

**Education Funding
Authority / Heyfordian
School Trust**

Heyford Park Free School

Transport Statement

Project Ref: 23824/017

Doc Ref: Interim Study

November 2012

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1 Introduction

1.1.1 Peter Brett Associates LLP (PBA) has been commissioned by the Education Funding Authority (EFA) and the Heyfordian School Trust to produce a Transport Statement (TS) in support of the provision of an all-through Free School for 4 – 18 years old children, located at Heyford Park, Oxfordshire.

1.2 Background

1.2.1 Heyford Park is located on the former RAF Upper Heyford site, which lies approximately 20km due north of Oxford. The nearest towns to the site are Bicester, approximately 7km south east of the site, Brackley approximately 10km north east, and Banbury 15km to the north. **Figure 1** shows the location of the site and wider area.

1.2.2 Heyford Park was an operational airfield from the 1960s until 1994 when it closed after a period of reduced activity. When operational, the airfield originally housed some 12,000 American servicemen and their families prior to being used by the RAF. Heyford Park offers a great range of infrastructure over a sizeable area due to its military history. Following the closure of the airfield, most of the infrastructure has been retained, with some used for commercial purposes now, although some are disused and derelict.

1.2.3 The Upper Heyford Airbase as a whole is designated as a Conservation Area, reflecting the key role that the Airbase played in the Cold War years, and the distinctive architecture and layouts which arose from that use.

Existing Situation

1.2.4 There are currently 315 occupied residential dwellings at Heyford Park and some commercial use (B1/B2/B8) operating from existing buildings previously used by the RAF. There is also an existing building holding temporary permission for sports use, known as Heyford Park Sports Centre which is currently used as a gym/local community hall. There are no schools in the area with the nearest primary school located in Steeple Aston and the nearest secondary school located in Bicester.

Consented Scheme

1.2.5 As part of Heyford Park's regeneration, proposals were submitted in 2007 and allowed by the Secretary of State in January 2010. Subsequent revisions to the submitted internal Masterplan layout were submitted when Dorchester Group acquired the site from its previous owners North Oxfordshire Consortium Limited. The site gained planning permission in December 2011 for the following:

- Refurbishment of the existing 315 dwellings;
- An additional 760 dwellings;
- 240-place primary school;

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- Change of use of building 74 (the former officers mess) for C1/C2 use (either a 120 bed hotel or a 120 bed care home proposed); and
- Commercial B1/B2/B8 use of existing Airfield buildings predominantly for storage.

1.2.6 There is no secondary school associated with the consented scheme.

Free Schools

1.2.7 In July 2012 the Prime Minister and the Education Secretary Michael Gove announced that 102 new Free Schools have been approved to open in 2013 and beyond. This is more than a 50 per cent increase on the number of schools that were approved last year and means that the number of Free Schools set to open each year is rising rapidly.

1.2.8 The Prime Minister has stated:

“Free Schools symbolise everything that is good about the revolution that we are bringing to Britain's schools.”

1.2.9 The DfE states the following in regards to Free Schools:

“Free Schools are all-ability state-funded schools set up in response to what local people say they want and need in order to improve education for children in their community. The right school can transform a child's life and help them achieve things they may never have imagined. Through the Free Schools programme it is now much easier for talented and committed teachers, charities, parents and education experts to open schools to address real demand within an area.”

1.3 Development Proposals

1.3.1 The development proposals consist of the following:

- Change of use of building 74 from C1/C2 use (consented for a 120 bed care home) to D1 use for use as the all-through Free School with places for 420 primary school children and 420 secondary school children;
- Provision of a 120 bed care home on the site formerly consented for a 240 pupil primary school; and
- Full permission for a gym associated with the school and evening use for local community facilities at building 583 (this building currently has temporary permission for that use).

1.3.2 As such, in terms of additional development over that which is already consented, this application seeks permission for an additional 180 primary school places and 420 secondary school places.

1.3.3 The all-through Free School will cater for school aged children between 4 and 18 years and will largely be made up of children from Heyford Park housing, including the 315 existing houses and the additional 760 additional consented houses. A demographics and

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population analysis of the existing population and the future population associated with the consented housing has been undertaken and can be found at **Section 4**.

1.3.4 The proposed all-through Free School consists of:

- 420 primary school places (240 space primary school already consented);
- 420 secondary school spaces;
- 35 members of staff for the Primary School; and
- 39 members of staff for the Secondary School.

1.3.5 The development of the Free School will be phased, with two forms of Reception Year pupils and two forms of Year 7 pupils joining each year from September 2013 onwards, until the primary and secondary elements join up and Heyford Park Free School truly becomes all-through when the school is fully occupied in 2019. The below diagram demonstrates the proposed phasing of the school development and is reproduced with permission from the Heyfordian Free School “Consultation Brochure” November 2012:

	2013	2014	2015	2016	2017	2018	2019
RECEPTION	60	60	60	60	60	60	60
YEAR 1		60	60	60	60	60	60
YEAR 2			60	60	60	60	60
YEAR 3				60	60	60	60
YEAR 4					60	60	60
YEAR 5						60	60
YEAR 6							60
YEAR 7	60	60	60	60	60	60	60
YEAR 8		60	60	60	60	60	60
YEAR 9			60	60	60	60	60
YEAR 10				60	60	60	60
YEAR 11					60	60	60
YEAR 12						60	60
YEAR 13							60
TOTALS	120	240	360	480	600	720	840

1.3.6 The full Consultation Brochure produced by the Heyfordian School Trust is included at **Appendix A**.

1.4 Aims of the Transport Statement

1.4.1 This Transport Statement will seek to assess the transport and traffic implications of providing a Free School at Heyford Park. The content of this report is summarised below:



Heyford Park Free School Transport Statement

- **Section 2** sets out the planning and policy context for the site in transport terms at a national, regional and local level;
- **Section 3** presents analysis of the existing transport conditions relative to the site in relation to access and accessibility;
- **Section 4** considers the impacts of the development in terms of traffic generation and distribution upon the local/strategic highway through junction capacity modelling;
- **Section 5** covers the Travel Plan Strategy for the site; and
- **Section 6** presents the recommendations and conclusions.

2 Planning and Policy Context

2.1 Introduction

2.1.1 Transport policy is detailed within a comprehensive national and local planning and transport policy framework. This section of the TS provides a review of the planning policy context relevant to transport in the area around the Heyford Park Free School site.

2.2 National Planning and Policy Context

National Planning Policy Framework (March 2012)

2.2.1 The National Planning Policy Framework (NPPF) is the government's fundamental policy instrument to guide delivery of development and infrastructure.

2.2.2 Regarding school provision, the NPPF recognises that the Government "*attaches great importance to ensuring that a sufficient choice of school places is available to meet the needs of existing and new communities. Local planning authorities should take a proactive, positive and collaborative approach to meeting this requirement, and to development that will widen choice in education*" (para. 72.)

2.2.3 The NPPF recognises that sustainable transport is key to facilitating sustainable development. It is however recognised that policies and measures to maximise sustainable transport solutions need to be location-specific.

2.2.4 Developments should be located where the need to travel will be minimised in the first instance and should seek to exploit all site-specific opportunities for the use of sustainable modes to reduce the need for major transport infrastructure and to limit the impact of the development on the transport network.

2.3 Regional Policy Context

The South East Plan (2009)

2.3.1 The Government published the Regional Spatial Strategy (RSS) for the South East in May 2009. This replaced the Regional Planning Guidance for the South East (RPG9).

2.3.2 Following the 2010 General Election, The Secretary of State for Communities and Local Government revoked the Regional Spatial Strategies, which included the South East Plan, with immediate effect. However, a challenge to this has resulted in the South East Plan being reinstated for the time being.

2.3.3 The South East Plan sets out a planning framework for the region from 2006-2026, and includes the Regional Transport Strategy (RTS) for the South East of England.

2.3.4 The RTS sets out to deliver the following: "*Our vision is a high quality transport system to act as a catalyst for continued economic growth and provide for an improved quality of life for all*

in a sustainable and socially inclusive manner; a regional transport system that progressively reaches the standard of the best in North West Europe”.

2.3.5 Considering this vision, a set of regionally specific objectives that integrate spatial and transportation planning at the regional level can be determined. The RTS seeks:

- To facilitate urban renaissance and foster social inclusion by re-balancing the structure and use of the transport system. In particular by bringing forward measures that encourage modal shift to more sustainable modes of transport and significantly improve the attractiveness of local public transport services, walking and cycling.
- To reduce the wider environmental, health and community impact associated with the transport system, by bringing forward management measures that reduce our reliance on single occupancy car use.
- To maintain existing transport infrastructure as an asset.

2.4 Local Policy Guidance

Oxfordshire Local Transport Plan 2011-2030

2.4.1 The current Oxfordshire Local Transport Plan 2011-2030¹ (LTP3) focuses on attracting and supporting economic investment and growth, delivering transport infrastructure, tackling congestion and improving quality of life. The document was adopted as policy in April 2011.

2.4.2 A set of 9 objectives will form the basis for actions in delivering the LTP including:

- *“Improve the condition of local roads, footways and cycleways, including resilience to climate change;*
- *Reduce congestion;*
- *Reduce casualties and the dangers associated with travel;*
- *Improve accessibility to work, education and services;*
- *Secure infrastructure and services to support development;*
- *Reduce carbon emissions from transport;*
- *Improve air quality, reduce other environmental impacts and enhance the street environment;*
- *Develop and increase the use of high quality, welcoming public transport; and*
- *Develop and increase cycling and walking for local journeys, recreation and health”.*

¹ <http://www.oxfordshire.gov.uk/cms/content/local-transport-plan-2011-2030>

- 2.4.3** The LTP3 recognises the importance of Travel Planning to encourage people to change their travel habits to ones which will cause fewer environmental problems. School Travel Planning provides initiatives to increase levels of walking, cycling and coach/bus travel as appropriate, to bring about improved health and help towards the goal of reducing peak time congestion. The LTP3 acknowledges that the distance to school is key in determining how pupils travel. It specifies that *“new housing, wherever possible, is located within walking or cycling distance of schools sites and that safe routes are provided”*.

The Cherwell Local Plan (Proposed Submission August 2012)

- 2.4.4** The Cherwell Local Plan sets out how the district will grow and change up to 2031. It sets out the proposals for how they will develop and support the local economy, protect villages and strengthen town centres.
- 2.4.5** The Local Plan outlines the central aim for Cherwell District is for their residents to enjoy a good quality of life. In order to do this, they *“will develop a sustainable economy that is vibrant and diverse with good transport links and sound infrastructure, supported by excellent educational facilities”*.
- 2.4.6** The provision of education is also considered to be necessary in order to accommodate population growth. Policy BSC 7: Meeting Education Needs supports growth plans of schools and identifies the important role that viable schools have to play in maintaining the quality of life of communities across the district.

2.5 Summary

- 2.5.1** In providing an all-through school in the heart of the community where 1,075 dwellings are to be located, the proposals compliment policy by providing education facilities alongside housing. The location of the proposed Free School facilitates and prioritises the use of walking and cycling as the predominant modes given the distance between the school and the community, further complimenting policy on the increased use of sustainable modes, particularly for education trips.
- 2.5.2** This TS demonstrates that the Heyford Park development proposals will comply with this policy context.

3 Existing and Consented Transport Conditions

3.1 Site Location within Highway Network Context

- 3.1.1** Heyford Park is located within a network of predominately rural roads, many of which are unclassified, although Junction 10 of the M40 motorway is located 5km to the east and the A420 Banbury to Oxford road runs from north to south some 6km to the west.
- 3.1.2** The M40 forms part of the strategic route to London to the south east and Birmingham to the north.
- 3.1.3** The proposed Free School site (building 74) is currently accessed from Camp Road, which forms the arterial route through Heyford Park. The former runway, taxiway and employment buildings associated with the Flying Field as well as building 74 lie to the north of Camp Road and the existing residential and auxiliary buildings lie to the south. The consented housing will be located both to the north and south of Camp Road.
- 3.1.4** Camp Road connects to Upper Heyford village, and the north-south route of Somerton Road / Station Road in the west (linking to the B4030 which runs parallel to Camp Road), through to the junctions with Chilgrove Drive and the B340 in the east.
- 3.1.5** Somerton Road provides connections to the village of Somerton and is subject to a 30mph speed limit through Upper Heyford which increases to 60mph when leaving the village.
- 3.1.6** The B430 forms a north-south link between the M40 and the A43 Trunk Road at Weston-on-the-Green, providing access to other key destinations including Bicester and Oxford. To the north the B430 terminates at Junction 10 of the M40, immediately north of the village of Ardley. The road is subject to a 60mph speed limit which decreases to 40mph through Ardley. To the south the B430 terminates at the A34 Trunk Road. The road is subject to a 60mph speed limit until it reaches the village of Weston-on-the-Green where it decreases to 40mph through the village. The B340 meets the B4030 in Middleton Stoney at a staggered crossroad.
- 3.1.7** Camp Road is approximately 6m wide where it passes through the existing development with one lane in either direction for the majority of the carriageway, with reduction to single-lane operation at 5 locations to provide traffic calming features. Camp Road operates under a 30mph speed limit along its length. Street lighting is provided and pedestrian footpaths are present along its length, although not all footways are currently within adopted land and therefore not maintained by the local authority.
- 3.1.8** The current layout of the Main Site Access/ Camp Road junction is a roundabout. The consented scheme, as set out in the Arup August 2007 Transport Assessment report, retains the existing main gate access but at a reduced width of 6m. This will provide the main access to the consented mixed residential/ commercial area albeit that other access points will be located along Camp Road. The main junction will be formed on a raised table comprising shared use road surface without road markings or signs specifying priority. On

the south side of Camp Road a new road of 6.5m width will form a cross roads junction with Camp Road and the main gate, and provide bus and vehicular access to the housing area.

3.1.9 **Figure 1** illustrates the site location at a strategic level, and **Figure 2** illustrates that site within the local highway context.

3.2 Access and Accessibility

Existing Bus Services

3.2.1 Camp Road is currently served by a single bus route, the 25/25A from Oxford to Bicester. The service is operated by Heyfordian Travel and offers approximately 1 service per hour in each direction on weekdays and Saturdays, with a less-frequent service during the evenings. There is no Sunday service. The closest bus stop to the proposed school is approximately 317m to the south-west, situated on a small loop off Camp Road just to the west of the main gate entrance to the Flying Field.

3.2.2 As part of the consented scheme it is proposed that the frequency of the bus will be doubled to half hourly and the route will alter slightly to penetrate the consented residential area to the south of Camp Road.

Existing Rail Services

3.2.3 The nearest railway station to the site is at Lower Heyford, approximately 4km to the south-west. The station is served by trains to/ from Banbury to Oxford with train frequencies of between 50 minutes to one hour and 20 minutes weekdays and Saturdays. There are no services on Sundays.

Existing Walking and Cycling Provision

3.2.4 Historically, there were a number of public rights of way (PRoW) crossing the site, but some of these were curtailed when the site came into military use, circa 1915.

3.2.5 The key routes which were curtailed when the site came into military use include:

- Portway – a bridleway to the west of the site running in a north – south direction linking to existing BW 9; and
- Aves Ditch – a bridleway to the east of the site running in a north – south direction linking to existing BW 7.

3.2.6 In addition, there were two further historical routes crossing the site, one running in a southwest-northeast direction (on the approximate alignment of the existing runway) and one running in a northwest-southeast direction crossing the runway and connecting the existing BW 8 with the existing BW 29.

3.2.7 There are numerous existing PRoW criss-crossing the local area and these existing rural links are made up of the following:

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- A network of bridleways (BW7, BW28, BW29, BW30) to the south and east of the site running in a southwest–northeast direction linking Camp Road to Caulcott to the south and Ardley at the northeast of the site;
- A network of footpaths and bridleways to the northern perimeter of the site including BW8 and FP13 linking Fritwell with Somerton; and
- A network of footpaths and bridleways to the south and west of the site linking Caulcott in the south to Heyford and Steeple Aston in the west and Somerton to the north.

3.2.8 As well as the off-road PRow, low levels of traffic in the predominantly rural area currently allow the potential for additional routes for walkers, cyclists and equestrians along the highway network.

3.2.9 Camp Road provides walk and cycle access from the main entrance of the site towards Upper Heyford to the west and The Heath and Home Wood to the east, providing leisure opportunities for walkers and cyclists. Camp Road is well lit with footpaths towards Upper Heyford of varying widths between 3m and 1m.

3.2.10 As part of the consented development at Heyford Park some of the original PRow on the site will be reinstated as well as improving connections to existing PRow elsewhere. In addition, the consented housing will be connected by a network of walk and cycle links penetrating the residential areas and providing a permeable site which facilitates and encourages walking and cycling within the local area.

3.2.11 **Figure 3** illustrates the existing and consented pedestrian and cycling routes, along with the location of the closest bus-stop to the site and Lower Heyford Rail Station.

4 Impacts of Development

4.1 Traffic Generation

4.1.1 The consented scheme includes the delivery of a 240-space primary school, whilst the new proposals set out plans for a 420-place primary school and 420-place secondary school, forming the proposed all-through Heyford Park Free School. This increase in primary school places and the addition of the secondary school are the only changes over the consented scheme and trips associated with them will form the basis of this assessment.

4.1.2 However it is worth noting that the Transport Assessment prepared by Arup in 2007 which supported the consented scheme, whilst including a 240-place primary school, assumed all trips made to and from the school would be internal trips or pass-by trips.

4.1.3 As such, this assessment has investigated whether this was a sound assumption or whether some of the trips associated with the consented primary school would have impact externally. In doing this, a robust assessment of the full impact of the school will be developed.

Population and Demographics

4.1.4 An initial population and demographics analysis has been undertaken in the first instance. This compares:

- Number of primary school aged children versus number of primary spaces available in the consented scheme;
- Number of secondary school aged children versus number of secondary spaces available in the consented scheme;
- Number of primary school aged children versus number of primary spaces available in the proposed scheme; and
- Number of secondary school aged children versus number of secondary spaces available in the proposed scheme.

4.1.5 In doing this, consideration will be given to all movements that would need to take place on the network:

- If there are more school spaces available than children in the area and hence children will travel from outside the area to the school; and, conversely; and
- If there are more children in the area than school spaces available and hence children living at Heyford Park will need to travel outside of the area to an alternative school.

4.1.6 It is recognised however that there is no specific catchment for this or other schools and even if there are spaces available parents may choose to send their children elsewhere and

conversely people from outside the area may wish for their children to attend the Heyford Park Free School.

- 4.1.7** The consented scheme for Heyford Park provides an additional 760 new dwellings in addition to the existing 315 homes already on the site. The population of Heyford Park will therefore grow in line with the increase in housing provision.
- 4.1.8** To establish the likely future population levels, and the demographic make-up, 2001 Census data was analysed to establish the existing population density and make-up.
- 4.1.9** The following 3 output areas were identified to cover Heyford Park: 38UBHL0013, 38UBHL0015, 38UBHL0016. These output areas are illustrated on **Figure 4**.
- 4.1.10** These output areas were then reviewed within the 2001 Census Data by Population Age in the South East. This provided the total number of Heyford Park residents as well as their demographic make-up. These results are summarised below.

Table 4.1 – Heyford Park Population by Age Group and Output Area

	Output Areas			Totals	Demographic Split
	38UBHL0013	38UBHL0015	38UBHL0016		
All People	295	245	265	805	
0-3yrs	11	16	16	43	5.3%
4 years	6	5	5	16	2.0%
5 years	5	6	8	19	2.4%
6 years	5	3	3	11	1.4%
7 years	8	3	5	16	2.0%
8 years	6	3	3	12	1.5%
9 years	6	3	3	12	1.5%
10years	5	3	0	8	1.0%
11 years	6	3	3	12	1.5%
12 years	3	3	7	13	1.6%
13 years	4	5	3	12	1.5%
14 years	6	0	3	9	1.1%
15 years	3	3	3	9	1.1%
16 years	3	3	4	10	1.2%
17 years	0	6	3	9	1.1%
18+ years	212	180	196	588	73.8%

- 4.1.11** The total population residing in the existing 315 dwellings is 805. From this, an average occupation level of 2.6 people per dwelling is established.
- 4.1.12** Heyford Park will be made up of a total of 1,075 dwellings including the existing 315 dwelling already in place. By taking the existing occupation level of 2.6 and multiplying it by the 1,075, a total future population of 2,757 is predicted once all houses are built and occupied.
- 4.1.13** For the purposes of the analysis it is assumed that the build out rate of the dwellings will mirror the occupation of the all-through Free School and will have a completion date of 2019. This equates to a build-out rate of 109 new dwellings per year, which is not an unreasonable assumption in terms of normal build out rates for housing developers. Should the build out rate be slower however due to the economic climate, ultimately the same ratio of school places to population will result, but potentially further into the future.

4.1.14 Interrogation of the NTEM 6.2 dataset used to inform the TEMPRO database shows that Cherwell District Council anticipates a build out of approximately 100 dwellings per year and thus the build out assumptions are considered corroborated. Using the rate of 109 dwellings per year, a breakdown of housing levels was calculated. The 2.6 persons per household occupation level was then applied to the full housing development to establish the likely year by year population growth between 2013 and 2019 and the corresponding ages of the increasing population year by year. The results of these calculations are summarised below.

Table 4.2 – Predicted Heyford Park Housing and Population (Total and by School Year)

Year	Dwellings	Total Pop	School Year													Total children	
			Reception	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year 10	Year 11	Year 12		Year 13
2012	315	805	16	19	11	16	12	12	8	12	13	12	9	9	10	9	168
2013	424	1082	22	26	15	22	16	16	11	16	17	16	12	12	13	12	226
2014	532	1360	27	32	19	27	20	20	14	20	22	20	15	15	17	15	284
2015	641	1637	33	39	22	33	24	24	16	24	26	24	18	18	20	18	342
2016	749	1915	38	45	26	38	29	29	19	29	31	29	21	21	24	21	400
2017	858	2192	44	52	30	44	33	33	22	33	35	33	25	25	27	25	458
2018	966	2470	49	58	34	49	37	37	25	37	40	37	28	28	31	28	515
2019	1075	2747	55	65	38	55	41	41	27	41	44	41	31	31	34	31	573

Consented Situation

4.1.15 Consent was granted previously for a 240-space primary school within Heyford Park. This primary school would naturally cater for children in the local vicinity and 240 spaces equates to a maximum class size of 34 pupils in each year (from Reception through to Year 6). A phased occupation would be anticipated with the assumption that occupation would occur year by year, as set out in the table below.

Table 4.3 – Assumed Phased Occupation for Consented Primary School (with 34 spaces per class, 1 intake class per year)

Year	Reception	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
2013	34	34	34	34	34	34	34
2014		34	34	34	34	34	34
2015			34	34	34	34	34
2016				34	34	34	34
2017					34	34	34
2018						34	34
2019							34

4.1.16 Whilst a proportion of Heyford Park children aged 4 – 10 years could be accommodated by the consented primary school, it can be seen by comparing **Tables 4.2** and **4.3** there are still

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a number of children aged between 4 - 17 who would need to travel off site, either because the school has not begun taking in that age-bracket yet; because the primary school is already full; or they are Secondary school students and there is no secondary school provision in the consented scheme. Analysis has been undertaken to determine the number of children that would fall into each of these brackets, with the results summarised below:

Table 4.4 – Assessment of Student Numbers into and out of Heyford Park in the Consented Situation

Year	Primary (4 – 10yr olds)			Secondary (11 - 17yr olds)		
	Heyford Park residents able to attend school on site	Heyford Park residents leaving site to attend school	External residents entering site to attend school	Heyford Park residents able to attend school on site	Heyford Park residents leaving site to attend school	External residents entering site to attend school
2012	0	94	0	0	74	0
2013	22	105	12	0	100	0
2014	59	100	9	0	125	0
2015	89	103	13	0	151	0
2016	128	95	8	0	176	0
2017	165	92	5	0	202	0
2018	204	89	0	0	227	0
2019	231	91	7	0	253	0

4.1.17 As the number of students attending the consented primary school increases, so does the level of required adults to staff the school. The Department for Education (DfE) published a report “School Workforce in England” in November 2011 which sets out the required adult to student ratio for primary and secondary schools. For primary schools, this is 1 adult per 11.9 students. Based on that ratio the following table sets out the required year-on-year staffing levels for the consented primary school.

Table 4.5 – Required Staffing Levels for Consented Primary School

Primary School Staff	
2012	0
2013	3
2014	6
2015	9
2016	11
2017	14
2018	17
2019	20

4.1.18 The traffic profile associated with the consented primary school was then calculated. The following assumptions were made:

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- All “external” trips, i.e. students leaving/entering Heyford Park to attend school, are driven (taking no account for car-sharing or linked trips);
- All those external trips are assumed to be one out bound trip and one inbound trip for each child;
- If there is a space available at the Free School a local child will fill the space (in line with the assumptions made in the original Arup TA for consistency and also reflecting the priorities set out in the Heyford Park Free School brochure which states that if the school is over-subscribed one of the criteria for selection is “*Those children whose permanent address is closest to the Heyford Park Free School*”);
- All “internal” trips, i.e. all Heyford Park school-aged children able to attend the school on-site, are made by non-car modes;
- All pupils will arrive at school between 08:00hrs – 09:00hrs;
- All pupils will have left school before 17:00hrs;
- All primary school staff will drive to school and arrive between 08:00hrs – 09:00hrs; and
- All primary school staff will leave between 16:30hrs and 17:30hrs and so half of the associated trips would be counted within the PM peak hour of 17:00hrs – 18:00hrs.

4.1.19 Taken all this into consideration, the calculated traffic profile for the consented education aspect is as follows:

Table 4.6 – Traffic Profiles for Consented Primary School and Associated Trips

	Primary School Traffic (PCUs)		Secondary School Traffic (PCUs)	
	AM 0800-0900 2-Way Traffic	PM 1700-1800 2-Way Traffic	AM 0800-0900 2-Way Traffic	PM 1700-1800 2-Way Traffic
2012	188	0	148	0
2013	238	1	199	0
2014	223	3	250	0
2015	240	4	301	0
2016	217	6	352	0
2017	210	7	403	0
2018	195	9	454	0
2019	216	10	505	0

4.1.20 It can be seen that for the consented scheme there would be some transport impact associated with education, as the consented primary school wouldn’t accommodate all school children within Heyford Park and the secondary school aged children would need to travel off site.

Proposed Situation

4.1.21 The Education Funding Authority and Heyfordian School Trust are now proposing a 420-place primary and 420-place secondary all-through Free School at Heyford Park. The

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Heyfordian School Trust has published a brochure setting out the anticipated phased occupation of the proposed Free School as follows:

Table 4.7 – Proposed Phased Occupation of Free School

Year	Reception	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year 10	Year 11	Year 12	Year 13
2013	60	60	60	60	60	60	60	60	60	60	60	60	60	60
2014		60	60	60	60	60	60		60	60	60	60	60	60
2015			60	60	60	60	60			60	60	60	60	60
2016				60	60	60	60				60	60	60	60
2017					60	60	60					60	60	60
2018						60	60						60	60
2019							60							60

4.1.22 This increase in capacity will affect:

- The predicted number of Heyford Park residents able to attend the school;
- The predicted number of Heyford Park residents travelling off-site to attend school;
- The predicted number of external residents travelling to Heyford Park to attend the school;
- The levels of staff required at the school; and
- The traffic profiles between 2012 - 2019 associated with these changes.

4.1.23 Following the same methodology set out for the consented primary school, the number of Heyford Park residents able to attend the proposed school, Heyford Park residents having to travel off-site for school and external residents travelling to Heyford Park to attend school are set out in **Table 4.8** below.

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Table 4.8 – Assessment of Student Numbers into and out of Heyford Park in Proposed Situation

Year	Primary (4 - 10yr olds)			Secondary (11 - 17yr olds)		
	Heyford Park residents able to attend school on site	Heyford Park residents leaving site to attend school	External residents entering site to attend school	Heyford Park residents able to attend school on site	Heyford Park residents leaving site to attend school	External residents entering site to attend school
2012	0	94	0	0	74	0
2013	22	105	38	16	83	44
2014	59	100	61	42	83	78
2015	94	98	86	75	81	105
2016	147	76	93	109	67	131
2017	202	54	98	150	52	150
2018	264	25	96	199	28	161
2019	316	5	104	253	0	167

4.1.24 The required staff for the Free School is based on the ratios set out in the DfE “School Workforce in England” Report - 1 adult per 11.9 students for Primary Schools and 1 adults per 10.9 students for Secondary Schools – and is set out in the table below.

Table 4.9 - Required Staffing Levels for Proposed Free School

	Primary School Staff	Secondary School Staff
2012	0	0
2013	5	6
2014	10	11
2015	15	17
2016	20	22
2017	25	28
2018	30	33
2019	35	39

4.1.25 Using the same assumptions set out in Paragraph 4.1.17 above, along with the assumption that all secondary school staff will leave the school between 17:00hrs - 18:00hrs, the calculated traffic profile for the proposed Free School is as follows:

Table 4.10 – Traffic Profiles for Proposed Free School and Associated Trips

	Primary School Traffic (PCUs)		Secondary School Traffic (PCUs)	
	AM 0800-0900 2-Way Traffic	PM 1700-1800 2-Way Traffic	AM 0800-0900 2-Way Traffic	PM 1700-1800 2-Way Traffic
2012	188	0	148	0
2013	292	3	260	6
2014	331	5	332	11
2015	383	8	387	17
2016	357	10	416	22
2017	331	13	431	28
2018	272	15	409	33
2019	253	18	373	39

4.1.26 Table 4.11 below shows the change in external school traffic between consented and proposed scenarios:

Table 4.11 – Change in Vehicle Flows between Consented and Proposed School Schemes

Year	AM			PM		
	Consented	Proposed	Difference	Consented	Proposed	Difference
2012	336	336	0	0	0	0
2013	437	552	115	1	9	8
2014	473	663	190	3	16	13
2015	541	770	229	4	25	21
2016	569	773	204	6	32	26
2017	613	762	149	7	41	34
2018	649	681	32	9	48	39
2019	724	626	-98	10	57	47

4.1.27 It can be seen by comparing the consented scheme (with 240 place primary school only) with the proposed including the all-through Free School, that by 2019 with full build out and occupation of consented housing and full occupation of the all-through Free School, the impact on the highway network in the AM peak is reduced from that consented, as secondary school children, who would otherwise have to travel up to 9 miles to school in Bicester would be able to attend school locally. There is a slight increase in the PM peak hour due to staff movements associated with the school.

4.2 Traffic Distribution

4.2.1 The distribution of all development traffic is taken directly from the Arup 2007 TA.

4.2.2 The Heyford Park existing (background) and consented site traffic (which did not include any school traffic) is taken from the Arup 2007 TA. This shows that of the total existing/consented site traffic 35% of all trips inbound and 34% of outbound trips utilise the Camp Road/Main Gate access. The remaining consented site traffic accesses/egresses Camp Road via Gate 7, Dacey Drive, Dow Street, Soden Road and Larson Road junctions.

4.2.3 The distribution of the School traffic into and out of the Heyford Park area onto the wider highway network has also been taken directly from the Arup 2007 TA, reflecting their assumptions for the consented site traffic distribution based on Census data and

Origin/Destination calculations. The percentage distribution applied to the consented and proposed school traffic is illustrated on **Figures 5 and 6**

4.3 Assessment Years

4.3.1 It is proposed that the opening year for the all-through Free School would be 2013 with it reaching full occupation by 2019. It has been assumed that the residential element of the consented development would be complete within the same timeframe. The DfT's "Guidance for Transport Assessments" states that:

"For the local transport network, a development should be assessed [...] for a period of no less than 5 years after the date of registration of a planning application."

4.3.2 2019 meets this criteria whilst coinciding with assumed full occupation and therefore represents a realistic traffic profile. As such, 2013 and 2019 have been assessed.

4.4 Methodology for Assessment and Growth Calculation

4.4.1 In order to compare the changes between consented and proposed development traffic impacts, it is necessary to recreate the predicted background traffic conditions assessed at the time of consent (i.e. Growth Factors calculated by Arup for 2006 – 2013 and 2006 – 2019).

4.4.2 However when the Arup TA was written in 2007, the level of growth used in the assessment was based on predicted housing and employment growth levels at that time. TEMPRO ratios are used in assessments and these reflect housing and employment growth predictions. Since the submission of the Arup Transport Assessment in 2007 the economic downturn has affected predicted growth considerably, resulting in a smaller increase of traffic upon the network than previously anticipated. The DfT have revised TEMPRO and its datasets to reflect the predicted this slower rate of growth which has occurred.

4.4.3 As such, an assessment will also be undertaken using new growth factors derived from the updated TEMPRO datasets in order to illustrate a comparison between consented and proposed developments using a more realistic base.

4.4.4 This will effectively form two streams of assessment – Arup Growth Base Networks for 2013 and 2019 and Recalculated Growth Base Networks for 2013 and 2019.

4.4.5 Consented Heyford Park traffic (which does not include any school-related traffic) will then be added to these network bases and this will form the reference case.

4.4.6 The traffic profiles for both consented and proposed school developments, as set out in **Section 4.1** above will then be added to the networks.

4.4.7 In summary, the following assessment years and scenarios will be assessed:

- 2013 Arup Growth Base (No Consented Site Traffic);

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- 2013 Arup Growth Base + Consented Site Traffic (including 240 space primary school, but no traffic assumed);
- 2013 Arup Growth Base + Consented Site Traffic + Proposed School Traffic;
- 2019 Arup Growth Base (No Consented Site Traffic);
- 2019 Arup Growth Base + Consented Site Traffic (including 240 space primary school but no traffic assumed);
- 2019 Arup Growth Base + Consented Site Traffic + Proposed School Traffic;
- 2013 Recalculated Growth Base (No Consented Site Traffic);
- 2013 Recalculated Growth Base + Consented Site Traffic (including 240 space primary school but no traffic assumed);
- 2013 Recalculated Growth Base + Consented Site Traffic + Proposed School Traffic;
- 2019 Recalculated Growth Base (No Consented Site Traffic);
- 2019 Recalculated Growth Base + Consented Site Traffic (including 240 space primary school but no traffic assumed); and
- 2019 Recalculated Growth Base + Consented Site Traffic + Proposed School Traffic.

4.4.8 In the 2007 Arup TA, growth was calculated for 2006 – 2013 only. 2019 was not assessed. Therefore this assessment follows the methodology set out within the Arup TA and calculated 2006 – 2019 growth using the same previous version of TEMPRO (version 5.0) and previous NTEM dataset (version 5.3) as used by Arup.

4.4.9 Growth has also been recalculated based on the new revised version of TEMPRO (version 6.2) and NTEM dataset 6.2 to provide 2013 and 2019 base networks upon which the consented and proposed school traffic can be added to more accurately reflect current trends and expectations for growth.

4.4.10 The calculated growth factors are shown in **Table 4.12** below.

Table 4.12 – Growth Factors as per Arup Specifications and Revised Growth Factors

	Arup-Calculated Growth Factors		Revised Growth Factors based on current TEMPRO predictions	
	2006 - 2013	2006-2019	2006 - 2013	2006-2019
AM	1.127	1.219	1.057	1.144
PM	1.128	1.222	1.063	1.154

4.4.11 All calculations for determining growth factors are included at **Appendix B**.

4.4.12 By comparing the Arup-calculated growth factors in the consented TA with the revised growth factors, the marked change in predicted growth is illustrated. It is anticipated that,

through junction capacity modelling, the decrease in background traffic from what was previously assessed will be highlighted further. .

4.5 Future Year Junction Capacity Assessments

4.5.1 The purpose of the junction capacity assessments is to draw comparisons between the consented and proposed traffic impacts upon the network. The junctions modelled will be the Main Access, the B430/Bicester Road/Heyford Road and Somerton Road/Camp Road/Station Road junctions. These reflect junctions modelled in the original Arup TA and capture the local impact from development both to the west and to the east, either where school children coming to the site are likely to be located, or routes where children from Heyford Park would go if they needed to attend school away from Heyford Park. It is not considered that school trips would impact on the strategic road network.

4.5.2 It is noted that when originally granted consent, the junctions assessed within the Arup report were modelled using older versions of junction capacity software, which resulted in slightly different results than those that will be presented here. It is considered appropriate to use current modelling software for all junctions and scenarios and in doing this, even if the results differ slightly from the original Arup TA, all assessments within this report are using the same base and so can be compared against each other.

Main Gate Access/Camp Road Junction

4.5.3 The Arup TA (2007) highlights proposals for junction improvements at the Main Gate junction, moving from the existing 3-arm roundabout to a proposed 4-arm priority crossroad. It has been assumed that these improvements will not have occurred by the opening year of 2013, but will be in place by full occupation at 2019. As such, this junction has been modelled using ARCADY 8 in 2013 and PICADY 8 in 2019.

B430/ Bicester Road/ Heyford Road

4.5.4 The B430/ Bicester Road/ Heyford Road junction is a four-arm signalised junction in the village of Middleton Stoney. The Arup TA shows proposed mitigation of this junction to improve geometries. It has been assumed that these improvements will not be in place by 2013, but will be by 2019. Therefore, this junction has been modelled based on the existing layout for 2013 (as per Arup's initial baseline model) and with the proposed improvements for 2019 (as per Arup's mitigated model). The junction has been modelled using LINSIG 3.

Somerton Road/ Camp Road/ Station Road

4.5.5 The Somerton Road/ Camp Road/ Station Road junction is a three-arm priority junction. The junction has been modelled using PICADY 8.

4.5.6 The 2013 junction capacity assessment results are included in full at **Appendix C** with the 2019 junction capacity assessment results included in full at **Appendix D**. A table with all the junction capacity assessment results for both 2013 and 2019 is provided at **Appendix E**. The results for all scenarios are summarised below.

4.6 2013 Arup Growth Base (No Consented Site Traffic) Junction Assessments

Main Gate Access/Camp Road

Table 4.13 – 2013 Arup Growth Base (No Consented Site Traffic) Junction Modelling Results – Main Gate Access/ Camp Road

Main Gate Access / Camp Road						
	AM Peak (08:00-09:00)			PM Peak (17:00-18:00)		
	Highest RFC	Highest MMQ	Delay (Secs)	Highest RFC	Highest MMQ	Delay (Secs)
Camp Road (East)	0.12	0.14	3.09	0.08	0.08	3.01
Camp Road (West)	0.10	0.11	3.73	0.10	0.11	3.65
Main Gate Access	0.04	0.04	2.03	0.12	0.13	2.22

- 4.6.1** As illustrated in **Table 4.13** the ARCADY model outputs show that the Main Gate Access/ Camp Road operates well within capacity in both the AM and PM peak periods. In the AM peak the highest RFC is 0.12 on the Camp Road (east) arm with an associated MMQ of 0.14 vehicles. In the PM peak the highest RFC is 0.12 on the Main Gate Access arm with an associated MMQ of 0.13 vehicles.

B430/ Bicester Road/ Heyford Road

Table 4.14 – 2013 Arup Growth Base (No Consented Site Traffic) Junction Modelling Results – B430/ Bicester Road/ Heyford Road

B430/ Bicester Road / Heyford Road						
	AM Peak (08:00-09:00)			PM Peak (17:00-18:00)		
	Deg Sat (%)	MMQ	Av. Delay (s/pcu)	Deg Sat (%)	MMQ	Av. Delay (s/pcu)
B4030 (E/B) Left Ahead Right	92.60%	14.10	104.20	75.40%	9.10	69.00
B430 Ardley Road South Right Left Ahead	82.70%	9.80	43.10	106.40%	49.30	187.10
B4030 (E/B) Ahead Right Left	91.90%	14.00	101.00	94.00%	15.00	110.60
B430 Ardley Road (N) Left Ahead Right	92.70%	22.70	64.80	85.50%	13.30	66.40

- 4.6.2** As illustrated in **Table 4.14** the LINSIG model outputs show that the B430/ Bicester Road/ Heyford Road junction operates close to capacity in the AM peak period and above capacity in the PM peak period. In the AM peak the highest Degree of Saturation (DOS) is 92.7% on the B430 Ardley Road (N) Left Ahead Right movement, with an associated MMQ of 22.7 vehicles. In the PM peak the highest DOS is 106.4% on the B430 Ardley Road South Right Left Ahead movement with an associated MMQ of 49.3 vehicles.

Somerton Road/ Camp Road/ Station Road

Table 4.15 – 2013 Arup Growth Base (No Consented Site Traffic) Junction Modelling Results – Somerton Road/ Camp Road/ Station Road

Somerton Road / Camp Road / Station Road						
	AM Peak (08:00-09:00)			PM Peak (17:00-18:00)		
	Highest RFC	Highest MMQ	Delay (min)	Highest RFC	Highest MMQ	Delay (min)
Camp Road to Somerton Road (South)	0.08	0.09	6.31	0.05	0.06	5.76
Camp Road to Somerton Road (North)	0.04	0.04	7.39	0.14	0.16	8.73
Somerton Road (South) to Somerton Road (North) & Camp Road	0.04	0.04	6.02	0.02	0.02	5.60

4.6.3 As illustrated in **Table 4.15** the PICADY model outputs show that the Somerton Road/ Camp Road/ Station Road junction operates well within capacity in both the AM and PM peak periods. In the AM peak the highest RFC is 0.08 on the Camp Road to Somerton Road (south) arm with associated MMQ's of 0.09 vehicles. In the PM peak the highest RFC is 0.14 on the Camp Road to Somerton Road (north) arm with associated MMQ's of 0.16 vehicles.

4.7 2013 Arup Growth Base + Consented Site Traffic - Junction Assessments

Main Gate Access / Camp Road

Table 4.16 – 2013 Arup Growth Base + Consented Site Traffic + Consented Primary School Junction Modelling Results – Main Gate Access/ Camp Road

Main Gate Access / Camp Road						
	AM Peak (08:00-09:00)			PM Peak (17:00-18:00)		
	Highest RFC	Highest MMQ	Delay (Secs)	Highest RFC	Highest MMQ	Delay (Secs)
Camp Road (East)	0.44	0.78	5.25	0.24	0.32	3.96
Camp Road (West)	0.33	0.48	6.06	0.19	0.24	4.49
Main Gate Access	0.35	0.53	2.98	0.38	0.61	3.16

4.7.1 As illustrated in **Table 4.16** the ARCADY model outputs show that the Main Gate Access/ Camp Road operates well within capacity in both the AM and PM peak periods. In the AM peak the highest RFC is 0.44 on the Camp Road (east) arm with an associated MMQ of 0.78 vehicles. In the PM peak the highest RFC is 0.38 on the Main Gate Access arm with an associated MMQ of 0.61 vehicles.

B430/ Bicester Road/ Heyford Road

Table 4.17 – 2013 Arup Growth Base + Consented Site Traffic + Consented Primary School Junction Modelling Results – B430/ Bicester Road/ Heyford Road

B430/ Bicester Road / Heyford Road						
	AM Peak (08:00-09:00)			PM Peak (17:00-18:00)		
	Deg Sat (%)	MMQ	Av. Delay (s/pcu)	Deg Sat (%)	MMQ	Av. Delay (s/pcu)
B4030 (E/B) Left Ahead Right	153.30%	114.30	771.90	135.50%	81.30	601.50
B430 Ardley Road South Right Left Ahead	108.50%	39.90	17.60	104.50%	49.20	154.60
B4030 (E/B) Ahead Right Left	222.30%	244.60	45.60	146.10%	97.90	692.60
B430 Ardley Road (N) Left Ahead Right	92.80%	23.70	18.50	121.80%	45.20	422.40

- 4.7.2** As illustrated in **Table 4.17** the LINSIG model outputs show that the B430/ Bicester Road/ Heyford Road junction operates over capacity in both the AM and PM peak periods. In the AM peak the highest DOS is 222.30% on the B4030 (E/B) Ahead Right Left movement, with an associated MMQ of 244.6 vehicles. In the PM peak the highest DOS is 146.10% on the B4030 (E/B) Ahead Right Left movement with an associated MMQ of 97.9 vehicles.

Somerton Road/ Camp Road/ Station Road

Table 4.18 - 2013 Arup Growth Base + Consented Site Traffic + Consented Primary School Junction Modelling Results – Somerton Road/ Camp Road/ Station Road

Somerton Road / Camp Road / Station Road						
	AM Peak (08:00-09:00)			PM Peak (17:00-18:00)		
	Highest RFC	Highest MMQ	Delay (Secs)	Highest RFC	Highest MMQ	Delay (Secs)
Camp Road to Somerton Road (South)	0.22	0.28	8.67	0.22	0.28	8.90
Camp Road to Somerton Road (North)	0.45	0.80	15.80	0.51	1.02	16.90
Somerton Road (South) to Somerton Road (North) & Camp Road	0.24	0.33	8.19	0.16	0.21	6.71

- 4.7.3** As illustrated in **Table 4.18** the PICADY model outputs show that the Somerton Road/ Camp Road/ Station Road junction operates well within capacity in both the AM and PM peak periods. In the AM peak the highest RFC is 0.45 on the Camp Road to Somerton Road (north) arm with associated MMQ of 0.80 vehicles. In the PM peak the highest RFC is 0.51 on the Camp Road to Somerton Road (north) arm with associated MMQ of 1.02 vehicles.

4.8 2013 Arup Growth Base + Consented Site Traffic + Proposed Free School Junction Assessments

Main Gate Access / Camp Road

Table 4.19 – 2013 Arup Growth Base + Consented Site Traffic + Proposed Free School Junction Modelling Results – Main Gate Access/ Camp Road

Main Gate Access / Camp Road						
	AM Peak (08:00-09:00)			PM Peak (17:00-18:00)		
	Highest RFC	Highest MMQ	Delay (Secs)	Highest RFC	Highest MMQ	Delay (Secs)
Camp Road (East)	0.48	0.92	5.71	0.24	0.32	3.96
Camp Road (West)	0.36	0.56	6.57	0.19	0.24	4.49
Main Gate Access	0.38	0.61	3.13	0.39	0.63	3.19

- 4.8.1** As illustrated in **Table 4.19** the ARCADY model outputs show that the Camp Road/ Main Gate Access junction operates within capacity in both the AM and PM peak periods. In the AM peak the highest RFC is 0.48 on the Camp Road (east) arm with an associated MMQ of 0.92 vehicles. In the PM peak the highest RFC is 0.39 on the Main Gate Access arm with an associated MMQ of 0.63 vehicles.

B430/ Bicester Road/ Heyford Road

Table 4.20 – 2013 Arup Growth Base + Consented Site Traffic + Proposed Free School Junction Modelling Results – B430/ Bicester Road/ Heyford Road

B430/ Bicester Road / Heyford Road						
	AM Peak (08:00-09:00)			PM Peak (17:00-18:00)		
	Deg Sat (%)	MMQ	Av. Delay (s/pcu)	Deg Sat (%)	MMQ	Av. Delay (s/pcu)
B4030 (E/B) Left Ahead Right	156.70%	120.90	800.50	135.50%	81.30	601.50
B430 Ardley Road South Right Left Ahead	109.70%	42.40	245.80	104.50%	49.20	154.60
B4030 (E/B) Ahead Right Left	228.80%	257.00	1198.20	146.70%	99.10	698.40
B430 Ardley Road (N) Left Ahead Right	92.00%	23.70	68.10	121.80%	45.20	422.40

- 4.8.2** As illustrated in **Table 4.20** the LINSIG model outputs show that the B430/ Bicester Road/ Heyford Road junction operates over capacity in both the AM and PM peak periods. In the AM peak the highest DOS is 228.80% on the B4030 (E/B) Ahead Right Left movement, with an associated MMQ of 257 vehicles. In the PM peak the highest DOS is 146.70% on the B4030 (E/B) Ahead Right Left movement with an associated MMQ of 99.10 vehicles.

Somerton Road/ Camp Road/ Station Road

Table 4.21 – 2013 Arup Growth Base + Consented Site Traffic + Proposed Free School Junction Modelling Results – Somerton Road/ Camp Road/ Station Road

Somerton Road / Camp Road / Station Road						
	AM Peak (08:00-09:00)			PM Peak (17:00-18:00)		
	Highest RFC	Highest MMQ	Delay (Secs)	Highest RFC	Highest MMQ	Delay (Secs)
Camp Road to Somerton Road (South)	0.23	0.30	8.99	0.22	0.28	8.93
Camp Road to Somerton Road (North)	0.47	0.87	16.63	0.51	1.03	16.99
Somerton Road (South) to Somerton Road (North) & Camp Road	0.25	0.35	8.35	0.16	0.21	6.71

4.8.3 As illustrated in **Table 4.21** the PICADY model outputs show that the Somerton Road/ Camp Road/ Station Road junction operates within capacity in both the AM and PM peak periods. In the AM peak the highest RFC is 0.47 on the Camp Road to Somerton Road (north) arm with an associated MMQ of 0.87 vehicles. In the PM peak the highest RFC is 0.51 on the Camp Road to Somerton Road (north) arm with an associated MMQ of 1.03 vehicles.

4.9 2019 Arup Growth Base (No Consented Site Traffic) Junction Assessments

Main Gate Access/ Camp Road

Table 4.22 – 2019 Arup Growth Base (No Consented Site Traffic) Junction Modelling Results – Main Gate Access/ Camp Road

Main Gate Access / Camp Road						
	AM Peak (08:00-09:00)			PM Peak (17:00-18:00)		
	Highest RFC	Highest MMQ	Delay (Secs)	Highest RFC	Highest MMQ	Delay (Secs)
New Access (South)	0.00	0.00	0.00	0.00	0.00	0.00
Camp Road (East)	0.19	0.26	7.11	0.13	0.15	6.84
Main Gate Access (North)	0.14	0.16	6.66	0.36	0.55	8.74
Camp Road (West)	0.00	0.00	0.00	0.00	0.00	0.00

4.9.1 As illustrated in **Table 4.22** the PICADY model outputs show that the Main Gate Access/Camp Road junction operates well within capacity in both the AM and PM peak periods. In the AM peak the highest RFC is 0.19 on the Camp Road (east) arm with an associated MMQ of 0.26 vehicles. In the PM peak the highest RFC is 0.36 on the Main Gate Access (north) arm with an associated MMQ of 0.55 vehicles.

B430/ Bicester Road/ Heyford Road

Table 4.23 – 2019 Arup Growth Base (No Consented Site Traffic) Junction Modelling Results – B430/Bicester Road/Heyford Road

B430/ Bicester Road / Heyford Road						
	AM Peak (08:00-09:00)			PM Peak (17:00-18:00)		
	Deg Sat (%)	MMQ	Av. Delay (s/pcu)	Deg Sat (%)	MMQ	Av. Delay (s/pcu)
B4030 (E/B) Left Ahead Right	80.40%	11.90	66.80	75.40%	9.70	66.20
B430 Ardley Road South Right Left Ahead	46.70%	8.10	31.00	75.40%	17.20	34.70
B4030 (E/B) Ahead Right Left	78.40%	11.80	62.90	79.10%	11.90	63.40
B430 Ardley Road (N) Left Ahead Right	77.60%	19.50	39.40	41.80%	8.40	26.40

- 4.9.2** As illustrated in **Table 4.23** the LINSIG model outputs show that the B430/ Bicester Road/ Heyford Road junction operates within capacity in both the AM and PM peak periods. In the AM peak the highest DOS is 80.40% on the B4030 (E/B) Left Ahead Right movement, with an associated MMQ of 11.90 vehicles. In the PM peak the highest DOS is 79.10% on the B4030 (E/B) Ahead Right Left movement with an associated MMQ of 11.90 vehicles.

Somerton Road/ Camp Road/ Station Road

Table 4.24 - 2019 Arup Growth Base (No Consented Site Traffic) Junction Modelling Results – Somerton Road/ Camp Road/ Station Road

Somerton Road / Camp Road / Station Road						
	AM Peak (08:00-09:00)			PM Peak (17:00-18:00)		
	Highest RFC	Highest MMQ	Delay (Secs)	Highest RFC	Highest MMQ	Delay (Secs)
Camp Road to Somerton Road (South)	0.09	0.09	6.38	0.06	0.06	5.82
Camp Road to Somerton Road (North)	0.04	0.05	7.45	0.15	0.17	8.90
Somerton Road (South) to Somerton Road (North) & Camp Road	0.04	0.05	6.03	0.02	0.03	5.59

- 4.9.3** As illustrated in **Table 4.24** the PICADY model outputs show that the Somerton Road/ Camp Road/ Station Road junction operates well within capacity in both the AM and PM peak periods. In the AM peak the highest RFC is 0.09 on the Camp Road to Somerton Road (south) arm with an associated MMQ of 0.09. In the PM peak the highest RFC is 0.15 on the Camp Road to Somerton Road (north) arm with an associated MMQ of 0.17.

4.10 2019 Arup Growth Base + Consented Site Traffic Junction Assessments

Main Gate Access/ Camp Road

Table 4.25 – 2019 Arup Growth Base + Consented Site Traffic + Consented Primary School Junction Modelling Results – Main Gate Access/ Camp Road

Main Gate Access / Camp Road						
	AM Peak (08:00-09:00)			PM Peak (17:00-18:00)		
	Highest RFC	Highest MMQ	Delay (Secs)	Highest RFC	Highest MMQ	Delay (Secs)
New Access (South)	0.66	1.71	40.01	0.55	1.21	18.39
Camp Road (East)	1.04	26.36	138.28	0.33	0.57	8.29
Main Gate Access (North)	1.30	78.96	535.17	0.82	4.14	32.39
Camp Road (West)	0.15	0.34	6.84	0.08	0.13	6.16

4.10.1 As illustrated in **Table 4.25** the PICADY model outputs show that the Main Gate Access/ Camp Road junction operates over capacity in the AM peak and within capacity in the PM peak. In the AM peak the Camp Road (east) arm and the Main Gate Access arm are shown to be operating with RFCs of 1.04 and 1.30 respectively. Their associated MMQs are 26.36 and 78.96 vehicles. In the PM peak the highest RFC is 0.82 on the Main Gate Access (north) arm with an associated MMQ of 4.14 vehicles.

B430/ Bicester Road/ Heyford Road

Table 4.26 – 2019 Arup Growth Base + Consented Site Traffic + Consented Primary School Junction Modelling Results – B430/Bicester Road/Heyford Road

B430/ Bicester Road / Heyford Road						
	AM Peak (08:00-09:00)			PM Peak (17:00-18:00)		
	Deg Sat (%)	MMQ	Av. Delay (s/pcu)	Deg Sat (%)	MMQ	Av. Delay (s/pcu)
B4030 (E/B) Left Ahead Right	138.30%	100.40	606.10	104.60%	33.00	185.80
B430 Ardley Road South Right Left Ahead	83.90%	16.20	60.10	102.80%	45.10	137.80
B4030 (E/B) Ahead Right Left	125.80%	120.50	471.90	105.40%	36.90	196.30
B430 Ardley Road (N) Left Ahead Right	109.90%	55.70	250.80	51.40%	9.80	35.70

4.10.2 As illustrated in **Table 4.26** the LINSIG model outputs show that the B430/ Bicester Road/ Heyford Road junction operates above capacity in both the AM and PM peak periods. In the AM peak the highest DOS is 138.30% on the B4030 (E/B) Left Ahead Right movement, with an associated MMQ of 100.40 vehicles. In the PM peak the highest DOS is 105.40% on the B4030 (E/B) Ahead Right Left movement with an associated MMQ of 36.90 vehicles.

Somerton Road/ Camp Road/ Station Road

Table 4.27 – 2019 Arup Growth Base + Consented Site Traffic + Consented Primary School Junction Modelling Results – Somerton Road/ Camp Road/ Station Road

Somerton Road / Camp Road / Station Road						
	AM Peak (08:00-09:00)			PM Peak (17:00-18:00)		
	Highest RFC	Highest MMQ	Delay (Secs)	Highest RFC	Highest MMQ	Delay (Secs)
Camp Road to Somerton Road (South)	0.27	0.36	9.90	0.23	0.30	9.23
Camp Road to Somerton Road (North)	0.52	1.05	18.77	0.53	1.10	17.71
Somerton Road (South) to Somerton Road (North) & Camp Road	0.27	0.40	8.69	0.16	0.22	6.70

4.10.3 As illustrated in **Table 4.27** the PICADY model outputs show that the Somerton Road/ Camp Road/ Station Road junction operates within capacity in both the AM and PM peak periods. In the AM peak the highest RFC is 0.52 on the Camp Road to Somerton Road (north) arm with an associated MMQ of 1.05 vehicles. In the PM peak the highest RFC is 0.53 on the Camp Road to Somerton Road (north) arm with an associated MMQ of 1.10 vehicles.

4.11 2019 Arup Growth Base + Consented Site Traffic + Proposed Free School Junction Assessments

Main Gate Access/ Camp Road

Table 4.28 – 2019 Arup Growth Base + Consented Site Traffic + Proposed Free School Junction Modelling Results – Main Gate Access/ Camp Road

Main Gate Access / Camp Road						
	AM Peak (08:00-09:00)			PM Peak (17:00-18:00)		
	Highest RFC	Highest MMQ	Delay (Secs)	Highest RFC	Highest MMQ	Delay (Secs)
New Access (South)	0.54	1.13	26.07	0.57	1.29	19.74
Camp Road (East)	1.00	19.91	109.26	0.33	0.57	8.29
Main Gate Access (North)	1.11	34.50	212.41	0.91	7.48	53.77
Camp Road (West)	0.15	0.32	6.78	0.08	0.13	6.16

4.11.1 As illustrated in **Table 4.28** the PICADY model outputs show that the Main Gate Access/ Camp Road junction operates over capacity in the AM peak and within capacity in the PM peak. In the AM peak the Camp Road (east) arm and the Main Gate Access arm are shown to be operating with RFCs of 1.00 and 1.11 respectively. Their associated MMQs are 19.91 and 34.50. In the PM peak the highest RFC is 0.91 on the Main Gate Access (north) arm with an associated MMQ of 7.48 vehicles.

B430/ Bicester Road/ Heyford Road

Table 4.29 – 2019 Arup Growth Base + Consented Site Traffic + Proposed Free School Junction Modelling Results
B430/Bicester Road/Heyford Road

B430/ Bicester Road / Heyford Road						
	AM Peak (08:00-09:00)			PM Peak (17:00-18:00)		
	Deg Sat (%)	MMQ	Av. Delay (s/pcu)	Deg Sat (%)	MMQ	Av. Delay (s/pcu)
B4030 (E/B) Left Ahead Right	132.20%	90.30	541.10	108.40%	39.30	237.60
B430 Ardley Road South Right Left Ahead	83.80%	16.20	59.90	102.80%	45.10	137.80
B4030 (E/B) Ahead Right Left	124.00%	111.00	448.60	105.10%	37.20	190.50
B430 Ardley Road (N) Left Ahead Right	109.90%	55.70	250.80	51.40%	9.80	35.70

- 4.11.2** As illustrated in **Table 4.29** the LINSIG model outputs show that the B430/ Bicester Road/ Heyford Road junction operates over capacity in both the AM and PM peak periods. In the AM peak the highest DOS is 132.20% on the B4030 (E/B) Left Ahead Right movement, with an associated MMQ of 90.30 vehicles. In the PM peak the highest DOS is 108.40% on the B4030 (E/B) Left Ahead Right movement with an associated MMQ of 39.30 vehicles.

Somerton Road/ Camp Road/ Station Road

Table 4.30 - 2019 Arup Growth Base + Consented Site Traffic + Proposed Free School Junction Modelling Results –
Somerton Road/ Camp Road/ Station Road

Somerton Road / Camp Road / Station Road						
	AM Peak (08:00-09:00)			PM Peak (17:00-18:00)		
	Highest RFC	Highest MMQ	Delay (Secs)	Highest RFC	Highest MMQ	Delay (Secs)
Camp Road to Somerton Road (South)	0.25	0.33	9.35	0.25	0.32	9.65
Camp Road to Somerton Road (North)	0.49	0.93	17.52	0.55	1.20	18.63
Somerton Road (South) to Somerton Road (North) & Camp Road	0.27	0.39	8.62	0.16	0.22	6.70

- 4.11.3** As illustrated in **Table 4.30** the PICADY model outputs show that the Somerton Road/ Camp Road/ Station Road junction operates within capacity in both the AM and PM peak periods. In the AM peak the highest RFC is 0.49 on the Camp Road to Somerton Road (north) arm with an associated MMQ of 0.93 vehicles. In the PM peak the highest RFC is 0.55 on the Camp Road to Somerton Road (north) arm with an associated MMQ of 1.20 vehicles.

4.12 2013 Recalculated Growth Base (No Consented Site Traffic) Junction Assessments

Main Gate Access/Camp Road

Table 4.31 – 2013 Recalculated Growth Base (No Consented Site Traffic) Junction Modelling Results – Main Gate Access/ Camp Road

Main Gate Access / Camp Road						
	AM Peak (08:00-09:00)			PM Peak (17:00-18:00)		
	Highest RFC	Highest MMQ	Delay (Secs)	Highest RFC	Highest MMQ	Delay (Secs)
Camp Road (East)	0.11	0.13	3.07	0.07	0.08	2.99
Camp Road (West)	0.10	0.11	3.69	0.09	0.10	3.62
Main Gate Access	0.04	0.04	2.03	0.11	0.12	2.20

- 4.12.1** As illustrated in **Table 4.31** the ARCADY model outputs show that the Main Gate Access/ Camp Road junction operates well within capacity in both the AM and PM peak periods. In the AM peak the highest RFC is 0.11 on the Camp Road (east) with associated MMQ of 0.13. In the PM peak the highest RFC is 0.11 on the Main Gate Access arm with an associated MMQ of 0.12 vehicles.

B430/ Bicester Road/ Heyford Road

Table 4.32 – 2013 Recalculated Growth Base (No Consented Site Traffic) Junction Modelling Results – B430/Bicester Road/Heyford Road

B430/ Bicester Road / Heyford Road						
	AM Peak (08:00-09:00)			PM Peak (17:00-18:00)		
	Deg Sat (%)	MMQ	Av. Delay (s/pcu)	Deg Sat (%)	MMQ	Av. Delay (s/pcu)
B4030 (E/B) Left Ahead Right	86.90%	11.80	86.30	71.40%	8.40	68.80
B430 Ardley Road South Right Left Ahead	69.90%	8.10	31.70	94.70%	21.20	62.40
B4030 (E/B) Ahead Right Left	86.00%	11.70	84.10	88.00%	12.30	89.10
B430 Ardley Road (N) Left Ahead Right	86.80%	18.50	49.70	83.80%	11.80	60.50

- 4.12.2** As illustrated in **Table 4.32** the LINSIG model outputs show that the B430/ Bicester Road/ Heyford Road junction operates within capacity in both the AM and PM peak periods. In the AM peak the highest DOS is 86.90% on the B4030 (E/B) Left Ahead Right movement, with an associated MMQ of 11.80 vehicles. In the PM peak the highest DOS is 94.70% on the B430 Ardley Road South Right Left Ahead movement with an associated MMQ of 21.20 vehicles.

Somerton Road/ Camp Road/ Station Road

Table 4.33 – 2013 Recalculated Growth Base (No Consented Site Traffic) Junction Modelling Results – Somerton Road/ Camp Road/ Station Road

Somerton Road / Camp Road / Station Road						
	AM Peak (08:00-09:00)			PM Peak (17:00-18:00)		
	Highest RFC	Highest MMQ	Delay (Secs)	Highest RFC	Highest MMQ	Delay (Secs)
Camp Road to Somerton Road (South)	0.07	0.08	6.26	0.05	0.05	5.72
Camp Road to Somerton Road (North)	0.04	0.04	7.33	0.13	0.15	8.62
Somerton Road (South) to Somerton Road (North) & Camp Road	0.03	0.04	5.99	0.02	0.02	5.60

4.12.3 As illustrated in **Table 4.33** the PICADY model outputs show that the Somerton Road/ Camp Road/ Station Road junction operates well within capacity in both the AM and PM peak periods. In the AM peak the highest RFC is 0.07 on the Camp Road to Somerton Road (south) arm with an associated MMQ of 0.08. In the PM peak the highest RFC is 0.13 on the Camp Road to Somerton Road (north) arm with an associated MMQ of 0.15 vehicles.

4.13 2013 Recalculated Growth Base + Consented Site Traffic Junction Assessments

Main Gate Access/Camp Road

Table 4.34 – 2013 Recalculated Growth Base + Consented Site Traffic + Consented Primary School Junction Modelling Results – Main Gate Access/ Camp Road

Main Gate Access / Camp Road						
	AM Peak (08:00-09:00)			PM Peak (17:00-18:00)		
	Highest RFC	Highest MMQ	Delay (Secs)	Highest RFC	Highest MMQ	Delay (Secs)
Camp Road (East)	0.43	0.75	5.16	0.24	0.31	3.92
Camp Road (West)	0.32	0.46	5.96	0.18	0.23	4.44
Main Gate Access	0.34	0.52	2.96	0.37	0.59	3.12

4.13.1 As illustrated in **Table 4.34** the ARCADY model outputs show that the Main Gate Access/ Camp Road junction operates within capacity in both the AM and PM peak periods. In the AM peak the highest RFC is 0.43 on the Camp Road (east) arm with an associated MMQ of 0.75 vehicles. In the PM peak the highest RFC is 0.37 on the Main Gate Access arm with an associated MMQ of 0.59 vehicles.

B430/ Bicester Road/ Heyford Road

Table 4.35 – 2013 Recalculated Growth Base + Consented Site Traffic + Consented Primary School Junction Modelling Results – B430/Bicester Road/Heyford Road

B430/ Bicester Road / Heyford Road						
	AM Peak (08:00-09:00)			PM Peak (17:00-18:00)		
	Deg Sat (%)	MMQ	Av. Delay (s/pcu)	Deg Sat (%)	MMQ	Av. Delay (s/pcu)
B4030 (E/B) Left Ahead Right	147.70%	103.70	722.30	131.50%	73.70	557.20
B430 Ardley Road South Right Left Ahead	92.30%	13.90	61.70	105.90%	51.20	178.20
B4030 (E/B) Ahead Right Left	216.50%	233.30	1146.90	140.40%	87.30	636.70
B430 Ardley Road (N) Left Ahead Right	91.60%	21.00	63.20	97.30%	17.30	118.30

- 4.13.2** As illustrated in **Table 4.35** the LINSIG model outputs show that the B430/ Bicester Road/ Heyford Road junction operates over capacity in both the AM and PM peak periods. In the AM peak the highest DOS is 216.50% on the B4030 (E/B) Ahead Right Left movement, with an associated MMQ of 233.30 vehicles. In the PM peak the highest DOS is 140.40% on the B4030 (E/B) Ahead Right Left movement with an associated MMQ of 87.30 vehicles.

Somerton Road/ Camp Road/ Station Road

Table 4.36 – 2013 Recalculated Growth Base + Consented Site Traffic + Consented Primary School Junction Modelling Results – Somerton Road/ Camp Road/ Station Road

Somerton Road / Camp Road / Station Road						
	AM Peak (08:00-09:00)			PM Peak (17:00-18:00)		
	Highest RFC	Highest MMQ	Delay (Secs)	Highest RFC	Highest MMQ	Delay (Secs)
Camp Road to Somerton Road (South)	0.21	0.27	8.52	0.21	0.27	8.69
Camp Road to Somerton Road (North)	0.44	0.78	15.54	0.50	0.97	16.41
Somerton Road (South) to Somerton Road (North) & Camp Road	0.23	0.32	8.14	0.16	0.21	6.73

- 4.13.3** As illustrated in **Table 4.36** the PICADY model outputs show that the Somerton Road/ Camp Road/ Station Road junction operates within capacity in both the AM and PM peak periods. In the AM peak the highest RFC is 0.44 on the Camp Road to Somerton Road (north) arm with an associated MMQ of 0.78 vehicles. In the PM peak the highest RFC is 0.50 on the Camp Road to Somerton Road (north) arm with an associated MMQ of 0.97 vehicles.

4.14 2013 Recalculated Growth Base + Consented Site Traffic + Proposed Free School Junction Assessments

Main Gate Access/ Camp Road

Table 4.37 – 2013 Recalculated Growth Base + Consented Site Traffic + Proposed Free School Junction Modelling Results – Main Gate Access/ Camp Road

Main Gate Access / Camp Road						
	AM Peak (08:00-09:00)			PM Peak (17:00-18:00)		
	Highest RFC	Highest MMQ	Delay (Secs)	Highest RFC	Highest MMQ	Delay (Secs)
Camp Road (East)	0.47	0.89	5.62	0.24	0.31	3.93
Camp Road (West)	0.35	0.54	6.46	0.18	0.23	4.44
Main Gate Access	0.38	0.60	3.11	0.38	0.61	3.15

- 4.14.1** As illustrated in **Table 4.37** the ARCADY model outputs show that the Main Gate Access/ Camp Road junction operates within capacity in both the AM and PM peak periods. In the AM peak the highest RFC is 0.47 on the Camp Road (east) arm with an associated MMQ of 0.89 vehicles. In the PM peak the highest RFC is 0.38 on the Main Gate Access arm with an associated MMQ of 0.61 vehicles.

B430/ Bicester Road/ Heyford Road

Table 4.38 – 2013 Recalculated Growth Base + Consented Site Traffic + Proposed Free School Junction Modelling Results – B430/Bicester Road/Heyford Road

B430 / Bicester Road / Heyford Road						
	AM Peak (08:00-09:00)			PM Peak (17:00-18:00)		
	Deg Sat (%)	MMQ	Av. Delay (s/pcu)	Deg Sat (%)	MMQ	Av. Delay (s/pcu)
B4030 (E/B) Left Ahead Right	151.30%	110.70	755.00	131.50%	73.70	557.20
B430 Ardley Road South Right Left Ahead	93.30%	14.60	65.60	105.90%	51.20	178.20
B4030 (E/B) Ahead Right Left	223.00%	245.80	1174.50	140.70%	87.90	639.00
B430 Ardley Road (N) Left Ahead Right	94.20%	22.50	73.10	97.30%	17.30	118.30

- 4.14.2** As illustrated in **Table 4.38** the LINSIG model outputs show that the B430/ Bicester Road/ Heyford Road junction operates over capacity in both the AM and PM peak periods. In the AM peak the highest DOS is 223.0% on the B4030 (E/B) Ahead Right Left movement, with an associated MMQ of 245.80 vehicles. In the PM peak the highest DOS is 140.70% on the B4030 (E/B) Ahead Right Left movement with an associated MMQ of 87.90 vehicles.

Somerton Road/ Camp Road/ Station Road

Table 4.39 – 2013 Recalculated Growth Base + Consented Site Traffic + Proposed Free School Junction Modelling Results – Somerton Road/ Camp Road/ Station Road

Somerton Road / Camp Road / Station Road						
	AM Peak (08:00-09:00)			PM Peak (17:00-18:00)		
	Highest RFC	Highest MMQ	Delay (Secs)	Highest RFC	Highest MMQ	Delay (Secs)
Camp Road to Somerton Road (South)	0.23	0.29	8.83	0.21	0.27	8.75
Camp Road to Somerton Road (North)	0.46	0.85	16.35	0.50	0.99	16.58
Somerton Road (South) to Somerton Road (North) & Camp Road	0.24	0.34	8.31	0.16	0.21	6.73

4.14.3 As illustrated in **Table 4.39** the PICADY model outputs show that the Somerton Road/ Camp Road/ Station Road junction operates within capacity in both the AM and PM peak periods. In the AM peak the highest RFC is 0.46 on the Camp Road to Somerton Road (north) arm with an associated MMQ of 0.85 vehicles. In the PM peak the highest RFC is 0.50 on the Camp Road to Somerton Road (north) arm with an associated MMQ of 0.99 vehicles.

4.15 2019 Recalculated Growth Base (No Consented Site Traffic) Junction Assessments

Main Gate Access/ Camp Road

Table 4.40 – 2019 Recalculated Growth Base (No Consented Site Traffic) Junction Modelling Results – Main Gate Access/ Camp Road

Main Gate Access / Camp Road						
	AM Peak (08:00-09:00)			PM Peak (17:00-18:00)		
	Highest RFC	Highest MMQ	Delay (Secs)	Highest RFC	Highest MMQ	Delay (Secs)
New Access (South)	0.00	0.00	0.00	0.00	0.00	0.00
Camp Road (East)	0.18	0.23	7.02	0.12	0.14	6.77
Main Gate Access (North)	0.13	0.14	6.55	0.34	0.50	8.41
Camp Road (West)	0.00	0.00	0.00	0.00	0.00	0.00

4.15.1 As illustrated in **Table 4.40** the PICADY model outputs show that the Main Gate Access/Camp Road junction operates well within capacity in both the AM and PM peak periods. In the AM peak the highest RFC is 0.18 on the Camp Road (east) arm with an associated MMQ of 0.23. In the PM peak the highest RFC is 0.34 on the Main Gate Access (north) arm with an associated MMQ of 0.50

B430/ Bicester Road/ Heyford Road

Table 4.41 – 2019 Recalculated Growth Base (No Consented Site Traffic) Junction Modelling Results – B430/Bicester Road/Heyford Road

B430 / Bicester Road / Heyford Road						
	AM Peak (08:00-09:00)			PM Peak (17:00-18:00)		
	Deg Sat (%)	MMQ	Av. Delay (s/pcu)	Deg Sat (%)	MMQ	Av. Delay (s/pcu)
B4030 (E/B) Left Ahead Right	75.60%	10.80	62.20	74.70%	9.20	67.00
B430 Ardley Road South Right Left Ahead	43.20%	7.20	29.20	70.10%	14.90	31.50
B4030 (E/B) Ahead Right Left	76.00%	10.90	61.80	74.70%	10.90	59.60
B430 Ardley Road (N) Left Ahead Right	71.30%	17.20	35.50	38.80%	7.70	25.10

- 4.15.2** As illustrated in **Table 4.41** the LINSIG model outputs show that the B430/ Bicester Road/ Heyford Road junction operates within capacity in both the AM and PM peak periods. In the AM peak the highest DOS is 76% on the B4030 (E/B) Ahead Right Left movement, with an associated MMQ of 10.90 vehicles. In the PM peak the highest DOS is 74.70% on the B4030 (E/B) Ahead Right Left movement with an associated MMQ of 10.90 vehicles.

Somerton Road/ Camp Road/ Station Road

Table 4.42 – 2019 Recalculated Growth Base (No Consented Site Traffic) Junction Modelling Results – Somerton Road/ Camp Road/ Station Road

Somerton Road / Camp Road / Station Road						
	AM Peak (08:00-09:00)			PM Peak (17:00-18:00)		
	Highest RFC	Highest MMQ	Delay (Secs)	Highest RFC	Highest MMQ	Delay (Secs)
Camp Road to Somerton Road (South)	0.08	0.09	6.32	0.06	0.06	5.78
Camp Road to Somerton Road (North)	0.04	0.04	7.39	0.14	0.16	8.78
Somerton Road (South) to Somerton Road (North) & Camp Road	0.04	0.04	6.02	0.02	0.02	5.59

- 4.15.3** As illustrated in **Table 4.42** the PICADY model outputs show that the Somerton Road/ Camp Road/ Station Road junction operates within capacity in both the AM and PM peak periods. In the AM peak the highest RFC is 0.08 on the Camp Road to Somerton Road (south) arm with an associated MMQ of 0.09 vehicles. In the PM the highest RFC is 0.14 on the Camp Road to Somerton Road (north) arm with an associated MMQ of 0.16 vehicles.

4.16 2019 Recalculated Growth Base + Consented Site Traffic Junction Assessments

Main Gate Access/ Camp Road

Table 4.43 – 2019 Recalculated Growth Base + Consented Site Traffic + Consented Primary School Junction Modelling Results – Main Gate Access/ Camp Road

Main Gate Access / Camp Road						
	AM Peak (08:00-09:00)			PM Peak (17:00-18:00)		
	Highest RFC	Highest MMQ	Delay (Secs)	Highest RFC	Highest MMQ	Delay (Secs)
New Access (South)	0.63	1.56	36.30	0.55	1.18	17.91
Camp Road (East)	1.02	22.53	121.73	0.32	0.55	8.17
Main Gate Access (North)	1.27	73.14	482.44	0.79	3.60	28.71
Camp Road (West)	0.15	0.33	66.82	0.08	0.13	6.18

- 4.16.1** As illustrated in **Table 4.43** the PICADY model outputs show that the Main Gate Access/ Camp Road junction operates over capacity in the AM peak and within capacity in the PM peak. In the AM peak the Camp Road (east) arm and the Main Gate Access arm are shown to be operating with RFCs of 1.02 and 1.27 respectively. Their associated MMQs are 22.53 and 73.14 vehicles. In the PM peak the highest RFC is 0.79 on the Main Gate Access (north) arm with an associated MMQ of 3.60 vehicles.

B430/ Bicester Road/ Heyford Road

Table 4.44 – 2019 Recalculated Growth Base + Consented Site Traffic + Consented Primary School Junction Modelling Results – Main Gate Access/ Camp Road

B430 / Bicester Road / Heyford Road						
	AM Peak (08:00-09:00)			PM Peak (17:00-18:00)		
	Deg Sat (%)	MMQ	Av. Delay (s/pcu)	Deg Sat (%)	MMQ	Av. Delay (s/pcu)
B4030 (E/B) Left Ahead Right	128.50%	82.00	500.50	101.50%	27.40	147.10
B430 Ardley Road South Right Left Ahead	82.90%	15.50	59.60	99.80%	35.10	103.10
B4030 (E/B) Ahead Right Left	119.90%	100.70	392.80	98.70%	25.30	114.60
B430 Ardley Road (N) Left Ahead Right	109.10%	50.80	242.10	49.60%	9.20	36.00

- 4.16.2** As illustrated in **Table 4.44** the LINSIG model outputs show that the B430/ Bicester Road/ Heyford Road junction operates over capacity in both the AM and PM peak periods. In the AM peak the highest DOS is 128.50% on the B4030 (E/B) Left Ahead Right movement, with an associated MMQ of 82 vehicles. In the PM peak the highest DOS is 101.50% on the B4030 (E/B) Left Ahead Right movement with an associated MMQ of 27.40 vehicles.

Somerton Road/ Camp Road/ Station Road

Table 4.45 – 2019 Recalculated Growth Base + Consented Site Traffic + Consented Primary School Junction Modelling Results – Somerton Road/ Camp Road/ Station Road

Somerton Road / Camp Road/ Station Road						
	AM Peak (08:00-09:00)			PM Peak (17:00-18:00)		
	Highest RFC	Highest MMQ	Delay (Secs)	Highest RFC	Highest MMQ	Delay (Secs)
Camp Road to Somerton Road (South)	0.26	0.34	9.68	0.20	0.29	9.03
Camp Road to Somerton Road (North)	0.51	1.02	18.36	0.52	1.06	17.24
Somerton Road (South) to Somerton Road (North) & Camp Road	0.27	0.39	8.65	0.16	0.22	6.70

4.16.3 As illustrated in **Table 4.45** the PICADY model outputs show that the Somerton Road/ Camp Road/ Station Road junction operates within capacity in both the AM and PM peak periods. In the AM peak the highest RFC is 0.51 on the Camp Road to Somerton Road (north) arm with an associated MMQ of 1.02 vehicles. In the PM peak the highest RFC is 0.52 on the Camp Road to Somerton Road (north) arm with an associated MMQ of 1.06 vehicles.

4.17 2019 Recalculated Growth Base + Consented Site Traffic + Proposed Free School Junction Assessments

Main Gate Access/ Camp Road

Table 4.46 – 2019 Recalculated Growth Base + Consented Site Traffic + Proposed Free School Junction Modelling Results – Main Gate Access/ Camp Road

Main Gate Access / Camp Road						
	AM Peak (08:00-09:00)			PM Peak (17:00-18:00)		
	Highest RFC	Highest MMQ	Delay (Secs)	Highest RFC	Highest MMQ	Delay (Secs)
New Access (South)	0.53	1.07	24.54	0.56	1.26	19.12
Camp Road (East)	0.99	16.84	95.13	0.32	0.55	8.17
Main Gate Access (North)	1.09	26.69	185.98	0.88	6.10	44.82
Camp Road (West)	0.15	0.31	6.77	0.08	0.13	6.18

4.17.1 As illustrated in **Table 4.46** the PICADY model outputs show that the Main Gate Access/ Camp Road junction operates over capacity in the AM peak and within capacity in the PM peak. In the AM peak the Camp Road (east) arm is operating just below capacity with an RFC of 0.99 and MMQ of 16.84 vehicles. The Main Gate Access arm is shown to be operating at capacity with an RFC of 1.09 and MMQ of 26.69 vehicles. In the PM peak the highest RFC is 0.88 on the Main Gate Access (north) arm with an associated MMQ of 6.10 vehicles.

B430/ Bicester Road/ Heyford Road

Table 4.47 – 2019 Recalculated Growth Base + Consented Site Traffic + Proposed Free School Junction Modelling Results – B430/Bicester Road/Heyford Road

B430/ Bicester Road / Heyford Road						
	AM Peak (08:00-09:00)			PM Peak (17:00-18:00)		
	Deg Sat (%)	MMQ	Av. Delay (s/pcu)	Deg Sat (%)	MMQ	Av. Delay (s/pcu)
B4030 (E/B) Left Ahead Right	123.00%	72.00	433.30	101.50%	27.40	147.10
B430 Ardley Road South Right Left Ahead	82.70%	15.40	59.30	99.80%	35.10	103.10
B4030 (E/B) Ahead Right Left	117.90%	91.30	366.30	101.40%	29.50	141.50
B430 Ardley Road (N) Left Ahead Right	109.10%	50.30	242.10	49.60%	9.20	36.00

- 4.17.2** As illustrated in **Table 4.47** the LINSIG model outputs show that the B430/ Bicester Road/ Heyford Road junction operates over capacity in both the AM and PM peak periods. In the AM peak the highest DOS is 123% on the B4030 (E/B) Left Ahead Right movement, with an associated MMQ of 72 vehicles. In the PM peak the highest DOS is 101.50% on the B4030 (E/B) Left Ahead Right movement with an associated MMQ of 27.40 vehicles.

Somerton Road/ Camp Road/ Station Road

Table 4.48 – 2019 Recalculated Growth Base + Consented Site Traffic + Proposed Free School Junction Modelling Results – Somerton Road/ Camp Road/ Station Road

Somerton Road / Camp Road / Station Road						
	AM Peak (08:00-09:00)			PM Peak (17:00-18:00)		
	Highest RFC	Highest MMQ	Delay (Secs)	Highest RFC	Highest MMQ	Delay (Secs)
Camp Road to Somerton Road (South)	0.24	0.31	9.13	0.24	0.31	9.38
Camp Road to Somerton Road (North)	0.48	0.90	17.07	0.54	1.14	17.98
Somerton Road (South) to Somerton Road (North) & Camp Road	0.26	0.38	8.58	0.16	0.22	6.70

- 4.17.3** As illustrated in **Table 4.48** the PICADY model outputs show that the Somerton Road/ Camp Road/ Station Road junction operates within capacity in both the AM and PM peak periods. In the AM peak the highest RFC is 0.48 on the Camp Road to Somerton Road (north) arm with an associated MMQ of 0.90 vehicles. In the PM peak the highest RFC is 0.54 on the Camp Road to Somerton Road (north) arm with an associated MMQ of 1.14 vehicles.

4.18 Summary

4.18.1 The results of the junction modelling is summarised in **Tables 4.49** to **4.52** below.

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Table 4.49 – 2013 “Arup growth” Junction Capacity Modelling Summary Results

Modelling Package	Junction	2013 "Arup Growth" Base (No Consented Site Traffic)						2013 "Arup Growth" Base + Consented Site Traffic + Consented School Traffic						2013 "Arup Growth" Base + Consented Site Traffic + Proposed School Traffic					
		AM			PM			AM			PM			AM			PM		
		RFC	MMQ	Max Delay (Secs)	RFC	MMQ	Max Delay (Secs)	RFC	MMQ	Max Delay (Secs)	RFC	MMQ	Max Delay (Secs)	RFC	MMQ	Max Delay (Secs)	RFC	MMQ	Max Delay (Secs)
ARCADY	Main Gate Access/ Camp Road – 2013 only																		
	Camp Road (East)	0.12	0.14	3.09	0.08	0.08	3.01	0.44	0.78	5.25	0.24	0.32	3.96	0.48	0.92	5.71	0.24	0.32	3.96
	Camp Road (West)	0.10	0.11	3.73	0.10	0.11	3.65	0.33	0.48	6.06	0.19	0.24	4.49	0.36	0.56	6.57	0.19	0.24	4.49
	Main Gate	0.04	0.04	2.03	0.12	0.13	2.22	0.35	0.53	2.98	0.38	0.61	3.16	0.38	0.61	3.13	0.39	0.63	3.19
LINSIG	B430 Bicester Road/ Heyford Road																		
	B4030 (E/B) Left Ahead Right	92.60 %	14.10	104.20	75.40 %	9.10	69.00	153.30 %	114.30	771.90	135.50 %	81.30	601.50	156.70 %	120.90	800.50	135.50 %	81.30	601.50
	B3040 Ardley Rd (S) Right Left Ahead	82.70 %	9.80	43.10	106.40 %	49.30	187.10	108.50 %	39.90	227.90	104.50 %	49.20	154.60	109.70 %	42.40	245.80	104.50 %	49.20	154.60
	B4030 (E/B) Ahead Right Left	91.90 %	14.00	101.00	94.00 %	15.00	110.60	222.30 %	244.60	1172.00	146.10 %	97.90	692.60	228.80 %	257.00	1198.20	146.70 %	99.10	698.40
	B430 Ardley Road (N) Left Ahead Right	92.70 %	22.70	64.80	85.50 %	13.30	66.40	92.80 %	23.70	68.10	121.80 %	45.20	422.40	92.80 %	23.70	68.10	121.80 %	45.20	422.40
PICADY	Somerton Road/ Camp Road/ Station Road																		
	Camp Road - Somerton Road (S)	0.08	0.09	6.31	0.05	0.06	5.76	0.22	0.28	8.67	0.22	0.28	8.90	0.23	0.30	8.99	0.22	0.28	8.93
	Camp Road - Somerton Road (N)	0.04	0.04	7.39	0.14	0.16	8.73	0.45	0.80	15.80	0.51	1.02	16.90	0.47	0.87	16.63	0.51	1.03	16.99
	Somerton Road (S) - Somerton Road (N) & Camp Road	0.04	0.04	6.02	0.02	0.02	5.60	0.24	0.33	8.19	0.16	0.21	6.71	0.25	0.35	8.35	0.16	0.21	6.71

- 4.18.2** As can be seen in **Table 4.49** above in the 2013 “Arup Growth” scenarios the Main Gate Access/ Camp Road and Somerton Road/ Camp Road/ Station Road junctions are predicted to operate within capacity in all three scenarios - the ‘Base’ (No Consented Site Traffic), the ‘Base + Consented Site Traffic + Consented School Traffic’ and the ‘Base + Consented Site Traffic + Proposed School Traffic’.
- 4.18.3** The results of the B340 Bicester Road/ Heyford Road junction show that the junction is predicted to operate within capacity in the AM peak of the 2013 “Arup Growth” ‘Base’ (No Consented Site Traffic). In the PM peak the junction is predicted to operate over capacity on one arm – the B3040 Ardley Road (S) Right Left Ahead movement. In the 2013 “Arup Growth” ‘Base + Consented Site Traffic + Consented School Traffic’ and the 2013 “Arup Growth” ‘Base + Consented Site Traffic + Proposed School Traffic’, the junction is predicted to operate over capacity. With the proposed school traffic the RFC’s, MMQ’s and delay increase slightly in the AM peak but remain the same in the PM peak.

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Table 4.50 – 2013 “Recalculated Growth” Junction Capacity Modelling Summary Results

Modelling Package	Junction	2013 "Recalculated Growth" Base (No Consented Site Traffic)						2013 "Recalculated Growth" Base + Consented Site Traffic + Consented School Traffic						2013 "Recalculated Growth" Base + Consented Site Traffic + Proposed School Traffic					
		AM			PM			AM			PM			AM			PM		
		RFC	MMQ	Max Delay (Secs)	RFC	MMQ	Max Delay (Secs)	RFC	MMQ	Max Delay (Secs)	RFC	MMQ	Max Delay (Secs)	RFC	MMQ	Max Delay (Secs)	RFC	MMQ	Max Delay (Secs)
ARCADY	Main Gate Access/ Camp Road – 2013 only																		
	Camp Road (East)	0.11	0.13	3.07	0.07	0.08	2.99	0.43	0.75	5.16	0.24	0.31	3.92	0.47	0.89	5.62	0.24	0.31	3.93
	Camp Road (West)	0.10	0.11	3.69	0.09	0.10	3.62	0.32	0.46	5.96	0.18	0.23	4.44	0.35	0.54	6.46	0.18	0.23	4.44
	Main Gate	0.04	0.04	2.03	0.11	0.12	2.20	0.34	0.52	2.96	0.37	0.59	3.12	0.38	0.60	3.11	0.38	0.61	3.15
LINSIG	B430 Bicester Road/ Heyford Road																		
	B4030 (E/B) Left Ahead Right	86.90 %	11.80	86.30	71.40 %	8.40	68.80	147.70 %	103.70	722.30	131.50 %	73.70	557.20	151.30 %	110.70	755.00	131.50 %	73.70	557.20
	B3040 Ardley Rd (S) Right Left Ahead	69.90 %	8.10	31.70	94.70 %	21.20	62.40	92.30 %	13.90	61.70	105.90 %	51.20	178.20	93.30 %	14.60	65.60	105.90 %	51.20	178.20
	B4030 (E/B) Ahead Right Left	86.00 %	11.70	84.10	88.00 %	12.30	89.10	216.50 %	233.30	1146.90	140.40 %	87.30	636.70	223.00 %	245.80	1174.50	140.70 %	87.90	639.00
	B430 Ardley Road (N) Left Ahead Right	86.80 %	18.50	49.70	83.80 %	11.80	60.50	91.60 %	21.00	63.20	97.30 %	17.30	118.30	94.20 %	22.50	73.10	97.30 %	17.30	118.30
PICADY	Somerton Road/ Camp Road/ Station Road																		
	Camp Road - Somerton Road (S)	0.07	0.08	6.26	0.05	0.05	5.72	0.21	0.27	8.52	0.21	0.27	8.69	0.23	0.29	8.83	0.21	0.27	8.75
	Camp Road - Somerton Road (N)	0.04	0.04	7.33	0.13	0.15	8.62	0.44	0.78	15.54	0.50	0.97	16.41	0.46	0.85	16.35	0.50	0.99	16.58
	Somerton Road (S) - Somerton	0.03	0.04	5.99	0.02	0.02	5.60	0.23	0.32	8.14	0.16	0.21	6.73	0.24	0.34	8.31	0.16	0.21	6.73

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Road (N) & Camp Road																			
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4.18.4 As can be seen in **Table 4.50** above the 2013 “Recalculated Growth” scenarios the Main Gate Access/ Camp Road and Somerton Road/ Camp Road/ Station Road junctions are predicted to operate within capacity in the ‘Base’ (No Consented Site Traffic), the ‘Base + Consented Site Traffic + Consented School Traffic’ and the ‘Base + Consented Site Traffic + Proposed School Traffic’ scenarios.

