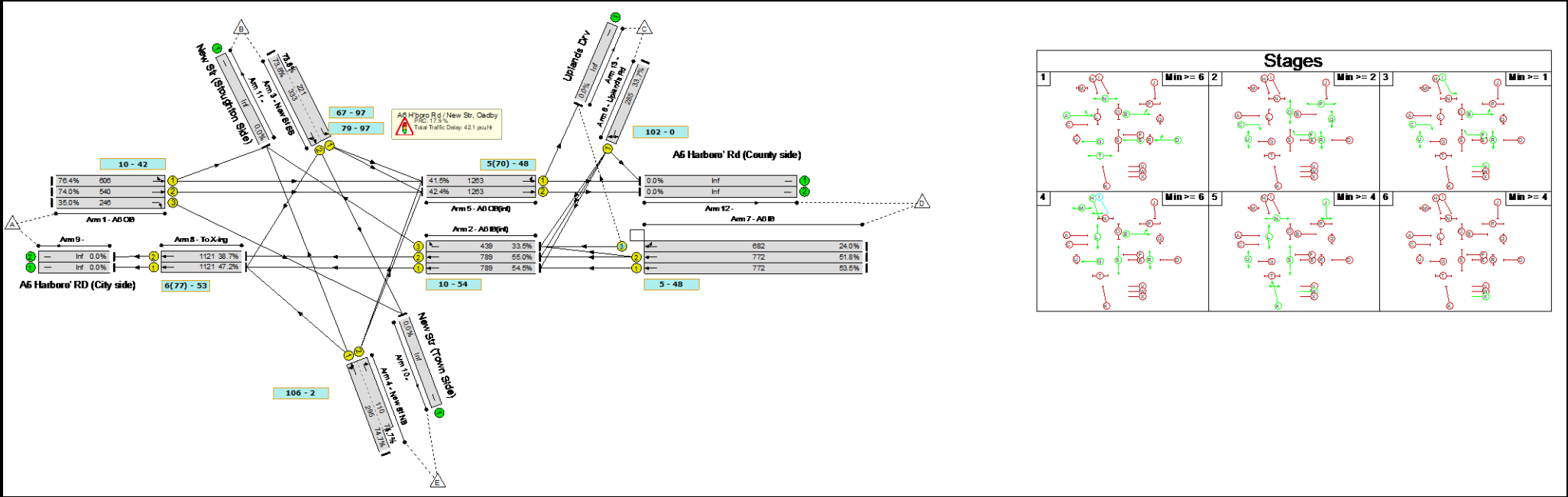
Stage Timings

Stage	1	2	3	4	5
Duration	32	2	1	15	12
Change Point	0	42	61	71	97

Signal Timings Diagram



Full Input Data And Results
Network Layout Diagram



Full Input Data And Results

Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network	-	-	N/A	-	-		-	-	-	-	-	-	76.4%
A6 H'boro Rd / New Str, Oadby	-	-	N/A	-	-		-	-	-	-	-	-	76.4%
1/1	A6 OB Ahead Left	U	N/A	N/A	A		1	32	-	463	2205	606	76.4%
1/2	A6 OB Ahead	U	N/A	N/A	A		1	32	-	400	1965	540	74.0%
1/3	A6 OB Right	U	N/A	N/A	C		1	14	-	86	1965	246	35.0%
2/1	A6 IB(int) Ahead	U	N/A	N/A	E		1	44	-	430	2105	789	54.5%
2/2	A6 IB(int) Ahead	U	N/A	N/A	E		1	44	-	434	2105	789	55.0%
2/3	A6 IB(int) Right	U	N/A	N/A	F		1	24	-	147	2105	439	33.5%
3/2+3/1	New St SB Left Right Ahead	U	N/A	N/A	H	I	1	18:30	12	409	2105:2105	333+221	73.8 : 73.8%
4/1+4/2	New St NB Right Left Ahead	U	N/A	N/A	K		1	16	-	302	2080:2080	295+110	74.7 : 74.7%
5/1	A6 OB(int) Ahead Left	U	N/A	N/A	B		2	70	-	524	2105	1263	41.5%
5/2	A6 OB(int) Ahead	U	N/A	N/A	B		2	70	-	536	2105	1263	42.4%
6/1	Uplands Rd Right Left	U	N/A	N/A	J		1	18	-	96	1800	285	33.7%
7/1	A6 IB Ahead	U	N/A	N/A	D		1	43	-	413	2105	772	53.5%
7/2	A6 IB Ahead	U	N/A	N/A	D		1	43	-	400	2105	772	51.8%
7/3	A6 IB Ahead Right	O	N/A	N/A	D		1	43	-	164	2105	682	24.0%
8/1	To X-ing Ahead	U	N/A	N/A	G		2	67	-	529	1950	1121	47.2%
8/2	To X-ing Ahead	U	N/A	N/A	G		2	67	-	434	1950	1121	38.7%
9/1		U	N/A	N/A	-		-	-	-	529	Inf	Inf	0.0%

Full Input Data And Results

9/2		U	N/A	N/A	-		-	-	-	434	Inf	Inf	0.0%
10/1		U	N/A	N/A	-		-	-	-	277	Inf	Inf	0.0%
11/1		U	N/A	N/A	-		-	-	-	371	Inf	Inf	0.0%
12/1		U	N/A	N/A	-		-	-	-	411	Inf	Inf	0.0%
12/2		U	N/A	N/A	-		-	-	-	536	Inf	Inf	0.0%
13/1		U	N/A	N/A	-		-	-	-	175	Inf	Inf	0.0%

Full Input Data And Results

Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network	-	-	22	0	0	31.5	10.5	0.0	42.1	-	-	-	-
A6 H'boro Rd / New Str, Oadby	-	-	22	0	0	31.5	10.5	0.0	42.1	-	-	-	-
1/1	463	463	-	-	-	5.1	1.6	-	6.7	52.2	14.1	1.6	15.7
1/2	400	400	-	-	-	4.4	1.4	-	5.8	52.2	12.1	1.4	13.5
1/3	86	86	-	-	-	1.1	0.3	-	1.4	59.3	2.6	0.3	2.9
2/1	430	430	-	-	-	0.2	0.6	-	0.8	6.6	11.2	0.6	11.8
2/2	434	434	-	-	-	0.4	0.6	-	1.0	8.1	11.5	0.6	12.1
2/3	147	147	-	-	-	1.3	0.3	-	1.5	37.9	4.9	0.3	5.1
3/2+3/1	409	409	-	-	-	4.9	1.4	-	6.3 (4.1+2.2)	55.4 (60.3:48.0)	7.8	1.4	9.2
4/1+4/2	302	302	-	-	-	4.1	1.4	-	5.5 (4.1+1.4)	65.6 (66.5:63.1)	7.0	1.4	8.5
5/1	524	524	-	-	-	0.3	0.4	-	0.6	4.2	2.4	0.4	2.7
5/2	536	536	-	-	-	0.1	0.4	-	0.5	3.2	0.6	0.4	1.0
6/1	96	96	-	-	-	1.2	0.3	-	1.5	54.4	2.8	0.3	3.1
7/1	413	413	-	-	-	3.4	0.6	-	4.0	34.9	10.8	0.6	11.4
7/2	400	400	-	-	-	3.3	0.5	-	3.8	34.5	10.3	0.5	10.9
7/3	164	164	22	0	0	1.2	0.2	0.0	1.4	30.2	3.7	0.2	3.9
8/1	529	529	-	-	-	0.4	0.4	-	0.8	5.6	9.2	0.4	9.7
8/2	434	434	-	-	-	0.2	0.3	-	0.5	3.9	9.4	0.3	9.7
9/1	529	529	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
9/2	434	434	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
10/1	277	277	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
11/1	371	371	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
12/1	411	411	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
12/2	536	536	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
13/1	175	175	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0

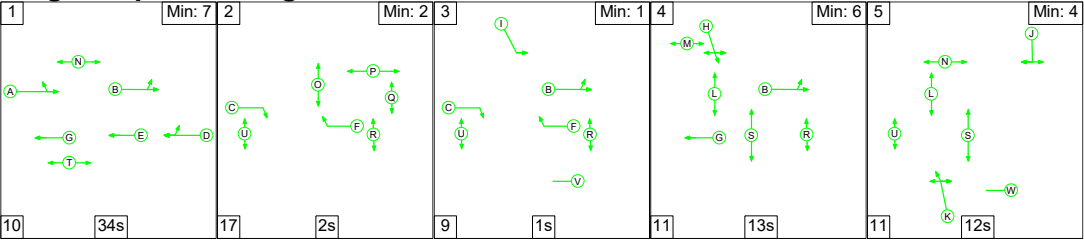
Full Input Data And Results

C1	PRC for Signalled Lanes (%):	17.9	Total Delay for Signalled Lanes (pcuHr):	42.07	Cycle Time (s):	120
	PRC Over All Lanes (%):	17.9	Total Delay Over All Lanes(pcuHr):	42.07		

Full Input Data And Results

Scenario 4: '2041 PM Pref no left filter' (FG4: '2041 PM Pref', Plan 1: 'no left filter')

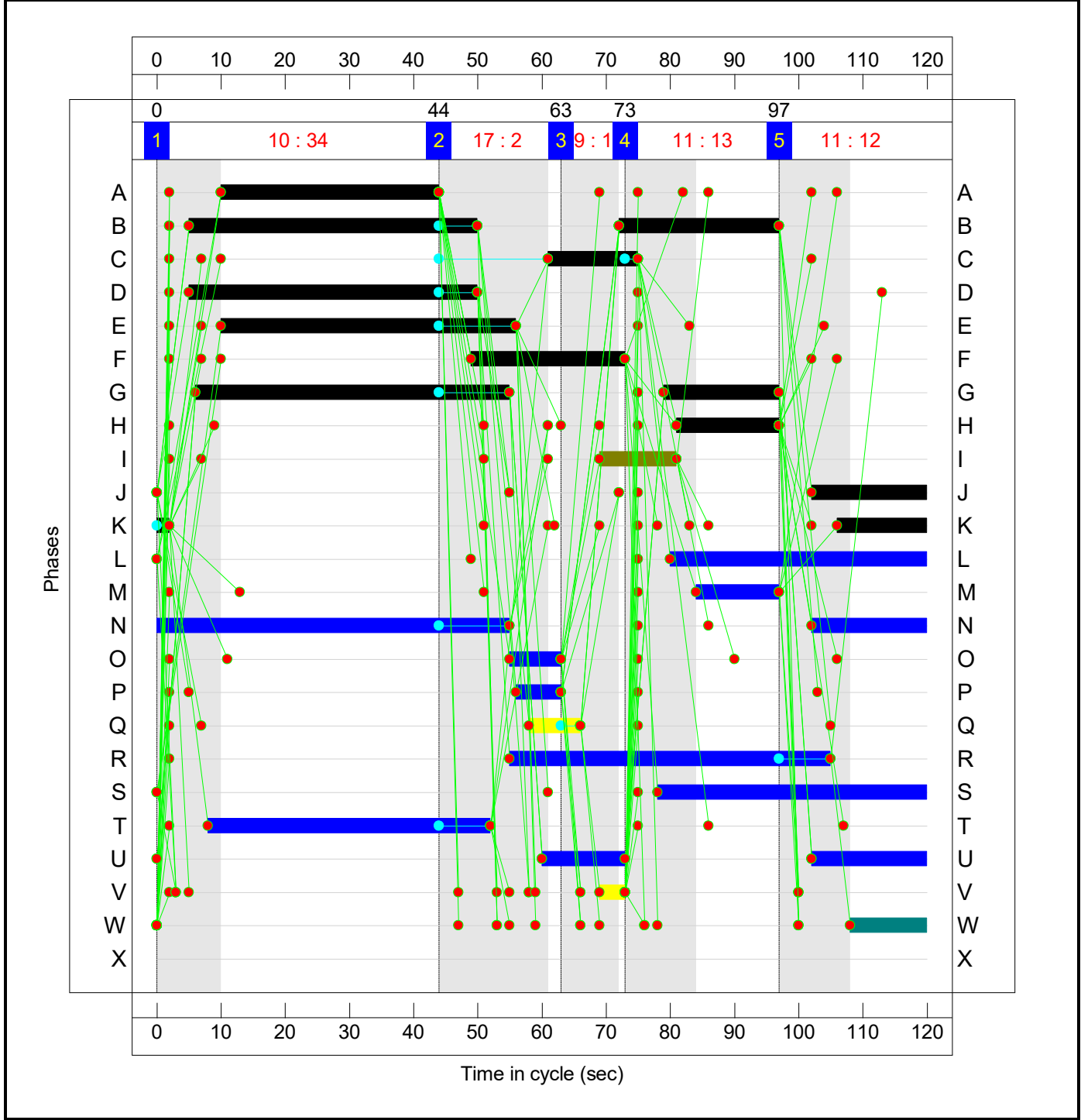
Stage Sequence Diagram



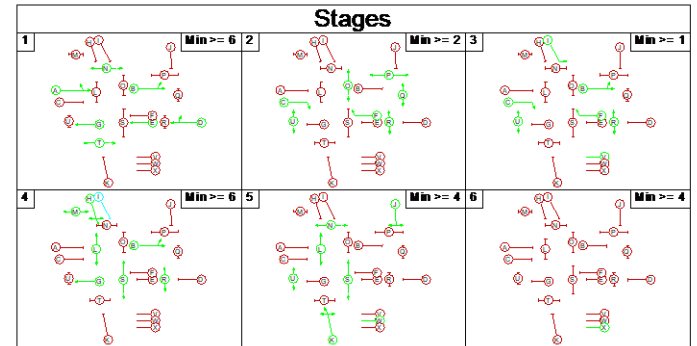
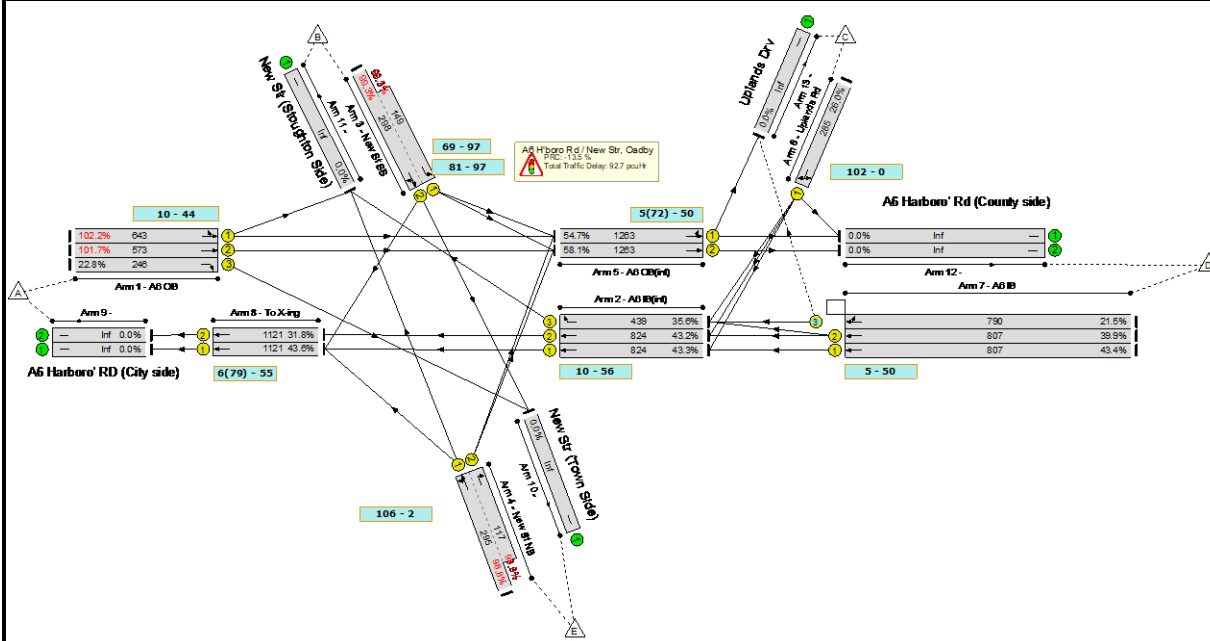
Stage Timings

Stage	1	2	3	4	5
Duration	34	2	1	13	12
Change Point	0	44	63	73	97

Signal Timings Diagram



Network Layout Diagram



Full Input Data And Results

Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network	-	-	N/A	-	-		-	-	-	-	-	-	102.2%
A6 H'boro Rd / New Str, Oadby	-	-	N/A	-	-		-	-	-	-	-	-	102.2%
1/1	A6 OB Ahead Left	U	N/A	N/A	A		1	34	-	657	2205	643	102.2%
1/2	A6 OB Ahead	U	N/A	N/A	A		1	34	-	583	1965	573	101.7%
1/3	A6 OB Right	U	N/A	N/A	C		1	14	-	56	1965	246	22.8%
2/1	A6 IB(int) Ahead	U	N/A	N/A	E		1	46	-	357	2105	824	43.3%
2/2	A6 IB(int) Ahead	U	N/A	N/A	E		1	46	-	356	2105	824	43.2%
2/3	A6 IB(int) Right	U	N/A	N/A	F		1	24	-	156	2105	439	35.6%
3/2+3/1	New St SB Left Right Ahead	U	N/A	N/A	H	I	1	16:28	12	444	2105:2105	298+149	99.3 : 99.3%
4/1+4/2	New St NB Right Left Ahead	U	N/A	N/A	K		1	16	-	407	2080:2080	295+117	98.8 : 98.8%
5/1	A6 OB(int) Ahead Left	U	N/A	N/A	B		2	70	-	703	2105	1263	54.7%
5/2	A6 OB(int) Ahead	U	N/A	N/A	B		2	70	-	744	2105	1263	58.1%
6/1	Uplands Rd Right Left	U	N/A	N/A	J		1	18	-	74	1800	285	26.0%
7/1	A6 IB Ahead	U	N/A	N/A	D		1	45	-	350	2105	807	43.4%
7/2	A6 IB Ahead	U	N/A	N/A	D		1	45	-	322	2105	807	39.9%
7/3	A6 IB Ahead Right	O	N/A	N/A	D		1	45	-	170	2105	790	21.5%
8/1	To X-ing Ahead	U	N/A	N/A	G		2	67	-	489	1950	1121	43.6%
8/2	To X-ing Ahead	U	N/A	N/A	G		2	67	-	356	1950	1121	31.8%
9/1		U	N/A	N/A	-		-	-	-	489	Inf	Inf	0.0%

Full Input Data And Results

9/2		U	N/A	N/A	-		-	-	-	356	Inf	Inf	0.0%
10/1		U	N/A	N/A	-		-	-	-	277	Inf	Inf	0.0%
11/1		U	N/A	N/A	-		-	-	-	447	Inf	Inf	0.0%
12/1		U	N/A	N/A	-		-	-	-	522	Inf	Inf	0.0%
12/2		U	N/A	N/A	-		-	-	-	744	Inf	Inf	0.0%
13/1		U	N/A	N/A	-		-	-	-	228	Inf	Inf	0.0%

Full Input Data And Results

Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network	-	-	11	0	5	38.4	54.3	0.0	92.7	-	-	-	-
A6 H'boro Rd / New Str, Oadby	-	-	11	0	5	38.4	54.3	0.0	92.7	-	-	-	-
1/1	657	643	-	-	-	8.6	16.7	-	25.3	138.7	22.4	16.7	39.1
1/2	583	573	-	-	-	7.5	14.8	-	22.3	137.4	19.8	14.8	34.6
1/3	56	56	-	-	-	0.7	0.1	-	0.9	56.8	1.7	0.1	1.8
2/1	357	357	-	-	-	0.1	0.4	-	0.5	4.6	7.6	0.4	8.0
2/2	356	356	-	-	-	0.3	0.4	-	0.7	7.1	8.9	0.4	9.3
2/3	156	156	-	-	-	1.4	0.3	-	1.7	39.0	5.2	0.3	5.5
3/2+3/1	444	444	-	-	-	5.8	9.7	-	15.5 (10.7+4.8)	125.6 (130.4:116.1)	9.8	9.7	19.5
4/1+4/2	407	407	-	-	-	5.7	8.9	-	14.5 (10.5+4.0)	128.7 (130.0:125.4)	9.6	8.9	18.5
5/1	690	690	-	-	-	0.4	0.6	-	1.0	5.1	3.0	0.6	3.6
5/2	734	734	-	-	-	0.2	0.7	-	0.9	4.5	1.1	0.7	1.8
6/1	74	74	-	-	-	0.9	0.2	-	1.1	52.9	2.2	0.2	2.3
7/1	350	350	-	-	-	2.7	0.4	-	3.0	31.3	8.6	0.4	8.9
7/2	322	322	-	-	-	2.4	0.3	-	2.7	30.6	7.8	0.3	8.1
7/3	170	170	11	0	5	1.2	0.1	0.0	1.3	28.4	3.8	0.1	3.9
8/1	489	489	-	-	-	0.5	0.4	-	0.9	6.7	6.1	0.4	6.4
8/2	356	356	-	-	-	0.1	0.2	-	0.3	3.5	6.6	0.2	6.8
9/1	489	489	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
9/2	356	356	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
10/1	277	277	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
11/1	446	446	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
12/1	512	512	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
12/2	734	734	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
13/1	225	225	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0

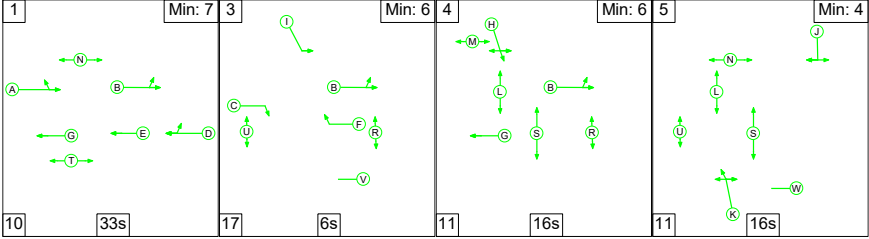
Full Input Data And Results

C1	PRC for Signalled Lanes (%):	-13.5	Total Delay for Signalled Lanes (pcuHr):	92.71	Cycle Time (s):	120
	PRC Over All Lanes (%):	-13.5	Total Delay Over All Lanes(pcuHr):	92.71		

Full Input Data And Results

Scenario 5: '2041 AM Core with left filter' (FG1: '2041 AM Core', Plan 2: 'with left filter')

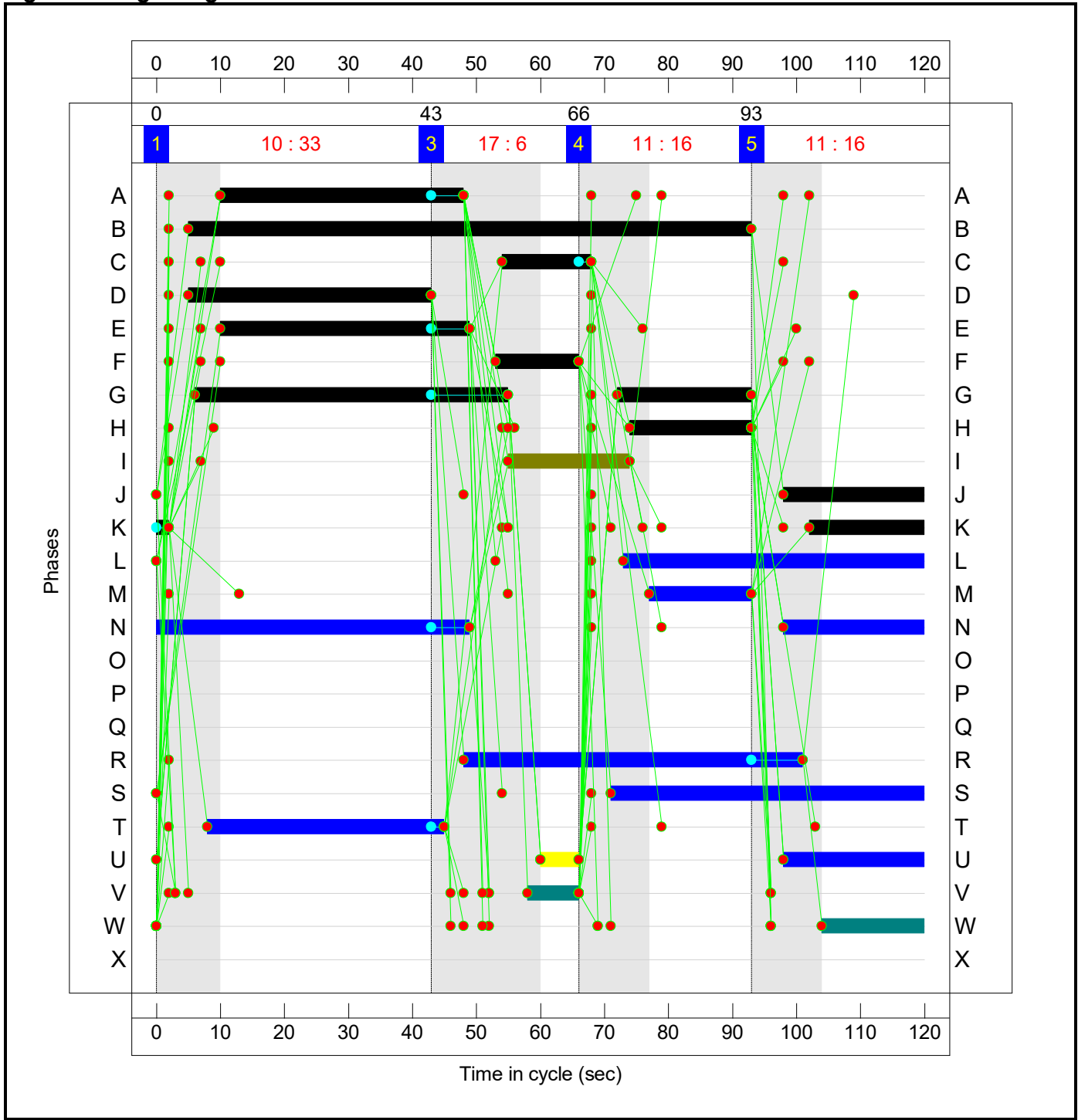
Stage Sequence Diagram



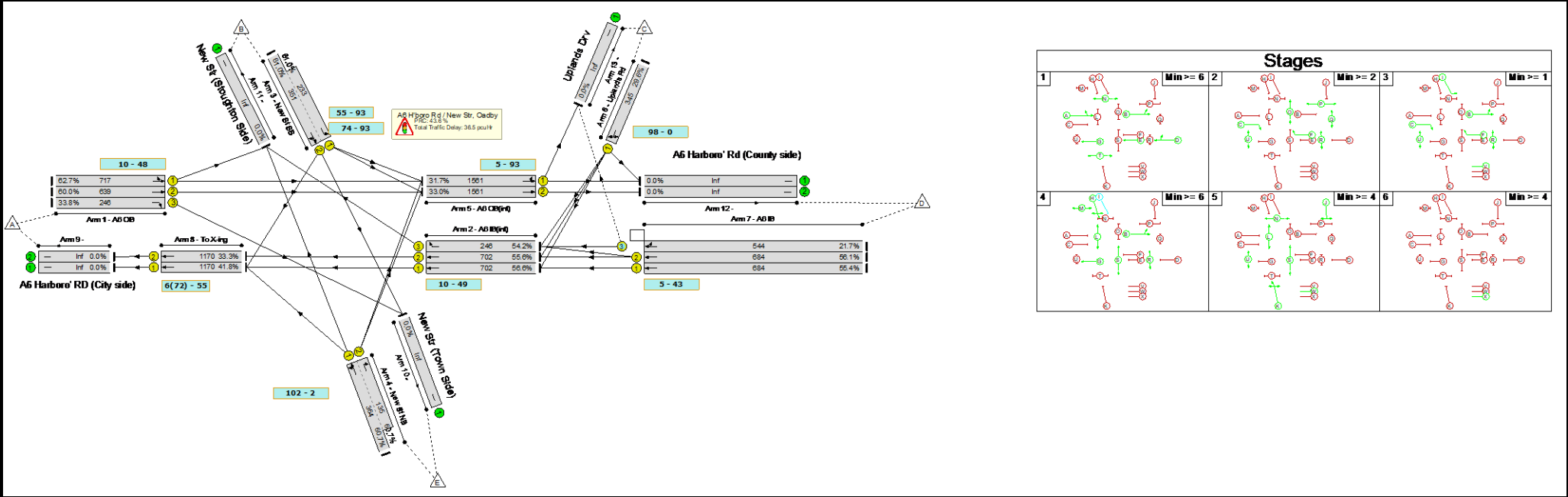
Stage Timings

Stage	1	3	4	5
Duration	33	6	16	16
Change Point	0	43	66	93

Signal Timings Diagram



Full Input Data And Results
Network Layout Diagram



Full Input Data And Results

Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network	-	-	N/A	-	-		-	-	-	-	-	-	62.7%
A6 H'boro Rd / New Str, Oadby	-	-	N/A	-	-		-	-	-	-	-	-	62.7%
1/1	A6 OB Ahead Left	U	N/A	N/A	A		1	38	-	449	2205	717	62.7%
1/2	A6 OB Ahead	U	N/A	N/A	A		1	38	-	383	1965	639	60.0%
1/3	A6 OB Right	U	N/A	N/A	C		1	14	-	83	1965	246	33.8%
2/1	A6 IB(int) Ahead	U	N/A	N/A	E		1	39	-	397	2105	702	56.6%
2/2	A6 IB(int) Ahead	U	N/A	N/A	E		1	39	-	390	2105	702	55.6%
2/3	A6 IB(int) Right	U	N/A	N/A	F		1	13	-	133	2105	246	54.2%
3/2+3/1	New St SB Left Right Ahead	U	N/A	N/A	H	I	1	19:38	19	356	2105:2105	351+233	61.0 : 61.0%
4/1+4/2	New St NB Right Left Ahead	U	N/A	N/A	K		1	20	-	303	2080:2080	364+135	60.7 : 60.7%
5/1	A6 OB(int) Ahead Left	U	N/A	N/A	B		1	88	-	495	2105	1561	31.7%
5/2	A6 OB(int) Ahead	U	N/A	N/A	B		1	88	-	515	2105	1561	33.0%
6/1	Uplands Rd Right Left	U	N/A	N/A	J		1	22	-	102	1800	345	29.6%
7/1	A6 IB Ahead	U	N/A	N/A	D		1	38	-	379	2105	684	55.4%
7/2	A6 IB Ahead	U	N/A	N/A	D		1	38	-	384	2105	684	56.1%
7/3	A6 IB Ahead Right	O	N/A	N/A	D		1	38	-	118	2105	544	21.7%
8/1	To X-ing Ahead	U	N/A	N/A	G		2	70	-	489	1950	1170	41.8%
8/2	To X-ing Ahead	U	N/A	N/A	G		2	70	-	390	1950	1170	33.3%
9/1		U	N/A	N/A	-		-	-	-	489	Inf	Inf	0.0%

Full Input Data And Results

9/2		U	N/A	N/A	-		-	-	-	390	Inf	Inf	0.0%
10/1		U	N/A	N/A	-		-	-	-	249	Inf	Inf	0.0%
11/1		U	N/A	N/A	-		-	-	-	356	Inf	Inf	0.0%
12/1		U	N/A	N/A	-		-	-	-	388	Inf	Inf	0.0%
12/2		U	N/A	N/A	-		-	-	-	515	Inf	Inf	0.0%
13/1		U	N/A	N/A	-		-	-	-	170	Inf	Inf	0.0%

