Transport Assessment

Residential Development – Northons Lane, Holbeach

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1.0 INTRODUCTION

OVERVIEW

1.1 attp has been commissioned by Gleeson Regeneration Ltd to prepare a Transport Assessment (TA) in support of a detailed planning application for residential development on land to the south of the A17 and north of Northons Lane in Holbeach. The local planning authority is South Holland District Council (SHDC) and the highways authority is Lincolnshire County Council (LCC).

1.2 The site is located to the north western extent of the Holbeach urban area c.800m from the town centre, 12km north east of Spalding town centre, 23km south of Boston town centre and 36km north east of Peterborough city centre.

1.3 The site is bound on its northern side by the A17, on its western side by the New River (Drain) undeveloped land and the A151, on its southern side by Northons lane and on its eastern side by the residential dwellings fronting Cedar Drive and Oakwood Glade. Further afield to the north and east is the residential settlement of Holbeach and the facilities associated with a town centre. To the north and west is predominantly undeveloped land. The location of the site is shown on the plan attached at **Appendix 1**.

1.4 A site layout has been developed which comprises 110 residential dwellings which will be accessed via extensions to two existing cul de sacs Oakwood Glade and Cedar Drive. A copy of the proposed site layout is attached at **Appendix 2**.

POLICY CONTEXT

National Planning Policy Framework – February 2019

1.5 The revised NPPF was published in February 2019 and represents the Government's latest approach to planning policy.

1.6 The NPPF states that:

Transport issues should be considered from the earliest stages of plan-making and development proposals, so that:

a) the potential impacts of development on transport networks can be addressed;

b) opportunities from existing or proposed transport infrastructure, and changing transport technology and usage, are realised – for example in relation to the scale, location or density of development that can be accommodated;

c) opportunities to promote walking, cycling and public transport use are identified and pursued;

d) the environmental impacts of traffic and transport infrastructure can be identified, assessed and taken into account – including appropriate opportunities for avoiding and mitigating any adverse effects, and for net environmental gains; and

e) patterns of movement, streets, parking and other transport considerations are integral to the design of schemes and contribute to making high quality places.

The planning system should actively manage patterns of growth in support of these objectives. Significant development should be focused on locations which are or can be made sustainable, through limiting the need to travel and offering a genuine choice of transport modes. This can help to reduce congestion and emissions and improve air quality and public health. However, opportunities to maximise sustainable transport solutions will vary between urban and rural areas, and this should be taken into account in both plan-making and decision-making.

1.7 The NPPF also states that when considering development proposals:

In assessing sites that may be allocated for development in plans, or specific applications for development, it should be ensured that

a) appropriate opportunities to promote sustainable transport modes can be – or have been – taken up, given the type of development and its location;

b) safe and suitable access to the site can be achieved for all users; and

c) any significant impacts from the development on the transport network (in terms of capacity and congestion), or on highway safety, can be cost effectively mitigated to an acceptable degree.

1.8 It also sets out that:

Development should only be prevented or refused on highways grounds if there would be an unacceptable impact on highway safety, or the residual cumulative impacts on the road network would be severe.

Within this context, applications for development should:

a) give priority first to pedestrian and cycle movements, both within the scheme and with neighbouring areas; and second – so far as possible – to facilitating access to high quality public transport, with layouts that maximise the catchment area for bus or other public transport services, and appropriate facilities that encourage public transport use;

b) address the needs of people with disabilities and reduced mobility in relation to all modes of transport;

c) create places that are safe, secure and attractive – which minimise the scope for conflicts between pedestrians, cyclists and vehicles, avoid unnecessary street clutter, and respond to local character and design standards;

d) allow for the efficient delivery of goods, and access by service and emergency vehicles; and

e) be designed to enable charging of plug-in and other ultra-low emission vehicles in safe, accessible and convenient locations.

All developments that will generate significant amounts of movement should be required to provide a travel plan, and the application should be supported by a transport statement or transport assessment so that the likely impacts of the proposal can be assessed.

4th Lincolnshire Local Transport Plan 2013/14 – 2022/23 (April 2013)

1.9 The 4th Lincolnshire Local Transport Plan (LTP4) covers the 10 year period 2013/14 to 2022/23. It builds on the strategies and policies adopted during the first 3 LTPs. Over the 10 year period of LTP4, it is expected that the individual strategies and policies which make up the overarching LTP will continue to evolve to reflect ongoing changes at the national level and new local initiatives.

1.10 Transport impacts on everyone's lives in many ways, be it catching a bus to work, walking to school or driving to a hospital appointment. Good transport is essential for a thriving economy and for social well-being, as well as supporting a range of wider aims and objectives such as encouraging a healthier lifestyle.

1.11 Both nationally and locally, pressure on existing transport networks continues to grow as the demand for the movement of people and goods increases. At the same time, concerns about the environmental impacts of transport continue to increase. Three key challenges have been identified for the 4th Lincolnshire LTP:

- Supporting growth and the local economy;
- Improving access to employment, training and key services; and
- Contributing to a healthier community.

1.12 Although LTP4 only covers the period from 2013/14 to 2022/23, it is important that it is set within an overall vision of how Lincolnshire's transport system will develop in the longer term. To this end, the 'Vision for 2030' shown in Figure 8 below was adopted for previous LTPs and this holds good for LTP4.



Fig 8 A Longer Term Vision for Transport in Lincolnshire

1.13 To help deliver the longer term vision set out above, a set of specific transport objectives for transport have been adopted for the 4th LTP. These were originally developed in consultation with stakeholders and the public during the earlier LTPs and have been reviewed and refined to better reflect transport issues which have arisen both nationally and locally since then.

- to assist the sustainable economic growth of Lincolnshire, and the wider region, through improvements to the transport network;
- to improve access to employment and key services by widening travel choices, especially for those without access to a car;

- to make travel for all modes safer and, in particular, reduce the number and severity of road casualties;
- to maintain the transport system to standards which allow safe and efficient movement of people and goods;
- to protect and enhance the built and natural environment of the county by reducing the adverse impacts of traffic, including HGVs;
- to improve the quality of public spaces for residents, workers and visitors by creating a safe, attractive and accessible environment;
- to improve the quality of life and health of residents and visitors by encouraging active travel and tackling air quality and noise problems; and
- to minimise carbon emissions from transport across the county.

1.14 An Interim Travel Plan has been developed for the proposed residential site and includes measures to promote the use of sustainable travel modes as well as reducing the need to travel.

1.15 The proposed development site lies within easy reach of Holbeach town centre and is close to a range of local facilities as set out in Section 4 of this report.

1.16 This TA includes a detailed appraisal of the impacts of the development proposals upon the surrounding highway network and demonstrates that the proposals will have a negligible impact upon the surrounding highway network.

1.17 It is therefore considered that the application proposals are acceptable and consistent with current national and local transport policies.

SCOPE OF REPORT

1.18 As well as traffic impact issues, this TA also considers the sustainability and accessibility of the site. The report therefore covers the following:

- Section 2 provides a description of the highway network surrounding the site, details of the existing traffic flows, parking provision, review of the personal injury accident records and the results of the baseline capacity assessments within the study area.
- Section 3 describes the site location and development proposals with regard to the proposed quantum of development and broad layout of the site, the proposed means of access to the site and also the proposed parking provision and servicing requirements.
- Section 4 examines the accessibility of the site by a number of travel modes and also considers the accessibility of a range of key services and facilities.
- Section 5 summarises the assessment parameters that have been adopted within this Transport Assessment.
- Section 6 examines the impact of development traffic on the local highway network and presents the results of the future year junction assessments to determine the potential impact of the proposals.
- The report summary and conclusions are drawn together in Section 7.

2.0 EXISTING CONDITIONS

SURROUNDING HIGHWAY NETWORK

2.1 The site is located to the north western extent of the Holbeach urban area c.800m from the town centre, 12km north east of Spalding town centre, 23km south of Boston town centre and 36km north east of Peterborough city centre.

2.2 The site is bound on its northern side by the A17, on its western side by the New River (Drain) undeveloped land and the A151, on its southern side by Northons lane and on its eastern side by the residential dwellings fronting Cedar Drive and Oakwood Glade. Further afield to the north and east is the residential settlement of Holbeach and the facilities associated with a town centre. To the north and west is predominantly undeveloped land. The location of the site is shown on the plan attached at **Appendix 1**.

2.3 Cedar Drive and Oakwood Glade, from which the site will be accessed by all , are existing residential cul de sacs which provide frontage access to residential properties. They have a carriageway width ranging from 5.0m to 6.0m, are subject to a 30mph speed restriction and have footways on both sides on the carriageway.

2.4 Both Cedar Drive and Oakwood Glade meet with Chestnut Avenue at priority junctions. Chestnut Avenue is a residential street providing frontage access to residential dwellings, it is subject to a 30mph speed restriction and have footways on both sides of the carriageway. To the north it meets with B1168 Boston Road South at a priority junction and to the south it meets with Northons Lane at a priority junction.

2.5 The B1168 Boston Road South is a distributor type road providing a direct route onto the A17 to the north and into Holbeach town centre to the south, it then goes on to Holbeach Drove where it meets with the B1166 Drove Road. The B1168 Boston Road South is one of the two main streets in Holbeach town centre and is home to a host of local facilities, it is also a bus route.

2.6 Northons Lane, which forms the southern boundary of the site, is a local distributor type road providing a direct route onto the A151 to the west and onto Spalding Road to the east.

2.7 Spalding Road is one of the two main streets in Holbeach town centre and is home to a host of local facilities, it is also a bus route.

2.8 The A151, located to the west of the site, is a distributor type road which connects with the A17 to the north and provides a direct route into Spalding town centre to the south west.

2.9 The A17, which forms the northern boundary of the site, is a distributor type road providing a direct route into Kings Lynn tow centre to the south east and into Sleaford and Newark on Trent town centres to the north west. It also provides access onto the A16 which provides a direct route into Peterborough city centre to the south.

2.10 The development site is well located in terms of its access onto the local and strategic highways networks.

EXISTING TRAFFIC FLOWS

2.11 In order to assess the transport implications of the development fully classified traffic counts were undertaken in the following locations on Tuesday 3rd March 2010 between the hours of 0700-1000 and 1530-1830. Queue data was also collected at junction 4. The 2020 AM and PM Peak surveyed flows, which were found to be 0800 to 0900 and 1600 to 1700, are summarised at **Appendix 3**.

- J1 – Northons Lane / Chestnut Avenue – priority junction
- J2 – B1168 Boston Road South / Chestnut Avenue – priority junction
- J3 – Northons Lane / Spalding Road – priority junction
- J4 – A17 / B1168 Boston Road South – roundabout junction

EXISTING JUNCTION CAPACITY ANALYSES

2.12 Junction models have been built, using the JUNCTIONS9 software, to test the impact of the development proposals upon the junctions within the study area. The queue data at junction 4 was used to validate the model for that junction.

2.13 The 2020 base traffic flows have been input into the junction models to determine current capacity. The full JUNCTIONS9 model outputs are included within **Appendix 4** and a summary of the results is in **Tables 2.1**.

Table 2.1: Summary of JUNCTIONS9 Results – 2020 AM and PM Peak Hours

Junction	Arm/ Movement	2020 Base Flows AM Peak		2020 Base Flows PM Peak	
		Max RFC	Max Queue	Max RFC	Max Queue
Northons Lane / Chestnut Avenue	Chestnut Avenue right turn	0.070	0	0.080	0
	Chestnut Avenue left turn	0.019	0	0.005	0
	Northons Lane (west bound) ahead and right	0.069	0	0.086	0
B1168 Boston Road South / Chestnut Avenue	Chestnut Avenue left turn	0.185	0	0.155	0
	Chestnut Avenue right turn	0.062	0	0.015	0
	B1168 Boston Road South (north bound) ahead and right	0.127	0	0.123	0
Northons Lane / Spalding Road	Northons Lane right and left turn	0.209	0	0.220	0
	Spalding Road (west bound) ahead and right	0.083	0	0.060	0
A17 / B1168 Boston Road South	Boston Road South (North)	0.329	0	0.311	0
	A17 (East)	0.732	3	0.694	2
	Boston Road South (South)	0.473	1	0.313	0
	A17 (West)	0.670	2	0.622	2

2.14 The results in **Table 2.1** show that all the junctions in the study area are currently operating well within capacity during the AM and PM peak hours. This is confirmed by on-site observations.

PERSONAL INJURY ACCIDENT DATA

2.15 Personal injury accident (PIA) records have been obtained from Crashmap for the period for the most recent five year period available. The study area includes Oakwood Glade, Cedar Drive Cedar Avenue and Northons Lane. The PIA data plot is included within **Appendix 5**.

2.16 Analysis of the accident maps showed that no accidents have been recorded in the study area over the five year study period considered.

2.17 As such it is considered that there are no existing safety problems associated with the road network surrounding the development site. It is not anticipated that the traffic associated with the proposed development would result in any significant safety implications on the adjacent highway network.

3.0 DEVELOPMENT PROPOSALS

3.1 A site layout has been developed which comprises 110 residential dwellings which will be accessed via extensions to two existing cul de sacs Oakwood Glade and Cedar Drive. A copy of the proposed site layout is attached at **Appendix 2**.

3.2 The principle spine roads will be 5.5 metres wide with 2.0m wide footways located on both sides of the carriageway.

3.3 The planning layout shows a hierarchy of access roads throughout the site serving the residential units. The internal layout has been designed with principal spine roads running into the site from Oakwood Glade and Cedar Drive with a hierarchy of roads branching off the main spine road, providing access to properties across the site.

3.4 Beyond this principal network of roads there are a number of private drives providing access to individual properties. The internal access roads have been designed to achieve low vehicle speeds within the site, incorporating appropriate changes in the road alignment which assist in providing a safe environment for pedestrians and cyclists within the site. The site layout proposals include a network of footways and footpaths across the site.

3.5 Following the publication of the NPPF, there is no longer a need for local authorities to set maximum car parking standards. Accordingly, LCC has ceased using the previously adopted maximum standards in its role as local highway authority. Instead, proposals are being dealt with on a case-by-case basis with the main issue being the provision of sufficient off-street parking to avoid the over-spill of parked vehicles onto the highway to the detriment of road safety and capacity.

3.6 Parking for the residential units will be provided on the basis of two spaces per dwelling. It is considered that the proposed level of parking provides an appropriate balance between the need to promote sustainable modes of transport, meeting residents' demands and minimising on street parking.

3.7 The proposals have also taken into account the needs of refuse vehicles and a copy of the swept path analyses is attached at **Appendix 6**.

4.0 EXISTING SUSTAINABLE TRANSPORT PROVISION

4.1 The Government's objectives set out in the NPPF are to ensure that new developments are provided in sustainable locations, where the need to travel is minimised and the use of sustainable modes can be maximised.

4.2 The site has a good level of accessibility by sustainable modes of transport and a Travel Plan has been developed for the site which will encourage the use of alternative modes of travel. This is anticipated to reduce the overall travel demands of the site, particularly trips by single occupancy vehicles.

4.3 Travel by non-car modes will be encouraged at the site and as outlined in Section 3.0, the proposals include pedestrian and cycle connections across the site, linking into the surrounding facilities.

4.4 This section outlines the existing walking, cycling and public transport facilities within the vicinity of the development site and describes the accessibility of the site in terms of its proximity to key services and destinations.

WALKING AND CYCLING

4.5 Whilst superseded by the NPPF, the transport policies set out in the former PPG13 set out specific guidance related to walking and cycling:

"Walking is the most important mode of travel at the local level and offers the greatest potential to replace short car trips, particularly under 2 kilometres" (Para 74)

and

"Cycling also has potential to substitute for short car trips, particularly those under 5 kilometres, and to form part of a longer journey by public transport" (Para 77).

Walking

4.6 Walking is recognised as the most important mode of travel at a local level and it offers the greatest potential to replace short car trips, particularly those trips under two kilometres. The walking isochrone plan attached at **Appendix 7** shows the 2.0 kilometre walking catchment area from the centre of the site which comprises Holbeach in its entirety, including key local facilities such as schools, healthcare facilities and food stores.

4.7 Footways will be provided on both sides of the internal spine road which will connect into the existing footways on both sides of Oakwood Glade and Cedar Drive. Footways in the surrounding area meet standards, and generous along certain roads, with dropped/low kerbs at appropriate junctions.

Cycling

4.8 Cycling also has the potential to substitute for short car trips, particularly those that are less than five kilometres. As such, all areas and facilities within a reasonable walking distance can also be considered to be within a reasonable cycling distance. The cycle isochrone plan attached at **Appendix 7** shows a 5.0 kilometre cycling catchment area from the centre of the site. It can be seen that, in addition to the areas that are accessible on foot, the five kilometre catchment area includes the surrounding villages of Fleet Hargate, Fleet, Whaplode and Saracens Head.

PUBLIC TRANSPORT

Bus

4.9 The nearest bus stops to the site are located on both sides the B1168 Boston Road South and the B1515 Spalding Road. As shown on the public transport figure attached at **Appendix 3** the most southerly extent of the site is 600m walking distance from a bus stop with the most northerly extent being 800m walking distance. A summary of the buses serving the stops in the vicinity of the site as summarised in **Table 4.1**.

Table 4.1: Bus Services

Service	Route Description	Service Frequency	
		Monday to Saturday	Sunday
B1168 Boston Road South and Spalding Road Bus Stops			
505 interConnect	Kings Lynn to Spalding	Every 30 minutes	-
505H	Holbeach Call Connect	On Demand	-
Spalding Road Bus Stops			
6067	Holbeach to Tydd St Mary	School Bus	
NG01	Spalding to Sutton Bridge	School Bus	
S36	Holbeach to Deeping St James	School Bus	
S125	Boston to Weston	School Bus	

4.10 **Table 4.1** shows that bus 505 serves the bus stops on the B1168 Boston Road and the B1515 Spalding Road with a service frequency of two buses per hour Monday to Saturday until around 2030. This service provides access into Holbeach town centre in addition to other surrounding towns and villages, including Kings Lynn, Long Sutton, Whaplode, Moulton and Spalding. There are additional bus services available from Spalding.

4.11 The Holbeach CallConnect is also available from the bus stops on the B1168 Boston Road and the B1515 Spalding Road. CallConnect buses operate throughout rural areas of Lincolnshire, North Lincolnshire, Rutland, Peterborough and East Northants. The service is designed to improve transport opportunities in rural communities and market towns where conventional bus services are limited or infrequent.

4.12 Everyone is welcome to use the CallConnect bus service for any reason and as frequently as required. The service is operated by modern, accessible minibuses and services operate between 7am-7pm Monday to Friday and 7.30am-6.30pm Saturday. Every CallConnect bus operates within an area of up to 12 miles giving passengers access to hundreds of locations. Serving small hamlets, remote villages, rural communities and market towns, our minibuses enables passengers to connect and travel further. More information can be found in our guides below.

4.13 In addition, there are a number of school buses which serve the stop on the B1515 Spalding Road, providing school children with a sustainable route from the site to and from school.

Rail

4.14 The nearest railway station to the site is located on Winsover Road in Spalding town centre which is accessible via the buses which serve the stops on the B1168 Boston Road and the B1515 Spalding Road. There is car and cycle parking available at the station and it is on the Lincoln to Peterborough line which operates every 60 minutes.

TRAVEL PATTERNS AND KEY DESTINATIONS

4.15 The surrounding area has a wide range of services and facilities which can be accessed by future residents of the site. All measurements are taken from the centre of the site.

- Holbeach town centre – has a range of facilities including public houses, restaurants, cafes, a range of shops, a library, a convenience store, places of worship, a doctors surgery, a pharmacy and a primary school, all of which are within a reasonable walking and cycling distance of the site and are accessible via public transport;

- Education provision – Holbeach Primary School is located on the B1168 Boston Road South circa 550m east of the site, University Academy Holbeach is located on Park Road circa 1.1km east of the site, all of which are within a reasonable walking and cycling distance of the site and are assessible via public transport;

- Health facilities - Holbeach Medical centre is located on Park Road circa 1.1km south east of the site, Little bury Medical Centre is located on Fishpond Lane circa 1.5km south east of the site, Holbeach Dental Practice is located on Albert Street circa 1.3km south east of the site, Boots Pharmacy is located on High Street circa 1.3km south east of the site and Coop Pharmacy is located on Fleet Street circa 1.4km south east of the site, all of which are within a reasonable walking and cycling distance of the site and are assessible via public transport;

- Food shopping – Tesco Superstore is located on the B1168 Boston Road South circa 1.0km south east of the site, One Stop is located on West End circa 1.0km south east of the site, Coles is located on High Street circa 1.3 km south east of the site and Coop is located on Fleet Street circa 1.4km south east of the site, all of which are within a reasonable walking and cycling distance of the site and are assessible via public transport;

- Recreation – Holbeach United FC Social Club is located on Park Road circa 1.4km south east of the site, Holbeach United Community Sports Academy is located on Penny Hill Road circa 1.4km north east of the site, Holbeach Community Centre is located on Fish Pond Lane circa 1.9km south east of the site and Netherfield Playing Fields are located north of Hall Gate circa 2.0km south of the site, all of which are within a reasonable walking and cycling distance of the site and are assessible via public transport.

SUMMARY

4.16 It is considered that the site is well served by existing bus services providing good connections around Holbeach, as well as the surrounding villages including Spalding. There are additional bus and rail services available from Spalding which may be used as part of a linked trip by those residents travelling further afield.

4.17 The site is situated in an accessible location with public houses, restaurants, cafes, a range of shops, a library, a convenience store, places of worship, a doctors surgery, a pharmacy and a primary school all located within a reasonable walking and cycling distance of the site and are accessible by bus. Additional facilities are available in Spalding town centre which is accessible via public transport.

4.18 Overall, it is concluded that a range of key facilities and services, including employment, retail, health and education uses, are readily accessible from the site. It is therefore considered that the location of the site is consistent with national and local policy objectives.

5.0 ASSESSMENT PARAMETERS

BACKGROUND

5.1 Given the fact that the development will be built and occupied over a number of years an assessment year of 2025 has been adopted for the analysis presented later in this report, five years post planning submission. This is in line with the guidance provided with the Department for Transport Guidance on Transport Assessment.

GROWTH AND COMMITTED DEVELOPMENT

5.2 The National Traffic Model (NTM) within the TEMPRO software has been interrogated to provide growth factors for Holbeach. The resultant growth factors are set out in **Table 5.1**.

Table 5.1: Traffic Growth Factors

Period	AM Peak	PM Peak
2020 - 2025	1.0766	1.0765

5.3 These growth factors have been applied to the 2020 surveyed flows to produce the 2025 base flows, a copy of which are provided in **Appendix 3**. These growth factors make allowance for planned development growth within an area. The 2025 base traffic flows have been used as the future year baseline traffic flows against which the potential development impacts have been assessed.

DEVELOPMENT TRAFFIC GENERATION

5.4 In accordance with the government's Guidance on Transport Assessment, the trip generation of the proposed residential development (based on the provision of 110 residential dwellings) has been assessed in order to consider access to the site by a range of modes.

5.5 Total vehicle trip generation rates have been used to determine the potential trip generation of the proposed development (based on up to 110 residential dwellings). The total vehicle trip rates and resulting total vehicle trip generation are summarised in **Table 5.2** and the TRICS output is attached at **Appendix 8**.

Table 5.2: Total Vehicle Trip Rates and Generation (110 dwellings)

Period	AM Peak		PM Peak	
	Arrivals	Departures	Arrivals	Departures
Trip Rates	0.155	0.432	0.414	0.230
Trip Generation	17	48	46	25

5.6 The development proposals, based on the provision of 110 dwellings, are forecast to generate some 65 and 71 two-way vehicle trips during the AM and PM peak hours, respectively. In the immediate vicinity of the site this equates to an increase in vehicular trips of approximately one vehicle per minute.

5.7 In order to derive the trip generation by mode, journey to work mode split data for the South Holland 003 Middle Super Output Area (MSOA), in which the development site is situated has been obtained from the National Statistics website. A copy of the model split data is attached at **Appendix 9** and summary is provided in **Table 5.3**.

Table 5.3: National Statistics Mode Split Data for South Holland 003 MSOA

Mode	Percentage
Pedestrian	8.5%
Bicycle	3.8%
Motorcycle	0.5%
Car Driver	75.6%
Car Passenger	7.7%
Bus	3.0%
Train	0.5%
Total	100%

5.8 Using the modal split data in **Table 5.3** and the total vehicle trips in **Table 5.2**, the morning and evening peak hour trips for each mode have been calculated and are shown in **Table 5.4**.

Table 5.4: Trip Generation by Mode

Period	AM Peak		PM Peak	
	Arrivals	Departures	Arrivals	Departures
Pedestrian	2	5	5	3
Bicycle	1	2	2	1
Motorcycle	0	0	0	0
Car Driver	17	48	46	25
Car Passenger	1	5	5	3
Bus	1	2	2	1
Train	0	1	1	0
Total	22	63	61	33

DEVELOPMENT DISTRIBUTION AND ASSIGNMENT

5.9 Development traffic distribution has been undertaken based upon existing (2011) travel to work data for the South Holland 003 MSOA, in which the site is situated. This method uses Office of National Statistics data and can be considered a robust approach.

5.10 The traffic distribution has been applied to the forecast trip generations to estimate the change in traffic flows on the highway network as a result of the development at the site. Consideration of the traffic distribution exercise shows the total change in traffic flows that is forecast on the road network as a result of the development proposals. A copy of the 2011 journey to work census data and assumed route assignments are attached at **Appendix 10.**

5.11 The resultant arrival and distribution traffic distribution patterns are provided at **Appendix 3**. These proportions have been applied to the total development traffic generation and the resultant development traffic assignment are also provided at **Appendix 3**.

6.0 FUTURE YEAR DEVELOPMENT IMPACTS

INTRODUCTION

6.1 The impacts of the development proposals have been based upon a comparison of the future year baseline conditions on the network (assessed using the 2025 base traffic flows) against the future year with development conditions on the network (assessed using the 2025 predicted traffic flows).

FUTURE YEAR JUNCTION CAPACITY REPORT

6.2 Future year junction capacity assessments have been undertaken at the following locations for the 2025 base and the 2025 predicted traffic flow scenarios, for both the AM and PM peak hours, using the validated base models outlined in Section 2.0:

- J1 – Northons Lane / Chestnut Avenue – priority junction
- J2 – B1168 Boston Road South / Chestnut Avenue – priority junction
- J3 – Northons Lane / Spalding Road – priority junction
- J4 – A17 / B1168 Boston Road South – roundabout junction

Full model outputs are included within **Appendix 4** and the results are summarised in **Tables 6.1** and **6.2**.

Table 6.1: Summary of JUNCTIONS9 Results – 2025 Base and Predicted AM Peak Hour

Junction	Arm/ Movement	2025 Base Flows AM Peak		2025 Predicted Flows AM Peak	
		Max RFC	Max Queue	Max RFC	Max Queue
Northons Lane / Chestnut Avenue	Chestnut Avenue right turn	0.093	0	0.134	0
	Chestnut Avenue left turn	0.026	0	0.026	0
	Northons Lane (west) ahead and right	0.091	0	0.107	0
B1168 Boston Road South / Chestnut Avenue	Chestnut Avenue left turn	0.200	0	0.240	0
	Chestnut Avenue right turn	0.067	0	0.070	0
	B1168 Boston Road South (north bound) ahead and right	0.137	0	0.153	0
Northons Lane / Spalding Road	Northons Lane right and left turn	0.229	0	0.296	0
	Spalding Road (west bound) ahead and right	0.089	0	0.098	0
A17 / B1168 Boston Road South	Boston Road South (North)	0.422	1	0.389	1
	A17 (East)	0.791	3	0.750	3
	Boston Road South (South)	0.585	1	0.382	1
	A17 (West)	0.727	3	0.673	2

Table 6.2: Summary of JUNCTIONS9 Results – 2025 Base and Predicted PM Peak Hour

Junction	Arm/ Movement	2025 Base Flows PM Peak		2025 Predicted Flows PM Peak	
		Max RFC	Max Queue	Max RFC	Max Queue
Northons Lane / Chestnut Avenue	Chestnut Avenue right turn	0.086	0	0.108	0
	Chestnut Avenue left turn	0.005	0	0.005	0
	Northons Lane (west) ahead and right	0.093	0	0.107	0
B1168 Boston Road South / Chestnut Avenue	Chestnut Avenue left turn	0.167	0	0.186	0
	Chestnut Avenue right turn	0.018	0	0.018	0
	B1168 Boston Road South (north bound) ahead and right	0.133	0	0.172	0
Northons Lane / Spalding Road	Northons Lane right and left turn	0.242	0	0.280	0
	Spalding Road (west bound) ahead and right	0.065	0	0.086	0
A17 / B1168 Boston Road South	Boston Road South (North)	0.435	1	0.402	1
	A17 (East)	0.795	4	0.761	3
	Boston Road South (South)	0.644	2	0.410	1
	A17 (West)	0.733	3	0.679	2

6.3 The results in **Tables 6.1** and **6.2** show that junctions within the study area are forecast to continue to operate with spare capacity under the future year traffic flow scenarios, both with and without the development. Impacts of the development proposals would be negligible with minimal increases in queuing expected at the junctions, during the AM and PM peak hours, as a result of the forecast development generated traffic flows.

6.4 In summary, the impact of the development-generated traffic on the surrounding area has been shown to be negligible and it is therefore concluded that the residential proposals could be accommodated without resulting in a detrimental impact upon the network.

7.0 SUMMARY AND CONCLUSIONS

7.1 attp has been commissioned by Gleeson Regeneration Ltd to prepare a Transport Assessment (TA) in support of a detailed planning application for residential development on land to the south of the A17 and north of Northons Lane in Holbeach. The local planning authority is South Holland District Council (SHDC) and the highways authority is Lincolnshire County Council (LCC).

7.2 The site is located to the north western extent of the Holbeach urban area c.800m from the town centre, 12km north east of Spalding town centre, 23km south of Boston town centre and 36km north east of Peterborough city centre.

7.3 The site is bound on its northern side by the A17, on its western side by the New River (Drain) undeveloped land and the A151, on its southern side by Northons lane and on its eastern side by the residential dwellings fronting Cedar Drive and Oakwood Glade. Further afield to the north and east is the residential settlement of Holbeach and the facilities associated with a town centre. To the north and west is predominantly undeveloped land.

7.4 A site layout has been developed which comprises 110 residential dwellings which will be accessed via extensions to two existing cul de sacs Oakwood Glade and Cedar Drive.

7.5 Analysis of the accident maps concluded that there is no existing safety problems associated with the road network surrounding the development site. It is not anticipated that the traffic associated with the proposed development would result in any significant safety implications on the adjacent highway network.

