Transportation Planning : Infrastructure Design
an RSK company

Prepared for: Castle Green Homes

Proposed Residential Development

Land off Holywell Road and Green Lane, Ewloe

Transport Assessment

230836

MARCH 2023

SCP GENERAL NOTES

Project No.: 230836-TA (0.0)

Title: Proposed Residential Development Land off Holywell Road and Green Lane, Ewloe, Transport Assessment

Client: Castle Green Homes

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1 INTRODUCTION

Overview

1.1 SCP have been instructed by Castle Green to provide highway, traffic and transport advice in support of a proposed residential development of 315 dwellings at land off Holywell Road and Green Lane, Ewloe.

1.2 The application site forms part of a wider site which is allocated in the Flintshire Local Development Plan (LDP) for 298 dwellings under site reference HN1.7. The principle of residential development on this site has therefore been found acceptable to Flintshire County Council (FCC).

1.3 This Transport Statement (TS) has been produced in accordance with Planning Policy Wales and TAN 18 and provides an assessment of the traffic and transport implications associated with the development proposals to inform FCC, as the local highway and planning authority, regarding the nature and magnitude of their impact.

1.4 This report concludes that the proposed development of this site can be accommodated without detriment to the operational capacity or safety of the local highway network and that it can be readily accessed on foot, by bicycle and by local public transport services.

Structure of Report

1.5 The structure of this report is as follows:

- Chapter 2 – summarises relevant national and local transport policies and evaluated a Transport Implementation Strategy;
- Chapter 3 – provides an appraisal of the existing conditions of the site including an appraisal of the local highway network, existing traffic conditions and road safety record;
- Chapter 4 – provides an appraisal of the development proposals;
- Chapter 5 – presents a review of the accessibility of the site by walking, cycling and public transport modes;

- Chapter 6 – describes the future baseline traffic conditions on the local highway network in relation to traffic growth;
- Chapter 7 – presents estimates of the trip generating potential of the scheme and sets out the methodologies for estimating the distribution of site traffic through the local highway network;
- Chapter 8 – presents an assessment of the impact of the development on the operational performance of site access junction ; and,
- Chapter 9 – provides the summary and conclusions to the above chapters.

2 POLICY CONTEXT AND TRANSPORT IMPLEMENTATION STRATEGY

Introduction

2.1 Technical Advice Note 18 (TAN 18) sets out the need for developments in Wales to include a Transport Implementation Strategy (TIS), which should include the following information in respect of each particular development proposal:

2.2 Details of how the development and the TIS relate to transport planning policies and strategy. TIS's are intended to incorporate all the elements of a Travel Plan (TP) and to ensure that these are integrated with design elements of the new development;

- A set of objectives and targets relating to managing travel demand for the development;
- A framework for monitoring the objectives and targets, including the future modal split of transport to the development; and
- Details of measures proposed to improve access by public transport, walking and cycling to reduce the number and impacts of motorised journeys associated with the development.

2.3 This TIS section is therefore prepared having regard to the advice from TAN 18, as outlined above. It is considered that this TIS can be taken forward and used as a framework for a future detailed Travel Plan that can be secured as part of a planning condition, if considered necessary

Policy Context - Planning Policy Wales (PPW)

2.4 In terms of the national transport policy that is relevant to the TIS, the latest 12th edition of PPW was published in February 2024 by the Welsh Government and sets out a framework for the Welsh planning authorities to prepare their development plans. Chapter 4 of PPW sets out the approach to Transport.

2.5 Paragraph 4.1.1 of PPW states that "*The planning system should enable people to access jobs and services through shorter, more efficient and sustainable journeys, by walking, cycling and public transport. By influencing the location, scale, density, mix of uses and design of new development, the planning system can improve choice in transport and secure accessibility in a way which supports sustainable development, increases physical activity, improves health and helps to tackle the causes of climate change and airborne pollution by:*

- *Enabling More Sustainable Travel Choices – measures to increase walking, cycling and public transport, reduce dependency on the car for daily travel;*
- *Network Management – measures to make best use of the available capacity, supported by targeted new infrastructure; and,*
- *Demand Management – the application of strategies and policies to reduce travel demand, specifically that of single-occupancy private vehicles".*

2.6 Paragraph 4.1.9-4.1.10 of PPW states that "*The Welsh Government is committed to reducing reliance on the private car and supporting a modal shift to walking, cycling and public transport. Delivering this objective will make an important contribution to decarbonisation, improving air quality, increasing physical activity, improving the health of the nation and realising the goals of the Well-being of Future Generations Act.*

The planning system has a key role to play in reducing the need to travel and supporting sustainable transport, by facilitating developments which:

- *are sited in the right locations, where they can be easily accessed by sustainable modes of travel and without the need for a car;*
- *are designed in a way which integrates them with existing land uses and neighbourhoods; and,*
- *make it possible for all short journeys within and beyond the development to be easily made by walking and cycling."*

2.7 With reference to the Active Travel (Wales) Act 2013, Paragraph 4.1.26 of PPW states that walking and cycling should be promoted for shorter journeys, particularly everyday journeys to work and education establishments or to other local services and facilities. "*The Active Travel Act requires local authorities to produce Integrated Network Maps, identifying the walking and cycling routes required to create fully integrated networks for walking and cycling to access work, education, services and facilities*".

2.8 In reference to supporting documentation with planning applications, paragraph 4.1.56 of PPW states that *"Transport Assessments are an important mechanism for setting out the scale of anticipated impacts of a proposed development, or redevelopment, is likely to have. They assist in helping to anticipate the impacts of development so that they can be understood and catered for appropriately."*

Local Policy – Flintshire Local Development Plan

2.9 The Flintshire LDP was adopted in January 2023 and covers the period 2015 to 2030. It forms part of the statutory development plan alongside Future Wales: The National Plan 2040. The Council will use the LDP and Future Wales as the primary basis for making decisions on planning applications and development proposals.

2.10 Policy PC5: Transport and Accessibility states that new development proposals must be supported by appropriate transport infrastructure, and depending on the nature, scale, location and siting of the proposal, will be required to:

a. Incorporate good access to the more sustainable modes of travel, firstly by walking and cycling, secondly by public transport, then by low emission private vehicle and finally by private motor vehicle;

b. not compromise the safe, effective and efficient use of the highway network and not have an adverse impact on highway safety or create unacceptable levels of traffic generation;

c. where significant adverse effects upon the transport network arising from the proposed development are unavoidable, they must be mitigated by, for example, improvements to transport infrastructure and traffic management;

d. provide appropriate levels of parking, servicing and maneuvering space and in non-residential development, a minimum of 10% of parking spaces to have electric vehicle charging points;

e. create well designed people orientated streets and make provision for people with restricted mobility including those with characteristics as defined by the Equality Act 2010;

f. safeguard, enhance and expand the active travel network, particularly by means of improving connectivity to and from the proposed development.

North Wales Local Authorities North Wales Joint Local Transport Plan

2.11 The Local Transport Plan (LTP) has been jointly produced by the six North Wales Local Authorities of Conwy County Borough Council, Denbighshire County Council, Flintshire County Council, Gwynedd Council, Isle of Anglesey County Council and Wrexham County Borough Council and aims to remove barriers to economic growth, prosperity and well- being by delivering safe, sustainable, affordable and effective transport networks.

2.12 The LTP identifies the key transport issues for North Wales which includes the lack of viable and affordable alternatives to the car to access key employment sites and other services. The LTP recognises that there is an opportunity to reduce short commuter trips by improving the quality and provision of sustainable transport and promoting modal shift, predominantly for a distance less than 5km, which is considered appropriate for the promotion of active modes.

2.13 The LTP 'Outcomes' are identified as:

- Connections to Key Destinations and Markets;
- Access to Employment;
- Access to Services;
- Increasing Levels of Walking and Cycling;
- Improved Safety and Security;
- Benefits and Minimised Impacts on the Environment.

2.14 The LTP goes on to set out the 'Higher Level Interventions' that will address these issues and aid the achievement of the desired outcomes; these include encouraging sustainable transport through providing access to services through a range of integrated transport measures to improve access to education, health, community, shopping and other services by public transport, walking and cycling as well as community transport, taxi and car share

Active Travel (Wales) Act 2013

2.15 The Welsh Government seeks to enable more people to walk, cycle and generally travel by more active methods so that:

- More people can experience the health benefits of active travel;
- We reduce our greenhouse gas emissions;
- We help address poverty and disadvantage and;
- We help our economy to grow by unlocking sustainable economic growth.

2.16 The Design Guidance: Active Travel (Wales) Act 2013 is statutory guidance and is published by the Welsh Government for use throughout Wales when designing and maintain active travel routes and facilities. It is intended to ensure that the requirements of the Active Travel Act are applied consistently and appropriately throughout Wales.

Well Being of Future Generations Act

2.17 The Well-being of Future Generations (Wales) Act is about improving the social, economic, environmental and cultural well-being of Wales. The Act puts in place seven well-being goals:

- A globally responsible Wales;
- A prosperous Wales;
- A resilient Wales;
- A healthier Wales;
- A more equal Wales;
- A Wales of cohesive communities;
- A Wales of vibrant culture and thriving Welsh language.

2.18 By having these goals in place it will make public bodies listen and think more about the long-term to prevent future problem and to take a more joined-up approach.

2.19 This travel plan has been developed in line with local and national transport policy and guidance and supports policies in the North Wales Joint Local Transport Plan, The Design Guidance: active Travel (Wales) Act 2013, The Well-being of Future Generations Act and the North Wales Regional Transport Plan.

TIS Objectives and Targets

Achieving the TIS Objectives and the Monitoring Process

2.25 The objectives and monitoring of the TIS will substantially be achieved through the appointment of suitable Travel Plan Co-ordinator/s (TPC/s). The TPC role for the development would most commonly be overseen by a Management Company located on the site, although in time this role could evolve to be overseen by the residents of the site themselves. Appropriate start-up funding will be provided for the TPC/s to cover the administration costs involved.

2.26 Once appointed, the TPC/s will act as the main contact for the TIS and will be responsible for implementing the TIS measures, involving new residents, maintaining a database and monitoring the effects of implementation. A full set of duties and responsibilities of the TPC/s is set out in the sections below.

2.27 The TPC/s will inform the Local Planning Authority and the appropriate local public transport operators of their contact details. Similarly, the TPC/s will obtain the contact details of the owners and complete a 'Contact' form to provide easy reference when dealing with relevant matters.

2.28 The TPC/s will undertake an initial resident travel survey, within three months of 30% occupation of the site, to enable a resident travel database to be set up. The TPC/s will prepare and distribute a questionnaire to each resident, to collect the following details:

- Postcode area of place of employment;
- Normal working hours;
- Mode of travel to work;
- Car ownership / usage;
- Reasons for not using public transport and other modes;
- The anticipated take-up of a car sharing scheme, the use of public transport or other non-car modes of travel to work; and,
- Information relating to potential areas for sustainable travel improvement, upon which the TPC/s could act and draw up measures to improve the TIS.

2.29 On receipt of the completed questionnaires the TPC/s will set up a travel database within 3 months of completion of the travel survey.

2.30 The TPC/s will agree the annual targets with the LPA within 1 month of completion of the travel survey analysis. The initial travel survey results for the proportion of residents travelling by single occupancy vehicles should be recorded along with the agreed short-term annual targets.

2.31 The TPC/s will ensure that any changes to the TIS or any relevant information is passed on to residents on a biannual / annual basis in the form of leaflets.

2.32 The TPC/s will ensure that residents are provided with information to allow ease of use of the local public transport by providing up-to-date public transport route maps and timetable information in residential 'welcome packs', and updating by leaflet drop, as necessary. Contact details for local taxi firms will also be provided by the TPC/s.

2.33 The TPC/s will liaise regularly with local public transport operators to ensure that information remains valid. The TPC/s will provide details of the websites and telephone advice services, such as http://www.traveline.info/ to enable residents to obtain details on their individual journey requirements.

2.34 The TPC/s will also liaise with the local public transport operators and release survey data to the operators to identify travel demands and allow appropriate services to be provided. The TPC/s will check regularly to ensure that the information supplied to residents remains valid.

2.35 The TPC/s will encourage walking as a mode of travel to the site by implementing the following initiatives:

- Raise awareness of the health benefits of walking through promotional material;
- Provide a map showing walking routes, indicating distances and times to the most common destinations near to the site; and,
- Ensure that footways on site are well maintained and lit and any defects reported to the highways authority on an annual/biannual basis.