4.18.5 The results of the B340 Bicester Road/ Heyford Road junction modelling show that the junction is predicted to operate within capacity in both the AM and PM peak periods in the 2013 “Recalculated Growth” ‘Base’ (No Consented Site Traffic). The junction is predicted to operate over capacity in both AM and PM peak periods in the 2013 “Recalculated Growth” ‘Base + Consented Site Traffic + Consented School Traffic’ and the 2013 “Recalculated Growth” + ‘Consented Site Traffic + Proposed School Traffic’ scenarios.

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Table 4.51 – 2019 “Arup Growth” Junction Capacity Modelling Summary Results

Modelling Package	Junction	2019 "Arup Growth" Base (No Consented Site Traffic)						2019 "Arup Growth" Base + Consented Site Traffic + Consented School Traffic						2019 "Arup Growth" Base + Consented Site Traffic + Proposed School Traffic					
		AM			PM			AM			PM								
		RFC	MMQ	Max Delay (Secs)	RFC	MMQ	Max Delay (Secs)	RFC	MMQ	Max Delay (Secs)	RFC	MMQ	Max Delay (Secs)	RFC	MMQ	Max Delay (Secs)	RFC	MMQ	Max Delay (Secs)
Main Gate Access/ Camp Road – 2019 only																			
PICADY	New Access (South)	0.00	0.00	0.00	0.00	0.00	0.00	0.66	1.71	40.01	0.55	1.21	18.39	0.54	1.13	26.07	0.57	1.29	19.74
	Camp Road (East)	0.19	0.26	7.11	0.13	0.15	6.84	1.04	26.36	138.28	0.33	0.57	8.29	1.00	19.91	109.26	0.33	0.57	8.29
	Main Gate Access (North)	0.14	0.16	6.66	0.36	0.55	8.74	1.30	78.96	535.17	0.82	4.14	32.39	1.11	34.50	212.41	0.91	7.48	53.77
	Camp Road (West)	0.00	0.00	0.00	0.00	0.00	0.00	0.15	0.34	6.84	0.08	0.13	6.16	0.15	0.32	6.78	0.08	0.13	6.16
B430 Bicester Road/ Heyford Road																			
LINSIG	B4030 (E/B) Left Ahead Right	80.40 %	11.90	66.80	75.40 %	9.70	66.20	138.30%	100.40	606.10	104.60%	33.00	185.80	132.20%	90.30	541.10	108.40%	39.30	237.60
	B3040 Ardley Rd (S) Right Left Ahead	46.70 %	8.10	31.00	75.40 %	17.20	34.70	83.90 %	16.20	60.10	102.80%	45.10	137.80	83.80 %	16.20	59.90	102.80%	45.10	137.80
	B4030 (E/B) Ahead Right Left	78.40 %	11.80	62.90	79.10 %	11.90	63.40	125.80%	120.50	471.90	105.40%	36.90	196.30	124.00%	111.00	448.60	105.10%	37.20	190.50
	B430 Ardley Road (N) Left Ahead Right	77.60 %	19.50	39.40	41.80 %	8.40	26.40	109.90%	55.70	250.80	51.40 %	9.80	35.70	109.90%	55.70	250.80	51.40 %	9.80	35.70
Somerton Road/ Camp Road/ Station Road																			
PICADY	Camp Road - Somerton Road (S)	0.09	0.09	6.38	0.06	0.06	5.82	0.27	0.36	9.90	0.23	0.30	9.23	0.25	0.33	9.35	0.25	0.32	9.65
	Camp Road - Somerton Road (N)	0.04	0.05	7.45	0.15	0.17	8.90	0.52	1.05	18.77	0.53	1.10	17.71	0.49	0.93	17.52	0.55	1.20	18.63
	Somerton Road (S) - Somerton Road (N) & Camp Road	0.04	0.05	6.03	0.02	0.03	5.59	0.27	0.40	8.69	0.16	0.22	6.70	0.27	0.39	8.62	0.16	0.22	6.70

- 4.18.6** As can be seen in **Table 4.51** above the Main Gate Access/ Camp Road is predicted to operate within capacity in the 2019 “Arup Growth” ‘Base’ (No Consented Site Traffic) AM and PM peak periods. The junction is predicted to operate over capacity in the 2019 “Arup Growth” ‘Base + Consented Site Traffic + Consented School Traffic’ and the 2019 “Arup Growth” ‘Base + Consented Site Traffic + Proposed School Traffic’ scenarios in the AM peaks. The junction is predicted to operate within capacity in the PM peaks. The junction is also predicted to operate better with the proposed school traffic than the consented school traffic.
- 4.18.7** The Somerton Road/ Camp Road/ Station Road junction is predicted to operate within capacity in the 2019 “Arup Growth” assessment scenarios in both AM and PM peak periods. The junction is also predicted to operate better with the proposed school traffic than with the consented school traffic.
- 4.18.8** The results of the B340 Bicester Road/ Heyford Road junction show that the junction is predicted to operate within capacity in both the AM and PM peak periods in the 2019 “Arup Growth” ‘Base’ (No Consented Site Traffic). The junction is predicted to operate over capacity in both AM and PM peak periods in the 2019 “Arup Growth” ‘Base + Consented Site Traffic + Consented School Traffic’ and the 2019 “Arup Growth” + Consented Site Traffic + Proposed School Traffic. The junction is predicted to operate better with the proposed school traffic than with the consented school traffic.

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Table 4.52 – 2019 “Recalculated Growth” Junction Capacity Modelling Summary Results

Modelling Package	Junction	2019 "Recalculated Growth" Base (No Consented Site Traffic)						2019 "Recalculated Growth" Base + Consented Site Traffic + Consented School Traffic						2019 "Recalculated Growth" Base + Consented Site Traffic + Proposed School Traffic							
		AM			PM			AM			PM			RF C		Max Delay (Secs)		RF C		Max Delay (Secs)	
		RFC	MMQ	Max Delay (Secs)	RFC	MMQ	Max Delay (Secs)	RFC	MMQ	Max Delay (Secs)	RFC	MMQ	Max Delay (Secs)	RFC	MMQ	Max Delay (Secs)	RF C	MMQ	Max Delay (Secs)	RF C	MMQ
PICADY	Main Gate Access/ Camp Road – 2019 only																				
	Camp Road (East)	0.00	0.00	0.00	0.00	0.00	0.00	0.63	1.56	36.30	0.55	1.18	17.91	0.53	1.07	24.54	0.56	1.26	19.12		
	Camp Road (West)	0.18	0.23	7.02	0.12	0.14	6.77	1.02	22.53	121.73	0.32	0.55	8.17	0.99	16.84	95.13	0.32	0.55	8.17		
	Main Gate	0.13	0.14	6.55	0.34	0.50	8.41	1.27	73.14	482.44	0.79	3.60	28.71	1.09	26.69	185.98	0.88	6.10	44.82		
	New Access (South)	0.00	0.00	0.00	0.00	0.00	0.00	0.15	0.33	66.82	0.08	0.13	6.18	0.15	0.31	6.77	0.08	0.13	6.18		
LINSIG	B430 Bicester Road/ Heyford Road																				
	B4030 (E/B) Left Ahead Right	75.60 %	10.80	62.20	74.70 %	9.20	67.00	128.50%	82.00	500.50	101.50%	27.40	147.10	123.00%	72.00	433.30	101.50%	27.40	147.10		
	B3040 Ardley Rd (S) Right Left Ahead	43.20 %	7.20	29.20	70.10 %	14.90	31.50	82.90 %	15.50	59.60	99.80%	35.10	103.10	82.70 %	15.40	59.30	99.80%	35.10	103.10		
	B4030 (E/B) Ahead Right Left	76.00 %	10.90	61.80	74.70 %	10.90	59.60	119.90%	100.70	392.80	98.70%	25.30	114.60	117.90%	91.30	366.30	101.40%	29.50	141.50		
	B430 Ardley Road (N) Left Ahead Right	71.30 %	17.20	35.50	38.80 %	7.70	25.10	109.10%	50.80	242.10	49.60 %	9.20	36.00	109.10%	50.30	242.10	49.60 %	9.20	36.00		
PICADY	Somerton Road/ Camp Road/ Station Road																				
Camp Road - Somerton Road (S)	0.08	0.09	6.32	0.06	0.06	5.78	0.26	0.34	9.68	0.20	0.29	9.03	0.24	0.31	9.13	0.24	0.31	9.38			

Heyford Park Free School
Transport Statement

Camp Road - Somerton Road (N)	0.04	0.04	7.39	0.14	0.16	8.78	0.51	1.02	18.36	0.52	1.06	17.24	0.48	0.90	17.07	0.54	1.14	17.98
Somerton Road (S) - Somerton Road (N) & Camp Road	0.04	0.04	6.02	0.02	0.02	5.59	0.27	0.39	8.65	0.16	0.22	6.70	0.26	0.38	8.58	0.16	0.22	6.70

- 4.18.9** As can be seen in **Table 4.52** that the Main Gate Access/ Camp Road is predicted to operate within capacity in the 2019 “Recalculated Growth” ‘Base’ (No Consented Site Traffic) AM and PM peak periods. The junction is predicted to operate over capacity in the 2019 “Recalculated Growth” ‘Base + Consented Site Traffic + Consented School Traffic’ and the 2019 “Recalculated Growth” ‘Base + Consented Site Traffic + Proposed School Traffic’ AM peaks. The junction is predicted to operate within capacity in the PM peaks. The junction is also predicted to operate better with the proposed school traffic than with the consented school traffic.
- 4.18.10** The Somerton Road/ Camp Road/ Station Road junction is predicted to operate within capacity in all the 2019 “Recalculated Growth” assessment scenarios in both AM and PM peak periods. The junction is also predicted to operate better with the proposed school traffic than with the consented school traffic.
- 4.18.11** The results of the B340 Bicester Road/ Heyford Road junction show that the junction is predicted to operate within capacity in both the AM and PM peak periods in the 2019 “Recalculated Growth” ‘Base’ (No Consented Site Traffic). The junction is predicted to operate over capacity in both AM and PM peak periods in the 2019 “Recalculated Growth” ‘Base + Consented Site Traffic + Consented School Traffic’ and the 2019 “Recalculated Growth” + Consented Site Traffic + Proposed School Traffic. The junction is predicted to operate better with the proposed school traffic than with the consented school traffic.

5 Sensitivity Test

5.1.1 The scenarios modelled assume a worst-case scenario in terms of mode share of external trips as it has assumed all external school trips are made by car (taking no account for car-sharing or linked trips) and that all those external trips are assumed to be one out bound trip and one inbound trip for each child.

5.1.2 However, should dedicated school buses be provided for children leaving/entering Heyford Park in both consented and proposed school scenarios, the level of traffic impacting upon the network would naturally be less.

5.1.3 Therefore, a sensitivity test has been carried out to investigate how the traffic profiles associated with both consented and proposed school scenarios could alter should a school bus be provided.

5.1.4 For this sensitivity test, the following assumptions have been made:

- Given that the possible number of dedicated school buses has not been set at this time, an assumption has been made that 50% of all students entering/leaving Heyford Park could use a bus;
- The remainder of students would be driven, as previously assessed;
- The same levels of staffing and assumptions associated with it as set out in **Section 4.1.23** have been applied; and
- A standard single-deck coach with 50 seats has been assumed for a dedicated school bus.

5.1.5 The revised traffic profile for the consented and proposed scenarios is set out below:

Table 5.1 – Sensitivity Test – Traffic Profiles Assuming 50% of Students Travel By Bus for Consented & Proposed Scenarios

Year	2-Way Traffic Flows (PCUs)			
	Consented		Proposed	
	AM	PM	AM	PM
2012	171	0	171	0
2013	224	1	286	8
2014	244	3	350	16
2015	281	4	409	24
2016	296	6	417	32
2017	319	7	414	40
2018	339	9	379	48
2019	378	10	355	56

5.1.6 The results of this sensitivity test show that even if 50% of all students under both consented and proposed scenarios were to travel into/out of Heyford Park by dedicated school bus, by 2019 the proposed scenario still shows an improvement over the consented scenario in the AM peak period, with a slight increase in PCUs seen in the PM peaks due to the increased level of staff required at the Free School.

Heyford Park Free School Transport Statement

- 5.1.7** Indeed, if school buses are provided, this would equally relate to children coming into Heyford Park from outside of the area to attend the Free School as it would to the children leaving Heyford Park to attend a school elsewhere such as Bicester. As such, there would be a nil detriment impact from education travel when comparing consented and proposed schemes.

6 Travel Plan Framework Strategy

6.1 Guidance

6.1.1 In accordance with the DfT documents 'Guidance on Transport Assessments' and DfT's 'Good Practice Guidelines: Delivering Travel Plans through the Planning Process' (2009), a Travel Plan Framework (TPF) will be prepared for the Free School.

6.1.2 The key aim of a TPF is to reduce the need to travel by single occupancy car trips associated with the development by promoting more sustainable alternatives to the car such as car sharing, public transport and by walking and cycling.

6.1.3 The contents of the TPF will include the following:

- Introduction;
- Site Accessibility;
 - General Situation;
 - Walking;
 - Cycling;
 - Bus Use;
 - Trains;
 - Driving; and
 - Neighbouring Land Uses and Local Facilities.
- Action Plan;
 - Informational Measures;
 - Promotional Measures;
 - Design of the Development;
 - Parking Measures;
 - Cycle, Motorcycle and Car Share Parking;
 - Car Parking;
 - Management Measures;
 - Off-site Transport Improvements;
 - Bus Services;

- Walking;
- Cycling;
- Targets and Outcomes; and
- References.

6.1.4 The school Travel Plan Framework would need to be submitted and agreed prior to occupation of the school and a monitoring and review strategy would be in place as the school population builds up until full capacity in 2019.

6.2 Site Wide Travel Plan

6.2.1 The Free School Travel Plan will be an independent site-specific document, but will comply with measures set out within the Site Wide Transport Strategies and supporting site wide Residential and Employment Travel Plans and will be guided by the overarching principles within those documents. Likewise, the Free School travel plan will comply with the travel plan targets set out within the Site Wide Travel Plan.

6.2.2 The objectives of the Transport Strategies are:

- To improve and enhance the public transport accessibility of the site as part of the successful development at Heyford Park.
- To minimise single occupancy private car use arising from the development.
- To maximise the use of non-car modes from the development.
- To minimize carbon emissions from transport arising from the development.
- To provide accessibility for mobility impaired people.
- To provide a safe and secure transport system.

6.2.3 The Transport Strategies state that the main opportunities to change travel behaviour at Heyford Park are likely to be:

- a) Maintaining and growing the level of internal trip making;
- b) Promotion of walking and cycling for local journeys;
- c) More effective use of the car;
- d) Promoting and marketing bus travel to/from Bicester and Oxford; and
- e) Easy access to public transport information which is regularly updated.

6.2.4 With regard to the Free School a) and b) above are particularly relevant. By including the all-through school at the heart of the consented development including 1,075 dwellings provides the perfect opportunity to increase the internal trip making for educational purposes and the

proximity of the proposed Free School to the residential areas means that the majority of those trips will be walking or cycling trips.

6.2.5 Pedestrian and cycle routes included as part of the consented development facilitates this. The consented measures provide opportunities for walking and cycling within the site through the provision of direct, convenient footways and cycleways, and for other local journeys by the provision of a financial contribution towards the provision of improvements to pedestrian and cycle routes along Camp Road.

6.2.6 All consented on-site links will be designed in accordance with *'The Manual for Streets'* (March 2007) and *Manual for Streets 2 (2010)* or other guidance in force at the time of construction, which promotes the use of all streets for all users and will ensure that movement on foot and by cycle is encouraged. Links will be direct, meeting pedestrian and cycle desire lines and will be lit. This will be achieved by ensuring that the Design Codes incorporate and facilitate such links, which will be designed-in from the outset at the detailed planning and then implementation stages.

7 Conclusions and Recommendations

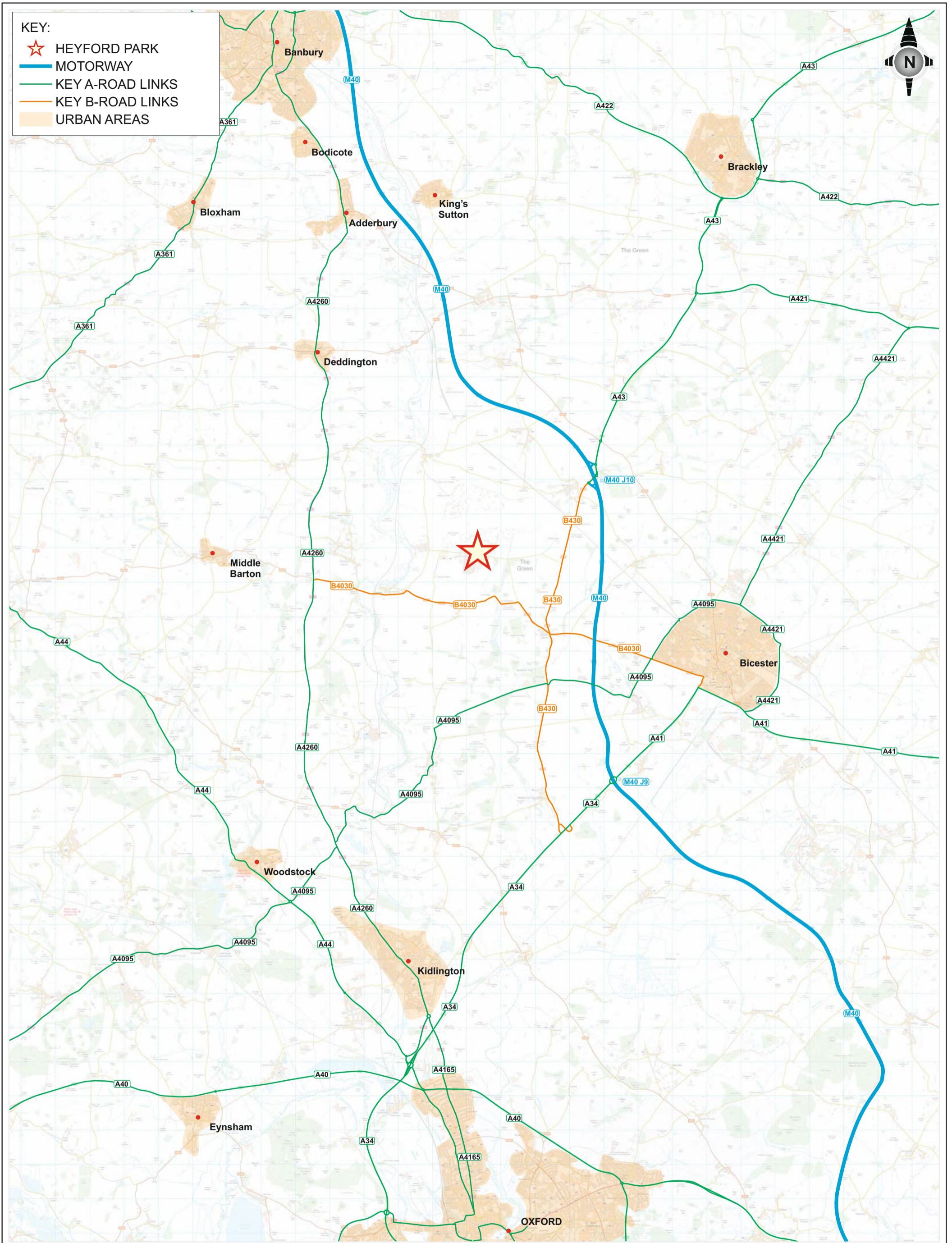
- 7.1.1** Peter Brett Associates LLP has been appointed by The Education Funding Agency and the Heyfordian School Trust to produce a Transport Statement assessing the transport impact of a 840-pupil all-through Free School at Heyford Park.
- 7.1.2** There is extant planning consent for 1,075 dwellings, employment and a 240 place primary school on the site and the proposed Free School replaces the consented primary school and also provides additional facilities for primary and secondary school children.
- 7.1.3** When comparing the situation with and without the proposed Free School ('consented' and 'proposed' scenarios) in 2019 at full occupation, there are 98 fewer person trips on the external network in the AM peak in the proposed scenario compared with consented due to education trips for residents of Heyford Park being internalised. The PM peak has an increase of 47 trips due to staff movements.
- 7.1.4** The junction capacity modelling indicates that The Main Gate Access and the B340/Bicester Road/Heyford Road junction operate over capacity in the 2019 scenario with proposed development, albeit that they both operate better with development than with the consented scenario. The Somerton Road/Camp Road/Station Road junction operates within capacity in the future year scenario with proposed development.
- 7.1.5** Notwithstanding that, the assessment is robust for a number of reasons. Whilst the original assessment assumed all trips associated with the consented primary school were internal a more in depth assessment of year on year population demographics suggests this may not be the case and this assessment has rectified that. In addition, growth factors used in original Arup TA (2007) were high, and over-predicted growth which has actually occurred in reality,
- 7.1.6** A sensitivity test was undertaken whereby it was assumed that in the consented scheme (with no secondary school on site) 50% the secondary school children who need to travel away from site to attend school utilised the bus. Even in this scenario it was demonstrated that the provision of the Free School on site reduces the overall impact on the highway network associated with education trips.
- 7.1.7** In summary, the assessment demonstrates that the provision of the Free School would have an overall positive impact on the highway network as education trips associated the consented residential development will be internalised. Furthermore, the location of the school in the heart of the residential development is likely to result in a shift to walk and cycle for education trips. As such, the location of the school supports current planning and sustainable transport policy and reduces the impact on the network over the consented scheme.
- 7.1.8** It is considered that the proposals as set out in this report do not change the outcomes from the original report for the consented scheme and as such the mitigation suggested in the original assessment including improvements to geometries at Middleton Stoney would come forward as per the consented scheme. This mitigation included proposed optimisation of the

Heyford Park Free School
Transport Statement

signal staging plus geometry alterations which produces a sufficient improvement to offset the impact of the development impact.

Figures

Heyford Park Free School
Transport Statement



- KEY:**
- ★ HEYFORD PARK
 - MOTORWAY
 - KEY A-ROAD LINKS
 - KEY B-ROAD LINKS
 - URBAN AREAS



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SCHOOL TRUST

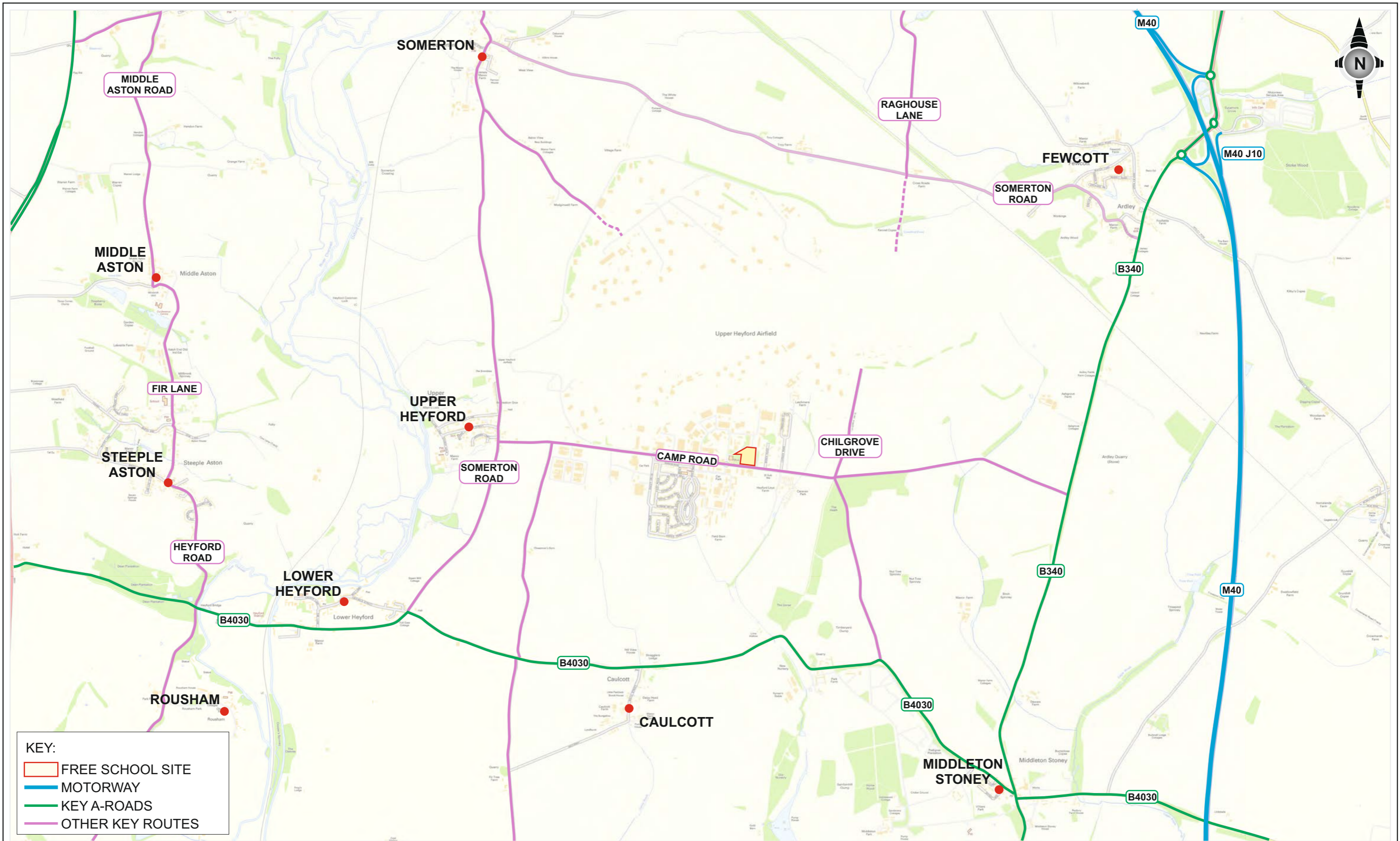
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HEYFORD PARK FREE SCHOOL
TRANSPORT STATEMENT

STRATEGIC SITE LOCATION

Mark	Revision		Drawn	Date	Chkd
Date	27.11.2012				
Scale	A3 - N.T.S				
Drawn by	ASa				
Checked by	DW				

FIGURE 1



KEY:

- FREE SCHOOL SITE
- MOTORWAY
- KEY A-ROADS
- OTHER KEY ROUTES



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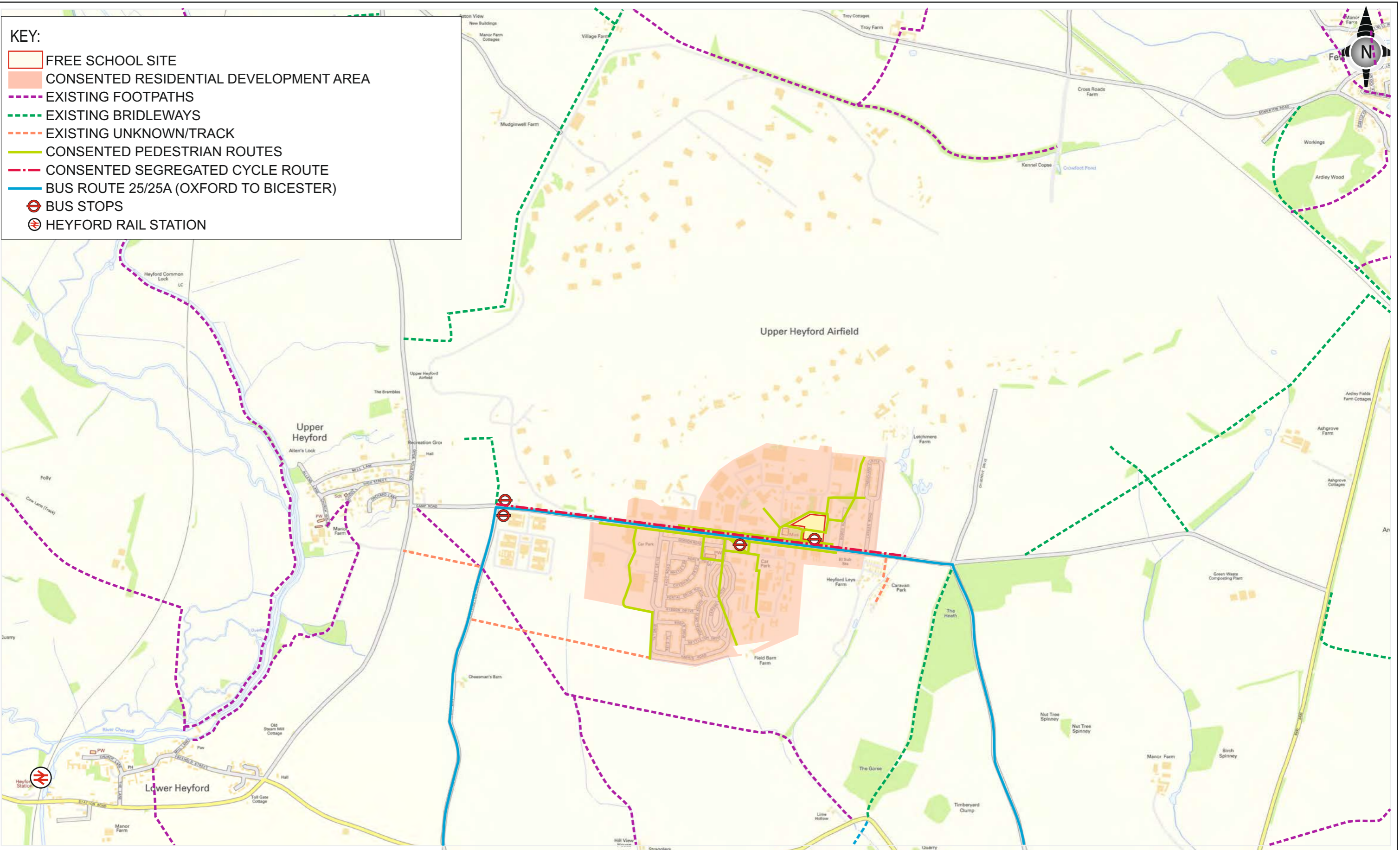
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**HEYFORD PARK FREE SCHOOL
TRANSPORT STATEMENT**

LOCAL SITE LOCATION

Mark	Revision		Drawn	Date	Chkd				
Date	27.11.2012								
Scale	A3 - N.T.S								
Drawn by	ASa								
Checked by	DW								

FIGURE 2



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SCHOOL TRUST

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HEYFORD PARK FREE SCHOOL
TRANSPORT STATEMENT

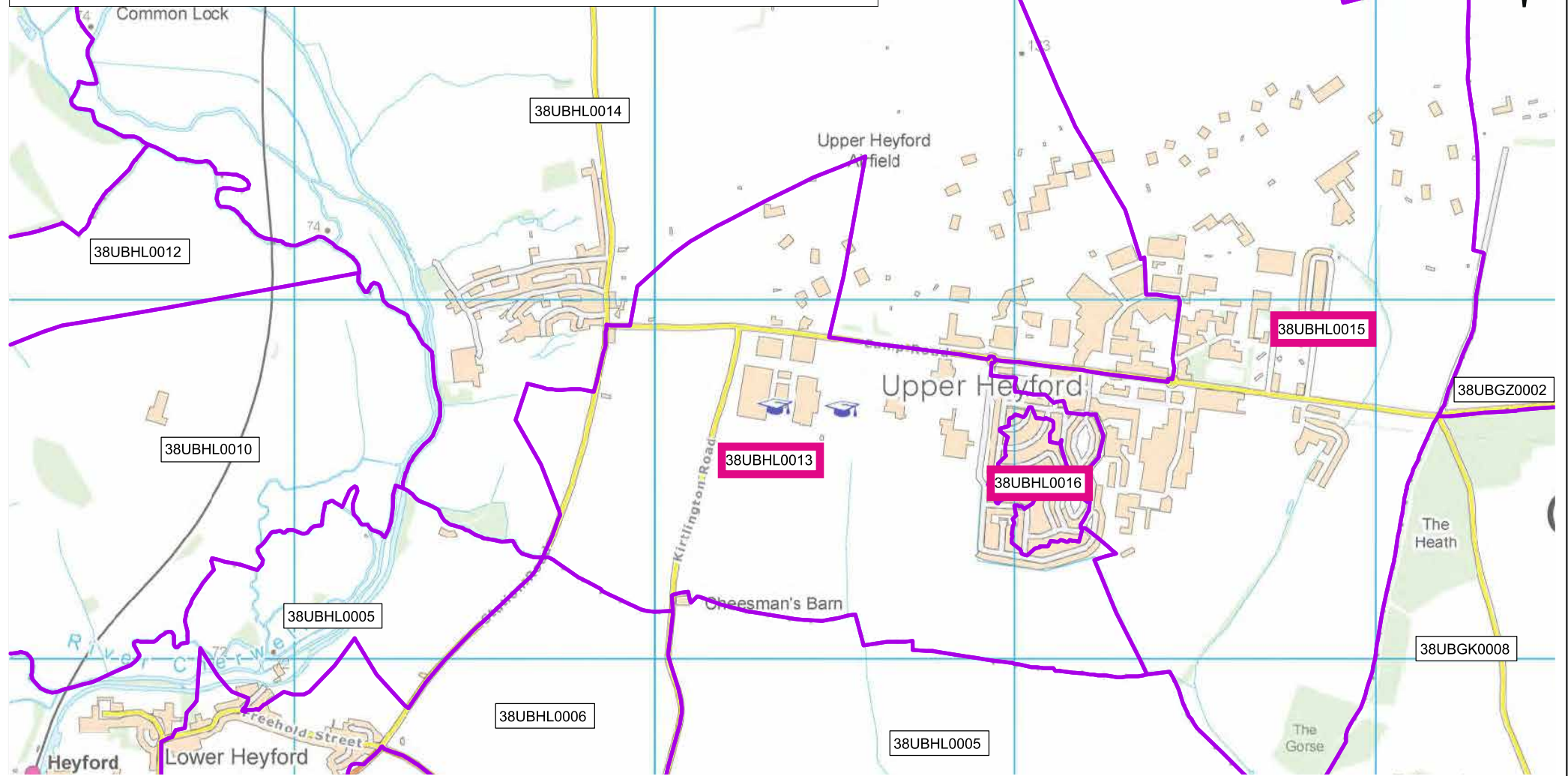
EXISTING & CONSENTED PUBLIC TRANSPORT, WALKING AND CYCLING PROVISION

Mark	Revision	Drawn	Date	Chkd
Date	27.11.2012			
Scale	A3 - N.T.S			
Drawn by	ASa			
Checked by	DW			

FIGURE 3

KEY:

 CENSUS DATA OUTPUT AREAS USED FOR DEMOGRAPHIC ASSESMENT



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SCHOOL TRUST

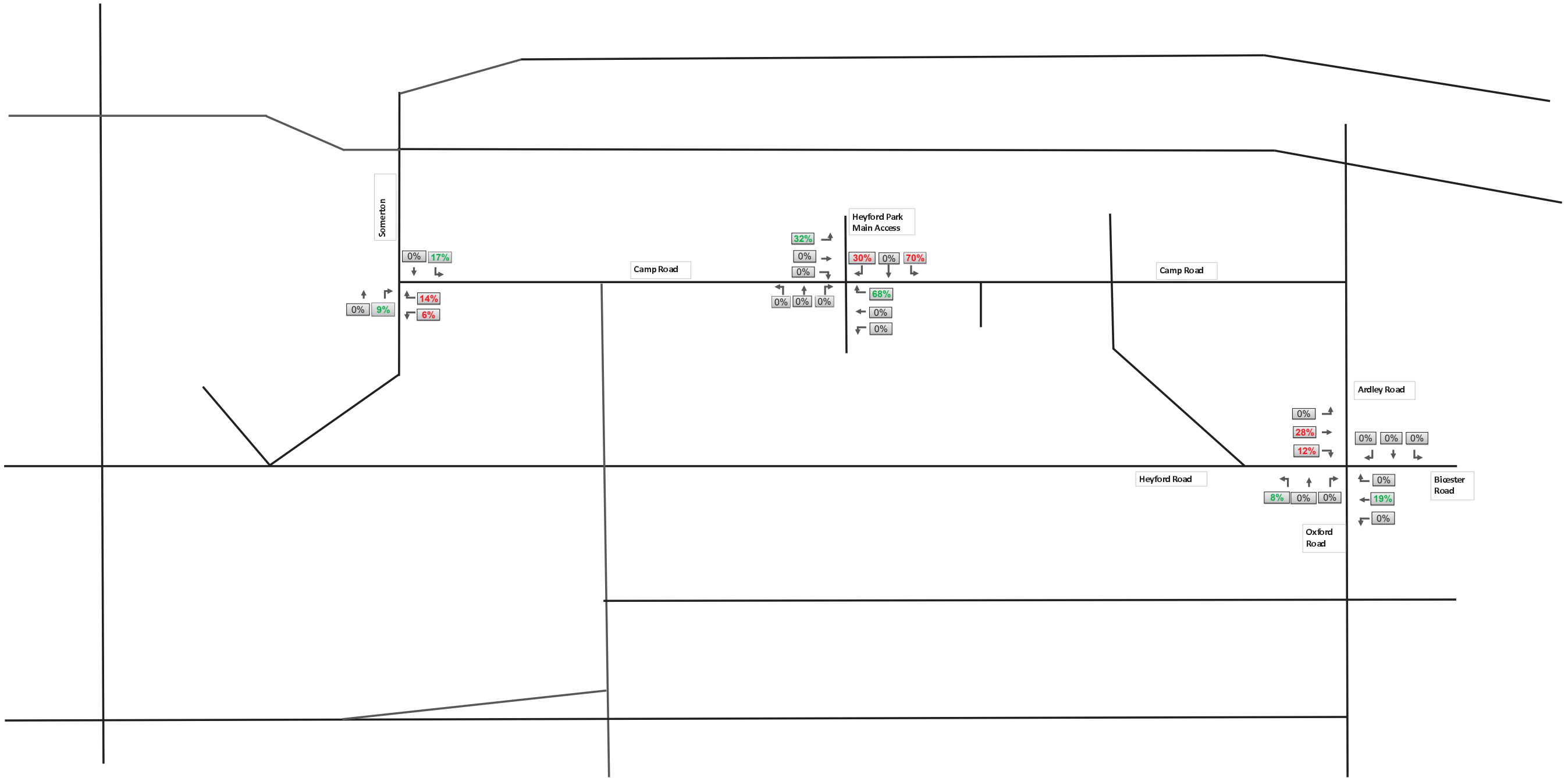
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HEYFORD PARK FREE SCHOOL
TRANSPORT STATEMENT

2011 CENSUS DATA OUTPUT AREAS USED FOR
DEMOGRAPHIC & POPULATION ASSESMENT

Mark	Revision	Drawn	Date	Chkd
Date	27.11.2012	<div data-bbox="1848 1439 2002 1474" data-label="Caption"> <p>FIGURE 4</p> </div> <div data-bbox="2116 1449 2139 1469" data-label="Text"> <p>-</p> </div>		
Scale	A4 - N.T.S			
Drawn by	ASa			
Checked by	DW			

KEY:
 XX% Percentage of Total School Traffic Out
 XX% Percentage of Total School Traffic In



Client: EFA / HEYFORDIAN SCHOOL TRUST

Drawing Title:

Percentage Distribution for School Traffic for AM Period (0800-0900hrs)

FOR INFORMATION

Date: 27.11.2012

Scale: N.T.S.

Drawn: ASa

Checked: DW

Figure 5

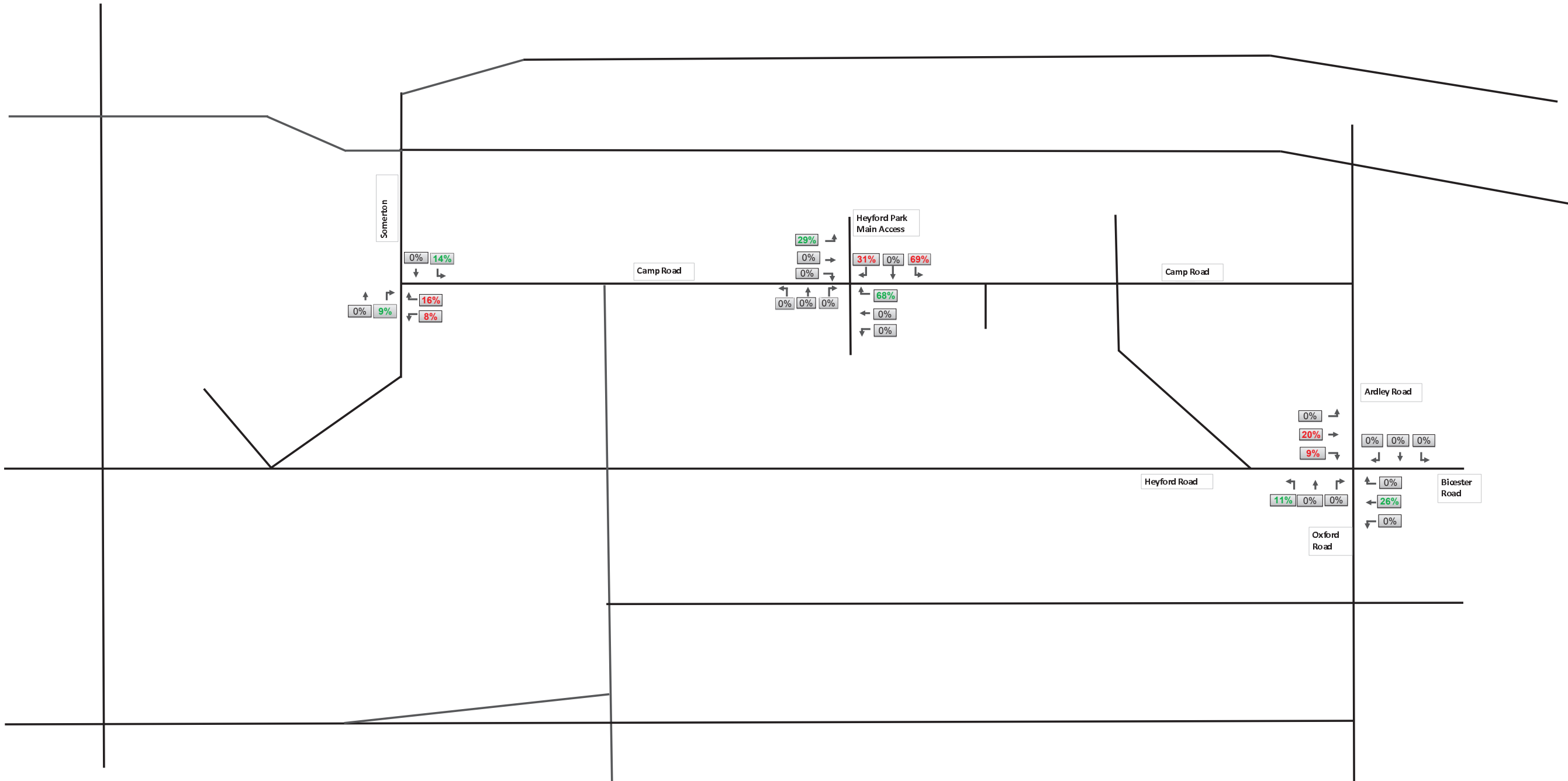
-

Report Title:

HEYFORD PARK FREE SCHOOL TRANSPORT STATEMENT

Version:

KEY:
 XX% Percentage of Total School Traffic Out
 XX% Percentage of Total School Traffic In



Client: EFA / HEYFORDIAN SCHOOL TRUST

Drawing Title:

Percentage Distribution for School Traffic for PM Period (1700-1800hrs)

FOR INFORMATION

Date: 27.11.2012

Scale: N.T.S.

Drawn: ASa

Checked: DW

Figure 6

-

PETER BRETT ASSOCIATES LLP
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Report Title:

HEYFORD PARK FREE SCHOOL TRANSPORT STATEMENT

Version:

Appendix A

Heyfordan School Trust Consultation Brochure November-December 2012

Heyford Park Free School
Transport Statement



HEYFORD PARK
FREE SCHOOL



“HAVE
YOUR
SAY...”

CONSULTATION BROCHURE

NOVEMBER - DECEMBER 2012

BONUM COMMUNE COMMUNITATIS



HEYFORD PARK
FREE SCHOOL

A FOREWORD FROM THE HEYFORDIAN SCHOOL TRUST	3
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HEYFORD PARK FREE SCHOOL- WHO'S WHO?	4
WHY WE THINK THIS AREA NEEDS A NEW SCHOOL	5
OUR VISION AND VALUES	6
OUR APPROACH	7
OUR EDUCATIONAL MODEL	8
DELIVERING SUCCESS	10
ADMISSIONS PROCESS	11
GETTING INVOLVED AND PROVIDING FEEDBACK	14

“We will know every one of our students well, providing an environment that will allow them to achieve what they are truly capable of”.

A FOREWORD FROM THE HEYFORDIAN SCHOOL TRUST

Thank you for taking the time to read our Consultation Brochure for Heyford Park Free School.

Our aim at Heyford Park Free School is very simple – to provide the best possible education for local children. In the pages that follow you’ll be able to find out more about the school, our vision, our expectations, what we hope to achieve and what that will mean for our students.

When starting out at Heyford Park Free School, students will join a small, inclusive and all-through school that reflects the strong community spirit we have here at Heyford Park while giving them the time to flourish, recognise their strengths and identify their own aims. Due to our size, we will understand each student and help them make full use of their potential, in turn supporting them to make their own decisions in the future. And because we are an all-through school, our students will be consistently monitored throughout their educational life, giving us the opportunity to ensure they grow and develop into confident and successful young people.

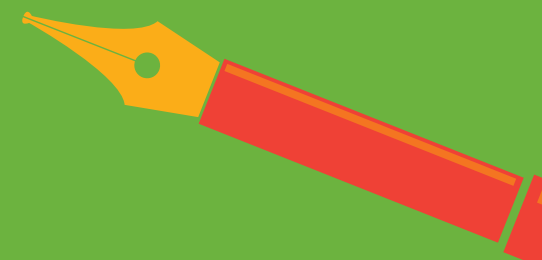
Our commitment is that The Heyfordian School Trust will work tirelessly to establish a high quality school that is fully integrated into the local community.

We continue to receive significant support and encouragement from many residents and families in Heyford Park and the local communities. We wish to build on this so that our school will provide a positive contribution to education in Cherwell. Your input is valued so please get involved.

If you have any queries, questions or feedback on what we are proposing, please do not hesitate to get in contact using the details provided in the back of this brochure. I hope to meet you at one of our upcoming consultation events.

Yours faithfully,

David Castles
Principal of Heyford Park Free School
on behalf of The Heyfordian School Trust



OUR PROPOSAL

We propose that the Secretary of State for Education enters into a Funding Agreement with The Heyfordian School Trust so that Heyford Park Free School may open to its first cohort of students in September 2013.

This brochure provides details of the proposal for Heyford Park Free School, which will be an all-through school that educates students from the age of 4 until the age of 19. The school will cater for students of all abilities and backgrounds. With small year group sizes and a strong emphasis on community engagement and involvement, Heyford Park Free School will be a real hub for local parents. We will encourage parents to work together with staff to ensure each child's individual needs are met.

The Heyfordian School Trust intends to open Heyford Park Free School within the historic Officers' Mess building on Camp Road,

Heyford Park. We also intend to utilise the Heyford Park Sports Centre as the sporting facilities for the school.

All your views and contributions will be taken into account before any decisions about whether to proceed with the proposed free school is made and a Funding Agreement is entered into between the Department for Education and The Heyfordian School Trust. This consultation is being conducted by The Heyfordian School Trust as the organisation that would be legally responsible for operating Heyford Park Free School if approved by the Secretary of State.

THE HEYFORD PARK FREE SCHOOL - WHO'S WHO?

The Heyfordian School Trust is the not-for-profit organisation that has been created for the opening and running of Heyford Park Free School. The trust combines the knowledge, commitment and passion of a diverse range of individuals, including local parents, local businesses, local educational experts and local community figures. For more details, including a full list of our Governors, please refer the Heyford Park Free School prospectus, pages 10 & 11.

In addition to The Heyfordian School Trust, Heyford Park Free School also has a **Parent and Resident Steering Group** which has played an integral role in shaping the vision for the Heyford Park Free School and is represented officially on the Trust. Anyone similarly committed to our aims is welcome to join the group.

The Trust has also recently appointed the Founding Principal of Heyford Park Free School, **David Castles**. David's knowledge of teaching and learning will be invaluable in ensuring the Trust is able to realise its vision of an outstanding school here at Heyford Park.

WHY WE THINK THIS AREA NEEDS A NEW SCHOOL

Oxfordshire County Council has acknowledged that Heyford Park needs a new primary school to serve the needs of the existing population as well as new families who will move to the site during its redevelopment.

In addition to this primary demand, the wider Bicester area is one of the most rapidly expanding towns in the country. With only 2 secondary schools, the Council has identified the need to deliver more secondary places. With children in this area of the Cherwell District travelling up to

9 miles to attend school, we propose that an all-through school that is in the heart of this rural area will help meet this demand. As the first all-through school in this part of North Oxfordshire, Heyford Park Free School also offers greater parental choice.



OUR VISION AND VALUES

Our values were defined by the Parent and Resident Steering Group at the very first community meeting. These are the foundation on which we have built the vision for Heyford Park Free School. Our commitments are:

**TO OPERATE
A SMALL
SCHOOL**

**TO BE COMMUNITY
ORIENTATED**

**TO OFFER AN
ALL-THROUGH
EDUCATION**

**TO BE
FLEXIBLE FOR
WORKING
PARENTS**

**TO BE ASPIRATIONAL
IN ALL THAT WE DO**

**TO OFFER
A PERSONALISED
EXPERIENCE
FOR EVERY CHILD**

**TO MAKE FULL USE
OF THE HERITAGE, THE
BUSINESS LINKS AT
HEYFORD PARK AND
OTHER FACILITIES AT
HEYFORD PARK**

Thus, the vision for Heyford Park Free School is to know every one of our students well, providing an environment that not only allows them to achieve what they are truly capable of, but also equips them with excellent academic qualifications and a "can do" attitude. We want our students to be able to create the right pathway for themselves whilst making a meaningful contribution to their community.

Our modern history specialism will ensure students are aware of the site's international heritage importance, giving them a sense of pride in their community and school in addition to a true connection to the origins of their community.

OUR APPROACH

At Heyford Park Free School we strive for excellence and have set ambitious targets for our students and the school.

We believe our small, nurturing, all-through school will provide an approach to learning that will allow students to realise their full potential as learners and people. That is why we have built opportunities for personalised learning into the heart of our curriculum. Individual Learning Plans will combine the knowledge of staff, the student and their parents in order to set ambitious educational and personal goals. We believe this will help boost the child's confidence as they will have access to whatever support they may need to achieve their aims.

OUR EDUCATIONAL MODEL

Our all-through school will mean the educational model at Heyford Park Free School is unique and distinctive. By smoothing the transition from primary to secondary education and providing a constant point of contact, there will be no disruption to our students' education. This will enrich their whole educational life, making it easier to track their progress and help students realise suitable goals.



HEYFORD PARK
PRIMARY SCHOOL

PRIMARY SCHOOL

Our main aim at primary level is to provide our students with a broad, exciting and engaging learning experience that allows them to secure high levels of attainment in core subjects. Students will leave primary school with the skills and knowledge necessary to progress smoothly on to secondary school.

The primary school will follow the national curriculum for Foundation Stage, Key Stage 1 and Key Stage 2, providing a well-planned, broad and balanced education. We propose a strong emphasis on the core subjects - English, Maths, Science and History - as well as a Modern Foreign Language which we will introduce at Key Stage 2. We will also ensure that formal learning is balanced with play and activities that take students out of the classroom in order to make best use of Heyford Park's diverse facilities.



HEYFORD PARK
SECONDARY SCHOOL

SECONDARY SCHOOL

The school's ultimate goal at secondary level is to equip students with a varied mix of high educational achievements and real "hands-on" experience and employability skills.

In Years 7, 8 and 9, subject specialist teachers will work with students to ensure they acquire the skills and patterns of behaviour they need to be successful learners. At Years 10 and 11, students will take GCSEs in the core subjects of English, Maths, Biology, Chemistry, Physics, History, French and three other "options" of their choosing. These will include a different Modern Foreign Language, Geography, Religious Studies, Art, Music, Drama, ICT and Additional Maths. Progress will be supported by their Individual Learning Plans, as well as fortnightly Study

Skills lessons that will ensure students can sit their exams with a confident mind-set. At A-level, students will take 5 subjects in Year 12, dropping to 4 in Year 13. Students at Heyford Park Free School will benefit from a range of activities designed to help them prepare for life after school, whether this be at a top university, a highly skilled apprenticeship or employment. By drawing on our links with local businesses and universities, we want students to leave the school with the right skills and attitude to succeed in the next chapter of their lives.

For further details on our Educational Model, please refer to the Heyford Park Free School prospectus, pages 12-17.

DELIVERING SUCCESS

The Heyfordian School Trust will continuously strive for excellence, and will only consider itself successful when our students are meeting the ambitious academic targets we have set. We aim for the school to be ranked 'outstanding' by Ofsted and for our students, their parents and the community to be fully engaged.

We believe our small, all-through model will be of enormous benefit when delivering these aims as we will be able to create an inclusive environment that supports our students and invites the community to be fully involved.

We will also ensure teaching is of the highest possible standard. As a brand new school, we have an unique opportunity to recruit committed and skilled staff who complement one another and can work together holistically. Our staff, and most importantly our Principal, will establish a culture of mutual respect from day one which will confirm the high standards of behaviour and attendance we expect to see at Heyford Park Free School.

SPECIAL EDUCATIONAL NEEDS AND GIFTED AND TALENTED PUPILS

All our students will be supported, whatever their needs, to reach their full potential and be significantly challenged. Learning must take place in a variety of ways in order to meet the needs of students with differing abilities, but we also acknowledge that students learn best when they feel they belong and are valued so no student will be excluded from an activity because of their special need. The school will have a large number of specially trained staff who will endeavour to ensure the needs of most students can be met within the classroom. A SENCO, fully trained to manage students with needs right across the spectrum, will be one of our first appointments. They will be in charge of all Individual Learning Plans and so will be in prime position to notice if a student is not making progress, allowing for the school to intervene quickly.

ADMISSION NUMBERS

In our first year, Heyford Park Free School is open to admissions from parents with children entering Reception and Year 7 in September 2013, and we will admit 60 students into each of these two year groups. As the below table indicates, we will admit these same numbers every year until 2019 when the primary and secondary elements "join-up" and the Heyford Park Free School truly becomes an all-through school.

	2013	2014	2015	2016	2017	2018	2019
RECEPTION	60	60	60	60	60	60	60
YEAR 1		60	60	60	60	60	60
YEAR 2			60	60	60	60	60
YEAR 3				60	60	60	60
YEAR 4					60	60	60
YEAR 5						60	60
YEAR 6							60
YEAR 7	60	60	60	60	60	60	60
YEAR 8		60	60	60	60	60	60
YEAR 9			60	60	60	60	60
YEAR 10				60	60	60	60
YEAR 11					60	60	60
YEAR 12						60	60
YEAR 13							60
TOTALS	120	240	360	480	600	720	840

MAKING AN APPLICATION

Our admissions process is managed by Oxfordshire County Council and all applications are made via the Council's Common Admissions Preference Form (CAPF) as is the case with any other maintained school in the county. The form can be requested from the Oxfordshire County Council admissions team or completed online via Oxfordshire County Council's website. If applying online, you can select the school by using the keyword **"Heyford"** or the first part of our postcode **"OX25"**. On the paper copy, simply insert our school code **"F002"**.

For further details, including the dates by which forms should be returned, please refer to Page 24 of the Heyford Park Free School prospectus.

ADMISSIONS ARRANGEMENTS

Heyford Park Free School will not have a catchment area. This means that if we receive 60 applications or less in any year group, everyone who has applied for a place will be successfully admitted.

In accordance with legal requirements, children who have a statement of Special Educational Needs which names Heyford Park Free School in Part 4 of the statement will automatically be admitted to the school.

If Heyford Park Free School is over-subscribed, the following criteria will be used in order to determine priority for a school place. These have been set in conjunction with Oxfordshire County Council.

1. Children who are looked after¹ by a local authority within the meaning of section 22 of the Children Act 1989 at the time of their application and previously looked after children. The term "previously looked after children" refers only to children who were looked after but ceased to be so because they were adopted (or became subject to a residence order or special guardianship order).
2. Disabled children who need to be admitted to the school on the grounds of physical accessibility. The definition of disability is that contained within the Equality Act 2010. The required supporting evidence for this criterion will be a Doctor's letter from the child's registered GP.

3. Children with siblings (i.e. a whole, half, stepbrother or stepsister resident at the same address) who are already on roll at the school and will still be on roll when the child is admitted.

4. Those children whose permanent address is closest to the Heyford Park Free School by the nearest designated public route as defined on the Directorate for Children Education and Families Geographic Information System – utilising the measuring system currently in operation by Oxfordshire County Council. This system measures the distance from the "seed point"² of the house, as identified in Royal Mail's Ordnance Survey, to the nearest open gate of the school. In cases where parents have shared responsibility for a child, meaning those instances where the child spends equal time with each parent, the permanent address of that child will be the address at which the child is registered with their GP.

Full details of our Admissions Policy can be found on the Heyford Park Free School website www.heyfordparkfreeschool.org

¹ A "looked after child" is a child who is (a) in the care of a local authority, or (b) being provided with accommodation by a local authority in the exercise of their social services functions at the time of making an application to a school.

² "Seed Points" are designated by Ordnance Survey using information provided by Royal Mail and City/District Councils. They always fall within the bounds of the property, and are accurately measured up to the nearest 10 centimetres. For full details, please refer to Oxfordshire County Council's document "Measuring Distance from Home to School". This can be requested from the council or downloaded online.

GETTING INVOLVED AND PROVIDING FEEDBACK

ENGAGING OUR COMMUNITY

It is important to The Heyfordian School Trust that we establish a school which fully embraces our motto of “Bonum Commune Communitatis” or “The Common Good of the Community”.

The Parent and Resident Steering Group can be joined by anyone who supports our aims, regardless of whether they have children of school age or whether they live on Heyford Park. Represented at Trust level, this group is able to directly influence the decisions the Trust makes and has its voice heard on a regular basis. If you would like to join, please get in touch using the details in the back of the brochure.

Similarly, any local groups or businesses who would like to work with the school or share resources can join the Heyfordian Network. For full details of this, please refer to pages 22 & 23 in the Heyford Park Free School prospectus.

CONSULTATION

Our consultation runs between:

5TH NOVEMBER - 17TH DECEMBER

As well as the on-going engagement we will be undertaking with the community, we would like to hear from all relevant stakeholders in the coming weeks to help inform the Secretary of State for Education's decision on whether to enter into a Funding Agreement with The Heyfordian School

Trust. We will record all the views that are shared with us during the formal consultation window, which will then be consolidated into a report that will be made available on our website.

There are many ways you can share your views with us:

1. Fill out a survey. This can be done online via our website WWW.HEYFORDPARKFREESCHOOL.ORG or by filling out the paper copy attached and returning by post to the address provided on the back cover of this brochure. Alternatively, scan your paper copy and email it to SGILL@CAMARGUEPR.COM

2. Call **0800 988 9146** if you wish to find out more information about the consultation or the survey.

3. Join us at one of the following **DROP-IN EVENTS** to provide your feedback, meet The Heyfordian School Trust or just to find out more information.

Tuesday 13th November	10am till 1pm	Heyford Park Activity Centre Brice Road, Upper Heyford. OX25 5TE
Friday 30th November	2.30pm till 5.30pm	John Paul II Conference Centre Henley House, The Causeway, Bicester. OX26 6AW
Wednesday 5th December	5pm till 8pm	Heyford Park House 52 Camp Road, Upper Heyford. OX25 5HD



ARTIST'S IMPRESSION OF THE NEW HEYFORD PARK FREE SCHOOL



GET IN TOUCH

CONSULTATION INFORMATION

Find out more information about the consultation process by calling **0800 988 9146**. If returning paper surveys, please send these to **Heyford Park Free School Team, Camargue PR, Eagle Tower, Montpellier Drive, Cheltenham, GL50 1TA** or email a scanned copy of your completed survey to **sgill@camarguepr.com**

SCHOOL INFORMATION

For more information on Heyford Park Free School or to request a meeting with The Heyfordian School Trust, please call Sarah on **01869 238 200** or email **info.heyfordparkfreeschool@dorchestergrp.com**

Appendix B

TEMPRO Calculations

Heyford Park Free School
Transport Statement

DERIVATION OF GROWTH FACTORS

North Oxfordshire 2006 to 2013

TEMPRO Trip End Totals by Time Period by TEMPRO zone

	AM				PM		
	Origin	Destination	Total		Origin	Destination	Total
2006 Cherwell Rural	14021	11567	25588		13536	15523	29059
Bicester	11123	8558	19681		10117	12169	22286
Total			45269	<i>a</i>			51345
2013 Cherwell Rural	15302	12423	27725		14581	16905	31486
Bicester	12223	9220	21443		10947	13348	24295
Total			49168	<i>b</i>			55781

TEMPRO Trip End Totals for Average Day for GB

	Origin	Destination	Total	
2006 GB	70502673	70502673	141005346	<i>d</i>
2013 GB	75458691	75458691	150917382	<i>e</i>

Growth Factors from 2006 by Time Period

	AM	PM	
2013	1.0861	1.0864	<i>b/a</i>

Growth Factors from 2006 for Average Day

2013	1.0703	<i>e/d</i>
------	--------	------------

NRTF 97 Factor for Total Traffic from 2006(%)

2013	Central	1.111	<i>g</i>
------	---------	-------	----------

Locally Adjusted NRTF factors for AM and PM peak periods

		Central	
	AM	PM	
2013	1.127	1.128	<i>g*(b/a)/(e/d)</i>

Note:

These calculations are based on paragraphs 5.6 to 5.7 of the TEMPRO Guidance Note
 These calculations assume that the roads to which these factors are applied primarily serve the Cherwell Rural and Bicester areas.

Prepared by: A Saunders
 Checked by: P Rawlins
 Date: 23.11.2012

DERIVATION OF GROWTH FACTORS

North Oxfordshire 2006 to 2019

TEMPRO Trip End Totals by time Periods by TEMPRO zone

	AM				PM		
	Origin	Destination	Total		Origin	Destination	Total
2006 Cherwell Rural	14021	11567	25588		13536	15523	29059
Bicester	11123	8558	19681		10117	12169	22286
Total			45269	a			51345
2019 Cherwell Rural	16033	12898	28931		15198	17733	32931
Bicester	12808	9586	22394		11425	14006	25431
Total			51325	b			58362

TEMPO Trip End Totals for Average Day for GB

	Origin	Destination	Total		
2006 GB	70502673	70502673	141005346	d	d
2019 GB	78899024	78899023	157798047	e	e

Growth Factors from 2006 by Time Period

	AM	PM	
2019	1.133778	1.136663745	b/a

Growth Factors from 2006 for Average Day

2019	1.119093	e/d
------	----------	-----

NRTF 97 Factor for Total Traffic from 2006(%)

	Central	
2019	1.203	g

Locally Adjusted NTRF factros for AM and PM peak periods				
	Central			
	AM	PM		
2019	1.219	1.222	g*(b/a)/(e/d)	

Note:

These calculations are based on TEMPRO version 5.3 datasets

Methodology/calculations follow those set out in the Arup 2007 Transport Assessment

Job Number: 23827
 Job Name: Heyford Park Free School
 Study Area: Upper Heyford, Oxfordshire

NRTF 1997 Growth Rates by Vehicle Type

Base Year:	2006	NRTF Growth Rate:
Future Year:	2019	
Veh Type:	All Types	
Rate:	Central	
		1.203

Base Year:	2010	NRTF Growth Rate:
Future Year:	2020	
Veh Type:	All Types	
Rate:	Central	
		1.146

Base Year:	2010	NRTF Growth Rate:
Future Year:	2016	
Veh Type:	All Types	
Rate:	Central	
		1.093

Base Year:	2010	NRTF Growth Rate:
Future Year:	2020	
Veh Type:	All Types	
Rate:	Central	
		1.146

Notes:

Base Year Range: 1996 - 2031

Future Year Range: 1996 - 2031

Veh Types: Car
 LGV
 Rigid HGV
 Artic HGV
 PSV
 All Types

Rate: Low
 Central
 High

Prepared by: A Saunders
Checked by: F Reid
Date: 23.11.2012

Recalculated Growth Factors for 2006 - 2013

TEMPRO v6.2 NTEM Dataset 6.2

The following selections have been made:

Trip Ends by time Period

Set area definition: Geographical Area

SE

Cherwell

rural (Cherwell) (38UB0)

Bicester)38UB2)

Base year = 2006

Future year = 2013

Trip End Selections

All Purposes

Car Driver Only

Trip End by time period selections

Weekday AM peak period (0700 - 0959)

Weekeday PM peak period (1600 - 1859)

by Origin/Destination

NTM Traffic Growth Callculations

rural (cherwell) - Rural All

Bicester - Rural All

Calculated adjusted local growth figure

AM	rural (Cherwell)	1.053
	Bicester	1.0612
	Average	1.0571
PM	rural (Cherwell)	1.0592
	Bicester	1.0667
	Average	1.06295

Prepared by: A Saunders
Checked by: F Reid
Date: 23.11.2012

Recalculated Growth Factors for 2006 - 2019

TEMPRO v6.2 NTEM Dataset 6.2

The following selections have been made:

Trip Ends by time Period

Set area definition: Geographical Area

SE
Cherwell
rural (Cherwell) (38UB0)
Bicester)38UB2)

Base year = 2006
Future year = 2019

Trip End Selections

All Purposes
Car Driver Only

Trip End by time period selections

Weekday AM peak period (0700 - 0959)
Weekeday PM peak period (1600 - 1859)
by Origin/Destination

NTM Traffic Growth Callculations

rural (cherwell) - Rural All
Bicester - Rural All

Calculated adjusted local growth figure

AM	rural (Cherwell)	1.1391
	Bicester	1.1496
	Average	1.14435
PM	rural (Cherwell)	1.1491
	Bicester	1.1583
	Average	1.1537

Appendix C

2013 Junction Capacity Assessment Results

Heyford Park Free School
Transport Statement

Junctions 8
ARCADY 8 - Roundabout Module
Version: 8.0.1.305 [25 May 2012] © Copyright TRL Limited, 2012
For sales and distribution information, program advice and maintenance, contact TRL: Tel: +44 (0)1344 770758 E-mail: software@trl.co.uk Web: http://www.trlsoftware.co.uk
The users of this computer program for the solution of an engineering problem are in no way relieved of their responsibility for the correctness of the solution

Filename: (new file)
 Path:
 Report generation date: 28/11/2012 10:25:31

- » (Default Analysis Set) - 2013 Arup Growth No Devt, AM
- » (Default Analysis Set) - 2013 Arup Growth no Devt, PM
- » (Default Analysis Set) - 2013 Arup Growth+Devt+Consented, AM
- » (Default Analysis Set) - 2013 Arup Growth+Devt+Consented, PM
- » (Default Analysis Set) - 2013 Arup Growth+Devt+Proposed, AM
- » (Default Analysis Set) - 2013 Arup Growth+Devt+Proposed, PM

File summary

File Description

Title	Camp Road_Main Gate 2013 Arup Growth
Location	
Site Number	
Date	26/11/2012
Version	
Status	(new file)
Identifier	
Client	
Jobnumber	
Enumerator	PBA\asaunders
Description	

Analysis Options

Vehicle Length (m)	Do Queue Variations	Calculate Residual Capacity	Residual Capacity Criteria Type	RFC Threshold	Average Delay Threshold (s)	Queue Threshold (PCU)
5.75			N/A	0.85	36.00	20.00

Units

Distance Units	Speed Units	Traffic Units Input	Traffic Units Results	Flow Units	Average Delay Units	Total Delay Units	Rate Of Delay Units
m	mph	PCU	PCU	perHour	s	-Min	perMin

(Default Analysis Set) - 2013 Arup Growth No Devt, AM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

Name	Roundabout Capacity Model	Description	Include In Report	Use Specific Demand Set(s)	Specific Demand Set (s)	Locked	Network Flow Scaling Factor (%)	Network Capacity Scaling Factor (%)	Reason For Scaling Factors
------	---------------------------	-------------	-------------------	----------------------------	-------------------------	--------	---------------------------------	-------------------------------------	----------------------------

(Default Analysis Set)	ARCADY		□							100.000	100.000	
------------------------	--------	--	---	--	--	--	--	--	--	---------	---------	--

Demand Set Details

Name	Scenario Name	Time Period Name	Description	Traffic Profile Type	Model Start Time (HH:mm)	Model Finish Time (HH:mm)	Model Time Period Length (min)	Time Segment Length (min)	Results For Central Hour Only	Single Time Segment Only	Locked	Run Automatically	Use Relationship	Relationship
2013 Arup Growth No Devt, AM	2013 Arup Growth No Devt	AM		ONE HOUR	07:45	09:15	90	15				□		

Junction Network

Junctions

Name	Junction Type	Arm Order	Grade Separated	Large Roundabout	Do Geometric Delay	Junction Delay (s)	Junction LOS
(untitled)	Roundabout	1,2,3				3.06	A

Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

Name	Name	Description
Camp Road (East)	Camp Road (East)	
Camp Road (West)	Camp Road (West)	
Main Gate	Main Gate	

Capacity Options

Name	Minimum Capacity (PCU/hr)	Maximum Capacity (PCU/hr)	Assume Flat Start Profile	Initial Queue (PCU)
Camp Road (East)	0.00	99999.00		0.00
Camp Road (West)	0.00	99999.00		0.00
Main Gate	0.00	99999.00		0.00

Roundabout Geometry

Name	V - Approach road half-width (m)	E - Entry width (m)	I' - Effective flare length (m)	R - Entry radius (m)	D - Inscribed circle diameter (m)	PHI - Conflict (entry) angle (deg)	Exit Only
Camp Road (East)	3.00	7.00	5.00	25.00	30.00	11.00	
Camp Road (West)	2.53	7.00	6.75	10.00	30.00	33.00	
Main Gate	5.00	8.50	5.00	22.50	30.00	25.00	

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

Pedestrian Crossings

Name	Crossing Type
Camp Road (East)	None

Camp Road (West)	None
Main Gate	None

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Name	Enter slope and intercept directly	Entered slope	Entered intercept (PCU/hr)	Final Slope	Final Intercept (PCU/hr)
Camp Road (East)		(calculated)	(calculated)	0.609	1344.045
Camp Road (West)		(calculated)	(calculated)	0.523	1128.320
Main Gate		(calculated)	(calculated)	0.703	1884.289

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

Traffic Flows

Demand Set Data Options

Default Vehicle Mix	Vehicle Mix Varies Over Time	Vehicle Mix Varies Over Turn	Vehicle Mix Varies Over Entry	Vehicle Mix Source	PCU Factor for a HV (PCU)	Default Turning Proportions	Estimate from entry/exit counts	Turning Proportions Vary Over Time	Turning Proportions Vary Over Turn	Turning Proportions Vary Over Entry
		☐	☐	HV Percentages	2.00				☐	☐

Entry Flows

General Flows Data

Name	Profile Type	Use Turning Counts	Average Demand Flow (PCU/hr)	Flow Scaling Factor (%)
Camp Road (East)	ONE HOUR	☐	145.00	100.000
Camp Road (West)	ONE HOUR	☐	101.00	100.000
Main Gate	ONE HOUR	☐	71.00	100.000

Turning Proportions

Turning Counts or Proportions (PCU/hr) - (untitled) (for whole period)

		To		
		1	2	3
From	1	0.000	56.000	89.000
	2	47.000	0.000	54.000
	3	41.000	30.000	0.000

Turning Proportions (PCU) - (untitled) (for whole period)

		To		
		1	2	3
From	1	0.00	0.39	0.61
	2	0.47	0.00	0.53
	3	0.58	0.42	0.00

Vehicle Mix

Average PCU Per Vehicle - (untitled) (for whole period)

		To		
		1	2	3
From	1	1.000	1.000	1.000
	2	1.000	1.000	1.000
	3	1.000	1.000	1.000

Heavy Vehicle Percentages - (untitled) (for whole period)

		To		
		1	2	3
From	1	0.000	0.000	0.000
	2	0.000	0.000	0.000
	3	0.000	0.000	0.000

Results

Results Summary for whole modelled period

Name	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)	Total Queueing Delay (PCU-min)	Average Queueing Delay (s)	Rate Of Queueing Delay (PCU-min/min)	Inclusive Total Queueing Delay (PCU-min)	Inclusive Average Queueing Delay (s)
Camp Road (East)	0.12	3.09	0.14	A	133.05	199.58	10.02	3.01	0.11	10.02	3.01
Camp Road (West)	0.10	3.73	0.11	A	92.68	139.02	8.39	3.62	0.09	8.39	3.62
Main Gate	0.04	2.03	0.04	A	65.15	97.73	3.27	2.01	0.04	3.27	2.01

Main Results for each time segment

Main results: (07:45-08:00)

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
Camp Road (East)	109.16	27.29	108.81	66.04	22.54	0.00	1330.33	929.35	0.082	0.00	0.09	2.947	A
Camp Road (West)	76.04	19.01	75.74	64.56	66.79	0.00	1093.42	830.25	0.070	0.00	0.07	3.537	A
Main Gate	53.45	13.36	53.33	107.28	35.25	0.00	1859.52	1612.81	0.029	0.00	0.03	1.993	A

Main results: (08:00-08:15)

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
Camp Road (East)	130.35	32.59	130.27	79.07	26.96	0.00	1327.64	929.35	0.098	0.09	0.11	3.006	A
Camp Road (West)	90.80	22.70	90.73	77.27	79.96	0.00	1086.54	830.25	0.084	0.07	0.09	3.614	A

Main Gate	63.83	15.96	63.80	128.47	42.22	0.00	1854.62	1612.81	0.034	0.03	0.04	2.010	A
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Main results: (08:15-08:30)

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
Camp Road (East)	159.65	39.91	159.54	96.83	33.02	0.00	1323.95	929.35	0.121	0.11	0.14	3.091	A
Camp Road (West)	111.20	27.80	111.11	94.63	97.92	0.00	1077.15	830.25	0.103	0.09	0.11	3.725	A
Main Gate	78.17	19.54	78.14	157.33	51.70	0.00	1847.96	1612.81	0.042	0.04	0.04	2.033	A

Main results: (08:30-08:45)

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
Camp Road (East)	159.65	39.91	159.65	96.89	33.03	0.00	1323.95	929.35	0.121	0.14	0.14	3.091	A
Camp Road (West)	111.20	27.80	111.20	94.69	97.99	0.00	1077.12	830.25	0.103	0.11	0.11	3.726	A
Main Gate	78.17	19.54	78.17	157.44	51.75	0.00	1847.93	1612.81	0.042	0.04	0.04	2.033	A

Main results: (08:45-09:00)

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
Camp Road (East)	130.35	32.59	130.46	79.17	26.98	0.00	1327.62	929.35	0.098	0.14	0.11	3.009	A
Camp Road (West)	90.80	22.70	90.89	77.37	80.08	0.00	1086.48	830.25	0.084	0.11	0.09	3.618	A
Main Gate	63.83	15.96	63.86	128.67	42.30	0.00	1854.57	1612.81	0.034	0.04	0.04	2.010	A

Main results: (09:00-09:15)

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
Camp Road (East)	109.16	27.29	109.24	66.30	22.60	0.00	1330.30	929.35	0.082	0.11	0.09	2.950	A
Camp Road (West)	76.04	19.01	76.10	64.79	67.05	0.00	1093.28	830.25	0.070	0.09	0.08	3.538	A
Main Gate	53.45	13.36	53.48	107.74	35.41	0.00	1859.40	1612.81	0.029	0.04	0.03	1.994	A

Queueing Delay Results for each time segment
Queueing Delay results: (07:45-08:00)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
Camp Road (East)	1.31	0.09	2.947	A	A

Camp Road (West)	1.10	0.07	3.537	A	A
Main Gate	0.44	0.03	1.993	A	A

Queueing Delay results: (08:00-08:15)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
Camp Road (East)	1.61	0.11	3.006	A	A
Camp Road (West)	1.35	0.09	3.614	A	A
Main Gate	0.53	0.04	2.010	A	A

Queueing Delay results: (08:15-08:30)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
Camp Road (East)	2.02	0.13	3.091	A	A
Camp Road (West)	1.70	0.11	3.725	A	A
Main Gate	0.66	0.04	2.033	A	A

Queueing Delay results: (08:30-08:45)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
Camp Road (East)	2.05	0.14	3.091	A	A
Camp Road (West)	1.72	0.11	3.726	A	A
Main Gate	0.66	0.04	2.033	A	A

Queueing Delay results: (08:45-09:00)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
Camp Road (East)	1.66	0.11	3.009	A	A
Camp Road (West)	1.39	0.09	3.618	A	A
Main Gate	0.54	0.04	2.010	A	A

Queueing Delay results: (09:00-09:15)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
Camp Road (East)	1.36	0.09	2.950	A	A
Camp Road (West)	1.14	0.08	3.538	A	A
Main Gate	0.45	0.03	1.994	A	A

(Default Analysis Set) - 2013 Arup Growth no Devt, PM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

Name	Roundabout Capacity Model	Description	Include In Report	Use Specific Demand Set(s)	Specific Demand Set (s)	Locked	Network Flow Scaling Factor (%)	Network Capacity Scaling Factor (%)	Reason For Scaling Factors

(Default Analysis Set)	ARCADY		□			100.000	100.000	
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Demand Set Details

Name	Scenario Name	Time Period Name	Description	Traffic Profile Type	Model Start Time (HH:mm)	Model Finish Time (HH:mm)	Model Time Period Length (min)	Time Segment Length (min)	Results For Central Hour Only	Single Time Segment Only	Locked	Run Automatically	Use Relationship	Relationship
2013 Arup Growth no Devt, FM	2013 Arup Growth no Devt	FM		ONE HOUR	16:45	18:15	90	15				□		

Junction Network

Junctions

Name	Junction Type	Arm Order	Grade Separated	Large Roundabout	Do Geometric Delay	Junction Delay (s)	Junction LOS
(untitled)	Roundabout	1,2,3				2.77	A

Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

Name	Name	Description
Camp Road (East)	Camp Road (East)	
Camp Road (West)	Camp Road (West)	
Main Gate	Main Gate	

Capacity Options

Name	Minimum Capacity (PCU/hr)	Maximum Capacity (PCU/hr)	Assume Flat Start Profile	Initial Queue (PCU)
Camp Road (East)	0.00	99999.00		0.00
Camp Road (West)	0.00	99999.00		0.00
Main Gate	0.00	99999.00		0.00

Roundabout Geometry

Name	V - Approach road half-width (m)	E - Entry width (m)	I' - Effective flare length (m)	R - Entry radius (m)	D - Inscribed circle diameter (m)	PHI - Conflict (entry) angle (deg)	Exit Only
Camp Road (East)	3.00	7.00	5.00	25.00	30.00	11.00	
Camp Road (West)	2.53	7.00	6.75	10.00	30.00	33.00	
Main Gate	5.00	8.50	5.00	22.50	30.00	25.00	

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

Pedestrian Crossings

Name	Crossing Type
Camp Road (East)	None

Camp Road (West)	None
Main Gate	None

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Name	Enter slope and intercept directly	Entered slope	Entered intercept (PCU/hr)	Final Slope	Final Intercept (PCU/hr)
Camp Road (East)		(calculated)	(calculated)	0.609	1344.045
Camp Road (West)		(calculated)	(calculated)	0.523	1128.320
Main Gate		(calculated)	(calculated)	0.703	1884.289

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

Traffic Flows

Demand Set Data Options

Default Vehicle Mix	Vehicle Mix Varies Over Time	Vehicle Mix Varies Over Turn	Vehicle Mix Varies Over Entry	Vehicle Mix Source	PCU Factor for a HV (PCU)	Default Turning Proportions	Estimate from entry/exit counts	Turning Proportions Vary Over Time	Turning Proportions Vary Over Turn	Turning Proportions Vary Over Entry
		☐	☐	HV Percentages	2.00				☐	☐

Entry Flows

General Flows Data

Name	Profile Type	Use Turning Counts	Average Demand Flow (PCU/hr)	Flow Scaling Factor (%)
Camp Road (East)	ONE HOUR	☐	90.00	100.000
Camp Road (West)	ONE HOUR	☐	98.00	100.000
Main Gate	ONE HOUR	☐	193.00	100.000

Turning Proportions

Turning Counts or Proportions (PCU/hr) - (untitled) (for whole period)

		To		
		1	2	3
From	1	0.000	29.000	61.000
	2	62.000	0.000	36.000
	3	117.000	76.000	0.000

Turning Proportions (PCU) - (untitled) (for whole period)

		To		
		1	2	3
From	1	0.00	0.32	0.68
	2	0.63	0.00	0.37
	3	0.61	0.39	0.00

Vehicle Mix

Average PCU Per Vehicle - (untitled) (for whole period)

		To		
		1	2	3
From	1	1.000	1.000	1.000
	2	1.000	1.000	1.000
	3	1.000	1.000	1.000

Heavy Vehicle Percentages - (untitled) (for whole period)

		To		
		1	2	3
From	1	0.000	0.000	0.000
	2	0.000	0.000	0.000
	3	0.000	0.000	0.000

Results

Results Summary for whole modelled period

Name	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)	Total Queueing Delay (PCU-min)	Average Queueing Delay (s)	Rate Of Queueing Delay (PCU-min/min)	Inclusive Total Queueing Delay (PCU-min)	Inclusive Average Queueing Delay (s)
Camp Road (East)	0.08	3.01	0.08	A	82.59	123.88	6.09	2.95	0.07	6.09	2.95
Camp Road (West)	0.10	3.65	0.11	A	89.93	134.89	8.01	3.56	0.09	8.01	3.56
Main Gate	0.12	2.22	0.13	A	177.10	265.65	9.56	2.16	0.11	9.56	2.16

Main Results for each time segment

Main results: (16:45-17:00)

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
Camp Road (East)	67.76	16.94	67.54	134.37	57.08	0.00	1309.31	975.89	0.052	0.00	0.05	2.898	A
Camp Road (West)	73.78	18.44	73.49	78.85	45.78	0.00	1104.40	782.70	0.067	0.00	0.07	3.492	A
Main Gate	145.30	36.33	144.96	72.77	46.50	0.00	1851.62	1536.34	0.078	0.00	0.08	2.109	A

Main results: (17:00-17:15)

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
Camp Road (East)	80.91	20.23	80.86	160.83	68.29	0.00	1302.49	975.89	0.062	0.05	0.07	2.946	A
Camp Road (West)	88.10	22.03	88.04	94.35	54.81	0.00	1099.68	782.70	0.080	0.07	0.09	3.557	A

Main Gate	173.50	43.38	173.43	87.15	55.70	0.00	1845.15	1536.34	0.094	0.08	0.10	2.153	A
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Main results: (17:15-17:30)

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
Camp Road (East)	99.09	24.77	99.03	196.96	83.64	0.00	1293.15	975.89	0.077	0.07	0.08	3.014	A
Camp Road (West)	107.90	26.98	107.81	115.54	67.12	0.00	1093.25	782.70	0.099	0.09	0.11	3.652	A
Main Gate	212.50	53.12	212.39	106.72	68.21	0.00	1836.36	1536.34	0.116	0.10	0.13	2.216	A

Main results: (17:30-17:45)

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
Camp Road (East)	99.09	24.77	99.09	197.08	83.68	0.00	1293.13	975.89	0.077	0.08	0.08	3.014	A
Camp Road (West)	107.90	26.98	107.90	115.61	67.16	0.00	1093.23	782.70	0.099	0.11	0.11	3.652	A
Main Gate	212.50	53.12	212.50	106.80	68.26	0.00	1836.32	1536.34	0.116	0.13	0.13	2.216	A

Main results: (17:45-18:00)

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
Camp Road (East)	80.91	20.23	80.97	161.04	68.36	0.00	1302.44	975.89	0.062	0.08	0.07	2.946	A
Camp Road (West)	88.10	22.03	88.19	94.46	54.88	0.00	1099.64	782.70	0.080	0.11	0.09	3.558	A
Main Gate	173.50	43.38	173.61	87.28	55.79	0.00	1845.09	1536.34	0.094	0.13	0.10	2.155	A

Main results: (18:00-18:15)

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
Camp Road (East)	67.76	16.94	67.80	134.85	57.25	0.00	1309.21	975.89	0.052	0.07	0.05	2.899	A
Camp Road (West)	73.78	18.44	73.84	79.09	45.96	0.00	1104.31	782.70	0.067	0.09	0.07	3.492	A
Main Gate	145.30	36.33	145.38	73.08	46.72	0.00	1851.46	1536.34	0.078	0.10	0.09	2.111	A

Queueing Delay Results for each time segment
Queueing Delay results: (16:45-17:00)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
Camp Road (East)	0.80	0.05	2.898	A	A

Camp Road (West)	1.05	0.07	3.492	A	A
Main Gate	1.26	0.08	2.109	A	A

Queueing Delay results: (17:00-17:15)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
Camp Road (East)	0.98	0.07	2.946	A	A
Camp Road (West)	1.29	0.09	3.557	A	A
Main Gate	1.54	0.10	2.153	A	A

Queueing Delay results: (17:15-17:30)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
Camp Road (East)	1.23	0.08	3.014	A	A
Camp Road (West)	1.61	0.11	3.652	A	A
Main Gate	1.94	0.13	2.216	A	A

Queueing Delay results: (17:30-17:45)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
Camp Road (East)	1.24	0.08	3.014	A	A
Camp Road (West)	1.64	0.11	3.652	A	A
Main Gate	1.96	0.13	2.216	A	A

Queueing Delay results: (17:45-18:00)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
Camp Road (East)	1.01	0.07	2.946	A	A
Camp Road (West)	1.33	0.09	3.558	A	A
Main Gate	1.58	0.11	2.155	A	A

Queueing Delay results: (18:00-18:15)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
Camp Road (East)	0.83	0.06	2.899	A	A
Camp Road (West)	1.09	0.07	3.492	A	A
Main Gate	1.29	0.09	2.111	A	A

(Default Analysis Set) - 2013 Arup Growth+Devt+Consented, AM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

Name	Roundabout Capacity Model	Description	Include In Report	Use Specific Demand Set(s)	Specific Demand Set (s)	Locked	Network Flow Scaling Factor (%)	Network Capacity Scaling Factor (%)	Reason For Scaling Factors
(Default Analysis Set)	ARCADY		☐				100.000	100.000	

Demand Set Details

Name	Scenario Name	Time Period Name	Description	Traffic Profile Type	Model Start Time (HH:mm)	Model Finish Time (HH:mm)	Model Time Period Length (min)	Time Segment Length (min)	Results For Central Hour Only	Single Time Segment Only	Locked	Ru Automa
2013 Arup Growth+Devt+Consented, AM	2013 Arup Growth+Devt+Consented	AM		ONE HOUR	07:45	09:15	90	15				☐

Junction Network

Junctions

Name	Junction Type	Arm Order	Grade Separated	Large Roundabout	Do Geometric Delay	Junction Delay (s)	Junction LOS
(untitled)	Roundabout	1,2,3				4.42	A

Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

Name	Name	Description
Camp Road (East)	Camp Road (East)	
Camp Road (West)	Camp Road (West)	
Main Gate	Main Gate	

Capacity Options

Name	Minimum Capacity (PCU/hr)	Maximum Capacity (PCU/hr)	Assume Flat Start Profile	Initial Queue (PCU)
Camp Road (East)	0.00	99999.00		0.00
Camp Road (West)	0.00	99999.00		0.00
Main Gate	0.00	99999.00		0.00

Roundabout Geometry

Name	V - Approach road half-width (m)	E - Entry width (m)	I' - Effective flare length (m)	R - Entry radius (m)	D - Inscribed circle diameter (m)	PHI - Conflict (entry) angle (deg)	Exit Only
Camp Road (East)	3.00	7.00	5.00	25.00	30.00	11.00	
Camp Road (West)	2.53	7.00	6.75	10.00	30.00	33.00	
Main Gate	5.00	8.50	5.00	22.50	30.00	25.00	

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

Pedestrian Crossings

Name	Crossing Type
Camp Road (East)	None
Camp Road (West)	None

Main Gate	None
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Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Name	Enter slope and intercept directly	Entered slope	Entered intercept (PCU/hr)	Final Slope	Final Intercept (PCU/hr)
Camp Road (East)		(calculated)	(calculated)	0.609	1344.045
Camp Road (West)		(calculated)	(calculated)	0.523	1128.320
Main Gate		(calculated)	(calculated)	0.703	1884.289

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

Traffic Flows

Demand Set Data Options

Default Vehicle Mix	Vehicle Mix Varies Over Time	Vehicle Mix Varies Over Turn	Vehicle Mix Varies Over Entry	Vehicle Mix Source	PCU Factor for a HV (PCU)	Default Turning Proportions	Estimate from entry/exit counts	Turning Proportions Vary Over Time	Turning Proportions Vary Over Turn	Turning Proportions Vary Over Entry
		☐	☐	HV Percentages	2.00				☐	☐

Entry Flows

General Flows Data

Name	Profile Type	Use Turning Counts	Average Demand Flow (PCU/hr)	Flow Scaling Factor (%)
Camp Road (East)	ONE HOUR	☐	486.00	100.000
Camp Road (West)	ONE HOUR	☐	261.00	100.000
Main Gate	ONE HOUR	☐	582.00	100.000

Turning Proportions

Turning Counts or Proportions (PCU/hr) - (untitled) (for whole period)

		To		
		1	2	3
From	1	0.000	56.000	430.000
	2	47.000	0.000	214.000
	3	398.000	184.000	0.000

Turning Proportions (PCU) - (untitled) (for whole period)

		To		
		1	2	3
From	1	0.00	0.12	0.88
	2	0.18	0.00	0.82
	3	0.68	0.32	0.00

Vehicle Mix

Average PCU Per Vehicle - (untitled) (for whole period)

		To

		1	2	3
From	1	1.000	1.000	1.000
	2	1.000	1.000	1.000
	3	1.000	1.000	1.000

Heavy Vehicle Percentages - (untitled) (for whole period)

		To		
		1	2	3
From	1	0.000	0.000	0.000
	2	0.000	0.000	0.000
	3	0.000	0.000	0.000

Results

Results Summary for whole modelled period

Name	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)	Total Queueing Delay (PCU-min)	Average Queueing Delay (s)	Rate Of Queueing Delay (PCU-min/min)	Inclusive Total Queueing Delay (PCU-min)	Inclusive Average Queueing Delay (s)
Camp Road (East)	0.44	5.25	0.78	A	445.96	668.94	51.44	4.61	0.57	51.44	4.61
Camp Road (West)	0.33	6.06	0.48	A	239.50	359.25	32.12	5.36	0.36	32.12	5.36
Main Gate	0.35	2.98	0.53	A	534.05	801.08	36.77	2.75	0.41	36.77	2.75

Main Results for each time segment

Main results: (07:45-08:00)