Full Input Data And Results

Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network	-	-	20	0	0	28.6	7.9	0.0	36.5	-	-	-	-
A6 H'boro Rd / New Str, Oadby	-	-	20	0	0	28.6	7.9	0.0	36.5	-	-	-	-
1/1	449	449	-	-	-	4.3	0.8	-	5.1	41.0	12.6	0.8	13.4
1/2	383	383	-	-	-	3.6	0.7	-	4.4	41.0	10.6	0.7	11.4
1/3	83	83	-	-	-	1.1	0.3	-	1.4	59.0	2.5	0.3	2.8
2/1	397	397	-	-	-	0.2	0.6	-	0.9	7.8	10.7	0.6	11.3
2/2	390	390	-	-	-	0.4	0.6	-	1.0	9.0	10.6	0.6	11.2
2/3	133	133	-	-	-	1.4	0.6	-	2.0	54.4	4.4	0.6	5.0
3/2+3/1	356	356	-	-	-	3.9	0.8	-	4.7 (3.2+1.5)	47.4 (54.2:37.2)	6.6	0.8	7.4
4/1+4/2	303	303	-	-	-	3.8	0.8	-	4.5 (3.4+1.2)	53.9 (54.8:51.6)	6.8	0.8	7.5
5/1	495	495	-	-	-	0.3	0.2	-	0.5	3.8	2.3	0.2	2.5
5/2	515	515	-	-	-	0.1	0.2	-	0.3	2.4	0.6	0.2	0.9
6/1	102	102	-	-	-	1.2	0.2	-	1.4	49.0	2.9	0.2	3.1
7/1	379	379	-	-	-	3.5	0.6	-	4.1	39.2	10.3	0.6	10.9
7/2	384	384	-	-	-	3.6	0.6	-	4.2	39.4	10.6	0.6	11.2
7/3	118	118	20	0	0	0.9	0.1	0.0	1.1	33.9	2.8	0.1	2.9
8/1	489	489	-	-	-	0.3	0.4	-	0.6	4.5	8.7	0.4	9.1
8/2	390	390	-	-	-	0.0	0.2	-	0.3	2.6	8.3	0.2	8.6
9/1	489	489	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
9/2	390	390	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
10/1	249	249	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
11/1	356	356	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
12/1	388	388	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
12/2	515	515	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
13/1	170	170	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0

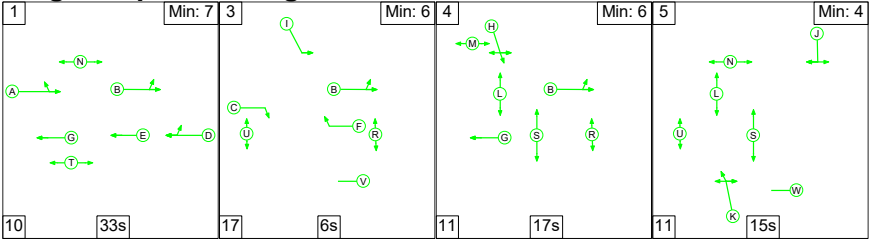
Full Input Data And Results

C1	PRC for Signalled Lanes (%):	43.6	Total Delay for Signalled Lanes (pcuHr):	36.51	Cycle Time (s):	120
	PRC Over All Lanes (%):	43.6	Total Delay Over All Lanes(pcuHr):	36.51		

Full Input Data And Results

Scenario 6: '2041 PM Core with left filter' (FG2: '2041 PM Core', Plan 2: 'with left filter')

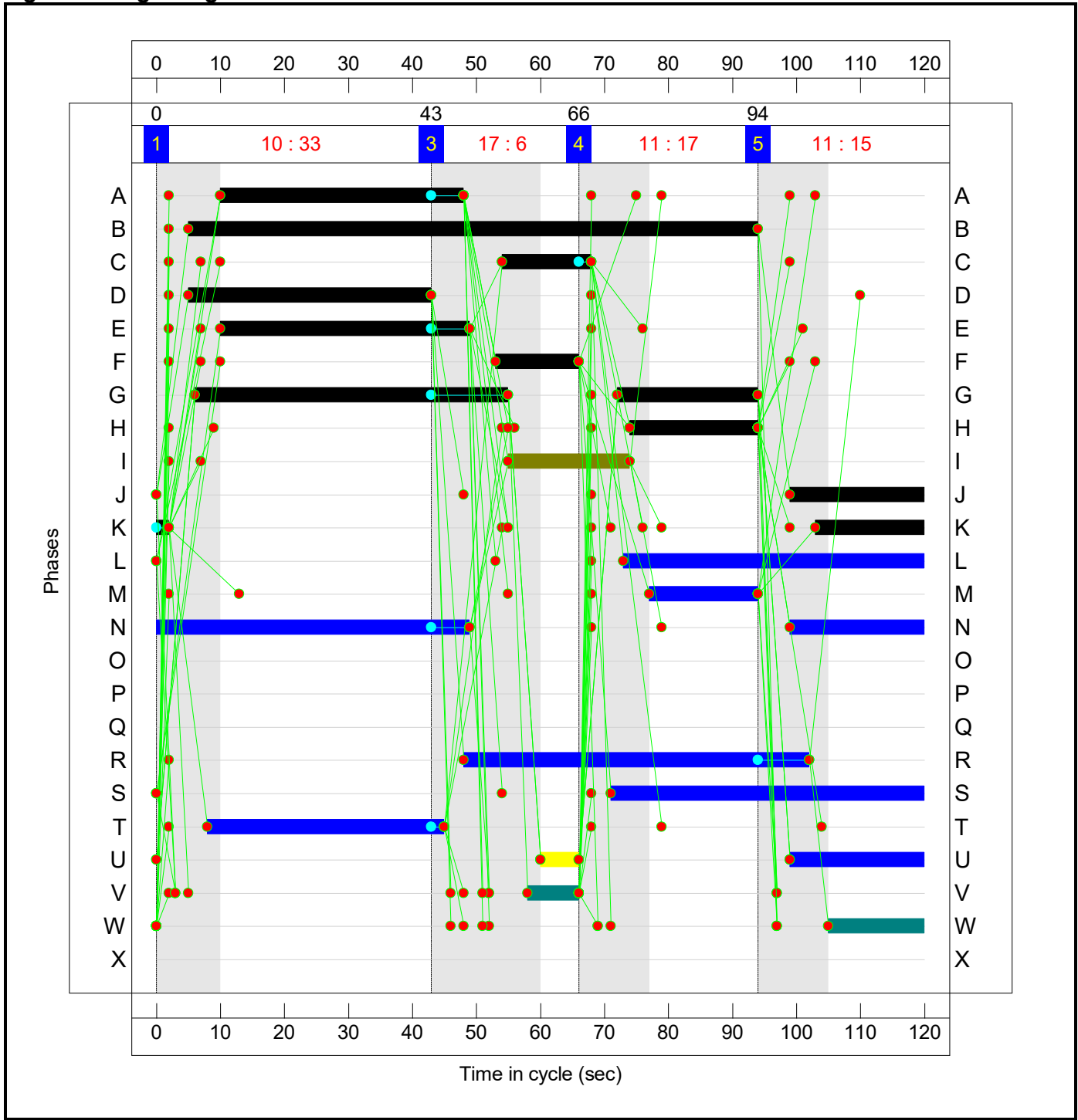
Stage Sequence Diagram



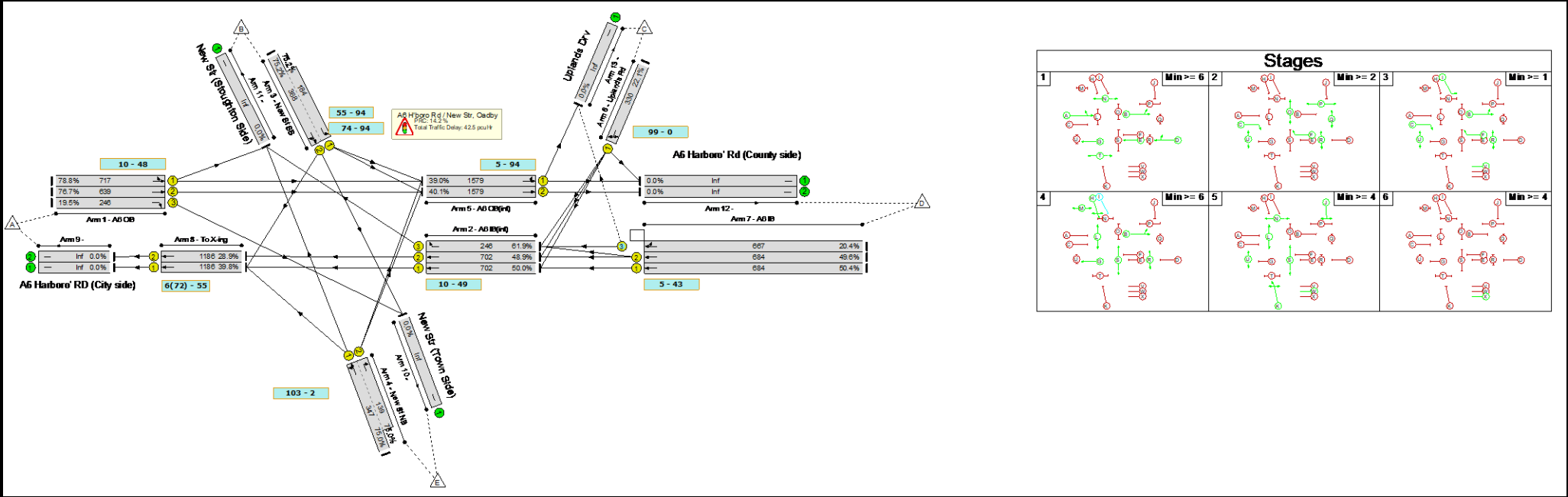
Stage Timings

Stage	1	3	4	5
Duration	33	6	17	15
Change Point	0	43	66	94

Signal Timings Diagram



Full Input Data And Results
Network Layout Diagram



Full Input Data And Results

Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network	-	-	N/A	-	-		-	-	-	-	-	-	78.8%
A6 H'boro Rd / New Str, Oadby	-	-	N/A	-	-		-	-	-	-	-	-	78.8%
1/1	A6 OB Ahead Left	U	N/A	N/A	A		1	38	-	565	2205	717	78.8%
1/2	A6 OB Ahead	U	N/A	N/A	A		1	38	-	490	1965	639	76.7%
1/3	A6 OB Right	U	N/A	N/A	C		1	14	-	48	1965	246	19.5%
2/1	A6 IB(int) Ahead	U	N/A	N/A	E		1	39	-	351	2105	702	50.0%
2/2	A6 IB(int) Ahead	U	N/A	N/A	E		1	39	-	343	2105	702	48.9%
2/3	A6 IB(int) Right	U	N/A	N/A	F		1	13	-	152	2105	246	61.9%
3/2+3/1	New St SB Left Right Ahead	U	N/A	N/A	H	I	1	20:39	19	415	2105:2105	368+184	75.2 : 75.2%
4/1+4/2	New St NB Right Left Ahead	U	N/A	N/A	K		1	19	-	364	2080:2080	347+139	75.0 : 75.0%
5/1	A6 OB(int) Ahead Left	U	N/A	N/A	B		1	89	-	615	2105	1579	39.0%
5/2	A6 OB(int) Ahead	U	N/A	N/A	B		1	89	-	633	2105	1579	40.1%
6/1	Uplands Rd Right Left	U	N/A	N/A	J		1	21	-	73	1800	330	22.1%
7/1	A6 IB Ahead	U	N/A	N/A	D		1	38	-	345	2105	684	50.4%
7/2	A6 IB Ahead	U	N/A	N/A	D		1	38	-	339	2105	684	49.6%
7/3	A6 IB Ahead Right	O	N/A	N/A	D		1	38	-	136	2105	667	20.4%
8/1	To X-ing Ahead	U	N/A	N/A	G		2	71	-	472	1950	1186	39.8%
8/2	To X-ing Ahead	U	N/A	N/A	G		2	71	-	343	1950	1186	28.9%
9/1		U	N/A	N/A	-		-	-	-	472	Inf	Inf	0.0%

Full Input Data And Results

9/2		U	N/A	N/A	-		-	-	-	343	Inf	Inf	0.0%
10/1		U	N/A	N/A	-		-	-	-	255	Inf	Inf	0.0%
11/1		U	N/A	N/A	-		-	-	-	410	Inf	Inf	0.0%
12/1		U	N/A	N/A	-		-	-	-	462	Inf	Inf	0.0%
12/2		U	N/A	N/A	-		-	-	-	633	Inf	Inf	0.0%
13/1		U	N/A	N/A	-		-	-	-	200	Inf	Inf	0.0%

Full Input Data And Results

Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network	-	-	16	0	0	31.7	10.7	0.0	42.5	-	-	-	-
A6 H'boro Rd / New Str, Oadby	-	-	16	0	0	31.7	10.7	0.0	42.5	-	-	-	-
1/1	565	565	-	-	-	5.8	1.8	-	7.6	48.3	16.9	1.8	18.8
1/2	490	490	-	-	-	5.0	1.6	-	6.6	48.3	14.6	1.6	16.2
1/3	48	48	-	-	-	0.6	0.1	-	0.7	56.2	1.4	0.1	1.5
2/1	351	351	-	-	-	0.1	0.5	-	0.6	5.9	8.2	0.5	8.7
2/2	343	343	-	-	-	0.3	0.5	-	0.8	8.3	8.9	0.5	9.3
2/3	152	152	-	-	-	1.6	0.8	-	2.4	57.4	5.1	0.8	5.9
3/2+3/1	415	415	-	-	-	4.7	1.5	-	6.2 (4.6+1.6)	53.8 (59.9:41.4)	8.8	1.5	10.3
4/1+4/2	364	364	-	-	-	4.7	1.5	-	6.2 (4.5+1.7)	61.0 (62.1:58.4)	8.2	1.5	9.7
5/1	615	615	-	-	-	0.3	0.3	-	0.6	3.7	2.6	0.3	3.0
5/2	633	633	-	-	-	0.1	0.3	-	0.5	2.7	1.0	0.3	1.4
6/1	73	73	-	-	-	0.8	0.1	-	1.0	48.7	2.1	0.1	2.2
7/1	345	345	-	-	-	3.1	0.5	-	3.6	38.0	9.2	0.5	9.7
7/2	339	339	-	-	-	3.1	0.5	-	3.6	37.8	9.0	0.5	9.5
7/3	136	136	16	0	0	1.1	0.1	0.0	1.3	33.4	3.2	0.1	3.4
8/1	472	472	-	-	-	0.3	0.3	-	0.6	4.8	6.7	0.3	7.0
8/2	343	343	-	-	-	0.0	0.2	-	0.2	2.4	6.7	0.2	6.9
9/1	472	472	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
9/2	343	343	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
10/1	255	255	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
11/1	410	410	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
12/1	462	462	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
12/2	633	633	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
13/1	200	200	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0

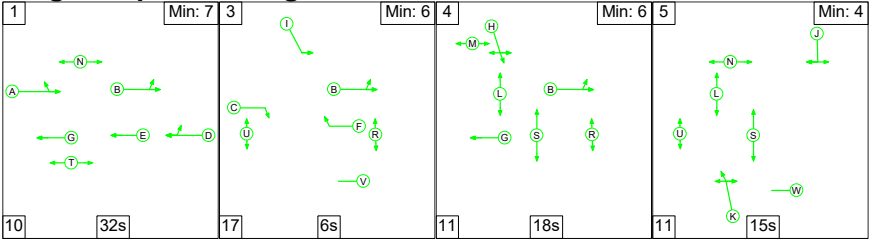
Full Input Data And Results

C1	PRC for Signalled Lanes (%):	14.2	Total Delay for Signalled Lanes (pcuHr):	42.47	Cycle Time (s):	120
	PRC Over All Lanes (%):	14.2	Total Delay Over All Lanes(pcuHr):	42.47		

Full Input Data And Results

Scenario 7: '2041 AM Pref with left filter' (FG3: '2041 AM Pref', Plan 2: 'with left filter')

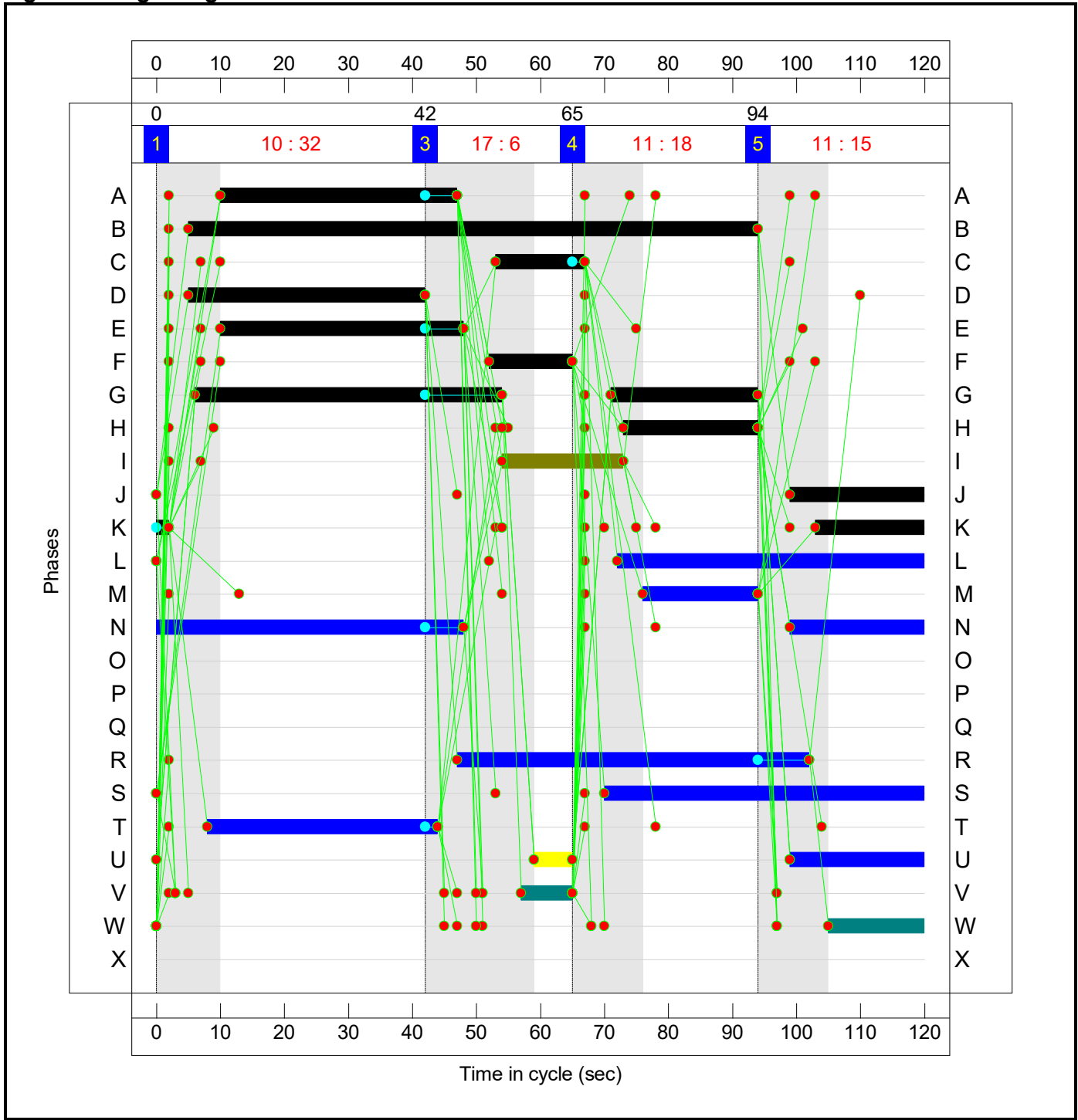
Stage Sequence Diagram



Stage Timings

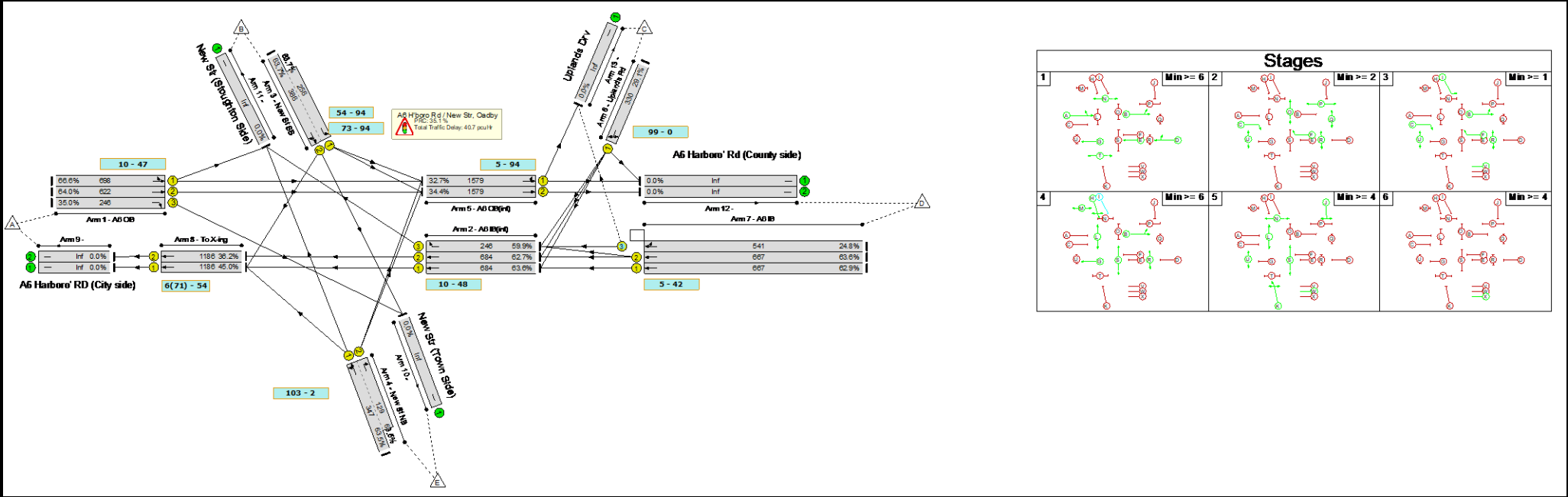
Stage	1	3	4	5
Duration	32	6	18	15
Change Point	0	42	65	94

Signal Timings Diagram



Full Input Data And Results

Network Layout Diagram



Full Input Data And Results

Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network	-	-	N/A	-	-		-	-	-	-	-	-	66.6%
A6 H'boro Rd / New Str, Oadby	-	-	N/A	-	-		-	-	-	-	-	-	66.6%
1/1	A6 OB Ahead Left	U	N/A	N/A	A		1	37	-	465	2205	698	66.6%
1/2	A6 OB Ahead	U	N/A	N/A	A		1	37	-	398	1965	622	64.0%
1/3	A6 OB Right	U	N/A	N/A	C		1	14	-	86	1965	246	35.0%
2/1	A6 IB(int) Ahead	U	N/A	N/A	E		1	38	-	435	2105	684	63.6%
2/2	A6 IB(int) Ahead	U	N/A	N/A	E		1	38	-	429	2105	684	62.7%
2/3	A6 IB(int) Right	U	N/A	N/A	F		1	13	-	147	2105	246	59.9%
3/2+3/1	New St SB Left Right Ahead	U	N/A	N/A	H	I	1	21:40	19	409	2105:2105	386+256	63.7 : 63.7%
4/1+4/2	New St NB Right Left Ahead	U	N/A	N/A	K		1	19	-	302	2080:2080	347+129	63.5 : 63.5%
5/1	A6 OB(int) Ahead Left	U	N/A	N/A	B		1	89	-	517	2105	1579	32.7%
5/2	A6 OB(int) Ahead	U	N/A	N/A	B		1	89	-	543	2105	1579	34.4%
6/1	Uplands Rd Right Left	U	N/A	N/A	J		1	21	-	96	1800	330	29.1%
7/1	A6 IB Ahead	U	N/A	N/A	D		1	37	-	419	2105	667	62.9%
7/2	A6 IB Ahead	U	N/A	N/A	D		1	37	-	424	2105	667	63.6%
7/3	A6 IB Ahead Right	O	N/A	N/A	D		1	37	-	134	2105	541	24.8%
8/1	To X-ing Ahead	U	N/A	N/A	G		2	71	-	534	1950	1186	45.0%
8/2	To X-ing Ahead	U	N/A	N/A	G		2	71	-	429	1950	1186	36.2%
9/1		U	N/A	N/A	-		-	-	-	534	Inf	Inf	0.0%

Full Input Data And Results

9/2		U	N/A	N/A	-		-	-	-	429	Inf	Inf	0.0%
10/1		U	N/A	N/A	-		-	-	-	277	Inf	Inf	0.0%
11/1		U	N/A	N/A	-		-	-	-	371	Inf	Inf	0.0%
12/1		U	N/A	N/A	-		-	-	-	404	Inf	Inf	0.0%
12/2		U	N/A	N/A	-		-	-	-	543	Inf	Inf	0.0%
13/1		U	N/A	N/A	-		-	-	-	175	Inf	Inf	0.0%

Full Input Data And Results

Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network	-	-	22	0	0	31.1	9.6	0.0	40.7	-	-	-	-
A6 H'boro Rd / New Str, Oadby	-	-	22	0	0	31.1	9.6	0.0	40.7	-	-	-	-
1/1	465	465	-	-	-	4.6	1.0	-	5.6	43.2	13.3	1.0	14.3
1/2	398	398	-	-	-	3.9	0.9	-	4.8	43.1	11.3	0.9	12.2
1/3	86	86	-	-	-	1.1	0.3	-	1.4	59.3	2.6	0.3	2.9
2/1	435	435	-	-	-	0.2	0.9	-	1.1	8.8	11.9	0.9	12.8
2/2	429	429	-	-	-	0.3	0.8	-	1.2	9.9	11.8	0.8	12.6
2/3	147	147	-	-	-	1.5	0.7	-	2.3	55.8	4.9	0.7	5.6
3/2+3/1	409	409	-	-	-	4.4	0.9	-	5.2 (3.6+1.6)	46.2 (53.0:35.9)	7.5	0.9	8.4
4/1+4/2	302	302	-	-	-	3.8	0.9	-	4.7 (3.5+1.2)	56.0 (56.9:53.6)	6.8	0.9	7.6
5/1	517	517	-	-	-	0.3	0.2	-	0.5	3.6	2.3	0.2	2.6
5/2	543	543	-	-	-	0.1	0.3	-	0.4	2.4	0.7	0.3	0.9
6/1	96	96	-	-	-	1.1	0.2	-	1.3	50.0	2.7	0.2	3.0
7/1	419	419	-	-	-	4.1	0.8	-	4.9	42.2	11.9	0.8	12.7
7/2	424	424	-	-	-	4.1	0.9	-	5.0	42.5	12.0	0.9	12.9
7/3	134	134	22	0	0	1.1	0.2	0.0	1.3	35.1	3.2	0.2	3.4
8/1	534	534	-	-	-	0.3	0.4	-	0.7	4.5	10.3	0.4	10.7
8/2	429	429	-	-	-	0.1	0.3	-	0.3	2.8	10.0	0.3	10.2
9/1	534	534	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
9/2	429	429	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
10/1	277	277	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
11/1	371	371	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
12/1	404	404	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
12/2	543	543	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
13/1	175	175	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0

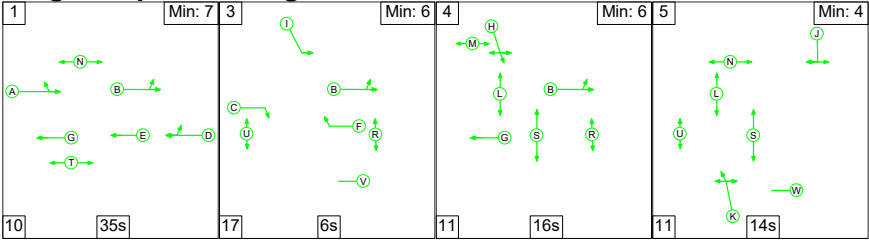
Full Input Data And Results

C1	PRC for Signalled Lanes (%):	35.1	Total Delay for Signalled Lanes (pcuHr):	40.66	Cycle Time (s):	120
	PRC Over All Lanes (%):	35.1	Total Delay Over All Lanes(pcuHr):	40.66		

Full Input Data And Results

Scenario 8: '2041 PM Pref with left filter' (FG4: '2041 PM Pref', Plan 2: 'with left filter')

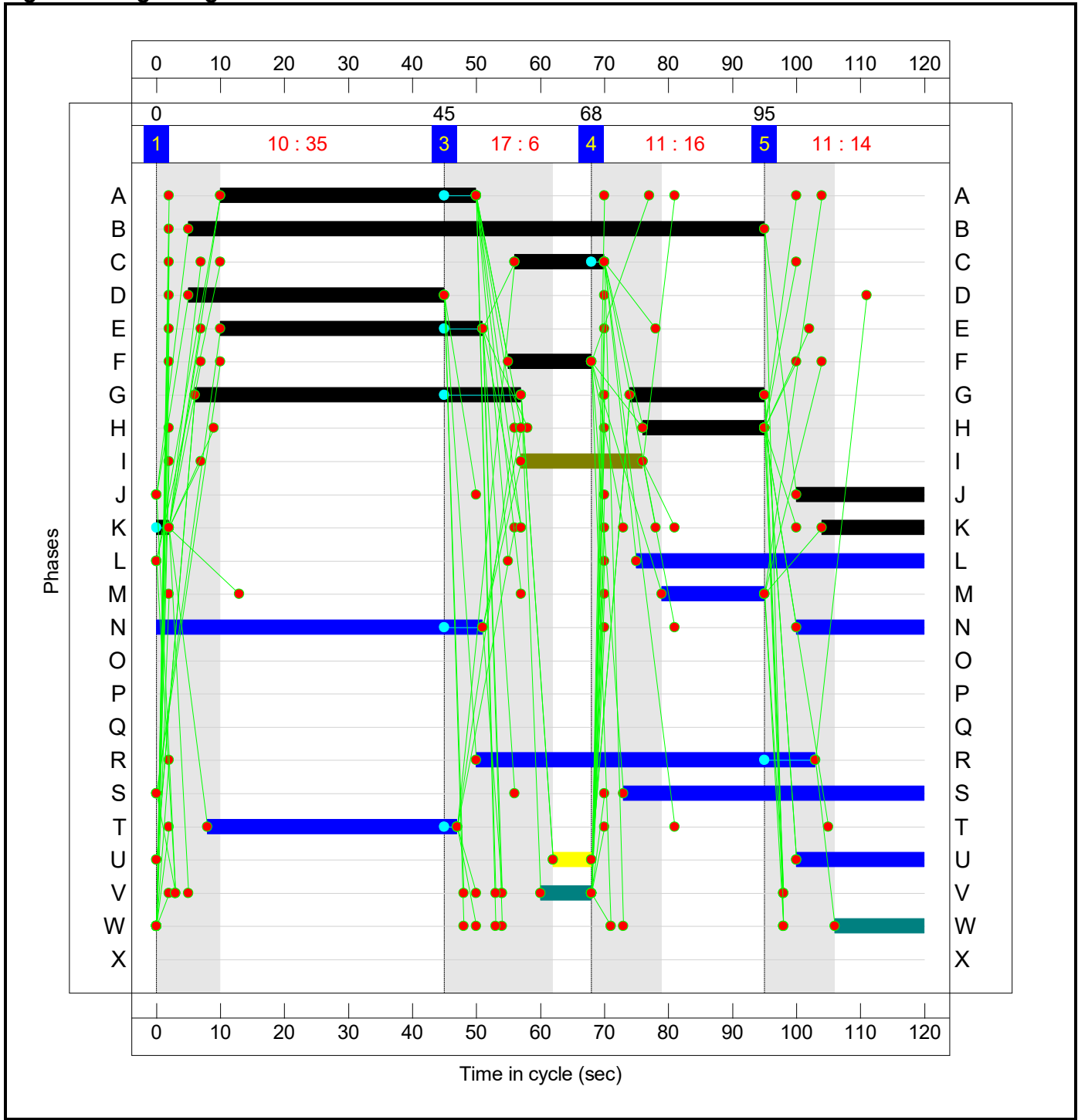
Stage Sequence Diagram



Stage Timings

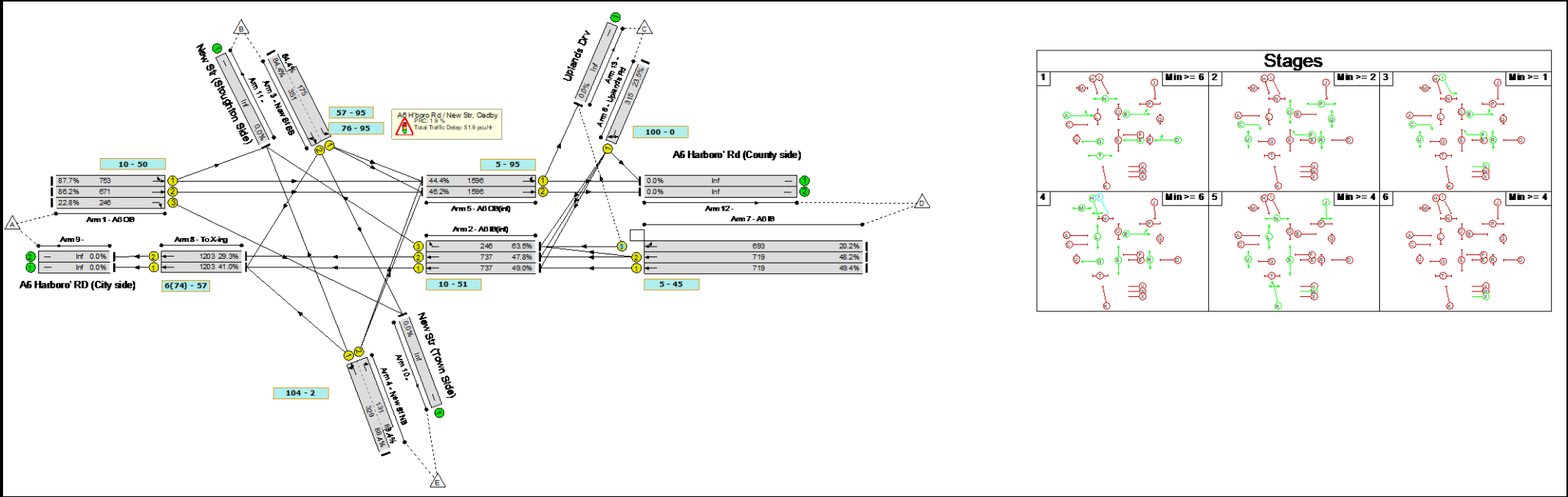
Stage	1	3	4	5
Duration	35	6	16	14
Change Point	0	45	68	95