2.36 In conjunction with the pedestrian initiatives, the TPC/s will investigate the potential to set up a bicycle user group (BUG) to encourage residents to cycle to work.

2.37 The TPC/s will set up a car sharing scheme, utilising the online website www.liftshare.com, within 3 months of receiving the initial residents travel surveys. Residents will be contacted by the TPC/s to allow potential car sharers to register an interest and provide details of their journey to and from work along with their contact phone number and work location. The TPC/s will then identify suitable matches for residents that may be able to share their journeys to and from work or for shopping trips.

2.38 The TPC/s will make the new residents aware of the existence of the TIS by providing them with a copy of the TIS as part of a welcome pack as they move into their properties. The existence of the TIS would also be highlighted in promotional literature and advertising for the new dwellings.

2.39 The TPC/s will monitor travel patterns on an annual basis for the first five years of the occupation of the sites and then at suitable intervals as agreed by the Local Planning Authority. The monitoring of the plan is important for the following reasons:

- It will ensure that the Local Planning Authority can see that the aims and objectives of the TIS are being achieved;
- It justifies the commitment of the TPC/s and of other resources;
- It maintains support for the plan by reporting successes;
- It identifies any measures that are not working or problems with the approach of the Plan;
- It can be shared with other organisations to refine the development of the Plan.

2.40 Surveys will be used to monitor travel to and from the site. The surveys can be used to monitor the number of residents walking, cycling, using cars and using public transport. The results can then be compared with the mode share targets identified earlier in this framework TIS.

2.41 The TPC/s will develop the monitoring programme in conjunction with the Local Planning Authority to ensure that the monitoring procedures are appropriate. The TPC/s will maintain a monitoring table of progress to key TIS targets based on the results of the monitoring travel surveys. This table will be published and distributed by leaflet to residents on the site.

2.42 The TPC/s will make information on mode share available to the Local Planning Authority as part of the continuous monitoring process, subject to the provisions of the Data Protection Act.

2.43 The TPC/s will undertake an annual review of the TIS in conjunction with the Local Planning Authority. This review will be important in assessing the effectiveness of the measures implemented and to identify areas where modification may be necessary. In particular the following will be assessed:

- The level of car/non-car usage at the site;
- Comments received from residents.

2.44 When reviewing the effectiveness of the TIS, the following questions will be asked:

- Which areas offer the greatest potential for change/improvement?
- Was the initiative implemented by the target date?
- How well used is each scheme/initiative?
- How much did it cost to introduce?

2.45 The TPC/s will compare the mode share statistics obtained from the annual monitoring to the targets set for the development. The TPC/s will set revised realistic targets for modal shifts to non-car travel modes and investigate the effectiveness of the TIS initiatives being promoted in conjunction with the Local Planning Authority.

2.46 In light of the data collected from the monitoring process, the TPC/s will adapt the TIS to enable the revised agreed targets to be achieved and submit a review report to be agreed with the Local Planning Authority.

2.47 It is considered that the delivery of the TIS / TP can be secured by planning condition, as appropriate.

3 SITE AND SURROUNDINGS

Overview

3.1 This Chapter provides a detailed description of the location of the site and composition, local highway network, existing traffic conditions and road safety record.

Site Location and Composition

3.2 The application site is located approximately 0.6 miles to the north-west of Ewloe centre and has an area of approximately 1.8ha. The site currently comprises undeveloped land.

3.3 **Figure 3.1** below shows the site location in relation to the wider highway network.

Figure 3.1 – Site Location – Wider View

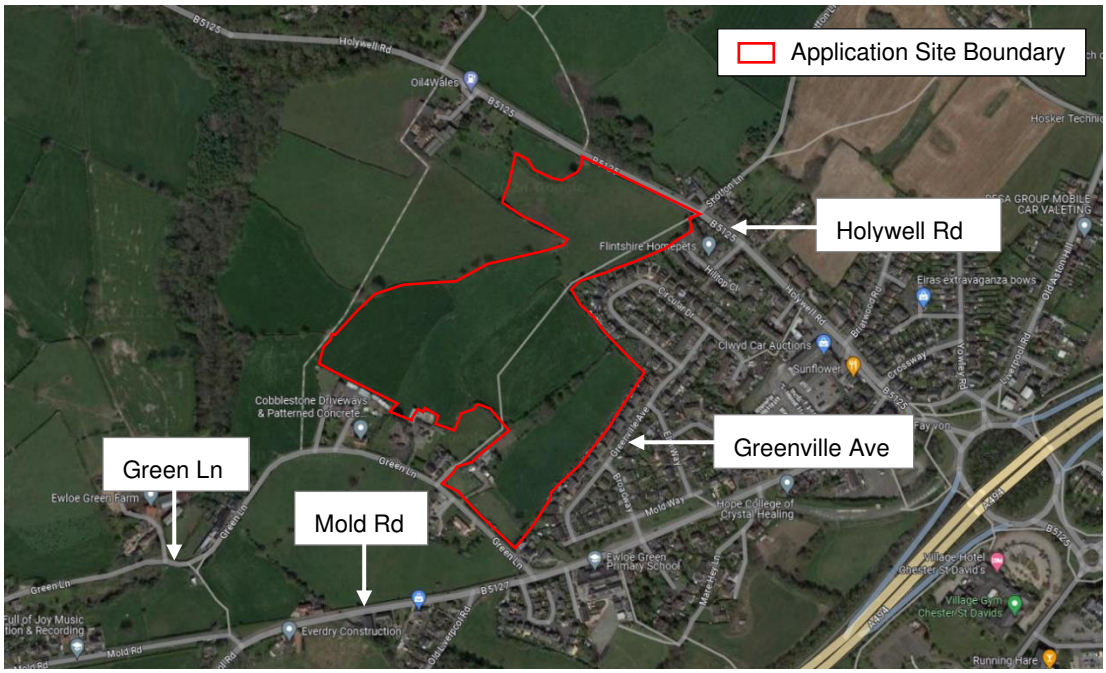
Source: Google Maps

3.4 As mentioned previously, the application site is allocated in the Flintshire LDP for 298 dwellings under site reference HN1.7.

3.5 The application site is bordered by undeveloped land to the north-west, residential properties and Old Mold Road to the north-east and east, and Green Lane to the south-west.

3.6 The location of the site in relation to the local area is shown on **Figure 2.2** below.

Figure 3.2 – Site Location – Local Highway Network



Source: Google Maps

3.7 Public Right of Way (PRoW) 142, 143 and 144 all run in the immediate vicinity of the site. PROW 120 runs to the south of the site and connects Old Mold Road to St David's Park where the Co-operative Convenience Store and Busy Bees Children's Nursery is located. Further details on PROW are provided later in Chapter 5 of this report.

Local Highway Network

Green Lane

3.8 Green Lane is along the south-western boundary of the site and connects the B5127 Mold Road to the south to Magazine Lane to the west.

3.9 Within the vicinity of the site, Green Lane is a rural lane in nature and has a carriageway width of approximately 4.0m, which widens out to the south where it meets the B5127 Mold Road. No footways are currently provided along Green Lane.

3.10 Within the vicinity of the site, Green lane is street lit and due to the recent announcement from Welsh Government is subject to a mandatory 20mph speed limit.

3.11 PRoW 143 runs along the northern boundary of the site and provides a link between Holywell Road to the north-east and Magazine Lane to the south-west. Further details on nearby PRoW are provided later in this report.

B5125 Holywell Road

3.12 The B5125 Holywell Road is located on the northern site boundary and connects the site to the B5127 Old Mold Road to the east and Connah's Quay Road to the north east. The B5125 Holywell Road is subject to a 60mph speed limit in the vicinity of the site and, the carriageway measures approximately 9m wide. Holywell Road benefits from footways on the eastern side and street lighting on both sides of the carriageway.

3.13 The B5125 Holywell Road provides direct frontage access to a number of residential dwellings as well as access to a number of residential cul-de-sacs. The B5125 Holywell Road meets the B5127 Old Mold Road at a priority junction, which is to be improved as part of the proposals, more details can be found in Chapter 3.

B5127 Old Mold Road

3.14 The B5127 Old Mold Road is located to the south-east of the site and connects the A494 to the east to Liverpool Road to the west which leads to Buckley. The B5127 Old Mold Road has a carriageway width of approximately 9m and benefits from footways and on both sides of the carriageway.

3.15 Within the vicinity of the site, the B5127 Old Mold Road is street lit and due to the recent announcement from Welsh Government is subject to a mandatory 20mph.

A494 Intersection

3.16 The A494 intersection is located immediately to the east of the Old Mold Road/Holywell Road junction. It is a large grade separate roundabout with slip roads for all movements onto and off the A494. The A494 is a trunk road which connects the M56 in the east with the A55 North Wales. Expressway in the west.

Traffic Survey Data

3.17 In order to establish existing traffic flow demand on the local network, turning count traffic flow surveys were undertaken on Tuesday 22nd February 2024 between the hours of 07:30-09:30 and 16:00-18:00 at the following junctions:-

- Holywell Road/Old Mold Road priority junction;
- B5127 / Old Mold Road / Holywell Road priority junction; and
- A494/B5125/B5127/Yowley Road priority roundabout

3.18 The traffic surveys are shown dramatically on **Traffic Flow Figure 1**.

3.19 In order to validate the capacity assessment presented later in this report, queue surveys were also undertaken at the aforementioned junctions. The surveys demonstrate a queues of over 25 vehicles occur sporadically along the A494 (north-eastbound off-slip) at the A494/B5125/B5127/Yowley Road roundabout during both the AM and PM peak hours. However, this is a result of queues from the upstream Holywell Road/Old Mold Road priority junction blocking back to the circulatory of the A494. Further details on this are provided later in this report along with the identification of an improvement scheme to help address this existing issue.

3.20 The peak hours for the local highway network have been calculated as being between 08:00 – 09:00 and 16:30 - 17:30 for both surveys.

3.21 The raw survey data for both surveys is included in **Appendix A.**

Highway Safety

3.22 In order to identify critical locations on the network with a poor accident record, STATS19 personal injury accident data has been obtained from Department for Transport (DfT) for the most recently available 5-year period (approx.), ending December 2022. The location and severity of the accidents is shown on **Figure 3.3** below.

Figure 3.3 – Site Location

3.23 The key points from the five year accident analysis are as follows:-

- No accidents occurred on Green Lane or at its junction with Mold Road;
- No accidents occurred along the sites frontage on Holywell Road;
- Only two accidents occurred on Holywell Road to the south of the site, both occurred at different locations, with one being of slight severity and one of serious severity;
- No accidents occurred at the Holywell Road / B5127 Old Mold Road junction; and
- Only three accidents occurred at the A494 intersection, two were of slight severity and one of serious severity.

3.24 Having regard to the above and the low number of accidents, their severity and lack of any accident cluster spots, the existing accident record does not represent a material concern in the context of the proposed development.

4 PROPOSED DEVELOPMENT

General

4.1 The proposed development will provide 315 dwellings comprising the following mix of accommodation:-

- 1no. 1 bed flats
- 96no. 2 bed houses
- 143no. 3 bed houses
- 68no. 4 bed houses

4.2 The proposed site layout plan is provided in **Appendix B**.

Proposed Access Arrangements

4.3 As shown on the site plan, two vehicular accesses will be provided to the site, one from Holywell Road and one from Green Lane.

4.4 The access from Holywell Road will take the form of a new priority-controlled ghost island right turn lane junction, to allow right turners into the site to queue without blocking those straight ahead movements. The access has been designed to typical residential standards with a 5.5m wide carriageway and 2m wide footways.

4.5 As part of the proposals, the 30mph speed limit of Holywell Road will be extended across the site frontage to reflect the urban character that will be created by the development proposals. A footway will also be provided along the site frontage, to connect with the existing footway located to the east of the access.

4.6 The site access will provide a visibility splays that have an 'x' distance (minor arm setback distance) of 2.4m and a 'y' (major road visibility) distance 90m, which is in accordance with the guidance set out in TAN18 for a 30mph road.

4.7 The proposed access arrangement from Holywell Road and visibility splays is shown on Drawing Number SCP/230836/D04 presented in **Appendix C**.