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
Camp Road (East)	365.89	91.47	364.26	334.00	138.14	0.00	1259.99	997.77	0.290	0.00	0.41	4.011	A
Camp Road (West)	196.49	49.12	195.47	180.11	322.29	0.00	959.92	667.03	0.205	0.00	0.26	4.704	A
Main Gate	438.16	109.54	436.93	482.56	35.20	0.00	1859.55	1799.89	0.236	0.00	0.31	2.528	A

Main results: (08:00-08:15)

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
Camp Road (East)	436.90	109.23	436.38	399.76	165.31	0.00	1243.45	997.77	0.351	0.41	0.54	4.457	A
Camp Road (West)	234.63	58.66	234.31	215.59	386.10	0.00	926.57	667.03	0.253	0.26	0.34	5.198	A

Main Gate	523.21	130.80	522.87	578.21	42.19	0.00	1854.64	1799.89	0.282	0.31	0.39	2.703	A
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Main results: (08:15-08:30)

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
Camp Road (East)	535.10	133.77	534.16	489.48	202.41	0.00	1220.87	997.77	0.438	0.54	0.77	5.234	A
Camp Road (West)	287.37	71.84	286.80	263.96	472.61	0.00	881.37	667.03	0.326	0.34	0.48	6.050	A
Main Gate	640.79	160.20	640.25	707.76	51.65	0.00	1848.00	1799.89	0.347	0.39	0.53	2.979	A

Main results: (08:30-08:45)

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
Camp Road (East)	535.10	133.77	535.08	489.95	202.59	0.00	1220.77	997.77	0.438	0.77	0.78	5.249	A
Camp Road (West)	287.37	71.84	287.36	264.24	473.42	0.00	880.94	667.03	0.326	0.48	0.48	6.064	A
Main Gate	640.79	160.20	640.79	709.03	51.75	0.00	1847.93	1799.89	0.347	0.53	0.53	2.981	A

Main results: (08:45-09:00)

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
Camp Road (East)	436.90	109.23	437.83	400.52	165.58	0.00	1243.28	997.77	0.351	0.78	0.55	4.476	A
Camp Road (West)	234.63	58.66	235.19	216.03	387.38	0.00	925.90	667.03	0.253	0.48	0.34	5.217	A
Main Gate	523.21	130.80	523.75	580.22	42.35	0.00	1854.53	1799.89	0.282	0.53	0.39	2.707	A

Main results: (09:00-09:15)

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
Camp Road (East)	365.89	91.47	366.42	335.31	138.63	0.00	1259.68	997.77	0.290	0.55	0.41	4.033	A
Camp Road (West)	196.49	49.12	196.82	180.85	324.20	0.00	958.92	667.03	0.205	0.34	0.26	4.725	A
Main Gate	438.16	109.54	438.50	485.58	35.44	0.00	1859.38	1799.89	0.236	0.39	0.31	2.535	A

Queueing Delay Results for each time segment
Queueing Delay results: (07:45-08:00)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
Camp Road (East)	5.95	0.40	4.011	A	A

Camp Road (West)	3.74	0.25	4.704	A	A
Main Gate	4.53	0.30	2.528	A	A

Queueing Delay results: (08:00-08:15)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
Camp Road (East)	7.91	0.53	4.457	A	A
Camp Road (West)	4.95	0.33	5.198	A	A
Main Gate	5.80	0.39	2.703	A	A

Queueing Delay results: (08:15-08:30)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
Camp Road (East)	11.29	0.75	5.234	A	A
Camp Road (West)	7.01	0.47	6.050	A	A
Main Gate	7.80	0.52	2.979	A	A

Queueing Delay results: (08:30-08:45)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
Camp Road (East)	11.62	0.77	5.249	A	A
Camp Road (West)	7.21	0.48	6.064	A	A
Main Gate	7.93	0.53	2.981	A	A

Queueing Delay results: (08:45-09:00)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
Camp Road (East)	8.38	0.56	4.476	A	A
Camp Road (West)	5.25	0.35	5.217	A	A
Main Gate	6.00	0.40	2.707	A	A

Queueing Delay results: (09:00-09:15)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
Camp Road (East)	6.29	0.42	4.033	A	A
Camp Road (West)	3.97	0.26	4.725	A	A
Main Gate	4.70	0.31	2.535	A	A

(Default Analysis Set) - 2013 Arup Growth+Devt+Consented, PM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

Name	Roundabout Capacity Model	Description	Include In Report	Use Specific Demand Set(s)	Specific Demand Set (s)	Locked	Network Flow Scaling Factor (%)	Network Capacity Scaling Factor (%)	Reason For Scaling Factors
(Default Analysis Set)	ARCADY		☐				100.000	100.000	

Demand Set Details

Name	Scenario Name	Time Period Name	Description	Traffic Profile Type	Model Start Time (HH:mm)	Model Finish Time (HH:mm)	Model Time Period Length (min)	Time Segment Length (min)	Results For Central Hour Only	Single Time Segment Only	Locked	Ru Automa
2013 Arup Growth+Devt+Consented, FM	2013 Arup Growth+Devt+Consented	FM		ONE HOUR	16:45	18:15	90	15				☐

Junction Network

Junctions

Name	Junction Type	Arm Order	Grade Separated	Large Roundabout	Do Geometric Delay	Junction Delay (s)	Junction LOS
(untitled)	Roundabout	1,2,3				3.57	A

Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

Name	Name	Description
Camp Road (East)	Camp Road (East)	
Camp Road (West)	Camp Road (West)	
Main Gate	Main Gate	

Capacity Options

Name	Minimum Capacity (PCU/hr)	Maximum Capacity (PCU/hr)	Assume Flat Start Profile	Initial Queue (PCU)
Camp Road (East)	0.00	99999.00		0.00
Camp Road (West)	0.00	99999.00		0.00
Main Gate	0.00	99999.00		0.00

Roundabout Geometry

Name	V - Approach road half-width (m)	E - Entry width (m)	I' - Effective flare length (m)	R - Entry radius (m)	D - Inscribed circle diameter (m)	PHI - Conflict (entry) angle (deg)	Exit Only
Camp Road (East)	3.00	7.00	5.00	25.00	30.00	11.00	
Camp Road (West)	2.53	7.00	6.75	10.00	30.00	33.00	
Main Gate	5.00	8.50	5.00	22.50	30.00	25.00	

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

Pedestrian Crossings

Name	Crossing Type
Camp Road (East)	None
Camp Road (West)	None

Main Gate	None
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Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Name	Enter slope and intercept directly	Entered slope	Entered intercept (PCU/hr)	Final Slope	Final Intercept (PCU/hr)
Camp Road (East)		(calculated)	(calculated)	0.609	1344.045
Camp Road (West)		(calculated)	(calculated)	0.523	1128.320
Main Gate		(calculated)	(calculated)	0.703	1884.289

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

Traffic Flows

Demand Set Data Options

Default Vehicle Mix	Vehicle Mix Varies Over Time	Vehicle Mix Varies Over Turn	Vehicle Mix Varies Over Entry	Vehicle Mix Source	PCU Factor for a HV (PCU)	Default Turning Proportions	Estimate from entry/exit counts	Turning Proportions Vary Over Time	Turning Proportions Vary Over Turn	Turning Proportions Vary Over Entry
		☐	☐	HV Percentages	2.00				☐	☐

Entry Flows

General Flows Data

Name	Profile Type	Use Turning Counts	Average Demand Flow (PCU/hr)	Flow Scaling Factor (%)
Camp Road (East)	ONE HOUR	☐	265.00	100.000
Camp Road (West)	ONE HOUR	☐	173.00	100.000
Main Gate	ONE HOUR	☐	635.00	100.000

Turning Proportions

Turning Counts or Proportions (PCU/hr) - (untitled) (for whole period)

		To		
		1	2	3
From	1	0.000	29.000	236.000
	2	62.000	0.000	111.000
	3	422.000	213.000	0.000

Turning Proportions (PCU) - (untitled) (for whole period)

		To		
		1	2	3
From	1	0.00	0.11	0.89
	2	0.36	0.00	0.64
	3	0.66	0.34	0.00

Vehicle Mix

Average PCU Per Vehicle - (untitled) (for whole period)

		To

		1	2	3
From	1	1.000	1.000	1.000
	2	1.000	1.000	1.000
	3	1.000	1.000	1.000

Heavy Vehicle Percentages - (untitled) (for whole period)

		To		
		1	2	3
From	1	0.000	0.000	0.000
	2	0.000	0.000	0.000
	3	0.000	0.000	0.000

Results

Results Summary for whole modelled period

Name	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)	Total Queueing Delay (PCU-min)	Average Queueing Delay (s)	Rate Of Queueing Delay (PCU-min/min)	Inclusive Total Queueing Delay (PCU-min)	Inclusive Average Queueing Delay (s)
Camp Road (East)	0.24	3.96	0.32	A	243.17	364.75	22.43	3.69	0.25	22.43	3.69
Camp Road (West)	0.19	4.49	0.24	A	158.75	238.12	16.75	4.22	0.19	16.75	4.22
Main Gate	0.38	3.16	0.61	A	582.69	874.03	42.08	2.89	0.47	42.08	2.89

Main Results for each time segment

Main results: (16:45-17:00)

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
Camp Road (East)	199.51	49.88	198.75	363.25	159.89	0.00	1246.75	993.65	0.160	0.00	0.19	3.434	A
Camp Road (West)	130.24	32.56	129.67	181.64	177.00	0.00	1035.83	665.93	0.126	0.00	0.14	3.970	A
Main Gate	478.06	119.52	476.67	260.20	46.47	0.00	1851.63	1716.59	0.258	0.00	0.35	2.616	A

Main results: (17:00-17:15)

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
Camp Road (East)	238.23	59.56	238.03	434.79	191.35	0.00	1227.60	993.65	0.194	0.19	0.24	3.637	A
Camp Road (West)	155.52	38.88	155.38	217.40	211.98	0.00	1017.55	665.93	0.153	0.14	0.18	4.175	A

Main Gate	570.85	142.71	570.45	311.67	55.68	0.00	1845.16	1716.59	0.309	0.35	0.45	2.824	A
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Main results: (17:15-17:30)

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
Camp Road (East)	291.77	72.94	291.45	532.37	234.30	0.00	1201.47	993.65	0.243	0.24	0.32	3.955	A
Camp Road (West)	190.48	47.62	190.25	266.19	259.56	0.00	992.69	665.93	0.192	0.18	0.24	4.485	A
Main Gate	699.15	174.79	698.49	381.63	68.18	0.00	1836.38	1716.59	0.381	0.45	0.61	3.162	A

Main results: (17:30-17:45)

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
Camp Road (East)	291.77	72.94	291.77	532.89	234.52	0.00	1201.34	993.65	0.243	0.32	0.32	3.957	A
Camp Road (West)	190.48	47.62	190.47	266.44	259.84	0.00	992.55	665.93	0.192	0.24	0.24	4.488	A
Main Gate	699.15	174.79	699.14	382.05	68.26	0.00	1836.32	1716.59	0.381	0.61	0.61	3.165	A

Main results: (17:45-18:00)

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
Camp Road (East)	238.23	59.56	238.54	435.62	191.70	0.00	1227.39	993.65	0.194	0.32	0.24	3.643	A
Camp Road (West)	155.52	38.88	155.74	217.81	212.44	0.00	1017.32	665.93	0.153	0.24	0.18	4.180	A
Main Gate	570.85	142.71	571.50	312.37	55.82	0.00	1845.07	1716.59	0.309	0.61	0.45	2.829	A

Main results: (18:00-18:15)

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
Camp Road (East)	199.51	49.88	199.71	364.70	160.49	0.00	1246.38	993.65	0.160	0.24	0.19	3.441	A
Camp Road (West)	130.24	32.56	130.39	182.35	177.85	0.00	1035.39	665.93	0.126	0.18	0.14	3.979	A
Main Gate	478.06	119.52	478.46	261.51	46.73	0.00	1851.45	1716.59	0.258	0.45	0.35	2.622	A

Queueing Delay Results for each time segment
Queueing Delay results: (16:45-17:00)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
Camp Road (East)	2.79	0.19	3.434	A	A

Camp Road (West)	2.10	0.14	3.970	A	A
Main Gate	5.11	0.34	2.616	A	A

Queueing Delay results: (17:00-17:15)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
Camp Road (East)	3.54	0.24	3.637	A	A
Camp Road (West)	2.65	0.18	4.175	A	A
Main Gate	6.60	0.44	2.824	A	A

Queueing Delay results: (17:15-17:30)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
Camp Road (East)	4.71	0.31	3.955	A	A
Camp Road (West)	3.48	0.23	4.485	A	A
Main Gate	9.02	0.60	3.162	A	A

Queueing Delay results: (17:30-17:45)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
Camp Road (East)	4.79	0.32	3.957	A	A
Camp Road (West)	3.55	0.24	4.488	A	A
Main Gate	9.19	0.61	3.165	A	A

Queueing Delay results: (17:45-18:00)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
Camp Road (East)	3.69	0.25	3.643	A	A
Camp Road (West)	2.77	0.18	4.180	A	A
Main Gate	6.85	0.46	2.829	A	A

Queueing Delay results: (18:00-18:15)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
Camp Road (East)	2.91	0.19	3.441	A	A
Camp Road (West)	2.20	0.15	3.979	A	A
Main Gate	5.31	0.35	2.622	A	A

(Default Analysis Set) - 2013 Arup Growth+Devt+Proposed, AM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

Name	Roundabout Capacity Model	Description	Include In Report	Use Specific Demand Set(s)	Specific Demand Set (s)	Locked	Network Flow Scaling Factor (%)	Network Capacity Scaling Factor (%)	Reason For Scaling Factors
(Default Analysis Set)	ARCADY		☐				100.000	100.000	

Demand Set Details

Name	Scenario Name	Time Period Name	Description	Traffic Profile Type	Model Start Time (HH:mm)	Model Finish Time (HH:mm)	Model Time Period Length (min)	Time Segment Length (min)	Results For Central Hour Only	Single Time Segment Only	Locked	Run Automatic
2013 Arup Growth+Devt+Proposed, AM	2013 Arup Growth+Devt+Proposed	AM		ONE HOUR	07:45	09:15	90	15				☐

Junction Network

Junctions

Name	Junction Type	Arm Order	Grade Separated	Large Roundabout	Do Geometric Delay	Junction Delay (s)	Junction LOS
(untitled)	Roundabout	1,2,3				4.74	A

Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

Name	Name	Description
Camp Road (East)	Camp Road (East)	
Camp Road (West)	Camp Road (West)	
Main Gate	Main Gate	

Capacity Options

Name	Minimum Capacity (PCU/hr)	Maximum Capacity (PCU/hr)	Assume Flat Start Profile	Initial Queue (PCU)
Camp Road (East)	0.00	99999.00		0.00
Camp Road (West)	0.00	99999.00		0.00
Main Gate	0.00	99999.00		0.00

Roundabout Geometry

Name	V - Approach road half-width (m)	E - Entry width (m)	I' - Effective flare length (m)	R - Entry radius (m)	D - Inscribed circle diameter (m)	PHI - Conflict (entry) angle (deg)	Exit Only
Camp Road (East)	3.00	7.00	5.00	25.00	30.00	11.00	
Camp Road (West)	2.53	7.00	6.75	10.00	30.00	33.00	
Main Gate	5.00	8.50	5.00	22.50	30.00	25.00	

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

Pedestrian Crossings

Name	Crossing Type
Camp Road (East)	None
Camp Road (West)	None

Main Gate	None
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Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Name	Enter slope and intercept directly	Entered slope	Entered intercept (PCU/hr)	Final Slope	Final Intercept (PCU/hr)
Camp Road (East)		(calculated)	(calculated)	0.609	1344.045
Camp Road (West)		(calculated)	(calculated)	0.523	1128.320
Main Gate		(calculated)	(calculated)	0.703	1884.289

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

Traffic Flows

Demand Set Data Options

Default Vehicle Mix	Vehicle Mix Varies Over Time	Vehicle Mix Varies Over Turn	Vehicle Mix Varies Over Entry	Vehicle Mix Source	PCU Factor for a HV (PCU)	Default Turning Proportions	Estimate from entry/exit counts	Turning Proportions Vary Over Time	Turning Proportions Vary Over Turn	Turning Proportions Vary Over Entry
		☐	☐	HV Percentages	2.00				☐	☐

Entry Flows

General Flows Data

Name	Profile Type	Use Turning Counts	Average Demand Flow (PCU/hr)	Flow Scaling Factor (%)
Camp Road (East)	ONE HOUR	☐	527.00	100.000
Camp Road (West)	ONE HOUR	☐	281.00	100.000
Main Gate	ONE HOUR	☐	635.00	100.000

Turning Proportions

Turning Counts or Proportions (PCU/hr) - (untitled) (for whole period)

		To		
		1	2	3
From	1	0.000	56.000	471.000
	2	47.000	0.000	234.000
	3	435.000	200.000	0.000

Turning Proportions (PCU) - (untitled) (for whole period)

		To		
		1	2	3
From	1	0.00	0.11	0.89
	2	0.17	0.00	0.83
	3	0.69	0.31	0.00

Vehicle Mix

Average PCU Per Vehicle - (untitled) (for whole period)

		To

		1	2	3
From	1	1.000	1.000	1.000
	2	1.000	1.000	1.000
	3	1.000	1.000	1.000

Heavy Vehicle Percentages - (untitled) (for whole period)

		To		
		1	2	3
From	1	0.000	0.000	0.000
	2	0.000	0.000	0.000
	3	0.000	0.000	0.000

Results

Results Summary for whole modelled period

Name	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)	Total Queueing Delay (PCU-min)	Average Queueing Delay (s)	Rate Of Queueing Delay (PCU-min/min)	Inclusive Total Queueing Delay (PCU-min)	Inclusive Average Queueing Delay (s)
Camp Road (East)	0.48	5.71	0.92	A	483.58	725.38	59.55	4.93	0.66	59.56	4.93
Camp Road (West)	0.36	6.57	0.56	A	257.85	386.78	36.79	5.71	0.41	36.79	5.71
Main Gate	0.38	3.13	0.61	A	582.69	874.03	41.74	2.87	0.46	41.74	2.87

Main Results for each time segment

Main results: (07:45-08:00)

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
Camp Road (East)	396.75	99.19	394.91	361.74	150.14	0.00	1252.68	997.82	0.317	0.00	0.46	4.189	A
Camp Road (West)	211.55	52.89	210.40	192.10	352.95	0.00	943.89	662.34	0.224	0.00	0.29	4.901	A
Main Gate	478.06	119.52	476.68	528.16	35.19	0.00	1859.56	1806.45	0.257	0.00	0.34	2.601	A

Main results: (08:00-08:15)

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
Camp Road (East)	473.76	118.44	473.13	432.98	179.67	0.00	1234.71	997.82	0.384	0.46	0.62	4.723	A
Camp Road (West)	252.61	63.15	252.23	229.95	422.86	0.00	907.36	662.34	0.278	0.29	0.38	5.491	A

Main Gate	570.85	142.71	570.46	632.90	42.19	0.00	1854.64	1806.45	0.308	0.34	0.44	2.803	A
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Main results: (08:15-08:30)

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
Camp Road (East)	580.24	145.06	579.07	530.13	220.00	0.00	1210.17	997.82	0.479	0.62	0.91	5.694	A
Camp Road (West)	309.39	77.35	308.69	281.53	517.53	0.00	857.89	662.34	0.361	0.38	0.56	6.547	A
Main Gate	699.15	174.79	698.50	774.59	51.63	0.00	1848.01	1806.45	0.378	0.44	0.61	3.130	A

Main results: (08:30-08:45)

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
Camp Road (East)	580.24	145.06	580.22	530.68	220.20	0.00	1210.05	997.82	0.480	0.91	0.92	5.715	A
Camp Road (West)	309.39	77.35	309.37	281.86	518.56	0.00	857.36	662.34	0.361	0.56	0.56	6.568	A
Main Gate	699.15	174.79	699.14	776.19	51.75	0.00	1847.93	1806.45	0.378	0.61	0.61	3.133	A

Main results: (08:45-09:00)

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
Camp Road (East)	473.76	118.44	474.91	433.86	180.00	0.00	1234.51	997.82	0.384	0.92	0.63	4.746	A
Camp Road (West)	252.61	63.15	253.30	230.46	424.45	0.00	906.53	662.34	0.279	0.56	0.39	5.518	A
Main Gate	570.85	142.71	571.49	635.38	42.37	0.00	1854.52	1806.45	0.308	0.61	0.45	2.808	A

Main results: (09:00-09:15)

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
Camp Road (East)	396.75	99.19	397.40	363.21	150.70	0.00	1252.34	997.82	0.317	0.63	0.47	4.213	A
Camp Road (West)	211.55	52.89	211.94	192.92	355.17	0.00	942.73	662.34	0.224	0.39	0.29	4.928	A
Main Gate	478.06	119.52	478.46	531.66	35.45	0.00	1859.38	1806.45	0.257	0.45	0.35	2.607	A

Queueing Delay Results for each time segment
Queueing Delay results: (07:45-08:00)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
Camp Road (East)	6.72	0.45	4.189	A	A

Camp Road (West)	4.19	0.28	4.901	A	A
Main Gate	5.08	0.34	2.601	A	A

Queueing Delay results: (08:00-08:15)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
Camp Road (East)	9.06	0.60	4.723	A	A
Camp Road (West)	5.62	0.37	5.491	A	A
Main Gate	6.55	0.44	2.803	A	A

Queueing Delay results: (08:15-08:30)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
Camp Road (East)	13.26	0.88	5.694	A	A
Camp Road (West)	8.14	0.54	6.547	A	A
Main Gate	8.93	0.60	3.130	A	A

Queueing Delay results: (08:30-08:45)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
Camp Road (East)	13.70	0.91	5.715	A	A
Camp Road (West)	8.40	0.56	6.568	A	A
Main Gate	9.09	0.61	3.133	A	A

Queueing Delay results: (08:45-09:00)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
Camp Road (East)	9.66	0.64	4.746	A	A
Camp Road (West)	5.99	0.40	5.518	A	A
Main Gate	6.80	0.45	2.808	A	A

Queueing Delay results: (09:00-09:15)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
Camp Road (East)	7.14	0.48	4.213	A	A
Camp Road (West)	4.46	0.30	4.928	A	A
Main Gate	5.28	0.35	2.607	A	A

(Default Analysis Set) - 2013 Arup Growth+Devt+Proposed, PM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

Name	Roundabout Capacity Model	Description	Include In Report	Use Specific Demand Set(s)	Specific Demand Set (s)	Locked	Network Flow Scaling Factor (%)	Network Capacity Scaling Factor (%)	Reason For Scaling Factors
(Default Analysis Set)	ARCADY		☐				100.000	100.000	

Demand Set Details

Name	Scenario Name	Time Period Name	Description	Traffic Profile Type	Model Start Time (HH:mm)	Model Finish Time (HH:mm)	Model Time Period Length (min)	Time Segment Length (min)	Results For Central Hour Only	Single Time Segment Only	Locked	Run Automatic
2013 Arup Growth+Devt+Proposed, FM	2013 Arup Growth+Devt+Proposed	FM		ONE HOUR	16:45	18:15	90	15				☐

Junction Network

Junctions

Name	Junction Type	Arm Order	Grade Separated	Large Roundabout	Do Geometric Delay	Junction Delay (s)	Junction LOS
(untitled)	Roundabout	1,2,3				3.59	A

Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

Name	Name	Description
Camp Road (East)	Camp Road (East)	
Camp Road (West)	Camp Road (West)	
Main Gate	Main Gate	

Capacity Options

Name	Minimum Capacity (PCU/hr)	Maximum Capacity (PCU/hr)	Assume Flat Start Profile	Initial Queue (PCU)
Camp Road (East)	0.00	99999.00		0.00
Camp Road (West)	0.00	99999.00		0.00
Main Gate	0.00	99999.00		0.00

Roundabout Geometry

Name	V - Approach road half-width (m)	E - Entry width (m)	I' - Effective flare length (m)	R - Entry radius (m)	D - Inscribed circle diameter (m)	PHI - Conflict (entry) angle (deg)	Exit Only
Camp Road (East)	3.00	7.00	5.00	25.00	30.00	11.00	
Camp Road (West)	2.53	7.00	6.75	10.00	30.00	33.00	
Main Gate	5.00	8.50	5.00	22.50	30.00	25.00	

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

Pedestrian Crossings

Name	Crossing Type
Camp Road (East)	None
Camp Road (West)	None

Main Gate	None
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Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Name	Enter slope and intercept directly	Entered slope	Entered intercept (PCU/hr)	Final Slope	Final Intercept (PCU/hr)
Camp Road (East)		(calculated)	(calculated)	0.609	1344.045
Camp Road (West)		(calculated)	(calculated)	0.523	1128.320
Main Gate		(calculated)	(calculated)	0.703	1884.289

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

Traffic Flows

Demand Set Data Options

Default Vehicle Mix	Vehicle Mix Varies Over Time	Vehicle Mix Varies Over Turn	Vehicle Mix Varies Over Entry	Vehicle Mix Source	PCU Factor for a HV (PCU)	Default Turning Proportions	Estimate from entry/exit counts	Turning Proportions Vary Over Time	Turning Proportions Vary Over Turn	Turning Proportions Vary Over Entry
		☐	☐	HV Percentages	2.00				☐	☐

Entry Flows

General Flows Data

Name	Profile Type	Use Turning Counts	Average Demand Flow (PCU/hr)	Flow Scaling Factor (%)
Camp Road (East)	ONE HOUR	☐	265.00	100.000
Camp Road (West)	ONE HOUR	☐	173.00	100.000
Main Gate	ONE HOUR	☐	643.00	100.000

Turning Proportions

Turning Counts or Proportions (PCU/hr) - (untitled) (for whole period)

		To		
		1	2	3
From	1	0.000	29.000	236.000
	2	62.000	0.000	111.000
	3	428.000	215.000	0.000

Turning Proportions (PCU) - (untitled) (for whole period)

		To		
		1	2	3
From	1	0.00	0.11	0.89
	2	0.36	0.00	0.64
	3	0.67	0.33	0.00

Vehicle Mix

Average PCU Per Vehicle - (untitled) (for whole period)

		To

		1	2	3
From	1	1.000	1.000	1.000
	2	1.000	1.000	1.000
	3	1.000	1.000	1.000

Heavy Vehicle Percentages - (untitled) (for whole period)

		To		
		1	2	3
From	1	0.000	0.000	0.000
	2	0.000	0.000	0.000
	3	0.000	0.000	0.000

Results

Results Summary for whole modelled period

Name	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)	Total Queueing Delay (PCU-min)	Average Queueing Delay (s)	Rate Of Queueing Delay (PCU-min/min)	Inclusive Total Queueing Delay (PCU-min)	Inclusive Average Queueing Delay (s)
Camp Road (East)	0.24	3.96	0.32	A	243.17	364.75	22.46	3.69	0.25	22.46	3.69
Camp Road (West)	0.19	4.49	0.24	A	158.75	238.12	16.75	4.22	0.19	16.75	4.22
Main Gate	0.39	3.19	0.63	A	590.03	885.04	42.87	2.91	0.48	42.87	2.91

Main Results for each time segment

Main results: (16:45-17:00)

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
Camp Road (East)	199.51	49.88	198.75	367.75	161.39	0.00	1245.83	994.74	0.160	0.00	0.19	3.437	A
Camp Road (West)	130.24	32.56	129.67	183.14	177.00	0.00	1035.83	665.42	0.126	0.00	0.14	3.970	A
Main Gate	484.08	121.02	482.67	260.20	46.47	0.00	1851.63	1716.72	0.261	0.00	0.35	2.627	A

Main results: (17:00-17:15)

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
Camp Road (East)	238.23	59.56	238.03	440.18	193.14	0.00	1226.51	994.74	0.194	0.19	0.24	3.641	A
Camp Road (West)	155.52	38.88	155.38	219.19	211.98	0.00	1017.55	665.42	0.153	0.14	0.18	4.175	A

Main Gate	578.04	144.51	577.64	311.67	55.68	0.00	1845.16	1716.72	0.313	0.35	0.45	2.840	A
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Main results: (17:15-17:30)

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
Camp Road (East)	291.77	72.94	291.45	538.97	236.49	0.00	1200.13	994.74	0.243	0.24	0.32	3.961	A
Camp Road (West)	190.48	47.62	190.25	268.39	259.56	0.00	992.69	665.42	0.192	0.18	0.24	4.485	A
Main Gate	707.96	176.99	707.28	381.63	68.18	0.00	1836.38	1716.72	0.386	0.45	0.62	3.187	A

Main results: (17:30-17:45)

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
Camp Road (East)	291.77	72.94	291.77	539.49	236.72	0.00	1200.00	994.74	0.243	0.32	0.32	3.963	A
Camp Road (West)	190.48	47.62	190.47	268.65	259.84	0.00	992.55	665.42	0.192	0.24	0.24	4.488	A
Main Gate	707.96	176.99	707.95	382.05	68.26	0.00	1836.32	1716.72	0.386	0.62	0.63	3.189	A

Main results: (17:45-18:00)

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
Camp Road (East)	238.23	59.56	238.54	441.02	193.50	0.00	1226.29	994.74	0.194	0.32	0.24	3.644	A
Camp Road (West)	155.52	38.88	155.74	219.61	212.44	0.00	1017.32	665.42	0.153	0.24	0.18	4.180	A
Main Gate	578.04	144.51	578.71	312.37	55.82	0.00	1845.07	1716.72	0.313	0.63	0.46	2.843	A

Main results: (18:00-18:15)

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
Camp Road (East)	199.51	49.88	199.71	369.22	162.00	0.00	1245.46	994.74	0.160	0.24	0.19	3.442	A
Camp Road (West)	130.24	32.56	130.39	183.86	177.85	0.00	1035.39	665.42	0.126	0.18	0.14	3.979	A
Main Gate	484.08	121.02	484.50	261.51	46.73	0.00	1851.45	1716.72	0.261	0.46	0.36	2.635	A

Queueing Delay Results for each time segment
Queueing Delay results: (16:45-17:00)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
Camp Road (East)	2.79	0.19	3.437	A	A

Camp Road (West)	2.10	0.14	3.970	A	A
Main Gate	5.20	0.35	2.627	A	A

Queueing Delay results: (17:00-17:15)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
Camp Road (East)	3.55	0.24	3.641	A	A
Camp Road (West)	2.65	0.18	4.175	A	A
Main Gate	6.72	0.45	2.840	A	A

Queueing Delay results: (17:15-17:30)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
Camp Road (East)	4.71	0.31	3.961	A	A
Camp Road (West)	3.48	0.23	4.485	A	A
Main Gate	9.20	0.61	3.187	A	A

Queueing Delay results: (17:30-17:45)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
Camp Road (East)	4.80	0.32	3.963	A	A
Camp Road (West)	3.55	0.24	4.488	A	A
Main Gate	9.37	0.62	3.189	A	A

Queueing Delay results: (17:45-18:00)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
Camp Road (East)	3.69	0.25	3.644	A	A
Camp Road (West)	2.77	0.18	4.180	A	A
Main Gate	6.98	0.47	2.843	A	A

Queueing Delay results: (18:00-18:15)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
Camp Road (East)	2.91	0.19	3.442	A	A
Camp Road (West)	2.20	0.15	3.979	A	A
Main Gate	5.40	0.36	2.635	A	A

Junctions 8
ARCADY 8 - Roundabout Module
Version: 8.0.1.305 [25 May 2012] © Copyright TRL Limited, 2012
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Filename: (new file)
Path:
Report generation date: 28/11/2012 10:33:27

- » (Default Analysis Set) - 2013 Recalc Growth No Devt, AM
- » (Default Analysis Set) - 2013 Recalc Growth no Devt, PM
- » (Default Analysis Set) - 2013 Recalc Growth+Devt+Consented, AM
- » (Default Analysis Set) - 2013 Recalc Growth+Devt+Consented, PM
- » (Default Analysis Set) - 2013 Recalc Growth+Devt+Proposed, AM
- » (Default Analysis Set) - 2013 Recalc Growth+Devt+Proposed, PM

File summary

File Description

Title	(untitled)
Location	
Site Number	
Date	26/11/2012
Version	
Status	(new file)
Identifier	
Client	
Jobnumber	
Enumerator	PBA\asaunders
Description	

Analysis Options

Vehicle Length (m)	Do Queue Variations	Calculate Residual Capacity	Residual Capacity Criteria Type	RFC Threshold	Average Delay Threshold (s)	Queue Threshold (PCU)
5.75			N/A	0.85	36.00	20.00

Units

Distance Units	Speed Units	Traffic Units Input	Traffic Units Results	Flow Units	Average Delay Units	Total Delay Units	Rate Of Delay Units
m	mph	PCU	PCU	perHour	s	-Min	perMin

(Default Analysis Set) - 2013 Recalc Growth No Devt, AM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

Name	Roundabout Capacity Model	Description	Include In Report	Use Specific Demand Set(s)	Specific Demand Set (s)	Locked	Network Flow Scaling Factor (%)	Network Capacity Scaling Factor (%)	Reason For Scaling Factors
(Default Analysis Set)	ARCADY		☐				100.000	100.000	

Demand Set Details

Name	Scenario Name	Time Period Name	Description	Traffic Profile Type	Model Start Time (HH:mm)	Model Finish Time (HH:mm)	Model Time Period Length (min)	Time Segment Length (min)	Results For Central Hour Only	Single Time Segment Only	Locked	Run Automatically	Use Relationship	Relationship
2013 Recalc Growth No Devt, AM	2013 Recalc Growth No Devt	AM		ONE HOUR	07:45	09:15	90	15				☐		

Junction Network

Junctions

Name	Junction Type	Arm Order	Grade Separated	Large Roundabout	Do Geometric Delay	Junction Delay (s)	Junction LOS
(untitled)	Roundabout	1,2,3				3.03	A

Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

Name	Name	Description
Camp Road (East)	Camp Road (East)	
Camp Road (West)	Camp Road (West)	
Main Gate	Main Gate	

Capacity Options

Name	Minimum Capacity (PCU/hr)	Maximum Capacity (PCU/hr)	Assume Flat Start Profile	Initial Queue (PCU)
Camp Road (East)	0.00	99999.00		0.00
Camp Road (West)	0.00	99999.00		0.00
Main Gate	0.00	99999.00		0.00

Roundabout Geometry

Name	V - Approach road half-width (m)	E - Entry width (m)	I' - Effective flare length (m)	R - Entry radius (m)	D - Inscribed circle diameter (m)	PHI - Conflict (entry) angle (deg)	Exit Only
Camp Road (East)	3.00	7.00	5.00	25.00	30.00	11.00	
Camp Road (West)	2.53	7.00	6.75	10.00	30.00	33.00	
Main Gate	5.00	8.50	5.00	22.50	30.00	25.00	

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

Pedestrian Crossings

Name	Crossing Type
------	---------------

Camp Road (East)	None
Camp Road (West)	None
Main Gate	None

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Name	Enter slope and intercept directly	Entered slope	Entered intercept (PCU/hr)	Final Slope	Final Intercept (PCU/hr)
Camp Road (East)		(calculated)	(calculated)	0.609	1344.045
Camp Road (West)		(calculated)	(calculated)	0.523	1128.320
Main Gate		(calculated)	(calculated)	0.703	1884.289

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

Traffic Flows

Demand Set Data Options

Default Vehicle Mix	Vehicle Mix Varies Over Time	Vehicle Mix Varies Over Turn	Vehicle Mix Varies Over Entry	Vehicle Mix Source	PCU Factor for a HV (PCU)	Default Turning Proportions	Estimate from entry/exit counts	Turning Proportions Vary Over Time	Turning Proportions Vary Over Turn	Turning Proportions Vary Over Entry
		<input type="checkbox"/>	<input type="checkbox"/>	HV Percentages	2.00				<input type="checkbox"/>	<input type="checkbox"/>

Entry Flows

General Flows Data

Name	Profile Type	Use Turning Counts	Average Demand Flow (PCU/hr)	Flow Scaling Factor (%)
Camp Road (East)	ONE HOUR	<input type="checkbox"/>	137.00	100.000
Camp Road (West)	ONE HOUR	<input type="checkbox"/>	95.00	100.000
Main Gate	ONE HOUR	<input type="checkbox"/>	67.00	100.000

Turning Proportions

Turning Counts or Proportions (PCU/hr) - (untitled) (for whole period)

		To		
		1	2	3
From	1	0.000	53.000	84.000
	2	44.000	0.000	51.000
	3	38.000	29.000	0.000

Turning Proportions (PCU) - (untitled) (for whole period)

		To		
		1	2	3
From	1	0.00	0.39	0.61
	2	0.46	0.00	0.54
	3	0.57	0.43	0.00

Vehicle Mix

Average PCU Per Vehicle - (untitled) (for whole period)

		To		
		1	2	3
From	1	1.000	1.000	1.000
	2	1.000	1.000	1.000
	3	1.000	1.000	1.000

Heavy Vehicle Percentages - (untitled) (for whole period)

		To		
		1	2	3
From	1	0.000	0.000	0.000
	2	0.000	0.000	0.000
	3	0.000	0.000	0.000

Results

Results Summary for whole modelled period

Name	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)	Total Queueing Delay (PCU-min)	Average Queueing Delay (s)	Rate Of Queueing Delay (PCU-min/min)	Inclusive Total Queueing Delay (PCU-min)	Inclusive Average Queueing Delay (s)
Camp Road (East)	0.11	3.07	0.13	A	125.71	188.57	9.40	2.99	0.10	9.40	2.99
Camp Road (West)	0.10	3.69	0.11	A	87.17	130.76	7.83	3.59	0.09	7.83	3.59
Main Gate	0.04	2.03	0.04	A	61.48	92.22	3.08	2.00	0.03	3.08	2.00

Main Results for each time segment
Main results: (07:45-08:00)

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
Camp Road (East)	103.14	25.79	102.81	61.54	21.78	0.00	1330.79	919.21	0.078	0.00	0.08	2.931	A
Camp Road (West)	71.52	17.88	71.24	61.56	63.03	0.00	1095.38	833.82	0.065	0.00	0.07	3.515	A
Main Gate	50.44	12.61	50.33	101.28	33.00	0.00	1861.10	1612.92	0.027	0.00	0.03	1.987	A

Main results: (08:00-08:15)

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
Camp Road (East)	123.16	30.79	123.09	73.68	26.06	0.00	1328.19	919.21	0.093	0.08	0.10	2.986	A
Camp													

Road (West)	85.40	21.35	85.34	73.68	75.47	0.00	1088.88	833.82	0.078	0.07	0.08	3.586	A
Main Gate	60.23	15.06	60.21	121.29	39.53	0.00	1856.51	1612.92	0.032	0.03	0.03	2.003	A

Main results: (08:15-08:30)

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
Camp Road (East)	150.84	37.71	150.74	90.22	31.92	0.00	1324.62	919.21	0.114	0.10	0.13	3.066	A
Camp Road (West)	104.60	26.15	104.51	90.23	92.42	0.00	1080.03	833.82	0.097	0.08	0.11	3.689	A
Main Gate	73.77	18.44	73.74	148.53	48.40	0.00	1850.28	1612.92	0.040	0.03	0.04	2.026	A

Main results: (08:30-08:45)

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
Camp Road (East)	150.84	37.71	150.84	90.28	31.93	0.00	1324.62	919.21	0.114	0.13	0.13	3.066	A
Camp Road (West)	104.60	26.15	104.60	90.28	92.49	0.00	1079.99	833.82	0.097	0.11	0.11	3.689	A
Main Gate	73.77	18.44	73.77	148.64	48.44	0.00	1850.25	1612.92	0.040	0.04	0.04	2.026	A

Main results: (08:45-09:00)

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
Camp Road (East)	123.16	30.79	123.26	73.77	26.08	0.00	1328.17	919.21	0.093	0.13	0.10	2.989	A
Camp Road (West)	85.40	21.35	85.49	73.77	75.58	0.00	1088.83	833.82	0.078	0.11	0.09	3.587	A
Main Gate	60.23	15.06	60.26	121.47	39.59	0.00	1856.47	1612.92	0.032	0.04	0.03	2.005	A

Main results: (09:00-09:15)

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
Camp Road (East)	103.14	25.79	103.21	61.78	21.84	0.00	1330.75	919.21	0.078	0.10	0.08	2.932	A
Camp Road (West)	71.52	17.88	71.58	61.77	63.28	0.00	1095.25	833.82	0.065	0.09	0.07	3.518	A
Main Gate	50.44	12.61	50.46	101.71	33.15	0.00	1860.99	1612.92	0.027	0.03	0.03	1.988	A

Queueing Delay Results for each time segment
Queueing Delay results: (07:45-08:00)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
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Camp Road (East)	1.24	0.08	2.931	A	A
Camp Road (West)	1.02	0.07	3.515	A	A
Main Gate	0.41	0.03	1.987	A	A

Queueing Delay results: (08:00-08:15)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
Camp Road (East)	1.51	0.10	2.986	A	A
Camp Road (West)	1.26	0.08	3.586	A	A
Main Gate	0.50	0.03	2.003	A	A

Queueing Delay results: (08:15-08:30)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
Camp Road (East)	1.90	0.13	3.066	A	A
Camp Road (West)	1.58	0.11	3.689	A	A
Main Gate	0.62	0.04	2.026	A	A

Queueing Delay results: (08:30-08:45)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
Camp Road (East)	1.92	0.13	3.066	A	A
Camp Road (West)	1.60	0.11	3.689	A	A
Main Gate	0.62	0.04	2.026	A	A

Queueing Delay results: (08:45-09:00)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
Camp Road (East)	1.56	0.10	2.989	A	A
Camp Road (West)	1.30	0.09	3.587	A	A
Main Gate	0.51	0.03	2.005	A	A

Queueing Delay results: (09:00-09:15)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
Camp Road (East)	1.28	0.09	2.932	A	A
Camp Road (West)	1.07	0.07	3.518	A	A
Main Gate	0.42	0.03	1.988	A	A

(Default Analysis Set) - 2013 Recalc Growth no Devt, PM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

Name	Roundabout Capacity Model	Description	Include In Report	Use Specific Demand Set(s)	Specific Demand Set (s)	Locked	Network Flow Scaling Factor (%)	Network Capacity Scaling Factor (%)	Reason For Scaling Factors
(Default Analysis Set)	ARCADY		☐				100.000	100.000	

Demand Set Details

Name	Scenario Name	Time Period Name	Description	Traffic Profile Type	Model Start Time (HH:mm)	Model Finish Time (HH:mm)	Model Time Period Length (min)	Time Segment Length (min)	Results For Central Hour Only	Single Time Segment Only	Locked	Run Automatically	Use Relationship	Relationship
2013 Recalc Growth no Devt, FM	2013 Recalc Growth no Devt	FM		ONE HOUR	16:45	18:15	90	15				☐		

Junction Network

Junctions

Name	Junction Type	Arm Order	Grade Separated	Large Roundabout	Do Geometric Delay	Junction Delay (s)	Junction LOS
(untitled)	Roundabout	1,2,3				2.75	A

Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

Name	Name	Description
Camp Road (East)	Camp Road (East)	
Camp Road (West)	Camp Road (West)	
Main Gate	Main Gate	

Capacity Options

Name	Minimum Capacity (PCU/hr)	Maximum Capacity (PCU/hr)	Assume Flat Start Profile	Initial Queue (PCU)
Camp Road (East)	0.00	99999.00		0.00
Camp Road (West)	0.00	99999.00		0.00
Main Gate	0.00	99999.00		0.00

Roundabout Geometry

Name	V - Approach road half-width (m)	E - Entry width (m)	I' - Effective flare length (m)	R - Entry radius (m)	D - Inscribed circle diameter (m)	PHI - Conflict (entry) angle (deg)	Exit Only
Camp Road (East)	3.00	7.00	5.00	25.00	30.00	11.00	
Camp Road (West)	2.53	7.00	6.75	10.00	30.00	33.00	
Main Gate	5.00	8.50	5.00	22.50	30.00	25.00	

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

Pedestrian Crossings

Name	Crossing Type
Camp Road (East)	None
Camp Road (West)	None
Main Gate	None

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Name	Enter slope and intercept directly	Entered slope	Entered intercept (PCU/hr)	Final Slope	Final Intercept (PCU/hr)
Camp Road (East)		(calculated)	(calculated)	0.609	1344.045
Camp Road (West)		(calculated)	(calculated)	0.523	1128.320
Main Gate		(calculated)	(calculated)	0.703	1884.289

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

Traffic Flows

Demand Set Data Options

Default Vehicle Mix	Vehicle Mix Varies Over Time	Vehicle Mix Varies Over Turn	Vehicle Mix Varies Over Entry	Vehicle Mix Source	PCU Factor for a HV (PCU)	Default Turning Proportions	Estimate from entry/exit counts	Turning Proportions Vary Over Time	Turning Proportions Vary Over Turn	Turning Proportions Vary Over Entry
		☐	☐	HV Percentages	2.00				☐	☐

Entry Flows

General Flows Data

Name	Profile Type	Use Turning Counts	Average Demand Flow (PCU/hr)	Flow Scaling Factor (%)
Camp Road (East)	ONE HOUR	☐	85.00	100.000
Camp Road (West)	ONE HOUR	☐	92.00	100.000
Main Gate	ONE HOUR	☐	182.00	100.000

Turning Proportions

Turning Counts or Proportions (PCU/hr) - (untitled) (for whole period)

		To		
		1	2	3
From	1	0.000	28.000	57.000
	2	58.000	0.000	34.000
	3	111.000	71.000	0.000

Turning Proportions (PCU) - (untitled) (for whole period)

		To		
		1	2	3
From	1	0.00	0.33	0.67
	2	0.63	0.00	0.37
	3	0.61	0.39	0.00

Vehicle Mix

Average PCU Per Vehicle - (untitled) (for whole period)

		To		
		1	2	3
From	1	1.000	1.000	1.000
	2	1.000	1.000	1.000
	3	1.000	1.000	1.000

Heavy Vehicle Percentages - (untitled) (for whole period)

		To		
		1	2	3
From	1	0.000	0.000	0.000
	2	0.000	0.000	0.000
	3	0.000	0.000	0.000

Results

Results Summary for whole modelled period

Name	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)	Total Queueing Delay (PCU-min)	Average Queueing Delay (s)	Rate Of Queueing Delay (PCU-min/min)	Inclusive Total Queueing Delay (PCU-min)	Inclusive Average Queueing Delay (s)
Camp Road (East)	0.07	2.99	0.08	A	78.00	117.00	5.72	2.93	0.06	5.72	2.93
Camp Road (West)	0.09	3.62	0.10	A	84.42	126.63	7.46	3.54	0.08	7.46	3.54
Main Gate	0.11	2.20	0.12	A	167.01	250.51	8.95	2.14	0.10	8.95	2.14

Main Results for each time segment

Main results: (16:45-17:00)

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
Camp Road (East)	63.99	16.00	63.79	126.87	53.33	0.00	1311.59	979.29	0.049	0.00	0.05	2.884	A
Camp Road (West)	69.26	17.32	69.00	74.34	42.78	0.00	1105.97	785.17	0.063	0.00	0.07	3.471	A
Main Gate	137.02	34.25	136.70	68.27	43.50	0.00	1853.72	1536.47	0.074	0.00	0.08	2.096	A

Main results: (17:00-17:15)

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
Camp													

Road (East)	76.41	19.10	76.37	151.85	63.80	0.00	1305.22	979.29	0.059	0.05	0.06	2.929	A
Camp Road (West)	82.71	20.68	82.65	88.96	51.21	0.00	1101.56	785.17	0.075	0.07	0.08	3.532	A
Main Gate	163.61	40.90	163.55	81.76	52.10	0.00	1847.68	1536.47	0.089	0.08	0.10	2.137	A

Main results: (17:15-17:30)

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
Camp Road (East)	93.59	23.40	93.52	185.96	78.13	0.00	1296.50	979.29	0.072	0.06	0.08	2.992	A
Camp Road (West)	101.29	25.32	101.21	108.94	62.72	0.00	1095.55	785.17	0.092	0.08	0.10	3.619	A
Main Gate	200.39	50.10	200.29	100.12	63.81	0.00	1839.45	1536.47	0.109	0.10	0.12	2.196	A

Main results: (17:30-17:45)

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
Camp Road (East)	93.59	23.40	93.59	186.07	78.17	0.00	1296.48	979.29	0.072	0.08	0.08	2.992	A
Camp Road (West)	101.29	25.32	101.29	109.00	62.76	0.00	1095.53	785.17	0.092	0.10	0.10	3.619	A
Main Gate	200.39	50.10	200.39	100.19	63.86	0.00	1839.42	1536.47	0.109	0.12	0.12	2.196	A

Main results: (17:45-18:00)

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
Camp Road (East)	76.41	19.10	76.47	152.04	63.87	0.00	1305.18	979.29	0.059	0.08	0.06	2.929	A
Camp Road (West)	82.71	20.68	82.79	89.06	51.28	0.00	1101.52	785.17	0.075	0.10	0.08	3.535	A
Main Gate	163.61	40.90	163.71	81.88	52.19	0.00	1847.62	1536.47	0.089	0.12	0.10	2.137	A

Main results: (18:00-18:15)

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
Camp Road (East)	63.99	16.00	64.04	127.31	53.48	0.00	1311.50	979.29	0.049	0.06	0.05	2.887	A
Camp Road (West)	69.26	17.32	69.32	74.57	42.94	0.00	1105.88	785.17	0.063	0.08	0.07	3.472	A
Main Gate	137.02	34.25	137.09	68.56	43.70	0.00	1853.58	1536.47	0.074	0.10	0.08	2.097	A

Queueing Delay Results for each time segment
Queueing Delay results: (16:45-17:00)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
Camp Road (East)	0.75	0.05	2.884	A	A
Camp Road (West)	0.98	0.07	3.471	A	A
Main Gate	1.18	0.08	2.096	A	A

Queueing Delay results: (17:00-17:15)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
Camp Road (East)	0.92	0.06	2.929	A	A
Camp Road (West)	1.20	0.08	3.532	A	A
Main Gate	1.44	0.10	2.137	A	A

Queueing Delay results: (17:15-17:30)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
Camp Road (East)	1.15	0.08	2.992	A	A
Camp Road (West)	1.50	0.10	3.619	A	A
Main Gate	1.81	0.12	2.196	A	A

Queueing Delay results: (17:30-17:45)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
Camp Road (East)	1.16	0.08	2.992	A	A
Camp Road (West)	1.52	0.10	3.619	A	A
Main Gate	1.83	0.12	2.196	A	A

Queueing Delay results: (17:45-18:00)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
Camp Road (East)	0.95	0.06	2.929	A	A
Camp Road (West)	1.24	0.08	3.535	A	A
Main Gate	1.47	0.10	2.137	A	A

Queueing Delay results: (18:00-18:15)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
Camp Road (East)	0.78	0.05	2.887	A	A
Camp Road (West)	1.02	0.07	3.472	A	A
Main Gate	1.21	0.08	2.097	A	A

(Default Analysis Set) - 2013 Recalc Growth+Devt+Consented, AM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

Name	Roundabout Capacity Model	Description	Include In Report	Use Specific Demand Set(s)	Specific Demand Set (s)	Locked	Network Flow Scaling Factor (%)	Network Capacity Scaling Factor (%)	Reason For Scaling Factors
(Default Analysis Set)	ARCADY		☐				100.000	100.000	

Demand Set Details

Name	Scenario Name	Time Period Name	Description	Traffic Profile Type	Model Start Time (HH:mm)	Model Finish Time (HH:mm)	Model Time Period Length (min)	Time Segment Length (min)	Results For Central Hour Only	Single Time Segment Only	Locked	Ru Automa
2013 Recalc Growth+Devt+Consented, AM	2013 Recalc Growth+Devt+Consented	AM		ONE HOUR	07:45	09:15	90	15				☐

Junction Network

Junctions

Name	Junction Type	Arm Order	Grade Separated	Large Roundabout	Do Geometric Delay	Junction Delay (s)	Junction LOS
(untitled)	Roundabout	1,2,3				4.35	A

Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

Name	Name	Description
Camp Road (East)	Camp Road (East)	
Camp Road (West)	Camp Road (West)	
Main Gate	Main Gate	

Capacity Options

Name	Minimum Capacity (PCU/hr)	Maximum Capacity (PCU/hr)	Assume Flat Start Profile	Initial Queue (PCU)
Camp Road (East)	0.00	99999.00		0.00
Camp Road (West)	0.00	99999.00		0.00
Main Gate	0.00	99999.00		0.00

Roundabout Geometry

Name	V - Approach road half-width (m)	E - Entry width (m)	I' - Effective flare length (m)	R - Entry radius (m)	D - Inscribed circle diameter (m)	PHI - Conflict (entry) angle (deg)	Exit Only
Camp Road (East)	3.00	7.00	5.00	25.00	30.00	11.00	
Camp Road (West)	2.53	7.00	6.75	10.00	30.00	33.00	
Main Gate	5.00	8.50	5.00	22.50	30.00	25.00	

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

Pedestrian Crossings

Name	Crossing Type
Camp Road (East)	None
Camp Road (West)	None
Main Gate	None

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Name	Enter slope and intercept directly	Entered slope	Entered intercept (PCU/hr)	Final Slope	Final Intercept (PCU/hr)
Camp Road (East)		(calculated)	(calculated)	0.609	1344.045
Camp Road (West)		(calculated)	(calculated)	0.523	1128.320
Main Gate		(calculated)	(calculated)	0.703	1884.289

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

Traffic Flows

Demand Set Data Options

Default Vehicle Mix	Vehicle Mix Varies Over Time	Vehicle Mix Varies Over Turn	Vehicle Mix Varies Over Entry	Vehicle Mix Source	PCU Factor for a HV (PCU)	Default Turning Proportions	Estimate from entry/exit counts	Turning Proportions Vary Over Time	Turning Proportions Vary Over Turn	Turning Proportions Vary Over Entry
		☐	☐	HV Percentages	2.00				☐	☐

Entry Flows

General Flows Data

Name	Profile Type	Use Turning Counts	Average Demand Flow (PCU/hr)	Flow Scaling Factor (%)
Camp Road (East)	ONE HOUR	☐	477.00	100.000
Camp Road (West)	ONE HOUR	☐	255.00	100.000
Main Gate	ONE HOUR	☐	578.00	100.000

Turning Proportions

Turning Counts or Proportions (PCU/hr) - (untitled) (for whole period)

		To		
		1	2	3
From	1	0.000	53.000	424.000
	2	44.000	0.000	211.000
	3	396.000	182.000	0.000

Turning Proportions (PCU) - (untitled) (for whole period)

		To		
		1	2	3
From	1	0.00	0.11	0.89
	2	0.17	0.00	0.83
	3	0.69	0.31	0.00

Vehicle Mix

Average PCU Per Vehicle - (untitled) (for whole period)

		To		
		1	2	3
From	1	1.000	1.000	1.000
	2	1.000	1.000	1.000
	3	1.000	1.000	1.000

Heavy Vehicle Percentages - (untitled) (for whole period)

		To		
		1	2	3
From	1	0.000	0.000	0.000
	2	0.000	0.000	0.000
	3	0.000	0.000	0.000

Results

Results Summary for whole modelled period

Name	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)	Total Queueing Delay (PCU-min)	Average Queueing Delay (s)	Rate Of Queueing Delay (PCU-min/min)	Inclusive Total Queueing Delay (PCU-min)	Inclusive Average Queueing Delay (s)
Camp Road (East)	0.43	5.16	0.75	A	437.70	656.56	49.85	4.56	0.55	49.86	4.56
Camp Road (West)	0.32	5.96	0.46	A	233.99	350.99	30.97	5.29	0.34	30.97	5.29
Main Gate	0.34	2.96	0.52	A	530.38	795.57	36.35	2.74	0.40	36.35	2.74

Main Results for each time segment

Main results: (07:45-08:00)

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
Camp Road (East)	359.11	89.78	357.53	330.25	136.64	0.00	1260.90	998.43	0.285	0.00	0.40	3.979	A
Camp Road (West)	191.98	47.99	190.99	176.36	317.80	0.00	962.26	664.58	0.200	0.00	0.25	4.662	A
Main Gate	435.15	108.79	433.93	475.83	32.95	0.00	1861.13	1803.71	0.234	0.00	0.30	2.520	A

Main results: (08:00-08:15)

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
Camp													

Road (East)	428.81	107.20	428.31	395.27	163.51	0.00	1244.54	998.43	0.345	0.40	0.52	4.407	A
Camp Road (West)	229.24	57.31	228.93	211.10	380.72	0.00	929.38	664.58	0.247	0.25	0.33	5.137	A
Main Gate	519.61	129.90	519.28	570.15	39.50	0.00	1856.53	1803.71	0.280	0.30	0.39	2.692	A

Main results: (08:15-08:30)

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
Camp Road (East)	525.19	131.30	524.29	483.99	200.22	0.00	1222.21	998.43	0.430	0.52	0.75	5.152	A
Camp Road (West)	280.76	70.19	280.22	258.47	466.04	0.00	884.80	664.58	0.317	0.33	0.46	5.949	A
Main Gate	636.39	159.10	635.85	697.90	48.35	0.00	1850.31	1803.71	0.344	0.39	0.52	2.962	A

Main results: (08:30-08:45)

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
Camp Road (East)	525.19	131.30	525.17	484.44	200.38	0.00	1222.11	998.43	0.430	0.75	0.75	5.165	A
Camp Road (West)	280.76	70.19	280.75	258.74	466.82	0.00	884.39	664.58	0.317	0.46	0.46	5.963	A
Main Gate	636.39	159.10	636.38	699.13	48.44	0.00	1850.25	1803.71	0.344	0.52	0.52	2.965	A

Main results: (08:45-09:00)

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
Camp Road (East)	428.81	107.20	429.69	396.01	163.78	0.00	1244.38	998.43	0.345	0.75	0.53	4.423	A
Camp Road (West)	229.24	57.31	229.77	211.53	381.95	0.00	928.74	664.58	0.247	0.46	0.33	5.153	A
Main Gate	519.61	129.90	520.14	572.07	39.65	0.00	1856.43	1803.71	0.280	0.52	0.39	2.694	A

Main results: (09:00-09:15)

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
Camp Road (East)	359.11	89.78	359.63	331.54	137.12	0.00	1260.60	998.43	0.285	0.53	0.40	3.997	A
Camp Road (West)	191.98	47.99	192.29	177.08	319.67	0.00	961.28	664.58	0.200	0.33	0.25	4.684	A
Main Gate	435.15	108.79	435.48	478.78	33.18	0.00	1860.97	1803.71	0.234	0.39	0.31	2.525	A

Queueing Delay Results for each time segment
Queueing Delay results: (07:45-08:00)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
Camp Road (East)	5.79	0.39	3.979	A	A
Camp Road (West)	3.62	0.24	4.662	A	A
Main Gate	4.49	0.30	2.520	A	A

Queueing Delay results: (08:00-08:15)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
Camp Road (East)	7.68	0.51	4.407	A	A
Camp Road (West)	4.78	0.32	5.137	A	A
Main Gate	5.73	0.38	2.692	A	A

Queueing Delay results: (08:15-08:30)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
Camp Road (East)	10.91	0.73	5.152	A	A
Camp Road (West)	6.74	0.45	5.949	A	A
Main Gate	7.71	0.51	2.962	A	A

Queueing Delay results: (08:30-08:45)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
Camp Road (East)	11.23	0.75	5.165	A	A
Camp Road (West)	6.93	0.46	5.963	A	A
Main Gate	7.84	0.52	2.965	A	A

Queueing Delay results: (08:45-09:00)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
Camp Road (East)	8.12	0.54	4.423	A	A
Camp Road (West)	5.06	0.34	5.153	A	A
Main Gate	5.94	0.40	2.694	A	A

Queueing Delay results: (09:00-09:15)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
Camp Road (East)	6.12	0.41	3.997	A	A
Camp Road (West)	3.84	0.26	4.684	A	A
Main Gate	4.65	0.31	2.525	A	A

(Default Analysis Set) - 2013 Recalc Growth+Devt+Consented, PM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

Name	Roundabout Capacity Model	Description	Include In Report	Use Specific Demand Set(s)	Specific Demand Set (s)	Locked	Network Flow Scaling Factor (%)	Network Capacity Scaling Factor (%)	Reason For Scaling Factors
(Default Analysis Set)	ARCADY		☐				100.000	100.000	

Demand Set Details

Name	Scenario Name	Time Period Name	Description	Traffic Profile Type	Model Start Time (HH:mm)	Model Finish Time (HH:mm)	Model Time Period Length (min)	Time Segment Length (min)	Results For Central Hour Only	Single Time Segment Only	Locked	Ru Automa
2013 Recalc Growth+Devt+Consented, FM	2013 Recalc Growth+Devt+Consented	FM		ONE HOUR	16:45	18:15	90	15				☐

Junction Network

Junctions

Name	Junction Type	Arm Order	Grade Separated	Large Roundabout	Do Geometric Delay	Junction Delay (s)	Junction LOS
(untitled)	Roundabout	1,2,3				3.53	A

Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

Name	Name	Description
Camp Road (East)	Camp Road (East)	
Camp Road (West)	Camp Road (West)	
Main Gate	Main Gate	

Capacity Options

Name	Minimum Capacity (PCU/hr)	Maximum Capacity (PCU/hr)	Assume Flat Start Profile	Initial Queue (PCU)
Camp Road (East)	0.00	99999.00		0.00
Camp Road (West)	0.00	99999.00		0.00
Main Gate	0.00	99999.00		0.00

Roundabout Geometry

Name	V - Approach road half-width (m)	E - Entry width (m)	I' - Effective flare length (m)	R - Entry radius (m)	D - Inscribed circle diameter (m)	PHI - Conflict (entry) angle (deg)	Exit Only
Camp Road (East)	3.00	7.00	5.00	25.00	30.00	11.00	
Camp Road (West)	2.53	7.00	6.75	10.00	30.00	33.00	
Main Gate	5.00	8.50	5.00	22.50	30.00	25.00	

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

Pedestrian Crossings

Name	Crossing Type
Camp Road (East)	None
Camp Road (West)	None
Main Gate	None

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Name	Enter slope and intercept directly	Entered slope	Entered intercept (PCU/hr)	Final Slope	Final Intercept (PCU/hr)
Camp Road (East)		(calculated)	(calculated)	0.609	1344.045
Camp Road (West)		(calculated)	(calculated)	0.523	1128.320
Main Gate		(calculated)	(calculated)	0.703	1884.289

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

Traffic Flows

Demand Set Data Options

Default Vehicle Mix	Vehicle Mix Varies Over Time	Vehicle Mix Varies Over Turn	Vehicle Mix Varies Over Entry	Vehicle Mix Source	PCU Factor for a HV (PCU)	Default Turning Proportions	Estimate from entry/exit counts	Turning Proportions Vary Over Time	Turning Proportions Vary Over Turn	Turning Proportions Vary Over Entry
		☐	☐	HV Percentages	2.00				☐	☐

Entry Flows

General Flows Data

Name	Profile Type	Use Turning Counts	Average Demand Flow (PCU/hr)	Flow Scaling Factor (%)
Camp Road (East)	ONE HOUR	☐	261.00	100.000
Camp Road (West)	ONE HOUR	☐	167.00	100.000
Main Gate	ONE HOUR	☐	624.00	100.000

Turning Proportions

Turning Counts or Proportions (PCU/hr) - (untitled) (for whole period)

		To		
		1	2	3
From	1	0.000	28.000	233.000
	2	58.000	0.000	109.000
	3	416.000	208.000	0.000

Turning Proportions (PCU) - (untitled) (for whole period)

		To		
		1	2	3
From	1	0.00	0.11	0.89
	2	0.35	0.00	0.65
	3	0.67	0.33	0.00

Vehicle Mix

Average PCU Per Vehicle - (untitled) (for whole period)

		To		
		1	2	3
From	1	1.000	1.000	1.000
	2	1.000	1.000	1.000
	3	1.000	1.000	1.000

Heavy Vehicle Percentages - (untitled) (for whole period)

		To		
		1	2	3
From	1	0.000	0.000	0.000
	2	0.000	0.000	0.000
	3	0.000	0.000	0.000

Results

Results Summary for whole modelled period

Name	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)	Total Queueing Delay (PCU-min)	Average Queueing Delay (s)	Rate Of Queueing Delay (PCU-min/min)	Inclusive Total Queueing Delay (PCU-min)	Inclusive Average Queueing Delay (s)
Camp Road (East)	0.24	3.92	0.31	A	239.50	359.25	21.94	3.66	0.24	21.94	3.66
Camp Road (West)	0.18	4.44	0.23	A	153.24	229.86	16.03	4.18	0.18	16.03	4.18
Main Gate	0.37	3.12	0.59	A	572.59	858.89	40.91	2.86	0.45	40.91	2.86

Main Results for each time segment

Main results: (16:45-17:00)

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
Camp Road (East)	196.49	49.12	195.75	355.76	156.14	0.00	1249.03	994.71	0.157	0.00	0.19	3.416	A
Camp Road (West)	125.73	31.43	125.18	177.14	174.75	0.00	1037.01	664.31	0.121	0.00	0.14	3.945	A
Main Gate	469.78	117.44	468.43	256.45	43.47	0.00	1853.74	1722.17	0.253	0.00	0.34	2.596	A

Main results: (17:00-17:15)

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
Camp													

Road (East)	234.63	58.66	234.44	425.81	186.86	0.00	1230.34	994.71	0.191	0.19	0.23	3.614	A
Camp Road (West)	150.13	37.53	149.99	212.01	209.29	0.00	1018.96	664.31	0.147	0.14	0.17	4.143	A
Main Gate	560.96	140.24	560.58	307.19	52.09	0.00	1847.68	1722.17	0.304	0.34	0.43	2.797	A

Main results: (17:15-17:30)

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
Camp Road (East)	287.37	71.84	287.06	521.39	228.80	0.00	1204.81	994.71	0.239	0.23	0.31	3.922	A
Camp Road (West)	183.87	45.97	183.66	259.60	256.26	0.00	994.42	664.31	0.185	0.17	0.23	4.439	A
Main Gate	687.04	171.76	686.40	376.13	63.78	0.00	1839.47	1722.17	0.374	0.43	0.59	3.120	A

Main results: (17:30-17:45)

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
Camp Road (East)	287.37	71.84	287.36	521.88	229.01	0.00	1204.69	994.71	0.239	0.31	0.31	3.924	A
Camp Road (West)	183.87	45.97	183.87	259.84	256.53	0.00	994.27	664.31	0.185	0.23	0.23	4.441	A
Main Gate	687.04	171.76	687.03	376.54	63.86	0.00	1839.42	1722.17	0.374	0.59	0.59	3.123	A

Main results: (17:45-18:00)

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
Camp Road (East)	234.63	58.66	234.94	426.61	187.20	0.00	1230.13	994.71	0.191	0.31	0.24	3.617	A
Camp Road (West)	150.13	37.53	150.34	212.40	209.73	0.00	1018.73	664.31	0.147	0.23	0.17	4.146	A
Main Gate	560.96	140.24	561.59	307.86	52.21	0.00	1847.60	1722.17	0.304	0.59	0.44	2.802	A

Main results: (18:00-18:15)

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
Camp Road (East)	196.49	49.12	196.69	357.16	156.72	0.00	1248.67	994.71	0.157	0.24	0.19	3.421	A
Camp Road (West)	125.73	31.43	125.87	177.82	175.59	0.00	1036.57	664.31	0.121	0.17	0.14	3.953	A
Main Gate	469.78	117.44	470.17	257.74	43.71	0.00	1853.57	1722.17	0.253	0.44	0.34	2.602	A

Queueing Delay Results for each time segment
Queueing Delay results: (16:45-17:00)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
Camp Road (East)	2.73	0.18	3.416	A	A
Camp Road (West)	2.02	0.13	3.945	A	A
Main Gate	4.98	0.33	2.596	A	A

Queueing Delay results: (17:00-17:15)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
Camp Road (East)	3.47	0.23	3.614	A	A
Camp Road (West)	2.54	0.17	4.143	A	A
Main Gate	6.42	0.43	2.797	A	A

Queueing Delay results: (17:15-17:30)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
Camp Road (East)	4.60	0.31	3.922	A	A
Camp Road (West)	3.33	0.22	4.439	A	A
Main Gate	8.75	0.58	3.120	A	A

Queueing Delay results: (17:30-17:45)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
Camp Road (East)	4.68	0.31	3.924	A	A
Camp Road (West)	3.39	0.23	4.441	A	A
Main Gate	8.91	0.59	3.123	A	A

Queueing Delay results: (17:45-18:00)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
Camp Road (East)	3.61	0.24	3.617	A	A
Camp Road (West)	2.65	0.18	4.146	A	A
Main Gate	6.67	0.44	2.802	A	A

Queueing Delay results: (18:00-18:15)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
Camp Road (East)	2.85	0.19	3.421	A	A
Camp Road (West)	2.11	0.14	3.953	A	A
Main Gate	5.18	0.35	2.602	A	A

(Default Analysis Set) - 2013 Recalc Growth+Devt+Proposed, AM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

Name	Roundabout Capacity Model	Description	Include In Report	Use Specific Demand Set(s)	Specific Demand Set (s)	Locked	Network Flow Scaling Factor (%)	Network Capacity Scaling Factor (%)	Reason For Scaling Factors
(Default Analysis Set)	ARCADY		☐				100.000	100.000	

Demand Set Details

Name	Scenario Name	Time Period Name	Description	Traffic Profile Type	Model Start Time (HH:mm)	Model Finish Time (HH:mm)	Model Time Period Length (min)	Time Segment Length (min)	Results For Central Hour Only	Single Time Segment Only	Locked	Run Automatic
2013 Recalc Growth+Devt+Proposed, AM	2013 Recalc Growth+Devt+Proposed	AM		ONE HOUR	07:45	09:15	90	15				☐

Junction Network

Junctions

Name	Junction Type	Arm Order	Grade Separated	Large Roundabout	Do Geometric Delay	Junction Delay (s)	Junction LOS
(untitled)	Roundabout	1,2,3				4.67	A

Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

Name	Name	Description
Camp Road (East)	Camp Road (East)	
Camp Road (West)	Camp Road (West)	
Main Gate	Main Gate	

Capacity Options

Name	Minimum Capacity (PCU/hr)	Maximum Capacity (PCU/hr)	Assume Flat Start Profile	Initial Queue (PCU)
Camp Road (East)	0.00	99999.00		0.00
Camp Road (West)	0.00	99999.00		0.00
Main Gate	0.00	99999.00		0.00

Roundabout Geometry

Name	V - Approach road half-width (m)	E - Entry width (m)	I' - Effective flare length (m)	R - Entry radius (m)	D - Inscribed circle diameter (m)	PHI - Conflict (entry) angle (deg)	Exit Only
Camp Road (East)	3.00	7.00	5.00	25.00	30.00	11.00	
Camp Road (West)	2.53	7.00	6.75	10.00	30.00	33.00	
Main Gate	5.00	8.50	5.00	22.50	30.00	25.00	

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

Pedestrian Crossings

Name	Crossing Type
Camp Road (East)	None
Camp Road (West)	None
Main Gate	None

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Name	Enter slope and intercept directly	Entered slope	Entered intercept (PCU/hr)	Final Slope	Final Intercept (PCU/hr)
Camp Road (East)		(calculated)	(calculated)	0.609	1344.045
Camp Road (West)		(calculated)	(calculated)	0.523	1128.320
Main Gate		(calculated)	(calculated)	0.703	1884.289

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

Traffic Flows

Demand Set Data Options

Default Vehicle Mix	Vehicle Mix Varies Over Time	Vehicle Mix Varies Over Turn	Vehicle Mix Varies Over Entry	Vehicle Mix Source	PCU Factor for a HV (PCU)	Default Turning Proportions	Estimate from entry/exit counts	Turning Proportions Vary Over Time	Turning Proportions Vary Over Turn	Turning Proportions Vary Over Entry
		☐	☐	HV Percentages	2.00				☐	☐

Entry Flows

General Flows Data

Name	Profile Type	Use Turning Counts	Average Demand Flow (PCU/hr)	Flow Scaling Factor (%)
Camp Road (East)	ONE HOUR	☐	519.00	100.000
Camp Road (West)	ONE HOUR	☐	275.00	100.000
Main Gate	ONE HOUR	☐	631.00	100.000

Turning Proportions

Turning Counts or Proportions (PCU/hr) - (untitled) (for whole period)

		To		
		1	2	3
From	1	0.000	53.000	466.000
	2	44.000	0.000	231.000
	3	433.000	198.000	0.000

Turning Proportions (PCU) - (untitled) (for whole period)

		To		
		1	2	3
From	1	0.00	0.10	0.90
	2	0.16	0.00	0.84
	3	0.69	0.31	0.00

Vehicle Mix

Average PCU Per Vehicle - (untitled) (for whole period)

		To		
		1	2	3
From	1	1.000	1.000	1.000
	2	1.000	1.000	1.000
	3	1.000	1.000	1.000

Heavy Vehicle Percentages - (untitled) (for whole period)

		To		
		1	2	3
From	1	0.000	0.000	0.000
	2	0.000	0.000	0.000
	3	0.000	0.000	0.000

Results

Results Summary for whole modelled period

Name	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)	Total Queueing Delay (PCU-min)	Average Queueing Delay (s)	Rate Of Queueing Delay (PCU-min/min)	Inclusive Total Queueing Delay (PCU-min)	Inclusive Average Queueing Delay (s)
Camp Road (East)	0.47	5.62	0.89	A	476.24	714.37	57.94	4.87	0.64	57.94	4.87
Camp Road (West)	0.35	6.46	0.54	A	252.34	378.52	35.53	5.63	0.39	35.53	5.63
Main Gate	0.38	3.11	0.60	A	579.02	868.52	41.28	2.85	0.46	41.28	2.85

Main Results for each time segment

Main results: (07:45-08:00)

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
Camp Road (East)	390.73	97.68	388.93	358.00	148.64	0.00	1253.60	998.41	0.312	0.00	0.45	4.155	A
Camp Road (West)	207.03	51.76	205.92	188.35	349.21	0.00	945.85	659.90	0.219	0.00	0.28	4.858	A
Main Gate	475.05	118.76	473.68	522.19	32.95	0.00	1861.14	1810.10	0.255	0.00	0.34	2.592	A

Main results: (08:00-08:15)

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
Camp													

Road (East)	466.57	116.64	465.96	428.49	177.88	0.00	1235.80	998.41	0.378	0.45	0.60	4.672	A
Camp Road (West)	247.22	61.80	246.85	225.46	418.38	0.00	909.70	659.90	0.272	0.28	0.37	5.429	A
Main Gate	567.26	141.81	566.87	625.73	39.50	0.00	1856.54	1810.10	0.306	0.34	0.44	2.791	A

Main results: (08:15-08:30)

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
Camp Road (East)	571.43	142.86	570.31	524.64	217.80	0.00	1211.51	998.41	0.472	0.60	0.88	5.603	A
Camp Road (West)	302.78	75.70	302.11	276.04	512.07	0.00	860.75	659.90	0.352	0.37	0.54	6.436	A
Main Gate	694.74	173.69	694.10	765.84	48.34	0.00	1850.32	1810.10	0.375	0.44	0.60	3.112	A

Main results: (08:30-08:45)

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
Camp Road (East)	571.43	142.86	571.41	525.18	218.00	0.00	1211.39	998.41	0.472	0.88	0.89	5.624	A
Camp Road (West)	302.78	75.70	302.77	276.35	513.06	0.00	860.23	659.90	0.352	0.54	0.54	6.457	A
Main Gate	694.74	173.69	694.74	767.38	48.44	0.00	1850.25	1810.10	0.375	0.60	0.60	3.114	A

Main results: (08:45-09:00)

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
Camp Road (East)	466.57	116.64	467.67	429.35	178.20	0.00	1235.61	998.41	0.378	0.89	0.61	4.694	A
Camp Road (West)	247.22	61.80	247.87	225.95	419.92	0.00	908.90	659.90	0.272	0.54	0.38	5.450	A
Main Gate	567.26	141.81	567.89	628.13	39.66	0.00	1856.42	1810.10	0.306	0.60	0.44	2.796	A

Main results: (09:00-09:15)

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
Camp Road (East)	390.73	97.68	391.35	359.44	149.19	0.00	1253.26	998.41	0.312	0.61	0.46	4.179	A
Camp Road (West)	207.03	51.76	207.41	189.15	351.39	0.00	944.71	659.90	0.219	0.38	0.28	4.886	A
Main Gate	475.05	118.76	475.44	525.61	33.19	0.00	1860.97	1810.10	0.255	0.44	0.34	2.598	A

Queueing Delay Results for each time segment
Queueing Delay results: (07:45-08:00)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
Camp Road (East)	6.57	0.44	4.155	A	A
Camp Road (West)	4.06	0.27	4.858	A	A
Main Gate	5.03	0.34	2.592	A	A

Queueing Delay results: (08:00-08:15)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
Camp Road (East)	8.84	0.59	4.672	A	A
Camp Road (West)	5.44	0.36	5.429	A	A
Main Gate	6.48	0.43	2.791	A	A

Queueing Delay results: (08:15-08:30)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
Camp Road (East)	12.86	0.86	5.603	A	A
Camp Road (West)	7.84	0.52	6.436	A	A
Main Gate	8.82	0.59	3.112	A	A

Queueing Delay results: (08:30-08:45)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
Camp Road (East)	13.29	0.89	5.624	A	A
Camp Road (West)	8.08	0.54	6.457	A	A
Main Gate	8.98	0.60	3.114	A	A

Queueing Delay results: (08:45-09:00)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
Camp Road (East)	9.40	0.63	4.694	A	A
Camp Road (West)	5.79	0.39	5.450	A	A
Main Gate	6.73	0.45	2.796	A	A

Queueing Delay results: (09:00-09:15)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
Camp Road (East)	6.98	0.47	4.179	A	A
Camp Road (West)	4.32	0.29	4.886	A	A
Main Gate	5.23	0.35	2.598	A	A

(Default Analysis Set) - 2013 Recalc Growth+Devt+Proposed, PM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

Name	Roundabout Capacity Model	Description	Include In Report	Use Specific Demand Set(s)	Specific Demand Set (s)	Locked	Network Flow Scaling Factor (%)	Network Capacity Scaling Factor (%)	Reason For Scaling Factors
(Default Analysis Set)	ARCADY		☐				100.000	100.000	

Demand Set Details

Name	Scenario Name	Time Period Name	Description	Traffic Profile Type	Model Start Time (HH:mm)	Model Finish Time (HH:mm)	Model Time Period Length (min)	Time Segment Length (min)	Results For Central Hour Only	Single Time Segment Only	Locked	Run Automatic
2013 Recalc Growth+Devt+Proposed, FM	2013 Recalc Growth+Devt+Proposed	FM		ONE HOUR	16:45	18:15	90	15				☐

Junction Network

Junctions

Name	Junction Type	Arm Order	Grade Separated	Large Roundabout	Do Geometric Delay	Junction Delay (s)	Junction LOS
(untitled)	Roundabout	1,2,3				3.54	A

Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

Name	Name	Description
Camp Road (East)	Camp Road (East)	
Camp Road (West)	Camp Road (West)	
Main Gate	Main Gate	

Capacity Options

Name	Minimum Capacity (PCU/hr)	Maximum Capacity (PCU/hr)	Assume Flat Start Profile	Initial Queue (PCU)
Camp Road (East)	0.00	99999.00		0.00
Camp Road (West)	0.00	99999.00		0.00
Main Gate	0.00	99999.00		0.00

Roundabout Geometry

Name	V - Approach road half-width (m)	E - Entry width (m)	I' - Effective flare length (m)	R - Entry radius (m)	D - Inscribed circle diameter (m)	PHI - Conflict (entry) angle (deg)	Exit Only
Camp Road (East)	3.00	7.00	5.00	25.00	30.00	11.00	
Camp Road (West)	2.53	7.00	6.75	10.00	30.00	33.00	
Main Gate	5.00	8.50	5.00	22.50	30.00	25.00	

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

Pedestrian Crossings

Name	Crossing Type
Camp Road (East)	None
Camp Road (West)	None
Main Gate	None

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Name	Enter slope and intercept directly	Entered slope	Entered intercept (PCU/hr)	Final Slope	Final Intercept (PCU/hr)
Camp Road (East)		(calculated)	(calculated)	0.609	1344.045
Camp Road (West)		(calculated)	(calculated)	0.523	1128.320
Main Gate		(calculated)	(calculated)	0.703	1884.289

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

Traffic Flows

Demand Set Data Options

Default Vehicle Mix	Vehicle Mix Varies Over Time	Vehicle Mix Varies Over Turn	Vehicle Mix Varies Over Entry	Vehicle Mix Source	PCU Factor for a HV (PCU)	Default Turning Proportions	Estimate from entry/exit counts	Turning Proportions Vary Over Time	Turning Proportions Vary Over Turn	Turning Proportions Vary Over Entry
		☐	☐	HV Percentages	2.00				☐	☐

Entry Flows

General Flows Data

Name	Profile Type	Use Turning Counts	Average Demand Flow (PCU/hr)	Flow Scaling Factor (%)
Camp Road (East)	ONE HOUR	☐	261.00	100.000
Camp Road (West)	ONE HOUR	☐	167.00	100.000
Main Gate	ONE HOUR	☐	632.00	100.000

Turning Proportions

Turning Counts or Proportions (PCU/hr) - (untitled) (for whole period)

		To		
		1	2	3
From	1	0.000	28.000	233.000
	2	58.000	0.000	109.000
	3	421.000	211.000	0.000

Turning Proportions (PCU) - (untitled) (for whole period)

		To		
		1	2	3
From	1	0.00	0.11	0.89
	2	0.35	0.00	0.65
	3	0.67	0.33	0.00

Vehicle Mix

Average PCU Per Vehicle - (untitled) (for whole period)

		To		
		1	2	3
From	1	1.000	1.000	1.000
	2	1.000	1.000	1.000
	3	1.000	1.000	1.000

Heavy Vehicle Percentages - (untitled) (for whole period)

		To		
		1	2	3
From	1	0.000	0.000	0.000
	2	0.000	0.000	0.000
	3	0.000	0.000	0.000

Results

Results Summary for whole modelled period

Name	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)	Total Queueing Delay (PCU-min)	Average Queueing Delay (s)	Rate Of Queueing Delay (PCU-min/min)	Inclusive Total Queueing Delay (PCU-min)	Inclusive Average Queueing Delay (s)
Camp Road (East)	0.24	3.93	0.31	A	239.50	359.25	21.98	3.67	0.24	21.98	3.67
Camp Road (West)	0.18	4.44	0.23	A	153.24	229.86	16.03	4.18	0.18	16.03	4.18
Main Gate	0.38	3.15	0.61	A	579.93	869.90	41.69	2.88	0.46	41.69	2.88

Main Results for each time segment

Main results: (16:45-17:00)

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
Camp Road (East)	196.49	49.12	195.75	359.51	158.39	0.00	1247.66	994.17	0.157	0.00	0.19	3.421	A
Camp Road (West)	125.73	31.43	125.18	179.39	174.75	0.00	1037.01	664.57	0.121	0.00	0.14	3.945	A
Main Gate	475.80	118.95	474.43	256.45	43.47	0.00	1853.74	1722.11	0.257	0.00	0.34	2.608	A

Main results: (17:00-17:15)

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
Camp													

Road (East)	234.63	58.66	234.44	430.30	189.55	0.00	1228.70	994.17	0.191	0.19	0.23	3.620	A
Camp Road (West)	150.13	37.53	149.99	214.70	209.29	0.00	1018.96	664.57	0.147	0.14	0.17	4.143	A
Main Gate	568.16	142.04	567.76	307.19	52.09	0.00	1847.68	1722.11	0.308	0.34	0.44	2.812	A

Main results: (17:15-17:30)

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
Camp Road (East)	287.37	71.84	287.06	526.88	232.10	0.00	1202.81	994.17	0.239	0.23	0.31	3.930	A
Camp Road (West)	183.87	45.97	183.66	262.89	256.26	0.00	994.42	664.57	0.185	0.17	0.23	4.439	A
Main Gate	695.84	173.96	695.19	376.13	63.78	0.00	1839.47	1722.11	0.378	0.44	0.61	3.144	A

Main results: (17:30-17:45)

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
Camp Road (East)	287.37	71.84	287.36	527.38	232.31	0.00	1202.68	994.17	0.239	0.31	0.31	3.932	A
Camp Road (West)	183.87	45.97	183.87	263.14	256.53	0.00	994.27	664.57	0.185	0.23	0.23	4.441	A
Main Gate	695.84	173.96	695.84	376.54	63.86	0.00	1839.42	1722.11	0.378	0.61	0.61	3.147	A

Main results: (17:45-18:00)

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
Camp Road (East)	234.63	58.66	234.94	431.11	189.90	0.00	1228.49	994.17	0.191	0.31	0.24	3.626	A
Camp Road (West)	150.13	37.53	150.34	215.10	209.73	0.00	1018.73	664.57	0.147	0.23	0.17	4.146	A
Main Gate	568.16	142.04	568.80	307.86	52.21	0.00	1847.60	1722.11	0.308	0.61	0.45	2.818	A

Main results: (18:00-18:15)

Name	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Entry Flow (PCU/hr)	Exit Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	Saturation Capacity (PCU/hr)	RFC	Start Queue (PCU)	End Queue (PCU)	Delay (s)	LOS
Camp Road (East)	196.49	49.12	196.69	360.93	158.98	0.00	1247.30	994.17	0.158	0.24	0.19	3.426	A
Camp Road (West)	125.73	31.43	125.87	180.09	175.59	0.00	1036.57	664.57	0.121	0.17	0.14	3.954	A
Main Gate	475.80	118.95	476.20	257.74	43.71	0.00	1853.57	1722.11	0.257	0.45	0.35	2.615	A

Queueing Delay Results for each time segment
Queueing Delay results: (16:45-17:00)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
Camp Road (East)	2.74	0.18	3.421	A	A
Camp Road (West)	2.02	0.13	3.945	A	A
Main Gate	5.07	0.34	2.608	A	A

Queueing Delay results: (17:00-17:15)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
Camp Road (East)	3.47	0.23	3.620	A	A
Camp Road (West)	2.54	0.17	4.143	A	A
Main Gate	6.54	0.44	2.812	A	A

Queueing Delay results: (17:15-17:30)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
Camp Road (East)	4.61	0.31	3.930	A	A
Camp Road (West)	3.33	0.22	4.439	A	A
Main Gate	8.93	0.60	3.144	A	A

Queueing Delay results: (17:30-17:45)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
Camp Road (East)	4.69	0.31	3.932	A	A
Camp Road (West)	3.39	0.23	4.441	A	A
Main Gate	9.09	0.61	3.147	A	A

Queueing Delay results: (17:45-18:00)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
Camp Road (East)	3.62	0.24	3.626	A	A
Camp Road (West)	2.65	0.18	4.146	A	A
Main Gate	6.79	0.45	2.818	A	A

Queueing Delay results: (18:00-18:15)

Name	Queueing Total Delay (PCU-min)	Queueing Rate Of Delay (PCU-min/min)	Average Delay Per Arriving Vehicle (s)	Unsignalised Level Of Service	Signalised Level Of Service
Camp Road (East)	2.86	0.19	3.426	A	A
Camp Road (West)	2.11	0.14	3.954	A	A
Main Gate	5.27	0.35	2.615	A	A

Junctions 8
PICADY 8 - Priority Intersection Module
Version: 8.0.1.305 [25 May 2012] © Copyright TRL Limited, 2012
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Filename: (new file)

Path:

Report generation date: 28/11/2012 11:29:47

- » (Default Analysis Set) - 2013 Arup Base, AM
- » (Default Analysis Set) - 2013 Arup Base, PM
- » (Default Analysis Set) - 2013 Arup Base + Site Dev + Consented, AM
- » (Default Analysis Set) - 2013 Arup Base + Site Dev + Consented, PM
- » (Default Analysis Set) - 2013 Arup Base + Site Dev + Proposed, AM
- » (Default Analysis Set) - 2013 Arup Base + Site Dev + Proposed, PM

File summary

File Description

Title	Somerton Road_Camp Road_Station Road
Location	Upper Heyford
Site Number	
Date	22/11/2012
Version	
Status	(new file)
Identifier	
Client	
Jobnumber	23824
Enumerator	PBA\ngyseman
Description	

Analysis Options

Vehicle Length (m)	Do Queue Variations	Calculate Residual Capacity	Residual Capacity Criteria Type	RFC Threshold	Average Delay Threshold (s)	Queue Threshold (PCU)
5.75			N/A	0.85	36.00	20.00

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

(Default Analysis Set) - 2013 Arup Base, AM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

Name	Description	Locked	Network Flow Scaling Factor (%)	Reason For Scaling Factors
(Default Analysis Set)			100.000	

Demand Set Details

Name	Scenario Name	Time Period Name	Description	Traffic Profile Type	Model Start Time (HH:mm)	Model Finish Time (HH:mm)	Model Time Period Length (min)	Time Segment Length (min)	Single Time Segment Only	Locked
2013 Arup Base, AM	2013 Arup Base	AM		ONE HOUR	07:45	09:15	90	15		

Junction Network

Junctions

Name	Junction Type	Major Road Direction	Arm Order	Junction Delay (s)	Junction LOS
Somerton Road_Camp Road_Station Road	T-Junction	Two-way	A,B,C	6.48	A

Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Name	Description	Arm Type
A	Somerton Road	Upper Heyford	Major
B	Camp Road	Upper Heyford	Minor
C	Station Road	Upper Heyford	Major

Major Arm Geometry

Arm	Width of carriageway (m)	Has kerbed central reserve	Width of kerbed central reserve (m)	Has right turn bay	Width For Right Turn (m)	Visibility For Right Turn (m)	Blocks?	Blocking Queue (PCU)
C	6.00		0.00		2.20	89.00	∅	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)	Lane Width (Left) (m)	Lane Width (Right) (m)	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				9.00	2.80	2.75	2.75	2.75		1.00	30	21

Pedestrian Crossings

Arm	Crossing Type
A	None
B	None
C	None

Slope / Intercept / Capacity

Priority Intersection Slopes and Intercepts

Junction	Stream	Intercept (PCU/hr)	Slope for A-B	Slope for A-C	Slope for C-A	Slope for C-B
1	B-A	547.450	0.100	0.252	0.159	0.360
1	B-C	650.553	0.100	0.252	-	-
1	C-B	625.504	0.242	0.242	-	-

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 Flows

Demand Set Data Options

Default Vehicle Mix	Vehicle Mix Varies Over Time	Vehicle Mix Varies Over Turn	Vehicle Mix Varies Over Entry	Vehicle Mix Source	PCU Factor for a HV (PCU)	Default Turning Proportions	Estimate from entry/exit counts	Turning Proportions Vary Over Time	Turning Proportions Vary Over Turn	Turning Proportions Vary Over Entry
		☐	☐	HV Percentages	2.00				☐	☐

Entry Flows

General Flows Data

Arm	Profile Type	Use Turning Counts	Average Demand Flow (PCU/hr)	Flow Scaling Factor (%)
A	ONE HOUR	☐	122.00	100.000
B	ONE HOUR	☐	64.00	100.000
C	ONE HOUR	☐	59.00	100.000

Turning Proportions

Turning Counts or Proportions (PCU/hr) - Junction 1 (for whole period)

