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PROPOSED RESIDENTIAL DEVELOPMENT LAND NORTH OF ASHLAND ROAD WEST, SUTTON IN ASHFIELD

TRANSPORT ASSESSMENT ADDENDUM

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project number: ADC1032			report reference: ADC1032-RP-G
version	date	author	Comments
1		Matt Tatler	internal draft
2	09/10/2020	Matt Tatler	issued to client team for comment
3	13/10/2020	Matt Tatler	revised and issued to NCC

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1.0 INTRODUCTION

1.1 ADC Infrastructure Limited produced a Transport Assessment and Travel Plan in support of an outline planning application for residential development on land to the north of Ashland Road West in Sutton in Ashfield, Nottinghamshire (application reference V/2020/0184).

1.2 The Transport Assessment examined the accessibility of the development site, and concluded that there were good opportunities for travel by sustainable modes. It forecast the increase in trips by all modes, and assessed the impact of the additional development traffic on the local highway network in a 2024 future year assessment. The Transport Assessment concluded that the development traffic could be accommodated on the highway network, within a study area previously agreed with the local highway authority that formed four off-site junctions. Beyond those junctions the traffic increases would not be material.

1.3 Overall, the Transport Assessment concluded that the proposed development would accord with the aims of the NPPF. The opportunities for sustainable travel would be improved as part of the proposals, and safe and suitable access could be achieved for all people. Therefore, it was concluded that it would be unreasonable to prevent the development on transport grounds.

1.4 However, comments on the Transport Assessment were received from Nottinghamshire County Council (NCC) on 15 April 2020. These queried the methodology used to distribute the development traffic on the highway network, and requested revised junction modelling using an alternative distribution of development traffic. NCC also queried the selected trip rates, assessment year, and study area previously agreed with the local highway authority.

1.5 This Transport Assessment Addendum report has now been prepared to address the comments raised by NCC.

1.6 The report is structured as follows:

- Section 2 presents the vehicle trip generation of the development as agreed with NCC via email on 2 July 2020.
- Section 3 describes the revised distribution and assignment of development traffic, using 2011 Census data, as agreed with NCC via email on 13 July 2020.
- Section 4 presents the assessment traffic flows, including growth rates and relevant committed development traffic.
- Section 5 assesses the impact of the development on the operation and safety of the study area junctions.

1.7 NCC also queried the access junction layout and the walking distances to the nearest available bus stops on Ashland Road West and Huthwaite Road. For the avoidance of doubt, these matters will be addressed separately with the local highway authority.

2.0 TRIP GENERATION

Proposed traffic generation

2.1 The agreed 85th percentile vehicle trip rates and the resultant vehicle trip generation based on 300 houses is shown in the table below. The TRICS outputs are contained in Appendix D of the Transport Assessment.

		Arrive	Depart	Two-way
Trip Rates	AM Peak	0.187	0.440	0.627
	PM Peak	0.439	0.274	0.713
Trip Generation	AM Peak	56	132	188
	PM Peak	132	82	214

3.0 VEHICLE DISTRIBUTION AND ASSIGNMENT

3.1 As requested by NCC, the forecast vehicle trip distribution pattern has been calculated using 2011 National Census data for the Ashland 006 MSOA. A copy of the Census data is provided in Appendix A and the resultant route choices as derived from Google Maps are shown in Figure 1 below.

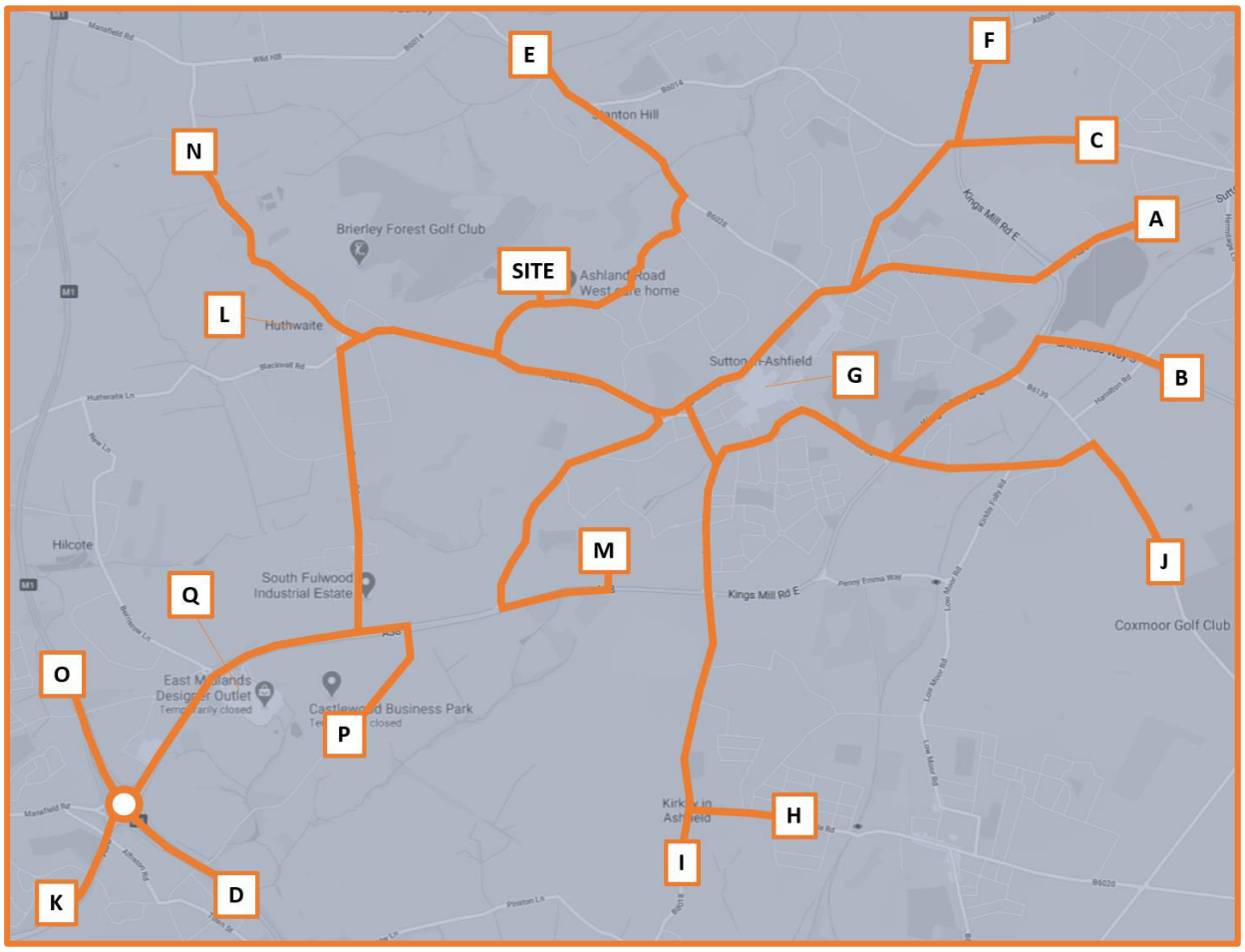


Figure 1: Route choices

3.2 In summary, the distribution pattern assumes that 98.1% of development traffic would route to and from the B6026 Huthwaite Road/Ashland Road T-junction. At that junction, 44.7% would route to and from the west and 53.3% would route to and from the east. To the west, 9.7% would route to/from Huthwaite via Market Street and Main Street, whilst 35% would route to and from the A38 Alfreton Road. At this junction, a small percentage of development traffic would route east on the A38 towards Pinxton but the majority (34.6%) would route to and from the west via the M1 J28 and the East Midlands Designer Outlet.

3.3 To the east of Ashland Road West, 4.9% of development traffic would route to and from the B6023 Alfreton Road towards the Calladine Business Park, and 48.5% would route through the B6023 Lammas Road/Hack Lane signal-controlled junction. Of which, 27% would route along Hack Lane and Spring Road before splitting at the Kirkby Road/Spring Road roundabout whilst 21.5% would continue along the B6023. Of the 27% of development traffic that would route along Hack Lane, 10.1% would travel to and from the A38 via Kirkby Road towards Kirkby in Ashfield, and 16.9% through the Forest Street/High Pavement/Station Road junction towards the A38 Kings Mill Road E/Station Road junction. With regards to the development traffic that continues along the B6023, 6.3 % would route to and from Manor Street via the town centre whilst 15.2% would travel along the B6023 Priestsic Road, through its junction with the B6028

Stoneyford Road before splitting equally at the B6023 Mansfield Road/Dalestorth Street/Outram Street junction.

3.4 The trip distribution pattern is shown in Diagram 1 and a summary of the trip distribution pattern and resultant development assignment is shown in the table below.

Route	Trip Distribution	AM Peak			PM Peak		
		Arrive	Depart	Two-way	Arrive	Depart	Two-way
A	7.6%	4	10	14	10	6	16
B	14.8%	8	19	27	20	12	32
C	7.6%	4	10	14	10	6	16
D	15.1%	8	20	28	20	12	32
E	1.9%	1	3	4	3	2	5
F	0.0%	0	0	0	0	0	0
G	6.3%	4	8	12	8	5	13
H	3.6%	2	5	7	5	3	8
I	6.5%	4	9	13	9	5	14
J	2.1%	1	3	4	3	2	5
K	9.5%	6	13	19	13	8	21
L	5.9%	3	8	11	8	5	13
M	4.9%	3	6	9	6	4	10
N	3.8%	2	5	7	5	3	8
O	2.3%	1	3	4	3	2	5
P	0.4%	0	1	1	1	0	1
Q	7.7%	4	10	14	10	6	16
Total	100%	56	132	188	132	82	214

3.5 The resultant morning and evening peak hour development traffic assignment is shown on Diagrams 2 and 3, respectively.

4.0 ASSESSMENT TRAFFIC FLOWS

Study area

4.1 As shown in Figure 2 below, following the revised calculations summarised above, the study area agreed with NCC includes the following junctions:

1. A38/Common Road
2. B6026 Blackwell Road/Common Road
3. B6026 Blackwell Road/Market Street
4. B6026 Huthwaite Road/Ashland Road West
5. B6026 Huthwaite Road/B6023 Alfreton Road/B6023 Lammas Road
6. B6023 Lammas Road/Hack Lane
7. Kirkby Road/Spring Road
8. High Pavement/Station Road/Forest Street
9. A38 Kings Mill Road E/Station Road
10. B6023 Mansfield Road/B6028 Stoneyford Road/Downing Street
11. B6023 Mansfield Road/Dalestorth Street/Outram Street
14. B6023 Lammas Road/Forest Street/Manor Street

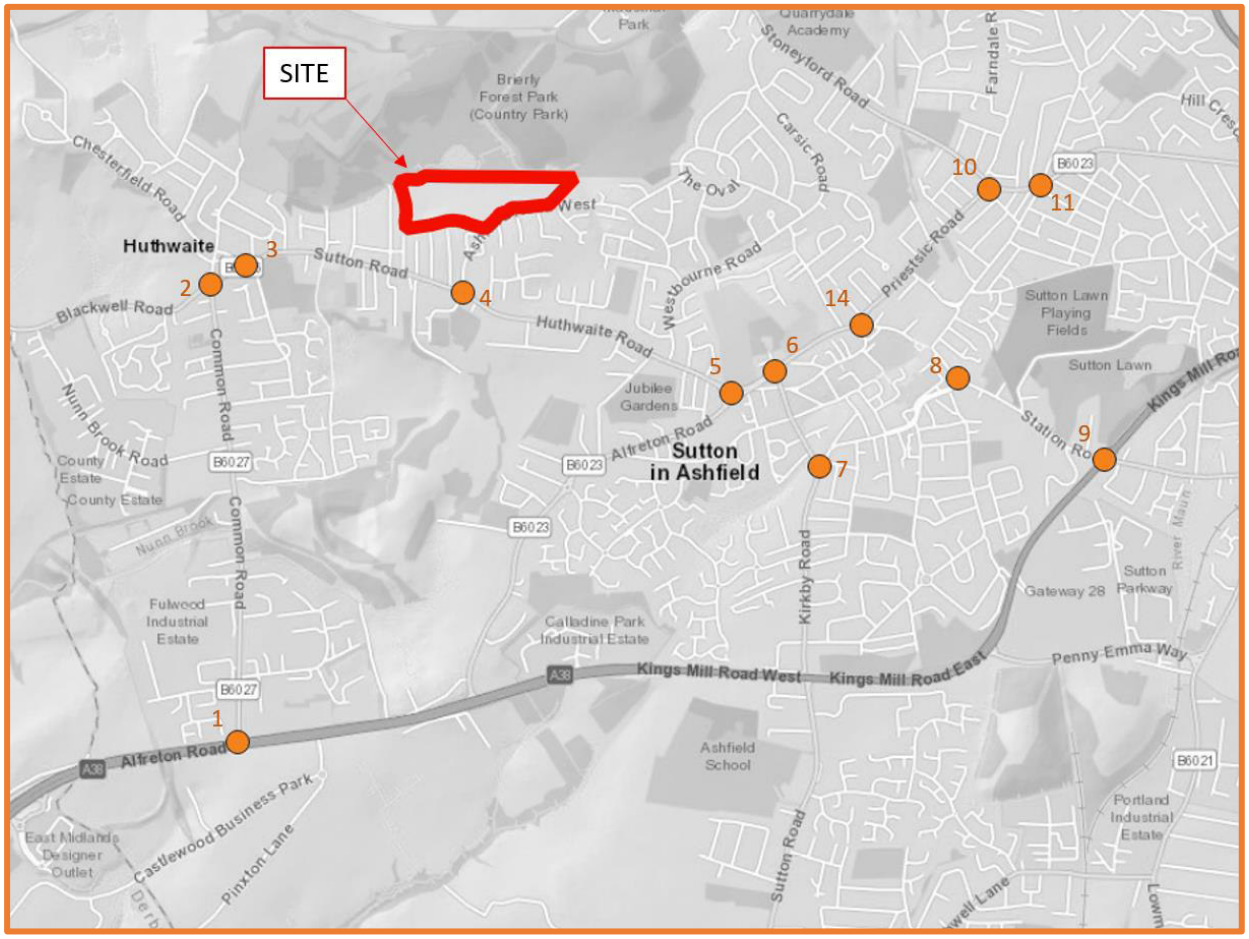


Figure 2: Study area junctions

Traffic flows

4.2 Recent traffic count data at each study area junction was obtained from various sources. A summary of the count data that was made available and the year of the survey is shown in the table below.

Ref	Junction	Year of Survey
1	A38/Common Road	2018
2	B6026 Blackwell Road/Common Road	2020*
3	Blackwell Road/Market Street	2020*
4	Huthwaite Road/Ashland Road West	2019
5	Huthwaite Road/Alfreton Road	2020*
6	Lammas Road/Hack Lane	2020*
7	Kirkby Road/Spring Road	2020*
8	High Pavement/Station Road/Forest Road	2020*
9	A38 Kings Mill Road E/Station Road	2018
10	Mansfield Road/Stoneyford Road	2019
11	Mansfield Road/Dalestorth Street	2008
14	Lammas Road/Forest Street/Manor Street	2019

4.3 The traffic count data is contained in Appendix B and the reference morning and evening traffic flows are shown in Diagrams 4 and 5.

COVID 19

4.4 Due to the lack of available traffic count data at 6 of the study area junctions, it was agreed with NCC to undertake new counts in September 2020 (* in the table above). To take into account the effects of COVID-19 on the current traffic levels in the area, it was agreed to apply an uplift to the surveyed flows using average traffic volume levels recorded by NCC over 65 permanent count sites across the county. NCC's count data, contained in Appendix C, confirms that average daily and peak hour traffic levels across the county were around 90% of those recorded before COVID restrictions were enforced in March 2020. To provide a robust assessment, an uplift of 11% was agreed with NCC and applied to the 2020 count data to take into account the COVID impacts. The 2020 traffic flows, with the 11% COVID uplift, are shown in Diagrams 6 and 7.

Assessment year traffic flows

4.5 Typically the use of an assessment year of five years after the date of registration of the planning application is required. As the planning application was made in 2020, this would mean an assessment year of 2025.

4.6 However, NCC state that based on a build out rate of 40 houses per year it would take up to 8 years to complete construction, and the assessment year should be revised to reflect this. In addition, NCC that COVID restrictions may also delay the start of development. As a result, NCC require a 10-year assessment year. This would mean an assessment year of 2030.

4.7 The reference traffic flows from 2008, 2018, 2019 and 2020 were therefore growthed to 2030 levels using TEMPRO, which includes links to the National Traffic Model. The TEMPRO outputs are contained in Appendix D and show the following growth rates:

Period	Peak	Growth Rate
2008 to 2030	AM	1.2423
	PM	1.2400
2018 to 2030	AM	1.1343
	PM	1.1297
2019 to 2030	AM	1.1271
	PM	1.1170
2020 to 2030	AM	1.1074
	PM	1.1047

4.8 The resultant 2030 base traffic flows are shown in Diagrams 8 and 9.

Committed development

4.9 In addition to the background growth, the 2030 assessment year traffic flows should consider traffic associated with any committed developments.

4.10 The Ashfield District Council interactive map (https://www.ashfield.gov.uk/community-leisure/maps/) contains information on determined planning applications. The map confirms that there are no major developments within Ashfield that need to be included as a committed development. Nevertheless, as confirmed by NCC, it is necessary to consider developments in both the neighbouring districts of Mansfield and Bolsover.

4.11 After reviewing the Mansfield and Bolsover planning portals, the following committed developments were identified and therefore considered:

- Penniment Farm (ref. 2010/0805/ST)
- Skegby Lane (ref. 2013/0435/ST)
- Lindhurst (ref. 2015/0045/ST)
- Larwood Park (ref. V/2011/0560)

4.12 Figure 3 below shows the study area junctions associated with each of the committed developments listed above. As shown, the study area junctions in this assessment are not impacted by any of the committed schemes. Hence, there are no developments in the locality that would significantly alter the background traffic flows.

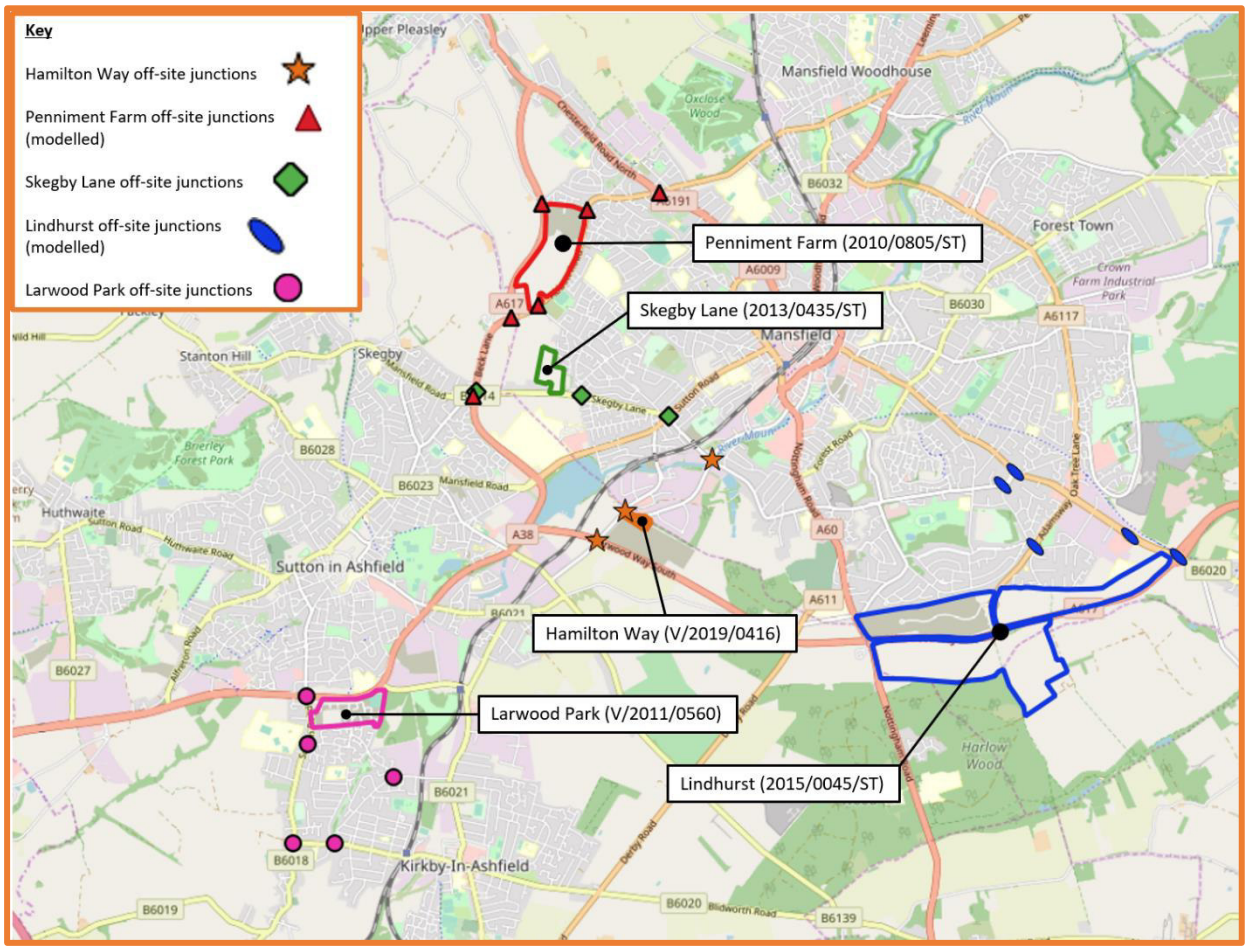


Figure 4: Committed development study area junctions

2030 with development traffic flows

4.13 The development traffic on Diagrams 2 and 3 were added to the 2030 base traffic flows and the resultant 2030 with development traffic flows are shown on Diagrams 10 and 11.

5.0 HIGHWAY IMPACT

Introduction

5.1 NCC state that any junction that the development generates 30 or more two-way vehicle movements at should be assessed. As a result, 12 off-site study area junctions were identified as described in earlier sections of this report.

Junction 1: A38/Common Road

5.2 The A38/Common Road is a signal-controlled T-junction. A model of the junction was built using LinSig Version 3 software and was tested to demonstrate how it would operate in 2030 both with and without the development in place. The capacity assessment results are summarised in the table below, and the full LinSig report is in Appendix E.

Assessment Year	Peak	Practical Reserve Capacity		Total Delay (PCUhr)	
		Background	With Development	Background	With Development
2030	AM	18.9%	14.9%	39.16	42.22
	PM	14.5%	11.7%	42.74	44.39

5.3 The results show that the junction would continue to operate within the normally accepted limits of performance in all modelled scenarios, with a positive PRC indicating that all links are operating below 90% of their theoretical capacity.

5.4 Overall, the A38/Common Road junction can accommodate the increase in vehicle trips generated by the proposed development.

Junction 2: B6026 Blackwell Road/Common Road

5.5 The Blackwell Road/Common Road junction is a signal controlled crossroads. A model of the junction was built using LinSig Version 3 software and tested to demonstrate how it would operate in 2030 both with and without the development in place. The capacity assessment results are summarised in the table below, and the full LinSig report is in Appendix F.

Assessment Year	Peak	Practical Reserve Capacity		Total Delay (PCUhr)	
		Background	With Development	Background	With Development
2030	AM	5.2	-7.9	17.05	27.24
	PM	-15.7%	-33.4%	42.43	93.86

5.6 As shown, the junction would operate above the normally accepted limits of performance in all modelled scenarios, with a negative PRC indicating that one or more links are operating above the 90% of their theoretical capacity. However, it should be noted that the junction is provided with signal-controlled crossings on all arms, meaning an all-red stage is required to cross pedestrians safely. This reduces the potential green time for vehicle traffic and hence reduces the capacity of the junction.

5.7 However, the pedestrian crossings are unlikely to be called every cycle. Therefore, the junction has also been tested with the all-red pedestrian stage double cycled, allowing more green time for vehicle traffic. The results are summarised in the table below.

Assessment Year	Peak	Practical Reserve Capacity		Total Delay (PCUhr)	
		Background	With Development	Background	With Development
2030	AM	42.8%	18.9%	14.30	14.36
	PM	14.1%	5.4%	16.30	19.25

5.8 As shown, with the all-red pedestrian stage double cycled the junction is forecast to operate within the normally accepted limits of performance.

5.9 In reality, the junction would operate between the two sets of results. It should also be noted that the junction is not afforded the advantages of a MOVA control system. Under MOVA control, the junction would operate more efficiently and with better queue performance than can be demonstrated in a LinSig assessment. As a result, a potential mitigation scheme at this junction could be to provide MOVA, subject to further discussions with NCC.

Junction 3: Blackwell Road/Market Street

5.10 The B6026 Blackwell Road/Market Street is a priority controlled simple T-junction, however Market Street is one-way only for vehicle movements from Blackwell Road to Main Street only. As a result, the only give way movements at the junction are the right turn movements from Blackwell Road to Market Street.

5.11 A model of the junction as built using Junctions 9 PICADY software and was tested to demonstrate how it would operate in 2030 both with and without the development in place. The junction geometries were measured from OS mapping. The results are summarised in the table below, and the PICADY outputs are in Appendix G.

	AM			PM		
	Queue (veh)	Delay (s)	RFC	Queue (veh)	Delay (s)	RFC
	2030 Background					
Blackwell Road Right Turn	1.9	11.32	58%	1.5	11.25	53%
	2030 With Development					
Blackwell Road Right Turn	2.5	12.86	64%	1.9	12.51	59%

5.12 As shown the junction would operate within the normally accepted limits of performance in all modelled scenarios with the RFC values on all arms below 85% of their theoretical maximum. As a result, the existing junction could accommodate the proposed development and no mitigation measures are necessary.

Junction 4: B6026 Huthwaite Road/Ashland Road West

5.13 The B6026 Huthwaite Road/Ashland Road West is a priority controlled simple T-junction. A model of the junction was built using Junctions 9 PICADY software and was tested to demonstrate how it would operate in 2030 both with and without the development. The results are summarised in the table below, and the PICADY outputs are in Appendix H.

	AM			PM		
	Queue (veh)	Delay (s)	RFC	Queue (veh)	Delay (s)	RFC
	2030 Background					
Ashland Road Left Turn	0.1	8.13	13%	0.1	8.23	5%
Ashland Road Right Turn	0.2	15.07	16%	0.2	14.45	14%
Huthwaite Road Right Turn	0.0	6.91	4%	0.1	7.15	7%
	2030 With Development					
Ashland Road Left Turn	0.5	11.82	32%	0.2	9.84	16%
Ashland Road Right Turn	0.7	21.99	40%	0.5	21.49	33%
Huthwaite Road Right Turn	0.1	7.25	10%	0.3	8.77	21%

5.14 As shown the junction would operate within the normally accepted limits of performance in all modelled scenarios with the RFC values on all arms below 85% of their theoretical maximum. As a result, the existing junction could accommodate the proposed development and no mitigation measures are necessary.

Junction 5: B6026 Huthwaite Road/B6023 Alfreton Road

5.15 The Huthwaite Road/Alfreton Road/Lammas Road junction is a series of T-junctions that operate similarly to a roundabout. The only difference being that the Lammas Road westbound approach does not give way and instead the right turn movements from Huthwaite Road to Alfreton Road give way to westbound movements. An aerial photograph of the junction is shown in Figure 5.

Figure 5: Aerial photo of Huthwaite Road/Alfreton Road/Lammas Road

5.16 The Huthwaite Road and Alfreton Road approaches to the junction operate more like a roundabout than T-junctions, with vehicle traffic giving way to one-way movements from the right. As a result, a model of the junction was built using Junctions 9 ARCADY software and was tested to demonstrate how it would operate in 2030 both with and without the development in place. The junction geometries were measured from OS mapping. The results are summarised in the table below, and the ARCADY outputs are in Appendix I.

	AM			PM		
	Queue (veh)	Delay (s)	RFC	Queue (veh)	Delay (s)	RFC
	2030 Background					
Alfreton Road	0.7	4.53	41%	2.0	9.10	67%
Huthwaite Road	0.7	3.20	42%	0.8	3.45	43%
	2030 With Development					
Alfreton Road	0.7	4.66	42%	2.3	10.30	70%
Huthwaite Road	0.9	3.44	46%	0.8	3.62	46%

5.17 As shown, the Alfreton Road and Huthwaite Road arms would operate within the normally accepted limits of performance in all modelled scenarios with the RFC values on all arms below 85% of their theoretical maximum.

5.18 For completeness, a PICADY model was created to assess the capacity of the Huthwaite Road give-way movement to Alfreton Road. The results are summarised in the table below and the PICADY outputs are in Appendix I.

	AM			PM		
	Queue (veh)	Delay (s)	RFC	Queue (veh)	Delay (s)	RFC
	2030 Background					
Huthwaite Road Right Turn	0.2	7.22	15%	0.2	7.55	14%
	2030 With Development					
Huthwaite Road Right Turn	0.2	7.36	17%	0.2	7.75	15%

5.19 As shown, the Huthwaite Road right turn give way movement would operate within the normally accepted limits of performance. As a result, the existing junction could accommodate the proposed development and no mitigation measures are necessary.

Junction 6: B063 Lammas Road/Hack Lane

5.20 The Lammas Road/Hack Lane is a signal controlled T-junction. A model of the junction was built using LinSig Version 3 software and was tested to demonstrate how it would operate in 2030 both with and without the development in place. The capacity assessment results are summarised in the table below, and the full LinSig report in in Appendix J.

Assessment Year	Peak	Practical Reserve Capacity		Total Delay (PCUhr)	
		Background	With Development	Background	With Development
2030	AM	23.0%	16.5%	17.53	19.58
	PM	8.9%	0.2%	23.49	28.95

5.21 The results show that the junction would continue to operate within the normally accepted limits of performance in all modelled scenarios, with a positive PRC indicating that all links are operating below 90% of their theoretical capacity. Overall, the junction can accommodate the increase in vehicle trips generated by the proposed development.

Junction 7: Kirkby Road/Spring Road

5.22 The Kirkby Road/Spring Road is a three-arm roundabout. A model of the junction was built using Junctions 9 ARCADY software and was tested to demonstrate how it would operate in 2030 both with and without the development in place. The results are summarised in the table below and the ARCADY outputs are in Appendix K.

	AM			PM		
	Queue (veh)	Delay (s)	RFC	Queue (veh)	Delay (s)	RFC
	2030 Background					
Spring Road	1.2	7.20	55%	1.3	7.10	56%
Kirkby Road (N)	0.6	4.77	36%	1.8	8.65	65%
Kirkby Road (S)	2.1	10.67	68%	2.1	11.86	68%
	2030 With Development					
Spring Road	1.4	7.82	58%	1.4	7.39	58%
Kirkby Road (N)	0.6	4.90	37%	2.0	9.35	67%
Kirkby Road (S)	2.2	11.07	69%	2.3	13.07	71%

5.23 As shown the junction would operate within the normally accepted limits of performance in all modelled scenarios with the RFC values on all arms below 85% of their theoretical maximum. As a result, the existing junction could accommodate the proposed development and no mitigation measures are necessary.

Junction 8: High Pavement/Forest Street/Station Road

5.24 The High Pavement/Forest Street/Station Road is a signal controlled T-junction. A model of the junction was built using LinSig Version 3 software and tested to demonstrate how it would operate in 2030 both with and without the development in place. The assessment results are summarised in the table below, and the full LinSig report is in Appendix L.

Assessment Year	Peak	Practical Reserve Capacity		Total Delay (PCUhr)	
		Background	With Development	Background	With Development
2030	AM	18.2%	15.8%	17.39	18.19
	PM	4.0%	0.6%	23.42	26.32

5.25 The results show that the junction would continue to operate within the normally accepted limits of performance in all modelled scenarios, with a positive PRC indicating that all links are operating below 90% of their theoretical capacity.

5.26 Overall, the High Pavement/Forest Street/Station Road junction can accommodate the increase in vehicle trips generated by the proposed development.

Junction 9: A38 Kings Mill Road E/Station Road

5.27 The A38 Kings Mill Road E/Station Road is a signal controlled crossroads junction. A model of the junction was built using LinSig Version 3 software and tested to demonstrate how it would operate in 2030 both with and without the development in place. The capacity assessment results are summarised in the table below, and the full LinSig report is in Appendix M.

Assessment Year	Peak	Practical Reserve Capacity		Total Delay (PCUhr)	
		Background	With Development	Background	With Development
2030	AM	-10.6%	-13.0%	80.69	87.88
	PM	-29.6%	-38.9%	195.76	259.35

5.28 As shown, the junction would operate above the normally accepted limits of performance in all modelled scenarios, with a negative PRC indicating that one or more links are operating above 90% of their theoretical capacity. However, in the morning peak hour, the addition of the development traffic would lead to only a 2.4% reduction in the PRC and the total delay across the junction would only increase by 7 PCUHr. In the evening peak, the junction operates with less capacity and hence the impact of the development is forecast to be greater with a reduction of 9.3% PRC and an increase of 63 PCUHr.

5.29 It should be noted that LinSig provides aggregated results based on uniform traffic flows and fixed signal timings and, therefore, does not take into account the advantages afforded by the demand responsive MOVA control system that is in place at the junction. Therefore, the junction, under MOVA control, would operate more efficiently and with better queue performance than shown in the LinSig modelling.

5.30 The proposed development would generate a total of 62 two-way movements at the junction in a morning peak hour and 74 two-way movements in the evening peak hour. This equates to only two additional vehicle movements every 90 second cycle. As a result, whilst the junction

is forecast to operate above its theoretical capacity, the impact of the development is not considered severe. Hence, no mitigation measures are necessary.

Junction 10 and 11: B6023 Mansfield Road/Stoneyford Road/Dalestorth Street

5.31 Junctions 10 and 11 are two signal controlled crossroads spaced around 200 metres apart. Such a separation distance would normally be considered sufficient to assess these junctions in isolation, as platoons would have enough time to disperse. However, in this case the junctions have been considered together as a network so that the interactions can be understood and any issues due to queuing between the junctions can be identified. The capacity assessment results are summarised in the table below, and the full LinSig report is in Appendix N.

Assessment Year	Peak	Practical Reserve Capacity		Total Delay (PCUhr)	
		Background	With Development	Background	With Development
2030	AM	-31.9%	-35.5%	207.53	210.10
	PM	-44.0%	-52.6%	268.06	286.53

5.32 As shown, the junction would operate above the normally accepted limits of performance in all modelled scenarios, with a negative PRC indicating that one or more links are operating above 90% of their theoretical capacity. However, in the morning peak, the addition of the development traffic would lead to only a 3.6% reduction in the PRC and the total delay across the junction would only increase by 2PCUHr. In the evening peak the development would lead to an 8.6% reduction in PRC and the total delay across the junction would increase by 19PCUHr.

5.33 The proposed development would generate a total of 56 two-way movements at the junctions in a morning peak hour and 64 two-way movements in an evening peak hour. This equates to less than two additional vehicle movement every cycle. This is not a severe impact and hence no mitigation measures are necessary.

5.34 The junction may benefit from the introduction of a MOVA control system although there does appear to be some form of vehicle control already in place.

Junction 14: Lammas Road/Forest Street/Manor Street

5.35 The Lammas Road/Forest Street/Manor Street is a four-arm roundabout in the centre of Sutton in Ashfield. A model of the junction was built using Junctions 9 ARCADY software and tested to demonstrate how it would operate in 2030 both with and without the development in place. The results are summarised in the table below and the ARCADY outputs are in Appendix O.

	AM			PM		
	Queue (veh)	Delay (s)	RFC	Queue (veh)	Delay (s)	RFC
	2030 Background					
Priestsic Road	2.0	6.12	67%	3.1	8.93	76%
Forest Street	0.1	4.47	12%	0.3	5.11	23%
Manor Street	0.2	3.50	14%	0.3	4.12	23%
Lammas Road	1.4	4.25	58%	1.8	5.49	65%
	2030 With Development					
Priestsic Road	2.1	6.28	68%	3.7	10.51	78%
Forest Street	0.1	4.53	12%	0.3	5.76	23%
Manor Street	0.2	3.54	15%	0.3	4.66	24%
Lammas Road	1.5	4.41	59%	2.1	6.22	66%

5.36 As shown the junction would operate within the normally accepted limits of performance in all modelled scenarios with the RFC values on all arms below 85% of their theoretical maximum. As a result, the existing junction could accommodate the proposed development and no mitigation measures are necessary.

Summary

5.37 As detailed above, the majority of the off-site junctions would continue to operate with spare capacity in the 2030 assessment year with the development in place. The junctions that are forecast to operate above their theoretical capacity are as follows:

- Junction 2: Blackwell Road/Common Road
- Junction 9: A38 Kings Mill Road E/Station Road
- Junction 10: Mansfield Road/Stoneyford Road
- Junction 11: Mansfield Road/Dalestorth Street

5.38 A mitigation scheme has been identified at Junction 2. It is proposed to introduce a MOVA control system at the junction which would allow the junction to operate more efficiently and with better queue performance than can be demonstrated in the LinSig assessment.

5.39 However, the development impact at Junctions 9 to 11 is not considered severe and hence mitigation schemes have not been proposed.

Diagram 1

Trip Distribution Pattern

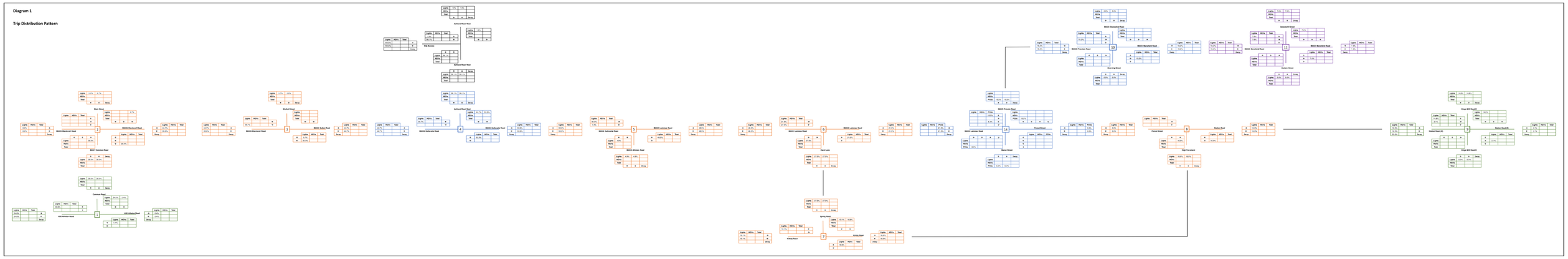


Diagram 2

Development Trip Assignment - AM Peak

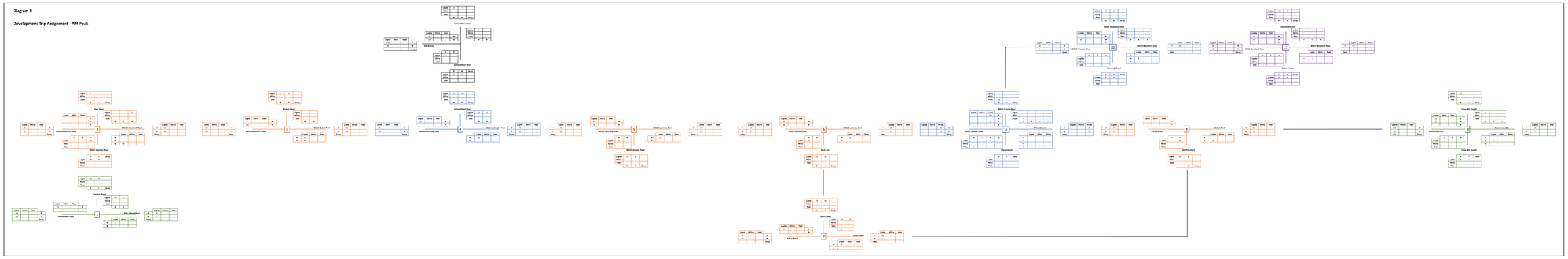


Diagram 3

Development Trip Assignment - PM Peak

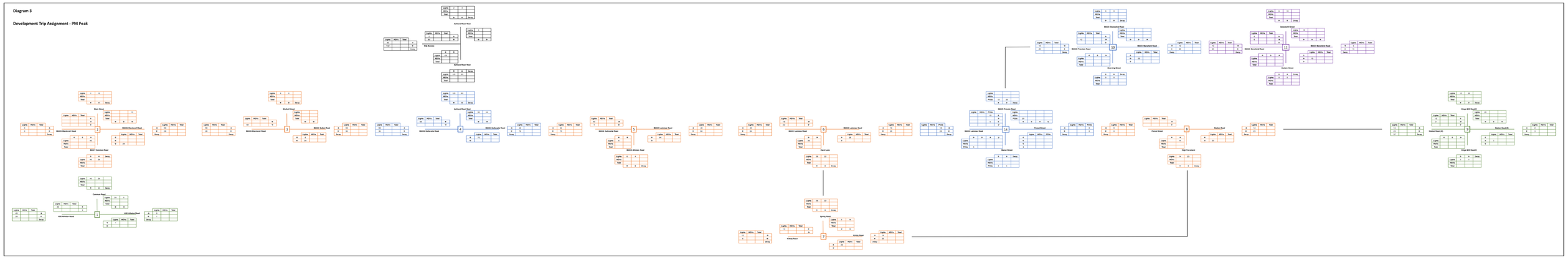


Diagram 4

Reference Traffic Flows - AM Peak

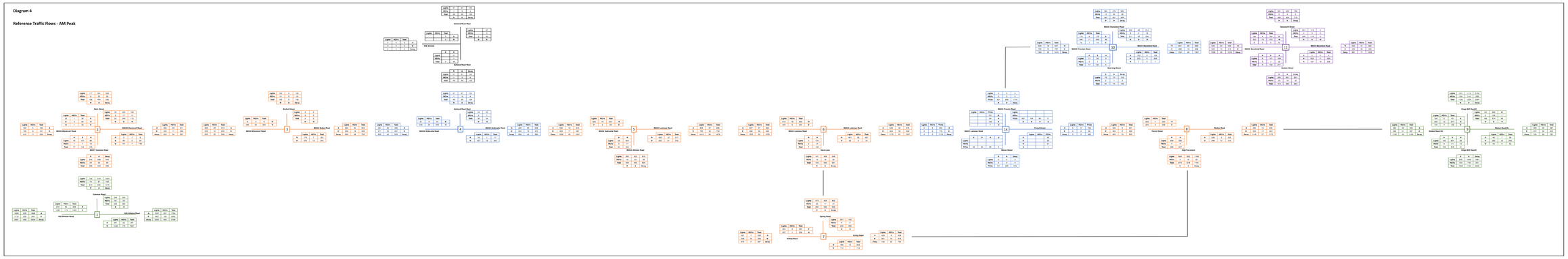

Ashford Road East
Ashford Road West
Tile Avenue
Main Street
B6019 Blackwell Road
B6017 Common Road
Common Road
A38 Allestree Road
B6019 Duffer Road
B6019 Rutland Road
B6019 Lamington Road
B6019 Athelstan Road
Bank Lane
Spring Road
Spring Slope
Spring Road
Forest Street
Forest Street
Station Street
High Pavement
Station Road (N)
Station Road (S)
Kings Mill Road
Kings Mill Road E
Kings Mill Road W
Mansfield Road
Mansfield Grove
Mansfield Road
Mansfield Road
Mansfield Road
Mansfield Road
Derby Road
Derby Road (N)
Derby Road (S)
Station Street
Mansfield Road
Mansfield Road
Mansfield Road
Mansfield Road

Diagram 5

Reference Traffic Flows - PM Peak

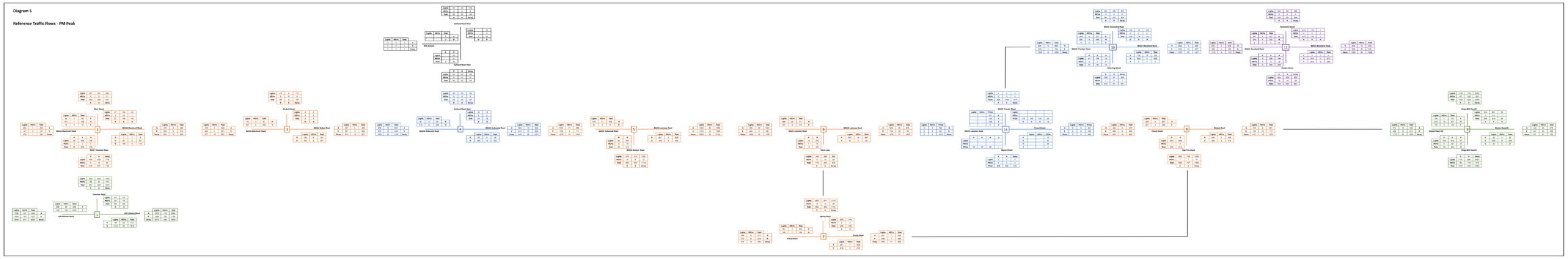


Diagram 6

COVID Uplift Flows - AM Peak

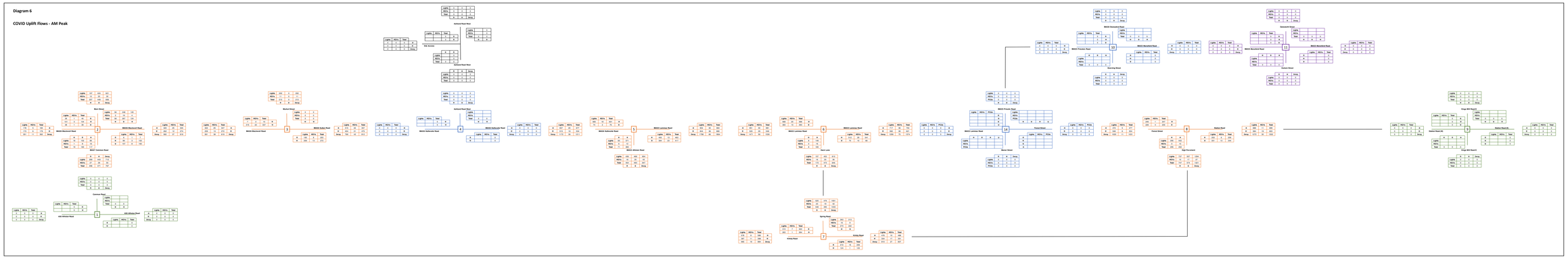

Antrim Road (N)
Tile Access
Antrim Road (N)
Antrim Road (N)
Lights HGVs Total
Cars 1 0 1
Taxis 0 0 0
Bmcy 0 0 0
Main Street
B6100 Blackwell Road
B6101 Cromore Road
A26 Ballyclare Road
A26 Antrim Road
Lights HGVs Total
Cars 127 143 270
Taxis 0 0 0
Bmcy 0 0 0
Main Street
B6100 Blackwell Road
Lights HGVs Total
Cars 0 0 0
Taxis 0 0 0
Bmcy 0 0 0
Main Street
B6100 Dublin Road
Lights HGVs Total
Cars 0 0 0
Taxis 0 0 0
Bmcy 0 0 0
B6100 Blackwell Road
Lights HGVs Total
Cars 0 0 0
Taxis 0 0 0
Bmcy 0 0 0
B6100 Rathcoole Road
Lights HGVs Total
Cars 0 0 0
Taxis 0 0 0
Bmcy 0 0 0
B6100 Rathcoole Road
Lights HGVs Total
Cars 0 0 0
Taxis 0 0 0
Bmcy 0 0 0
B6100 Rathcoole Road
Lights HGVs Total
Cars 0 0 0
Taxis 0 0 0
Bmcy 0 0 0
B6100 Rathcoole Road
Lights HGVs Total
Cars 0 0 0
Taxis 0 0 0
Bmcy 0 0 0
B6101 Lemnos Road
Lights HGVs Total
Cars 0 0 0
Taxis 0 0 0
Bmcy 0 0 0
B6101 Lemnos Road
Lights HGVs Total
Cars 0 0 0
Taxis 0 0 0
Bmcy 0 0 0
B6100 Athlone Road
Lights HGVs Total
Cars 0 0 0
Taxis 0 0 0
Bmcy 0 0 0
B6101 Lemnos Road
Lights HGVs Total
Cars 0 0 0
Taxis 0 0 0
Bmcy 0 0 0
B6101 Lemnos Road
Lights HGVs Total
Cars 0 0 0
Taxis 0 0 0
Bmcy 0 0 0
B6101 Lemnos Road
Lights HGVs Total
Cars 0 0 0
Taxis 0 0 0
Bmcy 0 0 0
B6101 Lemnos Road
Lights HGVs Total
Cars 0 0 0
Taxis 0 0 0
Bmcy 0 0 0
B6101 Lemnos Road
Lights HGVs Total
Cars 0 0 0
Taxis 0 0 0
Bmcy 0 0 0
Lights HGVs Total
Cars 0 0 0
Taxis 0 0 0
Bmcy 0 0 0
B6100 Newtown Road
Lights HGVs Total
Cars 0 0 0
Taxis 0 0 0
Bmcy 0 0 0
B6101 Fineway Road
Lights HGVs Total
Cars 0 0 0
Taxis 0 0 0
Bmcy 0 0 0
B6101 Blackthorn Road
Lights HGVs Total
Cars 0 0 0
Taxis 0 0 0
Bmcy 0 0 0
Lights HGVs Total
Cars 0 0 0
Taxis 0 0 0
Bmcy 0 0 0
Newtown Street
Lights HGVs Total
Cars 0 0 0
Taxis 0 0 0
Bmcy 0 0 0
B6101 Blackthorn Road
Lights HGVs Total
Cars 0 0 0
Taxis 0 0 0
Bmcy 0 0 0
B6101 Blackthorn Road
Lights HGVs Total
Cars 0 0 0
Taxis 0 0 0
Bmcy 0 0 0
Lights HGVs Total
Cars 0 0 0
Taxis 0 0 0
Bmcy 0 0 0
Lights HGVs PCUs
Cars 0 0 0
Taxis 0 0 0
Bmcy 0 0 0
B6101 Fineway Road
Lights HGVs PCUs
Cars 0 0 0
Taxis 0 0 0
Bmcy 0 0 0
B6101 Lemnos Road
Lights HGVs PCUs
Cars 0 0 0
Taxis 0 0 0
Bmcy 0 0 0

Diagram 7

COVID Uplift Flows - PM Peak

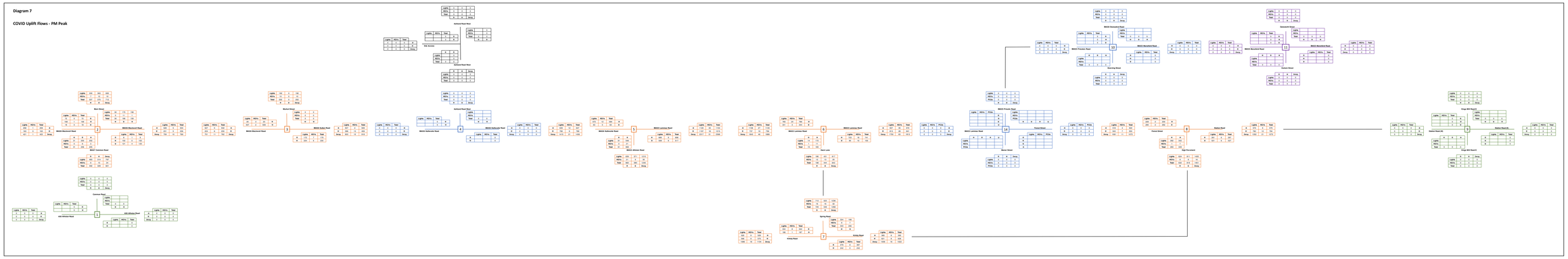

Antrim Road (N)
Tile Arcade
Antrim Road (N)
Antrim Road (N)
Antrim Road (N)
Main Street
B6005 Blackhall Road
B6005 Blackhall Road
B6007 Cromac Road
Cromac Road
A26 Albertbridge Road
A26 Albertbridge Road
Main Street
B6005 Ballyhackamore Road
B6005 Blackhall Road
Antrim Road (N)
B6005 Ballyhackamore Road
B6005 Ballyhackamore Road
B6005 Ballyhackamore Road
B6005 Ballyhackamore Road
B6005 Lisburn Road
B6005 Lisburn Road
B6005 Ormeau Road
B6005 Lisburn Road
B6005 Lisburn Road
B6005 Lisburn Road
B6005 Lisburn Road
Bank Lane
Bank Lane
Spring Road
Spring Road
Spring Road
Spring Road
B6005 Finaghy Road
B6005 Finaghy Road
B6005 Lisburn Road
Main Street
Forest Street
Forest Street
Station Street
High Pavement
Forest Street
Station Street
Station Road (N)
Station Road (N)
Station Road (N)
Station Road (N)
Kings Bridge Roundabout
Kings Bridge Roundabout
Kings Bridge Roundabout

Diagram 8

2030 Base Traffic Flows - AM Peak

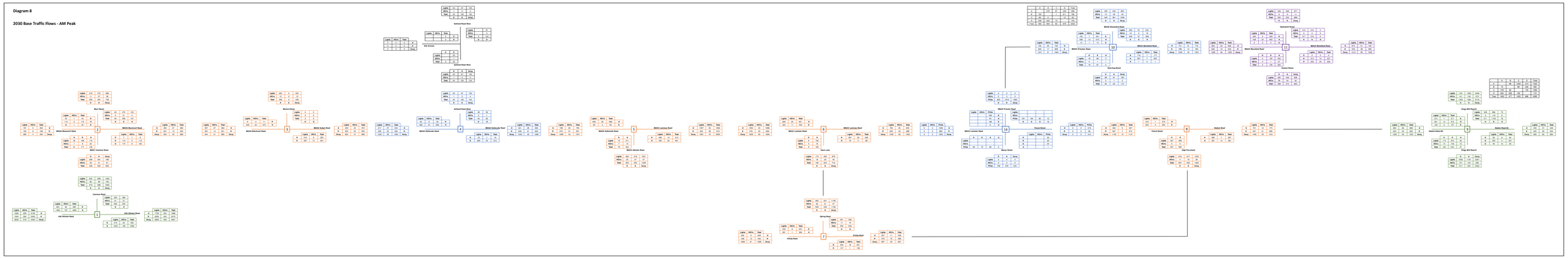


Diagram 9

2030 Base Traffic Flows - PM Peak

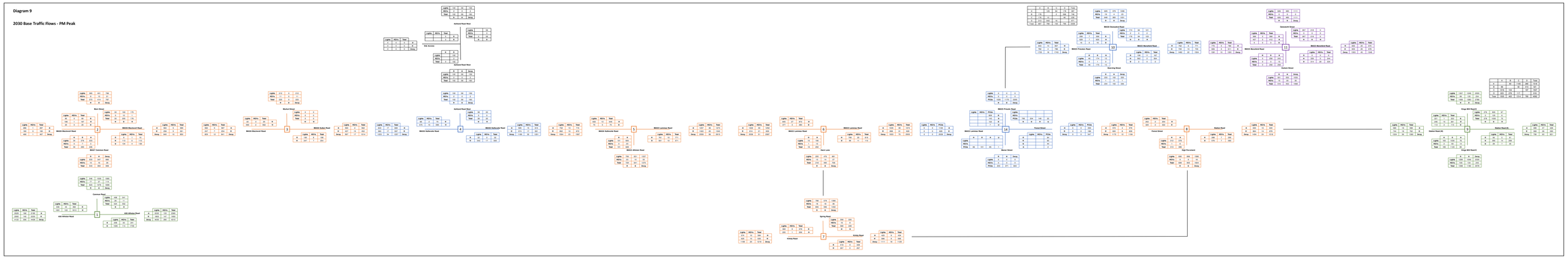


Diagram 10

2030 With Development Traffic Flows - AM Peak

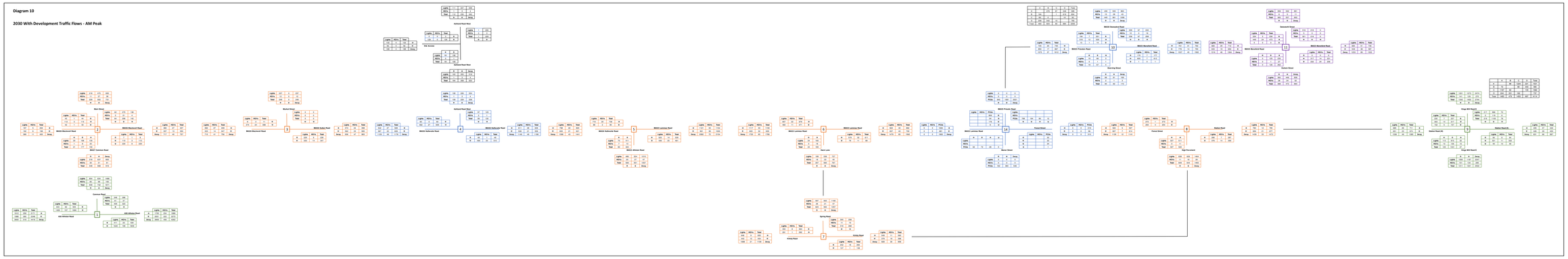
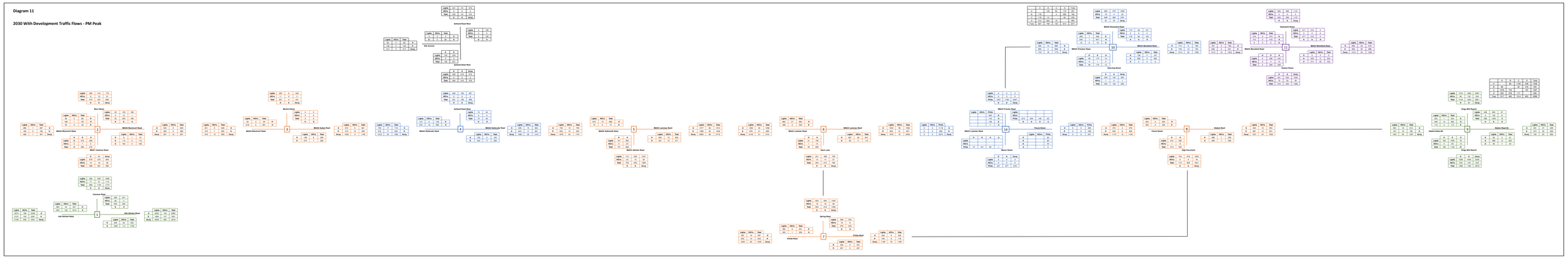


Diagram 11

2030 With Development Traffic Flows - PM Peak



APPENDIX A

2011 NATIONAL CENSUS TRIP DISTRIBUTION PATTERN

WU03EW - Location of usual residence and place of work by method of travel to work (MSOA level)

ONS Crown Copyright Reserved [from Nomis on 16 April 2020]

population	All usual residents aged 16 and over in employment the week before the census
units	Persons
date	2011
method of travel to work	Driving a car or van

place of work	E02005824 : Ashfield 006	Route
Mansfield	471	A/C
E02005822 : Ashfield 004	266	B
Newark and Sherwood	101	B
Bassetlaw	34	B
E02005832 : Ashfield 014	13	B
E02005834 : Ashfield 016	11	B
E02005831 : Ashfield 013	10	B
North Kesteven	8	B
South Kesteven	5	B
E02005833 : Ashfield 015	4	B
Lincoln	3	B
Peterborough	3	B
East Lindsey	1	B
West Lindsey	1	B
Nottingham	234	D
Broxtowe	57	D
Erewash	45	D
Rushcliffe	30	D
North West Leicestershire	19	D
Charnwood	15	D
North Warwickshire	9	D
Leicester	7	D
Blaby	7	D
Birmingham	7	D
Coventry	6	D
E02005830 : Ashfield 012	4	D
Camden	4	D
Hinckley and Bosworth	3	D
Corby	3	D
Kettering	3	D
Nuneaton and Bedworth	3	D
Luton	3	D
Hillingdon	3	D
Sutton	3	D
Rutland	2	D
Herefordshire, County of	2	D
E02005819 : Ashfield 001	47	E
E02005820 : Ashfield 002	13	E
E02005823 : Ashfield 005	195	G
E02005825 : Ashfield 007	112	H
E02005828 : Ashfield 010	78	I
E02005827 : Ashfield 009	66	I
E02005826 : Ashfield 008	57	I
Gedling	64	J
Amber Valley	194	K
Derby	67	K
South Derbyshire	15	K
East Staffordshire	6	K
Sefton	3	K
Stoke-on-Trent	3	K
Wigan	2	K
Lichfield	2	K
Newcastle-under-Lyme	2	K
E02005821 : Ashfield 003	184	L
E02005824 : Ashfield 006	151	M
Chesterfield	54	N
North East Derbyshire	48	N
Derbyshire Dales	16	N
Sheffield	21	O
Rotherham	14	O
East Riding of Yorkshire	9	O
Doncaster	8	O
Leeds	6	O
Wakefield	4	O
Preston	2	O
Richmondshire	2	O
Barnsley	2	O
Kirklees	2	O
E02005829 : Ashfield 011	12	P
Bolsover	240	Q

			AM Peak			PM Peak		
	Drivers	%	Arrive	Depart	Two-Way	Arrive	Depart	Two-Way
A = A38 Sutton Road	236	7.6%	4	10	14	10	6	16
B = A617 Sherwood Way S	460	14.8%	8	19	27	20	12	32
C = B6014 Skegby Lane	236	7.6%	4	10	14	10	6	16
D = M1 (S)	469	15.1%	8	20	28	20	12	32
E = B6028 Stoneyford Road	60	1.9%	1	3	4	3	2	5
F = A617 Beck Lane	0	0.0%	0	0	0	0	0	0
G = Sutton in Ashfield Town Centre	195	6.3%	4	8	12	8	5	13
H = Penny Emma Way	112	3.6%	2	5	7	5	3	8
I = B6018 Sutton Road	201	6.5%	4	9	13	9	5	14
J = B6139 Coxmoor Road	64	2.1%	1	3	4	3	2	5
K = A38 (W)	294	9.5%	6	13	19	13	8	21
L = Huthwaite (Chesterfield Road)	184	5.9%	3	8	11	8	5	13
M = Orchard Way (Kuehne & Nagel)	151	4.9%	3	6	9	6	4	10
N = Chesterfield Road (N)	118	3.8%	2	5	7	5	3	8
O = M1 (N)	70	2.3%	1	3	4	3	2	5
P = Pinxton Lane	12	0.4%	0	1	1	1	0	1
Q = Bolsover District	240	7.7%	4	10	14	10	6	16
Total	3101	100.0%	56	132	188	132	82	214

APPENDIX B

TRAFFIC COUNT DATA

A38 Mansfield - Manual Traffic Survey, Tuesday 17th April 2018

Produced by Road Data Services Ltd

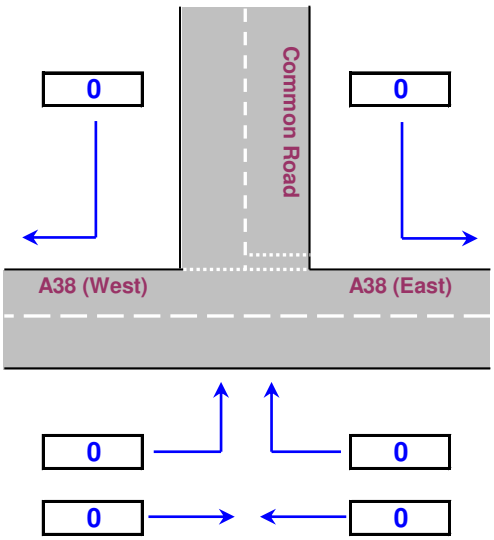
Junction: (1) Common Road / A38

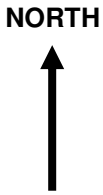
Vehicle Class: ALL CLASSES

Start Time: 1) 0700

End Time: 1) 1900

☐ **Peak Hour**





Note: The above diagram represents the Junction surveyed, although may not be the exact layout of the actual location.

Important Note: This spreadsheet & Interactive Vehicle Flow Diagram was produced based on specific parameters. Consequently, alteration to the spreadsheet format or it's properties may result in malfunction.

A38 Mansfield - Manual Traffic Survey, Tuesday 17th April 2018

Produced by Road Data Services Ltd

Junction: (1) Common Road / A38

Approach: Common Road

	Left to A38 (East)								Right to A38 (West)							
TIME	P/CYCLE	M/CYCLE	CAR	LGV	OGV1	OGV2	BUS	**TOTAL**	P/CYCLE	M/CYCLE	CAR	LGV	OGV1	OGV2	BUS	**TOTAL**
0700 - 0715	0	1	37	5	9	2	0	**54**	0	0	54	12	8	7	0	**81**
0715 - 0730	0	0	34	13	6	4	0	**57**	0	1	50	18	10	7	0	**86**
0730 - 0745	0	0	44	8	6	2	0	**60**	0	0	48	21	8	4	0	**81**
0745 - 0800	0	0	53	8	5	0	0	**66**	0	0	53	10	11	2	0	**76**
Hourly Total	**0**	**1**	**168**	**34**	**26**	**8**	**0**	**237**	**0**	**1**	**205**	**61**	**37**	**20**	**0**	**324**
0800 - 0815	0	0	64	12	10	2	0	**88**	0	1	52	13	10	6	0	**82**
0815 - 0830	0	0	48	15	6	2	0	**71**	0	1	48	19	9	4	0	**81**
0830 - 0845	0	0	44	12	5	2	0	**63**	0	0	58	17	10	5	1	**91**
0845 - 0900	0	0	36	22	1	1	0	**60**	0	0	40	15	9	4	0	**68**
Hourly Total	**0**	**0**	**192**	**61**	**22**	**7**	**0**	**282**	**0**	**2**	**198**	**64**	**38**	**19**	**1**	**322**
0900 - 0915	0	0	18	10	3	0	1	**32**	0	0	31	18	4	6	0	**59**
0915 - 0930	0	0	28	18	6	4	0	**56**	0	0	35	13	7	10	0	**65**
0930 - 0945	0	0	23	6	3	1	0	**33**	0	0	44	18	13	5	0	**80**
0945 - 1000	0	0	28	7	6	4	0	**45**	0	0	39	12	7	6	0	**64**
Hourly Total	**0**	**0**	**97**	**41**	**18**	**9**	**1**	**166**	**0**	**0**	**149**	**61**	**31**	**27**	**0**	**268**
1000 - 1015	0	0	23	9	5	2	0	**39**	0	0	37	15	12	8	0	**72**
1015 - 1030	0	0	41	9	6	5	0	**61**	0	0	33	18	5	4	0	**60**
1030 - 1045	0	0	23	11	4	2	0	**40**	0	0	29	14	8	4	0	**55**
1045 - 1100	0	0	38	12	7	3	0	**60**	0	0	37	21	10	3	0	**71**
Hourly Total	**0**	**0**	**125**	**41**	**22**	**12**	**0**	**200**	**0**	**0**	**136**	**68**	**35**	**19**	**0**	**258**
1100 - 1115	0	0	28	9	8	2	0	**47**	0	0	22	20	8	7	0	**57**
1115 - 1130	0	0	30	8	5	5	0	**48**	0	0	28	10	5	2	0	**45**
1130 - 1145	0	1	23	9	5	2	0	**40**	0	0	48	18	12	7	0	**85**
1145 - 1200	0	0	39	13	7	1	0	**60**	0	1	43	15	10	6	0	**75**
Hourly Total	**0**	**1**	**120**	**39**	**25**	**10**	**0**	**195**	**0**	**1**	**141**	**63**	**35**	**22**	**0**	**262**
1200 - 1215	0	0	45	16	4	1	0	**66**	0	0	56	9	7	7	0	**79**
1215 - 1230	0	0	39	7	6	0	0	**52**	0	0	47	16	1	2	0	**66**
1230 - 1245	0	0	44	12	6	1	0	**63**	0	0	56	9	9	3	0	**77**
1245 - 1300	0	0	30	11	2	2	0	**45**	0	0	36	10	11	5	0	**62**
Hourly Total	**0**	**0**	**158**	**46**	**18**	**4**	**0**	**226**	**0**	**0**	**195**	**44**	**28**	**17**	**0**	**284**
1300 - 1315	0	0	50	14	6	0	0	**70**	0	0	69	17	12	3	0	**101**
1315 - 1330	0	0	49	15	7	2	0	**73**	0	1	55	12	9	4	0	**81**
1330 - 1345	0	0	46	14	7	2	0	**69**	0	1	45	18	10	7	0	**81**
1345 - 1400	0	0	49	14	4	0	0	**67**	0	0	40	7	9	3	0	**59**
Hourly Total	**0**	**0**	**194**	**57**	**24**	**4**	**0**	**279**	**0**	**2**	**209**	**54**	**40**	**17**	**0**	**322**
1400 - 1415	0	0	42	5	7	2	0	**56**	0	0	62	10	7	5	0	**84**
1415 - 1430	0	1	54	17	4	0	0	**76**	0	1	43	16	5	4	0	**69**
1430 - 1445	0	1	34	12	2	2	0	**51**	0	0	41	16	14	1	0	**72**
1445 - 1500	0	1	54	10	4	1	0	**70**	0	0	48	14	7	2	0	**71**
Hourly Total	**0**	**3**	**184**	**44**	**17**	**5**	**0**	**253**	**0**	**1**	**194**	**56**	**33**	**12**	**0**	**296**
1500 - 1515	0	1	51	7	6	0	0	**65**	0	0	75	18	3	2	0	**98**
1515 - 1530	0	0	52	11	2	3	0	**68**	0	0	46	14	6	4	0	**70**
1530 - 1545	0	0	55	12	2	1	0	**70**	0	0	46	12	6	4	0	**68**
1545 - 1600	0	0	57	7	9	2	0	**75**	0	1	58	20	7	2	1	**89**
Hourly Total	**0**	**1**	**215**	**37**	**19**	**6**	**0**	**278**	**0**	**1**	**225**	**64**	**22**	**12**	**1**	**325**
1600 - 1615	0	3	130	17	3	1	1	**155**	0	2	139	15	8	3	0	**167**
1615 - 1630	0	1	53	9	2	0	1	**66**	0	1	97	14	2	0	0	**114**
1630 - 1645	0	3	134	11	0	1	0	**149**	0	0	97	19	5	2	0	**123**
1645 - 1700	0	0	108	6	1	0	0	**115**	0	0	87	12	4	3	0	**106**
Hourly Total	**0**	**7**	**425**	**43**	**6**	**2**	**2**	**485**	**0**	**3**	**420**	**60**	**19**	**8**	**0**	**510**
1700 - 1715	0	2	143	9	4	1	0	**159**	0	0	106	8	4	2	1	**121**
1715 - 1730	0	0	71	5	7	0	0	**83**	0	1	71	8	3	0	0	**83**
1730 - 1745	0	0	88	7	2	0	1	**98**	0	0	91	11	0	2	0	**104**
1745 - 1800	0	1	62	4	3	1	0	**71**	0	0	63	6	1	0	0	**70**
Hourly Total	**0**	**3**	**364**	**25**	**16**	**2**	**1**	**411**	**0**	**1**	**331**	**33**	**8**	**4**	**1**	**378**
1800 - 1815	0	0	57	12	0	0	0	**69**	0	0	63	6	0	2	0	**71**
1815 - 1830	0	0	33	5	5	0	0	**43**	0	0	42	5	4	1	0	**52**
1830 - 1845	0	0	52	4	4	0	0	**60**	0	0	47	6	3	1	0	**57**
1845 - 1900	0	2	31	2	1	0	0	**36**	0	0	30	2	2	1	0	**35**
Hourly Total	**0**	**2**	**173**	**23**	**10**	**0**	**0**	**208**	**0**	**0**	**182**	**19**	**9**	**5**	**0**	**215**
TOTAL	**0**	**18**	**2415**	**491**	**223**	**69**	**4**	**3220**	**0**	**12**	**2585**	**647**	**335**	**182**	**3**	**3764**

A38 Mansfield - Manual Traffic Survey, Tuesday 17th April 2018

Produced by Road Data Services Ltd

Junction: (1) Common Road / A38

Approach: A38 (East)

	W/B to A38 (West)								Right to Common Road							
TIME	P/CYCLE	M/CYCLE	CAR	LGV	OGV1	OGV2	BUS	**TOTAL**	P/CYCLE	M/CYCLE	CAR	LGV	OGV1	OGV2	BUS	**TOTAL**
0700 - 0715	0	3	263	78	13	17	4	**378**	0	0	63	8	2	3	0	**76**
0715 - 0730	0	1	268	70	11	24	1	**375**	0	0	92	6	3	0	0	**101**
0730 - 0745	0	2	305	65	25	11	4	**412**	0	1	71	9	2	1	0	**84**
0745 - 0800	0	1	297	64	19	17	1	**399**	0	1	90	13	4	4	1	**113**
Hourly Total	**0**	**7**	**1133**	**277**	**68**	**69**	**10**	**1564**	**0**	**2**	**316**	**36**	**11**	**8**	**1**	**374**
0800 - 0815	0	4	302	72	27	24	0	**429**	0	0	86	16	1	1	1	**105**
0815 - 0830	0	1	295	38	27	19	1	**381**	0	1	66	7	2	2	1	**79**
0830 - 0845	0	1	228	50	25	19	0	**323**	0	1	65	12	1	0	0	**79**
0845 - 0900	0	1	226	41	24	19	1	**312**	0	0	56	16	9	3	0	**84**
Hourly Total	**0**	**7**	**1051**	**201**	**103**	**81**	**2**	**1445**	**0**	**2**	**273**	**51**	**13**	**6**	**2**	**347**
0900 - 0915	0	0	232	54	26	15	0	**327**	0	0	45	12	4	5	0	**66**
0915 - 0930	0	0	256	48	26	22	2	**354**	0	0	37	15	2	1	0	**55**
0930 - 0945	0	1	229	35	26	15	0	**306**	0	0	32	6	3	1	0	**42**
0945 - 1000	0	0	177	26	18	15	1	**237**	0	0	22	12	6	2	0	**42**
Hourly Total	**0**	**1**	**894**	**163**	**96**	**67**	**3**	**1224**	**0**	**0**	**136**	**45**	**15**	**9**	**0**	**205**
1000 - 1015	0	0	173	42	22	24	1	**262**	0	0	19	7	10	1	0	**37**
1015 - 1030	0	2	171	50	22	26	2	**273**	0	0	24	10	2	0	0	**36**
1030 - 1045	0	0	151	31	27	26	0	**235**	0	0	30	10	5	1	0	**46**
1045 - 1100	0	0	174	36	23	10	1	**244**	0	0	28	11	4	4	0	**47**
Hourly Total	**0**	**2**	**669**	**159**	**94**	**86**	**4**	**1014**	**0**	**0**	**101**	**38**	**21**	**6**	**0**	**166**
1100 - 1115	0	0	134	34	22	29	0	**219**	0	0	18	9	2	3	0	**32**
1115 - 1130	0	2	187	35	30	16	1	**271**	0	0	22	10	5	3	0	**40**
1130 - 1145	0	1	205	32	23	18	0	**279**	1	1	16	8	6	1	0	**33**
1145 - 1200	0	0	194	42	18	15	1	**270**	0	0	22	11	10	1	0	**44**
Hourly Total	**0**	**3**	**720**	**143**	**93**	**78**	**2**	**1039**	**1**	**1**	**78**	**38**	**23**	**8**	**0**	**149**
1200 - 1215	0	1	179	27	21	15	0	**243**	0	0	33	13	6	1	0	**53**
1215 - 1230	0	2	206	28	29	19	1	**285**	0	0	31	12	6	2	0	**51**
1230 - 1245	0	0	175	34	22	18	1	**250**	0	0	25	12	7	1	0	**45**
1245 - 1300	0	1	240	42	29	17	1	**330**	0	0	27	7	11	4	0	**49**
Hourly Total	**0**	**4**	**800**	**131**	**101**	**69**	**3**	**1108**	**0**	**0**	**116**	**44**	**30**	**8**	**0**	**198**
1300 - 1315	0	2	239	28	17	15	0	**301**	0	0	31	8	6	3	0	**48**
1315 - 1330	0	1	220	40	14	11	1	**287**	0	0	29	6	6	2	0	**43**
1330 - 1345	0	2	217	39	15	18	0	**291**	0	0	55	15	9	1	0	**80**
1345 - 1400	0	4	220	26	22	19	1	**292**	0	0	41	9	9	0	0	**59**
Hourly Total	**0**	**9**	**896**	**133**	**68**	**63**	**2**	**1171**	**0**	**0**	**156**	**38**	**30**	**6**	**0**	**230**
1400 - 1415	0	3	212	39	14	19	0	**287**	0	0	46	11	7	0	0	**64**
1415 - 1430	1	1	208	42	13	16	2	**283**	0	0	23	7	5	2	0	**37**
1430 - 1445	0	1	194	51	19	20	0	**285**	0	0	33	3	3	1	0	**40**
1445 - 1500	0	1	188	43	15	16	3	**266**	0	0	25	14	4	0	0	**43**
Hourly Total	**1**	**6**	**802**	**175**	**61**	**71**	**5**	**1121**	**0**	**0**	**127**	**35**	**19**	**3**	**0**	**184**
1500 - 1515	0	2	200	46	20	18	1	**287**	0	0	19	7	7	2	0	**35**
1515 - 1530	0	0	195	36	12	19	3	**265**	0	0	34	14	8	3	2	**61**
1530 - 1545	0	3	196	48	20	28	1	**296**	0	0	35	10	10	0	0	**55**
1545 - 1600	0	1	239	47	26	12	1	**326**	0	0	30	8	3	2	0	**43**
Hourly Total	**0**	**6**	**830**	**177**	**78**	**77**	**6**	**1174**	**0**	**0**	**118**	**39**	**28**	**7**	**2**	**194**
1600 - 1615	0	2	259	41	14	11	0	**327**	0	0	28	11	7	4	0	**50**
1615 - 1630	0	5	282	39	12	14	2	**354**	0	0	41	10	6	3	0	**60**
1630 - 1645	0	3	345	43	7	13	1	**412**	0	0	41	7	4	1	0	**53**
1645 - 1700	0	1	305	37	14	16	0	**373**	0	0	27	6	8	1	1	**43**
Hourly Total	**0**	**11**	**1191**	**160**	**47**	**54**	**3**	**1466**	**0**	**0**	**137**	**34**	**25**	**9**	**1**	**206**
1700 - 1715	0	1	321	30	9	13	0	**374**	0	0	48	4	4	1	0	**57**
1715 - 1730	0	1	320	26	7	13	1	**368**	0	0	39	6	6	2	0	**53**
1730 - 1745	0	2	323	25	9	14	1	**374**	0	0	34	6	2	1	0	**43**
1745 - 1800	0	2	263	18	8	14	0	**305**	0	0	32	8	2	0	0	**42**
Hourly Total	**0**	**6**	**1227**	**99**	**33**	**54**	**2**	**1421**	**0**	**0**	**153**	**24**	**14**	**4**	**0**	**195**
1800 - 1815	0	1	258	12	6	5	1	**283**	0	0	43	9	2	2	0	**56**
1815 - 1830	0	1	252	26	2	10	0	**291**	0	0	25	2	2	0	0	**29**
1830 - 1845	0	2	177	24	2	8	1	**214**	0	0	32	0	2	2	0	**36**
1845 - 1900	0	0	178	16	6	6	0	**206**	0	0	25	6	2	0	0	**33**
Hourly Total	**0**	**4**	**865**	**78**	**16**	**29**	**2**	**994**	**0**	**0**	**125**	**17**	**8**	**4**	**0**	**154**
TOTAL	**1**	**66**	**11078**	**1896**	**858**	**798**	**44**	**14741**	**1**	**5**	**1836**	**439**	**237**	**78**	**6**	**2602**

A38 Mansfield - Manual Traffic Survey, Tuesday 17th April 2018

Produced by Road Data Services Ltd

Junction: (1) Common Road / A38

Approach: A38 (West)

	Left to Common Road								E/B to A38 (East)							
TIME	P/CYCLE	M/CYCLE	CAR	LGV	OGV1	OGV2	BUS	**TOTAL**	P/CYCLE	M/CYCLE	CAR	LGV	OGV1	OGV2	BUS	**TOTAL**
0700 - 0715	0	0	69	8	5	4	0	**86**	0	0	201	34	22	14	0	**271**
0715 - 0730	2	0	91	10	5	4	0	**112**	2	1	242	38	22	18	1	**324**
0730 - 0745	1	0	71	13	1	8	2	**96**	0	2	262	50	20	20	2	**356**
0745 - 0800	0	0	69	24	1	10	0	**104**	0	0	302	54	25	17	1	**399**
Hourly Total	**3**	**0**	**300**	**55**	**12**	**26**	**2**	**398**	**2**	**3**	**1007**	**176**	**89**	**69**	**4**	**1350**
0800 - 0815	0	0	80	23	6	13	0	**122**	0	1	282	33	18	24	2	**360**
0815 - 0830	0	3	84	7	6	8	0	**108**	0	0	272	37	17	24	4	**354**
0830 - 0845	0	0	77	15	6	4	0	**102**	0	1	261	42	17	22	0	**343**
0845 - 0900	0	1	64	16	9	3	0	**93**	0	0	188	28	19	24	0	**259**
Hourly Total	**0**	**4**	**305**	**61**	**27**	**28**	**0**	**425**	**0**	**2**	**1003**	**140**	**71**	**94**	**6**	**1316**
0900 - 0915	0	0	60	19	9	7	0	**95**	0	1	208	45	25	26	0	**305**
0915 - 0930	0	0	53	7	12	11	0	**83**	0	1	217	34	21	20	0	**293**
0930 - 0945	0	0	42	18	8	11	0	**79**	0	0	195	40	19	24	1	**279**
0945 - 1000	0	0	47	19	4	10	0	**80**	0	0	174	38	24	19	3	**258**
Hourly Total	**0**	**0**	**202**	**63**	**33**	**39**	**0**	**337**	**0**	**2**	**794**	**157**	**89**	**89**	**4**	**1135**
1000 - 1015	0	0	38	10	9	9	0	**66**	0	0	142	28	20	17	1	**208**
1015 - 1030	0	0	32	15	6	6	0	**59**	0	4	139	42	18	25	3	**231**
1030 - 1045	0	0	24	21	4	20	0	**69**	0	0	178	33	30	23	1	**265**
1045 - 1100	0	0	26	14	7	13	0	**60**	0	0	151	38	20	26	0	**235**
Hourly Total	**0**	**0**	**120**	**60**	**26**	**48**	**0**	**254**	**0**	**4**	**610**	**141**	**88**	**91**	**5**	**939**
1100 - 1115	0	1	22	15	7	11	0	**56**	0	0	162	41	15	23	1	**242**
1115 - 1130	0	0	32	10	6	9	0	**57**	0	2	176	31	30	31	0	**270**
1130 - 1145	0	0	32	17	11	4	0	**64**	0	0	156	31	21	26	1	**235**
1145 - 1200	0	0	29	16	9	4	0	**58**	0	0	146	29	16	40	1	**232**
Hourly Total	**0**	**1**	**115**	**58**	**33**	**28**	**0**	**235**	**0**	**2**	**640**	**132**	**82**	**120**	**3**	**979**
1200 - 1215	0	0	37	16	11	4	0	**68**	0	2	199	42	20	22	1	**286**
1215 - 1230	0	0	27	14	7	2	0	**50**	0	2	148	35	17	18	0	**220**
1230 - 1245	0	0	46	14	7	6	0	**73**	0	3	160	34	11	27	1	**236**
1245 - 1300	0	0	50	9	5	6	0	**70**	0	1	169	37	19	15	1	**242**
Hourly Total	**0**	**0**	**160**	**53**	**30**	**18**	**0**	**261**	**0**	**8**	**676**	**148**	**67**	**82**	**3**	**984**
1300 - 1315	0	0	41	21	3	6	0	**71**	0	0	178	32	15	27	1	**253**
1315 - 1330	0	0	28	26	11	7	0	**72**	0	2	192	35	24	32	0	**285**
1330 - 1345	0	0	30	21	10	1	0	**62**	0	1	220	32	21	24	1	**299**
1345 - 1400	0	0	41	25	10	2	0	**78**	0	0	193	34	27	34	0	**288**
Hourly Total	**0**	**0**	**140**	**93**	**34**	**16**	**0**	**283**	**0**	**3**	**783**	**133**	**87**	**117**	**2**	**1125**
1400 - 1415	0	0	53	21	14	6	0	**94**	0	4	320	46	20	13	5	**408**
1415 - 1430	0	0	34	14	4	4	0	**56**	0	0	194	38	21	17	0	**270**
1430 - 1445	0	0	40	15	11	1	0	**67**	0	2	216	40	25	14	2	**299**
1445 - 1500	0	0	37	18	10	5	0	**70**	0	3	211	36	18	29	1	**298**
Hourly Total	**0**	**0**	**164**	**68**	**39**	**16**	**0**	**287**	**0**	**9**	**941**	**160**	**84**	**73**	**8**	**1275**
1500 - 1515	0	0	40	22	10	4	0	**76**	0	1	217	40	16	24	0	**298**
1515 - 1530	0	0	35	17	8	7	0	**67**	0	5	226	38	16	24	0	**309**
1530 - 1545	0	0	43	16	6	7	0	**72**	0	0	222	51	16	29	2	**320**
1545 - 1600	0	0	27	19	9	6	1	**62**	0	0	218	46	13	17	0	**294**
Hourly Total	**0**	**0**	**145**	**74**	**33**	**24**	**1**	**277**	**0**	**6**	**883**	**175**	**61**	**94**	**2**	**1221**
1600 - 1615	0	0	29	14	6	5	0	**54**	0	3	201	55	11	19	0	**289**
1615 - 1630	0	0	71	29	8	6	0	**114**	0	2	332	80	16	18	1	**449**
1630 - 1645	0	0	43	13	7	4	0	**67**	0	2	256	54	12	16	2	**342**
1645 - 1700	0	0	54	19	3	5	0	**81**	0	1	353	53	5	11	1	**424**
Hourly Total	**0**	**0**	**197**	**75**	**24**	**20**	**0**	**316**	**0**	**8**	**1142**	**242**	**44**	**64**	**4**	**1504**
1700 - 1715	0	0	63	7	5	1	0	**76**	0	0	313	51	12	14	0	**390**
1715 - 1730	0	1	68	11	5	4	0	**89**	1	2	375	36	7	15	1	**437**
1730 - 1745	0	0	68	21	7	4	0	**100**	0	3	348	41	8	9	1	**410**
1745 - 1800	0	0	67	7	3	3	0	**80**	0	2	282	41	4	7	0	**336**
Hourly Total	**0**	**1**	**266**	**46**	**20**	**12**	**0**	**345**	**1**	**7**	**1318**	**169**	**31**	**45**	**2**	**1573**
1800 - 1815	0	0	62	15	5	4	0	**86**	0	1	369	38	6	11	0	**425**
1815 - 1830	0	0	42	15	2	3	0	**62**	0	2	344	35	8	7	1	**397**
1830 - 1845	0	0	36	5	0	2	0	**43**	0	0	222	21	7	10	0	**260**
1845 - 1900	0	0	41	9	3	1	0	**54**	0	0	212	17	8	6	3	**246**
Hourly Total	**0**	**0**	**181**	**44**	**10**	**10**	**0**	**245**	**0**	**3**	**1147**	**111**	**29**	**34**	**4**	**1328**

TOTAL	**3**	**6**	**2295**	**750**	**321**	**285**	**3**	**3663**	**3**	**57**	**10944**	**1884**	**822**	**972**	**47**	**14729**

ANSA Traffic & Construction Ltd.

Place: Sutton-in-Ashfield
Date: 09.09.2020

Weather: Sunny
Junction: Common Rd / Blackwell Rd / Main St

Client: ADC Infrastructure Ltd
Order no: ADC1032

Page: 1
of: 1

Time	Entering on: Common Road Northbound														Entering on: Blackwell Road Eastbound														Entering on: Main Street Southbound												Entering on: Blackwell Road Westbound													
	Left turn to: Blackwell Rd WB			Straight on to: Main St NB			Right turn to: Blackwell Rd EB			U-Turn to: Common Rd SB			Total		Left turn to: Main St NB			Straight over to: Blackwell Rd EB			Right Turn to: Common Rd SB			U-turn to: Blackwell Rd WB			Total		Left turn to: Blackwell Rd EB			Straight on to: Common Rd SB			Right turn to: Blackwell Rd WB			U-turn to: Main St NB			Total		Left turn to: Common Rd SB			Straight on to: Blackwell Rd WB			Right turn to: Main St NB			U-turn to: Blackwell Rd EB			Total		Grand
Begin	Light	Heavy	Total	Light	Heavy	Total	Light	Heavy	Total	Light	Heavy	Total	Vehs	PCUs	Light	Heavy	Total	Light	Heavy	Total	Light	Heavy	Total	Light	Heavy	Total	Vehs	PCUs	Light	Heavy	Total	Light	Heavy	Total	Light	Heavy	Total	Light	Heavy	Total	Vehs	PCUs	Light	Heavy	Total	Light	Heavy	Total	Light	Heavy	Total	Light	Heavy	Total	Vehs	PCUs	Totals
0730	2	0	2	24	2	26	15	3	18	0	0	0	46		3	0	3	16	0	16	4	0	4	0	0	0	23		19	1	20	65	6	71	12	0	12	0	0	0	103		40	1	41	26	0	26	0	1	1	0	0	0	68		240
0745	4	0	4	26	2	28	16	4	20	0	0	0	52		9	1	10	19	1	20	10	0	10	0	0	0	40		28	2	30	51	5	56	11	1	12	0	0	0	98		38	3	41	29	1	30	2	0	2	0	0	0	73		263
0800	0	1	1	33	2	35	26	5	31	0	0	0	67		2	0	2	29	0	29	10	1	11	0	0	0	42		26	2	28	55	5	60	11	0	11	0	0	0	99		32	1	33	22	1	23	2	0	2	0	0	0	58		266
0815	3	0	3	42	2	44	31	4	35	0	0	0	82		12	0	12	21	2	23	6	0	6	0	0	0	41		25	0	25	54	3	57	11	1	12	0	0	0	94		46	2	48	20	0	20	1	0	1	0	0	0	69		286
0830	9	0	9	36	1	37	16	3	19	0	0	0	65		12	0	12	22	0	22	8	0	8	0	0	0	42		29	0	29	63	4	67	17	0	17	0	0	0	113		25	1	26	18	1	19	0	1	1	0	0	0	46		266
0845	4	0	4	22	1	23	27	1	28	0	0	0	55		3	0	3	22	0	22	3	0	3	0	0	0	28		36	1	37	53	2	55	10	0	10	0	0	0	102		34	3	37	13	0	13	2	0	2	0	0	0	52		237
0900	6	0	6	16	5	21	17	0	17	0	0	0	44		0	0	0	20	1	21	5	0	5	0	0	0	26		28	0	28	29	5	34	10	1	11	0	0	0	73		27	0	27	15	2	17	0	0	0	0	0	0	44		187
0915	8	1	9	11	1	12	23	2	25	0	0	0	46		7	1	8	15	1	16	5	2	7	0	0	0	31		22	1	23	25	4	29	5	0	5	0	0	0	57		17	3	20	13	1	14	0	0	0	0	0	0	34		168
Total	36	2	38	210	16	226	171	22	193	0	0	0	457		48	2	50	164	5	169	51	3	54	0	0	0	273		213	7	220	395	34	429	87	3	90	0	0	0	739		259	14	273	156	6	162	7	2	9	0	0	0	444		1913
1630	7	0	7	61	1	62	40	1	41	0	0	0	110		14	0	14	43	0	43	3	0	3	0	0	0	60		45	1	46	40	4	44	4	0	4	0	0	0	94		27	1	28	20	0	20	2	1	3	0	0	0	51		315
1645	6	0	6	59	0	59	42	1	43	0	0	0	108		21	0	21	22	1	23	5	0	5	0	0	0	49		31	0	31	42	2	44	12	0	12	0	0	0	87		33	0	33	18	0	18	1	0	1	0	0	0	52		296
1700	7	0	7	56	3	59	60	0	60	0	0	0	126		22	0	22	61	0	61	4	0	4	0	0	0	87		39	0	39	43	2	45	3	0	3	0	0	0	87		22	1	23	19	0	19	0	0	0	0	0	0	42		342
1715	8	0	8	49	1	50	40	1	41	0	0	0	99		8	0	8	25	0	25	4	0	4	0	0	0	37		27	0	27	33	2	35	8	0	8	0	0	0	70		27	2	29	35	0	35	4	0	4	0	0	0	68		274
1730	6	0	6	50	1	51	36	1	37	0	0	0	94		11	0	11	20	0	20	4	0	4	0	0	0	35		33	0	33	37	3	40	10	0	10	0	0	0	83		27	0	27	22	0	22	1	1	2	0	0	0	51		263
1745	6	0	6	54	1	55	33	3	36	0	0	0	97		9	0	9	23	1	24	2	0	2	0	0	0	35		34	0	34	49	3	52	10	0	10	0	0	0	96		23	0	23	15	0	15	3	0	3	0	0	0	41		269
1800	12	0	12	48	1	49	41	1	42	0	0	0	103		10	0	10	23	0	23	4	0	4	0	0	0	37		28	1	29	42	3	45	10	0	10	0	0	0	84		31	0	31	17	0	17	1	0	1	0	0	0	49		273
1815	4	1	5	38	0	38	31	1	32	0	0	0	75		10	0	10	14	0	14	4	0	4	0	0	0	28		41	0	41	26	2	28	9	0	9	0	0	0	78		25	1	26	24	0	24	0	0	0	0	0	0	50		231
Total	56	1	57	415	8	423	323	9	332	0	0	0	812		105	0	105	231	2	233	30	0	30	0	0	0	368		278	2	280	312	21	333	66	0	66	0	0	0	679		215	5	220	170	0	170	12	2	14	0	0	0	404		2263

Place:	**Sutton-in-Ashfield**	**Weather:**	**Sunny**	**Client:**	**ADC Infrastructure Ltd**
Date:	**09.09.2020**	**Junction:**	**Blackwell Rd / Market St**	**Order no:**	**ADC1032**

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	Blackwell Road Eastbound														**Entering on: Market Street Southbound**														**Entering on: Blackwell Road Westbound**												
	Left turn to: Market St NB			Straight on to: Blackwell Rd EB			Right turn to: NA			U-Turn to: Blackwell Rd WB					Left turn to: Blackwell Rd EB			Straight over to: NA			Right Turn to: Blackwell Rd WB			U-turn to: Market St NB					Left turn to: NA			Straight on to: Blackwell Rd WB			Right turn to: Market St NB			U-turn to: Blackwell Rd EB					
Time Begin	Light	Heavy	Total	Light	Heavy	Total	Light	Heavy	Total	Light	Heavy	Total	Total Vehs	PCUs	Light	Heavy	Total	Light	Heavy	Total	Light	Heavy	Total	Light	Heavy	Total	Total Vehs	PCUs	Light	Heavy	Total	Light	Heavy	Total	Light	Heavy	Total	Light	Heavy	Total	Total Vehs	PCUs	**Grand Totals**
0730	1	1	2	48	3	51	0	0	0	0	0	0	53		0	0	0	0	0	0	0	0	0	0	0	0	0		0	0	0	63	2	65	22	2	24	0	0	0	89		142
0745	1	1	2	63	6	69	0	0	0	0	0	0	71		0	0	0	0	0	0	0	0	0	0	0	0	0		0	0	0	71	4	75	31	2	33	0	0	0	108		179
0800	2	0	2	80	7	87	0	0	0	0	0	0	89		0	0	0	0	0	0	0	0	0	0	0	0	0		0	0	0	51	2	53	47	1	48	0	0	0	101		190
0815	1	1	2	76	5	81	0	0	0	0	0	0	83		0	0	0	0	0	0	0	0	0	0	0	0	0		0	0	0	66	2	68	47	2	49	0	0	0	117		200
0830	2	1	3	65	2	67	0	0	0	0	0	0	70		0	0	0	0	0	0	0	0	0	0	0	0	0		0	0	0	45	4	49	51	2	53	0	0	0	102		172
0845	2	1	3	80	1	81	0	0	0	0	0	0	84		0	0	0	0	0	0	0	0	0	0	0	0	0		0	0	0	49	2	51	35	3	38	0	0	0	89		173
0900	5	1	6	62	0	62	0	0	0	0	0	0	68		0	0	0	0	0	0	0	0	0	0	0	0	0		0	0	0	42	2	44	25	3	28	0	0	0	72		140
0915	2	1	3	60	3	63	0	0	0	0	0	0	66		0	0	0	0	0	0	0	0	0	0	0	0	0		0	0	0	29	4	33	28	1	29	0	0	0	62		128
Total	16	7	23	534	27	561	0	0	0	0	0	0	584		0	0	0	0	0	0	0	0	0	0	0	0	0		0	0	0	416	22	438	286	16	302	0	0	0	740		1324
1630	4	1	5	124	1	125	0	0	0	0	0	0	130		0	0	0	0	0	0	0	0	0	0	0	0	0		0	0	0	42	2	44	41	1	42	0	0	0	86		216
1645	6	1	7	91	1	92	0	0	0	0	0	0	99		0	0	0	0	0	0	0	0	0	0	0	0	0		0	0	0	54	0	54	36	3	39	0	0	0	93		192
1700	2	0	2	152	0	152	0	0	0	0	0	0	154		0	0	0	0	0	0	0	0	0	0	0	0	0		0	0	0	47	1	48	40	1	41	0	0	0	89		243
1715	6	1	7	90	0	90	0	0	0	0	0	0	97		0	0	0	0	0	0	0	0	0	0	0	0	0		0	0	0	59	2	61	38	1	39	0	0	0	100		197
1730	3	1	4	87	0	87	0	0	0	0	0	0	91		0	0	0	0	0	0	0	0	0	0	0	0	0		0	0	0	51	1	52	42	2	44	0	0	0	96		187
1745	3	2	5	89	2	91	0	0	0	0	0	0	96		0	0	0	0	0	0	0	0	0	0	0	0	0		0	0	0	45	0	45	35	2	37	0	0	0	82		178
1800	4	0	4	85	2	87	0	0	0	0	0	0	91		0	0	0	0	0	0	0	0	0	0	0	0	0		0	0	0	46	0	46	33	1	34	1	0	1	81		172
1815	1	1	2	87	0	87	0	0	0	0	0	0	89		0	0	0	0	0	0	0	0	0	0	0	0	0		0	0	0	45	1	46	34	1	35	0	0	0	81		170
Total	29	7	36	805	6	811	0	0	0	0	0	0	847		0	0	0	0	0	0	0	0	0	0	0	0	0		0	0	0	389	7	396	299	12	311	1	0	1	708		1555

ANSA Traffic & Construction Ltd.