4.8 Vehicular access from Green Lane will be provided through the introduction of a priority-controlled T-junction onto Green Lane. In addition, Green Lane will be widened to have a carriageway width of 5.5m, a 2m wide footway along the eastern section of the carriageway and a verge along the western side of the carriageway. The proposed access from Green Lane is shown on drawing number SCP/230836/D01 presented in **Appendix C**.

4.9 The proposed access arrangement is consistent with the allocations requirements and the Transport Assessment that formed the part of the evidence base for the sites allocation.

Internal Layout and Servicing Arrangements

4.10 The internal site layout has been designed to typical residential standards with the main access road providing a 5.5m wide carriageway and 2m wide footways on both sides of the road. The main access road serves a number of cul-de-sacs, which provide a 4.8m wide carriageway, and private driveways.

4.11 Appropriately located turning heads are provided at the end of the internal cul-de-sacs which have been designed to accommodate the movements of a large refuse vehicle, as shown on the swept path analysis drawings presented in **Appendix D**.

Car Parking

4.12 Local parking standards are set out in FCC's Local Planning Guidance Note 11. This specifies the following standards:-

- 1 bedroom properties – 1.5 spaces per dwelling;
- 2 or 3 bedroom house – 2 car spaces per unit;
- 3 bedroom house – 2 car spaces per unit and;
- 3+ bedroom house – 3 car spaces per unit.

4.13 For cycle parking there is no prescribed parking.

4.14 As shown on the site plan, the proposed development complies with FCCs parking standards.

5 ACCESSIBILITY

Overview

5.1 This chapter provides an assessment of the current accessibility of the proposed site for pedestrians, cyclists, and public transport. As detailed earlier, the application site is allocated in the Flintshire LDP for residential development under site reference HN1.7. The principle of residential development and accessibility of this site has therefore been found acceptable to FCC.

Walking

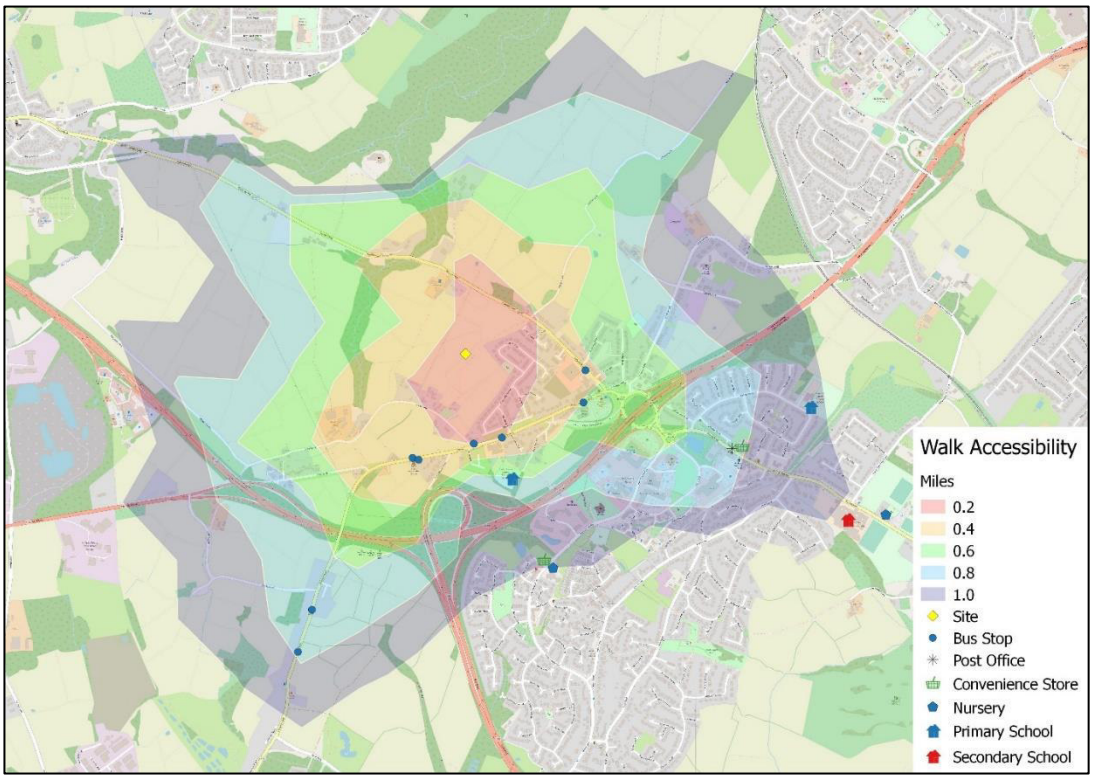
5.2 The surrounding area benefits from a good level of pedestrian infrastructure. Old Mold Road and Holywell Road benefits from benefit from footpaths on both sides of the road as well as street lighting and natural surveillance from the existing residential properties that abut the main walking routes.

5.3 As detailed earlier, the pedestrian infrastructure on Holywell Road along the site frontage and Green Lane is to be upgraded as part of the development.

5.4 Reference has been made to the Walking and Cycling Strategy for Wales, dated December 2003, which indicates that the practical distance for journeys on foot are up to 1 mile.

5.5 The pedestrian accessibility of the development has been modelled using Geographical Information System (GIS) software to produce isochrones mapping. The purpose of the isochrones is to demonstrate the areas within an acceptable walk distance of the site, as shown on **Figure 5.1**.

Figure 5.1 – Walk Accessibility



5.6 **Table 5.1 and 5.2** demonstrates the facilities which are within a 2 mile walk of the site accesses.

Table 5.1 – Accessibility of Facilities – Holywell Road Site Access

Facility	Detail	Distance from site (metres)
Takeaway	Fayon Fish and Chips	500m
Gym	Village Gym St David's Park	850m
Primary School	Ewloe Primary School	950m
Convenience Store	The Cooperative (The Hwy)	1000m
Post Office	Ewloe Post Office	1000m
Public House/Restaurant	Crown and Liver Public House	1100m
Primary School	Penarlag Community Primary School	1300m
Convenience Store	The Cooperative (St David's Park)	1400m
Nursery	Busy Bees	1400m
Secondary School	Hawarden High School	1500m
Nursery	The Highway Day Nursery	1500m

5.7 Hawarden Railway Station is just outside the 1 mile threshold and is located approximately 1.4miles to the east of the Holywell Road site access.

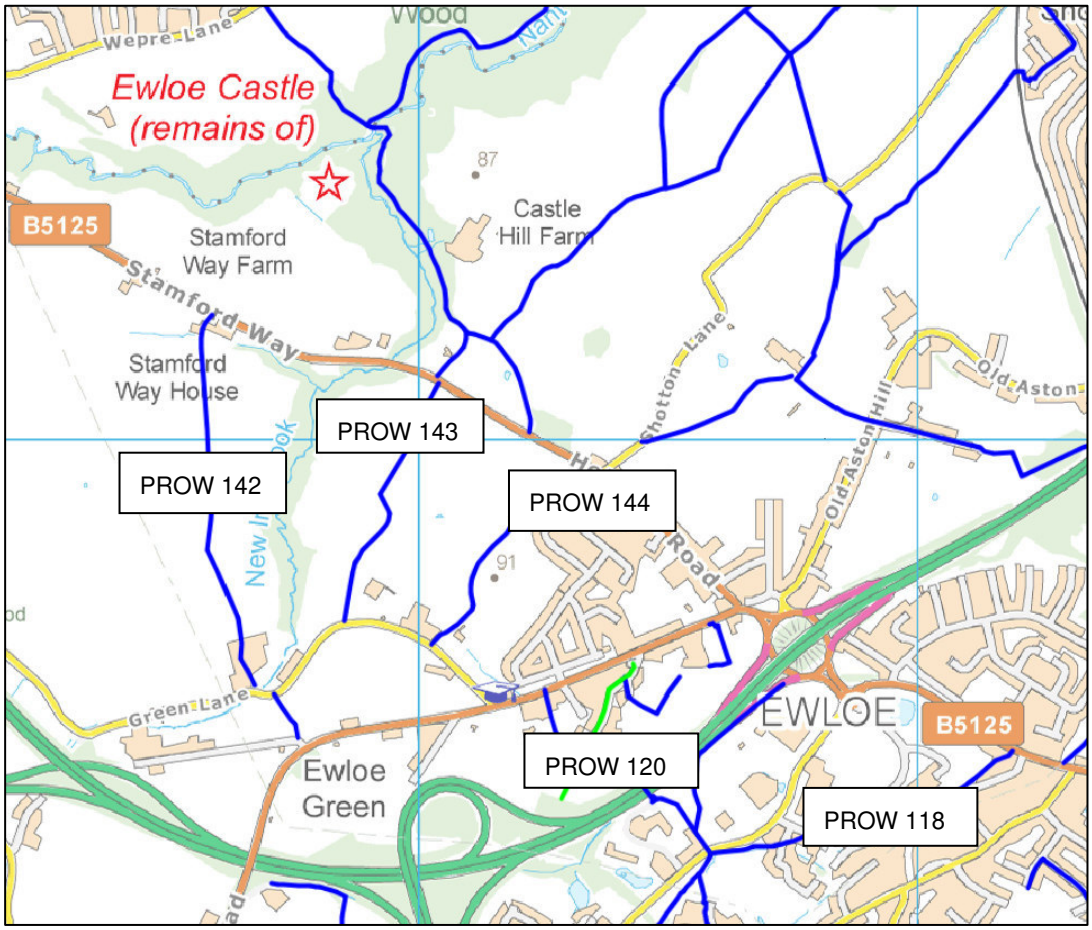
Table 5.2 – Accessibility of Facilities – Green Lane Site Access (Site B Access)

Facility	Detail	Distance from site (metres)
Primary School	Ewloe Primary School	200m
Takeaway	Fayon Fish and Chips	600m
Gym	Village Gym St David's Park	1000m
Nursery	Busy Bees	1000m
Convenience Store	The Cooperative (St David's Park)	1000m
Convenience Store	The Cooperative (The Hwy)	1200m
Post Office	Ewloe Post Office	1200m
Public House/Restaurant	Crown and Liver Public House	1300m
Primary School	Penarlag Community Primary School	1500m
Nursery	The Highway Day Nursery	1500m
Secondary School	Hawarden High School	1600m

5.8 Hawarden Railway Station is located just outside the 1 mile walking threshold and is located approximately 1.4miles to the east of Green Lane site access.

5.9 The site is well located to benefits from Public Rights of Way (PROW). This can be seen in **Figure 5.2.**

Figure 5.2 – PROW's in the Vicinity of the Site



5.10 PROW 142, 143 and 144 all run in the immediate vicinity of the site. PROW 120 runs to the south of the site and connects Old Mold Road to St David's Park where the Co-operative Convenience Store and Busy Bees Children's Nursery is located.

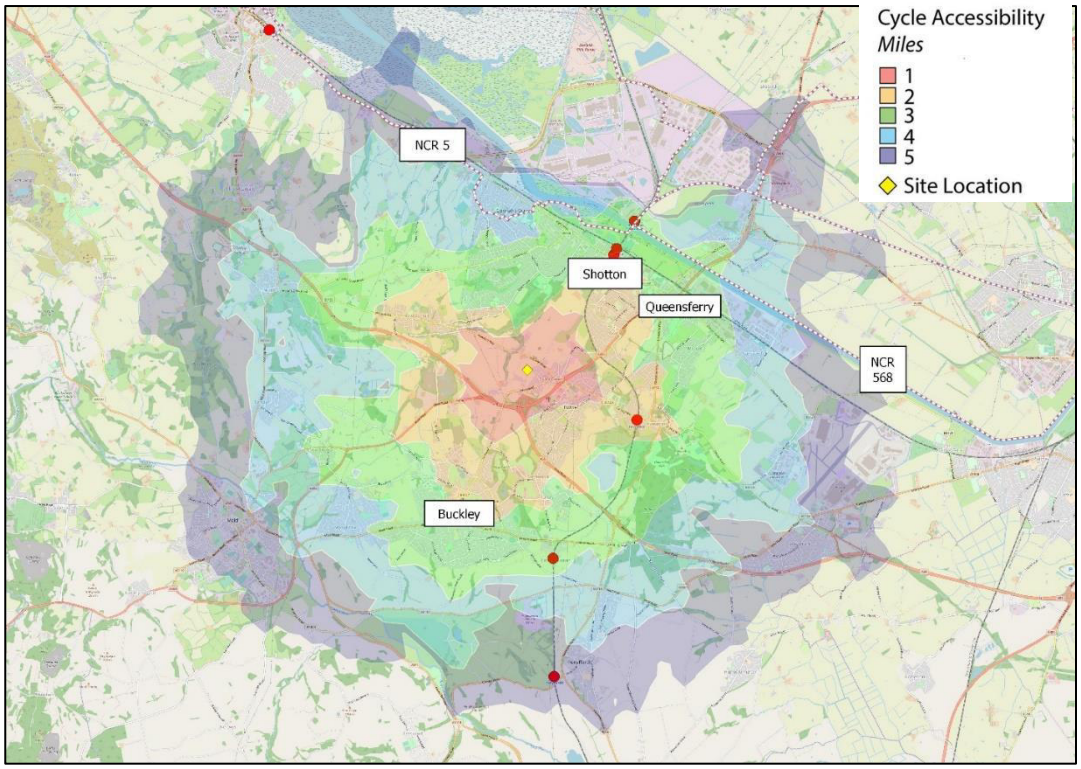
Cycling

5.11 Cycling is an inexpensive, efficient and healthy way to travel. Cycling, depending on the destination, provides a predictable arrival time which is often quicker than driving or using public transport, and is subject to fewer traffic and congestion delays.