Signal Timings Diagram



Full Input Data And Results

Network Layout Diagram



Full Input Data And Results

Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network	-	-	N/A	-	-		-	-	-	-	-	-	88.4%
A6 H'boro Rd / New Str, Oadby	-	-	N/A	-	-		-	-	-	-	-	-	88.4%
1/1	A6 OB Ahead Left	U	N/A	N/A	A		1	40	-	661	2205	753	87.7%
1/2	A6 OB Ahead	U	N/A	N/A	A		1	40	-	579	1965	671	86.2%
1/3	A6 OB Right	U	N/A	N/A	C		1	14	-	56	1965	246	22.8%
2/1	A6 IB(int) Ahead	U	N/A	N/A	E		1	41	-	361	2105	737	49.0%
2/2	A6 IB(int) Ahead	U	N/A	N/A	E		1	41	-	352	2105	737	47.8%
2/3	A6 IB(int) Right	U	N/A	N/A	F		1	13	-	156	2105	246	63.5%
3/2+3/1	New St SB Left Right Ahead	U	N/A	N/A	H	I	1	19:38	19	444	2105:2105	351+175	84.4 : 84.4%
4/1+4/2	New St NB Right Left Ahead	U	N/A	N/A	K		1	18	-	407	2080:2080	329+131	88.4 : 88.4%
5/1	A6 OB(int) Ahead Left	U	N/A	N/A	B		1	90	-	709	2105	1596	44.4%
5/2	A6 OB(int) Ahead	U	N/A	N/A	B		1	90	-	738	2105	1596	46.2%
6/1	Uplands Rd Right Left	U	N/A	N/A	J		1	20	-	74	1800	315	23.5%
7/1	A6 IB Ahead	U	N/A	N/A	D		1	40	-	355	2105	719	49.4%
7/2	A6 IB Ahead	U	N/A	N/A	D		1	40	-	347	2105	719	48.2%
7/3	A6 IB Ahead Right	O	N/A	N/A	D		1	40	-	140	2105	693	20.2%
8/1	To X-ing Ahead	U	N/A	N/A	G		2	72	-	493	1950	1203	41.0%
8/2	To X-ing Ahead	U	N/A	N/A	G		2	72	-	352	1950	1203	29.3%
9/1		U	N/A	N/A	-		-	-	-	493	Inf	Inf	0.0%

Full Input Data And Results

9/2		U	N/A	N/A	-		-	-	-	352	Inf	Inf	0.0%
10/1		U	N/A	N/A	-		-	-	-	277	Inf	Inf	0.0%
11/1		U	N/A	N/A	-		-	-	-	447	Inf	Inf	0.0%
12/1		U	N/A	N/A	-		-	-	-	528	Inf	Inf	0.0%
12/2		U	N/A	N/A	-		-	-	-	738	Inf	Inf	0.0%
13/1		U	N/A	N/A	-		-	-	-	228	Inf	Inf	0.0%

Full Input Data And Results

Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network	-	-	16	0	0	35.2	16.7	0.0	51.9	-	-	-	-
A6 H'boro Rd / New Str, Oadby	-	-	16	0	0	35.2	16.7	0.0	51.9	-	-	-	-
1/1	661	661	-	-	-	6.8	3.3	-	10.2	55.3	20.6	3.3	23.9
1/2	579	579	-	-	-	5.9	2.9	-	8.9	55.2	18.0	2.9	21.0
1/3	56	56	-	-	-	0.7	0.1	-	0.9	56.8	1.7	0.1	1.8
2/1	361	361	-	-	-	0.1	0.5	-	0.6	5.5	8.8	0.5	9.3
2/2	352	352	-	-	-	0.3	0.5	-	0.8	7.9	8.9	0.5	9.4
2/3	156	156	-	-	-	1.7	0.9	-	2.6	59.7	5.2	0.9	6.1
3/2+3/1	444	444	-	-	-	5.2	2.5	-	7.7 (5.7+2.1)	62.7 (69.1:50.0)	9.5	2.5	12.1
4/1+4/2	407	407	-	-	-	5.4	3.4	-	8.8 (6.4+2.4)	78.0 (79.2:74.8)	9.5	3.4	12.8
5/1	709	709	-	-	-	0.3	0.4	-	0.7	3.7	2.9	0.4	3.3
5/2	738	738	-	-	-	0.1	0.4	-	0.6	2.8	1.1	0.4	1.6
6/1	74	74	-	-	-	0.9	0.2	-	1.0	50.1	2.1	0.2	2.3
7/1	355	355	-	-	-	3.1	0.5	-	3.6	36.2	9.4	0.5	9.9
7/2	347	347	-	-	-	3.0	0.5	-	3.5	36.0	9.1	0.5	9.5
7/3	140	140	16	0	0	1.1	0.1	0.0	1.2	32.1	3.3	0.1	3.4
8/1	493	493	-	-	-	0.4	0.3	-	0.7	5.3	6.7	0.3	7.0
8/2	352	352	-	-	-	0.0	0.2	-	0.2	2.4	6.7	0.2	6.9
9/1	493	493	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
9/2	352	352	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
10/1	277	277	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
11/1	447	447	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
12/1	528	528	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
12/2	738	738	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
13/1	228	228	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0

Full Input Data And Results

C1	PRC for Signalled Lanes (%):	1.9	Total Delay for Signalled Lanes (pcuHr):	51.94	Cycle Time (s):	120
	PRC Over All Lanes (%):	1.9	Total Delay Over All Lanes(pcuHr):	51.94		

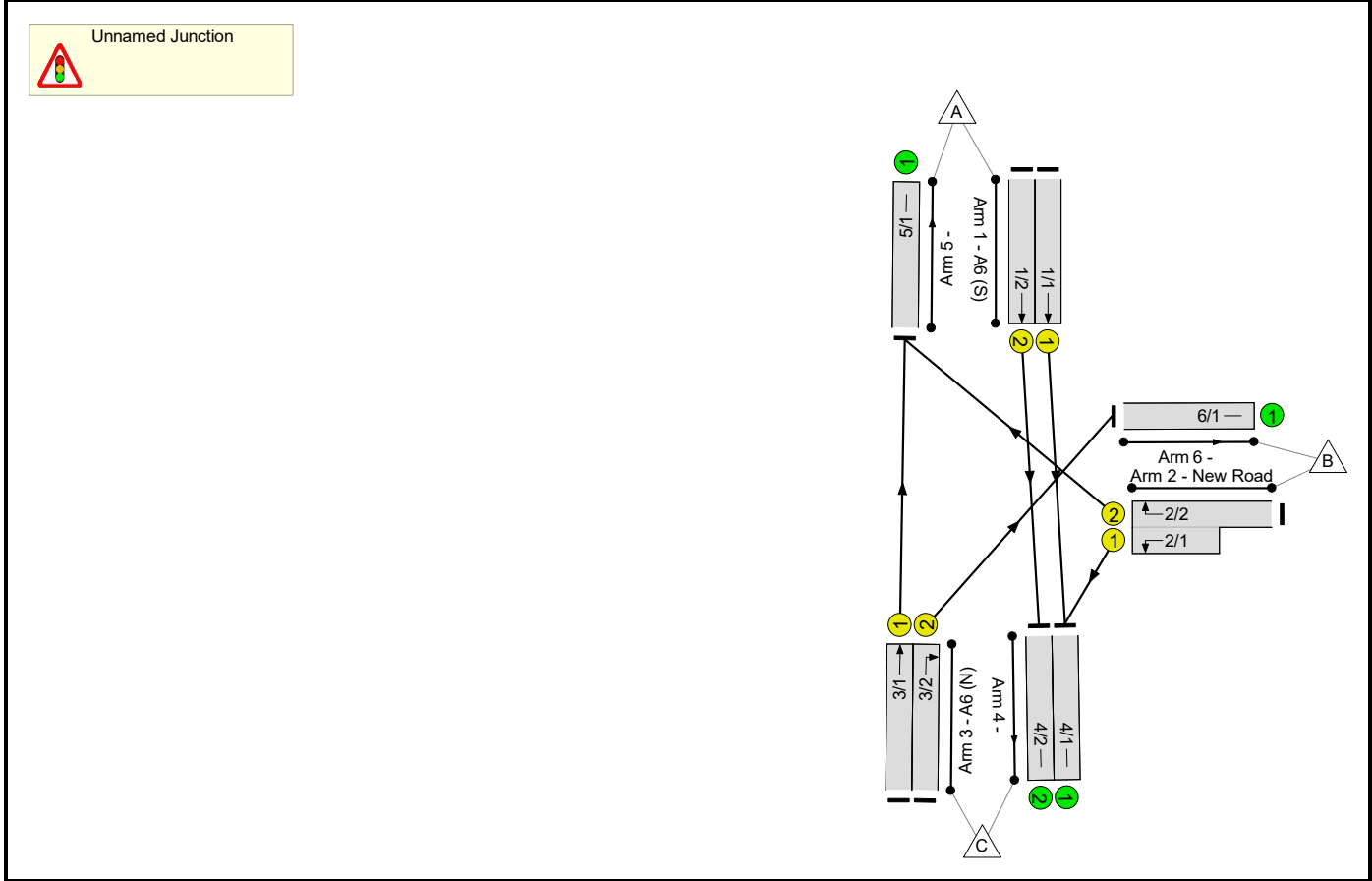
Full Input Data And Results

Full Input Data And Results

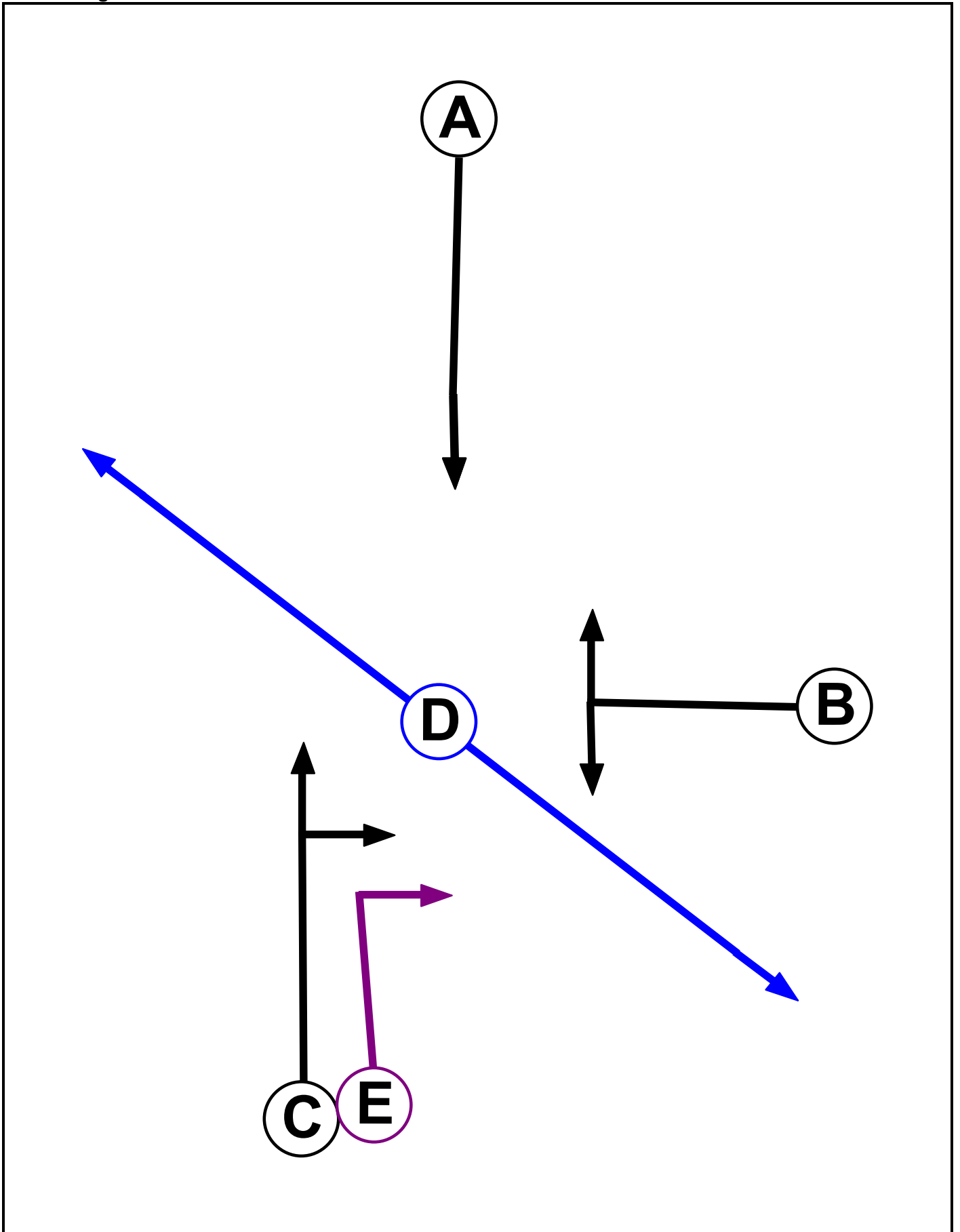
User and Project Details

Project:	
Title:	
Location:	
Additional detail:	
File name:	A6_New Road further mitigation.lsg3x
Author:	
Company:	
Address:	

Network Layout Diagram



Phase Diagram



Full Input Data And Results

Phase Input Data

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

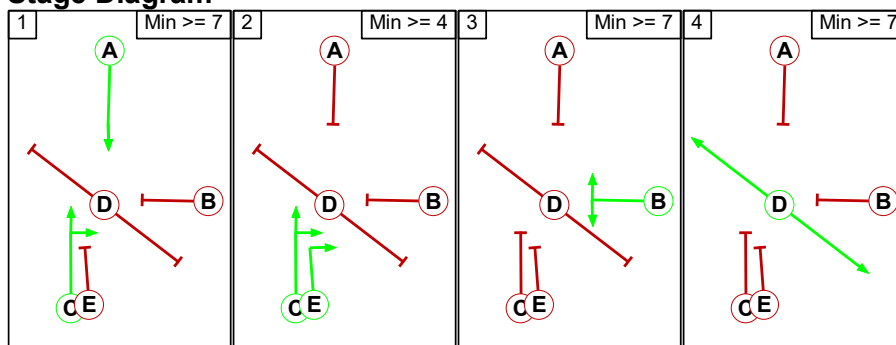
Phase Intergreens Matrix

		Starting Phase					
Terminating Phase		A	B	C	D	E	
	A		9	-	9	-	
	B	-		-	10	-	
	C	-	9		9	-	
	D	-	-	-		10	
	E	8	9	-	-		

Phases in Stage

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

Stage Diagram



Phase Delays

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

Prohibited Stage Change

From Stage	To Stage				
		1	2	3	4
	1		0	9	9
	2	8		9	9
	3	2	X		10
	4	2	10	2	

Full Input Data And Results

Give-Way Lane Input Data

Junction: Unnamed Junction
There are no Opposed Lanes in this Junction

Full Input Data And Results

Lane Input Data

Junction: Unnamed Junction												
Lane	Lane Type	Phases	Start Disp.	End Disp.	Physical Length (PCU)	Sat Flow Type	Def User Saturation Flow (PCU/Hr)	Lane Width (m)	Gradient	Nearside Lane	Turns	Turning Radius (m)
1/1 (A6 (S))	U	A	2	3	60.0	Geom	-	3.25	0.00	Y	Arm 4 Ahead	10.00
1/2 (A6 (S))	U	A	2	3	60.0	Geom	-	3.25	0.00	Y	Arm 4 Ahead	Inf
2/1 (New Road)	U	B	2	3	5.0	Geom	-	3.25	0.00	Y	Arm 4 Left	12.00
2/2 (New Road)	U	B	2	3	60.0	Geom	-	4.00	0.00	Y	Arm 5 Right	Inf
3/1 (A6 (N))	U	C	2	3	60.0	Geom	-	4.00	0.00	Y	Arm 5 Ahead	Inf
3/2 (A6 (N))	U	C E	2	3	60.0	Geom	-	3.25	0.00	Y	Arm 6 Right	Inf
4/1	U		2	3	60.0	Inf	-	-	-	-	-	-
4/2	U		2	3	60.0	Inf	-	-	-	-	-	-
5/1	U		2	3	60.0	Inf	-	-	-	-	-	-
6/1	U		2	3	60.0	Inf	-	-	-	-	-	-

Traffic Flow Groups

Flow Group	Start Time	End Time	Duration	Formula
1: '2041 Core AM'	08:00	09:00	01:00	
2: '2041 Core PM'	17:00	18:00	01:00	
3: '2041 Pref AM'	08:00	09:00	01:00	
4: '2041 Pref PM'	17:00	18:00	01:00	

Scenario 1: '2041 Core AM' (FG1: '2041 Core AM', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired

Desired Flow :

	Destination				
		A	B	C	Tot.
Origin	A	0	217	1324	1541
	B	158	0	45	203
	C	974	23	0	997
	Tot.	1132	240	1369	2741

Full Input Data And Results

Traffic Lane Flows

Lane	Scenario 1: 2041 Core AM
Junction: Unnamed Junction	
1/1	597
1/2	727
2/1 (short)	45
2/2 (with short)	203(In) 158(Out)
3/1	974
3/2	23
4/1	642
4/2	727
5/1	1132
6/1	23

Lane Saturation Flows

Junction: Unnamed Junction								
Lane	Lane Width (m)	Gradient	Nearside Lane	Allowed Turns	Turning Radius (m)	Turning Prop.	Sat Flow (PCU/Hr)	Flared Sat Flow (PCU/Hr)
1/1 (A6 (S))	3.25	0.00	Y	Arm 4 Ahead	10.00	100.0 %	1687	1687
1/2 (A6 (S))	3.25	0.00	Y	Arm 4 Ahead	Inf	100.0 %	1940	1940
2/1 (New Road)	3.25	0.00	Y	Arm 4 Left	12.00	100.0 %	1724	1724
2/2 (New Road)	4.00	0.00	Y	Arm 5 Right	Inf	100.0 %	2015	2015
3/1 (A6 (N))	4.00	0.00	Y	Arm 5 Ahead	Inf	100.0 %	2015	2015
3/2 (A6 (N))	3.25	0.00	Y	Arm 6 Right	Inf	100.0 %	1940	1940
4/1	Infinite Saturation Flow						Inf	Inf
4/2	Infinite Saturation Flow						Inf	Inf
5/1	Infinite Saturation Flow						Inf	Inf
6/1	Infinite Saturation Flow						Inf	Inf

Scenario 2: '2041 Core PM' (FG2: '2041 Core PM', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired

Desired Flow :

		Destination			
Origin		A	B	C	Tot.
	A	0	228	995	1223
	B	141	0	45	186
	C	1248	66	0	1314
	Tot.	1389	294	1040	2723

Traffic Lane Flows

Lane	Scenario 2: 2041 Core PM
Junction: Unnamed Junction	
1/1	442
1/2	553
2/1 (short)	45
2/2 (with short)	186(In) 141(Out)
3/1	1248
3/2	66
4/1	487
4/2	553
5/1	1389
6/1	66

Lane Saturation Flows

Junction: Unnamed Junction								
Lane	Lane Width (m)	Gradient	Nearside Lane	Allowed Turns	Turning Radius (m)	Turning Prop.	Sat Flow (PCU/Hr)	Flared Sat Flow (PCU/Hr)
1/1 (A6 (S))	3.25	0.00	Y	Arm 4 Ahead	10.00	100.0 %	1687	1687
1/2 (A6 (S))	3.25	0.00	Y	Arm 4 Ahead	Inf	100.0 %	1940	1940
2/1 (New Road)	3.25	0.00	Y	Arm 4 Left	12.00	100.0 %	1724	1724
2/2 (New Road)	4.00	0.00	Y	Arm 5 Right	Inf	100.0 %	2015	2015
3/1 (A6 (N))	4.00	0.00	Y	Arm 5 Ahead	Inf	100.0 %	2015	2015
3/2 (A6 (N))	3.25	0.00	Y	Arm 6 Right	Inf	100.0 %	1940	1940
4/1	Infinite Saturation Flow						Inf	Inf
4/2	Infinite Saturation Flow						Inf	Inf
5/1	Infinite Saturation Flow						Inf	Inf
6/1	Infinite Saturation Flow						Inf	Inf

Scenario 3: '2041 Pref AM' (FG3: '2041 Pref AM', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired

Desired Flow :

		Destination			
Origin		A	B	C	Tot.
	A	0	217	1327	1544
	B	165	0	47	212
	C	1016	24	0	1040
	Tot.	1181	241	1374	2796

Traffic Lane Flows

Lane	Scenario 3: 2041 Pref AM
Junction: Unnamed Junction	
1/1	599
1/2	728
2/1 (short)	47
2/2 (with short)	212(In) 165(Out)
3/1	1016
3/2	24
4/1	646
4/2	728
5/1	1181
6/1	24

Lane Saturation Flows

Junction: Unnamed Junction								
Lane	Lane Width (m)	Gradient	Nearside Lane	Allowed Turns	Turning Radius (m)	Turning Prop.	Sat Flow (PCU/Hr)	Flared Sat Flow (PCU/Hr)
1/1 (A6 (S))	3.25	0.00	Y	Arm 4 Ahead	10.00	100.0 %	1687	1687
1/2 (A6 (S))	3.25	0.00	Y	Arm 4 Ahead	Inf	100.0 %	1940	1940
2/1 (New Road)	3.25	0.00	Y	Arm 4 Left	12.00	100.0 %	1724	1724
2/2 (New Road)	4.00	0.00	Y	Arm 5 Right	Inf	100.0 %	2015	2015
3/1 (A6 (N))	4.00	0.00	Y	Arm 5 Ahead	Inf	100.0 %	2015	2015
3/2 (A6 (N))	3.25	0.00	Y	Arm 6 Right	Inf	100.0 %	1940	1940
4/1	Infinite Saturation Flow						Inf	Inf
4/2	Infinite Saturation Flow						Inf	Inf
5/1	Infinite Saturation Flow						Inf	Inf
6/1	Infinite Saturation Flow						Inf	Inf

Scenario 4: '2041 Pref PM' (FG4: '2041 Pref PM', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired

Desired Flow :

		Destination			
Origin		A	B	C	Tot.
	A	0	243	1061	1304
	B	141	0	45	186
	C	1206	64	0	1270
	Tot.	1347	307	1106	2760

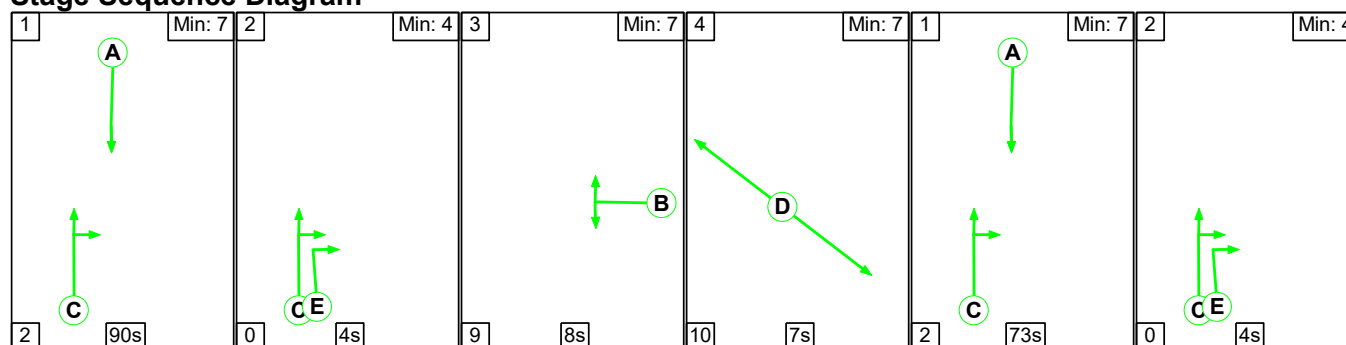
Traffic Lane Flows

Lane	Scenario 4: 2041 Pref PM
Junction: Unnamed Junction	
1/1	474
1/2	587
2/1 (short)	45
2/2 (with short)	186(In) 141(Out)
3/1	1206
3/2	64
4/1	519
4/2	587
5/1	1347
6/1	64

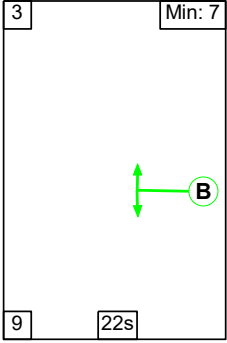
Lane Saturation Flows

Junction: Unnamed Junction								
Lane	Lane Width (m)	Gradient	Nearside Lane	Allowed Turns	Turning Radius (m)	Turning Prop.	Sat Flow (PCU/Hr)	Flared Sat Flow (PCU/Hr)
1/1 (A6 (S))	3.25	0.00	Y	Arm 4 Ahead	10.00	100.0 %	1687	1687
1/2 (A6 (S))	3.25	0.00	Y	Arm 4 Ahead	Inf	100.0 %	1940	1940
2/1 (New Road)	3.25	0.00	Y	Arm 4 Left	12.00	100.0 %	1724	1724
2/2 (New Road)	4.00	0.00	Y	Arm 5 Right	Inf	100.0 %	2015	2015
3/1 (A6 (N))	4.00	0.00	Y	Arm 5 Ahead	Inf	100.0 %	2015	2015
3/2 (A6 (N))	3.25	0.00	Y	Arm 6 Right	Inf	100.0 %	1940	1940
4/1	Infinite Saturation Flow						Inf	Inf
4/2	Infinite Saturation Flow						Inf	Inf
5/1	Infinite Saturation Flow						Inf	Inf
6/1	Infinite Saturation Flow						Inf	Inf

Scenario 1: '2041 Core AM' (FG1: '2041 Core AM', Plan 1: 'Network Control Plan 1')

Stage Sequence Diagram

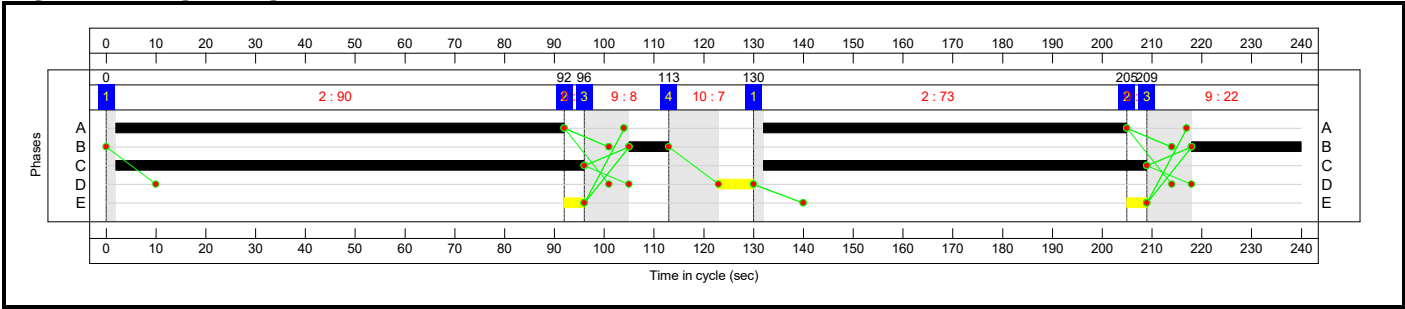
Full Input Data And Results



Stage Timings

Stage	1	2	3	4	1	2	3
Duration	90	4	8	7	73	4	22
Change Point	0	92	96	113	130	205	209