Place: Sutton-in-Ashfield
Date: 21.05.2019
Weather: Fine
Junction: J1
Client: ADC Infrastructure Ltd
Order no: ADC
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Time	Entering on: Huthwaite Road Eastbound														Entering on: Ashland Road Southbound														Entering on: Huthwaite Road Westbound												
	Left turn to: Ashland Rd W NB			Straight on to: Huthwaite Rd EB			Right turn to: NA			U-Turn to: Huthwaite Rd WB			Total		Left turn to: Huthwaite Rd EB			Straight over to: NA			Right Turn to: Huthwaite Rd WB			U-turn to: Ashland Rd W NB			Total		Left turn to: NA			Straight on to: Huthwaite Rd WB			Right turn to: Ashland Rd W NB			U-turn to: Huthwaite Rd EB			Total		Grand
Begin	Light	Heavy	Total	Light	Heavy	Total	Light	Heavy	Total	Light	Heavy	Total	Vehs	PCUs	Light	Heavy	Total	Light	Heavy	Total	Light	Heavy	Total	Light	Heavy	Total	Vehs	PCUs	Light	Heavy	Total	Light	Heavy	Total	Light	Heavy	Total	Light	Heavy	Total	Vehs	PCUs	Totals
0700	4	0	4	47	5	52	0	0	0	1	0	1	57		1	0	1	0	0	0	4	0	4	0	0	0	5		0	0	0	77	2	79	1	0	1	0	0	0	80		0
0715	4	0	4	63	7	70	0	0	0	0	0	0	74		9	0	9	0	0	0	12	0	12	0	0	0	21		0	0	0	83	2	85	1	0	1	0	0	0	86		0
0730	5	1	6	110	2	112	0	0	0	0	0	0	118		4	0	4	0	0	0	12	0	12	0	0	0	16		0	0	0	98	2	100	3	0	3	0	0	0	103		0
0745	7	0	7	102	6	108	0	0	0	0	0	0	115		11	1	12	0	0	0	14	0	14	0	0	0	26		0	0	0	110	8	118	2	0	2	0	0	0	120		0
0800	7	0	7	110	8	118	0	0	0	0	0	0	125		13	0	13	0	0	0	11	0	11	0	0	0	24		0	0	0	111	8	119	4	0	4	0	0	0	123		0
0815	8	0	8	114	7	121	0	0	0	0	0	0	129		8	0	8	0	0	0	17	1	18	0	0	0	26		0	0	0	115	4	119	1	1	2	0	0	0	121		0
0830	8	0	8	110	5	115	0	0	0	0	0	0	123		5	1	6	0	0	0	15	0	15	0	0	0	21		0	0	0	102	2	104	5	0	5	0	0	0	109		0
0845	8	0	8	96	4	100	0	0	0	0	0	0	108		8	1	9	0	0	0	10	0	10	0	0	0	19		0	0	0	109	4	113	6	0	6	0	0	0	119		0
0900	11	0	11	90	4	94	0	0	0	1	0	1	106		10	0	10	0	0	0	12	0	12	0	0	0	22		0	0	0	107	3	110	2	0	2	0	0	0	112		0
0915	8	0	8	87	3	90	0	0	0	0	0	0	98		3	0	3	0	0	0	7	1	8	0	0	0	11		0	0	0	88	2	90	4	0	4	0	0	0	94		0
Total	70	1	71	929	51	980	0	0	0	2	0	2	1053		72	3	75	0	0	0	114	2	116	0	0	0	191		0	0	0	1000	37	1037	29	1	30	0	0	0	1067		0
1600	15	0	15	152	3	155	0	0	0	0	0	0	170		4	0	4	0	0	0	5	0	5	0	0	0	9		0	0	0	98	4	102	7	0	7	0	0	0	109		0
1615	17	0	17	104	2	106	0	0	0	0	0	0	123		4	0	4	0	0	0	10	0	10	0	0	0	14		0	0	0	123	0	123	2	0	2	0	0	0	125		0
1630	16	0	16	135	1	136	0	0	0	0	0	0	152		5	0	5	0	0	0	3	0	3	0	0	0	8		0	0	0	119	4	123	6	0	6	0	0	0	129		0
1645	14	1	15	119	4	123	0	0	0	0	0	0	138		8	0	8	0	0	0	6	0	6	0	0	0	14		0	0	0	115	5	120	5	0	5	1	0	1	126		0
1700	18	0	18	147	3	150	0	0	0	0	0	0	168		2	0	2	0	0	0	8	0	8	0	0	0	10		0	0	0	106	3	109	9	0	9	0	0	0	118		0
1715	13	1	14	114	5	119	0	0	0	0	0	0	133		3	0	3	0	0	0	17	0	17	0	0	0	20		0	0	0	145	3	148	9	0	9	0	0	0	157		0
1730	18	0	18	102	2	104	0	0	0	0	0	0	122		6	0	6	0	0	0	12	0	12	0	0	0	18		0	0	0	112	3	115	7	0	7	0	0	0	122		0
1745	15	0	15	118	1	119	0	0	0	0	0	0	134		2	0	2	0	0	0	14	0	14	0	0	0	16		0	0	0	125	2	127	9	0	9	0	0	0	136		0
1800	16	0	16	129	4	133	0	0	0	0	0	0	149		5	1	6	0	0	0	6	0	6	0	0	0	12		0	0	0	114	1	115	6	0	6	0	0	0	121		0
1815	14	0	14	86	1	87	0	0	0	0	0	0	101		8	0	8	0	0	0	6	0	6	0	0	0	14		0	0	0	113	3	116	2	0	2	0	0	0	118		0
Total	156	2	158	###	26	1232	0	0	0	0	0	0	1390		47	1	48	0	0	0	87	0	87	0	0	0	135		0	0	0	1170	28	1198	62	0	62	1	0	1	1261		0

Place:	**Sutton-in-Ashfield**	**Weather:**	**Sunny**	**Client:**	**ADC Infrastructure Ltd**
Date:	**09.09.2020**	**Junction:**	**Huthwaite Rd / Lammas Rd / Alfreton Rd**	**Order no:**	**ADC1032**

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Time	Entering on: Huthwaite Road Eastbound														Entering on: Lammas Road Westbound														Entering on: Alfreton Road Northbound													
	Left turn to: NA			Straight on to: Lammas Rd EB			Right turn to: Alfreton Rd SB			U-Turn to: Huthwaite Rd WB			Total		Left turn to: Alfreton Rd SB			Straight over to: Huthwaite Rd WB			Right Turn to: NA			U-turn to: Lammas Rd EB			Total		Left turn to: NA			Straight on to: Skegby Lane WB			Right turn to: Brick Kiln Lane NB			U-turn to: Skegby Lane EB			Total		**Grand**
Begin	Light	Heavy	Total	Light	Heavy	Total	Light	Heavy	Total	Light	Heavy	Total	Vehs	PCUs	Light	Heavy	Total	Light	Heavy	Total	Light	Heavy	Total	Light	Heavy	Total	Vehs	PCUs	Light	Heavy	Total	Light	Heavy	Total	Light	Heavy	Total	Light	Heavy	Total	Vehs	PCUs	**Totals**
0730	0	0	0	103	2	105	15	0	15	0	0	0	120		117	2	119	80	4	84	0	0	0	0	1	1	204		0	0	0	11	0	11	76	3	79	1	0	1	91		415
0745	0	0	0	117	7	124	15	1	16	0	0	0	140		112	6	118	82	2	84	0	0	0	0	0	0	202		0	0	0	16	0	16	87	3	90	1	0	1	107		449
0800	0	0	0	132	4	136	16	1	17	0	0	0	153		89	7	96	94	5	99	0	0	0	2	0	2	197		0	0	0	19	2	21	79	3	82	3	0	3	106		456
0815	0	0	0	133	3	136	13	0	13	0	0	0	149		80	3	83	113	1	114	0	0	0	2	0	2	199		0	0	0	14	1	15	93	3	96	1	0	1	112		460
0830	0	0	0	143	2	145	23	0	23	0	0	0	168		74	5	79	116	4	120	0	0	0	1	1	2	201		0	0	0	10	2	12	75	2	77	1	0	1	90		459
0845	0	0	0	125	5	130	14	0	14	1	1	2	146		79	2	81	110	4	114	0	0	0	4	0	4	199		0	0	0	28	1	29	80	2	82	0	0	0	111		456
0900	0	0	0	130	1	131	29	0	29	0	0	0	160		86	3	89	90	5	95	0	0	0	5	0	5	189		0	0	0	13	0	13	67	1	68	0	0	0	81		430
0915	0	0	0	94	3	97	12	1	13	0	0	0	110		51	5	56	85	2	87	0	0	0	3	0	3	146		0	0	0	11	1	12	71	3	74	1	0	1	87		343
Total	0	0	0	977	27	1004	137	3	140	1	1	2	1146		688	33	721	770	27	797	0	0	0	17	2	19	1537		0	0	0	122	7	129	628	20	648	8	0	8	785		3468
1630	0	0	0	120	3	123	10	0	10	1	0	1	134		100	1	101	127	1	128	0	0	0	2	0	2	231		0	0	0	19	0	19	123	4	127	0	0	0	146		511
1645	0	0	0	129	4	133	14	0	14	0	0	0	147		121	4	125	148	3	151	0	0	0	3	0	3	279		0	0	0	20	0	20	137	4	141	2	0	2	163		589
1700	0	0	0	158	2	160	19	0	19	0	0	0	179		128	2	130	180	3	183	0	0	0	10	0	10	323		0	0	0	18	0	18	120	4	124	0	0	0	142		644
1715	0	0	0	108	2	110	14	0	14	0	0	0	124		109	1	110	166	1	167	0	0	0	2	0	2	279		0	0	0	25	0	25	114	7	121	0	0	0	146		549
1730	0	0	0	105	1	106	16	0	16	1	0	1	123		89	4	93	142	3	145	0	0	0	5	0	5	243		0	0	0	16	0	16	118	2	120	1	0	1	137		503
1745	0	0	0	97	4	101	14	0	14	1	0	1	116		91	1	92	125	1	126	0	0	0	3	0	3	221		0	0	0	11	0	11	79	3	82	0	0	0	93		430
1800	0	0	0	94	1	95	20	0	20	0	0	0	115		76	4	80	118	2	120	0	0	0	8	0	8	208		0	0	0	20	0	20	107	1	108	0	0	0	128		451
1815	0	0	0	85	2	87	9	0	9	0	0	0	96		57	5	62	121	1	122	0	0	0	6	0	6	190		0	0	0	20	0	20	88	1	89	0	0	0	109		395
Total	0	0	0	896	19	915	116	0	116	3	0	3	1034		771	22	793	###	15	###	0	0	0	39	0	39	1974		0	0	0	149	0	149	886	26	912	3	0	3	1064		4072

Place:	**Sutton-in-Ashfield**	**Weather:**	**Sunny**	**Client:**	**ADC Infrastructure Ltd**
Date:	**09.09.2020**	**Junction:**	**Lammas Rd / Hack Ln**	**Order no:**	**ADC1032**

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Entering on: Lammas Road Eastbound

Time	Left turn to: NA			Straight on to: Lammas Rd EB			Right turn to: Hack Ln SB			U-Turn to: Lammas Rd WB			Total	
Begin	Light	Heavy	Total	Light	Heavy	Total	Light	Heavy	Total	Light	Heavy	Total	Vehs	PCUs
0730	0	0	0	117	4	121	69	1	70	0	0	0	191	
0745	0	0	0	119	7	126	81	3	84	0	0	0	210	
0800	0	0	0	128	3	131	74	4	78	0	0	0	209	
0815	0	0	0	136	5	141	90	1	91	0	0	0	232	
0830	0	0	0	129	3	132	100	1	101	0	0	0	233	
0845	0	0	0	127	5	132	83	2	85	0	0	0	217	
0900	0	0	0	118	3	121	78	0	78	0	0	0	199	
0915	0	0	0	116	4	120	52	1	53	0	0	0	173	
Total	0	0	0	990	34	1024	627	13	640	0	0	0	1664	
1630	0	0	0	181	5	186	62	1	63	0	0	0	249	
1645	0	0	0	184	6	190	75	2	77	1	0	1	268	
1700	0	0	0	188	5	193	80	1	81	0	0	0	274	
1715	0	0	0	162	8	170	94	0	94	0	0	0	264	
1730	0	0	0	155	3	158	58	0	58	0	0	0	216	
1745	0	0	0	135	5	140	60	1	61	0	0	0	201	
1800	0	0	0	156	2	158	46	0	46	0	0	0	204	
1815	0	0	0	141	3	144	42	0	42	0	0	0	186	
Total	0	0	0	1302	37	1339	517	5	522	1	0	1	1862	

Entering on: Lammas Road Westbound

Time	Left turn to: Hack Ln SB			Straight over to: Lammas Rd WB			Right Turn to: NA			U-turn to: Lammas Rd EB			Total	
Begin	Light	Heavy	Total	Light	Heavy	Total	Light	Heavy	Total	Light	Heavy	Total	Vehs	PCUs
0730	16	2	18	139	5	144	0	0	0	0	0	0	162	
0745	11	3	14	133	9	142	0	0	0	0	0	0	156	
0800	13	1	14	111	6	117	0	0	0	0	0	0	131	
0815	24	4	28	116	4	120	0	0	0	0	0	0	148	
0830	15	1	16	101	7	108	0	0	0	0	0	0	124	
0845	15	1	16	105	4	109	0	0	0	0	0	0	125	
0900	21	5	26	111	6	117	0	0	0	0	0	0	143	
0915	13	4	17	77	6	83	0	0	0	0	0	0	100	
Total	128	21	149	893	47	940	0	0	0	0	0	0	1089	
1630	23	2	25	105	2	107	0	0	0	0	0	0	132	
1645	15	1	16	177	5	182	0	0	0	0	0	0	198	
1700	20	2	22	170	4	174	0	0	0	0	0	0	196	
1715	22	4	26	161	2	163	0	0	0	0	0	0	189	
1730	24	2	26	143	5	148	0	0	0	0	0	0	174	
1745	20	1	21	129	2	131	0	0	0	0	0	0	152	
1800	26	2	28	95	6	101	0	0	0	0	0	0	129	
1815	15	4	19	109	5	114	0	0	0	0	0	0	133	
Total	165	18	183	###	31	###	0	0	0	0	0	0	1303	

Entering on: Hack Lane Northbound

Time	Left turn to: Lammas Rd WB			Straight on to: NA			Right turn to: Lammas Rd EB			U-turn to: Hack Ln SB			Total		Grand
Begin	Light	Heavy	Total	Light	Heavy	Total	Light	Heavy	Total	Light	Heavy	Total	Vehs	PCUs	**Totals**
0730	1	0	1	0	0	0	22	2	24	0	0	0	25		378
0745	0	0	0	0	0	0	41	4	45	0	0	0	45		411
0800	3	0	3	0	0	0	28	6	34	0	0	0	37		377
0815	2	0	2	0	0	0	33	2	35	0	0	0	37		417
0830	2	0	2	0	0	0	32	2	34	0	0	0	36		393
0845	1	0	1	0	0	0	22	5	27	0	0	0	28		370
0900	1	1	2	0	0	0	41	3	44	0	0	0	46		388
0915	1	0	1	0	0	0	16	8	24	0	0	0	25		298
Total	11	1	12	0	0	0	235	32	267	0	0	0	279		3032
1630	7	0	7	0	0	0	34	2	36	0	0	0	43		424
1645	4	0	4	0	0	0	55	2	57	0	0	0	61		527
1700	5	0	5	0	0	0	33	3	36	0	0	0	41		511
1715	1	0	1	0	0	0	33	3	36	0	0	0	37		490
1730	3	1	4	0	0	0	34	2	36	0	0	0	40		430
1745	6	0	6	0	0	0	45	4	49	0	0	0	55		408
1800	4	0	4	0	0	0	37	1	38	0	0	0	42		375
1815	3	0	3	0	0	0	41	3	44	0	0	0	47		366
Total	33	1	34	0	0	0	312	20	332	0	0	0	366		3531

Place:	**Sutton-in-Ashfield**	**Weather:**	**Sunny**	**Client:**	**ADC Infrastructure Ltd**
Date:	**09.09.2020**	**Junction:**	**Spring Road / Kirkby Road**	**Order no:**	**ADC1032**

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	Kirkby Road Northbound														Entering on: Spring Road Southbound														Entering on: Kirkby Road Westbound												
	Left turn to: Spring Rd NB			Straight on to: NA			Right turn to: Kirkby Rd EB			U-Turn to: Kirkby Rd SB			Total		Left turn to: Kirkby Rd EB			Straight over to: NA			Right Turn to: Kirkby Rd SB			U-turn to: Spring Rd NB			Total		Left turn to: Kirkby Rd SB			Straight on to: NA			Right turn to: Spring Rd NB			U-turn to: Kirkby Rd EB			Total		
Time Begin	Light	Heavy	Total	Light	Heavy	Total	Light	Heavy	Total	Light	Heavy	Total	Vehs	PCUs	Light	Heavy	Total	Light	Heavy	Total	Light	Heavy	Total	Light	Heavy	Total	Vehs	PCUs	Light	Heavy	Total	Light	Heavy	Total	Light	Heavy	Total	Light	Heavy	Total	Vehs	PCUs	**Grand Totals**
0730	50	5	55	0	0	0	32	1	33	0	0	0	88		38	2	40	0	0	0	54	2	56	0	0	0	96		22	0	22	0	0	0	33	2	35	0	0	0	57		241
0745	66	0	66	0	0	0	44	2	46	1	0	1	113		43	1	44	0	0	0	67	3	70	0	0	0	114		24	0	24	0	0	0	39	4	43	0	0	0	67		294
0800	56	5	61	0	0	0	55	0	55	0	0	0	116		44	2	46	0	0	0	49	4	53	0	0	0	99		24	0	24	0	0	0	43	3	46	0	0	0	70		285
0815	69	1	70	0	0	0	66	1	67	0	0	0	137		47	3	50	0	0	0	66	4	70	0	0	0	120		21	0	21	0	0	0	45	3	48	1	0	1	70		327
0830	70	1	71	0	0	0	57	0	57	3	0	3	131		59	1	60	0	0	0	66	1	67	0	0	0	127		28	1	29	0	0	0	37	2	39	0	0	0	68		326
0845	78	2	80	0	0	0	66	0	66	0	0	0	146		50	2	52	0	0	0	55	2	57	0	0	0	109		32	0	32	0	0	0	55	4	59	0	0	0	91		346
0900	67	2	69	0	0	0	48	0	48	0	0	0	117		36	2	38	0	0	0	50	2	52	0	0	0	90		31	0	31	0	0	0	52	5	57	1	0	1	89		296
0915	46	6	52	0	0	0	28	0	28	1	0	1	81		43	4	47	0	0	0	39	4	43	0	0	0	90		26	0	26	0	0	0	43	3	46	0	0	0	72		243
Total	502	22	524	0	0	0	396	4	400	5	0	5	929		360	17	377	0	0	0	446	22	468	0	0	0	845		208	1	209	0	0	0	347	26	373	2	0	2	584		2358
1630	77	1	78	0	0	0	37	0	37	1	0	1	116		40	2	42	0	0	0	66	2	68	0	0	0	110		51	0	51	0	0	0	86	1	87	0	0	0	138		364
1645	81	3	84	0	0	0	43	0	43	0	0	0	127		46	0	46	0	0	0	72	3	75	0	0	0	121		57	0	57	0	0	0	76	1	77	1	0	1	135		383
1700	66	0	66	0	0	0	34	1	35	0	0	0	101		54	1	55	0	0	0	71	2	73	0	0	0	128		60	0	60	0	0	0	106	4	110	0	0	0	170		399
1715	77	3	80	0	0	0	54	0	54	2	0	2	136		39	3	42	0	0	0	83	1	84	0	0	0	126		50	0	50	0	0	0	73	1	74	0	0	0	124		386
1730	61	0	61	0	0	0	31	0	31	2	0	2	94		37	1	38	0	0	0	82	1	83	4	0	4	125		54	0	54	0	0	0	65	2	67	0	0	0	121		340
1745	79	2	81	0	0	0	35	0	35	0	0	0	116		38	1	39	0	0	0	70	1	71	0	0	0	110		48	0	48	0	0	0	56	2	58	0	0	0	106		332
1800	56	0	56	0	0	0	25	0	25	0	0	0	81		31	1	32	0	0	0	76	0	76	0	0	0	108		49	0	49	0	0	0	66	1	67	0	0	0	116		305
1815	69	1	70	0	0	0	24	0	24	1	0	1	95		36	3	39	0	0	0	48	3	51	0	0	0	90		30	0	30	0	0	0	48	2	50	0	0	0	80		265
Total	566	10	576	0	0	0	283	1	284	6	0	6	866		321	12	333	0	0	0	568	13	581	4	0	4	918		399	0	399	0	0	0	576	14	590	1	0	1	990		2774

Place:	**Sutton-in-Ashfield**	**Weather:**	**Sunny**	**Client:**	**ADC Infrastructure Ltd**
Date:	**09.09.2020**	**Junction:**	**Forest St / Station Rd / High Pavement**	**Order no:**	**ADC1032**

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High Pavement Northbound

Time	Left turn to: Forest Road WB			Straight on to: NA			Right turn to: Station Rd EB			U-Turn to: High Pavement SB			Total	PCUs
Begin	Light	Heavy	Total	Light	Heavy	Total	Light	Heavy	Total	Light	Heavy	Total	Vehs	
0730	35	0	35	0	0	0	58	4	62	0	0	0	97	
0745	43	2	45	0	0	0	75	2	77	0	0	0	122	
0800	57	0	57	0	0	0	91	2	93	0	0	0	150	
0815	65	0	65	0	0	0	91	3	94	0	0	0	159	
0830	72	0	72	0	0	0	127	1	128	0	0	0	200	
0845	63	0	63	0	0	0	108	2	110	0	0	0	173	
0900	66	0	66	0	0	0	72	3	75	0	0	0	141	
0915	46	1	47	0	0	0	59	3	62	0	0	0	109	
Total	447	3	450	0	0	0	681	20	701	0	0	0	1151	
1630	63	0	63	0	0	0	65	2	67	0	0	0	130	
1645	63	0	63	0	0	0	77	0	77	0	0	0	140	
1700	65	1	66	0	0	0	77	2	79	0	0	0	145	
1715	63	0	63	0	0	0	89	2	91	0	0	0	154	
1730	54	0	54	0	0	0	71	0	71	0	0	0	125	
1745	55	0	55	0	0	0	83	1	84	0	0	0	139	
1800	44	0	44	0	0	0	44	0	44	0	0	0	88	
1815	43	0	43	0	0	0	56	4	60	0	0	0	103	
Total	450	1	451	0	0	0	562	11	573	0	0	0	1024	

Entering on: Forest Road Eastbound

Time	Left turn to: NA			Straight over to: Station Rd EB			Right Turn to: High Pavement SB			U-turn to: Forest Road WB			Total	PCUs
Begin	Light	Heavy	Total	Light	Heavy	Total	Light	Heavy	Total	Light	Heavy	Total	Vehs	
0730	0	0	0	24	1	25	38	0	38	0	0	0	63	
0745	0	0	0	34	0	34	45	1	46	0	0	0	80	
0800	0	0	0	42	0	42	37	0	37	0	0	0	79	
0815	0	0	0	45	1	46	48	1	49	0	0	0	95	
0830	0	0	0	60	0	60	44	2	46	0	0	0	106	
0845	0	0	0	58	0	58	53	0	53	0	0	0	111	
0900	0	0	0	59	0	59	59	1	60	0	0	0	119	
0915	0	0	0	45	1	46	49	0	49	0	0	0	95	
Total	0	0	0	367	3	370	373	5	378	0	0	0	748	
1630	0	0	0	58	1	59	58	0	58	0	0	0	117	
1645	0	0	0	46	1	47	80	0	80	0	0	0	127	
1700	0	0	0	46	0	46	72	1	73	0	0	0	119	
1715	0	0	0	55	0	55	51	1	52	0	0	0	107	
1730	0	0	0	73	0	73	84	1	85	0	0	0	158	
1745	0	0	0	57	1	58	53	1	54	0	0	0	112	
1800	0	0	0	45	1	46	66	0	66	0	0	0	112	
1815	0	0	0	46	0	46	41	0	41	0	0	0	87	
Total	0	0	0	426	4	430	505	4	509	0	0	0	939	

Entering on: Station Road Westbound

Time	Left turn to: High Pavement SB			Straight on to: Forest Road WB			Right turn to: NA			U-turn to: Station Rd EB			Total	PCUs	Grand
Begin	Light	Heavy	Total	Light	Heavy	Total	Light	Heavy	Total	Light	Heavy	Total	Vehs		Totals
0730	32	4	36	20	0	20	0	0	0	0	0	0	56		216
0745	49	3	52	13	4	17	0	0	0	0	0	0	69		271
0800	61	4	65	34	1	35	0	0	0	0	0	0	100		329
0815	79	2	81	51	2	53	0	0	0	0	0	0	134		388
0830	60	4	64	49	1	50	0	0	0	0	0	0	114		420
0845	90	3	93	64	2	66	0	0	0	0	0	0	159		443
0900	69	3	72	64	0	64	0	0	0	0	0	0	136		396
0915	53	1	54	54	0	54	0	0	0	0	0	0	108		312
Total	493	24	517	349	10	359	0	0	0	0	0	0	876		2775
1630	119	0	119	70	1	71	0	0	0	0	0	0	190		437
1645	112	1	113	59	1	60	0	0	0	0	0	0	173		440
1700	137	4	141	55	1	56	0	0	0	0	0	0	197		461
1715	101	0	101	51	2	53	0	0	0	0	0	0	154		415
1730	89	0	89	57	0	57	0	0	0	0	0	0	146		429
1745	81	1	82	53	1	54	0	0	0	0	0	0	136		387
1800	52	1	53	52	0	52	0	0	0	0	0	0	105		305
1815	64	1	65	54	1	55	0	0	0	0	0	0	120		310
Total	755	8	763	451	7	458	0	0	0	0	0	0	1221		3184

A38 Mansfield - Manual Traffic Survey, Tuesday 17th April 2018

Produced by Road Data Services Ltd

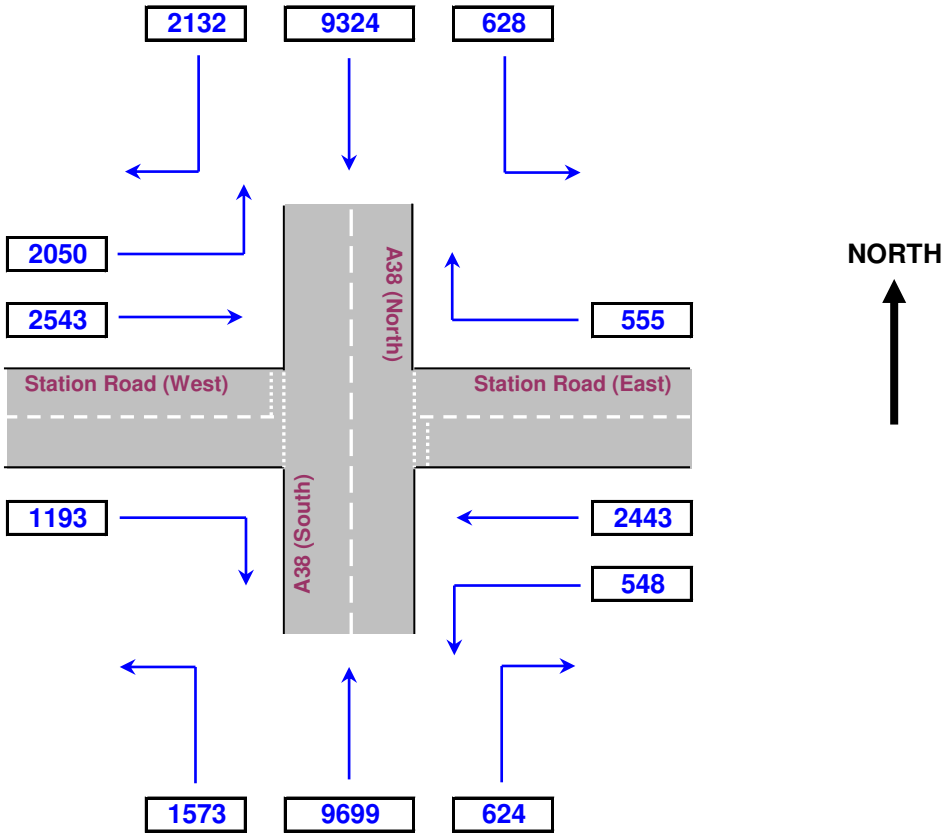
Junction: (7) A38 / Station Road

Vehicle Class: ALL CLASSES

Start Time: 1) 0700

End Time: 1) 1900

☐ **Peak Hour**



Note: The above diagram represents the Junction surveyed, although may not be the exact layout of the actual location.

Important Note: This spreadsheet & Interactive Vehicle Flow Diagram was produced based on specific parameters. Consequently, alteration to the spreadsheet format or it's properties may result in malfunction.

A38 Mansfield - Manual Traffic Survey, Tuesday 17th April 2018

Produced by Road Data Services Ltd

Junction: (7) A38 / Station Road

Approach: A38 (North)

	Left to Station Road (East)								S/B to A38 (South)								Right to Station Road (West)							
TIME	P/CYCLE	M/CYCLE	CAR	LGV	OGV1	OGV2	BUS	TOTAL	P/CYCLE	M/CYCLE	CAR	LGV	OGV1	OGV2	BUS	TOTAL	P/CYCLE	M/CYCLE	CAR	LGV	OGV1	OGV2	BUS	TOTAL
0700 - 0715	0	1	12	3	2	0	0	**18**	0	0	209	31	6	6	0	**252**	0	0	7	1	0	0	0	**8**
0715 - 0730	0	0	7	3	0	0	0	**10**	1	0	227	47	10	11	1	**297**	0	0	23	2	1	0	0	**26**
0730 - 0745	0	0	9	0	6	1	0	**16**	0	1	227	33	8	3	0	**272**	0	0	29	6	0	0	0	**35**
0745 - 0800	0	0	15	1	0	0	0	**16**	1	2	195	41	8	10	3	**260**	0	0	33	6	0	0	0	**39**
Hourly Total	**0**	**1**	**43**	**7**	**8**	**1**	**0**	**60**	**2**	**3**	**858**	**152**	**32**	**30**	**4**	**1081**	**0**	**0**	**92**	**15**	**1**	**0**	**0**	**108**
0800 - 0815	0	0	12	3	0	0	0	**15**	0	0	213	36	12	14	0	**275**	0	0	41	0	1	0	0	**42**
0815 - 0830	0	0	17	3	0	0	0	**20**	1	2	173	25	10	9	0	**220**	0	0	50	4	0	0	0	**54**
0830 - 0845	0	0	10	1	0	0	0	**11**	0	3	146	33	15	13	0	**210**	0	2	42	6	1	0	0	**51**
0845 - 0900	0	0	17	0	1	0	0	**18**	0	0	118	27	9	8	0	**162**	0	1	42	5	1	1	0	**50**
Hourly Total	**0**	**0**	**56**	**7**	**1**	**0**	**0**	**64**	**1**	**5**	**650**	**121**	**46**	**44**	**0**	**867**	**0**	**3**	**175**	**15**	**3**	**1**	**0**	**197**
0900 - 0915	0	0	13	2	1	1	1	**18**	0	0	152	36	18	9	0	**215**	0	0	35	5	0	2	0	**42**
0915 - 0930	0	0	9	4	0	0	0	**13**	0	0	146	21	11	11	1	**190**	0	0	31	4	2	0	0	**37**
0930 - 0945	0	0	10	1	0	0	0	**11**	0	0	137	17	12	5	2	**173**	0	0	42	7	1	0	0	**50**
0945 - 1000	0	0	9	4	1	0	0	**14**	0	0	115	27	14	8	0	**164**	0	0	33	6	0	0	0	**39**
Hourly Total	**0**	**0**	**41**	**11**	**2**	**1**	**1**	**56**	**0**	**0**	**550**	**101**	**55**	**33**	**3**	**742**	**0**	**0**	**141**	**22**	**3**	**2**	**0**	**168**
1000 - 1015	0	0	7	4	2	0	0	**13**	0	0	93	23	15	18	1	**150**	0	0	38	5	0	0	0	**43**
1015 - 1030	0	0	4	6	0	1	0	**11**	0	0	109	23	14	11	0	**157**	0	0	37	1	1	0	0	**39**
1030 - 1045	0	0	4	1	3	0	0	**8**	0	1	138	26	13	12	0	**190**	0	0	34	5	1	0	0	**40**
1045 - 1100	0	0	6	2	1	0	0	**9**	0	1	117	19	10	11	0	**158**	0	0	33	5	0	0	0	**38**
Hourly Total	**0**	**0**	**21**	**13**	**6**	**1**	**0**	**41**	**0**	**2**	**457**	**91**	**52**	**52**	**1**	**655**	**0**	**0**	**142**	**16**	**2**	**0**	**0**	**160**
1100 - 1115	0	0	9	1	0	0	0	**10**	0	0	118	23	12	18	1	**172**	0	0	35	6	3	0	0	**44**
1115 - 1130	0	0	9	1	2	0	0	**12**	0	3	115	13	11	7	0	**149**	0	0	27	8	0	0	0	**35**
1130 - 1145	0	0	9	1	2	0	0	**12**	0	0	109	24	19	14	0	**166**	0	0	31	7	1	0	0	**39**
1145 - 1200	0	0	10	2	1	0	0	**13**	0	0	139	24	13	9	1	**186**	0	0	36	6	3	0	0	**45**
Hourly Total	**0**	**0**	**37**	**5**	**5**	**0**	**0**	**47**	**0**	**3**	**481**	**84**	**55**	**48**	**2**	**673**	**0**	**0**	**129**	**27**	**7**	**0**	**0**	**163**
1200 - 1215	0	0	6	3	1	0	0	**10**	0	3	124	8	10	16	0	**161**	0	0	43	7	0	1	0	**51**
1215 - 1230	0	0	10	2	1	0	0	**13**	0	0	103	26	18	11	0	**158**	0	0	42	2	1	0	0	**45**
1230 - 1245	0	1	12	2	1	0	0	**16**	0	0	144	29	13	18	1	**205**	0	0	32	2	1	0	0	**35**
1245 - 1300	0	0	11	3	1	0	0	**15**	0	1	103	20	9	14	0	**147**	0	0	41	8	0	0	0	**49**
Hourly Total	**0**	**1**	**39**	**10**	**4**	**0**	**0**	**54**	**0**	**4**	**474**	**83**	**50**	**59**	**1**	**671**	**0**	**0**	**158**	**19**	**2**	**1**	**0**	**180**
1300 - 1315	1	0	9	2	1	0	0	**13**	0	0	139	19	8	13	0	**179**	0	0	48	9	0	0	0	**57**
1315 - 1330	0	0	6	1	0	0	0	**7**	2	2	161	18	9	8	0	**200**	0	1	32	2	0	0	0	**35**
1330 - 1345	0	0	5	0	0	0	0	**5**	1	3	181	29	12	13	0	**239**	0	0	46	6	0	0	0	**52**
1345 - 1400	0	0	7	0	0	0	0	**7**	0	3	136	18	16	12	1	**186**	0	0	41	4	0	0	0	**45**
Hourly Total	**1**	**0**	**27**	**3**	**1**	**0**	**0**	**32**	**3**	**8**	**617**	**84**	**45**	**46**	**1**	**804**	**0**	**1**	**167**	**21**	**0**	**0**	**0**	**189**
1400 - 1415	0	0	7	2	2	1	0	**12**	0	0	111	16	7	11	0	**145**	0	1	38	2	1	0	0	**42**
1415 - 1430	0	0	11	2	0	0	0	**13**	0	0	125	14	11	14	0	**164**	0	0	39	4	1	0	0	**44**
1430 - 1445	0	0	9	3	0	0	0	**12**	0	1	150	37	11	14	2	**215**	0	0	35	7	0	0	0	**42**
1445 - 1500	0	0	7	4	6	1	2	**20**	3	0	112	21	13	8	1	**158**	0	0	31	5	0	1	0	**37**
Hourly Total	**0**	**0**	**34**	**11**	**8**	**2**	**2**	**57**	**3**	**1**	**498**	**88**	**42**	**47**	**3**	**682**	**0**	**1**	**143**	**18**	**2**	**1**	**0**	**165**
1500 - 1515	0	0	9	0	2	1	0	**12**	0	1	140	17	16	9	1	**184**	0	0	42	6	0	0	0	**48**
1515 - 1530	0	0	13	0	2	0	1	**16**	0	3	132	24	17	8	2	**186**	0	0	44	2	0	0	0	**46**
1530 - 1545	0	0	16	1	1	0	0	**18**	0	0	171	24	12	13	2	**222**	0	1	43	5	2	0	0	**51**
1545 - 1600	0	0	12	1	0	0	0	**13**	0	0	145	26	22	8	1	**202**	0	0	48	5	0	0	0	**53**
Hourly Total	**0**	**0**	**50**	**2**	**5**	**1**	**1**	**59**	**0**	**4**	**588**	**91**	**67**	**38**	**6**	**794**	**0**	**1**	**177**	**18**	**2**	**0**	**0**	**198**
1600 - 1615	0	0	15	5	3	0	1	**24**	1	0	170	20	12	6	0	**209**	0	0	56	7	2	0	0	**65**
1615 - 1630	0	2	13	2	2	0	0	**19**	0	3	171	22	2	20	0	**218**	0	1	64	7	2	0	0	**74**
1630 - 1645	0	0	13	1	1	0	0	**15**	0	0	177	27	5	5	0	**214**	0	0	52	7	0	0	0	**59**
1645 - 1700	0	0	7	1	0	0	0	**8**	1	2	184	25	13	5	0	**230**	0	0	44	6	0	0	0	**50**
Hourly Total	**0**	**2**	**48**	**9**	**6**	**0**	**1**	**66**	**2**	**5**	**702**	**94**	**32**	**36**	**0**	**871**	**0**	**1**	**216**	**27**	**4**	**0**	**0**	**248**
1700 - 1715	0	0	15	2	0	0	0	**17**	0	1	204	11	9	4	0	**229**	0	0	31	2	0	0	0	**33**
1715 - 1730	0	0	9	1	1	0	0	**11**	0	2	167	20	4	7	0	**200**	0	0	61	4	0	0	0	**65**
1730 - 1745	0	0	15	1	0	0	0	**16**	0	0	181	15	5	6	0	**207**	0	0	42	2	0	0	0	**44**
1745 - 1800	0	1	8	2	0	0	0	**11**	0	0	214	16	3	6	0	**239**	0	0	38	6	0	0	0	**44**
Hourly Total	**0**	**1**	**47**	**6**	**1**	**0**	**0**	**55**	**0**	**3**	**766**	**62**	**21**	**23**	**0**	**875**	**0**	**0**	**172**	**14**	**0**	**0**	**0**	**186**
1800 - 1815	0	0	9	1	0	0	0	**10**	0	2	181	10	5	6	0	**204**	0	0	34	5	0	0	0	**39**
1815 - 1830	0	0	11	0	0	0	0	**11**	0	2	140	12	1	2	0	**157**	0	0	33	3	0	0	0	**36**
1830 - 1845	0	0	6	0	0	0	0	**6**	0	0	120	4	5	6	0	**135**	0	1	32	1	0	0	0	**34**
1845 - 1900	0	0	10	0	0	0	0	**10**	0	1	96	13	3	0	0	**113**	0	0	56	5	0	0	0	**61**
Hourly Total	**0**	**0**	**36**	**1**	**0**	**0**	**0**	**37**	**0**	**5**	**537**	**39**	**14**	**14**	**0**	**609**	**0**	**1**	**155**	**14**	**0**	**0**	**0**	**170**
TOTAL	**1**	**5**	**479**	**85**	**47**	**6**	**5**	**628**	**11**	**43**	**7178**	**1090**	**511**	**470**	**21**	**9324**	**0**	**8**	**1867**	**226**	**26**	**5**	**0**	**2132**

A38 Mansfield - Manual Traffic Survey, Tuesday 17th April 2018

Produced by Road Data Services Ltd

Junction: (7) A38 / Station Road

Approach: Station Road (East)

	Left to A38 (South)								W/B to Station Road (West)								Right to A38 (North)							
TIME	P/CYCLE	M/CYCLE	CAR	LGV	OGV1	OGV2	BUS	TOTAL	P/CYCLE	M/CYCLE	CAR	LGV	OGV1	OGV2	BUS	TOTAL	P/CYCLE	M/CYCLE	CAR	LGV	OGV1	OGV2	BUS	TOTAL
0700 - 0715	0	0	13	2	2	1	0	**18**	1	0	6	3	1	0	1	**12**	0	0	6	0	0	0	0	**6**
0715 - 0730	0	0	15	4	1	0	0	**20**	0	0	22	0	2	0	1	**25**	0	0	7	1	0	0	0	**8**
0730 - 0745	0	0	9	3	5	0	0	**17**	0	0	24	6	4	0	0	**34**	0	0	9	0	1	0	1	**11**
0745 - 0800	0	0	6	4	1	1	0	**12**	0	0	47	8	6	0	2	**63**	0	0	12	2	4	0	0	**18**
Hourly Total	**0**	**0**	**43**	**13**	**9**	**2**	**0**	**67**	**1**	**0**	**99**	**17**	**13**	**0**	**4**	**134**	**0**	**0**	**34**	**3**	**5**	**0**	**1**	**43**
0800 - 0815	0	0	12	3	1	1	1	**18**	0	0	40	7	1	0	0	**48**	0	0	10	3	4	0	0	**17**
0815 - 0830	0	1	5	5	1	0	0	**12**	0	0	70	7	3	0	1	**81**	0	0	8	4	1	1	1	**15**
0830 - 0845	0	1	5	1	1	0	0	**8**	0	0	92	11	2	0	1	**106**	0	0	8	2	0	0	1	**11**
0845 - 0900	0	0	8	0	0	1	0	**9**	0	0	47	9	2	0	1	**59**	0	0	5	1	0	0	0	**6**
Hourly Total	**0**	**2**	**30**	**9**	**3**	**2**	**1**	**47**	**0**	**0**	**249**	**34**	**8**	**0**	**3**	**294**	**0**	**0**	**31**	**10**	**5**	**1**	**2**	**49**
0900 - 0915	0	0	9	4	1	1	0	**15**	0	0	55	9	1	0	3	**68**	0	0	8	1	0	0	0	**9**
0915 - 0930	0	0	9	2	4	0	0	**15**	0	0	43	10	5	0	1	**59**	0	0	16	4	1	0	1	**22**
0930 - 0945	0	1	10	3	0	0	0	**14**	0	0	35	6	2	0	0	**43**	0	0	7	3	1	0	0	**11**
0945 - 1000	0	0	5	3	2	0	0	**10**	0	1	53	17	1	0	1	**73**	0	0	12	3	0	0	0	**15**
Hourly Total	**0**	**1**	**33**	**12**	**7**	**1**	**0**	**54**	**0**	**1**	**186**	**42**	**9**	**0**	**5**	**243**	**0**	**0**	**43**	**11**	**2**	**0**	**1**	**57**
1000 - 1015	0	0	2	3	1	0	0	**6**	0	0	38	7	3	0	2	**50**	0	0	7	0	3	0	0	**10**
1015 - 1030	0	0	10	4	2	2	0	**18**	0	0	51	3	0	0	1	**55**	0	0	8	4	0	1	0	**13**
1030 - 1045	0	0	9	2	0	0	0	**11**	0	0	24	5	1	1	1	**32**	0	0	9	2	1	0	0	**12**
1045 - 1100	0	0	8	2	3	1	0	**14**	0	1	55	7	0	0	1	**64**	0	0	11	2	2	0	0	**15**
Hourly Total	**0**	**0**	**29**	**11**	**6**	**3**	**0**	**49**	**0**	**1**	**168**	**22**	**4**	**1**	**5**	**201**	**0**	**0**	**35**	**8**	**6**	**1**	**0**	**50**
1100 - 1115	0	0	8	1	0	0	1	**10**	0	0	46	4	3	0	2	**55**	0	0	8	4	1	0	0	**13**
1115 - 1130	0	0	6	1	4	0	0	**11**	0	2	47	9	0	0	1	**59**	0	0	6	2	0	0	0	**8**
1130 - 1145	0	0	10	3	0	0	0	**13**	0	0	38	4	1	0	0	**43**	0	0	10	1	0	0	0	**11**
1145 - 1200	0	0	6	0	0	2	0	**8**	0	0	44	4	3	0	2	**53**	0	1	11	4	0	0	0	**16**
Hourly Total	**0**	**0**	**30**	**5**	**4**	**2**	**1**	**42**	**0**	**2**	**175**	**21**	**7**	**0**	**5**	**210**	**0**	**1**	**35**	**11**	**1**	**0**	**0**	**48**
1200 - 1215	0	0	3	1	1	0	0	**5**	0	0	30	5	2	0	2	**39**	0	0	11	0	2	0	0	**13**
1215 - 1230	0	0	4	1	2	1	0	**8**	0	0	45	7	1	0	1	**54**	0	0	7	1	1	0	0	**9**
1230 - 1245	0	0	6	4	2	2	0	**14**	0	0	38	4	0	0	0	**42**	0	0	6	1	1	1	0	**9**
1245 - 1300	0	0	5	3	1	0	0	**9**	0	0	42	4	2	0	1	**49**	0	0	12	4	0	0	0	**16**
Hourly Total	**0**	**0**	**18**	**9**	**6**	**3**	**0**	**36**	**0**	**0**	**155**	**20**	**5**	**0**	**4**	**184**	**0**	**0**	**36**	**6**	**4**	**1**	**0**	**47**
1300 - 1315	0	0	7	2	0	0	0	**9**	0	0	35	2	1	0	2	**40**	0	0	8	0	1	0	0	**9**
1315 - 1330	0	0	9	2	0	1	0	**12**	0	0	37	4	1	0	0	**42**	0	0	9	2	0	1	0	**12**
1330 - 1345	0	0	9	2	1	0	0	**12**	0	0	44	4	1	0	1	**50**	0	0	9	0	0	1	0	**10**
1345 - 1400	0	0	10	1	1	0	0	**12**	0	0	47	8	1	0	1	**57**	0	0	6	1	0	0	0	**7**
Hourly Total	**0**	**0**	**35**	**7**	**2**	**1**	**0**	**45**	**0**	**0**	**163**	**18**	**4**	**0**	**4**	**189**	**0**	**0**	**32**	**3**	**1**	**2**	**0**	**38**
1400 - 1415	0	0	6	5	0	1	0	**12**	0	0	35	8	1	0	2	**46**	0	0	11	1	1	0	0	**13**
1415 - 1430	0	0	9	4	1	2	0	**16**	0	0	48	4	1	0	1	**54**	0	1	9	0	0	0	0	**10**
1430 - 1445	0	0	11	5	1	0	0	**17**	0	1	50	5	1	0	0	**57**	0	0	14	1	1	0	0	**16**
1445 - 1500	0	0	6	6	0	1	0	**13**	0	1	57	5	2	0	2	**67**	0	0	8	1	0	0	0	**9**
Hourly Total	**0**	**0**	**32**	**20**	**2**	**4**	**0**	**58**	**0**	**2**	**190**	**22**	**5**	**0**	**5**	**224**	**0**	**1**	**42**	**3**	**2**	**0**	**0**	**48**
1500 - 1515	0	0	3	2	2	1	0	**8**	0	0	76	5	3	0	3	**87**	0	0	12	1	1	0	0	**14**
1515 - 1530	0	0	9	3	0	0	0	**12**	0	0	69	6	1	0	2	**78**	0	0	16	3	3	0	0	**22**
1530 - 1545	0	0	12	2	1	0	0	**15**	0	1	42	7	0	0	0	**50**	0	0	8	5	0	0	0	**13**
1545 - 1600	0	0	7	1	1	0	1	**10**	0	0	29	6	1	0	2	**38**	0	0	6	2	0	0	0	**8**
Hourly Total	**0**	**0**	**31**	**8**	**4**	**1**	**1**	**45**	**0**	**1**	**216**	**24**	**5**	**0**	**7**	**253**	**0**	**0**	**42**	**11**	**4**	**0**	**0**	**57**
1600 - 1615	0	0	6	2	0	0	0	**8**	1	1	52	9	0	0	1	**64**	0	0	11	0	1	0	0	**12**
1615 - 1630	0	0	3	0	0	0	0	**3**	0	0	36	8	0	0	1	**45**	0	0	11	0	0	0	0	**11**
1630 - 1645	0	0	7	0	0	0	0	**7**	0	1	61	8	0	0	1	**71**	0	0	12	4	0	0	0	**16**
1645 - 1700	0	0	6	1	1	0	0	**8**	0	0	65	11	0	0	0	**76**	0	0	11	1	0	0	0	**12**
Hourly Total	**0**	**0**	**22**	**3**	**1**	**0**	**0**	**26**	**1**	**2**	**214**	**36**	**0**	**0**	**3**	**256**	**0**	**0**	**45**	**5**	**1**	**0**	**0**	**51**
1700 - 1715	0	0	9	1	0	0	0	**10**	0	0	22	3	0	0	0	**25**	0	0	12	3	0	0	0	**15**
1715 - 1730	0	0	9	3	0	0	0	**12**	0	0	57	3	1	0	0	**61**	0	0	7	0	0	0	0	**7**
1730 - 1745	0	1	10	4	0	0	0	**15**	0	0	35	0	0	0	0	**35**	0	0	6	2	0	0	0	**8**
1745 - 1800	0	0	2	2	1	0	0	**5**	0	0	31	5	0	1	0	**37**	0	0	8	2	0	0	0	**10**
Hourly Total	**0**	**1**	**30**	**10**	**1**	**0**	**0**	**42**	**0**	**0**	**145**	**11**	**1**	**1**	**0**	**158**	**0**	**0**	**33**	**7**	**0**	**0**	**0**	**40**
1800 - 1815	0	0	9	0	0	0	0	**9**	0	0	27	6	0	0	0	**33**	0	0	9	1	0	0	0	**10**
1815 - 1830	0	0	7	3	0	0	0	**10**	0	0	16	0	1	0	0	**17**	0	0	2	1	0	0	0	**3**
1830 - 1845	0	0	5	3	0	0	0	**8**	0	0	22	0	0	0	0	**22**	0	0	7	0	0	0	1	**8**
1845 - 1900	0	0	9	1	0	0	0	**10**	0	0	23	2	0	0	0	**25**	0	0	5	1	0	0	0	**6**
Hourly Total	**0**	**0**	**30**	**7**	**0**	**0**	**0**	**37**	**0**	**0**	**88**	**8**	**1**	**0**	**0**	**97**	**0**	**0**	**23**	**3**	**0**	**0**	**1**	**27**

TOTAL	**0**	**4**	**363**	**114**	**45**	**19**	**3**	**548**	**2**	**9**	**2048**	**275**	**62**	**2**	**45**	**2443**	**0**	**2**	**431**	**81**	**31**	**5**	**5**	**555**

A38 Mansfield - Manual Traffic Survey, Tuesday 17th April 2018

Produced by Road Data Services Ltd

Junction: (7) A38 / Station Road

Approach: A38 (South)

	Left to Station Road (West)								N/B to A38 (North)								Right to Station Road (East)							
TIME	P/CYCLE	M/CYCLE	CAR	LGV	OGV1	OGV2	BUS	TOTAL	P/CYCLE	M/CYCLE	CAR	LGV	OGV1	OGV2	BUS	TOTAL	P/CYCLE	M/CYCLE	CAR	LGV	OGV1	OGV2	BUS	TOTAL
0700 - 0715	0	0	5	3	2	0	0	**10**	0	0	111	23	18	15	2	**169**	0	0	3	1	0	0	0	**4**
0715 - 0730	0	0	6	3	1	0	0	**10**	0	0	185	31	14	4	0	**234**	0	0	4	0	0	0	0	**4**
0730 - 0745	0	0	12	0	0	0	0	**12**	0	2	189	25	13	5	0	**234**	0	0	9	2	0	0	0	**11**
0745 - 0800	0	0	17	2	1	0	0	**20**	0	0	203	27	8	12	0	**250**	0	0	4	1	0	1	0	**6**
Hourly Total	**0**	**0**	**40**	**8**	**4**	**0**	**0**	**52**	**0**	**2**	**688**	**106**	**53**	**36**	**2**	**887**	**0**	**0**	**20**	**4**	**0**	**1**	**0**	**25**
0800 - 0815	0	0	19	5	0	0	0	**24**	0	0	176	23	18	13	0	**230**	0	0	2	1	0	1	0	**4**
0815 - 0830	0	0	23	6	0	0	0	**29**	0	0	168	29	13	19	1	**230**	0	0	7	2	0	1	0	**10**
0830 - 0845	0	0	24	4	1	0	0	**29**	0	0	161	20	8	13	0	**202**	0	0	10	1	2	1	0	**14**
0845 - 0900	0	0	33	3	0	0	0	**36**	0	0	164	28	12	15	0	**219**	0	0	21	2	2	0	1	**26**
Hourly Total	**0**	**0**	**99**	**18**	**1**	**0**	**0**	**118**	**0**	**0**	**669**	**100**	**51**	**60**	**1**	**881**	**0**	**0**	**40**	**6**	**4**	**3**	**1**	**54**
0900 - 0915	0	0	25	3	1	0	0	**29**	0	0	184	27	13	12	0	**236**	0	0	18	4	1	0	0	**23**
0915 - 0930	0	0	26	5	1	0	0	**32**	0	0	144	28	17	13	2	**204**	0	0	9	4	0	0	0	**13**
0930 - 0945	0	0	23	3	1	1	0	**28**	0	1	140	33	17	12	0	**203**	0	0	6	3	0	1	0	**10**
0945 - 1000	0	0	33	6	1	0	0	**40**	0	0	130	28	12	15	1	**186**	0	0	3	2	1	1	1	**8**
Hourly Total	**0**	**0**	**107**	**17**	**4**	**1**	**0**	**129**	**0**	**1**	**598**	**116**	**59**	**52**	**3**	**829**	**0**	**0**	**36**	**13**	**2**	**2**	**1**	**54**
1000 - 1015	0	0	32	2	1	0	0	**35**	0	0	119	17	16	15	0	**167**	0	0	8	0	1	1	0	**10**
1015 - 1030	0	0	14	0	3	0	0	**17**	0	2	89	22	15	12	2	**142**	0	0	5	0	2	1	0	**8**
1030 - 1045	0	0	24	2	3	0	0	**29**	0	1	106	34	9	14	1	**165**	0	0	9	3	3	1	0	**16**
1045 - 1100	0	0	20	1	2	0	0	**23**	0	0	131	30	13	13	1	**188**	0	0	4	1	4	0	0	**9**
Hourly Total	**0**	**0**	**90**	**5**	**9**	**0**	**0**	**104**	**0**	**3**	**445**	**103**	**53**	**54**	**4**	**662**	**0**	**0**	**26**	**4**	**10**	**3**	**0**	**43**
1100 - 1115	0	0	30	1	2	0	0	**33**	0	0	101	25	13	10	0	**149**	0	0	6	1	2	0	0	**9**
1115 - 1130	0	0	26	1	1	0	0	**28**	0	2	132	26	15	12	0	**187**	0	0	5	4	1	1	0	**11**
1130 - 1145	0	0	25	4	2	0	0	**31**	0	1	128	29	16	13	1	**188**	0	0	9	2	0	1	0	**12**
1145 - 1200	0	0	31	3	2	0	0	**36**	0	0	109	21	16	12	0	**158**	0	0	8	2	2	0	0	**12**
Hourly Total	**0**	**0**	**112**	**9**	**7**	**0**	**0**	**128**	**0**	**3**	**470**	**101**	**60**	**47**	**1**	**682**	**0**	**0**	**28**	**9**	**5**	**2**	**0**	**44**
1200 - 1215	0	0	20	2	1	0	0	**23**	0	1	121	31	5	13	0	**171**	0	0	3	5	1	1	0	**10**
1215 - 1230	0	0	32	1	0	1	0	**34**	0	2	149	22	9	5	0	**187**	0	0	5	2	3	0	0	**10**
1230 - 1245	0	1	39	4	0	0	0	**44**	0	1	120	26	11	11	0	**169**	0	2	5	2	1	1	0	**11**
1245 - 1300	0	0	25	5	1	0	0	**31**	0	0	96	20	8	7	0	**131**	0	0	7	2	0	0	0	**9**
Hourly Total	**0**	**1**	**116**	**12**	**2**	**1**	**0**	**132**	**0**	**4**	**486**	**99**	**33**	**36**	**0**	**658**	**0**	**2**	**20**	**11**	**5**	**2**	**0**	**40**
1300 - 1315	0	0	22	2	0	0	0	**24**	0	0	124	20	9	12	0	**165**	0	0	7	2	0	0	0	**9**
1315 - 1330	0	0	37	4	1	0	0	**42**	0	1	141	32	12	14	0	**200**	0	1	3	1	1	3	0	**9**
1330 - 1345	0	0	27	1	1	0	0	**29**	0	0	130	15	10	15	0	**170**	0	0	12	1	1	1	0	**15**
1345 - 1400	0	0	27	1	0	0	0	**28**	0	0	134	35	11	14	0	**194**	0	0	9	3	3	1	0	**16**
Hourly Total	**0**	**0**	**113**	**8**	**2**	**0**	**0**	**123**	**0**	**1**	**529**	**102**	**42**	**55**	**0**	**729**	**0**	**1**	**31**	**7**	**5**	**5**	**0**	**49**
1400 - 1415	0	2	30	2	0	0	0	**34**	0	1	167	30	13	6	0	**217**	0	0	7	2	1	0	0	**10**
1415 - 1430	0	0	26	5	0	0	0	**31**	0	3	195	30	14	6	2	**250**	0	0	11	3	2	1	0	**17**
1430 - 1445	0	0	20	4	1	0	0	**25**	0	2	221	27	12	6	0	**268**	0	0	10	2	1	0	0	**13**
1445 - 1500	0	0	30	2	1	0	0	**33**	0	3	126	26	7	9	0	**171**	0	0	5	1	1	2	0	**9**
Hourly Total	**0**	**2**	**106**	**13**	**2**	**0**	**0**	**123**	**0**	**9**	**709**	**113**	**46**	**27**	**2**	**906**	**0**	**0**	**33**	**8**	**5**	**3**	**0**	**49**
1500 - 1515	0	0	25	1	0	0	0	**26**	0	4	162	37	14	9	0	**226**	0	0	15	2	2	1	0	**20**
1515 - 1530	0	0	33	2	1	0	0	**36**	0	4	147	27	4	12	0	**194**	0	0	12	4	3	0	0	**19**
1530 - 1545	0	0	23	4	0	0	0	**27**	0	1	152	32	15	8	0	**208**	0	0	10	5	2	1	0	**18**
1545 - 1600	0	0	27	1	0	1	0	**29**	0	0	164	29	10	9	1	**213**	0	0	10	1	0	1	2	**14**
Hourly Total	**0**	**0**	**108**	**8**	**1**	**1**	**0**	**118**	**0**	**9**	**625**	**125**	**43**	**38**	**1**	**841**	**0**	**0**	**47**	**12**	**7**	**3**	**2**	**71**
1600 - 1615	0	0	45	1	0	0	0	**46**	1	1	223	41	10	5	0	**281**	0	0	18	5	1	0	0	**24**
1615 - 1630	0	1	17	3	2	0	0	**23**	0	1	169	36	2	6	0	**214**	0	0	8	4	1	0	0	**13**
1630 - 1645	1		55	4	0	0	0	**60**	0	2	166	35	3	6	0	**212**	0	0	15	1	0	0	0	**16**
1645 - 1700	0	0	31	5	1	0	0	**37**	0	2	210	26	7	3	0	**248**	0	0	15	1	0	2	0	**18**
Hourly Total	**1**	**1**	**148**	**13**	**3**	**0**	**0**	**166**	**1**	**6**	**768**	**138**	**22**	**20**	**0**	**955**	**0**	**0**	**56**	**11**	**2**	**2**	**0**	**71**
1700 - 1715	0	0	37	2	0	0	1	**40**	0	1	183	27	2	6	0	**219**	0	0	19	6	1	0	0	**26**
1715 - 1730	0	3	69	4	1	0	0	**77**	1	1	171	23	1	6	0	**203**	0	0	20	1	1	0	0	**22**
1730 - 1745	0	1	48	4	0	0	0	**53**	0	2	206	31	3	6	0	**248**	0	0	10	1	0	1	0	**12**
1745 - 1800	0	0	40	10	0	0	0	**50**	0	2	189	27	5	4	0	**227**	0	0	12	1	0	0	0	**13**
Hourly Total	**0**	**4**	**194**	**20**	**1**	**0**	**1**	**220**	**1**	**6**	**749**	**108**	**11**	**22**	**0**	**897**	**0**	**0**	**61**	**9**	**2**	**1**	**0**	**73**
1800 - 1815	0	0	32	7	0	0	0	**39**	0	3	203	18	3	3	0	**230**	0	0	11	1	0	0	0	**12**
1815 - 1830	0	0	40	0	0	0	0	**40**	0	1	195	19	2	0	0	**217**	0	0	11	1	0	0	0	**12**
1830 - 1845	0	1	31	3	0	0	0	**35**	0	1	146	15	6	3	0	**171**	0	0	9	1	0	0	0	**10**
1845 - 1900	0	0	41	4	1	0	0	**46**	0	0	129	16	5	3	1	**154**	0	0	13	2	0	0	2	**17**
Hourly Total	**0**	**1**	**144**	**14**	**1**	**0**	**0**	**160**	**0**	**5**	**673**	**68**	**16**	**9**	**1**	**772**	**0**	**0**	**44**	**5**	**0**	**0**	**2**	**51**
TOTAL	**1**	**9**	**1377**	**145**	**37**	**3**	**1**	**1573**	**2**	**49**	**7409**	**1279**	**489**	**456**	**15**	**9699**	**0**	**3**	**442**	**99**	**47**	**27**	**6**	**624**

A38 Mansfield - Manual Traffic Survey, Tuesday 17th April 2018

Produced by Road Data Services Ltd

Junction: (7) A38 / Station Road

Approach: Station Road (West)

	Left to A38 (North)								E/B to Station Road (East)								Right to A38 (South)							
TIME	P/CYCLE	M/CYCLE	CAR	LGV	OGV1	OGV2	BUS	TOTAL	P/CYCLE	M/CYCLE	CAR	LGV	OGV1	OGV2	BUS	TOTAL	P/CYCLE	M/CYCLE	CAR	LGV	OGV1	OGV2	BUS	TOTAL
0700 - 0715	0	0	21	4	0	0	0	**25**	0	0	27	5	2	0	1	**35**	0	0	16	2	0	1	0	**19**
0715 - 0730	0	0	22	3	1	0	0	**26**	0	1	22	6	5	0	2	**36**	0	0	17	1	0	0	0	**18**
0730 - 0745	0	0	38	5	1	0	0	**44**	0	0	29	2	4	0	1	**36**	0	0	20	1	1	1	1	**24**
0745 - 0800	0	0	28	5	0	0	0	**33**	1	1	39	8	0	0	1	**50**	0	1	22	4	0	0	0	**27**
Hourly Total	**0**	**0**	**109**	**17**	**2**	**0**	**0**	**128**	**1**	**2**	**117**	**21**	**11**	**0**	**5**	**157**	**0**	**1**	**75**	**8**	**1**	**2**	**1**	**88**
0800 - 0815	0	0	38	6	1	0	0	**45**	0	0	67	4	1	0	0	**72**	0	0	46	2	2	0	0	**50**
0815 - 0830	0	1	53	2	0	0	0	**56**	0	0	75	6	3	0	2	**86**	0	0	31	2	0	0	1	**34**
0830 - 0845	0	0	48	4	1	0	0	**53**	0	0	58	7	2	0	0	**67**	0	1	19	6	0	0	1	**27**
0845 - 0900	0	0	58	5	0	0	0	**63**	0	2	63	6	2	0	1	**74**	0	0	18	0	1	0	0	**19**
Hourly Total	**0**	**1**	**197**	**17**	**2**	**0**	**0**	**217**	**0**	**2**	**263**	**23**	**8**	**0**	**3**	**299**	**0**	**1**	**114**	**10**	**3**	**0**	**2**	**130**
0900 - 0915	0	0	32	3	1	1	0	**37**	0	0	49	8	1	0	2	**60**	0	0	13	2	0	0	0	**15**
0915 - 0930	0	0	19	5	2	0	0	**26**	1	0	29	8	0	0	1	**39**	0	0	12	4	1	1	0	**18**
0930 - 0945	0	0	27	7	1	0	0	**35**	0	0	50	6	0	0	3	**59**	0	0	10	1	1	0	0	**12**
0945 - 1000	0	0	31	2	1	0	0	**34**	0	0	30	7	4	0	0	**41**	0	0	17	2	2	0	0	**21**
Hourly Total	**0**	**0**	**109**	**17**	**5**	**1**	**0**	**132**	**1**	**0**	**158**	**29**	**5**	**0**	**6**	**199**	**0**	**0**	**52**	**9**	**4**	**1**	**0**	**66**
1000 - 1015	0	0	37	5	2	0	0	**44**	0	1	28	4	3	0	1	**37**	0	0	15	1	3	1	0	**20**
1015 - 1030	0	0	30	7	0	0	0	**37**	0	0	36	5	0	0	1	**42**	0	0	23	1	0	0	0	**24**
1030 - 1045	0	0	24	3	3	0	0	**30**	0	0	37	5	1	0	2	**45**	0	0	8	5	0	0	0	**13**
1045 - 1100	0	0	36	4	1	0	0	**41**	0	1	33	6	4	0	0	**44**	0	0	13	2	0	0	0	**15**
Hourly Total	**0**	**0**	**127**	**19**	**6**	**0**	**0**	**152**	**0**	**2**	**134**	**20**	**8**	**0**	**4**	**168**	**0**	**0**	**59**	**9**	**3**	**1**	**0**	**72**
1100 - 1115	0	0	40	1	1	0	0	**42**	2	0	41	6	3	0	1	**53**	0	0	24	0	2	0	0	**26**
1115 - 1130	0	0	40	5	2	0	0	**47**	0	0	36	4	1	0	2	**43**	0	0	31	2	2	0	0	**35**
1130 - 1145	0	0	32	6	0	0	0	**38**	0	0	33	5	4	0	2	**44**	0	0	24	3	1	0	0	**28**
1145 - 1200	0	0	43	7	2	0	0	**52**	0	0	33	4	2	0	0	**39**	0	0	15	1	1	0	0	**17**
Hourly Total	**0**	**0**	**155**	**19**	**5**	**0**	**0**	**179**	**2**	**0**	**143**	**19**	**10**	**0**	**5**	**179**	**0**	**0**	**94**	**6**	**6**	**0**	**0**	**106**
1200 - 1215	0	0	53	4	0	0	0	**57**	0	0	75	7	1	0	1	**84**	0	0	21	1	0	0	0	**22**
1215 - 1230	0	0	34	2	0	0	0	**36**	0	0	46	5	0	0	1	**52**	0	0	22	3	0	0	0	**25**
1230 - 1245	0	0	33	5	2	0	0	**40**	0	1	33	5	3	0	2	**44**	0	0	16	3	0	0	0	**19**
1245 - 1300	0	0	50	5	0	0	0	**55**	0	0	37	11	1	0	0	**49**	0	0	30	2	0	0	0	**32**
Hourly Total	**0**	**0**	**170**	**16**	**2**	**0**	**0**	**188**	**0**	**1**	**191**	**28**	**5**	**0**	**4**	**229**	**0**	**0**	**89**	**9**	**0**	**0**	**0**	**98**
1300 - 1315	0	0	43	10	1	0	0	**54**	0	0	50	3	2	0	1	**56**	0	0	25	1	1	0	0	**27**
1315 - 1330	0	0	36	5	0	0	0	**41**	0	0	31	3	0	0	1	**35**	0	1	26	2	1	1	0	**31**
1330 - 1345	0	0	62	6	0	0	0	**68**	0	0	50	6	1	0	2	**59**	0	1	28	2	0	0	0	**31**
1345 - 1400	0	0	38	5	0	0	0	**43**	0	0	48	5	2	0	0	**55**	0	0	27	1	0	1	0	**29**
Hourly Total	**0**	**0**	**179**	**26**	**1**	**0**	**0**	**206**	**0**	**0**	**179**	**17**	**5**	**0**	**4**	**205**	**0**	**2**	**106**	**6**	**2**	**2**	**0**	**118**
1400 - 1415	0	0	35	3	1	0	0	**39**	0	0	50	5	3	0	1	**59**	0	0	31	7	0	0	0	**38**
1415 - 1430	0	0	38	3	0	0	0	**41**	0	0	42	7	1	0	1	**51**	0	0	33	2	0	1	0	**36**
1430 - 1445	0	0	44	4	0	0	0	**48**	1	0	43	8	0	0	3	**55**	0	1	19	3	0	0	0	**23**
1445 - 1500	0	0	35	1	0	0	0	**36**	0	0	53	7	0	0	1	**61**	0	0	26	7	1	0	0	**34**
Hourly Total	**0**	**0**	**152**	**11**	**1**	**0**	**0**	**164**	**1**	**0**	**188**	**27**	**4**	**0**	**6**	**226**	**0**	**1**	**109**	**19**	**1**	**1**	**0**	**131**
1500 - 1515	0	0	48	3	0	0	0	**51**	0	0	55	4	1	0	0	**60**	0	0	24	1	0	0	0	**25**
1515 - 1530	0	0	49	5	1	0	0	**55**	0	1	57	9	1	0	2	**70**	0	0	18	3	0	1	0	**22**
1530 - 1545	0	0	41	2	0	0	0	**43**	0	1	57	9	4	0	2	**73**	0	0	29	1	0	0	0	**30**
1545 - 1600	0	0	37	4	0	0	0	**41**	0	0	78	13	1	0	2	**94**	0	0	27	5	1	0	0	**33**
Hourly Total	**0**	**0**	**175**	**14**	**1**	**0**	**0**	**190**	**0**	**2**	**247**	**35**	**7**	**0**	**6**	**297**	**0**	**0**	**98**	**10**	**1**	**1**	**0**	**110**
1600 - 1615	0	0	35	1	0	0	0	**36**	0	0	33	11	4	0	2	**50**	0	0	20	2	0	0	0	**22**
1615 - 1630	0	1	47	1	0	0	0	**49**	0	0	42	8	0	0	1	**51**	0	0	18	5	0	0	0	**23**
1630 - 1645	0	0	55	4	0	0	0	**59**	0	0	60	4	0	0	1	**65**	0	0	26	4	0	0	0	**30**
1645 - 1700	0	0	50	2	0	0	0	**52**	0	0	50	10	0	0	1	**61**	0	0	23	2	0	0	0	**25**
Hourly Total	**0**	**1**	**187**	**8**	**0**	**0**	**0**	**196**	**0**	**0**	**185**	**33**	**4**	**0**	**5**	**227**	**0**	**0**	**87**	**13**	**0**	**0**	**0**	**100**
1700 - 1715	0	0	51	5	1	0	0	**57**	1	0	49	9	1	0	1	**61**	0	0	26	2	0	0	0	**28**
1715 - 1730	0	0	43	3	1	0	1	**48**	1	1	43	1	0	0	0	**46**	0	0	16	2	0	0	0	**18**
1730 - 1745	0	0	33	4	0	0	0	**37**	0	0	40	3	1	0	2	**46**	0	0	25	0	0	0	0	**25**
1745 - 1800	0	0	35	4	0	0	0	**39**	0	1	34	5	1	0	0	**41**	0	0	23	1	0	1	0	**25**
Hourly Total	**0**	**0**	**162**	**16**	**2**	**0**	**1**	**181**	**2**	**2**	**166**	**18**	**3**	**0**	**3**	**194**	**0**	**0**	**90**	**5**	**0**	**1**	**0**	**96**
1800 - 1815	0	0	30	3	0	0	0	**33**	0	0	49	3	1	0	2	**55**	0	0	17	4	0	0	0	**21**
1815 - 1830	0	1	26	3	0	0	0	**30**	0	0	36	3	0	0	1	**40**	1	0	20	3	1	0	0	**25**
1830 - 1845	0	0	24	4	0	0	0	**28**	0	0	26	4	1	0	3	**34**	0	0	18	1	0	0	0	**19**
1845 - 1900	0	0	23	3	0	0	0	**26**	0	0	31	2	0	0	1	**34**	0	0	12	1	0	0	0	**13**
Hourly Total	**0**	**1**	**103**	**13**	**0**	**0**	**0**	**117**	**0**	**0**	**142**	**12**	**2**	**0**	**7**	**163**	**1**	**0**	**67**	**9**	**1**	**0**	**0**	**78**
TOTAL	**0**	**3**	**1825**	**193**	**27**	**1**	**1**	**2050**	**7**	**11**	**2113**	**282**	**72**	**0**	**58**	**2543**	**1**	**5**	**1040**	**113**	**22**	**9**	**3**	**1193**

ANSA Traffic & Construction Ltd.

Place: Sutton-in-Ashfield **Date:** 13.11.2019

Weather: Mixed **Junction:** DowningSt/PriestsicRd/StoneyfordRd/MansfieldRd

Client: ADC Infrasturcture Ltd **Order no:** ADC1017

Page: 1 **of:** 1

Entering on: Downing Street Northbound

Time	Left turn to: Priestsic Rd WB			Straight on to: Stoneyford Rd NB			Right turn to: Mansfield Rd EB			U-Turn to: Downing St SB			Total	
Begin	Light	Heavy	Total	Light	Heavy	Total	Light	Heavy	Total	Light	Heavy	Total	Vehs	PCUs
0730	3	0	3	17	0	17	0	0	0	0	0	0	20	
0745	3	0	3	8	0	8	1	1	2	0	0	0	13	
0800	8	0	8	18	0	18	0	0	0	0	0	0	26	
0815	3	0	3	16	1	17	2	0	2	0	0	0	22	
0830	7	0	7	16	0	16	1	0	1	0	0	0	24	
0845	4	0	4	22	0	22	0	0	0	0	0	0	26	
0900	4	1	5	13	1	14	2	0	2	0	0	0	21	
0915	9	0	9	13	0	13	4	0	4	0	0	0	26	
Total	41	1	42	123	2	125	10	1	11	0	0	0	178	
1630	8	0	8	25	2	27	1	0	1	0	0	0	36	
1645	9	0	9	42	0	42	2	0	2	0	0	0	53	
1700	13	0	13	38	0	38	5	0	5	0	0	0	56	
1715	11	0	11	45	0	45	2	0	2	0	0	0	58	
1730	8	0	8	34	0	34	1	0	1	0	0	0	43	
1745	9	0	9	39	1	40	4	0	4	0	0	0	53	
1800	1	0	1	31	0	31	1	0	1	0	0	0	33	
1815	14	0	14	23	0	23	3	0	3	0	0	0	40	
Total	73	0	73	277	3	280	19	0	19	0	0	0	372	

Entering on: Priestsic Road Eastbound

Time	Left turn to: Stoneyford Rd NB			Straight over to: Mansfield Rd EB			Right Turn to: Downing St SB			U-turn to: Priestsic Rd WB			Total	
Begin	Light	Heavy	Total	Light	Heavy	Total	Light	Heavy	Total	Light	Heavy	Total	Vehs	PCUs
0730	27	0	27	111	3	114	2	0	2	0	0	0	143	
0745	39	1	40	108	3	111	6	0	6	0	0	0	157	
0800	58	2	60	123	4	127	1	1	2	0	0	0	189	
0815	49	3	52	102	1	103	3	0	3	0	0	0	158	
0830	24	0	24	117	4	121	0	0	0	0	0	0	145	
0845	44	4	48	105	4	109	3	0	3	0	0	0	160	
0900	40	0	40	84	2	86	6	0	6	0	0	0	132	
0915	44	1	45	94	1	95	4	0	4	0	0	0	144	
Total	325	11	336	844	22	866	25	1	26	0	0	0	1228	
1630	84	1	85	146	1	147	2	0	2	0	0	0	234	
1645	60	2	62	126	2	128	4	0	4	0	0	0	194	
1700	55	2	57	127	1	128	3	0	3	0	0	0	188	
1715	62	1	63	156	2	158	4	0	4	0	0	0	225	
1730	75	1	76	151	2	153	3	0	3	0	0	0	232	
1745	76	2	78	128	1	129	4	0	4	0	0	0	211	
1800	78	1	79	102	2	104	6	0	6	0	0	0	189	
1815	87	0	87	108	0	108	5	0	5	0	0	0	200	
Total	577	10	587	###	11	###	31	0	31	0	0	0	1673	

Entering on: Stoneyford Road Southbound

Time	Left turn to: Mansfield Rd EB			Straight on to: Downing St SB			Right turn to: Priestsic Rd WB			U-turn to: Stoneyford Rd NB			Total	
Begin	Light	Heavy	Total	Light	Heavy	Total	Light	Heavy	Total	Light	Heavy	Total	Vehs	PCUs
0730	37	2	39	11	0	11	53	0	53	0	0	0	103	
0745	62	4	66	17	0	17	56	3	59	0	0	0	142	
0800	44	4	48	13	0	13	45	3	48	0	0	0	109	
0815	71	6	77	19	0	19	48	3	51	0	0	0	147	
0830	65	5	70	12	2	14	45	2	47	0	0	0	131	
0845	32	3	35	17	1	18	50	4	54	0	0	0	107	
0900	36	1	37	11	0	11	60	0	60	0	0	0	108	
0915	36	0	36	6	0	6	65	0	65	0	0	0	107	
Total	383	25	408	106	3	109	422	15	437	0	0	0	954	
1630	38	1	39	12	0	12	42	0	42	0	0	0	93	
1645	32	0	32	16	0	16	40	0	40	0	0	0	88	
1700	33	0	33	24	0	24	40	0	40	0	0	0	97	
1715	20	1	21	12	0	12	33	1	34	0	0	0	67	
1730	35	0	35	22	0	22	51	0	51	0	0	0	108	
1745	20	1	21	17	0	17	32	1	33	0	0	0	71	
1800	20	0	20	9	1	10	56	1	57	0	0	0	87	
1815	36	0	36	19	0	19	45	4	49	0	0	0	104	
Total	234	3	237	131	1	132	339	7	346	0	0	0	715	

Entering on: Mansfield Road Westbound

Time	Left turn to: Downing St SB			Straight on to: Priestsic Rd WB			Right turn to: Stoneyford Rd NB			U-turn to: Mansfield Rd EB			Total		Grand
Begin	Light	Heavy	Total	Light	Heavy	Total	Light	Heavy	Total	Light	Heavy	Total	Vehs	PCUs	Totals
0730	0	0	0	134	2	136	31	1	32	0	0	0	168		434
0745	0	0	0	125	1	126	33	2	35	0	0	0	161		473
0800	1	0	1	157	2	159	40	1	41	0	0	0	201		525
0815	0	0	0	117	1	118	48	2	50	0	0	0	168		495
0830	0	1	1	106	2	108	22	1	23	0	0	0	132		432
0845	0	0	0	117	4	121	20	4	24	0	0	0	145		438
0900	0	0	0	118	2	120	25	0	25	0	0	0	145		406
0915	1	1	2	74	3	77	22	1	23	0	0	0	102		379
Total	2	2	4	948	17	965	241	12	253	0	0	0	1222		3582
1630	0	0	0	121	0	121	36	0	36	0	0	0	157		520
1645	2	0	2	116	1	117	47	2	49	0	0	0	168		503
1700	1	0	1	114	1	115	33	3	36	0	0	0	152		493
1715	1	0	1	151	0	151	30	4	34	0	0	0	186		536
1730	0	0	0	109	0	109	35	2	37	0	0	0	146		529
1745	0	0	0	129	1	130	42	1	43	0	0	0	173		508
1800	1	0	1	119	0	119	32	1	33	0	0	0	153		462
1815	2	0	2	110	0	110	39	2	41	0	0	0	153		497
Total	7	0	7	969	3	972	294	15	309	0	0	0	1288		4048

COBA COUNT REPORT

Report Date: *16-Apr-2009*
Count No ID: *2319* **Arm:** 1

Nottinghamshire County
Communities Department
Traffic Data Collection
Manual Traffic Counts Database

Location: B 6023 - MANSFIELD RD/OUTRAM ST/DALESTORTH ST - SUTTON

Purpose Of Count: For LTP Team

Weather/Comments: FINE

Map Reference: 500/595 **Location Code:** 4/02 **Date Of Survey:** 23-10-2008
Type Of Count: COBA TURNING **Duration:** 9 HOURS (7-10, 11-14, 15-18) **Day Of Survey:** THURSDAY

Arm Location/Direction: B6023 MANSFIELD RD (N/E BOUND)

	Pedal Cycles				Motor Cycles			Cars and Taxis			Light Goods Vehicles			Rigid HGV 2/3 Axles			Rigid HGV 4+ Axles & Artics			Buses and Coaches			Total Motor Vehicles			
Time Comm:	L	A	R	Total	L	A	R	L	A	R	L	A	R	L	A	R	L	A	R	L	A	R	L	A	R	Total
07:00	2	1	0	3	0	3	0	36	105	0	10	26	0	1	3	0	0	1	0	0	0	0	47	138	0	185
07:30	0	2	0	2	0	1	0	74	91	0	25	17	0	1	4	0	0	1	0	1	0	0	101	114	0	215
08:00	0	1	0	1	1	4	0	66	137	0	11	24	0	1	10	0	0	1	0	0	1	0	79	177	0	256
08:30	0	0	0	0	0	0	0	98	168	0	4	20	0	2	5	0	0	2	0	1	0	0	105	195	0	300
09:00	0	1	0	1	0	1	0	68	139	1	7	9	0	0	10	0	0	0	0	0	0	0	75	159	1	235
09:30	0	0	0	0	0	2	0	63	106	0	5	10	0	1	7	1	0	1	0	1	1	0	70	127	1	198
11:00	0	0	0	0	1	0	0	84	133	0	6	22	0	0	5	0	0	0	0	0	0	0	91	160	0	251
11:30	0	1	0	1	2	0	0	81	144	0	6	23	0	3	4	0	0	1	0	1	0	0	93	172	0	265
12:00	0	0	0	0	2	0	0	64	113	0	9	22	0	1	2	0	0	1	0	1	0	0	77	138	0	215
12:30	0	0	0	0	1	1	0	80	127	0	15	13	1	2	4	0	0	0	0	3	0	0	101	145	1	247
13:00	0	0	0	0	1	0	0	78	114	1	7	22	0	0	3	0	1	0	0	0	0	0	87	139	1	227
13:30	0	0	0	0	1	2	0	81	136	0	4	12	0	1	1	0	0	2	0	1	0	0	88	153	0	241
15:00	0	1	0	1	1	5	0	112	136	0	7	12	0	2	5	0	0	0	0	0	1	0	122	159	0	281
15:30	1	0	0	1	0	1	0	94	156	0	17	19	0	0	5	0	0	0	0	0	0	0	111	181	0	292
16:00	0	1	0	1	3	2	0	103	154	0	12	26	0	0	3	0	0	1	0	0	1	0	118	187	0	305
16:30	1	0	0	1	6	0	0	118	141	0	17	14	0	0	1	0	0	1	0	0	0	0	141	157	0	298
17:00	2	0	0	2	3	0	0	135	160	0	18	13	0	0	2	0	0	0	0	0	0	0	156	175	0	331
17:30	0	0	0	0	1	1	0	130	164	0	12	8	0	1	0	0	0	1	0	0	0	0	144	174	0	318
TOTALS	6	8	0	14	23	23	0	1565	2424	2	192	312	1	16	74	1	1	13	0	9	4	0	1806	2850	4	4660

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COBA COUNT REPORT

Report Date: *16-Apr-2009*
Count No ID: *2319* **Arm:** 2

Nottinghamshire County
Communities Department
Traffic Data Collection
Manual Traffic Counts Database

Location: B 6023 - MANSFIELD RD/OUTRAM ST/DALESTORTH ST - SUTTON

Purpose Of Count: For LTP Team

Weather/Comments: FINE

Map Reference: 500/595 **Location Code:** 4/02 **Date Of Survey:** 23-10-2008
Type Of Count: COBA TURNING **Duration:** 9 HOURS (7-10, 11-14, 15-18) **Day Of Survey:** THURSDAY

Arm Location/Direction: B6023 MANSFIELD RD (S/W BOUND)

	Pedal Cycles				Motor Cycles			Cars and Taxis			Light Goods Vehicles			Rigid HGV 2/3 Axles			Rigid HGV 4+ Axles & Artics			Buses and Coaches			Total Motor Vehicles			
Time Comm:	L	A	R	Total	L	A	R	L	A	R	L	A	R	L	A	R	L	A	R	L	A	R	L	A	R	Total
07:00	0	0	0	0	0	1	0	25	64	0	5	12	0	0	4	0	0	4	0	7	0	0	37	85	0	122
07:30	3	4	0	7	2	1	0	46	115	0	9	13	0	3	1	0	0	4	0	7	0	0	67	134	0	201
08:00	1	1	0	2	2	0	0	72	110	0	7	23	0	4	5	0	0	2	0	7	0	0	92	140	0	232
08:30	0	2	0	2	3	3	0	99	104	0	4	12	0	0	4	0	0	0	0	8	0	0	114	123	0	237
09:00	0	0	0	0	0	0	0	99	92	0	10	12	0	1	2	0	0	1	0	4	1	0	114	108	0	222
09:30	1	2	0	3	2	0	0	82	81	0	10	7	0	0	4	0	2	2	0	8	0	0	104	94	0	198
11:00	1	0	0	1	1	1	0	66	109	0	3	12	0	2	4	0	0	0	0	6	0	0	78	126	0	204
11:30	0	0	0	0	1	0	0	114	120	0	12	14	0	5	1	0	0	1	0	10	0	0	142	136	0	278
12:00	2	0	0	2	6	0	0	67	104	0	9	12	0	2	3	0	1	1	0	6	0	0	91	120	0	211
12:30	0	0	0	0	1	1	0	105	133	0	15	24	0	0	3	0	0	0	0	8	0	0	129	161	0	290
13:00	0	0	0	0	1	0	0	82	130	0	13	14	0	1	8	0	1	1	0	6	0	0	104	153	0	257
13:30	0	0	0	0	0	2	0	76	131	0	7	20	0	5	5	0	0	2	0	9	1	0	97	161	0	258
15:00	0	2	0	2	4	0	0	75	127	0	10	16	0	0	3	0	0	1	0	5	0	0	94	147	0	241
15:30	0	0	0	0	1	2	0	99	141	0	11	15	0	0	3	0	0	1	0	10	1	0	121	163	0	284
16:00	0	1	0	1	2	2	0	114	127	0	14	22	0	2	0	0	0	3	0	7	0	0	139	154	0	293
16:30	1	0	0	1	2	1	0	107	137	0	19	22	0	1	2	0	0	0	0	7	0	0	136	162	0	298
17:00	2	2	0	4	0	0	0	108	102	0	17	11	0	1	1	0	0	1	0	7	0	0	133	115	0	248
17:30	2	1	0	3	0	0	0	94	90	0	4	18	0	1	1	0	0	0	0	5	0	0	104	109	0	213
TOTALS	13	15	0	28	28	14	0	1530	2017	0	179	279	0	28	54	0	4	24	0	127	3	0	1896	2391	0	4287

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COBA COUNT REPORT

Report Date: *16-Apr-2009*
Count No ID: *2319* **Arm:** 3

Nottinghamshire County
Communities Department
Traffic Data Collection
Manual Traffic Counts Database

Location: B 6023 - MANSFIELD RD/OUTRAM ST/DALESTORTH ST - SUTTON

Purpose Of Count: For LTP Team

Weather/Comments: FINE

Map Reference: 500/595 **Location Code:** 4/02 **Date Of Survey:** 23-10-2008
Type Of Count: COBA TURNING **Duration:** 9 HOURS (7-10, 11-14, 15-18) **Day Of Survey:** THURSDAY

Arm Location/Direction: DALESTORTH STREET (S/W BOUND)

	Pedal Cycles				Motor Cycles			Cars and Taxis			Light Goods Vehicles			Rigid HGV 2/3 Axles			Rigid HGV 4+ Axles & Artics			Buses and Coaches			Total Motor Vehicles			
Time Comm:	L	A	R	Total	L	A	R	L	A	R	L	A	R	L	A	R	L	A	R	L	A	R	L	A	R	Total
07:00	0	2	0	2	0	1	3	0	32	79	0	6	11	0	0	0	0	0	0	0	0	0	0	39	93	132
07:30	0	0	0	0	0	1	0	0	55	131	0	8	8	0	0	0	0	0	0	0	1	1	0	65	140	205
08:00	0	2	0	2	0	0	0	0	56	115	0	9	20	0	0	2	0	0	0	0	0	0	0	65	137	202
08:30	0	1	1	2	0	0	2	0	94	101	0	15	13	0	0	2	0	0	0	0	0	0	0	109	118	227
09:00	0	0	0	0	0	1	0	0	91	85	0	15	6	0	0	0	0	0	0	0	0	2	0	107	93	200
09:30	0	0	2	2	0	0	1	0	71	77	0	9	7	0	0	2	0	0	0	0	0	0	0	80	87	167
11:00	0	1	1	2	0	0	0	0	35	63	0	4	9	0	0	1	0	0	0	0	0	1	0	39	74	113
11:30	0	0	0	0	0	0	1	0	63	67	0	6	11	0	0	2	0	0	0	0	0	0	0	69	81	150
12:00	0	1	1	2	0	0	1	0	39	91	0	7	5	0	1	2	0	0	0	0	0	1	0	47	100	147
12:30	0	0	0	0	0	0	0	0	26	72	0	3	14	0	1	2	0	0	0	0	0	0	0	30	88	118
13:00	0	1	1	2	0	0	0	0	52	62	0	4	10	0	1	1	0	0	0	0	0	1	0	57	74	131
13:30	0	0	0	0	0	0	1	0	57	96	0	7	17	0	1	1	0	0	0	0	0	1	0	65	116	181
15:00	0	0	1	1	0	0	1	0	52	67	0	3	14	0	1	3	0	0	0	0	0	0	0	56	85	141
15:30	0	0	0	0	0	0	1	0	69	121	0	9	13	0	0	4	0	0	0	0	0	3	0	78	142	220
16:00	0	0	0	0	0	1	2	0	62	91	0	11	17	0	0	0	0	0	0	0	0	0	0	74	110	184
16:30	0	0	0	0	0	0	0	0	75	123	0	14	21	0	0	0	0	0	0	0	0	0	0	89	144	233
17:00	0	0	0	0	0	0	1	0	77	62	0	10	8	0	0	0	0	0	0	0	0	0	0	87	71	158
17:30	0	0	0	0	0	0	1	0	65	84	0	1	16	0	0	0	0	0	0	0	0	0	0	66	101	167
TOTALS	0	8	7	15	0	4	15	0	1071	1587	0	141	220	0	5	22	0	0	0	0	1	10	0	1222	1854	3076

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COBA COUNT REPORT

Report Date: *16-Apr-2009*
Count No ID: *2319* **Arm:** 4

Nottinghamshire County
Communities Department
Traffic Data Collection
Manual Traffic Counts Database

Location: B 6023 - MANSFIELD RD/OUTRAM ST/DALESTORTH ST - SUTTON

Purpose Of Count: For LTP Team

Weather/Comments: FINE

Map Reference: 500/595 **Location Code:** 4/02 **Date Of Survey:** 23-10-2008
Type Of Count: COBA TURNING **Duration:** 9 HOURS (7-10, 11-14, 15-18) **Day Of Survey:** THURSDAY

Arm Location/Direction: OUTRAM STREET (N/E BOUND)

	Pedal Cycles				Motor Cycles			Cars and Taxis			Light Goods Vehicles			Rigid HGV 2/3 Axles			Rigid HGV 4+ Axles & Artics			Buses and Coaches			Total Motor Vehicles			
Time Comm:	L	A	R	Total	L	A	R	L	A	R	L	A	R	L	A	R	L	A	R	L	A	R	L	A	R	Total
07:00	0	0	1	1	0	0	1	0	18	26	0	5	5	0	0	1	0	0	0	0	0	7	0	23	40	63
07:30	0	1	0	1	0	0	0	0	16	47	0	7	8	0	0	2	0	0	1	0	0	5	0	23	63	86
08:00	0	0	0	0	0	0	3	0	30	91	0	14	8	0	1	2	0	0	2	0	0	9	0	45	115	160
08:30	0	0	0	0	0	0	0	0	50	79	0	7	8	0	0	3	0	0	0	0	0	6	0	57	96	153
09:00	0	1	0	1	0	0	3	0	41	71	0	7	6	0	2	2	0	0	0	0	0	5	0	50	87	137
09:30	0	0	0	0	0	0	0	0	55	49	0	5	4	0	3	1	0	0	0	0	0	8	0	63	62	125
11:00	0	0	0	0	0	1	3	0	48	73	0	4	9	0	0	1	0	0	0	0	0	9	0	53	95	148
11:30	0	0	1	1	0	0	1	0	53	72	0	4	11	0	1	2	0	0	0	0	0	5	0	58	91	149
12:00	0	0	1	1	0	0	4	0	47	72	0	11	15	0	0	1	0	0	1	0	0	7	0	58	100	158
12:30	0	1	0	1	0	0	1	0	62	77	0	5	5	0	0	2	0	0	0	0	0	6	0	67	91	158
13:00	0	0	1	1	0	0	0	0	62	67	0	4	12	0	0	2	0	1	0	0	0	7	0	67	88	155
13:30	0	1	0	1	0	0	0	0	55	67	0	11	9	0	0	2	0	0	0	0	0	5	0	66	83	149
15:00	0	3	0	3	0	0	1	0	49	45	0	9	5	0	0	0	0	0	0	0	0	7	0	58	58	116
15:30	0	1	0	1	0	0	1	0	54	71	0	13	2	0	0	2	0	0	0	0	0	6	0	67	82	149
16:00	0	2	0	2	0	0	1	0	64	72	0	10	11	0	0	0	0	0	0	0	0	6	0	74	90	164
16:30	0	0	0	0	0	0	0	0	94	76	0	10	8	0	0	1	0	0	0	0	0	8	0	104	93	197
17:00	0	1	0	1	0	1	0	0	95	104	0	8	8	0	0	0	0	0	0	0	0	3	0	104	115	219
17:30	0	0	0	0	0	1	2	0	63	90	0	10	6	0	1	1	0	0	0	0	0	8	0	75	107	182
TOTALS	0	11	4	15	0	3	21	0	956	1249	0	144	140	0	8	25	0	1	4	0	0	117	0	1112	1556	2668

Note: This data is the property of Nottinghamshire County Council and must not be passed onto, sold or in any other way made available to any third party without prior permission. Please contact Transport Planning on (0115) 977 2393.