5.12 Transport Policy identifies that cycling represents a realistic and healthy alternative to the use of the private car for making journeys up to 5000m as a whole journey or as part of a longer journey by public transport.

5.13 GIS software has been used to model 3mile cycle catchment from the site and is shown on **Figure 5.3**.

Figure 5.3 – Cycle Accessibility



5.14 The site benefits from being located to the south of National Cycle Route 5 and 568.

5.15 Hawarden Railway Station is located within the cycle catchment approximately 1.4 miles and 1.6 miles to the south east of the development site.

5.16 The above plan shows that a number of areas can be accessed within a 3 mile cycle distance of the site. As the application site is within an acceptable cycle distance of a range of places and associated facilities, cycling is considered to be a viable alternative to private car use for prospective residents.

Public Transport

5.17 Guidance published by the IHT 'Planning for Public Transport in Developments' (1999), recommends that the maximum walking distance to a bus stop should be 400m, equating approximately to a five-minute walk.

5.18 The nearest bus stop in relation to the Green Lane site access is located within 100m. The nearest bus stop in relation to the Holywell Road site access is located approximately 400m to the south of the site on Old Mold Road.

5.19 **Table 5.3** shows a summary of the buses which run in the vicinity of the site.

Table 5.3 – Bus Service Summary

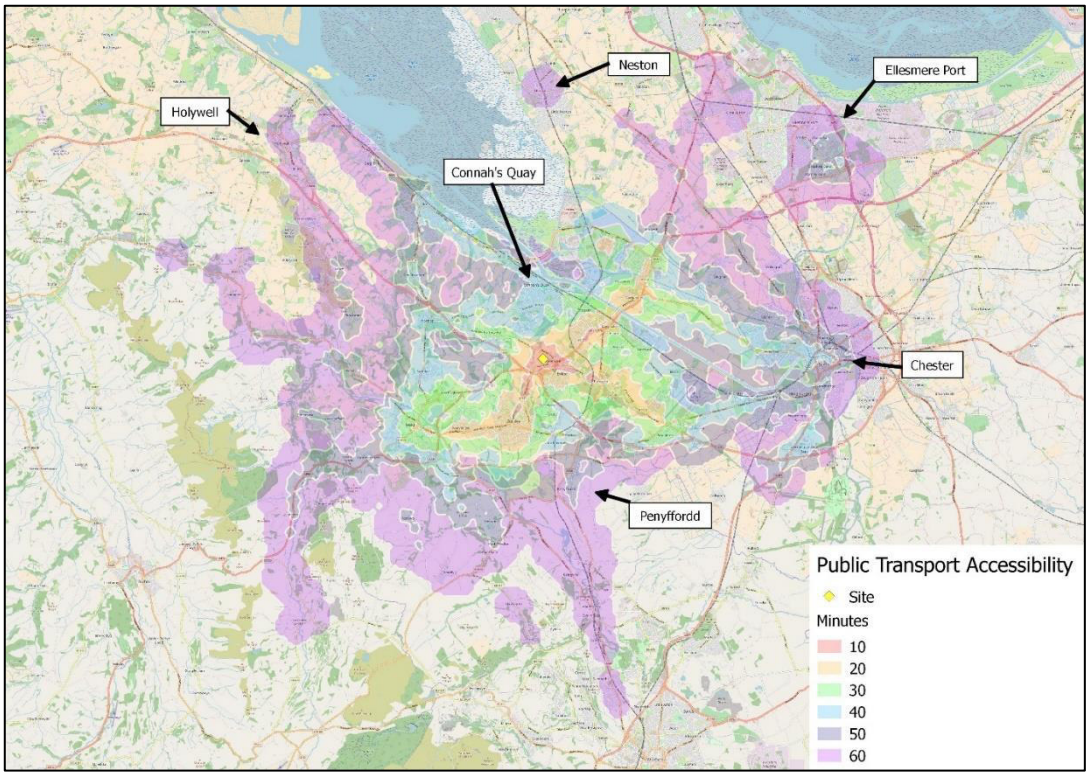
Service Number	Route	Operator	Average Service Headway (mins) each Direction of Travel		
			Mon-Fri	Sat	Sun
5	Ellesmere Port – Wolverham – Garden City – Ewloe - Mold	Arriva Wales	60	60	-
X4	Chester – Broughton – Hawarden – Buckley - Mold	Arriva Wales	60	60	-

Public Transport – Train

5.20 Hawarden Railway Station is located approximately 1.4 miles south east of the site. Hawarden Railway Station provides cycle lockers. This station serves services to Neston, Wrexham Central and Bidston, whilst also stopping at many other destinations on route.

5.21 TRACC software has been used to map a 60 minute journey time using public transport, including the walk to the nearby bus stops, and railway stations, and are presented in **Figure 5.5**. The analysis demonstrates that it is possible to reach areas such as Chester, Ellesmere Port and Neston amongst others, within an acceptable 60 minute commute time

Figure 5.5 – Public Transport Accessibility



5.22 Therefore, future residents of the site will have access to bus and train services which provide travel to a range of destinations at an acceptable frequency, making the site accessible without the use of a private car.

Summary

5.23 Overall, the site is considered to be well located in terms of its accessibility by non-car modes of transport. Access to the site by foot, cycle and public transport is of an acceptable standard making the site accessible.

6 FUTURE BASELINE TRAFFIC CONDITIONS

Introduction

6.1 This chapter describes the future baseline traffic conditions on the local highway network in relation to traffic growth and committed development traffic flows.

Traffic Growth

6.2 Capacity assessments have been undertaken in the predicted year of opening and 10-years hence. The anticipated year of opening of the development is 2025 and the future assessment year is therefore 2035.

6.3 In order to quantify the level of background traffic growth that could occur on the local network National Traffic Model (NTM) growth factors, modified by TEMPRO local growth factors, have been used for the Flintshire Area (W02000070) 013 dataset.

6.4 The growth factors have been summarised below.

Table 6.1 – TEMPRO Growth Factors

Period	AM Peak	PM Peak
2024 - 2025	1.0066	1.0064
2024 - 2035	1.0640	1.0617

6.5 The above growth factors are applied to the survey traffic flow data to obtain the 2025 and 2035 growthed surveyed traffic flows, as shown in **Traffic Flow Figures 2** and **3.**

7 TRIP GENERATION, DISTRIBUTION AND ASSIGNMENT

Introduction

7.1 This chapter provides an estimate of the trips generated by the proposed development, along with its distribution and assignment on the local highway network.

Trip Generation

7.2 In order to estimate the trip generating potential of the existing use of the site, average trip rates from the industry-standard TRICS Database have been obtained and are consistent with those presented in the Transport Assessment that formed part of the evidence base for the sites allocation. The selection criteria for the TRICS-based trip rates is as follows:-

i) Residential;

ii) Private Houses;

iii) Multi-modal surveys;

iv) Sites in Greater London and Ireland excluded;

v) Selection by Number of Dwellings;

vi) Weekday surveys only; and

vii) 'Edge of Town' and 'Suburban' locations included.

7.3 The multi modal TRICS outputs for the proposed development are presented in **Appendix E** and are summarised in **Table 7.1** below.

Table 7.1 - Estimated Trip Rates Associated with the Proposed Houses (Per Dwelling)

Mode	Weekday AM Peak Hour		Weekday PM Peak Hour	
	Arrivals	Departures	Arrivals	Departures
Vehicles	0.146	0.370	0.346	0.161
Cycles	0.005	0.015	0.01	0.003
Pedestrians	0.051	0.149	0.064	0.040
Pub. Trans.	0.002	0.048	0.028	0.002

7.4 The above trip rates have been applied to 315no. dwellings and summarised in **Table 7.2**.

Table 7.2 - Estimated Trip Generation Associated with the Proposed Houses (Based on 315no. Dwellings)				
Mode	**Weekday AM Peak Hour**		**Weekday PM Peak Hour**	
	Arrivals	**Departures**	**Arrivals**	**Departures**
Vehicles	46	117	109	51
Cycles	2	5	3	1
Pedestrians	16	47	20	13
Pub. Trans.	1	15	9	1

7.5 The proposed development includes apartments and an element of affordable housing which generally results in lower trip generation per unit. However, as the above assessments assume that all of the dwellings on site will be privately owned, the results are robust.

Trip Distribution

7.6 Vehicular trips generated by the proposed development are distributed on the local highway network based on travel to work data obtain from the 2011 National census for all travel to work "out-moves" for the Flintshire 013 Middle Super Output Area (MSOA), as presented in **Appendix F.**

7.7 Out-moves provide an indication of the numbers and destinations (on a MSOA) of people who reside in the Flintshire 013 MSOA and who work elsewhere, providing a good proxy for the distribution of the proposed residential development traffic. The trip distribution is shown in **Traffic Flow Figure 4** for the northern site access and **Traffic Flow Figure 5** for the southern site access.

Traffic Assignment

7.8 The development related traffic has been assigned to the above distribution method, and is shown in **Traffic Flow Figures 6 to 8**.

8 ANTICIPATED HIGHWAY IMPACT

Introduction

8.1 This Chapter describes the impact of the additional trips generated by the proposed development on the operation of the local highway network.

Assessment Methodology

8.2 Assessments of the priority controlled and roundabout junctions within the study area have been undertaken using Junctions 9 (ARCADY and PICADY) software and for the signal junction LINSIG software.

8.3 With the Junctions 9 model the results generated provide a Ratio to Flow capacity (RFC) along with an estimate of the likely traffic queues. RFC values between 0.00 and 0.85 are generally accepted as representing stable and acceptable operating conditions. Values between 0.85 and one and represents variable operation (i.e. possible queues building up at the junction during the period under consideration and increases in vehicular delay moving through the junction). RFC values in excess of one represents overloaded conditions (i.e. congested conditions).

8.4 Capacity assessments have been undertaken in future assessment years (2025 and 2035) in the 'with' and 'without' development scenarios.

8.5 The 2025 and 2035 'without development' baseline traffic flows are the growthed traffic flows, referred to previously as **Traffic Flow Figures 2 and 3**. The 2025 and 2035 'with development' assessment traffic flows are the sum of the baseline traffic flows and the proposed development traffic flows, as shown on **Traffic Flow Figure 9 and 10**.

Proposed Northern Site Access – Holywell Road

8.6 Junctions 9 PICADY software has been used in the assessment of the proposed northern site access. The PICADY results are presented in **Appendix G** with the results summarised in **Table 8.1**.

Table 8.1 – Proposed Northern Site Access Junction – 2025 and 2035 With Development Assessment Results

Movement	Stream	AM		PM	
		RFC	Queue (PCU)	RFC	Queue (PCU)
Assessment 'With Development' 2025					
Site Access – Holywell Road West	B-C	0.01	0.0	0.00	0.0
Site Access – Holywell Road East	B-A	0.23	0.3	0.11	0.1
Holywell Road East – Site Access	C-B	0.00	0.0	0.01	0.0
Assessment 'With Development' 2035					
Site Access – Holywell Road West	B-C	0.01	0.0	0.00	0.0
Site Access – Holywell Road East	B-A	0.23	0.3	0.11	0.1
Holywell Road East – Site Access	C-B	0.00	0.0	0.01	0.0

8.7 The assessment demonstrates that the proposed site access will operate well below theoretical capacity (0.85) and no queues are forecast at the site access or on Holywell Road in the peak hours as a result of the proposed development.