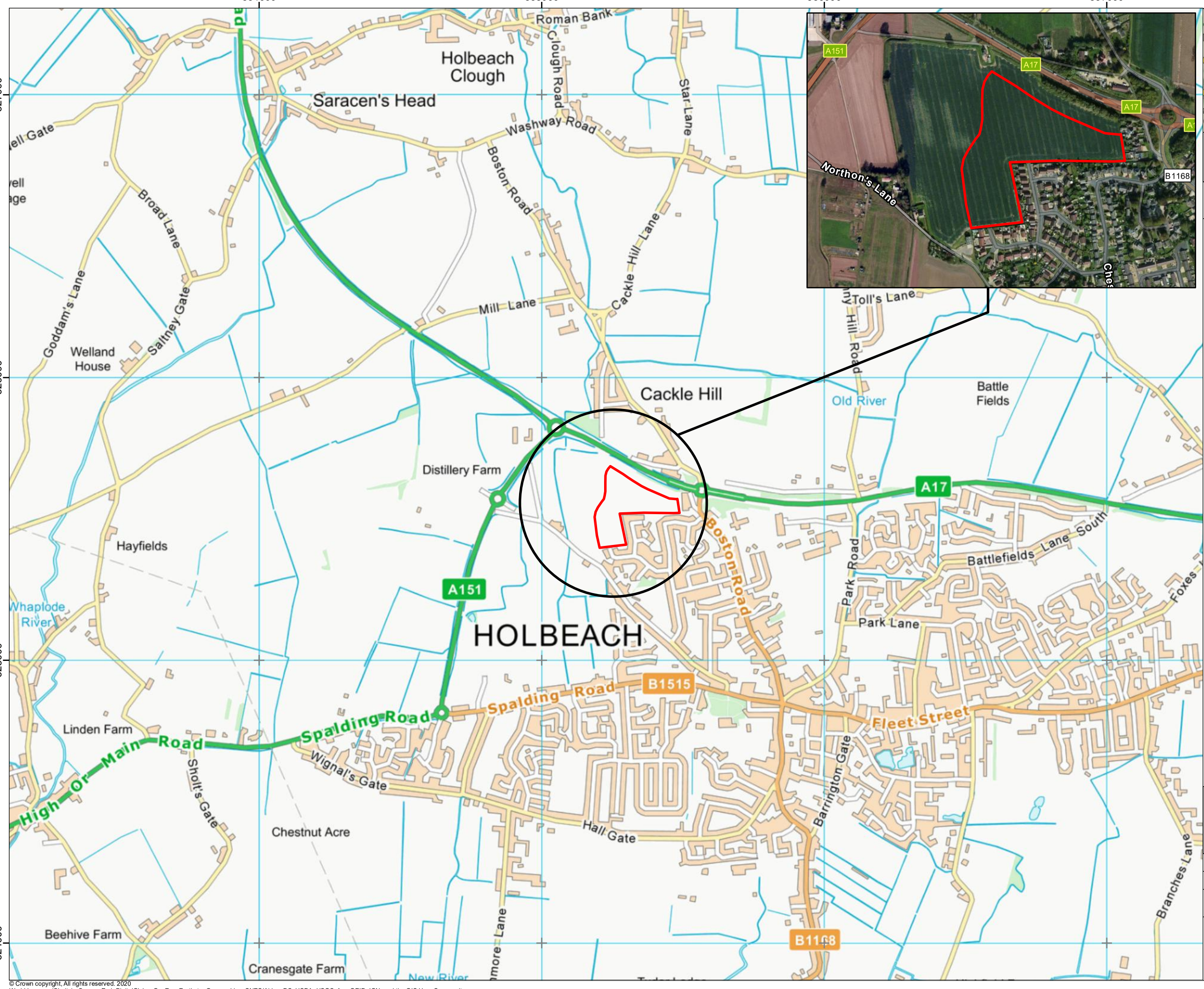
7.6 The report has shown that the development proposals will be accessible by a range of travel modes and have been developed to accord with current national and local transport policies. It is concluded that a range of key facilities and services can be accessed locally within Holbeach, within a reasonable walking and cycling distance of the site, and additional facilities can be accessed via public transport.

7.7 The development proposals, based on the provision of 110 dwellings, are forecast to generate some 65 and 71 two-way vehicle trips during the AM and PM peak hours, respectively. In the immediate vicinity of the site this equates to an increase in vehicular trips of approximately one vehicle per minute.

7.8 The impact of the development-generated traffic flows on the surrounding area has been shown to be negligible and it is therefore concluded that the residential proposals could be accommodated without resulting in any material impact upon the network.

7.9 Overall it is considered that the site is a suitable location for the proposed development and there are no highways or transport reasons that should prevent the granting of planning consent for the proposals.

APPENDIX 1



PROJECT:

Northons Lane, Holbeach

TITLE:

Site Layout Plan

Legend:

Site Boundary

AIMEE THOMPSON TRANSPORT PLANNING

m: 07507342334
e: aimee@at-transportplanning.co.uk

Rev	Date	Purpose of Revision	Drawn
A	12/02/2020	Initial Issue	DR

Drawing Reference:
702202

0 50 100 200 Metres

SCALE: 1:12,500

ISO A3

DO NOT SCALE

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World Imagery (Clarity): Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community
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APPENDIX 2

Schedule of Accommodation

To be read in conjunction with drawing no. 3162-0-001-A - DRAFT OVERLAY

Housetype	No. of Beds	Type	No. of Units	Percentage	Sq. Ft.	Total Sq. Ft.
201	2 Bedrooms	Semi-detached	17	15.45	651.00	11067.00
202	2 Bedrooms	Semi-detached	6	5.45	671.00	4026.00
301	3 Bedrooms	Semi-detached	11	10.00	759.00	8349.00
307	3 Bedrooms	Detached	12	10.91	807.00	9684.00
310S	3 Bedrooms	Semi-detached	13	11.82	788.00	10244.00
311	3 Bedrooms	Semi-detached	11	10.00	759.00	8349.00
313	3 Bedrooms	Semi-detached	4	3.64	811.00	3244.00
314	3 Bedrooms	Detached	3	2.73	811.00	2433.00
315	3 Bedrooms	Detached	17	15.45	816.00	13872
401	4 Bedrooms	Detached	11	10.00	1066.00	11726.00
403	4 Bedrooms	Detached	3	2.73	1048.00	3144.00
405	4 Bedrooms	Detached	2	1.82	1172.00	2344
Totals			110	100.00		88482.00

Trinity House

Drain

Drain

SALES AREA

BASIN

SPRUCE CL

CEDAR DRIVE

PINE CL

103

93

eld House

Northon's Lane, HOLBEACH

DO NOT SCALE - ALL DIMENSIONS & LEVELS TO BE CHECKED ON SITE - THIS DRAWING IS COPYRIGHT

SKETCH
subject to structural review
subject to accurate measured survey

revision	date	content	initials
-	-	-	-

project: PROPOSED RESIDENTIAL NORTHON'S LANE HOLBEACH

client: GLEESON DEVELOPMENT

title: SCHEMATIC SITE LAYOUT

date: 23.01.20 | scale: 1:500@A1 | drawn: DDS

drawing number: 3162-0-001 B | checked:

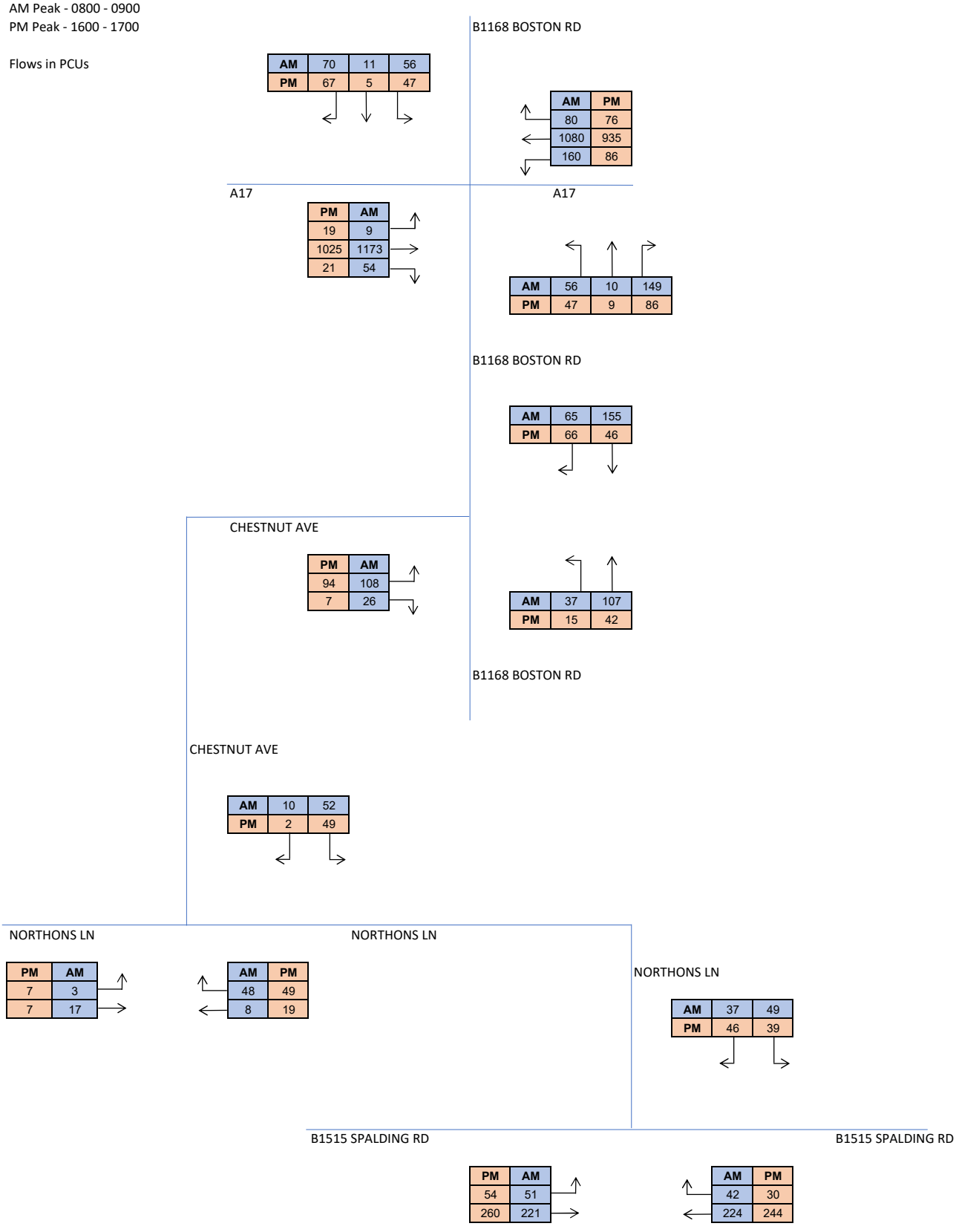
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Niemen Architects
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APPENDIX 3

BASE 2020 TRAFFIC FLOWS

AM Peak - 0800 - 0900
PM Peak - 1600 - 1700

Flows in PCUs



AM	70	11	56
PM	67	5	47

AM	80	76
	1080	935
	160	86

PM	AM	
19	9	
1025	1173	
21	54	

AM	56	10	149
PM	47	9	86

AM	65	155
PM	66	46

PM	AM	
94	108	
7	26	

AM	37	107
PM	15	42

AM	10	52
PM	2	49

PM	AM	
7	3	
7	17	

AM	PM	
48	49	
8	19	

AM	37	49
PM	46	39

PM	AM	
54	51	
260	221	

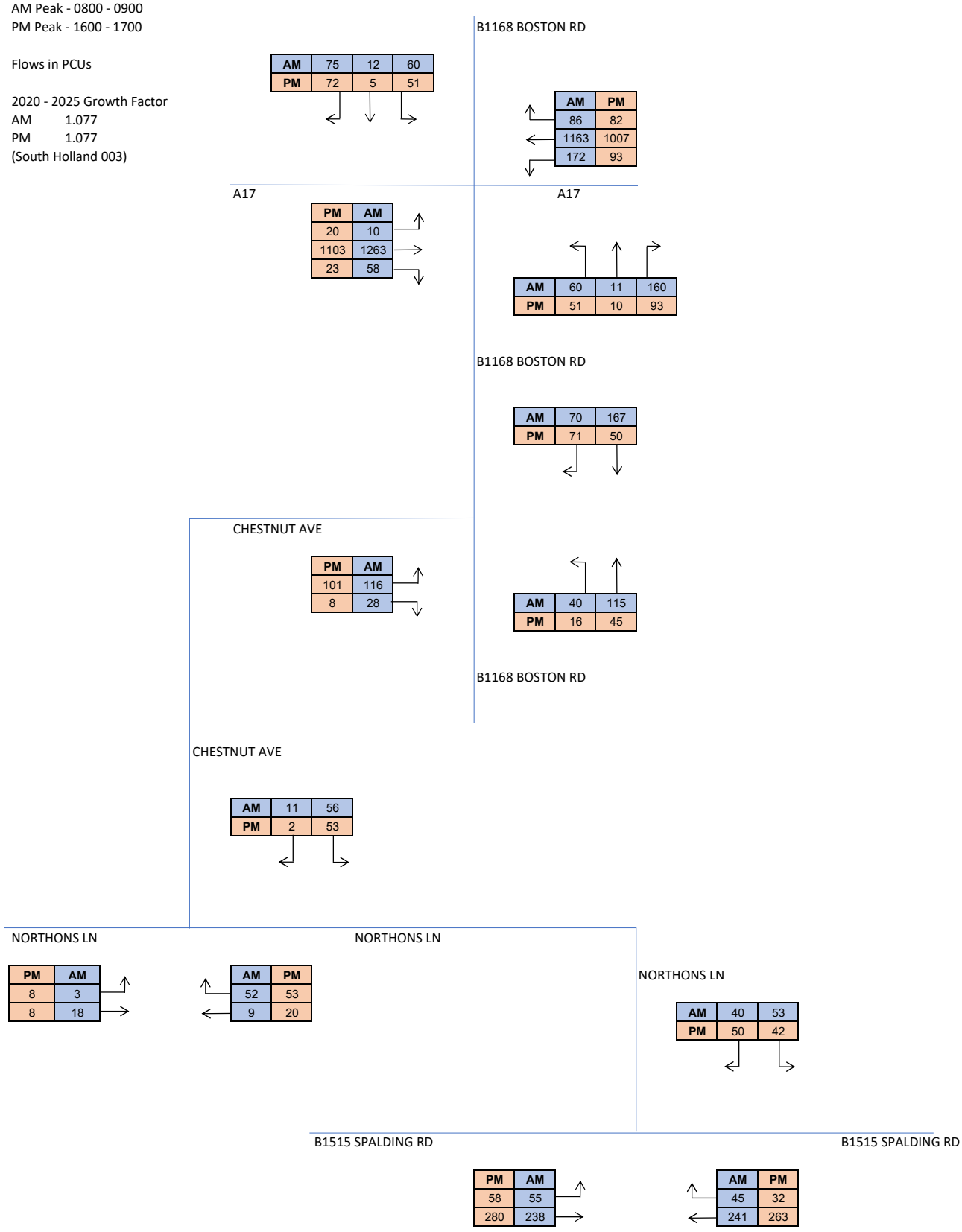
AM	PM	
42	30	
224	244	

BASE 2025 TRAFFIC FLOWS

AM Peak - 0800 - 0900
PM Peak - 1600 - 1700

Flows in PCUs

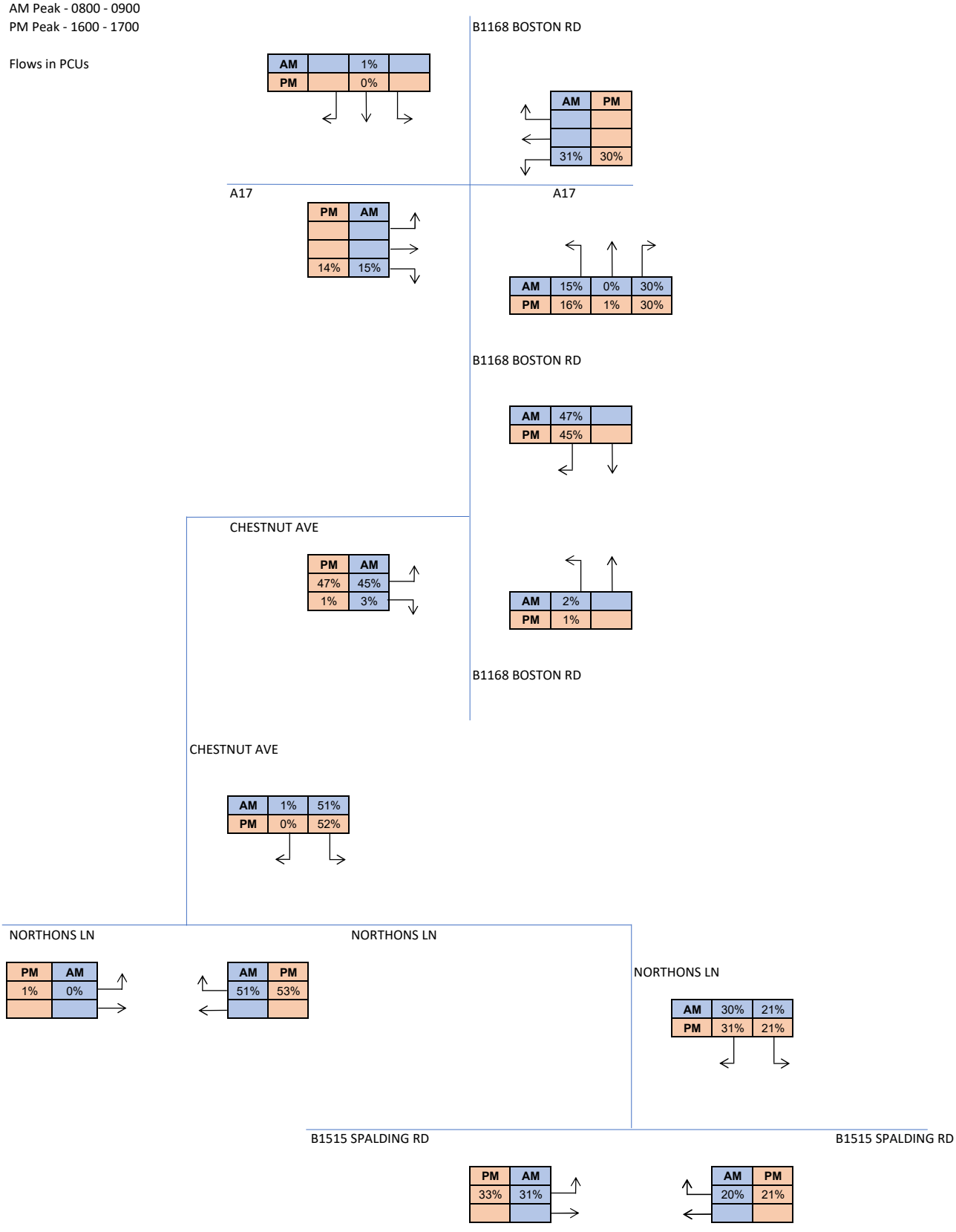
2020 - 2025 Growth Factor
AM 1.077
PM 1.077
(South Holland 003)



Development Distribution

AM Peak - 0800 - 0900
PM Peak - 1600 - 1700

Flows in PCUs



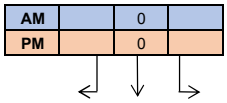
Development Traffic

AM Peak - 0800 - 0900
PM Peak - 1600 - 1700

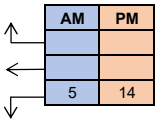
Flows in PCUs

	IN	OUT	2-WAY
AM	17	48	65
PM	46	25	71

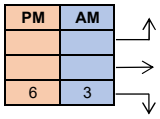
(Based on 110 dwellings)



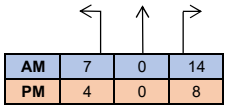
B1168 BOSTON RD



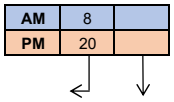
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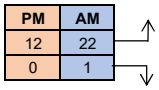
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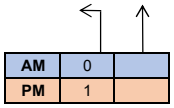


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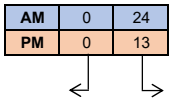
CHESTNUT AVE



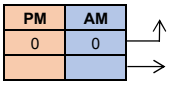


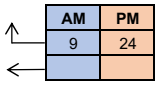
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CHESTNUT AVE



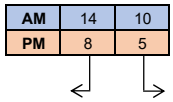
NORTHONS LN





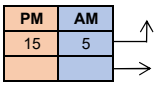
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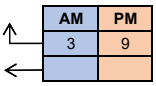
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B1515 SPALDING RD

B1515 SPALDING RD



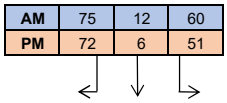


BASE PLUS DEVELOPMENT 2025 TRAFFIC FLOWS

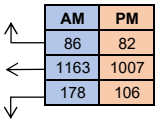
AM Peak - 0800 - 0900
PM Peak - 1600 - 1700

Flows in PCUs

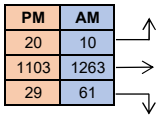
2020 - 2025 Growth Factor
AM 1.077
PM 1.077
(South Holland 003)



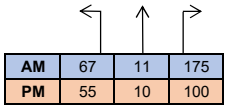
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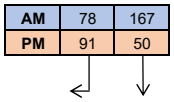
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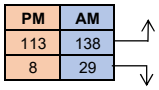
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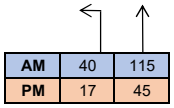


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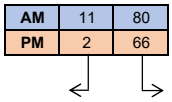
CHESTNUT AVE



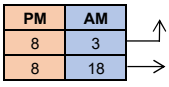


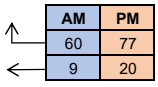
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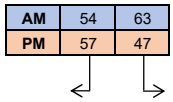
NORTHONS LN





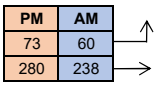
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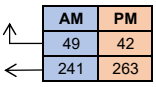
NORTHONS LN



B1515 SPALDING RD

B1515 SPALDING RD





APPENDIX 4

Junctions 8

ARCADY 8 - Roundabout Module

Version: 8.0.2.316 [14 Feb 2013]
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Filename: A17_B1168 Boston Rd_AM Peak.arc8
Path: Holbeach\Modelling
Report generation date: 18/03/2020 20:53:16

Summary of junction performance

	AM			
	Queue (PCU)	Delay (s)	RFC	LOS
	A1 - 2020 Base			
Arm 1	0.49	11.82	0.33	B
Arm 2	2.70	6.76	0.73	A
Arm 3	0.89	13.80	0.48	B
Arm 4	2.01	5.38	0.67	A

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

"D1 - 2020 Base, AM " model duration: 07:45 - 09:15
"D3 - 2025 Base, AM" model duration: 07:45 - 09:15
"D5 - 2025 Base + Dev, AM" model duration: 07:45 - 09:15

Run using Junctions 8.0.2.316 at 18/03/2020 20:52:58

File summary

File Description

Title	A17/ B168 Boston Road
Location	Holbeach
Site Number	
Date	18/03/2020
Version	
Status	
Identifier	
Client	
Jobnumber	
Enumerator	AT Transport Planning
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) - 2020 Base, 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
2020 Base, AM	2020 Base	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				6.93	A

Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Name	Description
1	B1168 Boston Road (n)	
2	A17 E	
3	B1168 Boston Road (s)	
4	A17 W	

Capacity Options

Arm	Minimum Capacity (PCU/hr)	Maximum Capacity (PCU/hr)	Assume Flat Start Profile	Initial Queue (PCU)
1	0.00	99999.00		0.00
2	0.00	99999.00		0.00
3	0.00	99999.00		0.00
4	0.00	99999.00		0.00

Roundabout Geometry

Arm	V - Approach road half-width (m)	E - Entry width (m)	I' - Effective flare length (m)	R - Entry radius (m)	D - Inscribed circle diameter (m)	PHI - Conflict (entry) angle (deg)	Exit Only

1	3.66	8.21	13.30	135.00	55.70	30.00	
2	5.30	7.89	14.00	39.00	55.80	28.50	
3	4.23	7.63	10.60	37.50	55.60	31.50	
4	8.00	8.20	2.00	26.00	55.80	27.00	

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

Pedestrian Crossings

Arm	Crossing Type
1	None
2	None
3	None
4	None

Slope / Intercept / Capacity

Arm Intercept Adjustments

Arm	Type	Reason	Direct Intercept Adjustment (PCU/hr)	Percentage Intercept Adjustment (%)
1	Direct		-450.00	
2	Direct		-75.00	
3	Direct		-500.00	
4	Direct		-300.00	

Roundabout Slope and Intercept used in model

Arm	Enter slope and intercept directly	Entered slope	Entered intercept (PCU/hr)	Final Slope	Final Intercept (PCU/hr)
1		(calculated)	(calculated)	0.617	1390.524
2		(calculated)	(calculated)	0.671	2084.771
3		(calculated)	(calculated)	0.608	1320.344
4		(calculated)	(calculated)	0.735	2223.493

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

Arm	Profile Type	Use Turning Counts	Average Demand Flow (PCU/hr)	Flow Scaling Factor (%)
1	ONE HOUR	✓	137.00	100.000
2	ONE HOUR	✓	1320.00	100.000
3	ONE HOUR	✓	215.00	100.000
4	ONE HOUR	✓	1236.00	100.000

Turning Proportions

Turning Counts or Proportions (PCU/hr) - Junction 1 (for whole period)

		To			
		1	2	3	4
From	1	0.000	56.000	11.000	70.000
	2	80.000	0.000	160.000	1080.000
	3	10.000	149.000	0.000	56.000
	4	9.000	1173.000	54.000	0.000

Turning Proportions (PCU) - Junction 1 (for whole period)

		To			
		1	2	3	4
From	1	0.00	0.41	0.08	0.51
	2	0.06	0.00	0.12	0.82
	3	0.05	0.69	0.00	0.26
	4	0.01	0.95	0.04	0.00

Vehicle Mix

Average PCU Per Vehicle - Junction 1 (for whole period)

		To			
		1	2	3	4
From	1	1.000	1.000	1.000	1.000
	2	1.000	1.000	1.000	1.000
	3	1.000	1.000	1.000	1.000
	4	1.000	1.000	1.000	1.000

Heavy Vehicle Percentages - Junction 1 (for whole period)

		To			
		1	2	3	4
From	1	0.000	0.000	0.000	0.000
	2	0.000	0.000	0.000	0.000
	3	0.000	0.000	0.000	0.000
	4	0.000	0.000	0.000	0.000

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)	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)
1	0.33	11.82	0.49	B	125.71	188.57	26.36	8.39	0.29	26.36	8.39
2	0.73	6.76	2.70	A	1211.26	1816.88	150.84	4.98	1.68	150.86	4.98
3	0.48	13.80	0.89	B	197.29	295.93	46.62	9.45	0.52	46.62	9.45
4	0.67	5.38	2.01	A	1134.18	1701.26	117.86	4.16	1.31	117.87	4.16

Main Results for each time segment

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

Arm	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
1	103.14	25.79	102.51	74.23	1032.02	0.00	753.34	60.27	0.137	0.00	0.16	5.527	A
2	993.77	248.44	989.91	1033.41	101.12	0.00	2016.92	2001.99	0.493	0.00	0.96	3.492	A
3	161.86	40.47	160.79	168.73	922.30	0.00	759.81	232.38	0.213	0.00	0.27	5.998	A
4	930.53	232.63	927.34	904.18	178.90	0.00	2092.06	2008.11	0.445	0.00	0.80	3.084	A

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

Arm	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
1	123.16	30.79	122.82	88.85	1235.16	0.00	627.91	60.27	0.196	0.16	0.24	7.122	A
2	1186.65	296.66	1184.76	1236.88	121.10	0.00	2003.51	2001.99	0.592	0.96	1.44	4.387	A
3	193.28	48.32	192.68	201.95	1103.91	0.00	649.43	232.38	0.298	0.27	0.42	7.871	A
4	1111.14	277.78	1109.71	1082.30	214.30	0.00	2066.06	2008.11	0.538	0.80	1.15	3.760	A

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

Arm	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
1	150.84	37.71	149.88	108.60	1510.40	0.00	457.97	60.27	0.329	0.24	0.48	11.649	B
2	1453.35	363.34	1448.45	1512.36	147.92	0.00	1985.51	2001.99	0.732	1.44	2.66	6.642	A
3	236.72	59.18	234.90	246.91	1349.46	0.00	500.19	232.38	0.473	0.42	0.87	13.478	B
4	1360.86	340.22	1357.50	1322.86	261.50	0.00	2031.39	2008.11	0.670	1.15	1.99	5.315	A

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

Arm	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
1	150.84	37.71	150.81	108.99	1514.87	0.00	455.21	60.27	0.331	0.48	0.49	11.824	B
2	1453.35	363.34	1453.20	1517.07	148.62	0.00	1985.05	2001.99	0.732	2.66	2.70	6.764	A
3	236.72	59.18	236.64	247.71	1354.11	0.00	497.37	232.38	0.476	0.87	0.89	13.797	B
4	1360.86	340.22	1360.78	1327.68	263.08	0.00	2030.23	2008.11	0.670	1.99	2.01	5.375	A

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

Arm	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
1	123.16	30.79	124.13	89.41	1241.60	0.00	623.94	60.27	0.197	0.49	0.25	7.215	A
2	1186.65	296.66	1191.55	1243.65	122.08	0.00	2002.85	2001.99	0.592	2.70	1.47	4.463	A
3	193.28	48.32	195.12	203.09	1110.54	0.00	645.40	232.38	0.299	0.89	0.43	8.026	A
4	1111.14	277.78	1114.49	1089.15	216.51	0.00	2064.43	2008.11	0.538	2.01	1.18	3.804	A

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

Arm	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
1	103.14	25.79	103.49	74.69	1037.83	0.00	749.75	60.27	0.138	0.25	0.16	5.575	A
2	993.77	248.44	995.73	1039.41	101.91	0.00	2016.39	2001.99	0.493	1.47	0.98	3.533	A
3	161.86	40.47	162.50	169.72	927.92	0.00	756.39	232.38	0.214	0.43	0.27	6.069	A
4	930.53	232.63	932.00	909.89	180.52	0.00	2090.88	2008.11	0.445	1.18	0.81	3.112	A

Queueing Delay Results for each time segment

Queueing Delay results: (07:45-08:00)

Arm	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
1	2.30	0.15	5.527	A	A
2	14.05	0.94	3.492	A	A
3	3.90	0.26	5.998	A	A
4	11.65	0.78	3.084	A	A

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

Arm	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
1	3.53	0.24	7.122	A	A
2	20.92	1.39	4.387	A	A
3	6.09	0.41	7.871	A	A
4	16.89	1.13	3.760	A	A

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

Arm	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
1	6.90	0.46	11.649	B	B
2	37.73	2.52	6.642	A	A
3	12.35	0.82	13.478	B	B
4	28.71	1.91	5.315	A	A

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

Arm	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
1	7.31	0.49	11.824	B	B
2	40.22	2.68	6.764	A	A
3	13.29	0.89	13.797	B	B
4	30.10	2.01	5.375	A	A

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

Arm	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
1	3.85	0.26	7.215	A	A
2	22.87	1.52	4.463	A	A
3	6.76	0.45	8.026	A	A
4	18.16	1.21	3.804	A	A

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

Arm	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
1	2.47	0.16	5.575	A	A
2	15.04	1.00	3.533	A	A
3	4.23	0.28	6.069	A	A
4	12.35	0.82	3.112	A	A

(Default Analysis Set) - 2025 Base, 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
2025 Base, AM	2025 Base	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				8.95	A

Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Name	Description
1	B1168 Boston Road (n)	
2	A17 E	
3	B1168 Boston Road (s)	
4	A17 W	

Capacity Options

Arm	Minimum Capacity (PCU/hr)	Maximum Capacity (PCU/hr)	Assume Flat Start Profile	Initial Queue (PCU)
1	0.00	99999.00		0.00
2	0.00	99999.00		0.00
3	0.00	99999.00		0.00
4	0.00	99999.00		0.00

Roundabout Geometry

Arm	V - Approach road half-width (m)	E - Entry width (m)	l' - Effective flare length (m)	R - Entry radius (m)	D - Inscribed circle diameter (m)	PHI - Conflict (entry) angle (deg)	Exit Only
1	3.66	8.21	13.30	135.00	55.70	30.00	
2	5.30	7.89	14.00	39.00	55.80	28.50	
3	4.23	7.63	10.60	37.50	55.60	31.50	
4	8.00	8.20	2.00	26.00	55.80	27.00	