2019 AM					
PCUs	Priestsic Road	Forest Street	Manor Street	Lammas Road	Total
Priestsic Road	11	86	164	697	958
Forest Street	45	1	21	20	87
Manor Street	64	25	0	52	141
Lammas Road	701	84	150	7	942
Total	821	196	335	776	2128

HGV%	Priestsic Road	Forest Street	Manor Street	Lammas Road	Total
Priestsic Road	10	23	1	3	
Forest Street	55	0	5	16	
Manor Street	2	4	0	41	
Lammas Road	3	4	12	0	
Total					

2019 PM					
PCUs	Priestsic Road	Forest Street	Manor Street	Lammas Road	Total
Priestsic Road	20	133	183	712	1048
Forest Street	75	2	39	54	170
Manor Street	90	58	1	59	208
Lammas Road	741	128	109	6	984
Total	926	321	332	831	2410

HGV%	Priestsic Road	Forest Street	Manor Street	Lammas Road	Total
Priestsic Road	5	12	1	1	
Forest Street	27	0	3	2	
Manor Street	0	0	0	30	
Lammas Road	1	2	16	0	
Total					

APPENDIX C

NCC TRAFFIC COUNT DATA

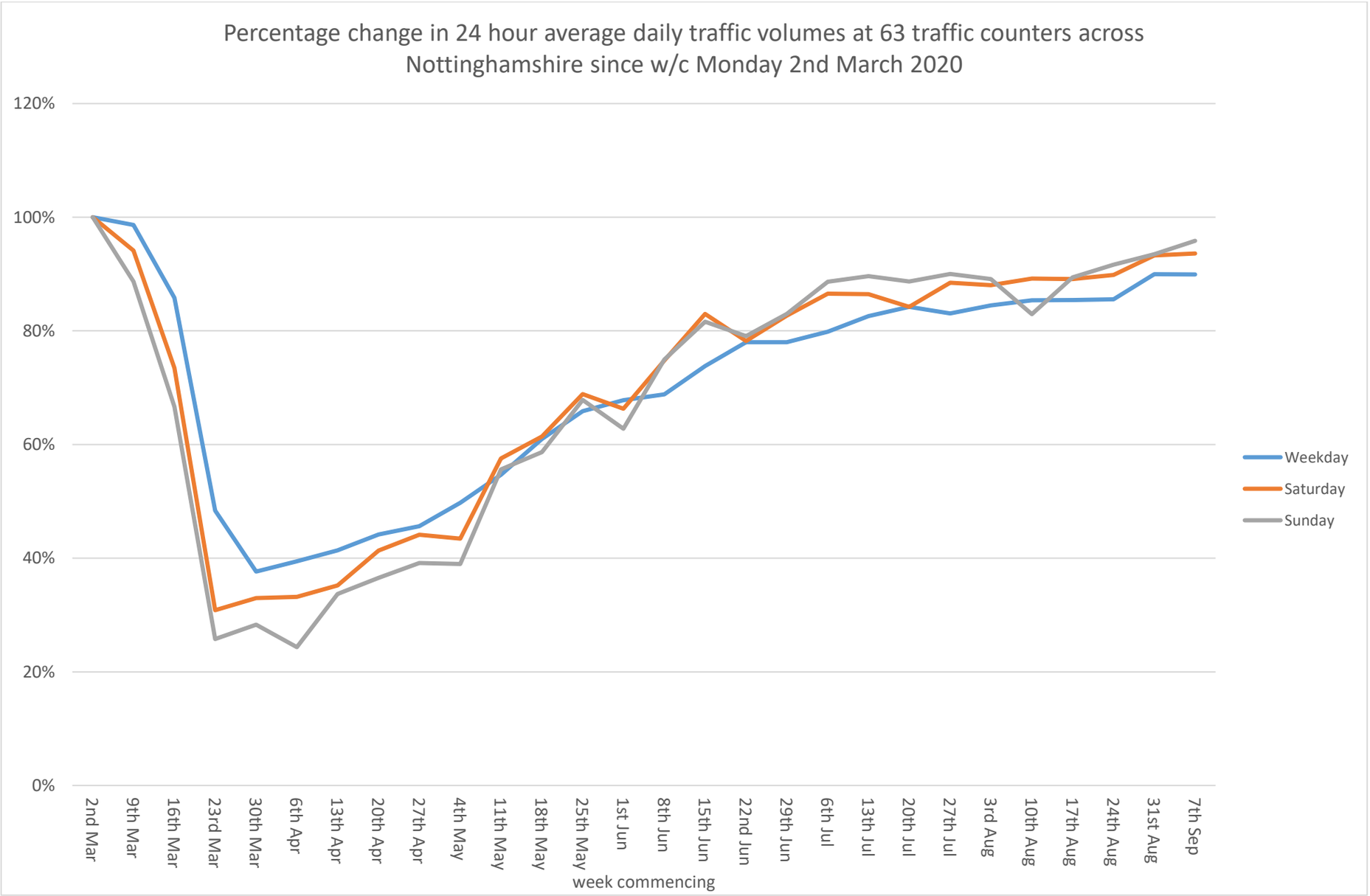
Average 24 hour traffic volumes by day of week at 63 permanent traffic counters operating across Nottinghamshire since w/c 2nd March 2020

week commencing (Mon)	Weekday	Saturday	Sunday
2nd Mar	14224	11443	9407
9th Mar	14030	10771	8344
16th Mar	12206	8405	6267
23rd Mar	6880	3530	2423
30th Mar	5354	3773	2661
6th Apr	5611	3800	2290
13th Apr	5885	4028	3171
20th Apr	6284	4729	3438
27th Apr	6489	5051	3683
4th May	7077	4972	3668
11th May	7776	6585	5233
18th May	8675	7027	5518
25th May	9368	7880	6382
1st Jun	9645	7587	5904
8th Jun	9789	8558	7049
15th Jun	10498	9495	7676
22nd Jun	11094	8952	7440
29th Jun	11095	9461	7807
6th Jul	11355	9901	8339
13th Jul	11750	9894	8432
20th Jul	11981	9637	8341
27th Jul	11815	10122	8469
3rd Aug	12017	10074	8382
10th Aug	12143	10209	7803
17th Aug	12148	10196	8409
24th Aug	12168	10281	8621
31st Aug	12800	10675	8794
7th Sep	12791	10711	9017

Percentage change

week commencing	Weekday	Saturday	Sunday	Lifting of lockdown measures
2nd Mar	100%	100%	100%	
9th Mar	99%	94%	89%	
16th Mar	86%	73%	67%	
23rd Mar	48%	31%	26%	Lockdown came into effect
30th Mar	38%	33%	28%	
6th Apr	39%	33%	24%	
13th Apr	41%	35%	34%	
20th Apr	44%	41%	37%	
27th Apr	46%	44%	39%	
4th May	50%	43%	39%	
11th May	55%	58%	56%	Step one
18th May	61%	61%	59%	
25th May	66%	69%	68%	
1st Jun	68%	66%	63%	Step two
8th Jun	69%	75%	75%	
15th Jun	74%	83%	82%	Step three
22nd Jun	78%	78%	79%	
29th Jun	78%	83%	83%	Step four (4th July)
6th Jul	80%	87%	89%	
13th Jul	83%	86%	90%	
20th Jul	84%	84%	89%	
27th Jul	83%	88%	90%	
3rd Aug	84%	88%	89%	
10th Aug	85%	89%	83%	
17th Aug	85%	89%	89%	
24th Aug	86%	90%	92%	
31st Aug	90%	93%	93%	
7th Sep	90%	94%	96%	

Step one	Unlimited travel allowed for exersise and some people encouraged to return to work
Step two	Up to six people allowed to meet in parks & gardens, some children returned to school, opening of some busineses e.g outdoor markets & car showrooms
Step three	Opening of none essential stores
Step four	Opening of pubs, restuarants, accommodation and some tourist and leisure attractions


Percentage change in 24 hour average daily traffic volumes at 63 traffic counters across Nottinghamshire since w/c Monday 2nd March 2020
120%
100%
80%
60%
40%
20%
0%
2nd Mar
9th Mar
16th Mar
23rd Mar
30th Mar
6th Apr
13th Apr
20th Apr
27th Apr
4th May
11th May
18th May
25th May
1st Jun
8th Jun
15th Jun
22nd Jun
29th Jun
6th Jul
13th Jul
20th Jul
27th Jul
3rd Aug
10th Aug
17th Aug
24th Aug
31st Aug
7th Sep
week commencing
Weekday
Saturday
Sunday

Average weekday traffic volumes by time of day. Data shown is average two way traffic volumes across 63 permanent traffic counters. No data by hour available for April

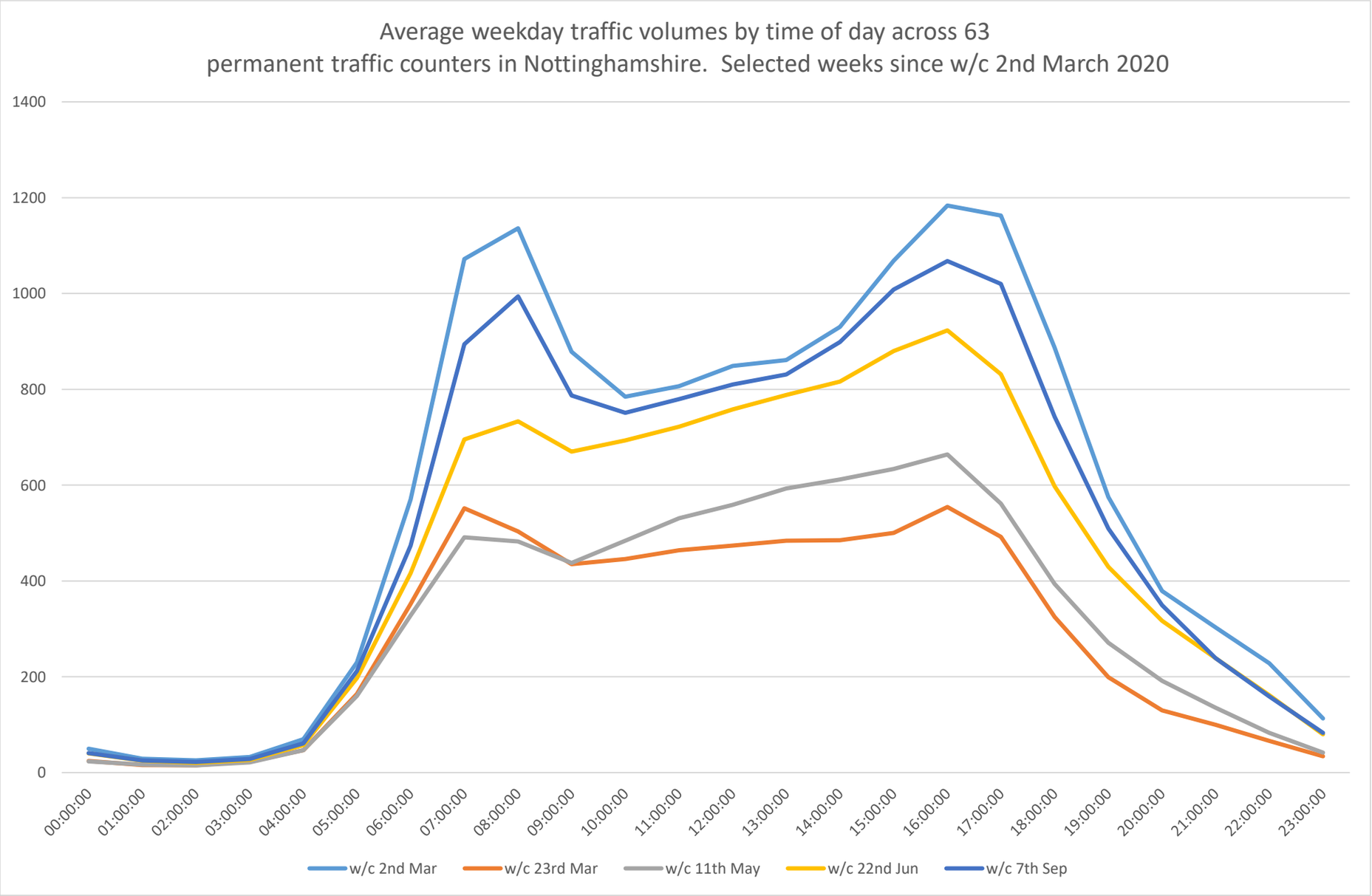
week commencing (Mon)	00:00:00	01:00:00	02:00:00	03:00:00	04:00:00	05:00:00	06:00:00	07:00:00	08:00:00	09:00:00	10:00:00	11:00:00	12:00:00	13:00:00	14:00:00	15:00:00	16:00:00	17:00:00	18:00:00	19:00:00	20:00:00	21:00:00	22:00:00	23:00:00
2nd Mar	50	29	26	33	70	230	570	1072	1136	878	785	807	849	861	930	1068	1184	1162	887	575	379	303	228	113
9th Mar	47	29	25	33	69	232	582	1084	1135	878	782	798	844	851	917	1052	1170	1141	849	553	367	279	203	108
16th Mar	41	26	22	31	64	218	533	968	984	774	727	748	769	780	824	930	1026	964	671	428	283	196	131	69
23rd Mar	24	16	15	23	47	164	352	552	503	435	446	464	474	484	485	500	554	492	325	199	130	100	66	34
30th Mar																								
6th Apr																								
13th Apr																								
20th Apr																								
27th Apr	21	16	15	21	44	149	292	428	417	369	403	444	467	491	503	516	538	457	316	217	152	110	69	35
4th May	22	16	15	22	44	152	308	462	455	404	437	477	500	527	540	563	601	512	357	249	176	124	76	37
11th May	23	17	15	21	47	160	328	491	482	437	484	531	559	593	612	634	664	561	394	271	192	136	83	42
18th May	27	19	16	23	49	169	349	533	535	501	555	602	632	660	680	701	728	620	436	311	225	158	98	48
25th May	29	20	17	25	52	174	365	557	558	548	616	665	689	710	723	746	777	681	488	351	256	183	113	56
1st Jun	31	21	17	23	52	180	381	608	613	548	594	642	680	711	736	782	823	724	509	356	258	183	115	58
8th Jun	32	21	18	25	53	188	393	635	637	555	586	639	682	722	751	804	857	747	514	348	245	173	114	57
15th Jun	35	23	19	25	55	194	407	669	691	609	641	687	726	763	794	851	904	802	557	381	271	194	133	67
22nd Jun	40	25	20	27	58	197	416	696	733	670	693	722	758	788	816	880	923	831	598	430	317	239	161	80
29th Jun	38	24	20	26	57	199	423	709	743	655	671	715	761	790	829	890	951	860	604	415	294	210	140	70
6th Jul	40	23	20	26	57	204	428	720	765	678	691	735	777	808	844	912	964	880	624	424	293	215	147	79
13th Jul	42	25	20	27	58	203	437	735	794	707	719	755	793	827	864	932	995	916	649	449	321	236	162	85
20th Jul	44	26	22	27	60	203	441	739	791	717	745	778	814	841	875	933	1012	946	675	467	332	246	168	88
27th Jul	43	27	22	28	58	202	436	707	744	703	757	791	812	831	839	886	976	925	679	477	350	259	172	91
3rd Aug	44	27	22	28	57	200	437	722	756	709	764	793	815	844	857	904	995	953	704	494	360	264	175	93
10th Aug	49	29	24	29	58	200	437	726	762	704	760	806	836	847	859	904	1001	962	709	510	376	276	180	97
17th Aug	47	28	23	29	59	204	442	729	765	706	758	802	831	853	869	907	997	962	714	504	374	271	179	95
24th Aug	46	27	23	28	58	201	433	723	762	709	765	813	847	864	873	922	1011	965	715	503	358	256	174	93
31st Aug	43	26	22	28	62	209	464	860	919	766	770	804	836	858	910	1002	1074	1023	748	521	363	243	164	86
7th Sep	41	26	22	29	61	212	474	894	994	787	751	780	810	831	899	1008	1068	1020	743	509	350	239	159	83

Percentage change

week commencing	00:00:00	01:00:00	02:00:00	03:00:00	04:00:00	05:00:00	06:00:00	07:00:00	08:00:00	09:00:00	10:00:00	11:00:00	12:00:00	13:00:00	14:00:00	15:00:00	16:00:00	17:00:00	18:00:00	19:00:00	20:00:00	21:00:00	22:00:00	23:00:00
2nd Mar	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
9th Mar	94%	102%	98%	102%	99%	101%	102%	101%	100%	100%	100%	99%	99%	99%	99%	98%	99%	98%	96%	96%	97%	92%	89%	96%
16th Mar	82%	88%	86%	94%	92%	95%	93%	90%	87%	88%	93%	93%	91%	91%	89%	87%	87%	83%	76%	74%	75%	65%	58%	61%
23rd Mar	49%	54%	60%	71%	68%	71%	62%	51%	44%	50%	57%	58%	56%	56%	52%	47%	47%	42%	37%	35%	34%	33%	29%	30%
30th Mar																								
6th Apr																								
13th Apr																								
20th Apr																								
27th Apr	43%	54%	57%	65%	64%	65%	51%	40%	37%	42%	51%	55%	55%	57%	54%	48%	45%	39%	36%	38%	40%	36%	30%	31%
4th May	45%	57%	60%	66%	63%	66%	54%	43%	40%	46%	56%	59%	59%	61%	58%	53%	51%	44%	40%	43%	47%	41%	33%	33%
11th May	47%	58%	59%	65%	67%	70%	58%	46%	42%	50%	62%	66%	66%	69%	66%	59%	56%	48%	44%	47%	51%	45%	36%	37%
18th May	54%	64%	63%	70%	70%	73%	61%	50%	47%	57%	71%	75%	74%	77%	73%	66%	61%	53%	49%	54%	59%	52%	43%	42%
25th May	59%	69%	66%	76%	74%	76%	64%	52%	49%	62%	78%	82%	81%	82%	78%	70%	66%	59%	55%	61%	68%	61%	50%	50%
1st Jun	63%	71%	66%	72%	75%	79%	67%	57%	54%	62%	76%	80%	80%	83%	79%	73%	70%	62%	57%	62%	68%	60%	50%	51%
8th Jun	65%	71%	69%	76%	76%	82%	69%	59%	56%	63%	75%	79%	80%	84%	81%	75%	72%	64%	58%	60%	65%	57%	50%	50%
15th Jun	71%	78%	75%	76%	80%	84%	71%	62%	61%	69%	82%	85%	86%	89%	85%	80%	76%	69%	63%	66%	71%	64%	58%	59%
22nd Jun	81%	87%	79%	81%	83%	86%	73%	65%	65%	76%	88%	90%	89%	92%	88%	82%	78%	72%	67%	75%	84%	79%	71%	71%
29th Jun	77%	83%	79%	80%	82%	86%	74%	66%	65%	75%	86%	89%	90%	92%	89%	83%	80%	74%	68%	72%	78%	69%	61%	62%
6th Jul	79%	80%	79%	80%	82%	89%	75%	67%	67%	77%	88%	91%	92%	94%	91%	85%	81%	76%	70%	74%	77%	71%	64%	70%
13th Jul	84%	87%	79%	82%	84%	88%	77%	69%	70%	81%	92%	94%	93%	96%	93%	87%	84%	79%	73%	78%	85%	78%	71%	75%
20th Jul	88%	90%	85%	83%	86%	88%	77%	69%	70%	82%	95%	96%	96%	98%	94%	87%	85%	81%	76%	81%	88%	81%	74%	78%
27th Jul	87%	94%	86%	87%	84%	88%	76%	66%	66%	80%	96%	98%	96%	97%	90%	83%	82%	80%	76%	83%	92%	86%	75%	80%
3rd Aug	88%	93%	85%	87%	82%	87%	77%	67%	67%	81%	97%	98%	96%	98%	92%	85%	84%	82%	79%	86%	95%	87%	77%	83%
10th Aug	98%	101%	93%	89%	83%	87%	77%	68%	67%	80%	97%	100%	98%	98%	92%	85%	85%	83%	80%	89%	99%	91%	79%	86%
17th Aug	95%	97%	89%	89%	85%	89%	77%	68%	67%	80%	97%	99%	98%	99%	93%	85%	84%	83%	80%	88%	99%	89%	79%	84%
24th Aug	92%	92%	88%	85%	84%	87%	76%	67%	67%	81%	97%	101%	100%	100%	94%	86%	85%	83%	81%	88%	95%	85%	76%	82%
31st Aug	86%	90%	84%	86%	88%	91%	81%	80%	81%	87%	98%	100%	98%	100%	98%	94%	91%	88%	84%	91%	96%	80%	72%	76%
7th Sep	82%	88%	87%	87%	88%	92%	83%	83%	87%	90%	96%	97%	95%	97%	97%	94%	90%	88%	84%	89%	92%	79%	70%	74%

Selected weeks for chart

week commencing (Mon)	00:00:00	01:00:00	02:00:00	03:00:00	04:00:00	05:00:00	06:00:00	07:00:00	08:00:00	09:00:00	10:00:00	11:00:00	12:00:00	13:00:00	14:00:00	15:00:00	16:00:00	17:00:00	18:00:00	19:00:00	20:00:00	21:00:00	22:00:00	23:00:00
w/c 2nd Mar	50	29	26	33	70	230	570	1072	1136	878	785	807	849	861	930	1068	1184	1162	887	575	379	303	228	113
w/c 23rd Mar	24	16	15	23	47	164	352	552	503	435	446	464	474	484	485	500	554	492	325	199	130	100	66	34
w/c 11th May	23	17	15	21	47	160	328	491	482	437	484	531	559	593	612	634	664	561	394	271	192	136	83	42
w/c 22nd Jun	40	25	20	27	58	197	416	696	733	670	693	722	758	788	816	880	923	831	598	430	317	239	161	80
w/c 7th Sep	41	26	22	29	61	212	474	894	994	787	751	780	810	831	899	1008	1068	1020	743	509	350	239	159	83


Average weekday traffic volumes by time of day across 63 permanent traffic counters in Nottinghamshire. Selected weeks since w/c 2nd March 2020
1400
1200
1000
800
600
400
200
0
00:00:00
01:00:00
02:00:00
03:00:00
04:00:00
05:00:00
06:00:00
07:00:00
08:00:00
09:00:00
10:00:00
11:00:00
12:00:00
13:00:00
14:00:00
15:00:00
16:00:00
17:00:00
18:00:00
19:00:00
20:00:00
21:00:00
22:00:00
23:00:00
w/c 2nd Mar
w/c 23rd Mar
w/c 11th May
w/c 22nd Jun
w/c 7th Sep

Average weekday 24 hour traffic flows by vehicle type across all roads

week commencing (Mon)	Car/Van	Heavy Van/Rigid HGV	Articulated HGV	Bus or coach
2nd Mar	12204	1458	261	99
9th Mar	12004	1457	269	99
16th Mar	10282	1389	266	95
23rd Mar	5522	975	214	68
30th Mar	4343	723	174	34
6th Apr	4551	752	177	32
13th Apr	4785	784	166	31
20th Apr	5133	817	157	30
27th Apr	5302	874	172	33
4th May	5755	966	187	34
11th May	6370	1038	193	38
18th May	7152	1115	200	40
25th May	7755	1176	208	40
1st Jun	8000	1220	211	49
8th Jun	8113	1247	213	52
15th Jun	8763	1288	221	57
22nd Jun	9268	1324	232	57
29th Jun	9265	1350	227	71
6th Jul	9502	1355	239	74
13th Jul	9859	1376	232	75
20th Jul	10059	1397	239	74
27th Jul	9953	1355	234	74
3rd Aug	10123	1372	239	76
10th Aug	10237	1376	244	75
17th Aug	10262	1374	234	76
24th Aug	10294	1373	234	77
31st Aug	10805	1438	243	87
7th Sep	10743	1463	261	90

Percentage change

week commencing	Car/Van	Heavy Van/Rigid HGV	Articulated HGV	Bus or coach
2nd Mar	100%	100%	100%	100%
9th Mar	98%	100%	103%	100%
16th Mar	84%	95%	102%	96%
23rd Mar	45%	67%	82%	68%
30th Mar	36%	50%	67%	34%
6th Apr	37%	52%	68%	32%
13th Apr	39%	54%	64%	31%
20th Apr	42%	56%	60%	30%
27th Apr	43%	60%	66%	34%
4th May	47%	66%	72%	35%
11th May	52%	71%	74%	38%
18th May	59%	77%	77%	40%
25th May	64%	81%	80%	41%
1st Jun	66%	84%	81%	49%
8th Jun	66%	86%	82%	53%
15th Jun	72%	88%	85%	57%
22nd Jun	76%	91%	89%	58%
29th Jun	76%	93%	87%	72%
6th Jul	78%	93%	92%	75%
13th Jul	81%	94%	89%	76%
20th Jul	82%	96%	92%	75%
27th Jul	82%	93%	90%	75%
3rd Aug	83%	94%	92%	77%
10th Aug	84%	94%	94%	76%
17th Aug	84%	94%	90%	77%
24th Aug	84%	94%	90%	78%
31st Aug	89%	99%	93%	88%
7th Sep	88%	100%	100%	92%

Average weekday 24 hour traffic flows by vehicle type. Urban counters only

week commencing (Mon)	Car/Van	Heavy Van/Rigid HGV	Articulated HGV	Bus or coach
2nd Mar	15220	1530	191	124
9th Mar	14999	1532	194	123
16th Mar	13048	1459	188	121
23rd Mar	7122	1030	149	81
30th Mar	5752	749	116	38
6th Apr	6053	783	114	36
13th Apr	6333	833	111	35
20th Apr	6767	882	117	36
27th Apr	6976	919	115	39
4th May	7533	1005	126	39
11th May	8203	1079	129	43
18th May	9097	1156	137	45
25th May	9861	1240	143	47
1st Jun	10083	1287	149	60
8th Jun	10280	1309	152	64
15th Jun	11062	1346	157	69
22nd Jun	11618	1389	164	70
29th Jun	11714	1424	163	90
6th Jul	11921	1437	174	93
13th Jul	12312	1453	164	93
20th Jul	12479	1462	169	92
27th Jul	12359	1426	166	92
3rd Aug	12527	1439	168	94
10th Aug	12710	1436	171	93
17th Aug	12796	1432	169	94
24th Aug	12834	1438	167	95
31st Aug	13472	1512	174	102
7th Sep	13411	1534	180	106

Percentage change

week commencing	Car/Van	Heavy Van/Rigid HGV	Articulated HGV	Bus or coach
2nd Mar	100%	100%	100%	100%
9th Mar	99%	100%	102%	99%
16th Mar	86%	95%	99%	97%
23rd Mar	47%	67%	78%	65%
30th Mar	38%	49%	61%	31%
6th Apr	40%	51%	60%	29%
13th Apr	42%	54%	58%	28%
20th Apr	44%	58%	61%	29%
27th Apr	46%	60%	60%	31%
4th May	49%	66%	66%	32%
11th May	54%	71%	68%	35%
18th May	60%	76%	72%	36%
25th May	65%	81%	75%	38%
1st Jun	66%	84%	78%	49%
8th Jun	68%	86%	79%	52%
15th Jun	73%	88%	82%	56%
22nd Jun	76%	91%	86%	57%
29th Jun	77%	93%	85%	73%
6th Jul	78%	94%	91%	75%
13th Jul	81%	95%	86%	75%
20th Jul	82%	96%	88%	74%
27th Jul	81%	93%	87%	74%
3rd Aug	82%	94%	88%	76%
10th Aug	84%	94%	90%	75%
17th Aug	84%	94%	88%	76%
24th Aug	84%	94%	87%	77%
31st Aug	89%	99%	91%	83%
7th Sep	88%	100%	94%	86%

Average weekday 24 hour traffic flows by vehicle type. Rural counters only

week commencing (Mon)	Car/Van	Heavy Van/Rigid HGV	Articulated HGV	Bus or coach
2nd Mar	9857	1402	315	79
9th Mar	9675	1400	326	80
16th Mar	8131	1335	326	75
23rd Mar	4277	932	266	57
30th Mar	3247	702	219	30
6th Apr	3383	728	227	28
13th Apr	3581	746	209	27
20th Apr	3862	767	188	25
27th Apr	4001	838	216	29
4th May	4373	935	235	31
11th May	4944	1005	242	34
18th May	5638	1083	249	35
25th May	6172	1128	258	36
1st Jun	6380	1169	259	40
8th Jun	6439	1200	260	43
15th Jun	6945	1243	271	47
22nd Jun	7471	1275	283	47
29th Jun	7360	1293	277	57
6th Jul	7621	1291	290	59
13th Jul	7952	1316	284	61
20th Jul	8177	1347	293	60
27th Jul	8081	1301	286	60
3rd Aug	8252	1321	294	62
10th Aug	8314	1330	300	61
17th Aug	8291	1329	285	61
24th Aug	8320	1322	286	63
31st Aug	8731	1381	296	74
7th Sep	8668	1408	325	78

Percentage change

week commencing	Car/Van	Heavy Van/Rigid HGV	Articulated HGV	Bus or coach
2nd Mar	100%	100%	100%	100%
9th Mar	98%	100%	104%	101%
16th Mar	82%	95%	104%	95%
23rd Mar	43%	66%	84%	72%
30th Mar	33%	50%	69%	38%
6th Apr	34%	52%	72%	36%
13th Apr	36%	53%	66%	34%
20th Apr	39%	55%	60%	32%
27th Apr	41%	60%	68%	36%
4th May	44%	67%	75%	39%
11th May	50%	72%	77%	43%
18th May	57%	77%	79%	44%
25th May	63%	80%	82%	45%
1st Jun	65%	83%	82%	50%
8th Jun	65%	86%	83%	54%
15th Jun	70%	89%	86%	59%
22nd Jun	76%	91%	90%	59%
29th Jun	75%	92%	88%	71%
6th Jul	77%	92%	92%	74%
13th Jul	81%	94%	90%	76%
20th Jul	83%	96%	93%	76%
27th Jul	82%	93%	91%	76%
3rd Aug	84%	94%	93%	78%
10th Aug	84%	95%	95%	77%
17th Aug	84%	95%	90%	77%
24th Aug	84%	94%	91%	80%
31st Aug	89%	99%	94%	93%
7th Sep	88%	100%	103%	99%

Average weekday 24 hour traffic flows by vehicle type. A Roads only

week commencing (Mon)	Car/Van	Heavy Van/Rigid HGV	Articulated HGV	Bus or coach
2nd Mar	16471	1972	378	124
9th Mar	16170	1966	386	124
16th Mar	13778	1887	379	117
23rd Mar	7327	1342	308	83
30th Mar	5699	990	250	44
6th Apr	5979	1037	257	42
13th Apr	6271	1089	253	42
20th Apr	6780	1163	247	43
27th Apr	7032	1211	257	46
4th May	7638	1333	278	46
11th May	8492	1429	283	51
18th May	9572	1529	293	52
25th May	10382	1610	302	54
1st Jun	10805	1686	311	62
8th Jun	10997	1724	316	66
15th Jun	11774	1767	324	72
22nd Jun	12554	1821	343	73
29th Jun	12601	1873	339	82
6th Jul	12884	1873	359	86
13th Jul	13401	1907	343	86
20th Jul	13707	1931	352	86
27th Jul	13603	1868	342	84
3rd Aug	13827	1889	351	87
10th Aug	13966	1888	356	85
17th Aug	14051	1884	342	87
24th Aug	14100	1891	345	90
31st Aug	14657	1966	356	104
7th Sep	14556	1997	388	107

Percentage change

week commencing	Car/Van	Heavy Van/Rigid HGV	Articulated HGV	Bus or coach
2nd Mar	100%	100%	100%	100%
9th Mar	98%	100%	102%	100%
16th Mar	84%	96%	100%	94%
23rd Mar	44%	68%	82%	67%
30th Mar	35%	50%	66%	35%
6th Apr	36%	53%	68%	34%
13th Apr	38%	55%	67%	34%
20th Apr	41%	59%	65%	35%
27th Apr	43%	61%	68%	37%
4th May	46%	68%	74%	37%
11th May	52%	72%	75%	41%
18th May	58%	78%	78%	42%
25th May	63%	82%	80%	44%
1st Jun	66%	85%	82%	50%
8th Jun	67%	87%	84%	53%
15th Jun	71%	90%	86%	58%
22nd Jun	76%	92%	91%	59%
29th Jun	77%	95%	90%	66%
6th Jul	78%	95%	95%	69%
13th Jul	81%	97%	91%	69%
20th Jul	83%	98%	93%	70%
27th Jul	83%	95%	90%	68%
3rd Aug	84%	96%	93%	70%
10th Aug	85%	96%	94%	69%
17th Aug	85%	96%	91%	70%
24th Aug	86%	96%	91%	72%
31st Aug	89%	100%	94%	83%
7th Sep	88%	101%	103%	87%

Average weekday 24 hour traffic flows by vehicle type. B Roads only

week commencing (Mon)	Car/Van	Heavy Van/Rigid HGV	Articulated HGV	Bus or coach
2nd Mar	8532	1233	226	63
9th Mar	8547	1254	240	64
16th Mar	7303	1167	248	62
23rd Mar	4050	777	197	51
30th Mar	3276	593	166	25
6th Apr	3393	603	166	26
13th Apr	3584	588	122	20
20th Apr	3824	550	93	14
27th Apr	3891	688	140	22
4th May	4168	775	160	26
11th May	4591	837	168	30
18th May	5101	904	176	31
25th May	5352	946	181	29
1st Jun	5561	970	178	35
8th Jun	5512	984	173	41
15th Jun	5993	1016	180	42
22nd Jun	6263	1046	186	42
29th Jun	6314	1041	176	50
6th Jul	6541	1070	183	50
13th Jul	6726	1066	188	53
20th Jul	6799	1107	196	52
27th Jul	6655	1073	200	59
3rd Aug	6834	1089	201	59
10th Aug	6933	1095	207	57
17th Aug	6904	1110	200	57
24th Aug	6930	1082	190	58
31st Aug	7344	1165	204	59
7th Sep	7365	1189	206	63

Percentage change

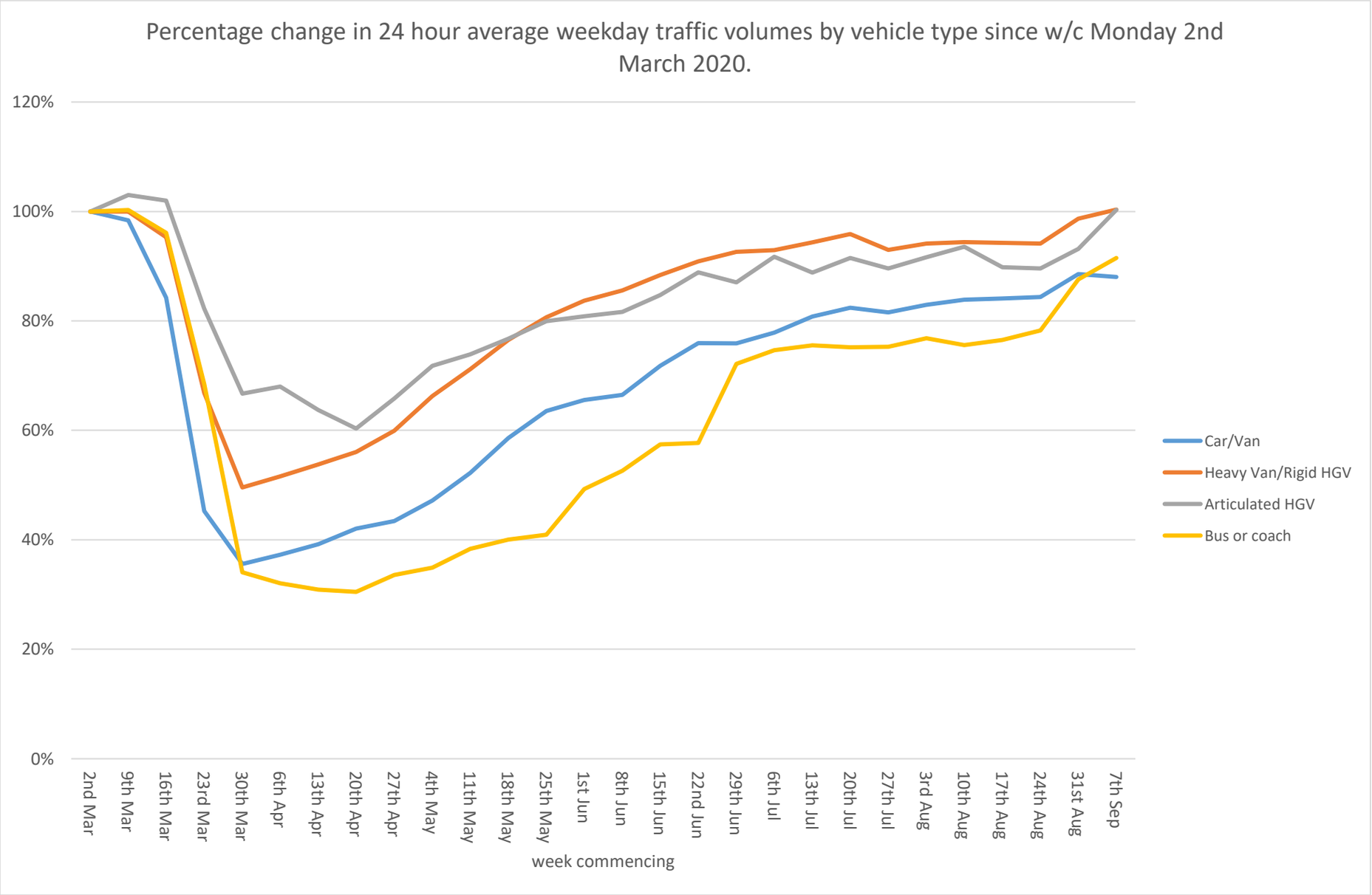
week commencing	Car/Van	Heavy Van/Rigid HGV	Articulated HGV	Bus or coach
2nd Mar	100%	100%	100%	100%
9th Mar	100%	102%	106%	102%
16th Mar	86%	95%	110%	99%
23rd Mar	47%	63%	87%	82%
30th Mar	38%	48%	73%	40%
6th Apr	40%	49%	73%	42%
13th Apr	42%	48%	54%	32%
20th Apr	45%	45%	41%	23%
27th Apr	46%	56%	62%	36%
4th May	49%	63%	71%	42%
11th May	54%	68%	74%	47%
18th May	60%	73%	78%	50%
25th May	63%	77%	80%	47%
1st Jun	65%	79%	79%	56%
8th Jun	65%	80%	77%	65%
15th Jun	70%	82%	79%	67%
22nd Jun	73%	85%	82%	67%
29th Jun	74%	84%	78%	80%
6th Jul	77%	87%	81%	80%
13th Jul	79%	86%	83%	85%
20th Jul	80%	90%	87%	83%
27th Jul	78%	87%	88%	93%
3rd Aug	80%	88%	89%	93%
10th Aug	81%	89%	92%	91%
17th Aug	81%	90%	88%	90%
24th Aug	81%	88%	84%	93%
31st Aug	86%	94%	90%	95%
7th Sep	86%	96%	91%	101%

Average weekday 24 hour traffic flows by vehicle type. C & U Roads only

week commencing (Mon)	Car/Van	Heavy Van/Rigid HGV	Articulated HGV	Bus or coach
2nd Mar	5851	515	33	72
9th Mar	5700	511	35	73
16th Mar	5055	480	33	73
23rd Mar	2767	332	23	47
30th Mar	2242	242	13	18
6th Apr	2367	251	13	14
13th Apr	2508	275	13	14
20th Apr	2592	277	14	14
27th Apr	2667	288	11	15
4th May	2929	318	11	16
11th May	3172	345	17	17
18th May	3523	381	17	19
25th May	3783	386	20	18
1st Jun	3845	407	19	30
8th Jun	3885	416	19	31
15th Jun	4258	432	21	35
22nd Jun	4399	446	22	34
29th Jun	4364	457	24	66
6th Jul	4510	453	24	66
13th Jul	4657	464	24	68
20th Jul	4728	465	25	66
27th Jul	4645	463	25	65
3rd Aug	4690	473	25	66
10th Aug	4764	487	28	65
17th Aug	4702	475	26	66
24th Aug	4704	474	24	66
31st Aug	5193	505	28	71
7th Sep	5146	518	29	75

Percentage change

week commencing	Car/Van	Heavy Van/Rigid HGV	Articulated HGV	Bus or coach
2nd Mar	100%	100%	100%	100%
9th Mar	97%	99%	105%	100%
16th Mar	86%	93%	101%	101%
23rd Mar	47%	64%	70%	65%
30th Mar	38%	47%	38%	25%
6th Apr	40%	49%	40%	19%
13th Apr	43%	53%	40%	19%
20th Apr	44%	54%	41%	19%
27th Apr	46%	56%	33%	20%
4th May	50%	62%	34%	22%
11th May	54%	67%	50%	23%
18th May	60%	74%	51%	26%
25th May	65%	75%	60%	25%
1st Jun	66%	79%	56%	42%
8th Jun	66%	81%	58%	42%
15th Jun	73%	84%	62%	49%
22nd Jun	75%	86%	68%	48%
29th Jun	75%	89%	72%	91%
6th Jul	77%	88%	71%	91%
13th Jul	80%	90%	72%	94%
20th Jul	81%	90%	75%	90%
27th Jul	79%	90%	74%	90%
3rd Aug	80%	92%	75%	91%
10th Aug	81%	95%	85%	90%
17th Aug	80%	92%	77%	91%
24th Aug	80%	92%	73%	90%
31st Aug	89%	98%	86%	98%
7th Sep	88%	100%	88%	104%

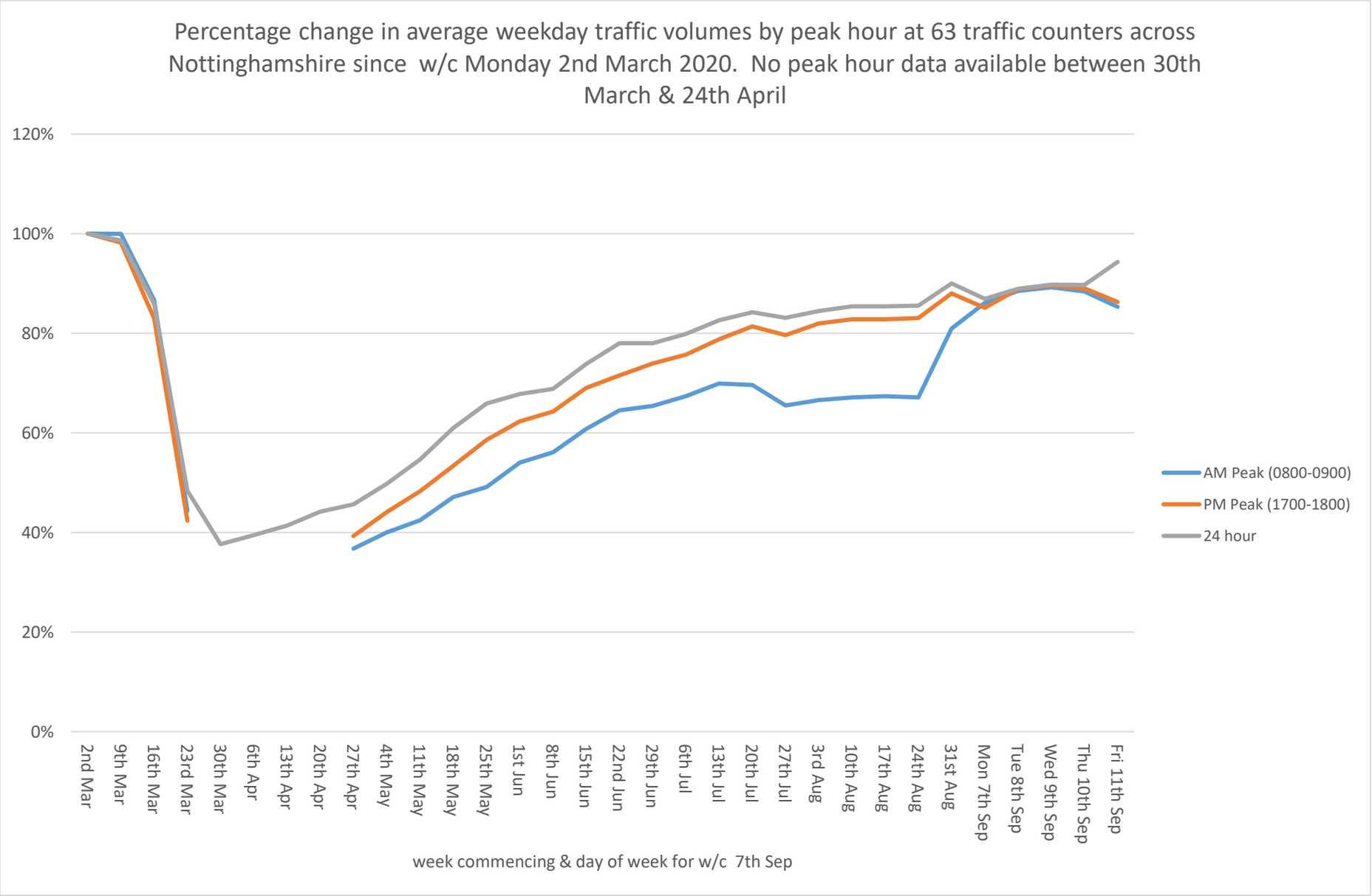

Percentage change in 24 hour average weekday traffic volumes by vehicle type since w/c Monday 2nd March 2020.
120%
100%
80%
60%
40%
20%
0%
2nd Mar
9th Mar
16th Mar
23rd Mar
30th Mar
6th Apr
13th Apr
20th Apr
27th Apr
4th May
11th May
18th May
25th May
1st Jun
8th Jun
15th Jun
22nd Jun
29th Jun
6th Jul
13th Jul
20th Jul
27th Jul
3rd Aug
10th Aug
17th Aug
24th Aug
31st Aug
7th Sep
week commencing
Car/Van
Heavy Van/Rigid HGV
Articulated HGV
Bus or coach

Average peak hour & 24hr weekday flow across all counters

week commencing (Mon)	AM Peak (0800-0900)	PM Peak (1700-1800)	24 hour
2nd Mar	1136	1162	14224
9th Mar	1135	1141	14030
16th Mar	984	964	12206
23rd Mar	503	492	6880
30th Mar	322	297	5354
6th Apr	341	312	5611
13th Apr	358	328	5885
20th Apr	378	360	6284
27th Apr	417	457	6489
4th May	455	512	7077
11th May	482	561	7776
18th May	535	620	8675
25th May	558	681	9368
1st Jun	613	724	9645
8th Jun	637	747	9789
15th Jun	691	802	10498
22nd Jun	733	831	11094
29th Jun	743	860	11095
6th Jul	765	880	11355
13th Jul	794	916	11750
20th Jul	791	946	11981
27th Jul	744	925	11815
3rd Aug	756	953	12017
10th Aug	762	962	12143
17th Aug	765	962	12148
24th Aug	762	965	12168
31st Aug	919	1023	12800
Mon 7th Sep	978	989	12362
Tue 8th Sep	1005	1033	12651
Wed 9th Sep	1013	1041	12763
Thu 10th Sep	1004	1035	12762
Fri 11th Sep	969	1003	13416

Percentage change

week commencing	AM Peak (0800-0900)	PM Peak (1700-1800)	24 hour
2nd Mar	100%	100%	100%
9th Mar	100%	98%	99%
16th Mar	87%	83%	86%
23rd Mar	44%	42%	48%
30th Mar			38%
6th Apr			39%
13th Apr			41%
20th Apr			44%
27th Apr	37%	39%	46%
4th May	40%	44%	50%
11th May	42%	48%	55%
18th May	47%	53%	61%
25th May	49%	59%	66%
1st Jun	54%	62%	68%
8th Jun	56%	64%	69%
15th Jun	61%	69%	74%
22nd Jun	65%	72%	78%
29th Jun	65%	74%	78%
6th Jul	67%	76%	80%
13th Jul	70%	79%	83%
20th Jul	70%	81%	84%
27th Jul	66%	80%	83%
3rd Aug	67%	82%	84%
10th Aug	67%	83%	85%
17th Aug	67%	83%	85%
24th Aug	67%	83%	86%
31st Aug	81%	88%	90%
Mon 7th Sep	86%	85%	87%
Tue 8th Sep	88%	89%	89%
Wed 9th Sep	89%	90%	90%
Thu 10th Sep	88%	89%	90%
Fri 11th Sep	85%	86%	94%


Percentage change in average weekday traffic volumes by peak hour at 63 traffic counters across Nottinghamshire since w/c Monday 2nd March 2020. No peak hour data available between 30th March & 24th April
120%
100%
80%
60%
40%
20%
0%
2nd Mar
9th Mar
16th Mar
23rd Mar
30th Mar
6th Apr
13th Apr
20th Apr
27th Apr
4th May
11th May
18th May
25th May
1st Jun
8th Jun
15th Jun
22nd Jun
29th Jun
6th Jul
13th Jul
20th Jul
27th Jul
3rd Aug
10th Aug
17th Aug
24th Aug
31st Aug
Mon 7th Sep
Tue 8th Sep
Wed 9th Sep
Thu 10th Sep
Fri 11th Sep
week commencing & day of week for w/c 7th Sep
AM Peak (0800-0900)
PM Peak (1700-1800)
24 hour

APPENDIX D

TEMPRO OUTPUTS

Dataset Version:	62
Result Type:	Trip ends by time period
Base Year:	2008
Future Year:	2030
Trip Purpose Group:	All purposes
Time Period:	Weekday AM peak period (0700 - 0959)
Trip End Type:	Origin/Destination
Alternative Assumptions Applied:	No
NTM:	Urban / Principal

Growth Factor

Area Description		All purposes	
Level	Name	Origin	Destination
37UB2	Sutton in Ashfield	1.1474	1.2248

Future Year - Base Year

Area Description		All purposes	
Level	Name	Origin	Destination
37UB2	Sutton in Ashfield	1,772	3,193

Base Year

Area Description		All purposes	
Level	Name	Origin	Destination
37UB2	Sutton in Ashfield	12,024	14,204

Future Year

Area Description		All purposes	
Level	Name	Origin	Destination
37UB2	Sutton in Ashfield	13,796	17,397

Level	Area	Local Growth Figure
E02005824	Ashfield 006	1.242305403

Dataset Version:	62
Result Type:	Trip ends by time period
Base Year:	2008
Future Year:	2030
Trip Purpose Group:	All purposes
Time Period:	Weekday PM peak period (1600 - 1859)
Trip End Type:	Origin/Destination
Alternative Assumptions Applied:	No
NTM:	Urban / Principal

Growth Factor

Area Description		All purposes	
Level	Name	Origin	Destination
37UB2	Sutton in Ashfield	1.2282	1.1817

Future Year - Base Year

Area Description		All purposes	
Level	Name	Origin	Destination
37UB2	Sutton in Ashfield	3,681	2,628

Base Year

Area Description		All purposes	
Level	Name	Origin	Destination
37UB2	Sutton in Ashfield	16,127	14,463

Future Year

Area Description		All purposes	
Level	Name	Origin	Destination
37UB2	Sutton in Ashfield	19,808	17,090

Level	Area	Local Growth Figure
E02005824	Ashfield 006	1.240089188

Dataset Version:	72
Result Type:	Trip ends by time period
Base Year:	2018
Future Year:	2030
Trip Purpose Group:	All purposes
Time Period:	Weekday AM peak period (0700 - 0959)
Trip End Type:	Origin/Destination
Alternative Assumptions Applied:	No
NTM:	Urban / Principal

Growth Factor

Area Description		All purposes	
Level	Name	Origin	Destination
E02005824	Ashfield 006	1.0877	1.0900

Future Year - Base Year

Area Description		All purposes	
Level	Name	Origin	Destination
E02005824	Ashfield 006	212	155

Base Year

Area Description		All purposes	
Level	Name	Origin	Destination
E02005824	Ashfield 006	2,419	1,725

Future Year

Area Description		All purposes	
Level	Name	Origin	Destination
E02005824	Ashfield 006	2,631	1,880

Level	Area	Local Growth Figure
E02005824	Ashfield 006	1.134357747

Dataset Version:	72
Result Type:	Trip ends by time period
Base Year:	2018
Future Year:	2030
Trip Purpose Group:	All purposes
Time Period:	Weekday PM peak period (1600 - 1859)
Trip End Type:	Origin/Destination
Alternative Assumptions Applied:	No
NTM:	Urban / Principal

Growth Factor

Area Description		All purposes	
Level	Name	Origin	Destination
E02005824	Ashfield 006	1.0849	1.0839

Future Year - Base Year

Area Description		All purposes	
Level	Name	Origin	Destination
E02005824	Ashfield 006	171	203

Base Year

Area Description		All purposes	
Level	Name	Origin	Destination
E02005824	Ashfield 006	2,012	2,422

Future Year

Area Description		All purposes	
Level	Name	Origin	Destination
E02005824	Ashfield 006	2,183	2,625

Level	Area	Local Growth Figure
E02005824	Ashfield 006	1.129721762

Dataset Version:	72
Result Type:	Trip ends by time period
Base Year:	2019
Future Year:	2030
Trip Purpose Group:	All purposes
Time Period:	Weekday AM peak period (0700 - 0959)
Trip End Type:	Origin/Destination
Alternative Assumptions Applied:	No
NTM:	Urban / Principal

Growth Factor

Area Description		All purposes	
Level	Name	Origin	Destination
E02005824	Ashfield 006	1.0786	1.0799

Future Year - Base Year

Area Description		All purposes	
Level	Name	Origin	Destination
E02005824	Ashfield 006	192	139

Base Year

Area Description		All purposes	
Level	Name	Origin	Destination
E02005824	Ashfield 006	2,439	1,741

Future Year

Area Description		All purposes	
Level	Name	Origin	Destination
E02005824	Ashfield 006	2,631	1,880

Level	Area	Local Growth Figure
E02005824	Ashfield 006	1.120719488

Dataset Version:	72
Result Type:	Trip ends by time period
Base Year:	2019
Future Year:	2030
Trip Purpose Group:	All purposes
Time Period:	Weekday PM peak period (1600 - 1859)
Trip End Type:	Origin/Destination
Alternative Assumptions Applied:	No
NTM:	Urban / Principal

Growth Factor

Area Description		All purposes	
Level	Name	Origin	Destination
E02005824	Ashfield 006	1.0759	1.0756

Future Year - Base Year

Area Description		All purposes	
Level	Name	Origin	Destination
E02005824	Ashfield 006	154	184

Base Year

Area Description		All purposes	
Level	Name	Origin	Destination
E02005824	Ashfield 006	2,029	2,441

Future Year

Area Description		All purposes	
Level	Name	Origin	Destination
E02005824	Ashfield 006	2,183	2,625

Level	Area	Local Growth Figure
E02005824	Ashfield 006	1.117085003

Dataset Version:	72
Result Type:	Trip ends by time period
Base Year:	2020
Future Year:	2030
Trip Purpose Group:	All purposes
Time Period:	Weekday AM peak period (0700 - 0959)
Trip End Type:	Origin/Destination
Alternative Assumptions Applied:	No
NTM:	Urban / Principal

Growth Factor

Area Description		All purposes	
Level	Name	Origin	Destination
E02005824	Ashfield 006	1.0697	1.0700

Future Year - Base Year

Area Description		All purposes	
Level	Name	Origin	Destination
E02005824	Ashfield 006	171	123

Base Year

Area Description		All purposes	
Level	Name	Origin	Destination
E02005824	Ashfield 006	2,459	1,757

Future Year

Area Description		All purposes	
Level	Name	Origin	Destination
E02005824	Ashfield 006	2,631	1,880

Level	Area	Local Growth Figure
E02005824	Ashfield 006	1.10744792

Dataset Version:	72
Result Type:	Trip ends by time period
Base Year:	2020
Future Year:	2030
Trip Purpose Group:	All purposes
Time Period:	Weekday PM peak period (1600 - 1859)
Trip End Type:	Origin/Destination
Alternative Assumptions Applied:	No
NTM:	Urban / Principal

Growth Factor

Area Description		All purposes	
Level	Name	Origin	Destination
E02005824	Ashfield 006	1.0671	1.0674

Future Year - Base Year

Area Description		All purposes	
Level	Name	Origin	Destination
E02005824	Ashfield 006	137	166

Base Year

Area Description		All purposes	
Level	Name	Origin	Destination
E02005824	Ashfield 006	2,045	2,459

Future Year

Area Description		All purposes	
Level	Name	Origin	Destination
E02005824	Ashfield 006	2,183	2,625

Level	Area	Local Growth Figure
E02005824	Ashfield 006	1.104756548

APPENDIX E

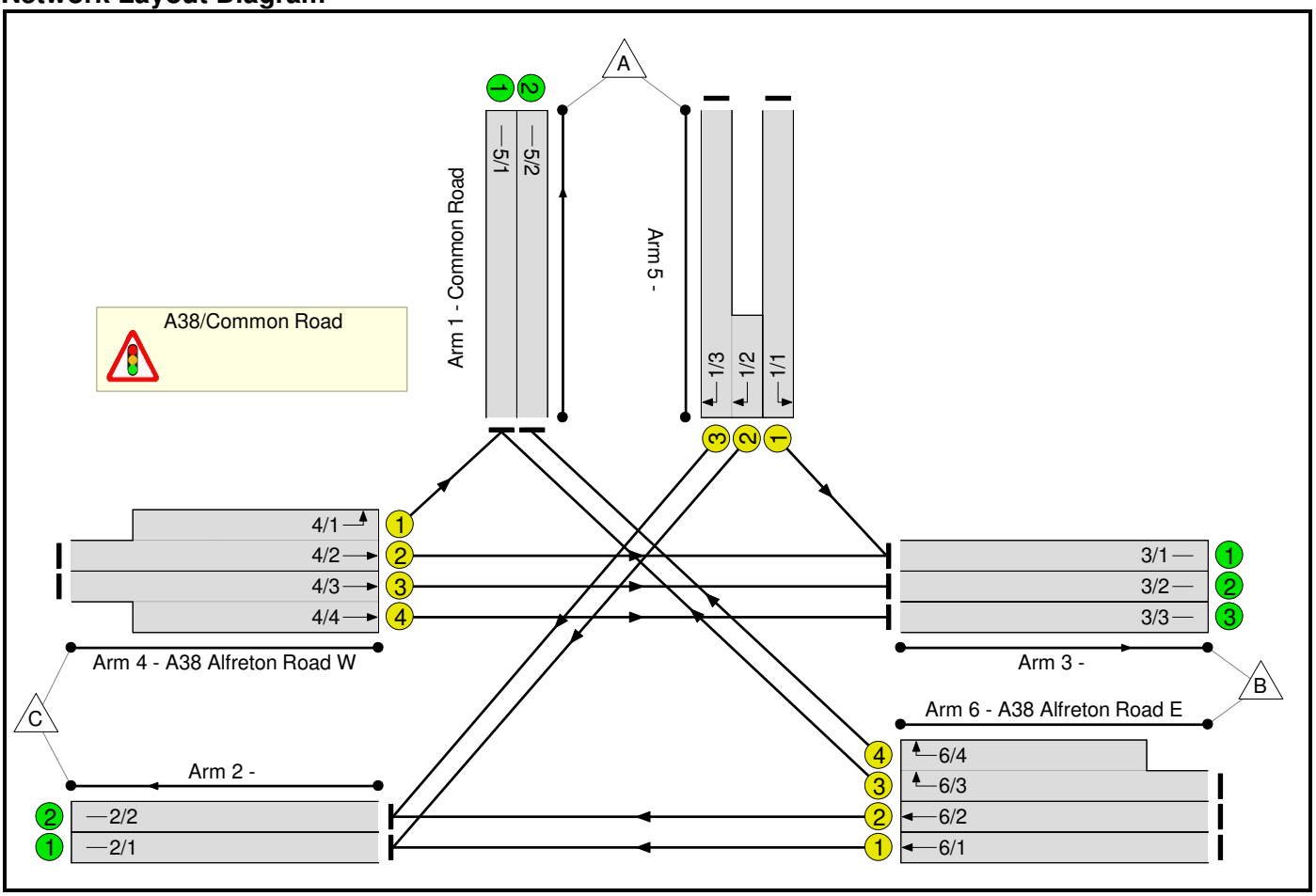
JUNCTION 1 LINSIG OUTPUTS

Full Input Data And Results

User and Project Details

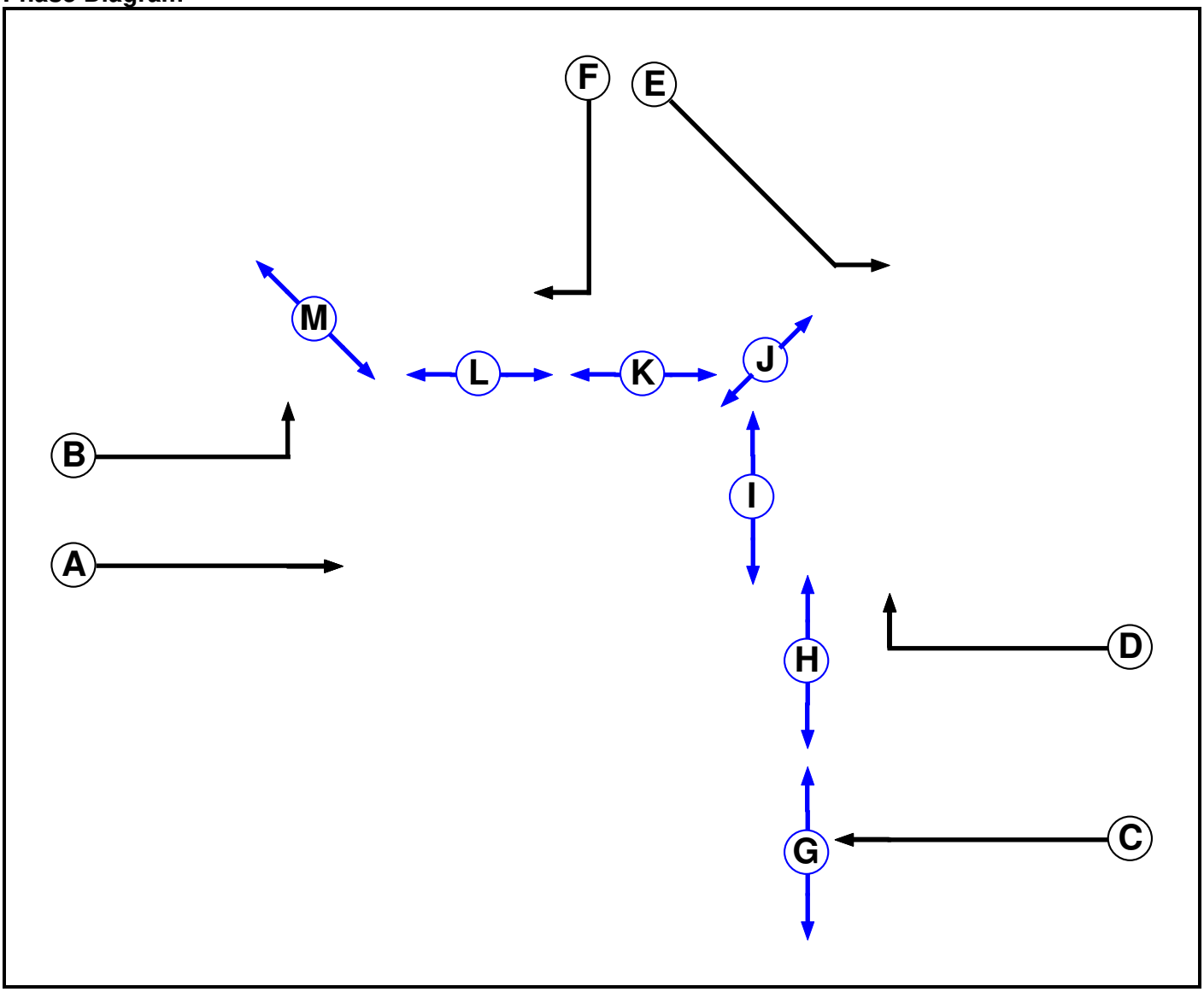
Project:	**Ashland Road, Sutton in Ashfield**
Title:	**A38 - Common Road**
Location:	
Client:	Bellway Homes
Additional detail:	
File name:	J1 A38-Common Road.lsg3x
Author:	
Company:	ADC Infrastructure Limited
Address:	King Edward Court, King Edward Street, Nottingham

Network Layout Diagram



Full Input Data And Results

Phase Diagram



Phase Input Data

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

Full Input Data And Results

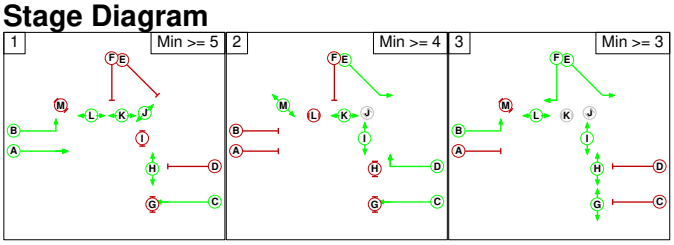
Phase Intergreens Matrix

Terminating Phase	Starting Phase												
	A	B	C	D	E	F	G	H	I	J	K	L	M
A		-	-	7	9	9	-	-	10	-	-	-	-
B	-		-	7	-	-	-	-	-	-	-	-	5
C	-	-		-	-	7	7	-	-	-	-	-	-
D	9	9	-		-	7	-	5	-	-	-	11	-
E	6	-	-	-		-	-	-	-	-	-	-	-
F	6	-	6	6	-		-	-	-	-	-	-	-
G	-	-	0	-	-	-		-	-	-	-	-	-
H	-	-	-	0	-	-	-		-	-	-	-	-
I	0	-	-	-	-	-	-	-		-	-	-	-
J	-	-	-	-	-	-	-	-	-		-	-	-
K	-	-	-	-	-	-	-	-	-	-		-	-
L	-	-	-	0	-	-	-	-	-	-	-		-
M	-	0	-	-	-	-	-	-	-	-	-	-	

Phases in Stage

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

Stage Diagram



Phase Delays

Term. Stage	Start Stage	Phase	Type	Value	Cont value
1	2	A	Losing	1	1
1	2	B	Losing	1	1
3	1	E	Losing	5	5
3	1	F	Losing	5	5

Full Input Data And Results

Prohibited Stage Change

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

Full Input Data And Results

Give-Way Lane Input Data

Junction: A38/Common Road
There are no Opposed Lanes in this Junction

Full Input Data And Results

Lane Input Data

Junction: A38/Common 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 (Common Road)	U	E	2	3	60.0	User	1900	-	-	-	-	-
1/2 (Common Road)	U	F	2	3	5.0	User	1800	-	-	-	-	-
1/3 (Common Road)	U	F	2	3	9.6	User	1800	-	-	-	-	-
2/1	U		2	3	60.0	User	2000	-	-	-	-	-
2/2	U		2	3	60.0	User	2000	-	-	-	-	-
3/1	U		2	3	60.0	User	2000	-	-	-	-	-
3/2	U		2	3	60.0	User	2000	-	-	-	-	-
3/3	U		2	3	60.0	User	2000	-	-	-	-	-
4/1 (A38 Alfreton Road W)	U	B	2	3	19.1	User	1900	-	-	-	-	-
4/2 (A38 Alfreton Road W)	U	A	2	3	60.0	User	2000	-	-	-	-	-
4/3 (A38 Alfreton Road W)	U	A	2	3	60.0	User	2000	-	-	-	-	-
4/4 (A38 Alfreton Road W)	U	A	2	3	23.5	User	2000	-	-	-	-	-
5/1	U		2	3	60.0	Geom	-	3.25	0.00	Y		
5/2	U		2	3	5.2	Geom	-	3.25	0.00	Y		
6/1 (A38 Alfreton Road E)	U	C	2	3	60.0	User	2000	-	-	-	-	-
6/2 (A38 Alfreton Road E)	U	C	2	3	60.0	User	2000	-	-	-	-	-
6/3 (A38 Alfreton Road E)	U	D	2	3	60.0	User	1800	-	-	-	-	-
6/4 (A38 Alfreton Road E)	U	D	2	3	16.5	User	1800	-	-	-	-	-

Full Input Data And Results

Traffic Flow Groups

Flow Group	Start Time	End Time	Duration	Formula
1: 'Validation'	08:00	09:00	01:00	
2: '2030 Bkgd AM'	08:00	09:00	01:00	
3: '2030 Bkgd PM'	17:00	18:00	01:00	
4: '2030 With Dev AM'	08:00	09:00	01:00	
5: '2030 With Dev PM'	17:00	18:00	01:00	

Scenario 1: '2030 Bkgd AM' (FG2: '2030 Bkgd AM', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired

Desired Flow :

		Destination			
		A	B	C	Tot.
Origin	A	0	360	424	784
	B	456	0	2038	2494
	C	548	1863	0	2411
	Tot.	1004	2223	2462	5689

Full Input Data And Results

Traffic Lane Flows

Lane	Scenario 1: 2030 Bkgd AM
Junction: A38/Common Road	
1/1	360
1/2 (short)	212
1/3 (with short)	424(In) 212(Out)
2/1	1231
2/2	1231
3/1	953
3/2	635
3/3	635
4/1 (short)	548
4/2 (with short)	1141(In) 593(Out)
4/3 (with short)	1270(In) 635(Out)
4/4 (short)	635
5/1	765
5/2	239
6/1	1019
6/2	1019
6/3 (with short)	456(In) 217(Out)
6/4 (short)	239

Full Input Data And Results

Lane Saturation Flows

Junction: A38/Common 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 (Common Road Lane 1)	This lane uses a directly entered Saturation Flow						1900	1900
1/2 (Common Road Lane 2)	This lane uses a directly entered Saturation Flow						1800	1800
1/3 (Common Road Lane 3)	This lane uses a directly entered Saturation Flow						1800	1800
2/1	This lane uses a directly entered Saturation Flow						2000	2000
2/2	This lane uses a directly entered Saturation Flow						2000	2000
3/1	This lane uses a directly entered Saturation Flow						2000	2000
3/2	This lane uses a directly entered Saturation Flow						2000	2000
3/3	This lane uses a directly entered Saturation Flow						2000	2000
4/1 (A38 Alfreton Road W Lane 1)	This lane uses a directly entered Saturation Flow						1900	1900
4/2 (A38 Alfreton Road W Lane 2)	This lane uses a directly entered Saturation Flow						2000	2000
4/3 (A38 Alfreton Road W Lane 3)	This lane uses a directly entered Saturation Flow						2000	2000
4/4 (A38 Alfreton Road W Lane 4)	This lane uses a directly entered Saturation Flow						2000	2000
5/1	3.25	0.00	Y				1940	1940
5/2	3.25	0.00	Y				1940	1940
6/1 (A38 Alfreton Road E Lane 1)	This lane uses a directly entered Saturation Flow						2000	2000
6/2 (A38 Alfreton Road E Lane 2)	This lane uses a directly entered Saturation Flow						2000	2000
6/3 (A38 Alfreton Road E Lane 3)	This lane uses a directly entered Saturation Flow						1800	1800
6/4 (A38 Alfreton Road E Lane 4)	This lane uses a directly entered Saturation Flow						1800	1800

Scenario 2: '2030 With Dev AM' (FG4: '2030 With Dev AM', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired

Desired Flow :

		Destination			
		A	B	C	Tot.
Origin	A	0	360	470	830
	B	457	0	2038	2495
	C	567	1863	0	2430
	Tot.	1024	2223	2508	5755

Full Input Data And Results

Traffic Lane Flows

Lane	Scenario 2: 2030 With Dev AM
Junction: A38/Common Road	
1/1	360
1/2 (short)	235
1/3 (with short)	470(In) 235(Out)
2/1	1254
2/2	1254
3/1	962
3/2	631
3/3	630
4/1 (short)	567
4/2 (with short)	1169(In) 602(Out)
4/3 (with short)	1261(In) 631(Out)
4/4 (short)	630
5/1	784
5/2	240
6/1	1019
6/2	1019
6/3 (with short)	457(In) 217(Out)
6/4 (short)	240

Full Input Data And Results

Lane Saturation Flows

Junction: A38/Common 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 (Common Road Lane 1)	This lane uses a directly entered Saturation Flow						1900	1900
1/2 (Common Road Lane 2)	This lane uses a directly entered Saturation Flow						1800	1800
1/3 (Common Road Lane 3)	This lane uses a directly entered Saturation Flow						1800	1800
2/1	This lane uses a directly entered Saturation Flow						2000	2000
2/2	This lane uses a directly entered Saturation Flow						2000	2000
3/1	This lane uses a directly entered Saturation Flow						2000	2000
3/2	This lane uses a directly entered Saturation Flow						2000	2000
3/3	This lane uses a directly entered Saturation Flow						2000	2000
4/1 (A38 Alfreton Road W Lane 1)	This lane uses a directly entered Saturation Flow						1900	1900
4/2 (A38 Alfreton Road W Lane 2)	This lane uses a directly entered Saturation Flow						2000	2000
4/3 (A38 Alfreton Road W Lane 3)	This lane uses a directly entered Saturation Flow						2000	2000
4/4 (A38 Alfreton Road W Lane 4)	This lane uses a directly entered Saturation Flow						2000	2000
5/1	3.25	0.00	Y				1940	1940
5/2	3.25	0.00	Y				1940	1940
6/1 (A38 Alfreton Road E Lane 1)	This lane uses a directly entered Saturation Flow						2000	2000
6/2 (A38 Alfreton Road E Lane 2)	This lane uses a directly entered Saturation Flow						2000	2000
6/3 (A38 Alfreton Road E Lane 3)	This lane uses a directly entered Saturation Flow						1800	1800
6/4 (A38 Alfreton Road E Lane 4)	This lane uses a directly entered Saturation Flow						1800	1800

Scenario 3: '2030 Bkgd PM' (FG3: '2030 Bkgd PM', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired

Desired Flow :

		Destination			
		A	B	C	Tot.
Origin	A	0	563	550	1113
	B	274	0	1823	2097
	C	426	1935	0	2361
	Tot.	700	2498	2373	5571

Full Input Data And Results

Traffic Lane Flows

Lane	Scenario 3: 2030 Bkgd PM
Junction: A38/Common Road	
1/1	563
1/2 (short)	275
1/3 (with short)	550(In) 275(Out)
2/1	1186
2/2	1187
3/1	1170
3/2	664
3/3	664
4/1 (short)	426
4/2 (with short)	1033(In) 607(Out)
4/3 (with short)	1328(In) 664(Out)
4/4 (short)	664
5/1	556
5/2	144
6/1	911
6/2	912
6/3 (with short)	274(In) 130(Out)
6/4 (short)	144

Full Input Data And Results

Lane Saturation Flows

Junction: A38/Common 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 (Common Road Lane 1)	This lane uses a directly entered Saturation Flow						1900	1900
1/2 (Common Road Lane 2)	This lane uses a directly entered Saturation Flow						1800	1800
1/3 (Common Road Lane 3)	This lane uses a directly entered Saturation Flow						1800	1800
2/1	This lane uses a directly entered Saturation Flow						2000	2000
2/2	This lane uses a directly entered Saturation Flow						2000	2000
3/1	This lane uses a directly entered Saturation Flow						2000	2000
3/2	This lane uses a directly entered Saturation Flow						2000	2000
3/3	This lane uses a directly entered Saturation Flow						2000	2000
4/1 (A38 Alfreton Road W Lane 1)	This lane uses a directly entered Saturation Flow						1900	1900
4/2 (A38 Alfreton Road W Lane 2)	This lane uses a directly entered Saturation Flow						2000	2000
4/3 (A38 Alfreton Road W Lane 3)	This lane uses a directly entered Saturation Flow						2000	2000
4/4 (A38 Alfreton Road W Lane 4)	This lane uses a directly entered Saturation Flow						2000	2000
5/1	3.25	0.00	Y				1940	1940
5/2	3.25	0.00	Y				1940	1940
6/1 (A38 Alfreton Road E Lane 1)	This lane uses a directly entered Saturation Flow						2000	2000
6/2 (A38 Alfreton Road E Lane 2)	This lane uses a directly entered Saturation Flow						2000	2000
6/3 (A38 Alfreton Road E Lane 3)	This lane uses a directly entered Saturation Flow						1800	1800
6/4 (A38 Alfreton Road E Lane 4)	This lane uses a directly entered Saturation Flow						1800	1800

Scenario 4: '2030 With Dev PM' (FG5: '2030 With Dev PM', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired

Desired Flow :

		Destination			
		A	B	C	Tot.
Origin	A	0	563	578	1141
	B	275	0	1823	2098
	C	471	1935	0	2406
	Tot.	746	2498	2401	5645

Full Input Data And Results

Traffic Lane Flows

Lane	Scenario 4: 2030 With Dev PM
Junction: A38/Common Road	
1/1	563
1/2 (short)	289
1/3 (with short)	578(In) 289(Out)
2/1	1200
2/2	1201
3/1	1172
3/2	663
3/3	663
4/1 (short)	471
4/2 (with short)	1080(In) 609(Out)
4/3 (with short)	1326(In) 663(Out)
4/4 (short)	663
5/1	601
5/2	145
6/1	911
6/2	912
6/3 (with short)	275(In) 130(Out)
6/4 (short)	145

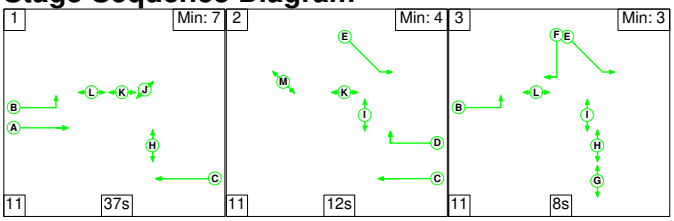
Full Input Data And Results

Lane Saturation Flows

Junction: A38/Common 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 (Common Road Lane 1)	This lane uses a directly entered Saturation Flow						1900	1900
1/2 (Common Road Lane 2)	This lane uses a directly entered Saturation Flow						1800	1800
1/3 (Common Road Lane 3)	This lane uses a directly entered Saturation Flow						1800	1800
2/1	This lane uses a directly entered Saturation Flow						2000	2000
2/2	This lane uses a directly entered Saturation Flow						2000	2000
3/1	This lane uses a directly entered Saturation Flow						2000	2000
3/2	This lane uses a directly entered Saturation Flow						2000	2000
3/3	This lane uses a directly entered Saturation Flow						2000	2000
4/1 (A38 Alfreton Road W Lane 1)	This lane uses a directly entered Saturation Flow						1900	1900
4/2 (A38 Alfreton Road W Lane 2)	This lane uses a directly entered Saturation Flow						2000	2000
4/3 (A38 Alfreton Road W Lane 3)	This lane uses a directly entered Saturation Flow						2000	2000
4/4 (A38 Alfreton Road W Lane 4)	This lane uses a directly entered Saturation Flow						2000	2000
5/1	3.25	0.00	Y				1940	1940
5/2	3.25	0.00	Y				1940	1940
6/1 (A38 Alfreton Road E Lane 1)	This lane uses a directly entered Saturation Flow						2000	2000
6/2 (A38 Alfreton Road E Lane 2)	This lane uses a directly entered Saturation Flow						2000	2000
6/3 (A38 Alfreton Road E Lane 3)	This lane uses a directly entered Saturation Flow						1800	1800
6/4 (A38 Alfreton Road E Lane 4)	This lane uses a directly entered Saturation Flow						1800	1800

Scenario 1: '2030 Bkgd AM' (FG2: '2030 Bkgd AM', Plan 1: 'Network Control Plan 1')

Stage Sequence Diagram

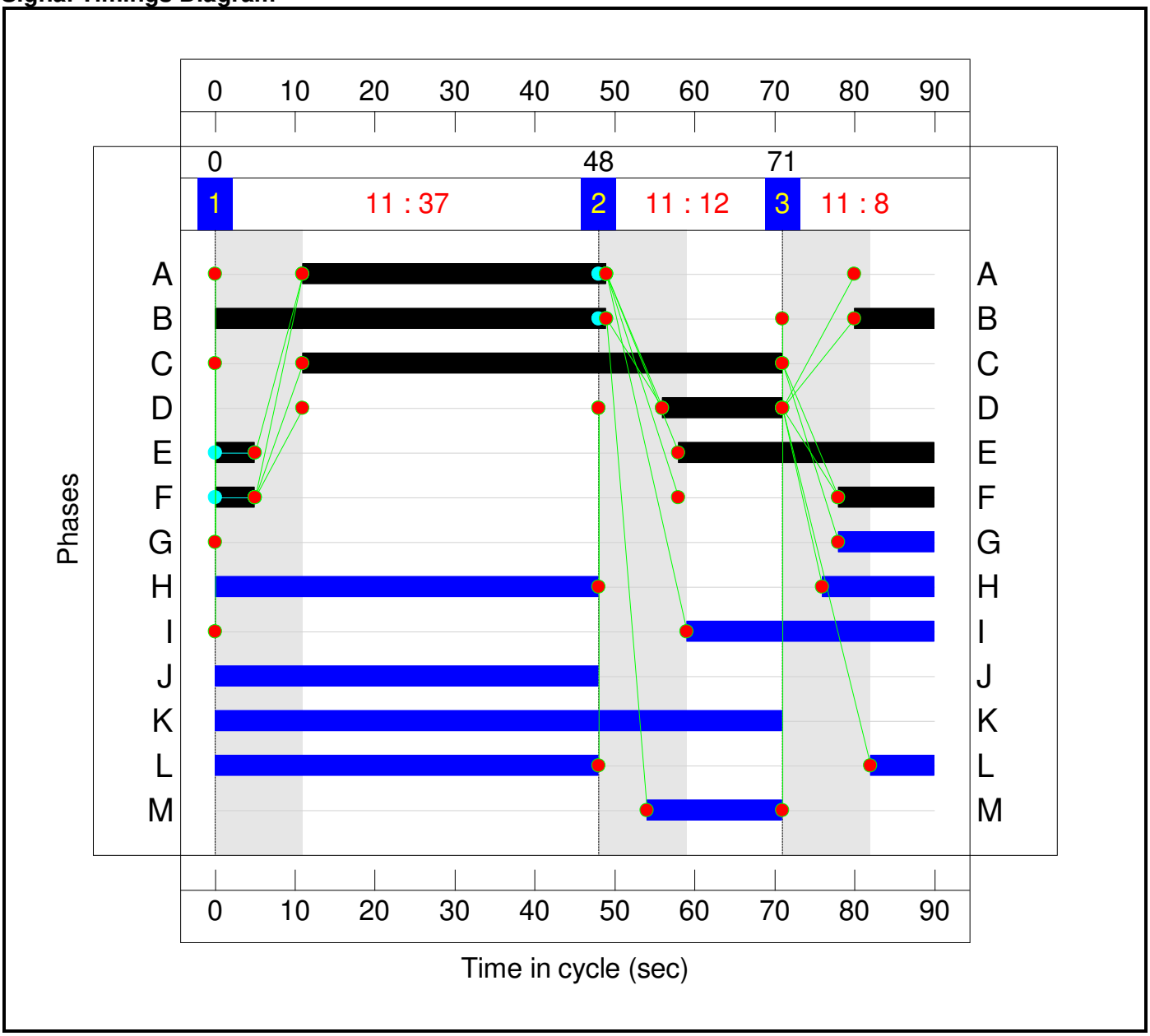


Stage Timings

Stage	1	2	3
Duration	37	12	8
Change Point	0	48	71

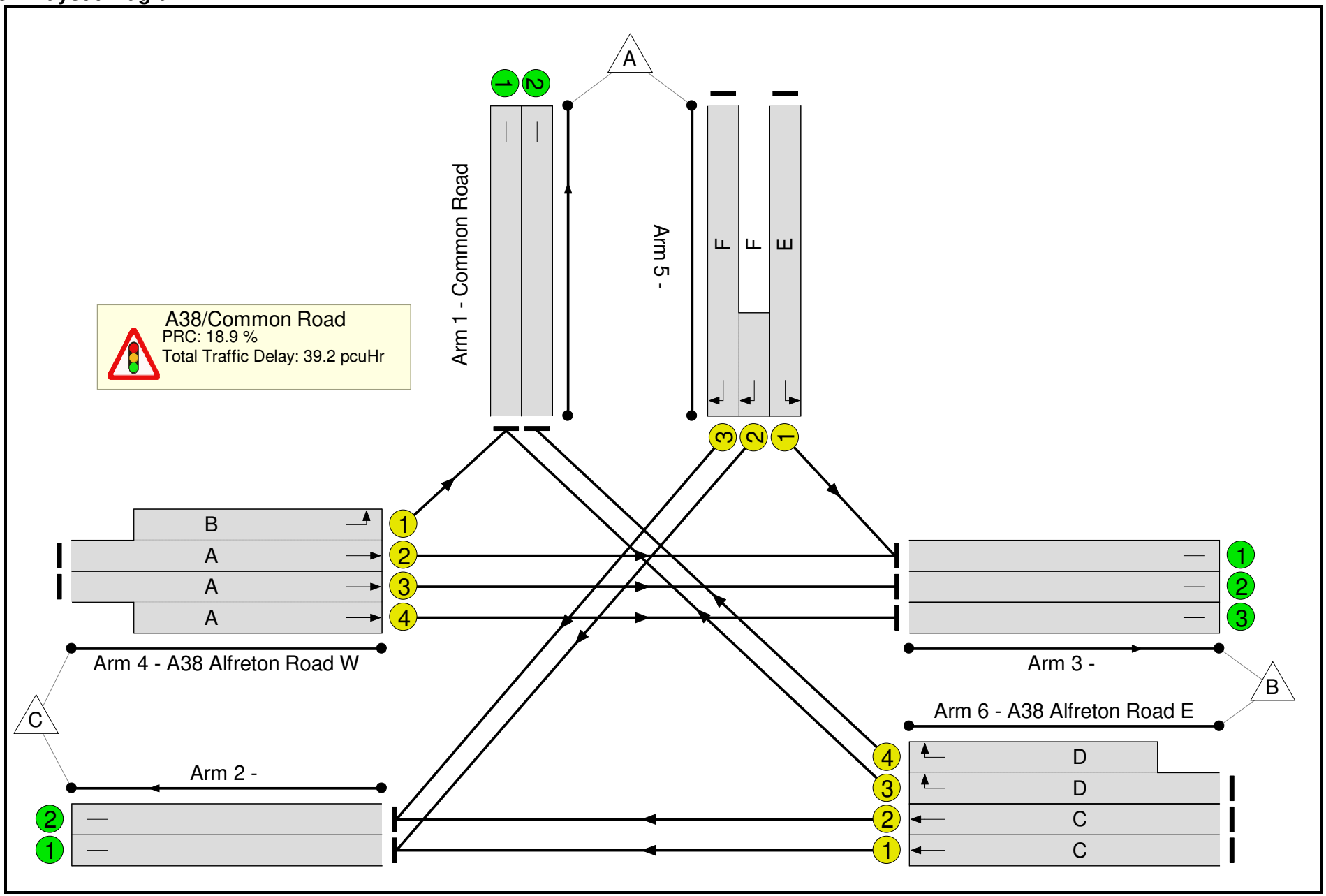
Full Input Data And Results

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: A38 - Common Road	**-**	**-**	**N/A**	**-**	**-**		**-**	**-**	**-**	**-**	**-**	**-**	**75.7%**
A38/Common Road	**-**	**-**	**N/A**	**-**	**-**		**-**	**-**	**-**	**-**	**-**	**-**	**75.7%**
1/1	Common Road Left	U	N/A	N/A	E		1	37	-	360	1900	802	44.9%
1/3+1/2	Common Road Right	U	N/A	N/A	F		1	17	-	424	1800:1800	280+280	75.7 : 75.7%
2/1		U	N/A	N/A	-		-	-	-	1231	2000	2000	61.6%
2/2		U	N/A	N/A	-		-	-	-	1231	2000	2000	61.6%
3/1		U	N/A	N/A	-		-	-	-	953	2000	2000	47.7%
3/2		U	N/A	N/A	-		-	-	-	635	2000	2000	31.8%
3/3		U	N/A	N/A	-		-	-	-	635	2000	2000	31.8%
4/2+4/1	A38 Alfreton Road W Ahead Left	U	N/A	N/A	A B		1	38:59	-	1141	2000:1900	820+758	72.3 : 72.3%
4/3+4/4	A38 Alfreton Road W Ahead	U	N/A	N/A	A		1	38	-	1270	2000:2000	867+867	73.3 : 73.3%
5/1		U	N/A	N/A	-		-	-	-	765	1940	1940	39.4%
5/2		U	N/A	N/A	-		-	-	-	239	1940	1940	12.3%
6/1	A38 Alfreton Road E Ahead	U	N/A	N/A	C		1	60	-	1019	2000	1356	75.2%
6/2	A38 Alfreton Road E Ahead	U	N/A	N/A	C		1	60	-	1019	2000	1356	75.2%
6/3+6/4	A38 Alfreton Road E Right	U	N/A	N/A	D		1	15	-	456	1800:1800	320+320	67.8 : 74.7%