Proposed Southern Site Access – Green Lane

8.8 Junctions 9 PICADY software has been used in the assessment of the proposed site access. The PICADY results are presented in **Appendix H** with the results summarised in **Table 8.2.**

Table 8.2 – Proposed Southern Site Access Junction – 2025 and 2035 With Development Assessment Results

Movement	Stream	AM		PM	
		RFC	Queue (PCU)	RFC	Queue (PCU)
Assessment 'With Development' 2025					
Site Access – Green Lane South	B-C	0.06	0.1	0.02	0.0
Site Access – Green Lane North	B-A	0.00	0.0	0.0	0.0
Green Lane South – Site Access	C-AB	0.02	0.0	0.05	0.1
Assessment 'With Development' 2035					
Site Access – Green Lane South	B-C	0.06	0.1	0.02	0.0
Site Access – Green Lane North	B-A	0.00	0	0.01	0.0
Green Lane South – Site Access	C-AB	0.02	0	0.05	0.1

8.9 The assessments demonstrate that the proposed site access will operate well below theoretical capacity (0.85) and no queues are forecast at the site access or Green Lane in the peak hours as a result of the proposed development.

Holywell Road/Old Mold Road Junction – 2025 and 2035 With and Without Development Assessment Results

8.10 Assessments of the Holywell Road/Old Mold Road junction have been undertaken using Junctions 9 (PICADY) software.

8.11 The PICADY results are presented in **Appendix I** with the results summarised in **Table 8.3.**

Table 8.3 – Holywell Road/Old Mold Road Junction (Existing Layout) With and Without Development Assessment Results

Movement	Stream	AM		PM	
		RFC	Queue (PCU)	RFC	Queue (PCU)
Base 'Without Development' 2025					
Holywell Road – Old Mold Road East	B-C	0.79	3.4	0.53	1.1
Holywell Road – Old Mold Road West	B-A	0.49	0.9	0.35	0.5
Old Mold Road West	C-AB	0.42	0.7	0.88	5.9
Base 'Without Development' 2035					
Holywell Road – Old Mold Road East	B-C	0.88	5.8	0.59	1.4
Holywell Road – Old Mold Road West	B-A	0.70	1.9	0.42	0.7
Old Mold Road West	C-AB	0.45	0.8	0.93	9.0
Assessment 'With Development' 2035					
Holywell Road – Old Mold Road East	B-C	1.13	32.3	0.78	3.0
Holywell Road – Old Mold Road West	B-A	1.09	7.6	0.67	1.7
Old Mold Road West	C-AB	0.53	1.1	1.09	33.9

8.12 The results show that a number of links are operating close to over capacity, including Holywell Road in the AM peak hour and Old Mold Road during the PM peak hour, when right turning traffic into Holywell Road blocks the straight ahead movement.

8.13 To mitigate the impact of the development at this junction, an improvement scheme has been identified which involves the widening on Holywell Road to provide two approach lanes at the give way and the introduction of a right turn lane from Old Mold Road west to Holywell Road. The proposed arrangement is shown on drawing number SCP/230836/F04 presented in **Appendix I**.

8.14 It should be noted that the proposed junction improvements are consistent with that identified in the Transport Assessment that formed the part of the evidence base for the sites allocation.

8.15 **Table 8.4** shows the 2025 and 2035 scenario with development and proposed junction improvements.

Table 8.4 – Holywell Road/Old Mold Road Junction 2025 and 2035 – 2025 and 2035 With Development Assessment Results (Junction Improvements)

Movement	Stream	AM		PM	
		RFC	Queue (PCU)	RFC	Queue (PCU)
2025 'With' Development - Junction Improvements					
Holywell Road – Old Mold Road East	B-C	0.83	4.4	0.52	1.1
Holywell Road – Old Mold Road West	B-A	0.30	0.4	0.33	0.5
Old Mold Road East – Holywell Road	C-AB	0.40	0.7	0.83	4.5
2035 'With' Development – Junction Improvements					
Holywell Road – Old Mold Road East	B-C	0.89	6.7	0.56	1.3
Holywell Road – Old Mold Road West	B-A	0.33	0.5	0.38	0.6
Old Mold Road East – Holywell Road	C-AB	0.43	0.7	0.88	6.3

8.16 The above analysis shows that the improvements to the junction will significantly improve the operation of the junction, mitigating the impact of the development and resulting in the junction operating better than it would in the without development and existing layout scenario.

Green Lane/ Mold Road Junction

8.17 Assessments of the Green Lane/ Mold Road junction have been undertaken using Junctions 9 (PICADY) software.

8.18 Assessments have been undertaken in the opening year of 2025 and the future assessment year of 2035.

8.19 The PICADY results are presented in **Appendix J** with the results summarised in **Table 8.5**.

Table 8.5 – Green Lane/ Mold Road Junction – 2025 and 2035 With Development Assessment Results

Movement	Stream	AM		PM	
		RFC	Queue (PCU)	RFC	Queue (PCU)
Assess 2025 'With' Development					
Green Lane –Mold Road West	B-C	0.11	0.1	0.04	0.0
Green Lane – Mold Road East	B-A	0.02	0.0	0.02	0.0
Mold Road West – Green Lane	C-AB	0.07	0.1	0.10	0.2
Assess 2035 'With' Development					
Green Lane –Mold Road West	B-C	0.12	0.1	0.04	0.0
Green Lane – Mold Road East	B-A	0.03	0.0	0.02	0.0
Mold Road West – Green Lane	C-AB	0.07	0.1	0.10	0.2

8.20 The assessments demonstrate that the junction will operate well below theoretical capacity (0.85) and no queues are forecast on Green Lane or Mold Road junction in the peak hours as a result of the proposed development.

A494 / B5125 Roundabout – 2025 and 2035 With Development Assessment Results

8.21 Assessments of the A494/B5125/Yowley Road roundabout have been undertaken using Junctions 9 (ARCADY) software.

8.22 The ARCADY results are presented in **Appendix K** and summarised in **Table 8.6**.

Table 8.6 – A494/B5125/B5127/Yowley Road Roundabout – 2025 and 2035 With Development Assessment Results

Arm	AM		PM	
	RFC	Queue (PCU)	RFC	Queue (PCU)
Assess 2025 'With' Development				
A494 (East)	0.32	0.7	0.02	0.0
B5125 (South)	0.39	1.0	0.25	0.3
A494 (West)	0.43	0.7	0.39	0.6
B5127 (North)	0.68	3.9	0.61	1.6
Yowley Road	0.11	0.2	0.08	0.1
Assess 2035 'With' Development				
A494 (East)	0.34	0.5	0.47	0.9
B5125 (South)	0.41	0.7	0.48	0.9
A494 (West)	0.46	0.8	0.48	0.9
B5127 (North)	0.73	2.6	0.42	0.7
Yowled Road	0.13	0.1	0.08	0.1

8.23 The assessments demonstrate that the roundabout will operate well below theoretical capacity (0.85) with the additional development traffic in both 2025 and 2035.

8.24 Based on the queue survey data presented in **Appendix A**, a queue of over 25 vehicles occurs briefly along the A494 (north-eastbound off-slip) during both the AM and PM peak hours. This is not reflected in the above ARCADY results given that the queues are a result of queues from the upstream the Holywell Road/Old Mold Road junction blocking back to the circulatory of the roundabout, restricting the ability for vehicles to exit the off-slip. The proposed improvements to the Old Mold Road/Holywell Road junction, described above, will remove the occasional blocking back to the A494 and Old Mold Road and result in a corresponding improvement to the operation of the A494 roundabout, particularly the north-eastbound off-slip.

9 SUMMARY AND CONCLUSIONS

9.1 SCP have been instructed by Castle Green to provide highway, traffic and transport advice in support of a proposed residential development of 315 dwellings at land off Holywell Road and Green Lane, Ewloe.

9.2 The application site forms part of a wider site which is allocated in the Flintshire Local Development Plan for residential development under site reference HN1.7. The principle of residential development on this site has therefore been found acceptable to Flintshire County Council.

9.3 The proposed development provides 315 residential dwellings comprising a mix of 1, 2, 3 & 4 bed apartments and houses.

9.4 two vehicular accesses will be provided to the site, one from Holywell Road and one from Green Lane.

9.5 The access from Holywell Road will take the form of a new priority controlled ghost island right turn lane junction, to allow right turners into the site to queue without blocking those straight ahead movements. The access has been designed to typical residential standards with a 5.5m wide carriageway and 2m wide footways.

9.6 As part of the proposals, the 30mph speed limit of Holywell Road will be extended across the site frontage to reflect the urban character that will be created by the development proposals. A footway will also be provided along the site frontage, to connect with the existing footway located to the east of the access.

9.7 Vehicular access from Green Lane will be provided through the introduction of a priority controlled T-junction onto Green Lane. In addition, Green Lane will be widened to have a carriageway width of 5.5m, a 2m wide footway along the eastern section of the carriageway and a verge along the western side of the carriageway.

9.8 The site layout has been designed in accordance with FCC's requirements and allows the movements of service and refuse vehicles to be accommodated without allowing their requirements to dominate the layout of the site. The scheme also provides a level of parking broadly in line with FCC's maximum parking standards.

9.9 The most recently available five-year road safety record of the local highway network surrounding the site has been examined and does not represent a material concern in the context of the development.

9.10 The accessibility of the site has been assessed by walk, cycle, and bus and train modes. Overall, the site benefits from a good level of accessibility by sustainable modes. Access to the site on foot and by cycle is of a good standard and there are good quality bus services within close proximity providing access to a range of local destinations. These findings demonstrate that prospective residents will not be wholly reliant on the private car.

9.11 The impact of the traffic arising from the scheme has been tested in detail at the following junctions:-

- Site Access - Holywell Road
- Site Access – Green Lane
- Holywell Road/Old Mold Road junction;
- Green Lane/Mold Road junction and;
- A494/B5125/B5127/Yowley Road Roundabout.

9.12 The assessments show that at the site accesses, the Green Lane/Old Mold Road Junction and A494/B5125/B5127/Yowley Road Roundabout there is either sufficient spare capacity to accommodate the proposed development or the development will not have a material impact on the operation of these junctions.

9.13 The existing Holywell Road/Old Mold Road Junction has been shown to be stressed under current conditions on the Holywell Road and Old Mold Road east arms. The addition of the proposed development traffic would reduce capacity further and increase queuing at the junction. Improvements are therefore proposed to mitigate the impact of the development which will include a right turn lane for those vehicles waiting to turn right into Holywell Road as well as a right and left turn lane out of Holywell Road onto Old Mold Road. These improvements will more than mitigate the impact of the development. It should be noted that proposed junction improvements are consistent with that identified in the Transport Assessment that formed the part of the evidence base for the sites allocation.

9.14 The A494/B5125/B5127/Yowley Road is shown to continue to work within capacity with the additional development traffic although the improvements to the Holywell Road/Old Mill Road junction, described above, will remove the occasional delays on the circulating carriageway and result in betterment for this roundabout.

9.15 It is therefore concluded that there is no highway-related reason to withhold planning permission for the scheme and the proposed development is therefore commended for approval.