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

Pedestrian Crossings

Arm	Crossing Type
1	None
2	None
3	None
4	None

Slope / Intercept / Capacity

Arm Intercept Adjustments

Arm	Type	Reason	Direct Intercept Adjustment (PCU/hr)	Percentage Intercept Adjustment (%)
1	Direct		-450.00	
2	Direct		-75.00	
3	Direct		-500.00	
4	Direct		-300.00	

Roundabout Slope and Intercept used in model

Arm	Enter slope and intercept directly	Entered slope	Entered intercept (PCU/hr)	Final Slope	Final Intercept (PCU/hr)
1		(calculated)	(calculated)	0.617	1390.524
2		(calculated)	(calculated)	0.671	2084.771
3		(calculated)	(calculated)	0.608	1320.344
4		(calculated)	(calculated)	0.735	2223.493

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

Arm	Profile Type	Use Turning Counts	Average Demand Flow (PCU/hr)	Flow Scaling Factor (%)
1	ONE HOUR	✓	147.00	100.000
2	ONE HOUR	✓	1421.00	100.000
3	ONE HOUR	✓	231.00	100.000
4	ONE HOUR	✓	1331.00	100.000

Turning Proportions

Turning Counts or Proportions (PCU/hr) - Junction 1 (for whole period)

		To			
		1	2	3	4
From	1	0.000	60.000	12.000	75.000
	2	86.000	0.000	172.000	1163.000
	3	11.000	160.000	0.000	60.000
	4	10.000	1263.000	58.000	0.000

Turning Proportions (PCU) - Junction 1 (for whole period)

		To			
		1	2	3	4
From	1	0.00	0.41	0.08	0.51
	2	0.06	0.00	0.12	0.82
	3	0.05	0.69	0.00	0.26
	4	0.01	0.95	0.04	0.00

Vehicle Mix

Average PCU Per Vehicle - Junction 1 (for whole period)

		To			
		1	2	3	4
From	1	1.000	1.000	1.000	1.000
	2	1.000	1.000	1.000	1.000
	3	1.000	1.000	1.000	1.000
	4	1.000	1.000	1.000	1.000

Heavy Vehicle Percentages - Junction 1 (for whole period)

		To			
		1	2	3	4
From	1	0.000	0.000	0.000	0.000
	2	0.000	0.000	0.000	0.000
	3	0.000	0.000	0.000	0.000
	4	0.000	0.000	0.000	0.000

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)	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)
1	0.42	16.19	0.72	C	134.89	202.33	35.18	10.43	0.39	35.19	10.43
2	0.79	8.69	3.70	A	1303.93	1955.90	193.01	5.92	2.14	193.03	5.92
3	0.59	19.90	1.37	C	211.97	317.95	64.16	12.11	0.71	64.16	12.11
4	0.73	6.54	2.63	A	1221.35	1832.02	145.85	4.78	1.62	145.86	4.78

Main Results for each time segment

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

Arm	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
1	110.67	27.67	109.93	80.19	1110.44	0.00	704.92	60.64	0.157	0.00	0.18	6.043	A
2	1069.80	267.45	1065.30	1111.80	108.57	0.00	2011.92	2001.97	0.532	0.00	1.13	3.779	A
3	173.91	43.48	172.64	181.42	992.44	0.00	717.18	232.10	0.242	0.00	0.32	6.597	A
4	1002.05	250.51	998.36	972.81	192.27	0.00	2082.24	2008.27	0.481	0.00	0.92	3.311	A

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

Arm	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
1	132.15	33.04	131.70	95.99	1329.00	0.00	569.98	60.64	0.232	0.18	0.30	8.206	A
2	1277.45	319.36	1274.96	1330.69	130.00	0.00	1997.54	2001.97	0.640	1.13	1.75	4.965	A
3	207.66	51.92	206.84	217.13	1187.83	0.00	598.43	232.10	0.347	0.32	0.52	9.174	A
4	1196.54	299.14	1194.71	1164.39	230.28	0.00	2054.33	2008.27	0.582	0.92	1.38	4.178	A

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

Arm	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
1	161.85	40.46	160.26	117.17	1623.63	0.00	388.06	60.64	0.417	0.30	0.69	15.696	C
2	1564.55	391.14	1557.05	1625.39	158.50	0.00	1978.42	2001.97	0.791	1.75	3.62	8.395	A
3	254.34	63.58	251.17	265.20	1450.35	0.00	438.88	232.10	0.580	0.52	1.31	18.872	C
4	1465.46	366.36	1460.63	1421.36	280.17	0.00	2017.67	2008.27	0.726	1.38	2.59	6.406	A

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

Arm	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
1	161.85	40.46	161.77	117.78	1630.31	0.00	383.94	60.64	0.422	0.69	0.72	16.191	C
2	1564.55	391.14	1564.23	1632.48	159.59	0.00	1977.68	2001.97	0.791	3.62	3.70	8.689	A
3	254.34	63.58	254.12	266.39	1457.43	0.00	434.58	232.10	0.585	1.31	1.37	19.896	C
4	1465.46	366.36	1465.30	1428.76	282.78	0.00	2015.75	2008.27	0.727	2.59	2.63	6.536	A

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

Arm	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
1	132.15	33.04	133.77	96.84	1338.47	0.00	564.12	60.64	0.234	0.72	0.31	8.397	A
2	1277.45	319.36	1285.04	1340.72	131.52	0.00	1996.52	2001.97	0.640	3.70	1.80	5.114	A
3	207.66	51.92	210.95	218.82	1197.75	0.00	592.40	232.10	0.351	1.37	0.55	9.517	A
4	1196.54	299.14	1201.39	1174.77	233.93	0.00	2051.64	2008.27	0.583	2.63	1.41	4.259	A

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

Arm	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
1	110.67	27.67	111.15	80.77	1117.49	0.00	700.56	60.64	0.158	0.31	0.19	6.112	A
2	1069.80	267.45	1072.43	1119.11	109.53	0.00	2011.27	2001.97	0.532	1.80	1.15	3.846	A
3	173.91	43.48	174.80	182.63	999.33	0.00	712.99	232.10	0.244	0.55	0.33	6.701	A
4	1002.05	250.51	1003.96	979.83	194.30	0.00	2080.75	2008.27	0.482	1.41	0.94	3.351	A

Queueing Delay Results for each time segment

Queueing Delay results: (07:45-08:00)

Arm	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
1	2.69	0.18	6.043	A	A
2	16.35	1.09	3.779	A	A
3	4.59	0.31	6.597	A	A
4	13.45	0.90	3.311	A	A

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

Arm	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
1	4.34	0.29	8.206	A	A

2	25.31	1.69	4.965	A	A
3	7.56	0.50	9.174	A	A
4	20.13	1.34	4.178	A	A

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

Arm	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
1	9.77	0.65	15.696	C	B
2	50.31	3.35	8.395	A	A
3	18.04	1.20	18.872	C	B
4	36.78	2.45	6.406	A	A

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

Arm	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
1	10.62	0.71	16.191	C	B
2	55.06	3.67	8.689	A	A
3	20.23	1.35	19.896	C	B
4	39.18	2.61	6.536	A	A

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

Arm	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
1	4.85	0.32	8.397	A	A
2	28.30	1.89	5.114	A	A
3	8.70	0.58	9.517	A	A
4	21.97	1.46	4.259	A	A

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

Arm	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
1	2.91	0.19	6.112	A	A
2	17.68	1.18	3.846	A	A
3	5.04	0.34	6.701	A	A
4	14.36	0.96	3.351	A	A

(Default Analysis Set) - 2025 Base + Dev, 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
2025 Base + Dev, AM	2025 Base + Dev	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				9.49	A

Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Name	Description
1	B1168 Boston Road (n)	
2	A17 E	
3	B1168 Boston Road (s)	
4	A17 W	

Capacity Options

Arm	Minimum Capacity (PCU/hr)	Maximum Capacity (PCU/hr)	Assume Flat Start Profile	Initial Queue (PCU)
1	0.00	99999.00		0.00
2	0.00	99999.00		0.00
3	0.00	99999.00		0.00
4	0.00	99999.00		0.00

Roundabout Geometry

Arm	V - Approach road half-width (m)	E - Entry width (m)	l' - Effective flare length (m)	R - Entry radius (m)	D - Inscribed circle diameter (m)	PHI - Conflict (entry) angle (deg)	Exit Only
1	3.66	8.21	13.30	135.00	55.70	30.00	
2	5.30	7.89	14.00	39.00	55.80	28.50	
3	4.23	7.63	10.60	37.50	55.60	31.50	
4	8.00	8.20	2.00	26.00	55.80	27.00	

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

Pedestrian Crossings

Arm	Crossing Type
1	None
2	None
3	None
4	None

Slope / Intercept / Capacity

Arm Intercept Adjustments

Arm	Type	Reason	Direct Intercept Adjustment (PCU/hr)	Percentage Intercept Adjustment (%)
1	Direct		-450.00	

2	Direct		-75.00	
3	Direct		-500.00	
4	Direct		-300.00	

Roundabout Slope and Intercept used in model

Arm	Enter slope and intercept directly	Entered slope	Entered intercept (PCU/hr)	Final Slope	Final Intercept (PCU/hr)
1		(calculated)	(calculated)	0.617	1390.524
2		(calculated)	(calculated)	0.671	2084.771
3		(calculated)	(calculated)	0.608	1320.344
4		(calculated)	(calculated)	0.735	2223.493

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

Arm	Profile Type	Use Turning Counts	Average Demand Flow (PCU/hr)	Flow Scaling Factor (%)
1	ONE HOUR	✓	147.00	100.000
2	ONE HOUR	✓	1427.00	100.000
3	ONE HOUR	✓	254.00	100.000
4	ONE HOUR	✓	1334.00	100.000

Turning Proportions

Turning Counts or Proportions (PCU/hr) - Junction 1 (for whole period)

		To			
		1	2	3	4
From	1	0.000	60.000	12.000	75.000
	2	86.000	0.000	178.000	1163.000
	3	11.000	175.000	0.000	68.000
	4	10.000	1263.000	61.000	0.000

Turning Proportions (PCU) - Junction 1 (for whole period)

		To			
		1	2	3	4
From	1	0.00	0.41	0.08	0.51
	2	0.06	0.00	0.12	0.81
	3	0.04	0.69	0.00	0.27
	4	0.01	0.95	0.05	0.00

Vehicle Mix

Average PCU Per Vehicle - Junction 1 (for whole period)

		To			
		1	2	3	4
From	1	1.000	1.000	1.000	1.000
	2	1.000	1.000	1.000	1.000
	3	1.000	1.000	1.000	1.000
	4	1.000	1.000	1.000	1.000

Heavy Vehicle Percentages - Junction 1 (for whole period)

		To			
		1	2	3	4
From	1	0.000	0.000	0.000	0.000
	2	0.000	0.000	0.000	0.000
	3	0.000	0.000	0.000	0.000
	4	0.000	0.000	0.000	0.000

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)	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)
1	0.44	17.13	0.76	C	134.89	202.33	36.55	10.84	0.41	36.55	10.84
2	0.80	8.88	3.80	A	1309.44	1964.16	196.64	6.01	2.18	196.66	6.01
3	0.64	23.07	1.73	C	233.07	349.61	77.69	13.33	0.86	77.69	13.33
4	0.73	6.72	2.71	A	1224.10	1836.15	149.08	4.87	1.66	149.10	4.87

Main Results for each time segment

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

Arm	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
1	110.67	27.67	109.92	80.19	1123.83	0.00	696.65	59.43	0.159	0.00	0.19	6.128	A
2	1074.32	268.58	1069.77	1122.95	110.81	0.00	2010.42	1999.59	0.534	0.00	1.14	3.809	A
3	191.22	47.81	189.79	188.17	992.41	0.00	717.19	238.23	0.267	0.00	0.36	6.808	A
4	1004.31	251.08	1000.58	978.75	203.45	0.00	2074.03	2006.81	0.484	0.00	0.93	3.343	A

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

Arm	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
1	132.15	33.04	131.68	95.98	1345.02	0.00	560.08	59.43	0.236	0.19	0.31	8.394	A
2	1282.84	320.71	1280.30	1344.02	132.68	0.00	1995.74	1999.59	0.643	1.14	1.77	5.013	A
3	228.34	57.09	227.35	225.20	1187.78	0.00	598.46	238.23	0.382	0.36	0.61	9.674	A
4	1199.24	299.81	1197.35	1171.49	243.65	0.00	2044.50	2006.81	0.587	0.93	1.40	4.240	A

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

Arm	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
1	161.85	40.46	160.15	117.12	1642.56	0.00	376.37	59.43	0.430	0.31	0.73	16.522	C
2	1571.16	392.79	1563.41	1641.00	161.71	0.00	1976.26	1999.59	0.795	1.77	3.71	8.561	A
3	279.66	69.91	275.50	275.02	1450.10	0.00	439.03	238.23	0.637	0.61	1.65	21.493	C
4	1468.76	367.19	1463.72	1429.63	295.96	0.00	2006.07	2006.81	0.732	1.40	2.66	6.576	A

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

Arm	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
1	161.85	40.46	161.75	117.77	1650.02	0.00	371.77	59.43	0.435	0.73	0.76	17.125	C
2	1571.16	392.79	1570.82	1648.89	162.89	0.00	1975.47	1999.59	0.795	3.71	3.80	8.875	A
3	279.66	69.91	279.31	276.30	1457.40	0.00	434.59	238.23	0.644	1.65	1.73	23.071	C
4	1468.76	367.19	1468.59	1437.51	299.20	0.00	2003.69	2006.81	0.733	2.66	2.71	6.721	A

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

Arm	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
1	132.15	33.04	133.90	96.89	1355.61	0.00	553.54	59.43	0.239	0.76	0.32	8.614	A
2	1282.84	320.71	1290.70	1355.20	134.32	0.00	1994.64	1999.59	0.643	3.80	1.83	5.169	A
3	228.34	57.09	232.72	227.00	1198.02	0.00	592.23	238.23	0.386	1.73	0.64	10.130	B
4	1199.24	299.81	1204.30	1182.54	248.20	0.00	2041.15	2006.81	0.588	2.71	1.44	4.327	A

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

Arm	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
1	110.67	27.67	111.17	80.78	1131.22	0.00	692.08	59.43	0.160	0.32	0.19	6.204	A
2	1074.32	268.58	1077.01	1130.59	111.81	0.00	2009.75	1999.59	0.535	1.83	1.16	3.871	A
3	191.22	47.81	192.30	189.43	999.38	0.00	712.96	238.23	0.268	0.64	0.37	6.927	A
4	1004.31	251.08	1006.28	985.96	205.72	0.00	2072.36	2006.81	0.485	1.44	0.95	3.384	A

Queueing Delay Results for each time segment

Queueing Delay results: (07:45-08:00)

Arm	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
1	2.72	0.18	6.128	A	A
2	16.51	1.10	3.809	A	A
3	5.20	0.35	6.808	A	A
4	13.60	0.91	3.343	A	A

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

Arm	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
1	4.43	0.30	8.394	A	A
2	25.65	1.71	5.013	A	A
3	8.74	0.58	9.674	A	A
4	20.45	1.36	4.240	A	A

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

Arm	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
1	10.25	0.68	16.522	C	B
2	51.43	3.43	8.561	A	A
3	22.25	1.48	21.493	C	C
4	37.77	2.52	6.576	A	A

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

Arm	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
1	11.20	0.75	17.125	C	B
2	56.43	3.76	8.875	A	A
3	25.53	1.70	23.071	C	C
4	40.34	2.69	6.721	A	A

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

Arm	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
1	4.98	0.33	8.614	A	A
2	28.75	1.92	5.169	A	A
3	10.23	0.68	10.130	B	B
4	22.38	1.49	4.327	A	A

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

Arm	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
1	2.96	0.20	6.204	A	A
2	17.87	1.19	3.871	A	A
3	5.74	0.38	6.927	A	A
4	14.54	0.97	3.384	A	A

Junctions 8

ARCADY 8 - Roundabout Module

Version: 8.0.2.316 [14 Feb 2013]
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Filename: A17_B1168 Boston Rd_PM Peak.arc8
Path: Holbeach\Modelling
Report generation date: 18/03/2020 20:48:45

Summary of junction performance

	PM			
	Queue (PCU)	Delay (s)	RFC	LOS
	A1 - 2020 Base			
Arm 1	0.45	12.41	0.31	B
Arm 2	2.24	6.75	0.69	A
Arm 3	0.45	10.50	0.31	B
Arm 4	1.63	5.05	0.62	A

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

"D2 - 2020 Base, PM " model duration: 15:45 - 17:15
"D4 - 2025 Base, PM" model duration: 15:45 - 17:15
"D6 - 2025 Base + Dev, PM" model duration: 15:45 - 17:15

Run using Junctions 8.0.2.316 at 18/03/2020 20:48:24

File summary

File Description

Title	A17/ B168 Boston Road
Location	Holbeach
Site Number	
Date	18/03/2020
Version	
Status	
Identifier	
Client	
Jobnumber	
Enumerator	AT Transport Planning
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) - 2020 Base, 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
2020 Base, PM	2020 Base	PM		ONE HOUR	15:45	17:15	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				6.50	A

Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Name	Description
1	B1168 Boston Road (n)	
2	A17 E	
3	B1168 Boston Road (s)	
4	A17 W	

Capacity Options

Arm	Minimum Capacity (PCU/hr)	Maximum Capacity (PCU/hr)	Assume Flat Start Profile	Initial Queue (PCU)
1	0.00	99999.00		0.00
2	0.00	99999.00		0.00
3	0.00	99999.00		0.00
4	0.00	99999.00		0.00

Roundabout Geometry

Arm	V - Approach road half-width (m)	E - Entry width (m)	I' - Effective flare length (m)	R - Entry radius (m)	D - Inscribed circle diameter (m)	PHI - Conflict (entry) angle (deg)	Exit Only

1	3.66	8.21	13.30	135.00	55.70	30.00	
2	5.30	7.89	14.00	39.00	55.80	28.50	
3	4.23	7.63	10.60	37.50	55.60	31.50	
4	8.00	8.20	2.00	26.00	55.80	27.00	

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

Pedestrian Crossings

Arm	Crossing Type
1	None
2	None
3	None
4	None

Slope / Intercept / Capacity

Arm Intercept Adjustments

Arm	Type	Reason	Direct Intercept Adjustment (PCU/hr)	Percentage Intercept Adjustment (%)
1	Direct		-650.00	
2	Direct		-350.00	
3	Direct		-600.00	
4	Direct		-500.00	

Roundabout Slope and Intercept used in model

Arm	Enter slope and intercept directly	Entered slope	Entered intercept (PCU/hr)	Final Slope	Final Intercept (PCU/hr)
1		(calculated)	(calculated)	0.617	1190.524
2		(calculated)	(calculated)	0.671	1809.771
3		(calculated)	(calculated)	0.608	1220.344
4		(calculated)	(calculated)	0.735	2023.493

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

Arm	Profile Type	Use Turning Counts	Average Demand Flow (PCU/hr)	Flow Scaling Factor (%)
1	ONE HOUR	✓	119.00	100.000
2	ONE HOUR	✓	1097.00	100.000
3	ONE HOUR	✓	142.00	100.000
4	ONE HOUR	✓	1065.00	100.000

Turning Proportions

Turning Counts or Proportions (PCU/hr) - Junction 1 (for whole period)

		To			
		1	2	3	4
From	1	0.000	47.000	5.000	67.000
	2	76.000	0.000	86.000	935.000
	3	9.000	86.000	0.000	47.000
	4	19.000	1025.000	21.000	0.000

Turning Proportions (PCU) - Junction 1 (for whole period)

		To			
		1	2	3	4
From	1	0.00	0.39	0.04	0.56
	2	0.07	0.00	0.08	0.85
	3	0.06	0.61	0.00	0.33
	4	0.02	0.96	0.02	0.00

Vehicle Mix

Average PCU Per Vehicle - Junction 1 (for whole period)

		To			
		1	2	3	4
From	1	1.000	1.000	1.000	1.000
	2	1.000	1.000	1.000	1.000
	3	1.000	1.000	1.000	1.000
	4	1.000	1.000	1.000	1.000

Heavy Vehicle Percentages - Junction 1 (for whole period)

		To			
		1	2	3	4
From	1	0.000	0.000	0.000	0.000
	2	0.000	0.000	0.000	0.000
	3	0.000	0.000	0.000	0.000
	4	0.000	0.000	0.000	0.000

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)	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)
1	0.31	12.41	0.45	B	109.20	163.79	24.73	9.06	0.27	24.73	9.06
2	0.69	6.75	2.24	A	1006.63	1509.94	130.07	5.17	1.45	130.08	5.17
3	0.31	10.50	0.45	B	130.30	195.45	25.96	7.97	0.29	25.97	7.97
4	0.62	5.05	1.63	A	977.26	1465.89	99.41	4.07	1.10	99.42	4.07

Main Results for each time segment

Main results: (15:45-16:00)

Arm	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
1	89.59	22.40	88.97	77.96	849.04	0.00	666.31	1.86	0.134	0.00	0.15	6.229	A
2	825.88	206.47	822.38	868.43	69.59	0.00	1763.08	1784.88	0.468	0.00	0.87	3.813	A
3	106.91	26.73	106.22	83.96	808.01	0.00	729.27	219.97	0.147	0.00	0.17	5.772	A
4	801.79	200.45	798.96	786.19	128.04	0.00	1929.43	1824.54	0.416	0.00	0.71	3.176	A

Main results: (16:00-16:15)

Arm	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
1	106.98	26.74	106.67	93.34	1016.31	0.00	563.03	1.86	0.190	0.15	0.23	7.882	A
2	986.18	246.55	984.60	1039.59	83.39	0.00	1753.81	1784.88	0.562	0.87	1.27	4.671	A
3	127.66	31.91	127.34	100.53	967.47	0.00	632.36	219.97	0.202	0.17	0.25	7.123	A
4	957.41	239.35	956.26	941.40	153.40	0.00	1910.80	1824.54	0.501	0.71	1.00	3.766	A

Main results: (16:15-16:30)

Arm	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
1	131.02	32.76	130.19	114.15	1243.43	0.00	422.81	1.86	0.310	0.23	0.44	12.267	B
2	1207.82	301.95	1204.05	1271.77	101.84	0.00	1741.43	1784.88	0.694	1.27	2.21	6.653	A
3	156.34	39.09	155.56	122.93	1182.96	0.00	501.39	219.97	0.312	0.25	0.45	10.386	B
4	1172.59	293.15	1170.09	1151.03	187.49	0.00	1885.76	1824.54	0.622	1.00	1.62	5.013	A

Main results: (16:30-16:45)

Arm	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
1	131.02	32.76	131.00	114.50	1246.29	0.00	421.04	1.86	0.311	0.44	0.45	12.409	B
2	1207.82	301.95	1207.71	1274.91	102.38	0.00	1741.07	1784.88	0.694	2.21	2.24	6.747	A
3	156.34	39.09	156.32	123.30	1186.79	0.00	499.06	219.97	0.313	0.45	0.45	10.501	B
4	1172.59	293.15	1172.54	1154.86	188.25	0.00	1885.20	1824.54	0.622	1.62	1.63	5.051	A

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

Arm	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
1	106.98	26.74	107.81	93.85	1020.55	0.00	560.42	1.86	0.191	0.45	0.24	7.968	A
2	986.18	246.55	989.93	1044.20	84.16	0.00	1753.30	1784.88	0.562	2.24	1.30	4.738	A
3	127.66	31.91	128.43	101.06	973.02	0.00	628.98	219.97	0.203	0.45	0.26	7.205	A
4	957.41	239.35	959.89	946.95	154.51	0.00	1909.99	1824.54	0.501	1.63	1.01	3.800	A

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

Arm	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
1	89.59	22.40	89.91	78.45	853.60	0.00	663.49	1.86	0.135	0.24	0.16	6.281	A
2	825.88	206.47	827.53	873.28	70.24	0.00	1762.64	1784.88	0.469	1.30	0.89	3.857	A
3	106.91	26.73	107.24	84.49	813.28	0.00	726.07	219.97	0.147	0.26	0.17	5.822	A
4	801.79	200.45	802.98	791.44	129.07	0.00	1928.67	1824.54	0.416	1.01	0.72	3.203	A

Queueing Delay Results for each time segment

Queueing Delay results: (15:45-16:00)

Arm	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
1	2.24	0.15	6.229	A	A
2	12.73	0.85	3.813	A	A
3	2.48	0.17	5.772	A	A
4	10.35	0.69	3.176	A	A

Queueing Delay results: (16:00-16:15)

Arm	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
1	3.39	0.23	7.882	A	A
2	18.51	1.23	4.671	A	A
3	3.66	0.24	7.123	A	A
4	14.61	0.97	3.766	A	A

Queueing Delay results: (16:15-16:30)

Arm	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
1	6.31	0.42	12.267	B	B
2	31.56	2.10	6.653	A	A
3	6.42	0.43	10.386	B	B
4	23.47	1.56	5.013	A	A

Queueing Delay results: (16:30-16:45)

Arm	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
1	6.67	0.44	12.409	B	B
2	33.41	2.23	6.747	A	A
3	6.74	0.45	10.501	B	B
4	24.43	1.63	5.051	A	A

Queueing Delay results: (16:45-17:00)

Arm	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
1	3.71	0.25	7.968	A	A
2	20.20	1.35	4.738	A	A
3	3.98	0.27	7.205	A	A
4	15.61	1.04	3.800	A	A

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

Arm	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
1	2.42	0.16	6.281	A	A
2	13.65	0.91	3.857	A	A
3	2.67	0.18	5.822	A	A
4	10.95	0.73	3.203	A	A

(Default Analysis Set) - 2025 Base, 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
2025 Base, PM	2025 Base	PM		ONE HOUR	15:45	17:15	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				7.90	A

Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Name	Description
1	B1168 Boston Road (n)	
2	A17 E	
3	B1168 Boston Road (s)	
4	A17 W	

Capacity Options

Arm	Minimum Capacity (PCU/hr)	Maximum Capacity (PCU/hr)	Assume Flat Start Profile	Initial Queue (PCU)
1	0.00	99999.00		0.00
2	0.00	99999.00		0.00
3	0.00	99999.00		0.00
4	0.00	99999.00		0.00

Roundabout Geometry

Arm	V - Approach road half-width (m)	E - Entry width (m)	l' - Effective flare length (m)	R - Entry radius (m)	D - Inscribed circle diameter (m)	PHI - Conflict (entry) angle (deg)	Exit Only
1	3.66	8.21	13.30	135.00	55.70	30.00	
2	5.30	7.89	14.00	39.00	55.80	28.50	
3	4.23	7.63	10.60	37.50	55.60	31.50	
4	8.00	8.20	2.00	26.00	55.80	27.00	

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

Pedestrian Crossings

Arm	Crossing Type
1	None
2	None
3	None
4	None

Slope / Intercept / Capacity

Arm Intercept Adjustments

Arm	Type	Reason	Direct Intercept Adjustment (PCU/hr)	Percentage Intercept Adjustment (%)
1	Direct		-650.00	
2	Direct		-350.00	
3	Direct		-600.00	
4	Direct		-500.00	

Roundabout Slope and Intercept used in model

Arm	Enter slope and intercept directly	Entered slope	Entered intercept (PCU/hr)	Final Slope	Final Intercept (PCU/hr)
1		(calculated)	(calculated)	0.617	1190.524
2		(calculated)	(calculated)	0.671	1809.771
3		(calculated)	(calculated)	0.608	1220.344
4		(calculated)	(calculated)	0.735	2023.493

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

Arm	Profile Type	Use Turning Counts	Average Demand Flow (PCU/hr)	Flow Scaling Factor (%)
1	ONE HOUR	✓	128.00	100.000
2	ONE HOUR	✓	1182.00	100.000
3	ONE HOUR	✓	154.00	100.000
4	ONE HOUR	✓	1146.00	100.000

Turning Proportions

Turning Counts or Proportions (PCU/hr) - Junction 1 (for whole period)

		To			
		1	2	3	4
From	1	0.000	51.000	5.000	72.000
	2	82.000	0.000	93.000	1007.000
	3	10.000	93.000	0.000	51.000
	4	20.000	1103.000	23.000	0.000

Turning Proportions (PCU) - Junction 1 (for whole period)

		To			
		1	2	3	4
From	1	0.00	0.40	0.04	0.56
	2	0.07	0.00	0.08	0.85
	3	0.06	0.60	0.00	0.33
	4	0.02	0.96	0.02	0.00

Vehicle Mix

Average PCU Per Vehicle - Junction 1 (for whole period)

		To			
		1	2	3	4
From	1	1.000	1.000	1.000	1.000
	2	1.000	1.000	1.000	1.000
	3	1.000	1.000	1.000	1.000
	4	1.000	1.000	1.000	1.000

Heavy Vehicle Percentages - Junction 1 (for whole period)

		To			
		1	2	3	4
From	1	0.000	0.000	0.000	0.000
	2	0.000	0.000	0.000	0.000
	3	0.000	0.000	0.000	0.000
	4	0.000	0.000	0.000	0.000

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)	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)
1	0.39	16.28	0.63	C	117.46	176.18	32.18	10.96	0.36	32.18	10.96
2	0.75	8.27	2.94	A	1084.62	1626.94	161.75	5.97	1.80	161.77	5.97
3	0.38	13.13	0.61	B	141.31	211.97	33.01	9.34	0.37	33.01	9.34
4	0.67	5.88	2.04	A	1051.59	1577.38	119.50	4.55	1.33	119.51	4.55

Main Results for each time segment

Main results: (15:45-16:00)

Arm	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
1	96.37	24.09	95.64	83.93	914.06	0.00	626.16	1.66	0.154	0.00	0.18	6.778	A
2	889.87	222.47	885.82	934.92	74.79	0.00	1759.59	1784.53	0.506	0.00	1.01	4.101	A
3	115.94	28.98	115.14	90.68	869.92	0.00	691.64	220.54	0.168	0.00	0.20	6.235	A
4	862.77	215.69	859.53	846.60	138.46	0.00	1921.77	1824.18	0.449	0.00	0.81	3.380	A

Main results: (16:00-16:15)

Arm	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
1	115.07	28.77	114.65	100.49	1094.18	0.00	514.96	1.66	0.223	0.18	0.28	8.984	A
2	1062.59	265.65	1060.55	1119.22	89.62	0.00	1749.64	1784.53	0.607	1.01	1.52	5.208	A
3	138.44	34.61	138.02	108.57	1041.60	0.00	587.30	220.54	0.236	0.20	0.30	8.005	A
4	1030.23	257.56	1028.78	1013.73	165.89	0.00	1901.63	1824.18	0.542	0.81	1.17	4.118	A

Main results: (16:15-16:30)

Arm	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
1	140.93	35.23	139.61	122.80	1338.10	0.00	364.35	1.66	0.387	0.28	0.61	15.926	C
2	1301.41	325.35	1295.94	1368.47	109.24	0.00	1736.47	1784.53	0.749	1.52	2.89	8.072	A
3	169.56	42.39	168.39	132.67	1272.51	0.00	446.96	220.54	0.379	0.30	0.60	12.870	B
4	1261.77	315.44	1258.37	1238.37	202.53	0.00	1874.71	1824.18	0.673	1.17	2.02	5.808	A

Main results: (16:30-16:45)

Arm	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
1	140.93	35.23	140.88	123.30	1342.03	0.00	361.93	1.66	0.389	0.61	0.63	16.276	C
2	1301.41	325.35	1301.20	1372.84	110.07	0.00	1735.92	1784.53	0.750	2.89	2.94	8.270	A
3	169.56	42.39	169.51	133.20	1278.07	0.00	443.59	220.54	0.382	0.60	0.61	13.128	B
4	1261.77	315.44	1261.69	1243.93	203.64	0.00	1873.89	1824.18	0.673	2.02	2.04	5.878	A