Full Input Data And Results

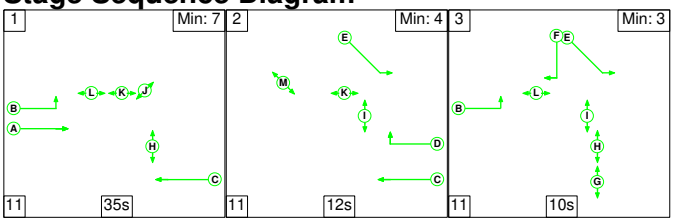
Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network: A38 - Common Road	**-**	**-**	**0**	**0**	**0**	**27.4**	**11.7**	**0.0**	**39.2**	**-**	**-**	**-**	**-**
A38/Common Road	**-**	**-**	**0**	**0**	**0**	**27.4**	**11.7**	**0.0**	**39.2**	**-**	**-**	**-**	**-**
1/1	360	360	-	-	-	1.9	0.4	-	2.3	22.6	6.4	0.4	6.8
1/3+1/2	424	424	-	-	-	3.8	1.5	-	5.4 (2.7+2.7)	45.6 (45.6:45.6)	4.8	1.5	6.3
2/1	1231	1231	-	-	-	0.0	0.8	-	0.8	2.3	0.0	0.8	0.8
2/2	1231	1231	-	-	-	0.0	0.8	-	0.8	2.3	0.0	0.8	0.8
3/1	953	953	-	-	-	0.0	0.5	-	0.5	1.7	0.0	0.5	0.5
3/2	635	635	-	-	-	0.0	0.2	-	0.2	1.3	0.0	0.2	0.2
3/3	635	635	-	-	-	0.0	0.2	-	0.2	1.3	0.0	0.2	0.2
4/2+4/1	1141	1141	-	-	-	4.5	1.3	-	5.8 (4.1+1.7)	18.2 (24.6:11.1)	11.9	1.3	13.2
4/3+4/4	1270	1270	-	-	-	7.5	1.4	-	8.8 (4.4+4.4)	25.0 (25.0:25.0)	13.1	1.4	14.4
5/1	765	765	-	-	-	0.0	0.3	-	0.3	1.5	0.0	0.3	0.3
5/2	239	239	-	-	-	0.0	0.1	-	0.1	1.1	0.0	0.1	0.1
6/1	1019	1019	-	-	-	2.7	1.5	-	4.2	14.8	16.7	1.5	18.2
6/2	1019	1019	-	-	-	2.7	1.5	-	4.2	14.8	16.7	1.5	18.2
6/3+6/4	456	456	-	-	-	4.4	1.2	-	5.6 (2.7+3.0)	44.5 (44.3:44.7)	5.6	1.2	6.9

C1 PRC for Signalled Lanes (%): 18.9 Total Delay for Signalled Lanes (pcuHr): 36.25 Cycle Time (s): 90
PRC Over All Lanes (%): 18.9 Total Delay Over All Lanes(pcuHr): 39.16

Full Input Data And Results

Scenario 2: '2030 With Dev AM' (FG4: '2030 With Dev AM', Plan 1: 'Network Control Plan 1')

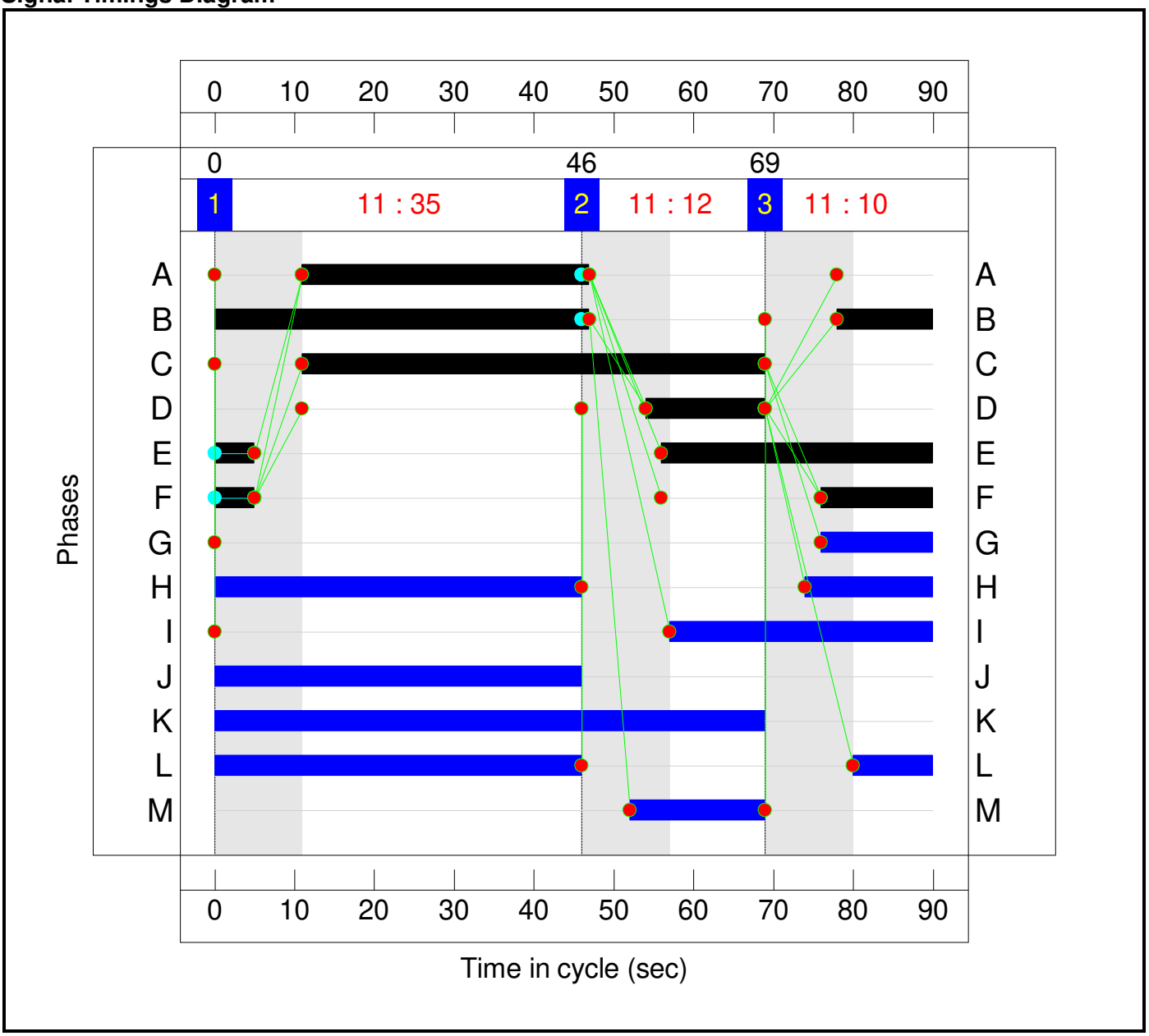
Stage Sequence Diagram



Stage Timings

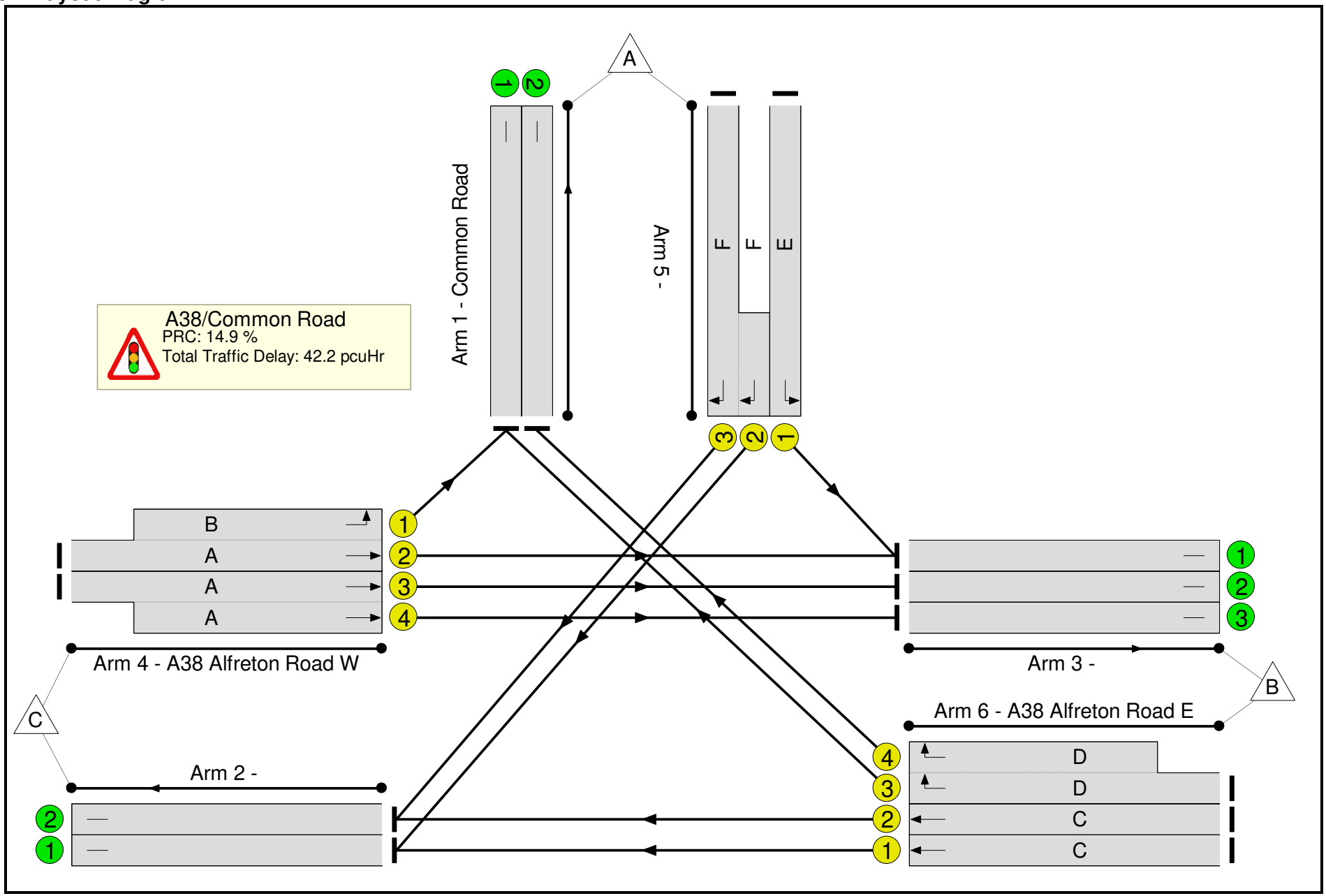
Stage	1	2	3
Duration	35	12	10
Change Point	0	46	69

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: A38 - Common Road	**-**	**-**	**N/A**	**-**	**-**		**-**	**-**	**-**	**-**	**-**	**-**	**78.3%**
A38/Common Road	**-**	**-**	**N/A**	**-**	**-**		**-**	**-**	**-**	**-**	**-**	**-**	**78.3%**
1/1	Common Road Left	U	N/A	N/A	E		1	39	-	360	1900	844	42.6%
1/3+1/2	Common Road Right	U	N/A	N/A	F		1	19	-	470	1800:1800	300+300	78.3 : 78.3%
2/1		U	N/A	N/A	-		-	-	-	1254	2000	2000	62.7%
2/2		U	N/A	N/A	-		-	-	-	1254	2000	2000	62.7%
3/1		U	N/A	N/A	-		-	-	-	962	2000	2000	48.1%
3/2		U	N/A	N/A	-		-	-	-	631	2000	2000	31.6%
3/3		U	N/A	N/A	-		-	-	-	630	2000	2000	31.5%
4/2+4/1	A38 Alfreton Road W Ahead Left	U	N/A	N/A	A B		1	36:59	-	1169	2000:1900	797+751	75.5 : 75.5%
4/3+4/4	A38 Alfreton Road W Ahead	U	N/A	N/A	A		1	36	-	1261	2000:2000	822+822	76.7 : 76.6%
5/1		U	N/A	N/A	-		-	-	-	784	1940	1940	40.4%
5/2		U	N/A	N/A	-		-	-	-	240	1940	1940	12.4%
6/1	A38 Alfreton Road E Ahead	U	N/A	N/A	C		1	58	-	1019	2000	1311	77.7%
6/2	A38 Alfreton Road E Ahead	U	N/A	N/A	C		1	58	-	1019	2000	1311	77.7%
6/3+6/4	A38 Alfreton Road E Right	U	N/A	N/A	D		1	15	-	457	1800:1800	320+320	67.8 : 75.0%

Full Input Data And Results

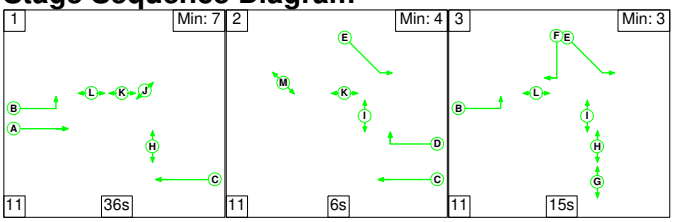
Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network: A38 - Common Road	**-**	**-**	**0**	**0**	**0**	**29.2**	**13.0**	**0.0**	**42.2**	**-**	**-**	**-**	**-**
A38/Common Road	**-**	**-**	**0**	**0**	**0**	**29.2**	**13.0**	**0.0**	**42.2**	**-**	**-**	**-**	**-**
1/1	360	360	-	-	-	1.7	0.4	-	2.1	20.9	6.1	0.4	6.5
1/3+1/2	470	470	-	-	-	4.1	1.8	-	5.8 (2.9+2.9)	44.8 (44.8:44.8)	5.8	1.8	7.5
2/1	1254	1254	-	-	-	0.0	0.8	-	0.8	2.4	0.0	0.8	0.8
2/2	1254	1254	-	-	-	0.0	0.8	-	0.8	2.4	0.0	0.8	0.8
3/1	962	962	-	-	-	0.0	0.5	-	0.5	1.7	0.0	0.5	0.5
3/2	631	631	-	-	-	0.0	0.2	-	0.2	1.3	0.0	0.2	0.2
3/3	630	630	-	-	-	0.0	0.2	-	0.2	1.3	0.0	0.2	0.2
4/2+4/1	1169	1169	-	-	-	4.9	1.5	-	6.4 (4.5+1.9)	19.7 (27.0:11.8)	12.5	1.5	14.1
4/3+4/4	1261	1261	-	-	-	8.0	1.6	-	9.6 (4.8+4.8)	27.4 (27.5:27.4)	13.5	1.6	15.1
5/1	784	784	-	-	-	0.0	0.3	-	0.3	1.6	0.0	0.3	0.3
5/2	240	240	-	-	-	0.0	0.1	-	0.1	1.1	0.0	0.1	0.1
6/1	1019	1019	-	-	-	3.1	1.7	-	4.8	17.0	17.8	1.7	19.6
6/2	1019	1019	-	-	-	3.1	1.7	-	4.8	17.0	17.8	1.7	19.6
6/3+6/4	457	457	-	-	-	4.4	1.2	-	5.7 (2.7+3.0)	44.6 (44.3:44.8)	5.7	1.2	6.9

C1 PRC for Signalled Lanes (%): 14.9 Total Delay for Signalled Lanes (pcuHr): 39.21 Cycle Time (s): 90
PRC Over All Lanes (%): 14.9 Total Delay Over All Lanes(pcuHr): 42.22

Full Input Data And Results

Scenario 3: '2030 Bkgd PM' (FG3: '2030 Bkgd PM', Plan 1: 'Network Control Plan 1')

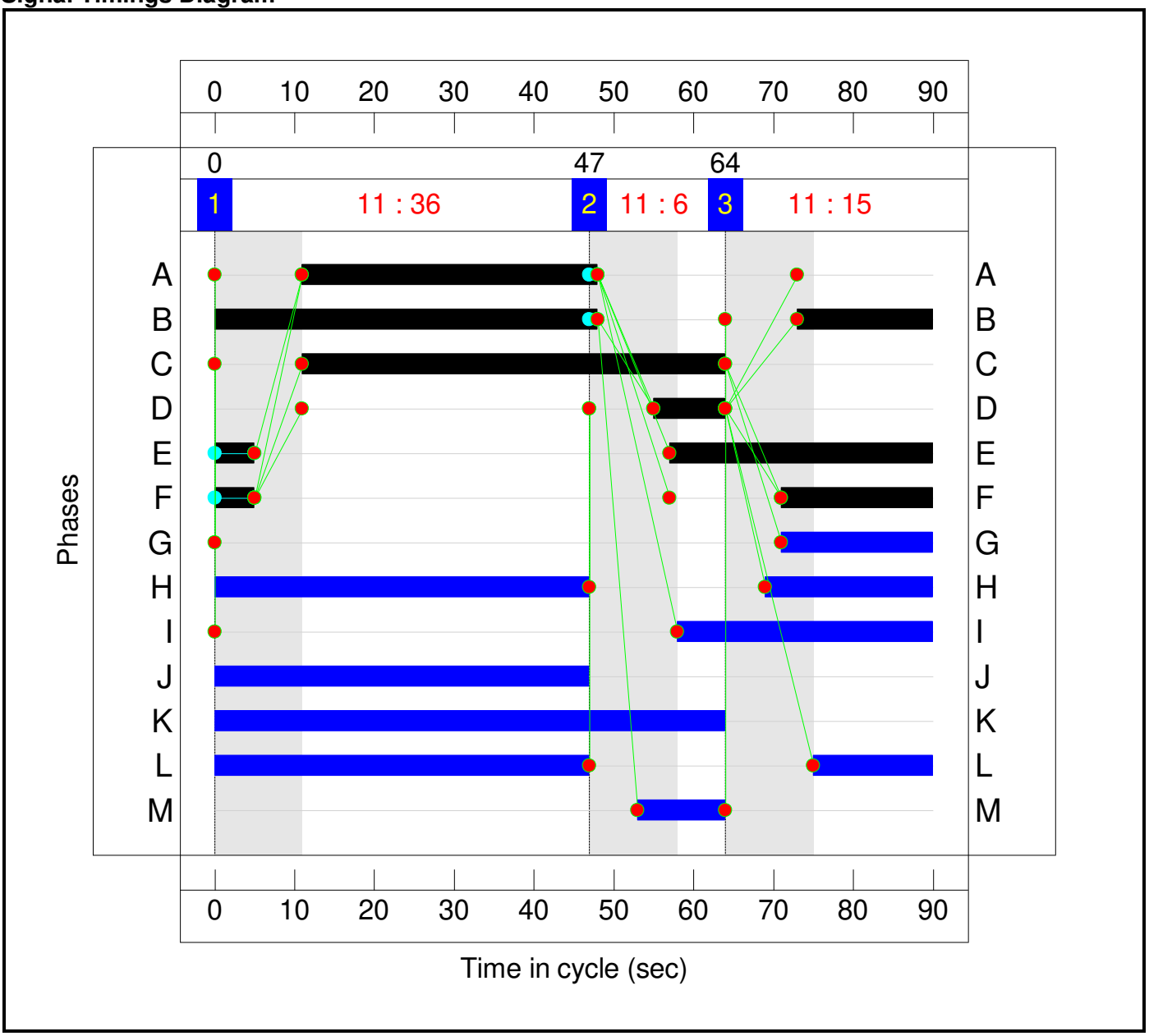
Stage Sequence Diagram



Stage Timings

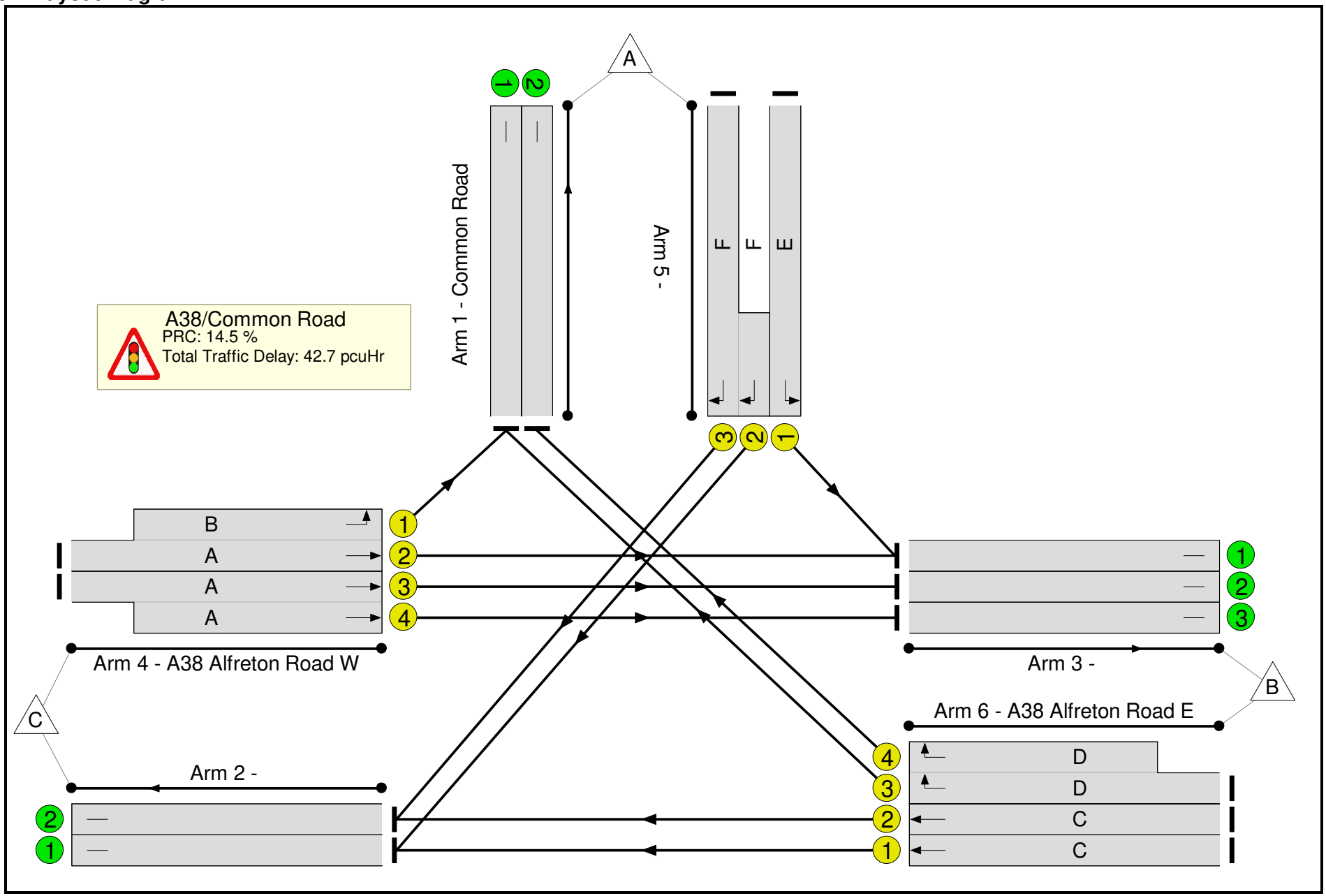
Stage	1	2	3
Duration	36	6	15
Change Point	0	47	64

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: A38 - Common Road	**-**	**-**	**N/A**	**-**	**-**		**-**	**-**	**-**	**-**	**-**	**-**	**78.6%**
A38/Common Road	**-**	**-**	**N/A**	**-**	**-**		**-**	**-**	**-**	**-**	**-**	**-**	**78.6%**
1/1	Common Road Left	U	N/A	N/A	E		1	38	-	563	1900	823	68.4%
1/3+1/2	Common Road Right	U	N/A	N/A	F		1	24	-	550	1800:1800	350+350	78.6 : 78.6%
2/1		U	N/A	N/A	-		-	-	-	1186	2000	2000	59.3%
2/2		U	N/A	N/A	-		-	-	-	1187	2000	2000	59.4%
3/1		U	N/A	N/A	-		-	-	-	1170	2000	2000	58.5%
3/2		U	N/A	N/A	-		-	-	-	664	2000	2000	33.2%
3/3		U	N/A	N/A	-		-	-	-	664	2000	2000	33.2%
4/2+4/1	A38 Alfreton Road W Ahead Left	U	N/A	N/A	A B		1	37:65	-	1033	2000:1900	814+572	74.5 : 74.5%
4/3+4/4	A38 Alfreton Road W Ahead	U	N/A	N/A	A		1	37	-	1328	2000:2000	844+844	78.6 : 78.6%
5/1		U	N/A	N/A	-		-	-	-	556	1940	1940	28.7%
5/2		U	N/A	N/A	-		-	-	-	144	1940	1940	7.4%
6/1	A38 Alfreton Road E Ahead	U	N/A	N/A	C		1	53	-	911	2000	1200	75.9%
6/2	A38 Alfreton Road E Ahead	U	N/A	N/A	C		1	53	-	912	2000	1200	76.0%
6/3+6/4	A38 Alfreton Road E Right	U	N/A	N/A	D		1	9	-	274	1800:1800	200+200	65.0 : 72.0%

Full Input Data And Results

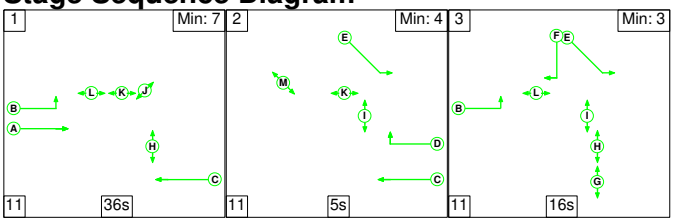
Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network: A38 - Common Road	**-**	**-**	**0**	**0**	**0**	**29.5**	**13.2**	**0.0**	**42.7**	**-**	**-**	**-**	**-**
A38/Common Road	**-**	**-**	**0**	**0**	**0**	**29.5**	**13.2**	**0.0**	**42.7**	**-**	**-**	**-**	**-**
1/1	563	563	-	-	-	3.2	1.1	-	4.3	27.4	11.3	1.1	12.3
1/3+1/2	550	550	-	-	-	4.3	1.8	-	6.0 (3.0+3.0)	39.6 (39.6:39.6)	7.1	1.8	8.9
2/1	1186	1186	-	-	-	0.0	0.7	-	0.7	2.2	0.0	0.7	0.7
2/2	1187	1187	-	-	-	0.0	0.7	-	0.7	2.2	0.0	0.7	0.7
3/1	1170	1170	-	-	-	0.0	0.7	-	0.7	2.2	0.0	0.7	0.7
3/2	664	664	-	-	-	0.0	0.2	-	0.2	1.3	0.0	0.2	0.2
3/3	664	664	-	-	-	0.0	0.2	-	0.2	1.3	0.0	0.2	0.2
4/2+4/1	1033	1033	-	-	-	4.1	1.5	-	5.6 (4.5+1.1)	19.4 (26.6:9.2)	12.5	1.5	13.9
4/3+4/4	1328	1328	-	-	-	8.3	1.8	-	10.1 (5.1+5.1)	27.4 (27.4:27.4)	14.2	1.8	16.0
5/1	556	556	-	-	-	0.0	0.2	-	0.2	1.3	0.0	0.2	0.2
5/2	144	144	-	-	-	0.0	0.0	-	0.0	1.0	0.0	0.0	0.0
6/1	911	911	-	-	-	3.3	1.6	-	4.9	19.4	16.7	1.6	18.3
6/2	912	912	-	-	-	3.4	1.6	-	4.9	19.4	16.7	1.6	18.3
6/3+6/4	274	274	-	-	-	2.9	1.1	-	4.0 (1.9+2.1)	52.5 (52.4:52.7)	3.4	1.1	4.5

C1 PRC for Signalled Lanes (%): 14.5 Total Delay for Signalled Lanes (pcuHr): 39.85 Cycle Time (s): 90
PRC Over All Lanes (%): 14.5 Total Delay Over All Lanes(pcuHr): 42.74

Full Input Data And Results

Scenario 4: '2030 With Dev PM' (FG5: '2030 With Dev PM', Plan 1: 'Network Control Plan 1')

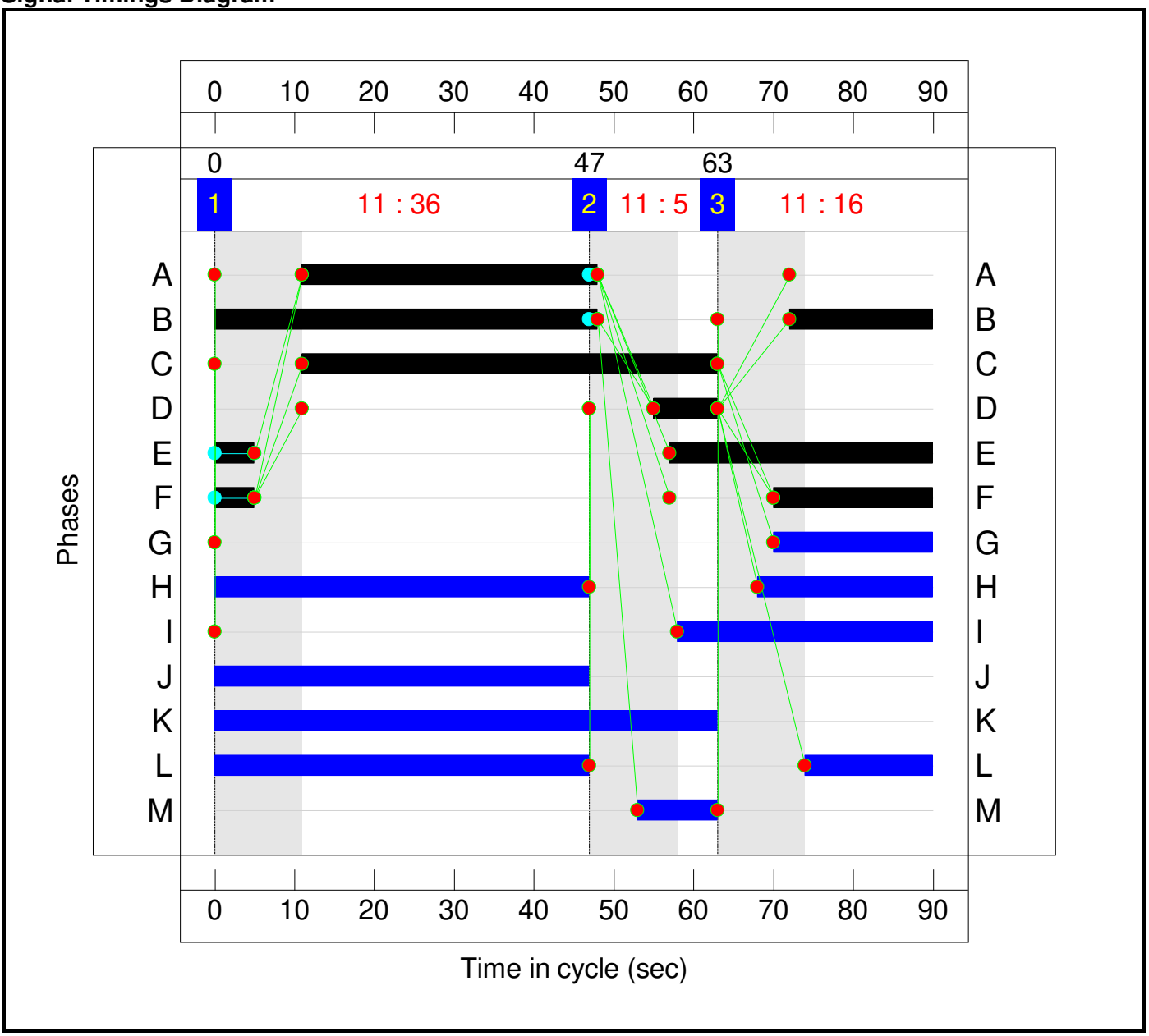
Stage Sequence Diagram



Stage Timings

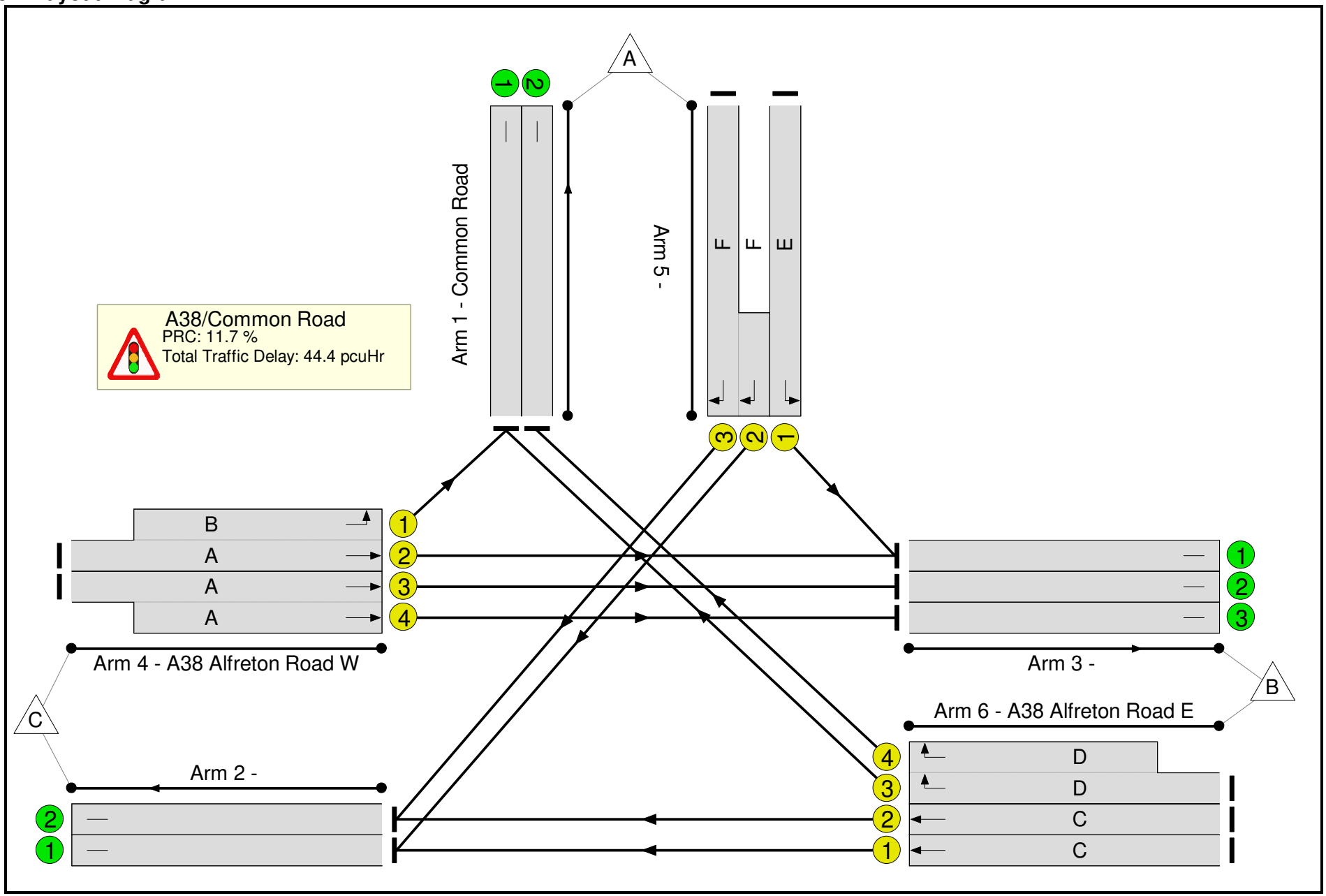
Stage	1	2	3
Duration	36	5	16
Change Point	0	47	63

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: A38 - Common Road	**-**	**-**	**N/A**	**-**	**-**		**-**	**-**	**-**	**-**	**-**	**-**	**80.6%**
A38/Common Road	**-**	**-**	**N/A**	**-**	**-**		**-**	**-**	**-**	**-**	**-**	**-**	**80.6%**
1/1	Common Road Left	U	N/A	N/A	E		1	38	-	563	1900	823	68.4%
1/3+1/2	Common Road Right	U	N/A	N/A	F		1	25	-	578	1800:1800	360+360	80.3 : 80.3%
2/1		U	N/A	N/A	-		-	-	-	1200	2000	2000	60.0%
2/2		U	N/A	N/A	-		-	-	-	1201	2000	2000	60.1%
3/1		U	N/A	N/A	-		-	-	-	1172	2000	2000	58.6%
3/2		U	N/A	N/A	-		-	-	-	663	2000	2000	33.2%
3/3		U	N/A	N/A	-		-	-	-	663	2000	2000	33.2%
4/2+4/1	A38 Alfreton Road W Ahead Left	U	N/A	N/A	A B		1	37:66	-	1080	2000:1900	812+628	75.0 : 75.0%
4/3+4/4	A38 Alfreton Road W Ahead	U	N/A	N/A	A		1	37	-	1326	2000:2000	844+844	78.5 : 78.5%
5/1		U	N/A	N/A	-		-	-	-	601	1940	1940	31.0%
5/2		U	N/A	N/A	-		-	-	-	145	1940	1940	7.5%
6/1	A38 Alfreton Road E Ahead	U	N/A	N/A	C		1	52	-	911	2000	1178	77.3%
6/2	A38 Alfreton Road E Ahead	U	N/A	N/A	C		1	52	-	912	2000	1178	77.4%
6/3+6/4	A38 Alfreton Road E Right	U	N/A	N/A	D		1	8	-	275	1800:1800	180+180	72.2 : 80.6%

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: A38 - Common Road	**-**	**-**	**0**	**0**	**0**	**30.1**	**14.3**	**0.0**	**44.4**	**-**	**-**	**-**	**-**
A38/Common Road	**-**	**-**	**0**	**0**	**0**	**30.1**	**14.3**	**0.0**	**44.4**	**-**	**-**	**-**	**-**
1/1	563	563	-	-	-	3.2	1.1	-	4.3	27.4	11.3	1.1	12.3
1/3+1/2	578	578	-	-	-	4.4	2.0	-	6.4 (3.2+3.2)	39.7 (39.7:39.7)	7.7	2.0	9.7
2/1	1200	1200	-	-	-	0.0	0.7	-	0.7	2.2	0.0	0.7	0.7
2/2	1201	1201	-	-	-	0.0	0.8	-	0.8	2.2	0.0	0.8	0.8
3/1	1172	1172	-	-	-	0.0	0.7	-	0.7	2.2	0.0	0.7	0.7
3/2	663	663	-	-	-	0.0	0.2	-	0.2	1.3	0.0	0.2	0.2
3/3	663	663	-	-	-	0.0	0.2	-	0.2	1.3	0.0	0.2	0.2
4/2+4/1	1080	1080	-	-	-	4.2	1.5	-	5.7 (4.5+1.2)	18.8 (26.6:8.9)	12.5	1.5	14.0
4/3+4/4	1326	1326	-	-	-	8.3	1.8	-	10.1 (5.0+5.0)	27.4 (27.4:27.4)	14.2	1.8	16.0
5/1	601	601	-	-	-	0.0	0.2	-	0.2	1.3	0.0	0.2	0.2
5/2	145	145	-	-	-	0.0	0.0	-	0.0	1.0	0.0	0.0	0.0
6/1	911	911	-	-	-	3.5	1.7	-	5.2	20.6	17.0	1.7	18.6
6/2	912	912	-	-	-	3.5	1.7	-	5.2	20.7	17.2	1.7	18.9
6/3+6/4	275	275	-	-	-	3.0	1.6	-	4.6 (2.2+2.4)	59.9 (59.7:60.1)	3.5	1.6	5.1

C1 PRC for Signalled Lanes (%): 11.7 Total Delay for Signalled Lanes (pcuHr): 41.42 Cycle Time (s): 90
PRC Over All Lanes (%): 11.7 Total Delay Over All Lanes(pcuHr): 44.39

APPENDIX F

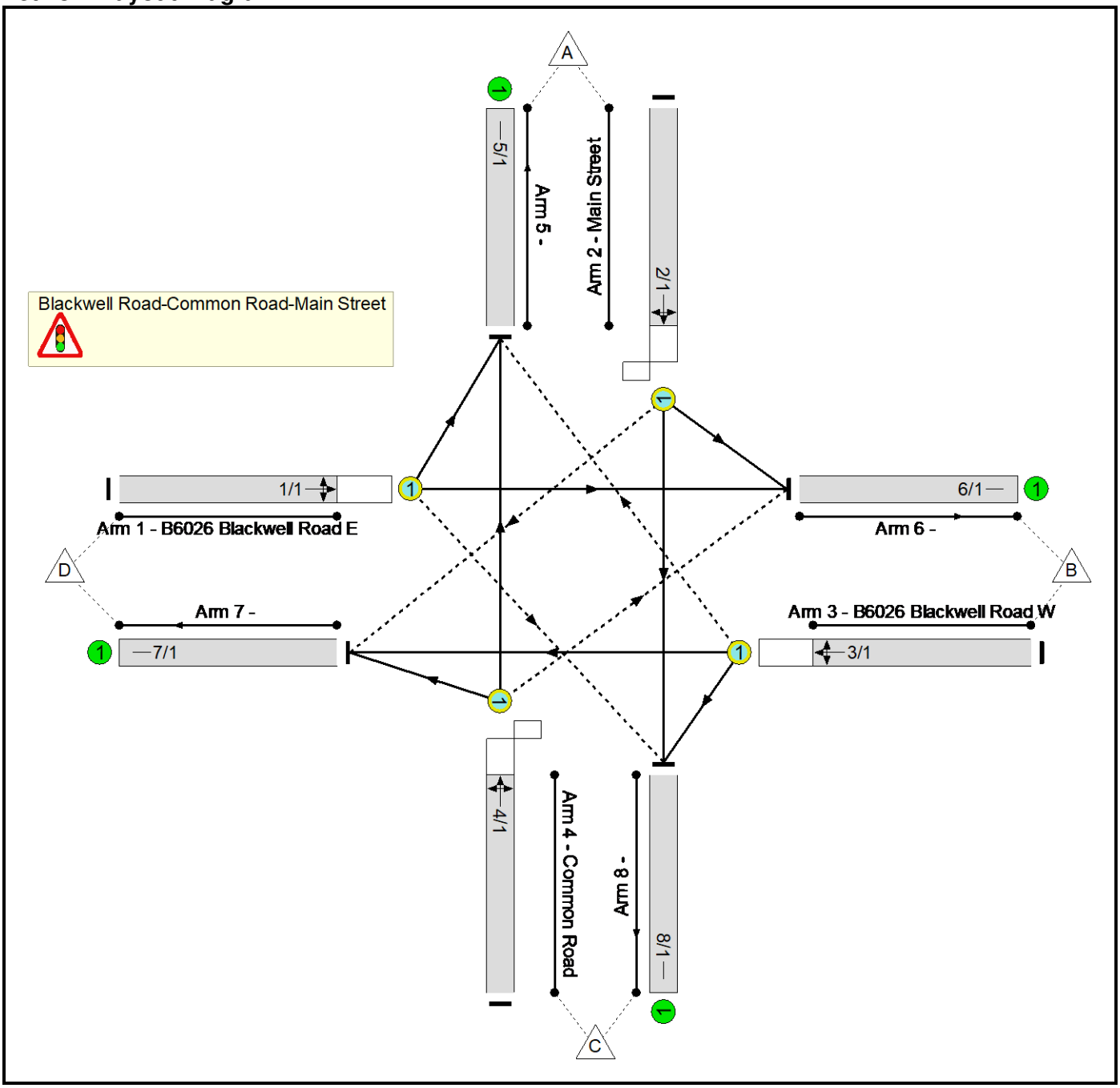
JUNCITON 2 LINSIG OUTPUTS

Full Input Data And Results

User and Project Details

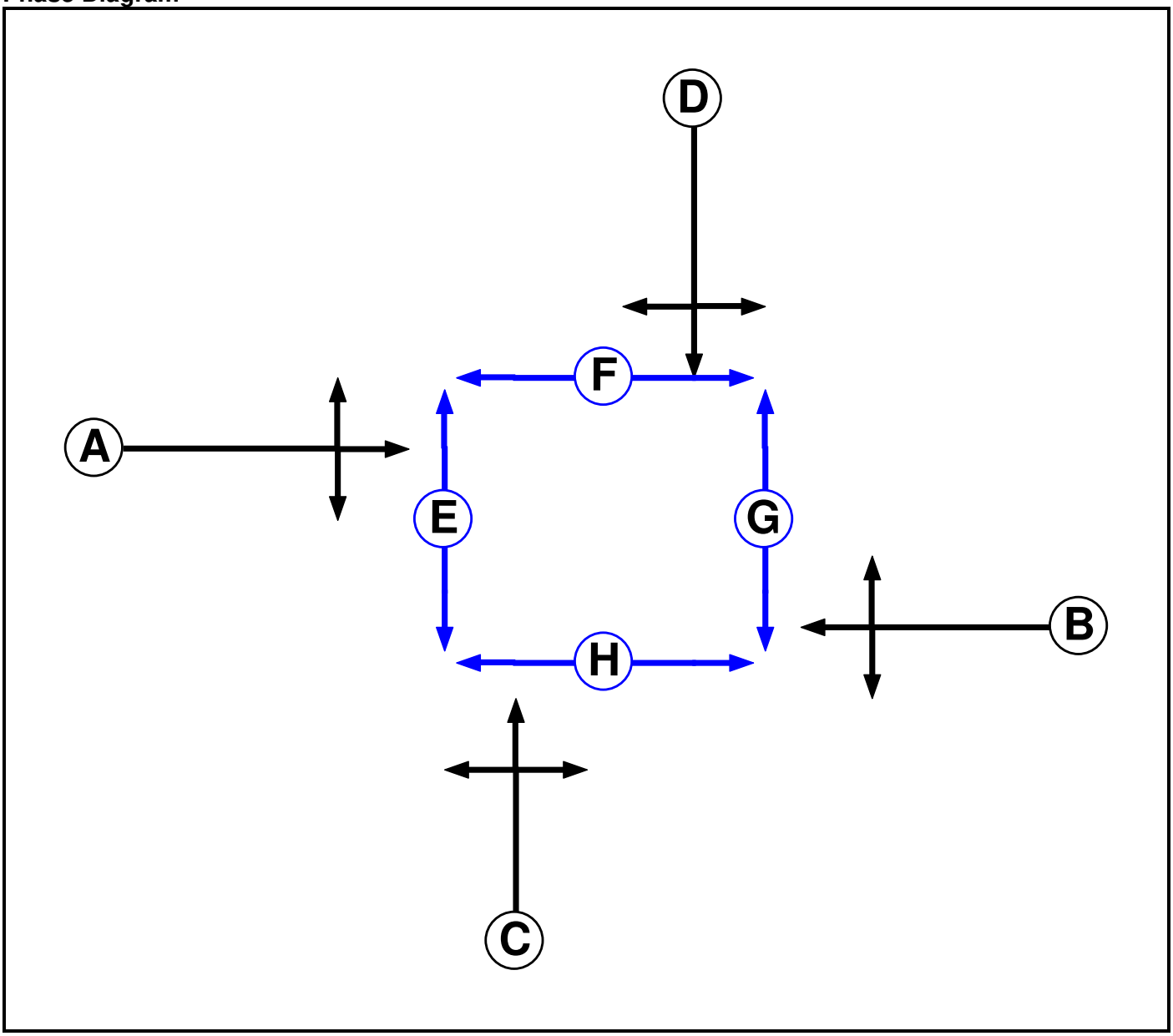
Project:	**Ashland Road, Sutton in Ashfield**
Title:	**J2 Blackwell Road-Common Road-Main Street**
Location:	
Client:	Bellway Homes
Additional detail:	
File name:	J2 Blackwell Road-Common Road-Main Street.lsg3x
Author:	
Company:	ADC Infrastructure Limited
Address:	King Edward Court, King Edward Street, Nottingham

Network Layout Diagram



Full Input Data And Results

Phase Diagram



Phase Input Data

Phase Name	Phase Type	Assoc. Phase	Street Min	Cont Min
A	Traffic		7	7
B	Traffic		7	7
C	Traffic		7	7
D	Traffic		7	7
E	Pedestrian		5	5
F	Pedestrian		5	5
G	Pedestrian		5	5
H	Pedestrian		5	5

Full Input Data And Results

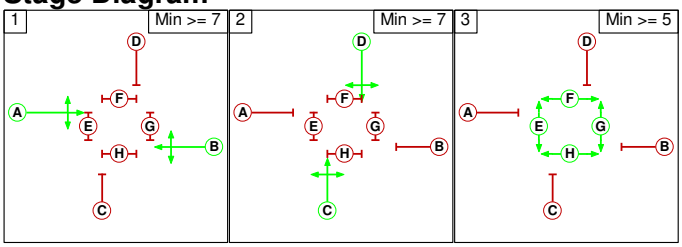
Phase Intergreens Matrix

Terminating Phase	Starting Phase							
	A	B	C	D	E	F	G	H
A		-	5	5	5	9	9	9
B	-		5	5	9	9	5	9
C	5	5		-	9	9	9	5
D	5	5	-		9	5	9	9
E	8	8	8	8		-	-	-
F	8	8	8	8	-		-	-
G	8	8	8	8	-	-		-
H	8	8	8	8	-	-	-	

Phases in Stage

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

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		5	9
2	5		9
3	8	8	

Full Input Data And Results

Give-Way Lane Input Data

Junction: Blackwell Road-Common Road-Main Street											
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 (B6026 Blackwell Road E)	8/1 (Right)	1439	0	3/1	1.09	To 7/1 (Ahead) To 8/1 (Left)	3.00	-	0.50	3	3.00
2/1 (Main Street)	7/1 (Right)	1439	0	4/1	1.09	To 5/1 (Ahead) To 7/1 (Left)	3.00	1.00	0.50	3	3.00
3/1 (B6026 Blackwell Road W)	5/1 (Right)	1439	0	1/1	1.09	To 5/1 (Left) To 6/1 (Ahead)	3.00	-	0.50	3	3.00
4/1 (Common Road)	6/1 (Right)	1439	0	2/1	1.09	To 6/1 (Left) To 8/1 (Ahead)	3.00	1.00	0.50	3	3.00

Full Input Data And Results

Lane Input Data

Junction: Blackwell Road-Common Road-Main Street												
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 (B6026 Blackwell Road E)	O	A	2	3	60.0	Geom	-	3.25	0.00	Y	Arm 5 Left	6.00
											Arm 6 Ahead	Inf
											Arm 8 Right	12.00
2/1 (Main Street)	O	D	2	3	60.0	Geom	-	3.25	0.00	Y	Arm 6 Left	10.00
											Arm 7 Right	12.00
											Arm 8 Ahead	Inf
3/1 (B6026 Blackwell Road W)	O	B	2	3	60.0	Geom	-	3.25	0.00	Y	Arm 5 Right	12.00
											Arm 7 Ahead	Inf
											Arm 8 Left	10.00
4/1 (Common Road)	O	C	2	3	60.0	Geom	-	3.00	0.00	Y	Arm 5 Ahead	Inf
											Arm 6 Right	12.00
											Arm 7 Left	10.00
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: '2030 Bkgd AM'	08:00	09:00	01:00	
2: '2030 Bkgd PM'	17:00	18:00	01:00	
3: '2030 With Dev AM'	08:00	09:00	01:00	
4: '2030 With Dev PM'	17:00	18:00	01:00	

Scenario 1: '2030 Bkgd AM' (FG1: '2030 Bkgd AM', Plan 1: 'Single Cycle')

Traffic Flows, Desired

Desired Flow :

		Destination				
		A	B	C	D	Tot.
Origin	A	0	141	317	66	524
	B	9	0	192	116	317
	C	186	150	0	22	358
	D	45	118	44	0	207
	Tot.	240	409	553	204	1406

Traffic Lane Flows

Lane	Scenario 1: 2030 Bkgd AM
Junction: Blackwell Road-Common Road-Main Street	
1/1	207
2/1	524
3/1	317
4/1	358
5/1	240
6/1	409
7/1	204
8/1	553

Full Input Data And Results

Lane Saturation Flows

Junction: Blackwell Road-Common Road-Main Street								
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 (B6026 Blackwell Road E)	3.25	0.00	Y	Arm 5 Left	6.00	21.7 %	1795	1795
				Arm 6 Ahead	Inf	57.0 %		
				Arm 8 Right	12.00	21.3 %		
2/1 (Main Street)	3.25	0.00	Y	Arm 6 Left	10.00	26.9 %	1837	1837
				Arm 7 Right	12.00	12.6 %		
				Arm 8 Ahead	Inf	60.5 %		
3/1 (B6026 Blackwell Road W)	3.25	0.00	Y	Arm 5 Right	12.00	2.8 %	1773	1773
				Arm 7 Ahead	Inf	36.6 %		
				Arm 8 Left	10.00	60.6 %		
4/1 (Common Road)	3.00	0.00	Y	Arm 5 Ahead	Inf	52.0 %	1804	1804
				Arm 6 Right	12.00	41.9 %		
				Arm 7 Left	10.00	6.1 %		
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: '2030 With Dev AM' (FG3: '2030 With Dev AM', Plan 1: 'Single Cycle')

Traffic Flows, Desired

Desired Flow :

		Destination				
		A	B	C	D	Tot.
Origin	A	0	146	317	66	529
	B	9	0	238	116	363
	C	186	170	0	22	378
	D	45	118	44	0	207
	Tot.	240	434	599	204	1477

Full Input Data And Results

Traffic Lane Flows

Lane	Scenario 2: 2030 With Dev AM
Junction: Blackwell Road-Common Road-Main Street	
1/1	207
2/1	529
3/1	363
4/1	378
5/1	240
6/1	434
7/1	204
8/1	599

Lane Saturation Flows

Junction: Blackwell Road-Common Road-Main Street								
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 (B6026 Blackwell Road E)	3.25	0.00	Y	Arm 5 Left	6.00	21.7 %	1795	1795
				Arm 6 Ahead	Inf	57.0 %		
				Arm 8 Right	12.00	21.3 %		
2/1 (Main Street)	3.25	0.00	Y	Arm 6 Left	10.00	27.6 %	1835	1835
				Arm 7 Right	12.00	12.5 %		
				Arm 8 Ahead	Inf	59.9 %		
3/1 (B6026 Blackwell Road W)	3.25	0.00	Y	Arm 5 Right	12.00	2.5 %	1761	1761
				Arm 7 Ahead	Inf	32.0 %		
				Arm 8 Left	10.00	65.6 %		
4/1 (Common Road)	3.00	0.00	Y	Arm 5 Ahead	Inf	49.2 %	1798	1798
				Arm 6 Right	12.00	45.0 %		
				Arm 7 Left	10.00	5.8 %		
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: '2030 Bkgd PM' (FG2: '2030 Bkgd PM', Plan 1: 'Single Cycle')

Traffic Flows, Desired

Desired Flow :

		Destination				
		A	B	C	D	Tot.
Origin	A	0	177	217	33	427
	B	10	0	142	113	265
	C	290	229	0	34	553
	D	80	188	20	0	288
	Tot.	380	594	379	180	1533

Traffic Lane Flows

Lane	Scenario 3: 2030 Bkgd PM
Junction: Blackwell Road-Common Road-Main Street	
1/1	288
2/1	427
3/1	265
4/1	553
5/1	380
6/1	594
7/1	180
8/1	379

Lane Saturation Flows

Junction: Blackwell Road-Common Road-Main Street								
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 (B6026 Blackwell Road E)	3.25	0.00	Y	Arm 5 Left	6.00	27.8 %	1799	1799
				Arm 6 Ahead	Inf	65.3 %		
				Arm 8 Right	12.00	6.9 %		
2/1 (Main Street)	3.25	0.00	Y	Arm 6 Left	10.00	41.5 %	1810	1810
				Arm 7 Right	12.00	7.7 %		
				Arm 8 Ahead	Inf	50.8 %		
3/1 (B6026 Blackwell Road W)	3.25	0.00	Y	Arm 5 Right	12.00	3.8 %	1788	1788
				Arm 7 Ahead	Inf	42.6 %		
				Arm 8 Left	10.00	53.6 %		
4/1 (Common Road)	3.00	0.00	Y	Arm 5 Ahead	Inf	52.4 %	1805	1805
				Arm 6 Right	12.00	41.4 %		
				Arm 7 Left	10.00	6.1 %		
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: '2030 With Dev PM' (FG4: '2030 With Dev PM', Plan 1: 'Single Cycle')

Traffic Flows, Desired

Desired Flow :

		Destination				
		A	B	C	D	Tot.
Origin	A	0	190	217	33	440
	B	11	0	170	113	294
	C	290	275	0	34	599
	D	80	188	20	0	288
	Tot.	381	653	407	180	1621

Traffic Lane Flows

Lane	Scenario 4: 2030 With Dev PM
Junction: Blackwell Road-Common Road-Main Street	
1/1	288
2/1	440
3/1	294
4/1	599
5/1	381
6/1	653
7/1	180
8/1	407

Full Input Data And Results

Lane Saturation Flows

Junction: Blackwell Road-Common Road-Main Street								
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 (B6026 Blackwell Road E)	3.25	0.00	Y	Arm 5 Left	6.00	27.8 %	1799	1799
				Arm 6 Ahead	Inf	65.3 %		
				Arm 8 Right	12.00	6.9 %		
2/1 (Main Street)	3.25	0.00	Y	Arm 6 Left	10.00	43.2 %	1806	1806
				Arm 7 Right	12.00	7.5 %		
				Arm 8 Ahead	Inf	49.3 %		
3/1 (B6026 Blackwell Road W)	3.25	0.00	Y	Arm 5 Right	12.00	3.7 %	1778	1778
				Arm 7 Ahead	Inf	38.4 %		
				Arm 8 Left	10.00	57.8 %		
4/1 (Common Road)	3.00	0.00	Y	Arm 5 Ahead	Inf	48.4 %	1797	1797
				Arm 6 Right	12.00	45.9 %		
				Arm 7 Left	10.00	5.7 %		
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 5: '2030 Bkgd AM DC' (FG1: '2030 Bkgd AM', Plan 2: 'Double Cycle')

Traffic Flows, Desired

Desired Flow :

		Destination				
		A	B	C	D	Tot.
Origin	A	0	141	317	66	524
	B	9	0	192	116	317
	C	186	150	0	22	358
	D	45	118	44	0	207
	Tot.	240	409	553	204	1406

Full Input Data And Results

Traffic Lane Flows

Lane	Scenario 5: 2030 Bkgd AM DC
Junction: Blackwell Road-Common Road-Main Street	
1/1	207
2/1	524
3/1	317
4/1	358
5/1	240
6/1	409
7/1	204
8/1	553

Lane Saturation Flows

Junction: Blackwell Road-Common Road-Main Street								
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 (B6026 Blackwell Road E)	3.25	0.00	Y	Arm 5 Left	6.00	21.7 %	1795	1795
				Arm 6 Ahead	Inf	57.0 %		
				Arm 8 Right	12.00	21.3 %		
2/1 (Main Street)	3.25	0.00	Y	Arm 6 Left	10.00	26.9 %	1837	1837
				Arm 7 Right	12.00	12.6 %		
				Arm 8 Ahead	Inf	60.5 %		
3/1 (B6026 Blackwell Road W)	3.25	0.00	Y	Arm 5 Right	12.00	2.8 %	1773	1773
				Arm 7 Ahead	Inf	36.6 %		
				Arm 8 Left	10.00	60.6 %		
4/1 (Common Road)	3.00	0.00	Y	Arm 5 Ahead	Inf	52.0 %	1804	1804
				Arm 6 Right	12.00	41.9 %		
				Arm 7 Left	10.00	6.1 %		
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 6: '2030 With Dev AM DC' (FG3: '2030 With Dev AM', Plan 2: 'Double Cycle')

Traffic Flows, Desired

Desired Flow :

		Destination				
		A	B	C	D	Tot.
Origin	A	0	146	317	66	529
	B	9	0	238	116	363
	C	186	170	0	22	378
	D	45	118	44	0	207
	Tot.	240	434	599	204	1477

Traffic Lane Flows

Lane	Scenario 6: 2030 With Dev AM DC
Junction: Blackwell Road-Common Road-Main Street	
1/1	207
2/1	529
3/1	363
4/1	378
5/1	240
6/1	434
7/1	204
8/1	599

Lane Saturation Flows

Junction: Blackwell Road-Common Road-Main Street								
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 (B6026 Blackwell Road E)	3.25	0.00	Y	Arm 5 Left	6.00	21.7 %	1795	1795
				Arm 6 Ahead	Inf	57.0 %		
				Arm 8 Right	12.00	21.3 %		
2/1 (Main Street)	3.25	0.00	Y	Arm 6 Left	10.00	27.6 %	1835	1835
				Arm 7 Right	12.00	12.5 %		
				Arm 8 Ahead	Inf	59.9 %		
3/1 (B6026 Blackwell Road W)	3.25	0.00	Y	Arm 5 Right	12.00	2.5 %	1761	1761
				Arm 7 Ahead	Inf	32.0 %		
				Arm 8 Left	10.00	65.6 %		
4/1 (Common Road)	3.00	0.00	Y	Arm 5 Ahead	Inf	49.2 %	1798	1798
				Arm 6 Right	12.00	45.0 %		
				Arm 7 Left	10.00	5.8 %		
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 7: '2030 Bkgd PM DC' (FG2: '2030 Bkgd PM', Plan 2: 'Double Cycle')

Traffic Flows, Desired

Desired Flow :

		Destination				
		A	B	C	D	Tot.
Origin	A	0	177	217	33	427
	B	10	0	142	113	265
	C	290	229	0	34	553
	D	80	188	20	0	288
	Tot.	380	594	379	180	1533

Traffic Lane Flows

Lane	Scenario 7: 2030 Bkgd PM DC
Junction: Blackwell Road-Common Road-Main Street	
1/1	288
2/1	427
3/1	265
4/1	553
5/1	380
6/1	594
7/1	180
8/1	379

Full Input Data And Results

Lane Saturation Flows

Junction: Blackwell Road-Common Road-Main Street								
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 (B6026 Blackwell Road E)	3.25	0.00	Y	Arm 5 Left	6.00	27.8 %	1799	1799
				Arm 6 Ahead	Inf	65.3 %		
				Arm 8 Right	12.00	6.9 %		
2/1 (Main Street)	3.25	0.00	Y	Arm 6 Left	10.00	41.5 %	1810	1810
				Arm 7 Right	12.00	7.7 %		
				Arm 8 Ahead	Inf	50.8 %		
3/1 (B6026 Blackwell Road W)	3.25	0.00	Y	Arm 5 Right	12.00	3.8 %	1788	1788
				Arm 7 Ahead	Inf	42.6 %		
				Arm 8 Left	10.00	53.6 %		
4/1 (Common Road)	3.00	0.00	Y	Arm 5 Ahead	Inf	52.4 %	1805	1805
				Arm 6 Right	12.00	41.4 %		
				Arm 7 Left	10.00	6.1 %		
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 8: '2030 With Dev PM DC' (FG4: '2030 With Dev PM', Plan 2: 'Double Cycle')

Traffic Flows, Desired

Desired Flow :

		Destination				
		A	B	C	D	Tot.
Origin	A	0	190	217	33	440
	B	11	0	170	113	294
	C	290	275	0	34	599
	D	80	188	20	0	288
	Tot.	381	653	407	180	1621

Full Input Data And Results

Traffic Lane Flows

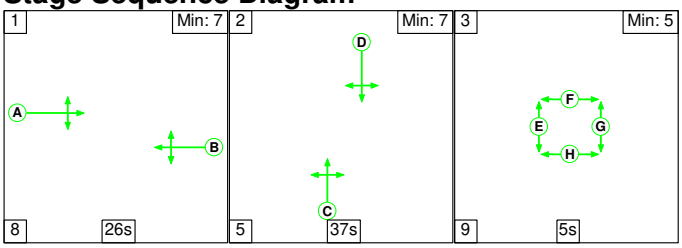
Lane	Scenario 8: 2030 With Dev PM DC
Junction: Blackwell Road-Common Road-Main Street	
1/1	288
2/1	440
3/1	294
4/1	599
5/1	381
6/1	653
7/1	180
8/1	407

Lane Saturation Flows

Junction: Blackwell Road-Common Road-Main Street								
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 (B6026 Blackwell Road E)	3.25	0.00	Y	Arm 5 Left	6.00	27.8 %	1799	1799
				Arm 6 Ahead	Inf	65.3 %		
				Arm 8 Right	12.00	6.9 %		
2/1 (Main Street)	3.25	0.00	Y	Arm 6 Left	10.00	43.2 %	1806	1806
				Arm 7 Right	12.00	7.5 %		
				Arm 8 Ahead	Inf	49.3 %		
3/1 (B6026 Blackwell Road W)	3.25	0.00	Y	Arm 5 Right	12.00	3.7 %	1778	1778
				Arm 7 Ahead	Inf	38.4 %		
				Arm 8 Left	10.00	57.8 %		
4/1 (Common Road)	3.00	0.00	Y	Arm 5 Ahead	Inf	48.4 %	1797	1797
				Arm 6 Right	12.00	45.9 %		
				Arm 7 Left	10.00	5.7 %		
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 1: '2030 Bkgd AM' (FG1: '2030 Bkgd AM', Plan 1: 'Single Cycle')

Stage Sequence Diagram

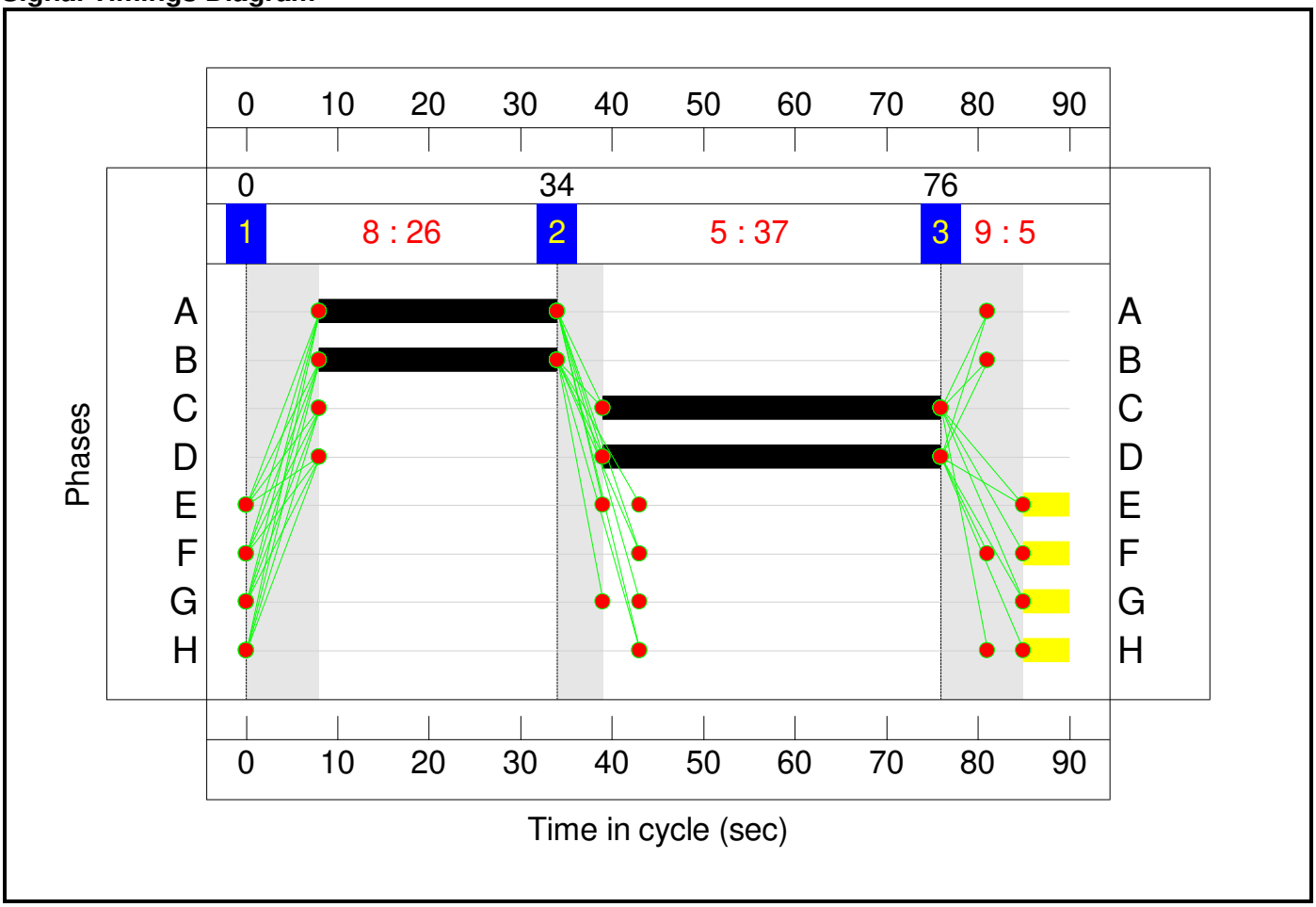


Full Input Data And Results

Stage Timings

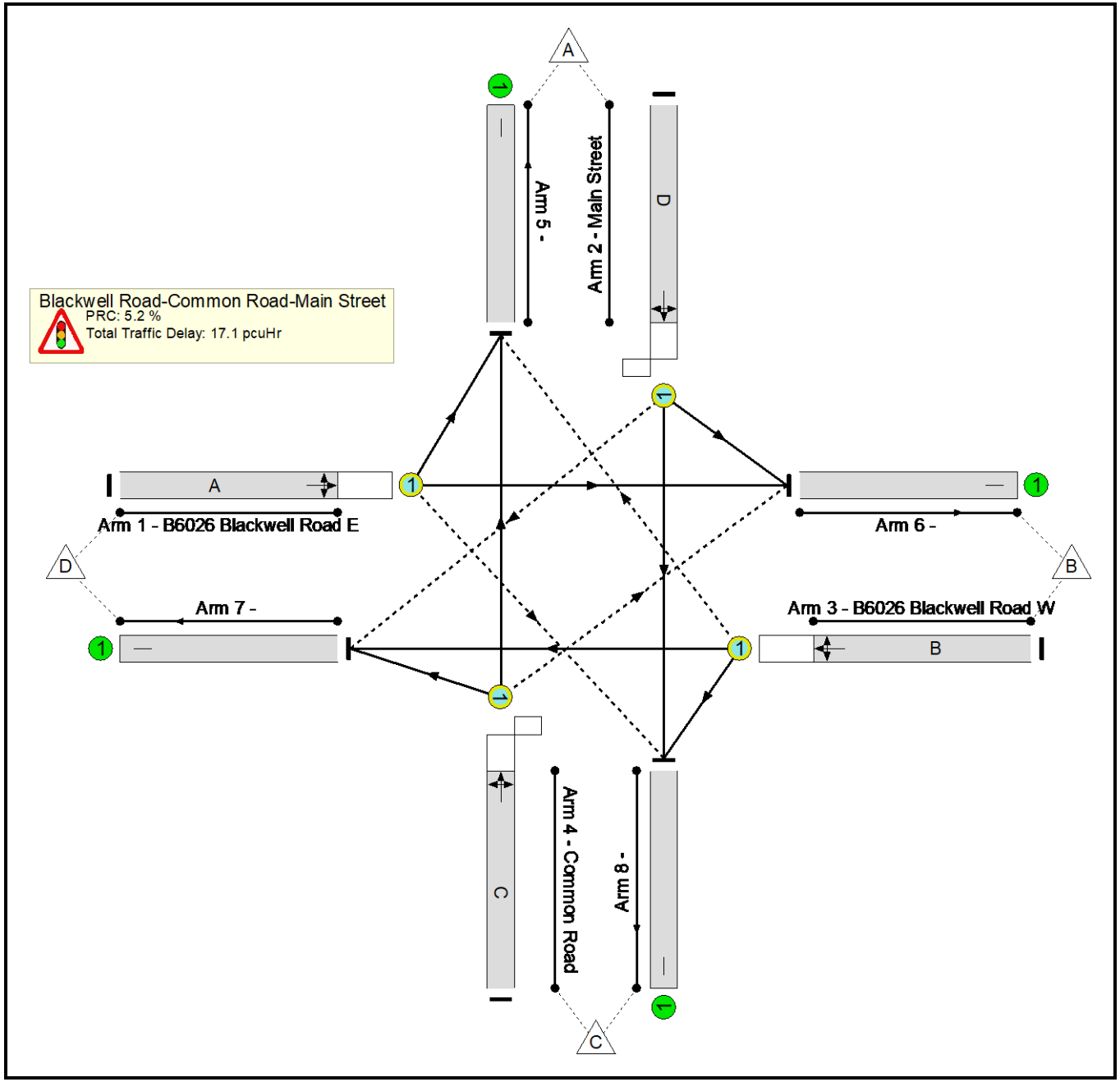
Stage	1	2	3
Duration	26	37	5
Change Point	0	34	76

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: J2 Blackwell Road-Common Road-Main Street	**-**	**-**	**N/A**	**-**	**-**		**-**	**-**	**-**	**-**	**-**	**-**	**85.6%**
Blackwell Road-Common Road-Main Street	**-**	**-**	**N/A**	**-**	**-**		**-**	**-**	**-**	**-**	**-**	**-**	**85.6%**
1/1	B6026 Blackwell Road E Left Ahead Right	O	N/A	N/A	A		1	26	-	207	1795	309	66.9%
2/1	Main Street Left Right Ahead	O	N/A	N/A	D		1	37	-	524	1837	776	67.6%
3/1	B6026 Blackwell Road W Right Ahead Left	O	N/A	N/A	B		1	26	-	317	1773	376	84.4%
4/1	Common Road Ahead Right Left	O	N/A	N/A	C		1	37	-	358	1804	418	85.6%
5/1		U	N/A	N/A	-		-	-	-	240	Inf	Inf	0.0%
6/1		U	N/A	N/A	-		-	-	-	409	Inf	Inf	0.0%
7/1		U	N/A	N/A	-		-	-	-	204	Inf	Inf	0.0%
8/1		U	N/A	N/A	-		-	-	-	553	Inf	Inf	0.0%

Full Input Data And Results

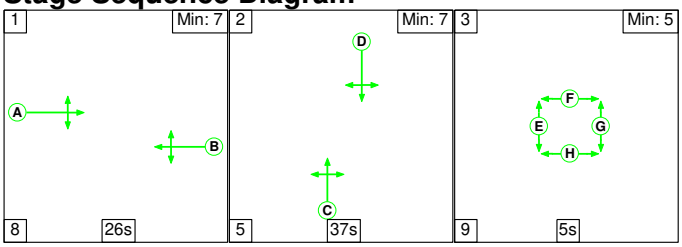
Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network: J2 Blackwell Road-Common Road-Main Street	**-**	**-**	**256**	**0**	**13**	**9.3**	**7.2**	**0.5**	**17.1**	**-**	**-**	**-**	**-**
Blackwell Road-Common Road-Main Street	**-**	**-**	**256**	**0**	**13**	**9.3**	**7.2**	**0.5**	**17.1**	**-**	**-**	**-**	**-**
1/1	207	207	37	0	7	1.4	1.0	0.0	2.5	42.8	4.2	1.0	5.2
2/1	524	524	65	0	1	3.1	1.0	0.0	4.1	28.2	10.5	1.0	11.5
3/1	317	317	8	0	1	2.6	2.5	0.0	5.1	57.6	7.6	2.5	10.1
4/1	358	358	147	0	3	2.3	2.7	0.4	5.4	54.5	8.6	2.7	11.3
5/1	240	240	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/1	409	409	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
7/1	204	204	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
8/1	553	553	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0

C1 PRC for Signalled Lanes (%): 5.2 Total Delay for Signalled Lanes (pcuHr): 17.05 Cycle Time (s): 90
PRC Over All Lanes (%): 5.2 Total Delay Over All Lanes(pcuHr): 17.05

Full Input Data And Results

Scenario 2: '2030 With Dev AM' (FG3: '2030 With Dev AM', Plan 1: 'Single Cycle')

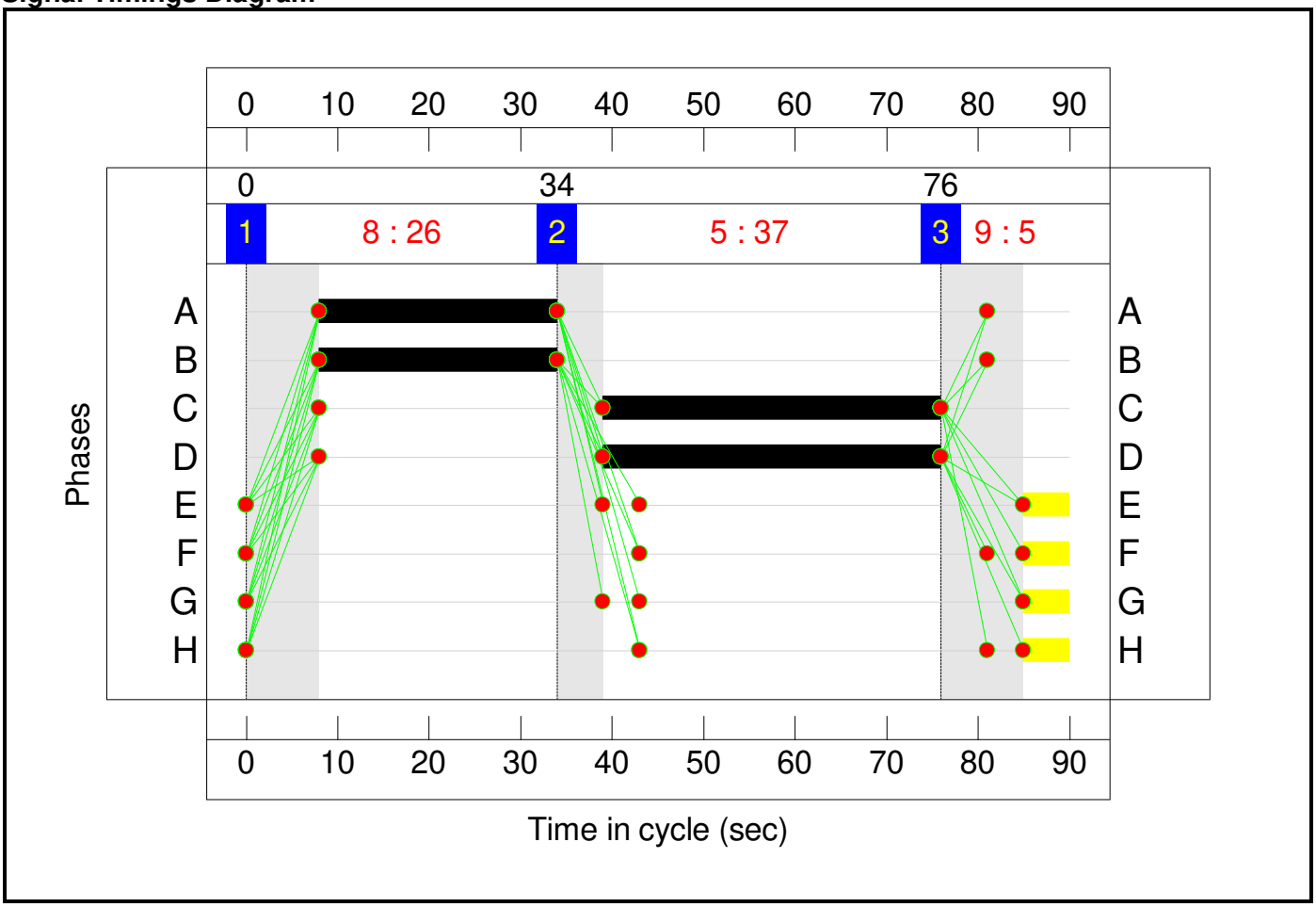
Stage Sequence Diagram



Stage Timings

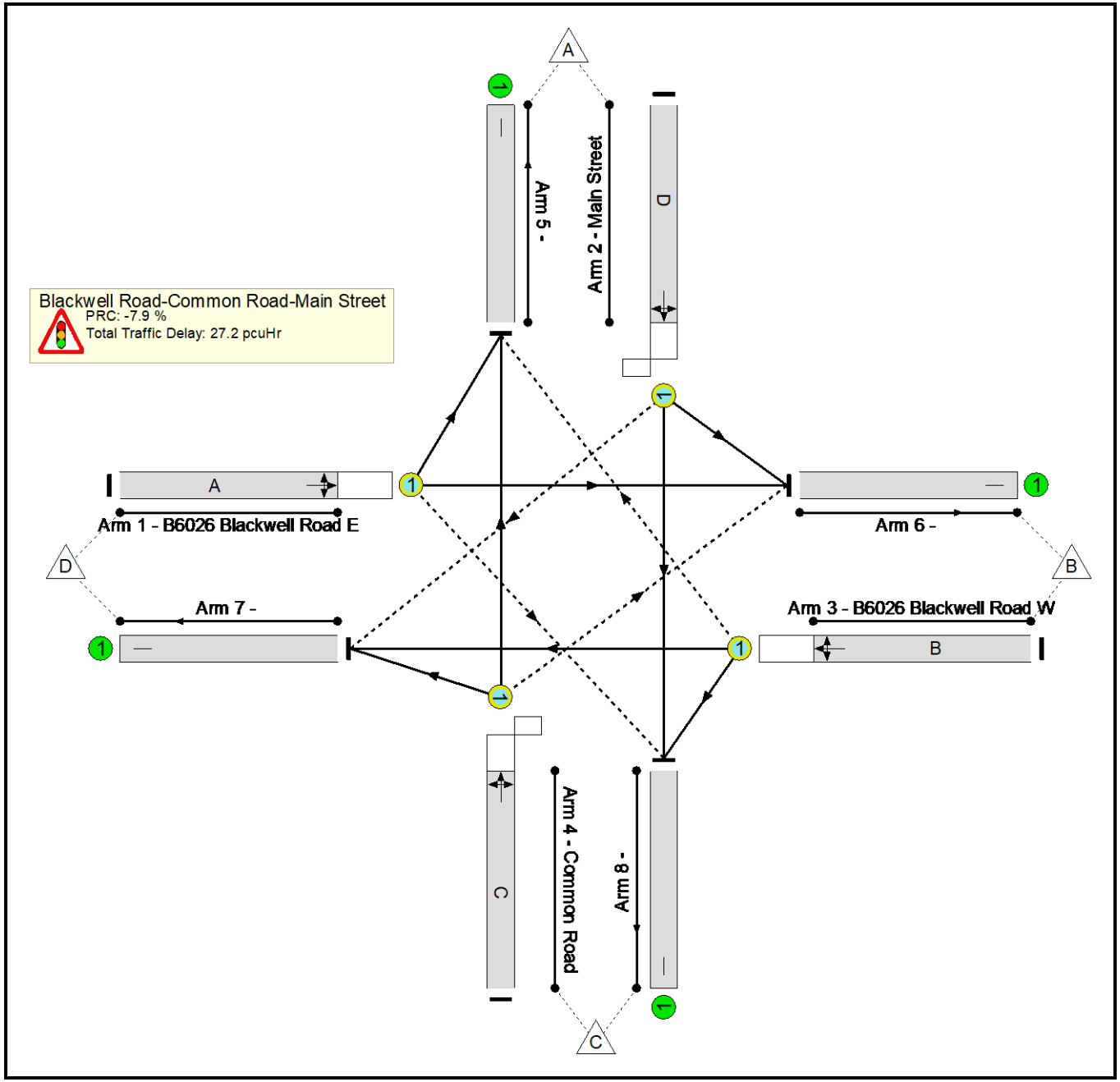
Stage	1	2	3
Duration	26	37	5
Change Point	0	34	76

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: J2 Blackwell Road-Common Road-Main Street	**-**	**-**	**N/A**	**-**	**-**		**-**	**-**	**-**	**-**	**-**	**-**	**97.1%**
Blackwell Road-Common Road-Main Street	**-**	**-**	**N/A**	**-**	**-**		**-**	**-**	**-**	**-**	**-**	**-**	**97.1%**
1/1	B6026 Blackwell Road E Left Ahead Right	O	N/A	N/A	A		1	26	-	207	1795	309	66.9%
2/1	Main Street Left Right Ahead	O	N/A	N/A	D		1	37	-	529	1835	775	68.3%
3/1	B6026 Blackwell Road W Right Ahead Left	O	N/A	N/A	B		1	26	-	363	1761	374	97.1%
4/1	Common Road Ahead Right Left	O	N/A	N/A	C		1	37	-	378	1798	390	97.0%
5/1		U	N/A	N/A	-		-	-	-	240	Inf	Inf	0.0%
6/1		U	N/A	N/A	-		-	-	-	434	Inf	Inf	0.0%
7/1		U	N/A	N/A	-		-	-	-	204	Inf	Inf	0.0%
8/1		U	N/A	N/A	-		-	-	-	599	Inf	Inf	0.0%

Full Input Data And Results

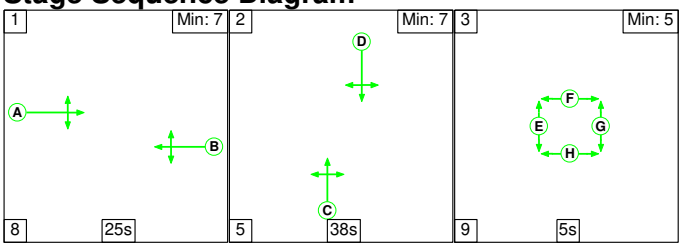
Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network: J2 Blackwell Road-Common Road-Main Street	**-**	**-**	**266**	**0**	**23**	**10.3**	**16.5**	**0.5**	**27.2**	**-**	**-**	**-**	**-**
Blackwell Road-Common Road-Main Street	**-**	**-**	**266**	**0**	**23**	**10.3**	**16.5**	**0.5**	**27.2**	**-**	**-**	**-**	**-**
1/1	207	207	37	0	7	1.4	1.0	0.0	2.5	42.8	4.2	1.0	5.2
2/1	529	529	65	0	1	3.1	1.1	0.0	4.2	28.4	10.7	1.1	11.8
3/1	363	363	7	0	2	3.1	7.2	0.0	10.3	102.2	9.0	7.2	16.2
4/1	378	378	157	0	13	2.6	7.2	0.5	10.3	98.1	9.3	7.2	16.6
5/1	240	240	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/1	434	434	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
7/1	204	204	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
8/1	599	599	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0

C1 PRC for Signalled Lanes (%): -7.9 Total Delay for Signalled Lanes (pcuHr): 27.24 Cycle Time (s): 90
PRC Over All Lanes (%): -7.9 Total Delay Over All Lanes(pcuHr): 27.24

Full Input Data And Results

Scenario 3: '2030 Bkgd PM' (FG2: '2030 Bkgd PM', Plan 1: 'Single Cycle')

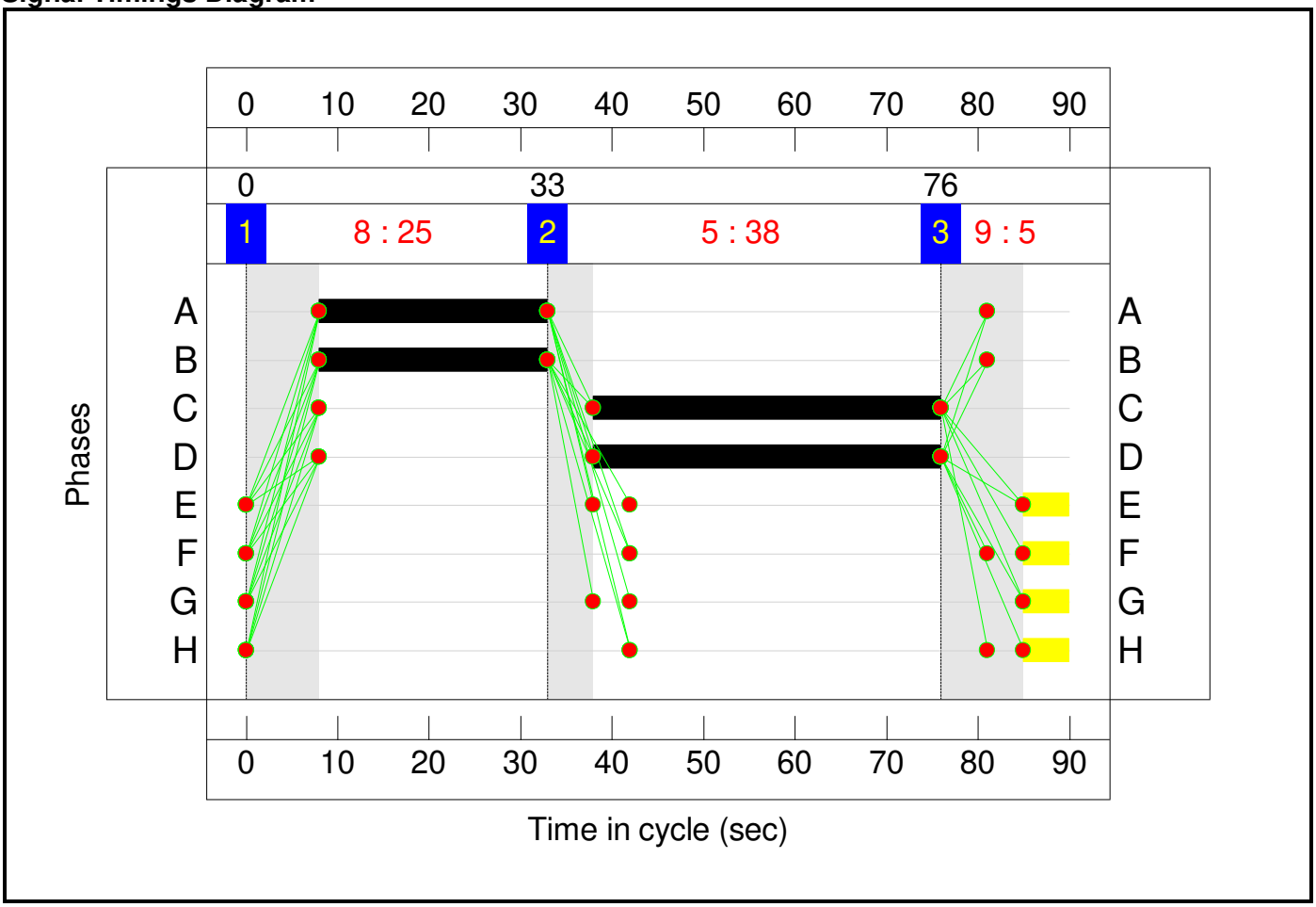
Stage Sequence Diagram



Stage Timings

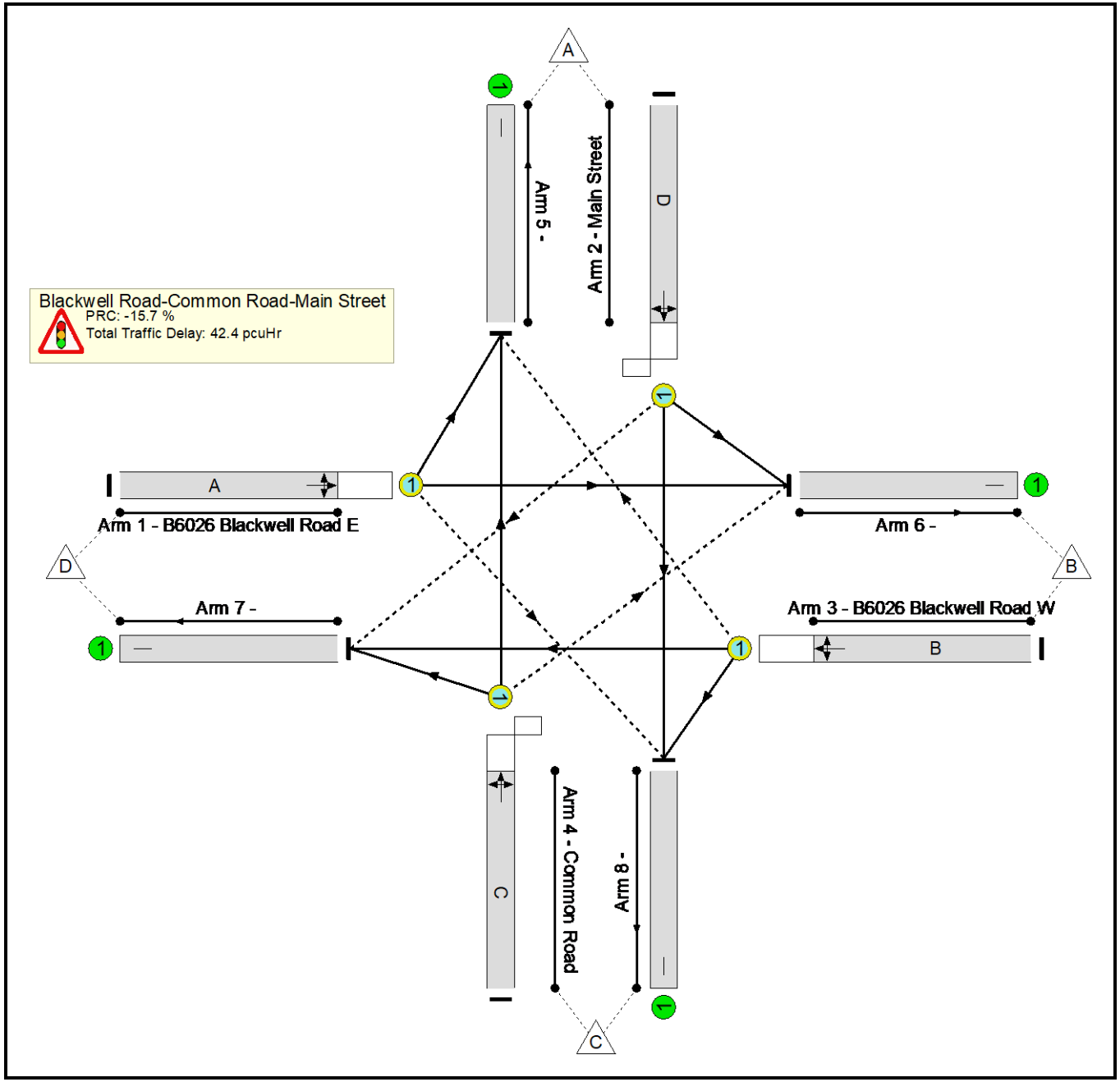
Stage	1	2	3
Duration	25	38	5
Change Point	0	33	76

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: J2 Blackwell Road-Common Road-Main Street	**-**	**-**	**N/A**	**-**	**-**		**-**	**-**	**-**	**-**	**-**	**-**	**104.1%**
Blackwell Road-Common Road-Main Street	**-**	**-**	**N/A**	**-**	**-**		**-**	**-**	**-**	**-**	**-**	**-**	**104.1%**
1/1	B6026 Blackwell Road E Left Ahead Right	O	N/A	N/A	A		1	25	-	288	1799	395	72.9%
2/1	Main Street Left Right Ahead	O	N/A	N/A	D		1	38	-	427	1810	784	54.4%
3/1	B6026 Blackwell Road W Right Ahead Left	O	N/A	N/A	B		1	25	-	265	1788	258	102.6%
4/1	Common Road Ahead Right Left	O	N/A	N/A	C		1	38	-	553	1805	531	104.1%
5/1		U	N/A	N/A	-		-	-	-	380	Inf	Inf	0.0%
6/1		U	N/A	N/A	-		-	-	-	594	Inf	Inf	0.0%
7/1		U	N/A	N/A	-		-	-	-	180	Inf	Inf	0.0%
8/1		U	N/A	N/A	-		-	-	-	379	Inf	Inf	0.0%