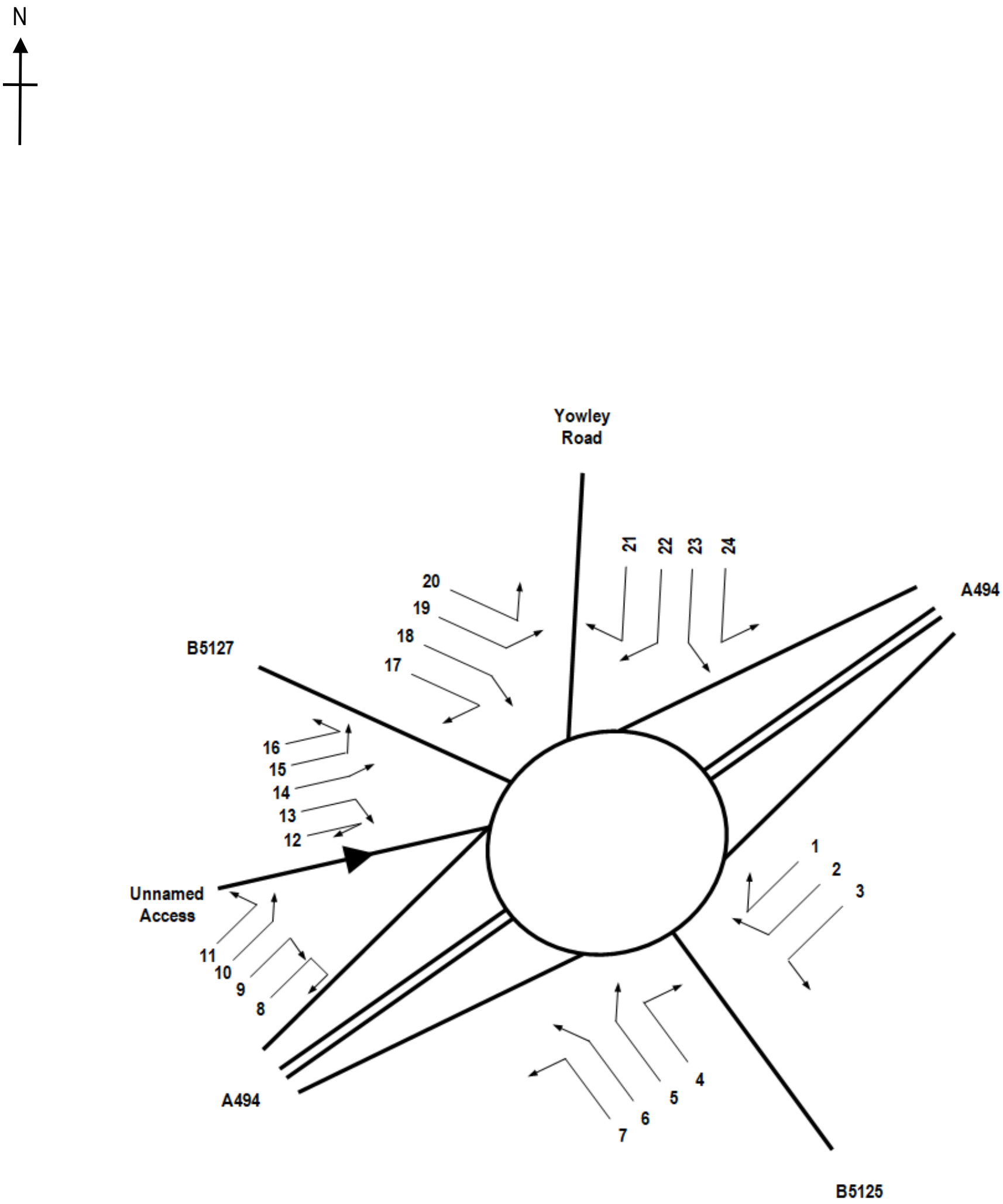
S|C|P

APPENDIX A

SURVEY CONTROL

Client:	SCP Transport
Client Contact:	Orla Proffitt
Survey Location:	Ewloe
Date(s) of Survey:	Thursday 22nd February 2024
Notes:	
On Site Supervisor:	David Cheng/Rachel Wong
Data Checking:	David Cheng
Survey Reference:	23.110 Ewloe
Status:	Final
Date of Issue:	28th February 2024

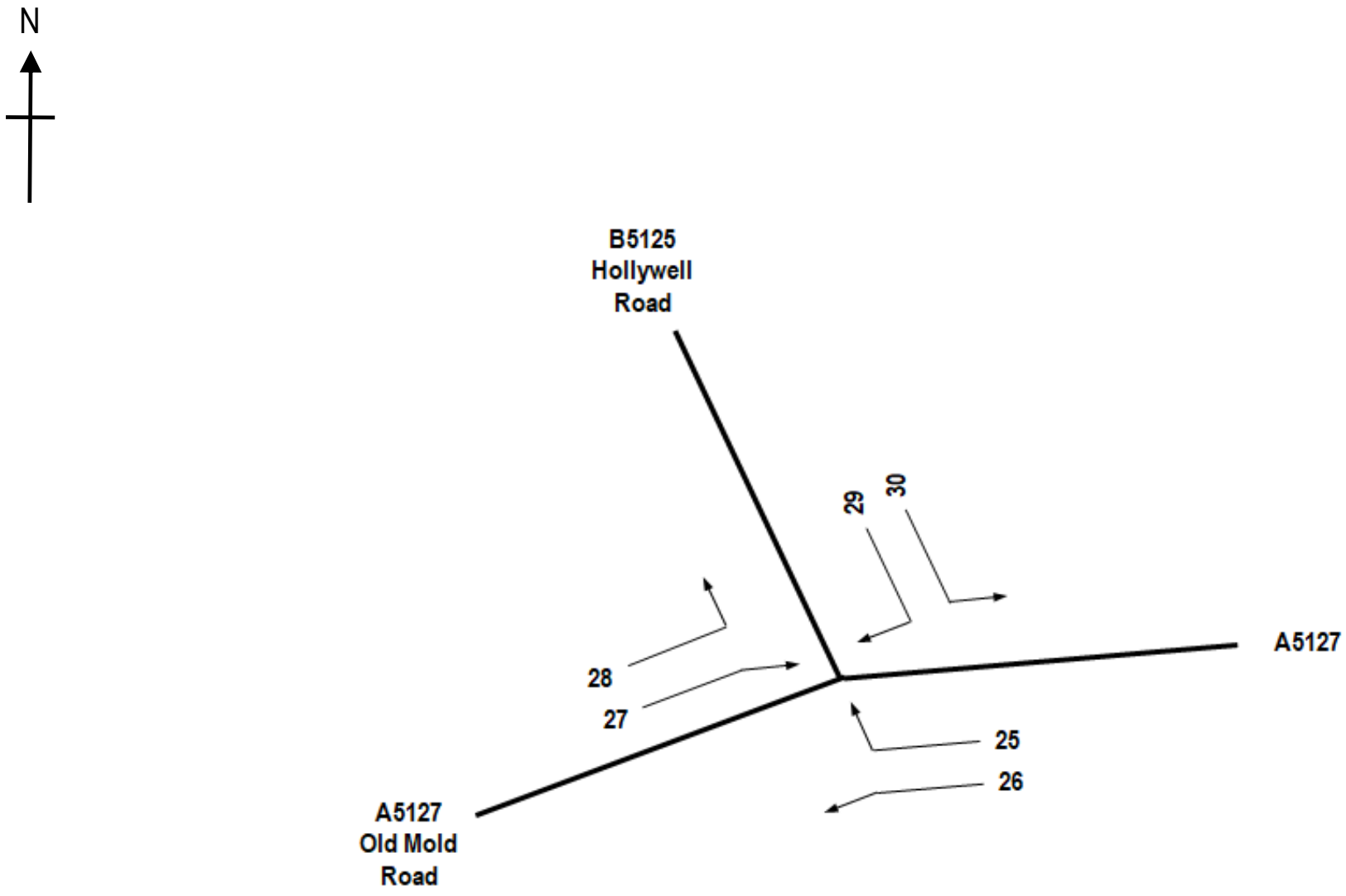
JUNCTION 1



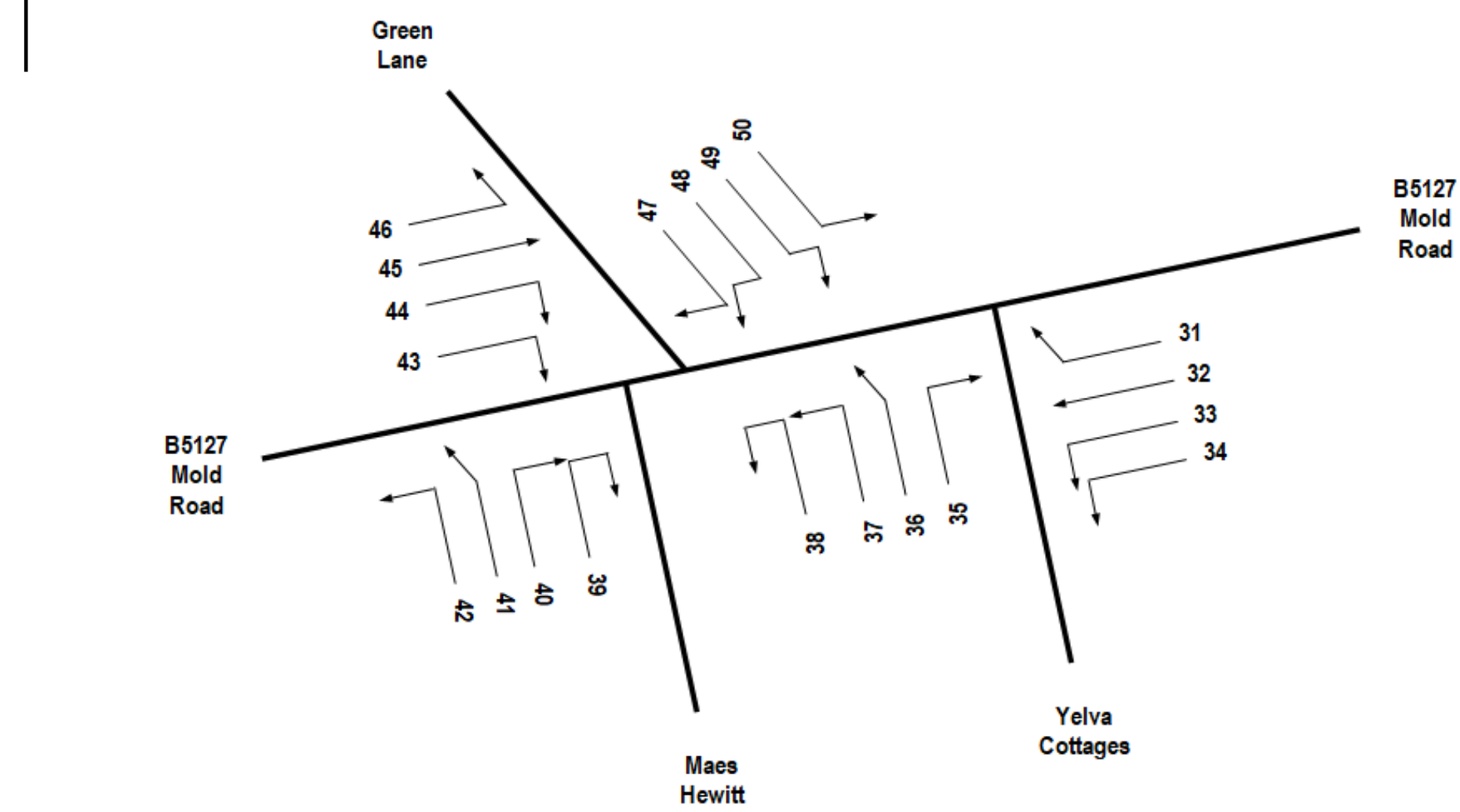
DRAWING TITLE: TRAFFIC MOVEMENT REFERENCE			
JOB TITLE: 23.110 EWLOE			
DRAWN BY: CC	DATE: FEB 2024	SCALE: NTS	REF: FIGURE 1

Transport Data Specialists Ltd
W: www.transportds.co.uk
E: enquiries@transportds.co.uk
T: 0777 625 2475 T: 0794 007 1260

JUNCTION 2



JUNCTION 3



DRAWING TITLE: TRAFFIC MOVEMENT REFERENCE			
JOB TITLE: 23.110 EWLOE			
DRAWN BY: CC	DATE: FEB 2024	SCALE: NTS	REF: FIGURE 2

Transport Data Specialists Ltd
W: www.transportds.co.uk
E: enquiries@transportds.co.uk
T: 0777 625 2475 T: 0794 007 1260

Time Beginning	A494/B5125/A494/B5127/Yowley Road - Thursday 22nd February 2024																				
	1							2							3						
	PC	MC	CAR	LGV	OGV1	OGV2	PSV	PC	MC	CAR	LGV	OGV1	OGV2	PSV	PC	MC	CAR	LGV	OGV1	OGV2	PSV
0730	0	0	1	0	0	0	0	0	1	18	4	1	1	0	0	0	28	8	1	0	0
0745	0	0	3	0	0	0	0	0	0	26	6	0	0	0	0	0	33	9	1	0	0
0800	0	0	1	0	0	1	0	0	0	35	7	2	0	1	0	0	49	9	4	0	0
0815	0	0	5	2	0	0	0	0	0	50	3	2	0	2	0	0	76	9	1	0	1
0830	0	0	5	0	0	0	0	0	0	28	2	2	0	0	0	0	66	6	2	1	0
0845	0	0	1	0	0	0	0	0	0	26	6	0	0	0	0	0	78	2	2	0	0
0900	0	0	3	0	0	0	0	0	0	15	6	2	0	0	0	0	44	9	0	0	1
0915	0	0	0	1	0	0	0	0	0	26	1	0	0	0	0	0	29	3	2	0	0