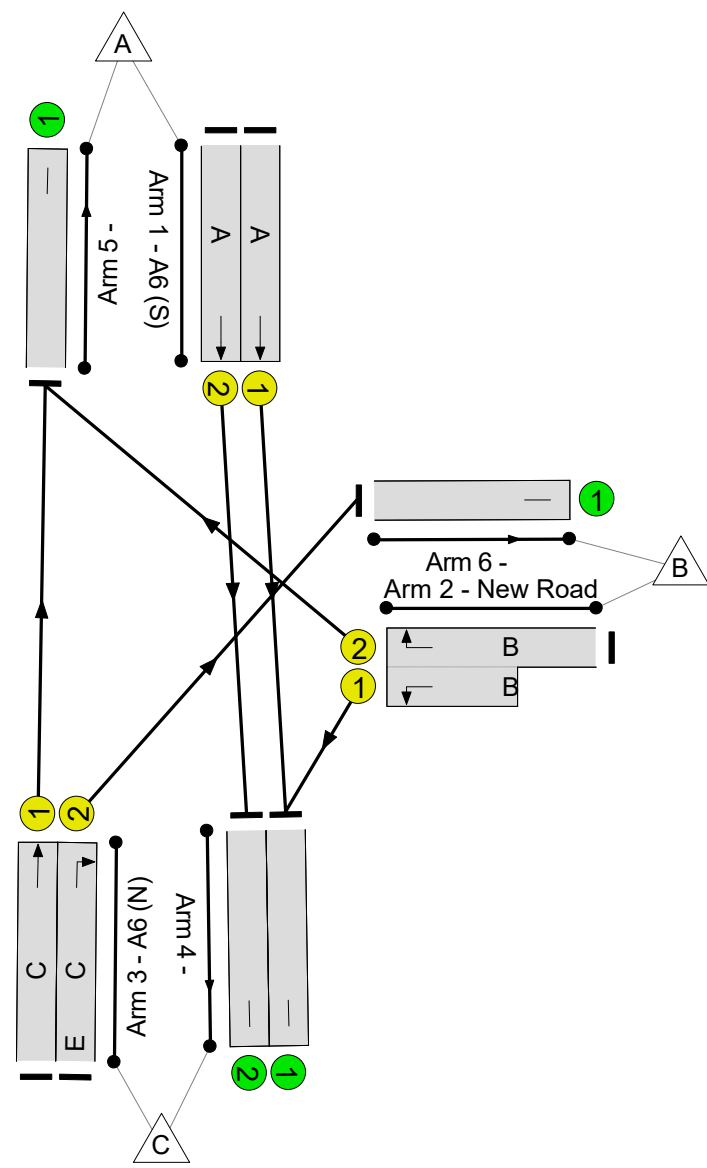
Signal Timings Diagram



Network Layout Diagram



Unnamed Junction
PRC: 34.2 %
Total Traffic Delay: 11.7 pcuHr



Full Input Data And Results

Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network	-	-	N/A	-	-		-	-	-	-	-	-	67.1%
Unnamed Junction	-	-	N/A	-	-		-	-	-	-	-	-	67.1%
1/1	A6 (S) Ahead	U	N/A	N/A	A		2	163	-	597	1687	1160	51.5%
1/2	A6 (S) Ahead	U	N/A	N/A	A		2	163	-	727	1940	1334	54.5%
2/2+2/1	New Road Left Right	U	N/A	N/A	B		2	30	-	203	2015:1724	238+68	66.3 : 66.3%
3/1	A6 (N) Ahead	U	N/A	N/A	C		2	171	-	974	2015	1452	67.1%
3/2	A6 (N) Right	U	N/A	N/A	C	E	2	171	8	23	1940	1398	1.6%
4/1		U	N/A	N/A	-		-	-	-	642	Inf	Inf	0.0%
4/2		U	N/A	N/A	-		-	-	-	727	Inf	Inf	0.0%
5/1		U	N/A	N/A	-		-	-	-	1132	Inf	Inf	0.0%
6/1		U	N/A	N/A	-		-	-	-	23	Inf	Inf	0.0%

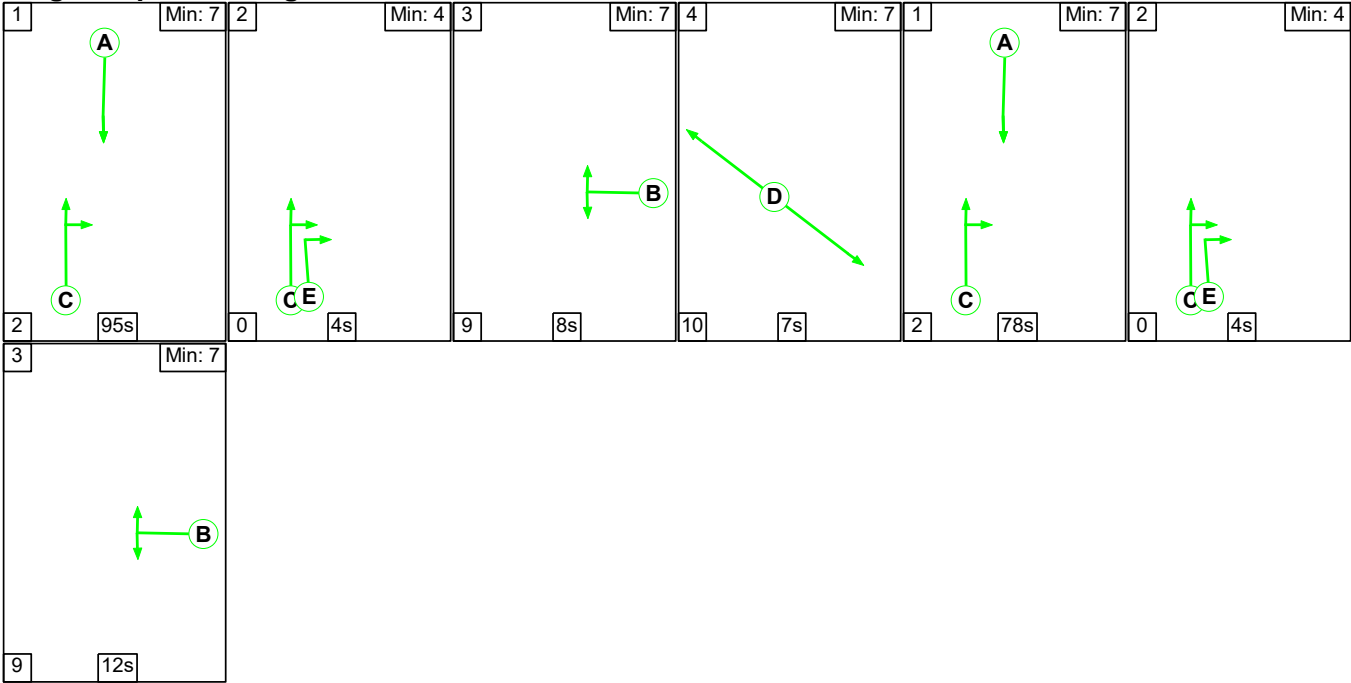
Full Input Data And Results

Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network	-	-	0	0	0	8.6	3.1	0.0	11.7	-	-	-	-
Unnamed Junction	-	-	0	0	0	8.6	3.1	0.0	11.7	-	-	-	-
1/1	597	597	-	-	-	1.5	0.5	-	2.0	12.3	9.9	0.5	10.5
1/2	727	727	-	-	-	1.9	0.6	-	2.5	12.3	12.5	0.6	13.1
2/2+2/1	203	203	-	-	-	2.7	1.0	-	3.7	65.5	4.9	1.0	5.9
3/1	974	974	-	-	-	2.5	1.0	-	3.5	12.8	18.1	1.0	19.1
3/2	23	23	-	-	-	0.0	0.0	-	0.0	6.1	0.2	0.0	0.2
4/1	642	642	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
4/2	727	727	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/1	1132	1132	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/1	23	23	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
C1 PRC for Signalled Lanes (%): 34.2 Total Delay for Signalled Lanes (pcuHr): 11.73 Cycle Time (s): 240 PRC Over All Lanes (%): 34.2 Total Delay Over All Lanes(pcuHr): 11.73													

Full Input Data And Results

Scenario 2: '2041 Core PM' (FG2: '2041 Core PM', Plan 1: 'Network Control Plan 1')

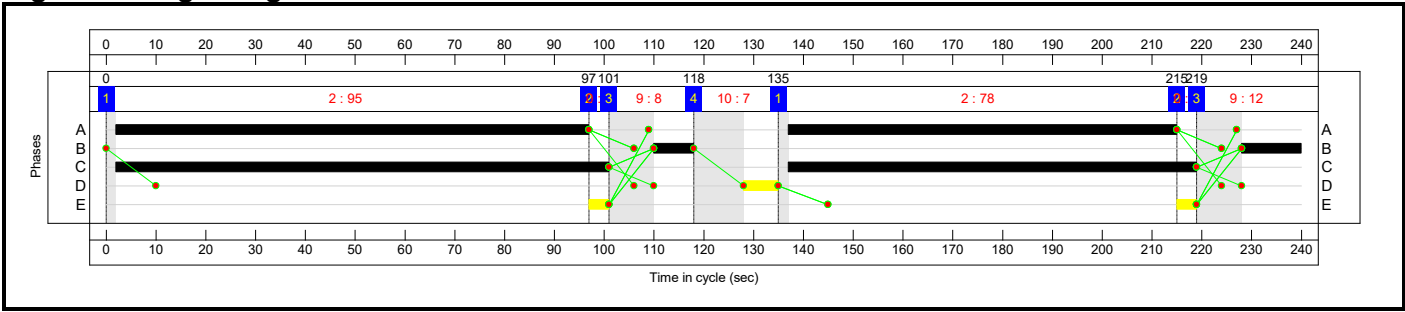
Stage Sequence Diagram



Stage Timings

Stage	1	2	3	4	1	2	3
Duration	95	4	8	7	78	4	12
Change Point	0	97	101	118	135	215	219

Signal Timings Diagram



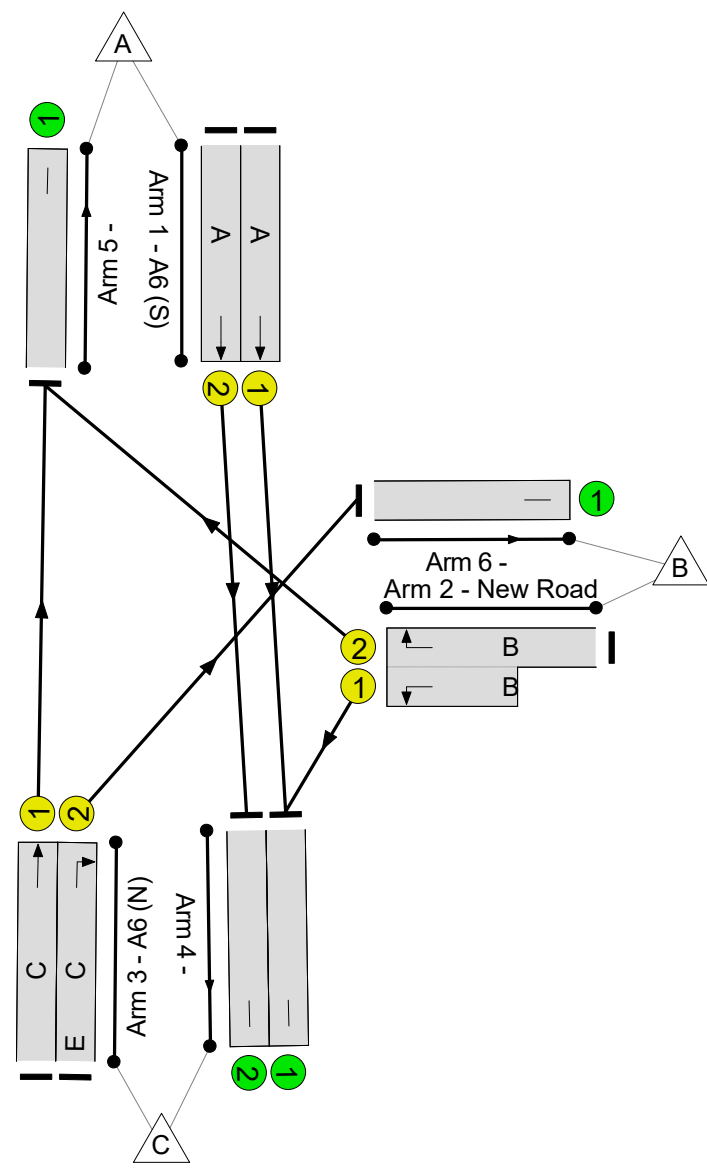
Network Layout Diagram



Unnamed Junction

PRC: 10.8 %

Total Traffic Delay: 12.5 pcuHr



Full Input Data And Results

Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network	-	-	N/A	-	-		-	-	-	-	-	-	81.2%
Unnamed Junction	-	-	N/A	-	-		-	-	-	-	-	-	81.2%
1/1	A6 (S) Ahead	U	N/A	N/A	A		2	173	-	442	1687	1230	35.9%
1/2	A6 (S) Ahead	U	N/A	N/A	A		2	173	-	553	1940	1415	39.1%
2/2+2/1	New Road Left Right	U	N/A	N/A	B		2	20	-	186	2015:1724	174+56	80.8 : 80.8%
3/1	A6 (N) Ahead	U	N/A	N/A	C		2	181	-	1248	2015	1536	81.2%
3/2	A6 (N) Right	U	N/A	N/A	C	E	2	181	8	66	1940	1479	4.5%
4/1		U	N/A	N/A	-		-	-	-	487	Inf	Inf	0.0%
4/2		U	N/A	N/A	-		-	-	-	553	Inf	Inf	0.0%
5/1		U	N/A	N/A	-		-	-	-	1389	Inf	Inf	0.0%
6/1		U	N/A	N/A	-		-	-	-	66	Inf	Inf	0.0%

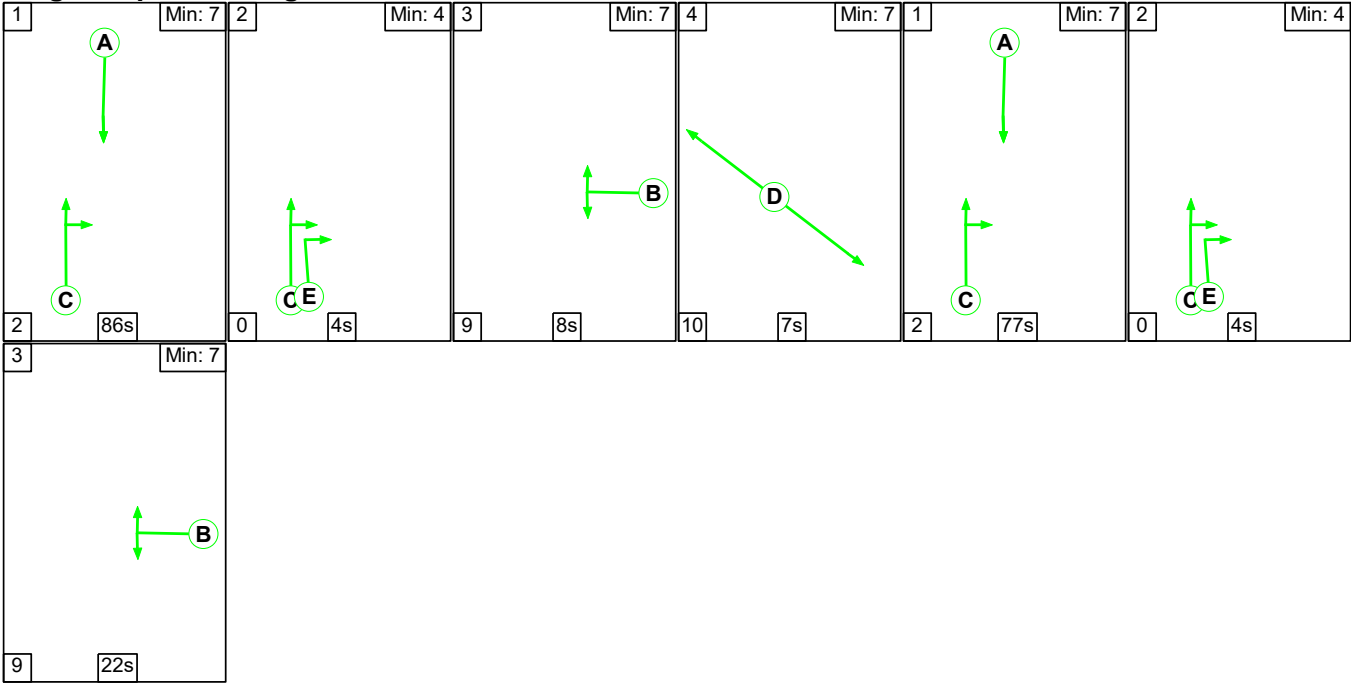
Full Input Data And Results

Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network	-	-	0	0	0	7.8	4.7	0.0	12.5	-	-	-	-
Unnamed Junction	-	-	0	0	0	7.8	4.7	0.0	12.5	-	-	-	-
1/1	442	442	-	-	-	0.8	0.3	-	1.0	8.5	6.4	0.3	6.7
1/2	553	553	-	-	-	1.0	0.3	-	1.3	8.5	8.3	0.3	8.6
2/2+2/1	186	186	-	-	-	2.7	1.9	-	4.7	90.1	4.6	1.9	6.5
3/1	1248	1248	-	-	-	3.2	2.1	-	5.4	15.5	31.5	2.1	33.7
3/2	66	66	-	-	-	0.1	0.0	-	0.1	5.0	0.7	0.0	0.7
4/1	487	487	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
4/2	553	553	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/1	1389	1389	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/1	66	66	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
C1 PRC for Signalled Lanes (%): 10.8 Total Delay for Signalled Lanes (pcuHr): 12.47 Cycle Time (s): 240 PRC Over All Lanes (%): 10.8 Total Delay Over All Lanes(pcuHr): 12.47													

Full Input Data And Results

Scenario 3: '2041 Pref AM' (FG3: '2041 Pref AM', Plan 1: 'Network Control Plan 1')

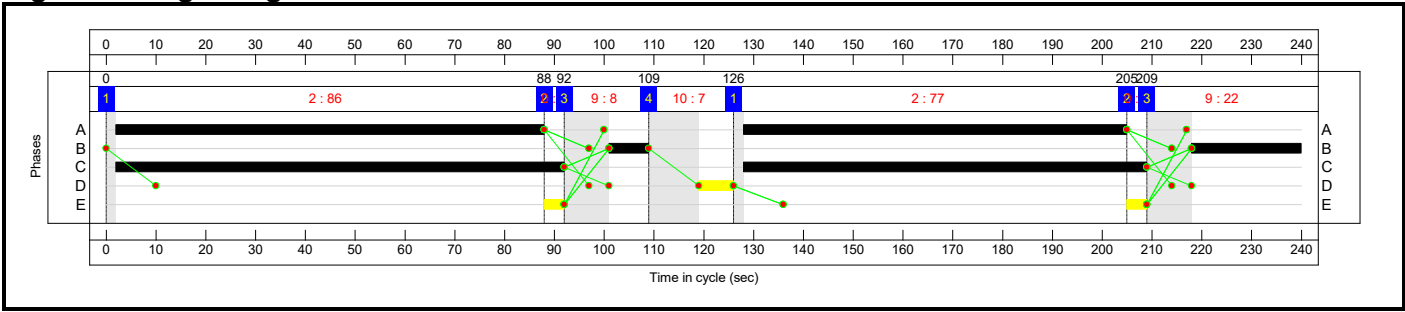
Stage Sequence Diagram



Stage Timings

Stage	1	2	3	4	1	2	3
Duration	86	4	8	7	77	4	22
Change Point	0	88	92	109	126	205	209

Signal Timings Diagram



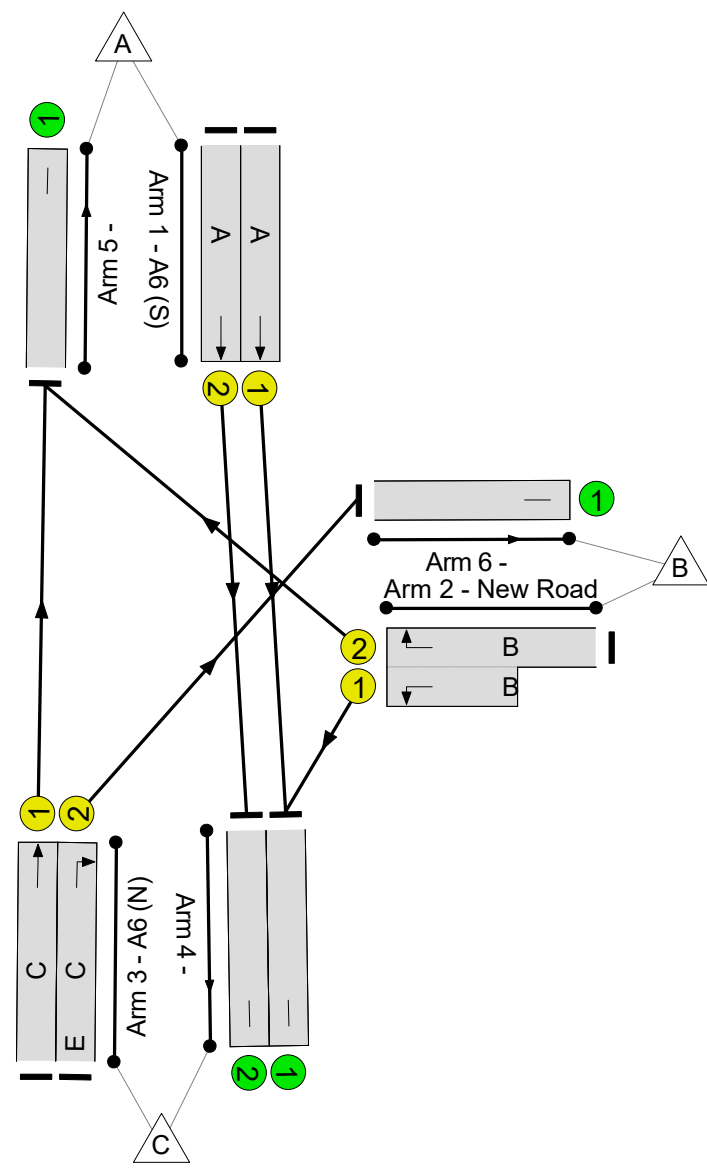
Network Layout Diagram



Unnamed Junction

PRC: 28.7 %

Total Traffic Delay: 12.4 pcuHr



Full Input Data And Results

Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network	-	-	N/A	-	-		-	-	-	-	-	-	69.9%
Unnamed Junction	-	-	N/A	-	-		-	-	-	-	-	-	69.9%
1/1	A6 (S) Ahead	U	N/A	N/A	A		2	163	-	599	1687	1160	51.6%
1/2	A6 (S) Ahead	U	N/A	N/A	A		2	163	-	728	1940	1334	54.6%
2/2+2/1	New Road Left Right	U	N/A	N/A	B		2	30	-	212	2015:1724	238+68	69.3 : 69.3%
3/1	A6 (N) Ahead	U	N/A	N/A	C		2	171	-	1016	2015	1452	69.9%
3/2	A6 (N) Right	U	N/A	N/A	C	E	2	171	8	24	1940	1398	1.7%
4/1		U	N/A	N/A	-		-	-	-	646	Inf	Inf	0.0%
4/2		U	N/A	N/A	-		-	-	-	728	Inf	Inf	0.0%
5/1		U	N/A	N/A	-		-	-	-	1181	Inf	Inf	0.0%
6/1		U	N/A	N/A	-		-	-	-	24	Inf	Inf	0.0%

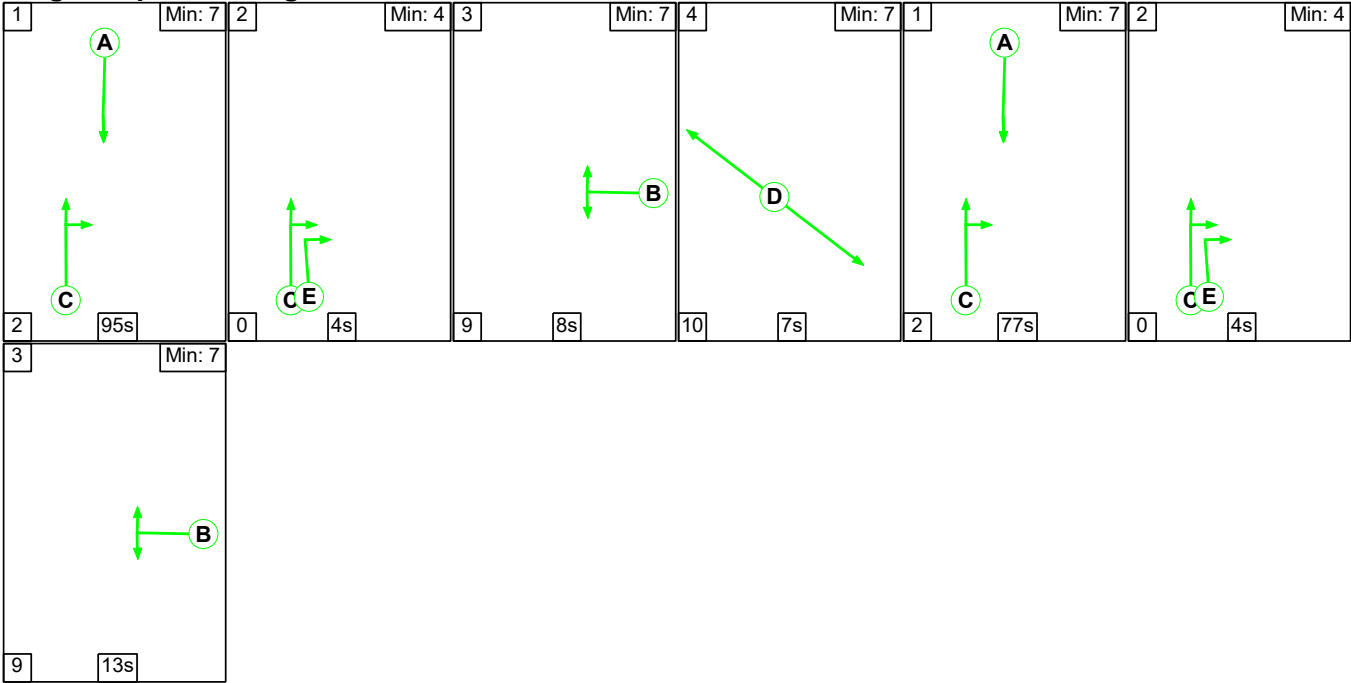
Full Input Data And Results

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Full Input Data And Results

Scenario 4: '2041 Pref PM' (FG4: '2041 Pref PM', Plan 1: 'Network Control Plan 1')

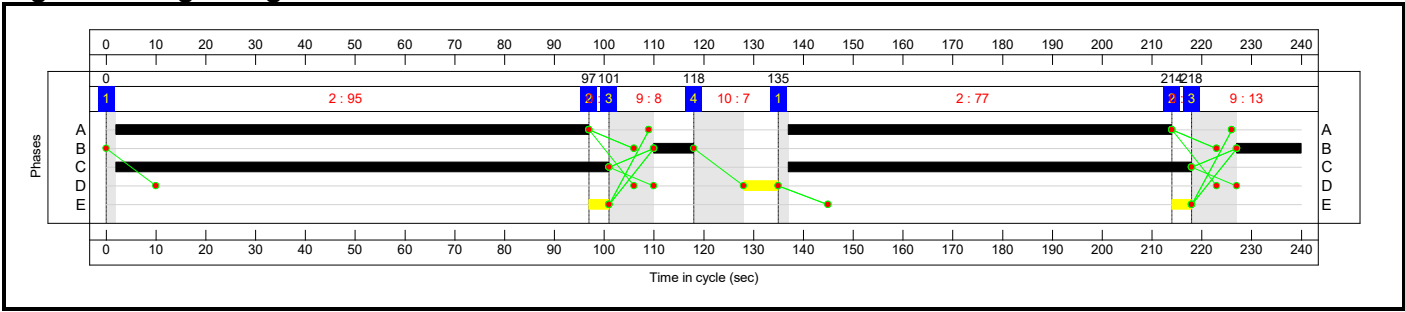
Stage Sequence Diagram



Stage Timings

Stage	1	2	3	4	1	2	3
Duration	95	4	8	7	77	4	13
Change Point	0	97	101	118	135	214	218

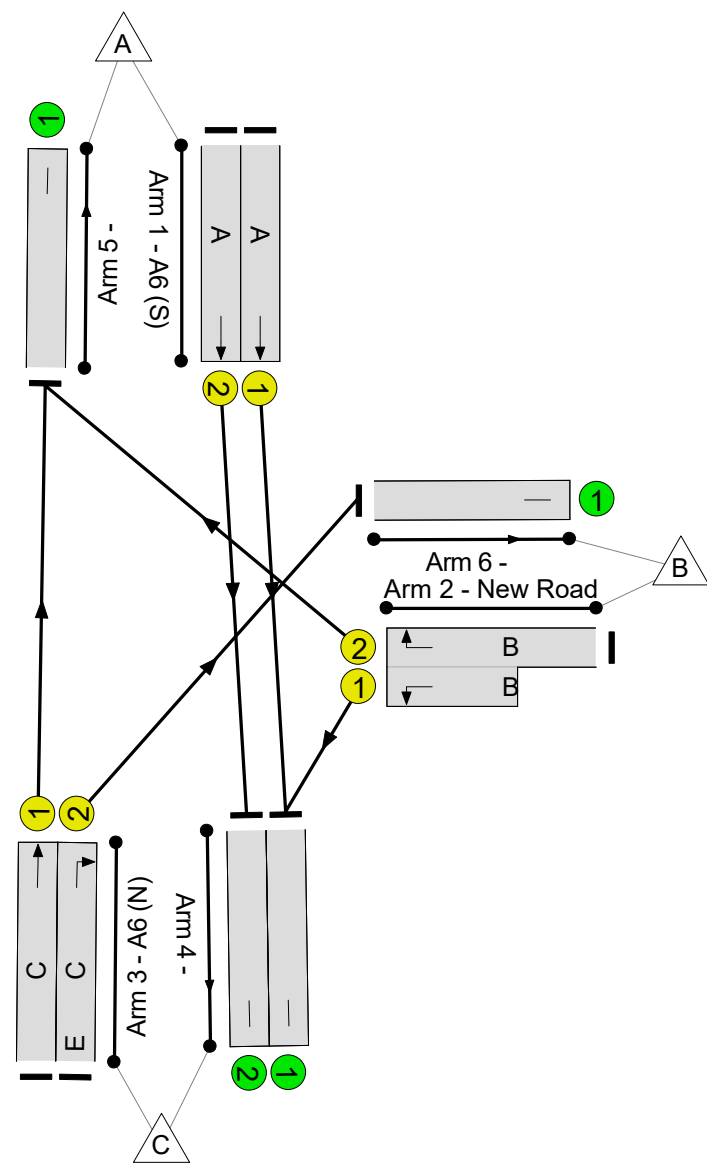
Signal Timings Diagram



Network Layout Diagram



Unnamed Junction
PRC: 14.0 %
Total Traffic Delay: 12.0 pcuHr



Full Input Data And Results

Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network	-	-	N/A	-	-		-	-	-	-	-	-	78.9%
Unnamed Junction	-	-	N/A	-	-		-	-	-	-	-	-	78.9%
1/1	A6 (S) Ahead	U	N/A	N/A	A		2	172	-	474	1687	1223	38.8%
1/2	A6 (S) Ahead	U	N/A	N/A	A		2	172	-	587	1940	1407	41.7%
2/2+2/1	New Road Left Right	U	N/A	N/A	B		2	21	-	186	2015:1724	181+58	78.1 : 78.1%
3/1	A6 (N) Ahead	U	N/A	N/A	C		2	180	-	1206	2015	1528	78.9%
3/2	A6 (N) Right	U	N/A	N/A	C	E	2	180	8	64	1940	1471	4.4%
4/1		U	N/A	N/A	-		-	-	-	519	Inf	Inf	0.0%
4/2		U	N/A	N/A	-		-	-	-	587	Inf	Inf	0.0%
5/1		U	N/A	N/A	-		-	-	-	1347	Inf	Inf	0.0%
6/1		U	N/A	N/A	-		-	-	-	64	Inf	Inf	0.0%