Full Input Data And Results

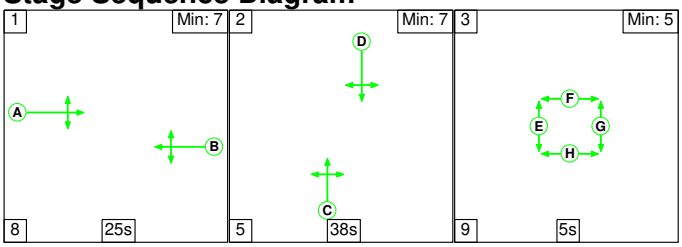
Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network: J2 Blackwell Road-Common Road-Main Street	**-**	**-**	**261**	**0**	**22**	**11.7**	**30.4**	**0.4**	**42.4**	**-**	**-**	**-**	**-**
Blackwell Road-Common Road-Main Street	**-**	**-**	**261**	**0**	**22**	**11.7**	**30.4**	**0.4**	**42.4**	**-**	**-**	**-**	**-**
1/1	288	288	18	0	2	2.2	1.3	0.0	3.5	44.2	6.2	1.3	7.6
2/1	427	427	32	0	1	2.2	0.6	0.0	2.8	24.0	7.8	0.6	8.4
3/1	265	258	7	0	2	2.4	10.0	0.0	12.4	168.4	6.8	10.0	16.8
4/1	553	531	203	0	17	4.9	18.5	0.3	23.7	154.0	14.4	18.5	32.9
5/1	368	368	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/1	585	585	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
7/1	176	176	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
8/1	375	375	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0

C1 PRC for Signalled Lanes (%): -15.7 Total Delay for Signalled Lanes (pcuHr): 42.43 Cycle Time (s): 90
PRC Over All Lanes (%): -15.7 Total Delay Over All Lanes(pcuHr): 42.43

Full Input Data And Results

Scenario 4: '2030 With Dev PM' (FG4: '2030 With Dev PM', Plan 1: 'Single Cycle')

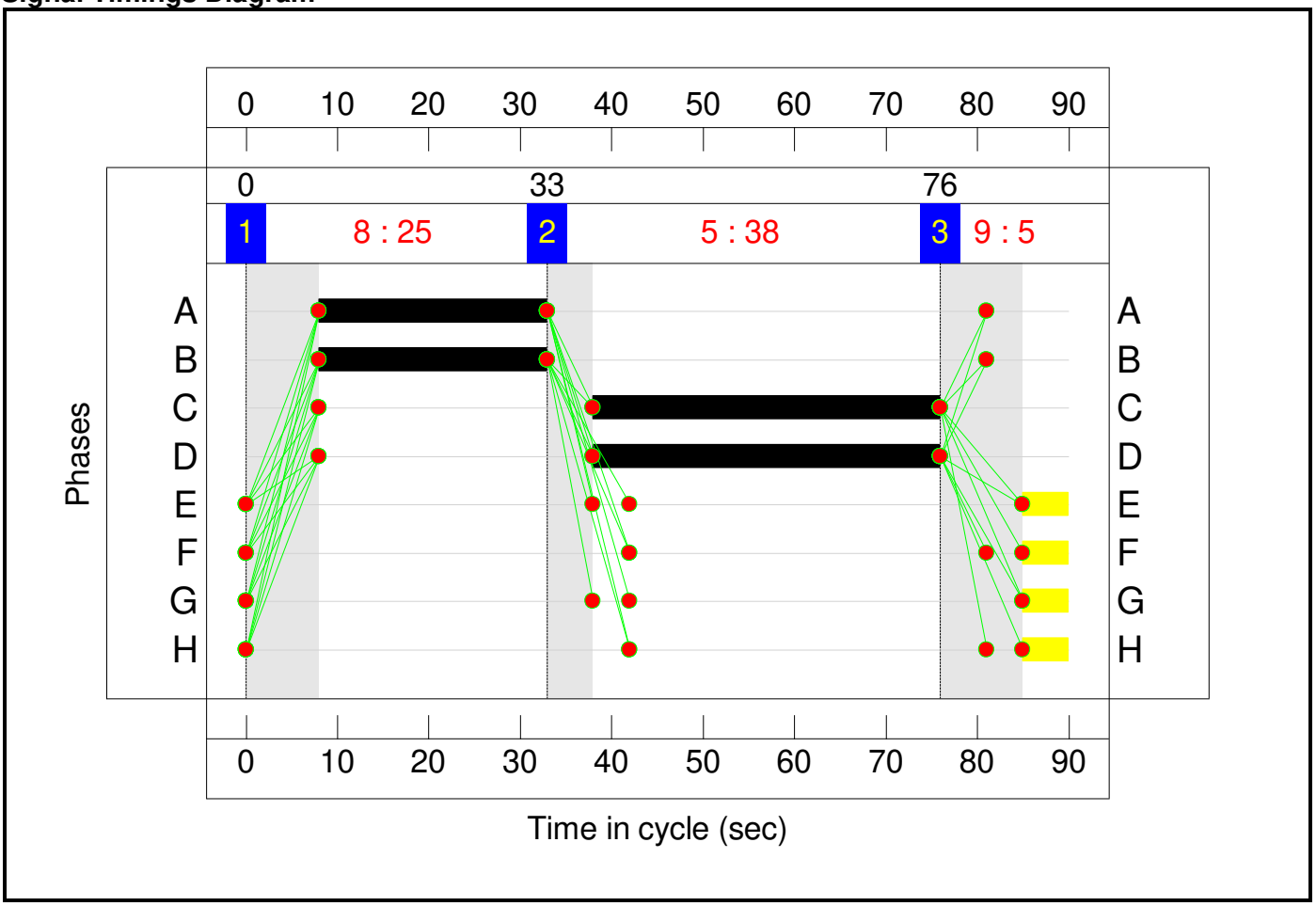
Stage Sequence Diagram



Stage Timings

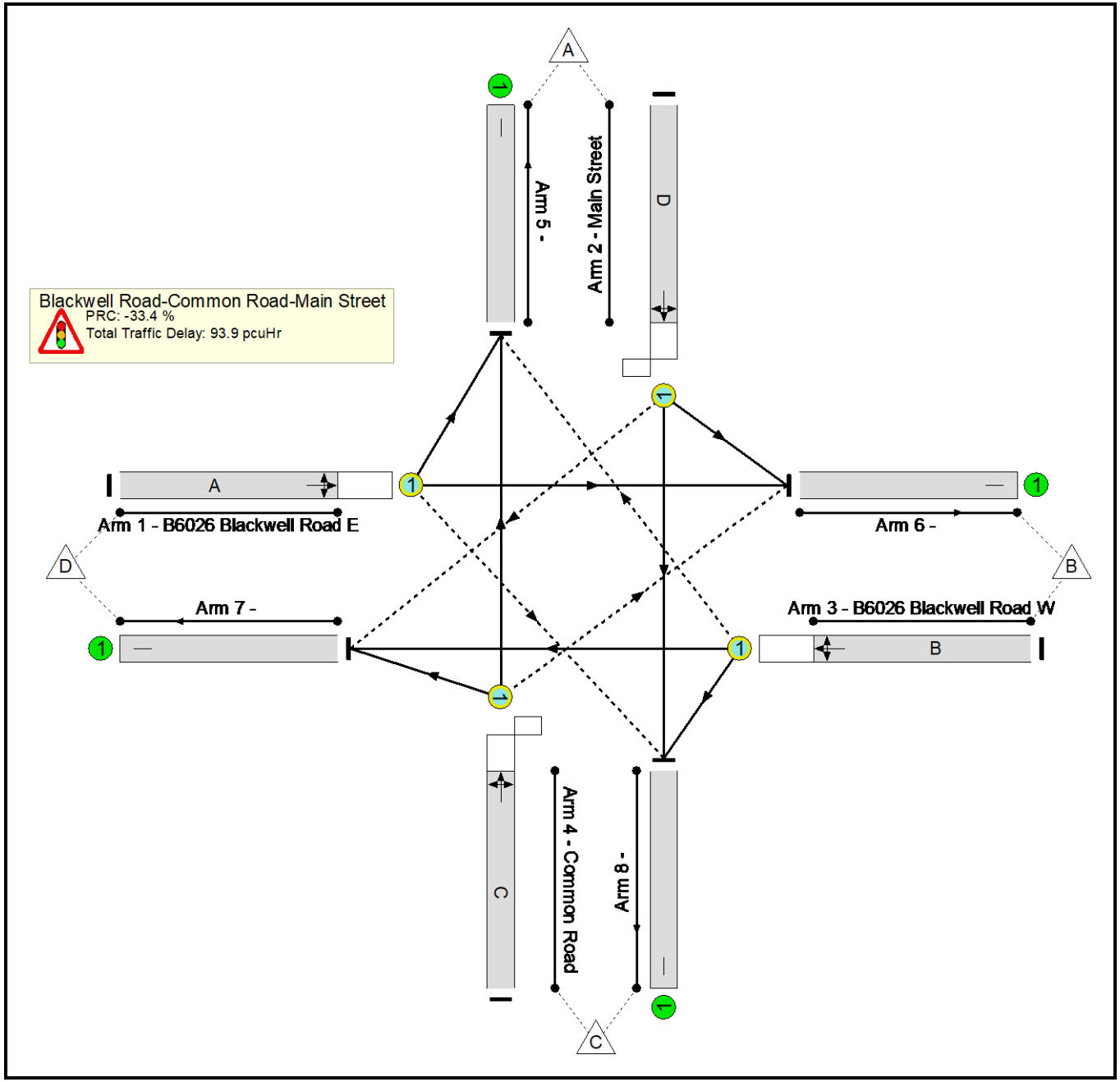
Stage	1	2	3
Duration	25	38	5
Change Point	0	33	76

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: J2 Blackwell Road-Common Road-Main Street	**-**	**-**	**N/A**	**-**	**-**		**-**	**-**	**-**	**-**	**-**	**-**	**120.1%**
Blackwell Road-Common Road-Main Street	**-**	**-**	**N/A**	**-**	**-**		**-**	**-**	**-**	**-**	**-**	**-**	**120.1%**
1/1	B6026 Blackwell Road E Left Ahead Right	O	N/A	N/A	A		1	25	-	288	1799	395	72.9%
2/1	Main Street Left Right Ahead	O	N/A	N/A	D		1	38	-	440	1806	783	56.2%
3/1	B6026 Blackwell Road W Right Ahead Left	O	N/A	N/A	B		1	25	-	294	1778	258	114.1%
4/1	Common Road Ahead Right Left	O	N/A	N/A	C		1	38	-	599	1797	499	120.1%
5/1		U	N/A	N/A	-		-	-	-	381	Inf	Inf	0.0%
6/1		U	N/A	N/A	-		-	-	-	653	Inf	Inf	0.0%
7/1		U	N/A	N/A	-		-	-	-	180	Inf	Inf	0.0%
8/1		U	N/A	N/A	-		-	-	-	407	Inf	Inf	0.0%

Full Input Data And Results

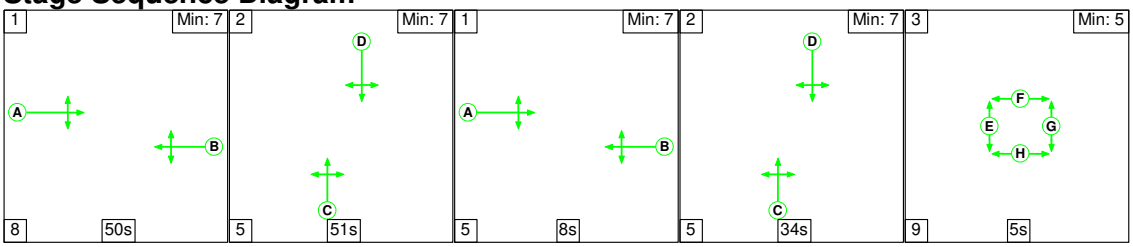
Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network: J2 Blackwell Road-Common Road-Main Street	**-**	**-**	**268**	**0**	**24**	**17.0**	**76.5**	**0.4**	**93.9**	**-**	**-**	**-**	**-**
Blackwell Road-Common Road-Main Street	**-**	**-**	**268**	**0**	**24**	**17.0**	**76.5**	**0.4**	**93.9**	**-**	**-**	**-**	**-**
1/1	288	288	18	0	2	2.2	1.3	0.0	3.5	44.2	6.2	1.3	7.6
2/1	440	440	32	0	1	2.3	0.6	0.0	3.0	24.4	8.2	0.6	8.8
3/1	294	258	7	0	2	4.0	21.6	0.0	25.6	313.3	8.3	21.6	29.9
4/1	599	499	211	0	18	8.5	52.9	0.4	61.8	371.1	18.2	52.9	71.1
5/1	331	331	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/1	607	607	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
7/1	160	160	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
8/1	386	386	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0

C1 PRC for Signalled Lanes (%): -33.4 Total Delay for Signalled Lanes (pcuHr): 93.86 Cycle Time (s): 90
PRC Over All Lanes (%): -33.4 Total Delay Over All Lanes(pcuHr): 93.86

Full Input Data And Results

Scenario 5: '2030 Bkgd AM DC' (FG1: '2030 Bkgd AM', Plan 2: 'Double Cycle')

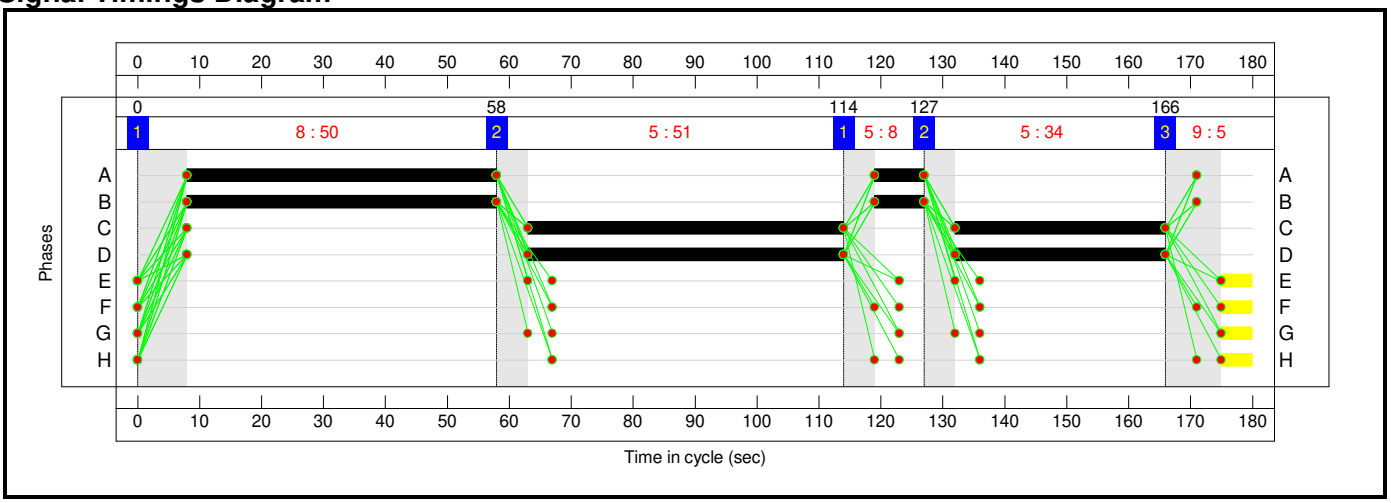
Stage Sequence Diagram



Stage Timings

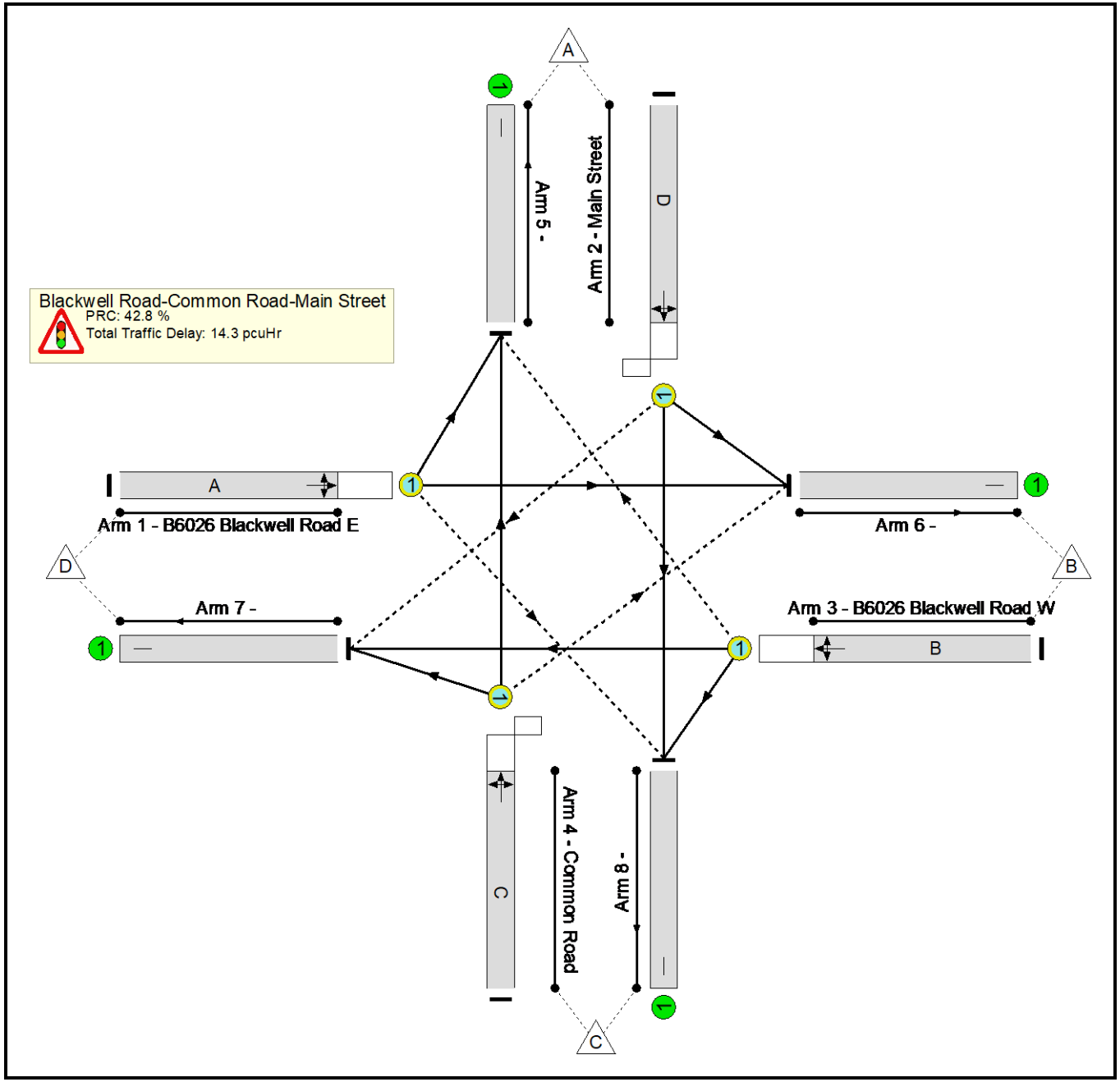
Stage	1	2	1	2	3
Duration	50	51	8	34	5
Change Point	0	58	114	127	166

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: J2 Blackwell Road-Common Road-Main Street	**-**	**-**	**N/A**	**-**	**-**		**-**	**-**	**-**	**-**	**-**	**-**	**63.0%**
Blackwell Road-Common Road-Main Street	**-**	**-**	**N/A**	**-**	**-**		**-**	**-**	**-**	**-**	**-**	**-**	**63.0%**
1/1	B6026 Blackwell Road E Left Ahead Right	O	N/A	N/A	A		2	58	-	207	1795	383	54.0%
2/1	Main Street Left Right Ahead	O	N/A	N/A	D		2	85	-	524	1837	888	59.0%
3/1	B6026 Blackwell Road W Right Ahead Left	O	N/A	N/A	B		2	58	-	317	1773	504	62.9%
4/1	Common Road Ahead Right Left	O	N/A	N/A	C		2	85	-	358	1804	568	63.0%
5/1		U	N/A	N/A	-		-	-	-	240	Inf	Inf	0.0%
6/1		U	N/A	N/A	-		-	-	-	409	Inf	Inf	0.0%
7/1		U	N/A	N/A	-		-	-	-	204	Inf	Inf	0.0%
8/1		U	N/A	N/A	-		-	-	-	553	Inf	Inf	0.0%

Full Input Data And Results

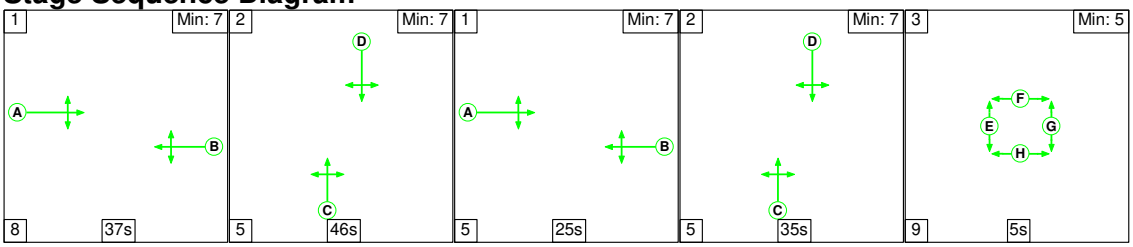
Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network: J2 Blackwell Road-Common Road-Main Street	**-**	**-**	**247**	**0**	**22**	**10.9**	**3.0**	**0.4**	**14.3**	**-**	**-**	**-**	**-**
Blackwell Road-Common Road-Main Street	**-**	**-**	**247**	**0**	**22**	**10.9**	**3.0**	**0.4**	**14.3**	**-**	**-**	**-**	**-**
1/1	207	207	35	0	9	1.3	0.6	0.0	1.9	33.5	3.9	0.6	4.5
2/1	524	524	65	0	1	3.4	0.7	0.0	4.2	28.5	15.4	0.7	16.1
3/1	317	317	8	0	1	3.2	0.8	0.0	4.0	46.0	9.7	0.8	10.6
4/1	358	358	140	0	10	3.0	0.8	0.3	4.2	42.0	12.7	0.8	13.6
5/1	240	240	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/1	409	409	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
7/1	204	204	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
8/1	553	553	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0

C1 PRC for Signalled Lanes (%): 42.8 Total Delay for Signalled Lanes (pcuHr): 14.30 Cycle Time (s): 180
PRC Over All Lanes (%): 42.8 Total Delay Over All Lanes(pcuHr): 14.30

Full Input Data And Results

Scenario 6: '2030 With Dev AM DC' (FG3: '2030 With Dev AM', Plan 2: 'Double Cycle')

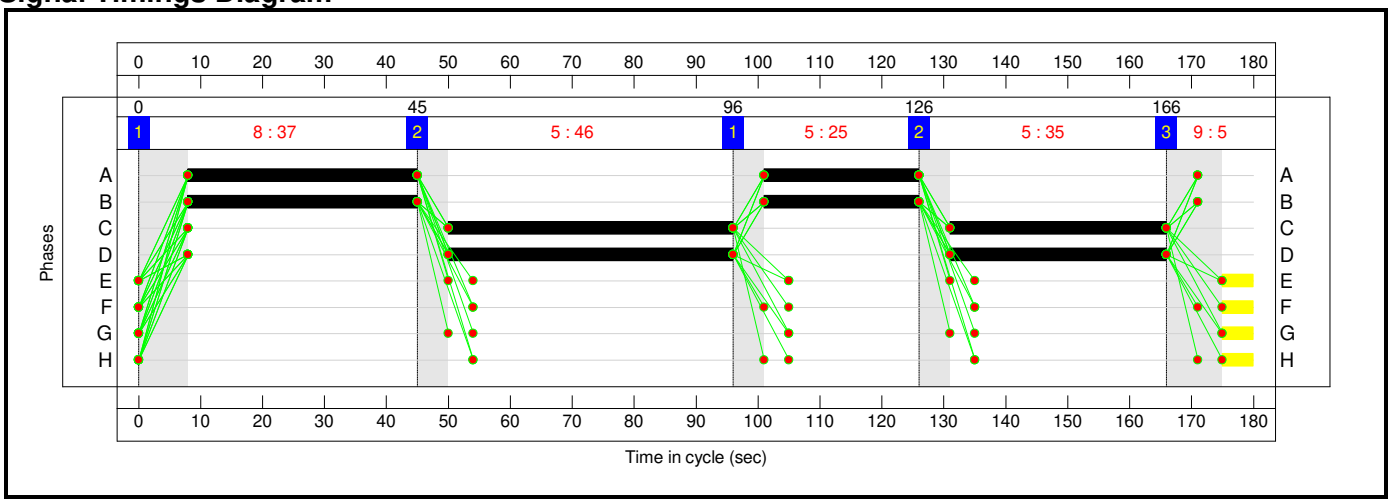
Stage Sequence Diagram



Stage Timings

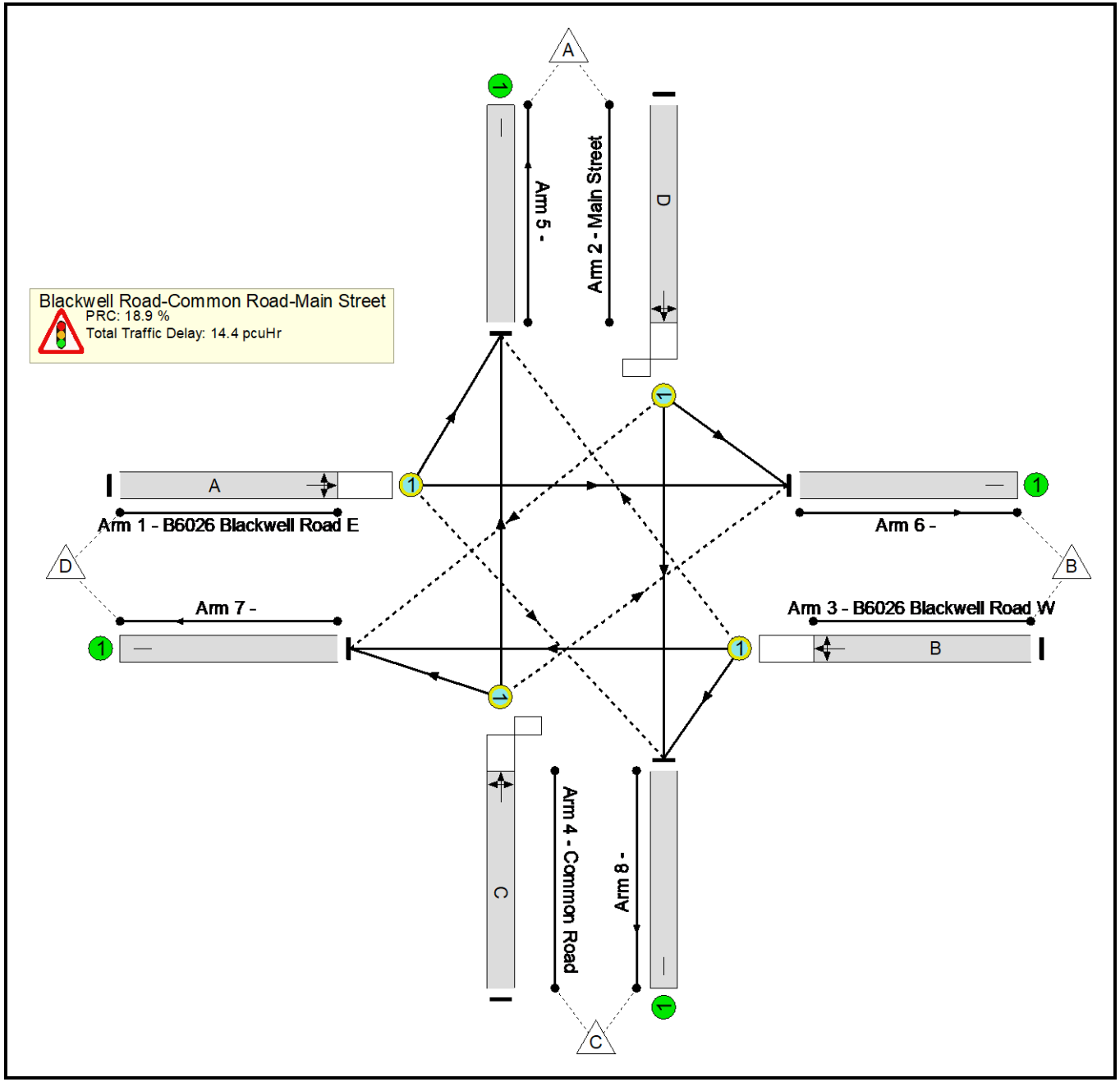
Stage	1	2	1	2	3
Duration	37	46	25	35	5
Change Point	0	45	96	126	166

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: J2 Blackwell Road-Common Road-Main Street	**-**	**-**	**N/A**	**-**	**-**		**-**	**-**	**-**	**-**	**-**	**-**	**75.7%**
Blackwell Road-Common Road-Main Street	**-**	**-**	**N/A**	**-**	**-**		**-**	**-**	**-**	**-**	**-**	**-**	**75.7%**
1/1	B6026 Blackwell Road E Left Ahead Right	O	N/A	N/A	A		2	62	-	207	1795	340	60.9%
2/1	Main Street Left Right Ahead	O	N/A	N/A	D		2	81	-	529	1835	846	62.5%
3/1	B6026 Blackwell Road W Right Ahead Left	O	N/A	N/A	B		2	62	-	363	1761	482	75.4%
4/1	Common Road Ahead Right Left	O	N/A	N/A	C		2	81	-	378	1798	500	75.7%
5/1		U	N/A	N/A	-		-	-	-	240	Inf	Inf	0.0%
6/1		U	N/A	N/A	-		-	-	-	434	Inf	Inf	0.0%
7/1		U	N/A	N/A	-		-	-	-	204	Inf	Inf	0.0%
8/1		U	N/A	N/A	-		-	-	-	599	Inf	Inf	0.0%

Full Input Data And Results

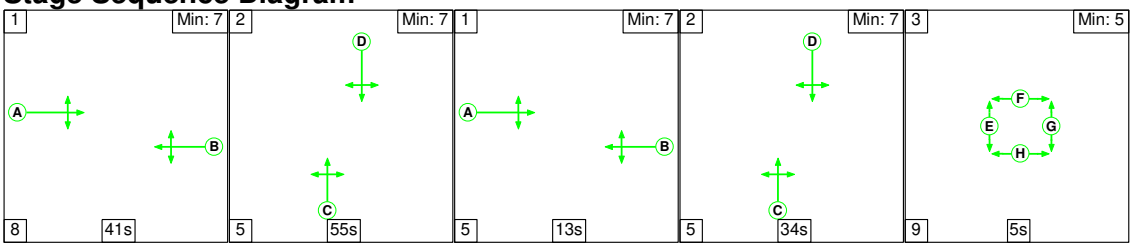
Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network: J2 Blackwell Road-Common Road-Main Street	**-**	**-**	**278**	**0**	**11**	**9.3**	**4.6**	**0.5**	**14.4**	**-**	**-**	**-**	**-**
Blackwell Road-Common Road-Main Street	**-**	**-**	**278**	**0**	**11**	**9.3**	**4.6**	**0.5**	**14.4**	**-**	**-**	**-**	**-**
1/1	207	207	40	0	4	1.2	0.8	0.0	2.0	35.2	3.9	0.8	4.7
2/1	529	529	65	0	1	2.9	0.8	0.0	3.8	25.7	12.9	0.8	13.8
3/1	363	363	9	0	0	2.6	1.5	0.0	4.1	41.0	8.7	1.5	10.2
4/1	378	378	165	0	5	2.5	1.5	0.4	4.4	42.2	11.3	1.5	12.9
5/1	240	240	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/1	434	434	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
7/1	204	204	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
8/1	599	599	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0

C1 PRC for Signalled Lanes (%): 18.9 Total Delay for Signalled Lanes (pcuHr): 14.36 Cycle Time (s): 180
PRC Over All Lanes (%): 18.9 Total Delay Over All Lanes(pcuHr): 14.36

Full Input Data And Results

Scenario 7: '2030 Bkgd PM DC' (FG2: '2030 Bkgd PM', Plan 2: 'Double Cycle')

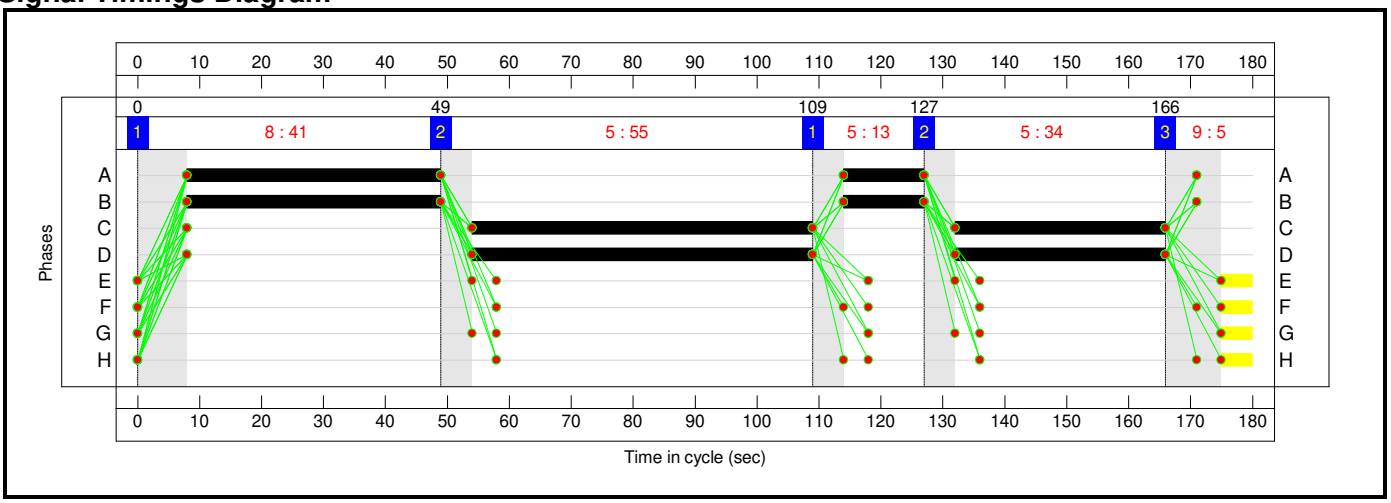
Stage Sequence Diagram



Stage Timings

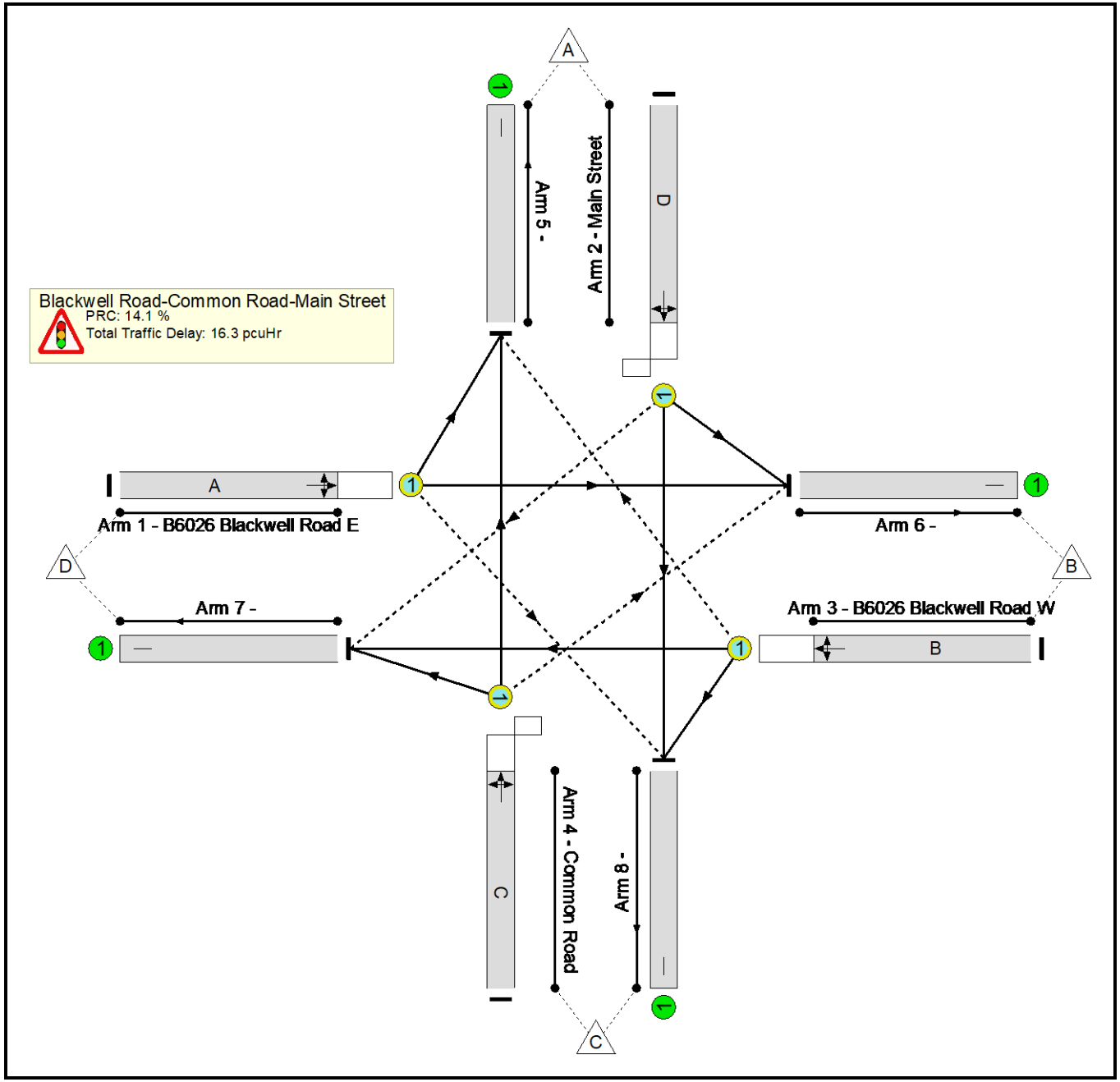
Stage	1	2	1	2	3
Duration	41	55	13	34	5
Change Point	0	49	109	127	166

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: J2 Blackwell Road-Common Road-Main Street	**-**	**-**	**N/A**	**-**	**-**		**-**	**-**	**-**	**-**	**-**	**-**	**78.9%**
Blackwell Road-Common Road-Main Street	**-**	**-**	**N/A**	**-**	**-**		**-**	**-**	**-**	**-**	**-**	**-**	**78.9%**
1/1	B6026 Blackwell Road E Left Ahead Right	O	N/A	N/A	A		2	54	-	288	1799	373	77.2%
2/1	Main Street Left Right Ahead	O	N/A	N/A	D		2	89	-	427	1810	915	46.7%
3/1	B6026 Blackwell Road W Right Ahead Left	O	N/A	N/A	B		2	54	-	265	1788	363	73.0%
4/1	Common Road Ahead Right Left	O	N/A	N/A	C		2	89	-	553	1805	701	78.9%
5/1		U	N/A	N/A	-		-	-	-	380	Inf	Inf	0.0%
6/1		U	N/A	N/A	-		-	-	-	594	Inf	Inf	0.0%
7/1		U	N/A	N/A	-		-	-	-	180	Inf	Inf	0.0%
8/1		U	N/A	N/A	-		-	-	-	379	Inf	Inf	0.0%

Full Input Data And Results

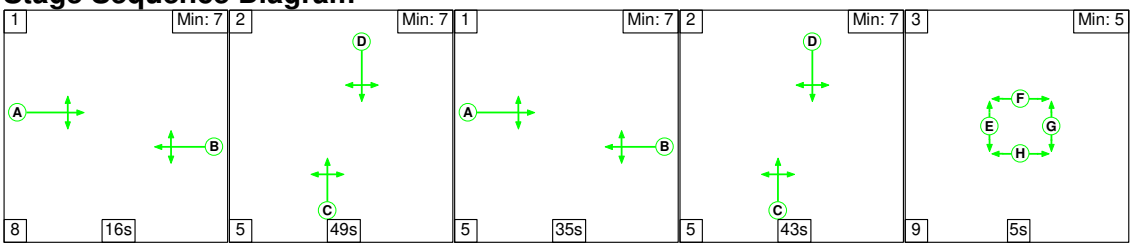
Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network: J2 Blackwell Road-Common Road-Main Street	**-**	**-**	**279**	**0**	**13**	**10.8**	**5.2**	**0.3**	**16.3**	**-**	**-**	**-**	**-**
Blackwell Road-Common Road-Main Street	**-**	**-**	**279**	**0**	**13**	**10.8**	**5.2**	**0.3**	**16.3**	**-**	**-**	**-**	**-**
1/1	288	288	17	0	3	2.2	1.6	0.0	3.8	47.8	6.2	1.6	7.9
2/1	427	427	32	0	1	2.1	0.4	0.0	2.6	21.8	10.3	0.4	10.8
3/1	265	265	8	0	2	2.3	1.3	0.0	3.6	49.1	7.1	1.3	8.4
4/1	553	553	221	0	8	4.2	1.8	0.3	6.3	40.9	18.6	1.8	20.4
5/1	380	380	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/1	594	594	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
7/1	180	180	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
8/1	379	379	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0

C1 PRC for Signalled Lanes (%): 14.1 Total Delay for Signalled Lanes (pcuHr): 16.30 Cycle Time (s): 180
PRC Over All Lanes (%): 14.1 Total Delay Over All Lanes(pcuHr): 16.30

Full Input Data And Results

Scenario 8: '2030 With Dev PM DC' (FG4: '2030 With Dev PM', Plan 2: 'Double Cycle')

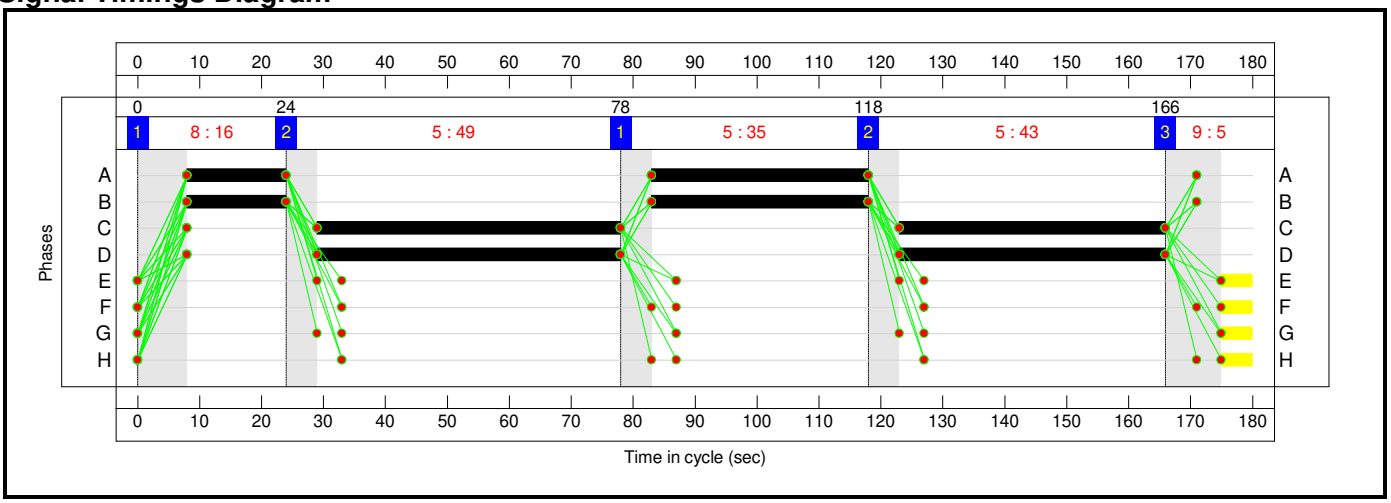
Stage Sequence Diagram



Stage Timings

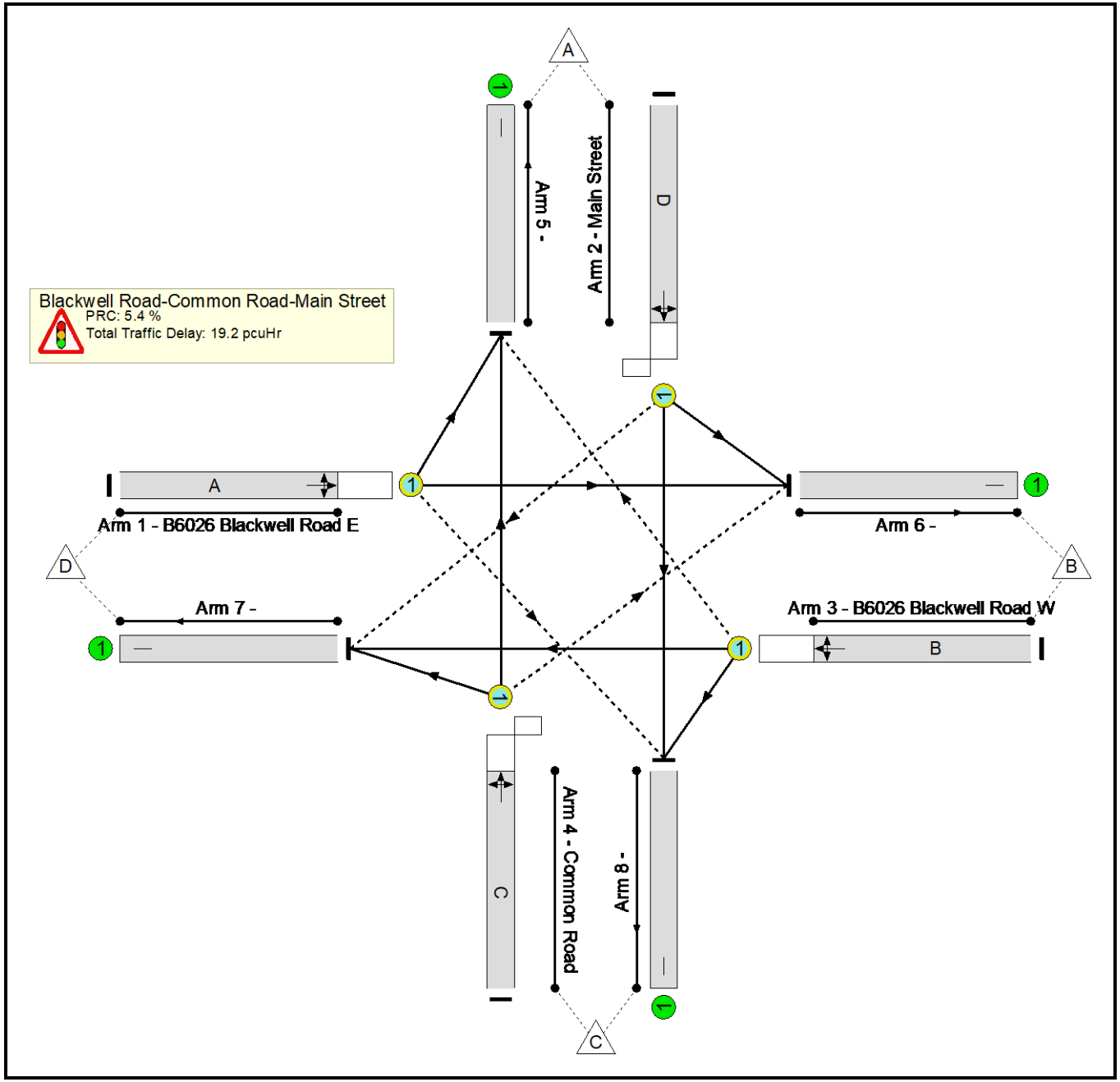
Stage	1	2	1	2	3
Duration	16	49	35	43	5
Change Point	0	24	78	118	166

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: J2 Blackwell Road-Common Road-Main Street	**-**	**-**	**N/A**	**-**	**-**		**-**	**-**	**-**	**-**	**-**	**-**	**85.4%**
Blackwell Road-Common Road-Main Street	**-**	**-**	**N/A**	**-**	**-**		**-**	**-**	**-**	**-**	**-**	**-**	**85.4%**
1/1	B6026 Blackwell Road E Left Ahead Right	O	N/A	N/A	A		2	51	-	288	1799	337	85.4%
2/1	Main Street Left Right Ahead	O	N/A	N/A	D		2	92	-	440	1806	943	46.7%
3/1	B6026 Blackwell Road W Right Ahead Left	O	N/A	N/A	B		2	51	-	294	1778	346	84.8%
4/1	Common Road Ahead Right Left	O	N/A	N/A	C		2	92	-	599	1797	708	84.5%
5/1		U	N/A	N/A	-		-	-	-	381	Inf	Inf	0.0%
6/1		U	N/A	N/A	-		-	-	-	653	Inf	Inf	0.0%
7/1		U	N/A	N/A	-		-	-	-	180	Inf	Inf	0.0%
8/1		U	N/A	N/A	-		-	-	-	407	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: J2 Blackwell Road-Common Road-Main Street	**-**	**-**	**326**	**0**	**13**	**10.7**	**8.2**	**0.3**	**19.2**	**-**	**-**	**-**	**-**
Blackwell Road-Common Road-Main Street	**-**	**-**	**326**	**0**	**13**	**10.7**	**8.2**	**0.3**	**19.2**	**-**	**-**	**-**	**-**
1/1	288	288	16	0	4	2.2	2.6	0.0	4.8	60.6	6.7	2.6	9.4
2/1	440	440	32	0	1	1.7	0.4	0.0	2.1	17.2	7.1	0.4	7.5
3/1	294	294	9	0	2	3.3	2.6	0.0	5.9	72.2	9.2	2.6	11.7
4/1	599	599	269	0	6	3.5	2.6	0.3	6.4	38.5	14.0	2.6	16.6
5/1	381	381	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/1	653	653	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
7/1	180	180	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
8/1	407	407	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0

C1 PRC for Signalled Lanes (%): 5.4 Total Delay for Signalled Lanes (pcuHr): 19.25 Cycle Time (s): 180
PRC Over All Lanes (%): 5.4 Total Delay Over All Lanes(pcuHr): 19.25

APPENDIX G

JUNCTION 3 PICADY OUTPUTS

Junctions 9

PICADY 9 - Priority Intersection Module

Version: 9.5.1.7462
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Filename: J3 Blackwell Road-Market Street.j9
Path: D:\Dropbox (ADC Infrastructure)\!!! ADC Projects\ADC1032 Ashland Road (Bellway)\Calculations
Report generation date: 07/10/2020 11:23:01

»Traffic Flows - 2030 Bkgd, AM
»Traffic Flows - 2030 Bkgd, PM
»Traffic Flows - 2030 With Dev, AM
»Traffic Flows - 2030 With Dev, PM

Summary of junction performance

	AM			PM		
	Queue (Veh)	Delay (s)	RFC	Queue (Veh)	Delay (s)	RFC
	Traffic Flows - 2030 Bkgd					
Stream B-AC	0.0	0.00	0.00	0.0	0.00	0.00
Stream C-AB	1.9	11.32	0.58	1.5	11.25	0.53
	Traffic Flows - 2030 With Dev					
Stream B-AC	0.0	0.00	0.00	0.0	0.00	0.00
Stream C-AB	2.5	12.86	0.64	1.9	12.51	0.59

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	Blackwell Road-Market Street
Location	Sutton in Ashfield
Site number	
Date	15/09/2020
Version	v 1
Status	Preliminary
Identifier	M Tatler
Client	Bellway
Jobnumber	ADC1032
Enumerator	M Tatler
Description	

Units

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

Analysis Options

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	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D1	2030 Bkgd	AM	ONE HOUR	07:45	09:15	15
D2	2030 Bkgd	PM	ONE HOUR	16:45	18:15	15
D3	2030 With Dev	AM	ONE HOUR	07:45	09:15	15
D4	2030 With Dev	PM	ONE HOUR	16:45	18:15	15

Analysis Set Details

ID	Name	Network flow scaling factor (%)
A1	Traffic Flows	100.000

Traffic Flows - 2030 Bkgd, AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	Blackwell Road-Market Street	T-Junction	Two-way		4.52	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Name	Description	Arm type
A	Blackwell Road (W)		Major
B	Market Street		Minor
C	Blackwell Road (E)		Major

Major Arm Geometry

Arm	Width of carriageway (m)	Has kerbed central reserve	Has right turn bay	Visibility for right turn (m)	Blocks?	Blocking queue (PCU)
C	7.90			150.0	✓	0.00

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

Minor Arm Geometry

Arm	Minor arm type	Lane width (m)	Visibility to left (m)	Visibility to right (m)
B	One lane	2.20	0	0

Slope / Intercept / Capacity

Priority Intersection Slopes and Intercepts

Stream	Intercept (Veh/hr)	Slope for A-B	Slope for A-C	Slope for C-A	Slope for C-B
B-A	440	0.073	0.186	0.117	0.265
B-C	574	0.081	0.204	-	-
C-B	661	0.235	0.235	-	-

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

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

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

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D1	2030 Bkgd	AM	ONE HOUR	07:45	09:15	15

Vehicle mix source	PCU Factor for a HV (PCU)
HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A		✓	384	100.000
B		✓	0	100.000
C		✓	526	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A	B	C
From	A	0	11	373
	B	0	0	0
	C	301	225	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A	B	C
From	A	0	27	6
	B	0	0	0
	C	5	4	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS
B-AC	0.00	0.00	0.0	A
C-AB	0.58	11.32	1.9	B
C-A				
A-B				
A-C				

Traffic Flows - 2030 Bkgd, PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	Blackwell Road-Market Street	T-Junction	Two-way		3.40	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D2	2030 Bkgd	PM	ONE HOUR	16:45	18:15	15

Vehicle mix source	PCU Factor for a HV (PCU)
HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A		✓	587	100.000
B		✓	0	100.000
C		✓	452	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A	B	C
From	A	0	25	562
	B	0	0	0
	C	254	198	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A	B	C
From	A	0	12	0
	B	0	0	0
	C	3	4	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS
B-AC	0.00	0.00	0.0	A
C-AB	0.53	11.25	1.5	B
C-A				
A-B				
A-C				

Traffic Flows - 2030 With Dev, AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	Blackwell Road-Market Street	T-Junction	Two-way		5.37	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D3	2030 With Dev	AM	ONE HOUR	07:45	09:15	15

Vehicle mix source	PCU Factor for a HV (PCU)
HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A		✓	409	100.000
B		✓	0	100.000
C		✓	585	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A	B	C
From	A	0	11	398
	B	0	0	0
	C	347	238	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A	B	C
From	A	0	27	6
	B	0	0	0
	C	4	4	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS
B-AC	0.00	0.00	0.0	A
C-AB	0.64	12.86	2.5	B
C-A				
A-B				
A-C				

Traffic Flows - 2030 With Dev, PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	Blackwell Road-Market Street	T-Junction	Two-way		3.80	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D4	2030 With Dev	PM	ONE HOUR	16:45	18:15	15

Vehicle mix source	PCU Factor for a HV (PCU)
HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A		✓	646	100.000
B		✓	0	100.000
C		✓	488	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A	B	C
From	A	0	25	621
	B	0	0	0
	C	282	206	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A	B	C
From	A	0	12	0
	B	0	0	0
	C	3	4	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS
B-AC	0.00	0.00	0.0	A
C-AB	0.59	12.51	1.9	B
C-A				
A-B				
A-C				

APPENDIX H

JUNCTION 4 PICADY OUTPUTS

Junctions 9

PICADY 9 - Priority Intersection Module

Version: 9.5.1.7462
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Filename: J4 Huthwaite Road-Ashland Road West PICADY Model.j9
Path: D:\Dropbox (ADC Infrastructure)\!!! ADC Projects\ADC1032 Ashland Road (Bellway)\Calculations
Report generation date: 07/10/2020 16:29:04

»2030 Traffic Flows - Background, AM
»2030 Traffic Flows - Background, PM
»2030 Traffic Flows - With Development, AM
»2030 Traffic Flows - With Development, PM

Summary of junction performance

	AM			PM		
	Queue (Veh)	Delay (s)	RFC	Queue (Veh)	Delay (s)	RFC
	2030 Traffic Flows - Background					
Stream B-C	0.1	8.13	0.13	0.1	8.23	0.05
Stream B-A	0.2	15.07	0.16	0.2	14.45	0.14
Stream C-B	0.0	6.91	0.04	0.1	7.15	0.07
	2030 Traffic Flows - With Development					
Stream B-C	0.5	11.82	0.32	0.2	9.84	0.16
Stream B-A	0.7	21.99	0.40	0.5	21.49	0.33
Stream C-B	0.1	7.25	0.10	0.3	8.77	0.21

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	B6026 Huthwaite Road-Ashland Road West
Location	Sutton-in-Ashfield
Site number	
Date	08/08/2019
Version	V1
Status	Preliminary
Identifier	M Tatler
Client	Bellway Homes
Jobnumber	ADC1032
Enumerator	M Tatler
Description	

Units

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

Analysis Options

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

Demand Set Summary

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D1	Background	AM	ONE HOUR	08:00	09:30	15	✓
D2	Background	PM	ONE HOUR	16:45	18:15	15	✓
D3	With Development	AM	ONE HOUR	08:00	09:30	15	✓
D4	With Development	PM	ONE HOUR	16:45	18:15	15	✓

Analysis Set Details

ID	Name	Include in report	Network flow scaling factor (%)	Network capacity scaling factor (%)
A1	2030 Traffic Flows	✓	100.000	100.000

2030 Traffic Flows - Background, AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	B6026 Huthwaite Road-Ashland Road West	T-Junction	Two-way		1.04	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Name	Description	Arm type
A	B6026 Huthwaite Road (W)		Major
B	Ashland Road West		Minor
C	B6026 Huthwaite Road (E)		Major

Major Arm Geometry

Arm	Width of carriageway (m)	Has kerbed central reserve	Has right turn bay	Width for right turn (m)	Visibility for right turn (m)	Blocks?	Blocking queue (PCU)
C	8.67		✓	3.00	160.0		-

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

Minor Arm Geometry

Arm	Minor arm type	Width at give-way (m)	Width at 5m (m)	Width at 10m (m)	Width at 15m (m)	Width at 20m (m)	Estimate flare length	Flare length (PCU)	Visibility to left (m)	Visibility to right (m)
B	One lane plus flare	10.00	6.00	4.47	3.86	3.86	✓	1.00	33	22

Slope / Intercept / Capacity

Priority Intersection Slopes and Intercepts

Stream	Intercept (Veh/hr)	Slope for A-B	Slope for A-C	Slope for C-A	Slope for C-B
B-A	503	0.081	0.205	0.129	0.293
B-C	685	0.093	0.235	-	-
C-B	725	0.248	0.248	-	-

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

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

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

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D1	Background	AM	ONE HOUR	08:00	09:30	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A		ONE HOUR	✓	544	100.000
B		ONE HOUR	✓	100	100.000
C		ONE HOUR	✓	529	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A	B	C
From	A	0	35	509
	B	40	0	60
	C	510	19	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A	B	C
From	A	0	0	5
	B	5	0	2
	C	4	5	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-C	0.13	8.13	0.1	A	55	83
B-A	0.16	15.07	0.2	C	37	55
C-A					468	702
C-B	0.04	6.91	0.0	A	17	26
A-B					32	48
A-C					467	701

2030 Traffic Flows - Background, PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	B6026 Huthwaite Road-Ashland Road West	T-Junction	Two-way		0.70	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

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

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A		ONE HOUR	✓	660	100.000
B		ONE HOUR	✓	58	100.000
C		ONE HOUR	✓	591	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A	B	C
From	A	0	70	590
	B	38	0	20
	C	559	32	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A	B	C
From	A	0	3	3
	B	0	0	0
	C	3	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-C	0.05	8.23	0.1	A	18	28
B-A	0.14	14.45	0.2	B	35	52
C-A					513	769
C-B	0.07	7.15	0.1	A	29	44
A-B					64	96
A-C					541	812

2030 Traffic Flows - With Development, AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	B6026 Huthwaite Road-Ashland Road West	T-Junction	Two-way		2.94	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D3	With Development	AM	ONE HOUR	08:00	09:30	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A		ONE HOUR	✓	569	100.000
B		ONE HOUR	✓	229	100.000
C		ONE HOUR	✓	559	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A	B	C
From	A	0	60	509
	B	99	0	130
	C	510	49	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A	B	C
From	A	0	0	5
	B	2	0	1
	C	4	2	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-C	0.32	11.82	0.5	B	119	179
B-A	0.40	21.99	0.7	C	91	136
C-A					468	702
C-B	0.10	7.25	0.1	A	45	67
A-B					55	83
A-C					467	701

2030 Traffic Flows - With Development, PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	B6026 Huthwaite Road-Ashland Road West	T-Junction	Two-way		2.00	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D4	With Development	PM	ONE HOUR	16:45	18:15	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A		ONE HOUR	✓	719	100.000
B		ONE HOUR	✓	138	100.000
C		ONE HOUR	✓	661	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A	B	C
From	A	0	129	590
	B	74	0	64
	C	559	102	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A	B	C
From	A	0	2	3
	B	0	0	0
	C	3	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-C	0.16	9.84	0.2	A	59	88
B-A	0.33	21.49	0.5	C	68	102
C-A					513	769
C-B	0.21	8.77	0.3	A	94	140
A-B					118	178
A-C					541	812

APPENDIX I

JUNCTION 5
ARCADY & PICADY OUTPUTS

Junctions 9

ARCADY 9 - Roundabout Module

Version: 9.5.1.7462
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Filename: (new file)
Path:
Report generation date: 08/10/2020 22:57:54

»2030 Traffic Flows - Bkgd, AM
»2030 Traffic Flows - Bkgd, PM
»2030 Traffic Flows - With Dev, AM
»2030 Traffic Flows - With Dev, PM

Summary of junction performance

	AM			PM		
	Queue (Veh)	Delay (s)	RFC	Queue (Veh)	Delay (s)	RFC
	2030 Traffic Flows - Bkgd					
Arm 1	1.6	5.51	0.62	4.8	11.96	0.83
Arm 2	0.7	4.53	0.41	2.0	9.10	0.67
Arm 3	0.7	3.20	0.42	0.8	3.45	0.43
	2030 Traffic Flows - With Dev					
Arm 1	1.8	5.80	0.64	6.4	15.60	0.87
Arm 2	0.7	4.66	0.42	2.3	10.30	0.70
Arm 3	0.9	3.44	0.46	0.8	3.62	0.46

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	08/10/2020
Version	
Status	(new file)
Identifier	
Client	
Jobnumber	
Enumerator	DESKTOP-1AM25OV\Matt Tatler
Description	

Units

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

Analysis Options

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	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D1	Bkgd	AM	ONE HOUR	07:45	09:15	15
D2	Bkgd	PM	ONE HOUR	16:45	18:15	15
D3	With Dev	AM	ONE HOUR	07:45	09:15	15
D4	With Dev	PM	ONE HOUR	16:45	18:15	15

Analysis Set Details

ID	Name	Network flow scaling factor (%)
A1	2030 Traffic Flows	100.000

2030 Traffic Flows - Bkgd, AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	Huthwaite Road/Alfreton Road	Standard Roundabout		1, 2, 3	4.52	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Name	Description
1	Lammas Road	
2	Alfreton Road	
3	Huthwaite Road	

Roundabout Geometry

Arm	V - Approach road half-width (m)	E - Entry width (m)	l' - Effective flare length (m)	R - Entry radius (m)	D - Inscribed circle diameter (m)	PHI - Conflict (entry) angle (deg)	Exit only
1	6.00	6.00	0.0	999.0	71.0	40.0	
2	3.00	6.70	30.0	21.0	57.0	26.0	
3	4.70	8.30	29.0	136.0	71.0	30.0	

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Arm	Final slope	Final intercept (PCU/hr)
1	0.527	1842
2	0.585	1741
3	0.604	2297

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

Traffic Demand

Demand Set Details

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

Vehicle mix source	PCU Factor for a HV (PCU)
HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
1		✓	973	100.000
2		✓	503	100.000
3		✓	750	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		1	2	3
From	1	0	461	512
	2	424	0	79
	3	666	84	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		1	2	3
From	1	0	5	3
	2	3	0	9
	3	3	2	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS
1	0.62	5.51	1.6	A
2	0.41	4.53	0.7	A
3	0.42	3.20	0.7	A

2030 Traffic Flows - Bkgd, PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	Huthwaite Road/Alfreton Road	Standard Roundabout		1, 2, 3	9.03	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

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

Vehicle mix source	PCU Factor for a HV (PCU)
HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
1		✓	1342	100.000
2		✓	729	100.000
3		✓	715	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		1	2	3
From	1	0	571	771
	2	628	0	101
	3	645	70	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		1	2	3
From	1	0	2	1
	2	4	0	0
	3	2	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS
1	0.83	11.96	4.8	B
2	0.67	9.10	2.0	A
3	0.43	3.45	0.8	A

2030 Traffic Flows - With Dev, AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	Huthwaite Road/Alfreton Road	Standard Roundabout		1, 2, 3	4.72	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D3	With Dev	AM	ONE HOUR	07:45	09:15	15

Vehicle mix source	PCU Factor for a HV (PCU)
HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
1		✓	1000	100.000
2		✓	506	100.000
3		✓	820	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		1	2	3
From	1	0	461	539
	2	424	0	82
	3	730	90	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		1	2	3
From	1	0	5	3
	2	3	0	9
	3	3	2	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS
1	0.64	5.80	1.8	A
2	0.42	4.66	0.7	A
3	0.46	3.44	0.9	A

2030 Traffic Flows - With Dev, PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	Huthwaite Road/Alfreton Road	Standard Roundabout		1, 2, 3	11.11	B

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D4	With Dev	PM	ONE HOUR	16:45	18:15	15

Vehicle mix source	PCU Factor for a HV (PCU)
HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
1		✓	1406	100.000
2		✓	735	100.000
3		✓	759	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		1	2	3
From	1	0	571	835
	2	628	0	107
	3	685	74	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		1	2	3
From	1	0	2	1
	2	4	0	0
	3	2	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS
1	0.87	15.60	6.4	C
2	0.70	10.30	2.3	B
3	0.46	3.62	0.8	A

Junctions 9

PICADY 9 - Priority Intersection Module

Version: 9.5.1.7462
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Filename: J5b Lammas Road.j9
Path: D:\Dropbox (ADC Infrastructure)\!!! ADC Projects\ADC1032 Ashland Road (Bellway)\Calculations
Report generation date: 07/10/2020 12:20:15

»Traffic Flows - 2030 Bkgd, AM
»Traffic Flows - 2030 Bkgd, PM
»Traffic Flows - 2030 With Dev, AM
»Traffic Flows - 2030 With Dev, PM

Summary of junction performance

	AM			PM		
	Queue (PCU)	Delay (s)	RFC	Queue (PCU)	Delay (s)	RFC
	Traffic Flows - 2030 Bkgd					
Stream B-AC	0.2	7.22	0.15	0.2	7.55	0.14
Stream C-B	0.0	0.00	0.00	0.0	0.00	0.00
	Traffic Flows - 2030 With Dev					
Stream B-AC	0.2	7.36	0.17	0.2	7.75	0.15
Stream C-B	0.0	0.00	0.00	0.0	0.00	0.00

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

File summary

File Description

Title	J5b Lammas Road
Location	Sutton in Ashfield
Site number	
Date	15/09/2020
Version	v 1
Status	Preliminary
Identifier	M Tatler
Client	Bellway
Jobnumber	ADC1032
Enumerator	M Tatler
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	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D1	2030 Bkgd	AM	ONE HOUR	07:45	09:15	15
D2	2030 Bkgd	PM	ONE HOUR	16:45	18:15	15
D3	2030 With Dev	AM	ONE HOUR	07:45	09:15	15
D4	2030 With Dev	PM	ONE HOUR	16:45	18:15	15

Analysis Set Details

ID	Name	Network flow scaling factor (%)
A1	Traffic Flows	100.000

Traffic Flows - 2030 Bkgd, AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	J5b Lammas Road	T-Junction	One-way from C to A		0.57	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Name	Description	Arm type
A	WB Circ		Major
B	SB Link		Minor
C	Lammas Road		Major

Major Arm Geometry

Arm	Width of carriageway (m)	Has kerbed central reserve	Width of kerbed central reserve (m)	Has right turn bay	Visibility for right turn (m)	Blocks?	Blocking queue (PCU)
C	6.70	✓	10.00		75.0		-

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

Minor Arm Geometry

Arm	Minor arm type	Lane width (m)	Visibility to left (m)	Visibility to right (m)
B	One lane	4.90	66	0

Slope / Intercept / Capacity

Priority Intersection Slopes and Intercepts

Stream	Intercept (PCU/hr)	Slope for A-B	Slope for A-C	Slope for C-A	Slope for C-B
B-A	726	0.073	0.185	0.117	0.265
B-C	743	0.077	0.195	-	-
C-B	617	0.162	0.162	-	-

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

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

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

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D1	2030 Bkgd	AM	ONE HOUR	07:45	09:15	15

Vehicle mix source	PCU Factor for a HV (PCU)
HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		✓	0	100.000
B		✓	84	100.000
C		✓	973	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		A	B	C
From	A	0	0	0
	B	84	0	0
	C	973	0	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A	B	C
From	A	0	0	0
	B	2	0	0
	C	4	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
B-AC	0.15	7.22	0.2	A
C-A				
C-B	0.00	0.00	0.0	A
A-B				
A-C				

Traffic Flows - 2030 Bkgd, PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	J5b Lammas Road	T-Junction	One-way from C to A		0.37	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D2	2030 Bkgd	PM	ONE HOUR	16:45	18:15	15

Vehicle mix source	PCU Factor for a HV (PCU)
HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		✓	0	100.000
B		✓	70	100.000
C		✓	1342	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		A	B	C
From	A	0	0	0
	B	70	0	0
	C	1342	0	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A	B	C
From	A	0	0	0
	B	0	0	0
	C	2	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
B-AC	0.14	7.55	0.2	A
C-A				
C-B	0.00	0.00	0.0	A
A-B				
A-C				

Traffic Flows - 2030 With Dev, AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	J5b Lammas Road	T-Junction	One-way from C to A		0.61	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D3	2030 With Dev	AM	ONE HOUR	07:45	09:15	15

Vehicle mix source	PCU Factor for a HV (PCU)
HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		✓	0	100.000
B		✓	90	100.000
C		✓	1000	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		A	B	C
From	A	0	0	0
	B	90	0	0
	C	1000	0	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A	B	C
From	A	0	0	0
	B	2	0	0
	C	4	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
B-AC	0.17	7.36	0.2	A
C-A				
C-B	0.00	0.00	0.0	A
A-B				
A-C				

Traffic Flows - 2030 With Dev, PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	J5b Lammas Road	T-Junction	One-way from C to A		0.39	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D4	2030 With Dev	PM	ONE HOUR	16:45	18:15	15

Vehicle mix source	PCU Factor for a HV (PCU)
HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		✓	0	100.000
B		✓	74	100.000
C		✓	1406	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		A	B	C
From	A	0	0	0
	B	74	0	0
	C	1406	0	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A	B	C
From	A	0	0	0
	B	0	0	0
	C	1	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
B-AC	0.15	7.75	0.2	A
C-A				
C-B	0.00	0.00	0.0	A
A-B				
A-C				

APPENDIX J

JUNCTION 6 LINSIG OUTPUTS

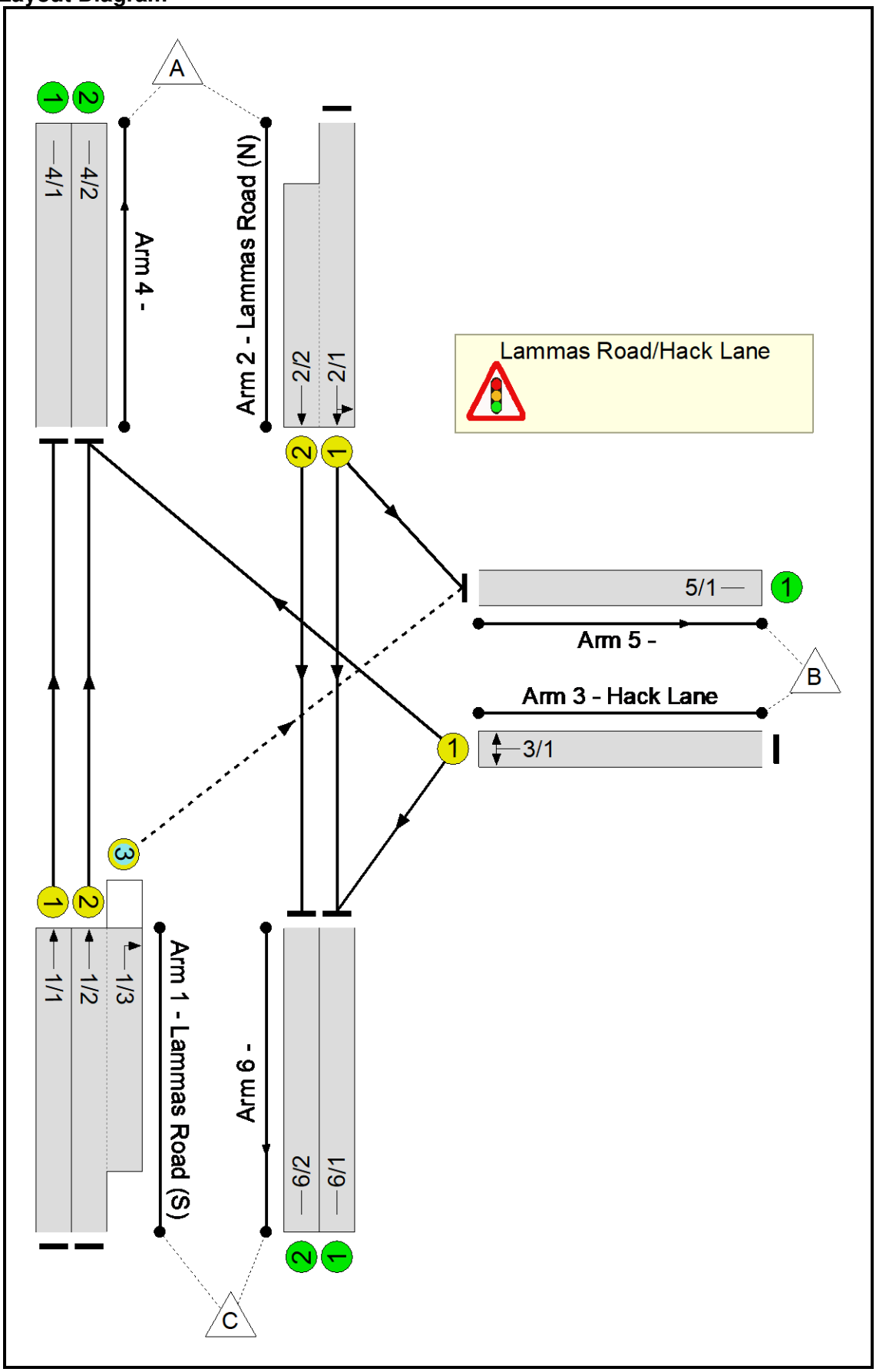
Full Input Data And Results

User and Project Details

Project:	**Ashland Road, Sutton in Ashfield**
Title:	**Lammas Road-Hack Lane**
Location:	
Client:	Bellway Homes
Additional detail:	
File name:	J6 Lammas Road-Hack Lane.lsg3x
Author:	
Company:	ADC Infrastructure Limited
Address:	King Edward Court, King Edward Street, Nottingham

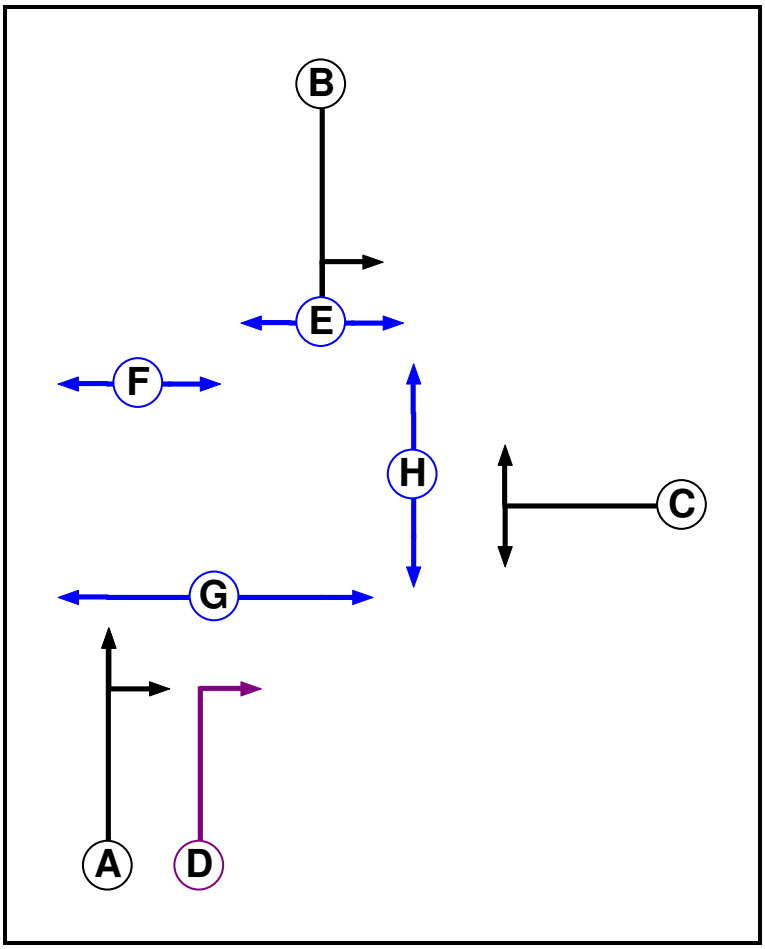
Full Input Data And Results

Network Layout Diagram



Full Input Data And Results

Phase Diagram



Phase Input Data

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

Full Input Data And Results

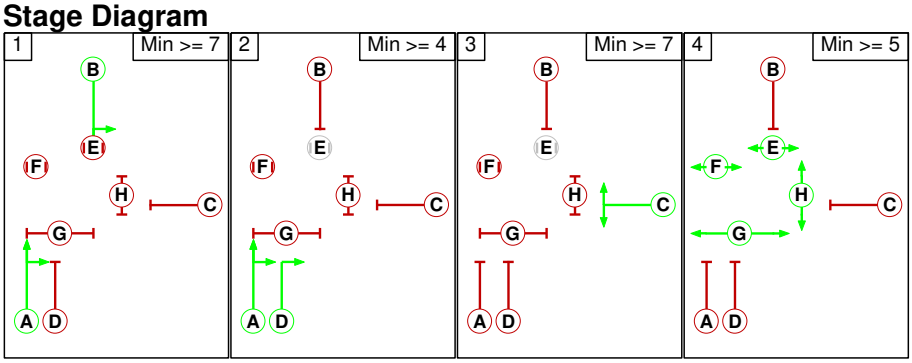
Phase Intergreens Matrix

Terminating Phase \ Starting Phase	A	B	C	D	E	F	G	H
A		-	5	-	-	6	6	-
B	-		5	5	5	-	6	6
C	5	5		5	-	7	6	5
D	-	5	5		-	-	5	6
E	-	7	-	-		-	-	-
F	7	-	7	-	-		-	-
G	7	7	7	7	-	-		-
H	-	7	7	7	-	-	-	

Phases in Stage

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

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	6
2	5		5	6
3	5	5		7
4	7	7	7	

Full Input Data And Results

Give-Way Lane Input Data

Junction: Lammas Road/Hack Lane											
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)**
1/3 (Lammas Road (S))	5/1 (Right)	1439	0	2/1	1.09	All	2.00	-	0.50	2	2.00
				2/2	1.09	All					

Full Input Data And Results

Lane Input Data

Junction: Lammas Road/Hack Lane												
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 (Lammas Road (S))	U	A	2	3	60.0	Geom	-	3.00	0.00	Y	Arm 4 Ahead	Inf
1/2 (Lammas Road (S))	U	A	2	3	60.0	Geom	-	3.00	0.00	N	Arm 4 Ahead	Inf
1/3 (Lammas Road (S))	O	A D	2	3	12.2	Geom	-	3.00	0.00	Y	Arm 5 Right	10.00
2/1 (Lammas Road (N))	U	B	2	3	60.0	Geom	-	3.50	0.00	Y	Arm 5 Left	10.00
											Arm 6 Ahead	Inf
2/2 (Lammas Road (N))	U	B	2	3	10.4	Geom	-	3.40	0.00	N	Arm 6 Ahead	Inf
3/1 (Hack Lane)	U	C	2	3	60.0	Geom	-	4.00	0.00	Y	Arm 4 Right	12.00
											Arm 6 Left	10.00
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	-	-	-	-	-	-
6/2	U		2	3	60.0	Inf	-	-	-	-	-	-

Traffic Flow Groups

Flow Group	Start Time	End Time	Duration	Formula
1: '2030 Bkgd AM'	08:00	09:00	01:00	
2: '2030 Bkgd PM'	17:00	18:00	01:00	
3: '2030 With Dev AM'	08:00	09:00	01:00	
4: '2030 With Dev PM'	17:00	18:00	01:00	

Scenario 1: '2030 Bkgd AM' (FG1: '2030 Bkgd AM', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired

Desired Flow :

		Destination			
		A	B	C	Tot.
Origin	A	0	100	631	731
	B	201	0	9	210
	C	673	446	0	1119
	Tot.	874	546	640	2060

Full Input Data And Results

Traffic Lane Flows

Lane	Scenario 1: 2030 Bkgd AM
Junction: Lammas Road/Hack Lane	
1/1	673
1/2 (with short)	446(In) 0(Out)
1/3 (short)	446
2/1 (with short)	731(In) 346(Out)
2/2 (short)	385
3/1	210
4/1	673
4/2	201
5/1	546
6/1	255
6/2	385

Lane Saturation Flows

Junction: Lammas Road/Hack Lane								
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 (Lammas Road (S))	3.00	0.00	Y	Arm 4 Ahead	Inf	100.0 %	1915	1915
1/2 (Lammas Road (S))	3.00	0.00	N	Arm 4 Ahead	Inf	0.0 %	2055	2055
1/3 (Lammas Road (S))	3.00	0.00	Y	Arm 5 Right	10.00	100.0 %	1665	1665
2/1 (Lammas Road (N))	3.50	0.00	Y	Arm 5 Left	10.00	28.9 %	1883	1883
				Arm 6 Ahead	Inf	71.1 %		
2/2 (Lammas Road (N))	3.40	0.00	N	Arm 6 Ahead	Inf	100.0 %	2095	2095
3/1 (Hack Lane)	4.00	0.00	Y	Arm 4 Right	12.00	95.7 %	1789	1789
				Arm 6 Left	10.00	4.3 %		
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
6/2	Infinite Saturation Flow						Inf	Inf

Full Input Data And Results

Scenario 2: '2030 With Dev AM' (FG3: '2030 With Dev AM', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired

Desired Flow :

		Destination			
		A	B	C	Tot.
Origin	A	0	100	643	743
	B	201	0	24	225
	C	701	482	0	1183
	Tot.	902	582	667	2151

Traffic Lane Flows

Lane	Scenario 2: 2030 With Dev AM
Junction: Lammas Road/Hack Lane	
1/1	701
1/2 (with short)	482(In) 0(Out)
1/3 (short)	482
2/1 (with short)	743(In) 352(Out)
2/2 (short)	391
3/1	225
4/1	701
4/2	201
5/1	582
6/1	276
6/2	391

Full Input Data And Results

Lane Saturation Flows

Junction: Lammas Road/Hack Lane								
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 (Lammas Road (S))	3.00	0.00	Y	Arm 4 Ahead	Inf	100.0 %	1915	1915
1/2 (Lammas Road (S))	3.00	0.00	N	Arm 4 Ahead	Inf	0.0 %	2055	2055
1/3 (Lammas Road (S))	3.00	0.00	Y	Arm 5 Right	10.00	100.0 %	1665	1665
2/1 (Lammas Road (N))	3.50	0.00	Y	Arm 5 Left	10.00	28.4 %	1885	1885
				Arm 6 Ahead	Inf	71.6 %		
2/2 (Lammas Road (N))	3.40	0.00	N	Arm 6 Ahead	Inf	100.0 %	2095	2095
3/1 (Hack Lane)	4.00	0.00	Y	Arm 4 Right	12.00	89.3 %	1787	1787
				Arm 6 Left	10.00	10.7 %		
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
6/2	Infinite Saturation Flow						Inf	Inf

Scenario 3: '2030 Bkgd PM' (FG2: '2030 Bkgd PM', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired

Desired Flow :

		Destination			
		A	B	C	Tot.
Origin	A	0	121	839	960
	B	214	0	17	231
	C	899	383	0	1282
	Tot.	1113	504	856	2473

Full Input Data And Results

Traffic Lane Flows

Lane	Scenario 3: 2030 Bkgd PM
Junction: Lammas Road/Hack Lane	
1/1	899
1/2 (with short)	383(In) 0(Out)
1/3 (short)	383
2/1 (with short)	960(In) 455(Out)
2/2 (short)	505
3/1	231
4/1	899
4/2	214
5/1	504
6/1	351
6/2	505

Lane Saturation Flows

Junction: Lammas Road/Hack Lane								
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 (Lammas Road (S))	3.00	0.00	Y	Arm 4 Ahead	Inf	100.0 %	1915	1915
1/2 (Lammas Road (S))	3.00	0.00	N	Arm 4 Ahead	Inf	0.0 %	2055	2055
1/3 (Lammas Road (S))	3.00	0.00	Y	Arm 5 Right	10.00	100.0 %	1665	1665
2/1 (Lammas Road (N))	3.50	0.00	Y	Arm 5 Left	10.00	26.6 %	1890	1890
				Arm 6 Ahead	Inf	73.4 %		
2/2 (Lammas Road (N))	3.40	0.00	N	Arm 6 Ahead	Inf	100.0 %	2095	2095
3/1 (Hack Lane)	4.00	0.00	Y	Arm 4 Right	12.00	92.6 %	1788	1788
				Arm 6 Left	10.00	7.4 %		
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
6/2	Infinite Saturation Flow						Inf	Inf

Full Input Data And Results

Scenario 4: '2030 With Dev PM' (FG4: '2030 With Dev PM', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired

Desired Flow :

		Destination			
		A	B	C	Tot.
Origin	A	0	121	867	988
	B	214	0	53	267
	C	917	405	0	1322
	Tot.	1131	526	920	2577

Traffic Lane Flows

Lane	Scenario 4: 2030 With Dev PM
Junction: Lammas Road/Hack Lane	
1/1	917
1/2 (with short)	405(In) 0(Out)
1/3 (short)	405
2/1 (with short)	988(In) 468(Out)
2/2 (short)	520
3/1	267
4/1	917
4/2	214
5/1	526
6/1	400
6/2	520

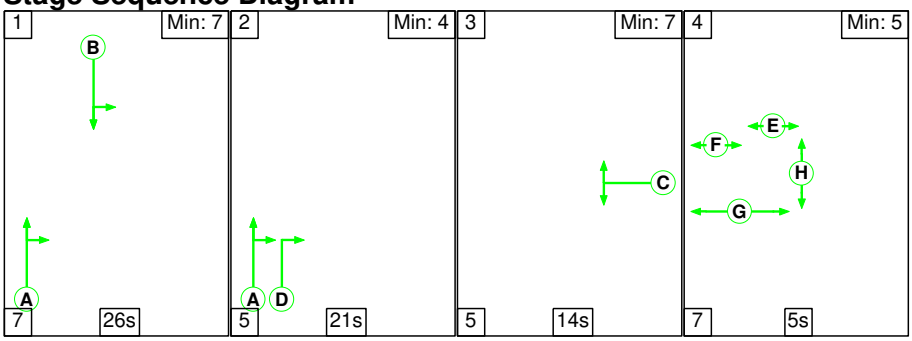
Full Input Data And Results

Lane Saturation Flows

Junction: Lammas Road/Hack Lane								
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 (Lammas Road (S))	3.00	0.00	Y	Arm 4 Ahead	Inf	100.0 %	1915	1915
1/2 (Lammas Road (S))	3.00	0.00	N	Arm 4 Ahead	Inf	0.0 %	2055	2055
1/3 (Lammas Road (S))	3.00	0.00	Y	Arm 5 Right	10.00	100.0 %	1665	1665
2/1 (Lammas Road (N))	3.50	0.00	Y	Arm 5 Left Arm 6 Ahead	10.00 Inf	25.9 % 74.1 %	1892	1892
2/2 (Lammas Road (N))	3.40	0.00	N	Arm 6 Ahead	Inf	100.0 %	2095	2095
3/1 (Hack Lane)	4.00	0.00	Y	Arm 4 Right Arm 6 Left	12.00 10.00	80.1 % 19.9 %	1783	1783
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
6/2	Infinite Saturation Flow						Inf	Inf

Scenario 1: '2030 Bkgd AM' (FG1: '2030 Bkgd AM', Plan 1: 'Network Control Plan 1')

Stage Sequence Diagram

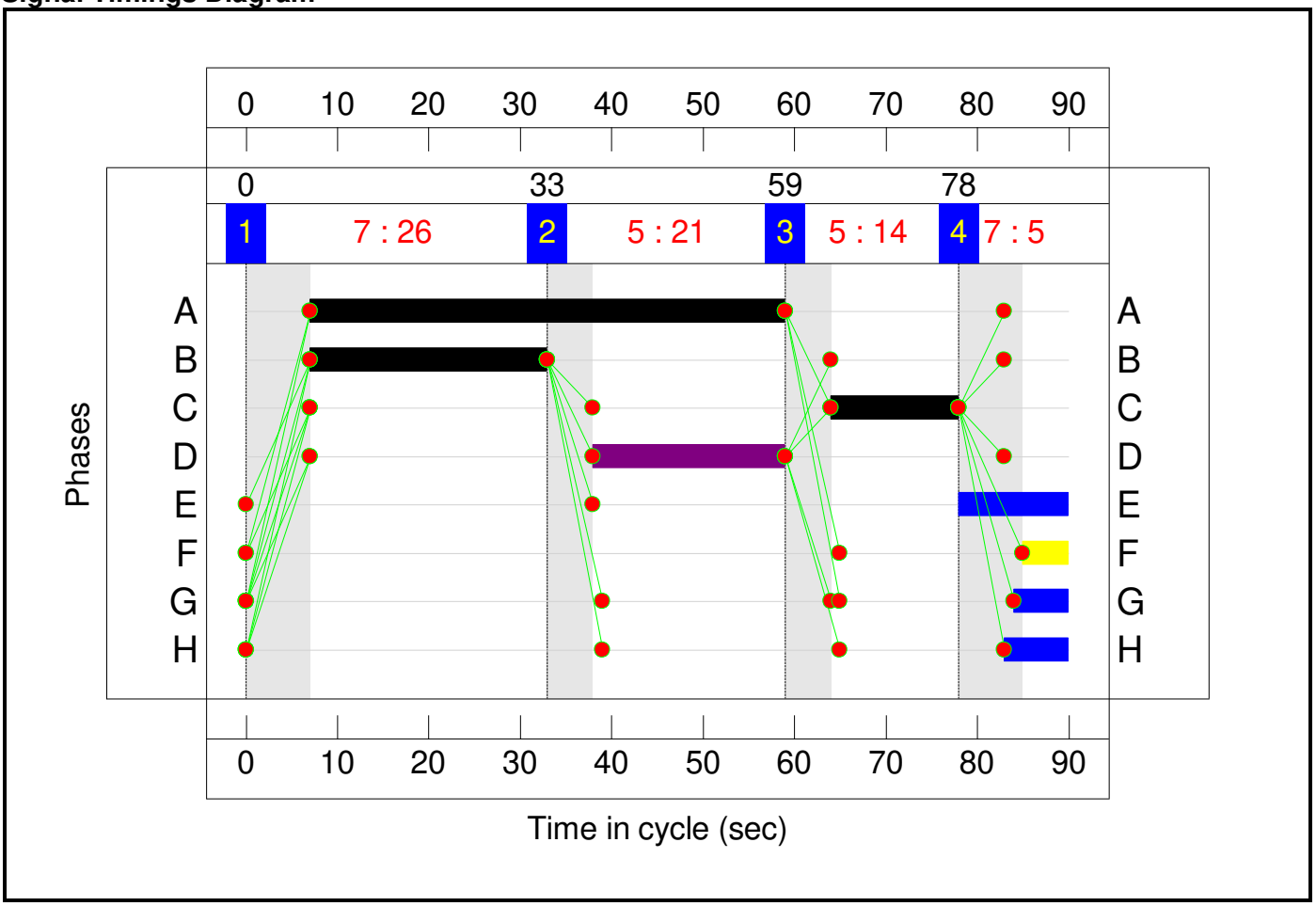


Stage Timings

Stage	1	2	3	4
Duration	26	21	14	5
Change Point	0	33	59	78

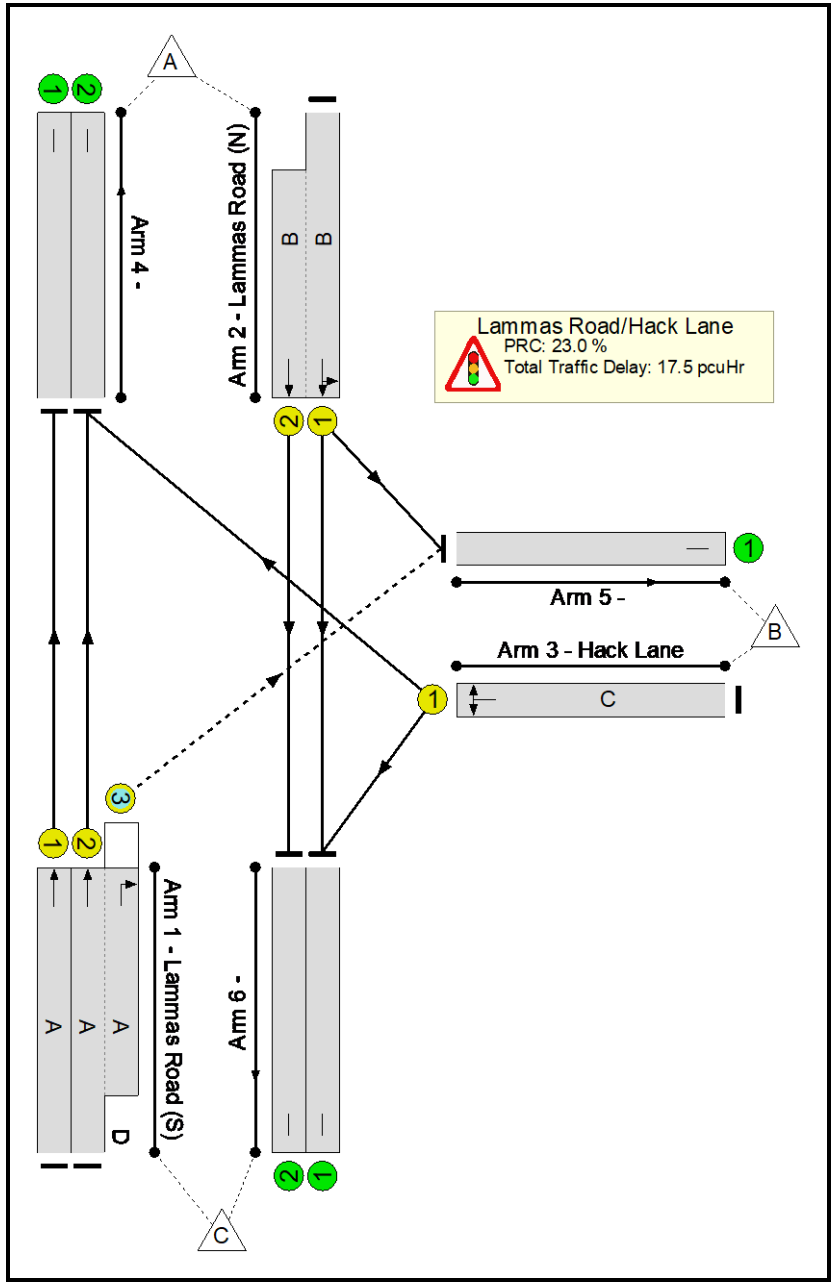
Full Input Data And Results

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: Lammas Road-Hack Lane	**-**	**-**	**N/A**	**-**	**-**		**-**	**-**	**-**	**-**	**-**	**-**	**73.2%**
Lammas Road/Hack Lane	**-**	**-**	**N/A**	**-**	**-**		**-**	**-**	**-**	**-**	**-**	**-**	**73.2%**
1/1	Lammas Road (S) Ahead	U	N/A	N/A	A		1	52	-	673	1915	1128	59.7%
1/2+1/3	Lammas Road (S) Ahead Right	U+O	N/A	N/A	A	D	1	52	21	446	2055:1665	0+610	0.0 : 73.2%
2/1+2/2	Lammas Road (N) Left Ahead	U	N/A	N/A	B		1	26	-	731	1883:2095	476+529	72.7 : 72.7%
3/1	Hack Lane Right Left	U	N/A	N/A	C		1	14	-	210	1789	298	70.4%
4/1		U	N/A	N/A	-		-	-	-	673	Inf	Inf	0.0%
4/2		U	N/A	N/A	-		-	-	-	201	Inf	Inf	0.0%
5/1		U	N/A	N/A	-		-	-	-	546	Inf	Inf	0.0%
6/1		U	N/A	N/A	-		-	-	-	255	Inf	Inf	0.0%
6/2		U	N/A	N/A	-		-	-	-	385	Inf	Inf	0.0%