Time Beginning	A494/B5125/A494/B5127/Yowley Road - Thursday 22nd February 2024																				
	1							2							3						
	PC	MC	CAR	LGV	OGV1	OGV2	PSV	PC	MC	CAR	LGV	OGV1	OGV2	PSV	PC	MC	CAR	LGV	OGV1	OGV2	PSV
1600	0	0	1	0	0	0	0	0	0	79	10	2	1	0	0	1	72	8	0	0	1
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1630	0	0	6	3	0	0	0	0	0	90	6	1	0	0	0	0	70	5	0	0	0
1645	0	0	4	2	0	0	0	0	0	72	8	1	0	0	0	0	82	6	2	0	0
1700	0	0	7	1	0	0	0	0	0	74	9	0	0	1	0	0	92	7	0	0	0
1715	0	0	5	0	0	0	0	0	2	114	12	0	0	0	0	0	83	9	0	0	1
1730	0	0	6	1	0	0	0	0	1	93	5	0	0	0	0	0	74	4	1	0	0
1745	0	0	3	1	0	0	0	0	0	87	15	1	0	0	0	2	79	5	0	0	0

Time Beginning	A494/B5125/A494/B5127/Yowley Road - Thursday 22nd February 2024																										
	4							5							6							7						
	PC	MC	CAR	LGV	OGV1	OGV2	PSV	PC	MC	CAR	LGV	OGV1	OGV2	PSV	PC	MC	CAR	LGV	OGV1	OGV2	PSV	PC	MC	CAR	LGV	OGV1	OGV2	PSV
0730	0	0	72	8	1	0	0	0	0	2	0	1	0	0	0	0	13	4	0	0	0	0	0	48	6	5	0	0
0745	0	0	63	8	0	0	0	0	0	2	1	0	0	0	0	0	18	0	0	0	1	0	0	51	4	0	1	0
0800	0	0	77	10	1	0	2	0	0	1	0	0	0	0	0	0	34	7	0	0	0	0	0	55	5	5	0	1
0815	0	1	92	14	2	1	0	0	0	2	0	0	0	0	0	0	54	8	0	0	0	0	0	65	7	0	0	1
0830	0	0	91	10	2	0	0	0	0	5	1	2	0	0	1	0	45	0	0	0	0	0	0	75	7	1	0	4
0845	0	1	67	6	1	1	0	0	0	5	0	0	0	0	0	0	39	0	0	0	0	0	0	57	7	1	0	1
0900	0	0	54	4	1	0	0	0	0	2	0	0	0	0	0	0	26	3	0	0	1	0	0	32	6	1	0	0
0915	0	0	37	8	0	0	0	0	0	3	3	0	0	0	0	0	21	0	2	0	0	0	0	28	5	2	0	1

Time Beginning	A494/B5125/A494/B5127/Yowley Road - Thursday 22nd February 2024																										
	4							5							6							7						
	PC	MC	CAR	LGV	OGV1	OGV2	PSV	PC	MC	CAR	LGV	OGV1	OGV2	PSV	PC	MC	CAR	LGV	OGV1	OGV2	PSV	PC	MC	CAR	LGV	OGV1	OGV2	PSV
1600	0	0	45	5	0	0	0	0	0	5	2	0	0	0	0	0	59	2	1	0	1	0	0	66	13	1	0	1
1615	0	0	42	4	1	0	1	0	0	8	1	0	0	0	0	0	59	5	1	0	1	0	0	57	10	1	0	0
1630	0	0	70	3	0	0	0	0	0	2	0	0	0	0	0	1	45	3	0	0	0	0	0	86	10	0	0	1
1645	0	1	79	4	0	0	0	0	0	6	2	0	0	0	0	0	58	4	1	0	0	0	0	73	9	1	0	0
1700	0	0	69	2	1	0	0	0	0	5	1	0	0	0	0	1	84	4	0	1	0	0	0	129	7	0	0	0
1715	0	0	63	1	1	1	0	0	0	4	1	0	0	0	0	0	61	3	1	0	1	0	1	74	8	0	0	1
1730	0	0	64	1	0	0	0	0	0	1	0	0	0	0	0	1	44	5	1	0	0	0	0	54	9	0	0	1
1745	0	0	61	6	1	0	0	0	0	1	0	0	0	0	0	0	50	2	0	0	0	0	0	43	5	0	0	0

Time Beginning	A494/B5125/A494/B5127/Yowley Road - Thursday 22nd February 2024																										
	8							9							10							11						
	PC	MC	CAR	LGV	OGV1	OGV2	PSV	PC	MC	CAR	LGV	OGV1	OGV2	PSV	PC	MC	CAR	LGV	OGV1	OGV2	PSV	PC	MC	CAR	LGV	OGV1	OGV2	PSV
0730	0	0	11	3	2	0	0	0	0	51	7	1	0	0	0	0	1	0	0	0	0	0	0	19	5	0	0	0
0745	0	0	8	6	3	1	0	0	1	75	14	2	0	0	0	0	6	1	0	0	0	0	0	24	7	1	0	0
0800	0	0	5	3	1	1	0	0	0	89	13	2	0	1	0	0	3	1	0	0	0	0	0	32	7	0	0	1
0815	0	0	11	3	3	3	0	0	0	106	9	2	0	0	0	0	3	0	0	0	0	0	0	26	8	0	0	0
0830	0	0	7	2	1	2	0	0	0	105	11	0	0	0	0	0	4	0	0	0	1	0	0	25	6	0	0	0
0845	0	0	9	2	2	1	0	0	1	129	10	3	0	0	0	0	1	0	0	0	0	0	0	20	11	0	1	1
0900	0	0	2	2	2	1	0	0	0	73	12	2	0	0	0	0	0	0	0	0	0	0	0	17	1	2	0	0
0915	0	0	3	2	1	1	0	0	0	40	6	2	0	0	0	0	2	2	0	0	0	0	0	17	3	2	0	0

Time Beginning	A494/B5125/A494/B5127/Yowley Road - Thursday 22nd February 2024																										
	8							9							10							11						
	PC	MC	CAR	LGV	OGV1	OGV2	PSV	PC	MC	CAR	LGV	OGV1	OGV2	PSV	PC	MC	CAR	LGV	OGV1	OGV2	PSV	PC	MC	CAR	LGV	OGV1	OGV2	PSV
1600	0	0	5	3	1	2	0	0	0	53	10	1	0	1	0	0	3	1	0	0	0	0	0	49	7	1	1	0
1615	0	0	6	1	0	2	0	0	0	77	10	1	0	1	0	0	2	1	1	0	0	0	0	59	14	1	0	0
1630	0	0	4	1	0	0	0	0	1	55	8	0	0	1	0	0	5	3	0	0	0	0	0	62	8	0	1	0
1645	0	0	9	2	2	0	0	0	0	62	11	1	0	0	0	0	3	2	0	0	0	0	0	49	10	0	1	0
1700	0	0	5	2	2	0	0	0	0	73	16	0	0	2	0	0	5	0	0	0	1	0	0	58	10	0	1	0
1715	0	0	7	3	1	0	0	0	0	76	10	0	0	0	0	0	1	0	0	0	0	0	0	61	8	1	0	0
1730	0	0	11	0	1	0	0	0	0	87	9	0	0	0	0	0	3	0	0	0	0	0	0	64	2	0	0	0
1745	0	0	6	2	0	1	0	0	0	65	7	0	0	0	0	0	1	1	0	0	0	0	0	41	6	1	0	1

Time Beginning	A494/B5125/A494/B5127/Yowley Road - Thursday 22nd February 2024																													
	12							13							14							15									
	PC	MC	CAR	LGV	OGV1	OGV2	PSV	PC	MC	CAR	LGV	OGV1	OGV2	PSV	PC	MC	CAR	LGV	OGV1	OGV2	PSV	PC	MC	CAR	LGV	OGV1	OGV2	PSV	PC	MC	CAR
0730	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0745	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0800	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0815	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0830	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0845	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0900	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0915	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Time Beginning	A494/B5125/A494/B5127/Yowley Road - Thursday 22nd February 2024																													
	12							13							14							15									
	PC	MC	CAR	LGV	OGV1	OGV2	PSV	PC	MC	CAR	LGV	OGV1	OGV2	PSV	PC	MC	CAR	LGV	OGV1	OGV2	PSV	PC	MC	CAR	LGV	OGV1	OGV2	PSV	PC	MC	CAR
1600	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1615	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1630	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1645	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
1700	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1715	0	0	0	0	0	1	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1730	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1745	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

16

LGV	OGV1	OGV2	PSV
0	0	0	0
0	1	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0

16

LGV	OGV1	OGV2	PSV
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0

Time Beginning	A494/B5125/A494/B5127/Yowley Road - Thursday 22nd February 2024																										
	17							18							19							20						
	PC	MC	CAR	LGV	OGV1	OGV2	PSV	PC	MC	CAR	LGV	OGV1	OGV2	PSV	PC	MC	CAR	LGV	OGV1	OGV2	PSV	PC	MC	CAR	LGV	OGV1	OGV2	PSV
0730	0	0	30	4	2	0	1	0	0	34	7	0	0	0	0	0	102	23	0	0	0	0	0	0	1	0	0	1
0745	0	0	37	1	0	1	0	0	1	64	8	1	0	1	0	0	70	21	1	1	1	0	0	3	0	0	0	0
0800	0	0	32	1	0	0	0	0	0	76	5	1	0	0	0	0	88	15	2	0	0	0	0	1	1	0	0	0
0815	0	0	18	1	2	0	1	0	0	82	5	1	0	1	0	0	85	15	0	0	0	0	0	5	1	0	0	0
0830	0	0	22	8	2	0	0	0	0	92	2	2	1	1	0	1	86	3	1	0	0	0	0	6	0	0	0	0
0845	0	0	34	4	2	0	0	1	0	72	1	0	0	1	0	0	83	12	1	0	1	0	0	7	0	0	0	0
0900	0	0	15	7	1	0	0	0	0	55	3	0	0	0	0	0	80	6	2	0	1	0	0	2	0	1	0	0
0915	0	0	12	5	1	1	0	0	0	29	2	0	0	0	0	0	44	7	0	0	1	0	0	2	4	1	0	0

Time Beginning	A494/B5125/A494/B5127/Yowley Road - Thursday 22nd February 2024																										
	17							18							19							20						
	PC	MC	CAR	LGV	OGV1	OGV2	PSV	PC	MC	CAR	LGV	OGV1	OGV2	PSV	PC	MC	CAR	LGV	OGV1	OGV2	PSV	PC	MC	CAR	LGV	OGV1	OGV2	PSV
1600	0	0	11	7	1	0	0	0	0	50	6	0	0	0	0	0	50	10	0	0	0	0	0	8	0	0	0	0
1615	0	0	21	6	0	0	0	0	0	38	4	0	0	0	0	0	39	7	0	0	0	0	0	4	1	0	0	0
1630	0	0	21	1	0	0	0	0	0	55	7	1	0	0	0	0	46	5	1	0	1	0	0	3	0	0	0	0
1645	0	0	14	4	0	1	0	0	0	50	1	1	0	0	0	0	62	3	0	0	0	0	0	3	1	0	0	0
1700	0	0	20	5	1	0	0	0	0	50	1	1	0	1	0	0	66	11	1	0	0	0	0	3	1	0	0	0
1715	0	0	5	8	0	0	0	0	0	68	1	1	0	0	1	0	49	3	0	0	0	0	0	5	0	0	0	0
1730	0	0	13	0	0	0	0	0	0	53	5	1	0	0	0	0	47	5	1	0	0	0	0	5	0	0	0	0
1745	0	0	6	5	0	0	0	0	0	50	1	0	1	0	0	0	42	2	0	0	0	0	0	5	0	0	0	0