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

Arm	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
1	115.07	28.77	116.40	101.20	1099.89	0.00	511.43	1.66	0.225	0.63	0.29	9.142	A
2	1062.59	265.65	1068.08	1125.52	90.77	0.00	1748.87	1784.53	0.608	2.94	1.57	5.331	A
3	138.44	34.61	139.62	109.33	1049.52	0.00	582.49	220.54	0.238	0.61	0.32	8.151	A
4	1030.23	257.56	1033.61	1021.66	167.48	0.00	1900.46	1824.18	0.542	2.04	1.20	4.170	A

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

Arm	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
1	96.37	24.09	96.80	84.52	919.47	0.00	622.83	1.66	0.155	0.29	0.18	6.848	A
2	889.87	222.47	892.02	940.69	75.58	0.00	1759.06	1784.53	0.506	1.57	1.03	4.163	A
3	115.94	28.98	116.38	91.31	876.29	0.00	687.77	220.54	0.169	0.32	0.20	6.307	A
4	862.77	215.69	864.27	852.95	139.72	0.00	1920.85	1824.18	0.449	1.20	0.82	3.413	A

Queueing Delay Results for each time segment

Queueing Delay results: (15:45-16:00)

Arm	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
1	2.62	0.17	6.778	A	A
2	14.71	0.98	4.101	A	A
3	2.90	0.19	6.235	A	A
4	11.82	0.79	3.380	A	A

Queueing Delay results: (16:00-16:15)

Arm	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
1	4.13	0.28	8.984	A	A

2	22.11	1.47	5.208	A	A
3	4.44	0.30	8.005	A	A
4	17.12	1.14	4.118	A	A

Queueing Delay results: (16:15-16:30)

Arm	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
1	8.65	0.58	15.926	C	B
2	40.61	2.71	8.072	A	A
3	8.51	0.57	12.870	B	B
4	28.99	1.93	5.808	A	A

Queueing Delay results: (16:30-16:45)

Arm	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
1	9.33	0.62	16.276	C	B
2	43.82	2.92	8.270	A	A
3	9.09	0.61	13.128	B	B
4	30.49	2.03	5.878	A	A

Queueing Delay results: (16:45-17:00)

Arm	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
1	4.61	0.31	9.142	A	A
2	24.56	1.64	5.331	A	A
3	4.91	0.33	8.151	A	A
4	18.50	1.23	4.170	A	A

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

Arm	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
1	2.85	0.19	6.848	A	A
2	15.93	1.06	4.163	A	A
3	3.15	0.21	6.307	A	A
4	12.58	0.84	3.413	A	A

(Default Analysis Set) - 2025 Base + Dev, 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
2025 Base + Dev, PM	2025 Base + Dev	PM		ONE HOUR	15:45	17:15	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				8.23	A

Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Name	Description
1	B1168 Boston Road (n)	
2	A17 E	
3	B1168 Boston Road (s)	
4	A17 W	

Capacity Options

Arm	Minimum Capacity (PCU/hr)	Maximum Capacity (PCU/hr)	Assume Flat Start Profile	Initial Queue (PCU)
1	0.00	99999.00		0.00
2	0.00	99999.00		0.00
3	0.00	99999.00		0.00
4	0.00	99999.00		0.00

Roundabout Geometry

Arm	V - Approach road half-width (m)	E - Entry width (m)	I' - Effective flare length (m)	R - Entry radius (m)	D - Inscribed circle diameter (m)	PHI - Conflict (entry) angle (deg)	Exit Only
1	3.66	8.21	13.30	135.00	55.70	30.00	
2	5.30	7.89	14.00	39.00	55.80	28.50	
3	4.23	7.63	10.60	37.50	55.60	31.50	
4	8.00	8.20	2.00	26.00	55.80	27.00	

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

Pedestrian Crossings

Arm	Crossing Type
1	None
2	None
3	None
4	None

Slope / Intercept / Capacity

Arm Intercept Adjustments

Arm	Type	Reason	Direct Intercept Adjustment (PCU/hr)	Percentage Intercept Adjustment (%)
1	Direct		-650.00	

2	Direct		-350.00	
3	Direct		-600.00	
4	Direct		-500.00	

Roundabout Slope and Intercept used in model

Arm	Enter slope and intercept directly	Entered slope	Entered intercept (PCU/hr)	Final Slope	Final Intercept (PCU/hr)
1		(calculated)	(calculated)	0.617	1190.524
2		(calculated)	(calculated)	0.671	1809.771
3		(calculated)	(calculated)	0.608	1220.344
4		(calculated)	(calculated)	0.735	2023.493

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

Arm	Profile Type	Use Turning Counts	Average Demand Flow (PCU/hr)	Flow Scaling Factor (%)
1	ONE HOUR	✓	129.00	100.000
2	ONE HOUR	✓	1196.00	100.000
3	ONE HOUR	✓	165.00	100.000
4	ONE HOUR	✓	1152.00	100.000

Turning Proportions

Turning Counts or Proportions (PCU/hr) - Junction 1 (for whole period)

		To			
		1	2	3	4
From	1	0.000	51.000	6.000	72.000
	2	82.000	0.000	107.000	1007.000
	3	10.000	100.000	0.000	55.000
	4	20.000	1103.000	29.000	0.000

Turning Proportions (PCU) - Junction 1 (for whole period)

		To			
		1	2	3	4
From	1	0.00	0.40	0.05	0.56
	2	0.07	0.00	0.09	0.84
	3	0.06	0.61	0.00	0.33
	4	0.02	0.96	0.03	0.00

Vehicle Mix

Average PCU Per Vehicle - Junction 1 (for whole period)

		To			
		1	2	3	4
From	1	1.000	1.000	1.000	1.000
	2	1.000	1.000	1.000	1.000
	3	1.000	1.000	1.000	1.000
	4	1.000	1.000	1.000	1.000

Heavy Vehicle Percentages - Junction 1 (for whole period)

		To			
		1	2	3	4
From	1	0.000	0.000	0.000	0.000
	2	0.000	0.000	0.000	0.000
	3	0.000	0.000	0.000	0.000
	4	0.000	0.000	0.000	0.000

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)	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)
1	0.40	17.04	0.66	C	118.37	177.56	33.47	11.31	0.37	33.48	11.31
2	0.76	8.68	3.12	A	1097.47	1646.21	169.20	6.17	1.88	169.22	6.17
3	0.41	13.73	0.68	B	151.41	227.11	36.48	9.64	0.41	36.48	9.64
4	0.68	6.00	2.09	A	1057.10	1585.64	121.89	4.61	1.35	121.90	4.61

Main Results for each time segment

Main results: (15:45-16:00)

Arm	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
1	97.12	24.28	96.38	83.92	923.77	0.00	620.17	0.00	0.157	0.00	0.18	6.862	A
2	900.41	225.10	896.24	940.12	80.03	0.00	1756.07	1779.06	0.513	0.00	1.04	4.167	A
3	124.22	31.06	123.35	106.42	869.85	0.00	691.68	235.84	0.180	0.00	0.22	6.325	A
4	867.29	216.82	864.01	849.52	143.68	0.00	1917.94	1818.38	0.452	0.00	0.82	3.406	A

Main results: (16:00-16:15)

Arm	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
1	115.97	28.99	115.54	100.48	1105.80	0.00	507.78	0.00	0.228	0.18	0.29	9.167	A
2	1075.18	268.79	1073.03	1125.45	95.89	0.00	1745.43	1779.06	0.616	1.04	1.58	5.337	A
3	148.33	37.08	147.86	127.41	1041.51	0.00	587.35	235.84	0.253	0.22	0.33	8.183	A
4	1035.62	258.91	1034.14	1017.23	172.14	0.00	1897.03	1818.38	0.546	0.82	1.19	4.165	A

Main results: (16:15-16:30)

Arm	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
1	142.03	35.51	140.62	122.77	1352.19	0.00	355.65	0.00	0.399	0.29	0.65	16.634	C
2	1316.82	329.21	1310.90	1375.94	116.87	0.00	1731.35	1779.06	0.761	1.58	3.06	8.443	A
3	181.67	45.42	180.33	155.66	1272.11	0.00	447.21	235.84	0.406	0.33	0.67	13.424	B
4	1268.38	317.09	1264.86	1242.34	210.10	0.00	1869.15	1818.38	0.679	1.19	2.07	5.923	A

Main results: (16:30-16:45)

Arm	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
1	142.03	35.51	141.97	123.29	1356.33	0.00	353.10	0.00	0.402	0.65	0.66	17.038	C
2	1316.82	329.21	1316.58	1380.53	117.77	0.00	1730.75	1779.06	0.761	3.06	3.12	8.678	A
3	181.67	45.42	181.61	156.32	1278.03	0.00	443.61	235.84	0.410	0.67	0.68	13.734	B
4	1268.38	317.09	1268.29	1248.30	211.34	0.00	1868.24	1818.38	0.679	2.07	2.09	5.998	A

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

Arm	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
1	115.97	28.99	117.40	101.24	1111.80	0.00	504.07	0.00	0.230	0.66	0.30	9.345	A
2	1075.18	268.79	1081.13	1132.06	97.15	0.00	1744.59	1779.06	0.616	3.12	1.63	5.473	A
3	148.33	37.08	149.68	128.34	1049.94	0.00	582.24	235.84	0.255	0.68	0.35	8.349	A
4	1035.62	258.91	1039.13	1025.70	173.91	0.00	1895.73	1818.38	0.546	2.09	1.22	4.221	A

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

Arm	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
1	97.12	24.28	97.57	84.53	929.32	0.00	616.74	0.00	0.157	0.30	0.19	6.942	A
2	900.41	225.10	902.68	946.03	80.87	0.00	1755.51	1779.06	0.513	1.63	1.06	4.232	A
3	124.22	31.06	124.72	107.17	876.38	0.00	687.71	235.84	0.181	0.35	0.22	6.399	A
4	867.29	216.82	868.82	856.07	145.03	0.00	1916.95	1818.38	0.452	1.22	0.83	3.438	A

Queueing Delay Results for each time segment

Queueing Delay results: (15:45-16:00)

Arm	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
1	2.67	0.18	6.862	A	A
2	15.12	1.01	4.167	A	A
3	3.15	0.21	6.325	A	A
4	11.97	0.80	3.406	A	A

Queueing Delay results: (16:00-16:15)

Arm	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
1	4.24	0.28	9.167	A	A
2	22.89	1.53	5.337	A	A
3	4.86	0.32	8.183	A	A
4	17.40	1.16	4.165	A	A

Queueing Delay results: (16:15-16:30)

Arm	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
1	9.08	0.61	16.634	C	B
2	42.81	2.85	8.443	A	A
3	9.48	0.63	13.424	B	B
4	29.68	1.98	5.923	A	A

Queueing Delay results: (16:30-16:45)

Arm	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
1	9.83	0.66	17.038	C	B
2	46.44	3.10	8.678	A	A
3	10.16	0.68	13.734	B	B
4	31.25	2.08	5.998	A	A

Queueing Delay results: (16:45-17:00)

Arm	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
1	4.75	0.32	9.345	A	A
2	25.54	1.70	5.473	A	A
3	5.40	0.36	8.349	A	A
4	18.83	1.26	4.221	A	A

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

Arm	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
1	2.91	0.19	6.942	A	A
2	16.40	1.09	4.232	A	A
3	3.43	0.23	6.399	A	A
4	12.75	0.85	3.438	A	A

Junctions 8

PICADY 8 - Priority Intersection Module

Version: 8.0.2.316 [14 Feb 2013]
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Filename: B1168 Boston Rd_Chestnut Ave.arc8
Path: Holbeach\Modelling
Report generation date: 19/03/2020 10:13:08

Summary of junction performance

	AM			
	Queue (PCU)	Delay (s)	RFC	LOS
	A1 - 2020 Base AM Peak			
Stream B-C	0.23	6.88	0.19	A
Stream B-A	0.07	8.25	0.06	A
Stream C-AB	0.15	7.03	0.13	A
Stream C-A	-	-	-	-
Stream A-B	-	-	-	-
Stream A-C	-	-	-	-

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

"D1 - 2020 Base AM Peak, AM " model duration: 07:45 - 09:15
"D2 - 2020 Base PM Peak, PM" model duration: 15:45 - 17:15
"D3 - 2025 Base AM Peak, AM" model duration: 07:45 - 09:15
"D4 - 2025 Base PM Peak, PM" model duration: 15:45 - 17:15
"D5 - 2025 Base plus Development AM Peak, AM" model duration: 07:45 - 09:15
"D6 - 2025 Base plus Development PM Peak, PM" model duration: 15:45 - 17:15

Run using Junctions 8.0.2.316 at 19/03/2020 10:12:38

File summary

File Description

Title	B1168 Boston Road/ Chester Avenue
Location	
Site Number	
Date	19/03/2020
Version	
Status	
Identifier	
Client	
Jobnumber	
Enumerator	AT Transport Planning
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) - 2020 Base AM Peak, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	DemandSets	D1 - 2020 Base AM Peak, AM	Demand Set 1: Scenario Name includes Time Period Name ('AM'). Are you sure this is correct?
Warning	DemandSets	D2 - 2020 Base PM Peak, PM	Demand Set 2: Scenario Name includes Time Period Name ('PM'). Are you sure this is correct?
Warning	DemandSets	D3 - 2025 Base AM Peak, AM	Demand Set 3: Scenario Name includes Time Period Name ('AM'). Are you sure this is correct?
Warning	DemandSets	D4 - 2025 Base PM Peak, PM	Demand Set 4: Scenario Name includes Time Period Name ('PM'). Are you sure this is correct?
Warning	DemandSets	D5 - 2025 Base plus Development AM Peak, AM	Demand Set 5: Scenario Name includes Time Period Name ('AM'). Are you sure this is correct?
Warning	DemandSets	D6 - 2025 Base plus Development PM Peak, PM	Demand Set 6: Scenario Name includes Time Period Name ('PM'). Are you sure this is correct?

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
2020 Base AM Peak, AM	2020 Base AM Peak	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
(untitled)	T-Junction	Two-way	A,B,C	7.11	A

Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Name	Description	Arm Type
A	B1168 Boston Road (s)		Major
B	Chesttnut Avenue		Minor
C	B1168 Boston Road (n)		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	8.71		0.00		2.20	53.00	✓	1.00

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				10.00	7.39	3.85	2.50	2.25	✓	1.00	60	23

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	543.383	0.087	0.221	0.139	0.315
1	B-C	684.085	0.092	0.234	-	-
1	C-B	604.656	0.207	0.207	-	-

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	✓	144.00	100.000
B	ONE HOUR	✓	134.00	100.000
C	ONE HOUR	✓	220.00	100.000

Turning Proportions

Turning Counts or Proportions (PCU/hr) - Junction 1 (for whole period)

		To		
		A	B	C
From	A	0.000	37.000	107.000
	B	26.000	0.000	108.000
	C	155.000	65.000	0.000

Turning Proportions (PCU) - Junction 1 (for whole period)

		To		
		A	B	C
From	A	0.00	0.26	0.74
	B	0.19	0.00	0.81
	C	0.70	0.30	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	0.19	6.88	0.23	A
B-A	0.06	8.25	0.07	A
C-AB	0.13	7.03	0.15	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	80.75	0.00	655.96	0.124	0.14	6.254	A
B-A	19.57	19.41	0.00	490.73	0.040	0.04	7.636	A
C-AB	49.76	49.39	0.00	588.85	0.085	0.09	6.669	A

C-A	115.87	115.87	0.00	-	-	-	-	-
A-B	27.86	27.86	0.00	-	-	-	-	-
A-C	80.56	80.56	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	96.95	0.00	650.26	0.149	0.17	6.504	A
B-A	23.37	23.34	0.00	479.94	0.049	0.05	7.884	A
C-AB	59.86	59.77	0.00	587.40	0.102	0.11	6.823	A
C-A	137.92	137.92	0.00	-	-	-	-	-
A-B	33.26	33.26	0.00	-	-	-	-	-
A-C	96.19	96.19	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	118.71	0.00	642.31	0.185	0.23	6.870	A
B-A	28.63	28.57	0.00	464.79	0.062	0.07	8.251	A
C-AB	74.24	74.11	0.00	586.29	0.127	0.15	7.026	A
C-A	167.99	167.99	0.00	-	-	-	-	-
A-B	40.74	40.74	0.00	-	-	-	-	-
A-C	117.81	117.81	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	118.91	0.00	642.28	0.185	0.23	6.877	A
B-A	28.63	28.63	0.00	464.73	0.062	0.07	8.254	A
C-AB	74.24	74.24	0.00	586.29	0.127	0.15	7.032	A
C-A	167.99	167.99	0.00	-	-	-	-	-
A-B	40.74	40.74	0.00	-	-	-	-	-
A-C	117.81	117.81	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	97.29	0.00	650.23	0.149	0.18	6.512	A
B-A	23.37	23.43	0.00	479.86	0.049	0.05	7.888	A
C-AB	59.86	59.98	0.00	587.40	0.102	0.12	6.829	A
C-A	137.92	137.92	0.00	-	-	-	-	-
A-B	33.26	33.26	0.00	-	-	-	-	-
A-C	96.19	96.19	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	81.45	0.00	655.89	0.124	0.14	6.270	A
B-A	19.57	19.61	0.00	490.56	0.040	0.04	7.646	A
C-AB	49.76	49.85	0.00	588.85	0.085	0.09	6.679	A
C-A	115.87	115.87	0.00	-	-	-	-	-
A-B	27.86	27.86	0.00	-	-	-	-	-
A-C	80.56	80.56	0.00	-	-	-	-	-

(Default Analysis Set) - 2020 Base PM Peak, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	DemandSets	D1 - 2020 Base AM Peak, AM	Demand Set 1: Scenario Name includes Time Period Name ('AM'). Are you sure this is correct?
Warning	DemandSets	D2 - 2020 Base PM Peak, PM	Demand Set 2: Scenario Name includes Time Period Name ('PM'). Are you sure this is correct?
Warning	DemandSets	D3 - 2025 Base AM Peak, AM	Demand Set 3: Scenario Name includes Time Period Name ('AM'). Are you sure this is correct?
Warning	DemandSets	D4 - 2025 Base PM Peak, PM	Demand Set 4: Scenario Name includes Time Period Name ('PM'). Are you sure this is correct?
Warning	DemandSets	D5 - 2025 Base plus Development AM Peak, AM	Demand Set 5: Scenario Name includes Time Period Name ('AM'). Are you sure this is correct?
Warning	DemandSets	D6 - 2025 Base plus Development PM Peak, PM	Demand Set 6: Scenario Name includes Time Period Name ('PM'). Are you sure this is correct?

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
2020 Base PM Peak, PM	2020 Base PM Peak	PM		ONE HOUR	15:45	17:15	90	15		

Junction Network

Junctions

Name	Junction Type	Major Road Direction	Arm Order	Junction Delay (s)	Junction LOS
(untitled)	T-Junction	Two-way	A,B,C	6.61	A

Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Name	Description	Arm Type
A	B1168 Boston Road (s)		Major
B	Chesttnut Avenue		Minor
C	B1168 Boston Road (n)		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	8.71		0.00		2.20	53.00	✓	1.00

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				10.00	7.39	3.85	2.50	2.25	✓	1.00	60	23

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	543.383	0.087	0.221	0.139	0.315
1	B-C	684.085	0.092	0.234	-	-
1	C-B	604.656	0.207	0.207	-	-

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	✓	57.00	100.000
B	ONE HOUR	✓	101.00	100.000
C	ONE HOUR	✓	112.00	100.000

Turning Proportions

Turning Counts or Proportions (PCU/hr) - Junction 1 (for whole period)

		To		
		A	B	C
From	A	0.000	15.000	42.000
	B	7.000	0.000	94.000
	C	46.000	66.000	0.000

Turning Proportions (PCU) - Junction 1 (for whole period)

		To		
		A	B	C
From	A	0.00	0.26	0.74
	B	0.07	0.00	0.93
	C	0.41	0.59	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	0.15	6.36	0.18	A
B-A	0.02	7.31	0.02	A
C-AB	0.12	6.89	0.14	A
C-A	-	-	-	-
A-B	-	-	-	-
A-C	-	-	-	-

Main Results for each time segment

Main results: (15:45-16:00)

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	70.77	70.30	0.00	673.91	0.105	0.12	5.961	A
B-A	5.27	5.23	0.00	514.40	0.010	0.01	7.070	A
C-AB	49.93	49.57	0.00	597.72	0.084	0.09	6.563	A
C-A	34.39	34.39	0.00	-	-	-	-	-
A-B	11.29	11.29	0.00	-	-	-	-	-
A-C	31.62	31.62	0.00	-	-	-	-	-

Main results: (16:00-16:15)

Stream	Total Demand	Entry Flow	Pedestrian Demand	Capacity	RFC	End Queue	Delay	LOS

	(PCU/hr)	(PCU/hr)	(Ped/hr)	(PCU/hr)		(PCU)	(s)	
B-C	84.50	84.40	0.00	671.90	0.126	0.14	6.128	A
B-A	6.29	6.28	0.00	508.36	0.012	0.01	7.169	A
C-AB	59.75	59.66	0.00	596.83	0.100	0.11	6.702	A
C-A	40.94	40.94	0.00	-	-	-	-	-
A-B	13.48	13.48	0.00	-	-	-	-	-
A-C	37.76	37.76	0.00	-	-	-	-	-

Main results: (16:15-16:30)

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	103.50	103.34	0.00	669.13	0.155	0.18	6.361	A
B-A	7.71	7.69	0.00	499.91	0.015	0.02	7.313	A
C-AB	73.43	73.31	0.00	595.85	0.123	0.14	6.887	A
C-A	49.88	49.88	0.00	-	-	-	-	-
A-B	16.52	16.52	0.00	-	-	-	-	-
A-C	46.24	46.24	0.00	-	-	-	-	-

Main results: (16:30-16:45)

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	103.50	103.49	0.00	669.12	0.155	0.18	6.363	A
B-A	7.71	7.71	0.00	499.87	0.015	0.02	7.313	A
C-AB	73.43	73.43	0.00	595.85	0.123	0.14	6.890	A
C-A	49.88	49.88	0.00	-	-	-	-	-
A-B	16.52	16.52	0.00	-	-	-	-	-
A-C	46.24	46.24	0.00	-	-	-	-	-

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	84.50	84.65	0.00	671.90	0.126	0.14	6.133	A
B-A	6.29	6.30	0.00	508.29	0.012	0.01	7.173	A
C-AB	59.75	59.86	0.00	596.83	0.100	0.11	6.707	A
C-A	40.94	40.94	0.00	-	-	-	-	-
A-B	13.48	13.48	0.00	-	-	-	-	-
A-C	37.76	37.76	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	70.77	70.88	0.00	673.90	0.105	0.12	5.972	A
B-A	5.27	5.28	0.00	514.24	0.010	0.01	7.072	A
C-AB	49.93	50.01	0.00	597.72	0.084	0.09	6.575	A
C-A	34.39	34.39	0.00	-	-	-	-	-
A-B	11.29	11.29	0.00	-	-	-	-	-
A-C	31.62	31.62	0.00	-	-	-	-	-

(Default Analysis Set) - 2025 Base AM Peak, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	DemandSets	D1 - 2020 Base AM Peak, AM	Demand Set 1: Scenario Name includes Time Period Name ('AM'). Are you sure this is correct?
Warning	DemandSets	D2 - 2020 Base PM Peak, PM	Demand Set 2: Scenario Name includes Time Period Name ('PM'). Are you sure this is correct?
Warning	DemandSets	D3 - 2025 Base AM Peak, AM	Demand Set 3: Scenario Name includes Time Period Name ('AM'). Are you sure this is correct?
Warning	DemandSets	D4 - 2025 Base PM Peak, PM	Demand Set 4: Scenario Name includes Time Period Name ('PM'). Are you sure this is correct?
Warning	DemandSets	D5 - 2025 Base plus Development AM Peak, AM	Demand Set 5: Scenario Name includes Time Period Name ('AM'). Are you sure this is correct?
Warning	DemandSets	D6 - 2025 Base plus Development PM Peak, PM	Demand Set 6: Scenario Name includes Time Period Name ('PM'). Are you sure this is correct?

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
2025 Base AM Peak, AM	2025 Base AM Peak	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
(untitled)	T-Junction	Two-way	A,B,C	7.25	A

Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Name	Description	Arm Type
A	B1168 Boston Road (s)		Major
B	Chesttnut Avenue		Minor
C	B1168 Boston Road (n)		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	8.71		0.00		2.20	53.00	✓	1.00

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				10.00	7.39	3.85	2.50	2.25	✓	1.00	60	23

	plus flare												

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	543.383	0.087	0.221	0.139	0.315
1	B-C	684.085	0.092	0.234	-	-
1	C-B	604.656	0.207	0.207	-	-

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	✓	155.00	100.000
B	ONE HOUR	✓	144.00	100.000
C	ONE HOUR	✓	237.00	100.000

Turning Proportions

Turning Counts or Proportions (PCU/hr) - Junction 1 (for whole period)

		To		
		A	B	C
From	A	0.000	40.000	115.000
	B	28.000	0.000	116.000
	C	167.000	70.000	0.000

Turning Proportions (PCU) - Junction 1 (for whole period)

		To		
		A	B	C
From	A	0.00	0.26	0.74
	B	0.19	0.00	0.81
	C	0.70	0.30	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	0.20	7.04	0.25	A
B-A	0.07	8.42	0.07	A
C-AB	0.14	7.12	0.16	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	87.33	86.72	0.00	653.77	0.134	0.15	6.342	A
B-A	21.08	20.90	0.00	486.56	0.043	0.04	7.731	A
C-AB	53.74	53.33	0.00	588.22	0.091	0.10	6.726	A
C-A	124.69	124.69	0.00	-	-	-	-	-
A-B	30.11	30.11	0.00	-	-	-	-	-
A-C	86.58	86.58	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	104.28	104.13	0.00	647.60	0.161	0.19	6.622	A
B-A	25.17	25.13	0.00	474.85	0.053	0.06	8.005	A
C-AB	64.72	64.62	0.00	586.92	0.110	0.13	6.893	A

C-A	148.34	148.34	0.00	-	-	-	-	-
A-B	35.96	35.96	0.00	-	-	-	-	-
A-C	103.38	103.38	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	127.72	127.49	0.00	638.96	0.200	0.25	7.035	A
B-A	30.83	30.76	0.00	458.33	0.067	0.07	8.419	A
C-AB	80.44	80.29	0.00	586.17	0.137	0.16	7.114	A
C-A	180.50	180.50	0.00	-	-	-	-	-
A-B	44.04	44.04	0.00	-	-	-	-	-
A-C	126.62	126.62	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	127.72	127.71	0.00	638.93	0.200	0.25	7.041	A
B-A	30.83	30.83	0.00	458.26	0.067	0.07	8.421	A
C-AB	80.44	80.44	0.00	586.17	0.137	0.16	7.120	A
C-A	180.50	180.50	0.00	-	-	-	-	-
A-B	44.04	44.04	0.00	-	-	-	-	-
A-C	126.62	126.62	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	104.28	104.50	0.00	647.55	0.161	0.19	6.633	A
B-A	25.17	25.23	0.00	474.75	0.053	0.06	8.010	A
C-AB	64.72	64.86	0.00	586.92	0.110	0.13	6.897	A
C-A	148.34	148.34	0.00	-	-	-	-	-
A-B	35.96	35.96	0.00	-	-	-	-	-
A-C	103.38	103.38	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	87.33	87.48	0.00	653.69	0.134	0.16	6.359	A
B-A	21.08	21.12	0.00	486.38	0.043	0.05	7.739	A
C-AB	53.74	53.83	0.00	588.22	0.091	0.10	6.739	A
C-A	124.69	124.69	0.00	-	-	-	-	-
A-B	30.11	30.11	0.00	-	-	-	-	-
A-C	86.58	86.58	0.00	-	-	-	-	-

(Default Analysis Set) - 2025 Base PM Peak, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	DemandSets	D1 - 2020 Base AM Peak, AM	Demand Set 1: Scenario Name includes Time Period Name ('AM'). Are you sure this is correct?
Warning	DemandSets	D2 - 2020 Base PM Peak, PM	Demand Set 2: Scenario Name includes Time Period Name ('PM'). Are you sure this is correct?
Warning	DemandSets	D3 - 2025 Base AM Peak, AM	Demand Set 3: Scenario Name includes Time Period Name ('AM'). Are you sure this is correct?
Warning	DemandSets	D4 - 2025 Base PM Peak, PM	Demand Set 4: Scenario Name includes Time Period Name ('PM'). Are you sure this is correct?
Warning	DemandSets	D5 - 2025 Base plus Development AM Peak, AM	Demand Set 5: Scenario Name includes Time Period Name ('AM'). Are you sure this is correct?
Warning	DemandSets	D6 - 2025 Base plus Development PM Peak, PM	Demand Set 6: Scenario Name includes Time Period Name ('PM'). Are you sure this is correct?