		To		
		A	B	C
From	A	0.000	57.000	65.000
	B	19.000	0.000	45.000
	C	39.000	20.000	0.000

Turning Proportions (PCU) - Junction 1 (for whole period)

		To		
		A	B	C
From	A	0.00	0.47	0.53
	B	0.30	0.00	0.70
	C	0.66	0.34	0.00

Vehicle Mix

Average PCU Per Vehicle - Junction 1 (for whole period)

--	--

		To		
		A	B	C
From	A	1.000	1.000	1.000
	B	1.000	1.000	1.000
	C	1.000	1.000	1.000

Heavy Vehicle Percentages - Junction 1 (for whole period)

		To		
		A	B	C
From	A	0.000	0.000	0.000
	B	0.000	0.000	0.000
	C	0.000	0.000	0.000

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
B-C	0.08	6.31	0.09	A
B-A	0.04	7.39	0.04	A
C-AB	0.04	6.02	0.04	A
C-A	-	-	-	-
A-B	-	-	-	-
A-C	-	-	-	-

Main Results for each time segment

Main results: (07:45-08:00)

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-C	33.88	33.65	0.00	629.56	0.054	0.06	6.040	A
B-A	14.30	14.19	0.00	520.69	0.027	0.03	7.105	A
C-AB	15.80	15.68	0.00	622.76	0.025	0.03	5.930	A
C-A	28.62	28.62	0.00	-	-	-	-	-
A-B	42.91	42.91	0.00	-	-	-	-	-
A-C	48.94	48.94	0.00	-	-	-	-	-

Main results: (08:00-08:15)

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-C	40.45	40.41	0.00	625.41	0.065	0.07	6.153	A
B-A	17.08	17.06	0.00	515.41	0.033	0.03	7.223	A
C-AB	19.05	19.03	0.00	622.31	0.031	0.03	5.966	A
C-A	33.99	33.99	0.00	-	-	-	-	-
A-B	51.24	51.24	0.00	-	-	-	-	-
A-C	58.43	58.43	0.00	-	-	-	-	-

Main results: (08:15-08:30)

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-C	49.55	49.48	0.00	619.69	0.080	0.09	6.313	A

B-A	20.92	20.89	0.00	508.13	0.041	0.04	7.388	A
C-AB	23.65	23.61	0.00	621.73	0.038	0.04	6.018	A
C-A	41.31	41.31	0.00	-	-	-	-	-
A-B	62.76	62.76	0.00	-	-	-	-	-
A-C	71.57	71.57	0.00	-	-	-	-	-

Main results: (08:30-08:45)

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-C	49.55	49.54	0.00	619.68	0.080	0.09	6.313	A
B-A	20.92	20.92	0.00	508.12	0.041	0.04	7.388	A
C-AB	23.65	23.65	0.00	621.74	0.038	0.04	6.018	A
C-A	41.31	41.31	0.00	-	-	-	-	-
A-B	62.76	62.76	0.00	-	-	-	-	-
A-C	71.57	71.57	0.00	-	-	-	-	-

Main results: (08:45-09:00)

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-C	40.45	40.52	0.00	625.40	0.065	0.07	6.157	A
B-A	17.08	17.11	0.00	515.39	0.033	0.03	7.224	A
C-AB	19.06	19.09	0.00	622.32	0.031	0.04	5.967	A
C-A	33.98	33.98	0.00	-	-	-	-	-
A-B	51.24	51.24	0.00	-	-	-	-	-
A-C	58.43	58.43	0.00	-	-	-	-	-

Main results: (09:00-09:15)

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-C	33.88	33.93	0.00	629.52	0.054	0.06	6.046	A
B-A	14.30	14.33	0.00	520.64	0.027	0.03	7.109	A
C-AB	15.80	15.83	0.00	622.77	0.025	0.03	5.931	A
C-A	28.61	28.61	0.00	-	-	-	-	-
A-B	42.91	42.91	0.00	-	-	-	-	-
A-C	48.94	48.94	0.00	-	-	-	-	-

(Default Analysis Set) - 2013 Arup Base, PM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

Name	Description	Locked	Network Flow Scaling Factor (%)	Reason For Scaling Factors
(Default Analysis Set)			100.000	

Demand Set Details

Name	Scenario Name	Time Period Name	Description	Traffic Profile Type	Model Start Time (HH:mm)	Model Finish Time (HH:mm)	Model Time Period Length (min)	Time Segment Length (min)	Single Time Segment Only	Locked
2013 Arup Base, PM	2013 Arup Base	PM		ONE HOUR	16:45	18:15	90	15		

Junction Network

Junctions

Name	Junction Type	Major Road Direction	Arm Order	Junction Delay (s)	Junction LOS
Somerton Road_Camp Road_Station Road	T-Junction	Two-way	A,B,C	7.45	A

Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Name	Description	Arm Type
A	Somerton Road	Upper Heyford	Major
B	Camp Road	Upper Heyford	Minor
C	Station Road	Upper Heyford	Major

Major Arm Geometry

Arm	Width of carriageway (m)	Has kerbed central reserve	Width of kerbed central reserve (m)	Has right turn bay	Width For Right Turn (m)	Visibility For Right Turn (m)	Blocks?	Blocking Queue (PCU)
C	6.00		0.00		2.20	89.00	∅	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)	Lane Width (Left) (m)	Lane Width (Right) (m)	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				9.00	2.80	2.75	2.75	2.75		1.00	30	21

Pedestrian Crossings

Arm	Crossing Type
A	None
B	None
C	None

Slope / Intercept / Capacity

Priority Intersection Slopes and Intercepts

Junction	Stream	Intercept (PCU/hr)	Slope for A-B	Slope for A-C	Slope for C-A	Slope for C-B
1	B-A	508.091	0.093	0.234	0.147	0.334
1	B-C	700.947	0.107	0.272	-	-
1	C-B	625.504	0.242	0.242	-	-

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 Flows

Demand Set Data Options

Default Vehicle Mix	Vehicle Mix Varies Over Time	Vehicle Mix Varies Over Turn	Vehicle Mix Varies Over Entry	Vehicle Mix Source	PCU Factor for a HV (PCU)	Default Turning Proportions	Estimate from entry/exit counts	Turning Proportions Vary Over Time	Turning Proportions Vary Over Turn	Turning Proportions Vary Over Entry
		☐	☐	HV Percentages	2.00				☐	☐

Entry Flows

General Flows Data

Arm	Profile Type	Use Turning Counts	Average Demand Flow (PCU/hr)	Flow Scaling Factor (%)
A	ONE HOUR	☐	83.00	100.000
B	ONE HOUR	☐	91.00	100.000
C	ONE HOUR	☐	92.00	100.000

Turning Proportions

Turning Counts or Proportions (PCU/hr) - Junction 1 (for whole period)

		To		
		A	B	C
From	A	0.000	51.000	32.000
	B	59.000	0.000	32.000
	C	82.000	10.000	0.000

Turning Proportions (PCU) - Junction 1 (for whole period)

		To		
		A	B	C
From	A	0.00	0.61	0.39
	B	0.65	0.00	0.35
	C	0.89	0.11	0.00

Vehicle Mix

Average PCU Per Vehicle - Junction 1 (for whole period)

		To		
		A	B	C
From	A	1.000	1.000	1.000
	B	1.000	1.000	1.000
	C	1.000	1.000	1.000

Heavy Vehicle Percentages - Junction 1 (for whole period)

		To		
		A	B	C
From	A	0.000	0.000	0.000
	B	0.000	0.000	0.000
	C	0.000	0.000	0.000

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
B-C	0.05	5.76	0.06	A
B-A	0.14	8.73	0.16	A
C-AB	0.02	5.60	0.02	A
C-A	-	-	-	-
A-B	-	-	-	-
A-C	-	-	-	-

Main Results for each time segment

Main results: (16:45-17:00)

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-C	24.09	23.94	0.00	674.10	0.036	0.04	5.535	A
B-A	44.42	44.02	0.00	487.25	0.091	0.10	8.114	A
C-AB	8.31	8.25	0.00	651.11	0.013	0.01	5.599	A
C-A	60.96	60.96	0.00	-	-	-	-	-
A-B	38.40	38.40	0.00	-	-	-	-	-
A-C	24.09	24.09	0.00	-	-	-	-	-

Main results: (17:00-17:15)

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-C	28.77	28.74	0.00	668.38	0.043	0.04	5.627	A
B-A	53.04	52.95	0.00	483.16	0.110	0.12	8.366	A
C-AB	10.12	10.10	0.00	656.19	0.015	0.02	5.571	A
C-A	72.59	72.59	0.00	-	-	-	-	-
A-B	45.85	45.85	0.00	-	-	-	-	-
A-C	28.77	28.77	0.00	-	-	-	-	-

Main results: (17:15-17:30)

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-C	35.23	35.19	0.00	660.36	0.053	0.06	5.758	A
B-A	64.96	64.83	0.00	477.50	0.136	0.16	8.720	A
C-AB	12.72	12.70	0.00	663.24	0.019	0.02	5.533	A
C-A	88.57	88.57	0.00	-	-	-	-	-
A-B	56.15	56.15	0.00	-	-	-	-	-
A-C	35.23	35.23	0.00	-	-	-	-	-

Main results: (17:30-17:45)

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-C	35.23	35.23	0.00	660.30	0.053	0.06	5.758	A
B-A	64.96	64.96	0.00	477.49	0.136	0.16	8.726	A
C-AB	12.72	12.72	0.00	663.24	0.019	0.02	5.533	A
C-A	88.57	88.57	0.00	-	-	-	-	-
A-B	56.15	56.15	0.00	-	-	-	-	-
A-C	35.23	35.23	0.00	-	-	-	-	-

Main results: (17:45-18:00)

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-C	35.23	35.23	0.00	660.30	0.053	0.06	5.758	A
B-A	64.96	64.96	0.00	477.49	0.136	0.16	8.726	A
C-AB	12.72	12.72	0.00	663.24	0.019	0.02	5.533	A
C-A	88.57	88.57	0.00	-	-	-	-	-
A-B	56.15	56.15	0.00	-	-	-	-	-
A-C	35.23	35.23	0.00	-	-	-	-	-

B-C	28.77	28.81	0.00	668.29	0.043	0.05	5.629	A
B-A	53.04	53.17	0.00	483.15	0.110	0.12	8.374	A
C-AB	10.12	10.14	0.00	656.19	0.015	0.02	5.572	A
C-A	72.59	72.59	0.00	-	-	-	-	-
A-B	45.85	45.85	0.00	-	-	-	-	-
A-C	28.77	28.77	0.00	-	-	-	-	-

Main results: (18:00-18:15)

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-C	24.09	24.12	0.00	673.90	0.036	0.04	5.540	A
B-A	44.42	44.51	0.00	487.23	0.091	0.10	8.133	A
C-AB	8.31	8.33	0.00	651.12	0.013	0.01	5.602	A
C-A	60.95	60.95	0.00	-	-	-	-	-
A-B	38.40	38.40	0.00	-	-	-	-	-
A-C	24.09	24.09	0.00	-	-	-	-	-

(Default Analysis Set) - 2013 Arup Base + Site Dev + Consented, AM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

Name	Description	Locked	Network Flow Scaling Factor (%)	Reason For Scaling Factors
(Default Analysis Set)			100.000	

Demand Set Details

Name	Scenario Name	Time Period Name	Description	Traffic Profile Type	Model Start Time (HH:mm)	Model Finish Time (HH:mm)	Model Time Period Length (min)	Time Segment Length (min)	Single Time Segment Only	Locked
2013 Arup Base + Site Dev + Consented, AM	2013 Arup Base + Site Dev + Consented	AM		ONE HOUR	07:45	09:15	90	15		

Junction Network

Junctions

Name	Junction Type	Major Road Direction	Arm Order	Junction Delay (s)	Junction LOS
Somerton Road_Camp Road_Station Road	T-Junction	Two-way	A,B,C	11.52	B

Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Name	Description	Arm Type
A	Somerton Road	Upper Heyford	Major

B	Camp Road	Upper Heyford	Minor
C	Station Road	Upper Heyford	Major

Major Arm Geometry

Arm	Width of carriageway (m)	Has kerbed central reserve	Width of kerbed central reserve (m)	Has right turn bay	Width For Right Turn (m)	Visibility For Right Turn (m)	Blocks?	Blocking Queue (PCU)
C	6.00		0.00		2.20	89.00	∅	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)	Lane Width (Left) (m)	Lane Width (Right) (m)	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				9.00	2.80	2.75	2.75	2.75		1.00	30	21

Pedestrian Crossings

Arm	Crossing Type
A	None
B	None
C	None

Slope / Intercept / Capacity

Priority Intersection Slopes and Intercepts

Junction	Stream	Intercept (PCU/hr)	Slope for A-B	Slope for A-C	Slope for C-A	Slope for C-B
1	B-A	508.091	0.093	0.234	0.147	0.334
1	B-C	700.947	0.107	0.272	-	-
1	C-B	625.504	0.242	0.242	-	-

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 Flows

Demand Set Data Options

Default Vehicle Mix	Vehicle Mix Varies Over Time	Vehicle Mix Varies Over Turn	Vehicle Mix Varies Over Entry	Vehicle Mix Source	PCU Factor for a HV (PCU)	Default Turning Proportions	Estimate from entry/exit counts	Turning Proportions Vary Over Time	Turning Proportions Vary Over Turn	Turning Proportions Vary Over Entry
		∅	∅	HV Percentages	2.00				∅	∅

Entry Flows

General Flows Data

Arm	Profile Type	Use Turning Counts	Average Demand Flow (PCU/hr)	Flow Scaling Factor (%)
A	ONE HOUR	∅	300.00	100.000
B	ONE HOUR	∅	275.00	100.000
C	ONE HOUR	∅	153.00	100.000

Turning Proportions

Turning Counts or Proportions (PCU/hr) - Junction 1 (for whole period)

		To		
		A	B	C
From	A	0.000	235.000	65.000
	B	167.000	0.000	108.000
	C	39.000	114.000	0.000

Turning Proportions (PCU) - Junction 1 (for whole period)

		To		
		A	B	C
From	A	0.00	0.78	0.22
	B	0.61	0.00	0.39
	C	0.25	0.75	0.00

Vehicle Mix

Average PCU Per Vehicle - Junction 1 (for whole period)

		To		
		A	B	C
From	A	1.000	1.000	1.000
	B	1.000	1.000	1.000
	C	1.000	1.000	1.000

Heavy Vehicle Percentages - Junction 1 (for whole period)

		To		
		A	B	C
From	A	0.000	0.000	0.000
	B	0.000	0.000	0.000
	C	0.000	0.000	0.000

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
B-C	0.22	8.67	0.28	A
B-A	0.45	15.80	0.80	C
C-AB	0.24	8.19	0.33	A
C-A	-	-	-	-
A-B	-	-	-	-
A-C	-	-	-	-

Main Results for each time segment

Main results: (07:45-08:00)

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-C	81.31	80.70	0.00	609.25	0.133	0.15	6.804	A
B-A	125.73	124.18	0.00	445.34	0.282	0.39	11.157	B
C-AB	90.29	89.54	0.00	590.81	0.153	0.19	7.171	A
C-A	24.90	24.90	0.00	-	-	-	-	-
A-B	176.92	176.92	0.00	-	-	-	-	-
A-C	48.94	48.94	0.00	-	-	-	-	-

Main results: (08:00-08:15)

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-C	97.09	96.91	0.00	581.67	0.167	0.20	7.426	A
B-A	150.13	149.59	0.00	431.67	0.348	0.52	12.736	B
C-AB	109.03	108.82	0.00	584.31	0.187	0.24	7.570	A
C-A	28.52	28.52	0.00	-	-	-	-	-
A-B	211.26	211.26	0.00	-	-	-	-	-
A-C	58.43	58.43	0.00	-	-	-	-	-

Main results: (08:15-08:30)

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-C	118.91	118.58	0.00	535.44	0.222	0.28	8.629	A
B-A	183.87	182.83	0.00	411.75	0.447	0.78	15.651	C
C-AB	135.63	135.29	0.00	575.40	0.236	0.32	8.176	A
C-A	32.83	32.83	0.00	-	-	-	-	-
A-B	258.74	258.74	0.00	-	-	-	-	-
A-C	71.57	71.57	0.00	-	-	-	-	-

Main results: (08:30-08:45)

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-C	118.91	118.90	0.00	534.25	0.223	0.28	8.667	A
B-A	183.87	183.82	0.00	411.55	0.447	0.80	15.798	C
C-AB	135.65	135.65	0.00	575.43	0.236	0.33	8.189	A
C-A	32.80	32.80	0.00	-	-	-	-	-
A-B	258.74	258.74	0.00	-	-	-	-	-
A-C	71.57	71.57	0.00	-	-	-	-	-

Main results: (08:45-09:00)

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-C	97.09	97.42	0.00	580.28	0.167	0.20	7.459	A
B-A	150.13	151.13	0.00	431.41	0.348	0.54	12.889	B
C-AB	109.06	109.39	0.00	584.35	0.187	0.24	7.585	A
C-A	28.48	28.48	0.00	-	-	-	-	-
A-B	211.26	211.26	0.00	-	-	-	-	-
A-C	58.43	58.43	0.00	-	-	-	-	-

Main results: (09:00-09:15)

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-C	81.31	81.50	0.00	607.74	0.134	0.16	6.845	A
B-A	125.73	126.30	0.00	444.95	0.283	0.40	11.320	B
C-AB	90.34	90.55	0.00	590.85	0.153	0.19	7.201	A
C-A	24.85	24.85	0.00	-	-	-	-	-
A-B	176.92	176.92	0.00	-	-	-	-	-
A-C	48.94	48.94	0.00	-	-	-	-	-

(Default Analysis Set) - 2013 Arup Base + Site Dev + Consented, PM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

Name	Description	Locked	Network Flow Scaling Factor (%)	Reason For Scaling Factors
(Default Analysis Set)			100.000	

Demand Set Details

Name	Scenario Name	Time Period Name	Description	Traffic Profile Type	Model Start Time (HH:mm)	Model Finish Time (HH:mm)	Model Time Period Length (min)	Time Segment Length (min)	Single Time Segment Only	Locked
2013 Arup Base + Site Dev + Consented, PM	2013 Arup Base + Site Dev + Consented	PM		ONE HOUR	16:45	18:15	90	15		

Junction Network

Junctions

Name	Junction Type	Major Road Direction	Arm Order	Junction Delay (s)	Junction LOS
Somerton Road_ Camp Road_ Station Road	T-Junction	Two-way	A,B,C	12.50	B

Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Name	Description	Arm Type
A	Somerton Road	Upper Heyford	Major
B	Camp Road	Upper Heyford	Minor
C	Station Road	Upper Heyford	Major

Major Arm Geometry

Arm	Width of carriageway (m)	Has kerbed central reserve	Width of kerbed central reserve (m)	Has right turn bay	Width For Right Turn (m)	Visibility For Right Turn (m)	Blocks?	Blocking Queue (PCU)
C	6.00		0.00		2.20	89.00	∅	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)	Lane Width (Left) (m)	Lane Width (Right) (m)	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				9.00	2.80	2.75	2.75	2.75		1.00	30	21

Pedestrian Crossings

Arm	Crossing Type
A	None
B	None
C	None

Slope / Intercept / Capacity

Priority Intersection Slopes and Intercepts

Junction	Stream	Intercept (PCU/hr)	Slope for A-B	Slope for A-C	Slope for C-A	Slope for C-B
1	B-A	508.091	0.093	0.234	0.147	0.334
1	B-C	700.947	0.107	0.272	-	-
1	C-B	625.504	0.242	0.242	-	-

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 Flows

Demand Set Data Options

Default Vehicle Mix	Vehicle Mix Varies Over Time	Vehicle Mix Varies Over Turn	Vehicle Mix Varies Over Entry	Vehicle Mix Source	PCU Factor for a HV (PCU)	Default Turning Proportions	Estimate from entry/exit counts	Turning Proportions Vary Over Time	Turning Proportions Vary Over Turn	Turning Proportions Vary Over Entry
		<input type="checkbox"/>	<input type="checkbox"/>	HV Percentages	2.00				<input type="checkbox"/>	<input type="checkbox"/>

Entry Flows

General Flows Data

Arm	Profile Type	Use Turning Counts	Average Demand Flow (PCU/hr)	Flow Scaling Factor (%)
A	ONE HOUR	<input type="checkbox"/>	189.00	100.000
B	ONE HOUR	<input type="checkbox"/>	304.00	100.000
C	ONE HOUR	<input type="checkbox"/>	160.00	100.000

Turning Proportions

Turning Counts or Proportions (PCU/hr) - Junction 1 (for whole period)

		To		
		A	B	C
From	A	0.000	157.000	32.000
	B	201.000	0.000	103.000
	C	82.000	78.000	0.000

Turning Proportions (PCU) - Junction 1 (for whole period)

		To		
		A	B	C

From	A	0.00	0.83	0.17
	B	0.66	0.00	0.34
	C	0.51	0.49	0.00

Vehicle Mix

Average PCU Per Vehicle - Junction 1 (for whole period)

From	To			
		A	B	C
	A	1.000	1.000	1.000
	B	1.000	1.000	1.000
C	1.000	1.000	1.000	

Heavy Vehicle Percentages - Junction 1 (for whole period)

From	To			
		A	B	C
	A	0.000	0.000	0.000
	B	0.000	0.000	0.000
C	0.000	0.000	0.000	

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
B-C	0.22	8.90	0.28	A
B-A	0.51	16.90	1.02	C
C-AB	0.16	6.71	0.21	A
C-A	-	-	-	-
A-B	-	-	-	-
A-C	-	-	-	-

Main Results for each time segment

Main results: (16:45-17:00)

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-C	77.54	76.96	0.00	606.64	0.128	0.15	6.789	A
B-A	151.32	149.40	0.00	460.76	0.328	0.48	11.494	B
C-AB	64.99	64.48	0.00	632.44	0.103	0.13	6.333	A
C-A	55.46	55.46	0.00	-	-	-	-	-
A-B	118.20	118.20	0.00	-	-	-	-	-
A-C	24.09	24.09	0.00	-	-	-	-	-

Main results: (17:00-17:15)

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-C	92.59	92.42	0.00	574.65	0.161	0.19	7.464	A
B-A	180.69	179.99	0.00	450.09	0.401	0.66	13.291	B

C-AB	79.26	79.13	0.00	634.07	0.125	0.16	6.488	A
C-A	64.58	64.58	0.00	-	-	-	-	-
A-B	141.14	141.14	0.00	-	-	-	-	-
A-C	28.77	28.77	0.00	-	-	-	-	-

Main results: (17:15-17:30)

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-C	113.41	113.06	0.00	519.79	0.218	0.28	8.844	A
B-A	221.31	219.91	0.00	434.19	0.510	1.00	16.687	C
C-AB	99.89	99.68	0.00	636.41	0.157	0.21	6.709	A
C-A	76.27	76.27	0.00	-	-	-	-	-
A-B	172.86	172.86	0.00	-	-	-	-	-
A-C	35.23	35.23	0.00	-	-	-	-	-

Main results: (17:30-17:45)

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-C	113.41	113.39	0.00	518.02	0.219	0.28	8.896	A
B-A	221.31	221.23	0.00	434.02	0.510	1.02	16.901	C
C-AB	99.92	99.91	0.00	636.45	0.157	0.21	6.711	A
C-A	76.24	76.24	0.00	-	-	-	-	-
A-B	172.86	172.86	0.00	-	-	-	-	-
A-C	35.23	35.23	0.00	-	-	-	-	-

Main results: (17:45-18:00)

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-C	92.59	92.93	0.00	572.60	0.162	0.19	7.512	A
B-A	180.69	182.03	0.00	449.89	0.402	0.69	13.508	B
C-AB	79.30	79.50	0.00	634.11	0.125	0.16	6.494	A
C-A	64.54	64.54	0.00	-	-	-	-	-
A-B	141.14	141.14	0.00	-	-	-	-	-
A-C	28.77	28.77	0.00	-	-	-	-	-

Main results: (18:00-18:15)

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-C	77.54	77.73	0.00	604.54	0.128	0.15	6.835	A
B-A	151.32	152.08	0.00	460.47	0.329	0.50	11.702	B
C-AB	65.05	65.19	0.00	632.49	0.103	0.13	6.350	A
C-A	55.40	55.40	0.00	-	-	-	-	-
A-B	118.20	118.20	0.00	-	-	-	-	-
A-C	24.09	24.09	0.00	-	-	-	-	-

(Default Analysis Set) - 2013 Arup Base + Site Dev + Proposed, AM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

Name	Description	Locked	Network Flow Scaling Factor (%)	Reason For Scaling Factors
(Default Analysis Set)			100.000	

Demand Set Details

Name	Scenario Name	Time Period Name	Description	Traffic Profile Type	Model Start Time (HH:mm)	Model Finish Time (HH:mm)	Model Time Period Length (min)	Time Segment Length (min)	Single Time Segment Only	Locked
2013 Arup Base + Site Dev + Proposed, AM	2013 Arup Base + Site Dev + Proposed	AM		ONE HOUR	07:45	09:15	90	15		

Junction Network

Junctions

Name	Junction Type	Major Road Direction	Arm Order	Junction Delay (s)	Junction LOS
Somerton Road_ Camp Road_Station Road	T-Junction	Two-way	A,B,C	12.02	B

Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Name	Description	Arm Type
A	Somerton Road	Upper Heyford	Major
B	Camp Road	Upper Heyford	Minor
C	Station Road	Upper Heyford	Major

Major Arm Geometry

Arm	Width of carriageway (m)	Has kerbed central reserve	Width of kerbed central reserve (m)	Has right turn bay	Width For Right Turn (m)	Visibility For Right Turn (m)	Blocks?	Blocking Queue (PCU)
C	6.00		0.00		2.20	89.00	∅	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)	Lane Width (Left) (m)	Lane Width (Right) (m)	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				9.00	2.80	2.75	2.75	2.75		1.00	30	21

Pedestrian Crossings

Arm	Crossing Type
A	None
B	None
C	None

Slope / Intercept / Capacity

Priority Intersection Slopes and Intercepts

Junction	Stream	Intercept (PCU/hr)	Slope for A-B	Slope for A-C	Slope for C-A	Slope for C-B
1	B-A	508.091	0.093	0.234	0.147	0.334
1	B-C	700.947	0.107	0.272	-	-

1	C-B	625.504	0.242	0.242	-	-
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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 Flows

Demand Set Data Options

Default Vehicle Mix	Vehicle Mix Varies Over Time	Vehicle Mix Varies Over Turn	Vehicle Mix Varies Over Entry	Vehicle Mix Source	PCU Factor for a HV (PCU)	Default Turning Proportions	Estimate from entry/exit counts	Turning Proportions Vary Over Time	Turning Proportions Vary Over Turn	Turning Proportions Vary Over Entry
		☐	☐	HV Percentages	2.00				☐	☐

Entry Flows

General Flows Data

Arm	Profile Type	Use Turning Counts	Average Demand Flow (PCU/hr)	Flow Scaling Factor (%)
A	ONE HOUR	☐	310.00	100.000
B	ONE HOUR	☐	285.00	100.000
C	ONE HOUR	☐	158.00	100.000

Turning Proportions

Turning Counts or Proportions (PCU/hr) - Junction 1 (for whole period)

		To		
		A	B	C
From	A	0.000	245.000	65.000
	B	174.000	0.000	111.000
	C	39.000	119.000	0.000

Turning Proportions (PCU) - Junction 1 (for whole period)

		To		
		A	B	C
From	A	0.00	0.79	0.21
	B	0.61	0.00	0.39
	C	0.25	0.75	0.00

Vehicle Mix

Average PCU Per Vehicle - Junction 1 (for whole period)

		To		
		A	B	C
From	A	1.000	1.000	1.000
	B	1.000	1.000	1.000
	C	1.000	1.000	1.000

Heavy Vehicle Percentages - Junction 1 (for whole period)

		To		
		A	B	C
From	A	0.000	0.000	0.000
	B	0.000	0.000	0.000
	C	0.000	0.000	0.000

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
B-C	0.23	8.99	0.30	A
B-A	0.47	16.63	0.87	C
C-AB	0.25	8.35	0.35	A
C-A	-	-	-	-
A-B	-	-	-	-
A-C	-	-	-	-

Main Results for each time segment

Main results: (07:45-08:00)

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-C	83.57	82.93	0.00	604.59	0.138	0.16	6.892	A
B-A	131.00	129.35	0.00	443.17	0.296	0.41	11.414	B
C-AB	94.26	93.47	0.00	589.02	0.160	0.20	7.255	A
C-A	24.69	24.69	0.00	-	-	-	-	-
A-B	184.45	184.45	0.00	-	-	-	-	-
A-C	48.94	48.94	0.00	-	-	-	-	-

Main results: (08:00-08:15)

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-C	99.79	99.59	0.00	574.77	0.174	0.21	7.572	A
B-A	156.42	155.82	0.00	428.92	0.365	0.56	13.151	B
C-AB	113.84	113.61	0.00	582.17	0.196	0.25	7.682	A
C-A	28.20	28.20	0.00	-	-	-	-	-
A-B	220.25	220.25	0.00	-	-	-	-	-
A-C	58.43	58.43	0.00	-	-	-	-	-

Main results: (08:15-08:30)

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-C	122.21	121.84	0.00	524.17	0.233	0.30	8.940	A
B-A	191.58	190.40	0.00	408.04	0.470	0.86	16.447	C
C-AB	141.63	141.27	0.00	572.80	0.247	0.34	8.339	A
C-A	32.33	32.33	0.00	-	-	-	-	-
A-B	269.75	269.75	0.00	-	-	-	-	-
A-C	71.57	71.57	0.00	-	-	-	-	-

Main results: (08:30-08:45)

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-C	122.21	122.20	0.00	522.74	0.234	0.30	8.987	A
B-A	191.58	191.52	0.00	407.82	0.470	0.87	16.631	C
C-AB	141.66	141.65	0.00	572.83	0.247	0.35	8.353	A
C-A	32.30	32.30	0.00	-	-	-	-	-
A-B	269.75	269.75	0.00	-	-	-	-	-
A-C	71.57	71.57	0.00	-	-	-	-	-

Main results: (08:45-09:00)

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-C	99.79	100.15	0.00	573.13	0.174	0.21	7.619	A
B-A	156.42	157.56	0.00	428.63	0.365	0.59	13.335	B
C-AB	113.87	114.22	0.00	582.22	0.196	0.26	7.699	A
C-A	28.17	28.17	0.00	-	-	-	-	-
A-B	220.25	220.25	0.00	-	-	-	-	-
A-C	58.43	58.43	0.00	-	-	-	-	-

Main results: (09:00-09:15)

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-C	83.57	83.77	0.00	602.90	0.139	0.16	6.939	A
B-A	131.00	131.64	0.00	442.75	0.296	0.43	11.597	B
C-AB	94.31	94.54	0.00	589.06	0.160	0.20	7.283	A
C-A	24.64	24.64	0.00	-	-	-	-	-
A-B	184.45	184.45	0.00	-	-	-	-	-
A-C	48.94	48.94	0.00	-	-	-	-	-

(Default Analysis Set) - 2013 Arup Base + Site Dev + Proposed, PM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

Name	Description	Locked	Network Flow Scaling Factor (%)	Reason For Scaling Factors
(Default Analysis Set)			100.000	

Demand Set Details

Name	Scenario Name	Time Period Name	Description	Traffic Profile Type	Model Start Time (HH:mm)	Model Finish Time (HH:mm)	Model Time Period Length (min)	Time Segment Length (min)	Single Time Segment Only	Locked
2013 Arup Base + Site Dev + Proposed, PM	2013 Arup Base + Site Dev + Proposed	PM		ONE HOUR	16:45	18:15	90	15		

Junction Network

Junctions

Name	Junction Type	Major Road Direction	Arm Order	Junction Delay (s)	Junction LOS
Somerton Road_Camp Road_Station Road	T-Junction	Two-way	A,B,C	12.57	B

Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Name	Description	Arm Type
A	Somerton Road	Upper Heyford	Major
B	Camp Road	Upper Heyford	Minor
C	Station Road	Upper Heyford	Major

Major Arm Geometry

Arm	Width of carriageway (m)	Has kerbed central reserve	Width of kerbed central reserve (m)	Has right turn bay	Width For Right Turn (m)	Visibility For Right Turn (m)	Blocks?	Blocking Queue (PCU)
C	6.00		0.00		2.20	89.00	∅	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)	Lane Width (Left) (m)	Lane Width (Right) (m)	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				9.00	2.80	2.75	2.75	2.75		1.00	30	21

Pedestrian Crossings

Arm	Crossing Type
A	None
B	None
C	None

Slope / Intercept / Capacity

Priority Intersection Slopes and Intercepts

Junction	Stream	Intercept (PCU/hr)	Slope for A-B	Slope for A-C	Slope for C-A	Slope for C-B
1	B-A	508.091	0.093	0.234	0.147	0.334
1	B-C	700.947	0.107	0.272	-	-
1	C-B	625.504	0.242	0.242	-	-

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 Flows

Demand Set Data Options

Default Vehicle Mix	Vehicle Mix Varies Over Time	Vehicle Mix Varies Over Turn	Vehicle Mix Varies Over Entry	Vehicle Mix Source	PCU Factor for a HV (PCU)	Default Turning Proportions	Estimate from entry/exit counts	Turning Proportions Vary Over Time	Turning Proportions Vary Over Turn	Turning Proportions Vary Over Entry
		∅	∅	HV Percentages	2.00				∅	∅

Entry Flows

General Flows Data

Arm	Profile Type	Use Turning Counts	Average Demand Flow (PCU/hr)	Flow Scaling Factor (%)
A	ONE HOUR	∅	189.00	100.000
B	ONE HOUR	∅	305.00	100.000
C	ONE HOUR	∅	160.00	100.000

Turning Proportions

Turning Counts or Proportions (PCU/hr) - Junction 1 (for whole period)

		To		
		A	B	C
From	A	0.000	157.000	32.000
	B	202.000	0.000	103.000
	C	82.000	78.000	0.000

Turning Proportions (PCU) - Junction 1 (for whole period)

		To		
		A	B	C
From	A	0.00	0.83	0.17
	B	0.66	0.00	0.34
	C	0.51	0.49	0.00

Vehicle Mix

Average PCU Per Vehicle - Junction 1 (for whole period)

		To		
		A	B	C
From	A	1.000	1.000	1.000
	B	1.000	1.000	1.000
	C	1.000	1.000	1.000

Heavy Vehicle Percentages - Junction 1 (for whole period)

		To		
		A	B	C
From	A	0.000	0.000	0.000
	B	0.000	0.000	0.000
	C	0.000	0.000	0.000

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
B-C	0.22	8.93	0.28	A
B-A	0.51	16.99	1.03	C

C-AB	0.16	6.71	0.21	A
C-A	-	-	-	-
A-B	-	-	-	-
A-C	-	-	-	-

Main Results for each time segment

Main results: (16:45-17:00)

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-C	77.54	76.96	0.00	606.08	0.128	0.15	6.797	A
B-A	152.08	150.14	0.00	460.75	0.330	0.48	11.521	B
C-AB	64.99	64.48	0.00	632.44	0.103	0.13	6.333	A
C-A	55.46	55.46	0.00	-	-	-	-	-
A-B	118.20	118.20	0.00	-	-	-	-	-
A-C	24.09	24.09	0.00	-	-	-	-	-

Main results: (17:00-17:15)

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-C	92.59	92.41	0.00	573.81	0.161	0.19	7.478	A
B-A	181.59	180.88	0.00	450.07	0.403	0.66	13.337	B
C-AB	79.26	79.13	0.00	634.07	0.125	0.16	6.488	A
C-A	64.58	64.58	0.00	-	-	-	-	-
A-B	141.14	141.14	0.00	-	-	-	-	-
A-C	28.77	28.77	0.00	-	-	-	-	-

Main results: (17:15-17:30)

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-C	113.41	113.06	0.00	518.41	0.219	0.28	8.874	A
B-A	222.41	220.99	0.00	434.14	0.512	1.01	16.772	C
C-AB	99.89	99.68	0.00	636.41	0.157	0.21	6.709	A
C-A	76.27	76.27	0.00	-	-	-	-	-
A-B	172.86	172.86	0.00	-	-	-	-	-
A-C	35.23	35.23	0.00	-	-	-	-	-

Main results: (17:30-17:45)

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-C	113.41	113.39	0.00	516.60	0.220	0.28	8.928	A
B-A	222.41	222.33	0.00	433.98	0.512	1.03	16.993	C
C-AB	99.92	99.91	0.00	636.45	0.157	0.21	6.711	A
C-A	76.24	76.24	0.00	-	-	-	-	-
A-B	172.86	172.86	0.00	-	-	-	-	-
A-C	35.23	35.23	0.00	-	-	-	-	-

Main results: (17:45-18:00)

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-C	92.59	92.93	0.00	571.72	0.162	0.20	7.526	A
B-A	181.59	182.95	0.00	449.87	0.404	0.69	13.554	B
C-AB	79.30	79.50	0.00	634.11	0.125	0.16	6.494	A
C-A	64.54	64.54	0.00	-	-	-	-	-



A-B	141.14	141.14	0.00	-	-	-	-	-
A-C	28.77	28.77	0.00	-	-	-	-	-

Main results: (18:00-18:15)

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-C	77.54	77.73	0.00	603.96	0.128	0.15	6.845	A
B-A	152.08	152.84	0.00	460.46	0.330	0.50	11.731	B
C-AB	65.05	65.19	0.00	632.49	0.103	0.13	6.350	A
C-A	55.40	55.40	0.00	-	-	-	-	-
A-B	118.20	118.20	0.00	-	-	-	-	-
A-C	24.09	24.09	0.00	-	-	-	-	-

Junctions 8
PICADY 8 - Priority Intersection Module
Version: 8.0.1.305 [25 May 2012] © Copyright TRL Limited, 2012
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Filename: (new file)

Path:

Report generation date: 28/11/2012 11:45:29

- » (Default Analysis Set) - 2013 Recalculated Base, AM
- » (Default Analysis Set) - 2013 Recalculated Base, PM
- » (Default Analysis Set) - 2013 Recalculated Base + Site Dev + Consented, AM
- » (Default Analysis Set) - 2013 Recalculated Base + Site Dev + Consented, PM
- » (Default Analysis Set) - 2013 Recalculated Base + Site Dev + Proposed, AM
- » (Default Analysis Set) - 2013 Recalculated Base + Site Dev + Proposed, PM

File summary

File Description

Title	Somerton Road_Camp Road_Station Road
Location	Upper Heyford
Site Number	
Date	22/11/2012
Version	
Status	(new file)
Identifier	
Client	
Jobnumber	23824
Enumerator	PBA\ngyseman
Description	

Analysis Options

Vehicle Length (m)	Do Queue Variations	Calculate Residual Capacity	Residual Capacity Criteria Type	RFC Threshold	Average Delay Threshold (s)	Queue Threshold (PCU)
5.75			N/A	0.85	36.00	20.00

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

(Default Analysis Set) - 2013 Recalculated Base, AM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

Name	Description	Locked	Network Flow Scaling Factor (%)	Reason For Scaling Factors
(Default Analysis Set)			100.000	

Demand Set Details

Name	Scenario Name	Time Period Name	Description	Traffic Profile Type	Model Start Time (HH:mm)	Model Finish Time (HH:mm)	Model Time Period Length (min)	Time Segment Length (min)	Single Time Segment Only	Locked
2013 Recalculated Base, AM	2013 Recalculated Base	AM		ONE HOUR	07:45	09:15	90	15		

Junction Network

Junctions

Name	Junction Type	Major Road Direction	Arm Order	Junction Delay (s)	Junction LOS
Somerton Road_Camp Road_Station Road	T-Junction	Two-way	A,B,C	6.44	A

Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Name	Description	Arm Type
A	Somerton Road	Upper Heyford	Major
B	Camp Road	Upper Heyford	Minor
C	Station Road	Upper Heyford	Major

Major Arm Geometry

Arm	Width of carriageway (m)	Has kerbed central reserve	Width of kerbed central reserve (m)	Has right turn bay	Width For Right Turn (m)	Visibility For Right Turn (m)	Blocks?	Blocking Queue (PCU)
C	6.00		0.00		2.20	89.00	∅	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)	Lane Width (Left) (m)	Lane Width (Right) (m)	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				9.00	2.80	2.75	2.75	2.75		1.00	30	21

Pedestrian Crossings

Arm	Crossing Type
A	None
B	None
C	None

Slope / Intercept / Capacity

Priority Intersection Slopes and Intercepts

Junction	Stream	Intercept (PCU/hr)	Slope for A-B	Slope for A-C	Slope for C-A	Slope for C-B
1	B-A	547.450	0.100	0.252	0.159	0.360
1	B-C	650.553	0.100	0.252	-	-
1	C-B	625.504	0.242	0.242	-	-

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 Flows

Demand Set Data Options

Default Vehicle Mix	Vehicle Mix Varies Over Time	Vehicle Mix Varies Over Turn	Vehicle Mix Varies Over Entry	Vehicle Mix Source	PCU Factor for a HV (PCU)	Default Turning Proportions	Estimate from entry/exit counts	Turning Proportions Vary Over Time	Turning Proportions Vary Over Turn	Turning Proportions Vary Over Entry
		☐	☐	HV Percentages	2.00				☐	☐

Entry Flows

General Flows Data

Arm	Profile Type	Use Turning Counts	Average Demand Flow (PCU/hr)	Flow Scaling Factor (%)
A	ONE HOUR	☐	114.00	100.000
B	ONE HOUR	☐	60.00	100.000
C	ONE HOUR	☐	55.00	100.000

Turning Proportions

Turning Counts or Proportions (PCU/hr) - Junction 1 (for whole period)

		To		
		A	B	C
From	A	0.000	53.000	61.000
	B	18.000	0.000	42.000
	C	37.000	18.000	0.000

Turning Proportions (PCU) - Junction 1 (for whole period)

		To		
		A	B	C
From	A	0.00	0.46	0.54
	B	0.30	0.00	0.70
	C	0.67	0.33	0.00

Vehicle Mix

Average PCU Per Vehicle - Junction 1 (for whole period)

		To		
		A	B	C
From	A	1.000	1.000	1.000
	B	1.000	1.000	1.000
	C	1.000	1.000	1.000

Heavy Vehicle Percentages - Junction 1 (for whole period)

		To		
		A	B	C
From	A	0.000	0.000	0.000
	B	0.000	0.000	0.000
	C	0.000	0.000	0.000

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
B-C	0.07	6.26	0.08	A
B-A	0.04	7.33	0.04	A
C-AB	0.03	5.99	0.04	A
C-A	-	-	-	-
A-B	-	-	-	-
A-C	-	-	-	-

Main Results for each time segment

Main results: (07:45-08:00)

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-C	31.62	31.41	0.00	630.86	0.050	0.05	6.004	A
B-A	13.55	13.45	0.00	522.54	0.026	0.03	7.069	A
C-AB	14.18	14.08	0.00	623.20	0.023	0.03	5.910	A
C-A	27.22	27.22	0.00	-	-	-	-	-
A-B	39.90	39.90	0.00	-	-	-	-	-
A-C	45.92	45.92	0.00	-	-	-	-	-

Main results: (08:00-08:15)

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-C	37.76	37.71	0.00	626.97	0.060	0.06	6.109	A
B-A	16.18	16.16	0.00	517.64	0.031	0.03	7.178	A
C-AB	17.09	17.07	0.00	622.82	0.027	0.03	5.942	A
C-A	32.35	32.35	0.00	-	-	-	-	-
A-B	47.65	47.65	0.00	-	-	-	-	-
A-C	54.84	54.84	0.00	-	-	-	-	-

Main results: (08:15-08:30)

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
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B-C	46.24	46.18	0.00	621.61	0.074	0.08	6.256	A
B-A	19.82	19.79	0.00	510.87	0.039	0.04	7.330	A
C-AB	21.20	21.17	0.00	622.35	0.034	0.04	5.987	A
C-A	39.35	39.35	0.00	-	-	-	-	-
A-B	58.35	58.35	0.00	-	-	-	-	-
A-C	67.16	67.16	0.00	-	-	-	-	-

Main results: (08:30-08:45)

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-C	46.24	46.24	0.00	621.60	0.074	0.08	6.256	A
B-A	19.82	19.82	0.00	510.86	0.039	0.04	7.330	A
C-AB	21.21	21.20	0.00	622.35	0.034	0.04	5.988	A
C-A	39.35	39.35	0.00	-	-	-	-	-
A-B	58.35	58.35	0.00	-	-	-	-	-
A-C	67.16	67.16	0.00	-	-	-	-	-

Main results: (08:45-09:00)

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-C	37.76	37.82	0.00	626.96	0.060	0.06	6.110	A
B-A	16.18	16.21	0.00	517.62	0.031	0.03	7.179	A
C-AB	17.10	17.13	0.00	622.83	0.027	0.03	5.945	A
C-A	32.35	32.35	0.00	-	-	-	-	-
A-B	47.65	47.65	0.00	-	-	-	-	-
A-C	54.84	54.84	0.00	-	-	-	-	-

Main results: (09:00-09:15)

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-C	31.62	31.67	0.00	630.82	0.050	0.05	6.008	A
B-A	13.55	13.57	0.00	522.50	0.026	0.03	7.073	A
C-AB	14.19	14.21	0.00	623.20	0.023	0.03	5.913	A
C-A	27.22	27.22	0.00	-	-	-	-	-
A-B	39.90	39.90	0.00	-	-	-	-	-
A-C	45.92	45.92	0.00	-	-	-	-	-

(Default Analysis Set) - 2013 Recalculated Base, PM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

Name	Description	Locked	Network Flow Scaling Factor (%)	Reason For Scaling Factors
(Default Analysis Set)			100.000	

Demand Set Details

Name	Scenario Name	Time Period Name	Description	Traffic Profile Type	Model Start Time (HH:mm)	Model Finish Time (HH:mm)	Model Time Period Length (min)	Time Segment Length (min)	Single Time Segment Only	Locked
2013 Recalculated Base, PM	2013 Recalculated Base	PM		ONE HOUR	16:45	18:15	90	15		

Junction Network

Junctions

Name	Junction Type	Major Road Direction	Arm Order	Junction Delay (s)	Junction LOS
Somerton Road_Camp Road_Station Road	T-Junction	Two-way	A,B,C	7.39	A

Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Name	Description	Arm Type
A	Somerton Road	Upper Heyford	Major
B	Camp Road	Upper Heyford	Minor
C	Station Road	Upper Heyford	Major

Major Arm Geometry

Arm	Width of carriageway (m)	Has kerbed central reserve	Width of kerbed central reserve (m)	Has right turn bay	Width For Right Turn (m)	Visibility For Right Turn (m)	Blocks?	Blocking Queue (PCU)
C	6.00		0.00		2.20	89.00	∅	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)	Lane Width (Left) (m)	Lane Width (Right) (m)	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				9.00	2.80	2.75	2.75	2.75		1.00	30	21

Pedestrian Crossings

Arm	Crossing Type
A	None
B	None
C	None

Slope / Intercept / Capacity

Priority Intersection Slopes and Intercepts

Junction	Stream	Intercept (PCU/hr)	Slope for A-B	Slope for A-C	Slope for C-A	Slope for C-B
1	B-A	508.091	0.093	0.234	0.147	0.334
1	B-C	700.947	0.107	0.272	-	-
1	C-B	625.504	0.242	0.242	-	-

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 Flows

Demand Set Data Options

Default Vehicle Mix	Vehicle Mix Varies Over Time	Vehicle Mix Varies Over Turn	Vehicle Mix Varies Over Entry	Vehicle Mix Source	PCU Factor for a HV (PCU)	Default Turning Proportions	Estimate from entry/exit counts	Turning Proportions Vary Over Time	Turning Proportions Vary Over Turn	Turning Proportions Vary Over Entry
		☐	☐	HV Percentages	2.00				☐	☐

Entry Flows

General Flows Data

Arm	Profile Type	Use Turning Counts	Average Demand Flow (PCU/hr)	Flow Scaling Factor (%)
A	ONE HOUR	☐	78.00	100.000
B	ONE HOUR	☐	86.00	100.000
C	ONE HOUR	☐	87.00	100.000

Turning Proportions

Turning Counts or Proportions (PCU/hr) - Junction 1 (for whole period)

		To		
		A	B	C
From	A	0.000	48.000	30.000
	B	56.000	0.000	30.000
	C	78.000	9.000	0.000

Turning Proportions (PCU) - Junction 1 (for whole period)

		To		
		A	B	C
From	A	0.00	0.62	0.38
	B	0.65	0.00	0.35
	C	0.90	0.10	0.00

Vehicle Mix

Average PCU Per Vehicle - Junction 1 (for whole period)

		To		
		A	B	C
From	A	1.000	1.000	1.000
	B	1.000	1.000	1.000
	C	1.000	1.000	1.000

Heavy Vehicle Percentages - Junction 1 (for whole period)

		To		
		A	B	C
From	A	0.000	0.000	0.000
	B	0.000	0.000	0.000
	C	0.000	0.000	0.000

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
B-C	0.05	5.72	0.05	A
B-A	0.13	8.62	0.15	A
C-AB	0.02	5.60	0.02	A
C-A	-	-	-	-
A-B	-	-	-	-
A-C	-	-	-	-

Main Results for each time segment

Main results: (16:45-17:00)

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-C	22.59	22.45	0.00	675.64	0.033	0.03	5.509	A
B-A	42.16	41.79	0.00	488.52	0.086	0.09	8.052	A
C-AB	7.44	7.39	0.00	650.01	0.011	0.01	5.601	A
C-A	58.06	58.06	0.00	-	-	-	-	-
A-B	36.14	36.14	0.00	-	-	-	-	-
A-C	22.59	22.59	0.00	-	-	-	-	-

Main results: (17:00-17:15)

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-C	26.97	26.94	0.00	670.29	0.040	0.04	5.595	A
B-A	50.34	50.26	0.00	484.68	0.104	0.11	8.284	A
C-AB	9.05	9.04	0.00	654.86	0.014	0.02	5.573	A
C-A	69.16	69.16	0.00	-	-	-	-	-
A-B	43.15	43.15	0.00	-	-	-	-	-
A-C	26.97	26.97	0.00	-	-	-	-	-

Main results: (17:15-17:30)

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-C	33.03	32.99	0.00	662.79	0.050	0.05	5.715	A
B-A	61.66	61.53	0.00	479.37	0.129	0.15	8.613	A
C-AB	11.37	11.35	0.00	661.60	0.017	0.02	5.535	A
C-A	84.42	84.42	0.00	-	-	-	-	-
A-B	52.85	52.85	0.00	-	-	-	-	-
A-C	33.03	33.03	0.00	-	-	-	-	-

Main results: (17:30-17:45)

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-C	33.03	33.03	0.00	662.74	0.050	0.05	5.716	A
B-A	61.66	61.65	0.00	479.36	0.129	0.15	8.618	A
C-AB	11.37	11.37	0.00	661.60	0.017	0.02	5.536	A
C-A	84.42	84.42	0.00	-	-	-	-	-
A-B	52.85	52.85	0.00	-	-	-	-	-
A-C	33.03	33.03	0.00	-	-	-	-	-

Main results: (17:45-18:00)

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-C	26.97	27.01	0.00	670.20	0.040	0.04	5.599	A
B-A	50.34	50.46	0.00	484.67	0.104	0.12	8.293	A
C-AB	9.05	9.07	0.00	654.86	0.014	0.02	5.574	A
C-A	69.16	69.16	0.00	-	-	-	-	-
A-B	43.15	43.15	0.00	-	-	-	-	-
A-C	26.97	26.97	0.00	-	-	-	-	-

Main results: (18:00-18:15)

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-C	22.59	22.62	0.00	675.46	0.033	0.03	5.514	A
B-A	42.16	42.25	0.00	488.50	0.086	0.10	8.070	A
C-AB	7.45	7.46	0.00	650.02	0.011	0.01	5.604	A
C-A	58.05	58.05	0.00	-	-	-	-	-
A-B	36.14	36.14	0.00	-	-	-	-	-
A-C	22.59	22.59	0.00	-	-	-	-	-

(Default Analysis Set) - 2013 Recalculated Base + Site Dev + Consented, AM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

Name	Description	Locked	Network Flow Scaling Factor (%)	Reason For Scaling Factors
(Default Analysis Set)			100.000	

Demand Set Details

Name	Scenario Name	Time Period Name	Description	Traffic Profile Type	Model Start Time (HH:mm)	Model Finish Time (HH:mm)	Model Time Period Length (min)	Time Segment Length (min)	Single Time Segment Only	Locked
2013 Recalculated Base + Site Dev + Consented, AM	2013 Recalculated Base + Site Dev + Consented	AM		ONE HOUR	07:45	09:15	90	15		

Junction Network

Junctions

Name	Junction Type	Major Road Direction	Arm Order	Junction Delay (s)	Junction LOS
Somerton Road_ Camp Road_Station Road	T-Junction	Two-way	A,B,C	11.39	B

Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Name	Description	Arm Type
A	Somerton Road	Upper Heyford	Major
B	Camp Road	Upper Heyford	Minor
C	Station Road	Upper Heyford	Major

Major Arm Geometry

Arm	Width of carriageway (m)	Has kerbed central reserve	Width of kerbed central reserve (m)	Has right turn bay	Width For Right Turn (m)	Visibility For Right Turn (m)	Blocks?	Blocking Queue (PCU)
C	6.00		0.00		2.20	89.00	∅	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)	Lane Width (Left) (m)	Lane Width (Right) (m)	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				9.00	2.80	2.75	2.75	2.75		1.00	30	21

Pedestrian Crossings

Arm	Crossing Type
A	None
B	None
C	None

Slope / Intercept / Capacity

Priority Intersection Slopes and Intercepts

Junction	Stream	Intercept (PCU/hr)	Slope for A-B	Slope for A-C	Slope for C-A	Slope for C-B
1	B-A	508.091	0.093	0.234	0.147	0.334
1	B-C	700.947	0.107	0.272	-	-
1	C-B	625.504	0.242	0.242	-	-

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 Flows

Demand Set Data Options

Default Vehicle Mix	Vehicle Mix Varies Over Time	Vehicle Mix Varies Over Turn	Vehicle Mix Varies Over Entry	Vehicle Mix Source	PCU Factor for a HV (PCU)	Default Turning Proportions	Estimate from entry/exit counts	Turning Proportions Vary Over Time	Turning Proportions Vary Over Turn	Turning Proportions Vary Over Entry
		∅	∅	HV Percentages	2.00				∅	∅

Entry Flows

General Flows Data

Arm	Profile Type	Use Turning Counts	Average Demand Flow (PCU/hr)	Flow Scaling Factor (%)
A	ONE HOUR	∅	292.00	100.000

B	ONE HOUR	□	271.00	100.000
C	ONE HOUR	□	150.00	100.000

Turning Proportions

Turning Counts or Proportions (PCU/hr) - Junction 1 (for whole period)

		To		
		A	B	C
From	A	0.000	231.000	61.000
	B	166.000	0.000	105.000
	C	37.000	113.000	0.000

Turning Proportions (PCU) - Junction 1 (for whole period)

		To		
		A	B	C
From	A	0.00	0.79	0.21
	B	0.61	0.00	0.39
	C	0.25	0.75	0.00

Vehicle Mix

Average PCU Per Vehicle - Junction 1 (for whole period)

		To		
		A	B	C
From	A	1.000	1.000	1.000
	B	1.000	1.000	1.000
	C	1.000	1.000	1.000

Heavy Vehicle Percentages - Junction 1 (for whole period)

		To		
		A	B	C
From	A	0.000	0.000	0.000
	B	0.000	0.000	0.000
	C	0.000	0.000	0.000

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
B-C	0.21	8.52	0.27	A
B-A	0.44	15.54	0.78	C
C-AB	0.23	8.14	0.32	A
C-A	-	-	-	-
A-B	-	-	-	-
A-C	-	-	-	-

Main Results for each time segment

Main results: (07:45-08:00)

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-C	79.05	78.46	0.00	611.08	0.129	0.15	6.752	A
B-A	124.97	123.45	0.00	446.93	0.280	0.38	11.078	B
C-AB	89.26	88.52	0.00	591.22	0.151	0.18	7.151	A
C-A	23.67	23.67	0.00	-	-	-	-	-
A-B	173.91	173.91	0.00	-	-	-	-	-
A-C	45.92	45.92	0.00	-	-	-	-	-

Main results: (08:00-08:15)

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-C	94.39	94.22	0.00	584.16	0.162	0.19	7.346	A
B-A	149.23	148.70	0.00	433.65	0.344	0.51	12.609	B
C-AB	107.72	107.51	0.00	584.78	0.184	0.24	7.542	A
C-A	27.13	27.13	0.00	-	-	-	-	-
A-B	207.66	207.66	0.00	-	-	-	-	-
A-C	54.84	54.84	0.00	-	-	-	-	-

Main results: (08:15-08:30)

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-C	115.61	115.29	0.00	539.17	0.214	0.27	8.487	A
B-A	182.77	181.76	0.00	414.38	0.441	0.77	15.406	C
C-AB	133.88	133.55	0.00	575.96	0.232	0.32	8.133	A
C-A	31.27	31.27	0.00	-	-	-	-	-
A-B	254.34	254.34	0.00	-	-	-	-	-
A-C	67.16	67.16	0.00	-	-	-	-	-

Main results: (08:30-08:45)

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-C	115.61	115.60	0.00	538.04	0.215	0.27	8.521	A
B-A	182.77	182.73	0.00	414.20	0.441	0.78	15.544	C
C-AB	133.90	133.90	0.00	575.98	0.232	0.32	8.145	A
C-A	31.25	31.25	0.00	-	-	-	-	-
A-B	254.34	254.34	0.00	-	-	-	-	-
A-C	67.16	67.16	0.00	-	-	-	-	-

Main results: (08:45-09:00)

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-C	94.39	94.70	0.00	582.84	0.162	0.20	7.378	A
B-A	149.23	150.20	0.00	433.41	0.344	0.54	12.756	B
C-AB	107.74	108.06	0.00	584.82	0.184	0.24	7.559	A
C-A	27.10	27.10	0.00	-	-	-	-	-
A-B	207.66	207.66	0.00	-	-	-	-	-
A-C	54.84	54.84	0.00	-	-	-	-	-

Main results: (09:00-09:15)

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-C	79.05	79.23	0.00	609.62	0.130	0.15	6.791	A
B-A	124.97	125.54	0.00	446.54	0.280	0.40	11.234	B
C-AB	89.30	89.51	0.00	591.26	0.151	0.19	7.178	A

C-A	23.63	23.63	0.00	-	-	-	-	-
A-B	173.91	173.91	0.00	-	-	-	-	-
A-C	45.92	45.92	0.00	-	-	-	-	-

(Default Analysis Set) - 2013 Recalculated Base + Site Dev + Consented, PM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

Name	Description	Locked	Network Flow Scaling Factor (%)	Reason For Scaling Factors
(Default Analysis Set)			100.000	

Demand Set Details

Name	Scenario Name	Time Period Name	Description	Traffic Profile Type	Model Start Time (HH:mm)	Model Finish Time (HH:mm)	Model Time Period Length (min)	Time Segment Length (min)	Single Time Segment Only	Locked
2013 Recalculated Base + Site Dev + Consented, PM	2013 Recalculated Base + Site Dev + Consented	PM		ONE HOUR	16:45	18:15	90	15		

Junction Network

Junctions

Name	Junction Type	Major Road Direction	Arm Order	Junction Delay (s)	Junction LOS
Somerton Road_Camp Road_Station Road	T-Junction	Two-way	A,B,C	12.18	B

Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Name	Description	Arm Type
A	Somerton Road	Upper Heyford	Major
B	Camp Road	Upper Heyford	Minor
C	Station Road	Upper Heyford	Major

Major Arm Geometry

Arm	Width of carriageway (m)	Has kerbed central reserve	Width of kerbed central reserve (m)	Has right turn bay	Width For Right Turn (m)	Visibility For Right Turn (m)	Blocks?	Blocking Queue (PCU)
C	6.00		0.00		2.20	89.00	∅	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)	Lane Width (Left) (m)	Lane Width (Right) (m)	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				9.00	2.80	2.75	2.75	2.75		1.00	30	21

Pedestrian Crossings

Arm	Crossing Type
A	None
B	None
C	None

Slope / Intercept / Capacity

Priority Intersection Slopes and Intercepts

Junction	Stream	Intercept (PCU/hr)	Slope for A-B	Slope for A-C	Slope for C-A	Slope for C-B
1	B-A	508.091	0.093	0.234	0.147	0.334
1	B-C	700.947	0.107	0.272	-	-
1	C-B	625.504	0.242	0.242	-	-

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 Flows

Demand Set Data Options

Default Vehicle Mix	Vehicle Mix Varies Over Time	Vehicle Mix Varies Over Turn	Vehicle Mix Varies Over Entry	Vehicle Mix Source	PCU Factor for a HV (PCU)	Default Turning Proportions	Estimate from entry/exit counts	Turning Proportions Vary Over Time	Turning Proportions Vary Over Turn	Turning Proportions Vary Over Entry
		☐	☐	HV Percentages	2.00				☐	☐

Entry Flows

General Flows Data

Arm	Profile Type	Use Turning Counts	Average Demand Flow (PCU/hr)	Flow Scaling Factor (%)
A	ONE HOUR	☐	184.00	100.000
B	ONE HOUR	☐	298.00	100.000
C	ONE HOUR	☐	156.00	100.000

Turning Proportions

Turning Counts or Proportions (PCU/hr) - Junction 1 (for whole period)

		To		
		A	B	C
From	A	0.000	154.000	30.000
	B	197.000	0.000	101.000
	C	78.000	78.000	0.000

Turning Proportions (PCU) - Junction 1 (for whole period)

		To		
		A	B	C
From	A	0.00	0.84	0.16
	B	0.66	0.00	0.34
	C	0.50	0.50	0.00

Vehicle Mix

Average PCU Per Vehicle - Junction 1 (for whole period)

		To		
		A	B	C
From	A	1.000	1.000	1.000
	B	1.000	1.000	1.000
	C	1.000	1.000	1.000

Heavy Vehicle Percentages - Junction 1 (for whole period)

		To		
		A	B	C
From	A	0.000	0.000	0.000
	B	0.000	0.000	0.000
	C	0.000	0.000	0.000

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
B-C	0.21	8.69	0.27	A
B-A	0.50	16.41	0.97	C
C-AB	0.16	6.73	0.21	A
C-A	-	-	-	-
A-B	-	-	-	-
A-C	-	-	-	-

Main Results for each time segment

Main results: (16:45-17:00)

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-C	76.04	75.47	0.00	609.66	0.125	0.14	6.732	A
B-A	148.31	146.45	0.00	461.89	0.321	0.46	11.349	B
C-AB	64.67	64.17	0.00	631.30	0.102	0.13	6.342	A
C-A	52.77	52.77	0.00	-	-	-	-	-
A-B	115.94	115.94	0.00	-	-	-	-	-
A-C	22.59	22.59	0.00	-	-	-	-	-

Main results: (17:00-17:15)

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-C	90.80	90.63	0.00	579.11	0.157	0.18	7.368	A
B-A	177.10	176.43	0.00	451.54	0.392	0.63	13.052	B
C-AB	78.79	78.66	0.00	632.69	0.125	0.16	6.498	A
C-A	61.45	61.45	0.00	-	-	-	-	-
A-B	138.44	138.44	0.00	-	-	-	-	-
A-C	26.97	26.97	0.00	-	-	-	-	-

Main results: (17:15-17:30)

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-C	111.20	110.88	0.00	526.96	0.211	0.26	8.652	A
B-A	216.90	215.60	0.00	436.16	0.497	0.96	16.221	C
C-AB	99.16	98.95	0.00	634.71	0.156	0.21	6.721	A
C-A	72.60	72.60	0.00	-	-	-	-	-
A-B	169.56	169.56	0.00	-	-	-	-	-
A-C	33.03	33.03	0.00	-	-	-	-	-

Main results: (17:30-17:45)

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-C	111.20	111.19	0.00	525.35	0.212	0.27	8.692	A
B-A	216.90	216.84	0.00	436.01	0.497	0.97	16.412	C
C-AB	99.18	99.18	0.00	634.73	0.156	0.21	6.726	A
C-A	72.58	72.58	0.00	-	-	-	-	-
A-B	169.56	169.56	0.00	-	-	-	-	-
A-C	33.03	33.03	0.00	-	-	-	-	-

Main results: (17:45-18:00)

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-C	90.80	91.11	0.00	577.23	0.157	0.19	7.409	A
B-A	177.10	178.35	0.00	451.35	0.392	0.66	13.246	B
C-AB	78.82	79.02	0.00	632.74	0.125	0.16	6.507	A
C-A	61.42	61.42	0.00	-	-	-	-	-
A-B	138.44	138.44	0.00	-	-	-	-	-
A-C	26.97	26.97	0.00	-	-	-	-	-

Main results: (18:00-18:15)

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-C	76.04	76.21	0.00	607.69	0.125	0.14	6.777	A
B-A	148.31	149.03	0.00	461.61	0.321	0.48	11.545	B
C-AB	64.73	64.87	0.00	631.35	0.103	0.13	6.359	A
C-A	52.71	52.71	0.00	-	-	-	-	-
A-B	115.94	115.94	0.00	-	-	-	-	-
A-C	22.59	22.59	0.00	-	-	-	-	-

(Default Analysis Set) - 2013 Recalculated Base + Site Dev + Proposed, AM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

Name	Description	Locked	Network Flow Scaling Factor (%)	Reason For Scaling Factors
(Default Analysis Set)			100.000	

Demand Set Details

Name	Scenario Name	Time Period Name	Description	Traffic Profile Type	Model Start Time (HH:mm)	Model Finish Time (HH:mm)	Model Time Period Length (min)	Time Segment Length (min)	Single Time Segment Only	Locked
2013 Recalculated Base + Site Dev + Proposed, AM	2013 Recalculated Base + Site Dev + Proposed	AM		ONE HOUR	07:45	09:15	90	15		

Junction Network

Junctions

Name	Junction Type	Major Road Direction	Arm Order	Junction Delay (s)	Junction LOS
Somerton Road_Camp Road_Station Road	T-Junction	Two-way	A,B,C	11.87	B

Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Name	Description	Arm Type
A	Somerton Road	Upper Heyford	Major
B	Camp Road	Upper Heyford	Minor
C	Station Road	Upper Heyford	Major

Major Arm Geometry

Arm	Width of carriageway (m)	Has kerbed central reserve	Width of kerbed central reserve (m)	Has right turn bay	Width For Right Turn (m)	Visibility For Right Turn (m)	Blocks?	Blocking Queue (PCU)
C	6.00		0.00		2.20	89.00	∅	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)	Lane Width (Left) (m)	Lane Width (Right) (m)	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				9.00	2.80	2.75	2.75	2.75		1.00	30	21

Pedestrian Crossings

Arm	Crossing Type
A	None
B	None
C	None

Slope / Intercept / Capacity

Priority Intersection Slopes and Intercepts

--	--	--	--	--	--	--	--	--	--	--	--	--	--

Junction	Stream	Intercept (PCU/hr)	Slope for A-B	Slope for A-C	Slope for C-A	Slope for C-B
1	B-A	508.091	0.093	0.234	0.147	0.334
1	B-C	700.947	0.107	0.272	-	-
1	C-B	625.504	0.242	0.242	-	-

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 Flows

Demand Set Data Options

Default Vehicle Mix	Vehicle Mix Varies Over Time	Vehicle Mix Varies Over Turn	Vehicle Mix Varies Over Entry	Vehicle Mix Source	PCU Factor for a HV (PCU)	Default Turning Proportions	Estimate from entry/exit counts	Turning Proportions Vary Over Time	Turning Proportions Vary Over Turn	Turning Proportions Vary Over Entry
		<input type="checkbox"/>	<input type="checkbox"/>	HV Percentages	2.00				<input type="checkbox"/>	<input type="checkbox"/>

Entry Flows

General Flows Data

Arm	Profile Type	Use Turning Counts	Average Demand Flow (PCU/hr)	Flow Scaling Factor (%)
A	ONE HOUR	<input type="checkbox"/>	302.00	100.000
B	ONE HOUR	<input type="checkbox"/>	281.00	100.000
C	ONE HOUR	<input type="checkbox"/>	155.00	100.000

Turning Proportions

Turning Counts or Proportions (PCU/hr) - Junction 1 (for whole period)

		To		
		A	B	C
From	A	0.000	241.000	61.000
	B	173.000	0.000	108.000
	C	37.000	118.000	0.000

Turning Proportions (PCU) - Junction 1 (for whole period)

		To		
		A	B	C
From	A	0.00	0.80	0.20
	B	0.62	0.00	0.38
	C	0.24	0.76	0.00

Vehicle Mix

Average PCU Per Vehicle - Junction 1 (for whole period)

		To		
		A	B	C

From	A	1.000	1.000	1.000
	B	1.000	1.000	1.000
	C	1.000	1.000	1.000

Heavy Vehicle Percentages - Junction 1 (for whole period)

From	To			
		A	B	C
	A	0.000	0.000	0.000
	B	0.000	0.000	0.000
C	0.000	0.000	0.000	

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
B-C	0.23	8.83	0.29	A
B-A	0.46	16.35	0.85	C
C-AB	0.24	8.31	0.34	A
C-A	-	-	-	-
A-B	-	-	-	-
A-C	-	-	-	-

Main Results for each time segment

Main results: (07:45-08:00)

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-C	81.31	80.69	0.00	606.46	0.134	0.15	6.840	A
B-A	130.24	128.62	0.00	444.77	0.293	0.41	11.331	B
C-AB	93.22	92.44	0.00	589.43	0.158	0.19	7.234	A
C-A	23.47	23.47	0.00	-	-	-	-	-
A-B	181.44	181.44	0.00	-	-	-	-	-
A-C	45.92	45.92	0.00	-	-	-	-	-

Main results: (08:00-08:15)

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-C	97.09	96.90	0.00	577.35	0.168	0.20	7.487	A
B-A	155.52	154.94	0.00	430.93	0.361	0.55	13.014	B
C-AB	112.51	112.29	0.00	582.64	0.193	0.25	7.653	A
C-A	26.83	26.83	0.00	-	-	-	-	-
A-B	216.65	216.65	0.00	-	-	-	-	-
A-C	54.84	54.84	0.00	-	-	-	-	-

Main results: (08:15-08:30)

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-C	118.91	118.56	0.00	528.09	0.225	0.29	8.784	A
B-A	190.48	189.34	0.00	410.72	0.464	0.84	16.174	C
C-AB	139.85	139.50	0.00	573.35	0.244	0.34	8.294	A

C-A	30.80	30.80	0.00	-	-	-	-	-
A-B	265.35	265.35	0.00	-	-	-	-	-
A-C	67.16	67.16	0.00	-	-	-	-	-

Main results: (08:30-08:45)

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-C	118.91	118.90	0.00	526.72	0.226	0.29	8.827	A
B-A	190.48	190.42	0.00	410.51	0.464	0.85	16.346	C
C-AB	139.88	139.87	0.00	573.38	0.244	0.34	8.308	A
C-A	30.78	30.78	0.00	-	-	-	-	-
A-B	265.35	265.35	0.00	-	-	-	-	-
A-C	67.16	67.16	0.00	-	-	-	-	-

Main results: (08:45-09:00)

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-C	97.09	97.43	0.00	575.78	0.169	0.20	7.533	A
B-A	155.52	156.62	0.00	430.65	0.361	0.58	13.191	B
C-AB	112.54	112.88	0.00	582.69	0.193	0.25	7.672	A
C-A	26.80	26.80	0.00	-	-	-	-	-
A-B	216.65	216.65	0.00	-	-	-	-	-
A-C	54.84	54.84	0.00	-	-	-	-	-

Main results: (09:00-09:15)

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-C	81.31	81.50	0.00	604.82	0.134	0.16	6.883	A
B-A	130.24	130.87	0.00	444.36	0.293	0.42	11.506	B
C-AB	93.27	93.49	0.00	589.47	0.158	0.20	7.264	A
C-A	23.42	23.42	0.00	-	-	-	-	-
A-B	181.44	181.44	0.00	-	-	-	-	-
A-C	45.92	45.92	0.00	-	-	-	-	-

(Default Analysis Set) - 2013 Recalculated Base + Site Dev + Proposed, PM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

Name	Description	Locked	Network Flow Scaling Factor (%)	Reason For Scaling Factors
(Default Analysis Set)			100.000	

Demand Set Details

Name	Scenario Name	Time Period Name	Description	Traffic Profile Type	Model Start Time (HH:mm)	Model Finish Time (HH:mm)	Model Time Period Length (min)	Time Segment Length (min)	Single Time Segment Only	Locked
2013 Recalculated Base + Site Dev + Proposed, PM	2013 Recalculated Base + Site Dev + Proposed	PM		ONE HOUR	16:45	18:15	90	15		

Junction Network

Junctions

Name	Junction Type	Major Road Direction	Arm Order	Junction Delay (s)	Junction LOS
Somerton Road_Camp Road_Station Road	T-Junction	Two-way	A,B,C	12.31	B

Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Name	Description	Arm Type
A	Somerton Road	Upper Heyford	Major
B	Camp Road	Upper Heyford	Minor
C	Station Road	Upper Heyford	Major

Major Arm Geometry

Arm	Width of carriageway (m)	Has kerbed central reserve	Width of kerbed central reserve (m)	Has right turn bay	Width For Right Turn (m)	Visibility For Right Turn (m)	Blocks?	Blocking Queue (PCU)
C	6.00		0.00		2.20	89.00	∅	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)	Lane Width (Left) (m)	Lane Width (Right) (m)	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				9.00	2.80	2.75	2.75	2.75		1.00	30	21

Pedestrian Crossings

Arm	Crossing Type
A	None
B	None
C	None

Slope / Intercept / Capacity

Priority Intersection Slopes and Intercepts

Junction	Stream	Intercept (PCU/hr)	Slope for A-B	Slope for A-C	Slope for C-A	Slope for C-B
1	B-A	508.091	0.093	0.234	0.147	0.334
1	B-C	700.947	0.107	0.272	-	-
1	C-B	625.504	0.242	0.242	-	-

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 Flows

Demand Set Data Options

Default Vehicle Mix	Vehicle Mix Varies Over Time	Vehicle Mix Varies Over Turn	Vehicle Mix Varies Over Entry	Vehicle Mix Source	PCU Factor for a HV (PCU)	Default Turning Proportions	Estimate from entry/exit counts	Turning Proportions Vary Over Time	Turning Proportions Vary Over Turn	Turning Proportions Vary Over Entry
		☐	☐	HV Percentages	2.00				☐	☐

Entry Flows

General Flows Data

Arm	Profile Type	Use Turning Counts	Average Demand Flow (PCU/hr)	Flow Scaling Factor (%)
A	ONE HOUR	☐	184.00	100.000
B	ONE HOUR	☐	300.00	100.000
C	ONE HOUR	☐	156.00	100.000

Turning Proportions

Turning Counts or Proportions (PCU/hr) - Junction 1 (for whole period)

		To		
		A	B	C
From	A	0.000	154.000	30.000
	B	199.000	0.000	101.000
	C	78.000	78.000	0.000

Turning Proportions (PCU) - Junction 1 (for whole period)

		To		
		A	B	C
From	A	0.00	0.84	0.16
	B	0.66	0.00	0.34
	C	0.50	0.50	0.00

Vehicle Mix

Average PCU Per Vehicle - Junction 1 (for whole period)

		To		
		A	B	C
From	A	1.000	1.000	1.000
	B	1.000	1.000	1.000
	C	1.000	1.000	1.000

Heavy Vehicle Percentages - Junction 1 (for whole period)

		To		
		A	B	C
From	A	0.000	0.000	0.000
	B	0.000	0.000	0.000
	C	0.000	0.000	0.000

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
B-C	0.21	8.75	0.27	A
B-A	0.50	16.58	0.99	C
C-AB	0.16	6.73	0.21	A
C-A	-	-	-	-
A-B	-	-	-	-
A-C	-	-	-	-

Main Results for each time segment

Main results: (16:45-17:00)

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-C	76.04	75.47	0.00	608.57	0.125	0.14	6.746	A
B-A	149.82	147.93	0.00	461.87	0.324	0.47	11.397	B
C-AB	64.67	64.17	0.00	631.30	0.102	0.13	6.342	A
C-A	52.77	52.77	0.00	-	-	-	-	-
A-B	115.94	115.94	0.00	-	-	-	-	-
A-C	22.59	22.59	0.00	-	-	-	-	-

Main results: (17:00-17:15)

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-C	90.80	90.62	0.00	577.46	0.157	0.18	7.393	A
B-A	178.90	178.22	0.00	451.49	0.396	0.64	13.138	B
C-AB	78.79	78.66	0.00	632.69	0.125	0.16	6.498	A
C-A	61.45	61.45	0.00	-	-	-	-	-
A-B	138.44	138.44	0.00	-	-	-	-	-
A-C	26.97	26.97	0.00	-	-	-	-	-

Main results: (17:15-17:30)

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-C	111.20	110.88	0.00	524.26	0.212	0.27	8.701	A
B-A	219.10	217.77	0.00	436.07	0.502	0.98	16.488	C
C-AB	99.16	98.95	0.00	634.71	0.156	0.21	6.721	A
C-A	72.60	72.60	0.00	-	-	-	-	-
A-B	169.56	169.56	0.00	-	-	-	-	-
A-C	33.03	33.03	0.00	-	-	-	-	-

Main results: (17:30-17:45)

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-C	111.20	111.19	0.00	522.59	0.213	0.27	8.750	A
B-A	219.10	219.04	0.00	435.92	0.503	0.99	16.584	C
C-AB	99.18	99.18	0.00	634.73	0.156	0.21	6.726	A
C-A	72.58	72.58	0.00	-	-	-	-	-
A-B	169.56	169.56	0.00	-	-	-	-	-
A-C	33.03	33.03	0.00	-	-	-	-	-

Main results: (17:45-18:00)

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-C	111.20	111.19	0.00	522.59	0.213	0.27	8.750	A
B-A	219.10	219.04	0.00	435.92	0.503	0.99	16.584	C
C-AB	99.18	99.18	0.00	634.73	0.156	0.21	6.726	A
C-A	72.58	72.58	0.00	-	-	-	-	-
A-B	169.56	169.56	0.00	-	-	-	-	-
A-C	33.03	33.03	0.00	-	-	-	-	-

B-C	90.80	91.11	0.00	575.51	0.158	0.19	7.438	A
B-A	178.90	180.18	0.00	451.30	0.396	0.67	13.342	B
C-AB	78.82	79.02	0.00	632.74	0.125	0.16	6.507	A
C-A	61.42	61.42	0.00	-	-	-	-	-
A-B	138.44	138.44	0.00	-	-	-	-	-
A-C	26.97	26.97	0.00	-	-	-	-	-

Main results: (18:00-18:15)

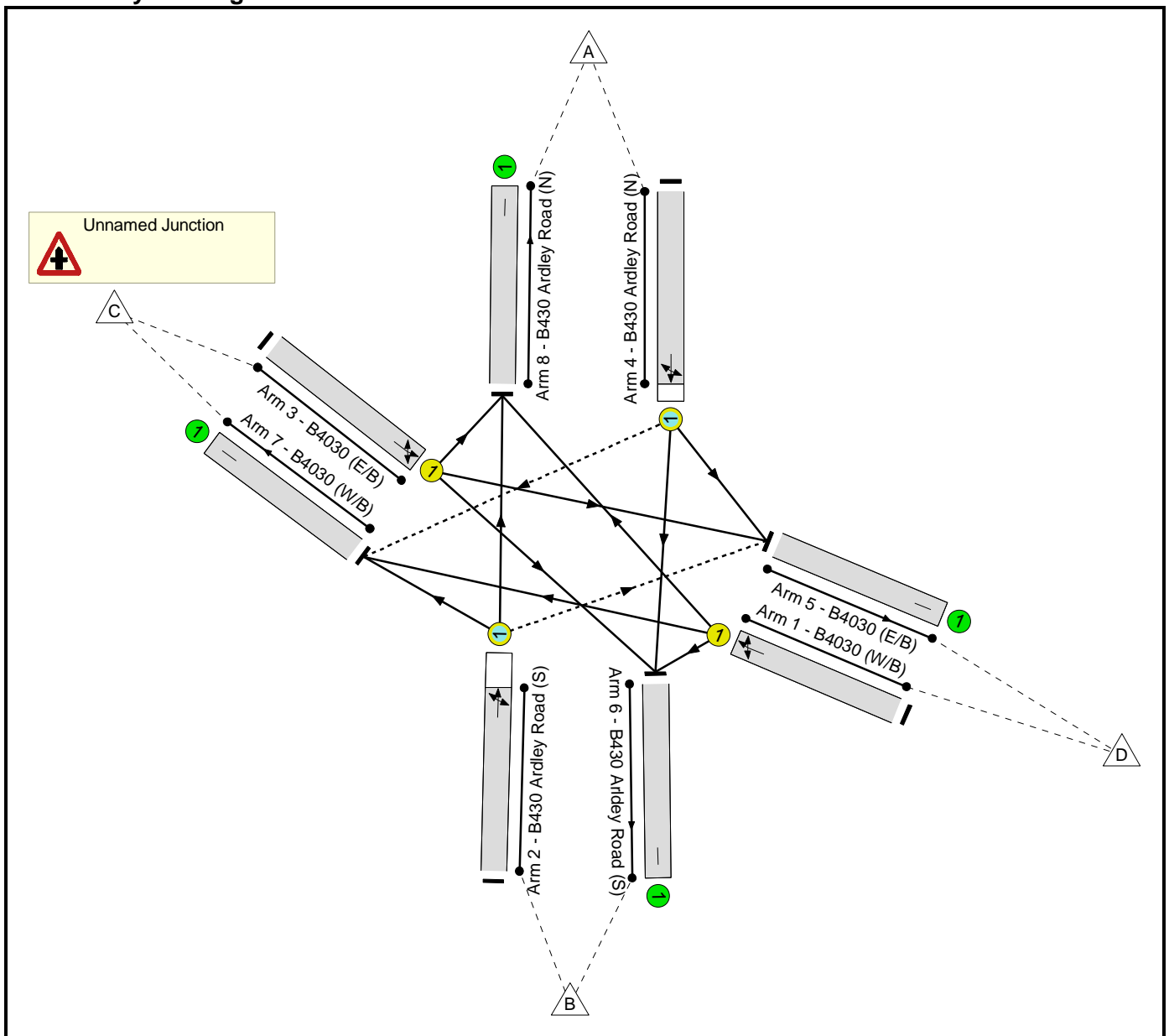
Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-C	76.04	76.22	0.00	606.55	0.125	0.14	6.789	A
B-A	149.82	150.55	0.00	461.59	0.325	0.49	11.603	B
C-AB	64.73	64.87	0.00	631.35	0.103	0.13	6.359	A
C-A	52.71	52.71	0.00	-	-	-	-	-
A-B	115.94	115.94	0.00	-	-	-	-	-
A-C	22.59	22.59	0.00	-	-	-	-	-

Full Input Data And Results
Full Input Data And Results

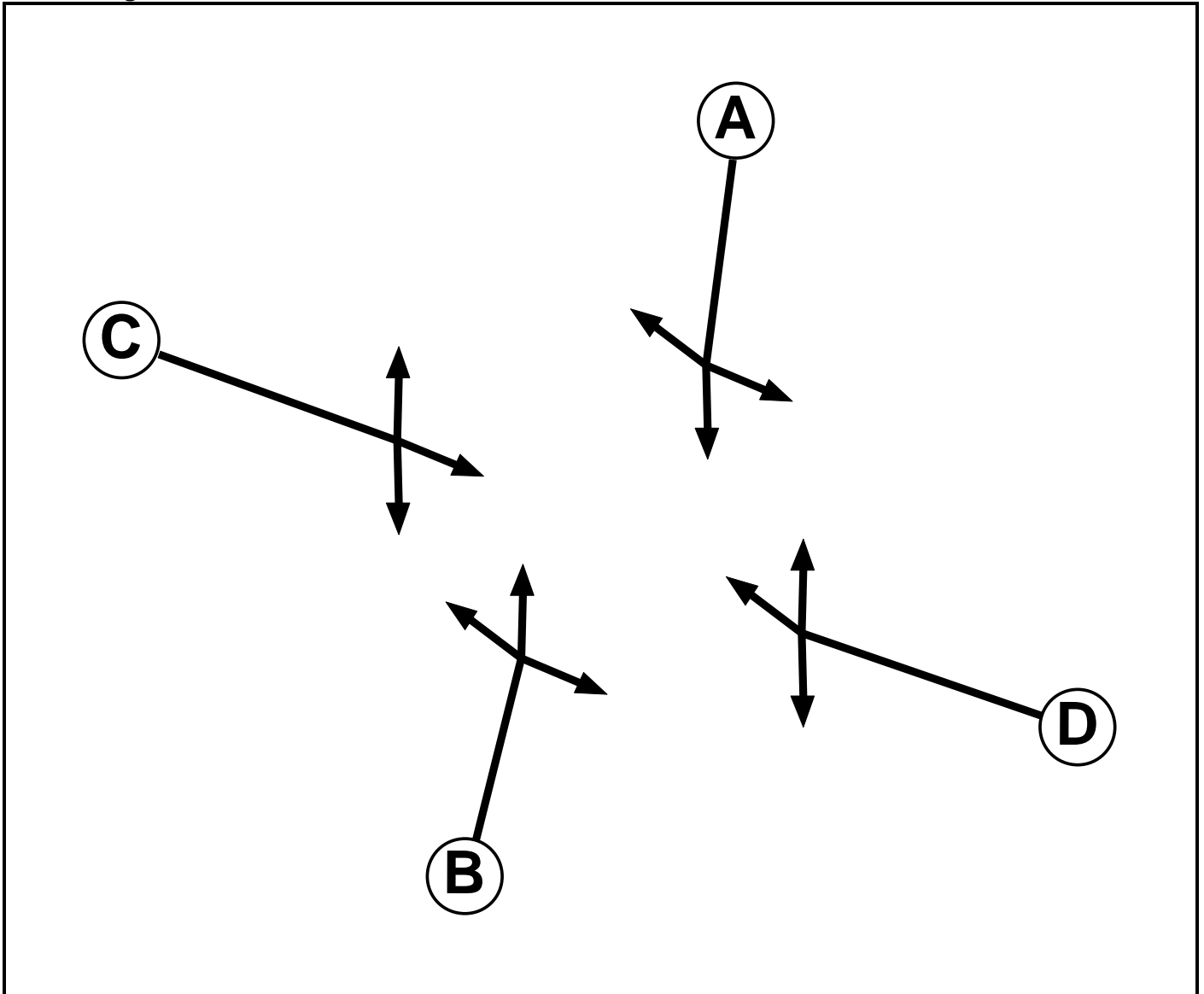
User and Project Details

Project:	Heyford Free School
Title:	Middleton Stoney Signalised Junction
Location:	Former RAF Site Upper Heyford
File name:	Middleton Stoney Signalised Junction_121128_Existing.lsg3x
Author:	
Company:	
Address:	
Notes:	

Network Layout Diagram



Phase Diagram



Phase Input Data

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

Full Input Data And Results

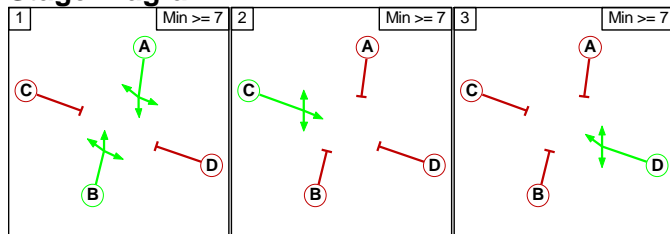
Phase Intergrens Matrix

		Starting Phase			
		A	B	C	D
Terminating Phase	A	-	7	7	
	B	7	-	7	7
	C	7	7	-	7
	D	7	7	7	-

Phases in Stage

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

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	-	7	7
	2	7	-	7
	3	7	7	-

Full Input Data And Results

Give-Way Lane Input Data

Junction: Unnamed Junction										
Lane	Movement	Max Flow when Giving Way (PCU/Hr)	Opposing Lane	Opp. Lane Coeff.	Opp. Mvmnts.	Right Turn Storage (PCU)	Non-Blocking Storage (PCU)	RTF	Right Turn Move up (s)	Max Turns in Intergreen (PCU)
2/1 (B430 Ardley Road (S))	5/1 (Right)	1439	4/1	1.09	4/1	2.00	-	0.50	2	2.00
4/1 (B430 Ardley Road (N))	7/1 (Right)	1439	2/1	1.09	2/1	1.00	-	0.50	1	1.00

Full Input Data And Results

Lane Input Data

Junction: Unnamed Junction												
Lane	Lane Type	Phases	Start Disp.	End Disp.	Physical Length (PCU)	Sat Flow Type	Def User Saturation Flow (PCU/Hr)	Lane Width (m)	Gradient	Nearside Lane	Turns	Turning Radius (m)
1/1 (B4030 (W/B))	U	D	2	3	60.0	Geom	-	3.20	0.00	Y	Arm 6 Left	17.50
											Arm 7 Ahead	45.00
											Arm 8 Right	12.50
											Arm 5 Right	10.00
2/1 (B430 Ardeley Road (S))	O	B	2	3	60.0	Geom	-	3.50	0.00	Y	Arm 7 Left	27.50
											Arm 8 Ahead	Inf
3/1 (B4030 (E/B))	U	C	2	3	60.0	Geom	-	3.50	0.00	Y	Arm 5 Ahead	Inf
											Arm 6 Right	45.00
											Arm 8 Left	7.50
4/1 (B430 Ardeley Road (N))	O	A	2	3	60.0	Geom	-	3.75	0.00	Y	Arm 5 Left	17.50
											Arm 6 Ahead	Inf
											Arm 7 Right	7.50
5/1 (B4030 (E/B))	U		2	3	60.0	Inf	-	-	-	-	-	-
6/1 (B430 Ardeley Road (S))	U		2	3	60.0	Inf	-	-	-	-	-	-
7/1 (B4030 (W/B))	U		2	3	60.0	Inf	-	-	-	-	-	-
8/1 (B430 Ardeley Road (N))	U		2	3	60.0	Inf	-	-	-	-	-	-

Full Input Data And Results

Traffic Flow Groups

Flow Group	Start Time	End Time	Duration	Formula
1: '2013 Arup Base (No Consented Dev) AM'	08:00	09:00	01:00	
2: '2013 Arup Base (No Consented Dev) PM'	17:00	18:00	01:00	
3: '2013 Arup Base + Consented Site Traffic AM'	08:00	09:00	01:00	
4: '2013 Arup Base + Consented Site Traffic PM'	17:00	18:00	01:00	
5: '2013 Arup Base + Consented Site Traffic + Proposed School AM'	08:00	09:00	01:00	
6: '2013 Arup Base + Consented Site Traffic + Proposed School PM'	17:00	18:00	01:00	
7: '2013 Recalculated Base (No Consented Dev) AM'	08:00	09:00	01:00	
8: '2013 Recalculated Base (No Consented Dev) PM'	17:00	18:00	01:00	
9: '2013 Recalculated Base + Consented Site Traffic AM'	08:00	09:00	01:00	
10: '2013 Recalculated Base + Consented Site Traffic PM'	17:00	18:00	01:00	
11: '2013 Recalculated Base + Consented Site Traffic + Proposed School AM'	08:00	09:00	01:00	
12: '2013 Recalculated Base + Consented Site Traffic + Proposed School PM'	17:00	18:00	01:00	