Full Input Data And Results

Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network	-	-	0	0	0	7.8	4.2	0.0	12.0	-	-	-	-
Unnamed Junction	-	-	0	0	0	7.8	4.2	0.0	12.0	-	-	-	-
1/1	474	474	-	-	-	0.9	0.3	-	1.2	8.9	7.1	0.3	7.4
1/2	587	587	-	-	-	1.1	0.4	-	1.5	8.9	9.0	0.4	9.3
2/2+2/1	186	186	-	-	-	2.7	1.7	-	4.4	84.6	4.6	1.7	6.3
3/1	1206	1206	-	-	-	3.0	1.9	-	4.9	14.6	29.1	1.9	31.0
3/2	64	64	-	-	-	0.1	0.0	-	0.1	5.1	0.6	0.0	0.7
4/1	519	519	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
4/2	587	587	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/1	1347	1347	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/1	64	64	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
C1 PRC for Signalled Lanes (%): 14.0 Total Delay for Signalled Lanes (pcuHr): 11.99 Cycle Time (s): 240 PRC Over All Lanes (%): 14.0 Total Delay Over All Lanes(pcuHr): 11.99													

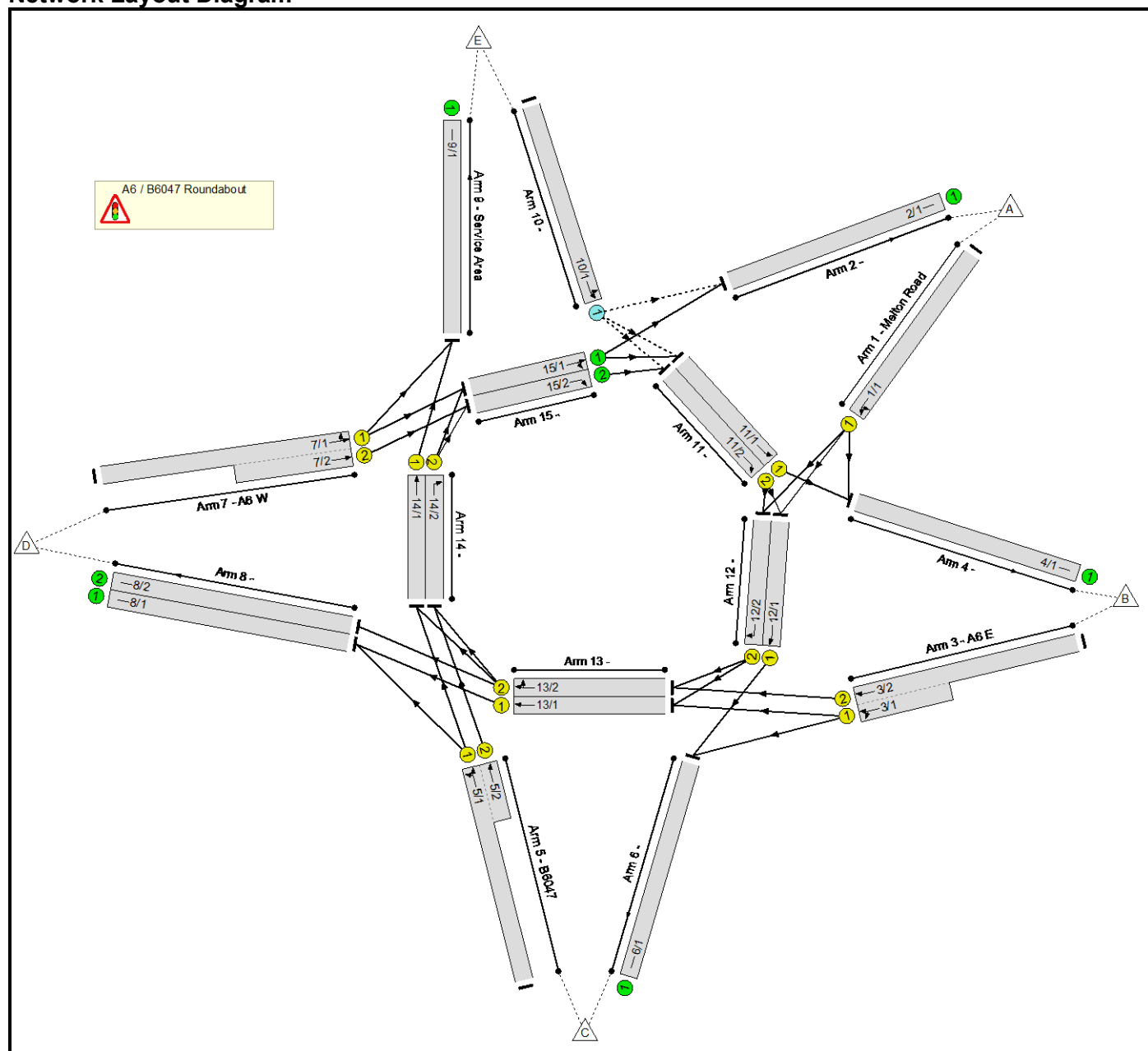
Full Input Data And Results

Full Input Data And Results

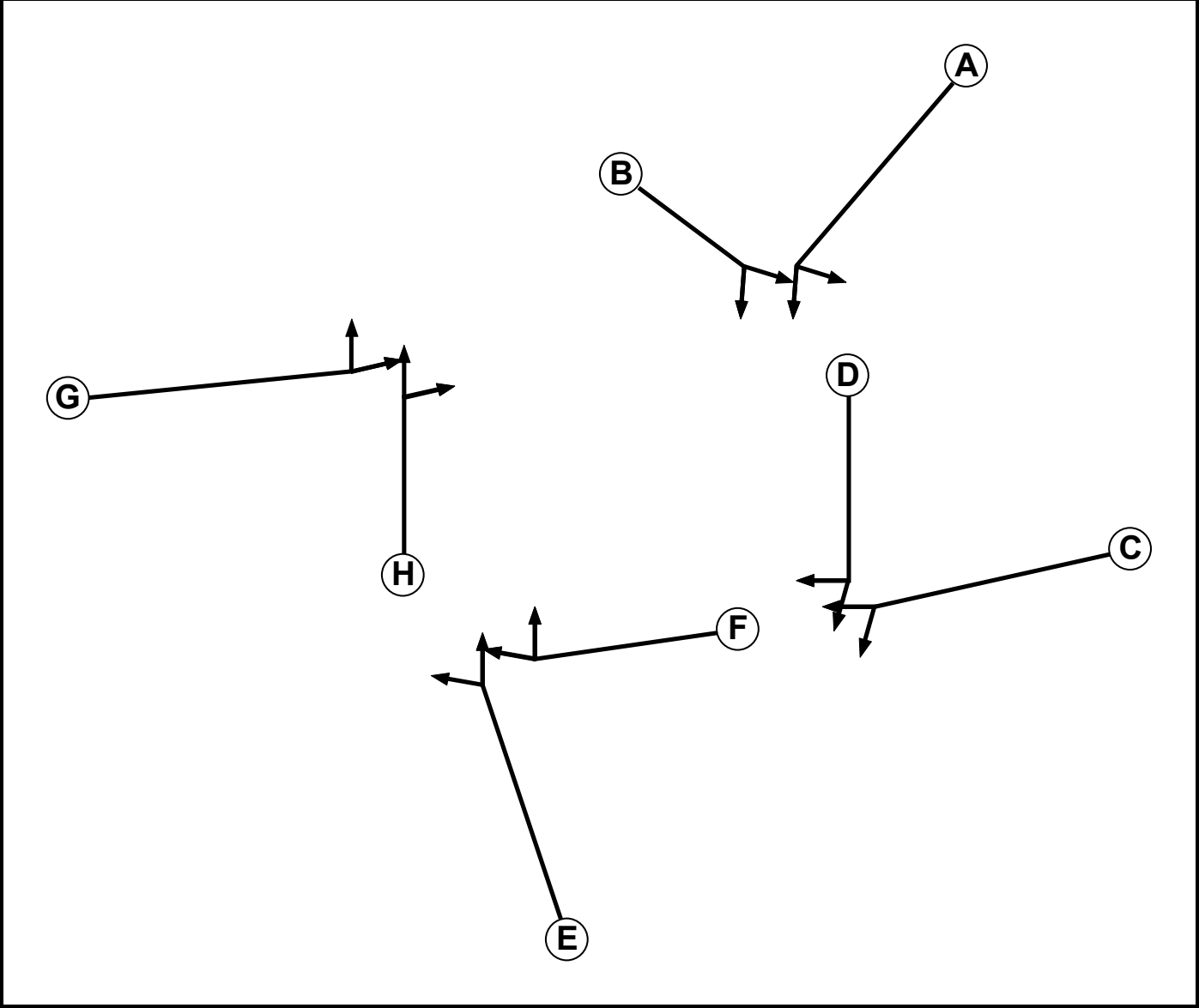
User and Project Details

Project:	
Title:	
Location:	
Additional detail:	
File name:	17_Mitigation - A6 x B6047 both sets of flows.lsg3x
Author:	
Company:	
Address:	

Network Layout Diagram



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	2		7	7
D	Traffic	2		7	7
E	Traffic	3		7	7
F	Traffic	3		7	7
G	Traffic	4		7	7
H	Traffic	4		7	7

Phase Intergreens Matrix

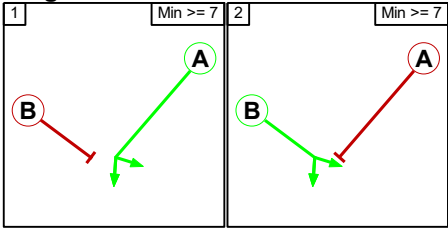
Terminating Phase	Starting Phase								
		A	B	C	D	E	F	G	H
	A		5	-	-	-	-	-	-
	B	5		-	-	-	-	-	-
	C	-	-		5	-	-	-	-
	D	-	-	5		-	-	-	-
	E	-	-	-	-		5	-	-
	F	-	-	-	-	5		-	-
	G	-	-	-	-	-	-		5
	H	-	-	-	-	-	5	-	

Phases in Stage

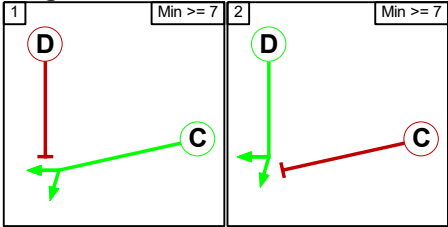
Stream	Stage No.	Phases in Stage
1	1	A
1	2	B
2	1	C
2	2	D
3	1	E
3	2	F
4	1	G
4	2	H

Stage Diagram

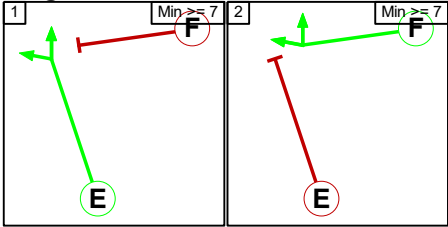
Stage Stream: 1



Stage Stream: 2

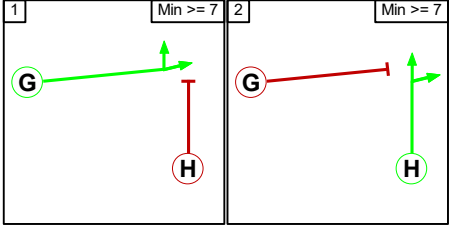


Stage Stream: 3



Full Input Data And Results

Stage Stream: 4



Phase Delays

Stage Stream: 1

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

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					

Stage Stream: 4

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

Prohibited Stage Change

Stage Stream: 1

	To Stage		
From Stage		1	2
	1		5
	2	5	

Stage Stream: 2

	To Stage		
From Stage		1	2
	1		5
	2	5	

Stage Stream: 3

	To Stage		
From Stage		1	2
	1		5
	2	5	

Full Input Data And Results

Stage Stream: 4

	To Stage		
From Stage		1	2
	1		5
	2	5	

Full Input Data And Results

Give-Way Lane Input Data

Junction: A6 / B6047 Roundabout											
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)
10/1	2/1 (Left)	1495	0	15/1	0.47	All	-	-	-	-	-
	11/1 (Ahead)	1495	0	15/1	0.47	All					
				15/2	0.47	To 11/2 (Right)					
	11/2 (Ahead)	1495	0	15/1	0.47	All					
				15/2	0.47	All					

Full Input Data And Results

Lane Input Data

Junction: A6 / B6047 Roundabout												
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 (Melton Road)	U	A	2	3	60.0	Geom	-	3.50	0.00	Y	Arm 4 Left	27.50
											Arm 12 Ahead	Inf
2/1	U	C	2	3	60.0	Inf	-	-	-	-	-	-
3/1 (A6 E)	U		2	3	8.0	Geom	-	3.75	0.00	Y	Arm 6 Left	45.00
3/2 (A6 E)	U		2	3	60.0	Geom	-	3.75	0.00	N	Arm 13 Ahead	Inf
4/1	U		2	3	60.0	Inf	-	-	-	-	Arm 13 Ahead	Inf
5/1 (B6047)	U	E	2	3	60.0	Geom	-	3.50	0.00	Y	Arm 8 Left	27.50
											Arm 14 Ahead	Inf
5/2 (B6047)	U	E	2	3	5.0	Geom	-	3.50	0.00	N	Arm 14 Ahead	Inf
6/1	U		2	3	60.0	Inf	-	-	-	-	-	-
7/1 (A6 W)	U	G	2	3	60.0	Geom	-	3.65	0.00	Y	Arm 9 Left	32.70
											Arm 15 Ahead	Inf
7/2 (A6 W)	U	G	2	3	10.0	Geom	-	3.65	0.00	N	Arm 15 Ahead	Inf
8/1	U		2	3	60.0	Inf	-	-	-	-	-	-
8/2	U		2	3	60.0	Inf	-	-	-	-	-	-
9/1 (Service Area)	U		2	3	60.0	Inf	-	-	-	-	-	-
10/1	O	B	2	3	60.0	User	1900	-	-	-	-	-
11/1	U		2	3	2.0	User	1900	-	-	-	-	-
11/2	U		2	3	2.0	User	1900	-	-	-	-	-
12/1	U	D	2	3	2.0	User	1900	-	-	-	-	-
12/2	U	D	2	3	2.0	User	1900	-	-	-	-	-
13/1	U	F	2	3	2.0	User	1900	-	-	-	-	-
13/2	U	F	2	3	2.0	User	1900	-	-	-	-	-
14/1	U	H	2	3	3.0	User	1900	-	-	-	-	-
14/2	U	H	2	3	3.0	User	1900	-	-	-	-	-
15/1	U		2	3	2.0	User	1900	-	-	-	-	-
15/2	U		2	3	2.0	User	1900	-	-	-	-	-

Traffic Flow Groups

Flow Group	Start Time	End Time	Duration	Formula
1: '2041 Pref AM'	08:00	09:00	01:00	
2: '2041 Pref PM'	17:00	18:00	01:00	
3: '2041 Core AM'	08:00	09:00	01:00	
4: '2041 Core PM'	17:00	18:00	01:00	

Scenario 1: '2041 Pref AM' (FG1: '2041 Pref AM', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired

Desired Flow :

Origin	Destination						
		A	B	C	D	E	Tot.
	A	0	277	335	162	0	774
	B	167	0	7	870	0	1044
	C	476	0	0	626	0	1102
	D	10	890	454	0	0	1354
	E	0	0	0	0	0	0
	Tot.	653	1167	796	1658	0	4274

Full Input Data And Results

Traffic Lane Flows

Lane	Scenario 1: 2041 Pref AM
Junction: A6 / B6047 Roundabout	
1/1	774
2/1	653
3/1 (short)	525
3/2 (with short)	1044(In) 519(Out)
4/1	1167
5/1 (with short)	1102(In) 626(Out)
5/2 (short)	476
6/1	796
7/1 (with short)	1354(In) 900(Out)
7/2 (short)	454
8/1	1226
8/2	432
9/1	0
10/1	0
11/1	890
11/2	454
12/1	789
12/2	162
13/1	600
13/2	599
14/1	0
14/2	643
15/1	1543
15/2	454

Junction: A6 / B6047 Roundabout								
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 (Melton Road)	3.50	0.00	Y	Arm 4 Left	27.50	35.8 %	1927	1927
				Arm 12 Ahead	Inf	64.2 %		
2/1	Infinite Saturation Flow						Inf	Inf
3/1 (A6 E)	3.75	0.00	Y	Arm 6 Left	45.00	1.3 %	1989	1989
				Arm 13 Ahead	Inf	98.7 %		
3/2 (A6 E)	3.75	0.00	N	Arm 13 Ahead	Inf	100.0 %	2130	2130
4/1	Infinite Saturation Flow						Inf	Inf
5/1 (B6047)	3.50	0.00	Y	Arm 8 Left	27.50	100.0 %	1863	1863
				Arm 14 Ahead	Inf	0.0 %		
5/2 (B6047)	3.50	0.00	N	Arm 14 Ahead	Inf	100.0 %	2105	2105
6/1	Infinite Saturation Flow						Inf	Inf
7/1 (A6 W)	3.65	0.00	Y	Arm 9 Left	32.70	0.0 %	1980	1980
				Arm 15 Ahead	Inf	100.0 %		
7/2 (A6 W)	3.65	0.00	N	Arm 15 Ahead	Inf	100.0 %	2120	2120
8/1	Infinite Saturation Flow						Inf	Inf
8/2	Infinite Saturation Flow						Inf	Inf
9/1 (Service Area Lane 1)	Infinite Saturation Flow						Inf	Inf
10/1	This lane uses a directly entered Saturation Flow						1900	1900
11/1	This lane uses a directly entered Saturation Flow						1900	1900
11/2	This lane uses a directly entered Saturation Flow						1900	1900
12/1	This lane uses a directly entered Saturation Flow						1900	1900
12/2	This lane uses a directly entered Saturation Flow						1900	1900
13/1	This lane uses a directly entered Saturation Flow						1900	1900
13/2	This lane uses a directly entered Saturation Flow						1900	1900
14/1	This lane uses a directly entered Saturation Flow						1900	1900
14/2	This lane uses a directly entered Saturation Flow						1900	1900
15/1	This lane uses a directly entered Saturation Flow						1900	1900
15/2	This lane uses a directly entered Saturation Flow						1900	1900

Full Input Data And Results

Scenario 2: '2041 Pref PM' (FG2: '2041 Pref PM', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired

Desired Flow :

	Destination						
Origin		A	B	C	D	E	Tot.
	A	0	194	254	123	0	571
	B	214	0	0	994	0	1208
	C	423	0	0	676	0	1099
	D	9	986	431	0	0	1426
	E	0	0	0	0	0	0
	Tot.	646	1180	685	1793	0	4304

Traffic Lane Flows

Lane	Scenario 2: 2041 Pref PM
Junction: A6 / B6047 Roundabout	
1/1	571
2/1	646
3/1 (short)	589
3/2 (with short)	1208(In) 619(Out)
4/1	1180
5/1 (with short)	1099(In) 676(Out)
5/2 (short)	423
6/1	685
7/1 (with short)	1426(In) 995(Out)
7/2 (short)	431
8/1	1342
8/2	451
9/1	0
10/1	0
11/1	986
11/2	431
12/1	685
12/2	123
13/1	666
13/2	665
14/1	0
14/2	637
15/1	1632
15/2	431

Full Input Data And Results

Scenario 3: '2041 Core AM' (FG3: '2041 Core AM', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired

Desired Flow :

	Destination						
Origin		A	B	C	D	E	Tot.
	A	0	292	354	171	0	817
	B	170	0	7	880	0	1057
	C	425	0	0	559	0	984
	D	9	816	416	0	0	1241
	E	0	0	0	0	0	0
	Tot.	604	1108	777	1610	0	4099

Traffic Lane Flows

Lane	Scenario 3: 2041 Core AM
Junction: A6 / B6047 Roundabout	
1/1	817
2/1	604
3/1 (short)	523
3/2 (with short)	1057(In) 534(Out)
4/1	1108
5/1 (with short)	984(In) 559(Out)
5/2 (short)	425
6/1	777
7/1 (with short)	1241(In) 825(Out)
7/2 (short)	416
8/1	1171
8/2	439
9/1	0
10/1	0
11/1	816
11/2	416
12/1	770
12/2	171
13/1	612
13/2	609
14/1	0
14/2	595
15/1	1420
15/2	416

Junction: A6 / B6047 Roundabout								
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 (Melton Road)	3.50	0.00	Y	Arm 4 Left	27.50	35.7 %	1927	1927
				Arm 12 Ahead	Inf	64.3 %		
2/1	Infinite Saturation Flow						Inf	Inf
3/1 (A6 E)	3.75	0.00	Y	Arm 6 Left	45.00	1.3 %	1989	1989
				Arm 13 Ahead	Inf	98.7 %		
3/2 (A6 E)	3.75	0.00	N	Arm 13 Ahead	Inf	100.0 %	2130	2130
4/1	Infinite Saturation Flow						Inf	Inf
5/1 (B6047)	3.50	0.00	Y	Arm 8 Left	27.50	100.0 %	1863	1863
				Arm 14 Ahead	Inf	0.0 %		
5/2 (B6047)	3.50	0.00	N	Arm 14 Ahead	Inf	100.0 %	2105	2105
6/1	Infinite Saturation Flow						Inf	Inf
7/1 (A6 W)	3.65	0.00	Y	Arm 9 Left	32.70	0.0 %	1980	1980
				Arm 15 Ahead	Inf	100.0 %		
7/2 (A6 W)	3.65	0.00	N	Arm 15 Ahead	Inf	100.0 %	2120	2120
8/1	Infinite Saturation Flow						Inf	Inf
8/2	Infinite Saturation Flow						Inf	Inf
9/1 (Service Area Lane 1)	Infinite Saturation Flow						Inf	Inf
10/1	This lane uses a directly entered Saturation Flow						1900	1900
11/1	This lane uses a directly entered Saturation Flow						1900	1900
11/2	This lane uses a directly entered Saturation Flow						1900	1900
12/1	This lane uses a directly entered Saturation Flow						1900	1900
12/2	This lane uses a directly entered Saturation Flow						1900	1900
13/1	This lane uses a directly entered Saturation Flow						1900	1900
13/2	This lane uses a directly entered Saturation Flow						1900	1900
14/1	This lane uses a directly entered Saturation Flow						1900	1900
14/2	This lane uses a directly entered Saturation Flow						1900	1900
15/1	This lane uses a directly entered Saturation Flow						1900	1900
15/2	This lane uses a directly entered Saturation Flow						1900	1900

Full Input Data And Results

Scenario 4: '2041 Core PM' (FG4: '2041 Core PM', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired

Desired Flow :

	Destination						
Origin		A	B	C	D	E	Tot.
	A	0	168	220	107	0	495
	B	203	0	0	941	0	1144
	C	402	0	0	642	0	1044
	D	9	1022	447	0	0	1478
	E	0	0	0	0	0	0
	Tot.	614	1190	667	1690	0	4161

Traffic Lane Flows

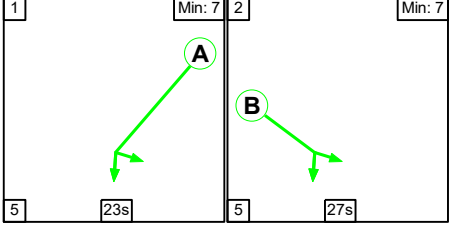
Lane	Scenario 4: 2041 Core PM
Junction: A6 / B6047 Roundabout	
1/1	495
2/1	614
3/1 (short)	566
3/2 (with short)	1144(In) 578(Out)
4/1	1190
5/1 (with short)	1044(In) 642(Out)
5/2 (short)	402
6/1	667
7/1 (with short)	1478(In) 1031(Out)
7/2 (short)	447
8/1	1268
8/2	422
9/1	0
10/1	0
11/1	1022
11/2	447
12/1	667
12/2	107
13/1	626
13/2	625
14/1	0
14/2	605
15/1	1636
15/2	447

Junction: A6 / B6047 Roundabout								
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 (Melton Road)	3.50	0.00	Y	Arm 4 Left	27.50	33.9 %	1929	1929
				Arm 12 Ahead	Inf	66.1 %		
2/1	Infinite Saturation Flow						Inf	Inf
3/1 (A6 E)	3.75	0.00	Y	Arm 6 Left	45.00	0.0 %	1990	1990
				Arm 13 Ahead	Inf	100.0 %		
3/2 (A6 E)	3.75	0.00	N	Arm 13 Ahead	Inf	100.0 %	2130	2130
4/1	Infinite Saturation Flow						Inf	Inf
5/1 (B6047)	3.50	0.00	Y	Arm 8 Left	27.50	100.0 %	1863	1863
				Arm 14 Ahead	Inf	0.0 %		
5/2 (B6047)	3.50	0.00	N	Arm 14 Ahead	Inf	100.0 %	2105	2105
6/1	Infinite Saturation Flow						Inf	Inf
7/1 (A6 W)	3.65	0.00	Y	Arm 9 Left	32.70	0.0 %	1980	1980
				Arm 15 Ahead	Inf	100.0 %		
7/2 (A6 W)	3.65	0.00	N	Arm 15 Ahead	Inf	100.0 %	2120	2120
8/1	Infinite Saturation Flow						Inf	Inf
8/2	Infinite Saturation Flow						Inf	Inf
9/1 (Service Area Lane 1)	Infinite Saturation Flow						Inf	Inf
10/1	This lane uses a directly entered Saturation Flow						1900	1900
11/1	This lane uses a directly entered Saturation Flow						1900	1900
11/2	This lane uses a directly entered Saturation Flow						1900	1900
12/1	This lane uses a directly entered Saturation Flow						1900	1900
12/2	This lane uses a directly entered Saturation Flow						1900	1900
13/1	This lane uses a directly entered Saturation Flow						1900	1900
13/2	This lane uses a directly entered Saturation Flow						1900	1900
14/1	This lane uses a directly entered Saturation Flow						1900	1900
14/2	This lane uses a directly entered Saturation Flow						1900	1900
15/1	This lane uses a directly entered Saturation Flow						1900	1900
15/2	This lane uses a directly entered Saturation Flow						1900	1900

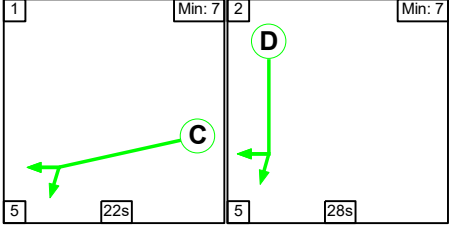
Scenario 1: '2041 Pref AM' (FG1: '2041 Pref AM', Plan 1: 'Network Control Plan 1')

Stage Sequence Diagram

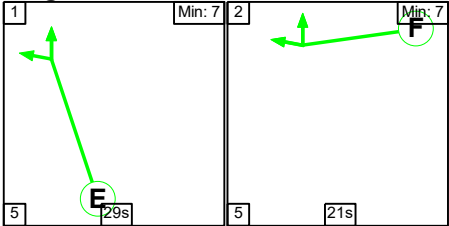
Stage Stream: 1



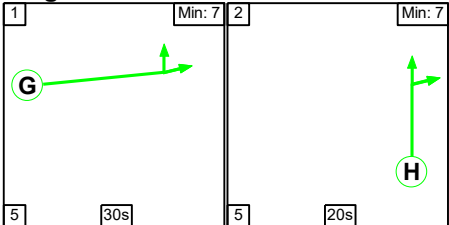
Stage Stream: 2



Stage Stream: 3



Stage Stream: 4



Stage Timings

Stage Stream: 1

Stage	1	2
Duration	23	27
Change Point	0	28

Stage Stream: 2

Stage	1	2
Duration	22	28
Change Point	47	14

Stage Stream: 3

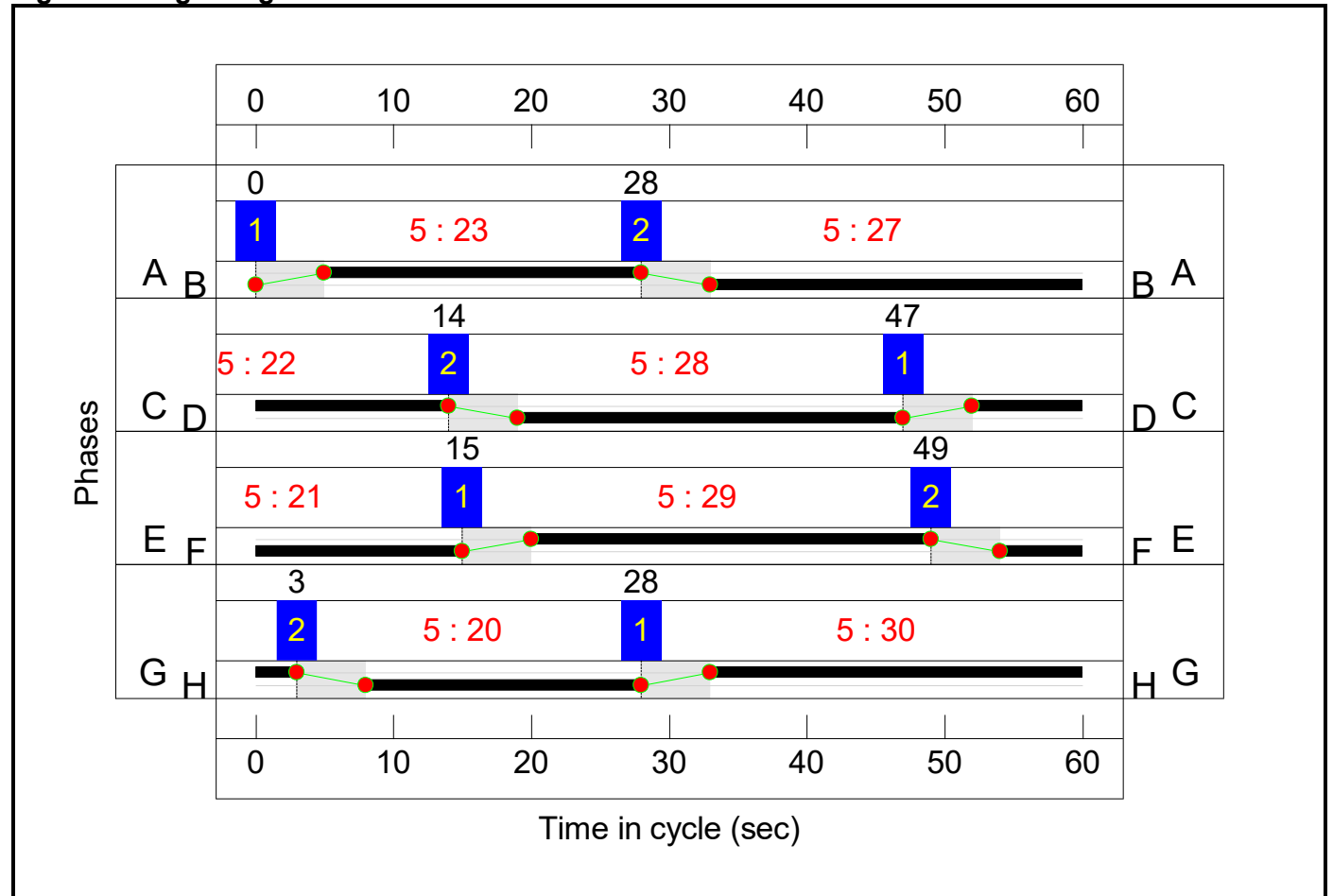
Stage	1	2
Duration	29	21
Change Point	15	49