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
2025 Base PM Peak, PM	2025 Base PM Peak	PM		ONE HOUR	15:45	17:15	90	15		

Junction Network

Junctions

Name	Junction Type	Major Road Direction	Arm Order	Junction Delay (s)	Junction LOS
(untitled)	T-Junction	Two-way	A,B,C	6.71	A

Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Name	Description	Arm Type
A	B1168 Boston Road (s)		Major
B	Chesttnut Avenue		Minor
C	B1168 Boston Road (n)		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	8.71		0.00		2.20	53.00	✓	1.00

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				10.00	7.39	3.85	2.50	2.25	✓	1.00	60	23

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	543.383	0.087	0.221	0.139	0.315
1	B-C	684.085	0.092	0.234	-	-
1	C-B	604.656	0.207	0.207	-	-

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	✓	61.00	100.000
B	ONE HOUR	✓	109.00	100.000
C	ONE HOUR	✓	121.00	100.000

Turning Proportions

Turning Counts or Proportions (PCU/hr) - Junction 1 (for whole period)

		To		
		A	B	C
From	A	0.000	16.000	45.000
	B	8.000	0.000	101.000
	C	50.000	71.000	0.000

Turning Proportions (PCU) - Junction 1 (for whole period)

		To		
		A	B	C
From	A	0.00	0.26	0.74
	B	0.07	0.00	0.93
	C	0.41	0.59	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	0.17	6.47	0.20	A
B-A	0.02	7.38	0.02	A
C-AB	0.13	6.97	0.15	A
C-A	-	-	-	-
A-B	-	-	-	-
A-C	-	-	-	-

Main Results for each time segment

Main results: (15:45-16:00)

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	75.53	0.00	673.06	0.113	0.13	6.019	A
B-A	6.02	5.98	0.00	512.10	0.012	0.01	7.112	A
C-AB	53.76	53.36	0.00	597.42	0.090	0.10	6.613	A
C-A	37.34	37.34	0.00	-	-	-	-	-
A-B	12.05	12.05	0.00	-	-	-	-	-
A-C	33.88	33.88	0.00	-	-	-	-	-

Main results: (16:00-16:15)

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	90.68	0.00	670.87	0.135	0.16	6.202	A
B-A	7.19	7.18	0.00	505.54	0.014	0.01	7.223	A
C-AB	64.35	64.26	0.00	596.56	0.108	0.12	6.763	A
C-A	44.43	44.43	0.00	-	-	-	-	-
A-B	14.38	14.38	0.00	-	-	-	-	-
A-C	40.45	40.45	0.00	-	-	-	-	-

Main results: (16:15-16:30)

Stream	Total Demand	Entry Flow	Pedestrian Demand	Capacity	RFC	End Queue	Delay	LOS

	(PCU/hr)	(PCU/hr)	(Ped/hr)	(PCU/hr)		(PCU)	(s)	
B-C	111.20	111.03	0.00	667.86	0.167	0.20	6.463	A
B-A	8.81	8.79	0.00	496.32	0.018	0.02	7.383	A
C-AB	79.14	79.01	0.00	595.65	0.133	0.15	6.966	A
C-A	54.09	54.09	0.00	-	-	-	-	-
A-B	17.62	17.62	0.00	-	-	-	-	-
A-C	49.55	49.55	0.00	-	-	-	-	-

Main results: (16:30-16:45)

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	111.20	0.00	667.85	0.167	0.20	6.466	A
B-A	8.81	8.81	0.00	496.27	0.018	0.02	7.384	A
C-AB	79.14	79.13	0.00	595.65	0.133	0.15	6.968	A
C-A	54.09	54.09	0.00	-	-	-	-	-
A-B	17.62	17.62	0.00	-	-	-	-	-
A-C	49.55	49.55	0.00	-	-	-	-	-

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	90.80	90.96	0.00	670.87	0.135	0.16	6.209	A
B-A	7.19	7.21	0.00	505.46	0.014	0.01	7.224	A
C-AB	64.35	64.47	0.00	596.56	0.108	0.12	6.766	A
C-A	44.43	44.43	0.00	-	-	-	-	-
A-B	14.38	14.38	0.00	-	-	-	-	-
A-C	40.45	40.45	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	76.04	76.16	0.00	673.04	0.113	0.13	6.034	A
B-A	6.02	6.03	0.00	511.93	0.012	0.01	7.115	A
C-AB	53.76	53.85	0.00	597.42	0.090	0.10	6.625	A
C-A	37.34	37.34	0.00	-	-	-	-	-
A-B	12.05	12.05	0.00	-	-	-	-	-
A-C	33.88	33.88	0.00	-	-	-	-	-

(Default Analysis Set) - 2025 Base plus Development AM Peak, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	DemandSets	D1 - 2020 Base AM Peak, AM	Demand Set 1: Scenario Name includes Time Period Name ('AM'). Are you sure this is correct?
Warning	DemandSets	D2 - 2020 Base PM Peak, PM	Demand Set 2: Scenario Name includes Time Period Name ('PM'). Are you sure this is correct?
Warning	DemandSets	D3 - 2025 Base AM Peak, AM	Demand Set 3: Scenario Name includes Time Period Name ('AM'). Are you sure this is correct?
Warning	DemandSets	D4 - 2025 Base PM Peak, PM	Demand Set 4: Scenario Name includes Time Period Name ('PM'). Are you sure this is correct?
Warning	DemandSets	D5 - 2025 Base plus Development AM Peak, AM	Demand Set 5: Scenario Name includes Time Period Name ('AM'). Are you sure this is correct?
Warning	DemandSets	D6 - 2025 Base plus Development PM Peak, PM	Demand Set 6: Scenario Name includes Time Period Name ('PM'). Are you sure this is correct?

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
2025 Base plus Development AM Peak, AM	2025 Base plus Development AM Peak	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
(untitled)	T-Junction	Two-way	A,B,C	7.49	A

Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Name	Description	Arm Type
A	B1168 Boston Road (s)		Major
B	Chesttnut Avenue		Minor
C	B1168 Boston Road (n)		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	8.71		0.00		2.20	53.00	✓	1.00

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				10.00	7.39	3.85	2.50	2.25	✓	1.00	60	23

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	543.383	0.087	0.221	0.139	0.315
1	B-C	684.085	0.092	0.234	-	-
1	C-B	604.656	0.207	0.207	-	-

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	✓	155.00	100.000
B	ONE HOUR	✓	168.00	100.000
C	ONE HOUR	✓	245.00	100.000

Turning Proportions

Turning Counts or Proportions (PCU/hr) - Junction 1 (for whole period)

		To		
		A	B	C
From	A	0.000	40.000	115.000
	B	29.000	0.000	139.000
	C	167.000	78.000	0.000

Turning Proportions (PCU) - Junction 1 (for whole period)

		To		
		A	B	C
From	A	0.00	0.26	0.74
	B	0.17	0.00	0.83
	C	0.68	0.32	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	7.42	0.31	A
B-A	0.07	8.55	0.08	A
C-AB	0.15	7.23	0.19	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	104.65	103.89	0.00	653.44	0.160	0.19	6.543	A
B-A	21.83	21.65	0.00	483.93	0.045	0.05	7.784	A
C-AB	60.01	59.55	0.00	589.10	0.102	0.11	6.792	A
C-A	124.44	124.44	0.00	-	-	-	-	-
A-B	30.11	30.11	0.00	-	-	-	-	-
A-C	86.58	86.58	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	124.96	124.77	0.00	647.16	0.193	0.24	6.890	A
B-A	26.07	26.03	0.00	471.29	0.055	0.06	8.084	A
C-AB	72.35	72.24	0.00	588.17	0.123	0.14	6.975	A
C-A	147.90	147.90	0.00	-	-	-	-	-
A-B	35.96	35.96	0.00	-	-	-	-	-
A-C	103.38	103.38	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	153.04	152.74	0.00	638.35	0.240	0.31	7.408	A
B-A	31.93	31.86	0.00	453.18	0.070	0.08	8.544	A

C-AB	90.06	89.89	0.00	588.06	0.153	0.18	7.225	A
C-A	179.69	179.69	0.00	-	-	-	-	-
A-B	44.04	44.04	0.00	-	-	-	-	-
A-C	126.62	126.62	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	153.04	153.04	0.00	638.32	0.240	0.31	7.417	A
B-A	31.93	31.93	0.00	453.09	0.070	0.08	8.547	A
C-AB	90.06	90.06	0.00	588.06	0.153	0.19	7.231	A
C-A	179.69	179.69	0.00	-	-	-	-	-
A-B	44.04	44.04	0.00	-	-	-	-	-
A-C	126.62	126.62	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	124.96	125.25	0.00	647.12	0.193	0.24	6.901	A
B-A	26.07	26.14	0.00	471.17	0.055	0.06	8.091	A
C-AB	72.35	72.51	0.00	588.17	0.123	0.14	6.985	A
C-A	147.90	147.90	0.00	-	-	-	-	-
A-B	35.96	35.96	0.00	-	-	-	-	-
A-C	103.38	103.38	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	104.65	104.84	0.00	653.35	0.160	0.19	6.567	A
B-A	21.83	21.88	0.00	483.70	0.045	0.05	7.795	A
C-AB	60.01	60.12	0.00	589.10	0.102	0.12	6.809	A
C-A	124.44	124.44	0.00	-	-	-	-	-
A-B	30.11	30.11	0.00	-	-	-	-	-
A-C	86.58	86.58	0.00	-	-	-	-	-

(Default Analysis Set) - 2025 Base plus Development PM Peak, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	DemandSets	D1 - 2020 Base AM Peak, AM	Demand Set 1: Scenario Name includes Time Period Name ('AM'). Are you sure this is correct?
Warning	DemandSets	D2 - 2020 Base PM Peak, PM	Demand Set 2: Scenario Name includes Time Period Name ('PM'). Are you sure this is correct?
Warning	DemandSets	D3 - 2025 Base AM Peak, AM	Demand Set 3: Scenario Name includes Time Period Name ('AM'). Are you sure this is correct?
Warning	DemandSets	D4 - 2025 Base PM Peak, PM	Demand Set 4: Scenario Name includes Time Period Name ('PM'). Are you sure this is correct?
Warning	DemandSets	D5 - 2025 Base plus Development AM Peak, AM	Demand Set 5: Scenario Name includes Time Period Name ('AM'). Are you sure this is correct?
Warning	DemandSets	D6 - 2025 Base plus Development PM Peak, PM	Demand Set 6: Scenario Name includes Time Period Name ('PM'). Are you sure this is correct?

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
2025 Base plus Development PM Peak, PM	2025 Base plus Development PM Peak	PM		ONE HOUR	15:45	17:15	90	15		

Junction Network

Junctions

Name	Junction Type	Major Road Direction	Arm Order	Junction Delay (s)	Junction LOS
(untitled)	T-Junction	Two-way	A,B,C	6.95	A

Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Name	Description	Arm Type
A	B1168 Boston Road (s)		Major
B	Chesttnut Avenue		Minor
C	B1168 Boston Road (n)		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	8.71		0.00		2.20	53.00	✓	1.00

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				10.00	7.39	3.85	2.50	2.25	✓	1.00	60	23

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	543.383	0.087	0.221	0.139	0.315
1	B-C	684.085	0.092	0.234	-	-
1	C-B	604.656	0.207	0.207	-	-

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	✓	62.00	100.000
B	ONE HOUR	✓	121.00	100.000
C	ONE HOUR	✓	142.00	100.000

Turning Proportions

Turning Counts or Proportions (PCU/hr) - Junction 1 (for whole period)

		To		
		A	B	C
From	A	0.000	17.000	45.000
	B	8.000	0.000	113.000
	C	50.000	92.000	0.000

Turning Proportions (PCU) - Junction 1 (for whole period)

		To		
		A	B	C
From	A	0.00	0.27	0.73
	B	0.07	0.00	0.93
	C	0.35	0.65	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	0.19	6.63	0.23	A
B-A	0.02	7.51	0.02	A
C-AB	0.17	7.29	0.21	A
C-A	-	-	-	-
A-B	-	-	-	-
A-C	-	-	-	-

Main Results for each time segment

Main results: (15:45-16:00)

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	85.07	84.50	0.00	672.97	0.126	0.14	6.113	A
B-A	6.02	5.98	0.00	506.78	0.012	0.01	7.188	A
C-AB	69.77	69.25	0.00	597.94	0.117	0.13	6.801	A
C-A	37.13	37.13	0.00	-	-	-	-	-
A-B	12.80	12.80	0.00	-	-	-	-	-
A-C	33.88	33.88	0.00	-	-	-	-	-

Main results: (16:00-16:15)

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	101.58	101.45	0.00	670.76	0.151	0.18	6.321	A
B-A	7.19	7.18	0.00	499.00	0.014	0.01	7.318	A
C-AB	83.58	83.46	0.00	597.33	0.140	0.16	7.003	A
C-A	44.08	44.08	0.00	-	-	-	-	-
A-B	15.28	15.28	0.00	-	-	-	-	-
A-C	40.45	40.45	0.00	-	-	-	-	-

Main results: (16:15-16:30)

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	124.42	124.22	0.00	667.70	0.186	0.23	6.622	A
B-A	8.81	8.79	0.00	488.04	0.018	0.02	7.511	A
C-AB	102.91	102.73	0.00	596.86	0.172	0.21	7.284	A
C-A	53.43	53.43	0.00	-	-	-	-	-

A-B	18.72	18.72	0.00	-	-	-	-	-
A-C	49.55	49.55	0.00	-	-	-	-	-

Main results: (16:30-16:45)

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	124.42	124.41	0.00	667.70	0.186	0.23	6.625	A
B-A	8.81	8.81	0.00	487.97	0.018	0.02	7.512	A
C-AB	102.91	102.91	0.00	596.86	0.172	0.21	7.287	A
C-A	53.43	53.43	0.00	-	-	-	-	-
A-B	18.72	18.72	0.00	-	-	-	-	-
A-C	49.55	49.55	0.00	-	-	-	-	-

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	101.58	101.78	0.00	670.75	0.151	0.18	6.331	A
B-A	7.19	7.21	0.00	498.89	0.014	0.01	7.321	A
C-AB	83.58	83.76	0.00	597.33	0.140	0.17	7.011	A
C-A	44.08	44.08	0.00	-	-	-	-	-
A-B	15.28	15.28	0.00	-	-	-	-	-
A-C	40.45	40.45	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	85.07	85.21	0.00	672.95	0.126	0.15	6.128	A
B-A	6.02	6.03	0.00	506.55	0.012	0.01	7.194	A
C-AB	69.77	69.90	0.00	597.94	0.117	0.13	6.821	A
C-A	37.13	37.13	0.00	-	-	-	-	-
A-B	12.80	12.80	0.00	-	-	-	-	-
A-C	33.88	33.88	0.00	-	-	-	-	-

Junctions 8

PICADY 8 - Priority Intersection Module

Version: 8.0.2.316 [14 Feb 2013]
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Filename: B1515 Spalding Rd_Northons.arc8
Path: Holbeach\Modelling
Report generation date: 19/03/2020 11:09:10

Summary of junction performance

	AM			
	Queue (PCU)	Delay (s)	RFC	LOS
	A1 - 2020 Base AM Peak			
Stream B-AC	0.26	10.05	0.21	B
Stream C-AB	0.09	6.77	0.08	A
Stream C-A	-	-	-	-
Stream A-B	-	-	-	-
Stream A-C	-	-	-	-

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

"D1 - 2020 Base AM Peak, AM " model duration: 07:45 - 09:15
"D2 - 2020 Base PM Peak, PM" model duration: 15:45 - 17:15
"D3 - 2025 Base AM Peak, AM" model duration: 07:45 - 09:15
"D4 - 2025 Base PM Peak, PM" model duration: 15:45 - 17:15
"D5 - 2025 Base plus Development AM Peak, AM" model duration: 07:45 - 09:15
"D6 - 2025 Base plus Development PM Peak, PM" model duration: 15:45 - 17:15

Run using Junctions 8.0.2.316 at 19/03/2020 11:08:32

File summary

File Description

Title	B1515 Spalding Rd/ Northons Lane
Location	
Site Number	
Date	19/03/2020
Version	
Status	
Identifier	
Client	
Jobnumber	
Enumerator	AT Transport Planning
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	Speed	Traffic Units	Traffic Units	Flow	Average Delay	Total Delay	Rate Of Delay
m	kph	PCU	PCU	perHour	s	-Min	perMin

(Default Analysis Set) - 2020 Base AM Peak, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	DemandSets	D1 - 2020 Base AM Peak, AM	Demand Set 1: Scenario Name includes Time Period Name ('AM'). Are you sure this is correct?
Warning	DemandSets	D2 - 2020 Base PM Peak, PM	Demand Set 2: Scenario Name includes Time Period Name ('PM'). Are you sure this is correct?
Warning	DemandSets	D3 - 2025 Base AM Peak, AM	Demand Set 3: Scenario Name includes Time Period Name ('AM'). Are you sure this is correct?
Warning	DemandSets	D4 - 2025 Base PM Peak, PM	Demand Set 4: Scenario Name includes Time Period Name ('PM'). Are you sure this is correct?
Warning	DemandSets	D5 - 2025 Base plus Development AM Peak, AM	Demand Set 5: Scenario Name includes Time Period Name ('AM'). Are you sure this is correct?
Warning	DemandSets	D6 - 2025 Base plus Development PM Peak, PM	Demand Set 6: Scenario Name includes Time Period Name ('PM'). Are you sure this is correct?

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
2020 Base AM Peak, AM	2020 Base AM Peak	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
(untitled)	T-Junction	Two-way	A,B,C	8.95	A

Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Name	Description	Arm Type
A	B1515 Spaldding Road (w)		Major
B	Northons Lane		Minor
C	B1515 Spaldding Road (e)		Major

Major Arm Geometry

Arm	Width of	Has kerbed	Width of kerbed	Has right	Width For	Visibility For	Blocks?	Blocking

	carriageway (m)	central reserve	central reserve (m)	turn bay	Right Turn (m)	Right Turn (m)		Queue (PCU)
C	8.37		0.00		2.20	100.00	✓	1.00

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	2.51								✓		14	11

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	463.736	0.076	0.191	0.120	0.274
1	B-C	599.967	0.082	0.208	-	-
1	C-B	631.874	0.220	0.220	-	-

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	✓	272.00	100.000
B	ONE HOUR	✓	86.00	100.000
C	ONE HOUR	✓	266.00	100.000

Turning Proportions

Turning Counts or Proportions (PCU/hr) - Junction 1 (for whole period)

		To		
From		A	B	C
	A	0.000	51.000	221.000
	B	37.000	0.000	49.000
	C	224.000	42.000	0.000

Turning Proportions (PCU) - Junction 1 (for whole period)

		To		
From		A	B	C
	A	0.00	0.19	0.81
	B	0.43	0.00	0.57
	C	0.84	0.16	0.00

Vehicle Mix

Average PCU Per Vehicle - Junction 1 (for whole period)

		To		
From		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)

		To		
From		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-AC	0.21	10.05	0.26	B
C-AB	0.08	6.77	0.09	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-AC	64.75	64.13	0.00	478.65	0.135	0.15	8.671	A
C-AB	32.11	31.88	0.00	593.00	0.054	0.06	6.412	A
C-A	168.15	168.15	0.00	-	-	-	-	-
A-B	38.40	38.40	0.00	-	-	-	-	-
A-C	166.38	166.38	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-AC	77.31	77.15	0.00	467.92	0.165	0.20	9.208	A
C-AB	38.62	38.56	0.00	587.04	0.066	0.07	6.563	A
C-A	200.51	200.51	0.00	-	-	-	-	-
A-B	45.85	45.85	0.00	-	-	-	-	-
A-C	198.67	198.67	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-AC	94.69	94.43	0.00	452.99	0.209	0.26	10.033	B
C-AB	47.89	47.81	0.00	579.77	0.083	0.09	6.767	A
C-A	244.98	244.98	0.00	-	-	-	-	-
A-B	56.15	56.15	0.00	-	-	-	-	-
A-C	243.33	243.33	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-AC	94.69	94.68	0.00	452.97	0.209	0.26	10.047	B
C-AB	47.89	47.89	0.00	579.77	0.083	0.09	6.767	A
C-A	244.98	244.98	0.00	-	-	-	-	-
A-B	56.15	56.15	0.00	-	-	-	-	-
A-C	243.33	243.33	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-AC	77.31	77.56	0.00	467.90	0.165	0.20	9.228	A
C-AB	38.62	38.69	0.00	587.04	0.066	0.07	6.565	A
C-A	200.51	200.51	0.00	-	-	-	-	-
A-B	45.85	45.85	0.00	-	-	-	-	-
A-C	198.67	198.67	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-AC	64.75	64.91	0.00	478.61	0.135	0.16	8.705	A
C-AB	32.11	32.16	0.00	593.00	0.054	0.06	6.418	A
C-A	168.15	168.15	0.00	-	-	-	-	-
A-B	38.40	38.40	0.00	-	-	-	-	-
A-C	166.38	166.38	0.00	-	-	-	-	-

(Default Analysis Set) - 2020 Base PM Peak, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	DemandSets	D1 - 2020 Base AM Peak, AM	Demand Set 1: Scenario Name includes Time Period Name ('AM'). Are you sure this is correct?
Warning	DemandSets	D2 - 2020 Base PM Peak, PM	Demand Set 2: Scenario Name includes Time Period Name ('PM'). Are you sure this is correct?
Warning	DemandSets	D3 - 2025 Base AM Peak, AM	Demand Set 3: Scenario Name includes Time Period Name ('AM'). Are you sure this is correct?
Warning	DemandSets	D4 - 2025 Base PM Peak, PM	Demand Set 4: Scenario Name includes Time Period Name ('PM'). Are you sure this is correct?
Warning	DemandSets	D5 - 2025 Base plus Development AM Peak, AM	Demand Set 5: Scenario Name includes Time Period Name ('AM'). Are you sure this is correct?
Warning	DemandSets	D6 - 2025 Base plus Development PM Peak, PM	Demand Set 6: Scenario Name includes Time Period Name ('PM'). Are you sure this is correct?

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
2020 Base PM Peak, PM	2020 Base PM Peak	PM		ONE HOUR	15:45	17:15	90	15		

Junction Network

Junctions

Name	Junction Type	Major Road Direction	Arm Order	Junction Delay (s)	Junction LOS
(untitled)	T-Junction	Two-way	A,B,C	9.75	A

Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Name	Description	Arm Type
A	B1515 Spaldding Road (w)		Major
B	Northons Lane		Minor
C	B1515 Spaldding Road (e)		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	8.37		0.00		2.20	100.00	✓	1.00

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	2.51								✓		14	11

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	463.736	0.076	0.191	0.120	0.274
1	B-C	599.967	0.082	0.208	-	-
1	C-B	631.874	0.220	0.220	-	-

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	✓	314.00	100.000
B	ONE HOUR	✓	85.00	100.000
C	ONE HOUR	✓	274.00	100.000

Turning Proportions

Turning Counts or Proportions (PCU/hr) - Junction 1 (for whole period)

		To		
		A	B	C
From	A	0.000	54.000	260.000
	B	46.000	0.000	39.000
	C	244.000	30.000	0.000

Turning Proportions (PCU) - Junction 1 (for whole period)

		To		
		A	B	C
From	A	0.00	0.17	0.83
	B	0.54	0.00	0.46
	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-AC	0.22	10.83	0.28	B
C-AB	0.06	6.76	0.06	A
C-A	-	-	-	-
A-B	-	-	-	-
A-C	-	-	-	-

Main Results for each time segment

Main results: (15:45-16:00)

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-AC	63.99	63.35	0.00	455.37	0.141	0.16	9.169	A
C-AB	22.86	22.70	0.00	584.80	0.039	0.04	6.403	A
C-A	183.42	183.42	0.00	-	-	-	-	-
A-B	40.65	40.65	0.00	-	-	-	-	-
A-C	195.74	195.74	0.00	-	-	-	-	-

Main results: (16:00-16:15)

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-AC	76.41	76.24	0.00	443.04	0.172	0.21	9.809	A
C-AB	27.46	27.42	0.00	576.95	0.048	0.05	6.550	A
C-A	218.86	218.86	0.00	-	-	-	-	-
A-B	48.54	48.54	0.00	-	-	-	-	-
A-C	233.73	233.73	0.00	-	-	-	-	-

Main results: (16:15-16:30)

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-AC	93.59	93.30	0.00	425.90	0.220	0.28	10.813	B
C-AB	33.98	33.92	0.00	566.90	0.060	0.06	6.754	A

C-A	267.70	267.70	0.00	-	-	-	-	-
A-B	59.46	59.46	0.00	-	-	-	-	-
A-C	286.27	286.27	0.00	-	-	-	-	-

Main results: (16:30-16:45)

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-AC	93.59	93.58	0.00	425.89	0.220	0.28	10.833	B
C-AB	33.98	33.98	0.00	566.90	0.060	0.06	6.757	A
C-A	267.70	267.70	0.00	-	-	-	-	-
A-B	59.46	59.46	0.00	-	-	-	-	-
A-C	286.27	286.27	0.00	-	-	-	-	-

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-AC	76.41	76.69	0.00	443.02	0.172	0.21	9.834	A
C-AB	27.46	27.52	0.00	576.95	0.048	0.05	6.554	A
C-A	218.86	218.86	0.00	-	-	-	-	-
A-B	48.54	48.54	0.00	-	-	-	-	-
A-C	233.73	233.73	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-AC	63.99	64.18	0.00	455.33	0.141	0.17	9.207	A
C-AB	22.86	22.90	0.00	584.80	0.039	0.04	6.406	A
C-A	183.42	183.42	0.00	-	-	-	-	-
A-B	40.65	40.65	0.00	-	-	-	-	-
A-C	195.74	195.74	0.00	-	-	-	-	-

(Default Analysis Set) - 2025 Base AM Peak, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	DemandSets	D1 - 2020 Base AM Peak, AM	Demand Set 1: Scenario Name includes Time Period Name ('AM'). Are you sure this is correct?
Warning	DemandSets	D2 - 2020 Base PM Peak, PM	Demand Set 2: Scenario Name includes Time Period Name ('PM'). Are you sure this is correct?
Warning	DemandSets	D3 - 2025 Base AM Peak, AM	Demand Set 3: Scenario Name includes Time Period Name ('AM'). Are you sure this is correct?
Warning	DemandSets	D4 - 2025 Base PM Peak, PM	Demand Set 4: Scenario Name includes Time Period Name ('PM'). Are you sure this is correct?
Warning	DemandSets	D5 - 2025 Base plus Development AM Peak, AM	Demand Set 5: Scenario Name includes Time Period Name ('AM'). Are you sure this is correct?
Warning	DemandSets	D6 - 2025 Base plus Development PM Peak, PM	Demand Set 6: Scenario Name includes Time Period Name ('PM'). Are you sure this is correct?

Analysis Set Details

Name	Description	Locked	Network Flow Scaling Factor (%)	Reason For Scaling Factors
(Default Analysis Set)			100.000	

Demand Set Details

Name	Scenario	Time	Description	Traffic	Model Start	Model	Model Time	Time	Single Time	Locked
2025 Base AM Peak, AM	2025 Base AM Peak	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
(untitled)	T-Junction	Two-way	A,B,C	9.26	A

Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Name	Description	Arm Type
A	B1515 Spaldding Road (w)		Major
B	Northons Lane		Minor
C	B1515 Spaldding Road (e)		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	8.37		0.00		2.20	100.00	✓	1.00

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	2.51								✓		14	11

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	463.736	0.076	0.191	0.120	0.274
1	B-C	599.967	0.082	0.208	-	-
1	C-B	631.874	0.220	0.220	-	-

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	✓	293.00	100.000
B	ONE HOUR	✓	93.00	100.000
C	ONE HOUR	✓	286.00	100.000

Turning Proportions

Turning Counts or Proportions (PCU/hr) - Junction 1 (for whole period)

		To		
		A	B	C
From	A	0.000	55.000	238.000
	B	40.000	0.000	53.000
	C	241.000	45.000	0.000

Turning Proportions (PCU) - Junction 1 (for whole period)

		To		
		A	B	C
From	A	0.00	0.19	0.81
	B	0.43	0.00	0.57
	C	0.84	0.16	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-AC	0.23	10.45	0.30	B
C-AB	0.09	6.85	0.10	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-AC	70.02	69.33	0.00	474.48	0.148	0.17	8.870	A
C-AB	34.49	34.24	0.00	590.52	0.058	0.06	6.468	A
C-A	180.83	180.83	0.00	-	-	-	-	-
A-B	41.41	41.41	0.00	-	-	-	-	-
A-C	179.18	179.18	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-AC	83.61	83.42	0.00	462.90	0.181	0.22	9.481	A
C-AB	41.53	41.47	0.00	584.35	0.071	0.08	6.631	A
C-A	215.58	215.58	0.00	-	-	-	-	-
A-B	49.44	49.44	0.00	-	-	-	-	-
A-C	213.96	213.96	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-AC	102.39	102.09	0.00	446.76	0.229	0.29	10.435	B
C-AB	51.62	51.52	0.00	576.96	0.089	0.10	6.851	A
C-A	263.28	263.28	0.00	-	-	-	-	-
A-B	60.56	60.56	0.00	-	-	-	-	-
A-C	262.04	262.04	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-AC	102.39	102.39	0.00	446.74	0.229	0.30	10.454	B
C-AB	51.62	51.61	0.00	576.96	0.089	0.10	6.854	A
C-A	263.28	263.28	0.00	-	-	-	-	-
A-B	60.56	60.56	0.00	-	-	-	-	-
A-C	262.04	262.04	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-AC	83.61	83.89	0.00	462.87	0.181	0.22	9.506	A
C-AB	41.53	41.62	0.00	584.35	0.071	0.08	6.633	A
C-A	215.58	215.58	0.00	-	-	-	-	-
A-B	49.44	49.44	0.00	-	-	-	-	-
A-C	213.96	213.96	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-AC	70.02	70.21	0.00	474.43	0.148	0.18	8.909	A
C-AB	34.49	34.55	0.00	590.52	0.058	0.06	6.475	A
C-A	180.83	180.83	0.00	-	-	-	-	-
A-B	41.41	41.41	0.00	-	-	-	-	-
A-C	179.18	179.18	0.00	-	-	-	-	-

(Default Analysis Set) - 2025 Base PM Peak, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	DemandSets	D1 - 2020 Base AM Peak, AM	Demand Set 1: Scenario Name includes Time Period Name ('AM'). Are you sure this is correct?
Warning	DemandSets	D2 - 2020 Base PM Peak, PM	Demand Set 2: Scenario Name includes Time Period Name ('PM'). Are you sure this is correct?
Warning	DemandSets	D3 - 2025 Base AM Peak, AM	Demand Set 3: Scenario Name includes Time Period Name ('AM'). Are you sure this is correct?
Warning	DemandSets	D4 - 2025 Base PM Peak, PM	Demand Set 4: Scenario Name includes Time Period Name ('PM'). Are you sure this is correct?
Warning	DemandSets	D5 - 2025 Base plus Development AM Peak, AM	Demand Set 5: Scenario Name includes Time Period Name ('AM'). Are you sure this is correct?
Warning	DemandSets	D6 - 2025 Base plus Development PM Peak, PM	Demand Set 6: Scenario Name includes Time Period Name ('PM'). Are you sure this is correct?

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
2025 Base PM Peak, PM	2025 Base PM Peak	PM		ONE HOUR	15:45	17:15	90	15		

Junction Network

Junctions

Name	Junction Type	Major Road Direction	Arm Order	Junction Delay (s)	Junction LOS
(untitled)	T-Junction	Two-way	A,B,C	10.17	B

Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Name	Description	Arm Type
A	B1515 Spaldding Road (w)		Major
B	Northons Lane		Minor
C	B1515 Spaldding Road (e)		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	8.37		0.00		2.20	100.00	✓	1.00

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	2.51								✓		14	11

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	463.736	0.076	0.191	0.120	0.274
1	B-C	599.967	0.082	0.208	-	-
1	C-B	631.874	0.220	0.220	-	-

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	✓	338.00	100.000
B	ONE HOUR	✓	92.00	100.000
C	ONE HOUR	✓	295.00	100.000

Turning Proportions

Turning Counts or Proportions (PCU/hr) - Junction 1 (for whole period)

		To		
		A	B	C
From	A	0.000	58.000	280.000
	B	50.000	0.000	42.000
	C	263.000	32.000	0.000

Turning Proportions (PCU) - Junction 1 (for whole period)

		To		
		A	B	C
From	A	0.00	0.17	0.83
	B	0.54	0.00	0.46
	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-AC	0.24	11.35	0.32	B
C-AB	0.06	6.84	0.07	A
C-A	-	-	-	-
A-B	-	-	-	-
A-C	-	-	-	-

Main Results for each time segment

Main results: (15:45-16:00)

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-AC	69.26	68.54	0.00	450.19	0.154	0.18	9.415	A
C-AB	24.44	24.26	0.00	581.61	0.042	0.04	6.457	A
C-A	197.65	197.65	0.00	-	-	-	-	-
A-B	43.67	43.67	0.00	-	-	-	-	-
A-C	210.80	210.80	0.00	-	-	-	-	-

Main results: (16:00-16:15)

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-AC	82.71	82.50	0.00	436.87	0.189	0.23	10.151	B
C-AB	29.38	29.34	0.00	573.36	0.051	0.05	6.617	A
C-A	235.82	235.82	0.00	-	-	-	-	-
A-B	52.14	52.14	0.00	-	-	-	-	-
A-C	251.71	251.71	0.00	-	-	-	-	-

Main results: (16:15-16:30)

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-AC	101.29	100.96	0.00	418.35	0.242	0.31	11.329	B
C-AB	36.42	36.36	0.00	562.90	0.065	0.07	6.836	A
C-A	288.38	288.38	0.00	-	-	-	-	-
A-B	63.86	63.86	0.00	-	-	-	-	-
A-C	308.29	308.29	0.00	-	-	-	-	-

Main results: (16:30-16:45)

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-AC	101.29	101.28	0.00	418.34	0.242	0.32	11.354	B
C-AB	36.42	36.42	0.00	562.90	0.065	0.07	6.839	A
C-A	288.38	288.38	0.00	-	-	-	-	-
A-B	63.86	63.86	0.00	-	-	-	-	-
A-C	308.29	308.29	0.00	-	-	-	-	-

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-AC	82.71	83.03	0.00	436.85	0.189	0.24	10.183	B
C-AB	29.38	29.44	0.00	573.36	0.051	0.06	6.618	A
C-A	235.82	235.82	0.00	-	-	-	-	-
A-B	52.14	52.14	0.00	-	-	-	-	-
A-C	251.71	251.71	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-AC	69.26	69.47	0.00	450.15	0.154	0.18	9.461	A
C-AB	24.44	24.48	0.00	581.61	0.042	0.04	6.461	A
C-A	197.65	197.65	0.00	-	-	-	-	-
A-B	43.67	43.67	0.00	-	-	-	-	-
A-C	210.80	210.80	0.00	-	-	-	-	-

(Default Analysis Set) - 2025 Base plus Development AM Peak, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	DemandSets	D1 - 2020 Base AM Peak, AM	Demand Set 1: Scenario Name includes Time Period Name ('AM'). Are you sure this is correct?
Warning	DemandSets	D2 - 2020 Base PM Peak, PM	Demand Set 2: Scenario Name includes Time Period Name ('PM'). Are you sure this is correct?
Warning	DemandSets	D3 - 2025 Base AM Peak, AM	Demand Set 3: Scenario Name includes Time Period Name ('AM'). Are you sure this is correct?
Warning	DemandSets	D4 - 2025 Base PM Peak, PM	Demand Set 4: Scenario Name includes Time Period Name ('PM'). Are you sure this is correct?
Warning	DemandSets	D5 - 2025 Base plus Development AM Peak, AM	Demand Set 5: Scenario Name includes Time Period Name ('AM'). Are you sure this is correct?
Warning	DemandSets	D6 - 2025 Base plus Development PM Peak, PM	Demand Set 6: Scenario Name includes Time Period Name ('PM'). Are you sure this is correct?