Scenario 1: 'Scenario 1' (FG1: '2013 Arup Base (No Consented Dev) AM', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired

Desired Flow :

	Destination					
	A	B	C	D	Tot.	
Origin	A	0	524	15	41	580
	B	249	0	52	59	360
	C	8	70	0	219	297
	D	82	71	140	0	293
	Tot.	339	665	207	319	1530

Full Input Data And Results

Traffic Lane Flows

Lane	Scenario 1: Scenario 1
Junction: Unnamed Junction	
1/1	293
2/1	360
3/1	297
4/1	580
5/1	319
6/1	665
7/1	207
8/1	339

Lane Saturation Flows

Junction: Unnamed Junction							
Lane	Lane Width (m)	Gradient	Nearside Lane	Allowed Turns	Turning Radius (m)	Turning Prop.	Sat flow (PCU/Hr)
1/1 (B4030 (W/B))	3.20	0.00	Y	Arm 6 Left	17.50	24.2 %	1808
				Arm 7 Ahead	45.00	47.8 %	
				Arm 8 Right	12.50	28.0 %	
2/1 (B430 Ardley Road (S))	3.50	0.00	Y	Arm 5 Right	10.00	16.4 %	1903
				Arm 7 Left	27.50	14.4 %	
				Arm 8 Ahead	Inf	69.2 %	
3/1 (B4030 (E/B))	3.50	0.00	Y	Arm 5 Ahead	Inf	73.7 %	1939
				Arm 6 Right	45.00	23.6 %	
				Arm 8 Left	7.50	2.7 %	
4/1 (B430 Ardley Road (N))	3.75	0.00	Y	Arm 5 Left	17.50	7.1 %	1968
				Arm 6 Ahead	Inf	90.3 %	
				Arm 7 Right	7.50	2.6 %	
5/1 (B4030 (E/B) Lane 1)				Infinite Saturation Flow			Inf
6/1 (B430 Ardley Road (S) Lane 1)				Infinite Saturation Flow			Inf
7/1 (B4030 (W/B) Lane 1)				Infinite Saturation Flow			Inf
8/1 (B430 Ardley Road (N) Lane 1)				Infinite Saturation Flow			Inf

Full Input Data And Results

Scenario 2: 'New Scenario' (FG2: '2013 Arup Base (No Consented Dev) PM', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired

Desired Flow :

Origin	Destination					
	A	B	C	D	Tot.	
A	0	280	10	41	331	
B	415	0	44	175	634	
C	23	68	0	210	301	
D	28	55	159	0	242	
Tot.	466	403	213	426	1508	

Traffic Lane Flows

Lane	Scenario 2: New Scenario
Junction: Unnamed Junction	
1/1	242
2/1	634
3/1	301
4/1	331
5/1	426
6/1	403
7/1	213
8/1	466

Full Input Data And Results

Lane Saturation Flows

Junction: Unnamed Junction							
Lane	Lane Width (m)	Gradient	Nearside Lane	Allowed Turns	Turning Radius (m)	Turning Prop.	Sat flow (PCU/Hr)
1/1 (B4030 (W/B))	3.20	0.00	Y	Arm 6 Left	17.50	22.7 %	1834
				Arm 7 Ahead	45.00	65.7 %	
				Arm 8 Right	12.50	11.6 %	
2/1 (B430 Ardley Road (S))	3.50	0.00	Y	Arm 5 Right	10.00	27.6 %	1880
				Arm 7 Left	27.50	6.9 %	
				Arm 8 Ahead	Inf	65.5 %	
3/1 (B4030 (E/B))	3.50	0.00	Y	Arm 5 Ahead	Inf	69.8 %	1921
				Arm 6 Right	45.00	22.6 %	
				Arm 8 Left	7.50	7.6 %	
4/1 (B430 Ardley Road (N))	3.75	0.00	Y	Arm 5 Left	17.50	12.4 %	1957
				Arm 6 Ahead	Inf	84.6 %	
				Arm 7 Right	7.50	3.0 %	
5/1 (B4030 (E/B) Lane 1)	Infinite Saturation Flow						Inf
6/1 (B430 Ardley Road (S) Lane 1)	Infinite Saturation Flow						Inf
7/1 (B4030 (W/B) Lane 1)	Infinite Saturation Flow						Inf
8/1 (B430 Ardley Road (N) Lane 1)	Infinite Saturation Flow						Inf

Scenario 3: 'New Scenario' (FG3: '2013 Arup Base + Consented Site Traffic AM', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired

Desired Flow :

Origin	Destination					
	A	B	C	D	Tot.	
A	0	524	15	41	580	
B	249	0	136	59	444	
C	8	197	0	515	720	
D	82	71	339	0	492	
Tot.	339	792	490	615	2236	

Full Input Data And Results

Traffic Lane Flows

Lane	Scenario 3: New Scenario
Junction: Unnamed Junction	
1/1	492
2/1	444
3/1	720
4/1	580
5/1	615
6/1	792
7/1	490
8/1	339

Lane Saturation Flows

Junction: Unnamed Junction							
Lane	Lane Width (m)	Gradient	Nearside Lane	Allowed Turns	Turning Radius (m)	Turning Prop.	Sat flow (PCU/Hr)
1/1 (B4030 (W/B))	3.20	0.00	Y	Arm 6 Left	17.50	14.4 %	1834
				Arm 7 Ahead	45.00	68.9 %	
				Arm 8 Right	12.50	16.7 %	
2/1 (B430 Ardley Road (S))	3.50	0.00	Y	Arm 5 Right	10.00	13.3 %	1896
				Arm 7 Left	27.50	30.6 %	
				Arm 8 Ahead	Inf	56.1 %	
3/1 (B4030 (E/B))	3.50	0.00	Y	Arm 5 Ahead	Inf	71.5 %	1943
				Arm 6 Right	45.00	27.4 %	
				Arm 8 Left	7.50	1.1 %	
4/1 (B430 Ardley Road (N))	3.75	0.00	Y	Arm 5 Left	17.50	7.1 %	1968
				Arm 6 Ahead	Inf	90.3 %	
				Arm 7 Right	7.50	2.6 %	
5/1 (B4030 (E/B) Lane 1)				Infinite Saturation Flow			Inf
6/1 (B430 Ardley Road (S) Lane 1)				Infinite Saturation Flow			Inf
7/1 (B4030 (W/B) Lane 1)				Infinite Saturation Flow			Inf
8/1 (B430 Ardley Road (N) Lane 1)				Infinite Saturation Flow			Inf

Full Input Data And Results

Scenario 4: 'New Scenario' (FG4: '2013 Arup Base + Consented Site Traffic PM', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired

Desired Flow :

Origin	Destination					
	A	B	C	D	Tot.	
A	0	280	10	41	331	
B	415	0	127	175	717	
C	23	148	0	298	469	
D	28	55	356	0	439	
Tot.	466	483	493	514	1956	

Traffic Lane Flows

Lane	Scenario 4: New Scenario
Junction: Unnamed Junction	
1/1	439
2/1	717
3/1	469
4/1	331
5/1	514
6/1	483
7/1	493
8/1	466

Full Input Data And Results

Lane Saturation Flows

Junction: Unnamed Junction							
Lane	Lane Width (m)	Gradient	Nearside Lane	Allowed Turns	Turning Radius (m)	Turning Prop.	Sat flow (PCU/Hr)
1/1 (B4030 (W/B))	3.20	0.00	Y	Arm 6 Left	17.50	12.5 %	1851
				Arm 7 Ahead	45.00	81.1 %	
				Arm 8 Right	12.50	6.4 %	
2/1 (B430 Ardley Road (S))	3.50	0.00	Y	Arm 5 Right	10.00	24.4 %	1878
				Arm 7 Left	27.50	17.7 %	
				Arm 8 Ahead	Inf	57.9 %	
3/1 (B4030 (E/B))	3.50	0.00	Y	Arm 5 Ahead	Inf	63.5 %	1926
				Arm 6 Right	45.00	31.6 %	
				Arm 8 Left	7.50	4.9 %	
4/1 (B430 Ardley Road (N))	3.75	0.00	Y	Arm 5 Left	17.50	12.4 %	1957
				Arm 6 Ahead	Inf	84.6 %	
				Arm 7 Right	7.50	3.0 %	
5/1 (B4030 (E/B) Lane 1)	Infinite Saturation Flow						Inf
6/1 (B430 Ardley Road (S) Lane 1)	Infinite Saturation Flow						Inf
7/1 (B4030 (W/B) Lane 1)	Infinite Saturation Flow						Inf
8/1 (B430 Ardley Road (N) Lane 1)	Infinite Saturation Flow						Inf

Scenario 5: 'New Scenario' (FG5: '2013 Arup Base + Consented Site Traffic + Proposed School AM', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired

Desired Flow :

	Destination					
	A	B	C	D	Tot.	
Origin	A	0	524	15	41	580
	B	249	0	141	59	449
	C	8	203	0	530	741
	D	82	71	350	0	503
	Tot.	339	798	506	630	2273

Full Input Data And Results

Traffic Lane Flows

Lane	Scenario 5: New Scenario
Junction: Unnamed Junction	
1/1	503
2/1	449
3/1	741
4/1	580
5/1	630
6/1	798
7/1	506
8/1	339

Lane Saturation Flows

Junction: Unnamed Junction							
Lane	Lane Width (m)	Gradient	Nearside Lane	Allowed Turns	Turning Radius (m)	Turning Prop.	Sat flow (PCU/Hr)
1/1 (B4030 (W/B))	3.20	0.00	Y	Arm 6 Left	17.50	14.1 %	1834
				Arm 7 Ahead	45.00	69.6 %	
				Arm 8 Right	12.50	16.3 %	
2/1 (B430 Ardley Road (S))	3.50	0.00	Y	Arm 5 Right	10.00	13.1 %	1895
				Arm 7 Left	27.50	31.4 %	
				Arm 8 Ahead	Inf	55.5 %	
3/1 (B4030 (E/B))	3.50	0.00	Y	Arm 5 Ahead	Inf	71.5 %	1943
				Arm 6 Right	45.00	27.4 %	
				Arm 8 Left	7.50	1.1 %	
4/1 (B430 Ardley Road (N))	3.75	0.00	Y	Arm 5 Left	17.50	7.1 %	1968
				Arm 6 Ahead	Inf	90.3 %	
				Arm 7 Right	7.50	2.6 %	
5/1 (B4030 (E/B) Lane 1)				Infinite Saturation Flow			Inf
6/1 (B430 Ardley Road (S) Lane 1)				Infinite Saturation Flow			Inf
7/1 (B4030 (W/B) Lane 1)				Infinite Saturation Flow			Inf
8/1 (B430 Ardley Road (N) Lane 1)				Infinite Saturation Flow			Inf

Full Input Data And Results

Scenario 6: 'New Scenario' (FG6: '2013 Arup Base + Consented Site Traffic + Proposed School PM', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired

Desired Flow :

	Destination					
		A	B	C	D	Tot.
Origin	A	0	280	10	41	331
	B	415	0	127	175	717
	C	23	148	0	300	471
	D	28	55	356	0	439
	Tot.	466	483	493	516	1958

Traffic Lane Flows

Lane	Scenario 6: New Scenario
Junction: Unnamed Junction	
1/1	439
2/1	717
3/1	471
4/1	331
5/1	516
6/1	483
7/1	493
8/1	466

Full Input Data And Results

Lane Saturation Flows

Junction: Unnamed Junction							
Lane	Lane Width (m)	Gradient	Nearside Lane	Allowed Turns	Turning Radius (m)	Turning Prop.	Sat flow (PCU/Hr)
1/1 (B4030 (W/B))	3.20	0.00	Y	Arm 6 Left	17.50	12.5 %	1851
				Arm 7 Ahead	45.00	81.1 %	
				Arm 8 Right	12.50	6.4 %	
2/1 (B430 Ardley Road (S))	3.50	0.00	Y	Arm 5 Right	10.00	24.4 %	1878
				Arm 7 Left	27.50	17.7 %	
				Arm 8 Ahead	Inf	57.9 %	
3/1 (B4030 (E/B))	3.50	0.00	Y	Arm 5 Ahead	Inf	63.7 %	1926
				Arm 6 Right	45.00	31.4 %	
				Arm 8 Left	7.50	4.9 %	
4/1 (B430 Ardley Road (N))	3.75	0.00	Y	Arm 5 Left	17.50	12.4 %	1957
				Arm 6 Ahead	Inf	84.6 %	
				Arm 7 Right	7.50	3.0 %	
5/1 (B4030 (E/B) Lane 1)	Infinite Saturation Flow						Inf
6/1 (B430 Ardley Road (S) Lane 1)	Infinite Saturation Flow						Inf
7/1 (B4030 (W/B) Lane 1)	Infinite Saturation Flow						Inf
8/1 (B430 Ardley Road (N) Lane 1)	Infinite Saturation Flow						Inf

Scenario 7: 'New Scenario' (FG7: '2013 Recalculated Base (No Consented Dev) AM', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired

Desired Flow :

	Destination					
	A	B	C	D	Tot.	
Origin	A	0	492	14	38	544
	B	234	0	49	55	338
	C	7	66	0	205	278
	D	77	67	131	0	275
	Tot.	318	625	194	298	1435

Full Input Data And Results

Traffic Lane Flows

Lane	Scenario 7: New Scenario
Junction: Unnamed Junction	
1/1	275
2/1	338
3/1	278
4/1	544
5/1	298
6/1	625
7/1	194
8/1	318

Lane Saturation Flows

Junction: Unnamed Junction							
Lane	Lane Width (m)	Gradient	Nearside Lane	Allowed Turns	Turning Radius (m)	Turning Prop.	Sat flow (PCU/Hr)
1/1 (B4030 (W/B))	3.20	0.00	Y	Arm 6 Left	17.50	24.4 %	1808
				Arm 7 Ahead	45.00	47.6 %	
				Arm 8 Right	12.50	28.0 %	
2/1 (B430 Ardley Road (S))	3.50	0.00	Y	Arm 5 Right	10.00	16.3 %	1903
				Arm 7 Left	27.50	14.5 %	
				Arm 8 Ahead	Inf	69.2 %	
3/1 (B4030 (E/B))	3.50	0.00	Y	Arm 5 Ahead	Inf	73.7 %	1940
				Arm 6 Right	45.00	23.7 %	
				Arm 8 Left	7.50	2.5 %	
4/1 (B430 Ardley Road (N))	3.75	0.00	Y	Arm 5 Left	17.50	7.0 %	1968
				Arm 6 Ahead	Inf	90.4 %	
				Arm 7 Right	7.50	2.6 %	
5/1 (B4030 (E/B) Lane 1)				Infinite Saturation Flow			Inf
6/1 (B430 Ardley Road (S) Lane 1)				Infinite Saturation Flow			Inf
7/1 (B4030 (W/B) Lane 1)				Infinite Saturation Flow			Inf
8/1 (B430 Ardley Road (N) Lane 1)				Infinite Saturation Flow			Inf

Full Input Data And Results

Scenario 8: 'New Scenario' (FG8: '2013 Recalculated Base (No Consented Dev) PM', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired

Desired Flow :

		Destination				
		A	B	C	D	Tot.
Origin	A	0	264	10	38	312
	B	391	0	41	165	597
	C	21	64	0	197	282
	D	27	52	150	0	229
	Tot.	439	380	201	400	1420

Traffic Lane Flows

Lane	Scenario 8: New Scenario
Junction: Unnamed Junction	
1/1	229
2/1	597
3/1	282
4/1	312
5/1	400
6/1	380
7/1	201
8/1	439

Full Input Data And Results

Lane Saturation Flows

Junction: Unnamed Junction							
Lane	Lane Width (m)	Gradient	Nearside Lane	Allowed Turns	Turning Radius (m)	Turning Prop.	Sat flow (PCU/Hr)
1/1 (B4030 (W/B))	3.20	0.00	Y	Arm 6 Left	17.50	22.7 %	1833
				Arm 7 Ahead	45.00	65.5 %	
				Arm 8 Right	12.50	11.8 %	
2/1 (B430 Ardley Road (S))	3.50	0.00	Y	Arm 5 Right	10.00	27.6 %	1880
				Arm 7 Left	27.50	6.9 %	
				Arm 8 Ahead	Inf	65.5 %	
3/1 (B4030 (E/B))	3.50	0.00	Y	Arm 5 Ahead	Inf	69.9 %	1922
				Arm 6 Right	45.00	22.7 %	
				Arm 8 Left	7.50	7.4 %	
4/1 (B430 Ardley Road (N))	3.75	0.00	Y	Arm 5 Left	17.50	12.2 %	1957
				Arm 6 Ahead	Inf	84.6 %	
				Arm 7 Right	7.50	3.2 %	
5/1 (B4030 (E/B) Lane 1)	Infinite Saturation Flow						Inf
6/1 (B430 Ardley Road (S) Lane 1)	Infinite Saturation Flow						Inf
7/1 (B4030 (W/B) Lane 1)	Infinite Saturation Flow						Inf
8/1 (B430 Ardley Road (N) Lane 1)	Infinite Saturation Flow						Inf

Scenario 9: 'New Scenario' (FG9: '2013 Recalculated Base + Consented Site Traffic AM', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired

Desired Flow :

	Destination					
	A	B	C	D	Tot.	
Origin	A	0	492	14	38	544
	B	234	0	133	55	422
	C	7	193	0	501	701
	D	77	67	330	0	474
	Tot.	318	752	477	594	2141

Full Input Data And Results

Traffic Lane Flows

Lane	Scenario 9: New Scenario
Junction: Unnamed Junction	
1/1	474
2/1	422
3/1	701
4/1	544
5/1	594
6/1	752
7/1	477
8/1	318

Lane Saturation Flows

Junction: Unnamed Junction							
Lane	Lane Width (m)	Gradient	Nearside Lane	Allowed Turns	Turning Radius (m)	Turning Prop.	Sat flow (PCU/Hr)
1/1 (B4030 (W/B))	3.20	0.00	Y	Arm 6 Left	17.50	14.1 %	1834
				Arm 7 Ahead	45.00	69.6 %	
				Arm 8 Right	12.50	16.2 %	
2/1 (B430 Ardley Road (S))	3.50	0.00	Y	Arm 5 Right	10.00	13.0 %	1895
				Arm 7 Left	27.50	31.5 %	
				Arm 8 Ahead	Inf	55.5 %	
3/1 (B4030 (E/B))	3.50	0.00	Y	Arm 5 Ahead	Inf	71.5 %	1943
				Arm 6 Right	45.00	27.5 %	
				Arm 8 Left	7.50	1.0 %	
4/1 (B430 Ardley Road (N))	3.75	0.00	Y	Arm 5 Left	17.50	7.0 %	1968
				Arm 6 Ahead	Inf	90.4 %	
				Arm 7 Right	7.50	2.6 %	
5/1 (B4030 (E/B) Lane 1)				Infinite Saturation Flow			Inf
6/1 (B430 Ardley Road (S) Lane 1)				Infinite Saturation Flow			Inf
7/1 (B4030 (W/B) Lane 1)				Infinite Saturation Flow			Inf
8/1 (B430 Ardley Road (N) Lane 1)				Infinite Saturation Flow			Inf

Full Input Data And Results

Scenario 10: 'New Scenario' (FG10: '2013 Recalculated Base + Consented Site Traffic PM', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired

Desired Flow :

		Destination				
		A	B	C	D	Tot.
Origin	A	0	264	10	38	312
	B	391	0	125	165	681
	C	21	144	0	286	451
	D	27	52	347	0	426
	Tot.	439	460	482	489	1870

Traffic Lane Flows

Lane	Scenario 10: New Scenario
Junction: Unnamed Junction	
1/1	426
2/1	681
3/1	451
4/1	312
5/1	489
6/1	460
7/1	482
8/1	439

Full Input Data And Results

Lane Saturation Flows

Junction: Unnamed Junction							
Lane	Lane Width (m)	Gradient	Nearside Lane	Allowed Turns	Turning Radius (m)	Turning Prop.	Sat flow (PCU/Hr)
1/1 (B4030 (W/B))	3.20	0.00	Y	Arm 6 Left	17.50	12.2 %	1851
				Arm 7 Ahead	45.00	81.5 %	
				Arm 8 Right	12.50	6.3 %	
2/1 (B430 Ardley Road (S))	3.50	0.00	Y	Arm 5 Right	10.00	24.2 %	1878
				Arm 7 Left	27.50	18.4 %	
				Arm 8 Ahead	Inf	57.4 %	
3/1 (B4030 (E/B))	3.50	0.00	Y	Arm 5 Ahead	Inf	63.4 %	1927
				Arm 6 Right	45.00	31.9 %	
				Arm 8 Left	7.50	4.7 %	
4/1 (B430 Ardley Road (N))	3.75	0.00	Y	Arm 5 Left	17.50	12.2 %	1957
				Arm 6 Ahead	Inf	84.6 %	
				Arm 7 Right	7.50	3.2 %	
5/1 (B4030 (E/B) Lane 1)	Infinite Saturation Flow						Inf
6/1 (B430 Ardley Road (S) Lane 1)	Infinite Saturation Flow						Inf
7/1 (B4030 (W/B) Lane 1)	Infinite Saturation Flow						Inf
8/1 (B430 Ardley Road (N) Lane 1)	Infinite Saturation Flow						Inf

Scenario 11: 'New Scenario' (FG11: '2013 Recalculated Base + Consented Site Traffic + Proposed School AM', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired

Desired Flow :

	Destination					
	A	B	C	D	Tot.	
Origin	A	0	492	14	38	544
	B	234	0	138	55	427
	C	7	199	0	516	722
	D	77	67	342	0	486
	Tot.	318	758	494	609	2179

Full Input Data And Results

Traffic Lane Flows

Lane	Scenario 11: New Scenario
Junction: Unnamed Junction	
1/1	486
2/1	427
3/1	722
4/1	544
5/1	609
6/1	758
7/1	494
8/1	318

Lane Saturation Flows

Junction: Unnamed Junction							
Lane	Lane Width (m)	Gradient	Nearside Lane	Allowed Turns	Turning Radius (m)	Turning Prop.	Sat flow (PCU/Hr)
1/1 (B4030 (W/B))	3.20	0.00	Y	Arm 6 Left	17.50	13.8 %	1835
				Arm 7 Ahead	45.00	70.4 %	
				Arm 8 Right	12.50	15.8 %	
2/1 (B430 Ardley Road (S))	3.50	0.00	Y	Arm 5 Right	10.00	12.9 %	1895
				Arm 7 Left	27.50	32.3 %	
				Arm 8 Ahead	Inf	54.8 %	
3/1 (B4030 (E/B))	3.50	0.00	Y	Arm 5 Ahead	Inf	71.5 %	1943
				Arm 6 Right	45.00	27.6 %	
				Arm 8 Left	7.50	1.0 %	
4/1 (B430 Ardley Road (N))	3.75	0.00	Y	Arm 5 Left	17.50	7.0 %	1968
				Arm 6 Ahead	Inf	90.4 %	
				Arm 7 Right	7.50	2.6 %	
5/1 (B4030 (E/B) Lane 1)				Infinite Saturation Flow			Inf
6/1 (B430 Ardley Road (S) Lane 1)				Infinite Saturation Flow			Inf
7/1 (B4030 (W/B) Lane 1)				Infinite Saturation Flow			Inf
8/1 (B430 Ardley Road (N) Lane 1)				Infinite Saturation Flow			Inf

Full Input Data And Results

Scenario 12: 'New Scenario' (FG12: '2013 Recalculated Base + Consented Site Traffic + Proposed School PM', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired

Desired Flow :

		Destination				
		A	B	C	D	Tot.
Origin	A	0	264	10	38	312
	B	391	0	125	165	681
	C	21	144	0	287	452
	D	27	52	347	0	426
	Tot.	439	460	482	490	1871

Traffic Lane Flows

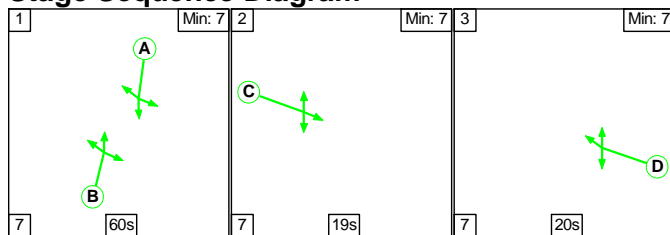
Lane	Scenario 12: New Scenario
Junction: Unnamed Junction	
1/1	426
2/1	681
3/1	452
4/1	312
5/1	490
6/1	460
7/1	482
8/1	439

Lane Saturation Flows

Junction: Unnamed Junction							
Lane	Lane Width (m)	Gradient	Nearside Lane	Allowed Turns	Turning Radius (m)	Turning Prop.	Sat flow (PCU/Hr)
1/1 (B4030 (W/B))	3.20	0.00	Y	Arm 6 Left	17.50	12.2 %	1851
				Arm 7 Ahead	45.00	81.5 %	
				Arm 8 Right	12.50	6.3 %	
2/1 (B430 Ardley Road (S))	3.50	0.00	Y	Arm 5 Right	10.00	24.2 %	1878
				Arm 7 Left	27.50	18.4 %	
				Arm 8 Ahead	Inf	57.4 %	
3/1 (B4030 (E/B))	3.50	0.00	Y	Arm 5 Ahead	Inf	63.5 %	1927
				Arm 6 Right	45.00	31.9 %	
				Arm 8 Left	7.50	4.6 %	
4/1 (B430 Ardley Road (N))	3.75	0.00	Y	Arm 5 Left	17.50	12.2 %	1957
				Arm 6 Ahead	Inf	84.6 %	
				Arm 7 Right	7.50	3.2 %	
5/1 (B4030 (E/B) Lane 1)	Infinite Saturation Flow						Inf
6/1 (B430 Ardley Road (S) Lane 1)	Infinite Saturation Flow						Inf
7/1 (B4030 (W/B) Lane 1)	Infinite Saturation Flow						Inf
8/1 (B430 Ardley Road (N) Lane 1)	Infinite Saturation Flow						Inf

Scenario 1: 'Scenario 1' (FG1: '2013 Arup Base (No Consented Dev) AM', Plan 1: 'Network Control Plan 1')

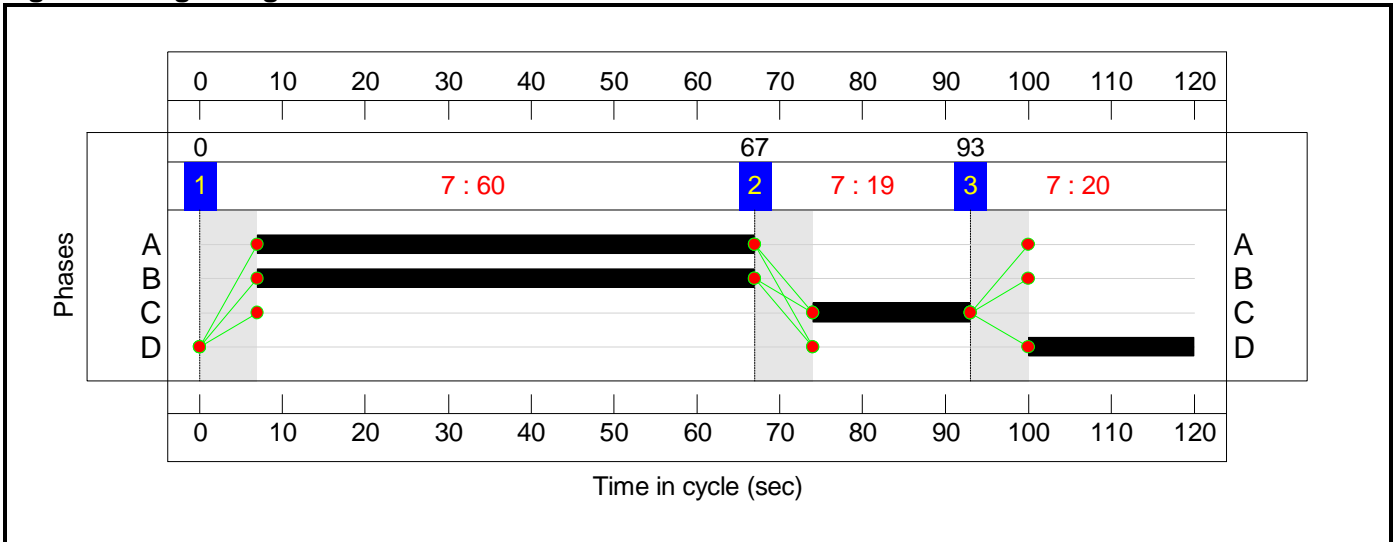
Stage Sequence Diagram



Stage Timings

Stage	1	2	3
Duration	60	19	20
Change Point	0	67	93

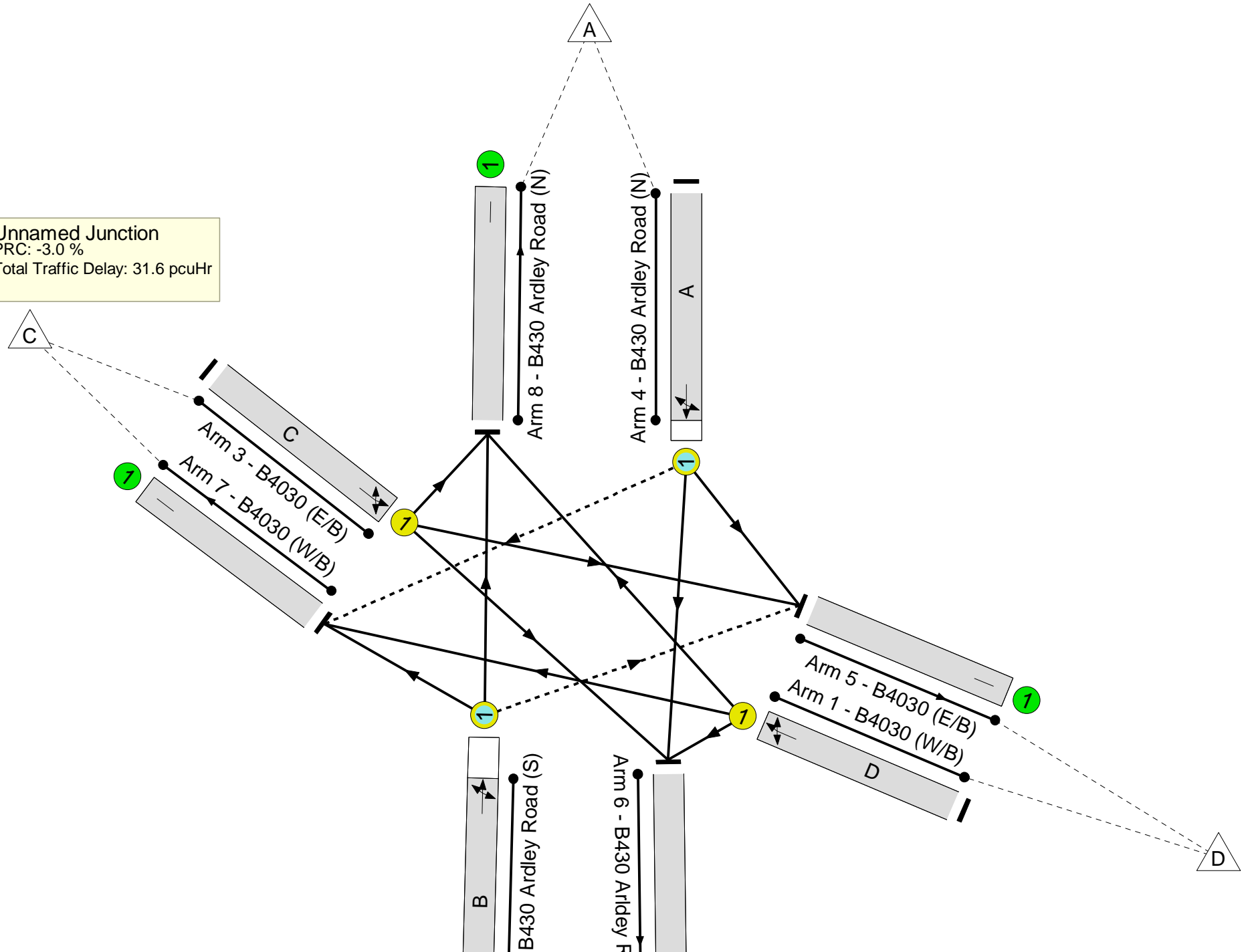

Signal Timings Diagram



Full Input Data And Results
Network Layout Diagram

Full Input Data And Results

Unnamed Junction
PRC: -3.0 %
Total Traffic Delay: 31.6 pcuHr



Full Input Data And Results

Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network	-	-	N/A	-	-		-	-	-	-	-	-	92.7%
Unnamed Junction	-	-	N/A	-	-		-	-	-	-	-	-	92.7%
1/1	B4030 (W/B) Left Ahead Right	U	N/A	N/A	D		1	20	-	293	1808	316	92.6%
2/1	B430 Ardley Road (S) Right Left Ahead	O	N/A	N/A	B		1	60	-	360	1903	435	82.7%
3/1	B4030 (E/B) Ahead Right Left	U	N/A	N/A	C		1	19	-	297	1939	323	91.9%
4/1	B430 Ardley Road (N) Left Ahead Right	O	N/A	N/A	A		1	60	-	580	1968	626	92.7%
5/1	B4030 (E/B)	U	N/A	N/A	-		-	-	-	319	Inf	Inf	0.0%
6/1	B430 Ardley Road (S)	U	N/A	N/A	-		-	-	-	665	Inf	Inf	0.0%
7/1	B4030 (W/B)	U	N/A	N/A	-		-	-	-	207	Inf	Inf	0.0%
8/1	B430 Ardley Road (N)	U	N/A	N/A	-		-	-	-	339	Inf	Inf	0.0%

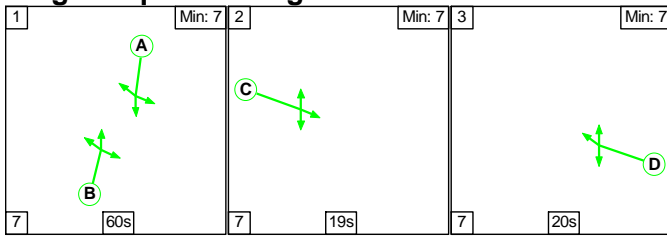
Full Input Data And Results

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	-	-	72	0	2	15.3	16.2	0.1	31.6	-	-	-	-
Unnamed Junction	-	-	72	0	2	15.3	16.2	0.1	31.6	-	-	-	-
1/1	293	293	-	-	-	4.0	4.5	-	8.5	104.2	9.6	4.5	14.1
2/1	360	360	58	0	1	2.0	2.3	0.1	4.3	43.1	7.5	2.3	9.8
3/1	297	297	-	-	-	4.1	4.3	-	8.3	101.0	9.7	4.3	14.0
4/1	580	580	14	0	1	5.3	5.2	0.0	10.4	64.8	17.5	5.2	22.7
5/1	319	319	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/1	665	665	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
7/1	207	207	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
8/1	339	339	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
<p>C1 PRC for Signalled Lanes (%): -3.0 Total Delay for Signalled Lanes (pcuHr): 31.57</p> <p> PRC Over All Lanes (%): -3.0 Total Delay Over All Lanes(pcuHr): 31.57 Cycle Time (s): 120</p>													

Full Input Data And Results

Scenario 2: 'New Scenario' (FG2: '2013 Arup Base (No Consented Dev) PM', Plan 1: 'Network Control Plan 1')

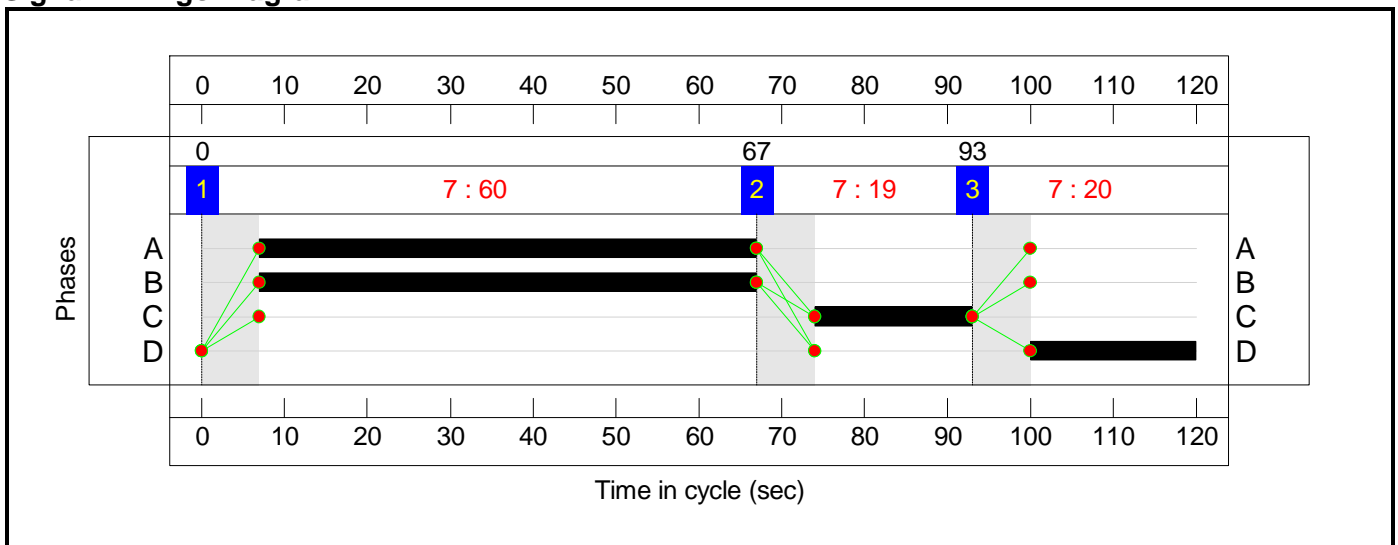
Stage Sequence Diagram



Stage Timings


Stage	1	2	3
Duration	60	19	20
Change Point	0	67	93

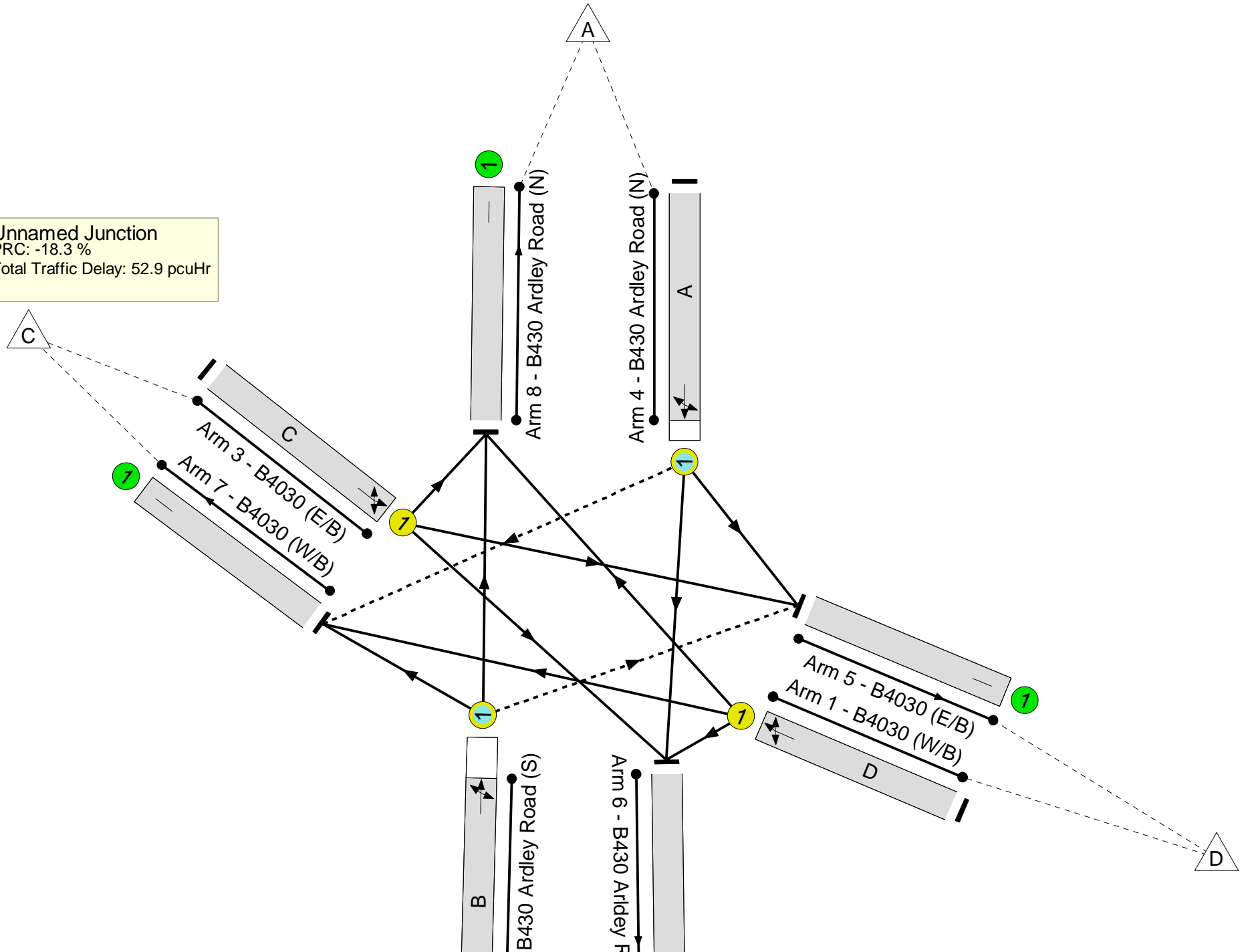
Signal Timings Diagram



Full Input Data And Results
Network Layout Diagram

Full Input Data And Results

 **Unnamed Junction**
PRC: -18.3 %
Total Traffic Delay: 52.9 pcuHr



Full Input Data And Results

Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network	-	-	N/A	-	-		-	-	-	-	-	-	106.4%
Unnamed Junction	-	-	N/A	-	-		-	-	-	-	-	-	106.4%
1/1	B4030 (W/B) Left Ahead Right	U	N/A	N/A	D		1	20	-	242	1834	321	75.4%
2/1	B430 Ardley Road (S) Right Left Ahead	O	N/A	N/A	B		1	60	-	634	1880	596	106.4%
3/1	B4030 (E/B) Ahead Right Left	U	N/A	N/A	C		1	19	-	301	1921	320	94.0%
4/1	B430 Ardley Road (N) Left Ahead Right	O	N/A	N/A	A		1	60	-	331	1957	386	85.8%
5/1	B4030 (E/B)	U	N/A	N/A	-		-	-	-	426	Inf	Inf	0.0%
6/1	B430 Ardey Road (S)	U	N/A	N/A	-		-	-	-	403	Inf	Inf	0.0%
7/1	B4030 (W/B)	U	N/A	N/A	-		-	-	-	213	Inf	Inf	0.0%
8/1	B430 Ardley Road (N)	U	N/A	N/A	-		-	-	-	466	Inf	Inf	0.0%

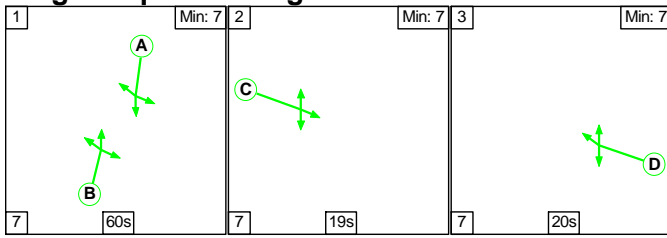
Full Input Data And Results

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	-	-	163	0	11	18.0	34.7	0.2	52.9	-	-	-	-
Unnamed Junction	-	-	163	0	11	18.0	34.7	0.2	52.9	-	-	-	-
1/1	242	242	-	-	-	3.2	1.5	-	4.6	69.0	7.7	1.5	9.1
2/1	634	596	154	0	11	7.4	25.4	0.2	33.0	187.1	23.9	25.4	49.3
3/1	301	301	-	-	-	4.1	5.1	-	9.2	110.6	9.9	5.1	15.0
4/1	331	331	10	0	0	3.4	2.7	0.0	6.1	66.4	10.6	2.7	13.3
5/1	415	415	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/1	403	403	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
7/1	210	210	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
8/1	441	441	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
<p>C1 PRC for Signalled Lanes (%): -18.3 Total Delay for Signalled Lanes (pcuHr): 52.95 PRC Over All Lanes (%): -18.3 Total Delay Over All Lanes(pcuHr): 52.95 Cycle Time (s): 120</p>													

Full Input Data And Results

Scenario 3: 'New Scenario' (FG3: '2013 Arup Base + Consented Site Traffic AM', Plan 1: 'Network Control Plan 1')

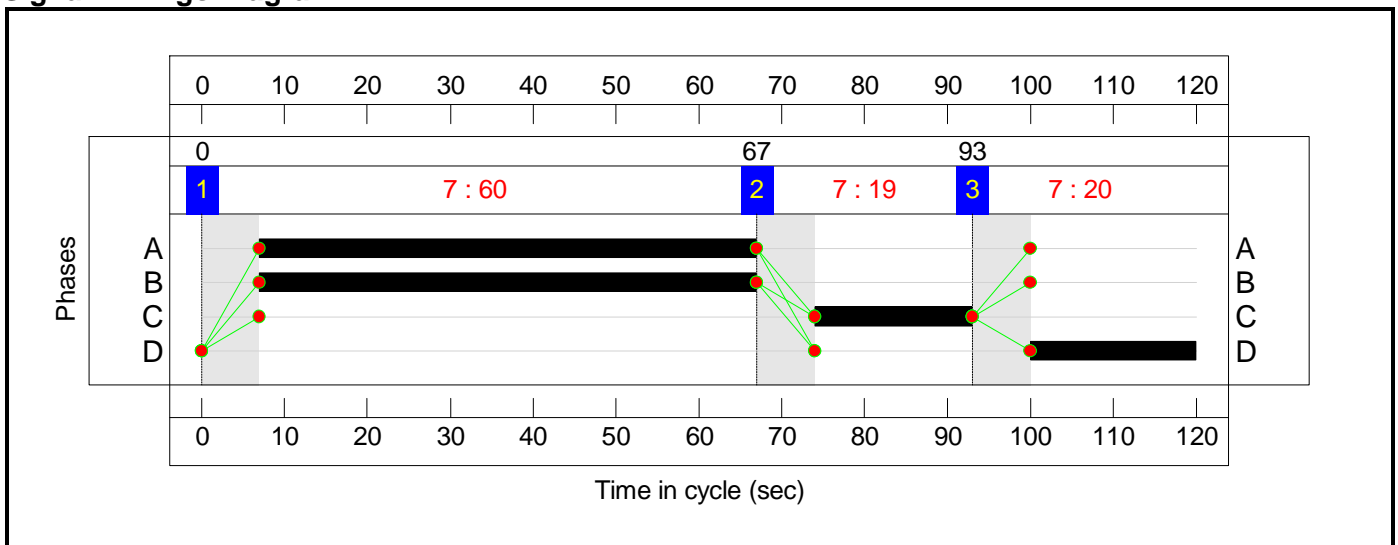
Stage Sequence Diagram



Stage Timings

Stage	1	2	3
Duration	60	19	20
Change Point	0	67	93

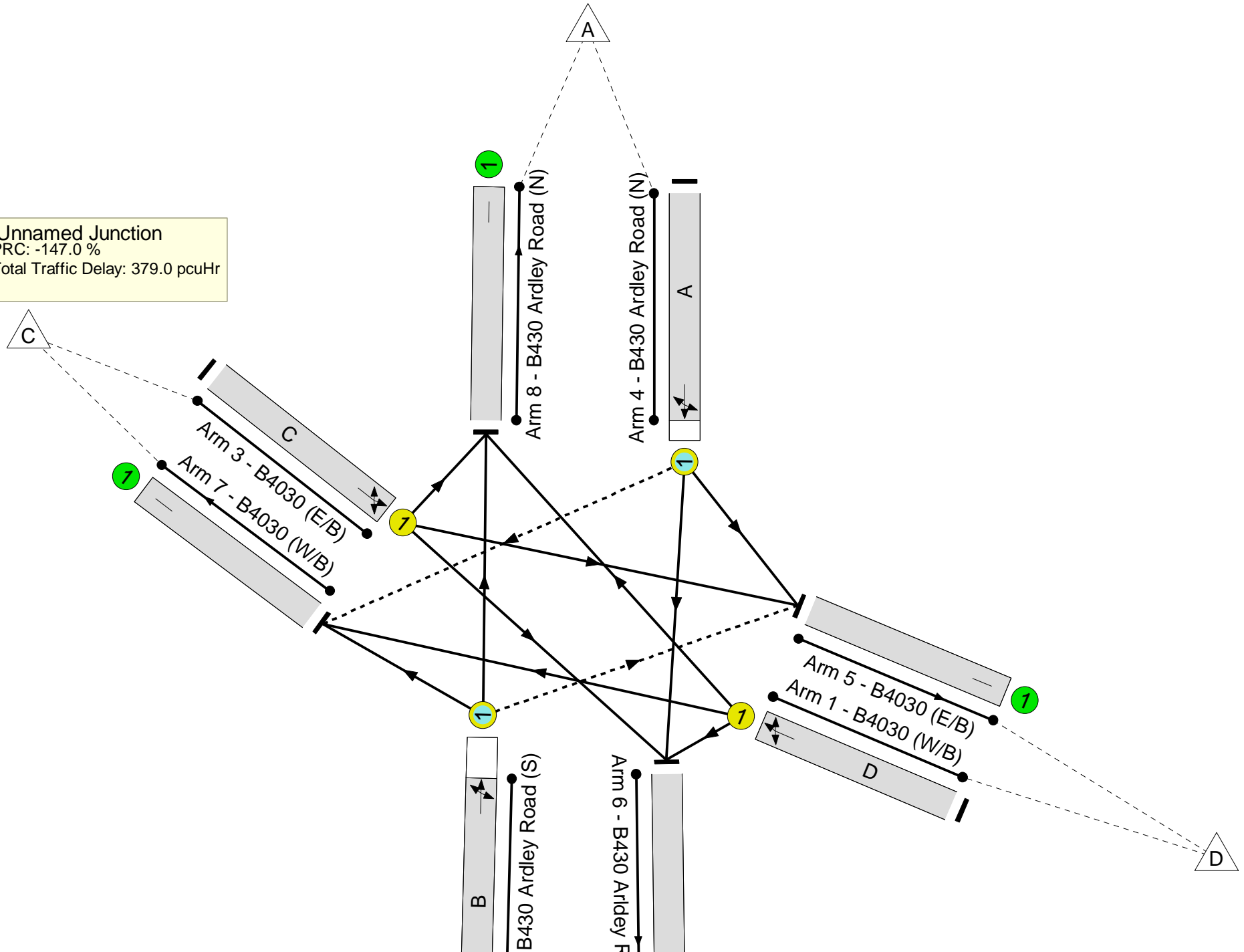

Signal Timings Diagram



Full Input Data And Results
Network Layout Diagram

Full Input Data And Results

Unnamed Junction
PRC: -147.0 %
Total Traffic Delay: 379.0 pcuHr



Full Input Data And Results

Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network	-	-	N/A	-	-		-	-	-	-	-	-	222.3%
Unnamed Junction	-	-	N/A	-	-		-	-	-	-	-	-	222.3%
1/1	B4030 (W/B) Left Ahead Right	U	N/A	N/A	D		1	20	-	492	1834	321	153.3%
2/1	B430 Ardley Road (S) Right Left Ahead	O	N/A	N/A	B		1	60	-	444	1896	409	108.5%
3/1	B4030 (E/B) Ahead Right Left	U	N/A	N/A	C		1	19	-	720	1943	324	222.3%
4/1	B430 Ardley Road (N) Left Ahead Right	O	N/A	N/A	A		1	60	-	580	1968	625	92.8%
5/1	B4030 (E/B)	U	N/A	N/A	-		-	-	-	615	Inf	Inf	0.0%
6/1	B430 Ardey Road (S)	U	N/A	N/A	-		-	-	-	792	Inf	Inf	0.0%
7/1	B4030 (W/B)	U	N/A	N/A	-		-	-	-	490	Inf	Inf	0.0%
8/1	B430 Ardley Road (N)	U	N/A	N/A	-		-	-	-	339	Inf	Inf	0.0%

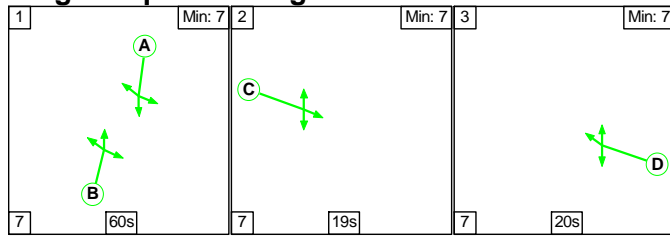
Full Input Data And Results

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	-	-	63	0	6	65.4	313.5	0.1	379.0	-	-	-	-
Unnamed Junction	-	-	63	0	6	65.4	313.5	0.1	379.0	-	-	-	-
1/1	492	321	-	-	-	18.5	86.9	-	105.5	771.9	27.4	86.9	114.3
2/1	444	409	48	0	6	5.7	22.3	0.1	28.1	227.9	17.6	22.3	39.9
3/1	720	324	-	-	-	35.4	199.0	-	234.4	1172.0	45.6	199.0	244.6
4/1	580	580	15	0	0	5.8	5.2	0.0	11.0	68.1	18.5	5.2	23.7
5/1	327	327	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/1	659	659	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
7/1	362	362	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
8/1	287	287	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
<p>C1 PRC for Signalled Lanes (%): -147.0 Total Delay for Signalled Lanes (pcuHr): 378.96 PRC Over All Lanes (%): -147.0 Total Delay Over All Lanes(pcuHr): 378.96 Cycle Time (s): 120</p>													

Full Input Data And Results

Scenario 4: 'New Scenario' (FG4: '2013 Arup Base + Consented Site Traffic PM', Plan 1: 'Network Control Plan 1')

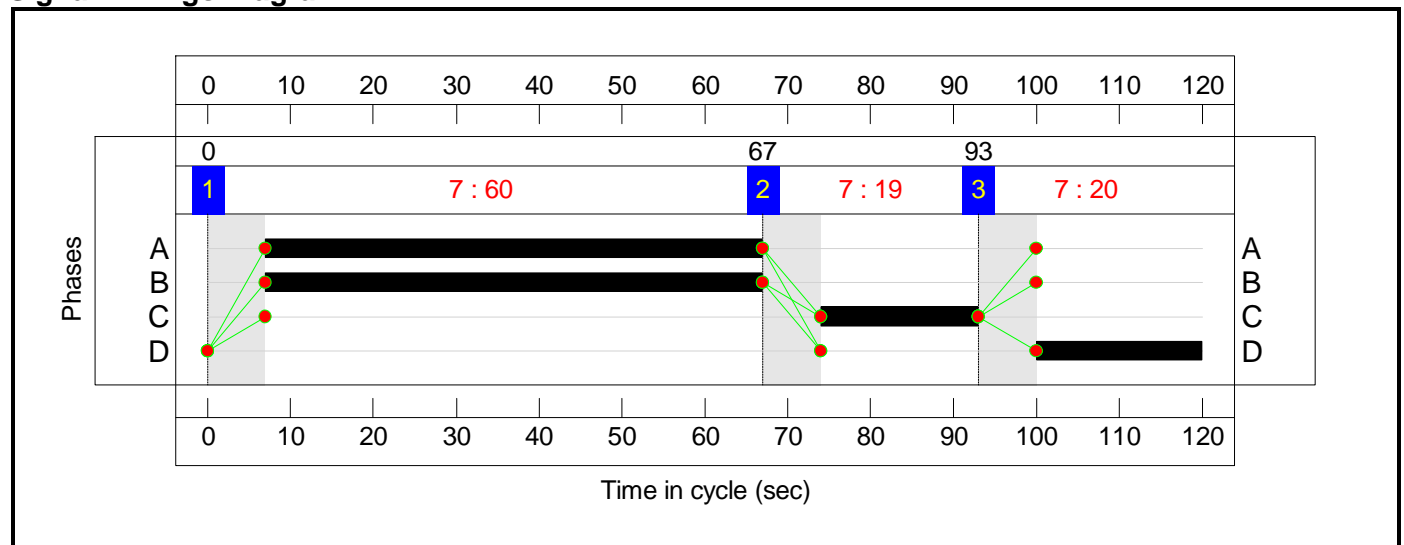
Stage Sequence Diagram



Stage Timings

Stage	1	2	3
Duration	60	19	20
Change Point	0	67	93

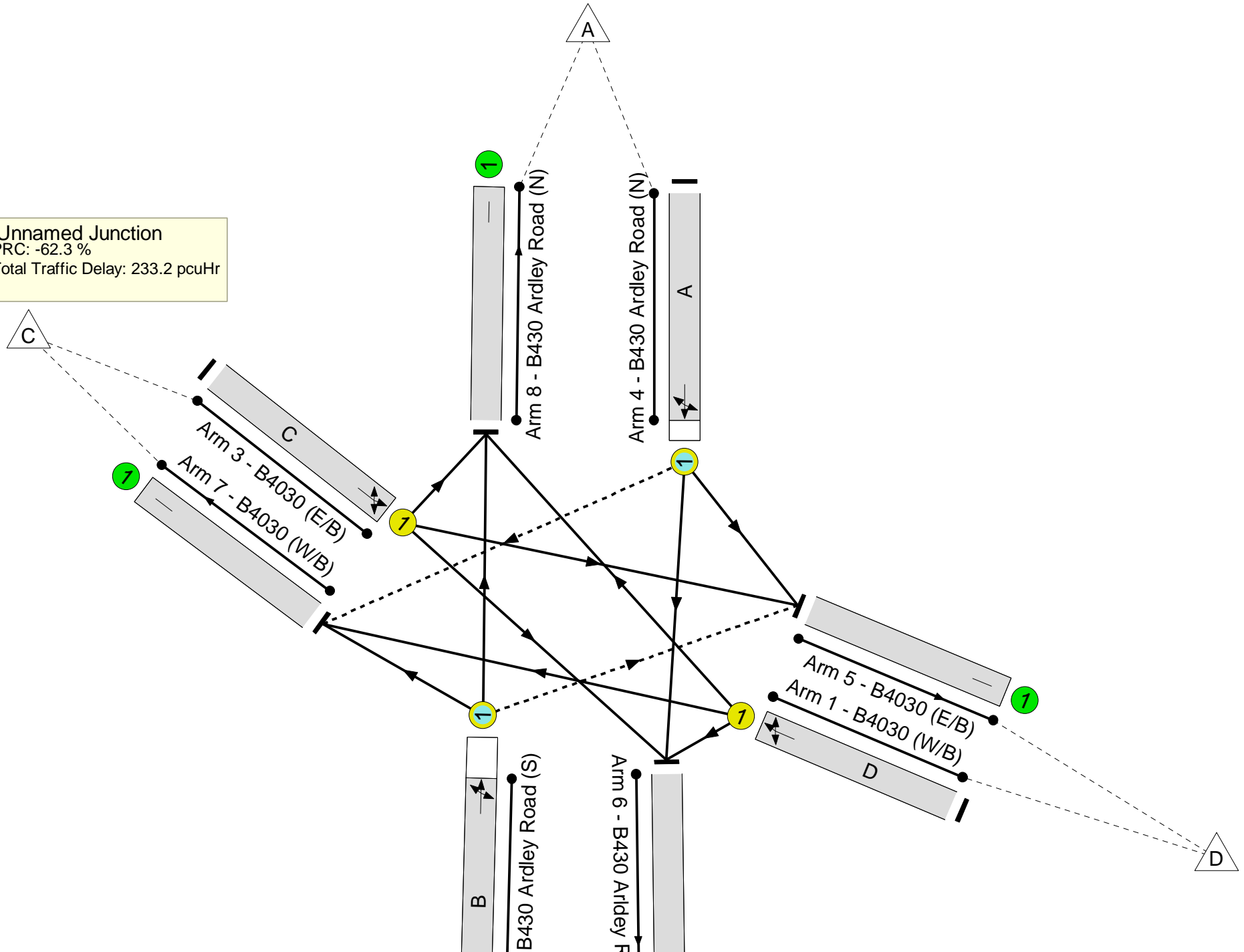

Signal Timings Diagram



Full Input Data And Results
Network Layout Diagram

Full Input Data And Results

Unnamed Junction
PRC: -62.3 %
Total Traffic Delay: 233.2 pcuHr



Full Input Data And Results

Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network	-	-	N/A	-	-		-	-	-	-	-	-	146.1%
Unnamed Junction	-	-	N/A	-	-		-	-	-	-	-	-	146.1%
1/1	B4030 (W/B) Left Ahead Right	U	N/A	N/A	D		1	20	-	439	1851	324	135.5%
2/1	B430 Ardley Road (S) Right Left Ahead	O	N/A	N/A	B		1	60	-	717	1878	686	104.5%
3/1	B4030 (E/B) Ahead Right Left	U	N/A	N/A	C		1	19	-	469	1926	321	146.1%
4/1	B430 Ardley Road (N) Left Ahead Right	O	N/A	N/A	A		1	60	-	331	1957	272	121.8%
5/1	B4030 (E/B)	U	N/A	N/A	-		-	-	-	514	Inf	Inf	0.0%
6/1	B430 Ardey Road (S)	U	N/A	N/A	-		-	-	-	483	Inf	Inf	0.0%
7/1	B4030 (W/B)	U	N/A	N/A	-		-	-	-	493	Inf	Inf	0.0%
8/1	B430 Ardley Road (N)	U	N/A	N/A	-		-	-	-	466	Inf	Inf	0.0%

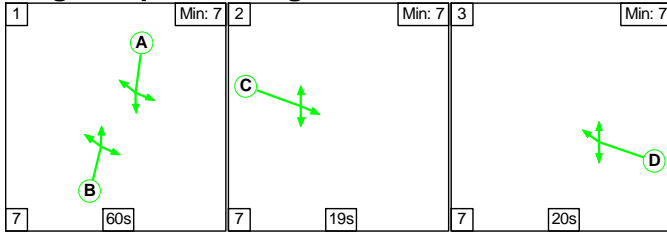
Full Input Data And Results

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	-	-	161	0	15	42.8	190.3	0.1	233.2	-	-	-	-
Unnamed Junction	-	-	161	0	15	42.8	190.3	0.1	233.2	-	-	-	-
1/1	439	324	-	-	-	14.0	59.4	-	73.3	601.5	21.9	59.4	81.3
2/1	717	686	153	0	15	7.5	23.1	0.1	30.8	154.6	26.1	23.1	49.2
3/1	469	321	-	-	-	14.7	75.6	-	90.2	692.6	22.4	75.6	97.9
4/1	331	272	8	0	1	6.6	32.2	0.0	38.8	422.4	13.0	32.2	45.2
5/1	405	405	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/1	372	372	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
7/1	392	392	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
8/1	434	434	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
<p>C1 PRC for Signalled Lanes (%): -62.3 Total Delay for Signalled Lanes (pcuHr): 233.20 PRC Over All Lanes (%): -62.3 Total Delay Over All Lanes(pcuHr): 233.20 Cycle Time (s): 120</p>													

Full Input Data And Results

Scenario 5: 'New Scenario' (FG5: '2013 Arup Base + Consented Site Traffic + Proposed School AM', Plan 1: 'Network Control Plan 1')

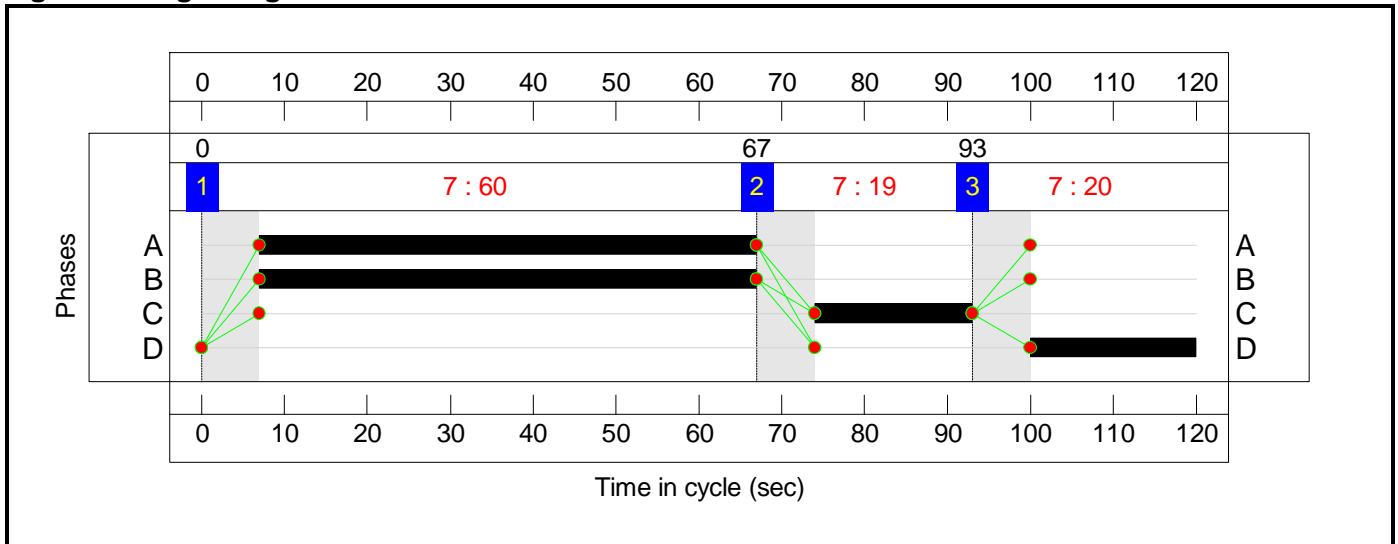
Stage Sequence Diagram



Stage Timings


Stage	1	2	3
Duration	60	19	20
Change Point	0	67	93

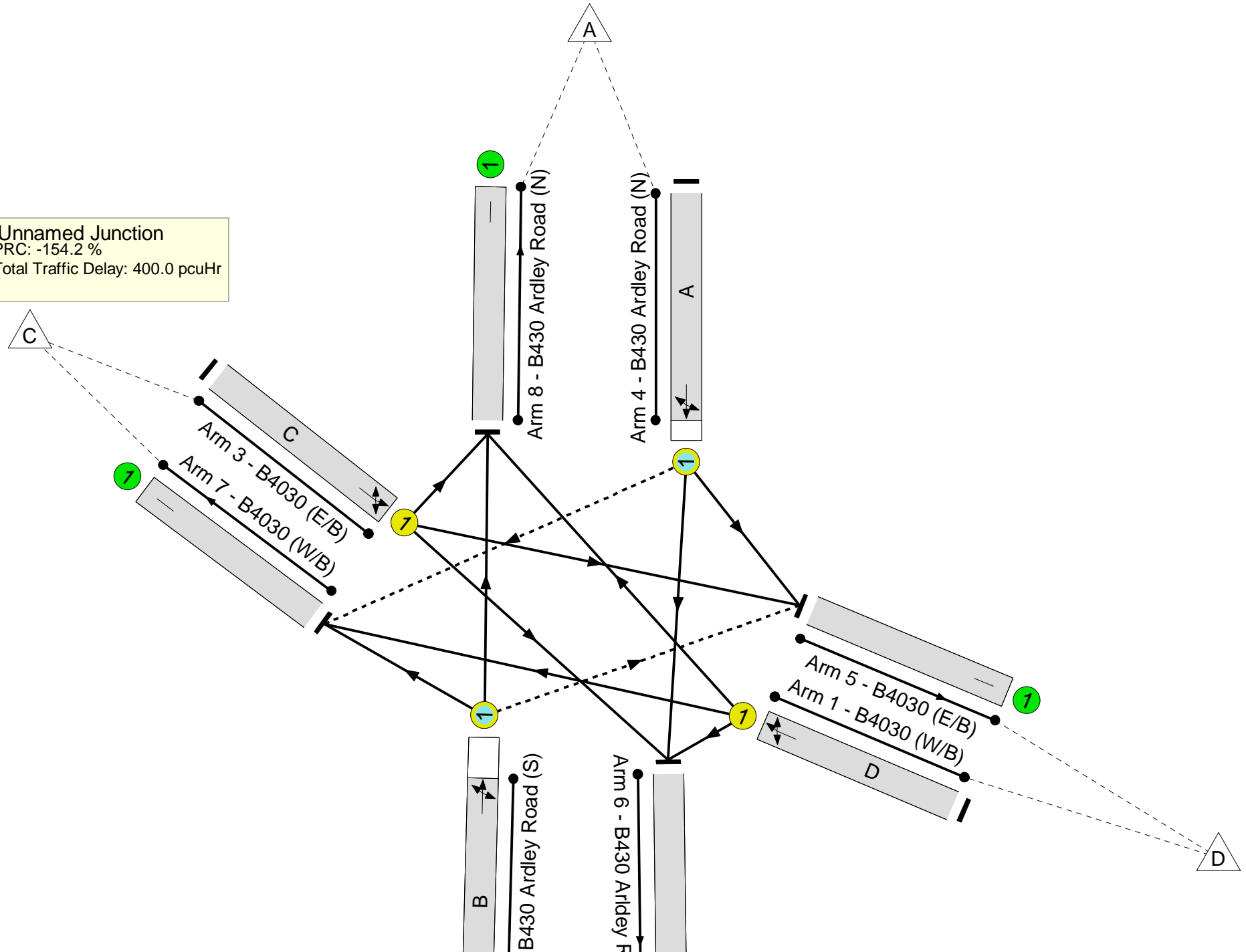
Signal Timings Diagram



Full Input Data And Results
Network Layout Diagram

Full Input Data And Results

 **Unnamed Junction**
PRC: -154.2 %
Total Traffic Delay: 400.0 pcuHr



Full Input Data And Results

Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network	-	-	N/A	-	-		-	-	-	-	-	-	228.8%
Unnamed Junction	-	-	N/A	-	-		-	-	-	-	-	-	228.8%
1/1	B4030 (W/B) Left Ahead Right	U	N/A	N/A	D		1	20	-	503	1834	321	156.7%
2/1	B430 Ardley Road (S) Right Left Ahead	O	N/A	N/A	B		1	60	-	449	1895	409	109.7%
3/1	B4030 (E/B) Ahead Right Left	U	N/A	N/A	C		1	19	-	741	1943	324	228.8%
4/1	B430 Ardley Road (N) Left Ahead Right	O	N/A	N/A	A		1	60	-	580	1968	625	92.8%
5/1	B4030 (E/B)	U	N/A	N/A	-		-	-	-	630	Inf	Inf	0.0%
6/1	B430 Ardey Road (S)	U	N/A	N/A	-		-	-	-	798	Inf	Inf	0.0%
7/1	B4030 (W/B)	U	N/A	N/A	-		-	-	-	506	Inf	Inf	0.0%
8/1	B430 Ardley Road (N)	U	N/A	N/A	-		-	-	-	339	Inf	Inf	0.0%

Full Input Data And Results

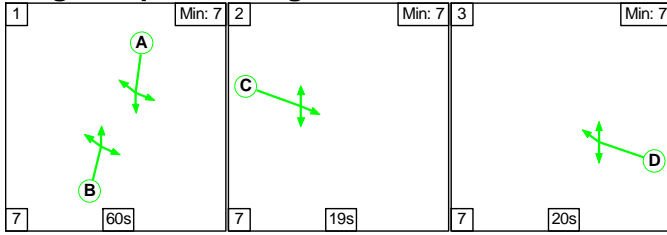
Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network	-	-	63	0	6	68.5	331.5	0.1	400.0	-	-	-	-
Unnamed Junction	-	-	63	0	6	68.5	331.5	0.1	400.0	-	-	-	-
1/1	503	321	-	-	-	19.5	92.4	-	111.8	800.5	28.5	92.4	120.9
2/1	449	409	48	0	6	6.1	24.4	0.1	30.6	245.4	18.0	24.4	42.4
3/1	741	324	-	-	-	37.2	209.5	-	246.6	1198.2	47.6	209.5	257.0
4/1	580	580	15	0	0	5.8	5.2	0.0	11.0	68.1	18.5	5.2	23.7
5/1	326	326	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/1	658	658	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
7/1	367	367	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
8/1	283	283	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0

C1		PRC for Signalled Lanes (%): -154.2	Total Delay for Signalled Lanes (pcuHr): 400.04	Cycle Time (s): 120
		PRC Over All Lanes (%): -154.2	Total Delay Over All Lanes(pcuHr): 400.04	

Full Input Data And Results

Scenario 6: 'New Scenario' (FG6: '2013 Arup Base + Consented Site Traffic + Proposed School PM', Plan 1: 'Network Control Plan 1')

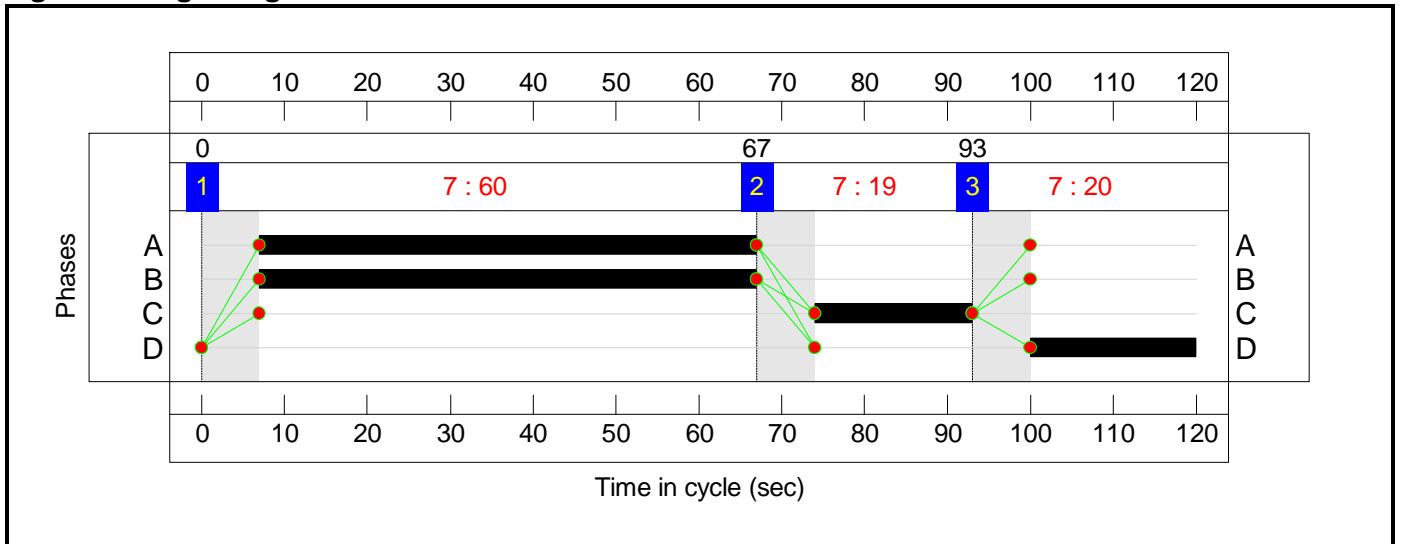
Stage Sequence Diagram



Stage Timings

Stage	1	2	3
Duration	60	19	20
Change Point	0	67	93

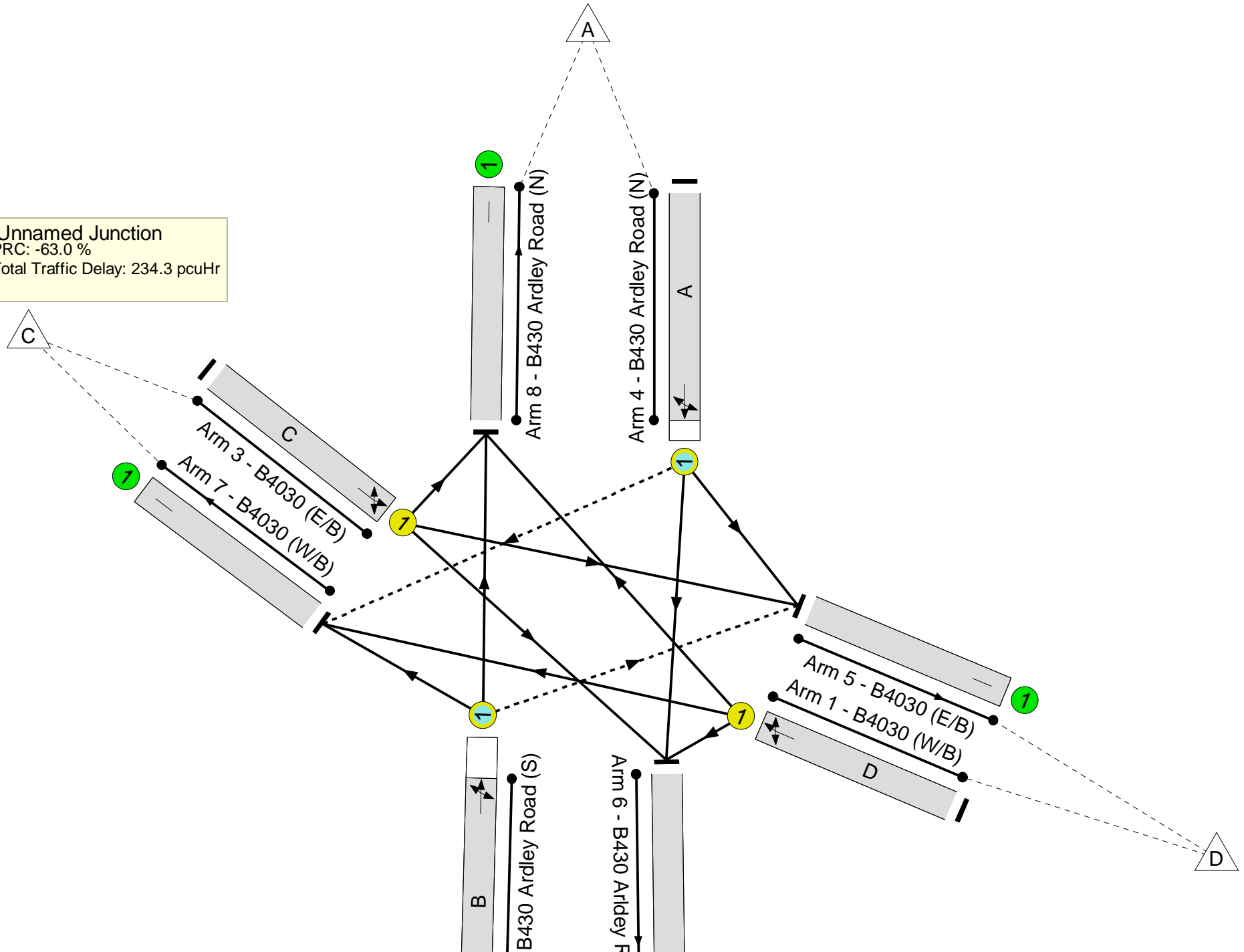

Signal Timings Diagram



Full Input Data And Results
Network Layout Diagram

Full Input Data And Results

Unnamed Junction
PRC: -63.0 %
Total Traffic Delay: 234.3 pcuHr



Full Input Data And Results

Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network	-	-	N/A	-	-		-	-	-	-	-	-	146.7%
Unnamed Junction	-	-	N/A	-	-		-	-	-	-	-	-	146.7%
1/1	B4030 (W/B) Left Ahead Right	U	N/A	N/A	D		1	20	-	439	1851	324	135.5%
2/1	B430 Ardley Road (S) Right Left Ahead	O	N/A	N/A	B		1	60	-	717	1878	686	104.5%
3/1	B4030 (E/B) Ahead Right Left	U	N/A	N/A	C		1	19	-	471	1926	321	146.7%
4/1	B430 Ardley Road (N) Left Ahead Right	O	N/A	N/A	A		1	60	-	331	1957	272	121.8%
5/1	B4030 (E/B)	U	N/A	N/A	-		-	-	-	516	Inf	Inf	0.0%
6/1	B430 Ardey Road (S)	U	N/A	N/A	-		-	-	-	483	Inf	Inf	0.0%
7/1	B4030 (W/B)	U	N/A	N/A	-		-	-	-	493	Inf	Inf	0.0%
8/1	B430 Ardley Road (N)	U	N/A	N/A	-		-	-	-	466	Inf	Inf	0.0%

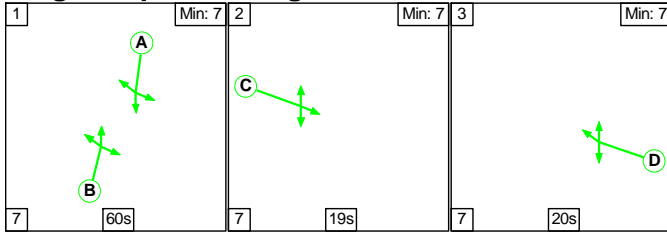
Full Input Data And Results

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	-	-	161	0	15	42.9	191.3	0.1	234.3	-	-	-	-
Unnamed Junction	-	-	161	0	15	42.9	191.3	0.1	234.3	-	-	-	-
1/1	439	324	-	-	-	14.0	59.4	-	73.3	601.5	21.9	59.4	81.3
2/1	717	686	153	0	15	7.5	23.1	0.1	30.8	154.6	26.1	23.1	49.2
3/1	471	321	-	-	-	14.8	76.5	-	91.4	698.4	22.6	76.5	99.1
4/1	331	272	8	0	1	6.6	32.2	0.0	38.8	422.4	13.0	32.2	45.2
5/1	406	406	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/1	371	371	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
7/1	392	392	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
8/1	434	434	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
<p>C1 PRC for Signalled Lanes (%): -63.0 Total Delay for Signalled Lanes (pcuHr): 234.35 PRC Over All Lanes (%): -63.0 Total Delay Over All Lanes(pcuHr): 234.35 Cycle Time (s): 120</p>													

Full Input Data And Results

Scenario 7: 'New Scenario' (FG7: '2013 Recalculated Base (No Consented Dev) AM', Plan 1: 'Network Control Plan 1')

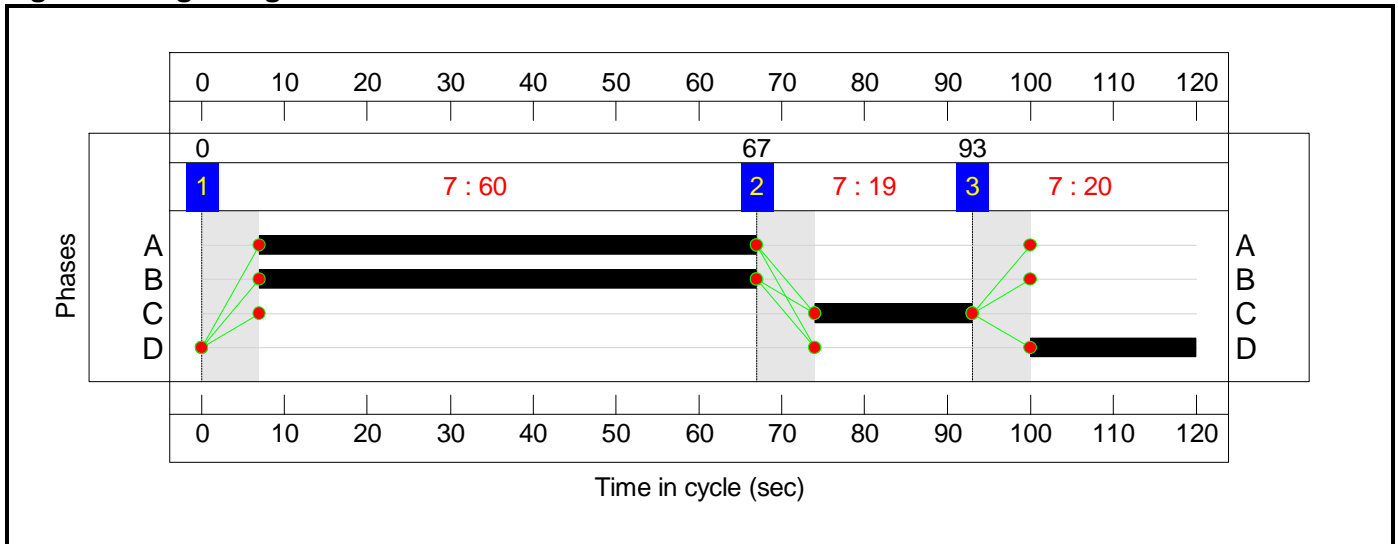
Stage Sequence Diagram



Stage Timings

Stage	1	2	3
Duration	60	19	20
Change Point	0	67	93

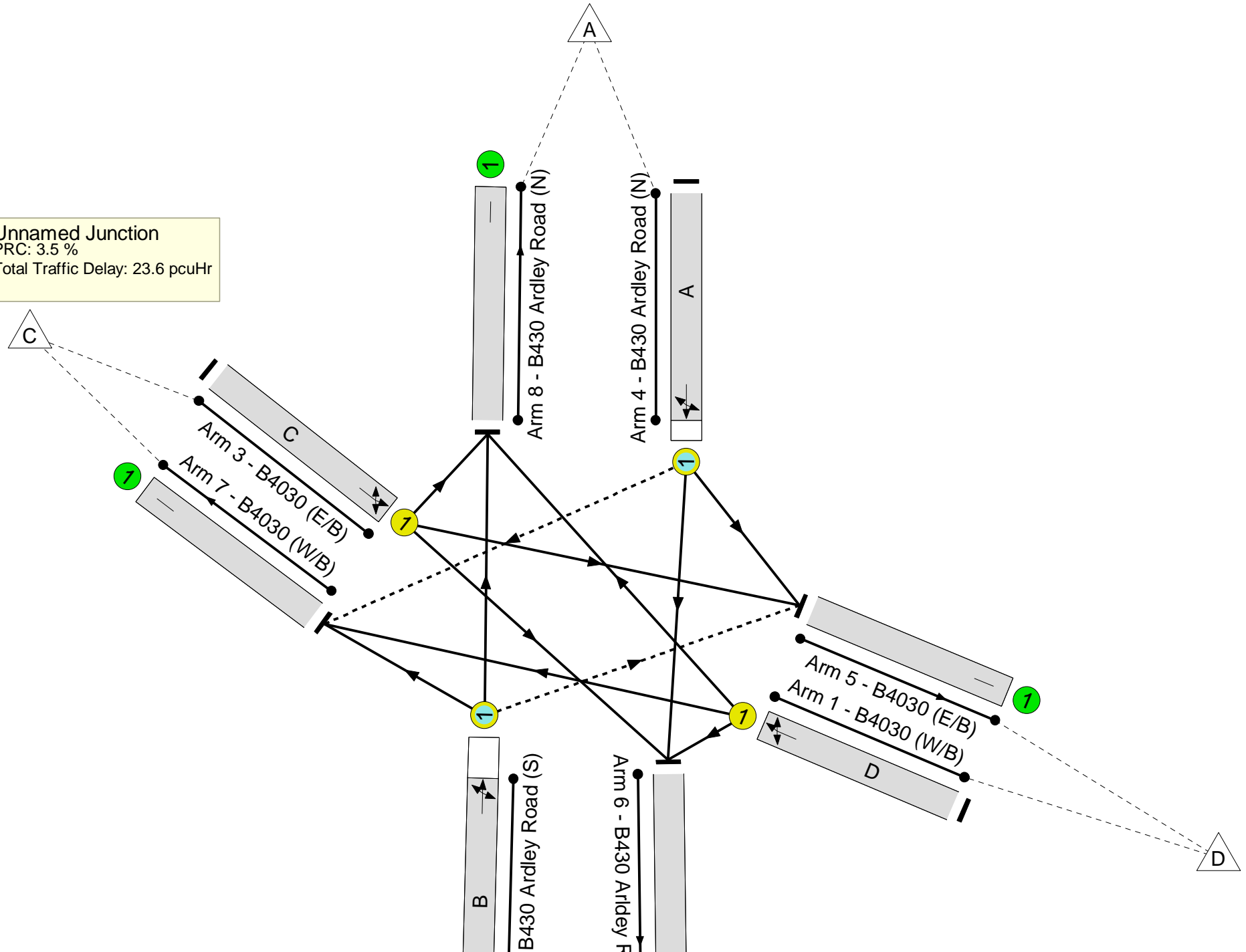

Signal Timings Diagram



Full Input Data And Results
Network Layout Diagram

Full Input Data And Results

Unnamed Junction
PRC: 3.5 %
Total Traffic Delay: 23.6 pcuHr



Full Input Data And Results

Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network	-	-	N/A	-	-		-	-	-	-	-	-	86.9%
Unnamed Junction	-	-	N/A	-	-		-	-	-	-	-	-	86.9%
1/1	B4030 (W/B) Left Ahead Right	U	N/A	N/A	D		1	20	-	275	1808	316	86.9%
2/1	B430 Ardley Road (S) Right Left Ahead	O	N/A	N/A	B		1	60	-	338	1903	483	69.9%
3/1	B4030 (E/B) Ahead Right Left	U	N/A	N/A	C		1	19	-	278	1940	323	86.0%
4/1	B430 Ardley Road (N) Left Ahead Right	O	N/A	N/A	A		1	60	-	544	1968	627	86.8%
5/1	B4030 (E/B)	U	N/A	N/A	-		-	-	-	298	Inf	Inf	0.0%
6/1	B430 Ardey Road (S)	U	N/A	N/A	-		-	-	-	625	Inf	Inf	0.0%
7/1	B4030 (W/B)	U	N/A	N/A	-		-	-	-	194	Inf	Inf	0.0%
8/1	B430 Ardley Road (N)	U	N/A	N/A	-		-	-	-	318	Inf	Inf	0.0%

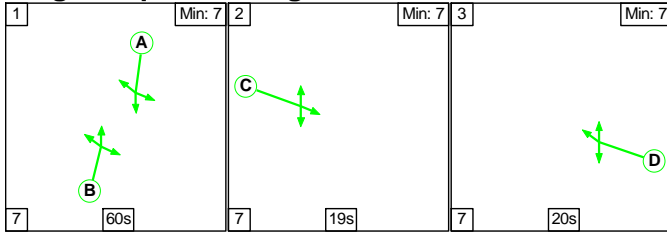
Full Input Data And Results

Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network	-	-	68	0	1	13.7	9.8	0.1	23.6	-	-	-	-
Unnamed Junction	-	-	68	0	1	13.7	9.8	0.1	23.6	-	-	-	-
1/1	275	275	-	-	-	3.7	2.9	-	6.6	86.3	8.9	2.9	11.8
2/1	338	338	54	0	1	1.8	1.1	0.1	3.0	31.7	6.9	1.1	8.1
3/1	278	278	-	-	-	3.8	2.7	-	6.5	84.1	9.0	2.7	11.7
4/1	544	544	14	0	0	4.5	3.1	0.0	7.5	49.7	15.4	3.1	18.5
5/1	298	298	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/1	625	625	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
7/1	194	194	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
8/1	318	318	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
<p>C1 PRC for Signalled Lanes (%): 3.5 Total Delay for Signalled Lanes (pcuHr): 23.57</p> <p> PRC Over All Lanes (%): 3.5 Total Delay Over All Lanes(pcuHr): 23.57 Cycle Time (s): 120</p>													