Full Input Data And Results

Stage Stream: 4

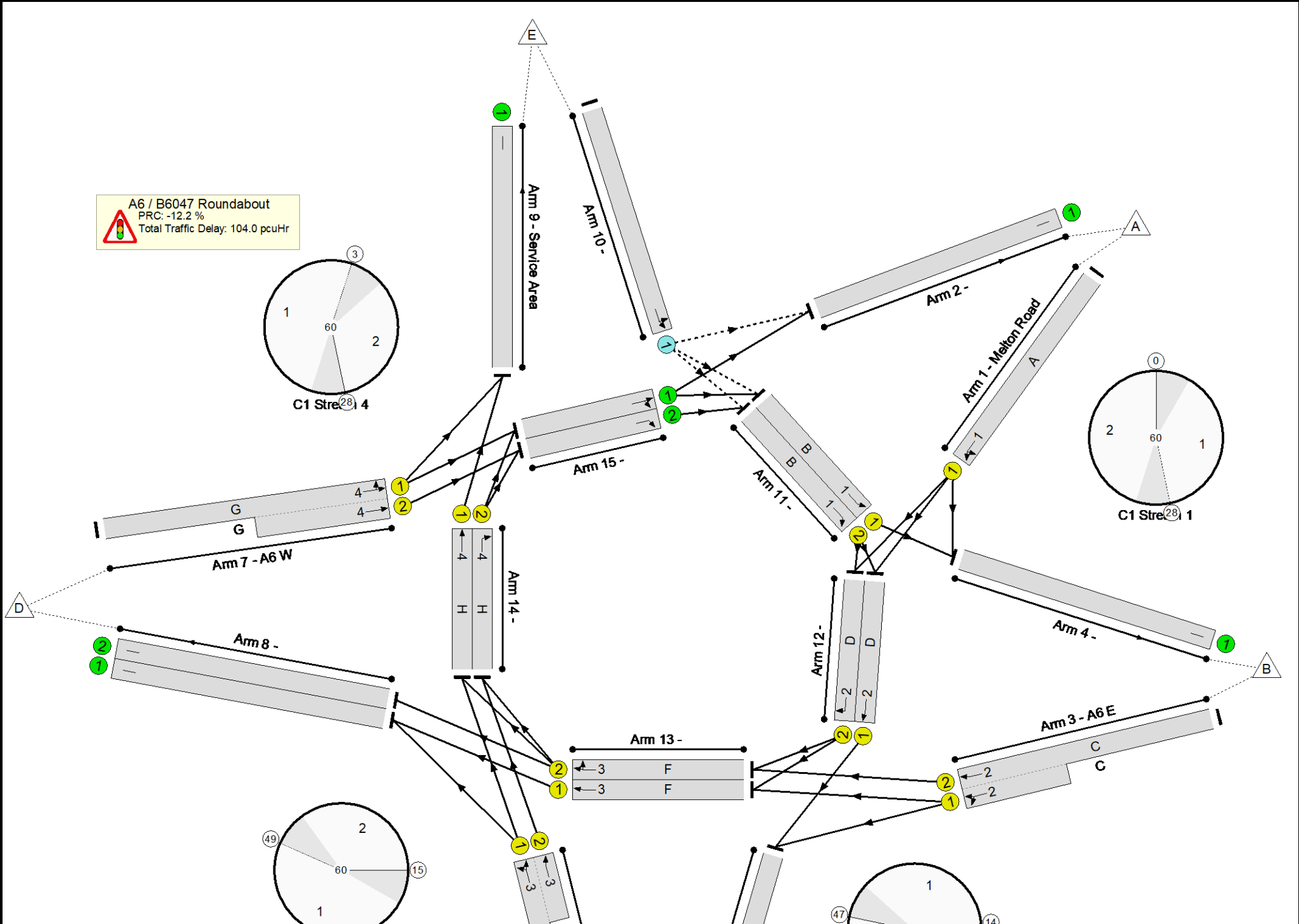
Stage	1	2
Duration	30	20
Change Point	28	3

Signal Timings Diagram



Full Input Data And Results

Network Layout Diagram



Full Input Data And Results

Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network	-	-	N/A	-	-		-	-	-	-	-	-	100.9%
A6 / B6047 Roundabout	-	-	N/A	-	-		-	-	-	-	-	-	100.9%
1/1	Melton Road Left Ahead	U	1	N/A	A		1	23	-	774	1927	771	100.4%
2/1		U	N/A	N/A	-		-	-	-	653	Inf	Inf	0.0%
3/2+3/1	A6 E Left Ahead	U	2	N/A	C		1	22	-	1044	2130:1989	628+635	82.7 : 82.7%
4/1		U	N/A	N/A	-		-	-	-	1167	Inf	Inf	0.0%
5/1+5/2	B6047 Left Ahead	U	3	N/A	E		1	29	-	1102	1863:2105	671+510	93.3 : 93.3%
6/1		U	N/A	N/A	-		-	-	-	796	Inf	Inf	0.0%
7/1+7/2	A6 W Left Ahead	U	4	N/A	G		1	30	-	1354	1980:2120	892+450	100.9 : 100.9%
8/1		U	N/A	N/A	-		-	-	-	1226	Inf	Inf	0.0%
8/2		U	N/A	N/A	-		-	-	-	432	Inf	Inf	0.0%
9/1	Service Area	U	N/A	N/A	-		-	-	-	0	Inf	Inf	0.0%
10/1	Left Ahead	O	N/A	N/A	-		-	-	-	0	1900	674	0.0%
11/1	Ahead	U	1	N/A	B		1	27	-	890	1900	887	99.4%
11/2	Right	U	1	N/A	B		1	27	-	454	1900	887	50.7%
12/1	Ahead	U	2	N/A	D		1	28	-	789	1900	918	85.3%
12/2	Right	U	2	N/A	D		1	28	-	162	1900	918	17.6%
13/1	Ahead	U	3	N/A	F		1	21	-	600	1900	697	86.1%
13/2	Ahead Right	U	3	N/A	F		1	21	-	599	1900	697	85.9%
14/1	Ahead	U	4	N/A	H		1	20	-	0	1900	665	0.0%
14/2	Right	U	4	N/A	H		1	20	-	643	1900	665	96.7%
15/1	Ahead Right	U	N/A	N/A	-		-	-	-	1543	1900	1900	80.8%
15/2	Right	U	N/A	N/A	-		-	-	-	454	1900	1900	23.7%

Full Input Data And Results

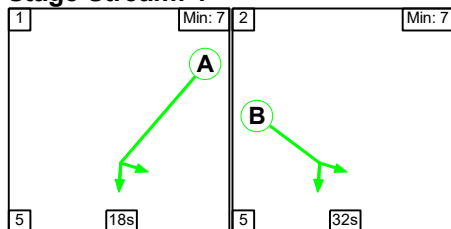
All Input Data and Results													
Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network	-	-	0	0	0	25.7	78.3	0.0	104.0	-	-	-	-
A6 / B6047 Roundabout	-	-	0	0	0	25.7	78.3	0.0	104.0	-	-	-	-
1/1	774	771	-	-	-	4.0	14.7	-	18.7	86.9	13.0	14.7	27.7
2/1	653	653	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
3/2+3/1	1044	1044	-	-	-	4.4	2.3	-	6.8	23.3	7.3	2.3	9.6
4/1	1158	1158	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/1+5/2	1102	1102	-	-	-	3.6	6.0	-	9.6	31.5	12.7	6.0	18.7
6/1	790	790	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
7/1+7/2	1354	1341	-	-	-	4.8	21.8	-	26.6	70.7	18.3	21.8	40.1
8/1	1226	1226	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
8/2	432	432	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
9/1	0	0	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
10/1	0	0	0	0	0	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
11/1	882	882	-	-	-	1.3	13.7	-	15.0	61.2	14.3	13.7	28.0
11/2	450	450	-	-	-	0.5	0.5	-	1.1	8.4	1.1	0.5	1.6
12/1	783	783	-	-	-	1.4	2.8	-	4.2	19.4	7.2	2.8	9.9
12/2	161	161	-	-	-	0.2	0.1	-	0.3	6.6	1.8	0.1	1.9
13/1	600	600	-	-	-	1.2	2.9	-	4.1	24.7	9.3	2.9	12.2
13/2	599	599	-	-	-	1.2	2.9	-	4.1	24.8	9.3	2.9	12.1
14/1	0	0	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
14/2	643	643	-	-	-	2.9	8.3	-	11.2	63.0	7.3	8.3	15.6
15/1	1535	1535	-	-	-	0.1	2.1	-	2.1	5.0	10.1	2.1	12.1
15/2	450	450	-	-	-	0.0	0.2	-	0.2	1.4	4.3	0.2	4.4
C1 Stream: 1 PRC for Signalled Lanes (%): -11.6 C1 Stream: 2 PRC for Signalled Lanes (%): 5.5 C1 Stream: 3 PRC for Signalled Lanes (%): -3.6 C1 Stream: 4 PRC for Signalled Lanes (%): -12.2 PRC Over All Lanes (%): -12.2 Total Delay for Signalled Lanes (pcuHr): 34.74 Total Delay for Signalled Lanes (pcuHr): 11.29 Total Delay for Signalled Lanes (pcuHr): 17.86 Total Delay for Signalled Lanes (pcuHr): 37.82 Total Delay Over All Lanes(pcuHr): 104.03 Cycle Time (s): 60 Cycle Time (s): 60 Cycle Time (s): 60 Cycle Time (s): 60													

Full Input Data And Results

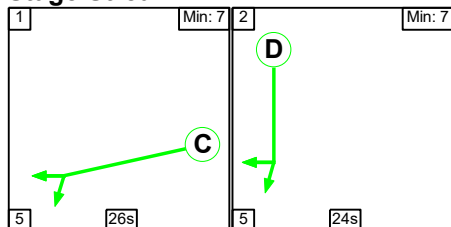
Scenario 2: '2041 Pref PM' (FG2: '2041 Pref PM', Plan 1: 'Network Control Plan 1')

Stage Sequence Diagram

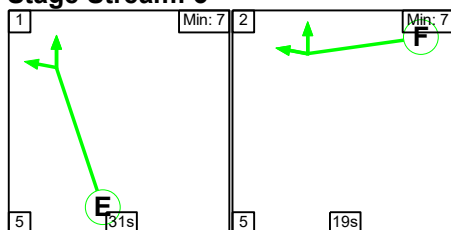
Stage Stream: 1



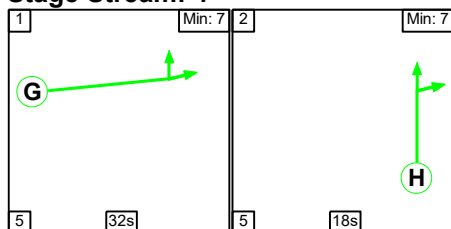
Stage Stream: 2



Stage Stream: 3



Stage Stream: 4



Stage Timings

Stage Stream: 1

Stage	1	2
Duration	18	32
Change Point	0	23

Stage Stream: 2

Stage	1	2
Duration	26	24
Change Point	37	8

Stage Stream: 3

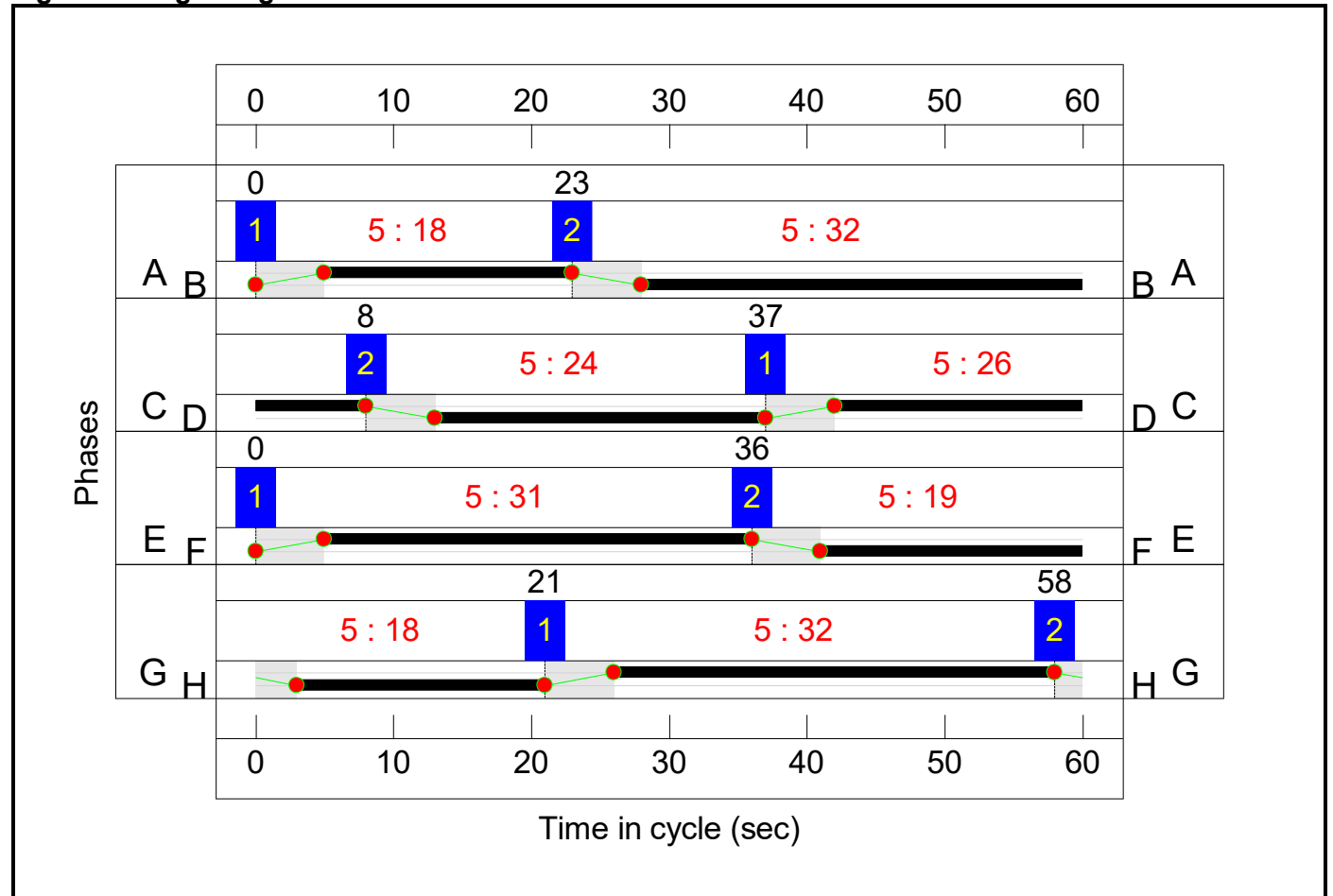
Stage	1	2
Duration	31	19
Change Point	0	36

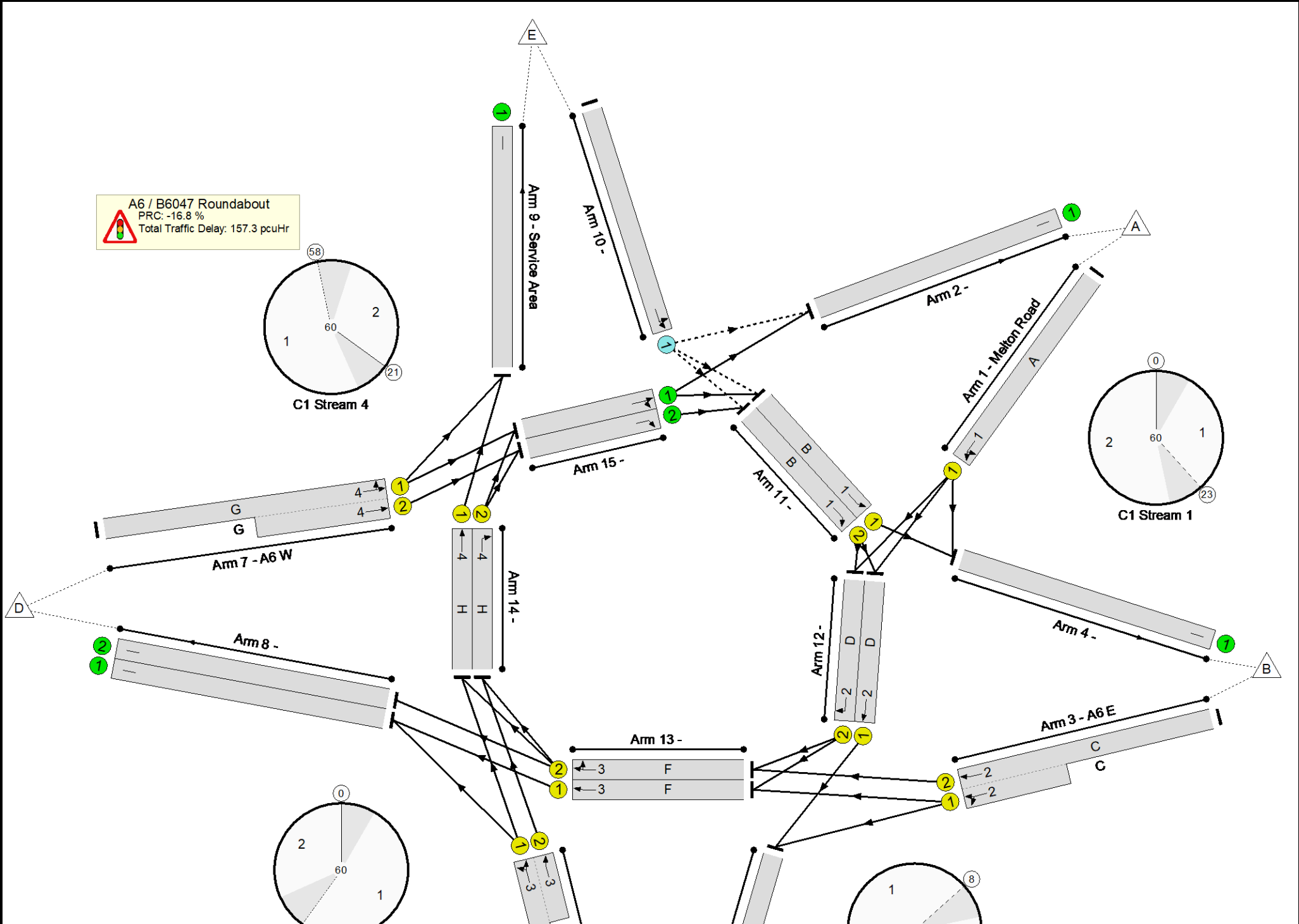
Full Input Data And Results

Stage Stream: 4

Stage	1	2
Duration	32	18
Change Point	21	58

Signal Timings Diagram





Full Input Data And Results

Network Results

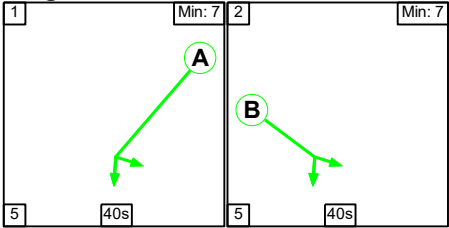
Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network	-	-	N/A	-	-		-	-	-	-	-	-	105.2%
A6 / B6047 Roundabout	-	-	N/A	-	-		-	-	-	-	-	-	105.2%
1/1	Melton Road Left Ahead	U	1	N/A	A		1	18	-	571	1929	611	93.5%
2/1		U	N/A	N/A	-		-	-	-	646	Inf	Inf	0.0%
3/2+3/1	A6 E Left Ahead	U	2	N/A	C		1	26	-	1208	2130:1990	709+674	87.4 : 87.4%
4/1		U	N/A	N/A	-		-	-	-	1180	Inf	Inf	0.0%
5/1+5/2	B6047 Left Ahead	U	3	N/A	E		1	31	-	1099	1863:2105	740+463	91.4 : 91.4%
6/1		U	N/A	N/A	-		-	-	-	685	Inf	Inf	0.0%
7/1+7/2	A6 W Left Ahead	U	4	N/A	G		1	32	-	1426	1980:2120	952+413	104.5 : 104.5%
8/1		U	N/A	N/A	-		-	-	-	1342	Inf	Inf	0.0%
8/2		U	N/A	N/A	-		-	-	-	451	Inf	Inf	0.0%
9/1	Service Area	U	N/A	N/A	-		-	-	-	0	Inf	Inf	0.0%
10/1	Left Ahead	O	N/A	N/A	-		-	-	-	0	1900	614	0.0%
11/1	Ahead	U	1	N/A	B		1	32	-	986	1900	1045	90.3%
11/2	Right	U	1	N/A	B		1	32	-	431	1900	1045	39.5%
12/1	Ahead	U	2	N/A	D		1	24	-	685	1900	792	84.2%
12/2	Right	U	2	N/A	D		1	24	-	123	1900	792	15.5%
13/1	Ahead	U	3	N/A	F		1	19	-	666	1900	633	105.2%
13/2	Ahead Right	U	3	N/A	F		1	19	-	665	1900	633	105.0%
14/1	Ahead	U	4	N/A	H		1	18	-	0	1900	602	0.0%
14/2	Right	U	4	N/A	H		1	18	-	637	1900	602	104.1%
15/1	Ahead Right	U	N/A	N/A	-		-	-	-	1632	1900	1900	81.8%
15/2	Right	U	N/A	N/A	-		-	-	-	431	1900	1900	21.7%

Full Input Data And Results

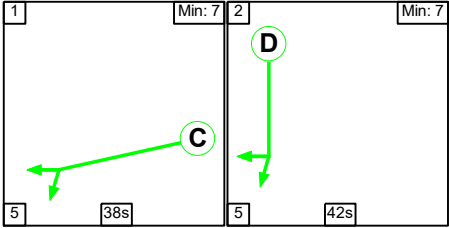
Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network	-	-	0	0	0	27.9	129.4	0.0	157.3	-	-	-	-
A6 / B6047 Roundabout	-	-	0	0	0	27.9	129.4	0.0	157.3	-	-	-	-
1/1	571	571	-	-	-	3.2	5.6	-	8.8	55.2	9.2	5.6	14.8
2/1	610	610	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
3/2+3/1	1208	1208	-	-	-	4.3	3.3	-	7.6	22.8	8.3	3.3	11.7
4/1	1138	1138	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/1+5/2	1099	1099	-	-	-	3.3	4.9	-	8.1	26.6	12.7	4.9	17.6
6/1	667	667	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
7/1+7/2	1426	1365	-	-	-	5.7	39.5	-	45.2	114.2	22.3	39.5	61.8
8/1	1309	1309	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
8/2	430	430	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
9/1	0	0	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
10/1	0	0	0	0	0	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
11/1	944	944	-	-	-	0.1	4.3	-	4.4	16.9	0.6	4.3	4.9
11/2	413	413	-	-	-	0.1	0.3	-	0.4	3.3	0.1	0.3	0.4
12/1	667	667	-	-	-	1.5	2.6	-	4.1	21.9	7.0	2.6	9.5
12/2	123	123	-	-	-	0.1	0.1	-	0.1	4.3	0.9	0.1	1.0
13/1	666	633	-	-	-	3.0	23.4	-	26.5	143.0	11.7	23.4	35.1
13/2	665	633	-	-	-	2.8	23.0	-	25.8	139.8	11.6	23.0	34.7
14/1	0	0	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
14/2	626	602	-	-	-	3.8	20.0	-	23.9	137.2	10.8	20.0	30.9
15/1	1554	1554	-	-	-	0.1	2.2	-	2.3	5.3	10.1	2.2	12.3
15/2	413	413	-	-	-	0.0	0.1	-	0.2	1.4	3.5	0.1	3.6
C1 Stream: 1 PRC for Signalled Lanes (%): -3.9 C1 Stream: 2 PRC for Signalled Lanes (%): 3.0 C1 Stream: 3 PRC for Signalled Lanes (%): -16.8 C1 Stream: 4 PRC for Signalled Lanes (%): -16.1 PRC Over All Lanes (%): -16.8 Total Delay for Signalled Lanes (pcuHr): 13.55 Total Delay for Signalled Lanes (pcuHr): 11.84 Total Delay for Signalled Lanes (pcuHr): 60.41 Total Delay for Signalled Lanes (pcuHr): 69.09 Total Delay Over All Lanes(pcuHr): 157.33 Cycle Time (s): 60 Cycle Time (s): 60 Cycle Time (s): 60 Cycle Time (s): 60													

Stage Sequence Diagram

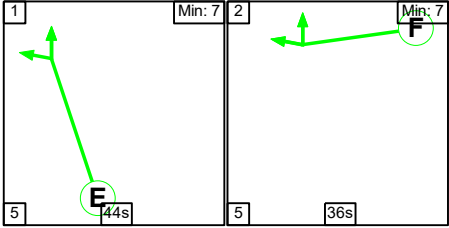
Stage Stream: 1



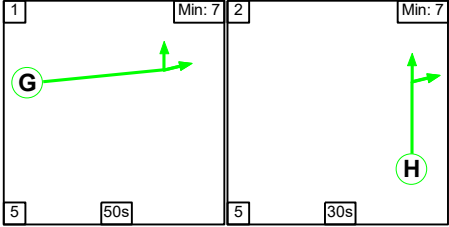
Stage Stream: 2



Stage Stream: 3



Stage Stream: 4



Stage Timings

Stage Stream: 1

Stage	1	2
Duration	40	40
Change Point	0	45

Stage Stream: 2

Stage	1	2
Duration	38	42
Change Point	63	16

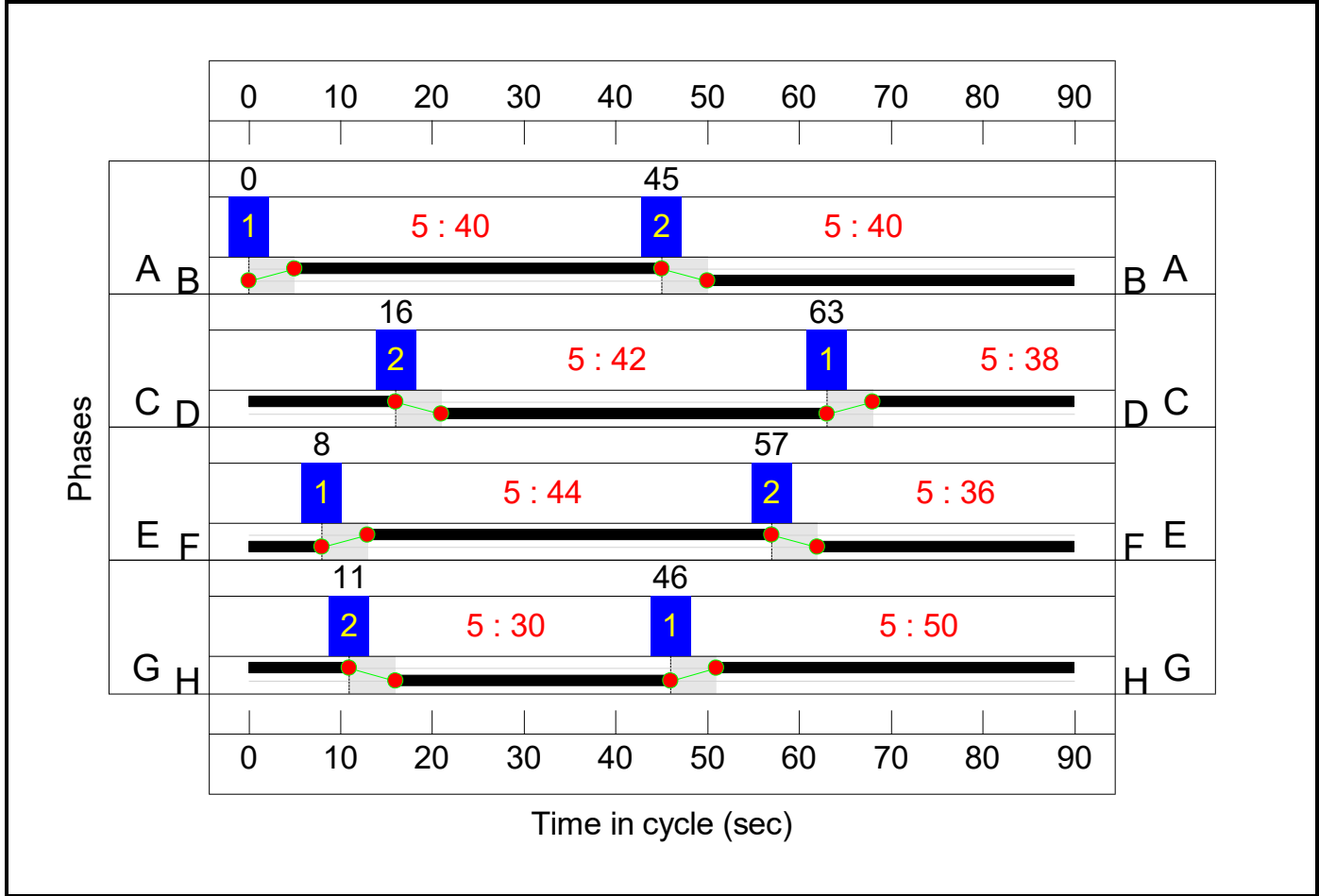
Stage Stream: 3

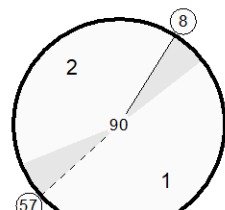
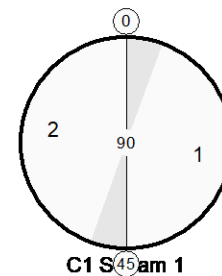
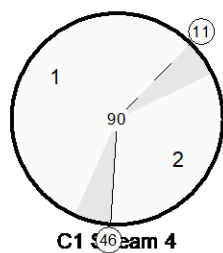
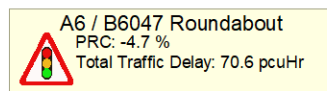
Stage	1	2
Duration	44	36
Change Point	8	57

Full Input Data And Results
Stage Stream: 4

Stage	1	2
Duration	50	30
Change Point	46	11

Signal Timings Diagram





Full Input Data And Results

Network Results

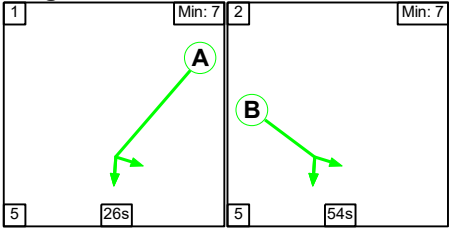
Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network	-	-	N/A	-	-		-	-	-	-	-	-	94.3%
A6 / B6047 Roundabout	-	-	N/A	-	-		-	-	-	-	-	-	94.3%
1/1	Melton Road Left Ahead	U	1	N/A	A		1	40	-	817	1927	878	93.1%
2/1		U	N/A	N/A	-		-	-	-	604	Inf	Inf	0.0%
3/2+3/1	A6 E Left Ahead	U	2	N/A	C		1	38	-	1057	2130:1989	609+596	87.7 : 87.7%
4/1		U	N/A	N/A	-		-	-	-	1108	Inf	Inf	0.0%
5/1+5/2	B6047 Left Ahead	U	3	N/A	E		1	44	-	984	1863:2105	633+481	88.3 : 88.3%
6/1		U	N/A	N/A	-		-	-	-	777	Inf	Inf	0.0%
7/1+7/2	A6 W Left Ahead	U	4	N/A	G		1	50	-	1241	1980:2120	894+451	92.3 : 92.3%
8/1		U	N/A	N/A	-		-	-	-	1171	Inf	Inf	0.0%
8/2		U	N/A	N/A	-		-	-	-	439	Inf	Inf	0.0%
9/1	Service Area	U	N/A	N/A	-		-	-	-	0	Inf	Inf	0.0%
10/1	Left Ahead	O	N/A	N/A	-		-	-	-	0	1900	673	0.0%
11/1	Ahead	U	1	N/A	B		1	40	-	816	1900	866	94.3%
11/2	Right	U	1	N/A	B		1	40	-	416	1900	866	48.1%
12/1	Ahead	U	2	N/A	D		1	42	-	770	1900	908	84.8%
12/2	Right	U	2	N/A	D		1	42	-	171	1900	908	18.8%
13/1	Ahead	U	3	N/A	F		1	36	-	612	1900	781	78.3%
13/2	Ahead Right	U	3	N/A	F		1	36	-	609	1900	781	78.0%
14/1	Ahead	U	4	N/A	H		1	30	-	0	1900	654	0.0%
14/2	Right	U	4	N/A	H		1	30	-	595	1900	654	90.9%
15/1	Ahead Right	U	N/A	N/A	-		-	-	-	1420	1900	1900	74.7%
15/2	Right	U	N/A	N/A	-		-	-	-	416	1900	1900	21.9%