Full Input Data And Results

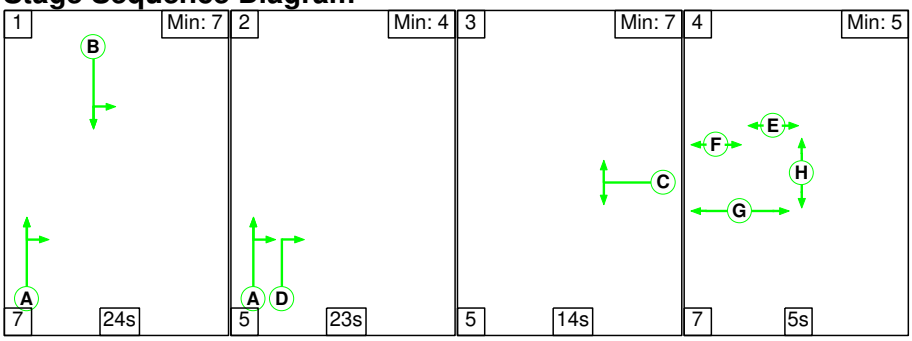
Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network: Lammas Road-Hack Lane	**-**	**-**	**86**	**350**	**10**	**12.3**	**4.6**	**0.7**	**17.5**	**-**	**-**	**-**	**-**
Lammas Road/Hack Lane	**-**	**-**	**86**	**350**	**10**	**12.3**	**4.6**	**0.7**	**17.5**	**-**	**-**	**-**	**-**
1/1	673	673	-	-	-	2.2	0.7	-	2.9	15.7	10.7	0.7	11.4
1/2+1/3	446	446	86	350	10	2.5	1.3	0.7	4.6 (0.0+4.6)	36.9 (0.0:36.9)	9.5	1.3	10.9
2/1+2/2	731	731	-	-	-	5.5	1.3	-	6.8 (3.2+3.6)	33.5 (33.5:33.5)	8.2	1.3	9.6
3/1	210	210	-	-	-	2.1	1.2	-	3.2	55.3	4.9	1.2	6.1
4/1	673	673	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
4/2	201	201	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/1	546	546	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/1	255	255	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/2	385	385	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0

C1 PRC for Signalled Lanes (%): 23.0 Total Delay for Signalled Lanes (pcuHr): 17.53 Cycle Time (s): 90
PRC Over All Lanes (%): 23.0 Total Delay Over All Lanes(pcuHr): 17.53

Full Input Data And Results

Scenario 2: '2030 With Dev AM' (FG3: '2030 With Dev AM', Plan 1: 'Network Control Plan 1')

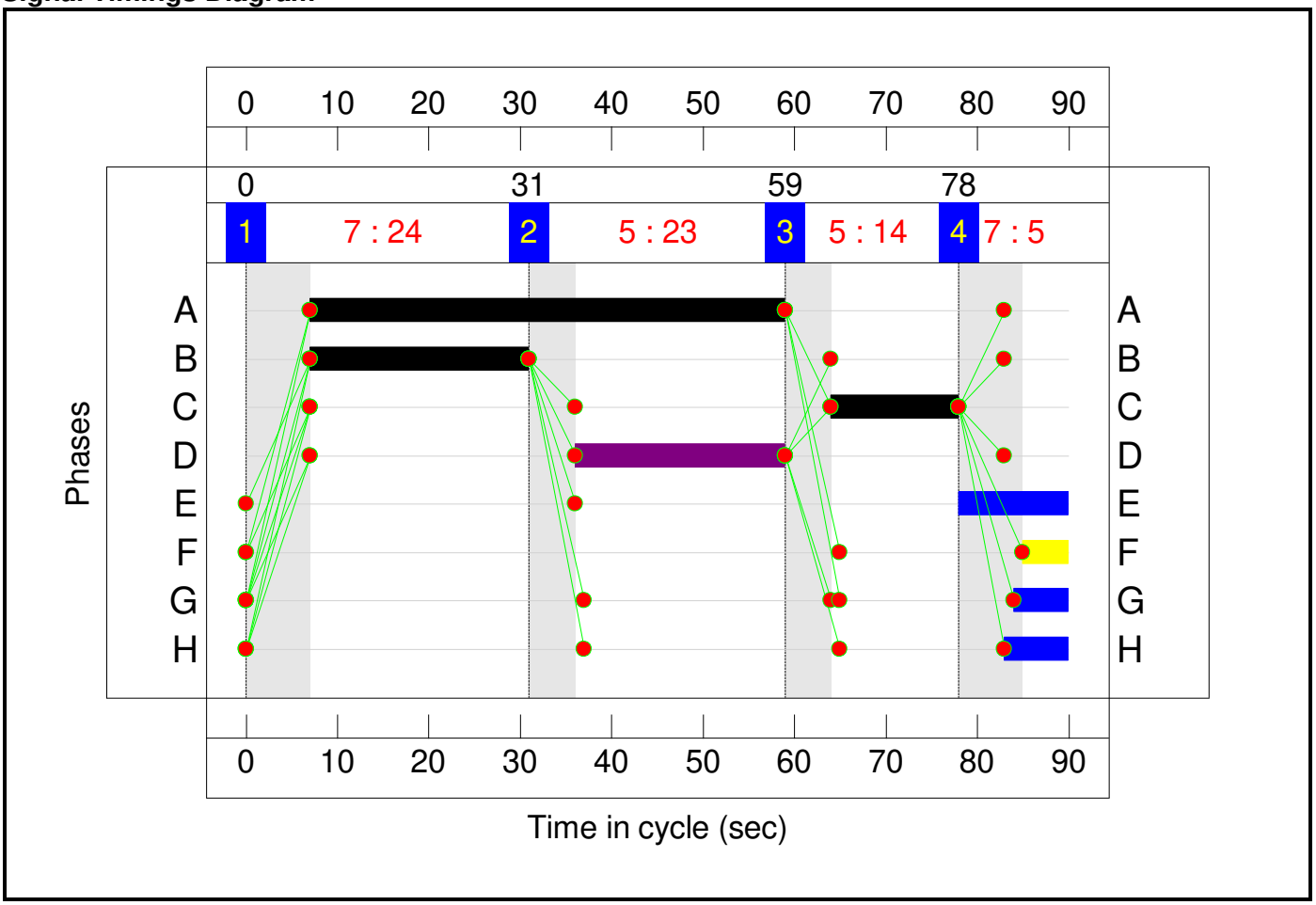
Stage Sequence Diagram



Stage Timings

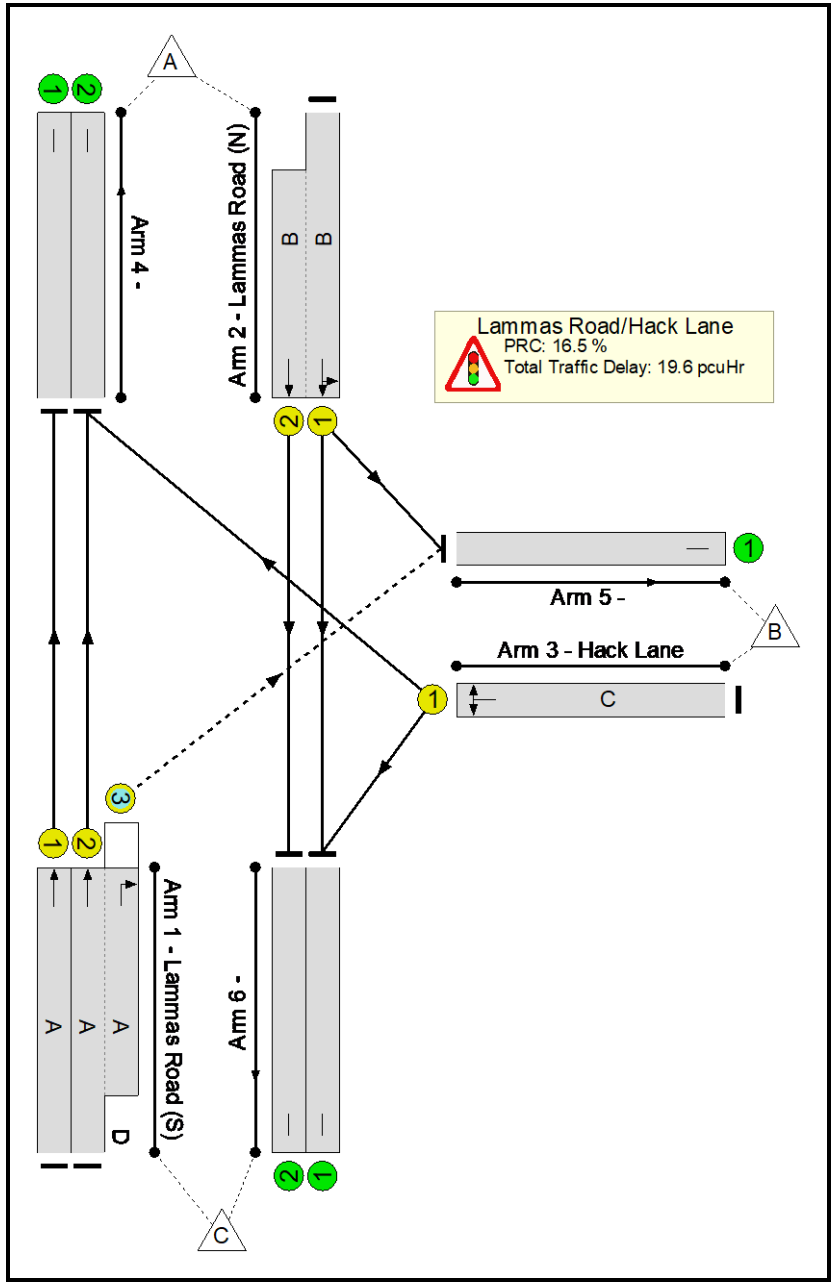
Stage	1	2	3	4
Duration	24	23	14	5
Change Point	0	31	59	78

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: Lammas Road-Hack Lane	**-**	**-**	**N/A**	**-**	**-**		**-**	**-**	**-**	**-**	**-**	**-**	**77.2%**
Lammas Road/Hack Lane	**-**	**-**	**N/A**	**-**	**-**		**-**	**-**	**-**	**-**	**-**	**-**	**77.2%**
1/1	Lammas Road (S) Ahead	U	N/A	N/A	A		1	52	-	701	1915	1128	62.2%
1/2+1/3	Lammas Road (S) Ahead Right	U+O	N/A	N/A	A	D	1	52	23	482	2055:1665	0+631	0.0 : 76.4%
2/1+2/2	Lammas Road (N) Left Ahead	U	N/A	N/A	B		1	24	-	743	1885:2095	456+506	77.2 : 77.2%
3/1	Hack Lane Right Left	U	N/A	N/A	C		1	14	-	225	1787	298	75.5%
4/1		U	N/A	N/A	-		-	-	-	701	Inf	Inf	0.0%
4/2		U	N/A	N/A	-		-	-	-	201	Inf	Inf	0.0%
5/1		U	N/A	N/A	-		-	-	-	582	Inf	Inf	0.0%
6/1		U	N/A	N/A	-		-	-	-	276	Inf	Inf	0.0%
6/2		U	N/A	N/A	-		-	-	-	391	Inf	Inf	0.0%

Full Input Data And Results

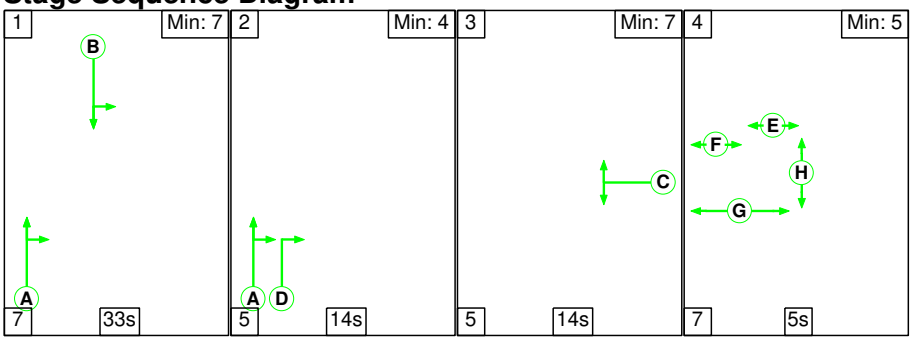
Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network: Lammas Road-Hack Lane	**-**	**-**	**70**	**401**	**11**	**13.3**	**5.6**	**0.7**	**19.6**	**-**	**-**	**-**	**-**
Lammas Road/Hack Lane	**-**	**-**	**70**	**401**	**11**	**13.3**	**5.6**	**0.7**	**19.6**	**-**	**-**	**-**	**-**
1/1	701	701	-	-	-	2.3	0.8	-	3.2	16.2	11.3	0.8	12.1
1/2+1/3	482	482	70	401	11	2.8	1.6	0.7	5.1 (0.0+5.1)	37.9 (0.0:37.9)	10.4	1.6	12.0
2/1+2/2	743	743	-	-	-	6.0	1.7	-	7.6 (3.6+4.0)	37.0 (37.0:37.0)	8.6	1.7	10.3
3/1	225	225	-	-	-	2.2	1.5	-	3.7	59.5	5.3	1.5	6.8
4/1	701	701	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
4/2	201	201	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/1	582	582	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/1	276	276	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/2	391	391	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0

C1 PRC for Signalled Lanes (%): 16.5 Total Delay for Signalled Lanes (pcuHr): 19.58 Cycle Time (s): 90
PRC Over All Lanes (%): 16.5 Total Delay Over All Lanes(pcuHr): 19.58

Full Input Data And Results

Scenario 3: '2030 Bkgd PM' (FG2: '2030 Bkgd PM', Plan 1: 'Network Control Plan 1')

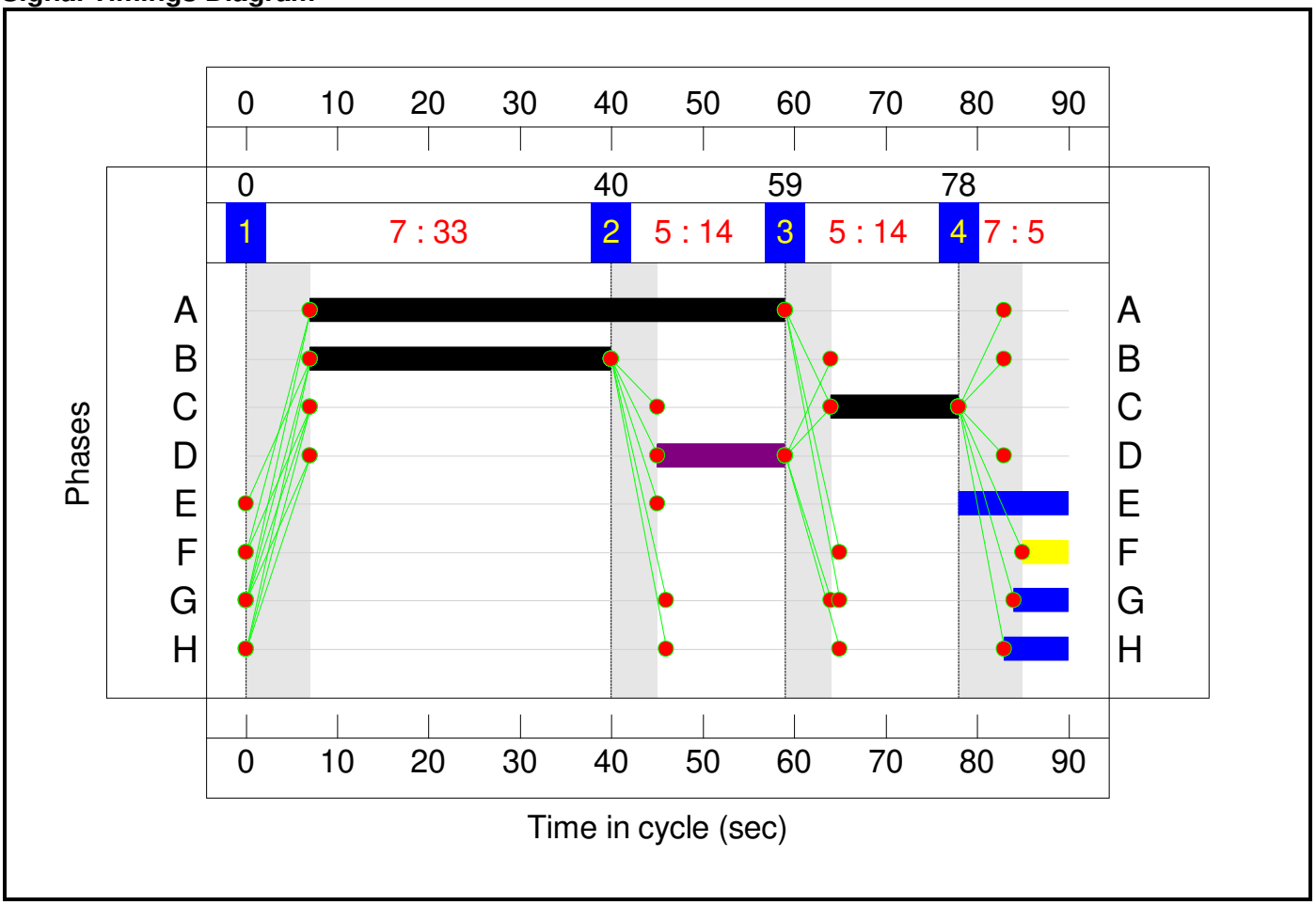
Stage Sequence Diagram



Stage Timings

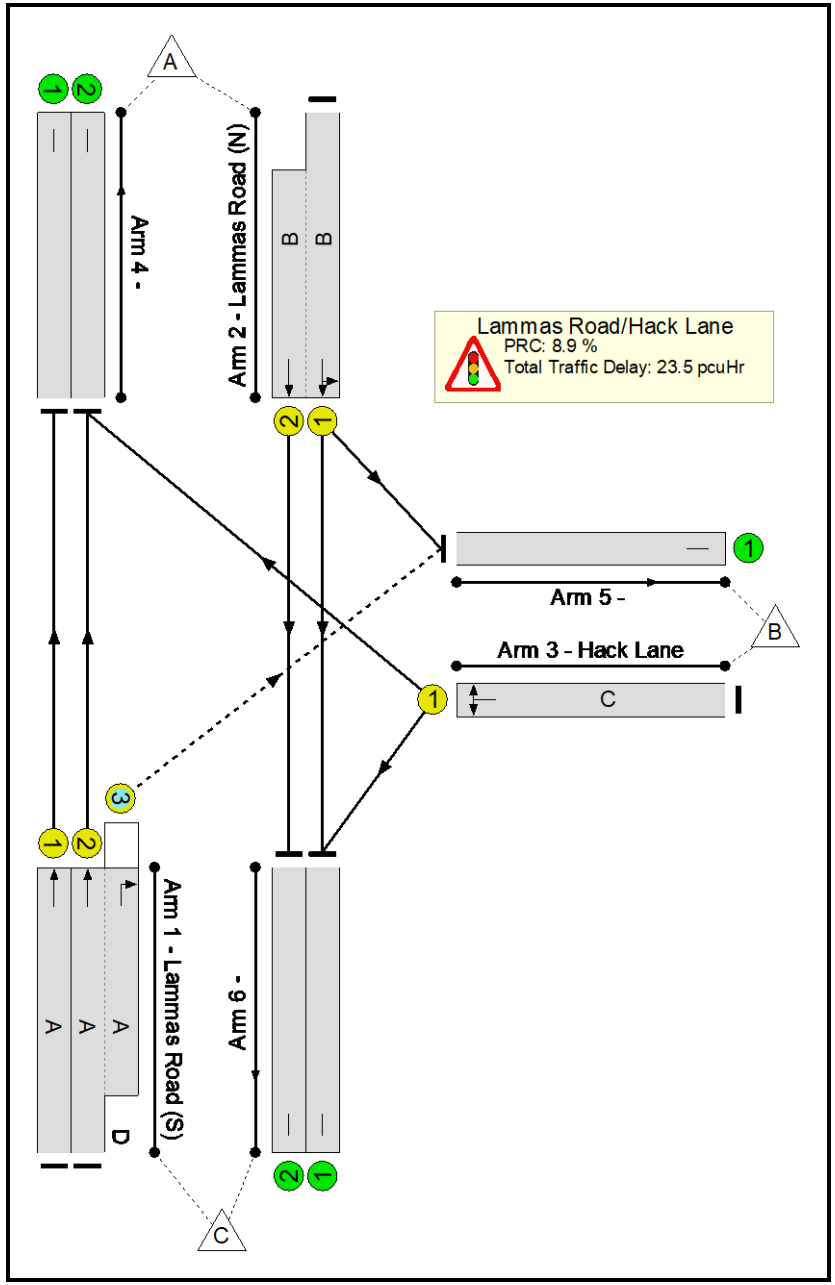
Stage	1	2	3	4
Duration	33	14	14	5
Change Point	0	40	59	78

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: Lammas Road-Hack Lane	**-**	**-**	**N/A**	**-**	**-**		**-**	**-**	**-**	**-**	**-**	**-**	**82.6%**
Lammas Road/Hack Lane	**-**	**-**	**N/A**	**-**	**-**		**-**	**-**	**-**	**-**	**-**	**-**	**82.6%**
1/1	Lammas Road (S) Ahead	U	N/A	N/A	A		1	52	-	899	1915	1128	79.7%
1/2+1/3	Lammas Road (S) Ahead Right	U+O	N/A	N/A	A	D	1	52	14	383	2055:1665	0+464	0.0 : 82.5%
2/1+2/2	Lammas Road (N) Left Ahead	U	N/A	N/A	B		1	33	-	960	1890:2095	551+611	82.6 : 82.6%
3/1	Hack Lane Right Left	U	N/A	N/A	C		1	14	-	231	1788	298	77.5%
4/1		U	N/A	N/A	-		-	-	-	899	Inf	Inf	0.0%
4/2		U	N/A	N/A	-		-	-	-	214	Inf	Inf	0.0%
5/1		U	N/A	N/A	-		-	-	-	504	Inf	Inf	0.0%
6/1		U	N/A	N/A	-		-	-	-	351	Inf	Inf	0.0%
6/2		U	N/A	N/A	-		-	-	-	505	Inf	Inf	0.0%

Full Input Data And Results

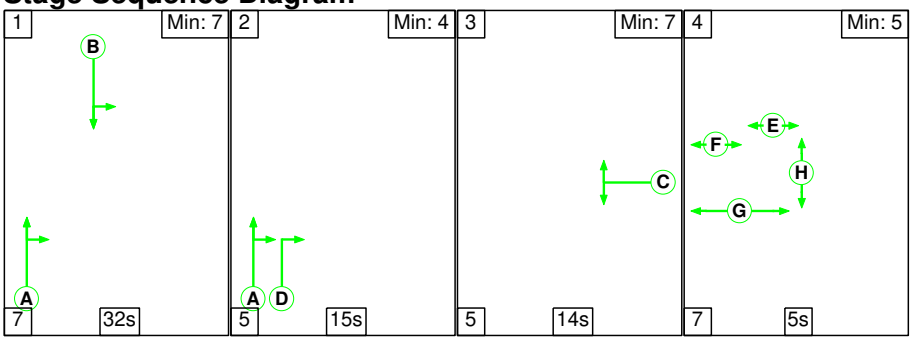
Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network: Lammas Road-Hack Lane	**-**	**-**	**70**	**305**	**9**	**14.5**	**8.1**	**0.9**	**23.5**	**-**	**-**	**-**	**-**
Lammas Road/Hack Lane	**-**	**-**	**70**	**305**	**9**	**14.5**	**8.1**	**0.9**	**23.5**	**-**	**-**	**-**	**-**
1/1	899	899	-	-	-	3.6	1.9	-	5.5	22.1	17.2	1.9	19.2
1/2+1/3	383	383	70	305	9	2.5	2.2	0.9	5.6 (0.0+5.6)	52.5 (0.0:52.5)	8.9	2.2	11.2
2/1+2/2	960	960	-	-	-	6.1	2.3	-	8.4 (4.0+4.4)	31.7 (31.7:31.7)	10.2	2.3	12.6
3/1	231	231	-	-	-	2.3	1.6	-	3.9	61.5	5.5	1.6	7.2
4/1	899	899	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
4/2	214	214	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/1	504	504	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/1	351	351	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/2	505	505	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0

C1 PRC for Signalled Lanes (%): 8.9 Total Delay for Signalled Lanes (pcuHr): 23.49 Cycle Time (s): 90
PRC Over All Lanes (%): 8.9 Total Delay Over All Lanes(pcuHr): 23.49

Full Input Data And Results

Scenario 4: '2030 With Dev PM' (FG4: '2030 With Dev PM', Plan 1: 'Network Control Plan 1')

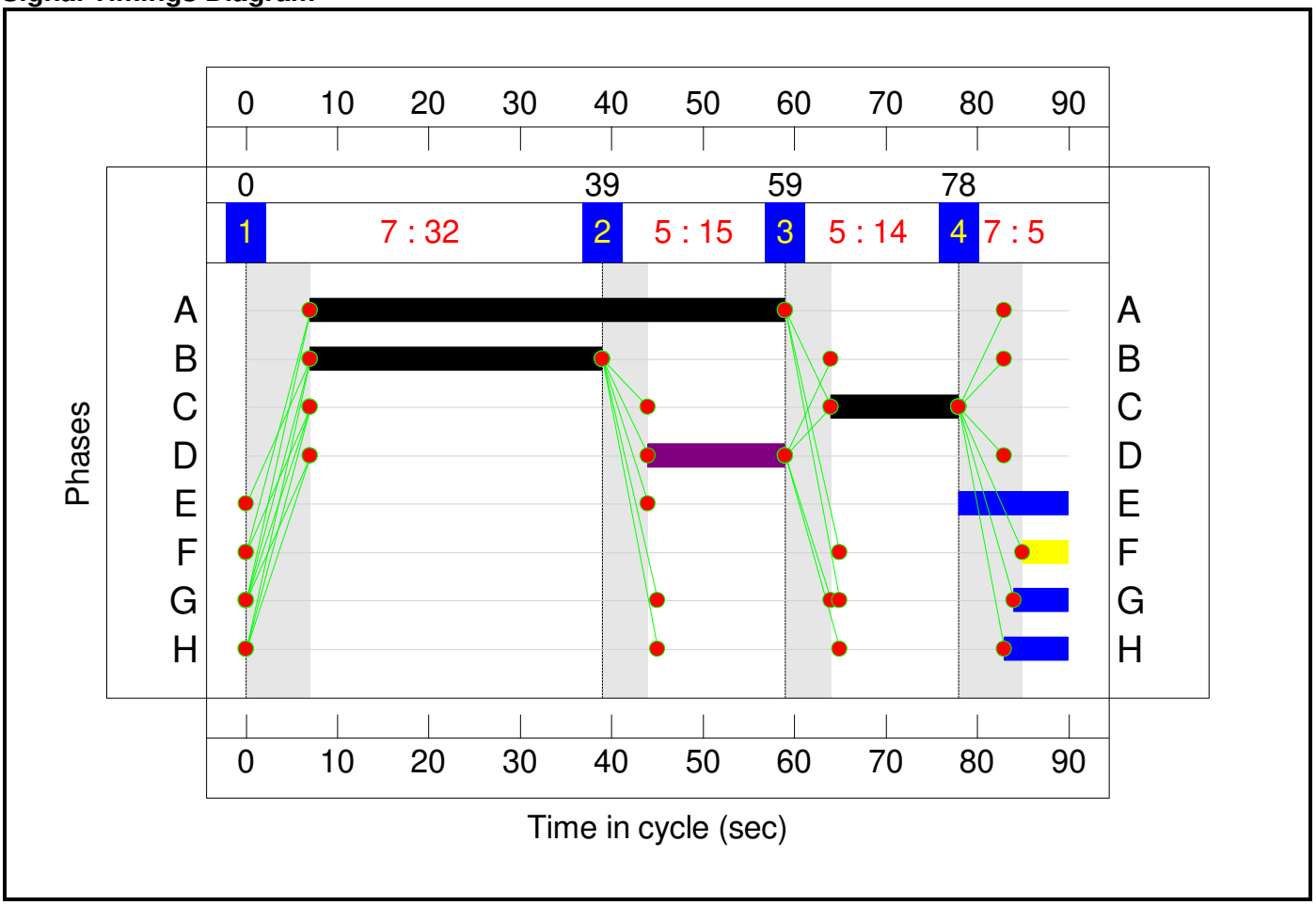
Stage Sequence Diagram



Stage Timings

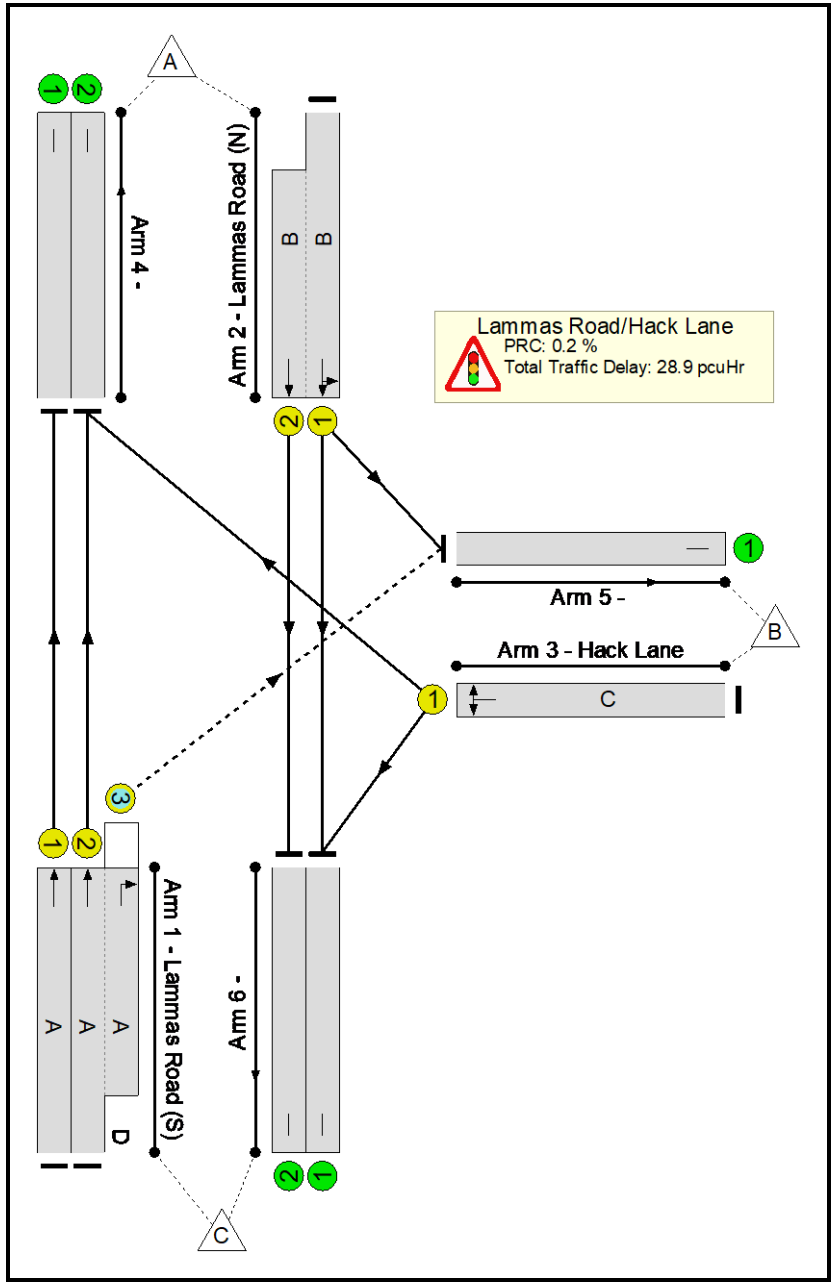
Stage	1	2	3	4
Duration	32	15	14	5
Change Point	0	39	59	78

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: Lammas Road-Hack Lane	**-**	**-**	**N/A**	**-**	**-**		**-**	**-**	**-**	**-**	**-**	**-**	**89.8%**
Lammas Road/Hack Lane	**-**	**-**	**N/A**	**-**	**-**		**-**	**-**	**-**	**-**	**-**	**-**	**89.8%**
1/1	Lammas Road (S) Ahead	U	N/A	N/A	A		1	52	-	917	1915	1128	81.3%
1/2+1/3	Lammas Road (S) Ahead Right	U+O	N/A	N/A	A	D	1	52	15	405	2055:1665	0+459	0.0 : 88.3%
2/1+2/2	Lammas Road (N) Left Ahead	U	N/A	N/A	B		1	32	-	988	1892:2095	540+600	86.7 : 86.7%
3/1	Hack Lane Right Left	U	N/A	N/A	C		1	14	-	267	1783	297	89.8%
4/1		U	N/A	N/A	-		-	-	-	917	Inf	Inf	0.0%
4/2		U	N/A	N/A	-		-	-	-	214	Inf	Inf	0.0%
5/1		U	N/A	N/A	-		-	-	-	526	Inf	Inf	0.0%
6/1		U	N/A	N/A	-		-	-	-	400	Inf	Inf	0.0%
6/2		U	N/A	N/A	-		-	-	-	520	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: Lammas Road-Hack Lane	**-**	**-**	**46**	**333**	**26**	**15.9**	**12.2**	**0.9**	**28.9**	**-**	**-**	**-**	**-**
Lammas Road/Hack Lane	**-**	**-**	**46**	**333**	**26**	**15.9**	**12.2**	**0.9**	**28.9**	**-**	**-**	**-**	**-**
1/1	917	917	-	-	-	3.7	2.1	-	5.9	23.0	17.8	2.1	20.0
1/2+1/3	405	405	46	333	26	2.8	3.4	0.9	7.1 (0.0+7.1)	62.8 (0.0:62.8)	9.7	3.4	13.0
2/1+2/2	988	988	-	-	-	6.6	3.1	-	9.7 (4.6+5.1)	35.4 (35.5:35.4)	11.8	3.1	14.9
3/1	267	267	-	-	-	2.7	3.6	-	6.3	85.0	6.5	3.6	10.1
4/1	917	917	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
4/2	214	214	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/1	526	526	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/1	400	400	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/2	520	520	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0

C1 PRC for Signalled Lanes (%): 0.2 Total Delay for Signalled Lanes (pcuHr): 28.95 Cycle Time (s): 90
PRC Over All Lanes (%): 0.2 Total Delay Over All Lanes(pcuHr): 28.95

APPENDIX K

JUNCTION 7 ARCADY OUTPUTS

Junctions 9

ARCADY 9 - Roundabout Module

Version: 9.5.1.7462
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Filename: J7 Kirkby Road-Spring Road.j9
Path: D:\Dropbox (ADC Infrastructure)\!!! ADC Projects\ADC1032 Ashland Road (Bellway)\Calculations
Report generation date: 07/10/2020 13:39:26

»Traffic Flows - 2030 Bkgd, AM
»Traffic Flows - 2030 Bkgd, PM
»Traffic Flows - 2030 With Dev, AM
»Traffic Flows - 2030 With Dev, PM

Summary of junction performance

	AM			PM		
	Queue (Veh)	Delay (s)	RFC	Queue (Veh)	Delay (s)	RFC
	Traffic Flows - 2030 Bkgd					
Arm 1	1.2	7.20	0.55	1.3	7.10	0.56
Arm 2	0.6	4.77	0.36	1.8	8.65	0.65
Arm 3	2.1	10.67	0.68	2.1	11.86	0.68
	Traffic Flows - 2030 With Dev					
Arm 1	1.4	7.82	0.58	1.4	7.39	0.58
Arm 2	0.6	4.90	0.37	2.0	9.35	0.67
Arm 3	2.2	11.07	0.69	2.3	13.07	0.71

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	J7 Kirkby Road-Spring Road
Location	Sutton in Ashfield
Site number	
Date	16/09/2020
Version	v 1
Status	Preliminary
Identifier	M Tatler
Client	Bellway
Jobnumber	ADC1032
Enumerator	M Tatler
Description	

Units

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

Analysis Options

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	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D1	2030 Bkgd	AM	ONE HOUR	07:45	09:15	15
D2	2030 Bkgd	PM	ONE HOUR	16:45	18:15	15
D3	2030 With Dev	AM	ONE HOUR	07:45	09:15	15
D4	2030 With Dev	PM	ONE HOUR	16:45	18:15	15

Analysis Set Details

ID	Name	Network flow scaling factor (%)
A1	Traffic Flows	100.000

Traffic Flows - 2030 Bkgd, AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	Kirkby Road-Spring Road	Standard Roundabout		1, 2, 3	7.99	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Name	Description
1	Spring Road	
2	Kirkby Road (N)	
3	Kirkby Road (S)	

Roundabout Geometry

Arm	V - Approach road half-width (m)	E - Entry width (m)	l' - Effective flare length (m)	R - Entry radius (m)	D - Inscribed circle diameter (m)	PHI - Conflict (entry) angle (deg)	Exit only
1	4.00	4.60	1.8	29.9	26.6	26.0	
2	4.70	4.70	0.0	999.0	26.6	38.0	
3	3.80	4.40	4.8	78.5	26.6	53.0	

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Arm	Final slope	Final intercept (PCU/hr)
1	0.596	1339
2	0.616	1453
3	0.550	1226

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

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D1	2030 Bkgd	AM	ONE HOUR	07:45	09:15	15

Vehicle mix source	PCU Factor for a HV (PCU)
HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
1		✓	548	100.000
2		✓	389	100.000
3		✓	649	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		1	2	3
From	1	0	246	302
	2	251	0	138
	3	357	292	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		1	2	3
From	1	0	4	4
	2	7	0	1
	3	2	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS
1	0.55	7.20	1.2	A
2	0.36	4.77	0.6	A
3	0.68	10.67	2.1	B

Traffic Flows - 2030 Bkgd, PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	Kirkby Road-Spring Road	Standard Roundabout		1, 2, 3	9.15	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D2	2030 Bkgd	PM	ONE HOUR	16:45	18:15	15

Vehicle mix source	PCU Factor for a HV (PCU)
HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
1		✓	596	100.000
2		✓	695	100.000
3		✓	584	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		1	2	3
From	1	0	228	368
	2	428	0	267
	3	378	206	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		1	2	3
From	1	0	4	3
	2	2	0	0
	3	2	1	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS
1	0.56	7.10	1.3	A
2	0.65	8.65	1.8	A
3	0.68	11.86	2.1	B

Traffic Flows - 2030 With Dev, AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	Kirkby Road-Spring Road	Standard Roundabout		1, 2, 3	8.37	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D3	2030 With Dev	AM	ONE HOUR	07:45	09:15	15

Vehicle mix source	PCU Factor for a HV (PCU)
HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
1		✓	584	100.000
2		✓	398	100.000
3		✓	655	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		1	2	3
From	1	0	268	316
	2	260	0	138
	3	363	292	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		1	2	3
From	1	0	4	4
	2	7	0	1
	3	2	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS
1	0.58	7.82	1.4	A
2	0.37	4.90	0.6	A
3	0.69	11.07	2.2	B

Traffic Flows - 2030 With Dev, PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	Kirkby Road-Spring Road	Standard Roundabout		1, 2, 3	9.86	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D4	2030 With Dev	PM	ONE HOUR	16:45	18:15	15

Vehicle mix source	PCU Factor for a HV (PCU)
HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
1		✓	618	100.000
2		✓	718	100.000
3		✓	597	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		1	2	3
From	1	0	242	376
	2	451	0	267
	3	391	206	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		1	2	3
From	1	0	3	3
	2	2	0	0
	3	2	1	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max LOS
1	0.58	7.39	1.4	A
2	0.67	9.35	2.0	A
3	0.71	13.07	2.3	B

APPENDIX L

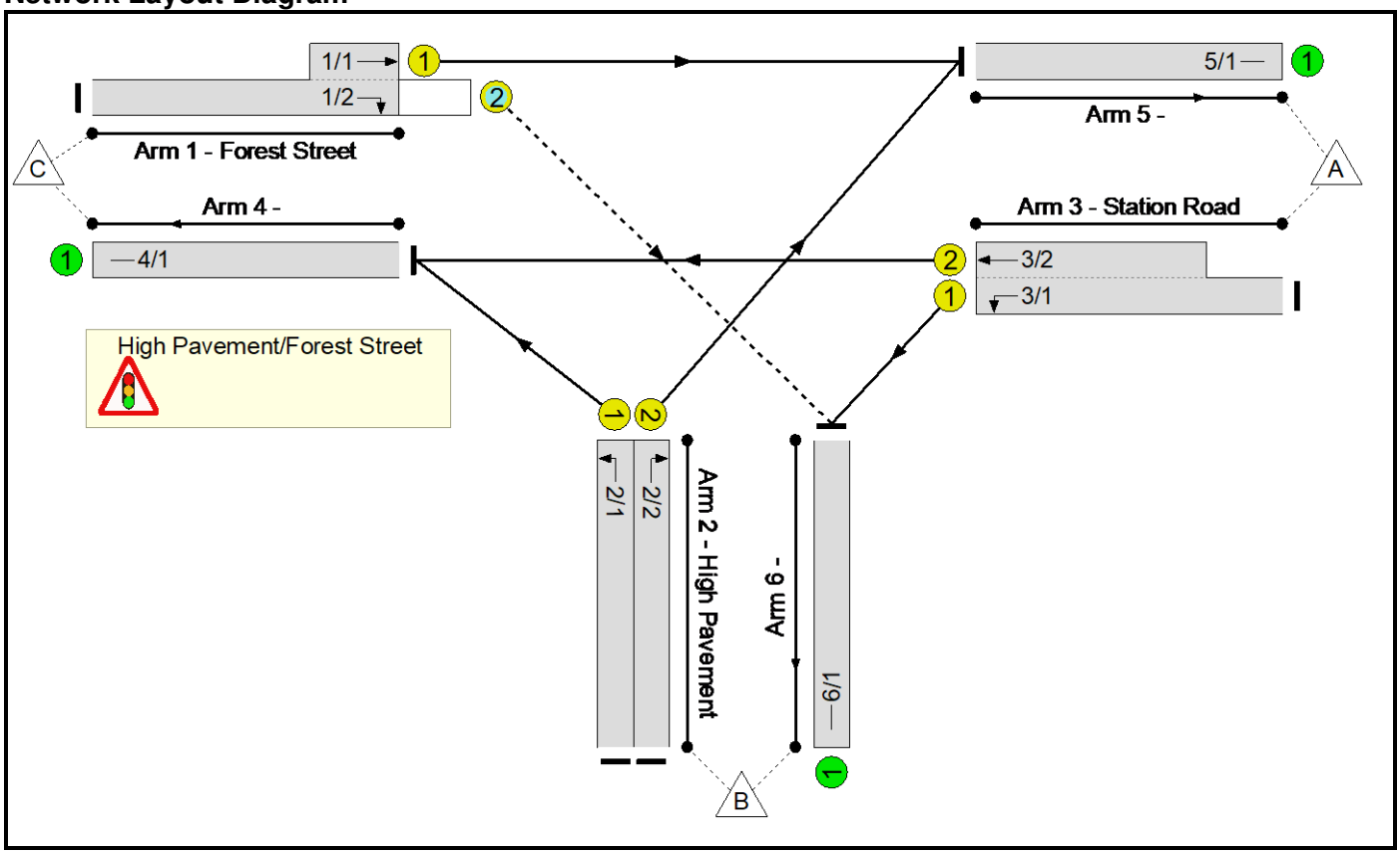
JUNCTION 8 LINSIG OUTPUTS

Full Input Data And Results

User and Project Details

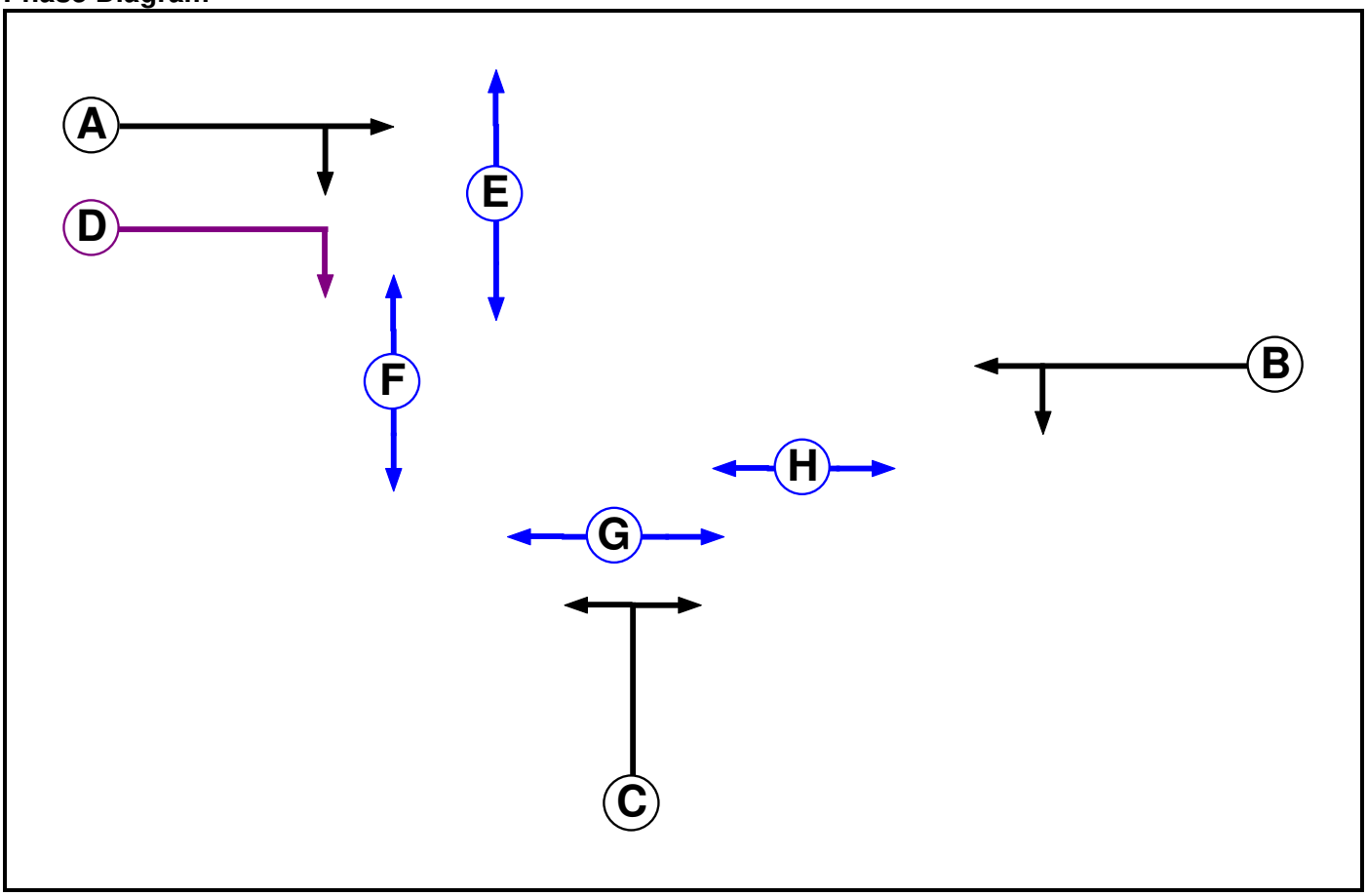
Project:	**Ashland Road, Sutton in Ashfield**
Title:	**High Pavement - Forest Street**
Location:	
Client:	Bellway Homes
Additional detail:	
File name:	J8 High Pavement-Forest Street.lsg3x
Author:	
Company:	ADC Infrastructure Limited
Address:	King Edward Court, King Edward Street, Nottingham

Network Layout Diagram



Full Input Data And Results

Phase Diagram



Phase Input Data

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

Full Input Data And Results

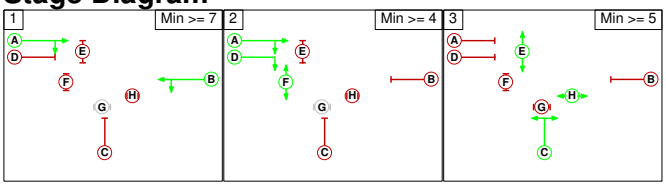
Phase Intergreens Matrix

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

Phases in Stage

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

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		10	5
2	6		10
3	6	7	

Full Input Data And Results

Give-Way Lane Input Data

Junction: High Pavement/Forest Street											
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 (Forest Street)	6/1 (Right)	1439	0	3/1	1.09	All	3.00	-	0.50	3	3.00
				3/2	1.09	All					

Full Input Data And Results

Lane Input Data

Junction: High Pavement/Forest Street												
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 (Forest Street)	U	A	2	3	3.7	Geom	-	3.00	0.00	Y	Arm 5 Ahead	Inf
1/2 (Forest Street)	O	A D	2	3	60.0	Geom	-	3.00	0.00	Y	Arm 6 Right	15.00
2/1 (High Pavement)	U	C	2	3	60.0	Geom	-	3.25	0.00	Y	Arm 4 Left	12.00
2/2 (High Pavement)	U	C	2	3	60.0	Geom	-	3.25	0.00	Y	Arm 5 Right	15.00
3/1 (Station Road)	U	B	2	3	60.0	Geom	-	3.25	0.00	Y	Arm 6 Left	10.00
3/2 (Station Road)	U	B	2	3	9.6	Geom	-	3.25	0.00	N	Arm 4 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: '2030 Bkgd AM'	08:00	09:00	01:00	
2: '2030 Bkgd PM'	17:00	18:00	01:00	
3: '2030 With Dev AM'	08:00	09:00	01:00	
4: '2030 With Dev PM'	17:00	18:00	01:00	

Scenario 1: '2030 Bkgd AM' (FG1: '2030 Bkgd AM', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired

Desired Flow :

		Destination			
		A	B	C	Tot.
Origin	A	0	395	294	689
	B	511	0	327	838
	C	274	258	0	532
	Tot.	785	653	621	2059

Full Input Data And Results

Traffic Lane Flows

Lane	Scenario 1: 2030 Bkgd AM
Junction: High Pavement/Forest Street	
1/1 (short)	274
1/2 (with short)	532(In) 258(Out)
2/1	327
2/2	511
3/1 (with short)	689(In) 395(Out)
3/2 (short)	294
4/1	621
5/1	785
6/1	653

Lane Saturation Flows

Junction: High Pavement/Forest Street								
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 (Forest Street)	3.00	0.00	Y	Arm 5 Ahead	Inf	100.0 %	1915	1915
1/2 (Forest Street)	3.00	0.00	Y	Arm 6 Right	15.00	100.0 %	1741	1741
2/1 (High Pavement)	3.25	0.00	Y	Arm 4 Left	12.00	100.0 %	1724	1724
2/2 (High Pavement)	3.25	0.00	Y	Arm 5 Right	15.00	100.0 %	1764	1764
3/1 (Station Road)	3.25	0.00	Y	Arm 6 Left	10.00	100.0 %	1687	1687
3/2 (Station Road)	3.25	0.00	N	Arm 4 Ahead	Inf	100.0 %	2080	2080
4/1	Infinite Saturation Flow						Inf	Inf
5/1	Infinite Saturation Flow						Inf	Inf
6/1	Infinite Saturation Flow						Inf	Inf

Scenario 2: '2030 With Dev AM' (FG3: '2030 With Dev AM', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired

Desired Flow :

		Destination			
		A	B	C	Tot.
Origin	A	0	404	294	698
	B	533	0	327	860
	C	274	258	0	532
	Tot.	807	662	621	2090

Full Input Data And Results

Traffic Lane Flows

Lane	Scenario 2: 2030 With Dev AM
Junction: High Pavement/Forest Street	
1/1 (short)	274
1/2 (with short)	532(In) 258(Out)
2/1	327
2/2	533
3/1 (with short)	698(In) 404(Out)
3/2 (short)	294
4/1	621
5/1	807
6/1	662

Lane Saturation Flows

Junction: High Pavement/Forest Street								
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 (Forest Street)	3.00	0.00	Y	Arm 5 Ahead	Inf	100.0 %	1915	1915
1/2 (Forest Street)	3.00	0.00	Y	Arm 6 Right	15.00	100.0 %	1741	1741
2/1 (High Pavement)	3.25	0.00	Y	Arm 4 Left	12.00	100.0 %	1724	1724
2/2 (High Pavement)	3.25	0.00	Y	Arm 5 Right	15.00	100.0 %	1764	1764
3/1 (Station Road)	3.25	0.00	Y	Arm 6 Left	10.00	100.0 %	1687	1687
3/2 (Station Road)	3.25	0.00	N	Arm 4 Ahead	Inf	100.0 %	2080	2080
4/1	Infinite Saturation Flow						Inf	Inf
5/1	Infinite Saturation Flow						Inf	Inf
6/1	Infinite Saturation Flow						Inf	Inf

Scenario 3: '2030 Bkgd PM' (FG2: '2030 Bkgd PM', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired

Desired Flow :

		Destination			
		A	B	C	Tot.
Origin	A	0	590	302	892
	B	394	0	314	708
	C	256	324	0	580
	Tot.	650	914	616	2180

Full Input Data And Results

Traffic Lane Flows

Lane	Scenario 3: 2030 Bkgd PM
Junction: High Pavement/Forest Street	
1/1 (short)	256
1/2 (with short)	580(In) 324(Out)
2/1	314
2/2	394
3/1 (with short)	892(In) 590(Out)
3/2 (short)	302
4/1	616
5/1	650
6/1	914

Lane Saturation Flows

Junction: High Pavement/Forest Street								
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 (Forest Street)	3.00	0.00	Y	Arm 5 Ahead	Inf	100.0 %	1915	1915
1/2 (Forest Street)	3.00	0.00	Y	Arm 6 Right	15.00	100.0 %	1741	1741
2/1 (High Pavement)	3.25	0.00	Y	Arm 4 Left	12.00	100.0 %	1724	1724
2/2 (High Pavement)	3.25	0.00	Y	Arm 5 Right	15.00	100.0 %	1764	1764
3/1 (Station Road)	3.25	0.00	Y	Arm 6 Left	10.00	100.0 %	1687	1687
3/2 (Station Road)	3.25	0.00	N	Arm 4 Ahead	Inf	100.0 %	2080	2080
4/1	Infinite Saturation Flow						Inf	Inf
5/1	Infinite Saturation Flow						Inf	Inf
6/1	Infinite Saturation Flow						Inf	Inf

Scenario 4: '2030 With Dev PM' (FG4: '2030 With Dev PM', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired

Desired Flow :

		Destination			
		A	B	C	Tot.
Origin	A	0	613	302	915
	B	408	0	314	722
	C	256	324	0	580
	Tot.	664	937	616	2217

Full Input Data And Results

Traffic Lane Flows

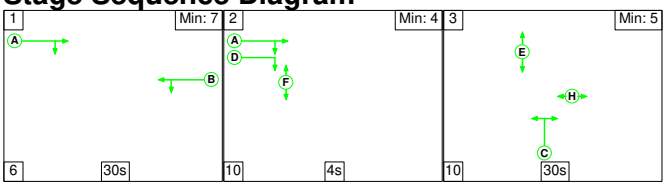
Lane	Scenario 4: 2030 With Dev PM
Junction: High Pavement/Forest Street	
1/1 (short)	256
1/2 (with short)	580(In) 324(Out)
2/1	314
2/2	408
3/1 (with short)	915(In) 613(Out)
3/2 (short)	302
4/1	616
5/1	664
6/1	937

Lane Saturation Flows

Junction: High Pavement/Forest Street								
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 (Forest Street)	3.00	0.00	Y	Arm 5 Ahead	Inf	100.0 %	1915	1915
1/2 (Forest Street)	3.00	0.00	Y	Arm 6 Right	15.00	100.0 %	1741	1741
2/1 (High Pavement)	3.25	0.00	Y	Arm 4 Left	12.00	100.0 %	1724	1724
2/2 (High Pavement)	3.25	0.00	Y	Arm 5 Right	15.00	100.0 %	1764	1764
3/1 (Station Road)	3.25	0.00	Y	Arm 6 Left	10.00	100.0 %	1687	1687
3/2 (Station Road)	3.25	0.00	N	Arm 4 Ahead	Inf	100.0 %	2080	2080
4/1	Infinite Saturation Flow						Inf	Inf
5/1	Infinite Saturation Flow						Inf	Inf
6/1	Infinite Saturation Flow						Inf	Inf

Scenario 1: '2030 Bkgd AM' (FG1: '2030 Bkgd AM', Plan 1: 'Network Control Plan 1')

Stage Sequence Diagram

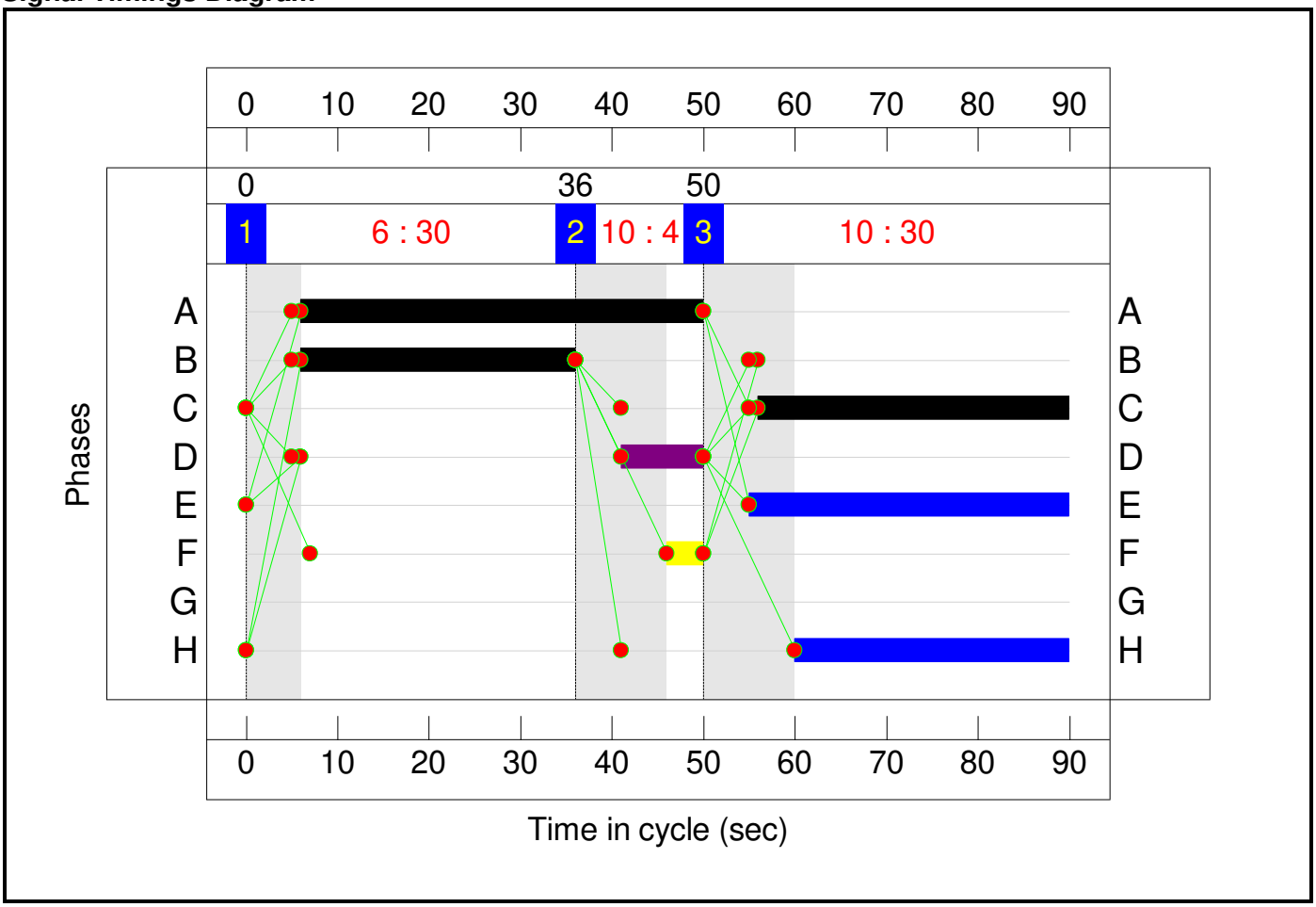


Full Input Data And Results

Stage Timings

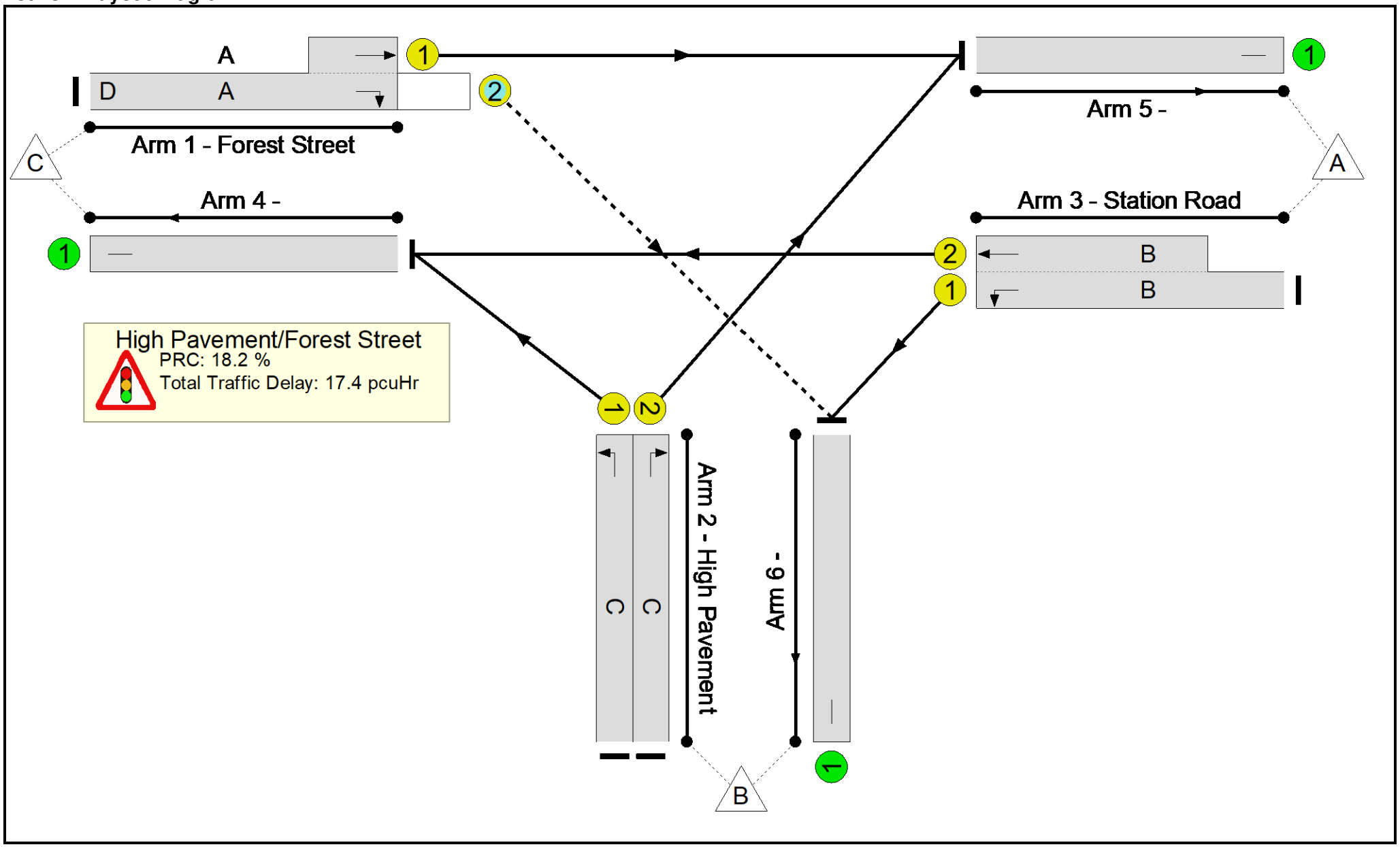
Stage	1	2	3
Duration	30	4	30
Change Point	0	36	50

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: High Pavement - Forest Street	**-**	**-**	**N/A**	**-**	**-**		**-**	**-**	**-**	**-**	**-**	**-**	**76.2%**
High Pavement/Forest Street	**-**	**-**	**N/A**	**-**	**-**		**-**	**-**	**-**	**-**	**-**	**-**	**76.2%**
1/2+1/1	Forest Street Ahead Right	O+U	N/A	N/A	A	D	1	44	9	532	1741:1915	411+436	62.8 : 62.8%
2/1	High Pavement Left	U	N/A	N/A	C		1	34	-	327	1724	670	48.8%
2/2	High Pavement Right	U	N/A	N/A	C		1	34	-	511	1764	686	74.5%
3/1+3/2	Station Road Ahead Left	U	N/A	N/A	B		1	30	-	689	1687:2080	519+386	76.2 : 76.2%
4/1		U	N/A	N/A	-		-	-	-	621	Inf	Inf	0.0%
5/1		U	N/A	N/A	-		-	-	-	785	Inf	Inf	0.0%
6/1		U	N/A	N/A	-		-	-	-	653	Inf	Inf	0.0%

Full Input Data And Results

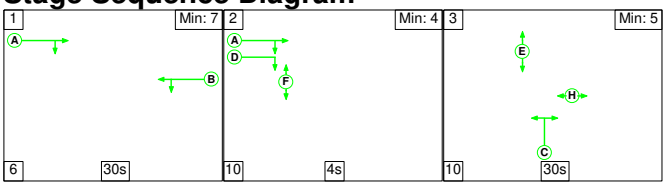
Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network: High Pavement - Forest Street	**-**	**-**	**99**	**151**	**9**	**12.1**	**4.3**	**1.0**	**17.4**	**-**	**-**	**-**	**-**
High Pavement/Forest Street	**-**	**-**	**99**	**151**	**9**	**12.1**	**4.3**	**1.0**	**17.4**	**-**	**-**	**-**	**-**
1/2+1/1	532	532	99	151	9	2.3	0.8	1.0	4.1 (2.6+1.4)	27.4 (36.5:18.9)	5.6	0.8	6.4
2/1	327	327	-	-	-	1.9	0.5	-	2.4	26.0	6.1	0.5	6.6
2/2	511	511	-	-	-	3.4	1.4	-	4.8	33.8	10.9	1.4	12.4
3/1+3/2	689	689	-	-	-	4.6	1.6	-	6.2 (3.7+2.5)	32.3 (33.5:30.8)	8.4	1.6	10.0
4/1	621	621	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/1	785	785	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/1	653	653	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0

C1 PRC for Signalled Lanes (%): 18.2 Total Delay for Signalled Lanes (pcuHr): 17.39 Cycle Time (s): 90
PRC Over All Lanes (%): 18.2 Total Delay Over All Lanes(pcuHr): 17.39

Full Input Data And Results

Scenario 2: '2030 With Dev AM' (FG3: '2030 With Dev AM', Plan 1: 'Network Control Plan 1')

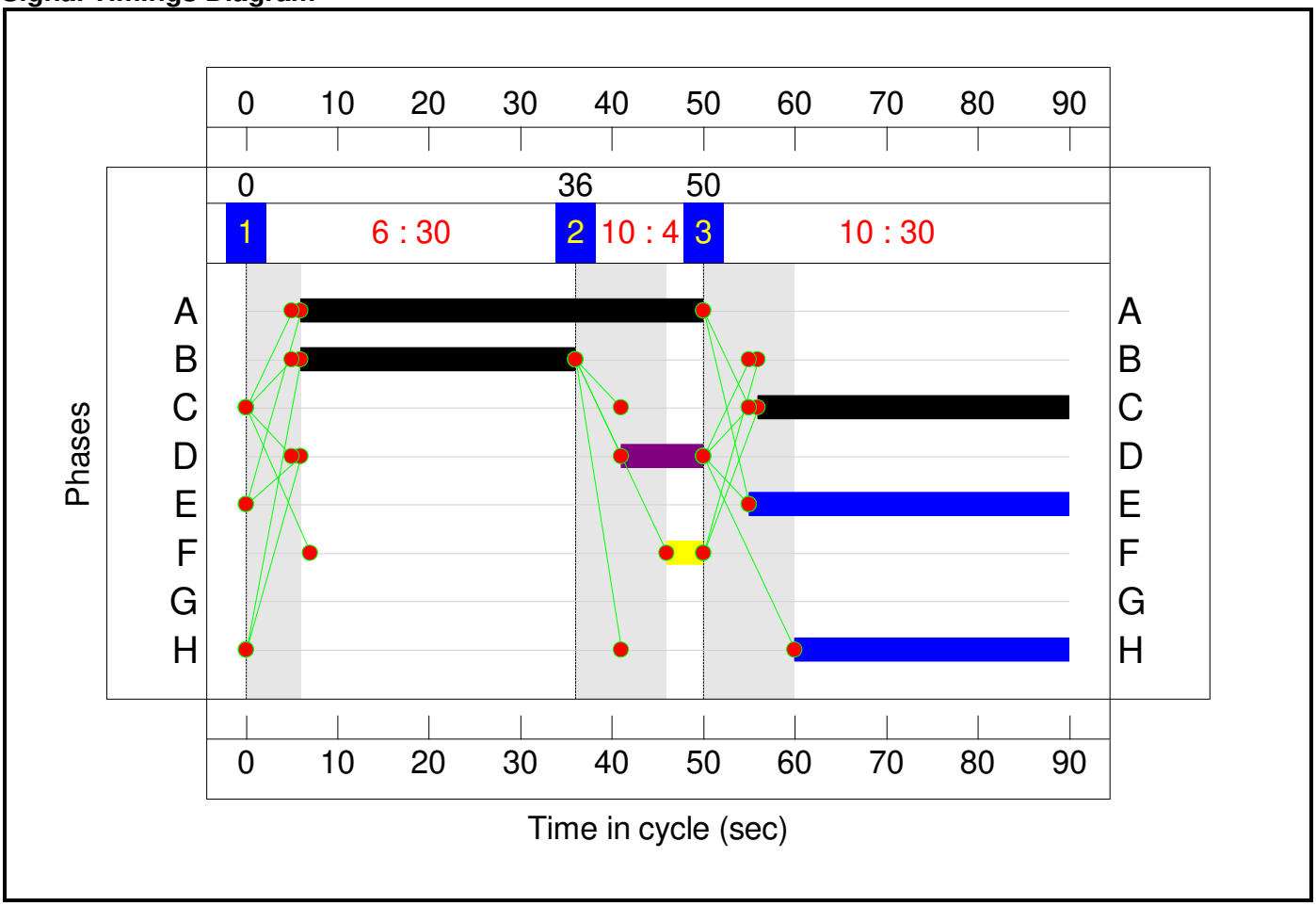
Stage Sequence Diagram



Stage Timings

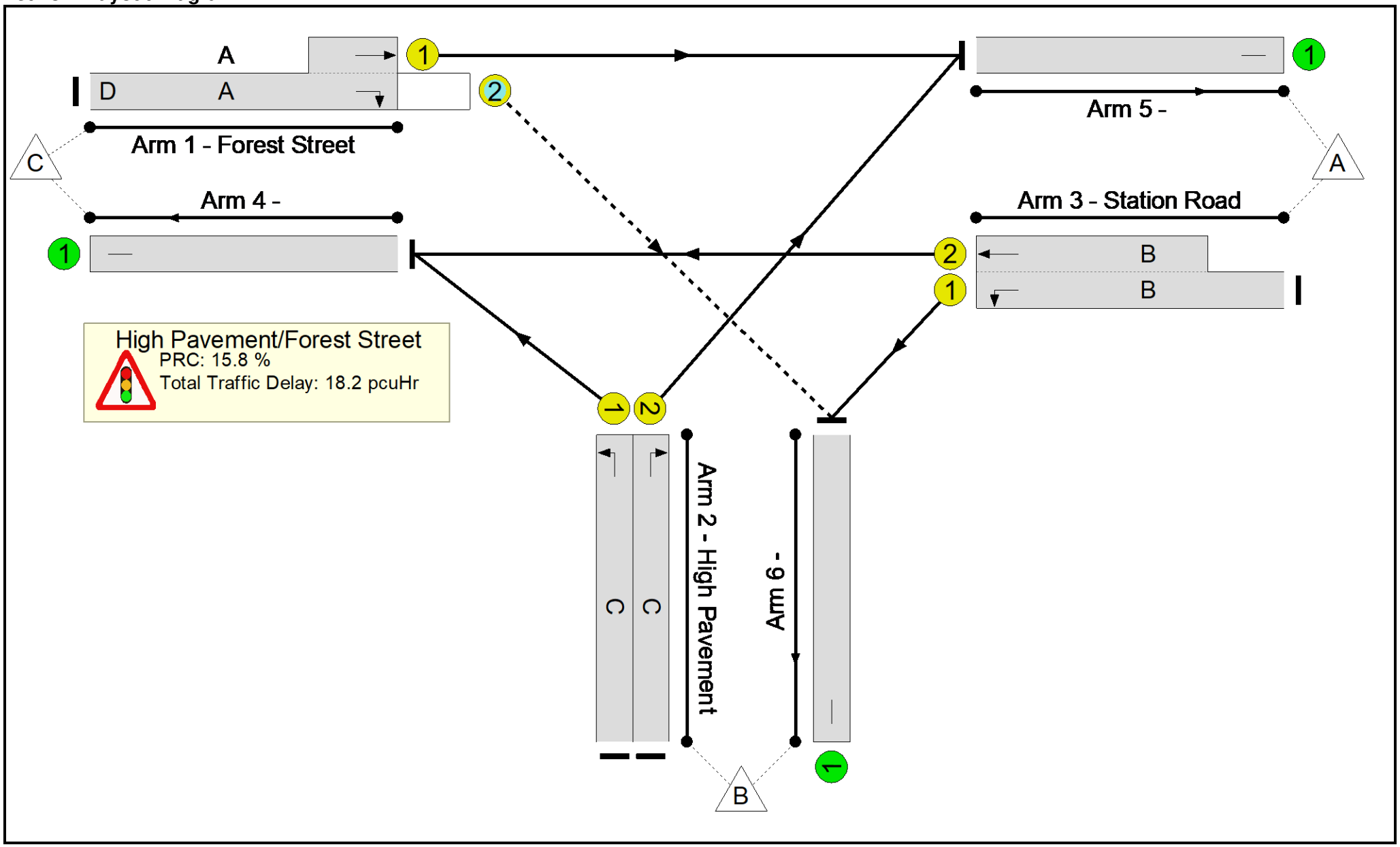
Stage	1	2	3
Duration	30	4	30
Change Point	0	36	50

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: High Pavement - Forest Street	**-**	**-**	**N/A**	**-**	**-**		**-**	**-**	**-**	**-**	**-**	**-**	**77.7%**
High Pavement/Forest Street	**-**	**-**	**N/A**	**-**	**-**		**-**	**-**	**-**	**-**	**-**	**-**	**77.7%**
1/2+1/1	Forest Street Ahead Right	O+U	N/A	N/A	A	D	1	44	9	532	1741:1915	402+427	64.1 : 64.1%
2/1	High Pavement Left	U	N/A	N/A	C		1	34	-	327	1724	670	48.8%
2/2	High Pavement Right	U	N/A	N/A	C		1	34	-	533	1764	686	77.7%
3/1+3/2	Station Road Ahead Left	U	N/A	N/A	B		1	30	-	698	1687:2080	520+378	77.7 : 77.7%
4/1		U	N/A	N/A	-		-	-	-	621	Inf	Inf	0.0%
5/1		U	N/A	N/A	-		-	-	-	807	Inf	Inf	0.0%
6/1		U	N/A	N/A	-		-	-	-	662	Inf	Inf	0.0%

Full Input Data And Results

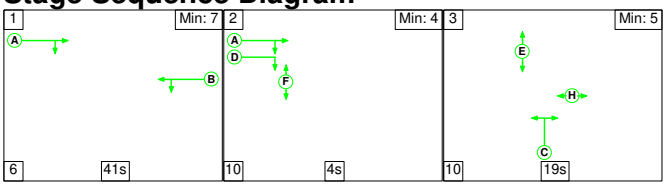
Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network: High Pavement - Forest Street	**-**	**-**	**90**	**159**	**9**	**12.4**	**4.8**	**1.0**	**18.2**	**-**	**-**	**-**	**-**
High Pavement/Forest Street	**-**	**-**	**90**	**159**	**9**	**12.4**	**4.8**	**1.0**	**18.2**	**-**	**-**	**-**	**-**
1/2+1/1	532	532	90	159	9	2.3	0.9	1.0	4.1 (2.7+1.5)	28.1 (37.5:19.2)	5.7	0.9	6.6
2/1	327	327	-	-	-	1.9	0.5	-	2.4	26.0	6.1	0.5	6.6
2/2	533	533	-	-	-	3.6	1.7	-	5.3	35.6	11.5	1.7	13.3
3/1+3/2	698	698	-	-	-	4.7	1.7	-	6.4 (3.8+2.6)	33.1 (34.3:31.4)	8.6	1.7	10.4
4/1	621	621	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/1	807	807	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/1	662	662	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0

C1 PRC for Signalled Lanes (%): 15.8 Total Delay for Signalled Lanes (pcuHr): 18.19 Cycle Time (s): 90
PRC Over All Lanes (%): 15.8 Total Delay Over All Lanes(pcuHr): 18.19

Full Input Data And Results

Scenario 3: '2030 Bkgd PM' (FG2: '2030 Bkgd PM', Plan 1: 'Network Control Plan 1')

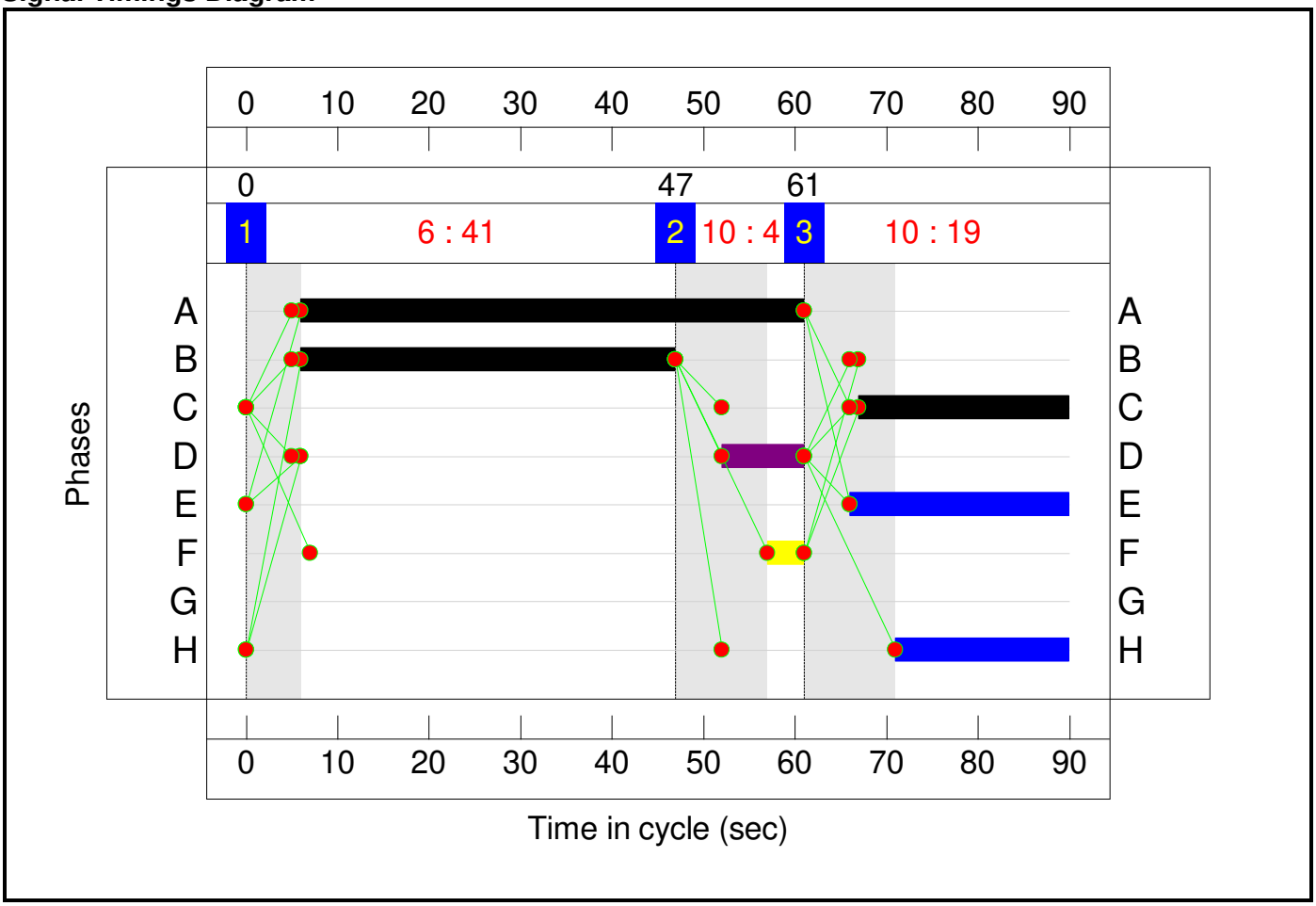
Stage Sequence Diagram



Stage Timings

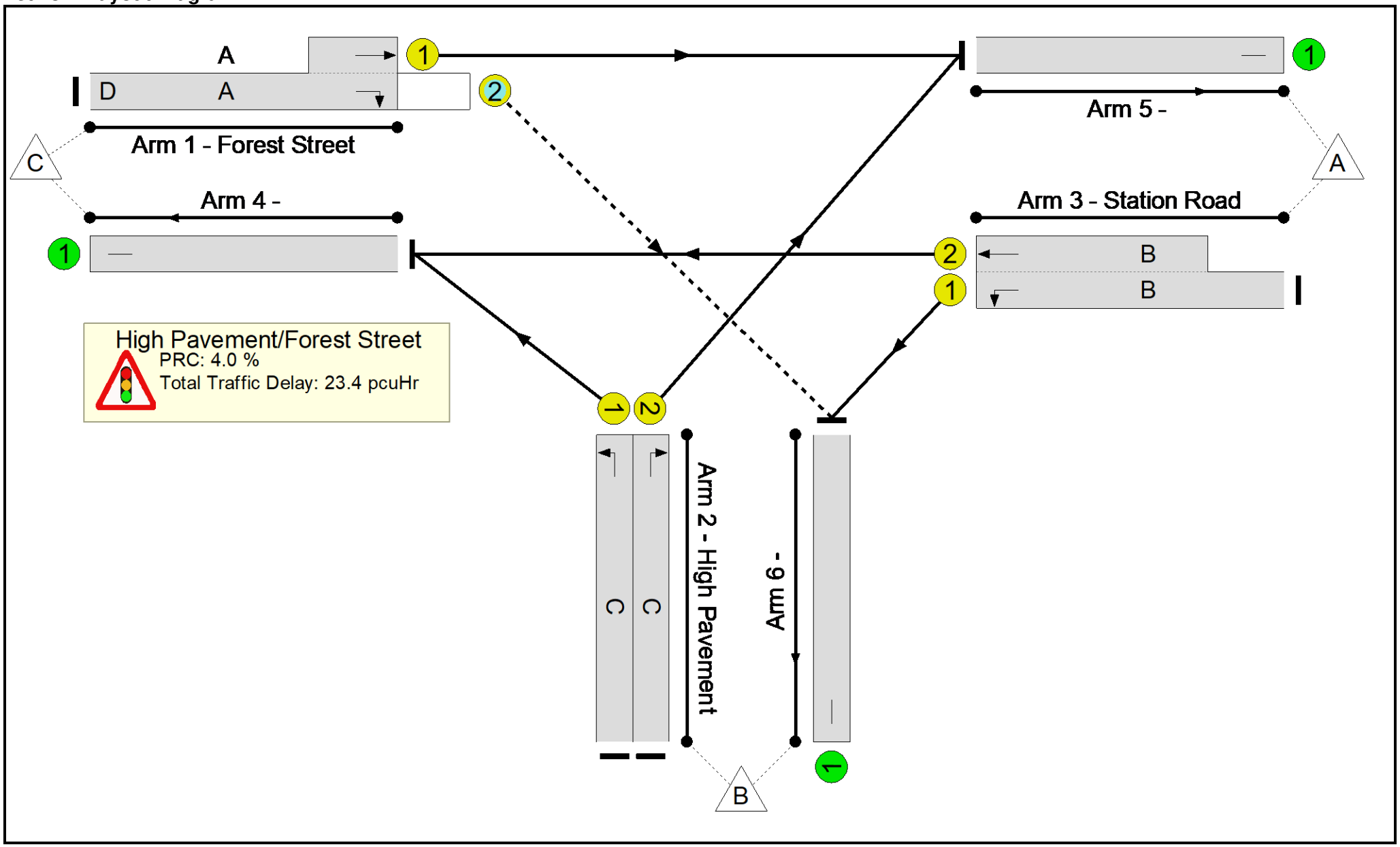
Stage	1	2	3
Duration	41	4	19
Change Point	0	47	61

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: High Pavement - Forest Street	**-**	**-**	**N/A**	**-**	**-**		**-**	**-**	**-**	**-**	**-**	**-**	**86.5%**
High Pavement/Forest Street	**-**	**-**	**N/A**	**-**	**-**		**-**	**-**	**-**	**-**	**-**	**-**	**86.5%**
1/2+1/1	Forest Street Ahead Right	O+U	N/A	N/A	A	D	1	55	9	580	1741:1915	382+302	84.7 : 84.7%
2/1	High Pavement Left	U	N/A	N/A	C		1	23	-	314	1724	460	68.3%
2/2	High Pavement Right	U	N/A	N/A	C		1	23	-	394	1764	470	83.8%
3/1+3/2	Station Road Ahead Left	U	N/A	N/A	B		1	41	-	892	1687:2080	682+349	86.5 : 86.5%
4/1		U	N/A	N/A	-		-	-	-	616	Inf	Inf	0.0%
5/1		U	N/A	N/A	-		-	-	-	650	Inf	Inf	0.0%
6/1		U	N/A	N/A	-		-	-	-	914	Inf	Inf	0.0%

Full Input Data And Results

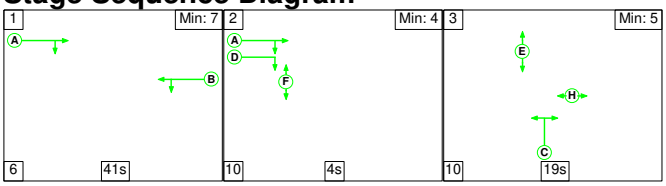
Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network: High Pavement - Forest Street	**-**	**-**	**71**	**192**	**62**	**12.7**	**9.2**	**1.5**	**23.4**	**-**	**-**	**-**	**-**
High Pavement/Forest Street	**-**	**-**	**71**	**192**	**62**	**12.7**	**9.2**	**1.5**	**23.4**	**-**	**-**	**-**	**-**
1/2+1/1	580	580	71	192	62	2.2	2.6	1.5	6.3 (4.6+1.7)	39.1 (51.1:23.9)	7.7	2.6	10.3
2/1	314	314	-	-	-	2.6	1.1	-	3.6	41.8	7.0	1.1	8.0
2/2	394	394	-	-	-	3.4	2.4	-	5.8	53.3	9.2	2.4	11.6
3/1+3/2	892	892	-	-	-	4.6	3.1	-	7.6 (5.3+2.4)	30.9 (32.2:28.3)	14.1	3.1	17.1
4/1	616	616	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/1	650	650	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/1	914	914	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0

C1 PRC for Signalled Lanes (%): 4.0 Total Delay for Signalled Lanes (pcuHr): 23.42 Cycle Time (s): 90
PRC Over All Lanes (%): 4.0 Total Delay Over All Lanes(pcuHr): 23.42

Full Input Data And Results

Scenario 4: '2030 With Dev PM' (FG4: '2030 With Dev PM', Plan 1: 'Network Control Plan 1')