Full Input Data And Results

Scenario 8: 'New Scenario' (FG8: '2013 Recalculated Base (No Consented Dev) PM', Plan 1: 'Network Control Plan 1')

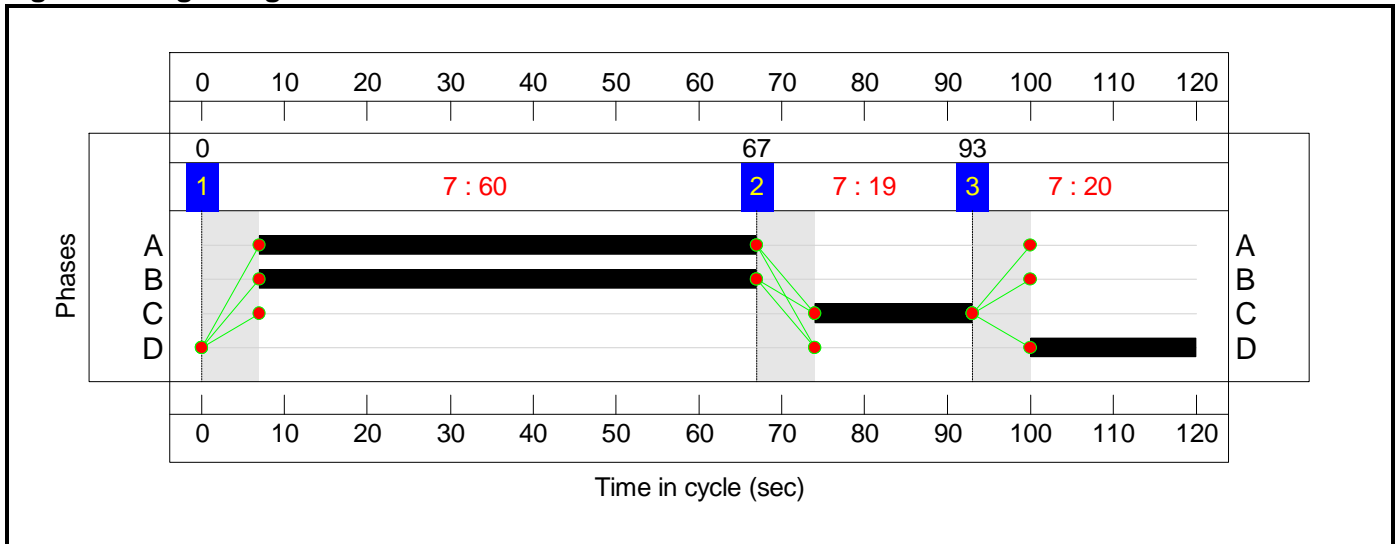
Stage Sequence Diagram



Stage Timings

Stage	1	2	3
Duration	60	19	20
Change Point	0	67	93

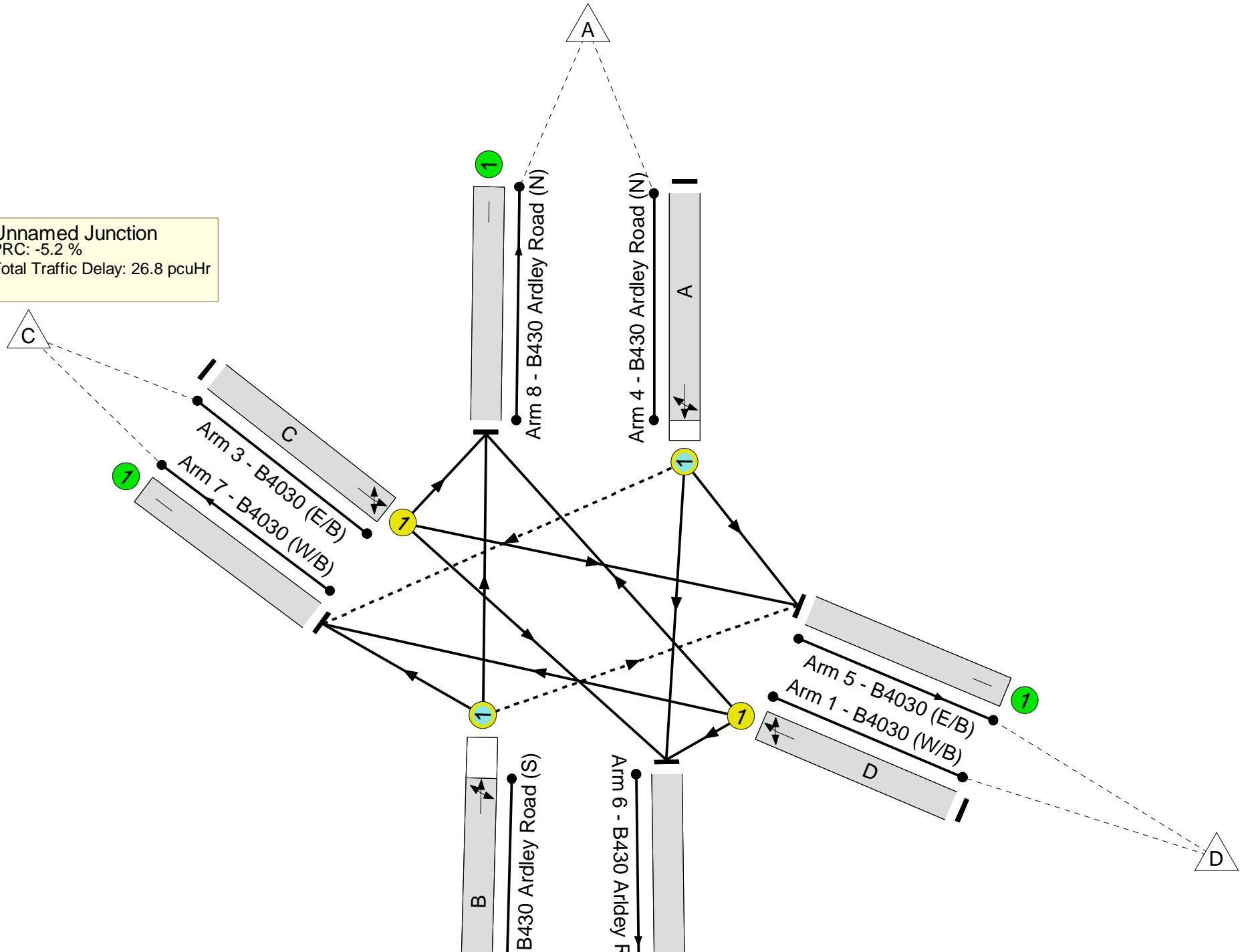

Signal Timings Diagram



Full Input Data And Results
Network Layout Diagram

Full Input Data And Results

Unnamed Junction
PRC: -5.2 %
Total Traffic Delay: 26.8 pcuHr



Full Input Data And Results

Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network	-	-	N/A	-	-		-	-	-	-	-	-	94.7%
Unnamed Junction	-	-	N/A	-	-		-	-	-	-	-	-	94.7%
1/1	B4030 (W/B) Left Ahead Right	U	N/A	N/A	D		1	20	-	229	1833	321	71.4%
2/1	B430 Ardley Road (S) Right Left Ahead	O	N/A	N/A	B		1	60	-	597	1880	631	94.7%
3/1	B4030 (E/B) Ahead Right Left	U	N/A	N/A	C		1	19	-	282	1922	320	88.0%
4/1	B430 Ardley Road (N) Left Ahead Right	O	N/A	N/A	A		1	60	-	312	1957	372	83.8%
5/1	B4030 (E/B)	U	N/A	N/A	-		-	-	-	400	Inf	Inf	0.0%
6/1	B430 Ardey Road (S)	U	N/A	N/A	-		-	-	-	380	Inf	Inf	0.0%
7/1	B4030 (W/B)	U	N/A	N/A	-		-	-	-	201	Inf	Inf	0.0%
8/1	B430 Ardley Road (N)	U	N/A	N/A	-		-	-	-	439	Inf	Inf	0.0%

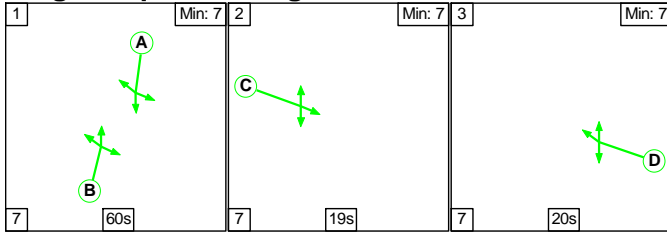
Full Input Data And Results

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	-	-	167	0	8	13.4	13.2	0.1	26.8	-	-	-	-
Unnamed Junction	-	-	167	0	8	13.4	13.2	0.1	26.8	-	-	-	-
1/1	229	229	-	-	-	3.0	1.2	-	4.2	65.8	7.2	1.2	8.4
2/1	597	597	157	0	8	3.8	6.4	0.1	10.3	62.4	14.8	6.4	21.2
3/1	282	282	-	-	-	3.8	3.2	-	7.0	89.1	9.2	3.2	12.3
4/1	312	312	10	0	1	2.8	2.4	0.0	5.2	60.5	9.4	2.4	11.8
5/1	400	400	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/1	380	380	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
7/1	201	201	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
8/1	439	439	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
<p>C1 PRC for Signalled Lanes (%): -5.2 Total Delay for Signalled Lanes (pcuHr): 26.76</p> <p> PRC Over All Lanes (%): -5.2 Total Delay Over All Lanes(pcuHr): 26.76 Cycle Time (s): 120</p>													

Full Input Data And Results

Scenario 9: 'New Scenario' (FG9: '2013 Recalculated Base + Consented Site Traffic AM', Plan 1: 'Network Control Plan 1')

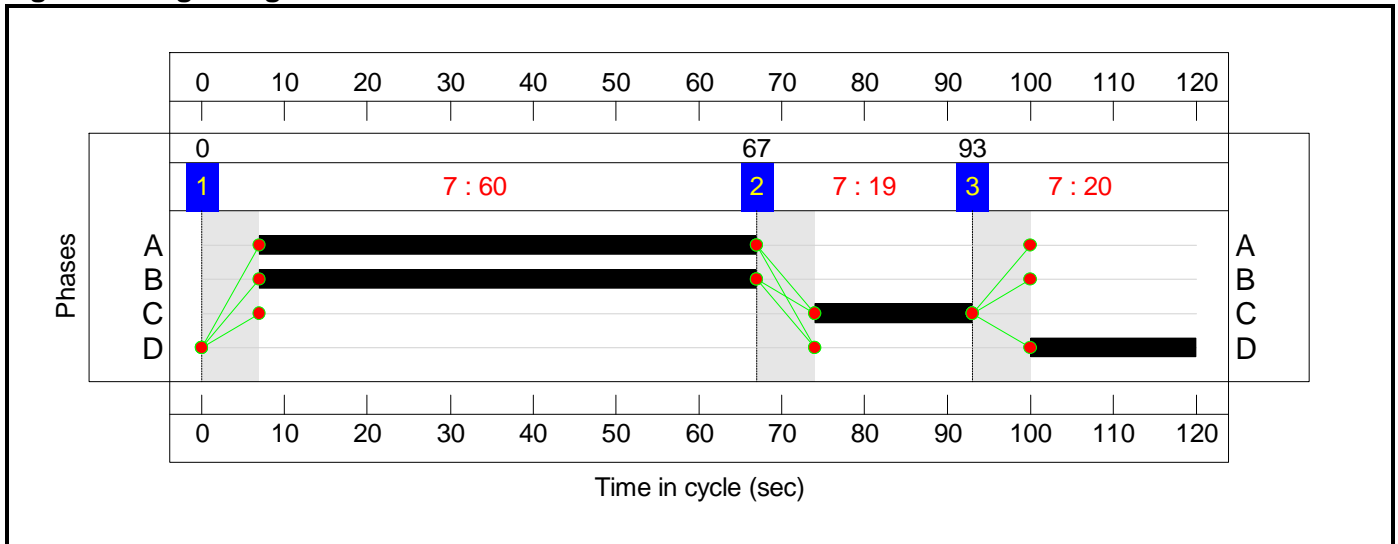
Stage Sequence Diagram



Stage Timings


Stage	1	2	3
Duration	60	19	20
Change Point	0	67	93

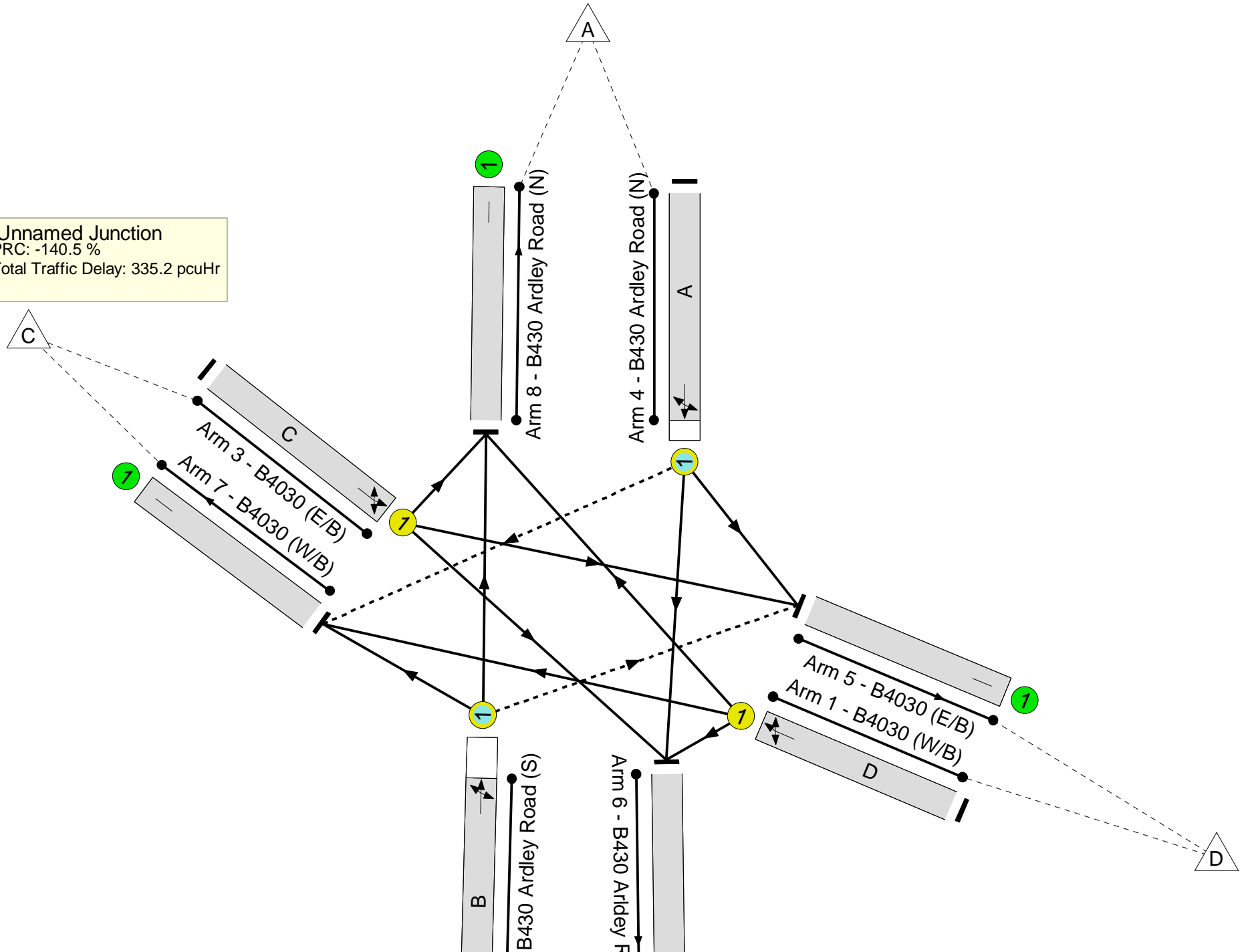
Signal Timings Diagram



Full Input Data And Results
Network Layout Diagram

Full Input Data And Results

 **Unnamed Junction**
PRC: -140.5 %
Total Traffic Delay: 335.2 pcuHr



Full Input Data And Results

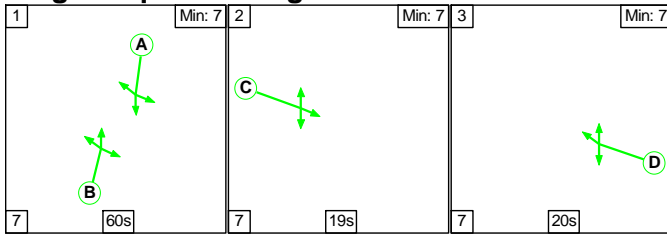
Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network	-	-	N/A	-	-		-	-	-	-	-	-	216.5%
Unnamed Junction	-	-	N/A	-	-		-	-	-	-	-	-	216.5%
1/1	B4030 (W/B) Left Ahead Right	U	N/A	N/A	D		1	20	-	474	1834	321	147.7%
2/1	B430 Ardley Road (S) Right Left Ahead	O	N/A	N/A	B		1	60	-	422	1895	457	92.3%
3/1	B4030 (E/B) Ahead Right Left	U	N/A	N/A	C		1	19	-	701	1943	324	216.5%
4/1	B430 Ardley Road (N) Left Ahead Right	O	N/A	N/A	A		1	60	-	544	1968	594	91.6%
5/1	B4030 (E/B)	U	N/A	N/A	-		-	-	-	594	Inf	Inf	0.0%
6/1	B430 Ardley Road (S)	U	N/A	N/A	-		-	-	-	752	Inf	Inf	0.0%
7/1	B4030 (W/B)	U	N/A	N/A	-		-	-	-	477	Inf	Inf	0.0%
8/1	B430 Ardley Road (N)	U	N/A	N/A	-		-	-	-	318	Inf	Inf	0.0%

Full Input Data And Results

Scenario 10: 'New Scenario' (FG10: '2013 Recalculated Base + Consented Site Traffic PM', Plan 1: 'Network Control Plan 1')

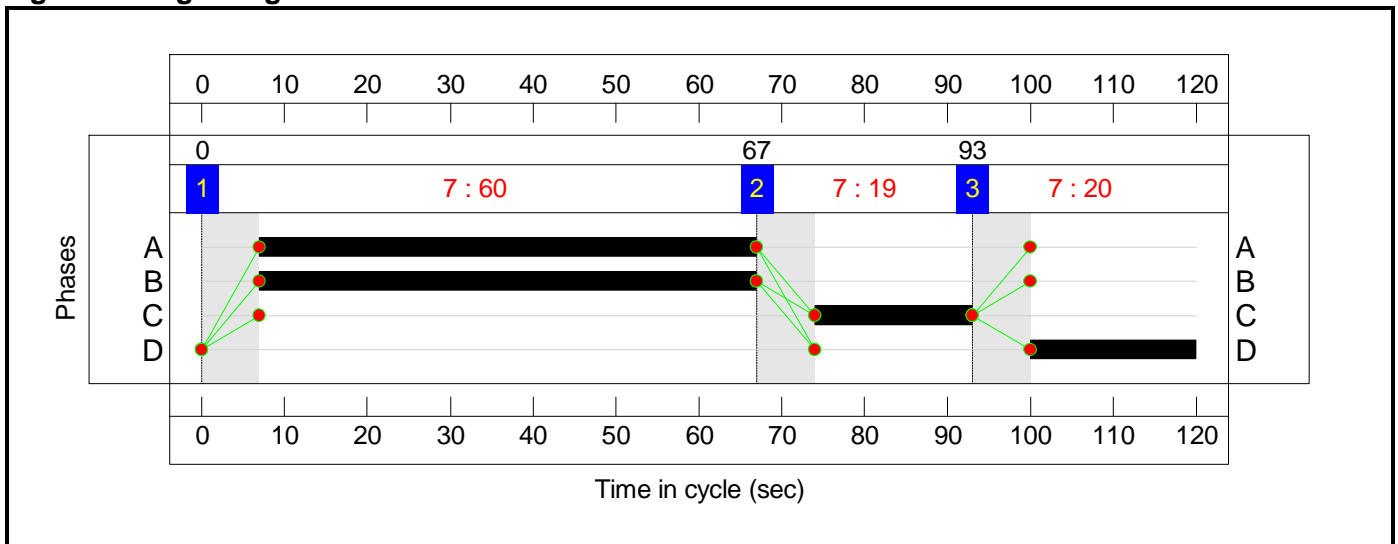
Stage Sequence Diagram



Stage Timings

Stage	1	2	3
Duration	60	19	20
Change Point	0	67	93

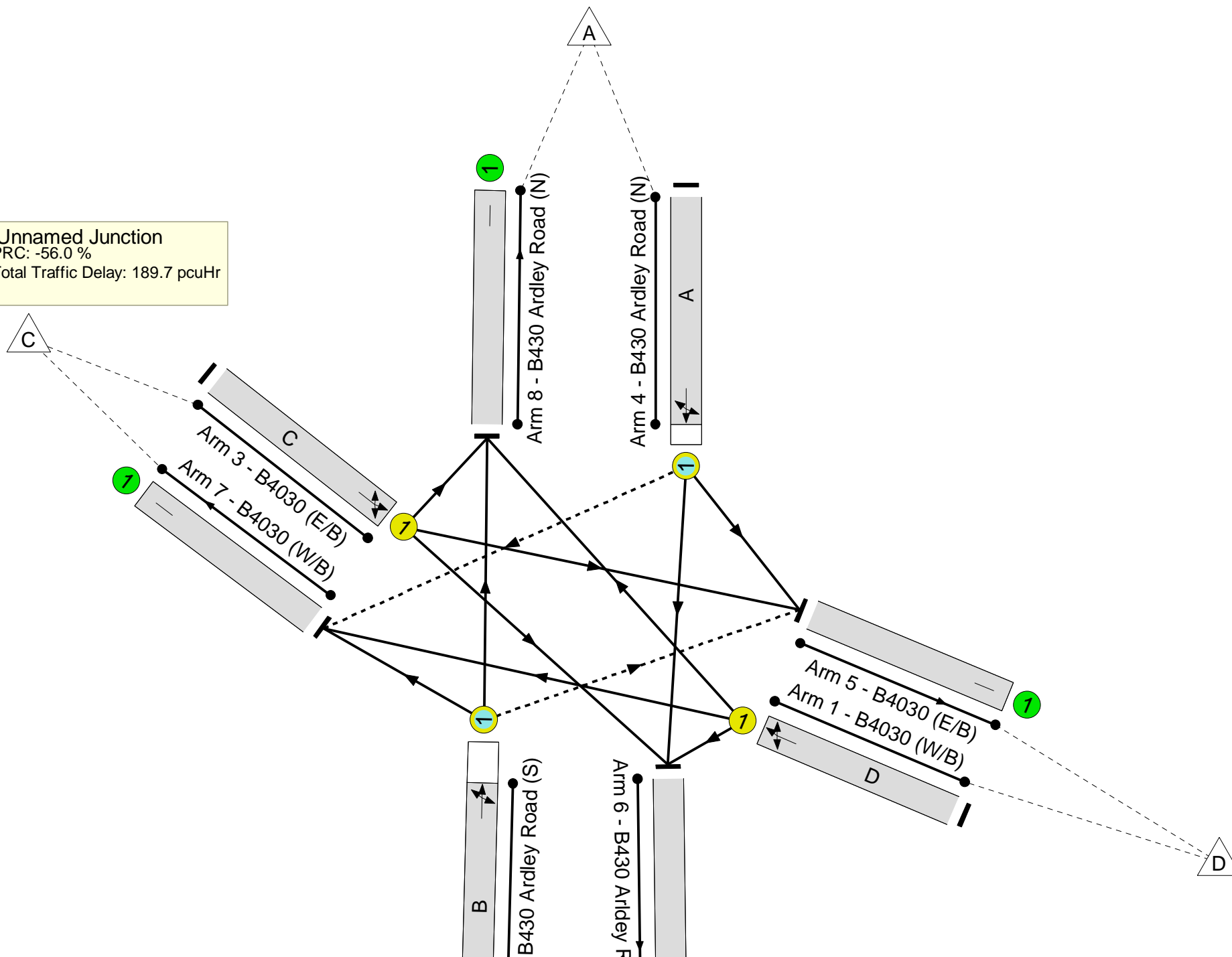

Signal Timings Diagram



Full Input Data And Results
Network Layout Diagram

Full Input Data And Results

Unnamed Junction
PRC: -56.0 %
Total Traffic Delay: 189.7 pcuHr



Full Input Data And Results

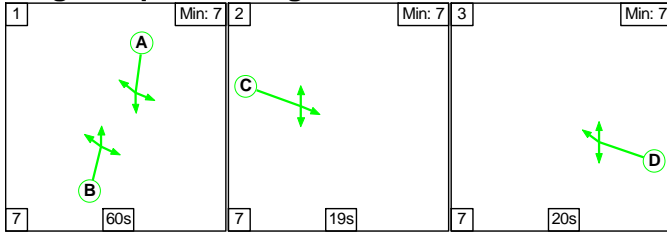
Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network	-	-	N/A	-	-		-	-	-	-	-	-	140.4%
Unnamed Junction	-	-	N/A	-	-		-	-	-	-	-	-	140.4%
1/1	B4030 (W/B) Left Ahead Right	U	N/A	N/A	D		1	20	-	426	1851	324	131.5%
2/1	B430 Ardley Road (S) Right Left Ahead	O	N/A	N/A	B		1	60	-	681	1878	643	105.9%
3/1	B4030 (E/B) Ahead Right Left	U	N/A	N/A	C		1	19	-	451	1927	321	140.4%
4/1	B430 Ardley Road (N) Left Ahead Right	O	N/A	N/A	A		1	60	-	312	1957	321	97.3%
5/1	B4030 (E/B)	U	N/A	N/A	-		-	-	-	489	Inf	Inf	0.0%
6/1	B430 Ardey Road (S)	U	N/A	N/A	-		-	-	-	460	Inf	Inf	0.0%
7/1	B4030 (W/B)	U	N/A	N/A	-		-	-	-	482	Inf	Inf	0.0%
8/1	B430 Ardley Road (N)	U	N/A	N/A	-		-	-	-	439	Inf	Inf	0.0%

Full Input Data And Results

Scenario 11: 'New Scenario' (FG11: '2013 Recalculated Base + Consented Site Traffic + Proposed School AM', Plan 1: 'Network Control Plan 1')

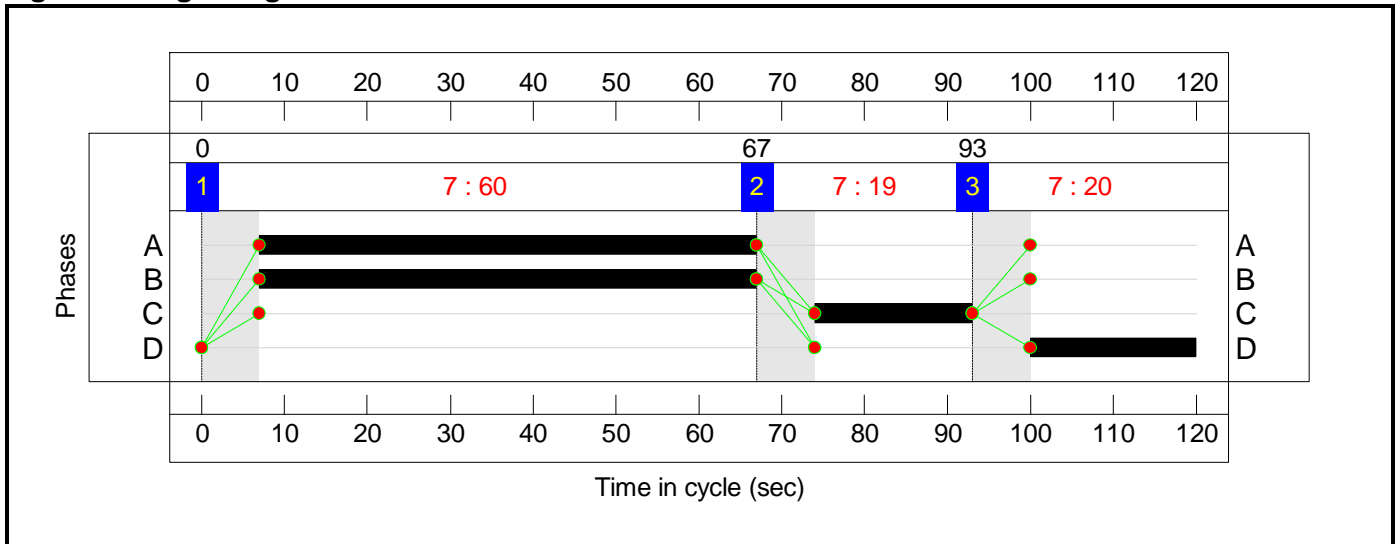
Stage Sequence Diagram



Stage Timings

Stage	1	2	3
Duration	60	19	20
Change Point	0	67	93

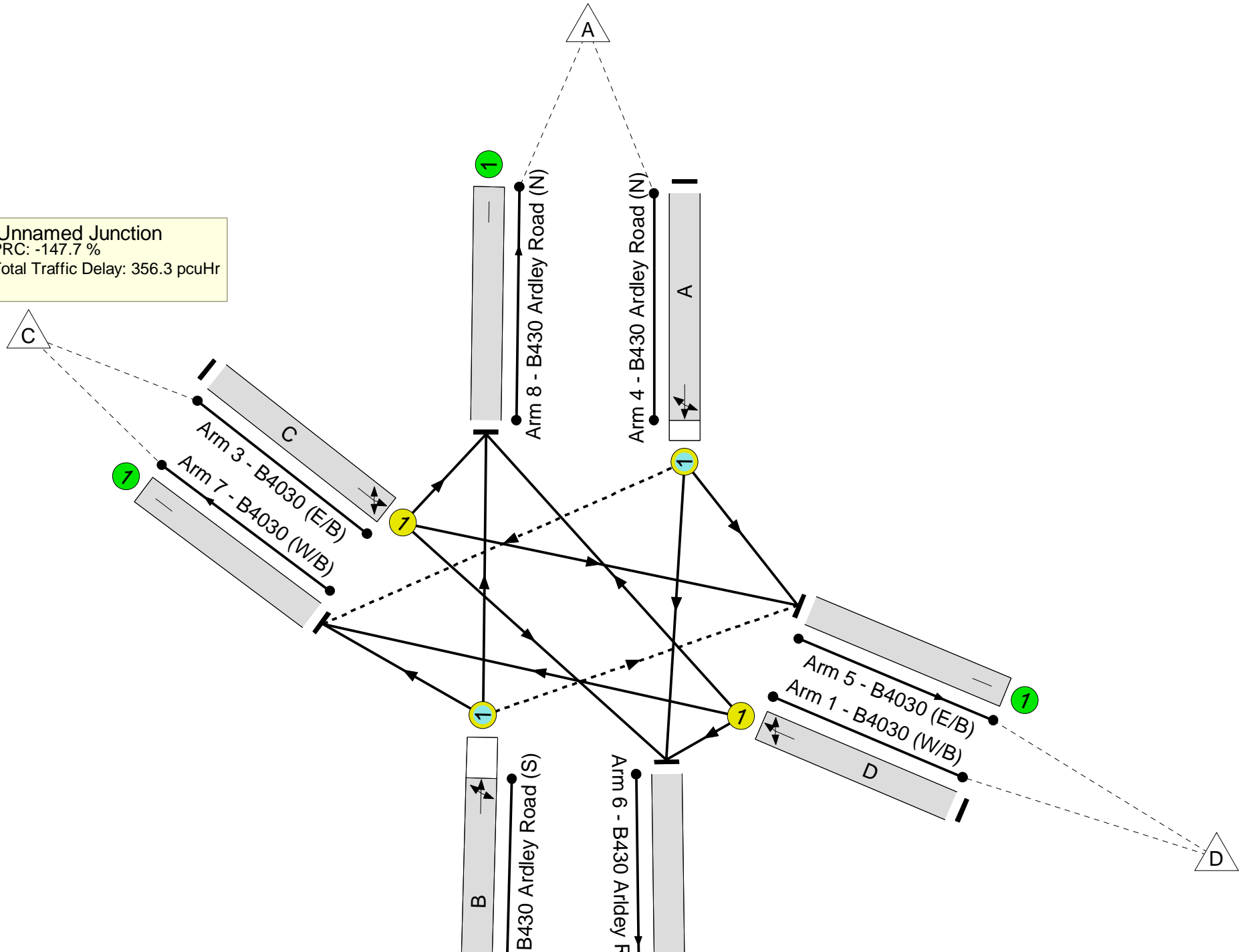

Signal Timings Diagram



Full Input Data And Results
Network Layout Diagram

Full Input Data And Results

Unnamed Junction
PRC: -147.7 %
Total Traffic Delay: 356.3 pcuHr



Full Input Data And Results

Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network	-	-	N/A	-	-		-	-	-	-	-	-	223.0%
Unnamed Junction	-	-	N/A	-	-		-	-	-	-	-	-	223.0%
1/1	B4030 (W/B) Left Ahead Right	U	N/A	N/A	D		1	20	-	486	1835	321	151.3%
2/1	B430 Ardley Road (S) Right Left Ahead	O	N/A	N/A	B		1	60	-	427	1895	458	93.3%
3/1	B4030 (E/B) Ahead Right Left	U	N/A	N/A	C		1	19	-	722	1943	324	223.0%
4/1	B430 Ardley Road (N) Left Ahead Right	O	N/A	N/A	A		1	60	-	544	1968	577	94.2%
5/1	B4030 (E/B)	U	N/A	N/A	-		-	-	-	609	Inf	Inf	0.0%
6/1	B430 Ardey Road (S)	U	N/A	N/A	-		-	-	-	758	Inf	Inf	0.0%
7/1	B4030 (W/B)	U	N/A	N/A	-		-	-	-	494	Inf	Inf	0.0%
8/1	B430 Ardley Road (N)	U	N/A	N/A	-		-	-	-	318	Inf	Inf	0.0%

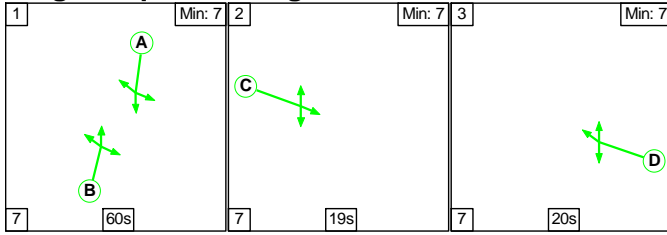
Full Input Data And Results

Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network	-	-	64	0	5	61.2	295.1	0.1	356.3	-	-	-	-
Unnamed Junction	-	-	64	0	5	61.2	295.1	0.1	356.3	-	-	-	-
1/1	486	321	-	-	-	18.0	83.9	-	101.9	755.0	26.8	83.9	110.7
2/1	427	427	51	0	4	2.5	5.2	0.1	7.8	65.6	9.4	5.2	14.6
3/1	722	324	-	-	-	35.6	200.0	-	235.6	1174.5	45.8	200.0	245.8
4/1	544	544	13	0	1	5.0	6.0	0.0	11.0	73.1	16.5	6.0	22.5
5/1	324	324	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/1	626	626	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
7/1	378	378	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
8/1	288	288	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
C1			PRC for Signalled Lanes (%): -147.7		PRC Over All Lanes (%): -147.7		Total Delay for Signalled Lanes (pcuHr): 356.31		Total Delay Over All Lanes(pcuHr): 356.31		Cycle Time (s): 120		

Full Input Data And Results

Scenario 12: 'New Scenario' (FG12: '2013 Recalculated Base + Consented Site Traffic + Proposed School PM', Plan 1: 'Network Control Plan 1')

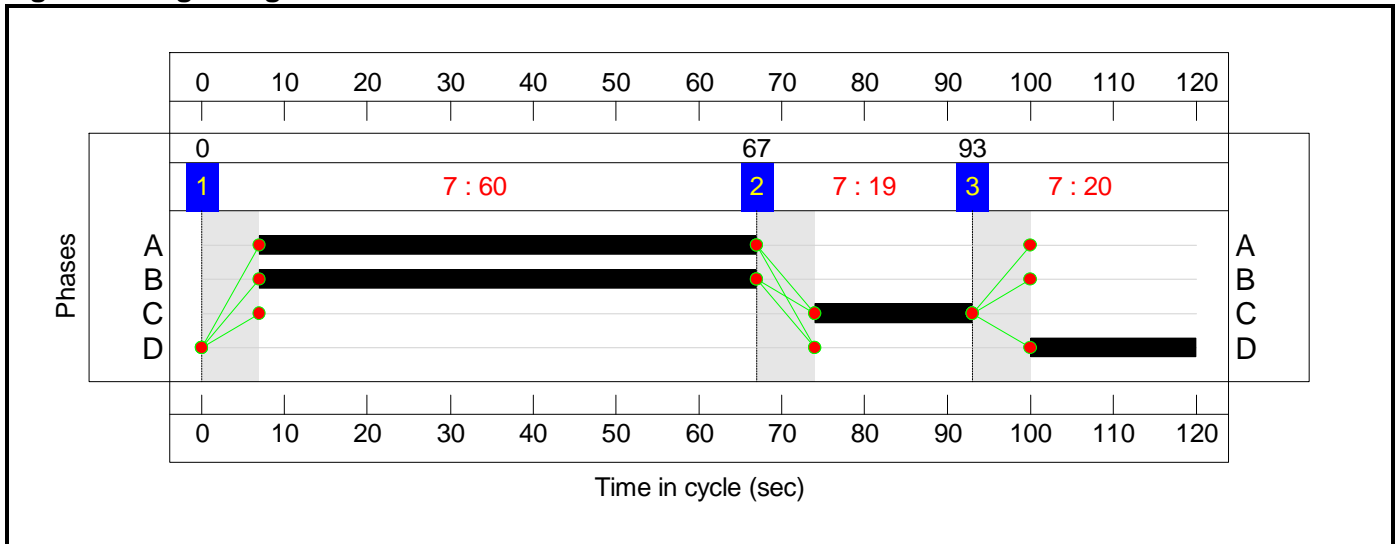
Stage Sequence Diagram



Stage Timings

Stage	1	2	3
Duration	60	19	20
Change Point	0	67	93

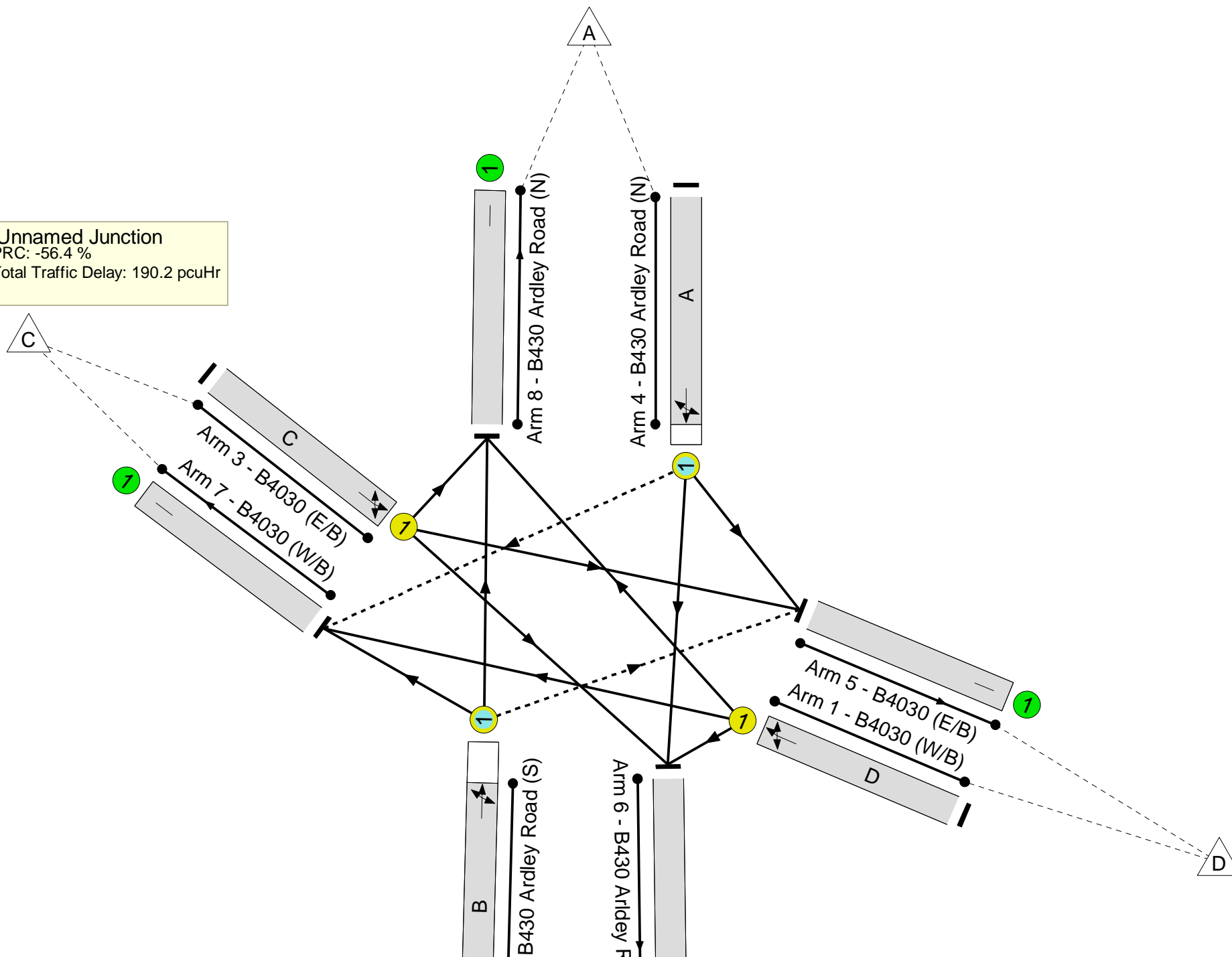

Signal Timings Diagram



Full Input Data And Results
Network Layout Diagram

Full Input Data And Results

Unnamed Junction
PRC: -56.4 %
Total Traffic Delay: 190.2 pcuHr



Full Input Data And Results

Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network	-	-	N/A	-	-		-	-	-	-	-	-	140.7%
Unnamed Junction	-	-	N/A	-	-		-	-	-	-	-	-	140.7%
1/1	B4030 (W/B) Left Ahead Right	U	N/A	N/A	D		1	20	-	426	1851	324	131.5%
2/1	B430 Ardley Road (S) Right Left Ahead	O	N/A	N/A	B		1	60	-	681	1878	643	105.9%
3/1	B4030 (E/B) Ahead Right Left	U	N/A	N/A	C		1	19	-	452	1927	321	140.7%
4/1	B430 Ardley Road (N) Left Ahead Right	O	N/A	N/A	A		1	60	-	312	1957	321	97.3%
5/1	B4030 (E/B)	U	N/A	N/A	-		-	-	-	490	Inf	Inf	0.0%
6/1	B430 Ardey Road (S)	U	N/A	N/A	-		-	-	-	460	Inf	Inf	0.0%
7/1	B4030 (W/B)	U	N/A	N/A	-		-	-	-	482	Inf	Inf	0.0%
8/1	B430 Ardley Road (N)	U	N/A	N/A	-		-	-	-	439	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	-	-	151	0	15	37.3	152.8	0.1	190.2	-	-	-	-
Unnamed Junction	-	-	151	0	15	37.3	152.8	0.1	190.2	-	-	-	-
1/1	426	324	-	-	-	12.9	53.0	-	65.9	557.2	20.6	53.0	73.7
2/1	681	643	141	0	15	7.9	25.7	0.1	33.7	178.2	25.6	25.7	51.2
3/1	452	321	-	-	-	13.2	67.1	-	80.3	639.9	20.8	67.1	87.9
4/1	312	312	10	0	0	3.3	6.9	0.0	10.3	118.3	10.3	6.9	17.3
5/1	398	398	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/1	406	406	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
7/1	392	392	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
8/1	405	405	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0

C1 PRC for Signalled Lanes (%): -56.4 Total Delay for Signalled Lanes (pcuHr): 190.23
 PRC Over All Lanes (%): -56.4 Total Delay Over All Lanes(pcuHr): 190.23 Cycle Time (s): 120

Appendix D

2019 Junction Capacity Assessment Results

Heyford Park Free School
Transport Statement

Junctions 8

PICADY 8 - Priority Intersection Module

Version: 8.0.1.305 [25 May 2012]
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Filename: (new file)

Path:

Report generation date: 28/11/2012 11:29:47

- » (Default Analysis Set) - 2019 Arup Base, AM
- » (Default Analysis Set) - 2019 Arup Base, PM
- » (Default Analysis Set) - 2019 Arup Base + Site Dev + Consented, AM
- » (Default Analysis Set) - 2019 Arup Base + Site Dev + Consented, PM
- » (Default Analysis Set) - 2019 Arup Base + Site Dev + Proposed, AM
- » (Default Analysis Set) - 2019 Arup Base + Site Dev + Proposed, PM

File summary

File Description

Title	Somerton Road_Camp Road_Station Road
Location	Upper Heyford
Site Number	
Date	22/11/2012
Version	
Status	(new file)
Identifier	
Client	
Jobnumber	23824
Enumerator	PBA\ngyseman
Description	

Analysis Options

Vehicle Length (m)	Do Queue Variations	Calculate Residual Capacity	Residual Capacity Criteria Type	RFC Threshold	Average Delay Threshold (s)	Queue Threshold (PCU)
5.75			N/A	0.85	36.00	20.00

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

(Default Analysis Set) - 2019 Arup Base, AM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

Name	Description	Locked	Network Flow Scaling Factor (%)	Reason For Scaling Factors
(Default Analysis Set)			100.000	

Demand Set Details

Name	Scenario Name	Time Period Name	Description	Traffic Profile Type	Model Start Time (HH:mm)	Model Finish Time (HH:mm)	Model Time Period Length (min)	Time Segment Length (min)	Single Time Segment Only	Locked
2019 Arup Base, AM	2019 Arup Base	AM		ONE HOUR	07:45	09:15	90	15		

Junction Network

Junctions

Name	Junction Type	Major Road Direction	Arm Order	Junction Delay (s)	Junction LOS
Somerton Road_Camp Road_Station Road	T-Junction	Two-way	A,B,C	6.53	A

Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Name	Description	Arm Type
A	Somerton Road	Upper Heyford	Major
B	Camp Road	Upper Heyford	Minor
C	Station Road	Upper Heyford	Major

Major Arm Geometry

Arm	Width of carriageway (m)	Has kerbed central reserve	Width of kerbed central reserve (m)	Has right turn bay	Width For Right Turn (m)	Visibility For Right Turn (m)	Blocks?	Blocking Queue (PCU)
C	6.00		0.00		2.20	89.00		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)	Lane Width (Left) (m)	Lane Width (Right) (m)	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				9.00	2.80	2.75	2.75	2.75		1.00	30	21

Pedestrian Crossings

Arm	Crossing Type
A	None
B	None
C	None

Slope / Intercept / Capacity

Priority Intersection Slopes and Intercepts

Junction	Stream	Intercept (PCU/hr)	Slope for A-B	Slope for A-C	Slope for C-A	Slope for C-B
1	B-A	547.450	0.100	0.252	0.159	0.360
1	B-C	650.553	0.100	0.252	-	-
1	C-B	625.504	0.242	0.242	-	-

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 Flows

Demand Set Data Options

Default Vehicle Mix	Vehicle Mix Varies Over Time	Vehicle Mix Varies Over Turn	Vehicle Mix Varies Over Entry	Vehicle Mix Source	PCU Factor for a HV (PCU)	Default Turning Proportions	Estimate from entry/exit counts	Turning Proportions Vary Over Time	Turning Proportions Vary Over Turn	Turning Proportions Vary Over Entry
		☐	☐	HV Percentages	2.00				☐	☐

Entry Flows

General Flows Data

Arm	Profile Type	Use Turning Counts	Average Demand Flow (PCU/hr)	Flow Scaling Factor (%)
A	ONE HOUR	☐	132.00	100.000
B	ONE HOUR	☐	68.00	100.000
C	ONE HOUR	☐	64.00	100.000

Turning Proportions

Turning Counts or Proportions (PCU/hr) - Junction 1 (for whole period)

	To		
	A	B	C

From	A	0.000	61.000	71.000
	B	20.000	0.000	48.000
	C	43.000	21.000	0.000

Turning Proportions (PCU) - Junction 1 (for whole period)

From	To			
		A	B	C
	A	0.00	0.46	0.54
	B	0.29	0.00	0.71
C	0.67	0.33	0.00	

Vehicle Mix

Average PCU Per Vehicle - Junction 1 (for whole period)

From	To			
		A	B	C
	A	1.000	1.000	1.000
	B	1.000	1.000	1.000
C	1.000	1.000	1.000	

Heavy Vehicle Percentages - Junction 1 (for whole period)

From	To			
		A	B	C
	A	0.000	0.000	0.000
	B	0.000	0.000	0.000
C	0.000	0.000	0.000	

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
B-C	0.09	6.38	0.09	A
B-A	0.04	7.45	0.05	A
C-AB	0.04	6.03	0.05	A
C-A	-	-	-	-
A-B	-	-	-	-
A-C	-	-	-	-

Main Results for each time segment

Main results: (07:45-08:00)

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-C	36.14	35.89	0.00	627.88	0.058	0.06	6.078	A
B-A	15.06	14.94	0.00	518.48	0.029	0.03	7.147	A
C-AB	16.67	16.55	0.00	622.97	0.027	0.03	5.937	A
C-A	31.51	31.51	0.00	-	-	-	-	-

A-B	45.92	45.92	0.00	-	-	-	-	-
A-C	53.45	53.45	0.00	-	-	-	-	-

Main results: (08:00-08:15)

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-C	43.15	43.10	0.00	623.40	0.069	0.07	6.203	A
B-A	17.98	17.95	0.00	512.77	0.035	0.04	7.274	A
C-AB	20.13	20.10	0.00	622.58	0.032	0.04	5.974	A
C-A	37.41	37.41	0.00	-	-	-	-	-
A-B	54.84	54.84	0.00	-	-	-	-	-
A-C	63.83	63.83	0.00	-	-	-	-	-

Main results: (08:15-08:30)

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-C	52.85	52.77	0.00	617.21	0.086	0.09	6.378	A
B-A	22.02	21.98	0.00	504.88	0.044	0.05	7.454	A
C-AB	25.02	24.98	0.00	622.08	0.040	0.05	6.028	A
C-A	45.45	45.45	0.00	-	-	-	-	-
A-B	67.16	67.16	0.00	-	-	-	-	-
A-C	78.17	78.17	0.00	-	-	-	-	-

Main results: (08:30-08:45)

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-C	52.85	52.85	0.00	617.20	0.086	0.09	6.378	A
B-A	22.02	22.02	0.00	504.86	0.044	0.05	7.454	A
C-AB	25.02	25.02	0.00	622.09	0.040	0.05	6.031	A
C-A	45.44	45.44	0.00	-	-	-	-	-
A-B	67.16	67.16	0.00	-	-	-	-	-
A-C	78.17	78.17	0.00	-	-	-	-	-

Main results: (08:45-09:00)

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-C	43.15	43.22	0.00	623.38	0.069	0.07	6.205	A
B-A	17.98	18.01	0.00	512.75	0.035	0.04	7.279	A
C-AB	20.13	20.17	0.00	622.58	0.032	0.04	5.975	A
C-A	37.40	37.40	0.00	-	-	-	-	-
A-B	54.84	54.84	0.00	-	-	-	-	-
A-C	63.83	63.83	0.00	-	-	-	-	-

Main results: (09:00-09:15)

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-C	36.14	36.19	0.00	627.84	0.058	0.06	6.086	A
B-A	15.06	15.08	0.00	518.43	0.029	0.03	7.154	A
C-AB	16.68	16.71	0.00	622.98	0.027	0.03	5.940	A
C-A	31.50	31.50	0.00	-	-	-	-	-
A-B	45.92	45.92	0.00	-	-	-	-	-
A-C	53.45	53.45	0.00	-	-	-	-	-

(Default Analysis Set) - 2019 Arup Base, PM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

Name	Description	Locked	Network Flow Scaling Factor (%)	Reason For Scaling Factors
(Default Analysis Set)			100.000	

Demand Set Details

Name	Scenario Name	Time Period Name	Description	Traffic Profile Type	Model Start Time (HH:mm)	Model Finish Time (HH:mm)	Model Time Period Length (min)	Time Segment Length (min)	Single Time Segment Only	Locked
2019 Arup Base, PM	2019 Arup Base	FM		ONE HOUR	16:45	18:15	90	15		

Junction Network

Junctions

Name	Junction Type	Major Road Direction	Arm Order	Junction Delay (s)	Junction LOS
Somerton Road_Camp Road_Station Road	T-Junction	Two-way	A,B,C	7.56	A

Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Name	Description	Arm Type
A	Somerton Road	Upper Heyford	Major
B	Camp Road	Upper Heyford	Minor
C	Station Road	Upper Heyford	Major

Major Arm Geometry

Arm	Width of carriageway (m)	Has kerbed central reserve	Width of kerbed central reserve (m)	Has right turn bay	Width For Right Turn (m)	Visibility For Right Turn (m)	Blocks?	Blocking Queue (PCU)
C	6.00		0.00		2.20	89.00	∅	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)	Lane Width (Left) (m)	Lane Width (Right) (m)	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				9.00	2.80	2.75	2.75	2.75		1.00	30	21

Pedestrian Crossings

Arm	Crossing Type
A	None
B	None
C	None

Slope / Intercept / Capacity

Priority Intersection Slopes and Intercepts

Junction	Stream	Intercept (PCU/hr)	Slope for A-B	Slope for A-C	Slope for C-A	Slope for C-B
1	B-A	508.091	0.093	0.234	0.147	0.334
1	B-C	700.947	0.107	0.272	-	-
1	C-B	625.504	0.242	0.242	-	-

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 Flows

Demand Set Data Options

Default Vehicle Mix	Vehicle Mix Varies Over Time	Vehicle Mix Varies Over Turn	Vehicle Mix Varies Over Entry	Vehicle Mix Source	PCU Factor for a HV (PCU)	Default Turning Proportions	Estimate from entry/exit counts	Turning Proportions Vary Over Time	Turning Proportions Vary Over Turn	Turning Proportions Vary Over Entry
		☐	☐	HV Percentages	2.00				☐	☐

Entry Flows

General Flows Data

Arm	Profile Type	Use Turning Counts	Average Demand Flow (PCU/hr)	Flow Scaling Factor (%)
A	ONE HOUR	☐	90.00	100.000
B	ONE HOUR	☐	99.00	100.000
C	ONE HOUR	☐	100.00	100.000

Turning Proportions

Turning Counts or Proportions (PCU/hr) - Junction 1 (for whole period)

		To		
		A	B	C
From	A	0.000	56.000	34.000
	B	64.000	0.000	35.000
	C	89.000	11.000	0.000

Turning Proportions (PCU) - Junction 1 (for whole period)

		To		
		A	B	C
From	A	0.00	0.62	0.38
	B	0.65	0.00	0.35
	C	0.89	0.11	0.00

Vehicle Mix

Average PCU Per Vehicle - Junction 1 (for whole period)

		To		
		A	B	C

From	A	1.000	1.000	1.000
	B	1.000	1.000	1.000
	C	1.000	1.000	1.000

Heavy Vehicle Percentages - Junction 1 (for whole period)

From	To			
		A	B	C
	A	0.000	0.000	0.000
	B	0.000	0.000	0.000
C	0.000	0.000	0.000	

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
B-C	0.06	5.82	0.06	A
B-A	0.15	8.90	0.17	A
C-AB	0.02	5.59	0.03	A
C-A	-	-	-	-
A-B	-	-	-	-
A-C	-	-	-	-

Main Results for each time segment

Main results: (16:45-17:00)

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-C	26.35	26.19	0.00	671.78	0.039	0.04	5.574	A
B-A	48.18	47.75	0.00	485.51	0.099	0.11	8.214	A
C-AB	9.21	9.15	0.00	653.36	0.014	0.02	5.588	A
C-A	66.07	66.07	0.00	-	-	-	-	-
A-B	42.16	42.16	0.00	-	-	-	-	-
A-C	25.60	25.60	0.00	-	-	-	-	-

Main results: (17:00-17:15)

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-C	31.46	31.43	0.00	665.51	0.047	0.05	5.677	A
B-A	57.53	57.43	0.00	481.07	0.120	0.13	8.496	A
C-AB	11.24	11.22	0.00	658.88	0.017	0.02	5.558	A
C-A	78.66	78.66	0.00	-	-	-	-	-
A-B	50.34	50.34	0.00	-	-	-	-	-
A-C	30.57	30.57	0.00	-	-	-	-	-

Main results: (17:15-17:30)

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-C	38.54	38.49	0.00	656.65	0.059	0.06	5.823	A
B-A	70.47	70.31	0.00	474.92	0.148	0.17	8.897	A
C-AB	14.16	14.14	0.00	666.56	0.021	0.03	5.517	A

C-A	95.94	95.94	0.00	-	-	-	-	-
A-B	61.66	61.66	0.00	-	-	-	-	-
A-C	37.43	37.43	0.00	-	-	-	-	-

Main results: (17:30-17:45)

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-C	38.54	38.53	0.00	656.58	0.059	0.06	5.824	A
B-A	70.47	70.46	0.00	474.91	0.148	0.17	8.900	A
C-AB	14.17	14.17	0.00	666.56	0.021	0.03	5.519	A
C-A	95.94	95.94	0.00	-	-	-	-	-
A-B	61.66	61.66	0.00	-	-	-	-	-
A-C	37.43	37.43	0.00	-	-	-	-	-

Main results: (17:45-18:00)

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-C	31.46	31.51	0.00	665.40	0.047	0.05	5.681	A
B-A	57.53	57.68	0.00	481.06	0.120	0.14	8.507	A
C-AB	11.24	11.27	0.00	658.88	0.017	0.02	5.558	A
C-A	78.65	78.65	0.00	-	-	-	-	-
A-B	50.34	50.34	0.00	-	-	-	-	-
A-C	30.57	30.57	0.00	-	-	-	-	-

Main results: (18:00-18:15)

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-C	26.35	26.39	0.00	671.56	0.039	0.04	5.581	A
B-A	48.18	48.29	0.00	485.48	0.099	0.11	8.237	A
C-AB	9.22	9.24	0.00	653.36	0.014	0.02	5.590	A
C-A	66.06	66.06	0.00	-	-	-	-	-
A-B	42.16	42.16	0.00	-	-	-	-	-
A-C	25.60	25.60	0.00	-	-	-	-	-

(Default Analysis Set) - 2019 Arup Base + Site Dev + Consented, AM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

Name	Description	Locked	Network Flow Scaling Factor (%)	Reason For Scaling Factors
(Default Analysis Set)			100.000	

Demand Set Details

Name	Scenario Name	Time Period Name	Description	Traffic Profile Type	Model Start Time (HH:mm)	Model Finish Time (HH:mm)	Model Time Period Length (min)	Time Segment Length (min)	Single Time Segment Only	Locked
2019 Arup Base + Site Dev + Consented, AM	2019 Arup Base + Site Dev + Consented	AM		ONE HOUR	07:45	09:15	90	15		

Junction Network

Junctions

Name	Junction Type	Major Road Direction	Arm Order	Junction Delay (s)	Junction LOS
Somerton Road_Camp Road_Station Road	T-Junction	Two-way	A,B,C	13.25	B

Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Name	Description	Arm Type
A	Somerton Road	Upper Heyford	Major
B	Camp Road	Upper Heyford	Minor
C	Station Road	Upper Heyford	Major

Major Arm Geometry

Arm	Width of carriageway (m)	Has kerbed central reserve	Width of kerbed central reserve (m)	Has right turn bay	Width For Right Turn (m)	Visibility For Right Turn (m)	Blocks?	Blocking Queue (PCU)
C	6.00		0.00		2.20	89.00	∅	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)	Lane Width (Left) (m)	Lane Width (Right) (m)	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				9.00	2.80	2.75	2.75	2.75		1.00	30	21

Pedestrian Crossings

Arm	Crossing Type
A	None
B	None
C	None

Slope / Intercept / Capacity

Priority Intersection Slopes and Intercepts

Junction	Stream	Intercept (PCU/hr)	Slope for A-B	Slope for A-C	Slope for C-A	Slope for C-B
1	B-A	508.091	0.093	0.234	0.147	0.334
1	B-C	700.947	0.107	0.272	-	-
1	C-B	625.504	0.242	0.242	-	-

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 Flows

Demand Set Data Options

Default Vehicle Mix	Vehicle Mix Varies Over Time	Vehicle Mix Varies Over Turn	Vehicle Mix Varies Over Entry	Vehicle Mix Source	PCU Factor for a HV (PCU)	Default Turning Proportions	Estimate from entry/exit counts	Turning Proportions Vary Over Time	Turning Proportions Vary Over Turn	Turning Proportions Vary Over Entry
		☐	☐	HV Percentages	2.00				☐	☐

Entry Flows

General Flows Data

Arm	Profile Type	Use Turning Counts	Average Demand Flow (PCU/hr)	Flow Scaling Factor (%)
A	ONE HOUR	☐	336.00	100.000
B	ONE HOUR	☐	307.00	100.000
C	ONE HOUR	☐	172.00	100.000

Turning Proportions

Turning Counts or Proportions (PCU/hr) - Junction 1 (for whole period)

		To		
		A	B	C
From	A	0.000	265.000	71.000
	B	187.000	0.000	120.000
	C	43.000	129.000	0.000

Turning Proportions (PCU) - Junction 1 (for whole period)

		To		
		A	B	C
From	A	0.00	0.79	0.21
	B	0.61	0.00	0.39
	C	0.25	0.75	0.00

Vehicle Mix

Average PCU Per Vehicle - Junction 1 (for whole period)

		To		
		A	B	C
From	A	1.000	1.000	1.000
	B	1.000	1.000	1.000
	C	1.000	1.000	1.000

Heavy Vehicle Percentages - Junction 1 (for whole period)

		To		
		A	B	C
From	A	0.000	0.000	0.000
	B	0.000	0.000	0.000
	C	0.000	0.000	0.000

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
B-C	0.27	9.90	0.36	A
B-A	0.52	18.77	1.05	C
C-AB	0.27	8.69	0.40	A
C-A	-	-	-	-
A-B	-	-	-	-
A-C	-	-	-	-

Main Results for each time segment

Main results: (07:45-08:00)

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-C	90.34	89.63	0.00	593.78	0.152	0.18	7.130	A
B-A	140.78	138.92	0.00	437.15	0.322	0.47	11.999	B
C-AB	102.76	101.87	0.00	586.42	0.175	0.22	7.419	A
C-A	26.73	26.73	0.00	-	-	-	-	-
A-B	199.51	199.51	0.00	-	-	-	-	-
A-C	53.45	53.45	0.00	-	-	-	-	-

Main results: (08:00-08:15)

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-C	107.88	107.64	0.00	558.75	0.193	0.24	7.976	A
B-A	168.11	167.38	0.00	421.26	0.399	0.65	14.136	B
C-AB	124.26	124.00	0.00	579.12	0.215	0.29	7.908	A
C-A	30.36	30.36	0.00	-	-	-	-	-
A-B	238.23	238.23	0.00	-	-	-	-	-
A-C	63.83	63.83	0.00	-	-	-	-	-

Main results: (08:15-08:30)

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-C	132.12	131.64	0.00	497.79	0.265	0.36	9.819	A
B-A	205.89	204.35	0.00	397.65	0.518	1.03	18.472	C
C-AB	154.90	154.47	0.00	569.13	0.272	0.39	8.676	A
C-A	34.47	34.47	0.00	-	-	-	-	-
A-B	291.77	291.77	0.00	-	-	-	-	-
A-C	78.17	78.17	0.00	-	-	-	-	-

Main results: (08:30-08:45)

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-C	132.12	132.11	0.00	495.68	0.267	0.36	9.901	A
B-A	205.89	205.81	0.00	397.34	0.518	1.05	18.772	C
C-AB	154.94	154.93	0.00	569.17	0.272	0.40	8.695	A
C-A	34.44	34.44	0.00	-	-	-	-	-
A-B	291.77	291.77	0.00	-	-	-	-	-
A-C	78.17	78.17	0.00	-	-	-	-	-

Main results: (08:45-09:00)

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-C	132.12	132.11	0.00	495.68	0.267	0.36	9.901	A
B-A	205.89	205.81	0.00	397.34	0.518	1.05	18.772	C
C-AB	154.94	154.93	0.00	569.17	0.272	0.40	8.695	A
C-A	34.44	34.44	0.00	-	-	-	-	-
A-B	291.77	291.77	0.00	-	-	-	-	-
A-C	78.17	78.17	0.00	-	-	-	-	-

B-C	107.88	108.35	0.00	556.42	0.194	0.24	8.044	A
B-A	168.11	169.59	0.00	420.89	0.399	0.68	14.408	B
C-AB	124.31	124.72	0.00	579.17	0.215	0.29	7.930	A
C-A	30.32	30.32	0.00	-	-	-	-	-
A-B	238.23	238.23	0.00	-	-	-	-	-
A-C	63.83	63.83	0.00	-	-	-	-	-

Main results: (09:00-09:15)

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-C	90.34	90.59	0.00	591.64	0.153	0.18	7.190	A
B-A	140.78	141.57	0.00	436.65	0.322	0.48	12.232	B
C-AB	102.82	103.09	0.00	586.47	0.175	0.23	7.455	A
C-A	26.67	26.67	0.00	-	-	-	-	-
A-B	199.51	199.51	0.00	-	-	-	-	-
A-C	53.45	53.45	0.00	-	-	-	-	-

(Default Analysis Set) - 2019 Arup Base + Site Dev + Consented, PM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

Name	Description	Locked	Network Flow Scaling Factor (%)	Reason For Scaling Factors
(Default Analysis Set)			100.000	

Demand Set Details

Name	Scenario Name	Time Period Name	Description	Traffic Profile Type	Model Start Time (HH:mm)	Model Finish Time (HH:mm)	Model Time Period Length (min)	Time Segment Length (min)	Single Time Segment Only	Locked
2019 Arup Base + Site Dev + Consented, PM	2019 Arup Base + Site Dev + Consented	PM		ONE HOUR	16:45	18:15	90	15		

Junction Network

Junctions

Name	Junction Type	Major Road Direction	Arm Order	Junction Delay (s)	Junction LOS
Somerton Road_Camp Road_Station Road	T-Junction	Two-way	A,B,C	13.01	B

Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Name	Description	Arm Type
A	Somerton Road	Upper Heyford	Major

B	Camp Road	Upper Heyford	Minor
C	Station Road	Upper Heyford	Major

Major Arm Geometry

Arm	Width of carriageway (m)	Has kerbed central reserve	Width of kerbed central reserve (m)	Has right turn bay	Width For Right Turn (m)	Visibility For Right Turn (m)	Blocks?	Blocking Queue (PCU)
C	6.00		0.00		2.20	89.00	∅	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)	Lane Width (Left) (m)	Lane Width (Right) (m)	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				9.00	2.80	2.75	2.75	2.75		1.00	30	21

Pedestrian Crossings

Arm	Crossing Type
A	None
B	None
C	None

Slope / Intercept / Capacity

Priority Intersection Slopes and Intercepts

Junction	Stream	Intercept (PCU/hr)	Slope for A-B	Slope for A-C	Slope for C-A	Slope for C-B
1	B-A	508.091	0.093	0.234	0.147	0.334
1	B-C	700.947	0.107	0.272	-	-
1	C-B	625.504	0.242	0.242	-	-

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 Flows

Demand Set Data Options

Default Vehicle Mix	Vehicle Mix Varies Over Time	Vehicle Mix Varies Over Turn	Vehicle Mix Varies Over Entry	Vehicle Mix Source	PCU Factor for a HV (PCU)	Default Turning Proportions	Estimate from entry/exit counts	Turning Proportions Vary Over Time	Turning Proportions Vary Over Turn	Turning Proportions Vary Over Entry
		∅	∅	HV Percentages	2.00				∅	∅

Entry Flows

General Flows Data

Arm	Profile Type	Use Turning Counts	Average Demand Flow (PCU/hr)	Flow Scaling Factor (%)
A	ONE HOUR	∅	196.00	100.000
B	ONE HOUR	∅	313.00	100.000
C	ONE HOUR	∅	168.00	100.000

Turning Proportions

Turning Counts or Proportions (PCU/hr) - Junction 1 (for whole period)

		To		
		A	B	C
From	A	0.000	162.000	34.000
	B	207.000	0.000	106.000
	C	89.000	79.000	0.000

Turning Proportions (PCU) - Junction 1 (for whole period)

		To		
		A	B	C
From	A	0.00	0.83	0.17
	B	0.66	0.00	0.34
	C	0.53	0.47	0.00

Vehicle Mix

Average PCU Per Vehicle - Junction 1 (for whole period)

		To		
		A	B	C
From	A	1.000	1.000	1.000
	B	1.000	1.000	1.000
	C	1.000	1.000	1.000

Heavy Vehicle Percentages - Junction 1 (for whole period)

		To		
		A	B	C
From	A	0.000	0.000	0.000
	B	0.000	0.000	0.000
	C	0.000	0.000	0.000

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
B-C	0.23	9.23	0.30	A
B-A	0.53	17.71	1.10	C
C-AB	0.16	6.70	0.22	A
C-A	-	-	-	-
A-B	-	-	-	-
A-C	-	-	-	-

Main Results for each time segment

Main results: (16:45-17:00)

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-C	79.80	79.20	0.00	602.08	0.133	0.15	6.878	A
B-A	155.84	153.82	0.00	458.83	0.340	0.50	11.726	B
C-AB	66.40	65.87	0.00	634.73	0.105	0.13	6.323	A
C-A	60.08	60.08	0.00	-	-	-	-	-
A-B	121.96	121.96	0.00	-	-	-	-	-
A-C	25.60	25.60	0.00	-	-	-	-	-

Main results: (17:00-17:15)

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-C	95.29	95.10	0.00	567.82	0.168	0.20	7.611	A
B-A	186.09	185.33	0.00	447.64	0.416	0.69	13.682	B
C-AB	81.12	80.98	0.00	636.84	0.127	0.17	6.477	A
C-A	69.91	69.91	0.00	-	-	-	-	-
A-B	145.63	145.63	0.00	-	-	-	-	-
A-C	30.57	30.57	0.00	-	-	-	-	-

Main results: (17:15-17:30)

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-C	116.71	116.33	0.00	508.59	0.229	0.29	9.170	A
B-A	227.91	226.37	0.00	430.86	0.529	1.08	17.466	C
C-AB	102.48	102.26	0.00	639.86	0.160	0.22	6.698	A
C-A	82.50	82.50	0.00	-	-	-	-	-
A-B	178.37	178.37	0.00	-	-	-	-	-
A-C	37.43	37.43	0.00	-	-	-	-	-

Main results: (17:30-17:45)

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-C	116.71	116.70	0.00	506.53	0.230	0.30	9.234	A
B-A	227.91	227.83	0.00	430.67	0.529	1.10	17.713	C
C-AB	102.51	102.50	0.00	639.89	0.160	0.22	6.703	A
C-A	82.47	82.47	0.00	-	-	-	-	-
A-B	178.37	178.37	0.00	-	-	-	-	-
A-C	37.43	37.43	0.00	-	-	-	-	-

Main results: (17:45-18:00)

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-C	95.29	95.66	0.00	565.46	0.169	0.20	7.670	A
B-A	186.09	187.58	0.00	447.41	0.416	0.73	13.932	B
C-AB	81.16	81.37	0.00	636.89	0.127	0.17	6.484	A
C-A	69.87	69.87	0.00	-	-	-	-	-
A-B	145.63	145.63	0.00	-	-	-	-	-
A-C	30.57	30.57	0.00	-	-	-	-	-

Main results: (18:00-18:15)

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-C	79.80	80.00	0.00	599.77	0.133	0.15	6.930	A
B-A	155.84	156.66	0.00	458.52	0.340	0.52	11.960	B
C-AB	66.46	66.61	0.00	634.79	0.105	0.13	6.340	A
C-A	60.01	60.01	0.00	-	-	-	-	-
A-B	121.96	121.96	0.00	-	-	-	-	-
A-C	25.60	25.60	0.00	-	-	-	-	-

(Default Analysis Set) - 2019 Arup Base + Site Dev + Proposed, AM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

Name	Description	Locked	Network Flow Scaling Factor (%)	Reason For Scaling Factors
(Default Analysis Set)			100.000	

Demand Set Details

Name	Scenario Name	Time Period Name	Description	Traffic Profile Type	Model Start Time (HH:mm)	Model Finish Time (HH:mm)	Model Time Period Length (min)	Time Segment Length (min)	Single Time Segment Only	Locked
2019 Arup Base + Site Dev + Proposed, AM	2019 Arup Base + Site Dev + Proposed	AM		ONE HOUR	07:45	09:15	90	15		

Junction Network

Junctions

Name	Junction Type	Major Road Direction	Arm Order	Junction Delay (s)	Junction LOS
Somerton Road_ Camp Road_ Station Road	T-Junction	Two-way	A,B,C	12.49	B

Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Name	Description	Arm Type
A	Somerton Road	Upper Heyford	Major
B	Camp Road	Upper Heyford	Minor
C	Station Road	Upper Heyford	Major

Major Arm Geometry

Arm	Width of carriageway (m)	Has kerbed central reserve	Width of kerbed central reserve (m)	Has right turn bay	Width For Right Turn (m)	Visibility For Right Turn (m)	Blocks?	Blocking Queue (PCU)
C	6.00		0.00		2.20	89.00	∅	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)	Lane Width (Left) (m)	Lane Width (Right) (m)	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				9.00	2.80	2.75	2.75	2.75		1.00	30	21

Pedestrian Crossings

Arm	Crossing Type
A	None
B	None
C	None

Slope / Intercept / Capacity

Priority Intersection Slopes and Intercepts

Junction	Stream	Intercept (PCU/hr)	Slope for A-B	Slope for A-C	Slope for C-A	Slope for C-B
1	B-A	508.091	0.093	0.234	0.147	0.334
1	B-C	700.947	0.107	0.272	-	-
1	C-B	625.504	0.242	0.242	-	-

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 Flows

Demand Set Data Options

Default Vehicle Mix	Vehicle Mix Varies Over Time	Vehicle Mix Varies Over Turn	Vehicle Mix Varies Over Entry	Vehicle Mix Source	PCU Factor for a HV (PCU)	Default Turning Proportions	Estimate from entry/exit counts	Turning Proportions Vary Over Time	Turning Proportions Vary Over Turn	Turning Proportions Vary Over Entry
		☐	☐	HV Percentages	2.00				☐	☐

Entry Flows

General Flows Data

Arm	Profile Type	Use Turning Counts	Average Demand Flow (PCU/hr)	Flow Scaling Factor (%)
A	ONE HOUR	☐	332.00	100.000
B	ONE HOUR	☐	292.00	100.000
C	ONE HOUR	☐	170.00	100.000

Turning Proportions

Turning Counts or Proportions (PCU/hr) - Junction 1 (for whole period)

		To		
		A	B	C
From	A	0.000	261.000	71.000
	B	177.000	0.000	115.000
	C	43.000	127.000	0.000

Turning Proportions (PCU) - Junction 1 (for whole period)

		To		
		A	B	C

From	A	0.00	0.79	0.21
	B	0.61	0.00	0.39
	C	0.25	0.75	0.00

Vehicle Mix

Average PCU Per Vehicle - Junction 1 (for whole period)

From	To			
		A	B	C
	A	1.000	1.000	1.000
	B	1.000	1.000	1.000
C	1.000	1.000	1.000	

Heavy Vehicle Percentages - Junction 1 (for whole period)

From	To			
		A	B	C
	A	0.000	0.000	0.000
	B	0.000	0.000	0.000
C	0.000	0.000	0.000	

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
B-C	0.25	9.35	0.33	A
B-A	0.49	17.52	0.93	C
C-AB	0.27	8.62	0.39	A
C-A	-	-	-	-
A-B	-	-	-	-
A-C	-	-	-	-

Main Results for each time segment

Main results: (07:45-08:00)

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-C	86.58	85.91	0.00	599.74	0.144	0.17	6.998	A
B-A	133.25	131.54	0.00	438.32	0.304	0.43	11.681	B
C-AB	101.16	100.29	0.00	587.13	0.172	0.22	7.383	A
C-A	26.83	26.83	0.00	-	-	-	-	-
A-B	196.49	196.49	0.00	-	-	-	-	-
A-C	53.45	53.45	0.00	-	-	-	-	-

Main results: (08:00-08:15)

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-C	103.38	103.17	0.00	567.88	0.182	0.22	7.744	A
B-A	159.12	158.48	0.00	422.93	0.376	0.59	13.578	B

C-AB	122.32	122.07	0.00	579.97	0.211	0.28	7.859	A
C-A	30.50	30.50	0.00	-	-	-	-	-
A-B	234.63	234.63	0.00	-	-	-	-	-
A-C	63.83	63.83	0.00	-	-	-	-	-

Main results: (08:15-08:30)

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-C	126.62	126.21	0.00	513.20	0.247	0.32	9.291	A
B-A	194.88	193.57	0.00	400.31	0.487	0.92	17.299	C
C-AB	152.48	152.06	0.00	570.17	0.267	0.38	8.605	A
C-A	34.70	34.70	0.00	-	-	-	-	-
A-B	287.37	287.37	0.00	-	-	-	-	-
A-C	78.17	78.17	0.00	-	-	-	-	-

Main results: (08:30-08:45)

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-C	126.62	126.60	0.00	511.53	0.248	0.33	9.352	A
B-A	194.88	194.82	0.00	400.05	0.487	0.93	17.525	C
C-AB	152.51	152.50	0.00	570.20	0.267	0.39	8.621	A
C-A	34.67	34.67	0.00	-	-	-	-	-
A-B	287.37	287.37	0.00	-	-	-	-	-
A-C	78.17	78.17	0.00	-	-	-	-	-

Main results: (08:45-09:00)

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-C	103.38	103.79	0.00	566.00	0.183	0.23	7.795	A
B-A	159.12	160.38	0.00	422.60	0.377	0.62	13.796	B
C-AB	122.37	122.77	0.00	580.02	0.211	0.29	7.883	A
C-A	30.46	30.46	0.00	-	-	-	-	-
A-B	234.63	234.63	0.00	-	-	-	-	-
A-C	63.83	63.83	0.00	-	-	-	-	-

Main results: (09:00-09:15)

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-C	86.58	86.80	0.00	597.89	0.145	0.17	7.045	A
B-A	133.25	133.95	0.00	437.85	0.304	0.45	11.874	B
C-AB	101.22	101.48	0.00	587.19	0.172	0.22	7.416	A
C-A	26.77	26.77	0.00	-	-	-	-	-
A-B	196.49	196.49	0.00	-	-	-	-	-
A-C	53.45	53.45	0.00	-	-	-	-	-

(Default Analysis Set) - 2019 Arup Base + Site Dev + Proposed, PM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

Name	Description	Locked	Network Flow Scaling Factor (%)	Reason For Scaling Factors
(Default Analysis Set)			100.000	

Demand Set Details

Name	Scenario Name	Time Period Name	Description	Traffic Profile Type	Model Start Time (HH:mm)	Model Finish Time (HH:mm)	Model Time Period Length (min)	Time Segment Length (min)	Single Time Segment Only	Locked
2019 Arup Base + Site Dev + Proposed, PM	2019 Arup Base + Site Dev + Proposed	PM		ONE HOUR	16:45	18:15	90	15		

Junction Network

Junctions

Name	Junction Type	Major Road Direction	Arm Order	Junction Delay (s)	Junction LOS
Somerton Road_Camp Road_Station Road	T-Junction	Two-way	A,B,C	13.65	B

Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Name	Description	Arm Type
A	Somerton Road	Upper Heyford	Major
B	Camp Road	Upper Heyford	Minor
C	Station Road	Upper Heyford	Major

Major Arm Geometry

Arm	Width of carriageway (m)	Has kerbed central reserve	Width of kerbed central reserve (m)	Has right turn bay	Width For Right Turn (m)	Visibility For Right Turn (m)	Blocks?	Blocking Queue (PCU)
C	6.00		0.00		2.20	89.00	∅	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)	Lane Width (Left) (m)	Lane Width (Right) (m)	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				9.00	2.80	2.75	2.75	2.75		1.00	30	21

Pedestrian Crossings

Arm	Crossing Type
A	None
B	None
C	None

Slope / Intercept / Capacity

Priority Intersection Slopes and Intercepts

Junction	Stream	Intercept (PCU/hr)	Slope for A-B	Slope for A-C	Slope for C-A	Slope for C-B
1	B-A	508.091	0.093	0.234	0.147	0.334
1	B-C	700.947	0.107	0.272	-	-

1	C-B	625.504	0.242	0.242	-	-
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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 Flows

Demand Set Data Options

Default Vehicle Mix	Vehicle Mix Varies Over Time	Vehicle Mix Varies Over Turn	Vehicle Mix Varies Over Entry	Vehicle Mix Source	PCU Factor for a HV (PCU)	Default Turning Proportions	Estimate from entry/exit counts	Turning Proportions Vary Over Time	Turning Proportions Vary Over Turn	Turning Proportions Vary Over Entry
		☐	☐	HV Percentages	2.00				☐	☐

Entry Flows

General Flows Data

Arm	Profile Type	Use Turning Counts	Average Demand Flow (PCU/hr)	Flow Scaling Factor (%)
A	ONE HOUR	☐	196.00	100.000
B	ONE HOUR	☐	325.00	100.000
C	ONE HOUR	☐	168.00	100.000

Turning Proportions

Turning Counts or Proportions (PCU/hr) - Junction 1 (for whole period)

		To		
		A	B	C
From	A	0.000	162.000	34.000
	B	215.000	0.000	110.000
	C	89.000	79.000	0.000

Turning Proportions (PCU) - Junction 1 (for whole period)

		To		
		A	B	C
From	A	0.00	0.83	0.17
	B	0.66	0.00	0.34
	C	0.53	0.47	0.00

Vehicle Mix

Average PCU Per Vehicle - Junction 1 (for whole period)

		To		
		A	B	C
From	A	1.000	1.000	1.000
	B	1.000	1.000	1.000
	C	1.000	1.000	1.000

Heavy Vehicle Percentages - Junction 1 (for whole period)

		To		
		A	B	C
From	A	0.000	0.000	0.000
	B	0.000	0.000	0.000
	C	0.000	0.000	0.000

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
B-C	0.25	9.65	0.32	A
B-A	0.55	18.63	1.20	C
C-AB	0.16	6.70	0.22	A
C-A	-	-	-	-
A-B	-	-	-	-
A-C	-	-	-	-

Main Results for each time segment

Main results: (16:45-17:00)

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-C	82.81	82.18	0.00	597.38	0.139	0.16	6.978	A
B-A	161.86	159.73	0.00	458.54	0.353	0.53	11.965	B
C-AB	66.40	65.87	0.00	634.73	0.105	0.13	6.323	A
C-A	60.08	60.08	0.00	-	-	-	-	-
A-B	121.96	121.96	0.00	-	-	-	-	-
A-C	25.60	25.60	0.00	-	-	-	-	-

Main results: (17:00-17:15)

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-C	98.89	98.68	0.00	560.58	0.176	0.21	7.791	A
B-A	193.28	192.45	0.00	447.10	0.432	0.74	14.088	B
C-AB	81.12	80.98	0.00	636.84	0.127	0.17	6.477	A
C-A	69.91	69.91	0.00	-	-	-	-	-
A-B	145.63	145.63	0.00	-	-	-	-	-
A-C	30.57	30.57	0.00	-	-	-	-	-

Main results: (17:15-17:30)

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-C	121.11	120.69	0.00	496.52	0.244	0.32	9.568	A
B-A	236.72	234.98	0.00	429.76	0.551	1.18	18.313	C
C-AB	102.48	102.26	0.00	639.86	0.160	0.22	6.698	A
C-A	82.50	82.50	0.00	-	-	-	-	-
A-B	178.37	178.37	0.00	-	-	-	-	-
A-C	37.43	37.43	0.00	-	-	-	-	-

Main results: (17:30-17:45)

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-C	121.11	121.10	0.00	494.10	0.245	0.32	9.651	A
B-A	236.72	236.62	0.00	429.54	0.551	1.20	18.630	C
C-AB	102.51	102.50	0.00	639.89	0.160	0.22	6.703	A
C-A	82.47	82.47	0.00	-	-	-	-	-
A-B	178.37	178.37	0.00	-	-	-	-	-
A-C	37.43	37.43	0.00	-	-	-	-	-

Main results: (17:45-18:00)

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-C	98.89	99.31	0.00	557.83	0.177	0.22	7.859	A
B-A	193.28	194.95	0.00	446.85	0.433	0.78	14.384	B
C-AB	81.16	81.37	0.00	636.89	0.127	0.17	6.484	A
C-A	69.87	69.87	0.00	-	-	-	-	-
A-B	145.63	145.63	0.00	-	-	-	-	-
A-C	30.57	30.57	0.00	-	-	-	-	-

Main results: (18:00-18:15)

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-C	82.81	83.03	0.00	594.81	0.139	0.16	7.039	A
B-A	161.86	162.76	0.00	458.22	0.353	0.56	12.221	B
C-AB	66.46	66.61	0.00	634.79	0.105	0.13	6.340	A
C-A	60.01	60.01	0.00	-	-	-	-	-
A-B	121.96	121.96	0.00	-	-	-	-	-
A-C	25.60	25.60	0.00	-	-	-	-	-

Junctions 8

PICADY 8 - Priority Intersection Module

Version: 8.0.1.305 [25 May 2012]
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Filename: (new file)

Path:

Report generation date: 28/11/2012 11:45:29

- » (Default Analysis Set) - 2019 Recalculated Base, AM
- » (Default Analysis Set) - 2019 Recalculated Base, PM
- » (Default Analysis Set) - 2019 Recalculated Base + Site Dev + Consented, AM
- » (Default Analysis Set) - 2019 Recalculated Base + Site Dev + Consented, PM
- » (Default Analysis Set) - 2019 Recalculated Base + Site Dev + Proposed, AM
- » (Default Analysis Set) - 2019 Recalculated Base + Site Dev + Proposed, PM

File summary

File Description

Title	Somerton Road_Camp Road_Station Road
Location	Upper Heyford
Site Number	
Date	22/11/2012
Version	
Status	(new file)
Identifier	
Client	
Jobnumber	23824
Enumerator	PBA\ngyseman
Description	

Analysis Options

Vehicle Length (m)	Do Queue Variations	Calculate Residual Capacity	Residual Capacity Criteria Type	RFC Threshold	Average Delay Threshold (s)	Queue Threshold (PCU)
5.75			N/A	0.85	36.00	20.00

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

(Default Analysis Set) - 2019 Recalculated Base, AM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

Name	Description	Locked	Network Flow Scaling Factor (%)	Reason For Scaling Factors
(Default Analysis Set)			100.000	

Demand Set Details

Name	Scenario Name	Time Period Name	Description	Traffic Profile Type	Model Start Time (HH:mm)	Model Finish Time (HH:mm)	Model Time Period Length (min)	Time Segment Length (min)	Single Time Segment Only	Locked
2019 Recalculated Base, AM	2019 Recalculated Base	AM		ONE HOUR	07:45	09:15	90	15		

Junction Network

Junctions

Name	Junction Type	Major Road Direction	Arm Order	Junction Delay (s)	Junction LOS
Somerton Road_Camp Road_Station Road	T-Junction	Two-way	A,B,C	6.48	A

Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Name	Description	Arm Type
A	Somerton Road	Upper Heyford	Major
B	Camp Road	Upper Heyford	Minor
C	Station Road	Upper Heyford	Major

Major Arm Geometry

Arm	Width of carriageway (m)	Has kerbed central reserve	Width of kerbed central reserve (m)	Has right turn bay	Width For Right Turn (m)	Visibility For Right Turn (m)	Blocks?	Blocking Queue (PCU)
C	6.00		0.00		2.20	89.00	∅	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)	Lane Width (Left) (m)	Lane Width (Right) (m)	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				9.00	2.80	2.75	2.75	2.75		1.00	30	21

Pedestrian Crossings

Arm	Crossing Type
A	None
B	None
C	None

Slope / Intercept / Capacity

Priority Intersection Slopes and Intercepts

Junction	Stream	Intercept (PCU/hr)	Slope for A-B	Slope for A-C	Slope for C-A	Slope for C-B
1	B-A	547.450	0.100	0.252	0.159	0.360
1	B-C	650.553	0.100	0.252	-	-
1	C-B	625.504	0.242	0.242	-	-

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 Flows

Demand Set Data Options

Default Vehicle Mix	Vehicle Mix Varies Over Time	Vehicle Mix Varies Over Turn	Vehicle Mix Varies Over Entry	Vehicle Mix Source	PCU Factor for a HV (PCU)	Default Turning Proportions	Estimate from entry/exit counts	Turning Proportions Vary Over Time	Turning Proportions Vary Over Turn	Turning Proportions Vary Over Entry
		∅	∅	HV Percentages	2.00				∅	∅

Entry Flows

General Flows Data

Arm	Profile Type	Use Turning Counts	Average Demand Flow (PCU/hr)	Flow Scaling Factor (%)
A	ONE HOUR	∅	123.00	100.000
B	ONE HOUR	∅	64.00	100.000
C	ONE HOUR	∅	60.00	100.000

Turning Proportions

Turning Counts or Proportions (PCU/hr) - Junction 1 (for whole period)

		To		
		A	B	C
From	A	0.000	57.000	66.000
	B	19.000	0.000	45.000
	C	40.000	20.000	0.000

Turning Proportions (PCU) - Junction 1 (for whole period)

		To		
		A	B	C
From	A	0.00	0.46	0.54
	B	0.30	0.00	0.70
	C	0.67	0.33	0.00

Vehicle Mix

Average PCU Per Vehicle - Junction 1 (for whole period)

		To		
		A	B	C
From	A	1.000	1.000	1.000
	B	1.000	1.000	1.000
	C	1.000	1.000	1.000

Heavy Vehicle Percentages - Junction 1 (for whole period)

		To		
		A	B	C
From	A	0.000	0.000	0.000
	B	0.000	0.000	0.000
	C	0.000	0.000	0.000

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
B-C	0.08	6.32	0.09	A
B-A	0.04	7.39	0.04	A
C-AB	0.04	6.02	0.04	A
C-A	-	-	-	-
A-B	-	-	-	-
A-C	-	-	-	-

Main Results for each time segment

Main results: (07:45-08:00)

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
--------	-----------------------	---------------------	----------------------------	-------------------	-----	-----------------	-----------	-----