Full Input Data And Results

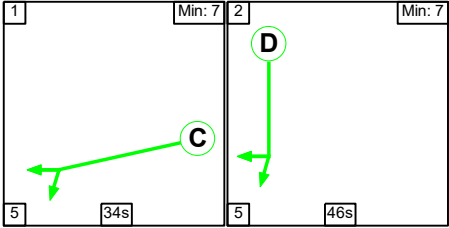
Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network	-	-	0	0	0	33.2	37.4	0.0	70.6	-	-	-	-
A6 / B6047 Roundabout	-	-	0	0	0	33.2	37.4	0.0	70.6	-	-	-	-
1/1	817	817	-	-	-	5.3	5.7	-	10.9	48.1	19.3	5.7	25.0
2/1	604	604	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
3/2+3/1	1057	1057	-	-	-	5.9	3.4	-	9.3	31.6	14.5	3.4	17.9
4/1	1108	1108	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/1+5/2	984	984	-	-	-	4.8	3.6	-	8.4	30.6	17.2	3.6	20.8
6/1	777	777	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
7/1+7/2	1241	1241	-	-	-	5.0	5.4	-	10.4	30.3	21.8	5.4	27.3
8/1	1171	1171	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
8/2	439	439	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
9/1	0	0	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
10/1	0	0	0	0	0	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
11/1	816	816	-	-	-	2.1	6.5	-	8.6	38.0	17.4	6.5	24.0
11/2	416	416	-	-	-	0.8	0.5	-	1.3	10.9	1.6	0.5	2.1
12/1	770	770	-	-	-	2.7	2.7	-	5.4	25.1	12.7	2.7	15.4
12/2	171	171	-	-	-	0.2	0.1	-	0.3	6.0	2.0	0.1	2.1
13/1	612	612	-	-	-	1.7	1.8	-	3.5	20.6	6.9	1.8	8.7
13/2	609	609	-	-	-	1.6	1.7	-	3.3	19.6	8.0	1.7	9.8
14/1	0	0	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
14/2	595	595	-	-	-	3.2	4.4	-	7.6	45.7	13.5	4.4	17.8
15/1	1420	1420	-	-	-	0.0	1.5	-	1.5	3.8	10.1	1.5	11.5
15/2	416	416	-	-	-	0.0	0.1	-	0.2	1.4	4.4	0.1	4.5
C1 Stream: 1 PRC for Signalled Lanes (%): -4.7 C1 Stream: 2 PRC for Signalled Lanes (%): 2.6 C1 Stream: 3 PRC for Signalled Lanes (%): 1.9 C1 Stream: 4 PRC for Signalled Lanes (%): -2.6 PRC Over All Lanes (%): -4.7 Total Delay for Signalled Lanes (pcuHr): 20.78 Total Delay for Signalled Lanes (pcuHr): 14.93 Total Delay for Signalled Lanes (pcuHr): 15.17 Total Delay for Signalled Lanes (pcuHr): 18.00 Total Delay Over All Lanes(pcuHr): 70.55 Cycle Time (s): 90 Cycle Time (s): 90 Cycle Time (s): 90 Cycle Time (s): 90													

Stage Sequence Diagram

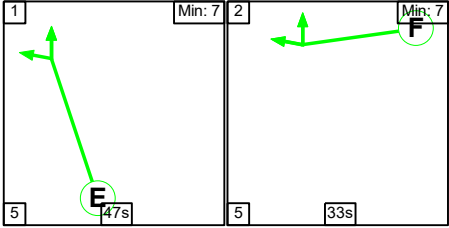
Stage Stream: 1



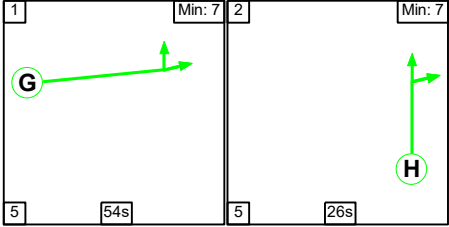
Stage Stream: 2



Stage Stream: 3



Stage Stream: 4



Stage Timings

Stage Stream: 1

Stage	1	2
Duration	26	54
Change Point	0	31

Stage Stream: 2

Stage	1	2
Duration	34	46
Change Point	45	84

Stage Stream: 3

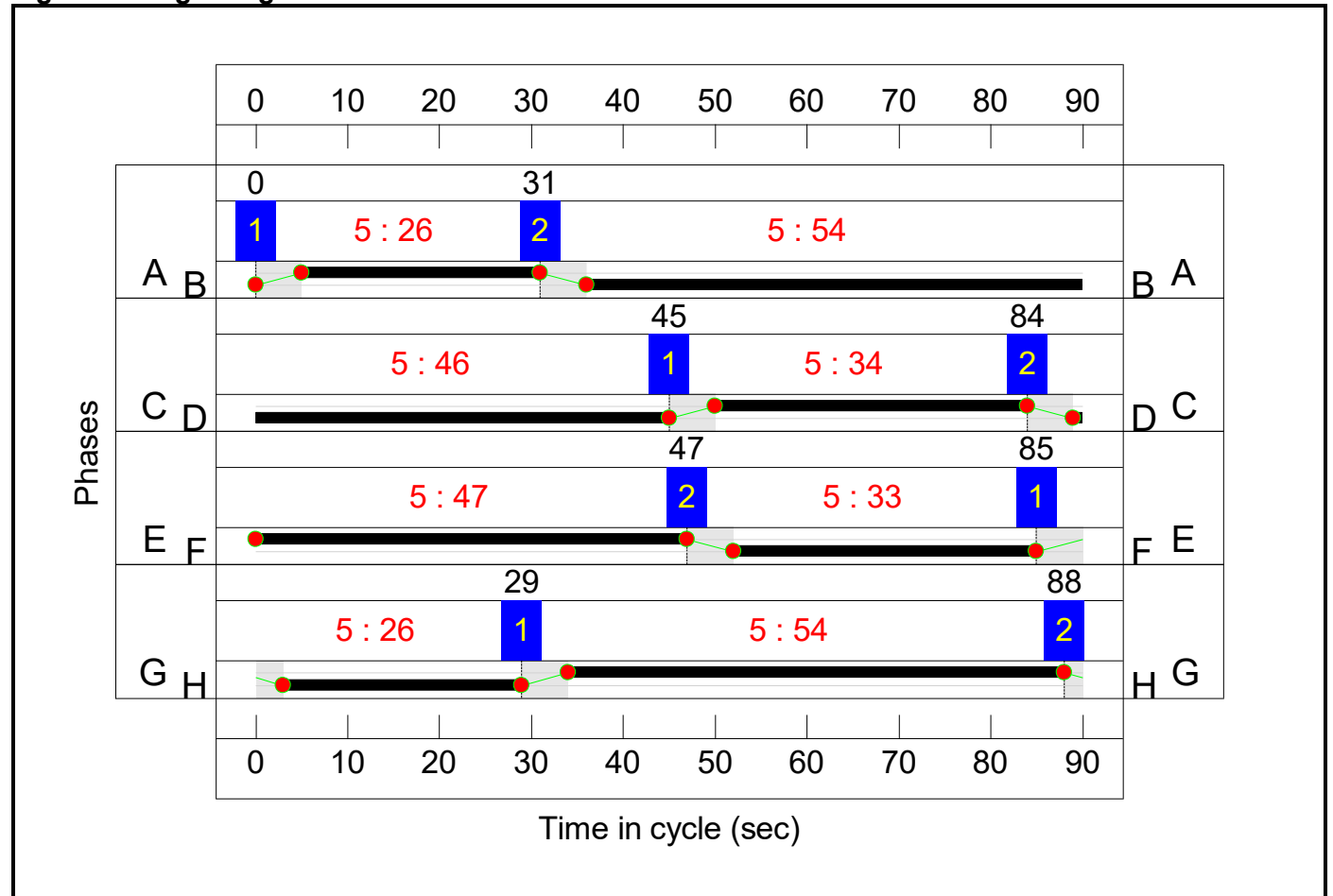
Stage	1	2
Duration	47	33
Change Point	85	47

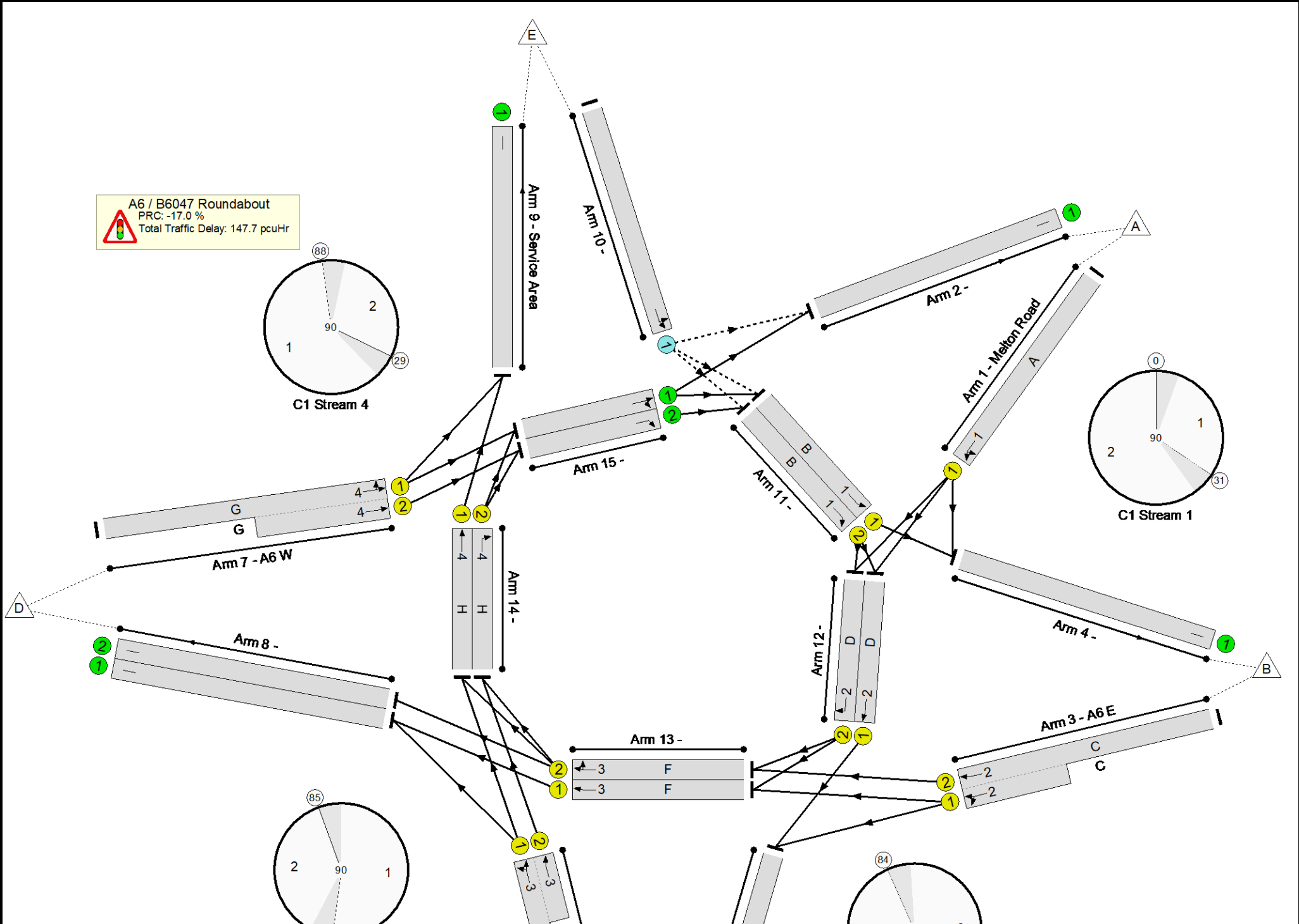
Full Input Data And Results

Stage Stream: 4

Stage	1	2
Duration	54	26
Change Point	29	88

Signal Timings Diagram





Full Input Data And Results

Network Results

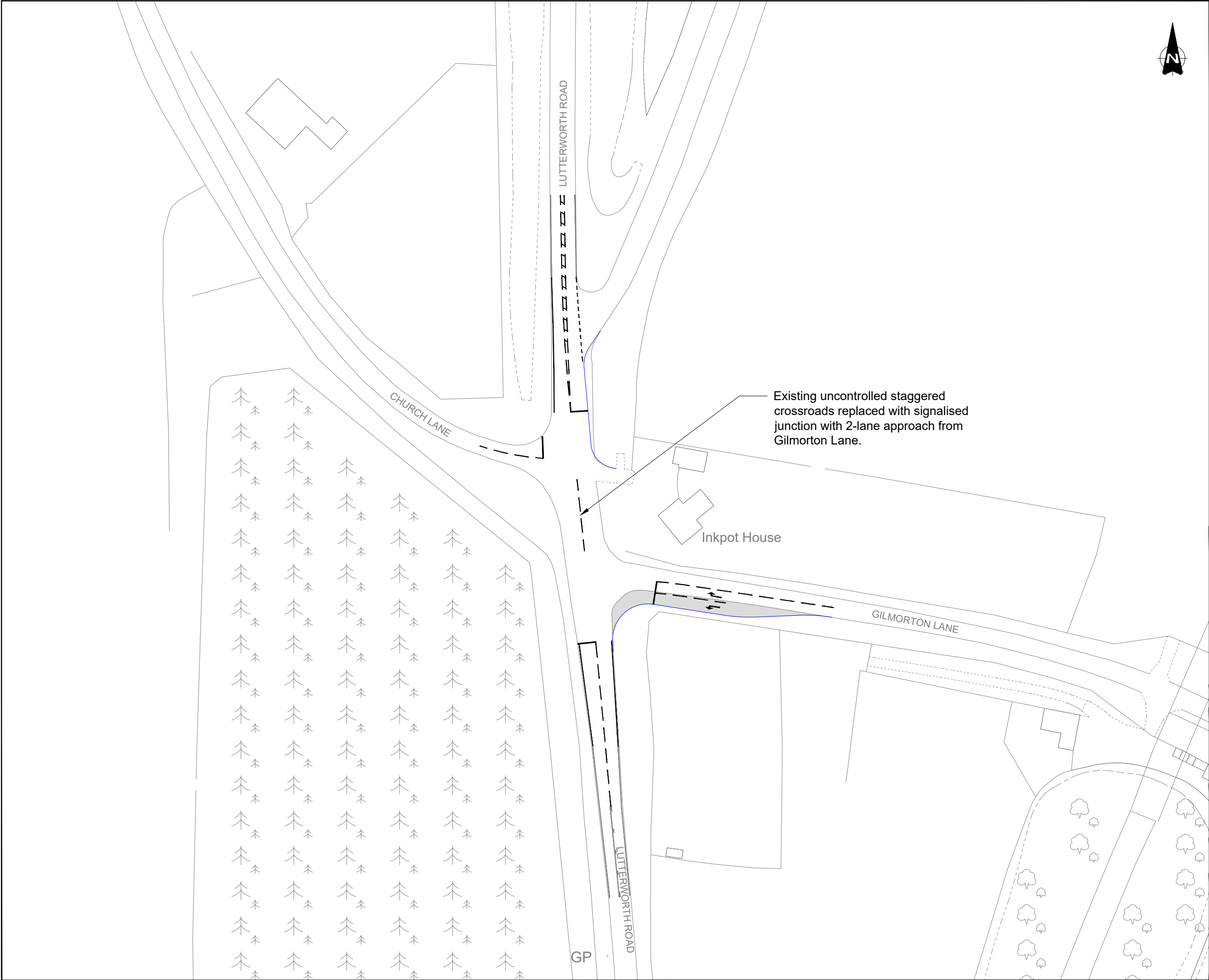
Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network	-	-	N/A	-	-		-	-	-	-	-	-	105.3%
A6 / B6047 Roundabout	-	-	N/A	-	-		-	-	-	-	-	-	105.3%
1/1	Melton Road Left Ahead	U	1	N/A	A		1	26	-	495	1929	579	85.5%
2/1		U	N/A	N/A	-		-	-	-	614	Inf	Inf	0.0%
3/2+3/1	A6 E Left Ahead	U	2	N/A	C		1	34	-	1144	2130:1990	563+551	102.7 : 102.7%
4/1		U	N/A	N/A	-		-	-	-	1190	Inf	Inf	0.0%
5/1+5/2	B6047 Left Ahead	U	3	N/A	E		1	47	-	1044	1863:2105	706+442	90.9 : 90.9%
6/1		U	N/A	N/A	-		-	-	-	667	Inf	Inf	0.0%
7/1+7/2	A6 W Left Ahead	U	4	N/A	G		1	54	-	1478	1980:2120	979+425	105.3 : 105.3%
8/1		U	N/A	N/A	-		-	-	-	1268	Inf	Inf	0.0%
8/2		U	N/A	N/A	-		-	-	-	422	Inf	Inf	0.0%
9/1	Service Area	U	N/A	N/A	-		-	-	-	0	Inf	Inf	0.0%
10/1	Left Ahead	O	N/A	N/A	-		-	-	-	0	1900	606	0.0%
11/1	Ahead	U	1	N/A	B		1	54	-	1022	1900	1161	83.6%
11/2	Right	U	1	N/A	B		1	54	-	447	1900	1161	36.6%
12/1	Ahead	U	2	N/A	D		1	46	-	667	1900	992	65.0%
12/2	Right	U	2	N/A	D		1	46	-	107	1900	992	10.8%
13/1	Ahead	U	3	N/A	F		1	33	-	626	1900	718	85.1%
13/2	Ahead Right	U	3	N/A	F		1	33	-	625	1900	718	84.9%
14/1	Ahead	U	4	N/A	H		1	26	-	0	1900	570	0.0%
14/2	Right	U	4	N/A	H		1	26	-	605	1900	570	105.2%
15/1	Ahead Right	U	N/A	N/A	-		-	-	-	1636	1900	1900	81.5%
15/2	Right	U	N/A	N/A	-		-	-	-	447	1900	1900	22.3%

Full Input Data And Results

All Input Data and Results													
Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network	-	-	0	0	0	35.9	111.9	0.0	147.7	-	-	-	-
A6 / B6047 Roundabout	-	-	0	0	0	35.9	111.9	0.0	147.7	-	-	-	-
1/1	495	495	-	-	-	4.1	2.8	-	6.9	49.8	11.6	2.8	14.3
2/1	579	579	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
3/2+3/1	1144	1114	-	-	-	8.7	26.1	-	34.9	109.7	22.5	26.1	48.6
4/1	1139	1139	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/1+5/2	1044	1044	-	-	-	4.9	4.6	-	9.5	32.6	19.8	4.6	24.4
6/1	645	645	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
7/1+7/2	1478	1404	-	-	-	8.4	45.2	-	53.6	130.6	35.9	45.2	81.1
8/1	1253	1253	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
8/2	412	412	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
9/1	0	0	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
10/1	0	0	0	0	0	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
11/1	971	971	-	-	-	0.1	2.5	-	2.6	9.6	0.6	2.5	3.1
11/2	425	425	-	-	-	0.0	0.3	-	0.3	2.8	0.1	0.3	0.4
12/1	645	645	-	-	-	1.7	0.9	-	2.6	14.4	8.6	0.9	9.5
12/2	107	107	-	-	-	0.0	0.1	-	0.1	2.0	0.0	0.1	0.1
13/1	611	611	-	-	-	1.1	2.7	-	3.8	22.2	12.2	2.7	14.9
13/2	610	610	-	-	-	0.9	2.7	-	3.6	21.3	11.8	2.7	14.5
14/1	0	0	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
14/2	600	570	-	-	-	5.9	21.7	-	27.6	165.8	15.7	21.7	37.4
15/1	1549	1549	-	-	-	0.0	2.2	-	2.2	5.2	10.1	2.2	12.3
15/2	425	425	-	-	-	0.0	0.1	-	0.2	1.3	3.5	0.1	3.6
C1 Stream: 1 PRC for Signalled Lanes (%): 5.2 C1 Stream: 2 PRC for Signalled Lanes (%): -14.1 C1 Stream: 3 PRC for Signalled Lanes (%): -1.0 C1 Stream: 4 PRC for Signalled Lanes (%): -17.0 PRC Over All Lanes (%): -17.0 Total Delay for Signalled Lanes (pcuHr): 9.78 Total Delay for Signalled Lanes (pcuHr): 37.52 Total Delay for Signalled Lanes (pcuHr): 16.83 Total Delay for Signalled Lanes (pcuHr): 81.23 Total Delay Over All Lanes(pcuHr): 147.73 Cycle Time (s): 90 Cycle Time (s): 90 Cycle Time (s): 90 Cycle Time (s): 90													



Appendix B: Preliminary scheme designs



NOTES

- 1. Do not scale from this drawing.
- 2. All dimensions are in metres unless otherwise stated.

KEY

- Proposed Kerbline
- Proposed New Carriageway
- Existing Road Markings
- Proposed Road Markings

P01	05.08.26	PRELIMINARY ISSUE	JM	CC	CC
Rev.	Date	Revision details	Drawn	Checked	Approved

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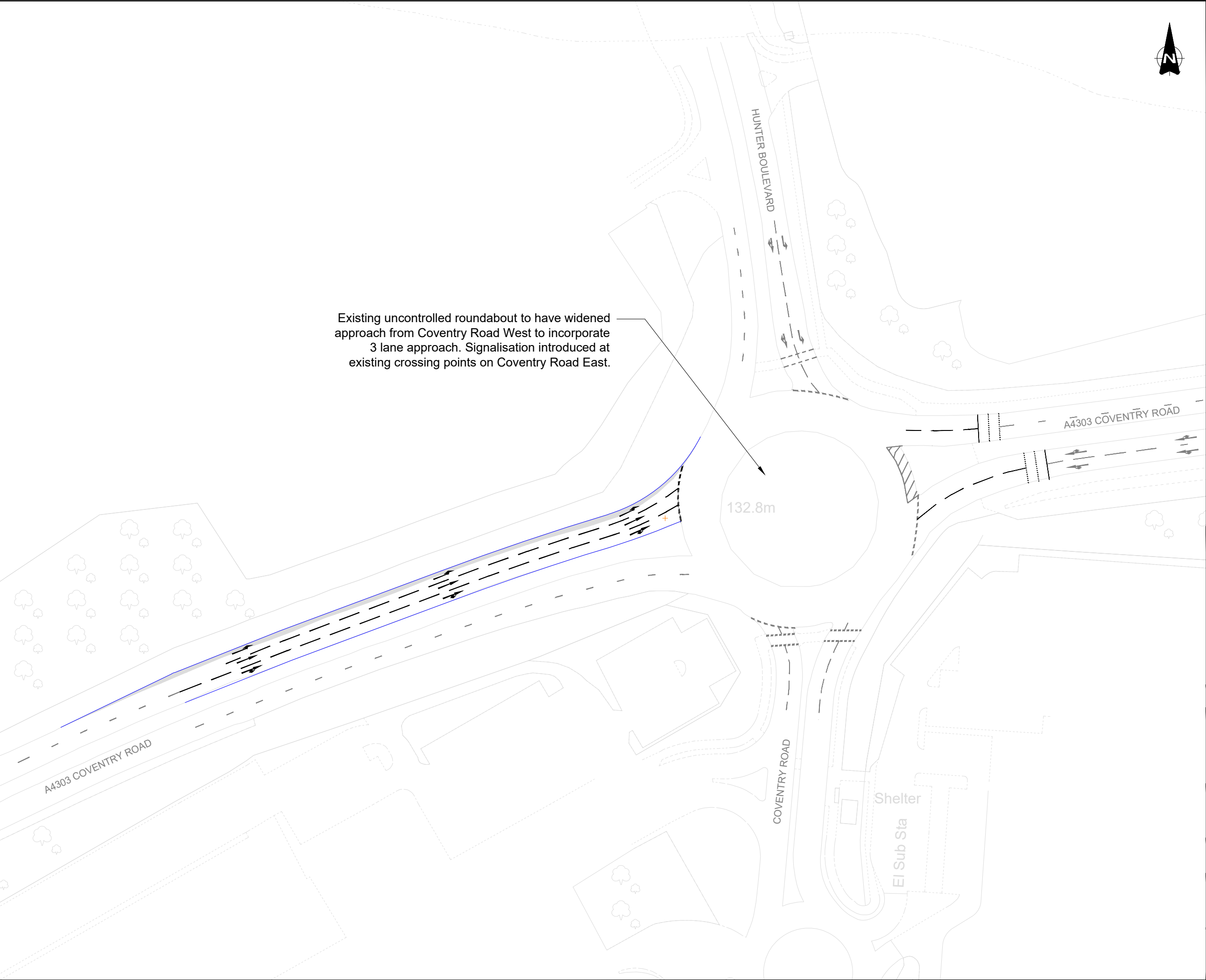
Client

HARBOROUGH LOCAL PLAN

Title

PROPOSED MITIGATION
LUTTERWORTH ROAD / CHURCH LANE
/ GILMORTON LANE

Drawn	Checked	Approved	Original dtp. size
JM	CC	CC	A3
Date	Scale	Drawing Status	Rev.
05.08.26	1:1000	PRELIMINARY	P01
Drawing Number	26B01-SYS-HGN-J1-DR-CH-01		



- NOTES**
1. Do not scale from this drawing.
 2. All dimensions are in metres unless otherwise stated.
- KEY**
- Proposed Kerbline
 - Proposed New Carriageway
 - Existing Road Markings
 - Proposed Road Markings

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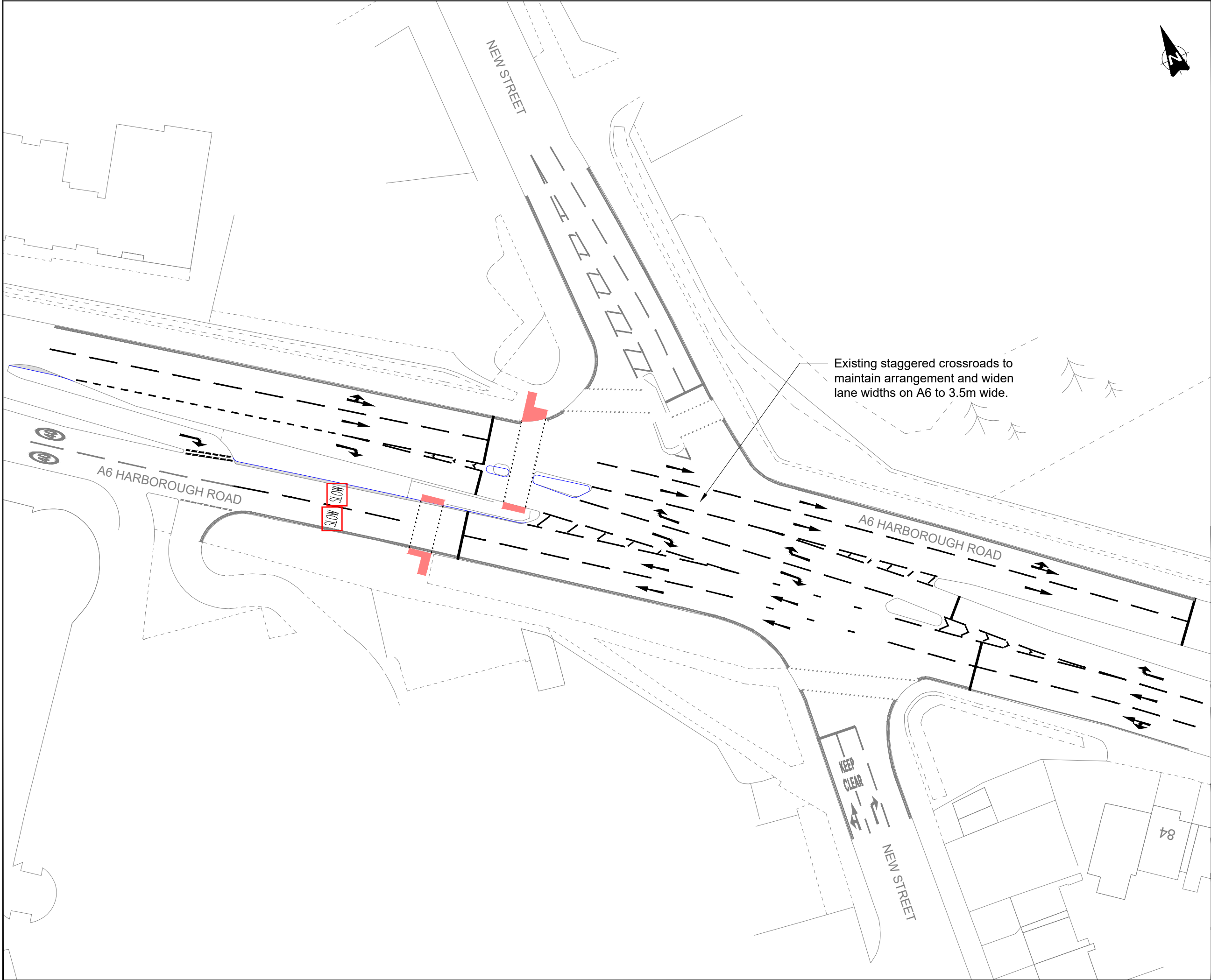
Project

HARBROUGH LOCAL PLAN

Title

PROPOSED MITIGATION
COVENTRY ROAD - HUNTER BOULEVARD

Drawn	Checked	Approved	Original dtp. size
JB	CC	CC	A3
Date	Scale	Drawing Status	
05.08.26	1:1000	PRELIMINARY	
Drawing Number	Rev.		
26B01-SYS-HGN-J3-DR-CH-01	P01		



NOTES

1. Do not scale from this drawing.
2. All dimensions are in metres unless otherwise stated.

KEY

- Proposed Kerbline
- Proposed New Carriageway
- Proposed Tactiles in Red
- Existing Road Markings
- Proposed Road Markings