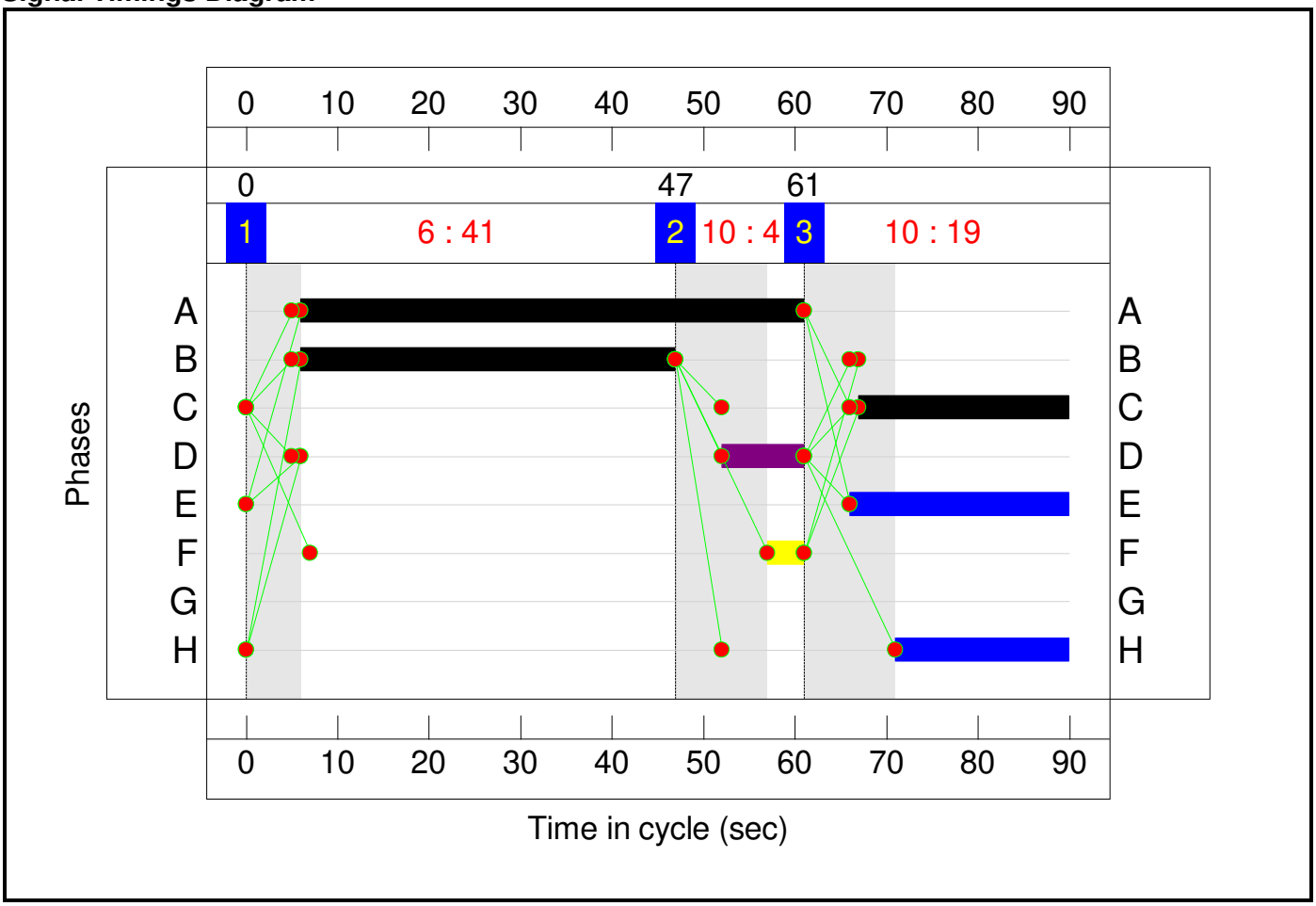
Stage Sequence Diagram



Stage Timings

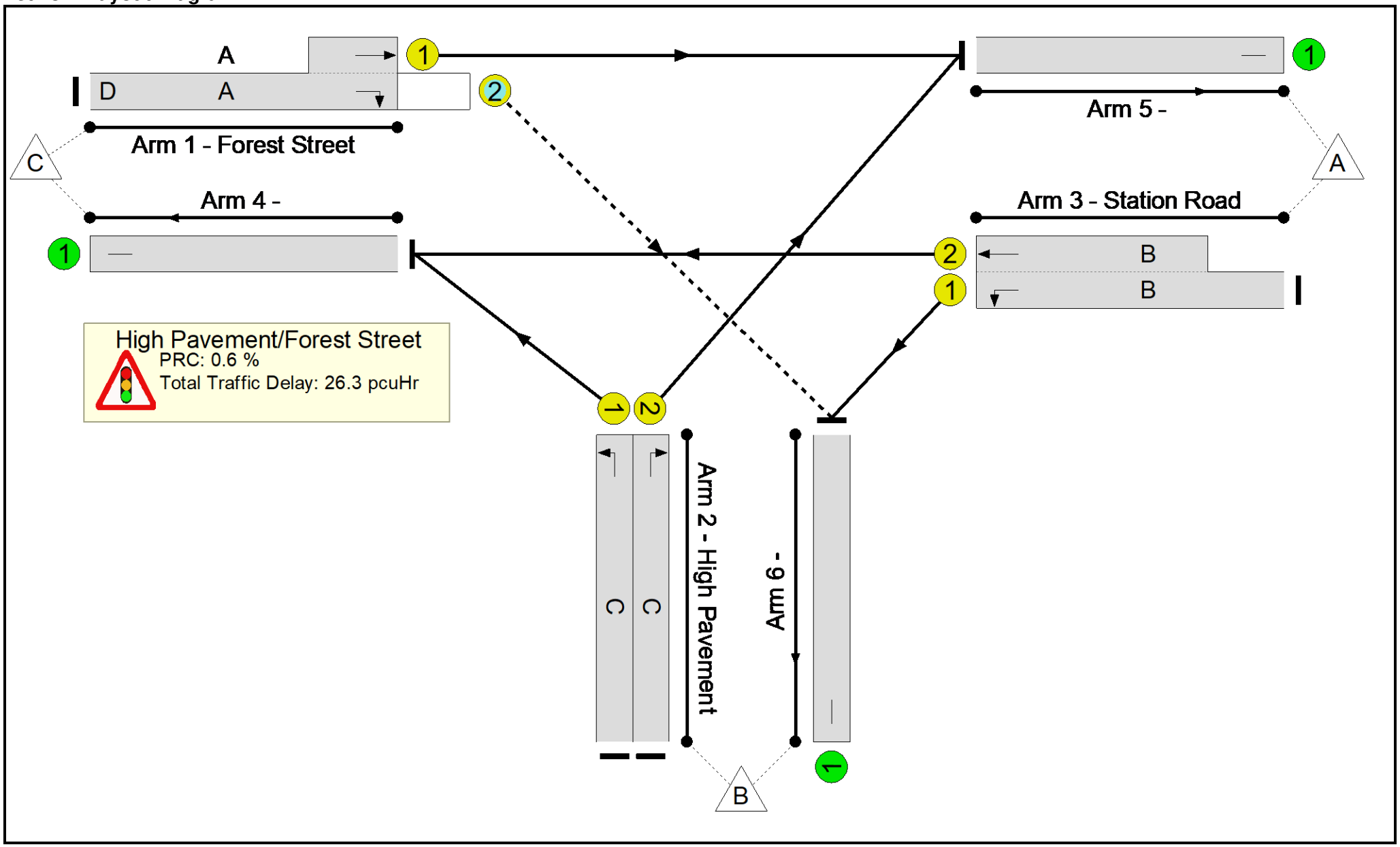
Stage	1	2	3
Duration	41	4	19
Change Point	0	47	61

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: High Pavement - Forest Street	**-**	**-**	**N/A**	**-**	**-**		**-**	**-**	**-**	**-**	**-**	**-**	**89.5%**
High Pavement/Forest Street	**-**	**-**	**N/A**	**-**	**-**		**-**	**-**	**-**	**-**	**-**	**-**	**89.5%**
1/2+1/1	Forest Street Ahead Right	O+U	N/A	N/A	A	D	1	55	9	580	1741:1915	366+289	88.6 : 88.6%
2/1	High Pavement Left	U	N/A	N/A	C		1	23	-	314	1724	460	68.3%
2/2	High Pavement Right	U	N/A	N/A	C		1	23	-	408	1764	470	86.7%
3/1+3/2	Station Road Ahead Left	U	N/A	N/A	B		1	41	-	915	1687:2080	685+338	89.5 : 89.5%
4/1		U	N/A	N/A	-		-	-	-	616	Inf	Inf	0.0%
5/1		U	N/A	N/A	-		-	-	-	664	Inf	Inf	0.0%
6/1		U	N/A	N/A	-		-	-	-	937	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: High Pavement - Forest Street	**-**	**-**	**54**	**192**	**78**	**13.2**	**11.6**	**1.5**	**26.3**	**-**	**-**	**-**	**-**
High Pavement/Forest Street	**-**	**-**	**54**	**192**	**78**	**13.2**	**11.6**	**1.5**	**26.3**	**-**	**-**	**-**	**-**
1/2+1/1	580	580	54	192	78	2.3	3.6	1.5	7.3 (5.2+2.1)	45.6 (58.3:29.6)	7.7	3.6	11.3
2/1	314	314	-	-	-	2.6	1.1	-	3.6	41.8	7.0	1.1	8.0
2/2	408	408	-	-	-	3.6	3.0	-	6.6	57.8	9.6	3.0	12.6
3/1+3/2	915	915	-	-	-	4.8	4.0	-	8.8 (6.1+2.7)	34.5 (35.8:31.9)	15.3	4.0	19.3
4/1	616	616	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/1	664	664	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/1	937	937	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0

C1 PRC for Signalled Lanes (%): 0.6 Total Delay for Signalled Lanes (pcuHr): 26.32 Cycle Time (s): 90
PRC Over All Lanes (%): 0.6 Total Delay Over All Lanes(pcuHr): 26.32

APPENDIX M

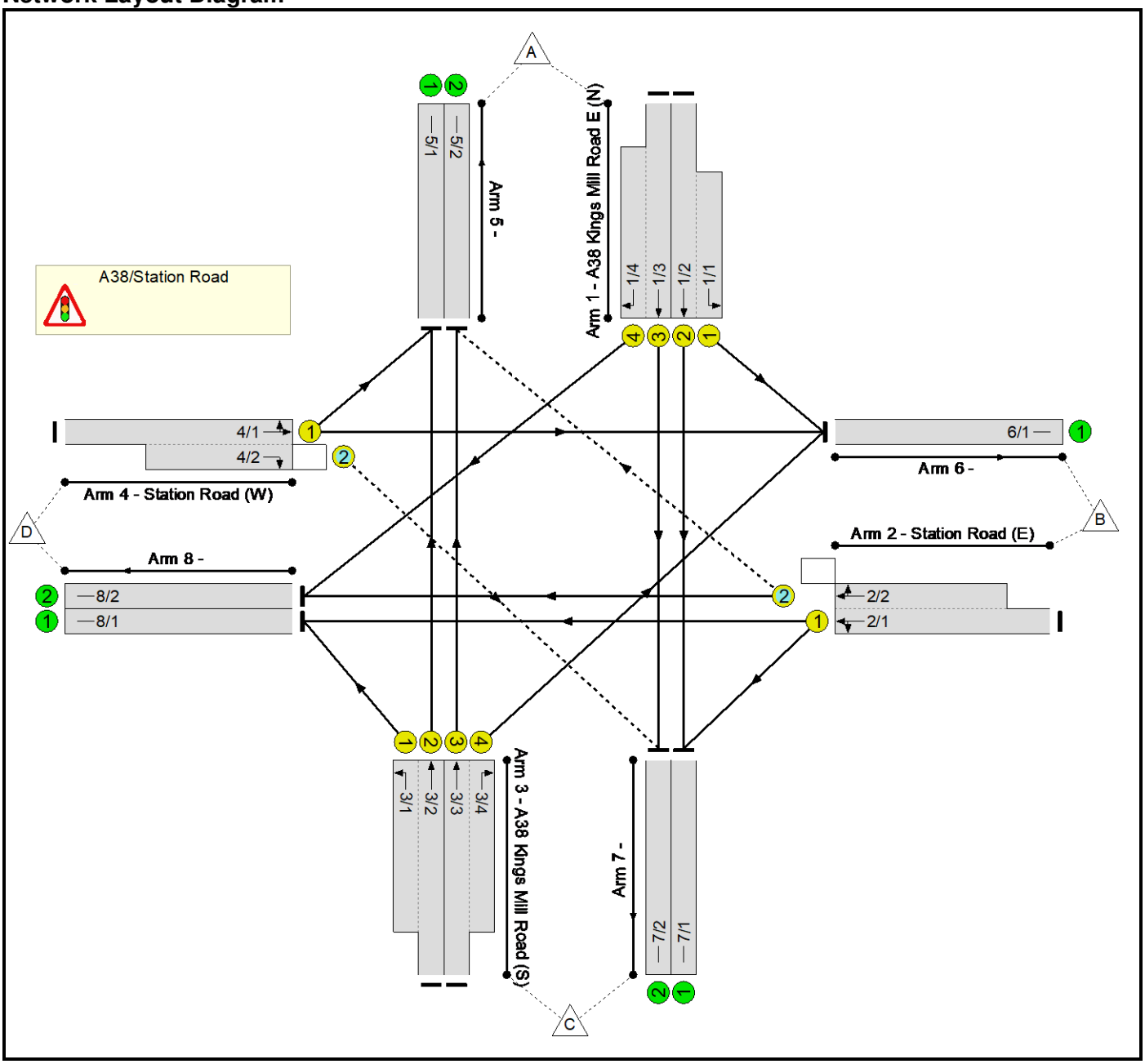
JUNCTION 9 LINSIG OUTPUTS

Full Input Data And Results

User and Project Details

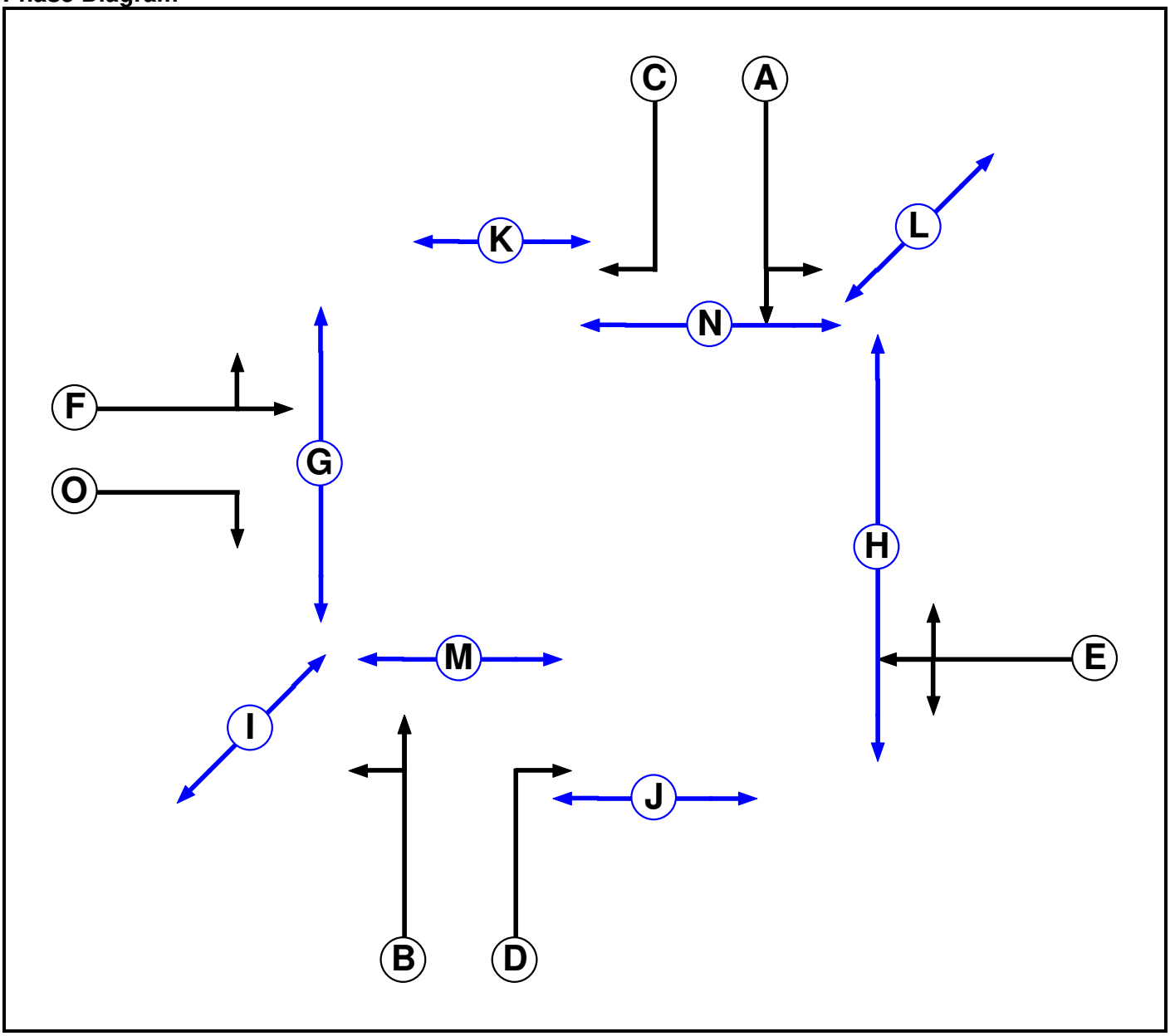
Project:	**Ashland Road, Sutton in Ashfield**
Title:	**A38 - Station Road**
Location:	
Client:	Bellway Homes
Additional detail:	
File name:	J9 A38-Station Road.lsg3x
Author:	
Company:	ADC Infrastructure Limited
Address:	King Edward Court, King Edward Street, Nottingham

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		7	7
B	Traffic		7	7
C	Traffic		7	7
D	Traffic		7	7
E	Traffic		7	7
F	Traffic		7	7
G	Pedestrian		7	7
H	Pedestrian		7	7
I	Pedestrian		7	7
J	Pedestrian		7	7
K	Pedestrian		7	7
L	Pedestrian		7	7
M	Pedestrian		7	7
N	Pedestrian		7	7
O	Traffic		7	7

Phase Intergreens Matrix

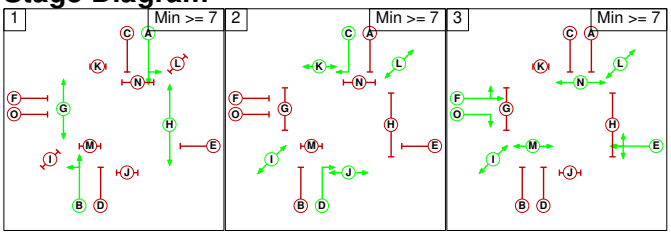
		Starting Phase														
		A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
Terminating Phase	A		-	-	7	8	8	-	-	-	11	-	7	7	7	7
	B	-		7	-	8	8	-	-	7	-	11	-	7	7	8
	C	-	12		-	7	7	11	12	-	-	-	-	5	5	5
	D	12	-	-		7	7	11	12	-	-	-	-	5	5	5
	E	5	9	5	5		-	9	5	-	10	11	-	-	-	-
	F	9	5	5	5	-		5	9	-	10	8	-	-	-	-
	G	-	-	0	0	0	0		-	-	-	-	-	-	-	0
	H	-	-	0	0	0	0	-		-	-	-	-	-	-	0
	I	-	9	-	-	-	-	-	-		-	-	-	-	-	-
	J	6	-	-	-	7	7	-	-	-		-	-	-	-	7
	K	-	6	-	-	7	7	-	-	-	-		-	-	-	-
	L	7	-	-	-	-	-	-	-	-	-	-		-	-	-
	M	0	0	0	0	-	-	-	-	-	-	-	-		-	-
	N	0	0	0	0	-	-	-	-	-	-	-	-	-		-
	O	5	5	5	5	-	-	5	0	-	11	-	-	-	-	

Phases in Stage

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

Full Input Data And Results

Stage Diagram



Phase Delays

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

Prohibited Stage Change

		To Stage		
		1	2	3
From Stage	1		11	8
	2	12		7
	3	9	11	

Full Input Data And Results

Give-Way Lane Input Data

Junction: A38/Station 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)**
2/2 (Station Road (E))	5/2 (Right)	1440	0	4/1	1.09	All	2.00	2.00	0.50	2	2.00
4/2 (Station Road (W))	7/2 (Right)	1440	0	2/2	1.09	All	2.00	-	0.50	2	2.00

Full Input Data And Results

Lane Input Data

Junction: A38/Station 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 (A38 Kings Mill Road E (N))	U	A	2	3	8.7	User	1800	-	-	-	-	-
1/2 (A38 Kings Mill Road E (N))	U	A	2	3	60.0	User	1900	-	-	-	-	-
1/3 (A38 Kings Mill Road E (N))	U	A	2	3	22.6	User	2000	-	-	-	-	-
1/4 (A38 Kings Mill Road E (N))	U	C	2	3	13.9	User	1800	-	-	-	-	-
2/1 (Station Road (E))	U	E	2	3	60.0	User	1900	-	-	-	-	-
2/2 (Station Road (E))	O	E	2	3	12.2	User	1800	-	-	-	-	-
3/1 (A38 Kings Mill Road (S))	U	B	2	3	27.8	User	1800	-	-	-	-	-
3/2 (A38 Kings Mill Road (S))	U	B	2	3	60.0	User	1900	-	-	-	-	-
3/3 (A38 Kings Mill Road (S))	U	B	2	3	27.8	User	2000	-	-	-	-	-
3/4 (A38 Kings Mill Road (S))	U	D	2	3	173.9	User	1800	-	-	-	-	-
4/1 (Station Road (W))	U	F	2	3	60.0	User	1900	-	-	-	-	-
4/2 (Station Road (W))	O	O	2	3	8.7	User	1800	-	-	-	-	-
5/1	U		2	3	60.0	Inf	-	-	-	-	-	-
5/2	U		2	3	60.0	Inf	-	-	-	-	-	-
6/1	U		2	3	60.0	Inf	-	-	-	-	-	-
7/1	U		2	3	60.0	Inf	-	-	-	-	-	-
7/2	U		2	3	60.0	Inf	-	-	-	-	-	-
8/1	U		2	3	60.0	Inf	-	-	-	-	-	-
8/2	U		2	3	60.0	Inf	-	-	-	-	-	-

Full Input Data And Results

Traffic Flow Groups

Flow Group	Start Time	End Time	Duration	Formula
1: 'Validation'	08:00	09:00	01:00	
2: '2030 Bkgd AM'	08:00	09:00	01:00	
3: '2030 Bkgd PM'	17:00	18:00	01:00	
4: '2030 With Dev AM'	08:00	09:00	01:00	
5: '2030 With Dev PM'	17:00	18:00	01:00	

Scenario 1: '2030 Bkgd AM' (FG2: '2030 Bkgd AM', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired

Desired Flow :

		Destination				
		A	B	C	D	Tot.
Origin	A	0	86	1224	213	1523
	B	72	0	69	342	483
	C	1167	62	0	133	1362
	D	224	329	162	0	715
	Tot.	1463	477	1455	688	4083

Full Input Data And Results

Traffic Lane Flows

Lane	Scenario 1: 2030 Bkgd AM
Junction: A38/Station Road	
1/1 (short)	86
1/2 (with short)	672(In) 586(Out)
1/3 (with short)	851(In) 638(Out)
1/4 (short)	213
2/1 (with short)	483(In) 248(Out)
2/2 (short)	235
3/1 (short)	133
3/2 (with short)	671(In) 538(Out)
3/3 (with short)	691(In) 629(Out)
3/4 (short)	62
4/1 (with short)	715(In) 553(Out)
4/2 (short)	162
5/1	762
5/2	701
6/1	477
7/1	655
7/2	800
8/1	312
8/2	376

Full Input Data And Results

Lane Saturation Flows

Junction: A38/Station 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 (A38 Kings Mill Road E (N) Lane 1)	This lane uses a directly entered Saturation Flow						1800	1800
1/2 (A38 Kings Mill Road E (N) Lane 2)	This lane uses a directly entered Saturation Flow						1900	1900
1/3 (A38 Kings Mill Road E (N) Lane 3)	This lane uses a directly entered Saturation Flow						2000	2000
1/4 (A38 Kings Mill Road E (N) Lane 4)	This lane uses a directly entered Saturation Flow						1800	1800
2/1 (Station Road (E) Lane 1)	This lane uses a directly entered Saturation Flow						1900	1900
2/2 (Station Road (E) Lane 2)	This lane uses a directly entered Saturation Flow						1800	1800
3/1 (A38 Kings Mill Road (S) Lane 1)	This lane uses a directly entered Saturation Flow						1800	1800
3/2 (A38 Kings Mill Road (S) Lane 2)	This lane uses a directly entered Saturation Flow						1900	1900
3/3 (A38 Kings Mill Road (S) Lane 3)	This lane uses a directly entered Saturation Flow						2000	2000
3/4 (A38 Kings Mill Road (S) Lane 4)	This lane uses a directly entered Saturation Flow						1800	1800
4/1 (Station Road (W) Lane 1)	This lane uses a directly entered Saturation Flow						1900	1900
4/2 (Station Road (W) Lane 2)	This lane uses a directly entered Saturation Flow						1800	1800
5/1	Infinite Saturation Flow						Inf	Inf
5/2	Infinite Saturation Flow						Inf	Inf
6/1	Infinite Saturation Flow						Inf	Inf
7/1	Infinite Saturation Flow						Inf	Inf
7/2	Infinite Saturation Flow						Inf	Inf
8/1	Infinite Saturation Flow						Inf	Inf
8/2	Infinite Saturation Flow						Inf	Inf

Scenario 2: '2030 With Dev AM' (FG4: '2030 With Dev AM', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired

Desired Flow :

		Destination				
		A	B	C	D	Tot.
Origin	A	0	86	1224	221	1531
	B	72	0	69	343	484
	C	1167	62	0	133	1362
	D	244	331	162	0	737
	Tot.	1483	479	1455	697	4114

Full Input Data And Results

Traffic Lane Flows

Lane	Scenario 2: 2030 With Dev AM
Junction: A38/Station Road	
1/1 (short)	86
1/2 (with short)	672(In) 586(Out)
1/3 (with short)	859(In) 638(Out)
1/4 (short)	221
2/1 (with short)	484(In) 249(Out)
2/2 (short)	235
3/1 (short)	133
3/2 (with short)	671(In) 538(Out)
3/3 (with short)	691(In) 629(Out)
3/4 (short)	62
4/1 (with short)	737(In) 575(Out)
4/2 (short)	162
5/1	782
5/2	701
6/1	479
7/1	655
7/2	800
8/1	313
8/2	384

Full Input Data And Results

Lane Saturation Flows

Junction: A38/Station 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 (A38 Kings Mill Road E (N) Lane 1)	This lane uses a directly entered Saturation Flow						1800	1800
1/2 (A38 Kings Mill Road E (N) Lane 2)	This lane uses a directly entered Saturation Flow						1900	1900
1/3 (A38 Kings Mill Road E (N) Lane 3)	This lane uses a directly entered Saturation Flow						2000	2000
1/4 (A38 Kings Mill Road E (N) Lane 4)	This lane uses a directly entered Saturation Flow						1800	1800
2/1 (Station Road (E) Lane 1)	This lane uses a directly entered Saturation Flow						1900	1900
2/2 (Station Road (E) Lane 2)	This lane uses a directly entered Saturation Flow						1800	1800
3/1 (A38 Kings Mill Road (S) Lane 1)	This lane uses a directly entered Saturation Flow						1800	1800
3/2 (A38 Kings Mill Road (S) Lane 2)	This lane uses a directly entered Saturation Flow						1900	1900
3/3 (A38 Kings Mill Road (S) Lane 3)	This lane uses a directly entered Saturation Flow						2000	2000
3/4 (A38 Kings Mill Road (S) Lane 4)	This lane uses a directly entered Saturation Flow						1800	1800
4/1 (Station Road (W) Lane 1)	This lane uses a directly entered Saturation Flow						1900	1900
4/2 (Station Road (W) Lane 2)	This lane uses a directly entered Saturation Flow						1800	1800
5/1	Infinite Saturation Flow						Inf	Inf
5/2	Infinite Saturation Flow						Inf	Inf
6/1	Infinite Saturation Flow						Inf	Inf
7/1	Infinite Saturation Flow						Inf	Inf
7/2	Infinite Saturation Flow						Inf	Inf
8/1	Infinite Saturation Flow						Inf	Inf
8/2	Infinite Saturation Flow						Inf	Inf

Scenario 3: '2030 Bkgd PM' (FG3: '2030 Bkgd PM', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired

Desired Flow :

		Destination				
		A	B	C	D	Tot.
Origin	A	0	83	1155	280	1518
	B	66	0	42	313	421
	C	1216	104	0	187	1507
	D	223	276	117	0	616
	Tot.	1505	463	1314	780	4062

Full Input Data And Results

Traffic Lane Flows

Lane	Scenario 3: 2030 Bkgd PM
Junction: A38/Station Road	
1/1 (short)	83
1/2 (with short)	954(In) 871(Out)
1/3 (with short)	564(In) 284(Out)
1/4 (short)	280
2/1 (with short)	421(In) 216(Out)
2/2 (short)	205
3/1 (short)	187
3/2 (with short)	762(In) 575(Out)
3/3 (with short)	745(In) 641(Out)
3/4 (short)	104
4/1 (with short)	616(In) 499(Out)
4/2 (short)	117
5/1	798
5/2	707
6/1	463
7/1	913
7/2	401
8/1	361
8/2	419

Full Input Data And Results

Lane Saturation Flows

Junction: A38/Station 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 (A38 Kings Mill Road E (N) Lane 1)	This lane uses a directly entered Saturation Flow						1800	1800
1/2 (A38 Kings Mill Road E (N) Lane 2)	This lane uses a directly entered Saturation Flow						1900	1900
1/3 (A38 Kings Mill Road E (N) Lane 3)	This lane uses a directly entered Saturation Flow						2000	2000
1/4 (A38 Kings Mill Road E (N) Lane 4)	This lane uses a directly entered Saturation Flow						1800	1800
2/1 (Station Road (E) Lane 1)	This lane uses a directly entered Saturation Flow						1900	1900
2/2 (Station Road (E) Lane 2)	This lane uses a directly entered Saturation Flow						1800	1800
3/1 (A38 Kings Mill Road (S) Lane 1)	This lane uses a directly entered Saturation Flow						1800	1800
3/2 (A38 Kings Mill Road (S) Lane 2)	This lane uses a directly entered Saturation Flow						1900	1900
3/3 (A38 Kings Mill Road (S) Lane 3)	This lane uses a directly entered Saturation Flow						2000	2000
3/4 (A38 Kings Mill Road (S) Lane 4)	This lane uses a directly entered Saturation Flow						1800	1800
4/1 (Station Road (W) Lane 1)	This lane uses a directly entered Saturation Flow						1900	1900
4/2 (Station Road (W) Lane 2)	This lane uses a directly entered Saturation Flow						1800	1800
5/1	Infinite Saturation Flow						Inf	Inf
5/2	Infinite Saturation Flow						Inf	Inf
6/1	Infinite Saturation Flow						Inf	Inf
7/1	Infinite Saturation Flow						Inf	Inf
7/2	Infinite Saturation Flow						Inf	Inf
8/1	Infinite Saturation Flow						Inf	Inf
8/2	Infinite Saturation Flow						Inf	Inf

Scenario 4: '2030 WIth Dev PM' (FG5: '2030 With Dev PM', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired

Desired Flow :

		Destination				
		A	B	C	D	Tot.
Origin	A	0	83	1155	300	1538
	B	66	0	42	316	424
	C	1216	104	0	187	1507
	D	235	278	117	0	630
	Tot.	1517	465	1314	803	4099

Full Input Data And Results

Traffic Lane Flows

Lane	Scenario 4: 2030 WIth Dev PM
Junction: A38/Station Road	
1/1 (short)	83
1/2 (with short)	1038(In) 955(Out)
1/3 (with short)	500(In) 200(Out)
1/4 (short)	300
2/1 (with short)	424(In) 218(Out)
2/2 (short)	206
3/1 (short)	187
3/2 (with short)	764(In) 577(Out)
3/3 (with short)	743(In) 639(Out)
3/4 (short)	104
4/1 (with short)	630(In) 513(Out)
4/2 (short)	117
5/1	812
5/2	705
6/1	465
7/1	997
7/2	317
8/1	363
8/2	440

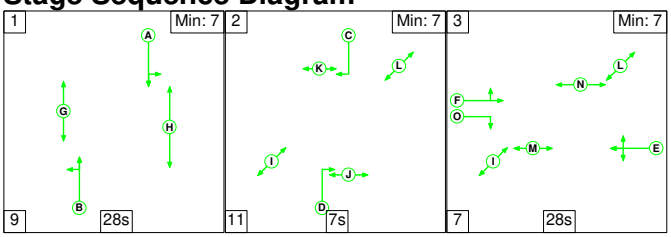
Full Input Data And Results

Lane Saturation Flows

Junction: A38/Station 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 (A38 Kings Mill Road E (N) Lane 1)	This lane uses a directly entered Saturation Flow						1800	1800
1/2 (A38 Kings Mill Road E (N) Lane 2)	This lane uses a directly entered Saturation Flow						1900	1900
1/3 (A38 Kings Mill Road E (N) Lane 3)	This lane uses a directly entered Saturation Flow						2000	2000
1/4 (A38 Kings Mill Road E (N) Lane 4)	This lane uses a directly entered Saturation Flow						1800	1800
2/1 (Station Road (E) Lane 1)	This lane uses a directly entered Saturation Flow						1900	1900
2/2 (Station Road (E) Lane 2)	This lane uses a directly entered Saturation Flow						1800	1800
3/1 (A38 Kings Mill Road (S) Lane 1)	This lane uses a directly entered Saturation Flow						1800	1800
3/2 (A38 Kings Mill Road (S) Lane 2)	This lane uses a directly entered Saturation Flow						1900	1900
3/3 (A38 Kings Mill Road (S) Lane 3)	This lane uses a directly entered Saturation Flow						2000	2000
3/4 (A38 Kings Mill Road (S) Lane 4)	This lane uses a directly entered Saturation Flow						1800	1800
4/1 (Station Road (W) Lane 1)	This lane uses a directly entered Saturation Flow						1900	1900
4/2 (Station Road (W) Lane 2)	This lane uses a directly entered Saturation Flow						1800	1800
5/1	Infinite Saturation Flow						Inf	Inf
5/2	Infinite Saturation Flow						Inf	Inf
6/1	Infinite Saturation Flow						Inf	Inf
7/1	Infinite Saturation Flow						Inf	Inf
7/2	Infinite Saturation Flow						Inf	Inf
8/1	Infinite Saturation Flow						Inf	Inf
8/2	Infinite Saturation Flow						Inf	Inf

Scenario 1: '2030 Bkgd AM' (FG2: '2030 Bkgd AM', Plan 1: 'Network Control Plan 1')

Stage Sequence Diagram

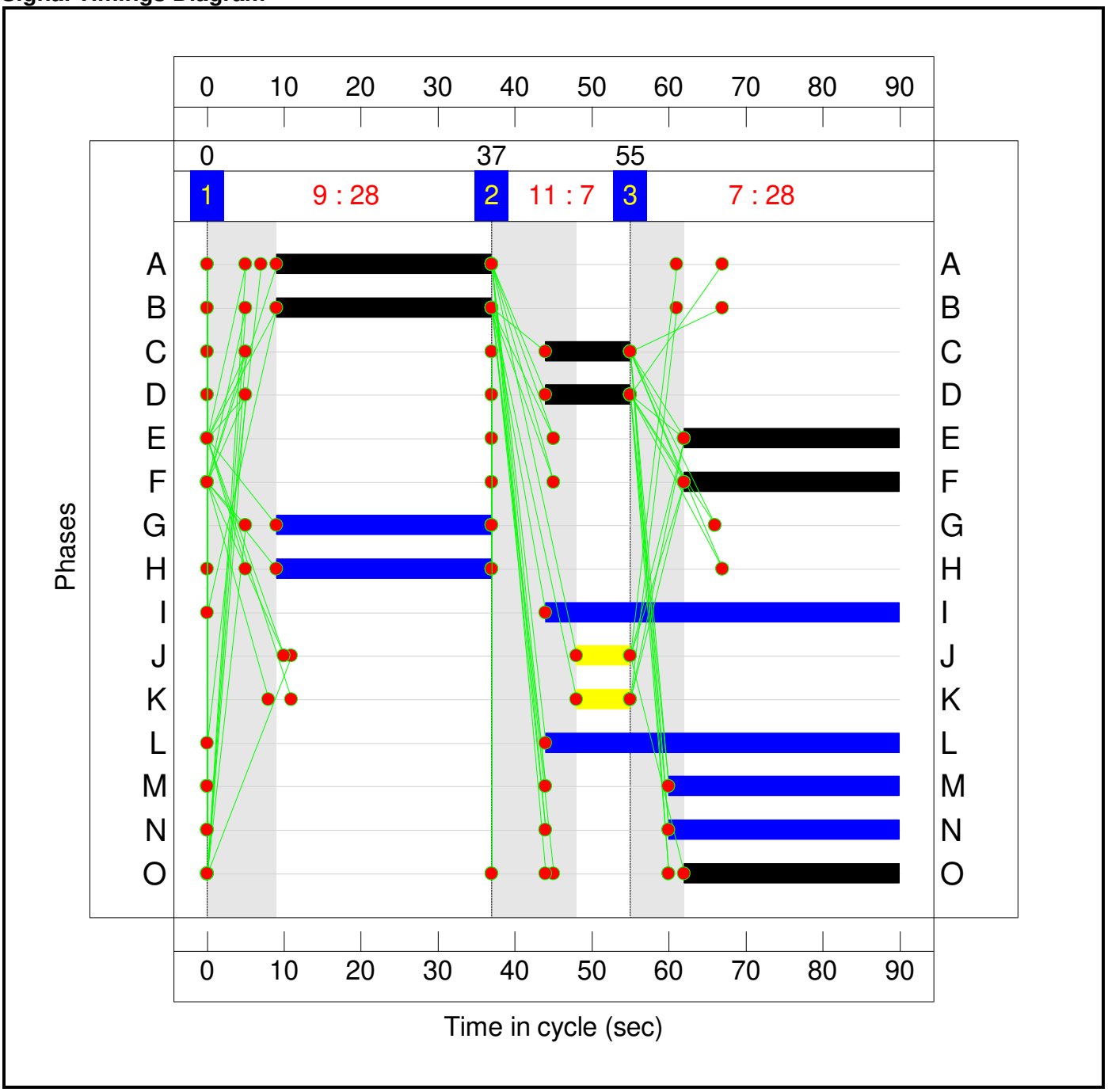


Full Input Data And Results

Stage Timings

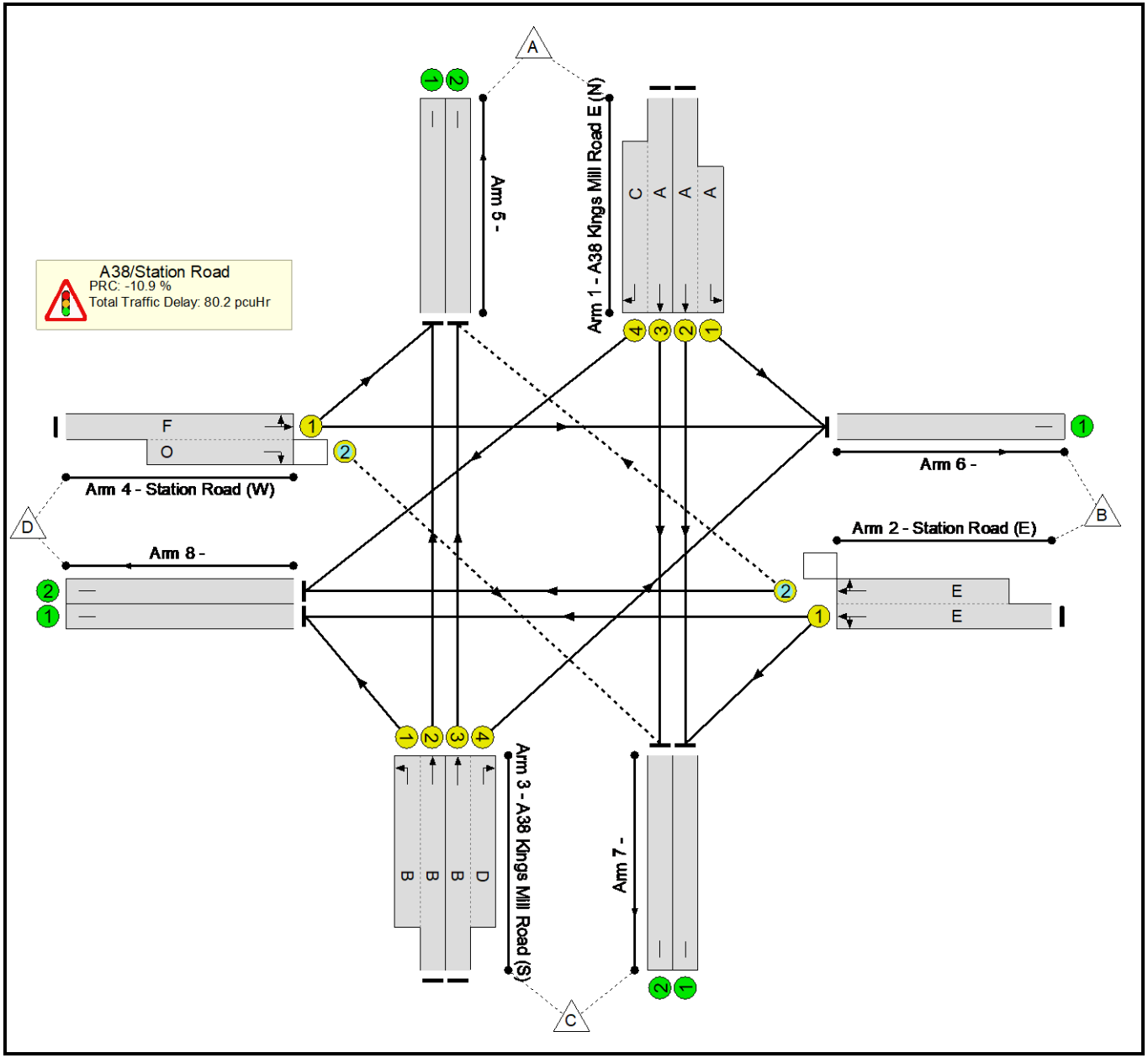
Stage	1	2	3
Duration	28	7	28
Change Point	0	37	55

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: A38 - Station Road	**-**	**-**	**N/A**	**-**	**-**		**-**	**-**	**-**	**-**	**-**	**-**	**99.8%**
A38/Station Road	**-**	**-**	**N/A**	**-**	**-**		**-**	**-**	**-**	**-**	**-**	**-**	**99.8%**
1/2+1/1	A38 Kings Mill Road E (N) Left Ahead	U	N/A	N/A	A		1	28	-	672	1900:1800	592+87	99.0 : 99.0%
1/3+1/4	A38 Kings Mill Road E (N) Ahead Right	U	N/A	N/A	A C		1	28:11	-	851	2000:1800	639+213	99.8 : 99.8%
2/1+2/2	Station Road (E) Right Left Ahead	U+O	N/A	N/A	E		1	28	-	483	1900:1800	276+261	90.0 : 90.0%
3/2+3/1	A38 Kings Mill Road (S) Ahead Left	U	N/A	N/A	B		1	28	-	671	1900:1800	612+151	87.9 : 87.9%
3/3+3/4	A38 Kings Mill Road (S) Ahead Right	U	N/A	N/A	B D		1	28:11	-	691	2000:1800	644+128	97.6 : 48.3%
4/1+4/2	Station Road (W) Left Ahead Right	U+O	N/A	N/A	F O		1	28	-	715	1900:1800	563+165	98.2 : 98.2%
5/1		U	N/A	N/A	-		-	-	-	762	Inf	Inf	0.0%
5/2		U	N/A	N/A	-		-	-	-	701	Inf	Inf	0.0%
6/1		U	N/A	N/A	-		-	-	-	477	Inf	Inf	0.0%
7/1		U	N/A	N/A	-		-	-	-	655	Inf	Inf	0.0%
7/2		U	N/A	N/A	-		-	-	-	800	Inf	Inf	0.0%
8/1		U	N/A	N/A	-		-	-	-	312	Inf	Inf	0.0%
8/2		U	N/A	N/A	-		-	-	-	376	Inf	Inf	0.0%

Full Input Data And Results

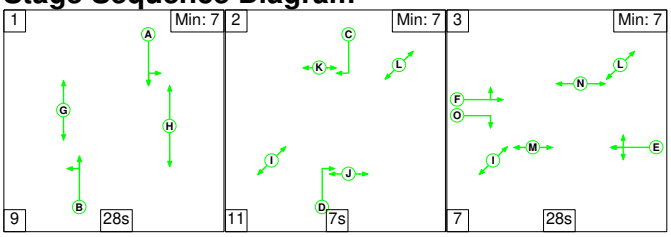
Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network: A38 - Station Road	**-**	**-**	**171**	**0**	**63**	**32.3**	**47.2**	**0.7**	**80.2**	**-**	**-**	**-**	**-**
A38/Station Road	**-**	**-**	**171**	**0**	**63**	**32.3**	**47.2**	**0.7**	**80.2**	**-**	**-**	**-**	**-**
1/2+1/1	672	672	-	-	-	5.5	11.4	-	16.9 (14.9+2.1)	90.8 (91.2:87.8)	15.3	11.4	26.8
1/3+1/4	851	851	-	-	-	7.6	14.2	-	21.8 (16.0+5.8)	92.4 (90.4:98.4)	16.5	14.2	30.7
2/1+2/2	483	483	9	0	63	3.2	3.9	0.5	7.6 (3.7+3.9)	56.4 (53.0:60.0)	4.8	3.9	8.7
3/2+3/1	671	671	-	-	-	5.1	3.4	-	8.5 (7.0+1.5)	45.7 (47.0:40.5)	12.7	3.4	16.1
3/3+3/4	691	618	-	-	-	5.1	3.9	-	8.9 (8.2+0.7)	46.6 (47.0:41.8)	13.5	3.9	17.3
4/1+4/2	715	715	162	0	0	5.7	10.4	0.2	16.4 (12.6+3.8)	82.4 (81.9:84.3)	14.9	10.4	25.3
5/1	762	762	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/2	645	645	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/1	460	460	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
7/1	655	655	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
7/2	800	800	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
8/1	312	312	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
8/2	376	376	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0

C1 PRC for Signalled Lanes (%): -10.9 Total Delay for Signalled Lanes (pcuHr): 80.18 Cycle Time (s): 90
PRC Over All Lanes (%): -10.9 Total Delay Over All Lanes(pcuHr): 80.18

Full Input Data And Results

Scenario 2: '2030 With Dev AM' (FG4: '2030 With Dev AM', Plan 1: 'Network Control Plan 1')

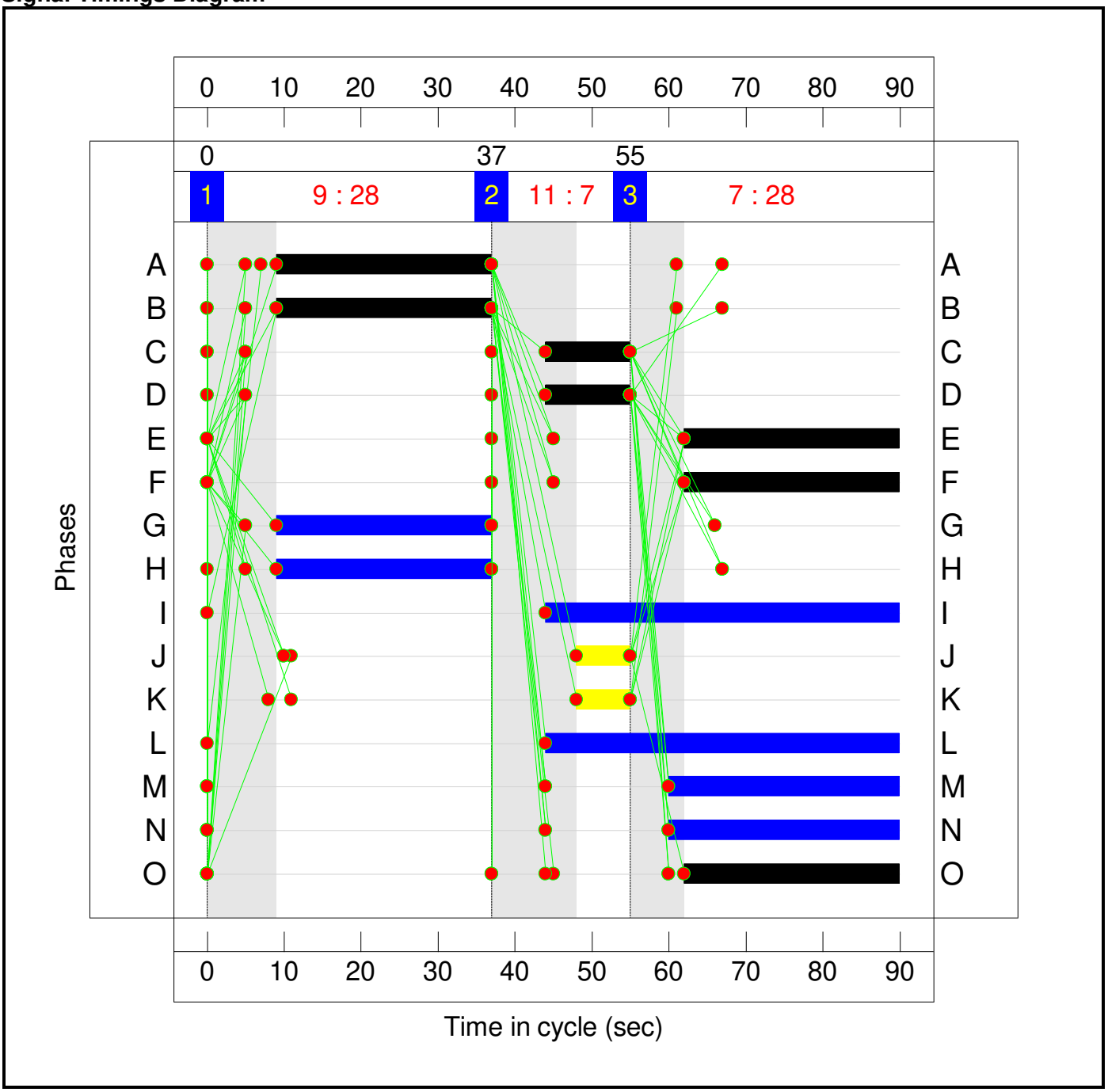
Stage Sequence Diagram



Stage Timings

Stage	1	2	3
Duration	28	7	28
Change Point	0	37	55

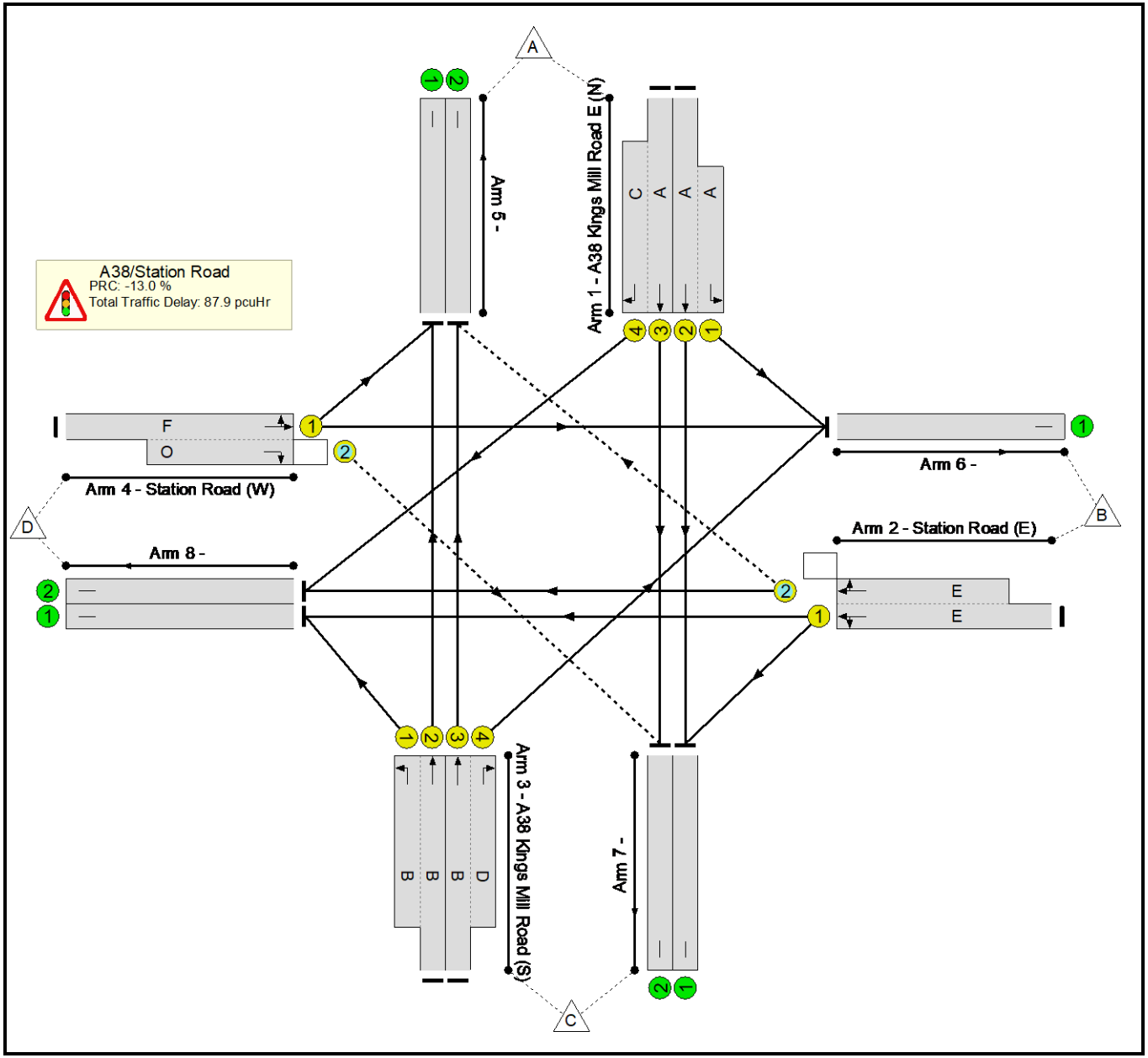
Signal Timings Diagram



Full Input Data And Results

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: A38 - Station Road	**-**	**-**	**N/A**	**-**	**-**		**-**	**-**	**-**	**-**	**-**	**-**	**101.7%**
A38/Station Road	**-**	**-**	**N/A**	**-**	**-**		**-**	**-**	**-**	**-**	**-**	**-**	**101.7%**
1/2+1/1	A38 Kings Mill Road E (N) Left Ahead	U	N/A	N/A	A		1	28	-	672	1900:1800	592+87	99.0 : 99.0%
1/3+1/4	A38 Kings Mill Road E (N) Ahead Right	U	N/A	N/A	A C		1	28:11	-	859	2000:1800	638+221	99.9 : 99.9%
2/1+2/2	Station Road (E) Right Left Ahead	U+O	N/A	N/A	E		1	28	-	484	1900:1800	277+261	90.0 : 90.0%
3/2+3/1	A38 Kings Mill Road (S) Ahead Left	U	N/A	N/A	B		1	28	-	671	1900:1800	612+151	87.9 : 87.9%
3/3+3/4	A38 Kings Mill Road (S) Ahead Right	U	N/A	N/A	B D		1	28:11	-	691	2000:1800	644+128	97.6 : 48.3%
4/1+4/2	Station Road (W) Left Ahead Right	U+O	N/A	N/A	F O		1	28	-	737	1900:1800	565+159	101.7 : 101.7%
5/1		U	N/A	N/A	-		-	-	-	782	Inf	Inf	0.0%
5/2		U	N/A	N/A	-		-	-	-	701	Inf	Inf	0.0%
6/1		U	N/A	N/A	-		-	-	-	479	Inf	Inf	0.0%
7/1		U	N/A	N/A	-		-	-	-	655	Inf	Inf	0.0%
7/2		U	N/A	N/A	-		-	-	-	800	Inf	Inf	0.0%
8/1		U	N/A	N/A	-		-	-	-	313	Inf	Inf	0.0%
8/2		U	N/A	N/A	-		-	-	-	384	Inf	Inf	0.0%

Full Input Data And Results

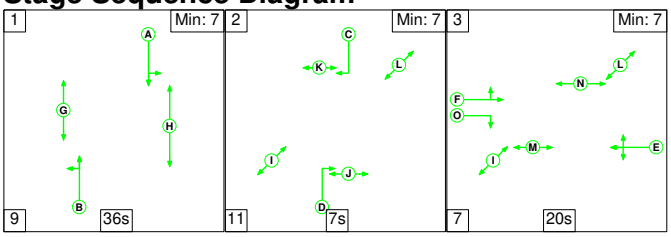
Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network: A38 - Station Road	**-**	**-**	**159**	**0**	**72**	**33.0**	**54.1**	**0.7**	**87.9**	**-**	**-**	**-**	**-**
A38/Station Road	**-**	**-**	**159**	**0**	**72**	**33.0**	**54.1**	**0.7**	**87.9**	**-**	**-**	**-**	**-**
1/2+1/1	672	672	-	-	-	5.5	11.4	-	16.9 (14.9+2.1)	90.8 (91.2:87.8)	15.3	11.4	26.8
1/3+1/4	859	859	-	-	-	7.7	14.5	-	22.3 (16.2+6.1)	93.4 (91.3:99.4)	16.5	14.5	31.1
2/1+2/2	484	484	0	0	72	3.2	3.9	0.5	7.6 (3.7+3.9)	56.5 (53.0:60.2)	4.8	3.9	8.8
3/2+3/1	671	671	-	-	-	5.1	3.4	-	8.5 (7.0+1.5)	45.7 (47.0:40.5)	12.7	3.4	16.1
3/3+3/4	691	618	-	-	-	5.1	3.9	-	8.9 (8.2+0.7)	46.6 (47.0:41.8)	13.5	3.9	17.3
4/1+4/2	737	725	159	0	0	6.4	17.0	0.2	23.6 (18.3+5.3)	115.3 (114.5:118.1)	16.0	17.0	33.0
5/1	778	778	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/2	645	645	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/1	456	456	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
7/1	655	655	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
7/2	797	797	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
8/1	313	313	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
8/2	384	384	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0

C1 PRC for Signalled Lanes (%): -13.0 Total Delay for Signalled Lanes (pcuHr): 87.88 Cycle Time (s): 90
PRC Over All Lanes (%): -13.0 Total Delay Over All Lanes(pcuHr): 87.88

Full Input Data And Results

Scenario 3: '2030 Bkgd PM' (FG3: '2030 Bkgd PM', Plan 1: 'Network Control Plan 1')

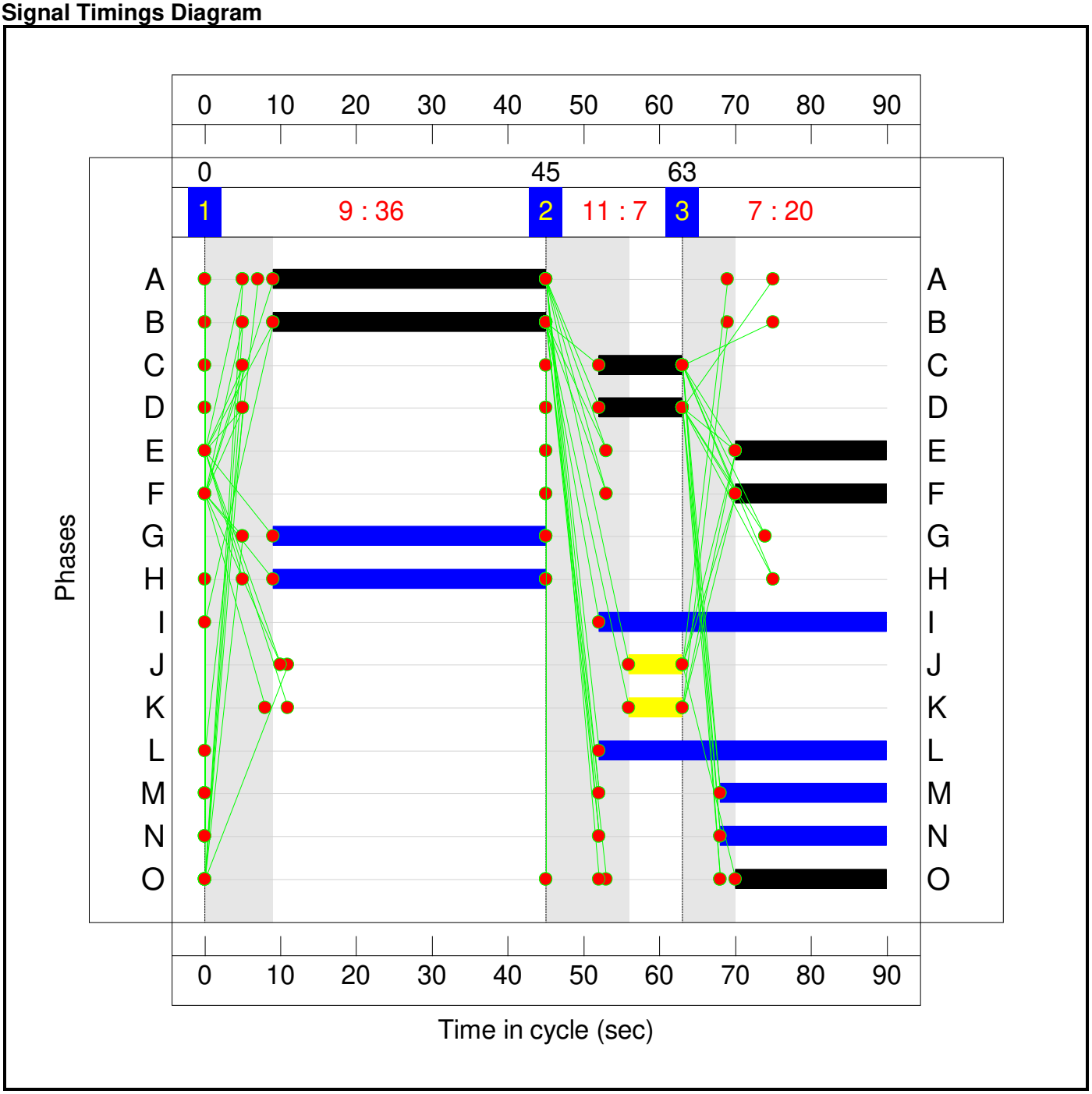
Stage Sequence Diagram



Stage Timings

Stage	1	2	3
Duration	36	7	20
Change Point	0	45	63

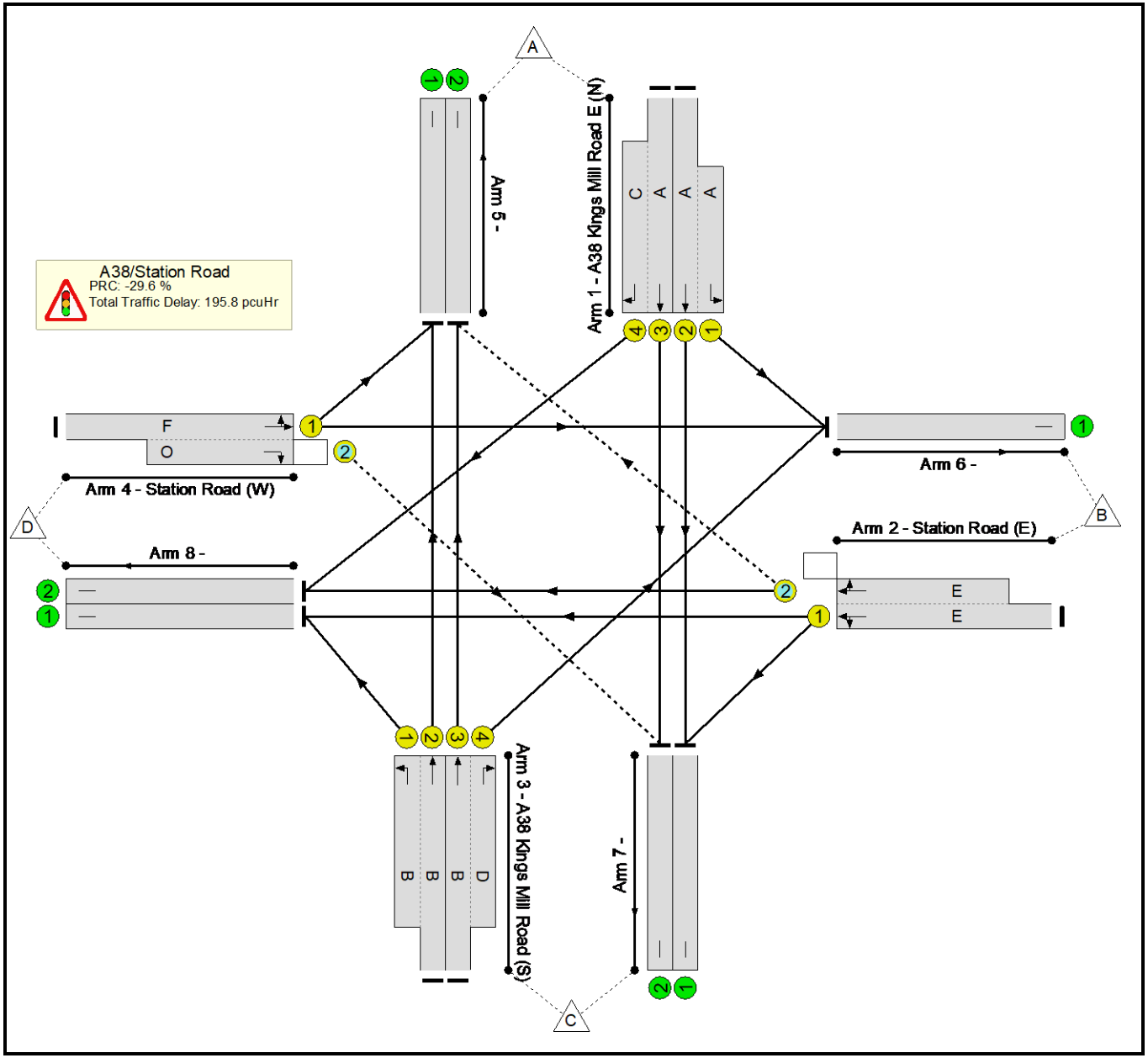
Signal Timings Diagram



Full Input Data And Results

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: A38 - Station Road	**-**	**-**	**N/A**	**-**	**-**		**-**	**-**	**-**	**-**	**-**	**-**	**116.7%**
A38/Station Road	**-**	**-**	**N/A**	**-**	**-**		**-**	**-**	**-**	**-**	**-**	**-**	**116.7%**
1/2+1/1	A38 Kings Mill Road E (N) Left Ahead	U	N/A	N/A	A		1	36	-	954	1900:1800	757+72	115.1 : 115.1%
1/3+1/4	A38 Kings Mill Road E (N) Ahead Right	U	N/A	N/A	A C		1	36:11	-	564	2000:1800	243+240	116.7 : 116.7%
2/1+2/2	Station Road (E) Right Left Ahead	U+O	N/A	N/A	E		1	20	-	421	1900:1800	262+248	82.5 : 82.5%
3/2+3/1	A38 Kings Mill Road (S) Ahead Left	U	N/A	N/A	B		1	36	-	762	1900:1800	781+254	73.6 : 73.6%
3/3+3/4	A38 Kings Mill Road (S) Ahead Right	U	N/A	N/A	B D		1	36:11	-	745	2000:1800	822+223	78.0 : 46.6%
4/1+4/2	Station Road (W) Left Ahead Right	U+O	N/A	N/A	F O		1	20	-	616	1900:1800	439+103	113.8 : 113.8%
5/1		U	N/A	N/A	-		-	-	-	798	Inf	Inf	0.0%
5/2		U	N/A	N/A	-		-	-	-	707	Inf	Inf	0.0%
6/1		U	N/A	N/A	-		-	-	-	463	Inf	Inf	0.0%
7/1		U	N/A	N/A	-		-	-	-	913	Inf	Inf	0.0%
7/2		U	N/A	N/A	-		-	-	-	401	Inf	Inf	0.0%
8/1		U	N/A	N/A	-		-	-	-	361	Inf	Inf	0.0%
8/2		U	N/A	N/A	-		-	-	-	419	Inf	Inf	0.0%

Full Input Data And Results

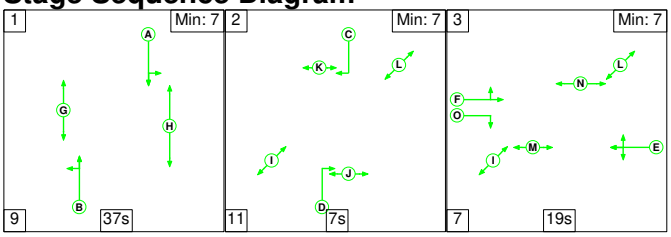
Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network: A38 - Station Road	**-**	**-**	**103**	**0**	**66**	**39.7**	**155.5**	**0.5**	**195.8**	**-**	**-**	**-**	**-**
A38/Station Road	**-**	**-**	**103**	**0**	**66**	**39.7**	**155.5**	**0.5**	**195.8**	**-**	**-**	**-**	**-**
1/2+1/1	954	829	-	-	-	12.1	66.1	-	78.2 (71.4+6.8)	295.0 (295.2:292.9)	28.0	66.1	94.1
1/3+1/4	564	524	-	-	-	5.8	43.5	-	49.3 (23.4+26.0)	314.9 (296.0:334.0)	8.0	43.5	51.5
2/1+2/2	421	421	0	0	66	3.5	2.2	0.3	6.1 (2.9+3.1)	51.7 (49.0:54.6)	4.6	2.2	6.9
3/2+3/1	762	762	-	-	-	4.5	1.4	-	5.9 (4.6+1.2)	27.7 (28.9:23.9)	12.0	1.4	13.4
3/3+3/4	745	725	-	-	-	4.8	1.2	-	6.0 (5.1+0.9)	29.2 (28.9:30.9)	13.7	1.2	14.9
4/1+4/2	616	541	103	0	0	9.0	41.1	0.2	50.3 (40.7+9.6)	294.0 (293.3:296.7)	15.9	41.1	57.0
5/1	771	771	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/2	707	707	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/1	399	399	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
7/1	799	799	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
7/2	387	387	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
8/1	361	361	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
8/2	379	379	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0

C1 PRC for Signalled Lanes (%): -29.6 Total Delay for Signalled Lanes (pcuHr): 195.76 Cycle Time (s): 90
PRC Over All Lanes (%): -29.6 Total Delay Over All Lanes(pcuHr): 195.76

Full Input Data And Results

Scenario 4: '2030 WIth Dev PM' (FG5: '2030 With Dev PM', Plan 1: 'Network Control Plan 1')

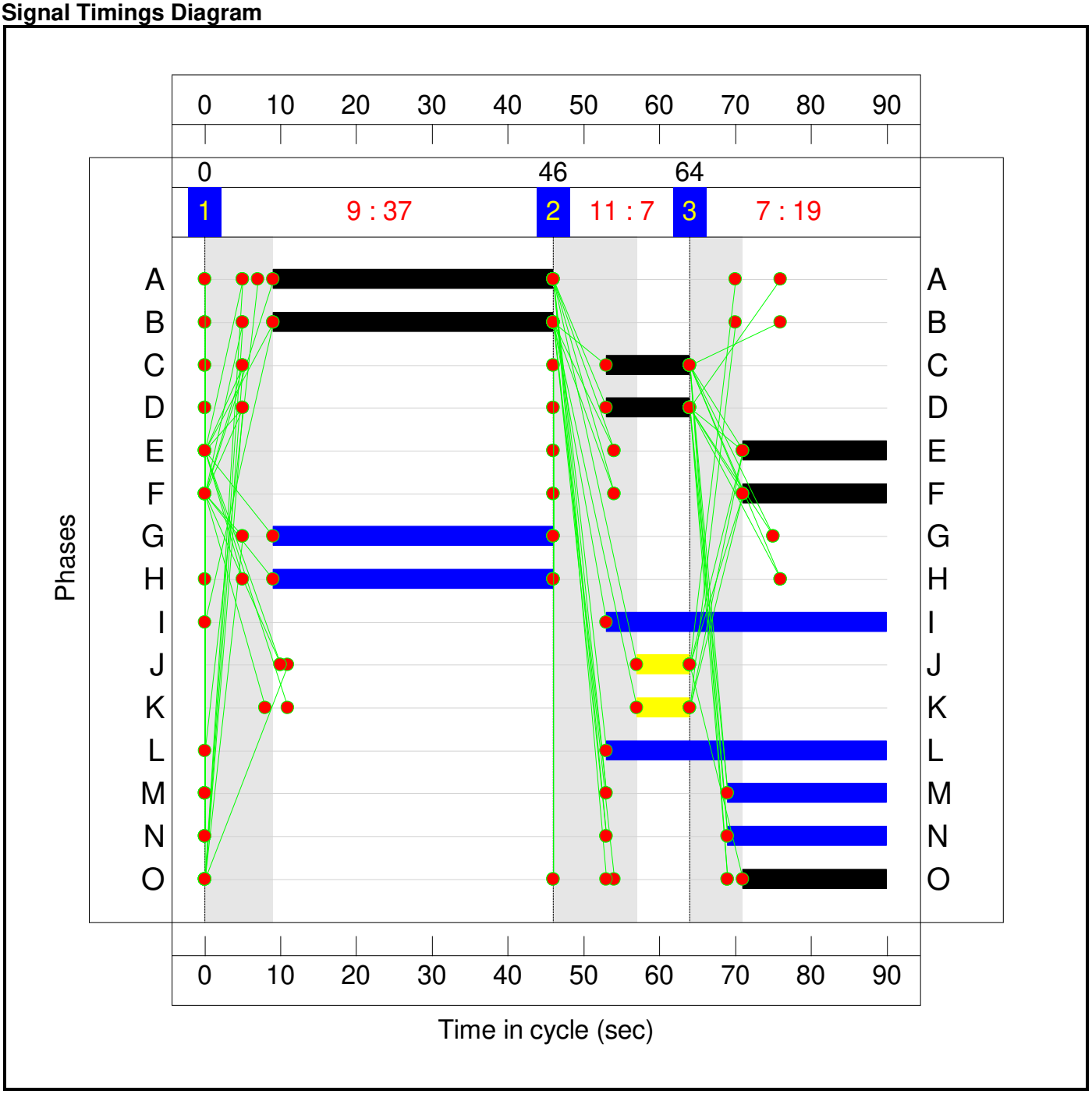
Stage Sequence Diagram



Stage Timings

Stage	1	2	3
Duration	37	7	19
Change Point	0	46	64

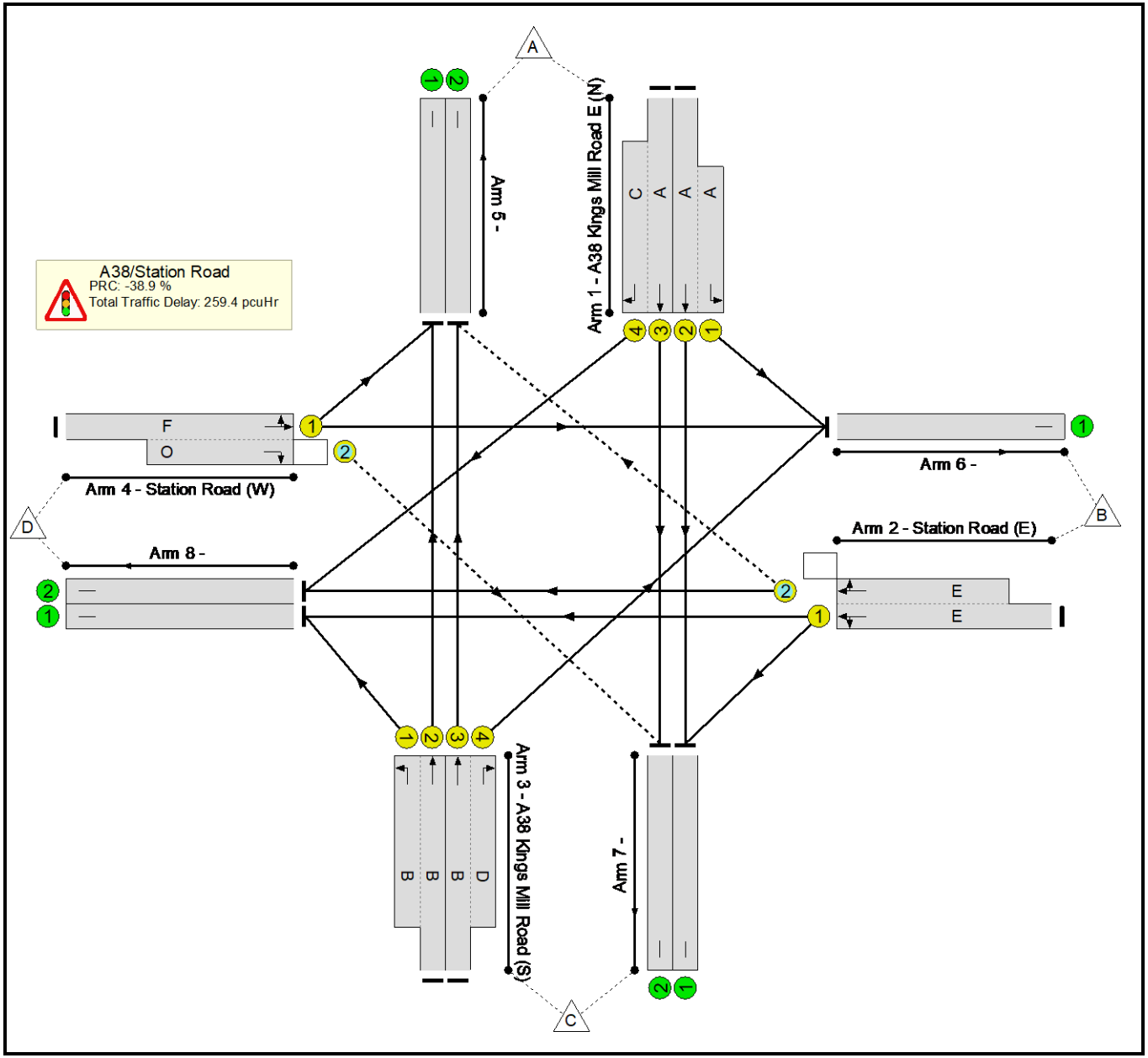
Signal Timings Diagram



Full Input Data And Results

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: A38 - Station Road	**-**	**-**	**N/A**	**-**	**-**		**-**	**-**	**-**	**-**	**-**	**-**	**125.0%**
A38/Station Road	**-**	**-**	**N/A**	**-**	**-**		**-**	**-**	**-**	**-**	**-**	**-**	**125.0%**
1/2+1/1	A38 Kings Mill Road E (N) Left Ahead	U	N/A	N/A	A		1	37	-	1038	1900:1800	780+68	122.5 : 122.5%
1/3+1/4	A38 Kings Mill Road E (N) Ahead Right	U	N/A	N/A	A C		1	37:11	-	500	2000:1800	160+240	125.0 : 125.0%
2/1+2/2	Station Road (E) Right Left Ahead	U+O	N/A	N/A	E		1	19	-	424	1900:1800	264+250	82.5 : 82.5%
3/2+3/1	A38 Kings Mill Road (S) Ahead Left	U	N/A	N/A	B		1	37	-	764	1900:1800	802+260	71.9 : 71.9%
3/3+3/4	A38 Kings Mill Road (S) Ahead Right	U	N/A	N/A	B D		1	37:11	-	743	2000:1800	844+227	75.7 : 45.9%
4/1+4/2	Station Road (W) Left Ahead Right	U+O	N/A	N/A	F O		1	19	-	630	1900:1800	422+96	121.6 : 121.6%
5/1		U	N/A	N/A	-		-	-	-	812	Inf	Inf	0.0%
5/2		U	N/A	N/A	-		-	-	-	705	Inf	Inf	0.0%
6/1		U	N/A	N/A	-		-	-	-	465	Inf	Inf	0.0%
7/1		U	N/A	N/A	-		-	-	-	997	Inf	Inf	0.0%
7/2		U	N/A	N/A	-		-	-	-	317	Inf	Inf	0.0%
8/1		U	N/A	N/A	-		-	-	-	363	Inf	Inf	0.0%
8/2		U	N/A	N/A	-		-	-	-	440	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: A38 - Station Road	**-**	**-**	**96**	**0**	**66**	**45.3**	**213.6**	**0.5**	**259.4**	**-**	**-**	**-**	**-**
A38/Station Road	**-**	**-**	**96**	**0**	**66**	**45.3**	**213.6**	**0.5**	**259.4**	**-**	**-**	**-**	**-**
1/2+1/1	1038	847	-	-	-	15.3	98.0	-	113.3 (104.3+9.0)	393.0 (393.2:390.9)	32.0	98.0	130.0
1/3+1/4	500	440	-	-	-	6.2	52.4	-	58.6 (21.9+36.7)	421.6 (393.9:440.1)	9.0	52.4	61.4
2/1+2/2	424	424	0	0	66	3.6	2.2	0.3	6.2 (3.0+3.1)	52.4 (49.8:55.0)	4.8	2.2	7.0
3/2+3/1	764	764	-	-	-	4.3	1.3	-	5.6 (4.4+1.2)	26.4 (27.6:22.7)	11.9	1.3	13.1
3/3+3/4	743	725	-	-	-	4.7	1.1	-	5.8 (4.9+0.9)	28.0 (27.5:30.9)	13.5	1.1	14.6
4/1+4/2	630	518	96	0	0	11.2	58.6	0.2	69.9 (56.9+13.1)	399.7 (399.0:402.4)	18.1	58.6	76.7
5/1	770	770	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/2	705	705	-	-	-	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	822	822	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
7/2	296	296	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
8/1	363	363	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
8/2	380	380	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0

C1 PRC for Signalled Lanes (%): -38.9 Total Delay for Signalled Lanes (pcuHr): 259.35 Cycle Time (s): 90
PRC Over All Lanes (%): -38.9 Total Delay Over All Lanes(pcuHr): 259.35

APPENDIX N

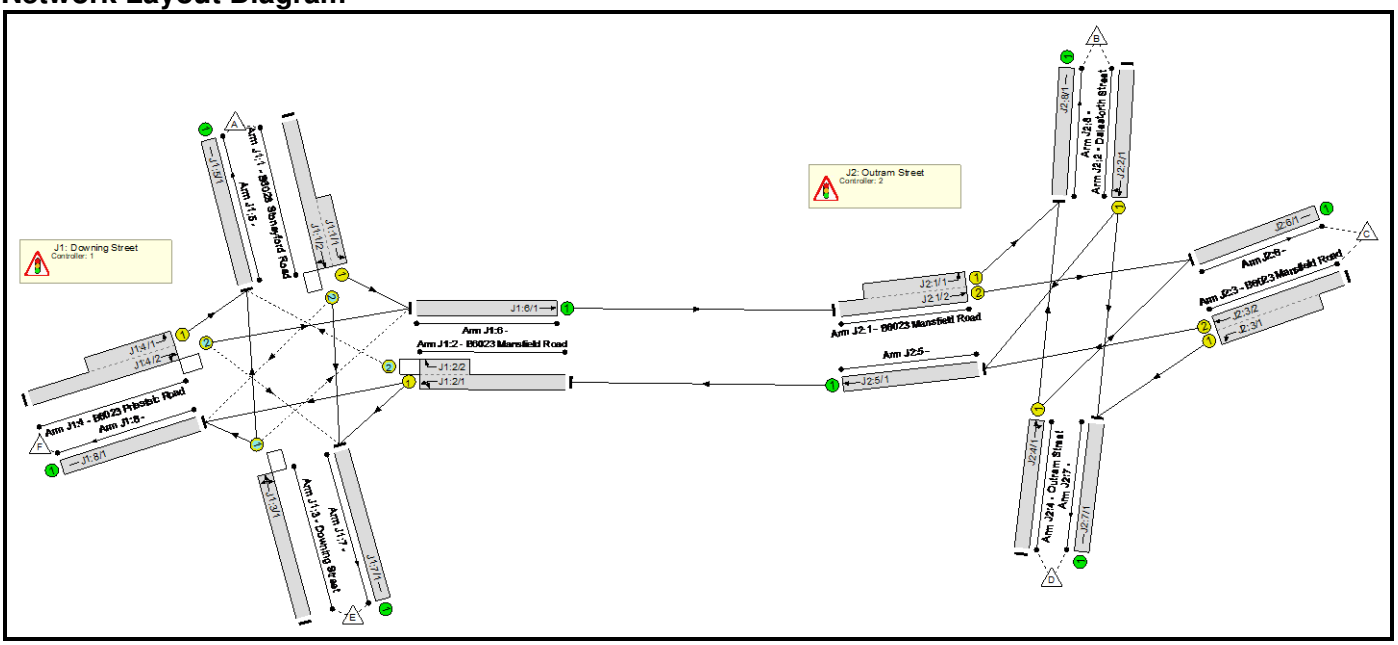
JUNCTIONS 10 AND 11 LINSIG OUTPUTS

Full Input Data And Results

User and Project Details

Project:	**Ashland Road, Sutton in Ashfield**
Title:	**Mansfield Road-Stoneyford Road-Downing Street-Dalestorth Street**
Location:	
Client:	Bellway Homes
Additional detail:	
File name:	J10-11 Mansfield Road-Stoneyford Road-Dalestorth Street (Network).lsg3x
Author:	
Company:	ADC Infrastructure Limited
Address:	King Edward Court, King Edward Street, Nottingham

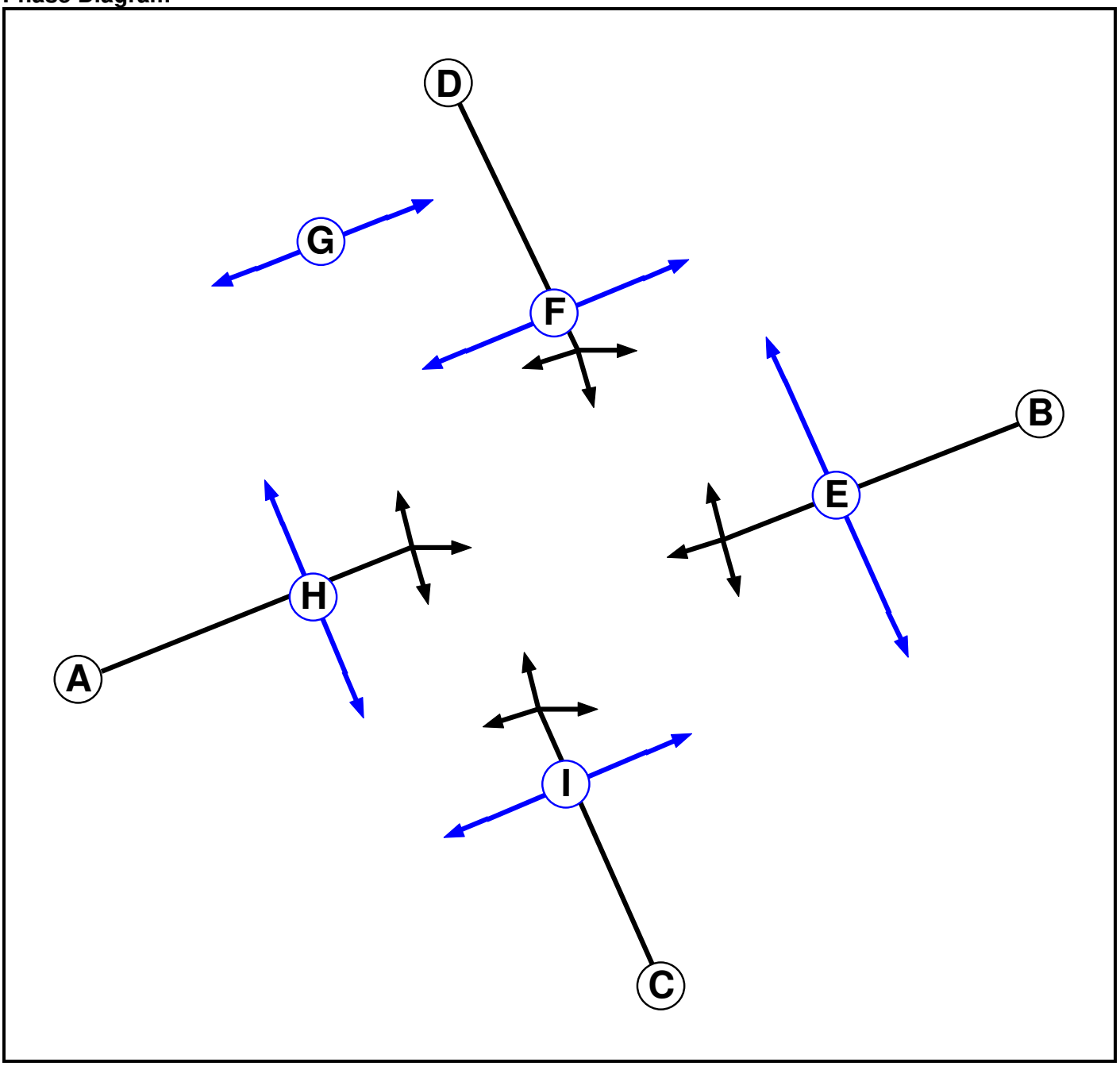
Network Layout Diagram



Full Input Data And Results

C1

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		6	6
F	Pedestrian		6	6
G	Pedestrian		6	6
H	Pedestrian		6	6
I	Pedestrian		6	6

Full Input Data And Results

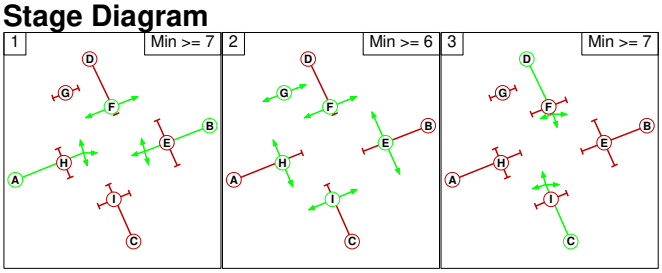
Phase Intergreens Matrix

		Starting Phase								
		A	B	C	D	E	F	G	H	I
Terminating Phase	A		-	7	7	9	-	10	8	10
	B	-		7	7	9	-	10	8	10
	C	7	7		-	10	5	8	10	8
	D	7	7	-		10	5	8	10	8
	E	8	8	8	8		-	-	-	-
	F	-	-	9	9	-		-	-	-
	G	8	8	8	8	-	-		-	-
	H	8	8	8	8	-	-	-		-
	I	9	9	9	9	-	-	-	-	

Phases in Stage

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

Stage Diagram



Phase Delays

Term. Stage	Start Stage	Phase	Type	Value	Cont value
1	2	A	Losing	2	2
1	2	B	Losing	2	2

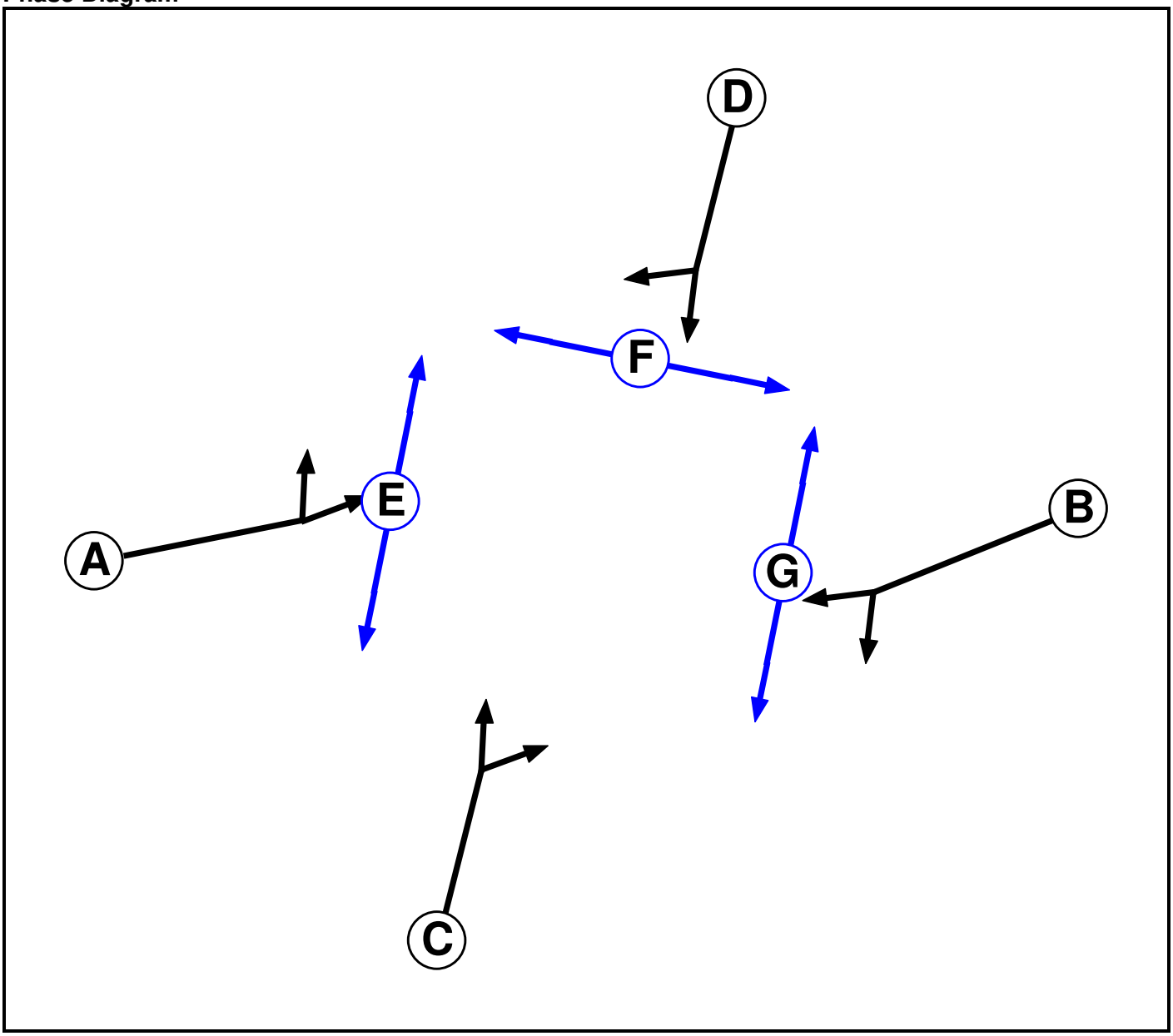
Prohibited Stage Change

		To Stage		
		1	2	3
From Stage	1		12	9
	2	9		9
	3	7	10	

Full Input Data And Results

C2

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		6	6
F	Pedestrian		6	6
G	Pedestrian		6	6

Full Input Data And Results

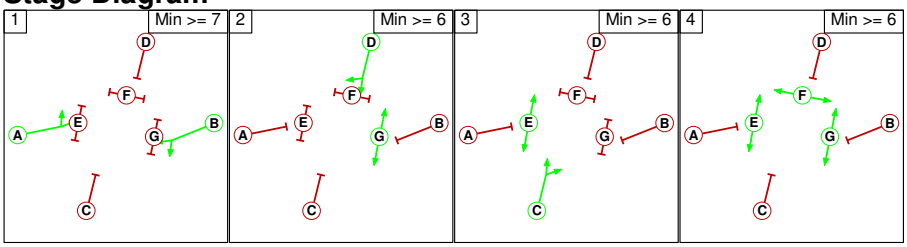
Phase Intergreens Matrix

Terminating Phase \ Starting Phase	A	B	C	D	E	F	G
A		-	7	7	5	8	8
B	-		7	7	8	10	5
C	7	7		5	-	10	8
D	7	7	5		8	8	-
E	8	8	-	8		-	-
F	8	8	8	8	-		-
G	8	8	8	-	-	-	

Phases in Stage

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

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		8	8	10
2	8		8	8
3	8	8		10
4	8	8	8	

Full Input Data And Results

Give-Way Lane Input Data

Junction: J1: Downing Street											
Lane	**Movement**	**Max Flow when Giving Way (PCU/Hr)**	**Min Flow when Giving Way (PCU/Hr)**	**Opposing Lane**	**Opp. Lane Coeff.**	**Opp. Mvmnts.**	**Right Turn Storage (PCU)**	**Non-Blocking Storage (PCU)**	**RTF**	**Right Turn Move up (s)**	**Max Turns in Intergreen (PCU)**
J1:1/2 (B6028 Stoneyford Road)	J1:8/1 (Right)	1439	0	J1:3/1	1.09	To J1:5/1 (Ahead) To J1:8/1 (Left)	2.00	2.00	0.50	2	2.00
J1:2/2 (B6023 Mansfield Road)	J1:5/1 (Right)	1439	0	J1:4/1	1.09	All	2.00	-	0.50	2	2.00
				J1:4/2	1.09	To J1:6/1 (Ahead)					
J1:3/1 (Downing Street)	J1:6/1 (Right)	1439	0	J1:1/1	1.09	All	2.00	2.00	0.50	2	2.00
				J1:1/2	1.09	To J1:7/1 (Ahead)					
J1:4/2 (B6023 Priestsic Road)	J1:7/1 (Right)	1439	0	J1:2/1	1.09	To J1:7/1 (Left) To J1:8/1 (Ahead)	2.00	2.00	0.50	2	2.00