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
2025 Base plus Development AM Peak, AM	2025 Base plus Development AM Peak	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
(untitled)	T-Junction	Two-way	A,B,C	10.22	B

Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Name	Description	Arm Type
A	B1515 Spaldding Road (w)		Major
B	Northons Lane		Minor
C	B1515 Spaldding Road (e)		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	8.37		0.00		2.20	100.00	✓	1.00

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	2.51								✓		14	11

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	463.736	0.076	0.191	0.120	0.274
1	B-C	599.967	0.082	0.208	-	-
1	C-B	631.874	0.220	0.220	-	-

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	✓	298.00	100.000
B	ONE HOUR	✓	118.00	100.000
C	ONE HOUR	✓	290.00	100.000

Turning Proportions

Turning Counts or Proportions (PCU/hr) - Junction 1 (for whole period)

		To		
		A	B	C
From	A	0.000	60.000	238.000
	B	55.000	0.000	63.000

	C	241.000	49.000	0.000

Turning Proportions (PCU) - Junction 1 (for whole period)

		To		
		A	B	C
From	A	0.00	0.20	0.80
	B	0.47	0.00	0.53
	C	0.83	0.17	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-AC	0.30	11.64	0.42	B
C-AB	0.10	6.91	0.11	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-AC	88.84	87.91	0.00	467.70	0.190	0.23	9.457	A
C-AB	37.62	37.34	0.00	590.33	0.064	0.07	6.507	A
C-A	180.71	180.71	0.00	-	-	-	-	-
A-B	45.17	45.17	0.00	-	-	-	-	-
A-C	179.18	179.18	0.00	-	-	-	-	-

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

Stream	Total Demand	Entry Flow	Pedestrian Demand	Capacity	RFC	End Queue	Delay	LOS
	(PCU/hr)	(PCU/hr)	(Ped/hr)	(PCU/hr)		(PCU)	(s)	
B-AC	106.08	105.81	0.00	455.74	0.233	0.30	10.279	B
C-AB	45.33	45.26	0.00	584.30	0.078	0.08	6.678	A
C-A	215.37	215.37	0.00	-	-	-	-	-
A-B	53.94	53.94	0.00	-	-	-	-	-
A-C	213.96	213.96	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-AC	129.92	129.47	0.00	439.10	0.296	0.41	11.609	B
C-AB	56.41	56.31	0.00	577.20	0.098	0.11	6.911	A
C-A	262.88	262.88	0.00	-	-	-	-	-
A-B	66.06	66.06	0.00	-	-	-	-	-
A-C	262.04	262.04	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-AC	129.92	129.91	0.00	439.08	0.296	0.42	11.643	B
C-AB	56.41	56.41	0.00	577.20	0.098	0.11	6.911	A
C-A	262.88	262.88	0.00	-	-	-	-	-
A-B	66.06	66.06	0.00	-	-	-	-	-
A-C	262.04	262.04	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-AC	106.08	106.51	0.00	455.71	0.233	0.31	10.323	B
C-AB	45.33	45.43	0.00	584.30	0.078	0.09	6.681	A
C-A	215.37	215.37	0.00	-	-	-	-	-
A-B	53.94	53.94	0.00	-	-	-	-	-
A-C	213.96	213.96	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-AC	88.84	89.12	0.00	467.64	0.190	0.24	9.519	A
C-AB	37.62	37.68	0.00	590.33	0.064	0.07	6.516	A
C-A	180.71	180.71	0.00	-	-	-	-	-
A-B	45.17	45.17	0.00	-	-	-	-	-
A-C	179.18	179.18	0.00	-	-	-	-	-

(Default Analysis Set) - 2025 Base plus Development PM Peak, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	DemandSets	D1 - 2020 Base AM Peak, AM	Demand Set 1: Scenario Name includes Time Period Name ('AM'). Are you sure this is correct?
Warning	DemandSets	D2 - 2020 Base PM Peak, PM	Demand Set 2: Scenario Name includes Time Period Name ('PM'). Are you sure this is correct?
Warning	DemandSets	D3 - 2025 Base AM Peak, AM	Demand Set 3: Scenario Name includes Time Period Name ('AM'). Are you sure this is correct?

Warning	DemandSets	D4 - 2025 Base PM Peak, PM	Demand Set 4: Scenario Name includes Time Period Name ('PM'). Are you sure this is correct?
Warning	DemandSets	D5 - 2025 Base plus Development AM Peak, AM	Demand Set 5: Scenario Name includes Time Period Name ('AM'). Are you sure this is correct?
Warning	DemandSets	D6 - 2025 Base plus Development PM Peak, PM	Demand Set 6: Scenario Name includes Time Period Name ('PM'). Are you sure this is correct?

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
2025 Base plus Development PM Peak, PM	2025 Base plus Development PM Peak	PM		ONE HOUR	15:45	17:15	90	15		

Junction Network

Junctions

Name	Junction Type	Major Road Direction	Arm Order	Junction Delay (s)	Junction LOS
(untitled)	T-Junction	Two-way	A,B,C	10.61	B

Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Name	Description	Arm Type
A	B1515 Spaldding Road (w)		Major
B	Northons Lane		Minor
C	B1515 Spaldding Road (e)		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	8.37		0.00		2.20	100.00	✓	1.00

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	2.51								✓		14	11

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	463.736	0.076	0.191	0.120	0.274
1	B-C	599.967	0.082	0.208	-	-
1	C-B	631.874	0.220	0.220	-	-

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	✓	354.00	100.000
B	ONE HOUR	✓	105.00	100.000
C	ONE HOUR	✓	305.00	100.000

Turning Proportions

Turning Counts or Proportions (PCU/hr) - Junction 1 (for whole period)

		To		
		A	B	C
From	A	0.000	74.000	280.000
	B	58.000	0.000	47.000
	C	263.000	42.000	0.000

Turning Proportions (PCU) - Junction 1 (for whole period)

		To		
		A	B	C
From	A	0.00	0.21	0.79
	B	0.55	0.00	0.45
	C	0.86	0.14	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-AC	0.28	12.10	0.39	B
C-AB	0.09	6.99	0.10	A
C-A	-	-	-	-
A-B	-	-	-	-
A-C	-	-	-	-

Main Results for each time segment

Main results: (15:45-16:00)

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-AC	79.05	78.20	0.00	446.35	0.177	0.21	9.756	A
C-AB	32.22	31.99	0.00	580.75	0.055	0.06	6.557	A
C-A	197.40	197.40	0.00	-	-	-	-	-
A-B	55.71	55.71	0.00	-	-	-	-	-
A-C	210.80	210.80	0.00	-	-	-	-	-

Main results: (16:00-16:15)

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-AC	94.39	94.14	0.00	432.48	0.218	0.28	10.633	B
C-AB	38.82	38.77	0.00	572.83	0.068	0.07	6.740	A
C-A	235.36	235.36	0.00	-	-	-	-	-
A-B	66.52	66.52	0.00	-	-	-	-	-
A-C	251.71	251.71	0.00	-	-	-	-	-

Main results: (16:15-16:30)

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-AC	115.61	115.18	0.00	413.17	0.280	0.38	12.064	B
C-AB	48.32	48.23	0.00	563.13	0.086	0.10	6.991	A
C-A	287.49	287.49	0.00	-	-	-	-	-
A-B	81.48	81.48	0.00	-	-	-	-	-
A-C	308.29	308.29	0.00	-	-	-	-	-

Main results: (16:30-16:45)

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-AC	115.61	115.59	0.00	413.16	0.280	0.39	12.098	B
C-AB	48.32	48.32	0.00	563.13	0.086	0.10	6.992	A
C-A	287.49	287.49	0.00	-	-	-	-	-
A-B	81.48	81.48	0.00	-	-	-	-	-
A-C	308.29	308.29	0.00	-	-	-	-	-

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-AC	94.39	94.80	0.00	432.45	0.218	0.28	10.676	B
C-AB	38.82	38.91	0.00	572.83	0.068	0.07	6.743	A
C-A	235.36	235.36	0.00	-	-	-	-	-
A-B	66.52	66.52	0.00	-	-	-	-	-
A-C	251.71	251.71	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-AC	79.05	79.31	0.00	446.29	0.177	0.22	9.818	A
C-AB	32.22	32.28	0.00	580.75	0.055	0.06	6.563	A
C-A	197.40	197.40	0.00	-	-	-	-	-
A-B	55.71	55.71	0.00	-	-	-	-	-
A-C	210.80	210.80	0.00	-	-	-	-	-

Junctions 8

PICADY 8 - Priority Intersection Module

Version: 8.0.2.316 [14 Feb 2013]
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Filename: Chestnut Ave_Northons Lane.arc8
Path: Holbeach\Modelling
Report generation date: 19/03/2020 10:45:06

Summary of junction performance

	AM			
	Queue (PCU)	Delay (s)	RFC	LOS
	A1 - 2020 Base AM Peak			
Stream B-C	0.09	5.92	0.09	A
Stream B-A	0.02	7.85	0.02	A
Stream C-AB	0.09	6.26	0.08	A
Stream C-A	-	-	-	-
Stream A-B	-	-	-	-
Stream A-C	-	-	-	-

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

"D1 - 2020 Base AM Peak, AM " model duration: 07:45 - 09:15
"D2 - 2020 Base PM Peak, PM" model duration: 15:45 - 17:15
"D3 - 2025 Base AM Peak, AM" model duration: 07:45 - 09:15
"D4 - 2025 Base PM Peak, PM" model duration: 15:45 - 17:15
"D5 - 2025 Base plus Development AM Peak, AM" model duration: 07:45 - 09:15
"D6 - 2025 Base plus Development PM Peak, PM" model duration: 15:45 - 17:15

Run using Junctions 8.0.2.316 at 19/03/2020 10:44:32

File summary

File Description

Title	Chester Avenue/ Northons Lane
Location	
Site Number	
Date	19/03/2020
Version	
Status	
Identifier	
Client	
Jobnumber	
Enumerator	AT Transport Planning
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) - 2020 Base AM Peak, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	DemandSets	D1 - 2020 Base AM Peak, AM	Demand Set 1: Scenario Name includes Time Period Name ('AM'). Are you sure this is correct?
Warning	DemandSets	D2 - 2020 Base PM Peak, PM	Demand Set 2: Scenario Name includes Time Period Name ('PM'). Are you sure this is correct?
Warning	DemandSets	D3 - 2025 Base AM Peak, AM	Demand Set 3: Scenario Name includes Time Period Name ('AM'). Are you sure this is correct?
Warning	DemandSets	D4 - 2025 Base PM Peak, PM	Demand Set 4: Scenario Name includes Time Period Name ('PM'). Are you sure this is correct?
Warning	DemandSets	D5 - 2025 Base plus Development AM Peak, AM	Demand Set 5: Scenario Name includes Time Period Name ('AM'). Are you sure this is correct?
Warning	DemandSets	D6 - 2025 Base plus Development PM Peak, PM	Demand Set 6: Scenario Name includes Time Period Name ('PM'). Are you sure this is correct?

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
2020 Base AM Peak, AM	2020 Base AM Peak	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
(untitled)	T-Junction	Two-way	A,B,C	6.25	A

Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Name	Description	Arm Type
A	Northons Lane (w)		Major
B	Chesttnut Avenue		Minor
C	Northons Lane (e)		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	8.58		0.00		2.20	100.00	✓	1.00

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				10.00	5.38	3.28	2.60	2.60	✓	1.00	21	18

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	489.998	0.079	0.200	0.126	0.286
1	B-C	673.438	0.092	0.232	-	-
1	C-B	631.874	0.217	0.217	-	-

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	✓	20.00	100.000
B	ONE HOUR	✓	62.00	100.000
C	ONE HOUR	✓	56.00	100.000

Turning Proportions

Turning Counts or Proportions (PCU/hr) - Junction 1 (for whole period)

		To		
		A	B	C
From	A	0.000	3.000	17.000
	B	10.000	0.000	52.000
	C	8.000	48.000	0.000

Turning Proportions (PCU) - Junction 1 (for whole period)

		To		
		A	B	C
From	A	0.00	0.15	0.85
	B	0.16	0.00	0.84
	C	0.14	0.86	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	0.09	5.92	0.09	A
B-A	0.02	7.85	0.02	A
C-AB	0.08	6.26	0.09	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	39.15	38.90	0.00	667.61	0.059	0.06	5.722	A
B-A	7.53	7.46	0.00	476.07	0.016	0.02	7.681	A
C-AB	36.16	35.91	0.00	628.83	0.058	0.06	6.068	A

C-A	6.00	6.00	0.00	-	-	-	-	-
A-B	2.26	2.26	0.00	-	-	-	-	-
A-C	12.80	12.80	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	46.75	46.69	0.00	666.42	0.070	0.07	5.808	A
B-A	8.99	8.98	0.00	473.29	0.019	0.02	7.753	A
C-AB	43.18	43.13	0.00	628.29	0.069	0.07	6.152	A
C-A	7.16	7.16	0.00	-	-	-	-	-
A-B	2.70	2.70	0.00	-	-	-	-	-
A-C	15.28	15.28	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	57.25	57.18	0.00	664.81	0.086	0.09	5.924	A
B-A	11.01	10.99	0.00	469.44	0.023	0.02	7.852	A
C-AB	52.91	52.84	0.00	627.57	0.084	0.09	6.263	A
C-A	8.75	8.75	0.00	-	-	-	-	-
A-B	3.30	3.30	0.00	-	-	-	-	-
A-C	18.72	18.72	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	57.25	57.25	0.00	664.80	0.086	0.09	5.924	A
B-A	11.01	11.01	0.00	469.42	0.023	0.02	7.852	A
C-AB	52.91	52.91	0.00	627.57	0.084	0.09	6.263	A
C-A	8.75	8.75	0.00	-	-	-	-	-
A-B	3.30	3.30	0.00	-	-	-	-	-
A-C	18.72	18.72	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	46.75	46.82	0.00	666.40	0.070	0.08	5.810	A
B-A	8.99	9.01	0.00	473.27	0.019	0.02	7.755	A
C-AB	43.18	43.25	0.00	628.29	0.069	0.07	6.153	A
C-A	7.16	7.16	0.00	-	-	-	-	-
A-B	2.70	2.70	0.00	-	-	-	-	-
A-C	15.28	15.28	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	39.15	39.20	0.00	667.56	0.059	0.06	5.731	A
B-A	7.53	7.54	0.00	476.03	0.016	0.02	7.684	A
C-AB	36.16	36.21	0.00	628.83	0.058	0.06	6.076	A
C-A	6.00	6.00	0.00	-	-	-	-	-
A-B	2.26	2.26	0.00	-	-	-	-	-
A-C	12.80	12.80	0.00	-	-	-	-	-

(Default Analysis Set) - 2020 Base PM Peak, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	DemandSets	D1 - 2020 Base AM Peak, AM	Demand Set 1: Scenario Name includes Time Period Name ('AM'). Are you sure this is correct?
Warning	DemandSets	D2 - 2020 Base PM Peak, PM	Demand Set 2: Scenario Name includes Time Period Name ('PM'). Are you sure this is correct?
Warning	DemandSets	D3 - 2025 Base AM Peak, AM	Demand Set 3: Scenario Name includes Time Period Name ('AM'). Are you sure this is correct?
Warning	DemandSets	D4 - 2025 Base PM Peak, PM	Demand Set 4: Scenario Name includes Time Period Name ('PM'). Are you sure this is correct?
Warning	DemandSets	D5 - 2025 Base plus Development AM Peak, AM	Demand Set 5: Scenario Name includes Time Period Name ('AM'). Are you sure this is correct?
Warning	DemandSets	D6 - 2025 Base plus Development PM Peak, PM	Demand Set 6: Scenario Name includes Time Period Name ('PM'). Are you sure this is correct?

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
2020 Base PM Peak, PM	2020 Base PM Peak	PM		ONE HOUR	15:45	17:15	90	15		

Junction Network

Junctions

Name	Junction Type	Major Road Direction	Arm Order	Junction Delay (s)	Junction LOS
(untitled)	T-Junction	Two-way	A,B,C	6.06	A

Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Name	Description	Arm Type
A	Northons Lane (w)		Major
B	Chesttnut Avenue		Minor
C	Northons Lane (e)		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	8.58		0.00		2.20	100.00	✓	1.00

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				10.00	5.38	3.28	2.60	2.60	✓	1.00	21	18

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	477.954	0.077	0.195	0.123	0.279
1	B-C	679.643	0.092	0.234	-	-
1	C-B	631.874	0.217	0.217	-	-

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	✓	14.00	100.000
B	ONE HOUR	✓	51.00	100.000
C	ONE HOUR	✓	68.00	100.000

Turning Proportions

Turning Counts or Proportions (PCU/hr) - Junction 1 (for whole period)

		To		
		A	B	C
From	A	0.000	7.000	7.000
	B	2.000	0.000	49.000
	C	19.000	49.000	0.000

Turning Proportions (PCU) - Junction 1 (for whole period)

		To		
		A	B	C
From	A	0.00	0.50	0.50
	B	0.04	0.00	0.96
	C	0.28	0.72	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	5.78	0.09	A
B-A	0.00	7.90	0.00	A
C-AB	0.09	6.25	0.09	A
C-A	-	-	-	-
A-B	-	-	-	-
A-C	-	-	-	-

Main Results for each time segment

Main results: (15:45-16:00)

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	36.89	36.66	0.00	677.37	0.054	0.06	5.617	A
B-A	1.51	1.49	0.00	464.39	0.003	0.00	7.776	A
C-AB	36.94	36.69	0.00	630.13	0.059	0.06	6.063	A
C-A	14.26	14.26	0.00	-	-	-	-	-
A-B	5.27	5.27	0.00	-	-	-	-	-
A-C	5.27	5.27	0.00	-	-	-	-	-

Main results: (16:00-16:15)

Stream	Total Demand	Entry Flow	Pedestrian Demand	Capacity	RFC	End Queue	Delay	LOS

	(PCU/hr)	(PCU/hr)	(Ped/hr)	(PCU/hr)		(PCU)	(s)	
B-C	44.05	44.00	0.00	676.93	0.065	0.07	5.687	A
B-A	1.80	1.80	0.00	461.66	0.004	0.00	7.828	A
C-AB	44.13	44.08	0.00	629.92	0.070	0.07	6.144	A
C-A	17.00	17.00	0.00	-	-	-	-	-
A-B	6.29	6.29	0.00	-	-	-	-	-
A-C	6.29	6.29	0.00	-	-	-	-	-

Main results: (16:15-16:30)

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	53.95	53.88	0.00	676.31	0.080	0.09	5.783	A
B-A	2.20	2.20	0.00	457.92	0.005	0.00	7.899	A
C-AB	54.10	54.03	0.00	629.69	0.086	0.09	6.253	A
C-A	20.77	20.77	0.00	-	-	-	-	-
A-B	7.71	7.71	0.00	-	-	-	-	-
A-C	7.71	7.71	0.00	-	-	-	-	-

Main results: (16:30-16:45)

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	53.95	53.95	0.00	676.31	0.080	0.09	5.783	A
B-A	2.20	2.20	0.00	457.90	0.005	0.00	7.899	A
C-AB	54.10	54.10	0.00	629.69	0.086	0.09	6.253	A
C-A	20.77	20.77	0.00	-	-	-	-	-
A-B	7.71	7.71	0.00	-	-	-	-	-
A-C	7.71	7.71	0.00	-	-	-	-	-

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	44.05	44.12	0.00	676.92	0.065	0.07	5.688	A
B-A	1.80	1.80	0.00	461.62	0.004	0.00	7.828	A
C-AB	44.13	44.21	0.00	629.92	0.070	0.08	6.148	A
C-A	17.00	17.00	0.00	-	-	-	-	-
A-B	6.29	6.29	0.00	-	-	-	-	-
A-C	6.29	6.29	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	36.89	36.94	0.00	677.37	0.054	0.06	5.621	A
B-A	1.51	1.51	0.00	464.31	0.003	0.00	7.778	A
C-AB	36.94	36.99	0.00	630.13	0.059	0.06	6.069	A
C-A	14.26	14.26	0.00	-	-	-	-	-
A-B	5.27	5.27	0.00	-	-	-	-	-
A-C	5.27	5.27	0.00	-	-	-	-	-

(Default Analysis Set) - 2025 Base AM Peak, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	DemandSets	D1 - 2020 Base AM Peak, AM	Demand Set 1: Scenario Name includes Time Period Name ('AM'). Are you sure this is correct?
Warning	DemandSets	D2 - 2020 Base PM Peak, PM	Demand Set 2: Scenario Name includes Time Period Name ('PM'). Are you sure this is correct?
Warning	DemandSets	D3 - 2025 Base AM Peak, AM	Demand Set 3: Scenario Name includes Time Period Name ('AM'). Are you sure this is correct?
Warning	DemandSets	D4 - 2025 Base PM Peak, PM	Demand Set 4: Scenario Name includes Time Period Name ('PM'). Are you sure this is correct?
Warning	DemandSets	D5 - 2025 Base plus Development AM Peak, AM	Demand Set 5: Scenario Name includes Time Period Name ('AM'). Are you sure this is correct?
Warning	DemandSets	D6 - 2025 Base plus Development PM Peak, PM	Demand Set 6: Scenario Name includes Time Period Name ('PM'). Are you sure this is correct?

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
2025 Base AM Peak, AM	2025 Base AM Peak	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
(untitled)	T-Junction	Two-way	A,B,C	6.30	A

Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Name	Description	Arm Type
A	Northons Lane (w)		Major
B	Chesttnut Avenue		Minor
C	Northons Lane (e)		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	8.58		0.00		2.20	100.00	✓	1.00

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				10.00	5.38	3.28	2.60	2.60	✓	1.00	21	18

	plus flare												

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	490.382	0.079	0.200	0.126	0.286
1	B-C	673.240	0.092	0.232	-	-
1	C-B	631.874	0.217	0.217	-	-

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	✓	21.00	100.000
B	ONE HOUR	✓	67.00	100.000
C	ONE HOUR	✓	61.00	100.000

Turning Proportions

Turning Counts or Proportions (PCU/hr) - Junction 1 (for whole period)

		To		
		A	B	C
From	A	0.000	3.000	18.000
	B	11.000	0.000	56.000
	C	9.000	52.000	0.000

Turning Proportions (PCU) - Junction 1 (for whole period)

		To		
		A	B	C
From	A	0.00	0.14	0.86
	B	0.16	0.00	0.84
	C	0.15	0.85	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	0.09	5.98	0.10	A
B-A	0.03	7.89	0.03	A
C-AB	0.09	6.31	0.10	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	42.16	41.89	0.00	666.97	0.063	0.07	5.756	A
B-A	8.28	8.21	0.00	475.32	0.017	0.02	7.706	A
C-AB	39.17	38.91	0.00	628.71	0.062	0.07	6.101	A
C-A	6.75	6.75	0.00	-	-	-	-	-
A-B	2.26	2.26	0.00	-	-	-	-	-
A-C	13.55	13.55	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	50.34	50.29	0.00	665.68	0.076	0.08	5.849	A
B-A	9.89	9.87	0.00	472.29	0.021	0.02	7.785	A
C-AB	46.79	46.74	0.00	628.16	0.074	0.08	6.191	A

C-A	8.05	8.05	0.00	-	-	-	-	-
A-B	2.70	2.70	0.00	-	-	-	-	-
A-C	16.18	16.18	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	61.66	61.58	0.00	663.94	0.093	0.10	5.976	A
B-A	12.11	12.09	0.00	468.11	0.026	0.03	7.894	A
C-AB	57.34	57.26	0.00	627.44	0.091	0.10	6.313	A
C-A	9.83	9.83	0.00	-	-	-	-	-
A-B	3.30	3.30	0.00	-	-	-	-	-
A-C	19.82	19.82	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	61.66	61.66	0.00	663.93	0.093	0.10	5.976	A
B-A	12.11	12.11	0.00	468.09	0.026	0.03	7.894	A
C-AB	57.34	57.33	0.00	627.44	0.091	0.10	6.313	A
C-A	9.83	9.83	0.00	-	-	-	-	-
A-B	3.30	3.30	0.00	-	-	-	-	-
A-C	19.82	19.82	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	50.34	50.42	0.00	665.66	0.076	0.08	5.853	A
B-A	9.89	9.91	0.00	472.27	0.021	0.02	7.786	A
C-AB	46.79	46.87	0.00	628.16	0.074	0.08	6.195	A
C-A	8.05	8.05	0.00	-	-	-	-	-
A-B	2.70	2.70	0.00	-	-	-	-	-
A-C	16.18	16.18	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	42.16	42.22	0.00	666.91	0.063	0.07	5.762	A
B-A	8.28	8.30	0.00	475.27	0.017	0.02	7.709	A
C-AB	39.17	39.23	0.00	628.71	0.062	0.07	6.109	A
C-A	6.75	6.75	0.00	-	-	-	-	-
A-B	2.26	2.26	0.00	-	-	-	-	-
A-C	13.55	13.55	0.00	-	-	-	-	-

(Default Analysis Set) - 2025 Base PM Peak, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	DemandSets	D1 - 2020 Base AM Peak, AM	Demand Set 1: Scenario Name includes Time Period Name ('AM'). Are you sure this is correct?
Warning	DemandSets	D2 - 2020 Base PM Peak, PM	Demand Set 2: Scenario Name includes Time Period Name ('PM'). Are you sure this is correct?
Warning	DemandSets	D3 - 2025 Base AM Peak, AM	Demand Set 3: Scenario Name includes Time Period Name ('AM'). Are you sure this is correct?
Warning	DemandSets	D4 - 2025 Base PM Peak, PM	Demand Set 4: Scenario Name includes Time Period Name ('PM'). Are you sure this is correct?
Warning	DemandSets	D5 - 2025 Base plus Development AM Peak, AM	Demand Set 5: Scenario Name includes Time Period Name ('AM'). Are you sure this is correct?
Warning	DemandSets	D6 - 2025 Base plus Development PM Peak, PM	Demand Set 6: Scenario Name includes Time Period Name ('PM'). Are you sure this is correct?

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
2025 Base PM Peak, PM	2025 Base PM Peak	PM		ONE HOUR	15:45	17:15	90	15		

Junction Network

Junctions

Name	Junction Type	Major Road Direction	Arm Order	Junction Delay (s)	Junction LOS
(untitled)	T-Junction	Two-way	A,B,C	6.10	A

Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Name	Description	Arm Type
A	Northons Lane (w)		Major
B	Chesttnut Avenue		Minor
C	Northons Lane (e)		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	8.58		0.00		2.20	100.00	✓	1.00

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				10.00	5.38	3.28	2.60	2.60	✓	1.00	21	18

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	477.954	0.077	0.195	0.123	0.279
1	B-C	679.643	0.092	0.234	-	-
1	C-B	631.874	0.217	0.217	-	-

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	✓	16.00	100.000
B	ONE HOUR	✓	55.00	100.000
C	ONE HOUR	✓	73.00	100.000

Turning Proportions

Turning Counts or Proportions (PCU/hr) - Junction 1 (for whole period)

		To		
		A	B	C
From	A	0.000	8.000	8.000
	B	2.000	0.000	53.000
	C	20.000	53.000	0.000

Turning Proportions (PCU) - Junction 1 (for whole period)

		To		
		A	B	C
From	A	0.00	0.50	0.50
	B	0.04	0.00	0.96
	C	0.27	0.73	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	0.09	5.83	0.09	A
B-A	0.00	7.93	0.00	A
C-AB	0.09	6.31	0.10	A
C-A	-	-	-	-
A-B	-	-	-	-
A-C	-	-	-	-

Main Results for each time segment

Main results: (15:45-16:00)

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	39.90	39.65	0.00	677.13	0.059	0.06	5.647	A
B-A	1.51	1.49	0.00	463.24	0.003	0.00	7.796	A
C-AB	39.96	39.69	0.00	629.88	0.063	0.07	6.097	A
C-A	15.00	15.00	0.00	-	-	-	-	-
A-B	6.02	6.02	0.00	-	-	-	-	-
A-C	6.02	6.02	0.00	-	-	-	-	-

Main results: (16:00-16:15)

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	47.65	47.59	0.00	676.63	0.070	0.08	5.722	A
B-A	1.80	1.80	0.00	460.26	0.004	0.00	7.852	A
C-AB	47.75	47.69	0.00	629.63	0.076	0.08	6.186	A
C-A	17.88	17.88	0.00	-	-	-	-	-
A-B	7.19	7.19	0.00	-	-	-	-	-
A-C	7.19	7.19	0.00	-	-	-	-	-

Main results: (16:15-16:30)

Stream	Total Demand	Entry Flow	Pedestrian Demand	Capacity	RFC	End Queue	Delay	LOS

	(PCU/hr)	(PCU/hr)	(Ped/hr)	(PCU/hr)		(PCU)	(s)	
B-C	58.35	58.28	0.00	675.95	0.086	0.09	5.828	A
B-A	2.20	2.20	0.00	456.19	0.005	0.00	7.929	A
C-AB	58.54	58.46	0.00	629.38	0.093	0.10	6.305	A
C-A	21.83	21.83	0.00	-	-	-	-	-
A-B	8.81	8.81	0.00	-	-	-	-	-
A-C	8.81	8.81	0.00	-	-	-	-	-

Main results: (16:30-16:45)

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	58.35	58.35	0.00	675.95	0.086	0.09	5.828	A
B-A	2.20	2.20	0.00	456.16	0.005	0.00	7.929	A
C-AB	58.54	58.54	0.00	629.38	0.093	0.10	6.305	A
C-A	21.83	21.83	0.00	-	-	-	-	-
A-B	8.81	8.81	0.00	-	-	-	-	-
A-C	8.81	8.81	0.00	-	-	-	-	-

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	47.65	47.72	0.00	676.63	0.070	0.08	5.726	A
B-A	1.80	1.80	0.00	460.22	0.004	0.00	7.852	A
C-AB	47.75	47.83	0.00	629.63	0.076	0.08	6.190	A
C-A	17.88	17.88	0.00	-	-	-	-	-
A-B	7.19	7.19	0.00	-	-	-	-	-
A-C	7.19	7.19	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	39.90	39.95	0.00	677.12	0.059	0.06	5.652	A
B-A	1.51	1.51	0.00	463.14	0.003	0.00	7.798	A
C-AB	39.96	40.02	0.00	629.88	0.063	0.07	6.105	A
C-A	15.00	15.00	0.00	-	-	-	-	-
A-B	6.02	6.02	0.00	-	-	-	-	-
A-C	6.02	6.02	0.00	-	-	-	-	-

(Default Analysis Set) - 2025 Base plus Development AM Peak, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	DemandSets	D1 - 2020 Base AM Peak, AM	Demand Set 1: Scenario Name includes Time Period Name ('AM'). Are you sure this is correct?
Warning	DemandSets	D2 - 2020 Base PM Peak, PM	Demand Set 2: Scenario Name includes Time Period Name ('PM'). Are you sure this is correct?
Warning	DemandSets	D3 - 2025 Base AM Peak, AM	Demand Set 3: Scenario Name includes Time Period Name ('AM'). Are you sure this is correct?
Warning	DemandSets	D4 - 2025 Base PM Peak, PM	Demand Set 4: Scenario Name includes Time Period Name ('PM'). Are you sure this is correct?
Warning	DemandSets	D5 - 2025 Base plus Development AM Peak, AM	Demand Set 5: Scenario Name includes Time Period Name ('AM'). Are you sure this is correct?
Warning	DemandSets	D6 - 2025 Base plus Development PM Peak, PM	Demand Set 6: Scenario Name includes Time Period Name ('PM'). Are you sure this is correct?