B-C	33.88	33.65	0.00	629.37	0.054	0.06	6.042	A
B-A	14.30	14.19	0.00	520.38	0.027	0.03	7.109	A
C-AB	15.82	15.70	0.00	623.08	0.025	0.03	5.927	A
C-A	29.35	29.35	0.00	-	-	-	-	-
A-B	42.91	42.91	0.00	-	-	-	-	-
A-C	49.69	49.69	0.00	-	-	-	-	-

Main results: (08:00-08:15)

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-C	40.45	40.41	0.00	625.19	0.065	0.07	6.155	A
B-A	17.08	17.06	0.00	515.04	0.033	0.03	7.228	A
C-AB	19.08	19.05	0.00	622.70	0.031	0.03	5.963	A
C-A	34.86	34.86	0.00	-	-	-	-	-
A-B	51.24	51.24	0.00	-	-	-	-	-
A-C	59.33	59.33	0.00	-	-	-	-	-

Main results: (08:15-08:30)

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-C	49.55	49.48	0.00	619.41	0.080	0.09	6.316	A
B-A	20.92	20.89	0.00	507.68	0.041	0.04	7.394	A
C-AB	23.69	23.66	0.00	622.21	0.038	0.04	6.014	A
C-A	42.37	42.37	0.00	-	-	-	-	-
A-B	62.76	62.76	0.00	-	-	-	-	-
A-C	72.67	72.67	0.00	-	-	-	-	-

Main results: (08:30-08:45)

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-C	49.55	49.54	0.00	619.40	0.080	0.09	6.316	A
B-A	20.92	20.92	0.00	507.66	0.041	0.04	7.395	A
C-AB	23.70	23.69	0.00	622.21	0.038	0.04	6.016	A
C-A	42.37	42.37	0.00	-	-	-	-	-
A-B	62.76	62.76	0.00	-	-	-	-	-
A-C	72.67	72.67	0.00	-	-	-	-	-

Main results: (08:45-09:00)

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-C	40.45	40.52	0.00	625.17	0.065	0.07	6.157	A
B-A	17.08	17.11	0.00	515.02	0.033	0.03	7.232	A
C-AB	19.08	19.12	0.00	622.70	0.031	0.04	5.964	A
C-A	34.86	34.86	0.00	-	-	-	-	-
A-B	51.24	51.24	0.00	-	-	-	-	-
A-C	59.33	59.33	0.00	-	-	-	-	-

Main results: (09:00-09:15)

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-C	33.88	33.93	0.00	629.33	0.054	0.06	6.046	A
B-A	14.30	14.33	0.00	520.33	0.027	0.03	7.116	A
C-AB	15.82	15.85	0.00	623.09	0.025	0.03	5.928	A
C-A	29.35	29.35	0.00	-	-	-	-	-
A-B	42.91	42.91	0.00	-	-	-	-	-
A-C	49.69	49.69	0.00	-	-	-	-	-

(Default Analysis Set) - 2019 Recalculated Base, PM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

Name	Description	Locked	Network Flow Scaling Factor (%)	Reason For Scaling Factors
(Default Analysis Set)			100.000	

Demand Set Details

Name	Scenario Name	Time Period Name	Description	Traffic Profile Type	Model Start Time (HH:mm)	Model Finish Time (HH:mm)	Model Time Period Length (min)	Time Segment Length (min)	Single Time Segment Only	Locked
2019 Recalculated Base, PM	2019 Recalculated Base	PM		ONE HOUR	16:45	18:15	90	15		

Junction Network

Junctions

Name	Junction Type	Major Road Direction	Arm Order	Junction Delay (s)	Junction LOS
Somerton Road_Camp Road_Station Road	T-Junction	Two-way	A,B,C	7.50	A

Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Name	Description	Arm Type
A	Somerton Road	Upper Heyford	Major
B	Camp Road	Upper Heyford	Minor
C	Station Road	Upper Heyford	Major

Major Arm Geometry

Arm	Width of carriageway (m)	Has kerbed central reserve	Width of kerbed central reserve (m)	Has right turn bay	Width For Right Turn (m)	Visibility For Right Turn (m)	Blocks?	Blocking Queue (PCU)
C	6.00		0.00		2.20	89.00	⏏	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)	Lane Width (Left) (m)	Lane Width (Right) (m)	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				9.00	2.80	2.75	2.75	2.75		1.00	30	21

Pedestrian Crossings

Arm	Crossing Type
A	None

B	None
C	None

Slope / Intercept / Capacity

Priority Intersection Slopes and Intercepts

Junction	Stream	Intercept (PCU/hr)	Slope for A-B	Slope for A-C	Slope for C-A	Slope for C-B
1	B-A	508.091	0.093	0.234	0.147	0.334
1	B-C	700.947	0.107	0.272	-	-
1	C-B	625.504	0.242	0.242	-	-

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 Flows

Demand Set Data Options

Default Vehicle Mix	Vehicle Mix Varies Over Time	Vehicle Mix Varies Over Turn	Vehicle Mix Varies Over Entry	Vehicle Mix Source	PCU Factor for a HV (PCU)	Default Turning Proportions	Estimate from entry/exit counts	Turning Proportions Vary Over Time	Turning Proportions Vary Over Turn	Turning Proportions Vary Over Entry
		☐	☐	HV Percentages	2.00				☐	☐

Entry Flows

General Flows Data

Arm	Profile Type	Use Turning Counts	Average Demand Flow (PCU/hr)	Flow Scaling Factor (%)
A	ONE HOUR	☐	84.00	100.000
B	ONE HOUR	☐	94.00	100.000
C	ONE HOUR	☐	94.00	100.000

Turning Proportions

Turning Counts or Proportions (PCU/hr) - Junction 1 (for whole period)

		To		
		A	B	C
From	A	0.000	52.000	32.000
	B	61.000	0.000	33.000
	C	84.000	10.000	0.000

Turning Proportions (PCU) - Junction 1 (for whole period)

		To		
		A	B	C
From	A	0.00	0.62	0.38
	B	0.65	0.00	0.35
	C	0.89	0.11	0.00

Vehicle Mix

Average PCU Per Vehicle - Junction 1 (for whole period)

		To		
		A	B	C
From	A	1.000	1.000	1.000
	B	1.000	1.000	1.000
	C	1.000	1.000	1.000

Heavy Vehicle Percentages - Junction 1 (for whole period)

		To		
		A	B	C
From	A	0.000	0.000	0.000
	B	0.000	0.000	0.000
	C	0.000	0.000	0.000

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
B-C	0.06	5.78	0.06	A
B-A	0.14	8.78	0.16	A
C-AB	0.02	5.59	0.02	A
C-A	-	-	-	-
A-B	-	-	-	-
A-C	-	-	-	-

Main Results for each time segment

Main results: (16:45-17:00)

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-C	24.84	24.69	0.00	673.43	0.037	0.04	5.547	A
B-A	45.92	45.51	0.00	486.96	0.094	0.10	8.148	A
C-AB	8.33	8.27	0.00	651.93	0.013	0.01	5.592	A
C-A	62.44	62.44	0.00	-	-	-	-	-
A-B	39.15	39.15	0.00	-	-	-	-	-
A-C	24.09	24.09	0.00	-	-	-	-	-

Main results: (17:00-17:15)

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-C	29.67	29.63	0.00	667.54	0.044	0.05	5.643	A
B-A	54.84	54.74	0.00	482.80	0.114	0.13	8.408	A
C-AB	10.14	10.13	0.00	657.16	0.015	0.02	5.563	A
C-A	74.36	74.36	0.00	-	-	-	-	-
A-B	46.75	46.75	0.00	-	-	-	-	-
A-C	28.77	28.77	0.00	-	-	-	-	-

Main results: (17:15-17:30)

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-C	36.33	36.29	0.00	659.27	0.055	0.06	5.778	A
B-A	67.16	67.02	0.00	477.06	0.141	0.16	8.777	A
C-AB	12.76	12.74	0.00	664.44	0.019	0.02	5.523	A
C-A	90.73	90.73	0.00	-	-	-	-	-
A-B	57.25	57.25	0.00	-	-	-	-	-
A-C	35.23	35.23	0.00	-	-	-	-	-

Main results: (17:30-17:45)

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-C	36.33	36.33	0.00	659.21	0.055	0.06	5.779	A
B-A	67.16	67.16	0.00	477.05	0.141	0.16	8.782	A
C-AB	12.77	12.77	0.00	664.44	0.019	0.02	5.526	A
C-A	90.73	90.73	0.00	-	-	-	-	-
A-B	57.25	57.25	0.00	-	-	-	-	-
A-C	35.23	35.23	0.00	-	-	-	-	-

Main results: (17:45-18:00)

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-C	29.67	29.71	0.00	667.45	0.044	0.05	5.647	A
B-A	54.84	54.97	0.00	482.79	0.114	0.13	8.418	A
C-AB	10.15	10.17	0.00	657.17	0.015	0.02	5.563	A
C-A	74.36	74.36	0.00	-	-	-	-	-
A-B	46.75	46.75	0.00	-	-	-	-	-
A-C	28.77	28.77	0.00	-	-	-	-	-

Main results: (18:00-18:15)

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-C	24.84	24.88	0.00	673.23	0.037	0.04	5.554	A
B-A	45.92	46.02	0.00	486.93	0.094	0.11	8.168	A
C-AB	8.33	8.35	0.00	651.94	0.013	0.01	5.593	A
C-A	62.44	62.44	0.00	-	-	-	-	-
A-B	39.15	39.15	0.00	-	-	-	-	-
A-C	24.09	24.09	0.00	-	-	-	-	-

(Default Analysis Set) - 2019 Recalculated Base + Site Dev + Consented, AM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

Name	Description	Locked	Network Flow Scaling Factor (%)	Reason For Scaling Factors
(Default Analysis Set)			100.000	

Demand Set Details

Name	Scenario Name	Time Period Name	Description	Traffic Profile Type	Model Start Time (HH:mm)	Model Finish Time (HH:mm)	Model Time Period Length (min)	Time Segment Length (min)	Single Time Segment Only	Locked
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2019 Recalculated Base + Site Dev + Consented, AM	2019 Recalculated Base + Site Dev + Consented	AM		ONE HOUR	07:45	09:15	90	15		
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Junction Network

Junctions

Name	Junction Type	Major Road Direction	Arm Order	Junction Delay (s)	Junction LOS
Somerton Road_Camp Road_Station Road	T-Junction	Two-way	A,B,C	13.03	B

Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Name	Description	Arm Type
A	Somerton Road	Upper Heyford	Major
B	Camp Road	Upper Heyford	Minor
C	Station Road	Upper Heyford	Major

Major Arm Geometry

Arm	Width of carriageway (m)	Has kerbed central reserve	Width of kerbed central reserve (m)	Has right turn bay	Width For Right Turn (m)	Visibility For Right Turn (m)	Blocks?	Blocking Queue (PCU)
C	6.00		0.00		2.20	89.00	∅	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)	Lane Width (Left) (m)	Lane Width (Right) (m)	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				9.00	2.80	2.75	2.75	2.75		1.00	30	21

Pedestrian Crossings

Arm	Crossing Type
A	None
B	None
C	None

Slope / Intercept / Capacity

Priority Intersection Slopes and Intercepts

Junction	Stream	Intercept (PCU/hr)	Slope for A-B	Slope for A-C	Slope for C-A	Slope for C-B
1	B-A	508.091	0.093	0.234	0.147	0.334
1	B-C	700.947	0.107	0.272	-	-
1	C-B	625.504	0.242	0.242	-	-

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 Flows

Demand Set Data Options

Default Vehicle Mix	Vehicle Mix Varies Over Time	Vehicle Mix Varies Over Turn	Vehicle Mix Varies Over Entry	Vehicle Mix Source	PCU Factor for a HV (PCU)	Default Turning Proportions	Estimate from entry/exit counts	Turning Proportions Vary Over Time	Turning Proportions Vary Over Turn	Turning Proportions Vary Over Entry
		☐	☐	HV Percentages	2.00				☐	☐

Entry Flows

General Flows Data

Arm	Profile Type	Use Turning Counts	Average Demand Flow (PCU/hr)	Flow Scaling Factor (%)
A	ONE HOUR	☐	327.00	100.000
B	ONE HOUR	☐	303.00	100.000
C	ONE HOUR	☐	168.00	100.000

Turning Proportions

Turning Counts or Proportions (PCU/hr) - Junction 1 (for whole period)

		To		
		A	B	C
From	A	0.000	261.000	66.000
	B	186.000	0.000	117.000
	C	40.000	128.000	0.000

Turning Proportions (PCU) - Junction 1 (for whole period)

		To		
		A	B	C
From	A	0.00	0.80	0.20
	B	0.61	0.00	0.39
	C	0.24	0.76	0.00

Vehicle Mix

Average PCU Per Vehicle - Junction 1 (for whole period)

		To		
		A	B	C
From	A	1.000	1.000	1.000
	B	1.000	1.000	1.000
	C	1.000	1.000	1.000

Heavy Vehicle Percentages - Junction 1 (for whole period)

		To		
		A	B	C

From	A	0.000	0.000	0.000
	B	0.000	0.000	0.000
	C	0.000	0.000	0.000

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
B-C	0.26	9.68	0.34	A
B-A	0.51	18.36	1.02	C
C-AB	0.27	8.65	0.39	A
C-A	-	-	-	-
A-B	-	-	-	-
A-C	-	-	-	-

Main Results for each time segment

Main results: (07:45-08:00)

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-C	88.08	87.40	0.00	596.00	0.148	0.17	7.070	A
B-A	140.03	138.19	0.00	439.07	0.319	0.46	11.894	B
C-AB	101.55	100.68	0.00	586.48	0.173	0.22	7.399	A
C-A	24.93	24.93	0.00	-	-	-	-	-
A-B	196.49	196.49	0.00	-	-	-	-	-
A-C	49.69	49.69	0.00	-	-	-	-	-

Main results: (08:00-08:15)

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-C	105.18	104.96	0.00	561.85	0.187	0.23	7.875	A
B-A	167.21	166.50	0.00	423.67	0.395	0.64	13.956	B
C-AB	122.69	122.44	0.00	579.17	0.212	0.28	7.880	A
C-A	28.34	28.34	0.00	-	-	-	-	-
A-B	234.63	234.63	0.00	-	-	-	-	-
A-C	59.33	59.33	0.00	-	-	-	-	-

Main results: (08:15-08:30)

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-C	128.82	128.37	0.00	502.65	0.256	0.34	9.607	A
B-A	204.79	203.32	0.00	400.88	0.511	1.01	18.080	C
C-AB	152.74	152.32	0.00	569.15	0.268	0.38	8.631	A
C-A	32.23	32.23	0.00	-	-	-	-	-
A-B	287.37	287.37	0.00	-	-	-	-	-
A-C	72.67	72.67	0.00	-	-	-	-	-

Main results: (08:30-08:45)

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-C	128.82	128.80	0.00	500.66	0.257	0.34	9.681	A
B-A	204.79	204.71	0.00	400.60	0.511	1.02	18.358	C

C-AB	152.77	152.76	0.00	569.19	0.268	0.39	8.647	A
C-A	32.20	32.20	0.00	-	-	-	-	-
A-B	287.37	287.37	0.00	-	-	-	-	-
A-C	72.67	72.67	0.00	-	-	-	-	-

Main results: (08:45-09:00)

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-C	105.18	105.62	0.00	559.63	0.188	0.23	7.936	A
B-A	167.21	168.63	0.00	423.32	0.395	0.67	14.215	B
C-AB	122.73	123.13	0.00	579.22	0.212	0.29	7.902	A
C-A	28.30	28.30	0.00	-	-	-	-	-
A-B	234.63	234.63	0.00	-	-	-	-	-
A-C	59.33	59.33	0.00	-	-	-	-	-

Main results: (09:00-09:15)

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-C	88.08	88.32	0.00	593.92	0.148	0.18	7.122	A
B-A	140.03	140.79	0.00	438.58	0.319	0.48	12.119	B
C-AB	101.61	101.87	0.00	586.53	0.173	0.22	7.432	A
C-A	24.87	24.87	0.00	-	-	-	-	-
A-B	196.49	196.49	0.00	-	-	-	-	-
A-C	49.69	49.69	0.00	-	-	-	-	-

(Default Analysis Set) - 2019 Recalculated Base + Site Dev + Consented, PM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

Name	Description	Locked	Network Flow Scaling Factor (%)	Reason For Scaling Factors
(Default Analysis Set)			100.000	

Demand Set Details

Name	Scenario Name	Time Period Name	Description	Traffic Profile Type	Model Start Time (HH:mm)	Model Finish Time (HH:mm)	Model Time Period Length (min)	Time Segment Length (min)	Single Time Segment Only	Locked
2019 Recalculated Base + Site Dev + Consented, PM	2019 Recalculated Base + Site Dev + Consented	PM		ONE HOUR	16:45	18:15	90	15		

Junction Network

Junctions

Name	Junction Type	Major Road Direction	Arm Order	Junction Delay (s)	Junction LOS
Somerton Road_Camp Road_Station Road	T-Junction	Two-way	A,B,C	12.72	B

Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Name	Description	Arm Type
A	Somerton Road	Upper Heyford	Major
B	Camp Road	Upper Heyford	Minor
C	Station Road	Upper Heyford	Major

Major Arm Geometry

Arm	Width of carriageway (m)	Has kerbed central reserve	Width of kerbed central reserve (m)	Has right turn bay	Width For Right Turn (m)	Visibility For Right Turn (m)	Blocks?	Blocking Queue (PCU)
C	6.00		0.00		2.20	89.00	☐	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)	Lane Width (Left) (m)	Lane Width (Right) (m)	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				9.00	2.80	2.75	2.75	2.75		1.00	30	21

Pedestrian Crossings

Arm	Crossing Type
A	None
B	None
C	None

Slope / Intercept / Capacity

Priority Intersection Slopes and Intercepts

Junction	Stream	Intercept (PCU/hr)	Slope for A-B	Slope for A-C	Slope for C-A	Slope for C-B
1	B-A	508.091	0.093	0.234	0.147	0.334
1	B-C	700.947	0.107	0.272	-	-
1	C-B	625.504	0.242	0.242	-	-

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 Flows

Demand Set Data Options

Default Vehicle Mix	Vehicle Mix Varies Over Time	Vehicle Mix Varies Over Turn	Vehicle Mix Varies Over Entry	Vehicle Mix Source	PCU Factor for a HV (PCU)	Default Turning Proportions	Estimate from entry/exit counts	Turning Proportions Vary Over Time	Turning Proportions Vary Over Turn	Turning Proportions Vary Over Entry
		☐	☐	HV Percentages	2.00				☐	☐

Entry Flows

General Flows Data

Arm	Profile Type	Use Turning Counts	Average Demand Flow (PCU/hr)	Flow Scaling Factor (%)
A	ONE HOUR	∅	191.00	100.000
B	ONE HOUR	∅	308.00	100.000
C	ONE HOUR	∅	162.00	100.000

Turning Proportions

Turning Counts or Proportions (PCU/hr) - Junction 1 (for whole period)

		To		
		A	B	C
From	A	0.000	159.000	32.000
	B	204.000	0.000	104.000
	C	84.000	78.000	0.000

Turning Proportions (PCU) - Junction 1 (for whole period)

		To		
		A	B	C
From	A	0.00	0.83	0.17
	B	0.66	0.00	0.34
	C	0.52	0.48	0.00

Vehicle Mix

Average PCU Per Vehicle - Junction 1 (for whole period)

		To		
		A	B	C
From	A	1.000	1.000	1.000
	B	1.000	1.000	1.000
	C	1.000	1.000	1.000

Heavy Vehicle Percentages - Junction 1 (for whole period)

		To		
		A	B	C
From	A	0.000	0.000	0.000
	B	0.000	0.000	0.000
	C	0.000	0.000	0.000

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
B-C	0.22	9.03	0.29	A
B-A	0.52	17.24	1.06	C
C-AB	0.16	6.70	0.22	A
C-A	-	-	-	-
A-B	-	-	-	-

A-C	-	-	-	-
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Main Results for each time segment

Main results: (16:45-17:00)

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-C	78.30	77.71	0.00	604.72	0.129	0.15	6.824	A
B-A	153.58	151.62	0.00	460.32	0.334	0.49	11.591	B
C-AB	65.15	64.64	0.00	633.09	0.103	0.13	6.328	A
C-A	56.81	56.81	0.00	-	-	-	-	-
A-B	119.70	119.70	0.00	-	-	-	-	-
A-C	24.09	24.09	0.00	-	-	-	-	-

Main results: (17:00-17:15)

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-C	93.49	93.31	0.00	571.76	0.164	0.19	7.518	A
B-A	183.39	182.66	0.00	449.51	0.408	0.67	13.452	B
C-AB	79.50	79.36	0.00	634.86	0.125	0.16	6.481	A
C-A	66.14	66.14	0.00	-	-	-	-	-
A-B	142.94	142.94	0.00	-	-	-	-	-
A-C	28.77	28.77	0.00	-	-	-	-	-

Main results: (17:15-17:30)

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-C	114.51	114.15	0.00	515.04	0.222	0.28	8.971	A
B-A	224.61	223.15	0.00	433.36	0.518	1.04	17.002	C
C-AB	100.26	100.05	0.00	637.40	0.157	0.21	6.701	A
C-A	78.11	78.11	0.00	-	-	-	-	-
A-B	175.06	175.06	0.00	-	-	-	-	-
A-C	35.23	35.23	0.00	-	-	-	-	-

Main results: (17:30-17:45)

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-C	114.51	114.50	0.00	513.15	0.223	0.29	9.030	A
B-A	224.61	224.53	0.00	433.19	0.519	1.06	17.235	C
C-AB	100.29	100.28	0.00	637.43	0.157	0.22	6.704	A
C-A	78.08	78.08	0.00	-	-	-	-	-
A-B	175.06	175.06	0.00	-	-	-	-	-
A-C	35.23	35.23	0.00	-	-	-	-	-

Main results: (17:45-18:00)

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-C	93.49	93.84	0.00	569.58	0.164	0.20	7.574	A
B-A	183.39	184.79	0.00	449.30	0.408	0.71	13.683	B
C-AB	79.53	79.74	0.00	634.91	0.125	0.16	6.490	A
C-A	66.10	66.10	0.00	-	-	-	-	-
A-B	142.94	142.94	0.00	-	-	-	-	-
A-C	28.77	28.77	0.00	-	-	-	-	-

Main results: (18:00-18:15)

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-C	78.30	78.49	0.00	602.53	0.130	0.15	6.873	A
B-A	153.58	154.37	0.00	460.02	0.334	0.51	11.810	B
C-AB	65.22	65.36	0.00	633.14	0.103	0.13	6.342	A
C-A	56.75	56.75	0.00	-	-	-	-	-
A-B	119.70	119.70	0.00	-	-	-	-	-
A-C	24.09	24.09	0.00	-	-	-	-	-

(Default Analysis Set) - 2019 Recalculated Base + Site Dev + Proposed, AM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

Name	Description	Locked	Network Flow Scaling Factor (%)	Reason For Scaling Factors
(Default Analysis Set)			100.000	

Demand Set Details

Name	Scenario Name	Time Period Name	Description	Traffic Profile Type	Model Start Time (HH:mm)	Model Finish Time (HH:mm)	Model Time Period Length (min)	Time Segment Length (min)	Single Time Segment Only	Locked
2019 Recalculated Base + Site Dev + Proposed, AM	2019 Recalculated Base + Site Dev + Proposed	AM		ONE HOUR	07:45	09:15	90	15		

Junction Network

Junctions

Name	Junction Type	Major Road Direction	Arm Order	Junction Delay (s)	Junction LOS
Somerton Road_Camp Road_Station Road	T-Junction	Two-way	A,B,C	12.25	B

Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Name	Description	Arm Type
A	Somerton Road	Upper Heyford	Major
B	Camp Road	Upper Heyford	Minor
C	Station Road	Upper Heyford	Major

Major Arm Geometry

Arm	Width of carriageway (m)	Has kerbed central reserve	Width of kerbed central reserve (m)	Has right turn bay	Width For Right Turn (m)	Visibility For Right Turn (m)	Blocks?	Blocking Queue (PCU)
C	6.00		0.00		2.20	89.00	∅	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)	Lane Width (Left) (m)	Lane Width (Right) (m)	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				9.00	2.80	2.75	2.75	2.75		1.00	30	21

Pedestrian Crossings

Arm	Crossing Type
A	None
B	None
C	None

Slope / Intercept / Capacity

Priority Intersection Slopes and Intercepts

Junction	Stream	Intercept (PCU/hr)	Slope for A-B	Slope for A-C	Slope for C-A	Slope for C-B
1	B-A	508.091	0.093	0.234	0.147	0.334
1	B-C	700.947	0.107	0.272	-	-
1	C-B	625.504	0.242	0.242	-	-

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 Flows

Demand Set Data Options

Default Vehicle Mix	Vehicle Mix Varies Over Time	Vehicle Mix Varies Over Turn	Vehicle Mix Varies Over Entry	Vehicle Mix Source	PCU Factor for a HV (PCU)	Default Turning Proportions	Estimate from entry/exit counts	Turning Proportions Vary Over Time	Turning Proportions Vary Over Turn	Turning Proportions Vary Over Entry
		☐	☐	HV Percentages	2.00				☐	☐

Entry Flows

General Flows Data

Arm	Profile Type	Use Turning Counts	Average Demand Flow (PCU/hr)	Flow Scaling Factor (%)
A	ONE HOUR	☐	323.00	100.000
B	ONE HOUR	☐	287.00	100.000
C	ONE HOUR	☐	166.00	100.000

Turning Proportions

Turning Counts or Proportions (PCU/hr) - Junction 1 (for whole period)

To			
	A	B	C

From	A	0.000	257.000	66.000
	B	175.000	0.000	112.000
	C	40.000	126.000	0.000

Turning Proportions (PCU) - Junction 1 (for whole period)

From	To			
		A	B	C
	A	0.00	0.80	0.20
	B	0.61	0.00	0.39
C	0.24	0.76	0.00	

Vehicle Mix

Average PCU Per Vehicle - Junction 1 (for whole period)

From	To			
		A	B	C
	A	1.000	1.000	1.000
	B	1.000	1.000	1.000
C	1.000	1.000	1.000	

Heavy Vehicle Percentages - Junction 1 (for whole period)

From	To			
		A	B	C
	A	0.000	0.000	0.000
	B	0.000	0.000	0.000
C	0.000	0.000	0.000	

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
B-C	0.24	9.13	0.31	A
B-A	0.48	17.07	0.90	C
C-AB	0.26	8.58	0.38	A
C-A	-	-	-	-
A-B	-	-	-	-
A-C	-	-	-	-

Main Results for each time segment

Main results: (07:45-08:00)

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-C	84.32	83.67	0.00	602.41	0.140	0.16	6.931	A
B-A	131.75	130.07	0.00	440.23	0.299	0.42	11.546	B
C-AB	99.96	99.11	0.00	587.20	0.170	0.21	7.364	A
C-A	25.02	25.02	0.00	-	-	-	-	-

A-B	193.48	193.48	0.00	-	-	-	-	-
A-C	49.69	49.69	0.00	-	-	-	-	-

Main results: (08:00-08:15)

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-C	100.69	100.48	0.00	571.64	0.176	0.21	7.637	A
B-A	157.32	156.70	0.00	425.33	0.370	0.57	13.368	B
C-AB	120.76	120.52	0.00	580.02	0.208	0.27	7.832	A
C-A	28.47	28.47	0.00	-	-	-	-	-
A-B	231.04	231.04	0.00	-	-	-	-	-
A-C	59.33	59.33	0.00	-	-	-	-	-

Main results: (08:15-08:30)

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-C	123.31	122.93	0.00	519.09	0.238	0.31	9.077	A
B-A	192.68	191.44	0.00	403.53	0.477	0.88	16.871	C
C-AB	150.33	149.93	0.00	570.19	0.264	0.38	8.568	A
C-A	32.44	32.44	0.00	-	-	-	-	-
A-B	282.96	282.96	0.00	-	-	-	-	-
A-C	72.67	72.67	0.00	-	-	-	-	-

Main results: (08:30-08:45)

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-C	123.31	123.30	0.00	517.54	0.238	0.31	9.131	A
B-A	192.68	192.62	0.00	403.28	0.478	0.90	17.074	C
C-AB	150.36	150.35	0.00	570.22	0.264	0.38	8.576	A
C-A	32.41	32.41	0.00	-	-	-	-	-
A-B	282.96	282.96	0.00	-	-	-	-	-
A-C	72.67	72.67	0.00	-	-	-	-	-

Main results: (08:45-09:00)

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-C	100.69	101.06	0.00	569.88	0.177	0.22	7.686	A
B-A	157.32	158.51	0.00	425.02	0.370	0.60	13.570	B
C-AB	120.80	121.19	0.00	580.07	0.208	0.28	7.855	A
C-A	28.43	28.43	0.00	-	-	-	-	-
A-B	231.04	231.04	0.00	-	-	-	-	-
A-C	59.33	59.33	0.00	-	-	-	-	-

Main results: (09:00-09:15)

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-C	84.32	84.53	0.00	600.65	0.140	0.16	6.977	A
B-A	131.75	132.41	0.00	439.77	0.300	0.44	11.737	B
C-AB	100.01	100.27	0.00	587.25	0.170	0.22	7.399	A
C-A	24.96	24.96	0.00	-	-	-	-	-
A-B	193.48	193.48	0.00	-	-	-	-	-
A-C	49.69	49.69	0.00	-	-	-	-	-

(Default Analysis Set) - 2019 Recalculated Base + Site Dev + Proposed, PM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

Name	Description	Locked	Network Flow Scaling Factor (%)	Reason For Scaling Factors
(Default Analysis Set)			100.000	

Demand Set Details

Name	Scenario Name	Time Period Name	Description	Traffic Profile Type	Model Start Time (HH:mm)	Model Finish Time (HH:mm)	Model Time Period Length (min)	Time Segment Length (min)	Single Time Segment Only	Locked
2019 Recalculated Base + Site Dev + Proposed, PM	2019 Recalculated Base + Site Dev + Proposed	FM		ONE HOUR	16:45	18:15	90	15		

Junction Network

Junctions

Name	Junction Type	Major Road Direction	Arm Order	Junction Delay (s)	Junction LOS
Somerton Road_Camp Road_Station Road	T-Junction	Two-way	A,B,C	13.25	B

Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Name	Description	Arm Type
A	Somerton Road	Upper Heyford	Major
B	Camp Road	Upper Heyford	Minor
C	Station Road	Upper Heyford	Major

Major Arm Geometry

Arm	Width of carriageway (m)	Has kerbed central reserve	Width of kerbed central reserve (m)	Has right turn bay	Width For Right Turn (m)	Visibility For Right Turn (m)	Blocks?	Blocking Queue (PCU)
C	6.00		0.00		2.20	89.00	∅	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)	Lane Width (Left) (m)	Lane Width (Right) (m)	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				9.00	2.80	2.75	2.75	2.75		1.00	30	21

Pedestrian Crossings

Arm	Crossing Type
A	None
B	None
C	None

Slope / Intercept / Capacity

Priority Intersection Slopes and Intercepts

Junction	Stream	Intercept (PCU/hr)	Slope for A-B	Slope for A-C	Slope for C-A	Slope for C-B
1	B-A	508.091	0.093	0.234	0.147	0.334
1	B-C	700.947	0.107	0.272	-	-
1	C-B	625.504	0.242	0.242	-	-

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 Flows

Demand Set Data Options

Default Vehicle Mix	Vehicle Mix Varies Over Time	Vehicle Mix Varies Over Turn	Vehicle Mix Varies Over Entry	Vehicle Mix Source	PCU Factor for a HV (PCU)	Default Turning Proportions	Estimate from entry/exit counts	Turning Proportions Vary Over Time	Turning Proportions Vary Over Turn	Turning Proportions Vary Over Entry
		☐	☐	HV Percentages	2.00				☐	☐

Entry Flows

General Flows Data

Arm	Profile Type	Use Turning Counts	Average Demand Flow (PCU/hr)	Flow Scaling Factor (%)
A	ONE HOUR	☐	191.00	100.000
B	ONE HOUR	☐	319.00	100.000
C	ONE HOUR	☐	162.00	100.000

Turning Proportions

Turning Counts or Proportions (PCU/hr) - Junction 1 (for whole period)

		To		
		A	B	C
From	A	0.000	159.000	32.000
	B	211.000	0.000	108.000
	C	84.000	78.000	0.000

Turning Proportions (PCU) - Junction 1 (for whole period)

		To		
		A	B	C
From	A	0.00	0.83	0.17
	B	0.66	0.00	0.34
	C	0.52	0.48	0.00

Vehicle Mix

Average PCU Per Vehicle - Junction 1 (for whole period)

		To		
		A	B	C
From	A	1.000	1.000	1.000
	B	1.000	1.000	1.000
	C	1.000	1.000	1.000

Heavy Vehicle Percentages - Junction 1 (for whole period)

		To		
		A	B	C
From	A	0.000	0.000	0.000
	B	0.000	0.000	0.000
	C	0.000	0.000	0.000

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
B-C	0.24	9.38	0.31	A
B-A	0.54	17.98	1.14	C
C-AB	0.16	6.70	0.22	A
C-A	-	-	-	-
A-B	-	-	-	-
A-C	-	-	-	-

Main Results for each time segment

Main results: (16:45-17:00)

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-C	81.31	80.69	0.00	600.69	0.135	0.16	6.914	A
B-A	158.85	156.78	0.00	460.06	0.345	0.52	11.789	B
C-AB	65.15	64.64	0.00	633.09	0.103	0.13	6.328	A
C-A	56.81	56.81	0.00	-	-	-	-	-
A-B	119.70	119.70	0.00	-	-	-	-	-
A-C	24.09	24.09	0.00	-	-	-	-	-

Main results: (17:00-17:15)

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-C	97.09	96.89	0.00	565.58	0.172	0.21	7.678	A
B-A	189.68	188.90	0.00	449.02	0.422	0.71	13.838	B
C-AB	79.50	79.36	0.00	634.86	0.125	0.16	6.481	A
C-A	66.14	66.14	0.00	-	-	-	-	-
A-B	142.94	142.94	0.00	-	-	-	-	-
A-C	28.77	28.77	0.00	-	-	-	-	-

Main results: (17:15-17:30)

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
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B-C	118.91	118.51	0.00	504.79	0.236	0.30	9.310	A
B-A	232.32	230.70	0.00	432.36	0.537	1.12	17.703	C
C-AB	100.26	100.05	0.00	637.40	0.157	0.21	6.701	A
C-A	78.11	78.11	0.00	-	-	-	-	-
A-B	175.06	175.06	0.00	-	-	-	-	-
A-C	35.23	35.23	0.00	-	-	-	-	-

Main results: (17:30-17:45)

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-C	118.91	118.90	0.00	502.61	0.237	0.31	9.382	A
B-A	232.32	232.23	0.00	432.16	0.538	1.14	17.983	C
C-AB	100.29	100.28	0.00	637.43	0.157	0.22	6.704	A
C-A	78.08	78.08	0.00	-	-	-	-	-
A-B	175.06	175.06	0.00	-	-	-	-	-
A-C	35.23	35.23	0.00	-	-	-	-	-

Main results: (17:45-18:00)

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-C	97.09	97.48	0.00	563.09	0.172	0.21	7.739	A
B-A	189.68	191.24	0.00	448.79	0.423	0.75	14.060	B
C-AB	79.53	79.74	0.00	634.91	0.125	0.16	6.490	A
C-A	66.10	66.10	0.00	-	-	-	-	-
A-B	142.94	142.94	0.00	-	-	-	-	-
A-C	28.77	28.77	0.00	-	-	-	-	-

Main results: (18:00-18:15)

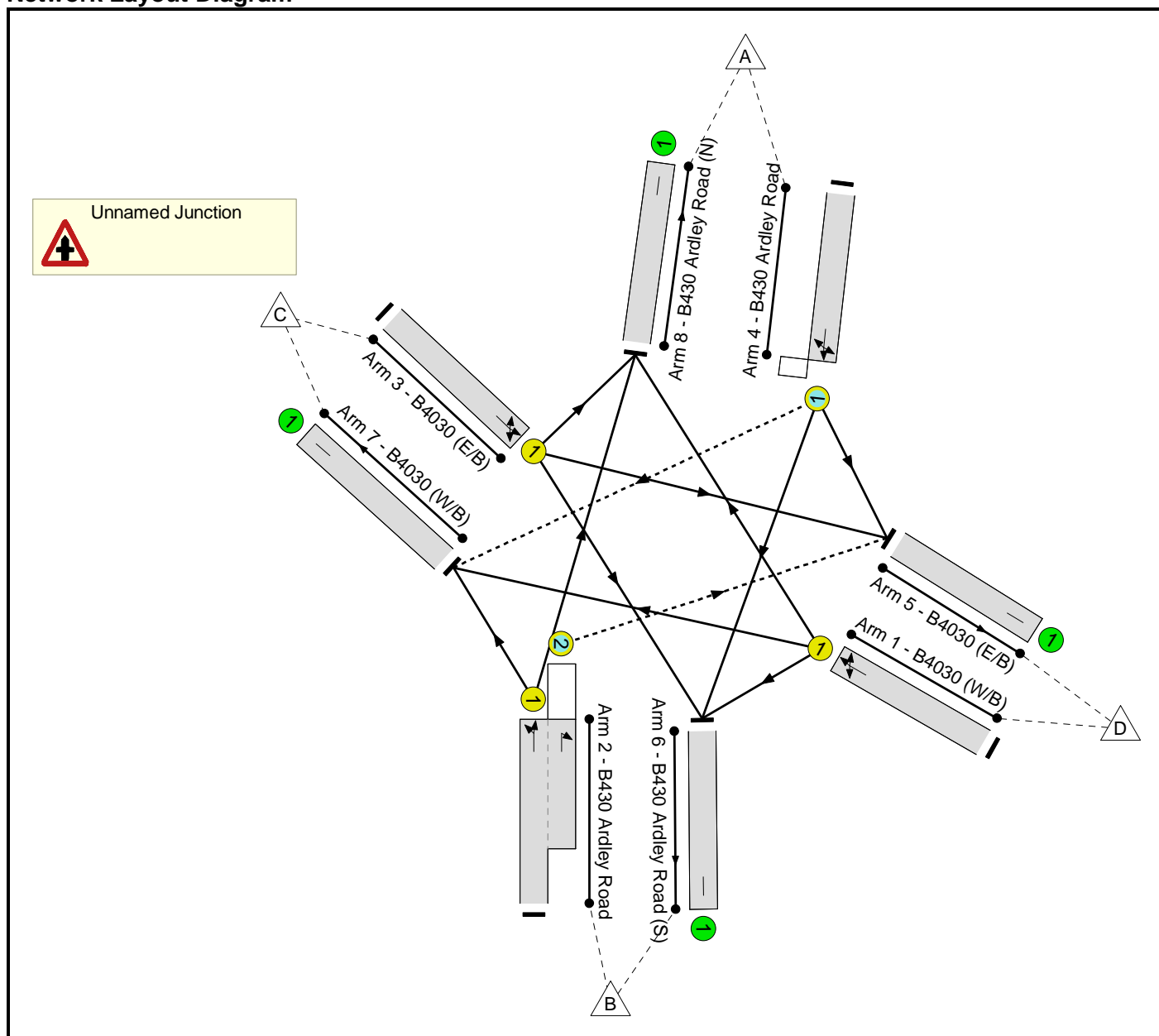
Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-C	81.31	81.52	0.00	598.29	0.136	0.16	6.971	A
B-A	158.85	159.70	0.00	459.75	0.346	0.54	12.034	B
C-AB	65.22	65.36	0.00	633.14	0.103	0.13	6.342	A
C-A	56.75	56.75	0.00	-	-	-	-	-
A-B	119.70	119.70	0.00	-	-	-	-	-
A-C	24.09	24.09	0.00	-	-	-	-	-

Full Input Data And Results
Full Input Data And Results

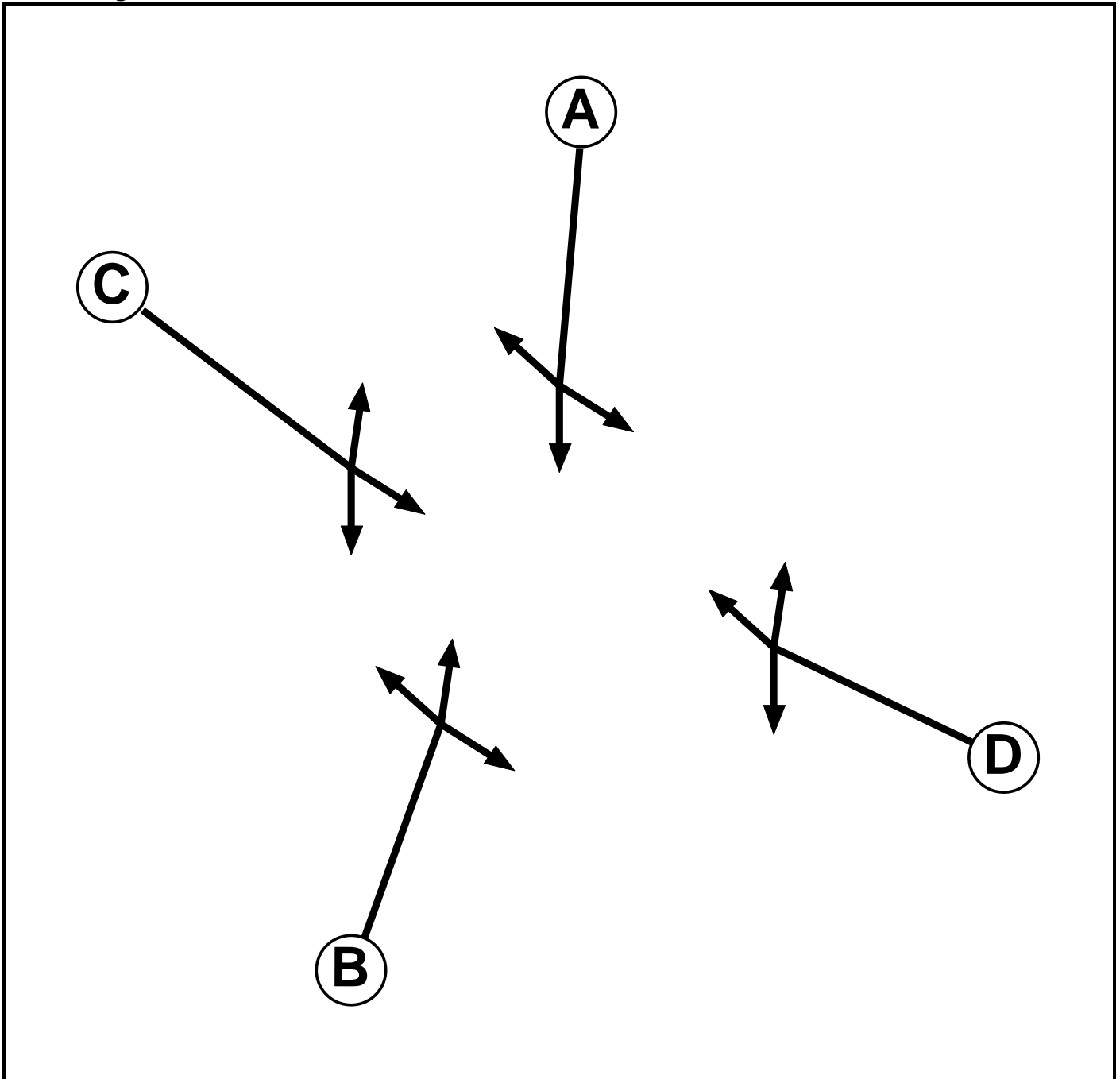
User and Project Details

Project:	Heyford Free School
Title:	Middleton Stoney Signalised Junction
Location:	Former RAF Site Upper Heyford
File name:	Middleton Stoney Signalised Junction_121128_Proposed.lsg3x
Author:	
Company:	Peter Brett Associated LLP
Address:	
Notes:	

Network Layout Diagram



Phase Diagram



Phase Input Data

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

Full Input Data And Results

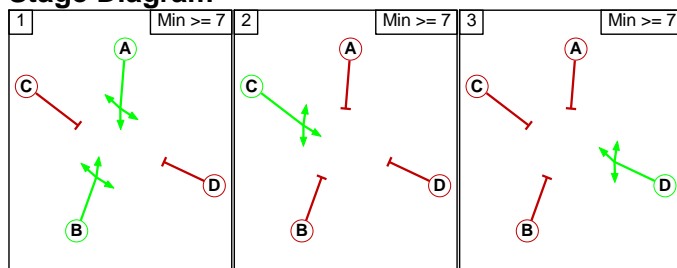
Phase Intergrens Matrix

		Starting Phase			
		A	B	C	D
Terminating Phase	A	-	6	8	
	B	-	7	5	
	C	5	6	-	7
	D	7	5	5	-

Phases in Stage

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

Stage Diagram



Phase Delays

Term. Stage	Start Stage	Phase	Type	Value	Cont value
1	3	B	Losing	2	2

Prohibited Stage Change

		To Stage		
		1	2	3
From Stage	1	-	7	8
	2	6	-	7
	3	7	5	-

Full Input Data And Results

Give-Way Lane Input Data

Junction: Unnamed Junction										
Lane	Movement	Max 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 (B430 Ardley Road)	5/1 (Right)	1439	4/1	1.09	4/1	3.00	-	0.50	3	2.00
4/1 (B430 Ardley Road)	7/1 (Right)	1439	2/1	1.09	2/1	1.00	1.00	0.50	1	1.00

Full Input Data And Results

Lane Input Data

Junction: Unnamed Junction												
Lane	Lane Type	Phases	Start Disp.	End Disp.	Physical Length (PCU)	Sat Flow Type	Def User Saturation Flow (PCU/Hr)	Lane Width (m)	Gradient	Nearside Lane	Turns	Turning Radius (m)
1/1 (B4030 (W/B))	U	D	2	3	60.0	User	1819	-	-	-	-	-
2/1 (B430 Ardley Road)	U	B	2	3	60.0	User	1860	-	-	-	-	-
2/2 (B430 Ardley Road)	O	B	2	3	7.0	User	1713	-	-	-	-	-
3/1 (B4030 (E/B))	U	C	2	3	60.0	User	1761	-	-	-	-	-
4/1 (B430 Ardley Road)	O	A	2	3	60.0	User	1902	-	-	-	-	-
5/1 (B4030 (E/B))	U		2	3	60.0	Inf	-	-	-	-	-	-
6/1 (B430 Ardley Road (S))	U		2	3	60.0	Inf	-	-	-	-	-	-
7/1 (B4030 (W/B))	U		2	3	60.0	Inf	-	-	-	-	-	-
8/1 (B430 Ardley Road (N))	U		2	3	60.0	Inf	-	-	-	-	-	-

Traffic Flow Groups

Flow Group	Start Time	End Time	Duration	Formula
1: '2019 Arup Base (No Consented Dev) AM'	08:00	09:00	01:00	
2: '2019 Arup Base (No Consented Dev) PM'	17:00	18:00	01:00	
3: '2019 Arup Base + Consented Site Traffic AM'	08:00	09:00	01:00	
4: '2019 Arup Base + Consented Site Traffic PM'	17:00	18:00	01:00	
5: '2019 Arup Base + Consented Site Traffic + Proposed School AM'	08:00	09:00	01:00	
6: '2019 Arup Base + Consented Site Traffic + Proposed School PM'	17:00	18:00	01:00	
7: '2019 Recalculated Base (No Consented Dev) AM'	08:00	09:00	01:00	
8: '2019 Recalculated Base (No Consented Dev) PM'	17:00	18:00	01:00	
9: '2019 Recalculated Base + Consented Site Traffic AM'	08:00	09:00	01:00	
10: '2019 Recalculated Base + Consented Site Traffic PM'	17:00	18:00	01:00	
11: '2019 Recalculated Base + Consented Site Traffic + Proposed School AM'	08:00	09:00	01:00	
12: '2019 Recalculated Base + Consented Site Traffic + Proposed School PM'	17:00	18:00	01:00	

Scenario 1: 'Scenario 1' (FG1: '2019 Arup Base (No Consented Dev) AM', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired

Desired Flow :

		Destination				
		A	B	C	D	Tot.
Origin	A	0	567	16	44	627
	B	269	0	56	63	388
	C	9	76	0	237	322
	D	89	77	151	0	317
	Tot.	367	720	223	344	1654

Traffic Lane Flows

Lane	Scenario 1: Scenario 1
Junction: Unnamed Junction	
1/1	317
2/1 (with short)	388(In) 325(Out)
2/2 (short)	63
3/1	322
4/1	627
5/1	344
6/1	720
7/1	223
8/1	367

Full Input Data And Results

Lane Saturation Flows

Junction: Unnamed Junction							
Lane	Lane Width (m)	Gradient	Nearside Lane	Allowed Turns	Turning Radius (m)	Turning Prop.	Sat flow (PCU/Hr)
1/1 (B4030 (W/B) Lane 1)							This lane uses a directly entered Saturation Flow 1819
2/1 (B430 Ardley Road Lane 1)							This lane uses a directly entered Saturation Flow 1860
2/2 (B430 Ardley Road Lane 2)							This lane uses a directly entered Saturation Flow 1713
3/1 (B4030 (E/B) Lane 1)							This lane uses a directly entered Saturation Flow 1761
4/1 (B430 Ardley Road Lane 1)							This lane uses a directly entered Saturation Flow 1902
5/1 (B4030 (E/B) Lane 1)							Infinite Saturation Flow Inf
6/1 (B430 Ardley Road (S) Lane 1)							Infinite Saturation Flow Inf
7/1 (B4030 (W/B) Lane 1)							Infinite Saturation Flow Inf
8/1 (B430 Ardley Road (N) Lane 1)							Infinite Saturation Flow Inf

Scenario 2: 'New Scenario' (FG2: '2019 Arup Base (No Consented Dev) PM', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired

Desired Flow :

	Destination					
	A	B	C	D	Tot.	
Origin	A	0	303	11	44	358
	B	450	0	48	189	687
	C	24	74	0	227	325
	D	31	60	172	0	263
	Tot.	505	437	231	460	1633

Full Input Data And Results

Traffic Lane Flows

Lane	Scenario 2: New Scenario
Junction: Unnamed Junction	
1/1	263
2/1 (with short)	687(In) 498(Out)
2/2 (short)	189
3/1	325
4/1	358
5/1	460
6/1	437
7/1	231
8/1	505

Lane Saturation Flows

Junction: Unnamed Junction							
Lane	Lane Width (m)	Gradient	Nearside Lane	Allowed Turns	Turning Radius (m)	Turning Prop.	Sat flow (PCU/Hr)
1/1 (B4030 (W/B) Lane 1)							This lane uses a directly entered Saturation Flow 1819
2/1 (B430 Ardley Road Lane 1)							This lane uses a directly entered Saturation Flow 1860
2/2 (B430 Ardley Road Lane 2)							This lane uses a directly entered Saturation Flow 1713
3/1 (B4030 (E/B) Lane 1)							This lane uses a directly entered Saturation Flow 1761
4/1 (B430 Ardley Road Lane 1)							This lane uses a directly entered Saturation Flow 1902
5/1 (B4030 (E/B) Lane 1)							Infinite Saturation Flow Inf
6/1 (B430 Ardley Road (S) Lane 1)							Infinite Saturation Flow Inf
7/1 (B4030 (W/B) Lane 1)							Infinite Saturation Flow Inf
8/1 (B430 Ardley Road (N) Lane 1)							Infinite Saturation Flow Inf

Full Input Data And Results

Scenario 3: 'New Scenario' (FG3: '2019 Arup Base + Consented Site Traffic AM', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired

Desired Flow :

		Destination				
		A	B	C	D	Tot.
Origin	A	0	567	16	44	627
	B	269	0	152	63	484
	C	9	219	0	566	794
	D	89	77	379	0	545
	Tot.	367	863	547	673	2450

Traffic Lane Flows

Lane	Scenario 3: New Scenario
Junction: Unnamed Junction	
1/1	545
2/1 (with short)	484(In) 421(Out)
2/2 (short)	63
3/1	794
4/1	627
5/1	673
6/1	863
7/1	547
8/1	367

Lane Saturation Flows

Junction: Unnamed Junction							
Lane	Lane Width (m)	Gradient	Nearside Lane	Allowed Turns	Turning Radius (m)	Turning Prop.	Sat flow (PCU/Hr)
1/1 (B4030 (W/B) Lane 1)							This lane uses a directly entered Saturation Flow 1819
2/1 (B430 Ardley Road Lane 1)							This lane uses a directly entered Saturation Flow 1860
2/2 (B430 Ardley Road Lane 2)							This lane uses a directly entered Saturation Flow 1713
3/1 (B4030 (E/B) Lane 1)							This lane uses a directly entered Saturation Flow 1761
4/1 (B430 Ardley Road Lane 1)							This lane uses a directly entered Saturation Flow 1902
5/1 (B4030 (E/B) Lane 1)							Infinite Saturation Flow Inf
6/1 (B430 Ardley Road (S) Lane 1)							Infinite Saturation Flow Inf
7/1 (B4030 (W/B) Lane 1)							Infinite Saturation Flow Inf
8/1 (B430 Ardley Road (N) Lane 1)							Infinite Saturation Flow Inf

Full Input Data And Results

Scenario 4: 'New Scenario' (FG4: '2019 Arup Base + Consented Site Traffic PM', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired

Desired Flow :

		Destination				
		A	B	C	D	Tot.
Origin	A	0	303	11	44	358
	B	450	0	131	189	770
	C	24	154	0	317	495
	D	31	60	369	0	460
	Tot.	505	517	511	550	2083

Traffic Lane Flows

Lane	Scenario 4: New Scenario
Junction: Unnamed Junction	
1/1	460
2/1 (with short)	770(In) 581(Out)
2/2 (short)	189
3/1	495
4/1	358
5/1	550
6/1	517
7/1	511
8/1	505

Full Input Data And Results

Lane Saturation Flows

Junction: Unnamed Junction							
Lane	Lane Width (m)	Gradient	Nearside Lane	Allowed Turns	Turning Radius (m)	Turning Prop.	Sat flow (PCU/Hr)
1/1 (B4030 (W/B) Lane 1)							This lane uses a directly entered Saturation Flow 1819
2/1 (B430 Ardley Road Lane 1)							This lane uses a directly entered Saturation Flow 1860
2/2 (B430 Ardley Road Lane 2)							This lane uses a directly entered Saturation Flow 1713
3/1 (B4030 (E/B) Lane 1)							This lane uses a directly entered Saturation Flow 1761
4/1 (B430 Ardley Road Lane 1)							This lane uses a directly entered Saturation Flow 1902
5/1 (B4030 (E/B) Lane 1)							Infinite Saturation Flow Inf
6/1 (B430 Ardley Road (S) Lane 1)							Infinite Saturation Flow Inf
7/1 (B4030 (W/B) Lane 1)							Infinite Saturation Flow Inf
8/1 (B430 Ardley Road (N) Lane 1)							Infinite Saturation Flow Inf

Scenario 5: 'New Scenario' (FG5: '2019 Arup Base + Consented Site Traffic + Proposed School AM', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired

Desired Flow :

Origin	Destination					
	A	B	C	D	Tot.	
A	0	567	16	44	627	
B	269	0	151	63	483	
C	9	210	0	545	764	
D	89	77	375	0	541	
Tot.	367	854	542	652	2415	

Full Input Data And Results

Traffic Lane Flows

Lane	Scenario 5: New Scenario
Junction: Unnamed Junction	
1/1	541
2/1 (with short)	483(In) 420(Out)
2/2 (short)	63
3/1	764
4/1	627
5/1	652
6/1	854
7/1	542
8/1	367

Lane Saturation Flows

Junction: Unnamed Junction							
Lane	Lane Width (m)	Gradient	Nearside Lane	Allowed Turns	Turning Radius (m)	Turning Prop.	Sat flow (PCU/Hr)
1/1 (B4030 (W/B) Lane 1)							This lane uses a directly entered Saturation Flow 1819
2/1 (B430 Ardley Road Lane 1)							This lane uses a directly entered Saturation Flow 1860
2/2 (B430 Ardley Road Lane 2)							This lane uses a directly entered Saturation Flow 1713
3/1 (B4030 (E/B) Lane 1)							This lane uses a directly entered Saturation Flow 1761
4/1 (B430 Ardley Road Lane 1)							This lane uses a directly entered Saturation Flow 1902
5/1 (B4030 (E/B) Lane 1)							Infinite Saturation Flow Inf
6/1 (B430 Ardley Road (S) Lane 1)							Infinite Saturation Flow Inf
7/1 (B4030 (W/B) Lane 1)							Infinite Saturation Flow Inf
8/1 (B430 Ardley Road (N) Lane 1)							Infinite Saturation Flow Inf

Full Input Data And Results

Scenario 6: 'New Scenario' (FG6: '2019 Arup Base + Consented Site Traffic + Proposed School PM', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired

Desired Flow :

	Destination					
	A	B	C	D	Tot.	
Origin	A	0	303	11	44	358
B	450	0	131	189	770	
C	24	158	0	327	509	
D	31	60	369	0	460	
Tot.	505	521	511	560	2097	

Traffic Lane Flows

Lane	Scenario 6: New Scenario
Junction: Unnamed Junction	
1/1	460
2/1 (with short)	770(In) 581(Out)
2/2 (short)	189
3/1	509
4/1	358
5/1	560
6/1	521
7/1	511
8/1	505

Full Input Data And Results

Lane Saturation Flows

Junction: Unnamed Junction							
Lane	Lane Width (m)	Gradient	Nearside Lane	Allowed Turns	Turning Radius (m)	Turning Prop.	Sat flow (PCU/Hr)
1/1 (B4030 (W/B) Lane 1)							This lane uses a directly entered Saturation Flow 1819
2/1 (B430 Ardley Road Lane 1)							This lane uses a directly entered Saturation Flow 1860
2/2 (B430 Ardley Road Lane 2)							This lane uses a directly entered Saturation Flow 1713
3/1 (B4030 (E/B) Lane 1)							This lane uses a directly entered Saturation Flow 1761
4/1 (B430 Ardley Road Lane 1)							This lane uses a directly entered Saturation Flow 1902
5/1 (B4030 (E/B) Lane 1)							Infinite Saturation Flow Inf
6/1 (B430 Ardley Road (S) Lane 1)							Infinite Saturation Flow Inf
7/1 (B4030 (W/B) Lane 1)							Infinite Saturation Flow Inf
8/1 (B430 Ardley Road (N) Lane 1)							Infinite Saturation Flow Inf

Scenario 7: 'New Scenario' (FG7: '2019 Recalculated Base (No Consented Dev) AM', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired

Desired Flow :

	Destination					
	A	B	C	D	Tot.	
Origin	A	0	532	15	41	588
B	253	0	53	60	366	
C	8	71	0	222	301	
D	84	72	142	0	298	
Tot.	345	675	210	323	1553	

Full Input Data And Results

Traffic Lane Flows

Lane	Scenario 7: New Scenario
Junction: Unnamed Junction	
1/1	298
2/1 (with short)	366(In) 306(Out)
2/2 (short)	60
3/1	301
4/1	588
5/1	323
6/1	675
7/1	210
8/1	345

Lane Saturation Flows

Junction: Unnamed Junction							
Lane	Lane Width (m)	Gradient	Nearside Lane	Allowed Turns	Turning Radius (m)	Turning Prop.	Sat flow (PCU/Hr)
1/1 (B4030 (W/B) Lane 1)							This lane uses a directly entered Saturation Flow 1819
2/1 (B430 Ardley Road Lane 1)							This lane uses a directly entered Saturation Flow 1860
2/2 (B430 Ardley Road Lane 2)							This lane uses a directly entered Saturation Flow 1713
3/1 (B4030 (E/B) Lane 1)							This lane uses a directly entered Saturation Flow 1761
4/1 (B430 Ardley Road Lane 1)							This lane uses a directly entered Saturation Flow 1902
5/1 (B4030 (E/B) Lane 1)							Infinite Saturation Flow Inf
6/1 (B430 Ardley Road (S) Lane 1)							Infinite Saturation Flow Inf
7/1 (B4030 (W/B) Lane 1)							Infinite Saturation Flow Inf
8/1 (B430 Ardley Road (N) Lane 1)							Infinite Saturation Flow Inf

Full Input Data And Results

Scenario 8: 'New Scenario' (FG8: '2019 Recalculated Base (No Consented Dev) PM', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired

Desired Flow :

	Destination					
	A	B	C	D	Tot.	
Origin	A	0	286	10	42	338
	B	425	0	45	179	649
	C	23	70	0	214	307
	D	29	57	163	0	249
	Tot.	477	413	218	435	1543

Traffic Lane Flows

Lane	Scenario 8: New Scenario
Junction: Unnamed Junction	
1/1	249
2/1 (with short)	649(In) 470(Out)
2/2 (short)	179
3/1	307
4/1	338
5/1	435
6/1	413
7/1	218
8/1	477

Full Input Data And Results

Lane Saturation Flows

Junction: Unnamed Junction							
Lane	Lane Width (m)	Gradient	Nearside Lane	Allowed Turns	Turning Radius (m)	Turning Prop.	Sat flow (PCU/Hr)
1/1 (B4030 (W/B) Lane 1)							This lane uses a directly entered Saturation Flow 1819
2/1 (B430 Ardley Road Lane 1)							This lane uses a directly entered Saturation Flow 1860
2/2 (B430 Ardley Road Lane 2)							This lane uses a directly entered Saturation Flow 1713
3/1 (B4030 (E/B) Lane 1)							This lane uses a directly entered Saturation Flow 1761
4/1 (B430 Ardley Road Lane 1)							This lane uses a directly entered Saturation Flow 1902
5/1 (B4030 (E/B) Lane 1)							Infinite Saturation Flow Inf
6/1 (B430 Ardley Road (S) Lane 1)							Infinite Saturation Flow Inf
7/1 (B4030 (W/B) Lane 1)							Infinite Saturation Flow Inf
8/1 (B430 Ardley Road (N) Lane 1)							Infinite Saturation Flow Inf

Scenario 9: 'New Scenario' (FG9: '2019 Recalculated Base + Consented Site Traffic AM', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired

Desired Flow :

Origin	Destination					
	A	B	C	D	Tot.	
A	0	532	15	41	588	
B	253	0	149	60	462	
C	8	214	0	552	774	
D	84	72	370	0	526	
Tot.	345	818	534	653	2350	

Full Input Data And Results

Traffic Lane Flows

Lane	Scenario 9: New Scenario
Junction: Unnamed Junction	
1/1	526
2/1 (with short)	462(In) 402(Out)
2/2 (short)	60
3/1	774
4/1	588
5/1	653
6/1	818
7/1	534
8/1	345

Lane Saturation Flows

Junction: Unnamed Junction							
Lane	Lane Width (m)	Gradient	Nearside Lane	Allowed Turns	Turning Radius (m)	Turning Prop.	Sat flow (PCU/Hr)
1/1 (B4030 (W/B) Lane 1)							This lane uses a directly entered Saturation Flow 1819
2/1 (B430 Ardley Road Lane 1)							This lane uses a directly entered Saturation Flow 1860
2/2 (B430 Ardley Road Lane 2)							This lane uses a directly entered Saturation Flow 1713
3/1 (B4030 (E/B) Lane 1)							This lane uses a directly entered Saturation Flow 1761
4/1 (B430 Ardley Road Lane 1)							This lane uses a directly entered Saturation Flow 1902
5/1 (B4030 (E/B) Lane 1)							Infinite Saturation Flow Inf
6/1 (B430 Ardley Road (S) Lane 1)							Infinite Saturation Flow Inf
7/1 (B4030 (W/B) Lane 1)							Infinite Saturation Flow Inf
8/1 (B430 Ardley Road (N) Lane 1)							Infinite Saturation Flow Inf

Full Input Data And Results

Scenario 10: 'New Scenario' (FG10: '2019 Recalculated Base + Consented Site Traffic PM', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired

Desired Flow :

	Destination					
		A	B	C	D	Tot.
Origin	A	0	286	10	42	338
	B	425	0	128	179	732
	C	23	150	0	305	478
	D	29	57	360	0	446
	Tot.	477	493	498	526	1994

Traffic Lane Flows

Lane	Scenario 10: New Scenario
Junction: Unnamed Junction	
1/1	446
2/1 (with short)	732(In) 553(Out)
2/2 (short)	179
3/1	478
4/1	338
5/1	526
6/1	493
7/1	498
8/1	477

Full Input Data And Results

Lane Saturation Flows

Junction: Unnamed Junction							
Lane	Lane Width (m)	Gradient	Nearside Lane	Allowed Turns	Turning Radius (m)	Turning Prop.	Sat flow (PCU/Hr)
1/1 (B4030 (W/B) Lane 1)							This lane uses a directly entered Saturation Flow 1819
2/1 (B430 Ardley Road Lane 1)							This lane uses a directly entered Saturation Flow 1860
2/2 (B430 Ardley Road Lane 2)							This lane uses a directly entered Saturation Flow 1713
3/1 (B4030 (E/B) Lane 1)							This lane uses a directly entered Saturation Flow 1761
4/1 (B430 Ardley Road Lane 1)							This lane uses a directly entered Saturation Flow 1902
5/1 (B4030 (E/B) Lane 1)							Infinite Saturation Flow Inf
6/1 (B430 Ardley Road (S) Lane 1)							Infinite Saturation Flow Inf
7/1 (B4030 (W/B) Lane 1)							Infinite Saturation Flow Inf
8/1 (B430 Ardley Road (N) Lane 1)							Infinite Saturation Flow Inf

Scenario 11: 'New Scenario' (FG11: '2019 Recalculated Base + Consented Site Traffic + Proposed School AM', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired

Desired Flow :

	Destination					
	A	B	C	D	Tot.	
Origin	A	0	532	15	41	588
B	253	0	147	60	460	
C	8	205	0	531	744	
D	84	72	366	0	522	
Tot.	345	809	528	632	2314	

Full Input Data And Results

Traffic Lane Flows

Lane	Scenario 11: New Scenario
Junction: Unnamed Junction	
1/1	522
2/1 (with short)	460(In) 400(Out)
2/2 (short)	60
3/1	744
4/1	588
5/1	632
6/1	809
7/1	528
8/1	345

Lane Saturation Flows

Junction: Unnamed Junction							
Lane	Lane Width (m)	Gradient	Nearside Lane	Allowed Turns	Turning Radius (m)	Turning Prop.	Sat flow (PCU/Hr)
1/1 (B4030 (W/B) Lane 1)							This lane uses a directly entered Saturation Flow 1819
2/1 (B430 Ardley Road Lane 1)							This lane uses a directly entered Saturation Flow 1860
2/2 (B430 Ardley Road Lane 2)							This lane uses a directly entered Saturation Flow 1713
3/1 (B4030 (E/B) Lane 1)							This lane uses a directly entered Saturation Flow 1761
4/1 (B430 Ardley Road Lane 1)							This lane uses a directly entered Saturation Flow 1902
5/1 (B4030 (E/B) Lane 1)							Infinite Saturation Flow Inf
6/1 (B430 Ardley Road (S) Lane 1)							Infinite Saturation Flow Inf
7/1 (B4030 (W/B) Lane 1)							Infinite Saturation Flow Inf
8/1 (B430 Ardley Road (N) Lane 1)							Infinite Saturation Flow Inf

Full Input Data And Results

Scenario 12: 'New Scenario' (FG12: '2019 Recalculated Base + Consented Site Traffic + Proposed School PM', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired

Desired Flow :

	Destination					
		A	B	C	D	Tot.
Origin	A	0	286	10	42	338
	B	425	0	128	179	732
	C	23	154	0	314	491
	D	29	57	360	0	446
	Tot.	477	497	498	535	2007

Traffic Lane Flows

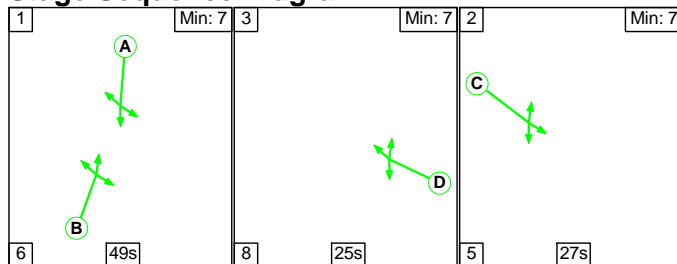
Lane	Scenario 12: New Scenario
Junction: Unnamed Junction	
1/1	446
2/1 (with short)	732(In) 553(Out)
2/2 (short)	179
3/1	491
4/1	338
5/1	535
6/1	497
7/1	498
8/1	477

Lane Saturation Flows

Junction: Unnamed Junction							
Lane	Lane Width (m)	Gradient	Nearside Lane	Allowed Turns	Turning Radius (m)	Turning Prop.	Sat flow (PCU/Hr)
1/1 (B4030 (W/B) Lane 1)							This lane uses a directly entered Saturation Flow 1819
2/1 (B430 Ardley Road Lane 1)							This lane uses a directly entered Saturation Flow 1860
2/2 (B430 Ardley Road Lane 2)							This lane uses a directly entered Saturation Flow 1713
3/1 (B4030 (E/B) Lane 1)							This lane uses a directly entered Saturation Flow 1761
4/1 (B430 Ardley Road Lane 1)							This lane uses a directly entered Saturation Flow 1902
5/1 (B4030 (E/B) Lane 1)							Infinite Saturation Flow Inf
6/1 (B430 Ardley Road (S) Lane 1)							Infinite Saturation Flow Inf
7/1 (B4030 (W/B) Lane 1)							Infinite Saturation Flow Inf
8/1 (B430 Ardley Road (N) Lane 1)							Infinite Saturation Flow Inf

Scenario 1: 'Scenario 1' (FG1: '2019 Arup Base (No Consented Dev) AM', Plan 1: 'Network Control Plan 1')

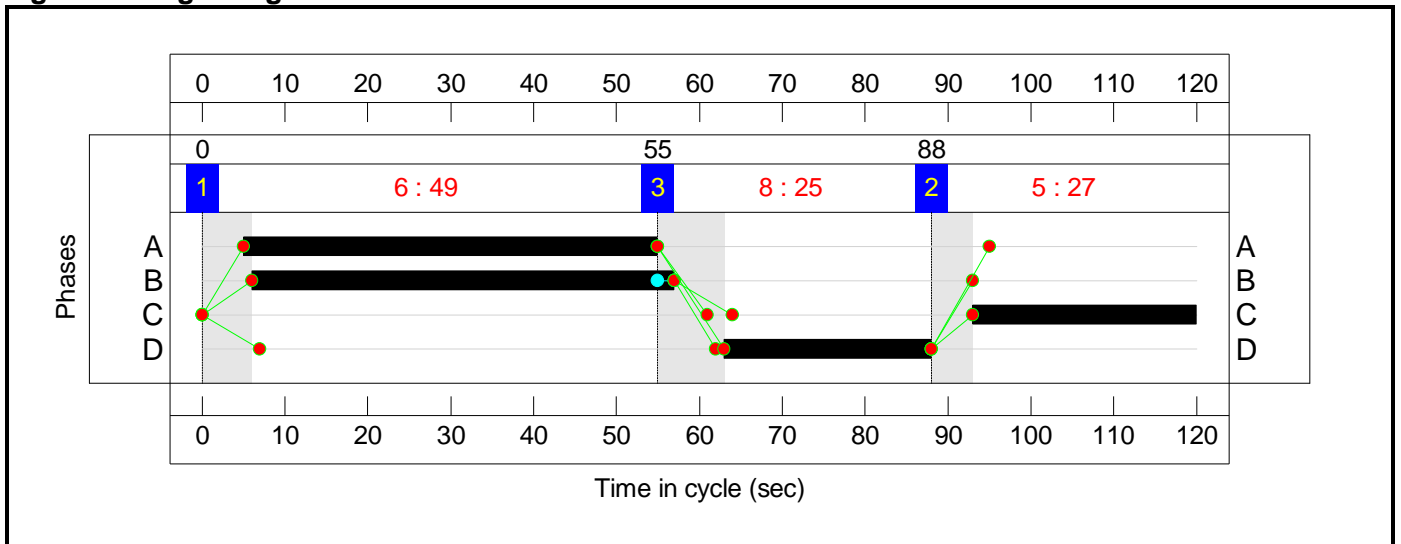
Stage Sequence Diagram



Stage Timings


Stage	1	3	2
Duration	49	25	27
Change Point	0	55	88

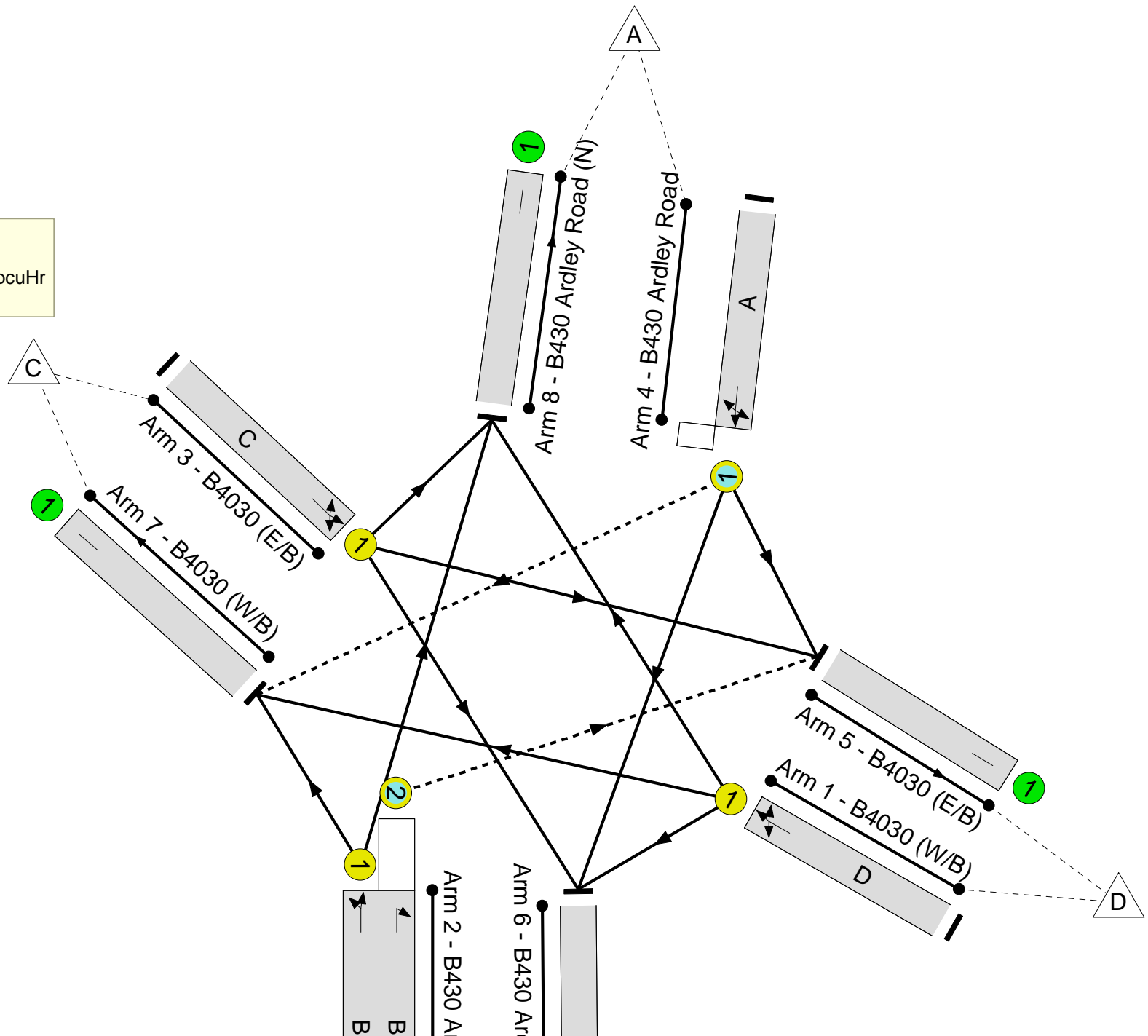
Signal Timings Diagram



Full Input Data And Results
Network Layout Diagram

Full Input Data And Results

 **Unnamed Junction**
PRC: 11.9 %
Total Traffic Delay: 21.7 pcuHr



Full Input Data And Results

Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network	-	-	N/A	-	-		-	-	-	-	-	-	80.4%
Unnamed Junction	-	-	N/A	-	-		-	-	-	-	-	-	80.4%
1/1	B4030 (W/B) Left Ahead Right	U	N/A	N/A	D		1	25	-	317	1819	394	80.4%
2/1+2/2	B430 Ardley Road Right Left Ahead	U+O	N/A	N/A	B		1	51	-	388	1860:1713	832	46.7%
3/1	B4030 (E/B) Ahead Right Left	U	N/A	N/A	C		1	27	-	322	1761	411	78.4%
4/1	B430 Ardley Road Left Ahead Right	O	N/A	N/A	A		1	50	-	627	1902	808	77.6%
5/1	B4030 (E/B)	U	N/A	N/A	-		-	-	-	344	Inf	Inf	0.0%
6/1	B430 Ardley Road (S)	U	N/A	N/A	-		-	-	-	720	Inf	Inf	0.0%
7/1	B4030 (W/B)	U	N/A	N/A	-		-	-	-	223	Inf	Inf	0.0%
8/1	B430 Ardley Road (N)	U	N/A	N/A	-		-	-	-	367	Inf	Inf	0.0%

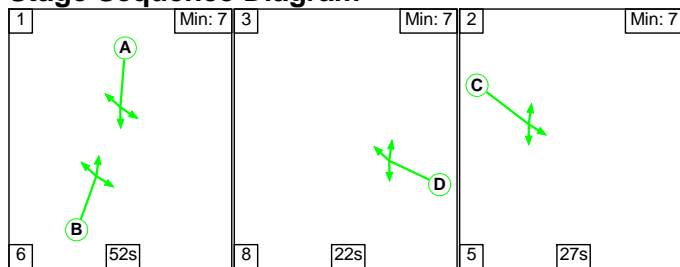
Full Input Data And Results

Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network	-	-	77	0	2	15.4	5.8	0.5	21.7	-	-	-	-
Unnamed Junction	-	-	77	0	2	15.4	5.8	0.5	21.7	-	-	-	-
1/1	317	317	-	-	-	3.9	2.0	-	5.9	66.8	10.0	2.0	11.9
2/1+2/2	388	388	61	0	2	2.5	0.4	0.4	3.3	31.0	7.6	0.4	8.1
3/1	322	322	-	-	-	3.9	1.7	-	5.6	62.6	10.0	1.7	11.8
4/1	627	627	16	0	0	5.2	1.7	0.0	6.9	39.4	17.8	1.7	19.5
5/1	344	344	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/1	720	720	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
7/1	223	223	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
8/1	367	367	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
<p>C1 PRC for Signalled Lanes (%): 11.9 Total Delay for Signalled Lanes (pcuHr): 21.70 PRC Over All Lanes (%): 11.9 Total Delay Over All Lanes(pcuHr): 21.70 Cycle Time (s): 120</p>													

Full Input Data And Results

Scenario 2: 'New Scenario' (FG2: '2019 Arup Base (No Consented Dev) PM', Plan 1: 'Network Control Plan 1')

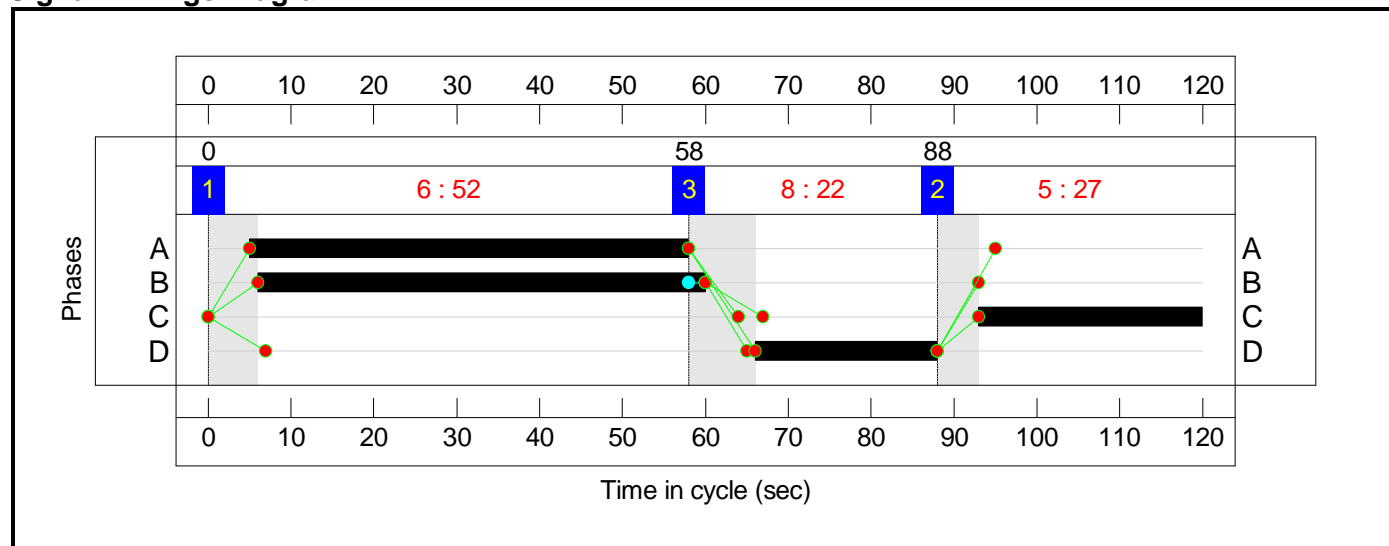
Stage Sequence Diagram



Stage Timings


Stage	1	3	2
Duration	52	22	27
Change Point	0	58	88

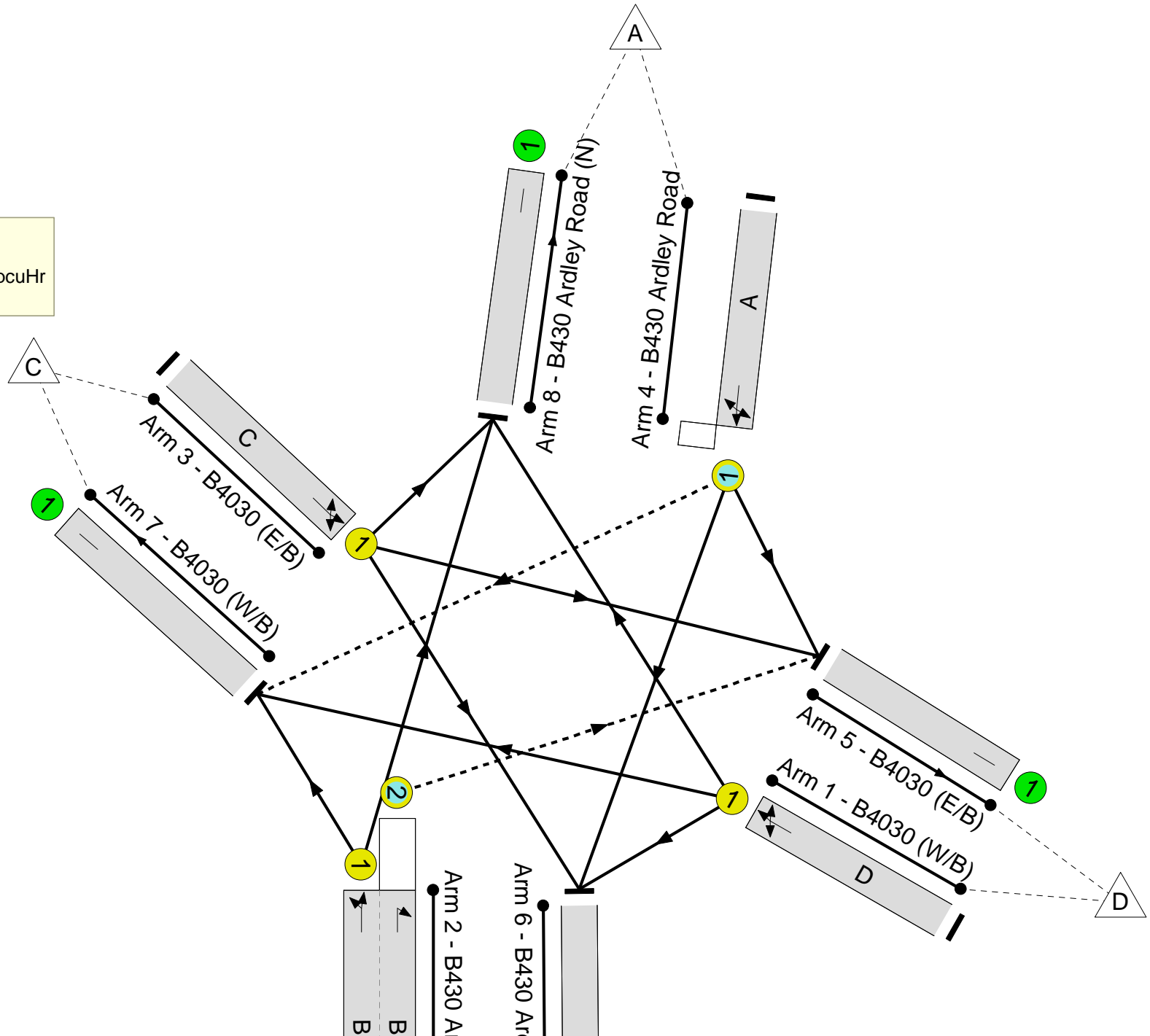
Signal Timings Diagram



Full Input Data And Results
Network Layout Diagram

Full Input Data And Results

 **Unnamed Junction**
PRC: 13.8 %
Total Traffic Delay: 19.8 pcuHr



Full Input Data And Results

Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network	-	-	N/A	-	-		-	-	-	-	-	-	79.1%
Unnamed Junction	-	-	N/A	-	-		-	-	-	-	-	-	79.1%
1/1	B4030 (W/B) Left Ahead Right	U	N/A	N/A	D		1	22	-	263	1819	349	75.4%
2/1+2/2	B430 Ardley Road Right Left Ahead	U+O	N/A	N/A	B		1	54	-	687	1860:1713	911	75.4%
3/1	B4030 (E/B) Ahead Right Left	U	N/A	N/A	C		1	27	-	325	1761	411	79.1%
4/1	B430 Ardley Road Left Ahead Right	O	N/A	N/A	A		1	53	-	358	1902	856	41.8%
5/1	B4030 (E/B)	U	N/A	N/A	-		-	-	-	460	Inf	Inf	0.0%
6/1	B430 Ardley Road (S)	U	N/A	N/A	-		-	-	-	437	Inf	Inf	0.0%
7/1	B4030 (W/B)	U	N/A	N/A	-		-	-	-	231	Inf	Inf	0.0%
8/1	B430 Ardley Road (N)	U	N/A	N/A	-		-	-	-	505	Inf	Inf	0.0%

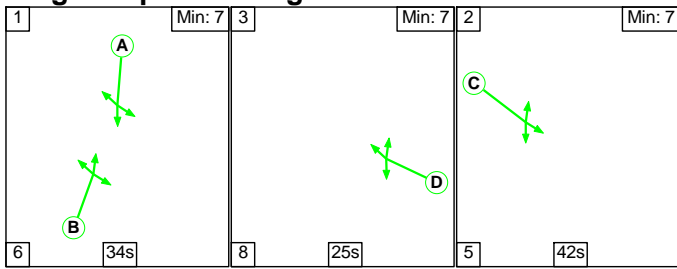
Full Input Data And Results

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	-	-	195	0	5	14.2	5.2	0.5	19.8	-	-	-	-
Unnamed Junction	-	-	195	0	5	14.2	5.2	0.5	19.8	-	-	-	-
1/1	263	263	-	-	-	3.3	1.5	-	4.8	66.2	8.3	1.5	9.7
2/1+2/2	687	687	184	0	5	4.7	1.5	0.4	6.6	34.7	15.7	1.5	17.2
3/1	325	325	-	-	-	3.9	1.8	-	5.7	63.4	10.1	1.8	11.9
4/1	358	358	11	0	0	2.2	0.4	0.0	2.6	26.4	8.1	0.4	8.4
5/1	460	460	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/1	437	437	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
7/1	231	231	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
8/1	505	505	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
<p>C1 PRC for Signalled Lanes (%): 13.8 Total Delay for Signalled Lanes (pcuHr): 19.81</p> <p> PRC Over All Lanes (%): 13.8 Total Delay Over All Lanes(pcuHr): 19.81 Cycle Time (s): 120</p>													

Full Input Data And Results

Scenario 3: 'New Scenario' (FG3: '2019 Arup Base + Consented Site Traffic AM', Plan 1: 'Network Control Plan 1')