Junction: J2: Outram Street
There are no Opposed Lanes in this Junction

Full Input Data And Results

Lane Input Data

Junction: J1: Downing Street												
Lane	**Lane Type**	**Phases**	**Start Disp.**	**End Disp.**	**Physical Length (PCU)**	**Sat Flow Type**	**Def User Saturation Flow (PCU/Hr)**	**Lane Width (m)**	**Gradient**	**Nearside Lane**	**Turns**	**Turning Radius (m)**
J1:1/1 (B6028 Stoneyford Road)	U	D	2	3	7.0	Geom	-	3.00	0.00	Y	Arm J1:6 Left	12.00
J1:1/2 (B6028 Stoneyford Road)	O	D	2	3	60.0	Geom	-	3.00	0.00	Y	Arm J1:7 Ahead	Inf
											Arm J1:8 Right	20.00
J1:2/1 (B6023 Mansfield Road)	U	B	2	3	31.3	Geom	-	2.50	0.00	Y	Arm J1:7 Left	12.00
											Arm J1:8 Ahead	Inf
J1:2/2 (B6023 Mansfield Road)	O	B	2	3	5.0	Geom	-	2.50	0.00	Y	Arm J1:5 Right	20.00
J1:3/1 (Downing Street)	O	C	2	3	60.0	Geom	-	4.00	0.00	Y	Arm J1:5 Ahead	Inf
											Arm J1:6 Right	20.00
											Arm J1:8 Left	6.00
J1:4/1 (B6023 Priestsic Road)	U	A	2	3	9.0	Geom	-	2.75	0.00	Y	Arm J1:5 Left	15.00
J1:4/2 (B6023 Priestsic Road)	O	A	2	3	60.0	Geom	-	2.75	0.00	Y	Arm J1:6 Ahead	Inf
											Arm J1:7 Right	18.00
J1:5/1	U		2	3	60.0	Inf	-	-	-	-	-	-
J1:6/1	U		2	3	3.5	Inf	-	-	-	-	-	-
J1:7/1	U		2	3	60.0	Inf	-	-	-	-	-	-
J1:8/1	U		2	3	60.0	Inf	-	-	-	-	-	-

Full Input Data And Results

Junction: J2: Outram Street												
Lane	**Lane Type**	**Phases**	**Start Disp.**	**End Disp.**	**Physical Length (PCU)**	**Sat Flow Type**	**Def User Saturation Flow (PCU/Hr)**	**Lane Width (m)**	**Gradient**	**Nearside Lane**	**Turns**	**Turning Radius (m)**
J2:1/1 (B6023 Mansfield Road)	U	A	2	3	13.9	User	1800	-	-	-	-	-
J2:1/2 (B6023 Mansfield Road)	U	A	2	3	34.8	User	1800	-	-	-	-	-
J2:2/1 (Dalestorth Street)	U	D	2	3	60.0	User	1800	-	-	-	-	-
J2:3/1 (B6023 Mansfield Road)	U	B	2	3	13.9	User	1800	-	-	-	-	-
J2:3/2 (B6023 Mansfield Road)	U	B	2	3	60.0	User	1800	-	-	-	-	-
J2:4/1 (Outram Street)	U	C	2	3	60.0	User	1800	-	-	-	-	-
J2:5/1	U		2	3	3.5	Inf	-	-	-	-	-	-
J2:6/1	U		2	3	60.0	Inf	-	-	-	-	-	-
J2:7/1	U		2	3	60.0	Inf	-	-	-	-	-	-
J2:8/1	U		2	3	60.0	Inf	-	-	-	-	-	-

Traffic Flow Groups

Flow Group	Start Time	End Time	Duration	Formula
1: 'Validation'	17:00	18:00	01:00	
2: '2030 Bkgd AM'	08:00	09:00	01:00	
3: '2030 Bkgd PM'	17:00	18:00	01:00	
4: '2030 With Dev AM'	08:00	09:00	01:00	
5: '2030 With Dev PM'	17:00	18:00	01:00	

Scenario 1: '2030 Bkgd AM' (FG2: '2030 Bkgd AM', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired

Desired Flow :

		Destination						
		A	B	C	D	E	F	Tot.
Origin	A	0	69	154	0	65	310	598
	B	67	0	0	216	0	264	547
	C	72	0	0	280	0	280	632
	D	0	129	294	0	0	0	423
	E	67	1	3	0	0	22	93
	F	254	162	325	0	17	0	758
	Tot.	460	361	776	496	82	876	3051

Full Input Data And Results

Traffic Lane Flows

Lane	Scenario 1: 2030 Bkgd AM
Junction: J1: Downing Street	
J1:1/1 (short)	223
J1:1/2 (with short)	598(In) 375(Out)
J1:2/1 (with short)	683(In) 544(Out)
J1:2/2 (short)	139
J1:3/1	93
J1:4/1 (short)	254
J1:4/2 (with short)	758(In) 504(Out)
J1:5/1	460
J1:6/1	714
J1:7/1	82
J1:8/1	876
Junction: J2: Outram Street	
J2:1/1 (short)	232
J2:1/2 (with short)	714(In) 482(Out)
J2:2/1	547
J2:3/1 (short)	280
J2:3/2 (with short)	632(In) 352(Out)
J2:4/1	423
J2:5/1	683
J2:6/1	776
J2:7/1	496
J2:8/1	361

Full Input Data And Results

Lane Saturation Flows

Junction: J1: Downing Street								
Lane	**Lane Width (m)**	**Gradient**	**Nearside Lane**	**Allowed Turns**	**Turning Radius (m)**	**Turning Prop.**	**Sat Flow (PCU/Hr)**	**Flared Sat Flow (PCU/Hr)**
J1:1/1 (B6028 Stoneyford Road)	3.00	0.00	Y	Arm J1:6 Left	12.00	100.0 %	1702	1702
J1:1/2 (B6028 Stoneyford Road)	3.00	0.00	Y	Arm J1:7 Ahead	Inf	17.3 %	1803	1803
				Arm J1:8 Right	20.00	82.7 %		
J1:2/1 (B6023 Mansfield Road)	2.50	0.00	Y	Arm J1:7 Left	12.00	0.0 %	1865	1865
				Arm J1:8 Ahead	Inf	100.0 %		
J1:2/2 (B6023 Mansfield Road)	2.50	0.00	Y	Arm J1:5 Right	20.00	100.0 %	1735	1735
J1:3/1 (Downing Street)	4.00	0.00	Y	Arm J1:5 Ahead	Inf	72.0 %	1897	1897
				Arm J1:6 Right	20.00	4.3 %		
				Arm J1:8 Left	6.00	23.7 %		
J1:4/1 (B6023 Priestsic Road)	2.75	0.00	Y	Arm J1:5 Left	15.00	100.0 %	1718	1718
J1:4/2 (B6023 Priestsic Road)	2.75	0.00	Y	Arm J1:6 Ahead	Inf	96.6 %	1885	1885
				Arm J1:7 Right	18.00	3.4 %		
J1:5/1	Infinite Saturation Flow						Inf	Inf
J1:6/1	Infinite Saturation Flow						Inf	Inf
J1:7/1	Infinite Saturation Flow						Inf	Inf
J1:8/1	Infinite Saturation Flow						Inf	Inf

Junction: J2: Outram Street								
Lane	**Lane Width (m)**	**Gradient**	**Nearside Lane**	**Allowed Turns**	**Turning Radius (m)**	**Turning Prop.**	**Sat Flow (PCU/Hr)**	**Flared Sat Flow (PCU/Hr)**
J2:1/1 (B6023 Mansfield Road Lane 1)	This lane uses a directly entered Saturation Flow						1800	1800
J2:1/2 (B6023 Mansfield Road Lane 2)	This lane uses a directly entered Saturation Flow						1800	1800
J2:2/1 (Dalestorth Street Lane 1)	This lane uses a directly entered Saturation Flow						1800	1800
J2:3/1 (B6023 Mansfield Road Lane 1)	This lane uses a directly entered Saturation Flow						1800	1800
J2:3/2 (B6023 Mansfield Road Lane 2)	This lane uses a directly entered Saturation Flow						1800	1800
J2:4/1 (Outram Street Lane 1)	This lane uses a directly entered Saturation Flow						1800	1800
J2:5/1	Infinite Saturation Flow						Inf	Inf
J2:6/1	Infinite Saturation Flow						Inf	Inf
J2:7/1	Infinite Saturation Flow						Inf	Inf
J2:8/1	Infinite Saturation Flow						Inf	Inf

Full Input Data And Results

Scenario 2: '2030 With Dev AM' (FG4: '2030 With Dev AM', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired

Desired Flow :

		Destination						
		A	B	C	D	E	F	Tot.
Origin	A	0	70	154	0	65	310	599
	B	67	0	0	216	0	268	551
	C	72	0	0	280	0	284	636
	D	0	129	294	0	0	0	423
	E	67	1	3	0	0	22	93
	F	254	171	336	0	17	0	778
	Tot.	460	371	787	496	82	884	3080

Traffic Lane Flows

Lane	Scenario 2: 2030 With Dev AM
Junction: J1: Downing Street	
J1:1/1 (short)	224
J1:1/2 (with short)	599(In) 375(Out)
J1:2/1 (with short)	691(In) 552(Out)
J1:2/2 (short)	139
J1:3/1	93
J1:4/1 (short)	254
J1:4/2 (with short)	778(In) 524(Out)
J1:5/1	460
J1:6/1	735
J1:7/1	82
J1:8/1	884
Junction: J2: Outram Street	
J2:1/1 (short)	242
J2:1/2 (with short)	735(In) 493(Out)
J2:2/1	551
J2:3/1 (short)	280
J2:3/2 (with short)	636(In) 356(Out)
J2:4/1	423
J2:5/1	691
J2:6/1	787
J2:7/1	496
J2:8/1	371

Full Input Data And Results

Lane Saturation Flows

Junction: J1: Downing Street								
Lane	**Lane Width (m)**	**Gradient**	**Nearside Lane**	**Allowed Turns**	**Turning Radius (m)**	**Turning Prop.**	**Sat Flow (PCU/Hr)**	**Flared Sat Flow (PCU/Hr)**
J1:1/1 (B6028 Stoneyford Road)	3.00	0.00	Y	Arm J1:6 Left	12.00	100.0 %	1702	1702
J1:1/2 (B6028 Stoneyford Road)	3.00	0.00	Y	Arm J1:7 Ahead	Inf	17.3 %	1803	1803
				Arm J1:8 Right	20.00	82.7 %		
J1:2/1 (B6023 Mansfield Road)	2.50	0.00	Y	Arm J1:7 Left	12.00	0.0 %	1865	1865
				Arm J1:8 Ahead	Inf	100.0 %		
J1:2/2 (B6023 Mansfield Road)	2.50	0.00	Y	Arm J1:5 Right	20.00	100.0 %	1735	1735
J1:3/1 (Downing Street)	4.00	0.00	Y	Arm J1:5 Ahead	Inf	72.0 %	1897	1897
				Arm J1:6 Right	20.00	4.3 %		
				Arm J1:8 Left	6.00	23.7 %		
J1:4/1 (B6023 Priestsic Road)	2.75	0.00	Y	Arm J1:5 Left	15.00	100.0 %	1718	1718
J1:4/2 (B6023 Priestsic Road)	2.75	0.00	Y	Arm J1:6 Ahead	Inf	96.8 %	1885	1885
				Arm J1:7 Right	18.00	3.2 %		
J1:5/1	Infinite Saturation Flow						Inf	Inf
J1:6/1	Infinite Saturation Flow						Inf	Inf
J1:7/1	Infinite Saturation Flow						Inf	Inf
J1:8/1	Infinite Saturation Flow						Inf	Inf

Junction: J2: Outram Street								
Lane	**Lane Width (m)**	**Gradient**	**Nearside Lane**	**Allowed Turns**	**Turning Radius (m)**	**Turning Prop.**	**Sat Flow (PCU/Hr)**	**Flared Sat Flow (PCU/Hr)**
J2:1/1 (B6023 Mansfield Road Lane 1)	This lane uses a directly entered Saturation Flow						1800	1800
J2:1/2 (B6023 Mansfield Road Lane 2)	This lane uses a directly entered Saturation Flow						1800	1800
J2:2/1 (Dalestorth Street Lane 1)	This lane uses a directly entered Saturation Flow						1800	1800
J2:3/1 (B6023 Mansfield Road Lane 1)	This lane uses a directly entered Saturation Flow						1800	1800
J2:3/2 (B6023 Mansfield Road Lane 2)	This lane uses a directly entered Saturation Flow						1800	1800
J2:4/1 (Outram Street Lane 1)	This lane uses a directly entered Saturation Flow						1800	1800
J2:5/1	Infinite Saturation Flow						Inf	Inf
J2:6/1	Infinite Saturation Flow						Inf	Inf
J2:7/1	Infinite Saturation Flow						Inf	Inf
J2:8/1	Infinite Saturation Flow						Inf	Inf

Full Input Data And Results

Scenario 3: '2030 Bkgd PM' (FG3: '2030 Bkgd PM', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired

Desired Flow :

		Destination						
		A	B	C	D	E	F	Tot.
Origin	A	0	53	62	0	110	178	403
	B	55	0	0	217	232	1	505
	C	76	0	0	355	300	1	732
	D	0	268	284	0	0	0	552
	E	186	5	7	0	0	47	245
	F	350	300	339	0	23	0	1012
	Tot.	667	626	692	572	665	227	3449

Traffic Lane Flows

Lane	Scenario 3: 2030 Bkgd PM
Junction: J1: Downing Street	
J1:1/1 (short)	115
J1:1/2 (with short)	403(In) 288(Out)
J1:2/1 (with short)	665(In) 534(Out)
J1:2/2 (short)	131
J1:3/1	245
J1:4/1 (short)	350
J1:4/2 (with short)	1012(In) 662(Out)
J1:5/1	667
J1:6/1	766
J1:7/1	665
J1:8/1	227
Junction: J2: Outram Street	
J2:1/1 (short)	358
J2:1/2 (with short)	766(In) 408(Out)
J2:2/1	505
J2:3/1 (short)	355
J2:3/2 (with short)	732(In) 377(Out)
J2:4/1	552
J2:5/1	665
J2:6/1	692
J2:7/1	572
J2:8/1	626

Full Input Data And Results

Lane Saturation Flows

Junction: J1: Downing Street								
Lane	**Lane Width (m)**	**Gradient**	**Nearside Lane**	**Allowed Turns**	**Turning Radius (m)**	**Turning Prop.**	**Sat Flow (PCU/Hr)**	**Flared Sat Flow (PCU/Hr)**
J1:1/1 (B6028 Stoneyford Road)	3.00	0.00	Y	Arm J1:6 Left	12.00	100.0 %	1702	1702
J1:1/2 (B6028 Stoneyford Road)	3.00	0.00	Y	Arm J1:7 Ahead	Inf	38.2 %	1830	1830
				Arm J1:8 Right	20.00	61.8 %		
J1:2/1 (B6023 Mansfield Road)	2.50	0.00	Y	Arm J1:7 Left	12.00	99.6 %	1658	1658
				Arm J1:8 Ahead	Inf	0.4 %		
J1:2/2 (B6023 Mansfield Road)	2.50	0.00	Y	Arm J1:5 Right	20.00	100.0 %	1735	1735
J1:3/1 (Downing Street)	4.00	0.00	Y	Arm J1:5 Ahead	Inf	75.9 %	1916	1916
				Arm J1:6 Right	20.00	4.9 %		
				Arm J1:8 Left	6.00	19.2 %		
J1:4/1 (B6023 Priestsic Road)	2.75	0.00	Y	Arm J1:5 Left	15.00	100.0 %	1718	1718
J1:4/2 (B6023 Priestsic Road)	2.75	0.00	Y	Arm J1:6 Ahead	Inf	96.5 %	1885	1885
				Arm J1:7 Right	18.00	3.5 %		
J1:5/1	Infinite Saturation Flow						Inf	Inf
J1:6/1	Infinite Saturation Flow						Inf	Inf
J1:7/1	Infinite Saturation Flow						Inf	Inf
J1:8/1	Infinite Saturation Flow						Inf	Inf

Junction: J2: Outram Street								
Lane	**Lane Width (m)**	**Gradient**	**Nearside Lane**	**Allowed Turns**	**Turning Radius (m)**	**Turning Prop.**	**Sat Flow (PCU/Hr)**	**Flared Sat Flow (PCU/Hr)**
J2:1/1 (B6023 Mansfield Road Lane 1)	This lane uses a directly entered Saturation Flow						1800	1800
J2:1/2 (B6023 Mansfield Road Lane 2)	This lane uses a directly entered Saturation Flow						1800	1800
J2:2/1 (Dalestorth Street Lane 1)	This lane uses a directly entered Saturation Flow						1800	1800
J2:3/1 (B6023 Mansfield Road Lane 1)	This lane uses a directly entered Saturation Flow						1800	1800
J2:3/2 (B6023 Mansfield Road Lane 2)	This lane uses a directly entered Saturation Flow						1800	1800
J2:4/1 (Outram Street Lane 1)	This lane uses a directly entered Saturation Flow						1800	1800
J2:5/1	Infinite Saturation Flow						Inf	Inf
J2:6/1	Infinite Saturation Flow						Inf	Inf
J2:7/1	Infinite Saturation Flow						Inf	Inf
J2:8/1	Infinite Saturation Flow						Inf	Inf

Full Input Data And Results

Scenario 4: '2030 With Dev PM' (FG5: '2030 With Dev PM', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired

Desired Flow :

		Destination						
		A	B	C	D	E	F	Tot.
Origin	A	0	52	62	0	111	178	403
	B	55	0	0	217	242	1	515
	C	76	0	0	355	311	1	743
	D	0	283	269	0	0	0	552
	E	185	5	7	0	0	47	244
	F	350	306	344	0	23	0	1023
	Tot.	666	646	682	572	687	227	3480

Traffic Lane Flows

Lane	Scenario 4: 2030 With Dev PM
Junction: J1: Downing Street	
J1:1/1 (short)	114
J1:1/2 (with short)	403(In) 289(Out)
J1:2/1 (with short)	686(In) 555(Out)
J1:2/2 (short)	131
J1:3/1	244
J1:4/1 (short)	350
J1:4/2 (with short)	1023(In) 673(Out)
J1:5/1	666
J1:6/1	776
J1:7/1	687
J1:8/1	227
Junction: J2: Outram Street	
J2:1/1 (short)	363
J2:1/2 (with short)	776(In) 413(Out)
J2:2/1	515
J2:3/1 (short)	355
J2:3/2 (with short)	743(In) 388(Out)
J2:4/1	552
J2:5/1	686
J2:6/1	682
J2:7/1	572
J2:8/1	646

Full Input Data And Results

Lane Saturation Flows

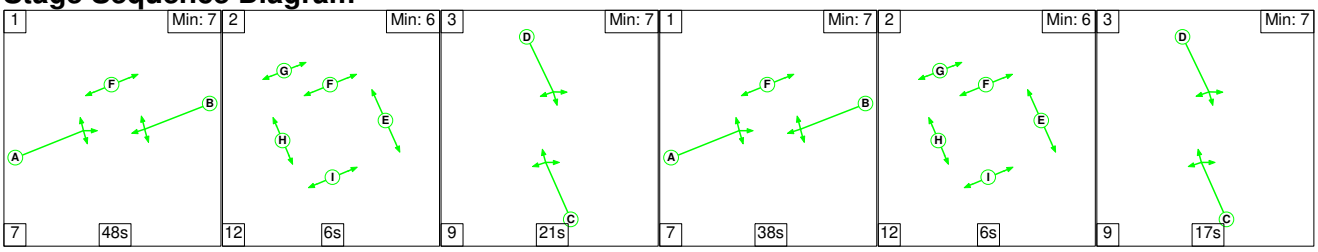
Junction: J1: Downing Street								
Lane	**Lane Width (m)**	**Gradient**	**Nearside Lane**	**Allowed Turns**	**Turning Radius (m)**	**Turning Prop.**	**Sat Flow (PCU/Hr)**	**Flared Sat Flow (PCU/Hr)**
J1:1/1 (B6028 Stoneyford Road)	3.00	0.00	Y	Arm J1:6 Left	12.00	100.0 %	1702	1702
J1:1/2 (B6028 Stoneyford Road)	3.00	0.00	Y	Arm J1:7 Ahead	Inf	38.4 %	1830	1830
				Arm J1:8 Right	20.00	61.6 %		
J1:2/1 (B6023 Mansfield Road)	2.50	0.00	Y	Arm J1:7 Left	12.00	99.6 %	1658	1658
				Arm J1:8 Ahead	Inf	0.4 %		
J1:2/2 (B6023 Mansfield Road)	2.50	0.00	Y	Arm J1:5 Right	20.00	100.0 %	1735	1735
J1:3/1 (Downing Street)	4.00	0.00	Y	Arm J1:5 Ahead	Inf	75.8 %	1916	1916
				Arm J1:6 Right	20.00	4.9 %		
				Arm J1:8 Left	6.00	19.3 %		
J1:4/1 (B6023 Priestsic Road)	2.75	0.00	Y	Arm J1:5 Left	15.00	100.0 %	1718	1718
J1:4/2 (B6023 Priestsic Road)	2.75	0.00	Y	Arm J1:6 Ahead	Inf	96.6 %	1885	1885
				Arm J1:7 Right	18.00	3.4 %		
J1:5/1	Infinite Saturation Flow						Inf	Inf
J1:6/1	Infinite Saturation Flow						Inf	Inf
J1:7/1	Infinite Saturation Flow						Inf	Inf
J1:8/1	Infinite Saturation Flow						Inf	Inf

Junction: J2: Outram Street								
Lane	**Lane Width (m)**	**Gradient**	**Nearside Lane**	**Allowed Turns**	**Turning Radius (m)**	**Turning Prop.**	**Sat Flow (PCU/Hr)**	**Flared Sat Flow (PCU/Hr)**
J2:1/1 (B6023 Mansfield Road Lane 1)	This lane uses a directly entered Saturation Flow						1800	1800
J2:1/2 (B6023 Mansfield Road Lane 2)	This lane uses a directly entered Saturation Flow						1800	1800
J2:2/1 (Dalestorth Street Lane 1)	This lane uses a directly entered Saturation Flow						1800	1800
J2:3/1 (B6023 Mansfield Road Lane 1)	This lane uses a directly entered Saturation Flow						1800	1800
J2:3/2 (B6023 Mansfield Road Lane 2)	This lane uses a directly entered Saturation Flow						1800	1800
J2:4/1 (Outram Street Lane 1)	This lane uses a directly entered Saturation Flow						1800	1800
J2:5/1	Infinite Saturation Flow						Inf	Inf
J2:6/1	Infinite Saturation Flow						Inf	Inf
J2:7/1	Infinite Saturation Flow						Inf	Inf
J2:8/1	Infinite Saturation Flow						Inf	Inf

Full Input Data And Results

Scenario 1: '2030 Bkgd AM' (FG2: '2030 Bkgd AM', Plan 1: 'Network Control Plan 1')
C1

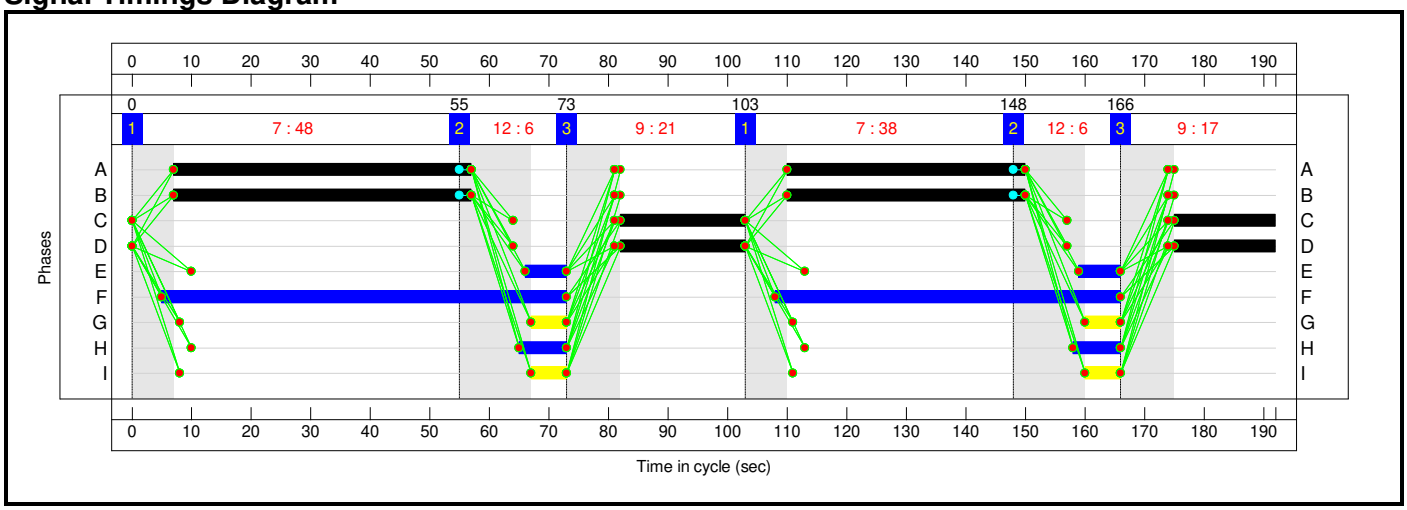
Stage Sequence Diagram



Stage Timings

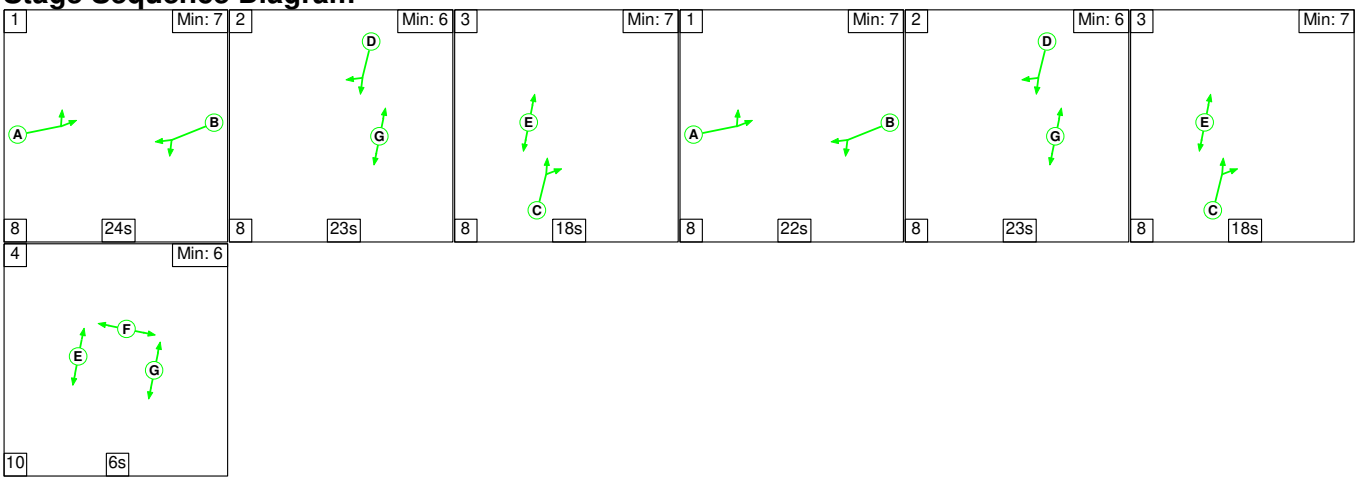
Stage	1	2	3	1	2	3
Duration	48	6	21	38	6	17
Change Point	0	55	73	103	148	166

Signal Timings Diagram



C2

Stage Sequence Diagram

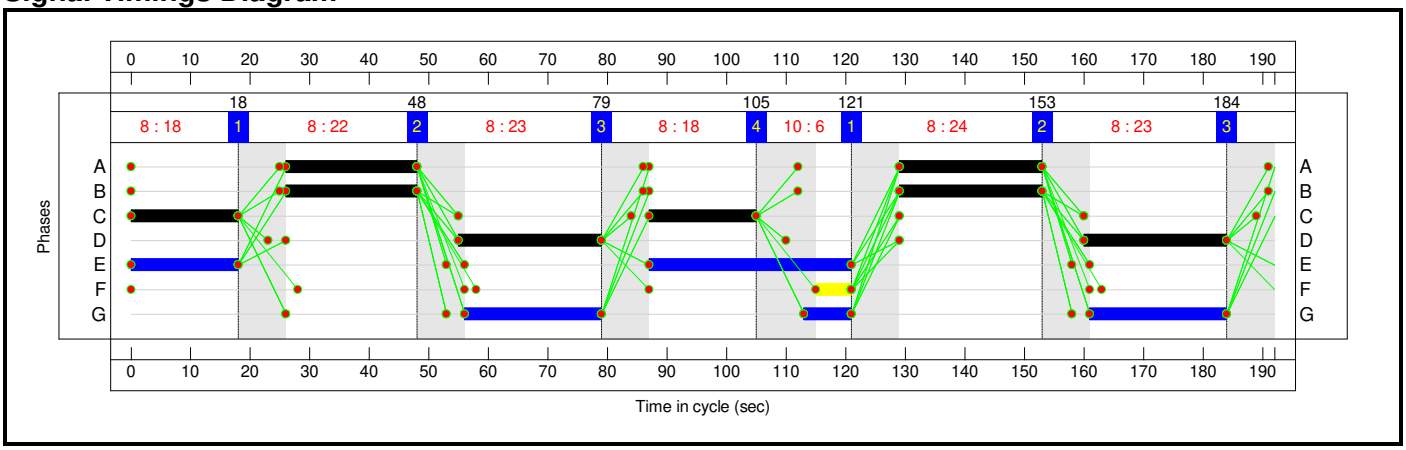


Full Input Data And Results

Stage Timings

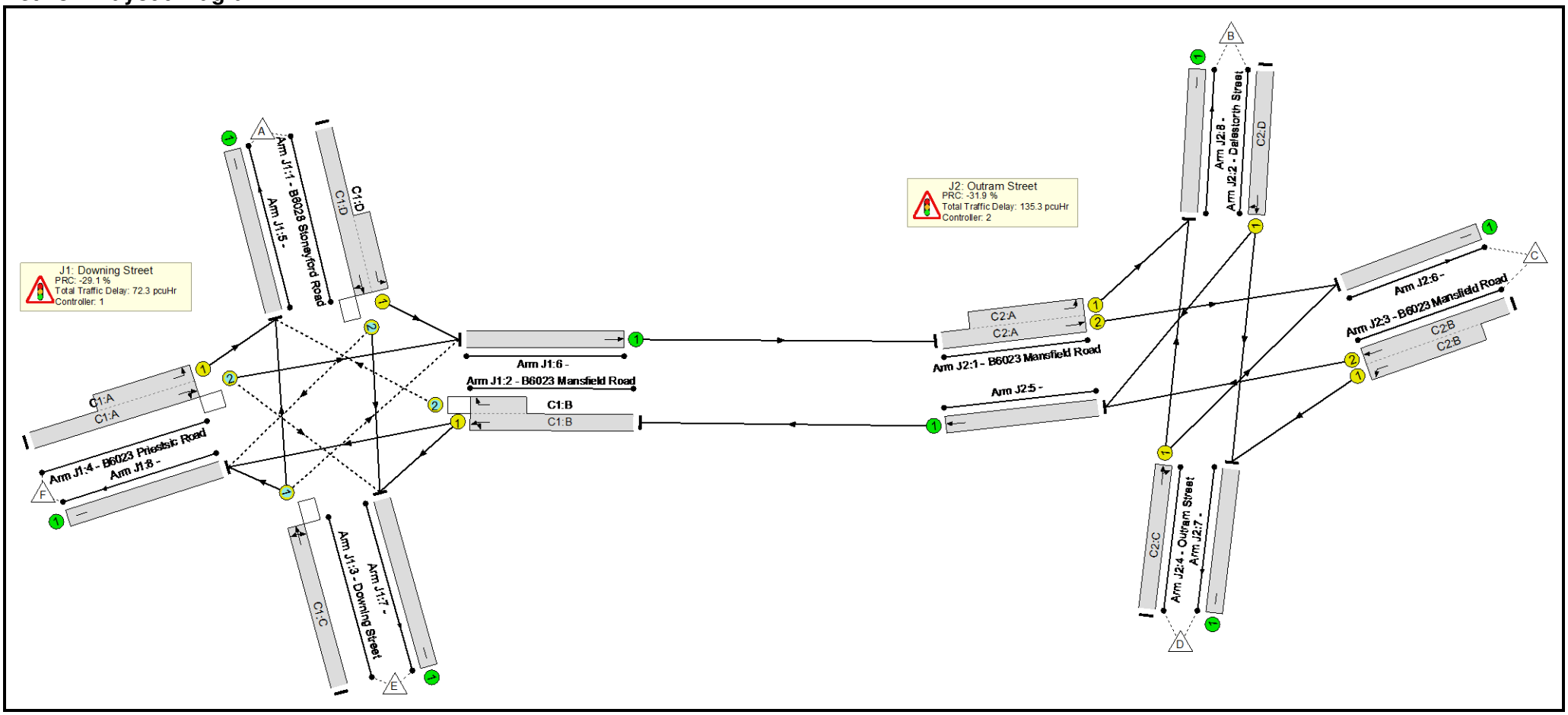
Stage	1	2	3	1	2	3	4
Duration	24	23	18	22	23	18	6
Change Point	121	153	184	18	48	79	105

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: Mansfield Road-Stoneyford Road-Downing Street-Dalestorth Street	**-**	**-**	**N/A**	**-**	**-**		**-**	**-**	**-**	**-**	**-**	**-**	**118.7%**
J1: Downing Street	**-**	**-**	**N/A**	**-**	**-**		**-**	**-**	**-**	**-**	**-**	**-**	**116.1%**
1/2+1/1	B6028 Stoneyford Road Left Ahead Right	O+U	N/A	N/A	C1:D		2	38	-	598	1803:1702	323+192	116.1 : 116.1%
2/1+2/2	B6023 Mansfield Road Right Left Ahead	U+O	N/A	N/A	C1:B		2	90	-	683	1865:1735	736+188	68.8 : 68.8%
3/1	Downing Street Ahead Right Left	O	N/A	N/A	C1:C		2	38	-	93	1897	395	23.5%
4/2+4/1	B6023 Priestsic Road Left Ahead Right	O+U	N/A	N/A	C1:A		2	90	-	758	1885:1718	704+355	71.6 : 71.6%
5/1		U	N/A	N/A	-		-	-	-	460	Inf	Inf	0.0%
6/1	Ahead	U	N/A	N/A	-		-	-	-	714	Inf	Inf	0.0%
7/1		U	N/A	N/A	-		-	-	-	82	Inf	Inf	0.0%
8/1		U	N/A	N/A	-		-	-	-	876	Inf	Inf	0.0%
J2: Outram Street	**-**	**-**	**N/A**	**-**	**-**		**-**	**-**	**-**	**-**	**-**	**-**	**118.7%**
1/2+1/1	B6023 Mansfield Road Ahead Left	U	N/A	N/A	C2:A		2	46	-	714	1800:1800	450+217	102.4 : 102.7%
2/1	Dalestorth Street Right Ahead	U	N/A	N/A	C2:D		2	48	-	547	1800	469	116.7%
3/2+3/1	B6023 Mansfield Road Ahead Left	U	N/A	N/A	C2:B		2	46	-	632	1800:1800	450+358	78.2 : 78.2%
4/1	Outram Street Right Ahead	U	N/A	N/A	C2:C		2	36	-	423	1800	356	118.7%

Full Input Data And Results

5/1	Ahead	U	N/A	N/A	-		-	-	-	683	Inf	Inf	0.0%
6/1		U	N/A	N/A	-		-	-	-	776	Inf	Inf	0.0%
7/1		U	N/A	N/A	-		-	-	-	496	Inf	Inf	0.0%
8/1		U	N/A	N/A	-		-	-	-	361	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: Mansfield Road-Stoneyford Road-Downing Street-Dalestorth Street	**-**	**-**	**373**	**0**	**45**	**61.2**	**145.6**	**0.7**	**207.5**	**-**	**-**	**-**	**-**
J1: Downing Street	**-**	**-**	**373**	**0**	**45**	**24.2**	**47.4**	**0.7**	**72.3**	**-**	**-**	**-**	**-**
1/2+1/1	598	515	222	0	44	15.5	44.9	0.3	60.7	365.2	22.3	44.9	67.2
2/1+2/2	636	636	129	0	0	4.3	1.1	0.4	5.8	32.7	12.8	1.1	13.8
3/1	93	93	4	0	0	0.8	0.2	0.0	1.0	37.9	2.2	0.2	2.3
4/2+4/1	758	758	17	0	0	3.6	1.2	0.0	4.9	23.1	10.7	1.2	11.9
5/1	450	450	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/1	683	683	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
7/1	73	73	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
8/1	795	795	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
J2: Outram Street	**-**	**-**	**0**	**0**	**0**	**37.1**	**98.2**	**0.0**	**135.3**	**-**	**-**	**-**	**-**
1/2+1/1	683	668	-	-	-	5.5	17.8	-	23.3	122.6	15.3	17.8	33.1
2/1	547	469	-	-	-	13.9	42.4	-	56.2	370.0	24.3	42.4	66.7
3/2+3/1	632	632	-	-	-	5.8	1.8	-	7.6	43.3	9.7	1.8	11.4
4/1	423	356	-	-	-	11.9	36.3	-	48.2	410.0	17.7	36.3	54.0
5/1	636	636	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/1	698	698	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
7/1	465	465	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
8/1	326	326	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0

C1	PRC for Signalled Lanes (%):	-29.1	Total Delay for Signalled Lanes (pcuHr):	72.28	Cycle Time (s):	192
C2	PRC for Signalled Lanes (%):	-31.9	Total Delay for Signalled Lanes (pcuHr):	135.25	Cycle Time (s):	192
	PRC Over All Lanes (%):	-31.9	Total Delay Over All Lanes(pcuHr):	207.53		

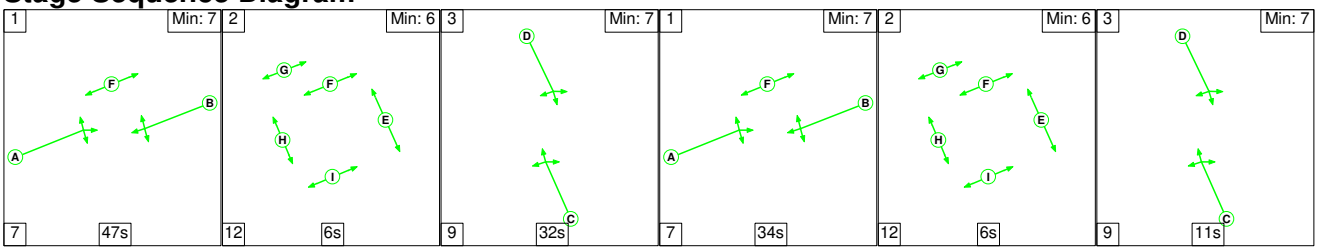
Full Input Data And Results

Full Input Data And Results

Scenario 2: '2030 With Dev AM' (FG4: '2030 With Dev AM', Plan 1: 'Network Control Plan 1')

C1

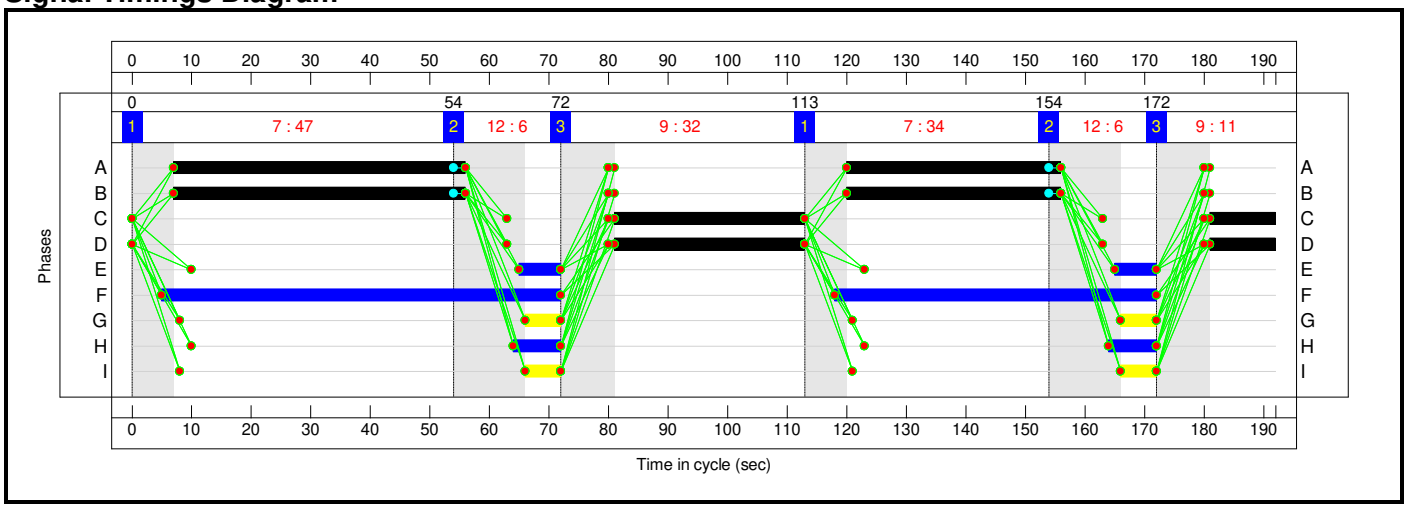
Stage Sequence Diagram



Stage Timings

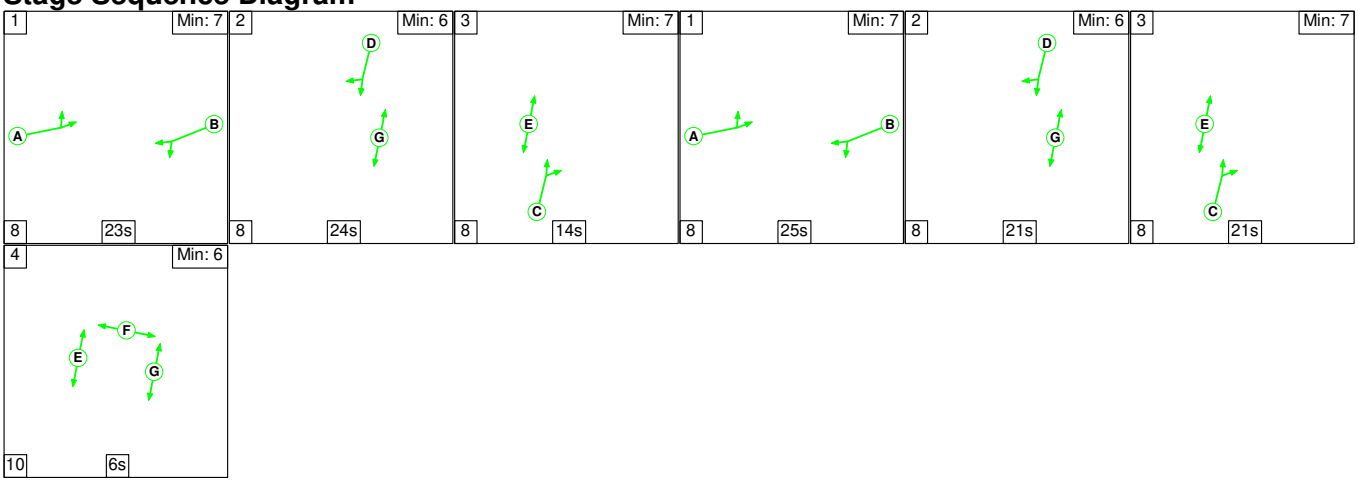
Stage	1	2	3	1	2	3
Duration	47	6	32	34	6	11
Change Point	0	54	72	113	154	172

Signal Timings Diagram



C2

Stage Sequence Diagram

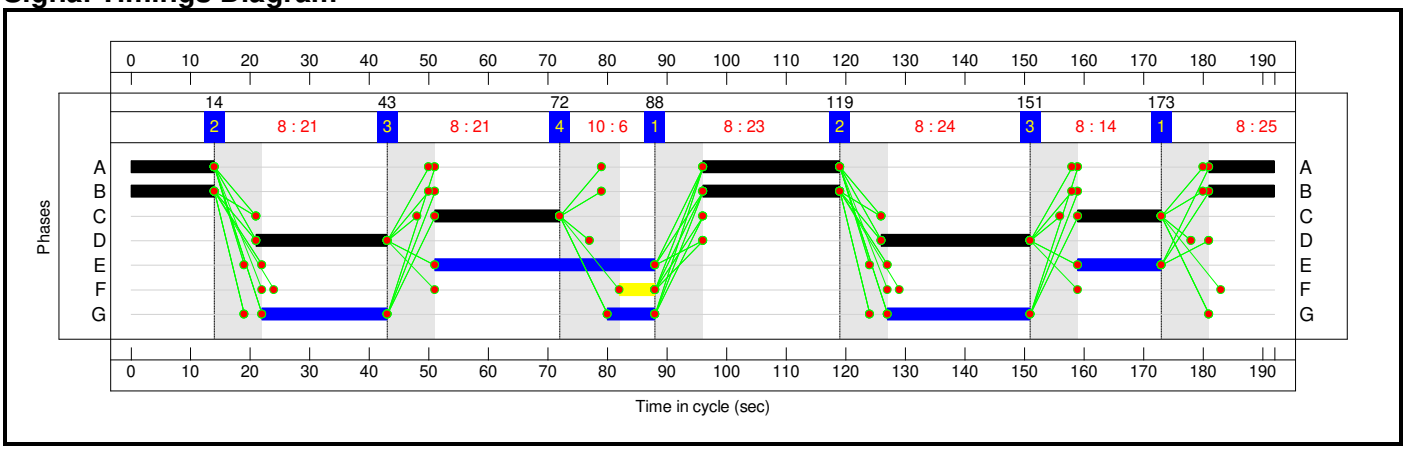


Stage Timings

Stage	1	2	3	1	2	3	4
Duration	23	24	14	25	21	21	6
Change Point	88	119	151	173	14	43	72

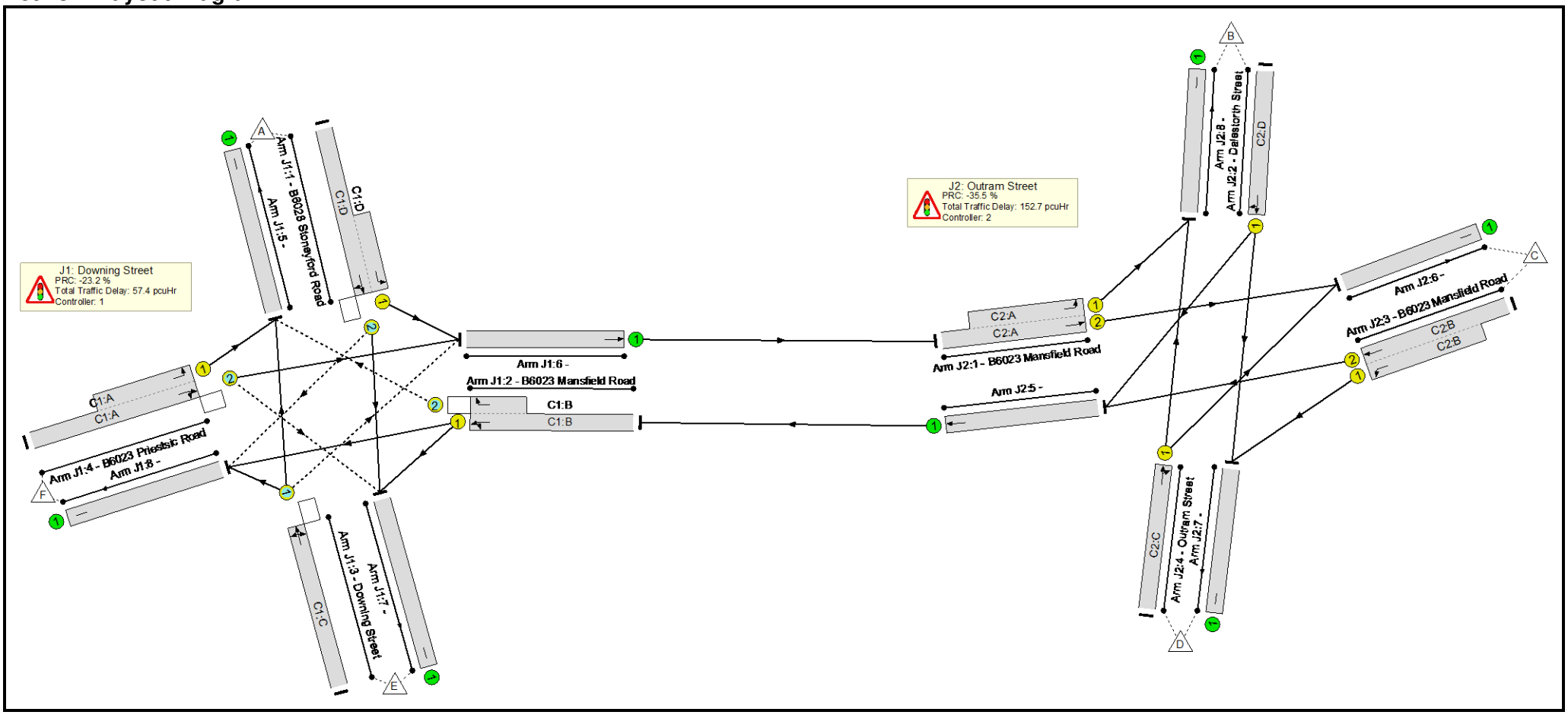
Full Input Data And Results

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: Mansfield Road-Stoneyford Road-Downing Street-Dalestorth Street	**-**	**-**	**N/A**	**-**	**-**		**-**	**-**	**-**	**-**	**-**	**-**	**121.9%**
J1: Downing Street	**-**	**-**	**N/A**	**-**	**-**		**-**	**-**	**-**	**-**	**-**	**-**	**110.9%**
1/2+1/1	B6028 Stoneyford Road Left Ahead Right	O+U	N/A	N/A	C1:D		2	43	-	599	1803:1702	338+202	110.9 : 110.9%
2/1+2/2	B6023 Mansfield Road Right Left Ahead	U+O	N/A	N/A	C1:B		2	85	-	691	1865:1735	700+176	72.5 : 72.6%
3/1	Downing Street Ahead Right Left	O	N/A	N/A	C1:C		2	43	-	93	1897	445	20.9%
4/2+4/1	B6023 Priestsic Road Left Ahead Right	O+U	N/A	N/A	C1:A		2	85	-	778	1885:1718	677+328	77.4 : 77.4%
5/1		U	N/A	N/A	-		-	-	-	460	Inf	Inf	0.0%
6/1	Ahead	U	N/A	N/A	-		-	-	-	735	Inf	Inf	0.0%
7/1		U	N/A	N/A	-		-	-	-	82	Inf	Inf	0.0%
8/1		U	N/A	N/A	-		-	-	-	884	Inf	Inf	0.0%
J2: Outram Street	**-**	**-**	**N/A**	**-**	**-**		**-**	**-**	**-**	**-**	**-**	**-**	**121.9%**
1/2+1/1	B6023 Mansfield Road Ahead Left	U	N/A	N/A	C2:A		2	48	-	735	1800:1800	469+230	102.0 : 102.2%
2/1	Dalestorth Street Right Ahead	U	N/A	N/A	C2:D		2	47	-	551	1800	459	119.9%
3/2+3/1	B6023 Mansfield Road Ahead Left	U	N/A	N/A	C2:B		2	48	-	636	1800:1800	469+369	75.9 : 75.9%
4/1	Outram Street Right Ahead	U	N/A	N/A	C2:C		2	35	-	423	1800	347	121.9%

Full Input Data And Results

5/1	Ahead	U	N/A	N/A	-		-	-	-	691	Inf	Inf	0.0%
6/1		U	N/A	N/A	-		-	-	-	787	Inf	Inf	0.0%
7/1		U	N/A	N/A	-		-	-	-	496	Inf	Inf	0.0%
8/1		U	N/A	N/A	-		-	-	-	371	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: Mansfield Road-Stoneyford Road-Downing Street-Dalestorth Street	**-**	**-**	**375**	**0**	**53**	**64.0**	**145.3**	**0.9**	**210.1**	**-**	**-**	**-**	**-**
J1: Downing Street	**-**	**-**	**375**	**0**	**53**	**19.6**	**37.0**	**0.9**	**57.4**	**-**	**-**	**-**	**-**
1/2+1/1	599	540	257	0	22	12.7	33.9	0.2	46.8	281.6	23.8	33.9	57.6
2/1+2/2	635	635	97	0	31	1.7	1.3	0.6	3.6	20.3	9.9	1.3	11.2
3/1	93	93	4	0	0	0.8	0.1	0.0	0.9	35.1	2.2	0.1	2.3
4/2+4/1	778	778	17	0	0	4.4	1.7	0.0	6.1	28.2	15.7	1.7	17.4
5/1	449	449	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/1	713	713	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
7/1	76	76	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
8/1	809	809	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
J2: Outram Street	**-**	**-**	**0**	**0**	**0**	**44.4**	**108.3**	**0.0**	**152.7**	**-**	**-**	**-**	**-**
1/2+1/1	713	704	-	-	-	9.2	17.4	-	26.6	134.4	14.9	17.4	32.3
2/1	551	459	-	-	-	16.1	48.6	-	64.7	422.7	26.3	48.6	74.9
3/2+3/1	636	636	-	-	-	5.8	1.6	-	7.3	41.4	9.9	1.6	11.4
4/1	423	347	-	-	-	13.3	40.7	-	54.0	459.7	20.0	40.7	60.7
5/1	635	635	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/1	710	710	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
7/1	460	460	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
8/1	341	341	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0

C1	PRC for Signalled Lanes (%):	-23.2	Total Delay for Signalled Lanes (pcuHr):	57.43	Cycle Time (s):	192
C2	PRC for Signalled Lanes (%):	-35.5	Total Delay for Signalled Lanes (pcuHr):	152.66	Cycle Time (s):	192
	PRC Over All Lanes (%):	-35.5	Total Delay Over All Lanes(pcuHr):	210.10		

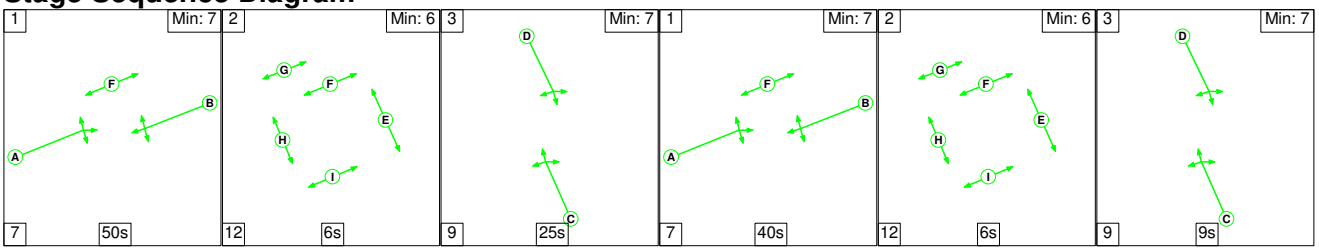
Full Input Data And Results

Full Input Data And Results

Scenario 3: '2030 Bkgd PM' (FG3: '2030 Bkgd PM', Plan 1: 'Network Control Plan 1')

C1

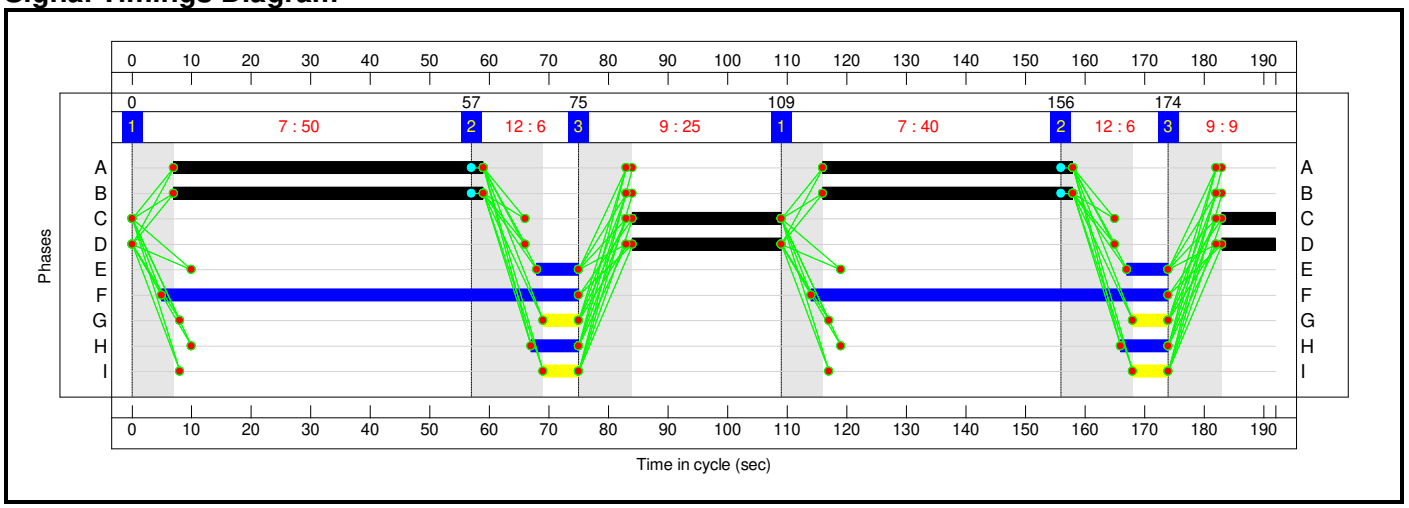
Stage Sequence Diagram



Stage Timings

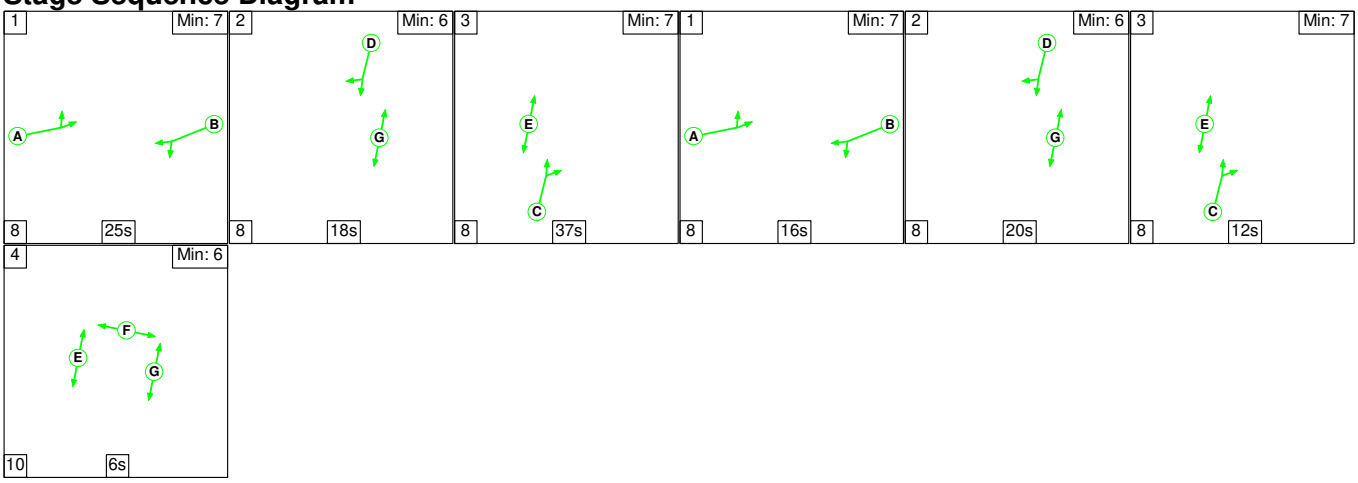
Stage	1	2	3	1	2	3
Duration	50	6	25	40	6	9
Change Point	0	57	75	109	156	174

Signal Timings Diagram



C2

Stage Sequence Diagram

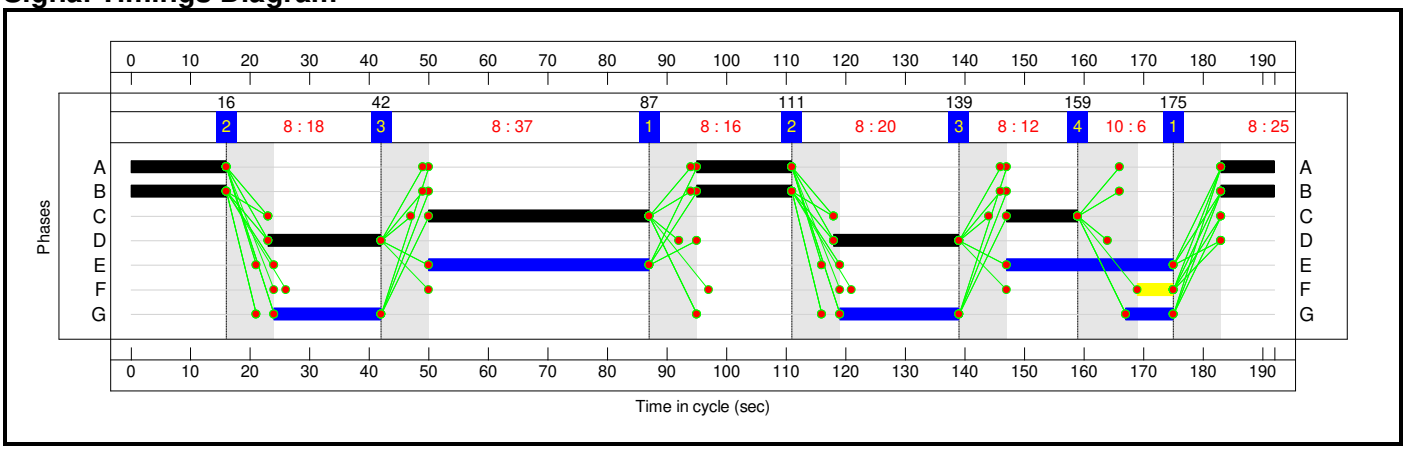


Stage Timings

Stage	1	2	3	1	2	3	4
Duration	25	18	37	16	20	12	6
Change Point	175	16	42	87	111	139	159

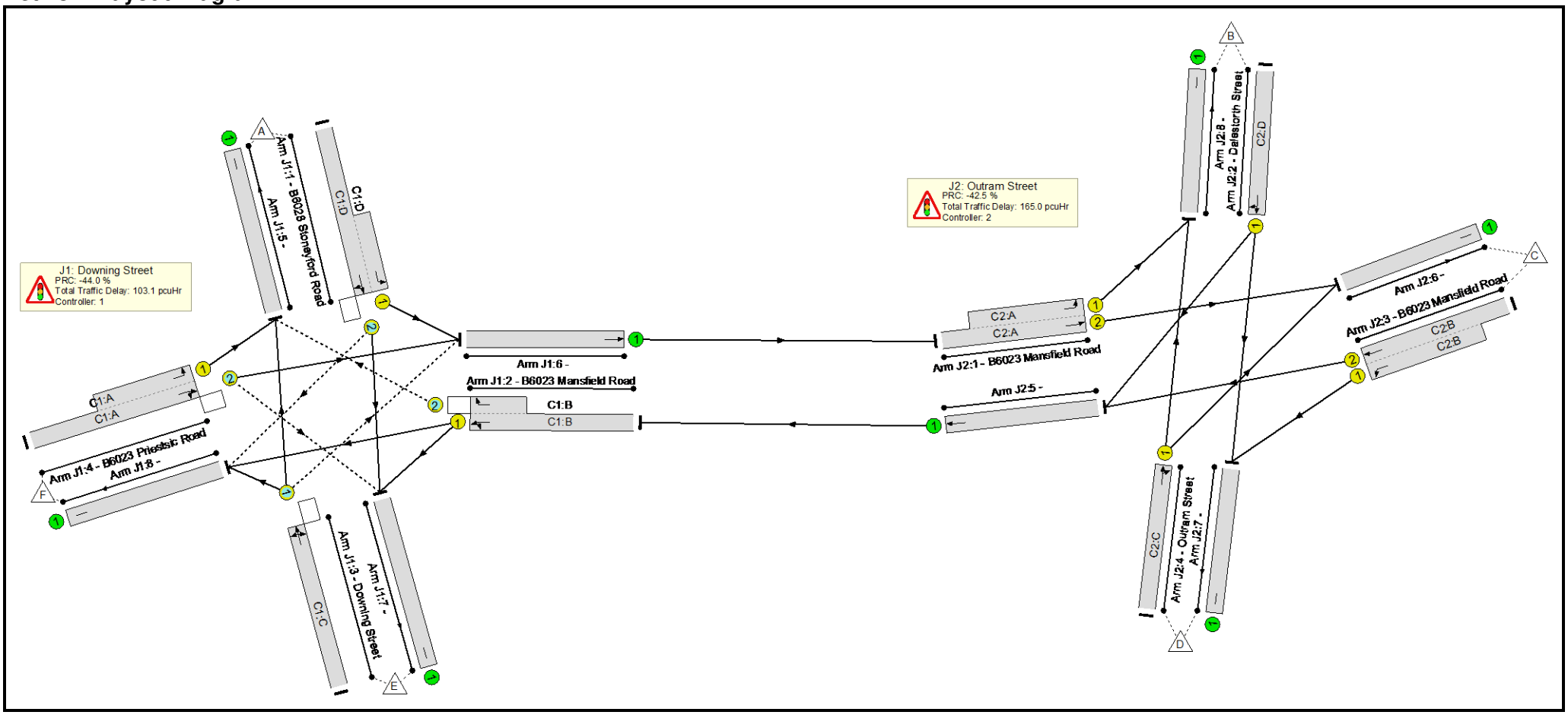
Full Input Data And Results

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: Mansfield Road-Stoneyford Road-Downing Street-Dalestorth Street	**-**	**-**	**N/A**	**-**	**-**		**-**	**-**	**-**	**-**	**-**	**-**	**129.6%**
J1: Downing Street	**-**	**-**	**N/A**	**-**	**-**		**-**	**-**	**-**	**-**	**-**	**-**	**129.6%**
1/2+1/1	B6028 Stoneyford Road Left Ahead Right	O+U	N/A	N/A	C1:D		2	34	-	403	1830:1702	222+89	129.6 : 129.6%
2/1+2/2	B6023 Mansfield Road Right Left Ahead	U+O	N/A	N/A	C1:B		2	94	-	665	1658:1735	453+111	106.5 : 107.0%
3/1	Downing Street Ahead Right Left	O	N/A	N/A	C1:C		2	34	-	245	1916	359	68.2%
4/2+4/1	B6023 Priestsic Road Left Ahead Right	O+U	N/A	N/A	C1:A		2	94	-	1012	1885:1718	723+382	91.6 : 91.6%
5/1		U	N/A	N/A	-		-	-	-	667	Inf	Inf	0.0%
6/1	Ahead	U	N/A	N/A	-		-	-	-	766	Inf	Inf	0.0%
7/1		U	N/A	N/A	-		-	-	-	665	Inf	Inf	0.0%
8/1		U	N/A	N/A	-		-	-	-	227	Inf	Inf	0.0%
J2: Outram Street	**-**	**-**	**N/A**	**-**	**-**		**-**	**-**	**-**	**-**	**-**	**-**	**128.3%**
1/2+1/1	B6023 Mansfield Road Ahead Left	U	N/A	N/A	C2:A		2	41	-	766	1800:1800	403+354	97.7 : 97.8%
2/1	Dalestorth Street Right Ahead	U	N/A	N/A	C2:D		2	40	-	505	1800	394	128.3%
3/2+3/1	B6023 Mansfield Road Ahead Left	U	N/A	N/A	C2:B		2	41	-	732	1800:1800	403+380	93.5 : 93.5%
4/1	Outram Street Right Ahead	U	N/A	N/A	C2:C		2	49	-	552	1800	478	115.5%

Full Input Data And Results

5/1	Ahead	U	N/A	N/A	-		-	-	-	665	Inf	Inf	0.0%
6/1		U	N/A	N/A	-		-	-	-	692	Inf	Inf	0.0%
7/1		U	N/A	N/A	-		-	-	-	572	Inf	Inf	0.0%
8/1		U	N/A	N/A	-		-	-	-	626	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: Mansfield Road-Stoneyford Road-Downing Street-Dalestorth Street	**-**	**-**	**155**	**0**	**128**	**73.9**	**192.8**	**1.3**	**268.1**	**-**	**-**	**-**	**-**
J1: Downing Street	**-**	**-**	**155**	**0**	**128**	**22.9**	**78.8**	**1.3**	**103.1**	**-**	**-**	**-**	**-**
1/2+1/1	403	311	80	0	57	13.0	48.1	0.3	61.4	548.7	19.9	48.1	68.0
2/1+2/2	602	594	40	0	71	1.4	24.8	1.0	27.1	162.4	12.2	24.8	36.9
3/1	245	245	12	0	0	2.6	1.1	0.0	3.7	54.4	6.8	1.1	7.8
4/2+4/1	1012	1012	23	0	0	5.9	4.9	0.0	10.8	38.5	23.9	4.9	28.8
5/1	647	647	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/1	740	740	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
7/1	589	589	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
8/1	186	186	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
J2: Outram Street	**-**	**-**	**0**	**0**	**0**	**51.0**	**114.0**	**0.0**	**165.0**	**-**	**-**	**-**	**-**
1/2+1/1	740	740	-	-	-	10.5	10.0	-	20.5	99.9	15.4	10.0	25.4
2/1	505	394	-	-	-	17.4	57.8	-	75.2	535.9	25.5	57.8	83.3
3/2+3/1	732	732	-	-	-	8.5	5.9	-	14.3	70.5	11.2	5.9	17.0
4/1	552	478	-	-	-	14.6	40.4	-	55.0	358.4	26.9	40.4	67.2
5/1	602	602	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/1	640	640	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
7/1	524	524	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
8/1	578	578	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0

C1	PRC for Signalled Lanes (%):	-44.0	Total Delay for Signalled Lanes (pcuHr):	103.08	Cycle Time (s): 192
C2	PRC for Signalled Lanes (%):	-42.5	Total Delay for Signalled Lanes (pcuHr):	164.98	Cycle Time (s): 192
	PRC Over All Lanes (%):	-44.0	Total Delay Over All Lanes(pcuHr):	268.06	

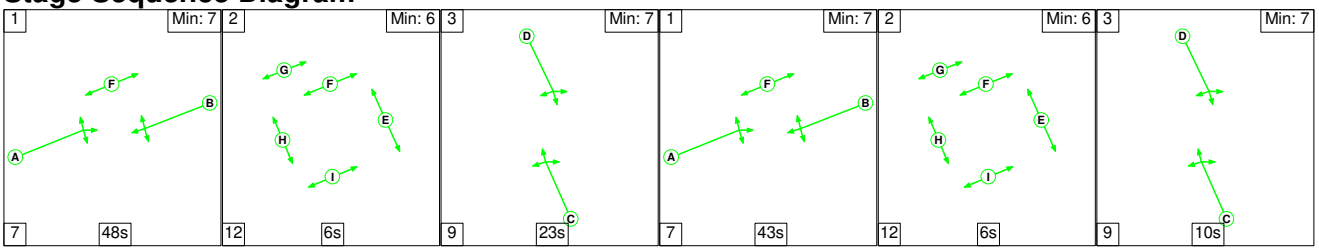
Full Input Data And Results

Full Input Data And Results

Scenario 4: '2030 With Dev PM' (FG5: '2030 With Dev PM', Plan 1: 'Network Control Plan 1')

C1

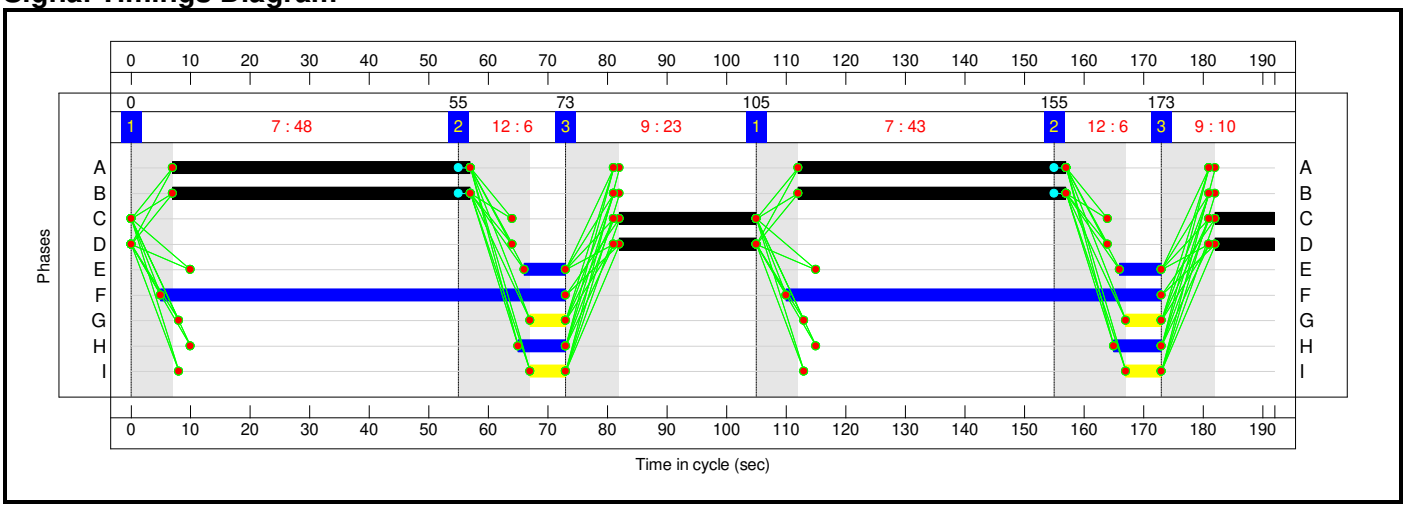
Stage Sequence Diagram



Stage Timings

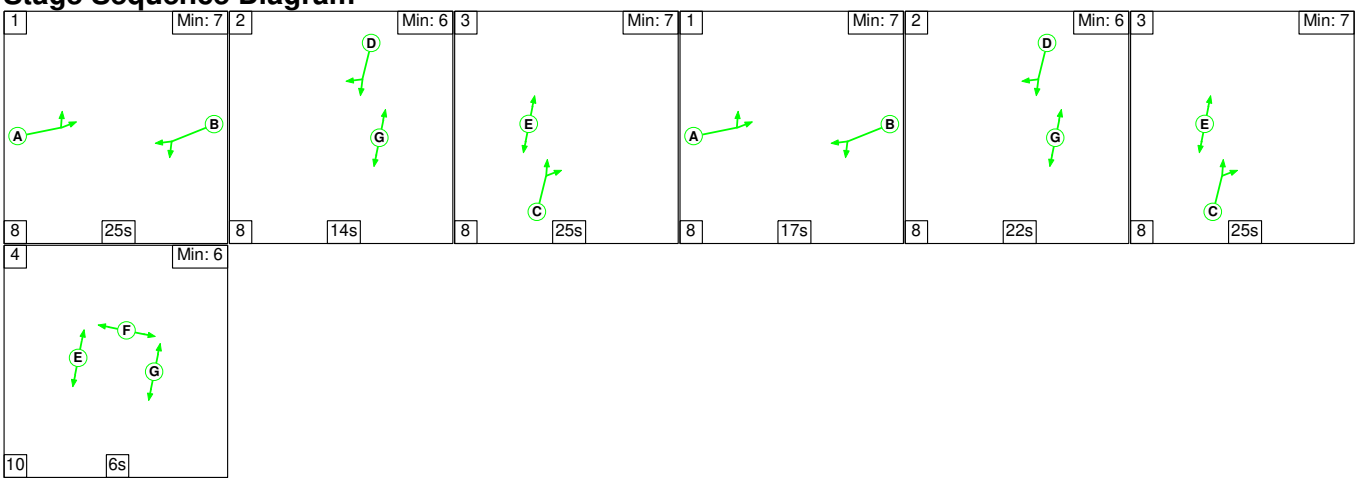
Stage	1	2	3	1	2	3
Duration	48	6	23	43	6	10
Change Point	0	55	73	105	155	173

Signal Timings Diagram



C2

Stage Sequence Diagram

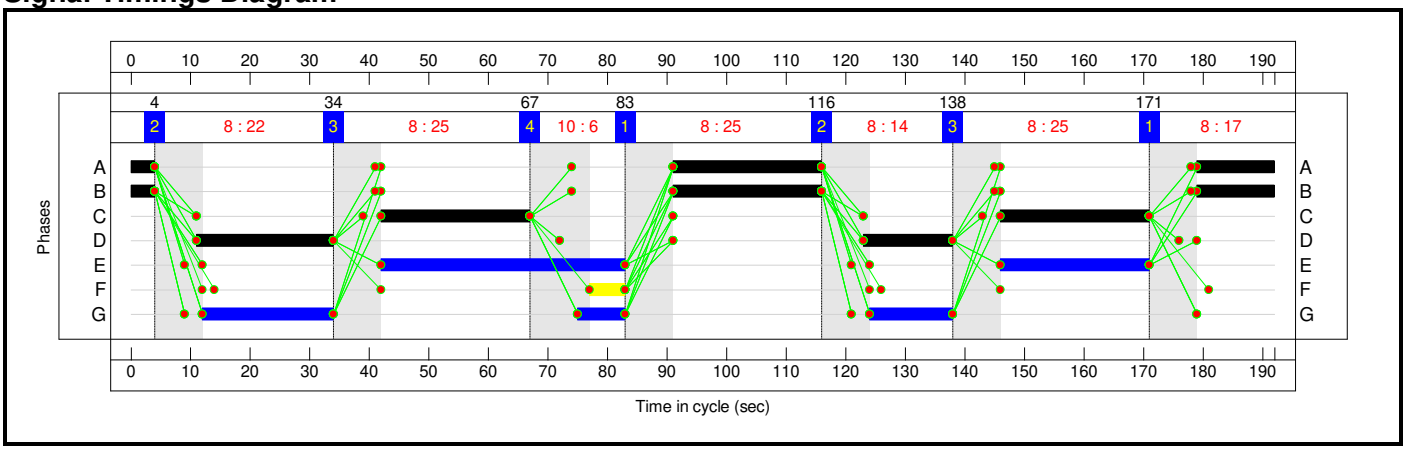


Stage Timings

Stage	1	2	3	1	2	3	4
Duration	25	14	25	17	22	25	6
Change Point	83	116	138	171	4	34	67

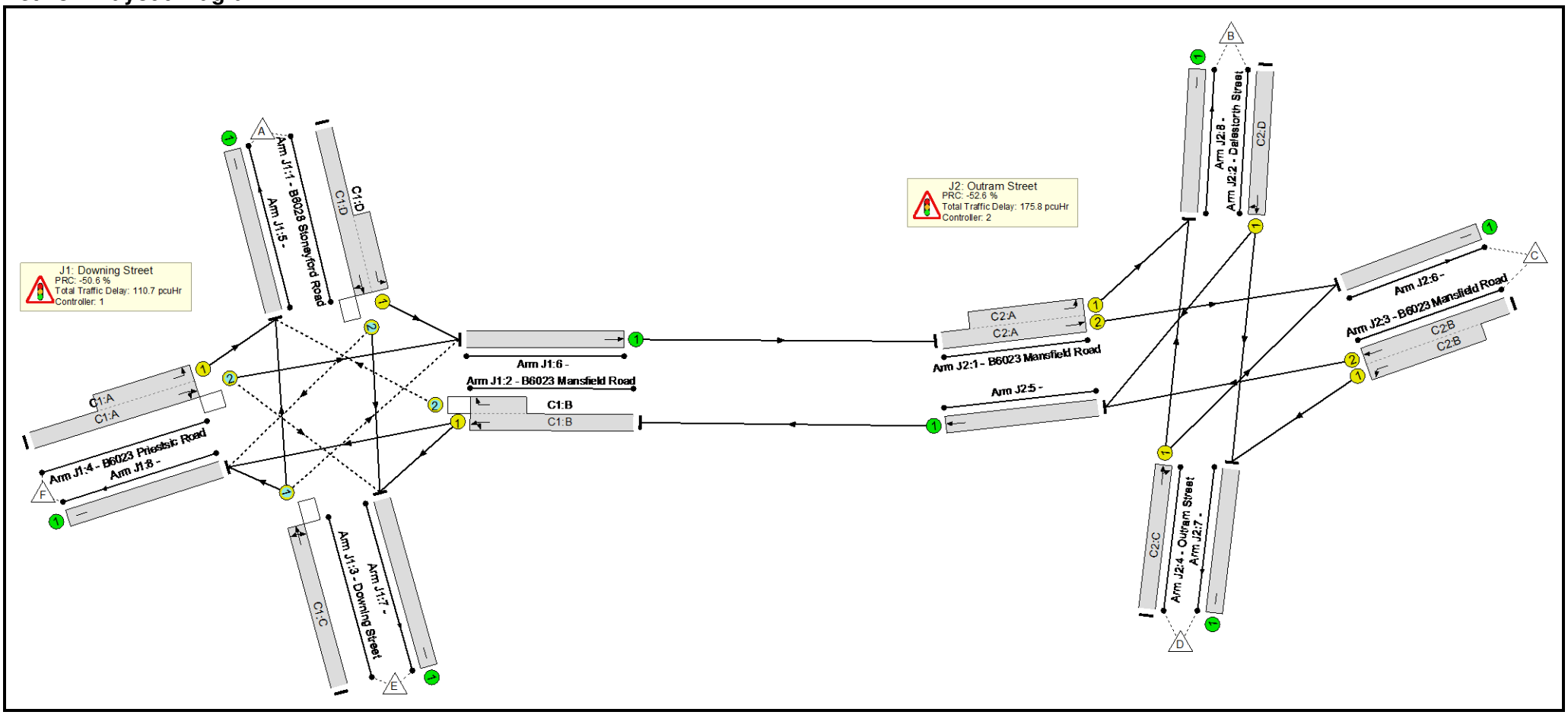
Full Input Data And Results

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: Mansfield Road-Stoneyford Road-Downing Street-Dalestorth Street	**-**	**-**	**N/A**	**-**	**-**		**-**	**-**	**-**	**-**	**-**	**-**	**137.3%**
J1: Downing Street	**-**	**-**	**N/A**	**-**	**-**		**-**	**-**	**-**	**-**	**-**	**-**	**135.5%**
1/2+1/1	B6028 Stoneyford Road Left Ahead Right	O+U	N/A	N/A	C1:D		2	33	-	403	1830:1702	213+84	135.5 : 135.5%
2/1+2/2	B6023 Mansfield Road Right Left Ahead	U+O	N/A	N/A	C1:B		2	95	-	686	1658:1735	460+109	106.3 : 106.8%
3/1	Downing Street Ahead Right Left	O	N/A	N/A	C1:C		2	33	-	244	1916	349	69.9%
4/2+4/1	B6023 Priestsic Road Left Ahead Right	O+U	N/A	N/A	C1:A		2	95	-	1023	1885:1718	731+380	92.0 : 92.0%
5/1		U	N/A	N/A	-		-	-	-	666	Inf	Inf	0.0%
6/1	Ahead	U	N/A	N/A	-		-	-	-	776	Inf	Inf	0.0%
7/1		U	N/A	N/A	-		-	-	-	687	Inf	Inf	0.0%
8/1		U	N/A	N/A	-		-	-	-	227	Inf	Inf	0.0%
J2: Outram Street	**-**	**-**	**N/A**	**-**	**-**		**-**	**-**	**-**	**-**	**-**	**-**	**137.3%**
1/2+1/1	B6023 Mansfield Road Ahead Left	U	N/A	N/A	C2:A		2	42	-	776	1800:1800	412+363	96.2 : 96.4%
2/1	Dalestorth Street Right Ahead	U	N/A	N/A	C2:D		2	38	-	515	1800	375	137.3%
3/2+3/1	B6023 Mansfield Road Ahead Left	U	N/A	N/A	C2:B		2	42	-	743	1800:1800	412+377	94.1 : 94.1%
4/1	Outram Street Right Ahead	U	N/A	N/A	C2:C		2	50	-	552	1800	488	113.2%

Full Input Data And Results

5/1	Ahead	U	N/A	N/A	-		-	-	-	686	Inf	Inf	0.0%
6/1		U	N/A	N/A	-		-	-	-	682	Inf	Inf	0.0%
7/1		U	N/A	N/A	-		-	-	-	572	Inf	Inf	0.0%
8/1		U	N/A	N/A	-		-	-	-	646	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: Mansfield Road-Stoneyford Road-Downing Street-Dalestorth Street	**-**	**-**	**146**	**0**	**129**	**77.6**	**207.6**	**1.3**	**286.5**	**-**	**-**	**-**	**-**
J1: Downing Street	**-**	**-**	**146**	**0**	**129**	**24.1**	**85.3**	**1.3**	**110.7**	**-**	**-**	**-**	**-**
1/2+1/1	403	297	74	0	57	14.3	54.7	0.3	69.3	618.7	20.6	54.7	75.3
2/1+2/2	605	598	37	0	71	1.8	24.3	1.0	27.1	161.2	11.0	24.3	35.4
3/1	244	244	12	0	0	2.5	1.1	0.0	3.7	53.9	6.3	1.1	7.4
4/2+4/1	1023	1023	23	0	0	5.5	5.2	0.0	10.7	37.7	23.7	5.2	28.9
5/1	644	644	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/1	746	746	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
7/1	592	592	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
8/1	180	180	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
J2: Outram Street	**-**	**-**	**0**	**0**	**0**	**53.5**	**122.3**	**0.0**	**175.8**	**-**	**-**	**-**	**-**
1/2+1/1	746	746	-	-	-	10.7	8.2	-	18.9	91.4	14.0	8.2	22.2
2/1	515	375	-	-	-	22.5	71.8	-	94.3	659.1	29.8	71.8	101.6
3/2+3/1	743	743	-	-	-	7.6	6.3	-	13.9	67.2	11.7	6.3	18.0
4/1	552	488	-	-	-	12.6	36.1	-	48.7	317.7	22.8	36.1	58.9
5/1	605	605	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/1	634	634	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
7/1	513	513	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
8/1	599	599	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0

C1	PRC for Signalled Lanes (%):	-50.6	Total Delay for Signalled Lanes (pcuHr):	110.71	Cycle Time (s): 192
C2	PRC for Signalled Lanes (%):	-52.6	Total Delay for Signalled Lanes (pcuHr):	175.82	Cycle Time (s): 192
	PRC Over All Lanes (%):	-52.6	Total Delay Over All Lanes(pcuHr):	286.53	

Full Input Data And Results

APPENDIX O

JUNCTION 14 ARCADY OUTPUTS

Junctions 9

ARCADY 9 - Roundabout Module

Version: 9.5.1.7462
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Filename: J14 Lammas Road-Priestsic Road.j9
Path: D:\Dropbox (ADC Infrastructure)\!!! ADC Projects\ADC1032 Ashland Road (Bellway)\Calculations
Report generation date: 07/10/2020 15:31:14

»Traffic Flows - 2030 Bkgd, AM
»Traffic Flows - 2030 Bkgd, PM
»Traffic Flows - 2030 With Dev, AM
»Traffic Flows - 2030 With Dev, PM

Summary of junction performance

	AM			PM		
	Queue (PCU)	Delay (s)	RFC	Queue (PCU)	Delay (s)	RFC
	Traffic Flows - 2030 Bkgd					
Arm 1	2.0	6.12	0.67	3.1	8.93	0.76
Arm 2	0.1	4.47	0.12	0.3	5.11	0.23
Arm 3	0.2	3.50	0.14	0.3	4.12	0.23
Arm 4	1.4	4.25	0.58	1.8	5.49	0.65
	Traffic Flows - 2030 With Dev					
Arm 1	2.1	6.28	0.68	3.7	10.51	0.78
Arm 2	0.1	4.53	0.12	0.3	5.76	0.23
Arm 3	0.2	3.54	0.15	0.3	4.66	0.24
Arm 4	1.5	4.41	0.59	2.1	6.22	0.66

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	J14 Lammas Road-Priestsic Road-Manor Road
Location	Sutton in Ashfield
Site number	
Date	16/09/2020
Version	v 1
Status	Preliminary
Identifier	M Tatler
Client	Bellway
Jobnumber	ADC1032
Enumerator	M Tatler
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	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D1	2030 Bkgd	AM	ONE HOUR	07:45	09:15	15
D2	2030 Bkgd	PM	ONE HOUR	16:45	18:15	15
D3	2030 With Dev	AM	ONE HOUR	07:45	09:15	15
D4	2030 With Dev	PM	ONE HOUR	16:45	18:15	15

Analysis Set Details

ID	Name	Network flow scaling factor (%)
A1	Traffic Flows	100.000

Traffic Flows - 2030 Bkgd, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Vehicle Mix		HV% is zero for all movements / time segments. Vehicle Mix matrix should be completed whether working in PCUs or Vehs. If HV% at the junction is genuinely zero, please ignore this warning.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	Lammas Road-Priestsic Road-Manor Road	Standard Roundabout		1, 2, 3, 4	5.05	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Name	Description
1	B6023 Priestsic Road	
2	Forest Street	
3	Manor Street	
4	Lammas Road	

Roundabout Geometry

Arm	V - Approach road half-width (m)	E - Entry width (m)	l' - Effective flare length (m)	R - Entry radius (m)	D - Inscribed circle diameter (m)	PHI - Conflict (entry) angle (deg)	Exit only
1	4.70	8.60	8.6	44.8	38.3	22.5	
2	4.10	7.10	20.4	10.2	35.7	40.0	
3	4.30	9.80	8.4	16.1	38.3	24.5	
4	4.00	8.90	18.8	51.7	35.7	21.0	

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Arm	Final slope	Final intercept (PCU/hr)
1	0.724	2007
2	0.627	1708
3	0.679	1855
4	0.759	2145

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

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D1	2030 Bkgd	AM	ONE HOUR	07:45	09:15	15

Vehicle mix source	PCU Factor for a HV (PCU)
HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1		✓	1073	100.000
2		✓	97	100.000
3		✓	158	100.000
4		✓	1056	100.000

Origin-Destination Data

Demand (PCU/hr)

		To			
		1	2	3	4
From	1	12	96	184	781
	2	50	1	24	22
	3	72	28	0	58
	4	786	94	168	8

Vehicle Mix

Heavy Vehicle Percentages

		To			
		1	2	3	4
From	1	0	0	0	0
	2	0	0	0	0
	3	0	0	0	0
	4	0	0	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
1	0.67	6.12	2.0	A
2	0.12	4.47	0.1	A
3	0.14	3.50	0.2	A
4	0.58	4.25	1.4	A

Traffic Flows - 2030 Bkgd, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Vehicle Mix		HV% is zero for all movements / time segments. Vehicle Mix matrix should be completed whether working in PCUs or Vehs. If HV% at the junction is genuinely zero, please ignore this warning.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	Lammas Road-Priestsic Road-Manor Road	Standard Roundabout		1, 2, 3, 4	6.84	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D2	2030 Bkgd	PM	ONE HOUR	16:45	18:15	15

Vehicle mix source	PCU Factor for a HV (PCU)
HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1		✓	1170	100.000
2		✓	190	100.000
3		✓	233	100.000
4		✓	1100	100.000

Origin-Destination Data

Demand (PCU/hr)

		To			
		1	2	3	4
From	1	22	149	204	795
	2	84	60	44	2
	3	101	65	1	66
	4	828	143	122	7

Vehicle Mix

Heavy Vehicle Percentages

		To			
		1	2	3	4
From	1	0	0	0	0
	2	0	0	0	0
	3	0	0	0	0
	4	0	0	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
1	0.76	8.93	3.1	A
2	0.23	5.11	0.3	A
3	0.23	4.12	0.3	A
4	0.65	5.49	1.8	A

Traffic Flows - 2030 With Dev, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Vehicle Mix		HV% is zero for all movements / time segments. Vehicle Mix matrix should be completed whether working in PCUs or Vehs. If HV% at the junction is genuinely zero, please ignore this warning.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	Lammas Road-Priestsic Road-Manor Road	Standard Roundabout		1, 2, 3, 4	5.19	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D3	2030 With Dev	AM	ONE HOUR	07:45	09:15	15

Vehicle mix source	PCU Factor for a HV (PCU)
HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1		✓	1081	100.000
2		✓	97	100.000
3		✓	162	100.000
4		✓	1084	100.000

Origin-Destination Data

Demand (PCU/hr)

		To			
		1	2	3	4
From	1	12	96	184	789
	2	50	1	24	22
	3	72	28	0	62
	4	806	94	176	8

Vehicle Mix

Heavy Vehicle Percentages

		To			
		1	2	3	4
From	1	0	0	0	0
	2	0	0	0	0
	3	0	0	0	0
	4	0	0	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
1	0.68	6.28	2.1	A
2	0.12	4.53	0.1	A
3	0.15	3.54	0.2	A
4	0.59	4.41	1.5	A

Traffic Flows - 2030 With Dev, PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	Lammas Road-Priestsic Road-Manor Road	Standard Roundabout		1, 2, 3, 4	7.92	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D4	2030 With Dev	PM	ONE HOUR	16:45	18:15	15

Default vehicle mix	Vehicle mix source	PCU Factor for a HV (PCU)
✓	HV Percentages	2.00

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1		✓	1190	100.000
2		✓	190	100.000
3		✓	241	100.000
4		✓	1118	100.000

Origin-Destination Data

Demand (PCU/hr)

		To			
		1	2	3	4
From	1	22	149	204	815
	2	84	60	44	2
	3	101	65	1	74
	4	840	143	128	7

Vehicle Mix

Heavy Vehicle Percentages

		To			
		1	2	3	4
From	1	10	10	10	10
	2	10	10	10	10
	3	10	10	10	10
	4	10	10	10	10

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
1	0.78	10.51	3.7	B
2	0.23	5.76	0.3	A
3	0.24	4.66	0.3	A
4	0.66	6.22	2.1	A