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
2025 Base plus Development AM Peak, AM	2025 Base plus Development AM Peak	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
(untitled)	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	Northons Lane (w)		Major
B	Chesttnut Avenue		Minor
C	Northons Lane (e)		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	8.58		0.00		2.20	100.00	✓	1.00

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				10.00	5.38	3.28	2.60	2.60	✓	1.00	21	18

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	484.455	0.078	0.198	0.125	0.283
1	B-C	676.294	0.092	0.233	-	-
1	C-B	631.874	0.217	0.217	-	-

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	✓	21.00	100.000
B	ONE HOUR	✓	92.00	100.000
C	ONE HOUR	✓	70.00	100.000

Turning Proportions

Turning Counts or Proportions (PCU/hr) - Junction 1 (for whole period)

		To		
		A	B	C
From	A	0.000	3.000	18.000
	B	11.000	0.000	81.000
	C	9.000	61.000	0.000

Turning Proportions (PCU) - Junction 1 (for whole period)

		To		
		A	B	C
From	A	0.00	0.14	0.86
	B	0.12	0.00	0.88
	C	0.13	0.87	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	0.13	6.23	0.15	A
B-A	0.03	8.06	0.03	A
C-AB	0.11	6.42	0.12	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	60.98	60.58	0.00	669.94	0.091	0.10	5.904	A
B-A	8.28	8.21	0.00	467.45	0.018	0.02	7.838	A
C-AB	45.96	45.65	0.00	628.76	0.073	0.08	6.171	A
C-A	6.74	6.74	0.00	-	-	-	-	-
A-B	2.26	2.26	0.00	-	-	-	-	-
A-C	13.55	13.55	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	72.82	72.73	0.00	668.63	0.109	0.12	6.041	A
B-A	9.89	9.87	0.00	463.91	0.021	0.02	7.928	A
C-AB	54.90	54.83	0.00	628.23	0.087	0.10	6.278	A
C-A	8.03	8.03	0.00	-	-	-	-	-
A-B	2.70	2.70	0.00	-	-	-	-	-
A-C	16.18	16.18	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	89.18	89.06	0.00	666.86	0.134	0.15	6.228	A
B-A	12.11	12.09	0.00	458.96	0.026	0.03	8.056	A

C-AB	67.28	67.18	0.00	627.54	0.107	0.12	6.424	A
C-A	9.80	9.80	0.00	-	-	-	-	-
A-B	3.30	3.30	0.00	-	-	-	-	-
A-C	19.82	19.82	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	89.18	89.18	0.00	666.85	0.134	0.15	6.231	A
B-A	12.11	12.11	0.00	458.93	0.026	0.03	8.056	A
C-AB	67.28	67.27	0.00	627.54	0.107	0.12	6.424	A
C-A	9.80	9.80	0.00	-	-	-	-	-
A-B	3.30	3.30	0.00	-	-	-	-	-
A-C	19.82	19.82	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	72.82	72.94	0.00	668.62	0.109	0.12	6.044	A
B-A	9.89	9.91	0.00	463.87	0.021	0.02	7.931	A
C-AB	54.90	54.99	0.00	628.23	0.087	0.10	6.280	A
C-A	8.03	8.03	0.00	-	-	-	-	-
A-B	2.70	2.70	0.00	-	-	-	-	-
A-C	16.18	16.18	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	60.98	61.07	0.00	669.89	0.091	0.10	5.915	A
B-A	8.28	8.30	0.00	467.36	0.018	0.02	7.843	A
C-AB	45.96	46.03	0.00	628.76	0.073	0.08	6.180	A
C-A	6.74	6.74	0.00	-	-	-	-	-
A-B	2.26	2.26	0.00	-	-	-	-	-
A-C	13.55	13.55	0.00	-	-	-	-	-

(Default Analysis Set) - 2025 Base plus Development PM Peak, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	DemandSets	D1 - 2020 Base AM Peak, AM	Demand Set 1: Scenario Name includes Time Period Name ('AM'). Are you sure this is correct?
Warning	DemandSets	D2 - 2020 Base PM Peak, PM	Demand Set 2: Scenario Name includes Time Period Name ('PM'). Are you sure this is correct?
Warning	DemandSets	D3 - 2025 Base AM Peak, AM	Demand Set 3: Scenario Name includes Time Period Name ('AM'). Are you sure this is correct?
Warning	DemandSets	D4 - 2025 Base PM Peak, PM	Demand Set 4: Scenario Name includes Time Period Name ('PM'). Are you sure this is correct?
Warning	DemandSets	D5 - 2025 Base plus Development AM Peak, AM	Demand Set 5: Scenario Name includes Time Period Name ('AM'). Are you sure this is correct?
Warning	DemandSets	D6 - 2025 Base plus Development PM Peak, PM	Demand Set 6: Scenario Name includes Time Period Name ('PM'). Are you sure this is correct?

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
2025 Base plus Development PM Peak, PM	2025 Base plus Development PM Peak	PM		ONE HOUR	15:45	17:15	90	15		

Junction Network

Junctions

Name	Junction Type	Major Road Direction	Arm Order	Junction Delay (s)	Junction LOS
(untitled)	T-Junction	Two-way	A,B,C	6.34	A

Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Name	Description	Arm Type
A	Northons Lane (w)		Major
B	Chesttnut Avenue		Minor
C	Northons Lane (e)		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	8.58		0.00		2.20	100.00	✓	1.00

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				10.00	5.38	3.28	2.60	2.60	✓	1.00	21	18

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	477.954	0.077	0.195	0.123	0.279
1	B-C	679.643	0.092	0.234	-	-
1	C-B	631.874	0.217	0.217	-	-

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	✓	16.00	100.000
B	ONE HOUR	✓	68.00	100.000
C	ONE HOUR	✓	98.00	100.000

Turning Proportions

Turning Counts or Proportions (PCU/hr) - Junction 1 (for whole period)

		To		
		A	B	C
From	A	0.000	8.000	8.000
	B	2.000	0.000	66.000
	C	20.000	78.000	0.000

Turning Proportions (PCU) - Junction 1 (for whole period)

		To		
		A	B	C
From	A	0.00	0.50	0.50
	B	0.03	0.00	0.97
	C	0.20	0.80	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	0.11	5.97	0.12	A
B-A	0.00	8.07	0.00	A
C-AB	0.14	6.62	0.16	A
C-A	-	-	-	-
A-B	-	-	-	-
A-C	-	-	-	-

Main Results for each time segment

Main results: (15:45-16:00)

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	49.69	49.37	0.00	677.12	0.073	0.08	5.732	A
B-A	1.51	1.49	0.00	457.90	0.003	0.00	7.887	A
C-AB	58.85	58.44	0.00	630.17	0.093	0.10	6.293	A
C-A	14.93	14.93	0.00	-	-	-	-	-
A-B	6.02	6.02	0.00	-	-	-	-	-
A-C	6.02	6.02	0.00	-	-	-	-	-

Main results: (16:00-16:15)

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	59.33	59.27	0.00	676.62	0.088	0.10	5.831	A
B-A	1.80	1.80	0.00	453.80	0.004	0.00	7.964	A
C-AB	70.34	70.25	0.00	630.05	0.112	0.12	6.431	A
C-A	17.76	17.76	0.00	-	-	-	-	-
A-B	7.19	7.19	0.00	-	-	-	-	-
A-C	7.19	7.19	0.00	-	-	-	-	-

Main results: (16:15-16:30)

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	72.67	72.57	0.00	675.93	0.108	0.12	5.966	A
B-A	2.20	2.20	0.00	448.20	0.005	0.00	8.071	A
C-AB	86.29	86.16	0.00	630.00	0.137	0.16	6.617	A
C-A	21.61	21.61	0.00	-	-	-	-	-

A-B	8.81	8.81	0.00	-	-	-	-	-
A-C	8.81	8.81	0.00	-	-	-	-	-

Main results: (16:30-16:45)

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	72.67	72.67	0.00	675.93	0.108	0.12	5.966	A
B-A	2.20	2.20	0.00	448.16	0.005	0.00	8.072	A
C-AB	86.29	86.29	0.00	630.00	0.137	0.16	6.620	A
C-A	21.61	21.61	0.00	-	-	-	-	-
A-B	8.81	8.81	0.00	-	-	-	-	-
A-C	8.81	8.81	0.00	-	-	-	-	-

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	59.33	59.43	0.00	676.62	0.088	0.10	5.835	A
B-A	1.80	1.80	0.00	453.74	0.004	0.00	7.967	A
C-AB	70.34	70.47	0.00	630.05	0.112	0.13	6.436	A
C-A	17.76	17.76	0.00	-	-	-	-	-
A-B	7.19	7.19	0.00	-	-	-	-	-
A-C	7.19	7.19	0.00	-	-	-	-	-

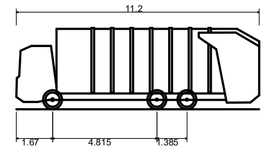
Main results: (17:00-17:15)

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	49.69	49.76	0.00	677.11	0.073	0.08	5.740	A
B-A	1.51	1.51	0.00	457.76	0.003	0.00	7.890	A
C-AB	58.85	58.95	0.00	630.17	0.093	0.10	6.302	A
C-A	14.93	14.93	0.00	-	-	-	-	-
A-B	6.02	6.02	0.00	-	-	-	-	-
A-C	6.02	6.02	0.00	-	-	-	-	-

APPENDIX 5

DO NOT SCALE

VEHICLE DETAILS



Phoenix 2 Duo (P2-15W with Elite 6x4 chassis)	
Overall Length	11.200m
Overall Width	2.530m
Overall Body Height	3.751m
Min Body Ground Clearance	0.304m
Track Width	2.500m
Lock to lock time	4.00s
Kerb to Kerb Turning Radius	9.500m

REV	DATE	BY	DESCRIPTION	CHK	APP
-	13/07/2020	TS	FIRST ISSUE	AT	AT

DRAWING STATUS: FOR INFORMATION ONLY

AIMEE THOMPSON TRANSPORT PLANNING

CLIENT: GLEESON HOMES

ARCHITECT: N/A

PROJECT: NORTHONS LANE HOLBEACH

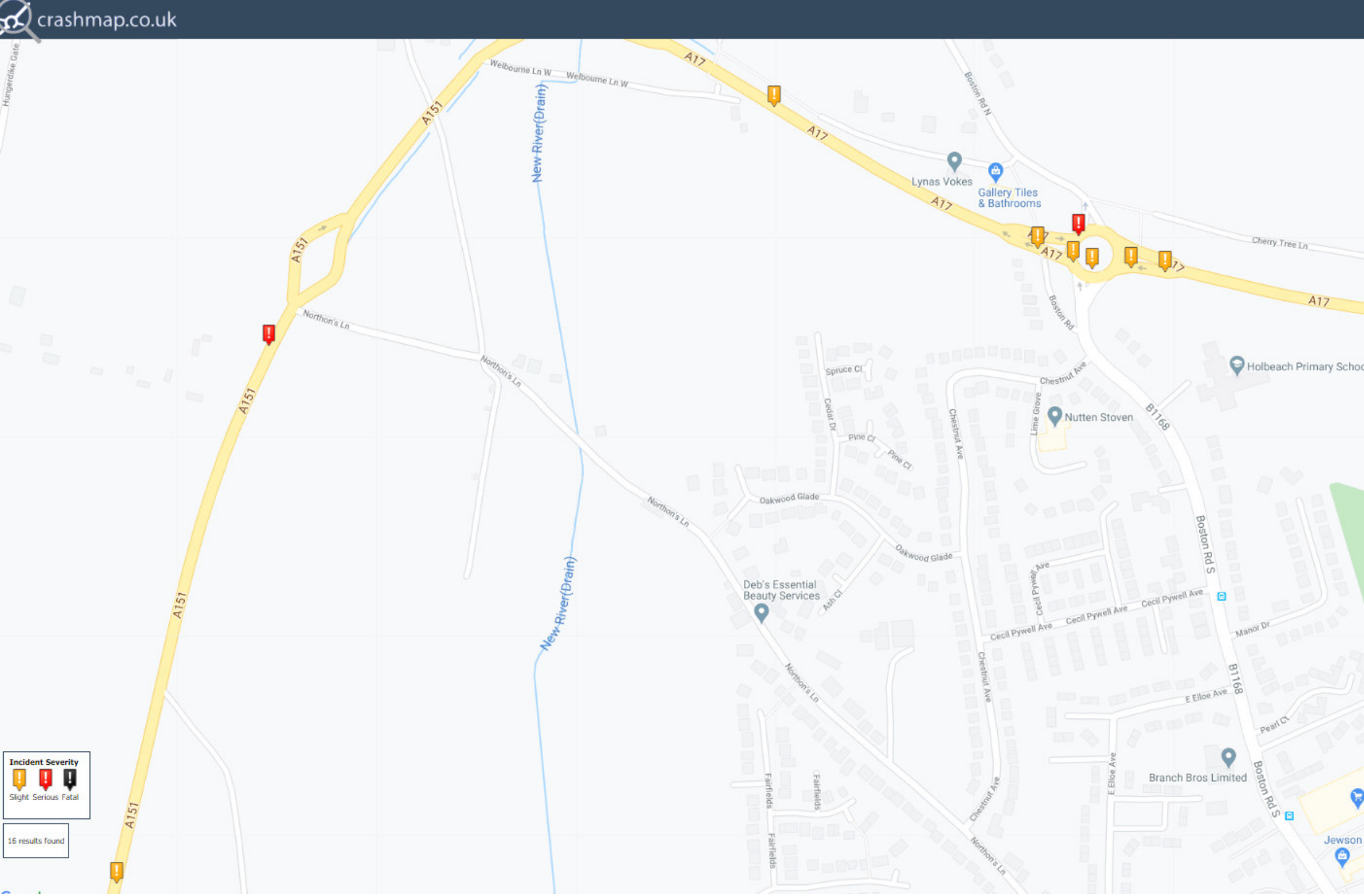
TITLE: SWEPT PATH ANALYSIS

SCALE @ A1:	SCALE @ A3:	CHECKED:	APPROVED:
1:250	1:500	AT	AT
CAD FILE:		DESIGN-DRAWN:	DATE:
20001_SPA_001.dwg		TS	13/07/2020
PROJECT No:		DRAWING No:	REV:
20001		20001/SPA/001	-

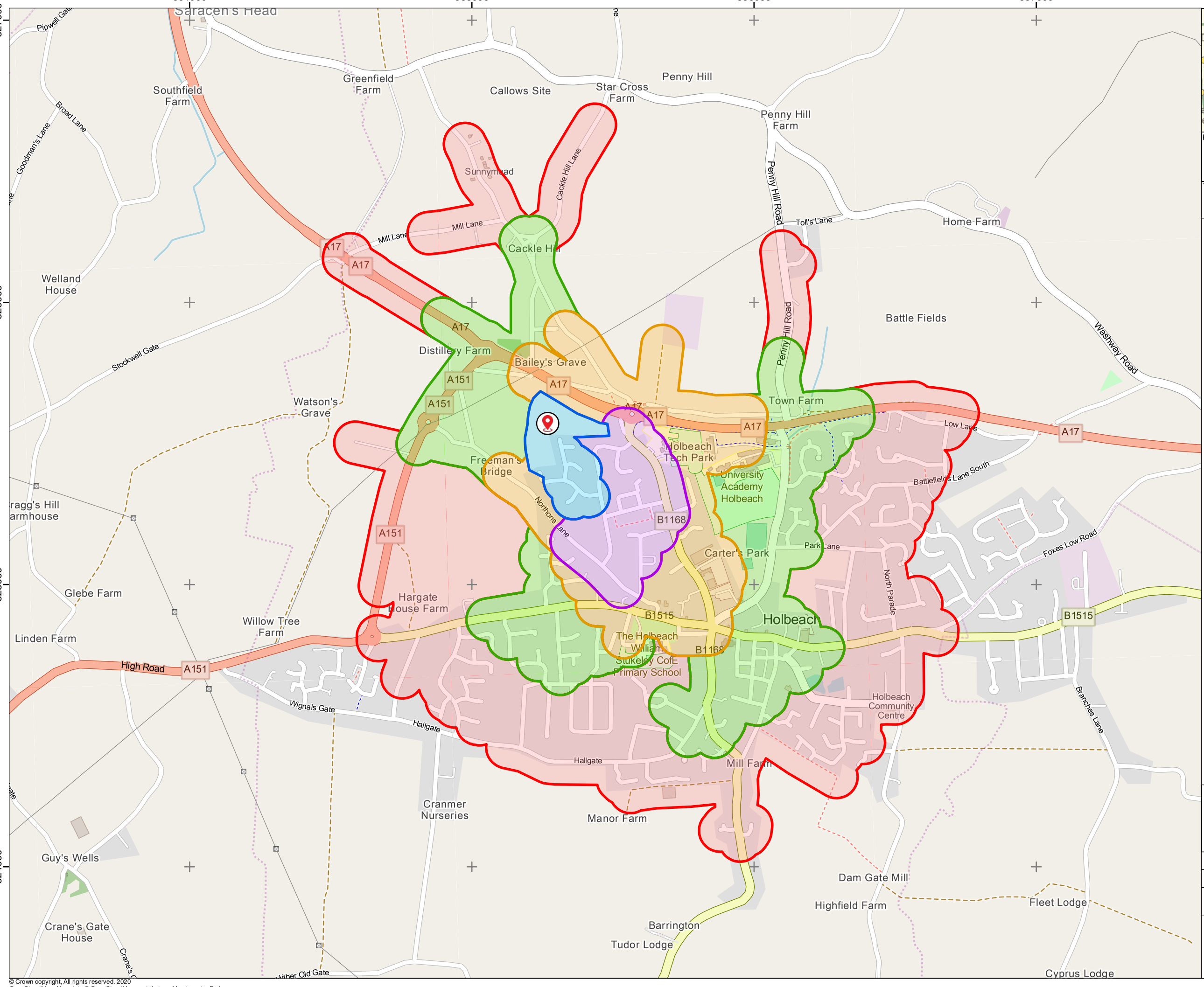
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T: 07507 342334 E: aimee@at-transportplanning.co.uk

D:\OneDrive\ATTP\20001 – Northons Lane, Holbeach\Drawings\20001_SPA_001.dwg

APPENDIX 6


crashmap.co.uk
A17
A151
Welbourne Ln W
New River(Drain)
Boston Rd N
Lynas Vokes
Gallery Tiles & Bathrooms
Cherry Tree Ln
Boston Rd
Northon's Ln
Spruce Cl
Cedar Dr
Pine Cl
Chestnut Ave
Lime Grove
Nutten Stoven
Holbeach Primary Schoo
B1168
Oakwood Glade
Deb's Essential Beauty Services
Ash Ct
Cecil Pywell Ave
Manor Dr
Boston Rd S
E Elloe Ave
Pearl Ct
Fairfields
Branch Bros Limited
Jewson
Incident Severity
Slight Serious Fatal
16 results found

APPENDIX 7



PROJECT:

Northons Lane, Holbeach

TITLE:

Walking Isochrone Plan

Legend:

Site Location

Walking Isochrone (m):

- 400
- 800
- 1200
- 1600
- 2000

AIMEE THOMPSON TRANSPORT PLANNING

m: 07507342334
e: aimee@at-transportplanning.co.uk

Rev	Date	Purpose of Revision	Drawn
A	12/02/2020	Initial Issue	DR

Drawing Reference:
702202

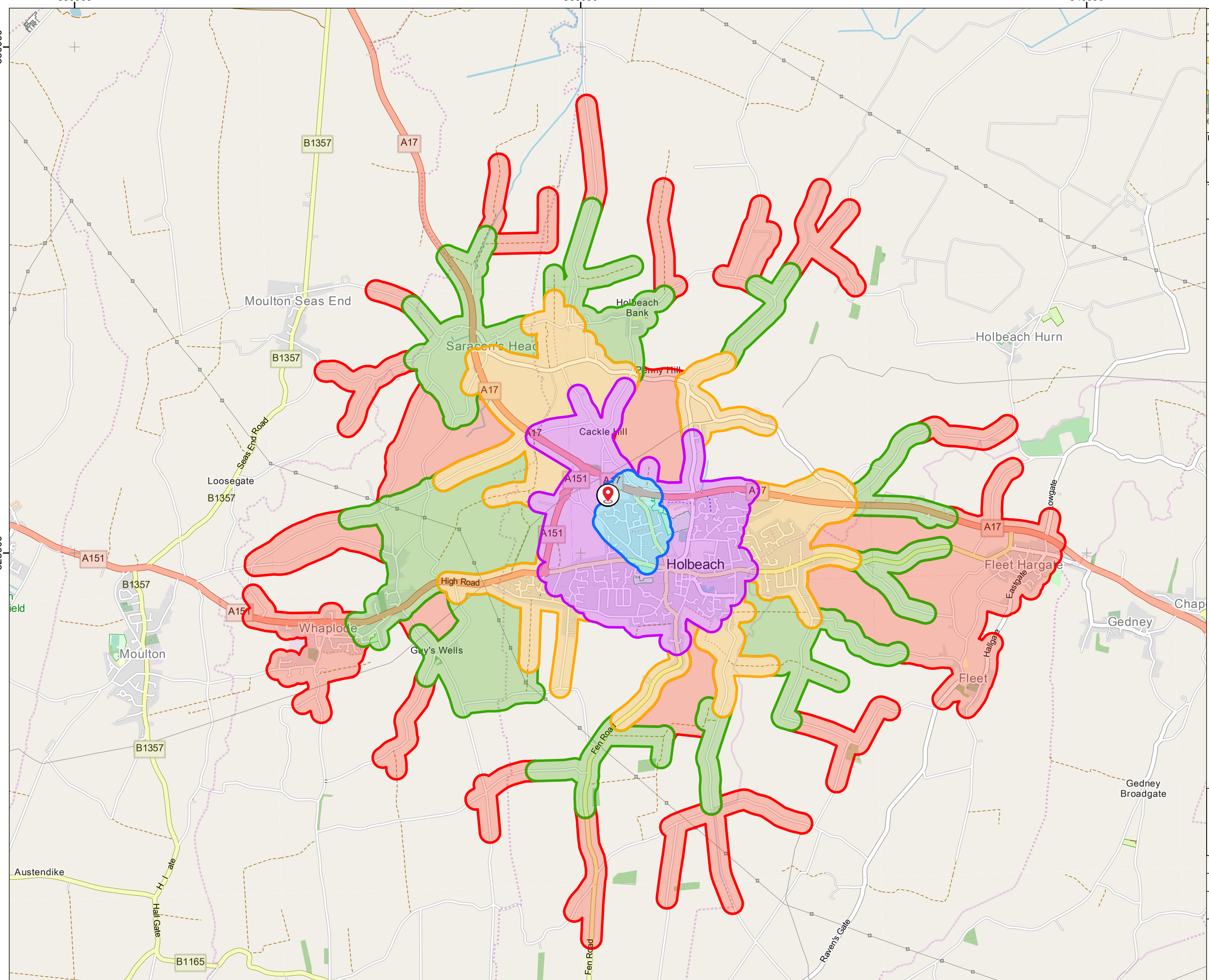
0 50 100 200 Metres

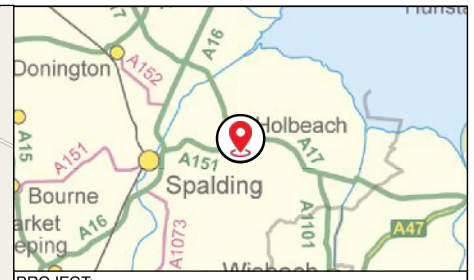
SCALE: 1:12,500

ISO A3

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Service © openrouteservice.org | Map data © OpenStreetMap contributor

DO NOT SCALE





PROJECT:

Northons Lane, Holbeach

TITLE:

Cycling Isochrone Plan

Legend:

Site Location

Cycling Isochrone (m):

- 1000
- 2000
- 3000
- 4000
- 5000

AIMEE THOMPSON TRANSPORT PLANNING

m: 07507342334
e: aimee@at-transportplanning.co.uk

Rev	Date	Purpose of Revision	Drawn
A	12/02/2020	Initial Issue	DR

Drawing Reference:
702202

0 250 500 1,000 Metres

SCALE: 1:35,000

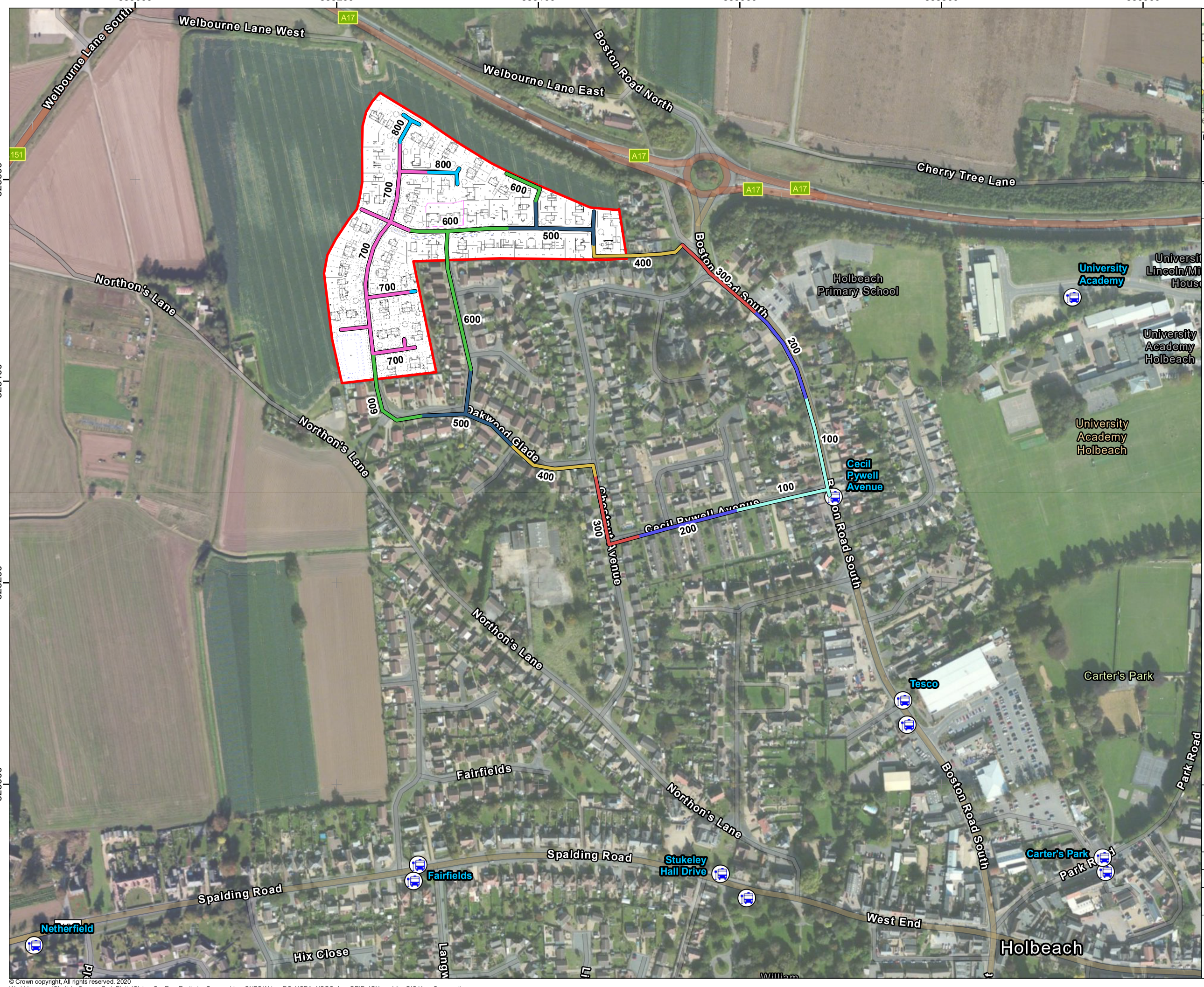
ISO A3

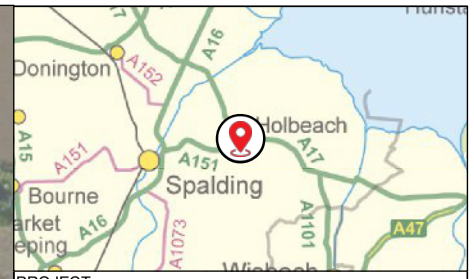
DO NOT SCALE

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Service © openrouteservice.org | Map data © OpenStreetMap contributor

535000 535200 535400 535600 535800 536000

325600 325400 325200 325000





PROJECT:

Northons Lane, Holbeach

TITLE:

Bus Stop Plan

Legend:

- Site Boundary
- Bus Stop Locations

Bus Stop Walking Distances:

- 100
- 200
- 300
- 400
- 500
- 600
- 700
- 800

AIMEE THOMPSON TRANSPORT PLANNING

m: 07507342334
e: aimee@at-transportplanning.co.uk

Rev	Date	Purpose of Revision	Drawn
A	31/03/2020	Initial Issue	DR

Drawing Reference:
702202

0 25 50 100 Metres

SCALE: 1:3,500

ISO A3

DO NOT SCALE

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Hybrid Reference Layer: Sources: Esri, HERE, Garmin, FAO, NOAA, USGS, © OpenStreetMap contributors, and the GIS User Community
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APPENDIX 8

TRIP RATE CALCULATION SELECTION PARAMETERS:

Land Use : 03 - RESIDENTIAL
Category : A - HOUSES PRIVATELY OWNED

VEHICLES

Selected regions and areas:

02	**SOUTH EAST**		
	ES	EAST SUSSEX	1 days
	EX	ESSEX	1 days
03	**SOUTH WEST**		
	WL	WILTSHIRE	1 days
04	**EAST ANGLIA**		
	SF	SUFFOLK	2 days
05	**EAST MIDLANDS**		
	LE	LEICESTERSHIRE	1 days
	LN	LINCOLNSHIRE	1 days
	NT	NOTTINGHAMSHIRE	1 days
06	**WEST MIDLANDS**		
	SH	SHROPSHIRE	1 days
	WM	WEST MIDLANDS	1 days
	WO	WORCESTERSHIRE	2 days
07	**YORKSHIRE & NORTH LINCOLNSHIRE**		
	NY	NORTH YORKSHIRE	3 days
08	**NORTH WEST**		
	CH	CHESHIRE	2 days
	GM	GREATER MANCHESTER	1 days
	LC	LANCASHIRE	1 days
09	**NORTH**		
	CB	CUMBRIA	2 days

This section displays the number of survey days per TRICS® sub-region in the selected set

Filtering Stage 2 selection:

This data displays the chosen trip rate parameter and its selected range. Only sites that fall within the parameter range are included in the trip rate calculation.