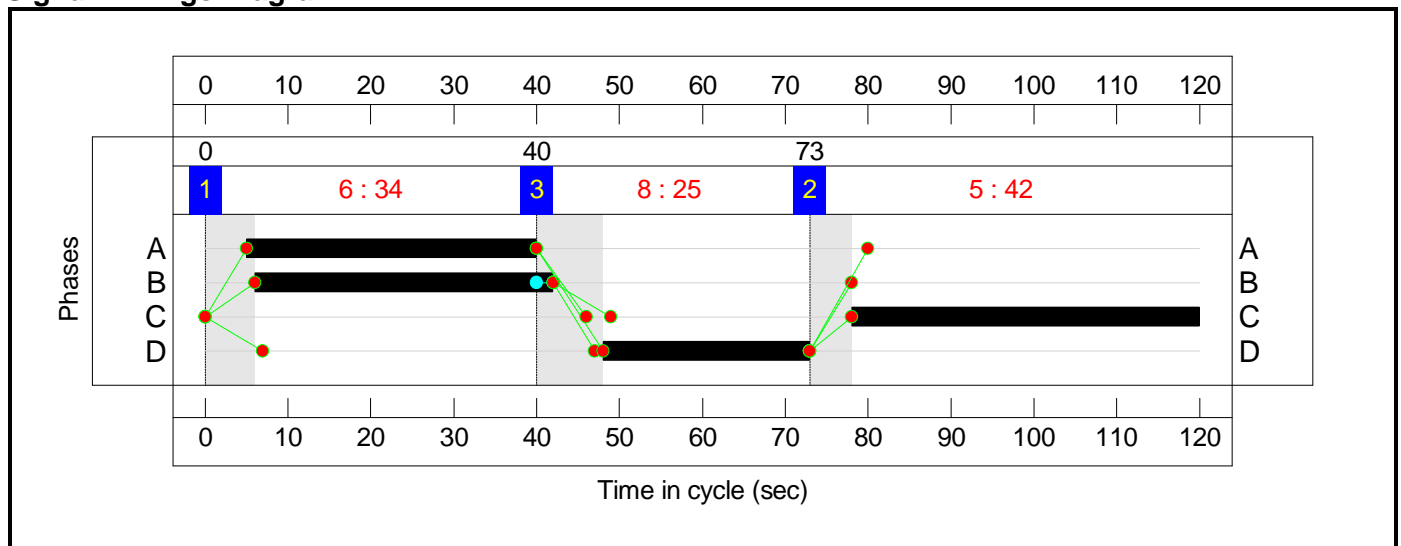
Stage Sequence Diagram




Stage Timings

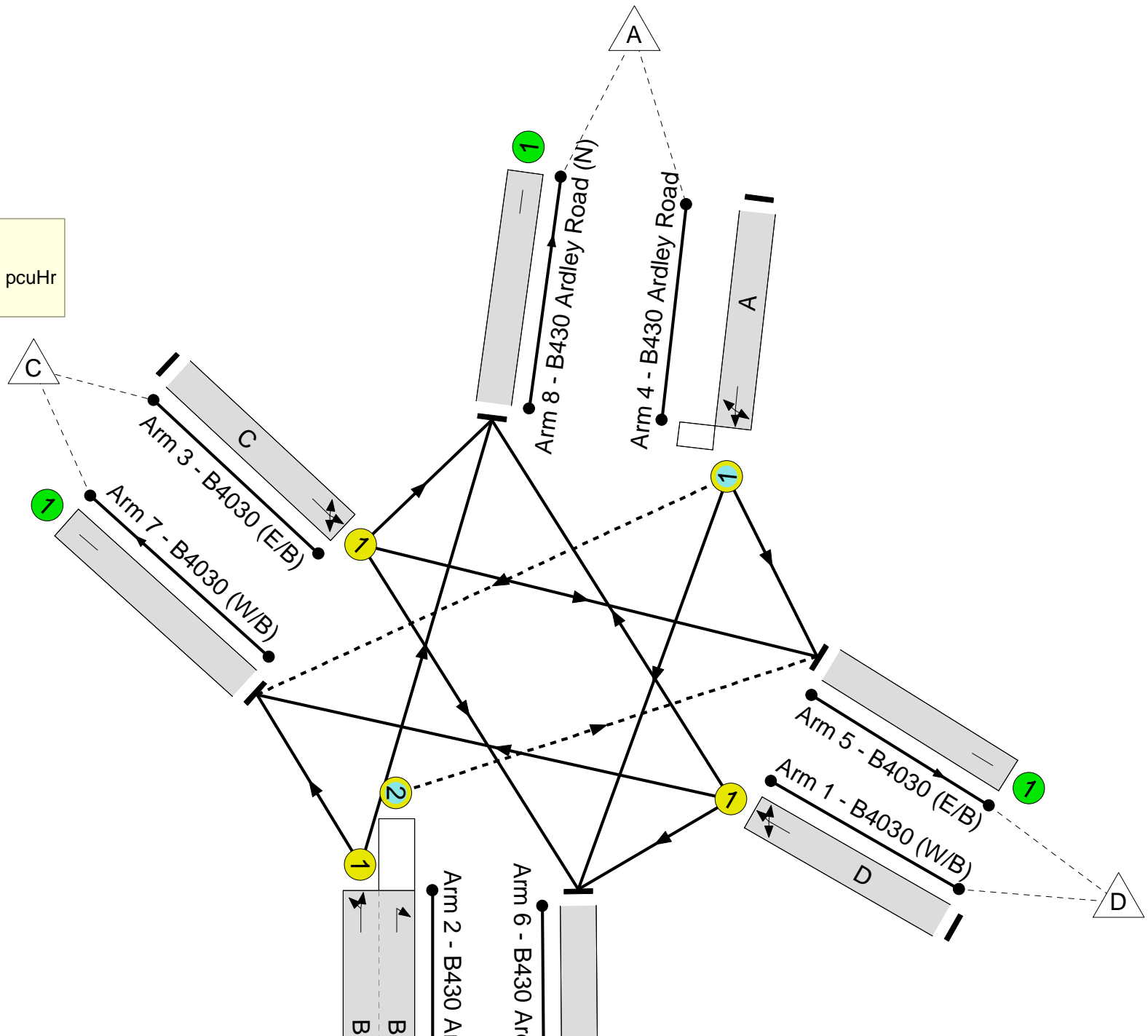
Stage	1	3	2
Duration	34	25	42
Change Point	0	40	73

Signal Timings Diagram



Full Input Data And Results
Network Layout Diagram

 **Unnamed Junction**
PRC: -53.6 %
Total Traffic Delay: 247.6 pcuHr



Full Input Data And Results

Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network	-	-	N/A	-	-		-	-	-	-	-	-	138.3%
Unnamed Junction	-	-	N/A	-	-		-	-	-	-	-	-	138.3%
1/1	B4030 (W/B) Left Ahead Right	U	N/A	N/A	D		1	25	-	545	1819	394	138.3%
2/1+2/2	B430 Ardley Road Right Left Ahead	U+O	N/A	N/A	B		1	36	-	484	1860:1713	577	83.9%
3/1	B4030 (E/B) Ahead Right Left	U	N/A	N/A	C		1	42	-	794	1761	631	125.8%
4/1	B430 Ardley Road Left Ahead Right	O	N/A	N/A	A		1	35	-	627	1902	571	109.9%
5/1	B4030 (E/B)	U	N/A	N/A	-		-	-	-	673	Inf	Inf	0.0%
6/1	B430 Ardley Road (S)	U	N/A	N/A	-		-	-	-	863	Inf	Inf	0.0%
7/1	B4030 (W/B)	U	N/A	N/A	-		-	-	-	547	Inf	Inf	0.0%
8/1	B430 Ardley Road (N)	U	N/A	N/A	-		-	-	-	367	Inf	Inf	0.0%

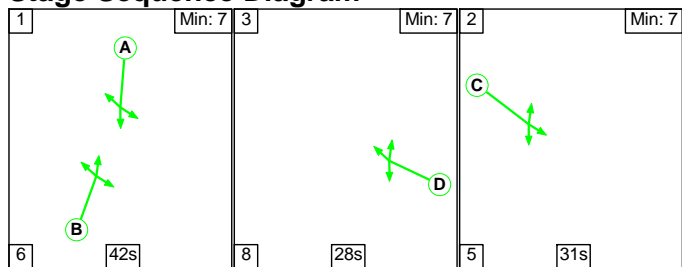
Full Input Data And Results

Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network	-	-	15	0	60	50.5	196.5	0.6	247.6	-	-	-	-
Unnamed Junction	-	-	15	0	60	50.5	196.5	0.6	247.6	-	-	-	-
1/1	545	394	-	-	-	14.6	77.2	-	91.8	606.1	23.2	77.2	100.4
2/1+2/2	484	484	0	0	60	5.0	2.5	0.6	8.1	60.1	13.7	2.5	16.2
3/1	794	631	-	-	-	20.2	83.9	-	104.1	471.9	36.7	83.9	120.5
4/1	627	571	15	0	0	10.7	33.0	0.0	43.7	250.8	22.8	33.0	55.7
5/1	550	550	-	-	-	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	441	441	-	-	-	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 (%):		-53.6	Total Delay for Signalled Lanes (pcuHr):		247.60					
			PRC Over All Lanes (%):		-53.6	Total Delay Over All Lanes (pcuHr):		247.60	Cycle Time (s): 120				

Full Input Data And Results

Scenario 4: 'New Scenario' (FG4: '2019 Arup Base + Consented Site Traffic PM', Plan 1: 'Network Control Plan 1')

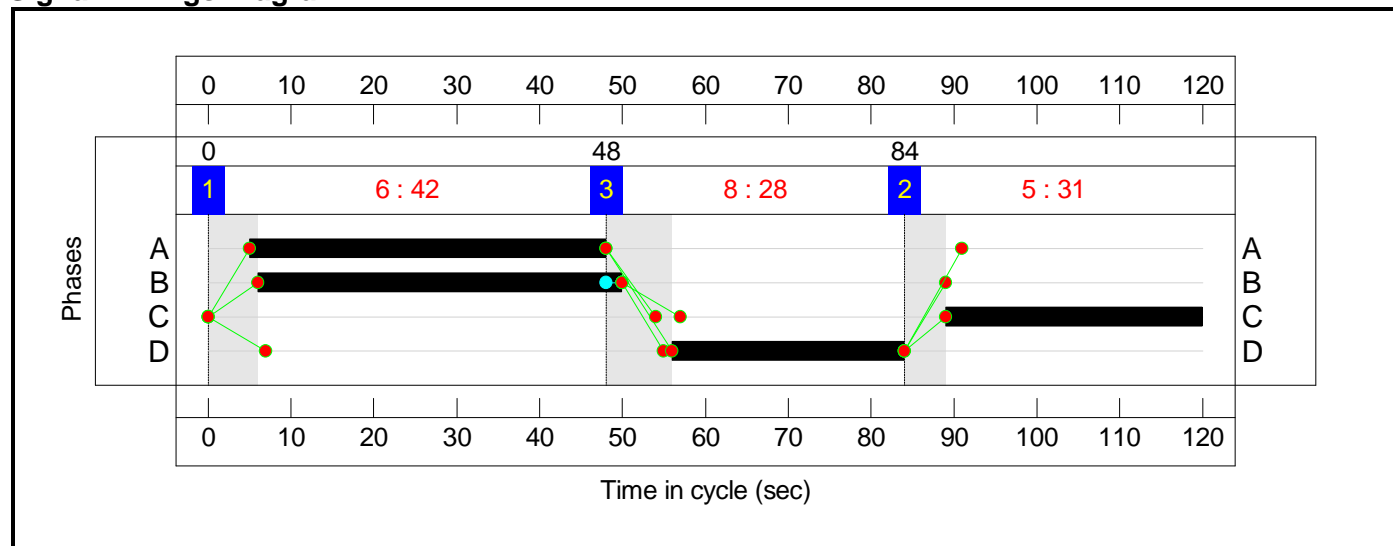
Stage Sequence Diagram



Stage Timings


Stage	1	3	2
Duration	42	28	31
Change Point	0	48	84

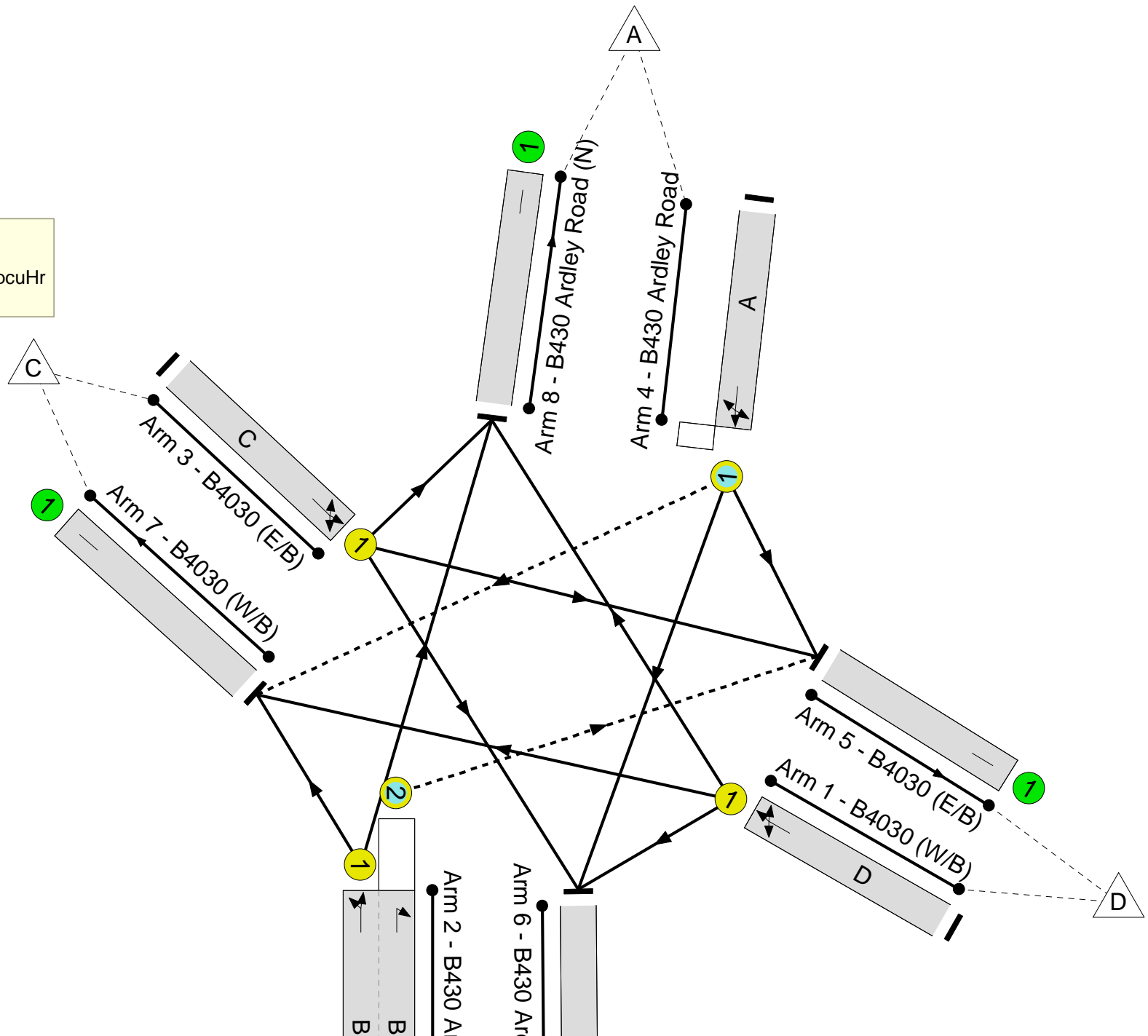
Signal Timings Diagram



Full Input Data And Results
Network Layout Diagram

Full Input Data And Results

 **Unnamed Junction**
PRC: -17.1 %
Total Traffic Delay: 83.8 pcuHr



Full Input Data And Results

Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network	-	-	N/A	-	-		-	-	-	-	-	-	105.4%
Unnamed Junction	-	-	N/A	-	-		-	-	-	-	-	-	105.4%
1/1	B4030 (W/B) Left Ahead Right	U	N/A	N/A	D		1	28	-	460	1819	440	104.6%
2/1+2/2	B430 Ardley Road Right Left Ahead	U+O	N/A	N/A	B		1	44	-	770	1860:1713	749	102.8%
3/1	B4030 (E/B) Ahead Right Left	U	N/A	N/A	C		1	31	-	495	1761	470	105.4%
4/1	B430 Ardley Road Left Ahead Right	O	N/A	N/A	A		1	43	-	358	1902	697	51.4%
5/1	B4030 (E/B)	U	N/A	N/A	-		-	-	-	550	Inf	Inf	0.0%
6/1	B430 Ardley Road (S)	U	N/A	N/A	-		-	-	-	517	Inf	Inf	0.0%
7/1	B4030 (W/B)	U	N/A	N/A	-		-	-	-	511	Inf	Inf	0.0%
8/1	B430 Ardley Road (N)	U	N/A	N/A	-		-	-	-	505	Inf	Inf	0.0%

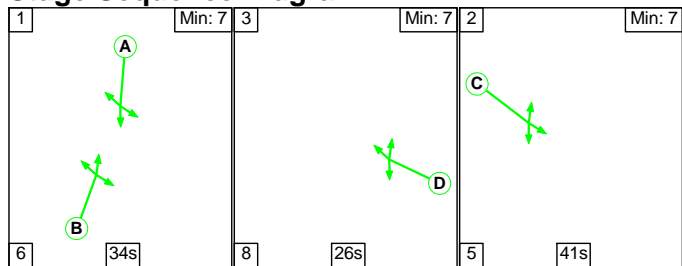
Full Input Data And Results

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	-	-	175	0	19	26.5	56.8	0.5	83.8	-	-	-	-
Unnamed Junction	-	-	175	0	19	26.5	56.8	0.5	83.8	-	-	-	-
1/1	460	440	-	-	-	6.8	17.0	-	23.7	185.8	16.0	17.0	33.0
2/1+2/2	770	749	173	0	11	8.9	20.1	0.4	29.5	137.8	24.9	20.1	45.1
3/1	495	470	-	-	-	7.8	19.2	-	27.0	196.3	17.8	19.2	36.9
4/1	358	358	3	0	8	2.9	0.5	0.1	3.6	35.7	9.2	0.5	9.8
5/1	529	529	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/1	506	506	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
7/1	491	491	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
8/1	490	490	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
<p>C1 PRC for Signalled Lanes (%): -17.1 Total Delay for Signalled Lanes (pcuHr): 83.77</p> <p> PRC Over All Lanes (%): -17.1 Total Delay Over All Lanes(pcuHr): 83.77 Cycle Time (s): 120</p>													

Full Input Data And Results

Scenario 5: 'New Scenario' (FG5: '2019 Arup Base + Consented Site Traffic + Proposed School AM', Plan 1: 'Network Control Plan 1')

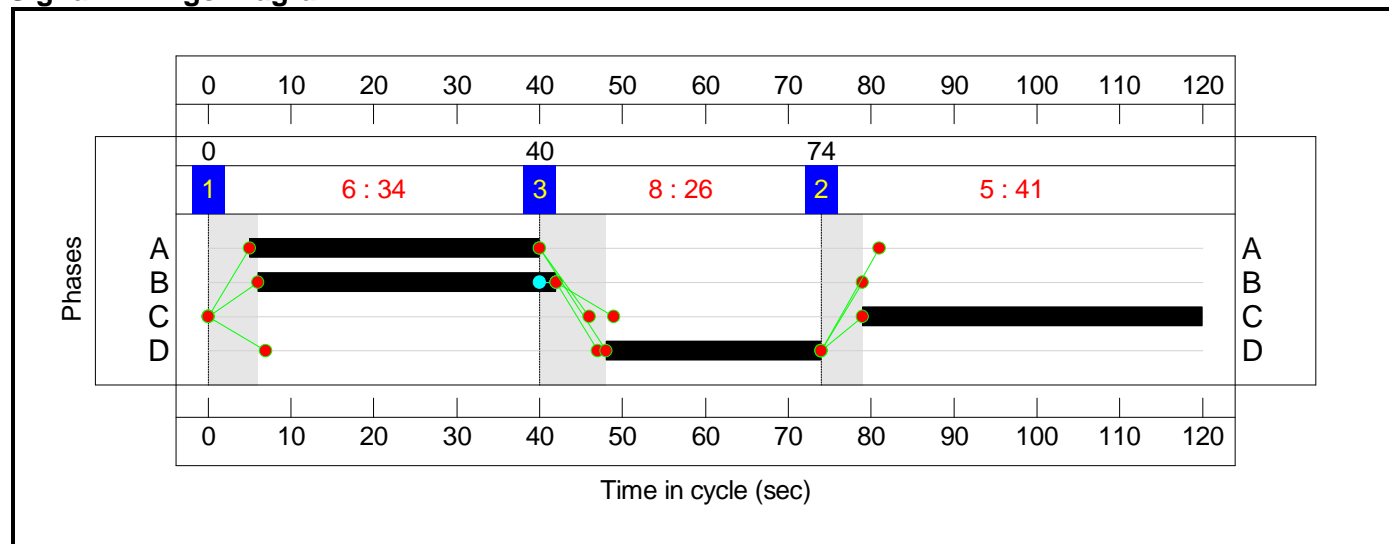
Stage Sequence Diagram



Stage Timings

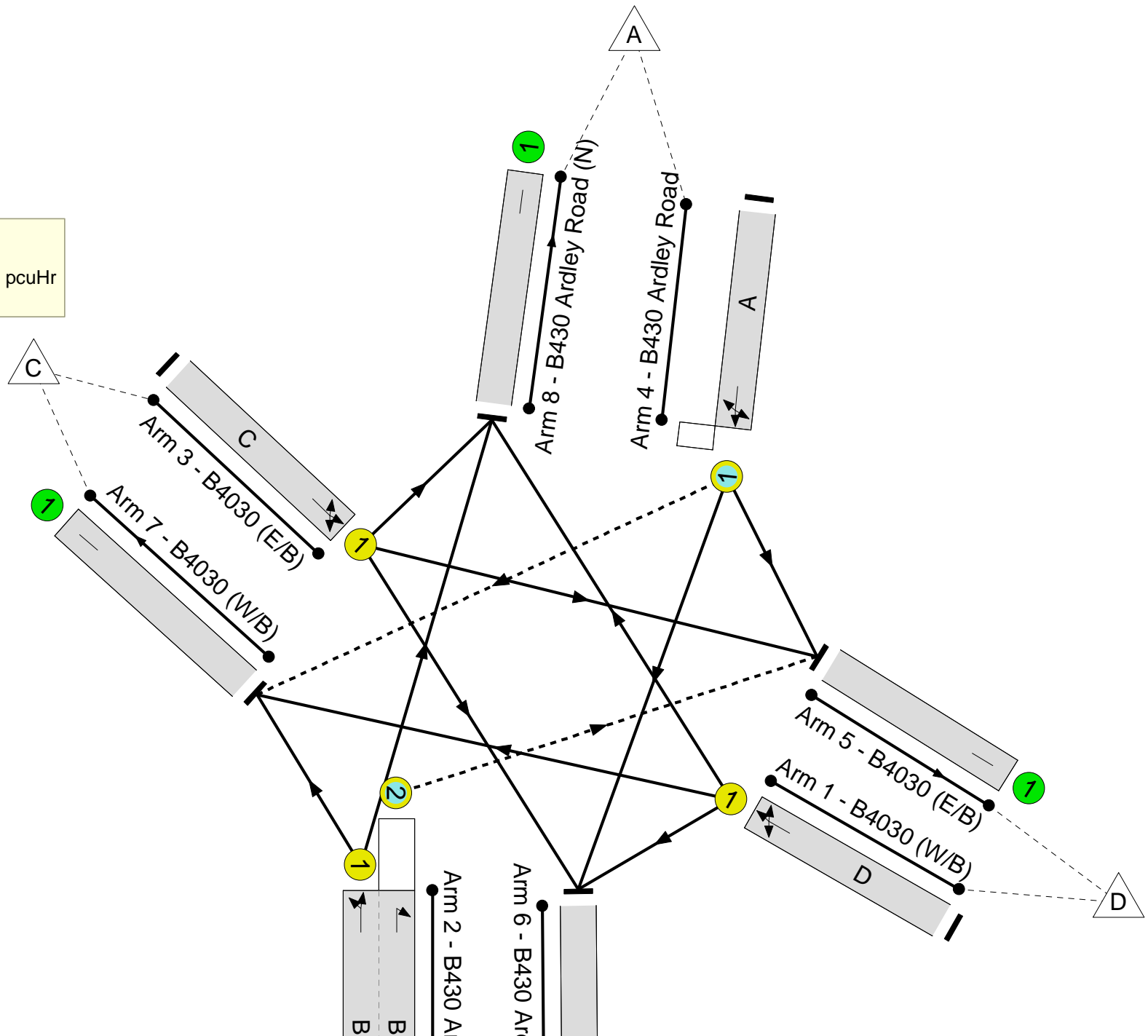

Stage	1	3	2
Duration	34	26	41
Change Point	0	40	74

Signal Timings Diagram



Full Input Data And Results
Network Layout Diagram

Unnamed Junction
PRC: -46.9 %
Total Traffic Delay: 228.3 pcuHr



Full Input Data And Results

Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network	-	-	N/A	-	-		-	-	-	-	-	-	132.2%
Unnamed Junction	-	-	N/A	-	-		-	-	-	-	-	-	132.2%
1/1	B4030 (W/B) Left Ahead Right	U	N/A	N/A	D		1	26	-	541	1819	409	132.2%
2/1+2/2	B430 Ardley Road Right Left Ahead	U+O	N/A	N/A	B		1	36	-	483	1860:1713	577	83.8%
3/1	B4030 (E/B) Ahead Right Left	U	N/A	N/A	C		1	41	-	764	1761	616	124.0%
4/1	B430 Ardley Road Left Ahead Right	O	N/A	N/A	A		1	35	-	627	1902	571	109.9%
5/1	B4030 (E/B)	U	N/A	N/A	-		-	-	-	652	Inf	Inf	0.0%
6/1	B430 Ardley Road (S)	U	N/A	N/A	-		-	-	-	854	Inf	Inf	0.0%
7/1	B4030 (W/B)	U	N/A	N/A	-		-	-	-	542	Inf	Inf	0.0%
8/1	B430 Ardley Road (N)	U	N/A	N/A	-		-	-	-	367	Inf	Inf	0.0%

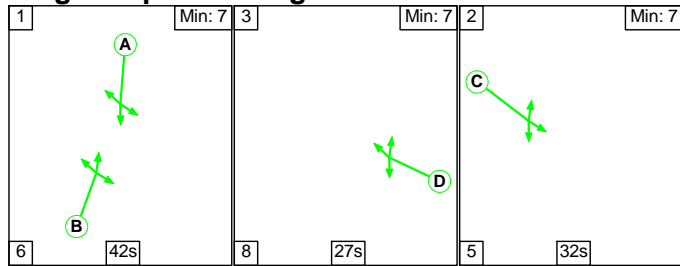
Full Input Data And Results

Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network	-	-	15	0	60	48.0	179.6	0.6	228.3	-	-	-	-
Unnamed Junction	-	-	15	0	60	48.0	179.6	0.6	228.3	-	-	-	-
1/1	541	409	-	-	-	13.5	67.9	-	81.3	541.1	22.4	67.9	90.3
2/1+2/2	483	483	0	0	60	5.0	2.5	0.6	8.0	59.9	13.7	2.5	16.2
3/1	764	616	-	-	-	18.9	76.3	-	95.2	448.6	34.7	76.3	111.0
4/1	627	571	15	0	0	10.7	33.0	0.0	43.7	250.8	22.8	33.0	55.7
5/1	540	540	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/1	744	744	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
7/1	449	449	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
8/1	344	344	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
<p>C1 PRC for Signalled Lanes (%): -46.9 Total Delay for Signalled Lanes (pcuHr): 228.25 PRC Over All Lanes (%): -46.9 Total Delay Over All Lanes(pcuHr): 228.25 Cycle Time (s): 120</p>													

Full Input Data And Results

Scenario 6: 'New Scenario' (FG6: '2019 Arup Base + Consented Site Traffic + Proposed School PM', Plan 1: 'Network Control Plan 1')

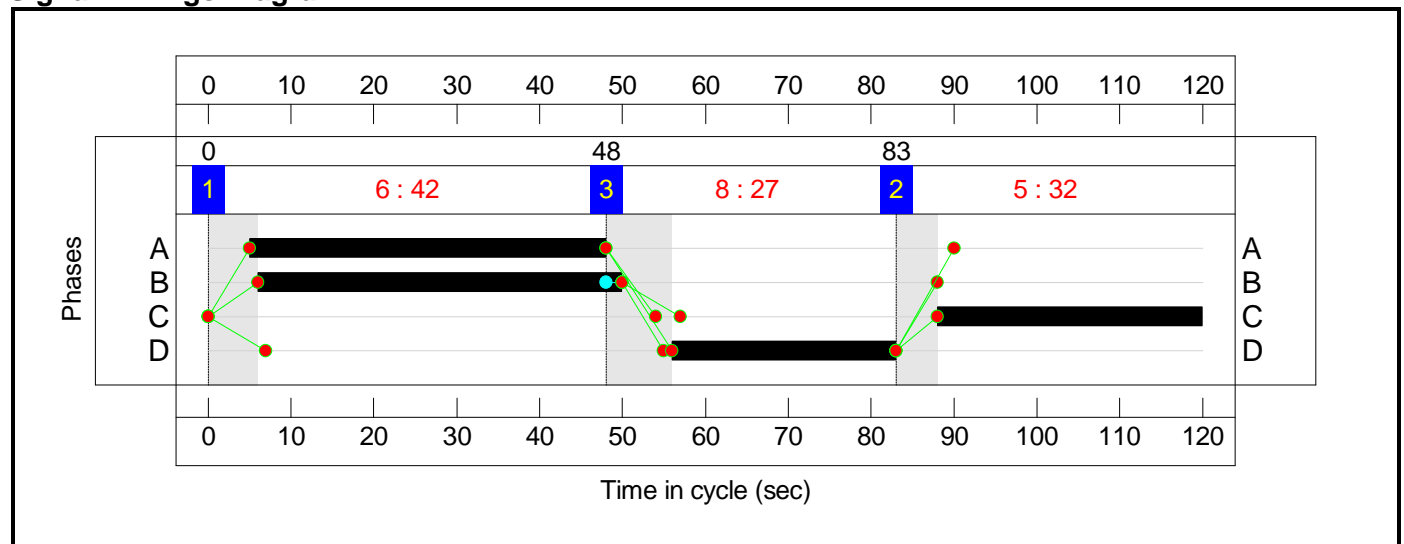
Stage Sequence Diagram



Stage Timings


Stage	1	3	2
Duration	42	27	32
Change Point	0	48	83

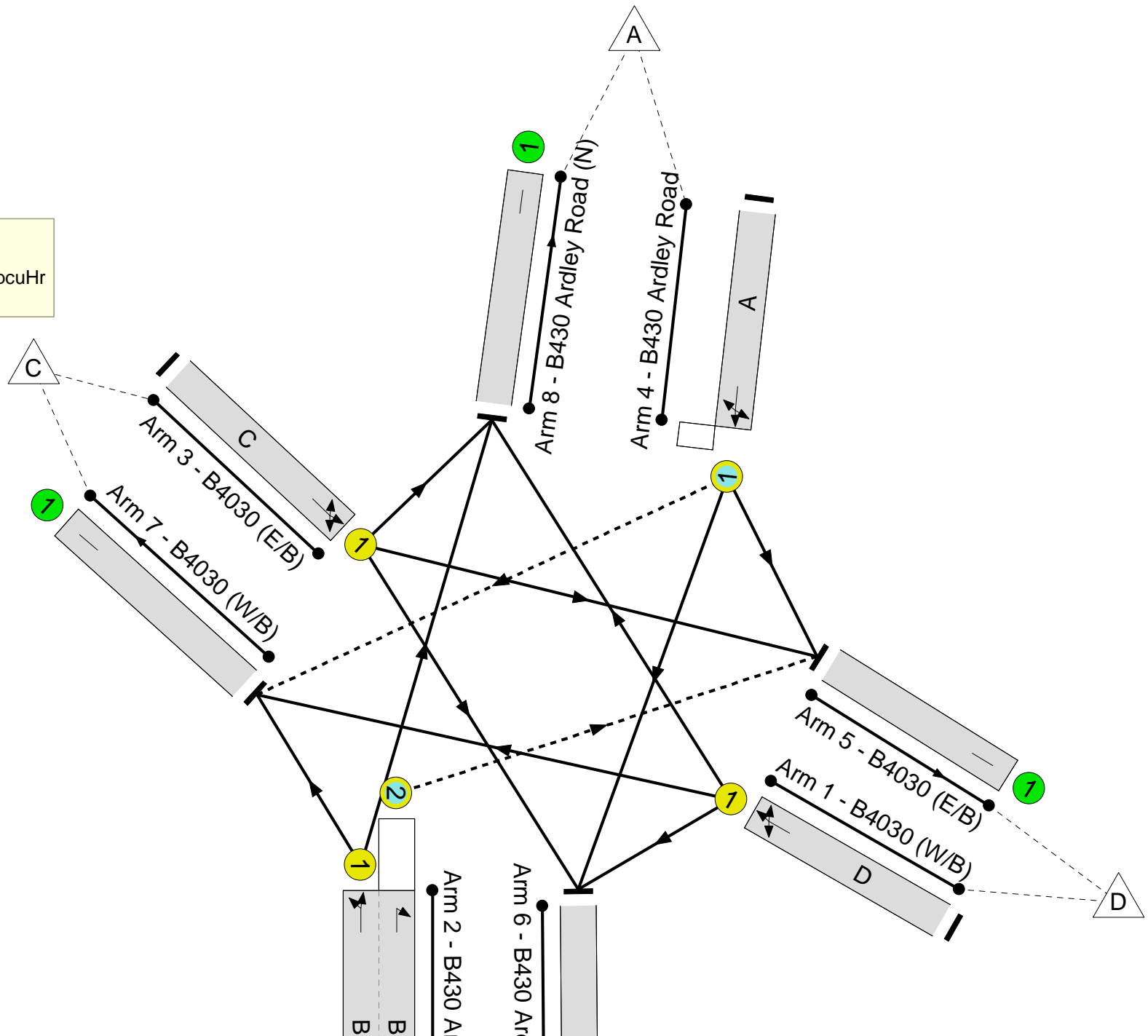
Signal Timings Diagram



Full Input Data And Results
Network Layout Diagram

Full Input Data And Results

 **Unnamed Junction**
PRC: -20.4 %
Total Traffic Delay: 90.3 pcuHr



Full Input Data And Results

Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network	-	-	N/A	-	-		-	-	-	-	-	-	108.4%
Unnamed Junction	-	-	N/A	-	-		-	-	-	-	-	-	108.4%
1/1	B4030 (W/B) Left Ahead Right	U	N/A	N/A	D		1	27	-	460	1819	424	108.4%
2/1+2/2	B430 Ardley Road Right Left Ahead	U+O	N/A	N/A	B		1	44	-	770	1860:1713	749	102.8%
3/1	B4030 (E/B) Ahead Right Left	U	N/A	N/A	C		1	32	-	509	1761	484	105.1%
4/1	B430 Ardley Road Left Ahead Right	O	N/A	N/A	A		1	43	-	358	1902	697	51.4%
5/1	B4030 (E/B)	U	N/A	N/A	-		-	-	-	560	Inf	Inf	0.0%
6/1	B430 Ardley Road (S)	U	N/A	N/A	-		-	-	-	521	Inf	Inf	0.0%
7/1	B4030 (W/B)	U	N/A	N/A	-		-	-	-	511	Inf	Inf	0.0%
8/1	B430 Ardley Road (N)	U	N/A	N/A	-		-	-	-	505	Inf	Inf	0.0%

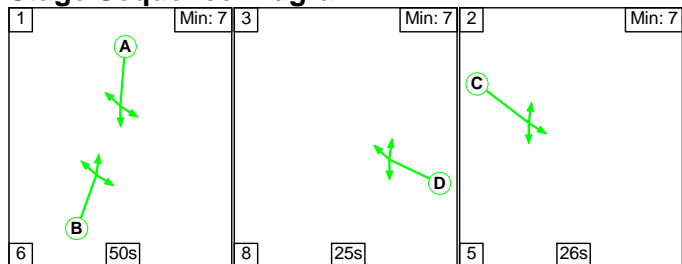
Full Input Data And Results

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	-	-	175	0	19	27.3	62.5	0.5	90.3	-	-	-	-
Unnamed Junction	-	-	175	0	19	27.3	62.5	0.5	90.3	-	-	-	-
1/1	460	424	-	-	-	7.5	22.8	-	30.4	237.6	16.5	22.8	39.3
2/1+2/2	770	749	173	0	11	8.9	20.1	0.4	29.5	137.8	24.9	20.1	45.1
3/1	509	484	-	-	-	7.9	19.0	-	26.9	190.5	18.2	19.0	37.2
4/1	358	358	3	0	8	2.9	0.5	0.1	3.6	35.7	9.2	0.5	9.8
5/1	539	539	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/1	509	509	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
7/1	479	479	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
8/1	489	489	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
<p>C1 PRC for Signalled Lanes (%): -20.4 Total Delay for Signalled Lanes (pcuHr): 90.33</p> <p> PRC Over All Lanes (%): -20.4 Total Delay Over All Lanes(pcuHr): 90.33 Cycle Time (s): 120</p>													

Full Input Data And Results

Scenario 7: 'New Scenario' (FG7: '2019 Recalculated Base (No Consented Dev) AM', Plan 1: 'Network Control Plan 1')

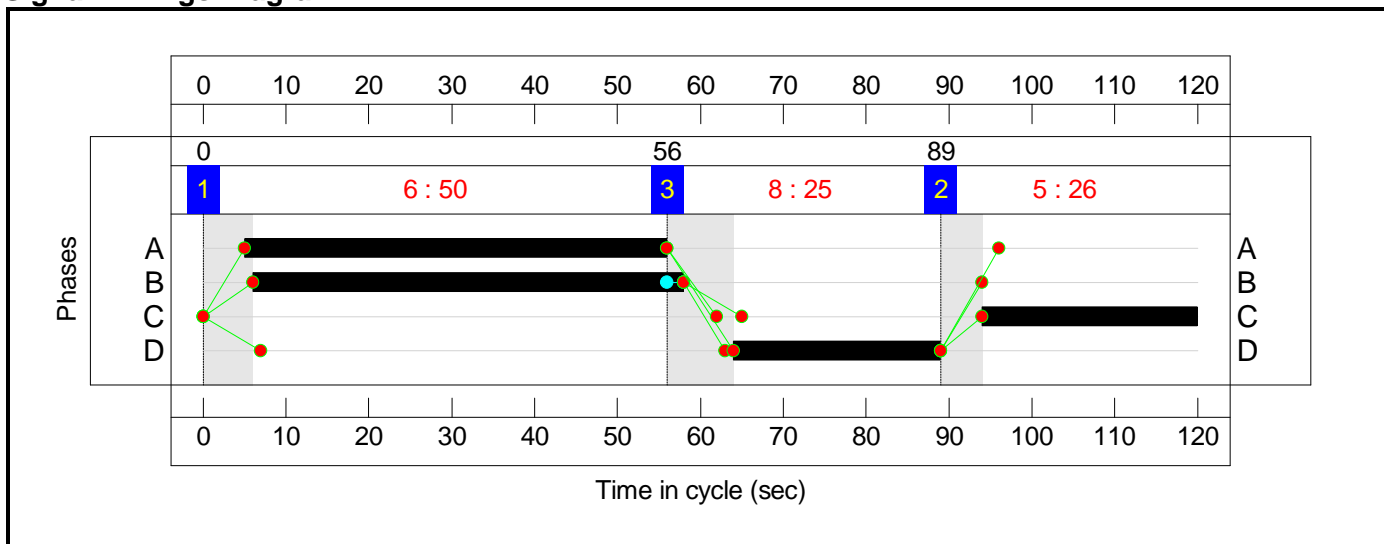
Stage Sequence Diagram



Stage Timings


Stage	1	3	2
Duration	50	25	26
Change Point	0	56	89

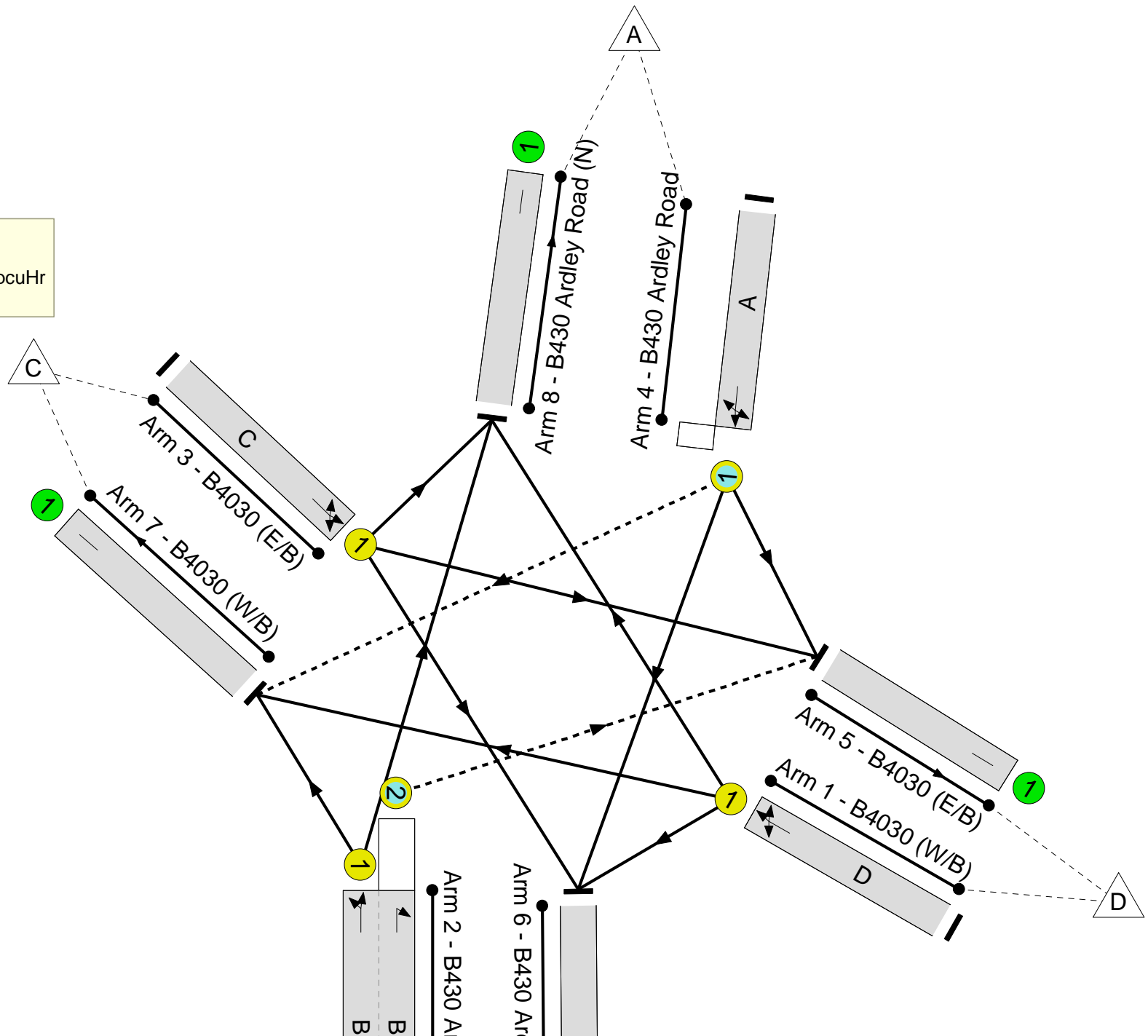
Signal Timings Diagram



Full Input Data And Results
Network Layout Diagram

Full Input Data And Results

 **Unnamed Junction**
PRC: 18.5 %
Total Traffic Delay: 19.1 pcuHr



Full Input Data And Results

Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network	-	-	N/A	-	-		-	-	-	-	-	-	76.0%
Unnamed Junction	-	-	N/A	-	-		-	-	-	-	-	-	76.0%
1/1	B4030 (W/B) Left Ahead Right	U	N/A	N/A	D		1	25	-	298	1819	394	75.6%
2/1+2/2	B430 Ardley Road Right Left Ahead	U+O	N/A	N/A	B		1	52	-	366	1860:1713	847	43.2%
3/1	B4030 (E/B) Ahead Right Left	U	N/A	N/A	C		1	26	-	301	1761	396	76.0%
4/1	B430 Ardley Road Left Ahead Right	O	N/A	N/A	A		1	51	-	588	1902	824	71.3%
5/1	B4030 (E/B)	U	N/A	N/A	-		-	-	-	323	Inf	Inf	0.0%
6/1	B430 Ardley Road (S)	U	N/A	N/A	-		-	-	-	675	Inf	Inf	0.0%
7/1	B4030 (W/B)	U	N/A	N/A	-		-	-	-	210	Inf	Inf	0.0%
8/1	B430 Ardley Road (N)	U	N/A	N/A	-		-	-	-	345	Inf	Inf	0.0%

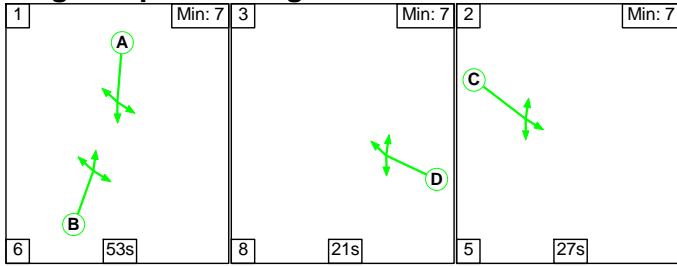
Full Input Data And Results

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	-	-	74	0	2	14.1	4.6	0.4	19.1	-	-	-	-
Unnamed Junction	-	-	74	0	2	14.1	4.6	0.4	19.1	-	-	-	-
1/1	298	298	-	-	-	3.6	1.5	-	5.1	62.2	9.3	1.5	10.8
2/1+2/2	366	366	59	0	2	2.2	0.4	0.4	3.0	29.2	6.8	0.4	7.2
3/1	301	301	-	-	-	3.6	1.5	-	5.2	61.8	9.4	1.5	10.9
4/1	588	588	15	0	0	4.6	1.2	0.0	5.8	35.5	16.0	1.2	17.2
5/1	323	323	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/1	675	675	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
7/1	210	210	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
8/1	345	345	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
<p>C1 PRC for Signalled Lanes (%): 18.5 Total Delay for Signalled Lanes (pcuHr): 19.09</p> <p> PRC Over All Lanes (%): 18.5 Total Delay Over All Lanes(pcuHr): 19.09 Cycle Time (s): 120</p>													

Full Input Data And Results

Scenario 8: 'New Scenario' (FG8: '2019 Recalculated Base (No Consented Dev) PM', Plan 1: 'Network Control Plan 1')

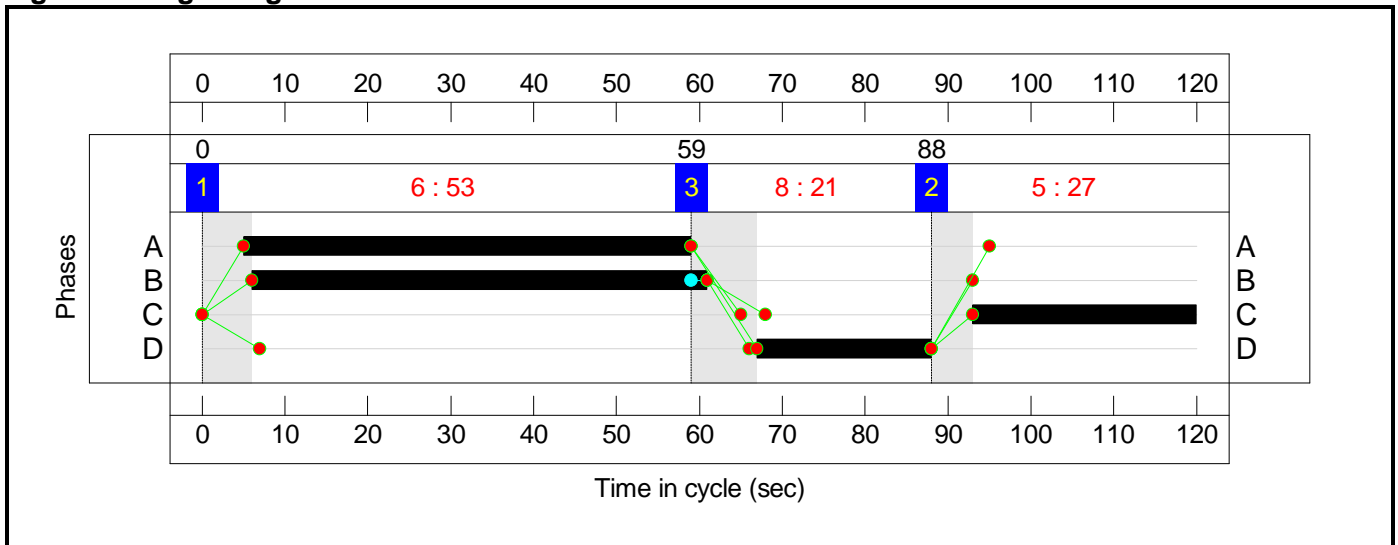
Stage Sequence Diagram



Stage Timings


Stage	1	3	2
Duration	53	21	27
Change Point	0	59	88

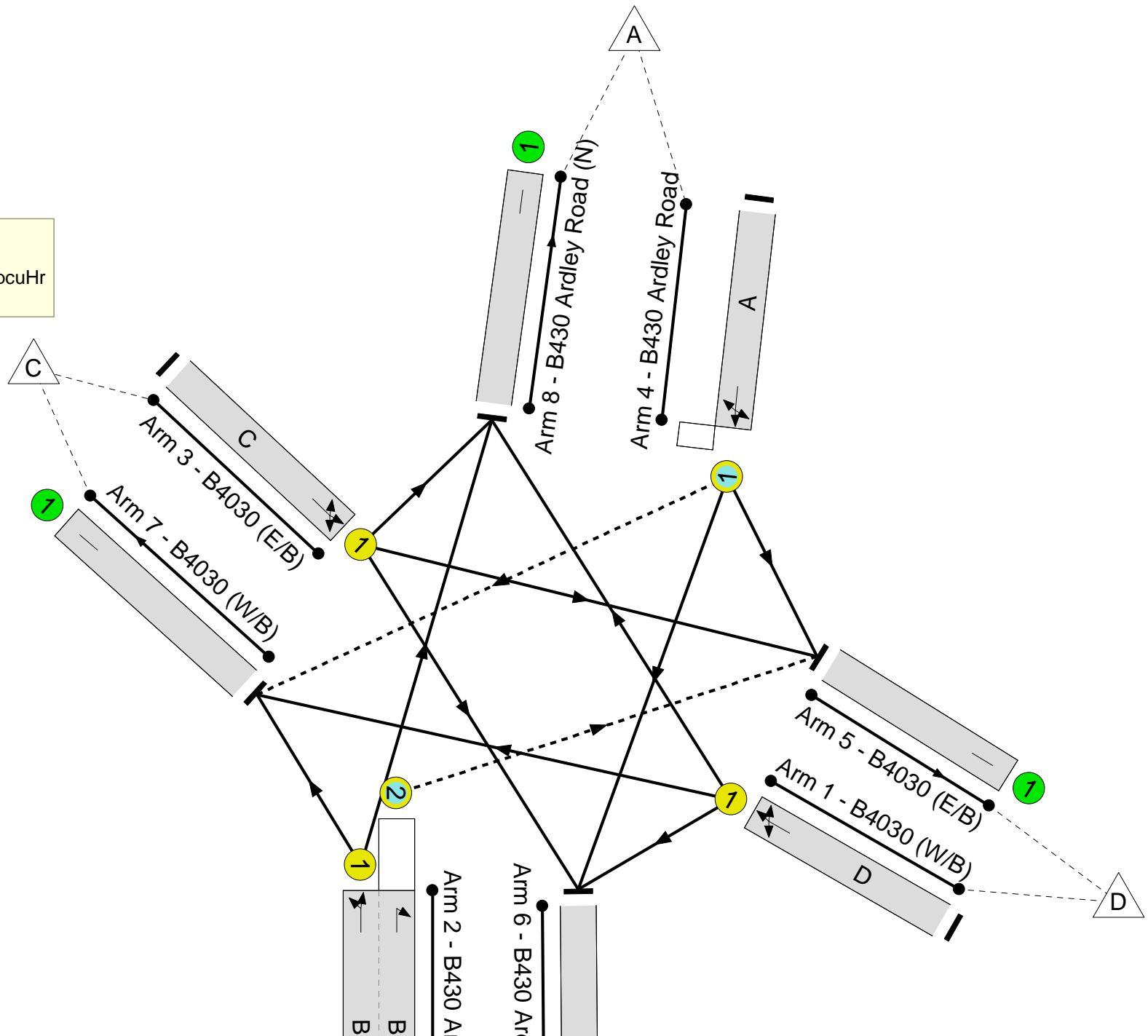
Signal Timings Diagram



Full Input Data And Results
Network Layout Diagram

Full Input Data And Results

 **Unnamed Junction**
PRC: 20.5 %
Total Traffic Delay: 17.8 pcuHr



Full Input Data And Results

Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network	-	-	N/A	-	-		-	-	-	-	-	-	74.7%
Unnamed Junction	-	-	N/A	-	-		-	-	-	-	-	-	74.7%
1/1	B4030 (W/B) Left Ahead Right	U	N/A	N/A	D		1	21	-	249	1819	333	74.7%
2/1+2/2	B430 Ardley Road Right Left Ahead	U+O	N/A	N/A	B		1	55	-	649	1860:1713	926	70.1%
3/1	B4030 (E/B) Ahead Right Left	U	N/A	N/A	C		1	27	-	307	1761	411	74.7%
4/1	B430 Ardley Road Left Ahead Right	O	N/A	N/A	A		1	54	-	338	1902	872	38.8%
5/1	B4030 (E/B)	U	N/A	N/A	-		-	-	-	435	Inf	Inf	0.0%
6/1	B430 Ardley Road (S)	U	N/A	N/A	-		-	-	-	413	Inf	Inf	0.0%
7/1	B4030 (W/B)	U	N/A	N/A	-		-	-	-	218	Inf	Inf	0.0%
8/1	B430 Ardley Road (N)	U	N/A	N/A	-		-	-	-	477	Inf	Inf	0.0%

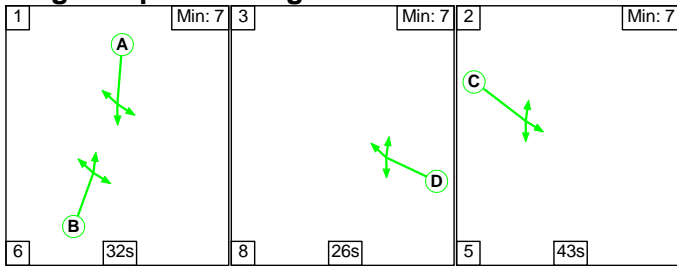
Full Input Data And Results

Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network	-	-	185	0	4	13.0	4.3	0.4	17.8	-	-	-	-
Unnamed Junction	-	-	185	0	4	13.0	4.3	0.4	17.8	-	-	-	-
1/1	249	249	-	-	-	3.2	1.4	-	4.6	67.0	7.8	1.4	9.2
2/1+2/2	649	649	175	0	4	4.2	1.2	0.4	5.7	31.5	13.7	1.2	14.9
3/1	307	307	-	-	-	3.6	1.4	-	5.1	59.6	9.5	1.4	10.9
4/1	338	338	10	0	0	2.0	0.3	0.0	2.4	25.1	7.4	0.3	7.7
5/1	435	435	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/1	413	413	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
7/1	218	218	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
8/1	477	477	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
<p>C1 PRC for Signalled Lanes (%): 20.5 Total Delay for Signalled Lanes (pcuHr): 17.75</p> <p> PRC Over All Lanes (%): 20.5 Total Delay Over All Lanes(pcuHr): 17.75 Cycle Time (s): 120</p>													

Full Input Data And Results

Scenario 9: 'New Scenario' (FG9: '2019 Recalculated Base + Consented Site Traffic AM', Plan 1: 'Network Control Plan 1')

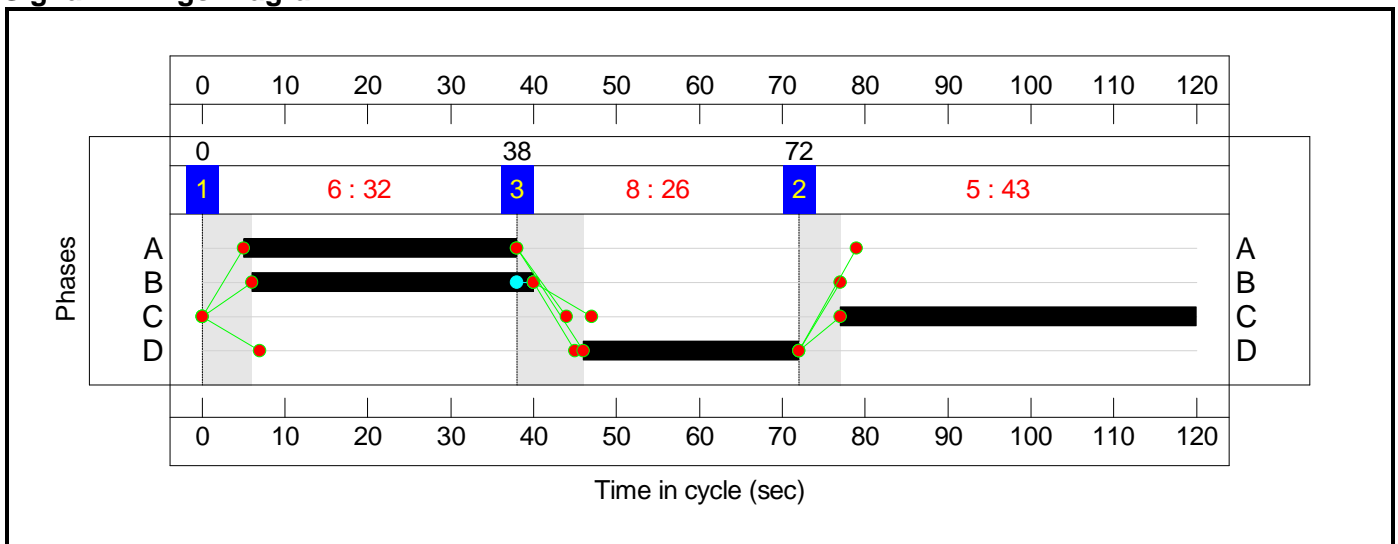
Stage Sequence Diagram



Stage Timings

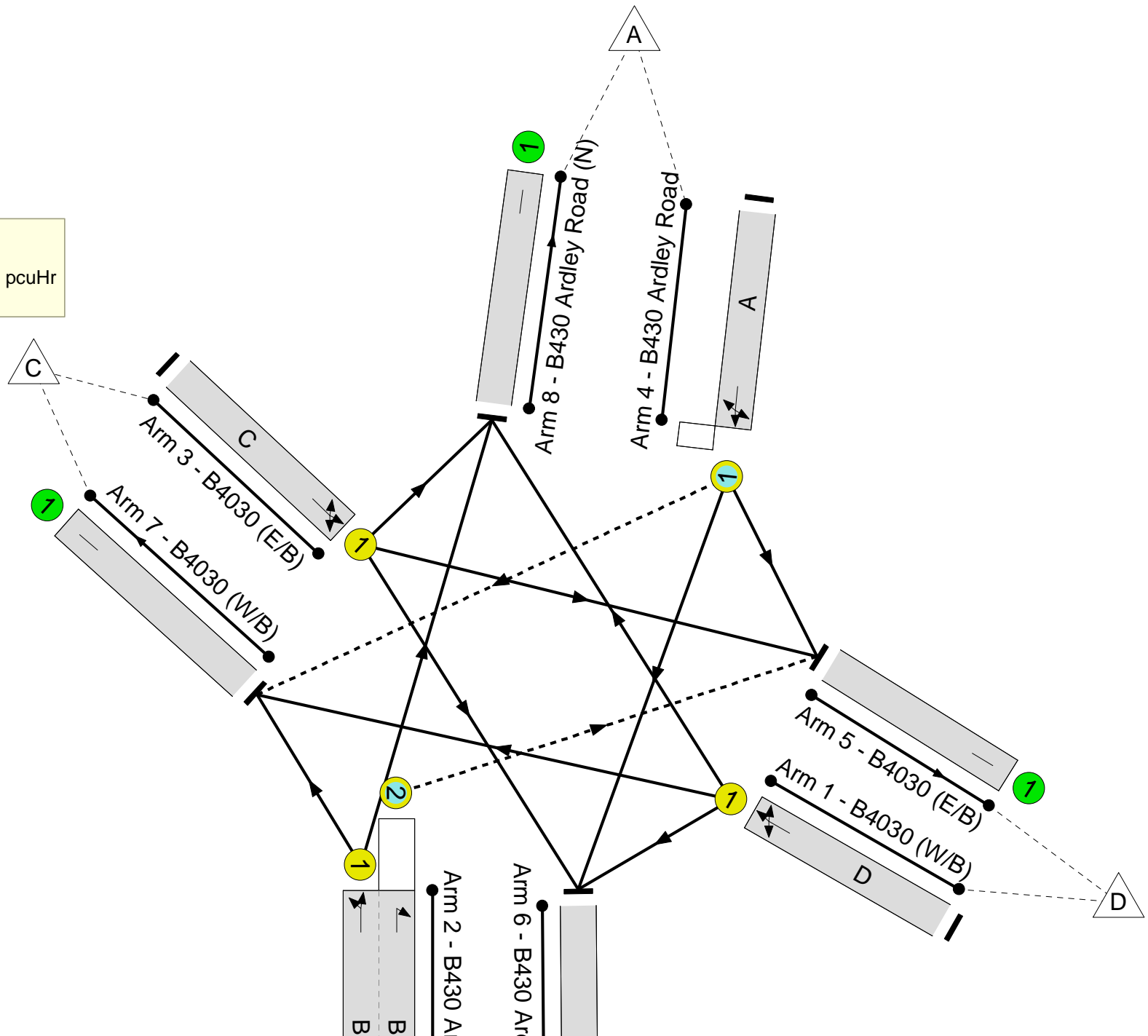

Stage	1	3	2
Duration	32	26	43
Change Point	0	38	72

Signal Timings Diagram



Full Input Data And Results
Network Layout Diagram

Unnamed Junction
PRC: -42.8 %
Total Traffic Delay: 204.8 pcuHr



Full Input Data And Results

Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network	-	-	N/A	-	-		-	-	-	-	-	-	128.5%
Unnamed Junction	-	-	N/A	-	-		-	-	-	-	-	-	128.5%
1/1	B4030 (W/B) Left Ahead Right	U	N/A	N/A	D		1	26	-	526	1819	409	128.5%
2/1+2/2	B430 Ardley Road Right Left Ahead	U+O	N/A	N/A	B		1	34	-	462	1860:1713	557	82.9%
3/1	B4030 (E/B) Ahead Right Left	U	N/A	N/A	C		1	43	-	774	1761	646	119.9%
4/1	B430 Ardley Road Left Ahead Right	O	N/A	N/A	A		1	33	-	588	1902	539	109.1%
5/1	B4030 (E/B)	U	N/A	N/A	-		-	-	-	653	Inf	Inf	0.0%
6/1	B430 Ardley Road (S)	U	N/A	N/A	-		-	-	-	818	Inf	Inf	0.0%
7/1	B4030 (W/B)	U	N/A	N/A	-		-	-	-	534	Inf	Inf	0.0%
8/1	B430 Ardley Road (N)	U	N/A	N/A	-		-	-	-	345	Inf	Inf	0.0%

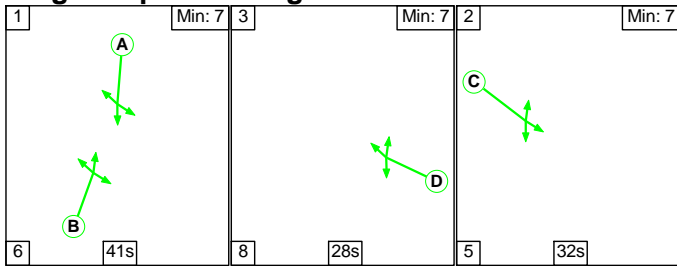
Full Input Data And Results

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	-	-	14	0	60	44.9	159.4	0.4	204.8	-	-	-	-
Unnamed Junction	-	-	14	0	60	44.9	159.4	0.4	204.8	-	-	-	-
1/1	526	409	-	-	-	12.6	60.5	-	73.1	500.5	21.4	60.5	82.0
2/1+2/2	462	462	0	0	60	4.9	2.3	0.4	7.6	59.6	13.2	2.3	15.5
3/1	774	646	-	-	-	17.4	67.0	-	84.5	392.8	33.7	67.0	100.7
4/1	588	539	14	0	0	10.0	29.5	0.0	39.5	242.1	21.2	29.5	50.8
5/1	558	558	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/1	722	722	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
7/1	451	451	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
8/1	325	325	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
<p>C1 PRC for Signalled Lanes (%): -42.8 Total Delay for Signalled Lanes (pcuHr): 204.77 PRC Over All Lanes (%): -42.8 Total Delay Over All Lanes(pcuHr): 204.77 Cycle Time (s): 120</p>													

Full Input Data And Results

Scenario 10: 'New Scenario' (FG10: '2019 Recalculated Base + Consented Site Traffic PM', Plan 1: 'Network Control Plan 1')

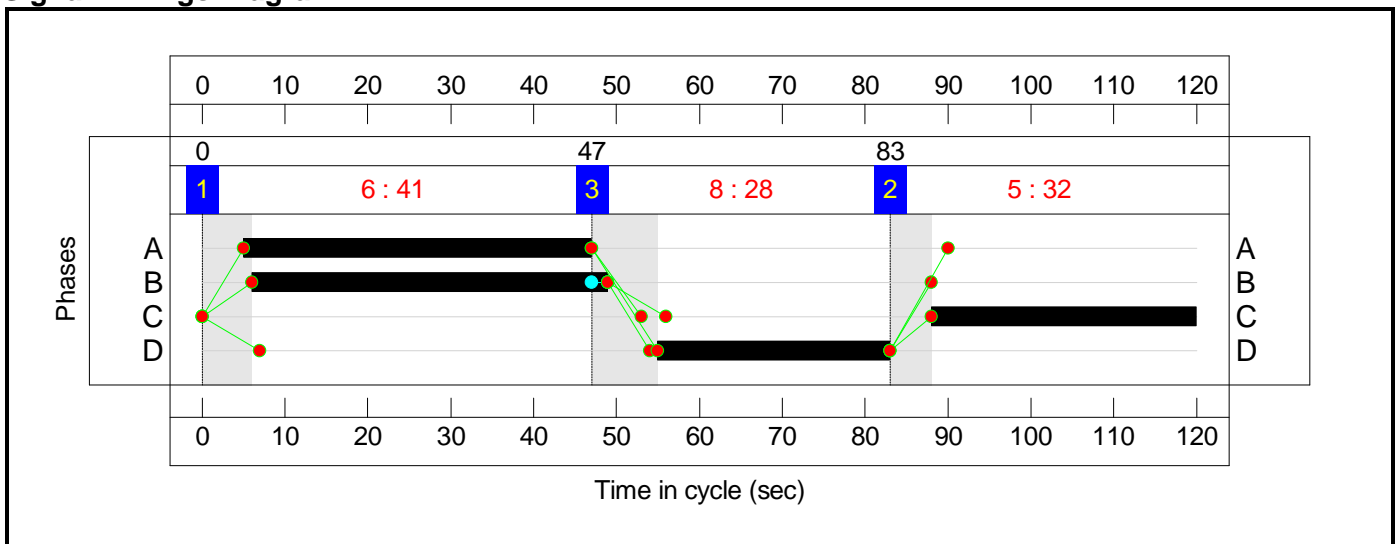
Stage Sequence Diagram



Stage Timings


Stage	1	3	2
Duration	41	28	32
Change Point	0	47	83

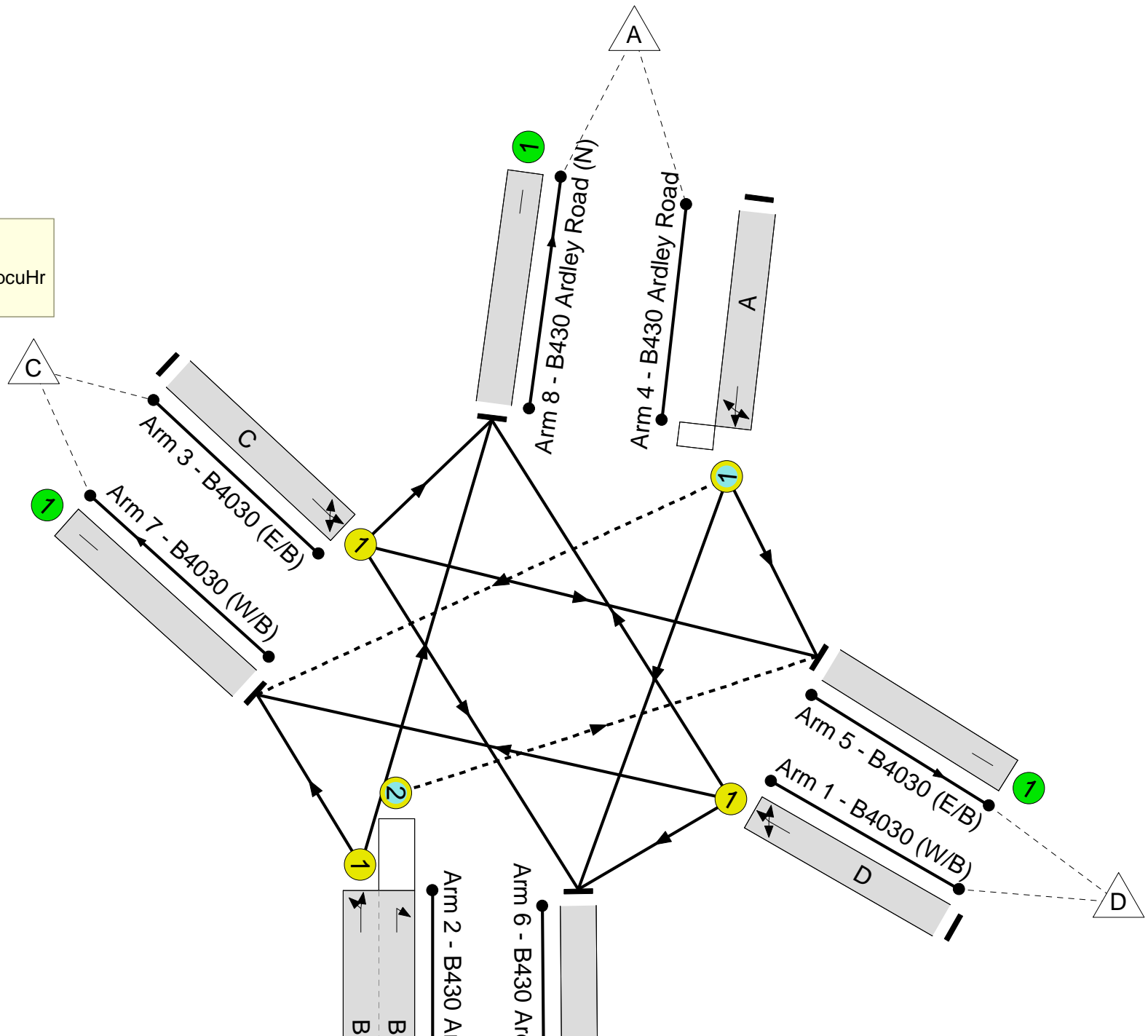
Signal Timings Diagram



Full Input Data And Results
Network Layout Diagram

Full Input Data And Results

 **Unnamed Junction**
PRC: -12.7 %
Total Traffic Delay: 57.8 pcuHr



Full Input Data And Results

Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network	-	-	N/A	-	-		-	-	-	-	-	-	101.5%
Unnamed Junction	-	-	N/A	-	-		-	-	-	-	-	-	101.5%
1/1	B4030 (W/B) Left Ahead Right	U	N/A	N/A	D		1	28	-	446	1819	440	101.5%
2/1+2/2	B430 Ardley Road Right Left Ahead	U+O	N/A	N/A	B		1	43	-	732	1860:1713	733	99.8%
3/1	B4030 (E/B) Ahead Right Left	U	N/A	N/A	C		1	32	-	478	1761	484	98.7%
4/1	B430 Ardley Road Left Ahead Right	O	N/A	N/A	A		1	42	-	338	1902	681	49.6%
5/1	B4030 (E/B)	U	N/A	N/A	-		-	-	-	526	Inf	Inf	0.0%
6/1	B430 Ardley Road (S)	U	N/A	N/A	-		-	-	-	493	Inf	Inf	0.0%
7/1	B4030 (W/B)	U	N/A	N/A	-		-	-	-	498	Inf	Inf	0.0%
8/1	B430 Ardley Road (N)	U	N/A	N/A	-		-	-	-	477	Inf	Inf	0.0%

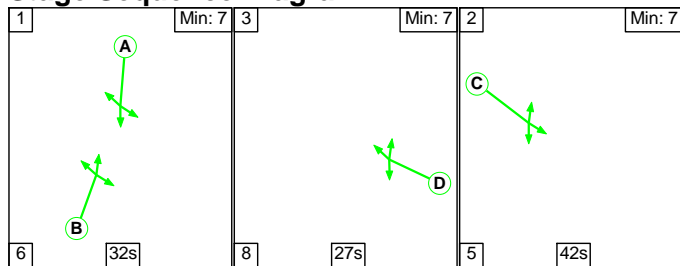
Full Input Data And Results

Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network	-	-	171	0	18	21.9	35.4	0.4	57.8	-	-	-	-
Unnamed Junction	-	-	171	0	18	21.9	35.4	0.4	57.8	-	-	-	-
1/1	446	440	-	-	-	5.9	12.3	-	18.2	147.1	15.1	12.3	27.4
2/1+2/2	732	732	168	0	11	7.4	13.2	0.4	21.0	103.1	21.9	13.2	35.1
3/1	478	478	-	-	-	5.7	9.5	-	15.2	114.6	15.8	9.5	25.3
4/1	338	338	3	0	7	2.8	0.5	0.1	3.4	36.0	8.7	0.5	9.2
5/1	526	526	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/1	492	492	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
7/1	493	493	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
8/1	477	477	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
<p>C1 PRC for Signalled Lanes (%): -12.7 Total Delay for Signalled Lanes (pcuHr): 57.79</p> <p> PRC Over All Lanes (%): -12.7 Total Delay Over All Lanes(pcuHr): 57.79 Cycle Time (s): 120</p>													

Full Input Data And Results

Scenario 11: 'New Scenario' (FG11: '2019 Recalculated Base + Consented Site Traffic + Proposed School AM', Plan 1: 'Network Control Plan 1')

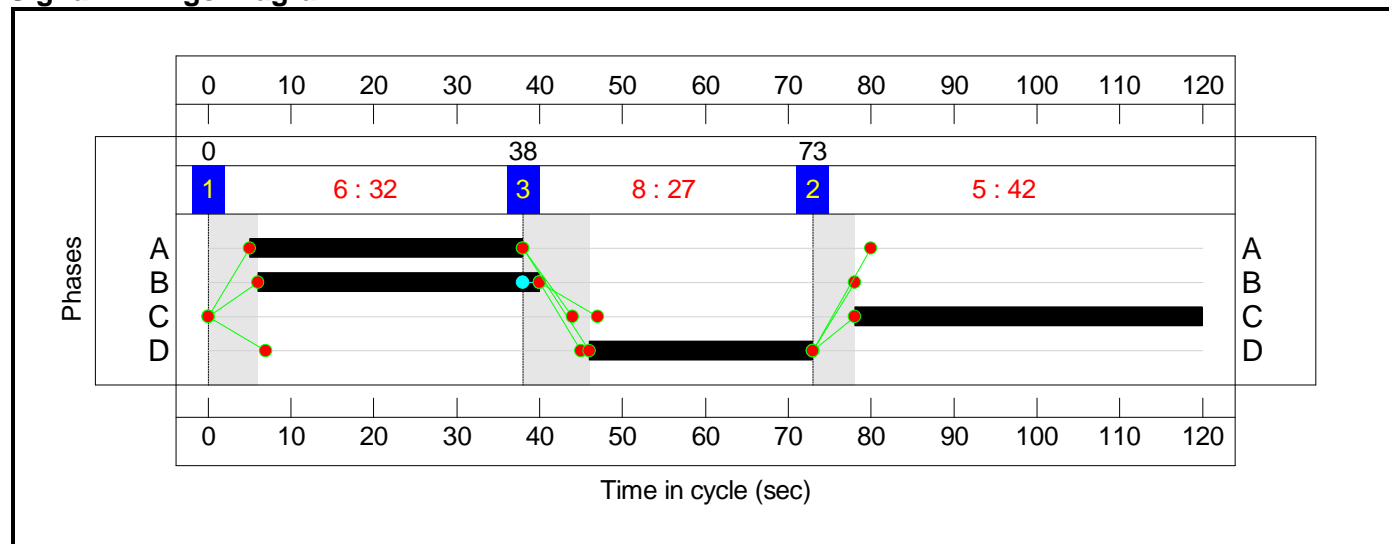
Stage Sequence Diagram




Stage Timings

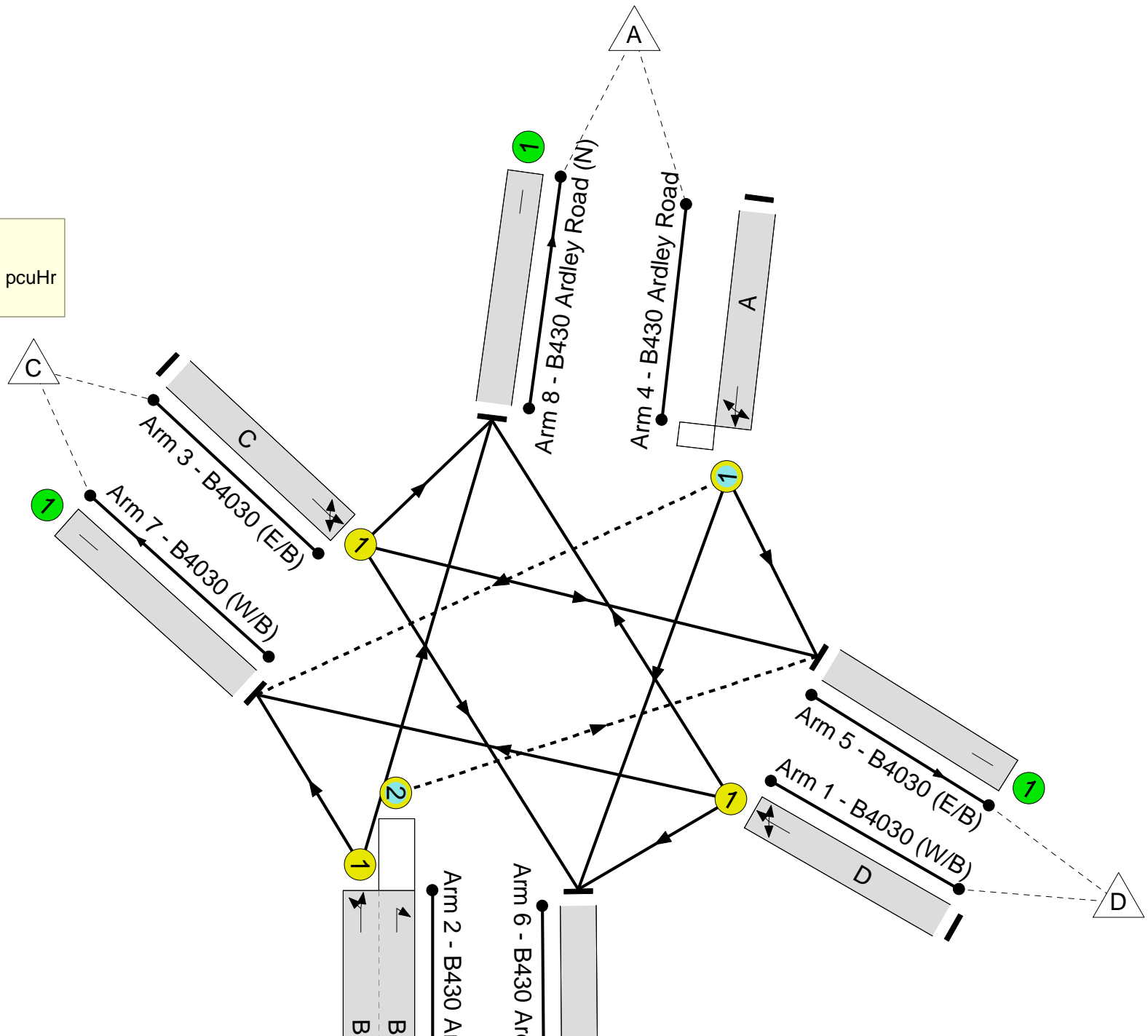
Stage	1	3	2
Duration	32	27	42
Change Point	0	38	73

Signal Timings Diagram



Full Input Data And Results
Network Layout Diagram

 **Unnamed Junction**
PRC: -36.7 %
Total Traffic Delay: 185.6 pcuHr



Full Input Data And Results

Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network	-	-	N/A	-	-		-	-	-	-	-	-	123.0%
Unnamed Junction	-	-	N/A	-	-		-	-	-	-	-	-	123.0%
1/1	B4030 (W/B) Left Ahead Right	U	N/A	N/A	D		1	27	-	522	1819	424	123.0%
2/1+2/2	B430 Ardley Road Right Left Ahead	U+O	N/A	N/A	B		1	34	-	460	1860:1713	556	82.7%
3/1	B4030 (E/B) Ahead Right Left	U	N/A	N/A	C		1	42	-	744	1761	631	117.9%
4/1	B430 Ardley Road Left Ahead Right	O	N/A	N/A	A		1	33	-	588	1902	539	109.1%
5/1	B4030 (E/B)	U	N/A	N/A	-		-	-	-	632	Inf	Inf	0.0%
6/1	B430 Ardley Road (S)	U	N/A	N/A	-		-	-	-	809	Inf	Inf	0.0%
7/1	B4030 (W/B)	U	N/A	N/A	-		-	-	-	528	Inf	Inf	0.0%
8/1	B430 Ardley Road (N)	U	N/A	N/A	-		-	-	-	345	Inf	Inf	0.0%

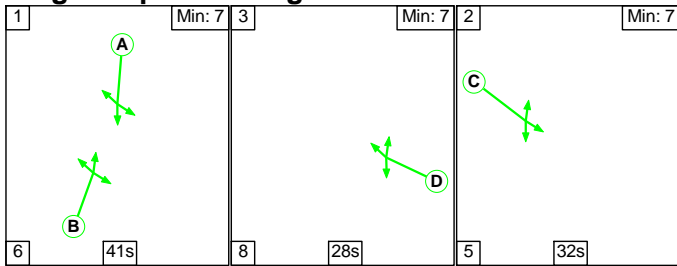
Full Input Data And Results

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	-	-	14	0	60	42.5	142.7	0.4	185.6	-	-	-	-
Unnamed Junction	-	-	14	0	60	42.5	142.7	0.4	185.6	-	-	-	-
1/1	522	424	-	-	-	11.5	51.3	-	62.8	433.3	20.7	51.3	72.0
2/1+2/2	460	460	0	0	60	4.9	2.3	0.4	7.6	59.3	13.1	2.3	15.4
3/1	744	631	-	-	-	16.1	59.6	-	75.7	366.3	31.7	59.6	91.3
4/1	588	539	14	0	0	10.0	29.5	0.0	39.5	242.1	21.2	29.5	50.8
5/1	548	548	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/1	720	720	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
7/1	458	458	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
8/1	328	328	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
C1			PRC for Signalled Lanes (%):		-36.7	Total Delay for Signalled Lanes (pcuHr):		185.65					
			PRC Over All Lanes (%):		-36.7	Total Delay Over All Lanes(pcuHr):		185.65	Cycle Time (s): 120				

Full Input Data And Results

Scenario 12: 'New Scenario' (FG12: '2019 Recalculated Base + Consented Site Traffic + Proposed School PM', Plan 1: 'Network Control Plan 1')

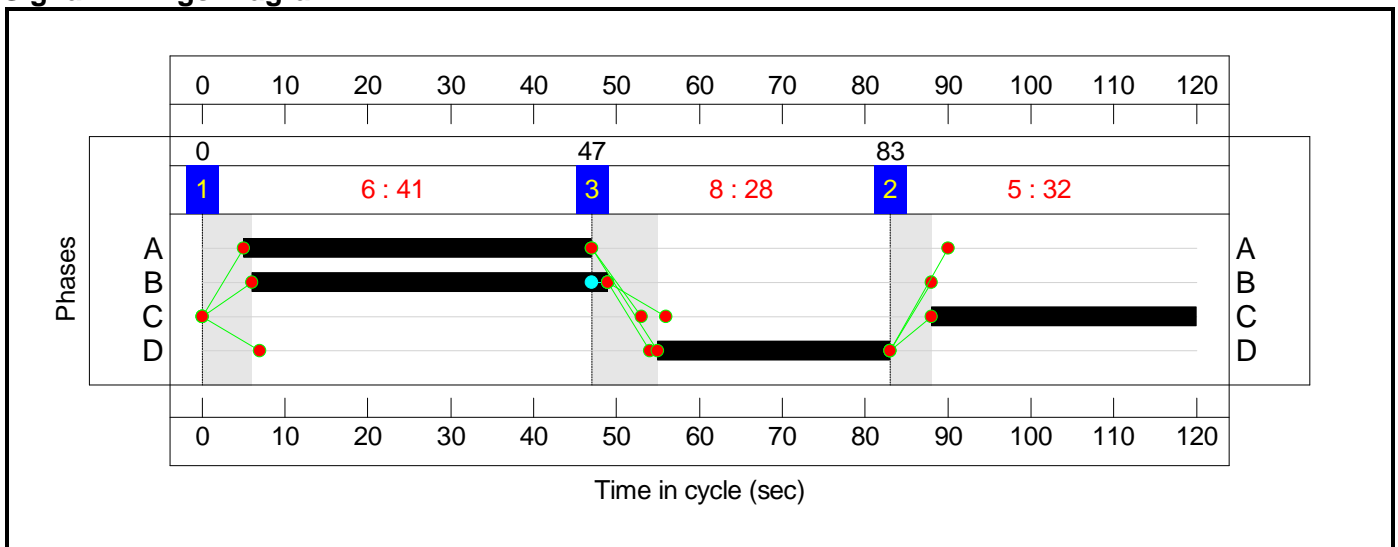
Stage Sequence Diagram




Stage Timings

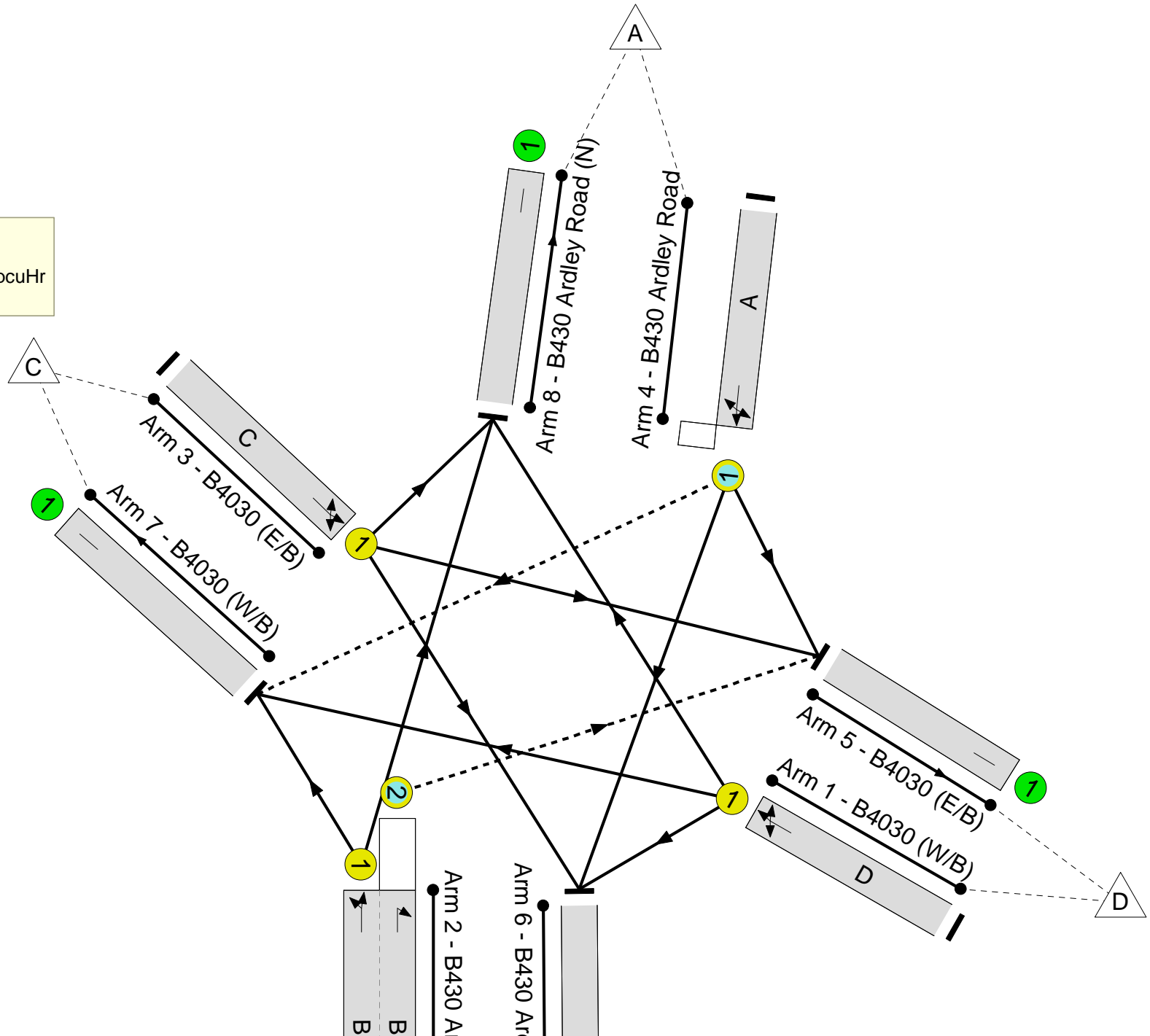
Stage	1	3	2
Duration	41	28	32
Change Point	0	47	83

Signal Timings Diagram



Full Input Data And Results
Network Layout Diagram

 **Unnamed Junction**
PRC: -12.7 %
Total Traffic Delay: 61.9 pcuHr



Full Input Data And Results

Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network	-	-	N/A	-	-		-	-	-	-	-	-	101.5%
Unnamed Junction	-	-	N/A	-	-		-	-	-	-	-	-	101.5%
1/1	B4030 (W/B) Left Ahead Right	U	N/A	N/A	D		1	28	-	446	1819	440	101.5%
2/1+2/2	B430 Ardley Road Right Left Ahead	U+O	N/A	N/A	B		1	43	-	732	1860:1713	733	99.8%
3/1	B4030 (E/B) Ahead Right Left	U	N/A	N/A	C		1	32	-	491	1761	484	101.4%
4/1	B430 Ardley Road Left Ahead Right	O	N/A	N/A	A		1	42	-	338	1902	681	49.6%
5/1	B4030 (E/B)	U	N/A	N/A	-		-	-	-	535	Inf	Inf	0.0%
6/1	B430 Ardley Road (S)	U	N/A	N/A	-		-	-	-	497	Inf	Inf	0.0%
7/1	B4030 (W/B)	U	N/A	N/A	-		-	-	-	498	Inf	Inf	0.0%
8/1	B430 Ardley Road (N)	U	N/A	N/A	-		-	-	-	477	Inf	Inf	0.0%

Full Input Data And Results

Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network	-	-	171	0	18	22.6	38.8	0.4	61.9	-	-	-	-
Unnamed Junction	-	-	171	0	18	22.6	38.8	0.4	61.9	-	-	-	-
1/1	446	440	-	-	-	5.9	12.3	-	18.2	147.1	15.1	12.3	27.4
2/1+2/2	732	732	168	0	11	7.4	13.2	0.4	21.0	103.1	21.9	13.2	35.1
3/1	491	484	-	-	-	6.4	12.9	-	19.3	141.5	16.6	12.9	29.5
4/1	338	338	3	0	7	2.8	0.5	0.1	3.4	36.0	8.7	0.5	9.2
5/1	531	531	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/1	494	494	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
7/1	493	493	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
8/1	476	476	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
<p>C1 PRC for Signalled Lanes (%): -12.7 Total Delay for Signalled Lanes (pcuHr): 61.86</p> <p> PRC Over All Lanes (%): -12.7 Total Delay Over All Lanes(pcuHr): 61.86 Cycle Time (s): 120</p>													

Appendix E

Junction Capacity Assessment Results Summary Table

Heyford Park Free School
Transport Statement