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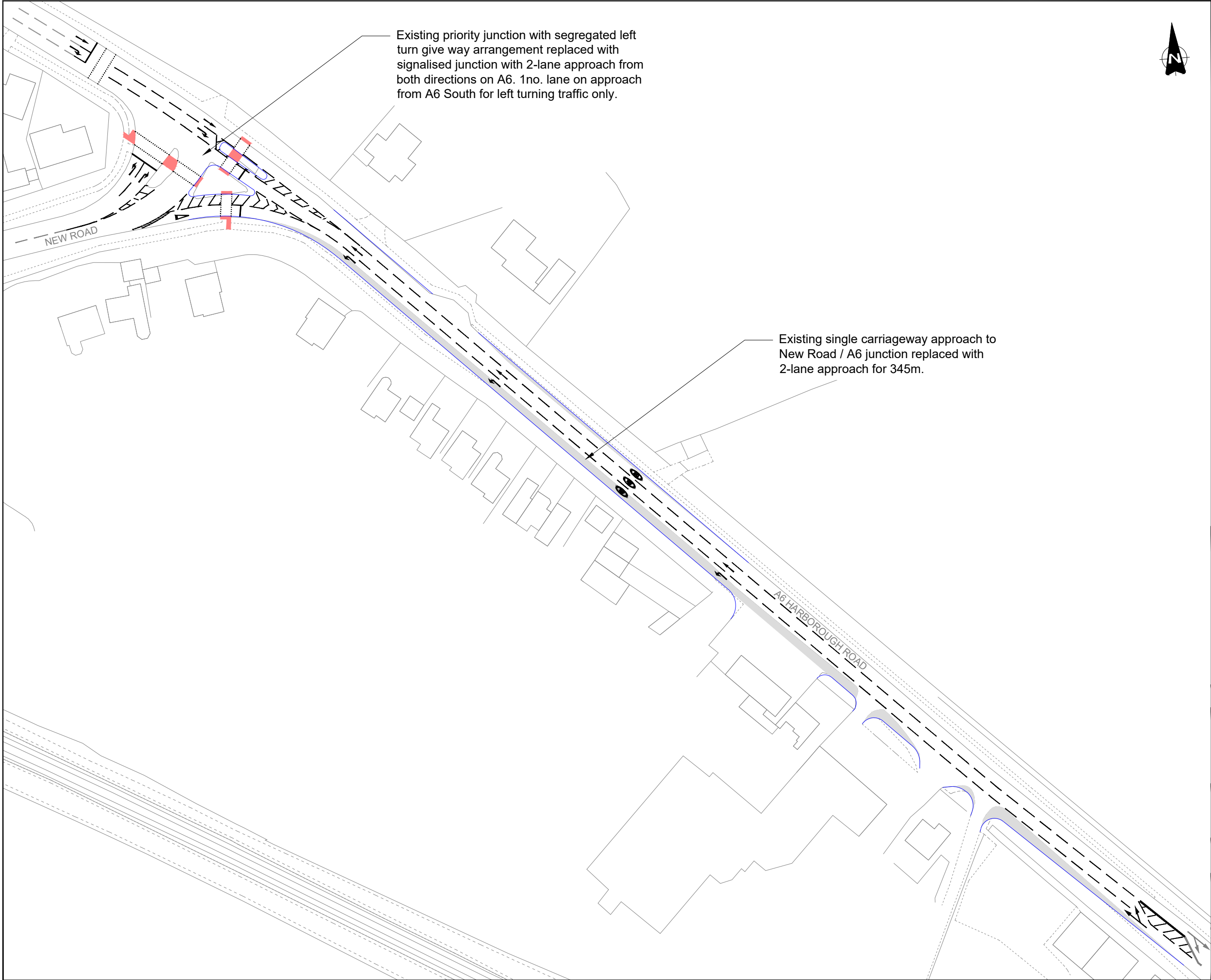
Project

HARBOROUGH LOCAL PLAN

Title

PROPOSED MITIGATION
A6 HARBOROUGH ROAD / NEW STREET

Drawn	Checked	Approved	Original dtp. size
JM	CC	CC	A3
Date	Scale	Drawing Status	
05.08.26	1:500	PRELIMINARY	
Drawing Number	Rev.		
26B01-SYS-HGN-J15-DR-CH-01	P01		



NOTES

1. Do not scale from this drawing.
2. All dimensions are in metres unless otherwise stated.

KEY

- Proposed Kerblines
- Proposed New Carriageway
- Proposed Tactiles in Red
- Existing Road Markings
- Proposed Road Markings

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Rev.	Date	Revision details	Drawn	Checked	Approved

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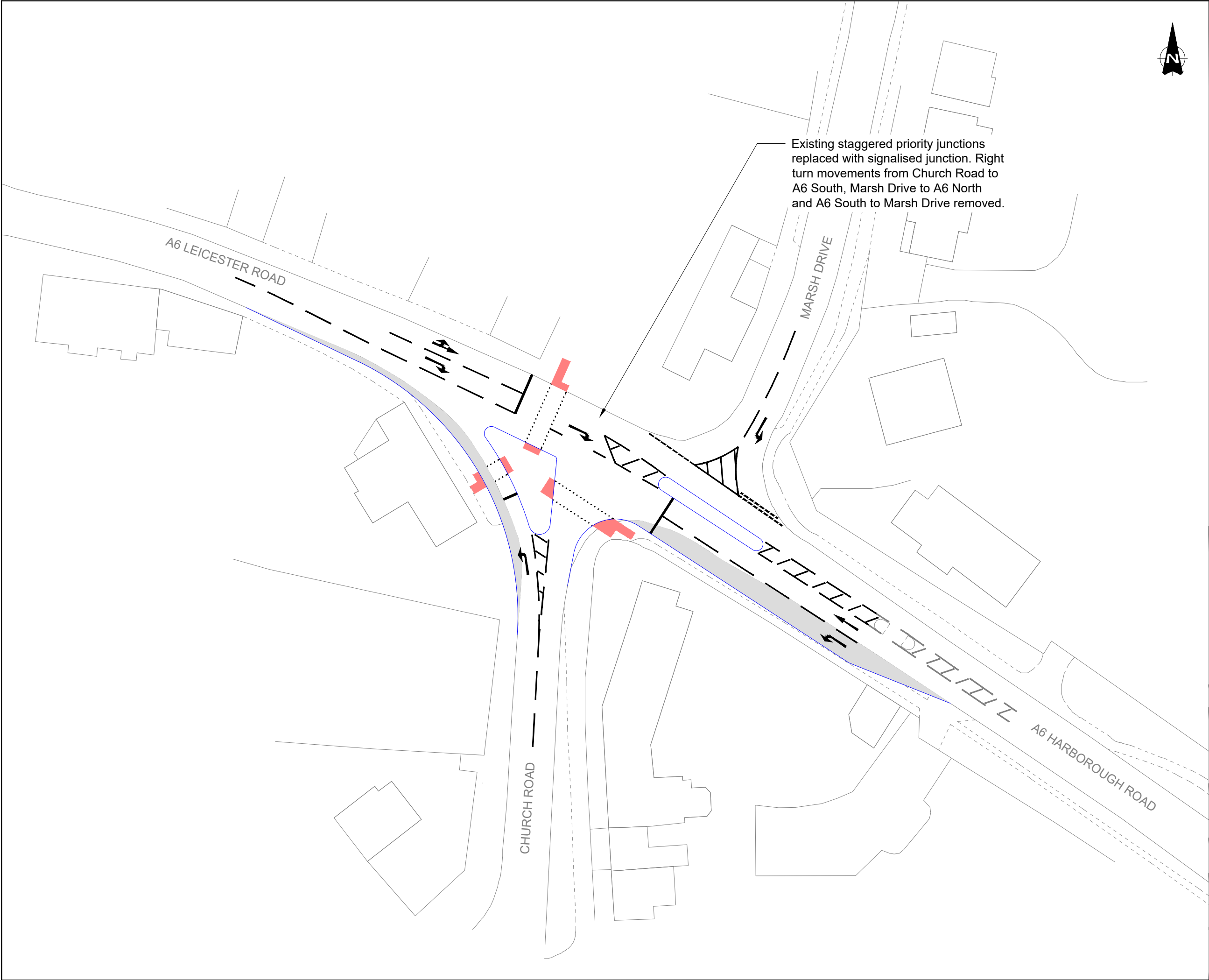
HARBOROUGH LOCAL PLAN

Title

PROPOSED MITIGATION
A6 HARBOROUGH ROAD / NEW ROAD

Drawn	Checked	Approved	Original dtp. size
JM	CC	CC	A3
Date	Scale	Drawing Status	
05.08.26	1:1000	PRELIMINARY	

Drawing Number	Rev.
26B01-SYS-HGN-J16-DR-CH-01	P01



NOTES

- 1. Do not scale from this drawing.
- 2. All dimensions are in metres unless otherwise stated.

KEY

- Proposed Kerbline
- Proposed New Carriageway
- Proposed Tactiles in Red
- Existing Road Markings
- Proposed Road Markings

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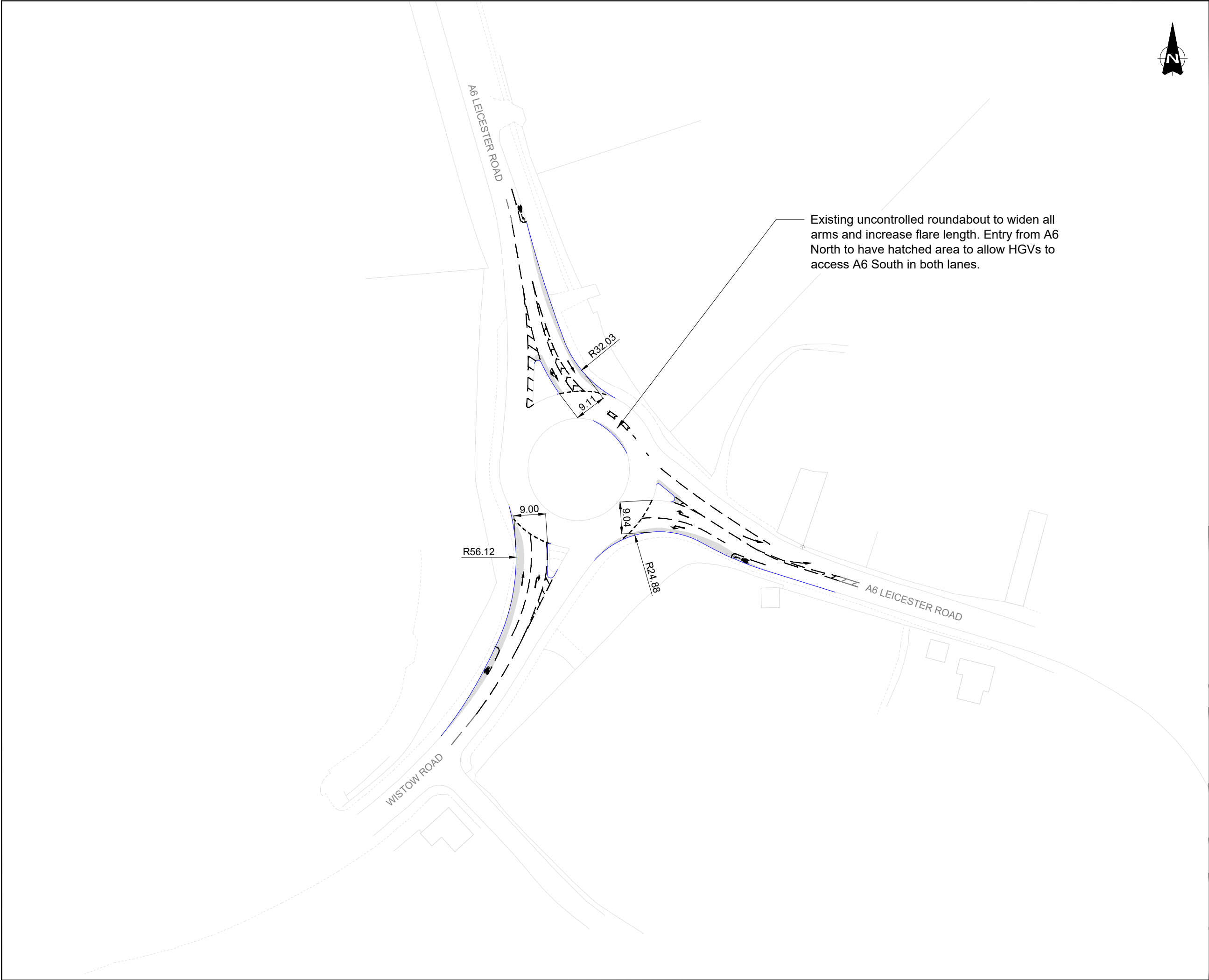


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Project
HARBOROUGH LOCAL PLAN

Title
PROPOSED MITIGATION
A6 LEICESTER ROAD / MARSH DRIVE /
CHURCH ROAD

Drawn JM	Checked CC	Approved CC	Original dtp. size A3
Date 05.08.26	Scale 1:500	Drawing Status PRELIMINARY	Rev. P01
Drawing Number 26B01-SYS-HGN-J18-DR-CH-01			



NOTES

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KEY

- Proposed Kerbline
- Proposed New Carriageway
- Existing Road Markings
- Proposed Road Markings

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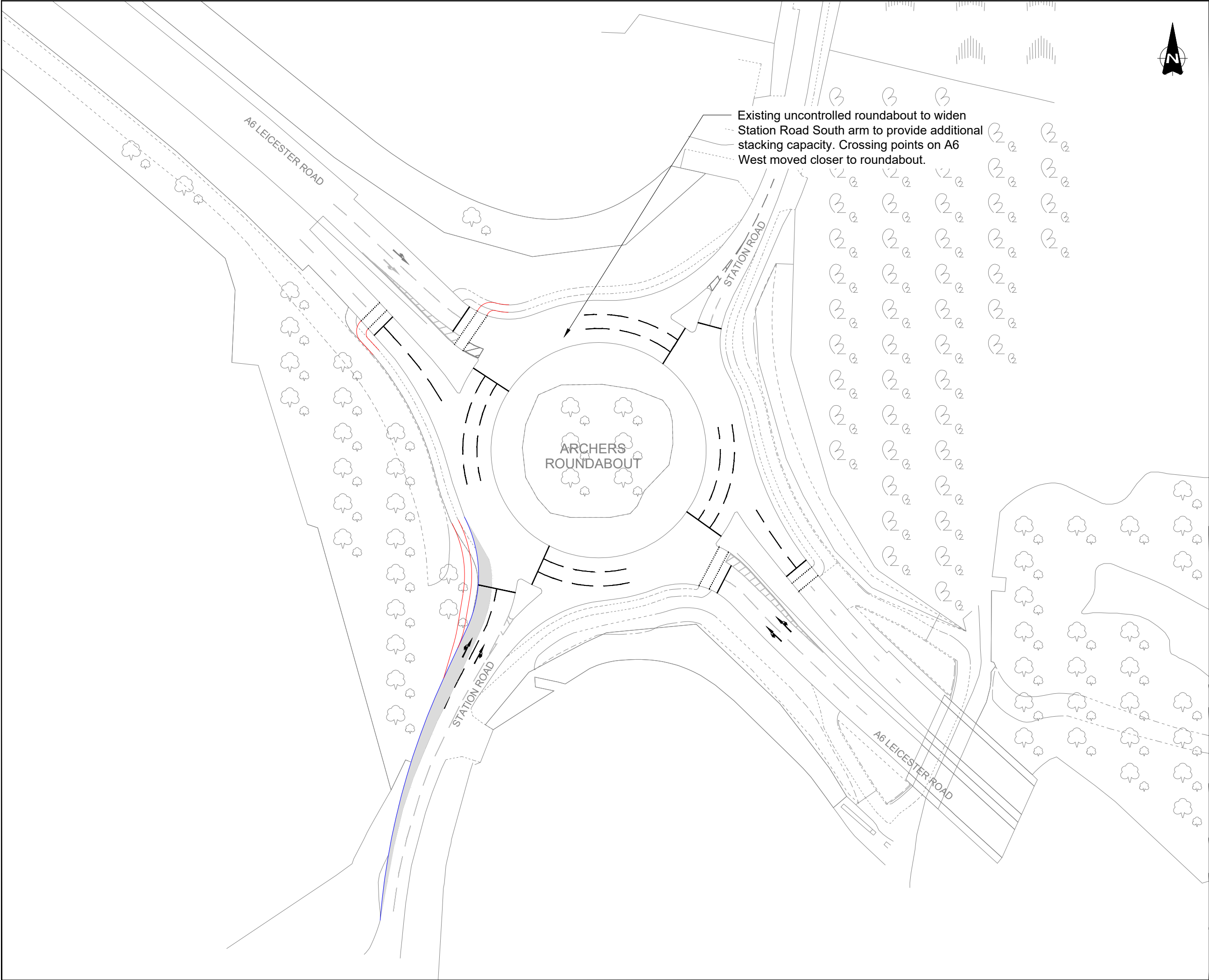
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HARBOROUGH LOCAL PLAN

Title

PROPOSED MITIGATION
A6 LEICESTER ROAD / WISTOW ROAD

Drawn	Checked	Approved	Original dtp. size
JM	CC	CC	A3
Date	Scale	Drawing Status	
05.08.26	1:1000	PRELIMINARY	
Drawing Number			Rev.
26B01-SYS-HGN-J18-DR-CH-01			P01



NOTES

- 1. Do not scale from this drawing.
- 2. All dimensions are in metres unless otherwise stated.

KEY

- Proposed Kerbline
- Proposed Edging Kerb
- Proposed New Carriageway
- Existing Road Markings
- Proposed Road Markings

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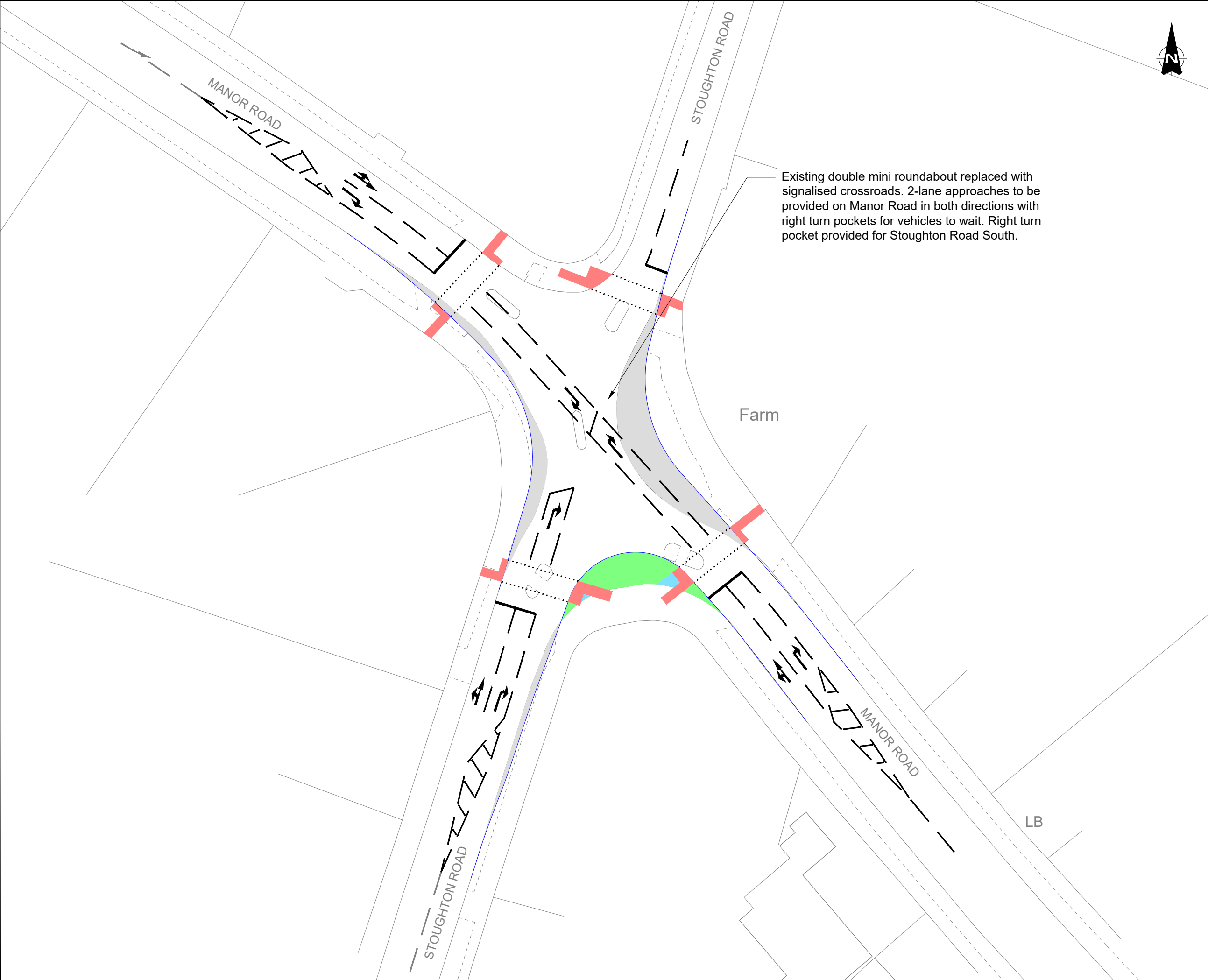
Project

HARBOROUGH LOCAL PLAN

Title

PROPOSED MITIGATION
ARCHERS ROUNDABOUT

Drawn	Checked	Approved	Original dtp. size
JB	CC	CC	A3
Date	Scale	Drawing Status	
05.08.26	1:500	PRELIMINARY	
Drawing Number	26B01-SYS-HGN-J20-DR-CH-01-P01		Rev. P01



NOTES

1. Do not scale from this drawing.
2. All dimensions are in metres unless otherwise stated.

KEY

- Proposed Kerbline
- Proposed New Carriageway
- Proposed Verge
- Proposed Footway
- Proposed Tactile Paving in Red
- Existing Road Markings
- Proposed Road Markings

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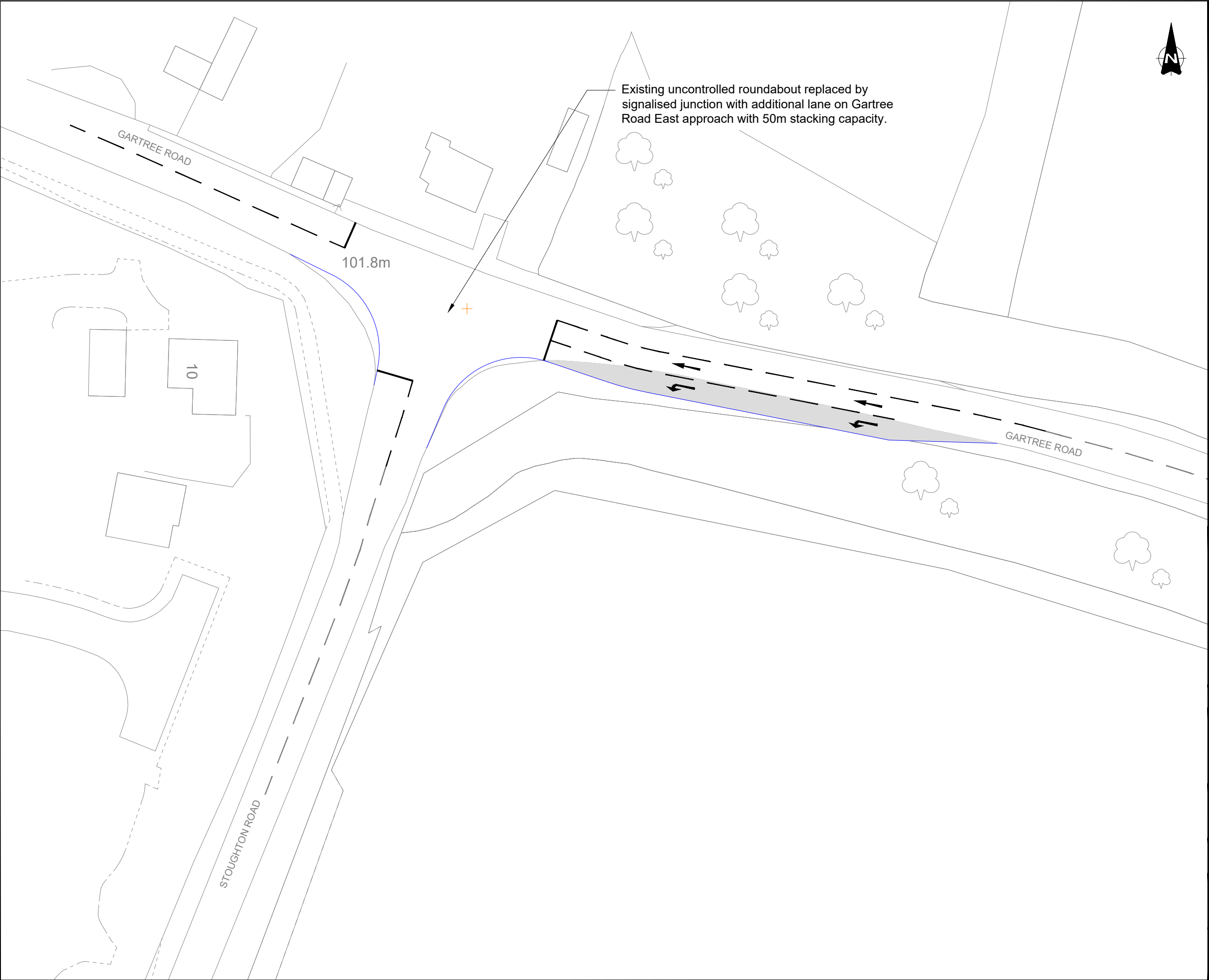
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PROPOSED MITIGATION
MANOR ROAD / STOUGHTON ROAD

Drawn JM	Checked CC	Approved CC	Original dtp. size A3
Date 05.08.26	Scale 1:500	Drawing Status PRELIMINARY	Rev. P01
Drawing Number 26B01-SYS-HGN-J24-DR-CH-01			



NOTES

- 1. Do not scale from this drawing.
- 2. All dimensions are in metres unless otherwise stated.

KEY

- Proposed Kerbline
- Proposed New Carriageway
- Existing Road Markings
- Proposed Road Markings

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Rev.	Date	Revision details	Drawn	Checked	Approved

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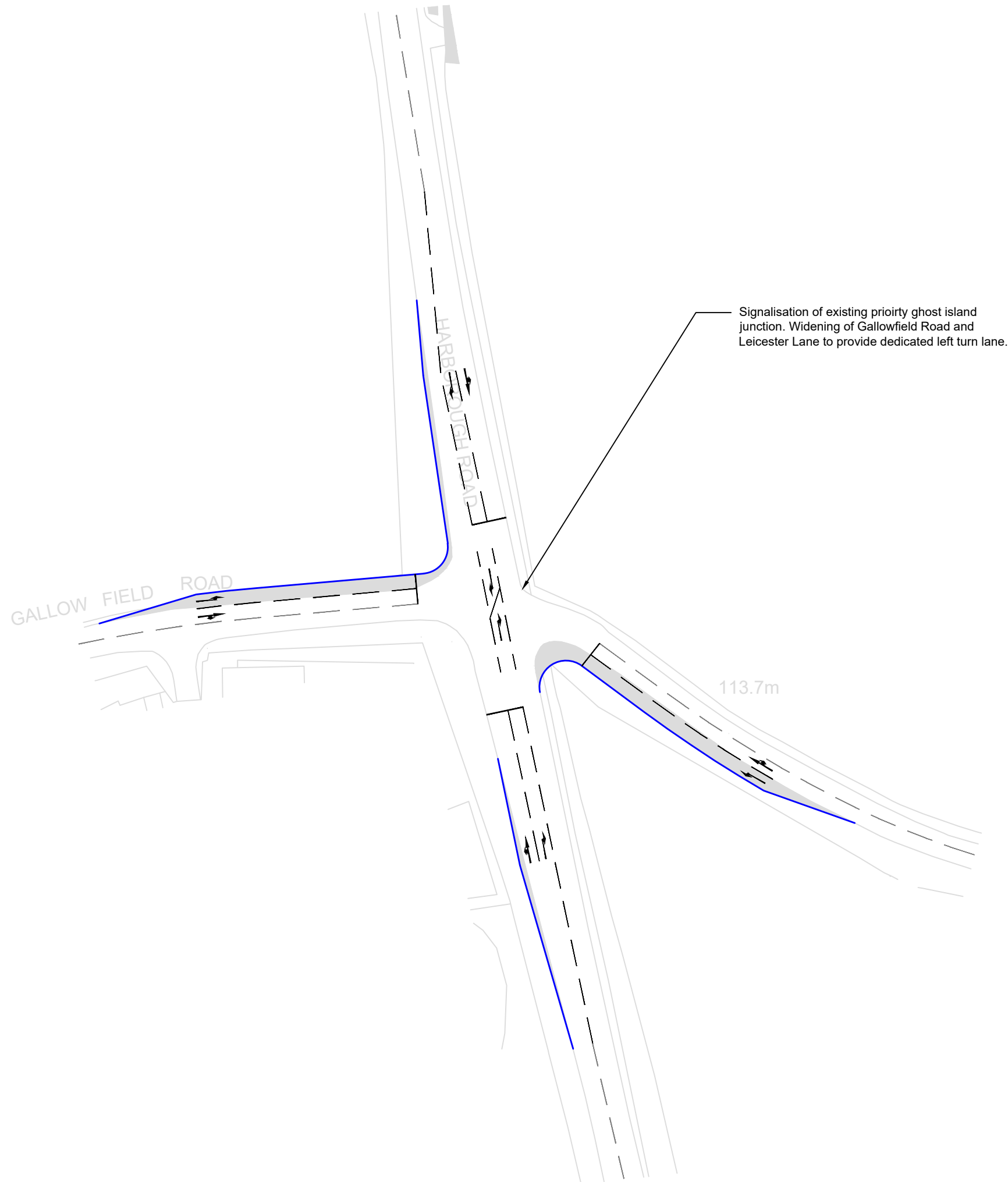
Project

HARBOROUGH LOCAL PLAN

Title

PROPOSED MITIGATION
GARTREE ROAD

Drawn	Checked	Approved	Original dtp. size
JB	CC	CC	A3
Date	Scale	Drawing Status	
05.08.26	1:500	PRELIMINARY	
Drawing Number	Rev.		
26B01-SYS-HGN-J25-DR-CH-01-P01	P01		



NOTES

1. Do not scale from this drawing.
2. All dimensions are in metres unless otherwise stated.

KEY

- Proposed Kerbline
- Proposed New Carriageway
- Existing Road Markings
- Proposed Road Markings

Rev.	Date	Revision details	Drawn	Checked	Approved

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HARBOROUGH LOCAL PLAN

Title

PROPOSED MITIGATION
B6047 - GALLOWFIELD ROAD

Drawn	Checked	Approved	Original dwg. size
JJ	CC	CC	A3

Date	Scale	Drawing Status
20.08.26	1:500	PRELIMINARY

Drawing Number	Rev.
26B01-SYS-HGN-J26-DR-CH-01	P01

**Appendix C: Scheme cost estimates**

Scheme description	Scheme location	Estimated cost range
A426 Lutterworth Road / Gilmorton Lane / Church Lane (full signalisation, with lane widening Gilmorton Lane)	Dunton Basset	£400,000 – £580,000
A4303 Coventry Road / Hunter Boulevard (lane widening on the A4303 Coventry Road (W))	Lutterworth	£350,000 - £500,000
A6 Harborough Road / B582 New Street (signal optimisation and lane widening)	Market Harborough	£300,000 - £500,000
A6 Harborough Road / New Road (signalisation of the junction and an additional lane on the A6)	Kibworth	£900,000 - £1,300,000
A6 Harborough Road / B6047 Melton Road	Market Harborough	TBC - Awaiting LCC input
A6 Leicester Road / Marsh Drive / Church Road (full signalisation)	Kibworth	£475,000 - £685,000
A6 Leicester Road / Wistow Road (lane widening on all arms of the roundabout)	Kibworth	£600,000 - £860,000
A6 / Station Road (Archers Roundabout) (signalisation and lane widening on Station Road South)	Great Glen	£800,000 - £1,150,000
B582 / Manor Road / Manor Road Extension (signalised crossroads with stage sequencing revised to allow both Manor Road arms to run simultaneously)	Oadby	£700,000 - £1,001,000
B582 Gartree Road / Gartree Road / A582 (signalisation of the roundabout, combined with a 50m flare lane on Gartree Road)	Oadby	£500,000 - £700,000
B6047 / Leicester Lane / Gallow Field Road (lane widening and flaring on approaches)	Market Harborough	£650,000 - £940,000

SYSTRA in the UK and Ireland leads the delivery of sustainable infrastructure and environments through specialist engineering and consultancy services.

A world leader in mobility and mass transit, we deliver planning and development consultancy, engineering design, project management, and specialist technical services, that enables the safe and efficient movement of people, goods and essential services.

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