Parameter:	Number of dwellings
Actual Range:	10 to 237 (units:)
Range Selected by User:	6 to 1000 (units:)

Public Transport Provision:
Selection by: Include all surveys

Date Range: 01/01/05 to 23/10/12

This data displays the range of survey dates selected. Only surveys that were conducted within this date range are included in the trip rate calculation.

Selected survey days:

Monday	5 days
Tuesday	8 days
Wednesday	2 days
Thursday	3 days
Friday	3 days

This data displays the number of selected surveys by day of the week.

Selected survey types:

Manual count	21 days
Directional ATC Count	0 days

This data displays the number of manual classified surveys and the number of unclassified ATC surveys, the total adding up to the overall number of surveys in the selected set. Manual surveys are undertaken using staff, whilst ATC surveys are undertaking using machines.

Selected Locations:

Edge of Town Centre	1
Edge of Town	20

This data displays the number of surveys per main location category within the selected set. The main location categories consist of Free Standing, Edge of Town, Suburban Area, Neighbourhood Centre, Edge of Town Centre, Town Centre and Not Known.

Selected Location Sub Categories:

Residential Zone	14
Out of Town	1
No Sub Category	6

This data displays the number of surveys per location sub-category within the selected set. The location sub-categories consist of Commercial Zone, Industrial Zone, Development Zone, Residential Zone, Retail Zone, Built-Up Zone, Village, Out of Town, High Street and No Sub Category.

Filtering Stage 3 selection:

Use Class:

C3	21 days

This data displays the number of surveys per Use Class classification within the selected set. The Use Classes Order 2005 has been used for this purpose, which can be found within the Library module of TRICS®.

Filtering Stage 3 selection (Cont.):

Population within 1 mile:

1,001 to 5,000	3 days
5,001 to 10,000	6 days
10,001 to 15,000	5 days
15,001 to 20,000	5 days
20,001 to 25,000	2 days

This data displays the number of selected surveys within stated 1-mile radii of population.

Population within 5 miles:

5,001 to 25,000	3 days
25,001 to 50,000	3 days
50,001 to 75,000	1 days
75,001 to 100,000	3 days
100,001 to 125,000	5 days
125,001 to 250,000	4 days
250,001 to 500,000	1 days
500,001 or More	1 days

This data displays the number of selected surveys within stated 5-mile radii of population.

Car ownership within 5 miles:

0.6 to 1.0	8 days
1.1 to 1.5	12 days
1.6 to 2.0	1 days

This data displays the number of selected surveys within stated ranges of average cars owned per residential dwelling, within a radius of 5-miles of selected survey sites.

Travel Plan:

Yes	1 days
No	20 days

This data displays the number of surveys within the selected set that were undertaken at sites with Travel Plans in place, and the number of surveys that were undertaken at sites without Travel Plans.

LIST OF SITES relevant to selection parameters

1 **CB-03-A-03** **SEMI DETACHED** **CUMBRIA**
HAWKSHEAD AVENUE

WORKINGTON
Edge of Town
Residential Zone
Total Number of dwellings: 40
Survey date: THURSDAY *20/11/08* *Survey Type: MANUAL*

2 **CB-03-A-04** **SEMI DETACHED** **CUMBRIA**
MOORCLOSE ROAD
SALTERBACK
WORKINGTON
Edge of Town
No Sub Category
Total Number of dwellings: 82
Survey date: FRIDAY *24/04/09* *Survey Type: MANUAL*

3 **CH-03-A-02** **HOUSES/FLATS** **CHESHIRE**
SYDNEY ROAD

CREWE
Edge of Town
Residential Zone
Total Number of dwellings: 174
Survey date: TUESDAY *14/10/08* *Survey Type: MANUAL*

4 **CH-03-A-05** **DETACHED** **CHESHIRE**
SYDNEY ROAD
SYDNEY
CREWE
Edge of Town
Residential Zone
Total Number of dwellings: 17
Survey date: TUESDAY *14/10/08* *Survey Type: MANUAL*

5 **ES-03-A-02** **PRIVATE HOUSING** **EAST SUSSEX**
SOUTH COAST ROAD

PEACEHAVEN
Edge of Town
Residential Zone
Total Number of dwellings: 37
Survey date: FRIDAY *18/11/11* *Survey Type: MANUAL*

6 **EX-03-A-01** **SEMI-DET.** **ESSEX**
MILTON ROAD
CORRINGHAM
STANFORD-LE-HOPE
Edge of Town
Residential Zone
Total Number of dwellings: 237
Survey date: TUESDAY *13/05/08* *Survey Type: MANUAL*

7 **GM-03-A-10** **DETACHED/SEMI** **GREATER MANCHESTER**
BUTT HILL DRIVE
PRESTWICH
MANCHESTER
Edge of Town
Residential Zone
Total Number of dwellings: 29
Survey date: WEDNESDAY *12/10/11* *Survey Type: MANUAL*

8 **LC-03-A-22** **BUNGALOWS** **LANCASHIRE**
CLIFTON DRIVE NORTH

BLACKPOOL
Edge of Town
Residential Zone
Total Number of dwellings: 98
Survey date: TUESDAY *18/10/05* *Survey Type: MANUAL*

9 **LE-03-A-01** **DETACHED** **LEICESTERSHIRE**
REDWOOD AVENUE

MELTON MOWBRAY
Edge of Town
Residential Zone
Total Number of dwellings: 11
Survey date: TUESDAY *03/05/05* *Survey Type: MANUAL*

10 **LN-03-A-01** **MIXED HOUSES** **LINCOLNSHIRE**
BRANT ROAD
BRACEBRIDGE
LINCOLN
Edge of Town
Residential Zone
Total Number of dwellings: 150
Survey date: TUESDAY *15/05/07* *Survey Type: MANUAL*

11 **NT-03-A-03** **SEMI DETACHED** **NOTTINGHAMSHIRE**
B6018 SUTTON ROAD

KIRKBY-IN-ASHFIELD
Edge of Town
Residential Zone
Total Number of dwellings: 166
Survey date: WEDNESDAY *28/06/06* *Survey Type: MANUAL*

12 **NY-03-A-03** **PRIVATE HOUSING** **NORTH YORKSHIRE**
NEW ROW

BOROUGHBRIDGE
Edge of Town Centre
Residential Zone
Total Number of dwellings: 14
Survey date: MONDAY *15/09/08* *Survey Type: MANUAL*

13 **NY-03-A-05** **HOUSES AND FLATS** **NORTH YORKSHIRE**
BOROUGHBRIDGE ROAD

RIPON
Edge of Town
No Sub Category
Total Number of dwellings: 71
Survey date: MONDAY *22/09/08* *Survey Type: MANUAL*

14 **NY-03-A-07** **DETACHED & SEMI DET.** **NORTH YORKSHIRE**
CRAVEN WAY

BOROUGHBRIDGE
Edge of Town
No Sub Category
Total Number of dwellings: 23
Survey date: TUESDAY *18/10/11* *Survey Type: MANUAL*

15 **SF-03-A-02** **SEMI DET./TERRACED** **SUFFOLK**
STOKE PARK DRIVE
MAIDENHALL
IPSWICH
Edge of Town
Residential Zone
Total Number of dwellings: 230
Survey date: THURSDAY *24/05/07* *Survey Type: MANUAL*

16 **SF-03-A-03** **MIXED HOUSES** **SUFFOLK**
BARTON HILL
FORNHAM ST MARTIN
BURY ST EDMUNDS
Edge of Town
Out of Town
Total Number of dwellings: 101
Survey date: MONDAY *15/05/06* *Survey Type: MANUAL*

17 **SH-03-A-03** **DETATCHED** **SHROPSHIRE**
SOMERBY DRIVE
BICTON HEATH
SHREWSBURY
Edge of Town
No Sub Category
Total Number of dwellings: 10
Survey date: FRIDAY *26/06/09* *Survey Type: MANUAL*

18 **WL-03-A-01** **SEMI D./TERRACED W. BASSETT** **WILTSHIRE**
MAPLE DRIVE

WOOTTON BASSETT
Edge of Town
Residential Zone
Total Number of dwellings: 99
Survey date: MONDAY *02/10/06* *Survey Type: MANUAL*

19 **WM-03-A-03** **MIXED HOUSING** **WEST MIDLANDS**
BASELEY WAY
ROWLEYS GREEN
COVENTRY
Edge of Town
Residential Zone
Total Number of dwellings: 84
Survey date: MONDAY *24/09/07* *Survey Type: MANUAL*

20 **WO-03-A-02** **SEMI DETACHED** **WORCESTERSHIRE**
MEADOWHILL ROAD

REDDITCH
Edge of Town
No Sub Category
Total Number of dwellings: 48
Survey date: TUESDAY *02/05/06* *Survey Type: MANUAL*

21 **WO-03-A-06** **DET./TERRACED** **WORCESTERSHIRE**
ST GODWALDS ROAD
ASTON FIELDS
BROMSGROVE
Edge of Town
No Sub Category
Total Number of dwellings: 232
Survey date: THURSDAY *30/06/05* *Survey Type: MANUAL*

This section provides a list of all survey sites and days in the selected set. For each individual survey site, it displays a unique site reference code and site address, the selected trip rate calculation parameter and its value, the day of the week and date of each survey, and whether the survey was a manual classified count or an ATC count.

TRIP RATE for Land Use 03 - RESIDENTIAL/A - HOUSES PRIVATELY OWNED

VEHICLES

Calculation factor: 1 DWELLS

BOLD print indicates peak (busiest) period

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	21	93	0.083	21	93	0.301	21	93	0.384
08:00 - 09:00	21	93	0.155	**21**	**93**	**0.432**	21	93	0.587
09:00 - 10:00	21	93	0.176	21	93	0.218	21	93	0.394
10:00 - 11:00	21	93	0.150	21	93	0.195	21	93	0.345
11:00 - 12:00	21	93	0.196	21	93	0.182	21	93	0.378
12:00 - 13:00	21	93	0.199	21	93	0.181	21	93	0.380
13:00 - 14:00	21	93	0.181	21	93	0.172	21	93	0.353
14:00 - 15:00	21	93	0.201	21	93	0.188	21	93	0.389
15:00 - 16:00	21	93	0.323	21	93	0.226	21	93	0.549
16:00 - 17:00	21	93	0.339	21	93	0.206	21	93	0.545
17:00 - 18:00	**21**	**93**	**0.414**	21	93	0.230	**21**	**93**	**0.644**
18:00 - 19:00	21	93	0.283	21	93	0.209	21	93	0.492
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			2.700			2.740			5.440

This section displays the trip rate results based on the selected set of surveys and the selected count type (shown just above the table). It is split by three main columns, representing arrivals trips, departures trips, and total trips (arrivals plus departures). Within each of these main columns are three sub-columns. These display the number of survey days where count data is included (per time period), the average value of the selected trip rate calculation parameter (per time period), and the trip rate result (per time period). Total trip rates (the sum of the column) are also displayed at the foot of the table.

To obtain a trip rate, the average (mean) trip rate parameter value (TRP) is first calculated for all selected survey days that have count data available for the stated time period. The average (mean) number of arrivals, departures or totals (whichever applies) is also calculated (COUNT) for all selected survey days that have count data available for the stated time period. Then, the average count is divided by the average trip rate parameter value, and multiplied by the stated calculation factor (shown just above the table and abbreviated here as FACT). So, the method is: COUNT/TRP FACT. Trip rates are then rounded to 3 decimal places.*

Parameter summary

Trip rate parameter range selected:	10 - 237 (units:)
Survey date date range:	01/01/05 - 23/10/12
Number of weekdays (Monday-Friday):	21
Number of Saturdays:	0
Number of Sundays:	0
Surveys manually removed from selection:	1

This section displays a quick summary of some of the data filtering selections made by the TRICS® user. The trip rate calculation parameter range of all selected surveys is displayed first, followed by the range of minimum and maximum survey dates selected by the user. Then, the total number of selected weekdays and weekend days in the selected set of surveys are show. Finally, the number of survey days that have been manually removed from the selected set outside of the standard filtering procedure are displayed.

TRIP RATE for Land Use 03 - RESIDENTIAL/A - HOUSES PRIVATELY OWNED

OGVS

Calculation factor: 1 DWELLS

BOLD print indicates peak (busiest) period

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	21	93	0.005	21	93	0.004	21	93	0.009
08:00 - 09:00	21	93	0.002	21	93	0.002	21	93	0.004
09:00 - 10:00	21	93	0.004	21	93	0.003	21	93	0.007
10:00 - 11:00	21	93	0.005	**21**	**93**	**0.007**	**21**	**93**	**0.012**
11:00 - 12:00	21	93	0.001	21	93	0.002	21	93	0.003
12:00 - 13:00	**21**	**93**	**0.006**	21	93	0.006	21	93	0.012
13:00 - 14:00	21	93	0.003	21	93	0.004	21	93	0.007
14:00 - 15:00	21	93	0.002	21	93	0.002	21	93	0.004
15:00 - 16:00	21	93	0.001	21	93	0.001	21	93	0.002
16:00 - 17:00	21	93	0.002	21	93	0.001	21	93	0.003
17:00 - 18:00	21	93	0.001	21	93	0.001	21	93	0.002
18:00 - 19:00	21	93	0.000	21	93	0.001	21	93	0.001
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.032			0.034			0.066

This section displays the trip rate results based on the selected set of surveys and the selected count type (shown just above the table). It is split by three main columns, representing arrivals trips, departures trips, and total trips (arrivals plus departures). Within each of these main columns are three sub-columns. These display the number of survey days where count data is included (per time period), the average value of the selected trip rate calculation parameter (per time period), and the trip rate result (per time period). Total trip rates (the sum of the column) are also displayed at the foot of the table.

To obtain a trip rate, the average (mean) trip rate parameter value (TRP) is first calculated for all selected survey days that have count data available for the stated time period. The average (mean) number of arrivals, departures or totals (whichever applies) is also calculated (COUNT) for all selected survey days that have count data available for the stated time period. Then, the average count is divided by the average trip rate parameter value, and multiplied by the stated calculation factor (shown just above the table and abbreviated here as FACT). So, the method is: COUNT/TRP FACT. Trip rates are then rounded to 3 decimal places.*

Parameter summary

Trip rate parameter range selected:	10 - 237 (units:)
Survey date date range:	01/01/05 - 23/10/12
Number of weekdays (Monday-Friday):	21
Number of Saturdays:	0
Number of Sundays:	0
Surveys manually removed from selection:	1

This section displays a quick summary of some of the data filtering selections made by the TRICS® user. The trip rate calculation parameter range of all selected surveys is displayed first, followed by the range of minimum and maximum survey dates selected by the user. Then, the total number of selected weekdays and weekend days in the selected set of surveys are show. Finally, the number of survey days that have been manually removed from the selected set outside of the standard filtering procedure are displayed.

TRIP RATE for Land Use 03 - RESIDENTIAL/A - HOUSES PRIVATELY OWNED

PSVS

Calculation factor: 1 DWELLS

BOLD print indicates peak (busiest) period

Time Range	ARRIVALS			DEPARTURES			TOTALS		
	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	21	93	0.000	21	93	0.000	21	93	0.000
08:00 - 09:00	21	93	0.001	**21**	**93**	**0.001**	21	93	0.002
09:00 - 10:00	21	93	0.001	21	93	0.001	21	93	0.002
10:00 - 11:00	21	93	0.001	21	93	0.001	21	93	0.002
11:00 - 12:00	21	93	0.000	21	93	0.000	21	93	0.000
12:00 - 13:00	21	93	0.000	21	93	0.000	21	93	0.000
13:00 - 14:00	21	93	0.001	21	93	0.001	21	93	0.002
14:00 - 15:00	21	93	0.000	21	93	0.000	21	93	0.000
15:00 - 16:00	**21**	**93**	**0.002**	21	93	0.001	**21**	**93**	**0.003**
16:00 - 17:00	21	93	0.001	21	93	0.001	21	93	0.002
17:00 - 18:00	21	93	0.000	21	93	0.000	21	93	0.000
18:00 - 19:00	21	93	0.000	21	93	0.000	21	93	0.000
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.007			0.006			0.013

This section displays the trip rate results based on the selected set of surveys and the selected count type (shown just above the table). It is split by three main columns, representing arrivals trips, departures trips, and total trips (arrivals plus departures). Within each of these main columns are three sub-columns. These display the number of survey days where count data is included (per time period), the average value of the selected trip rate calculation parameter (per time period), and the trip rate result (per time period). Total trip rates (the sum of the column) are also displayed at the foot of the table.

To obtain a trip rate, the average (mean) trip rate parameter value (TRP) is first calculated for all selected survey days that have count data available for the stated time period. The average (mean) number of arrivals, departures or totals (whichever applies) is also calculated (COUNT) for all selected survey days that have count data available for the stated time period. Then, the average count is divided by the average trip rate parameter value, and multiplied by the stated calculation factor (shown just above the table and abbreviated here as FACT). So, the method is: COUNT/TRP FACT. Trip rates are then rounded to 3 decimal places.*

Parameter summary

Trip rate parameter range selected:	10 - 237 (units:)
Survey date date range:	01/01/05 - 23/10/12
Number of weekdays (Monday-Friday):	21
Number of Saturdays:	0
Number of Sundays:	0
Surveys manually removed from selection:	1

This section displays a quick summary of some of the data filtering selections made by the TRICS® user. The trip rate calculation parameter range of all selected surveys is displayed first, followed by the range of minimum and maximum survey dates selected by the user. Then, the total number of selected weekdays and weekend days in the selected set of surveys are show. Finally, the number of survey days that have been manually removed from the selected set outside of the standard filtering procedure are displayed.

TRIP RATE for Land Use 03 - RESIDENTIAL/A - HOUSES PRIVATELY OWNED

CYCLISTS

Calculation factor: 1 DWELLS

BOLD print indicates peak (busiest) period

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	21	93	0.007	**21**	**93**	**0.013**	21	93	0.020
08:00 - 09:00	21	93	0.004	21	93	0.011	21	93	0.015
09:00 - 10:00	21	93	0.005	21	93	0.003	21	93	0.008
10:00 - 11:00	21	93	0.003	21	93	0.005	21	93	0.008
11:00 - 12:00	21	93	0.006	21	93	0.004	21	93	0.010
12:00 - 13:00	21	93	0.008	21	93	0.004	21	93	0.012
13:00 - 14:00	21	93	0.004	21	93	0.005	21	93	0.009
14:00 - 15:00	21	93	0.003	21	93	0.004	21	93	0.007
15:00 - 16:00	21	93	0.015	21	93	0.011	21	93	0.026
16:00 - 17:00	21	93	0.013	21	93	0.011	21	93	0.024
17:00 - 18:00	**21**	**93**	**0.017**	21	93	0.013	**21**	**93**	**0.030**
18:00 - 19:00	21	93	0.015	21	93	0.010	21	93	0.025
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.100			0.094			0.194

This section displays the trip rate results based on the selected set of surveys and the selected count type (shown just above the table). It is split by three main columns, representing arrivals trips, departures trips, and total trips (arrivals plus departures). Within each of these main columns are three sub-columns. These display the number of survey days where count data is included (per time period), the average value of the selected trip rate calculation parameter (per time period), and the trip rate result (per time period). Total trip rates (the sum of the column) are also displayed at the foot of the table.

To obtain a trip rate, the average (mean) trip rate parameter value (TRP) is first calculated for all selected survey days that have count data available for the stated time period. The average (mean) number of arrivals, departures or totals (whichever applies) is also calculated (COUNT) for all selected survey days that have count data available for the stated time period. Then, the average count is divided by the average trip rate parameter value, and multiplied by the stated calculation factor (shown just above the table and abbreviated here as FACT). So, the method is: COUNT/TRP FACT. Trip rates are then rounded to 3 decimal places.*

Parameter summary

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Number of weekdays (Monday-Friday):	21
Number of Saturdays:	0
Number of Sundays:	0
Surveys manually removed from selection:	1

This section displays a quick summary of some of the data filtering selections made by the TRICS® user. The trip rate calculation parameter range of all selected surveys is displayed first, followed by the range of minimum and maximum survey dates selected by the user. Then, the total number of selected weekdays and weekend days in the selected set of surveys are show. Finally, the number of survey days that have been manually removed from the selected set outside of the standard filtering procedure are displayed.

APPENDIX 9

QS701EW - Method of travel to work

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population	All usual residents aged 16 to 74
units	Persons
date	2011
area type	2011 super output areas - middle layer
area name	E02005467 : South Holland 003

Method of Travel to Work	Total	%
Train	16	0.5%
Bus, minibus or coach	87	3.0%
Taxi	7	0.2%
Motorcycle, scooter or moped	16	0.5%
Driving a car or van	2,204	75.6%
Passenger in a car or van	225	7.7%
Bicycle	111	3.8%
On foot	248	8.5%
	2,914	

APPENDIX 10

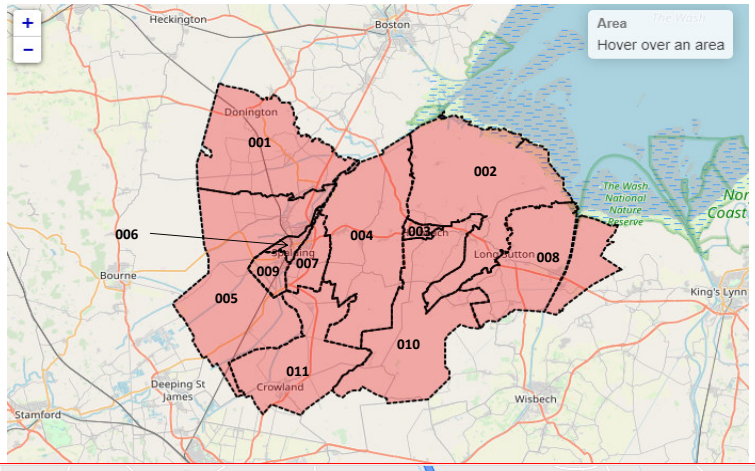
WU03EW - Location of usual residence and place of work by method of travel to wo

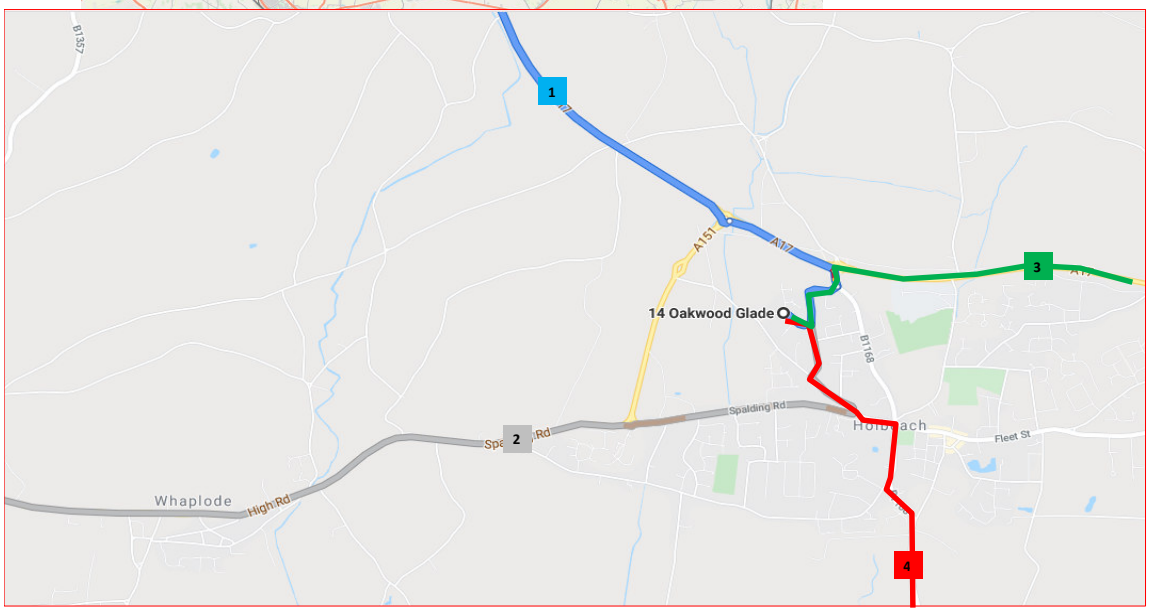
ONS Crown Copyright Reserved [from Nomis on 14 February 2020]

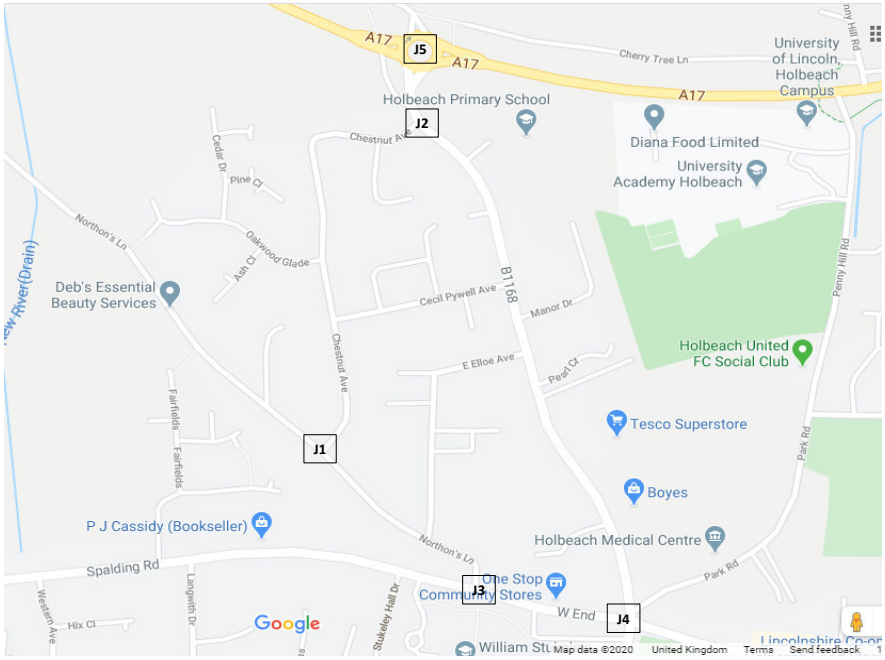
population	All usual residents aged 16 and over in employment the week before the census
units	Persons
date	2011
method of travel to work	All categories: Method of travel to work (2001 specification)

	usual residence					
place of work : 2011 census merged local authority district	**E02005467 : South Holland 003**		1	2	3	4
South Holland	1,901					
Boston	131		5%	0%	0%	0%
Peterborough	115		0%	2%	0%	2%
Fenland	101		0%	0%	0%	4%
King's Lynn and West N	82		0%	0%	3%	0%
South Kesteven	44		1%	1%	0%	0%
North Kesteven	28		1%	0%	0%	0%
Lincoln	18		1%	0%	0%	0%
Huntingdonshire	11		0%	0%	0%	0%
Rutland	7		0%	0%	0%	0%
East Lindsey	7		0%	0%	0%	0%
Breckland	5		0%	0%	0%	0%
Hillingdon	5		0%	0%	0%	0%
Dover	5		0%	0%	0%	0%
West Lindsey	4		0%	0%	0%	0%
Kensington and Chelse	4		0%	0%	0%	0%
Westminster,City of Lor	4		0%	0%	0%	0%
Harrogate	3		0%	0%	0%	0%
East Northamptonshire	3		0%	0%	0%	0%
Cannock Chase	3		0%	0%	0%	0%
Broxbourne	3		0%	0%	0%	0%
St Albans	3		0%	0%	0%	0%
South Norfolk	3		0%	0%	0%	0%
Portsmouth	3		0%	0%	0%	0%
Northumberland	2		0%	0%	0%	0%
Derby	2		0%	0%	0%	0%
Charnwood	2		0%	0%	0%	0%
Northampton	2		0%	0%	0%	0%
Bassetlaw	2		0%	0%	0%	0%
South Cambridgeshire	2		0%	0%	0%	0%
Harlow	2		0%	0%	0%	0%
Hammersmith and Fulh	2		0%	0%	0%	0%
Tower Hamlets	2		0%	0%	0%	0%
Wandsworth	2		0%	0%	0%	0%
Milton Keynes	2		0%	0%	0%	0%
Cherwell	2		0%	0%	0%	0%
South Gloucestershire	2		0%	0%	0%	0%

East Devon	2		0%	0%	0%	0%
Rochdale	1		0%	0%	0%	0%
Barnsley	1		0%	0%	0%	0%
Bradford	1		0%	0%	0%	0%
Chesterfield	1		0%	0%	0%	0%
Blaby	1		0%	0%	0%	0%
Melton	1		0%	0%	0%	0%
Corby	1		0%	0%	0%	0%
Wellingborough	1		0%	0%	0%	0%
Rushcliffe	1		0%	0%	0%	0%
East Staffordshire	1		0%	0%	0%	0%
Stratford-on-Avon	1		0%	0%	0%	0%
Birmingham	1		0%	0%	0%	0%
Luton	1		0%	0%	0%	0%
Bedford	1		0%	0%	0%	0%
Central Bedfordshire	1		0%	0%	0%	0%
Cambridge	1		0%	0%	0%	0%
Stevenage	1		0%	0%	0%	0%
Broadland	1		0%	0%	0%	0%
North Norfolk	1		0%	0%	0%	0%
Forest Heath	1		0%	0%	0%	0%
St Edmundsbury	1		0%	0%	0%	0%
Harrow	1		0%	0%	0%	0%
Merton	1		0%	0%	0%	0%
Richmond upon Thame	1		0%	0%	0%	0%
Sutton	1		0%	0%	0%	0%
Slough	1		0%	0%	0%	0%
Sevenoaks	1		0%	0%	0%	0%
Oxford	1		0%	0%	0%	0%
Chichester	1		0%	0%	0%	0%
Poole	1		0%	0%	0%	0%
Cotswold	1		0%	0%	0%	0%
	2,552		**12%**	**28%**	**23%**	**18%**


Area
Hover over an area
Heckington
Boston
Donington
001
002
003
004
005
006
007
008
009
010
011
Bourne
Long Sutton
King's Lynn
Deeping St James
Crowland
Wisbech
Stamford


1
2
3
4
14 Oakwood Glade
A151
A17
B1168
B1357
Spalding Rd
Fleet St
Whaplode
High Rd


A17
J5
J2
J1
J3
J4
Holbeach Primary School
University of Lincoln, Holbeach Campus
Diana Food Limited
University Academy Holbeach
Deb's Essential Beauty Services
Holbeach United FC Social Club
Tesco Superstore
Boyes
P J Cassidy (Bookseller)
Holbeach Medical Centre
One Stop Community Stores
Spalding Rd
B1168
Cherry Tree Ln
Chestnut Ave
Cedar Dr
Pine Ct
Oakwood Glade
Ash Ct
Northon's Ln
Cecil Pywell Ave
Manor Dr
E Elloe Ave
Pearl Ct
Park Rd
Fairfields
Stukeley Hall Dr
Langwith Dr
Western Ave
Hix Ct
W End
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