Time Beginning	A494/B5125/A494/B5127/Yowley Road - Thursday 22nd February 2024																										
	21							22							23							24						
	PC	MC	CAR	LGV	OGV1	OGV2	PSV	PC	MC	CAR	LGV	OGV1	OGV2	PSV	PC	MC	CAR	LGV	OGV1	OGV2	PSV	PC	MC	CAR	LGV	OGV1	OGV2	PSV
0730	0	0	3	0	0	0	0	0	0	1	0	0	0	0	0	0	1	3	0	0	0	0	0	1	1	0	0	1
0745	0	0	1	0	0	0	0	0	0	3	0	0	0	0	0	0	3	1	0	0	0	0	0	5	0	0	0	0
0800	0	0	0	0	0	0	0	0	0	2	0	1	0	0	0	0	7	1	0	0	0	0	0	6	2	0	0	0
0815	0	0	4	0	0	0	0	0	0	6	0	0	0	0	0	0	6	0	0	0	0	0	0	2	2	0	0	0
0830	0	0	4	1	1	0	0	0	0	4	0	0	0	0	0	0	6	0	0	0	0	0	0	5	0	0	0	1
0845	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	4	0	0	0	0	0	0	0	0	0	0	0
0900	0	0	1	0	0	0	0	0	0	2	1	0	0	0	0	0	1	0	0	0	0	0	0	2	0	0	0	0
0915	0	0	1	0	0	0	0	0	0	7	1	0	0	0	0	0	1	0	0	0	0	0	0	2	1	0	0	0

Time Beginning	A494/B5125/A494/B5127/Yowley Road - Thursday 22nd February 2024																										
	21							22							23							24						
	PC	MC	CAR	LGV	OGV1	OGV2	PSV	PC	MC	CAR	LGV	OGV1	OGV2	PSV	PC	MC	CAR	LGV	OGV1	OGV2	PSV	PC	MC	CAR	LGV	OGV1	OGV2	PSV
1600	0	0	2	0	0	0	0	0	0	1	0	0	0	0	0	0	3	1	0	0	0	0	0	4	0	0	0	0
1615	0	0	1	0	0	0	0	0	0	4	3	0	0	0	0	0	5	0	0	0	0	0	0	3	0	0	0	0
1630	0	0	2	0	0	0	0	0	0	5	0	0	0	0	0	0	6	2	0	0	0	0	0	4	1	0	0	0
1645	0	0	2	0	0	0	0	0	0	6	1	0	0	0	0	0	6	0	0	0	0	0	0	3	0	0	0	0
1700	0	0	1	1	0	0	0	0	0	2	1	0	0	0	0	0	5	1	0	0	0	0	0	2	1	0	0	0
1715	0	0	2	0	0	0	0	0	0	1	0	0	0	0	0	0	4	0	0	0	0	0	0	5	1	0	0	1
1730	0	0	2	0	0	0	0	0	0	3	0	0	0	0	0	0	5	1	0	0	0	0	0	5	1	0	0	0
1745	0	0	0	0	0	0	0	0	0	9	0	0	0	0	0	0	6	0	0	0	0	0	0	5	0	0	0	0

Time Beginning	B5127/B5127 Old Mold Road/B5125 Holywell Road - Thursday 22nd February 2024																											
	25							26							27							28							
	PC	MC	CAR	LGV	OGV1	OGV2	PSV	PC	MC	CAR	LGV	OGV1	OGV2	PSV	PC	MC	CAR	LGV	OGV1	OGV2	PSV	PC	MC	CAR	LGV	OGV1	OGV2	PSV	PC	MC	CAR
0730	0	0	17	4	1	0	0	0	1	38	9	0	1	0	0	0	113	21	0	0	1	0	0	4	4	0	0	0	0	0	11
0745	0	0	18	6	1	0	0	0	0	49	7	1	0	1	0	0	91	23	2	1	2	0	0	7	2	0	0	0	0	0	12
0800	0	0	26	9	0	0	1	0	0	75	12	0	0	1	1	0	128	15	2	0	0	0	0	7	5	0	0	1	0	0	10
0815	0	0	30	7	0	0	0	1	0	109	12	3	0	2	0	0	98	14	3	0	0	0	0	19	0	0	0	0	0	0	28
0830	1	0	40	6	0	0	0	0	0	65	4	3	0	0	0	0	151	10	4	0	1	0	0	20	0	0	0	0	0	0	16
0845	0	0	48	11	0	0	1	0	0	36	7	0	1	0	1	0	116	11	1	0	2	0	0	23	3	0	0	0	0	0	5
0900	0	0	21	2	3	0	0	0	0	41	7	1	0	1	0	0	83	11	2	0	1	0	0	8	0	0	0	0	0	0	7
0915	0	0	25	2	2	0	0	0	0	38	5	0	0	0	0	0	48	11	0	0	2	0	0	7	1	0	0	0	0	0	5

Time Beginning	B5127/B5127 Old Mold Road/B5125 Holywell Road - Thursday 22nd February 2024																											
	25							26							27							28							
	PC	MC	CAR	LGV	OGV1	OGV2	PSV	PC	MC	CAR	LGV	OGV1	OGV2	PSV	PC	MC	CAR	LGV	OGV1	OGV2	PSV	PC	MC	CAR	LGV	OGV1	OGV2	PSV	PC	MC	CAR
1600	0	0	83	9	0	0	0	0	0	95	12	3	2	2	0	0	81	11	0	0	1	0	0	19	2	0	0	0	0	0	11
1615	0	0	94	17	2	0	0	0	0	117	16	1	0	1	0	0	57	8	0	0	0	0	0	13	2	0	0	0	0	0	19
1630	0	0	90	5	0	1	0	1	0	110	13	1	0	0	1	0	61	11	1	0	1	0	0	16	0	0	0	0	0	0	12
1645	0	0	88	14	1	0	0	0	0	93	10	0	1	0	0	0	69	3	0	0	0	0	0	17	0	0	0	0	0	0	12
1700	0	1	95	14	1	0	0	0	0	125	10	0	1	1	0	0	79	15	0	0	1	0	0	16	2	1	0	0	0	0	12
1715	0	1	103	9	0	0	0	0	1	135	15	2	0	1	3	0	79	8	0	0	0	0	1	18	3	0	0	0	0	0	13
1730	0	1	96	7	0	0	0	0	1	103	5	0	0	0	0	0	63	9	0	0	0	0	1	6	0	0	0	0	0	0	13
1745	0	0	87	13	2	0	1	1	0	97	9	0	0	0	0	0	53	10	0	0	0	0	0	10	3	1	0	0	0	0	16

29				30						
LGV	OGV1	OGV2	PSV	PC	MC	CAR	LGV	OGV1	OGV2	PSV
3	0	0	0	0	0	62	16	1	0	1
1	0	0	0	0	1	79	7	0	0	0
4	0	0	0	0	0	73	11	0	0	0
3	0	0	0	0	0	89	8	0	0	2
1	1	0	0	0	1	58	4	0	0	0
4	0	0	0	0	0	82	6	2	0	0
1	0	0	0	0	0	64	7	1	0	0
2	0	0	0	0	0	40	6	2	0	0

29				30						
LGV	OGV1	OGV2	PSV	PC	MC	CAR	LGV	OGV1	OGV2	PSV
1	0	0	0	0	0	47	8	2	0	0
0	0	0	0	0	0	37	9	0	0	0
3	0	0	0	0	0	61	5	0	0	0
2	0	0	0	0	0	57	9	2	0	0
3	0	0	0	0	0	60	6	1	0	0
2	0	0	0	0	0	49	4	1	0	0
1	0	0	0	0	0	52	5	0	0	0
0	0	0	0	0	0	47	0	0	0	0

Time Beginning	B5127 Mold Road/Yelva Cottages/Maes Hewitt/Green Lane - Thursday 22nd February 2024																										
	31							32							33							34						
	PC	MC	CAR	LGV	OGV1	OGV2	PSV	PC	MC	CAR	LGV	OGV1	OGV2	PSV	PC	MC	CAR	LGV	OGV1	OGV2	PSV	PC	MC	CAR	LGV	OGV1	OGV2	PSV
0730	0	0	1	0	0	0	0	0	1	41	9	1	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0
0745	0	0	2	1	0	0	0	0	0	48	5	1	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0
0800	0	0	1	0	0	0	0	0	0	56	13	0	0	1	0	0	3	0	0	0	0	0	0	0	0	0	0	0
0815	0	0	2	1	0	0	0	0	0	71	11	2	0	1	0	0	2	1	0	0	0	0	0	0	0	0	0	0
0830	0	0	10	0	1	0	0	1	0	63	8	3	0	1	0	0	3	0	0	0	0	0	0	0	0	0	0	0
0845	0	0	0	2	0	0	0	0	0	43	9	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0900	0	0	2	0	0	0	0	0	0	38	6	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0915	0	0	3	1	0	0	0	0	0	35	6	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Time Beginning	B5127 Mold Road/Yelva Cottages/Maes Hewitt/Green Lane - Thursday 22nd February 2024																										
	31							32							33							34						
	PC	MC	CAR	LGV	OGV1	OGV2	PSV	PC	MC	CAR	LGV	OGV1	OGV2	PSV	PC	MC	CAR	LGV	OGV1	OGV2	PSV	PC	MC	CAR	LGV	OGV1	OGV2	PSV
1600	0	0	6	0	0	0	0	2	0	76	9	3	0	2	0	0	0	1	0	0	0	0	0	1	0	0	0	0
1615	0	0	4	1	0	0	0	0	0	115	14	1	0	1	0	0	4	0	0	0	0	0	0	1	0	0	0	0
1630	0	0	2	0	0	0	0	2	0	89	13	1	0	0	0	0	5	0	0	0	0	0	0	0	0	0	0	0
1645	0	0	1	0	0	0	0	0	0	89	11	0	0	0	0	0	3	0	0	0	0	0	0	0	0	0	0	0
1700	0	0	3	1	0	0	0	0	0	105	12	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0
1715	0	0	4	1	0	0	0	0	1	108	17	0	0	2	0	0	2	1	0	0	0	0	0	0	0	0	0	0
1730	0	0	2	0	0	0	0	0	0	105	6	1	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0
1745	0	0	0	0	0	0	0	0	0	91	10	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0

Time Beginning	B5127 Mold Road/Yelva Cottages/Maes Hewitt/Green Lane - Thursday 22nd February 2024																										
	35							36							37							38						
	PC	MC	CAR	LGV	OGV1	OGV2	PSV	PC	MC	CAR	LGV	OGV1	OGV2	PSV	PC	MC	CAR	LGV	OGV1	OGV2	PSV	PC	MC	CAR	LGV	OGV1	OGV2	PSV
0730	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0745	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0800	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0815	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0830	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0
0845	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0900	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0915	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Time Beginning	B5127 Mold Road/Yelva Cottages/Maes Hewitt/Green Lane - Thursday 22nd February 2024																										
	35							36							37							38						
	PC	MC	CAR	LGV	OGV1	OGV2	PSV	PC	MC	CAR	LGV	OGV1	OGV2	PSV	PC	MC	CAR	LGV	OGV1	OGV2	PSV	PC	MC	CAR	LGV	OGV1	OGV2	PSV
1600	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1615	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1630	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1645	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1700	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1715	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1730	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1745	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Time Beginning	B5127 Mold Road/Yelva Cottages/Maes Hewitt/Green Lane - Thursday 22nd February 2024																										
	39							40							41							42						
	PC	MC	CAR	LGV	OGV1	OGV2	PSV	PC	MC	CAR	LGV	OGV1	OGV2	PSV	PC	MC	CAR	LGV	OGV1	OGV2	PSV	PC	MC	CAR	LGV	OGV1	OGV2	PSV
0730	0	0	0	0	0	0	0	0	0	2	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0745	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0800	0	0	0	0	0	0	0	0	0	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0
0815	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0
0830	0	0	0	0	0	0	0	0	0	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0845	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0900	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0915	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Time Beginning	B5127 Mold Road/Yelva Cottages/Maes Hewitt/Green Lane - Thursday 22nd February 2024																										
	39							40							41							42						
	PC	MC	CAR	LGV	OGV1	OGV2	PSV	PC	MC	CAR	LGV	OGV1	OGV2	PSV	PC	MC	CAR	LGV	OGV1	OGV2	PSV	PC	MC	CAR	LGV	OGV1	OGV2	PSV
1600	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1615	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0
1630	0	0	0	0	0	0	0	0	0	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1645	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0
1700	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1715	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1730	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1745	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

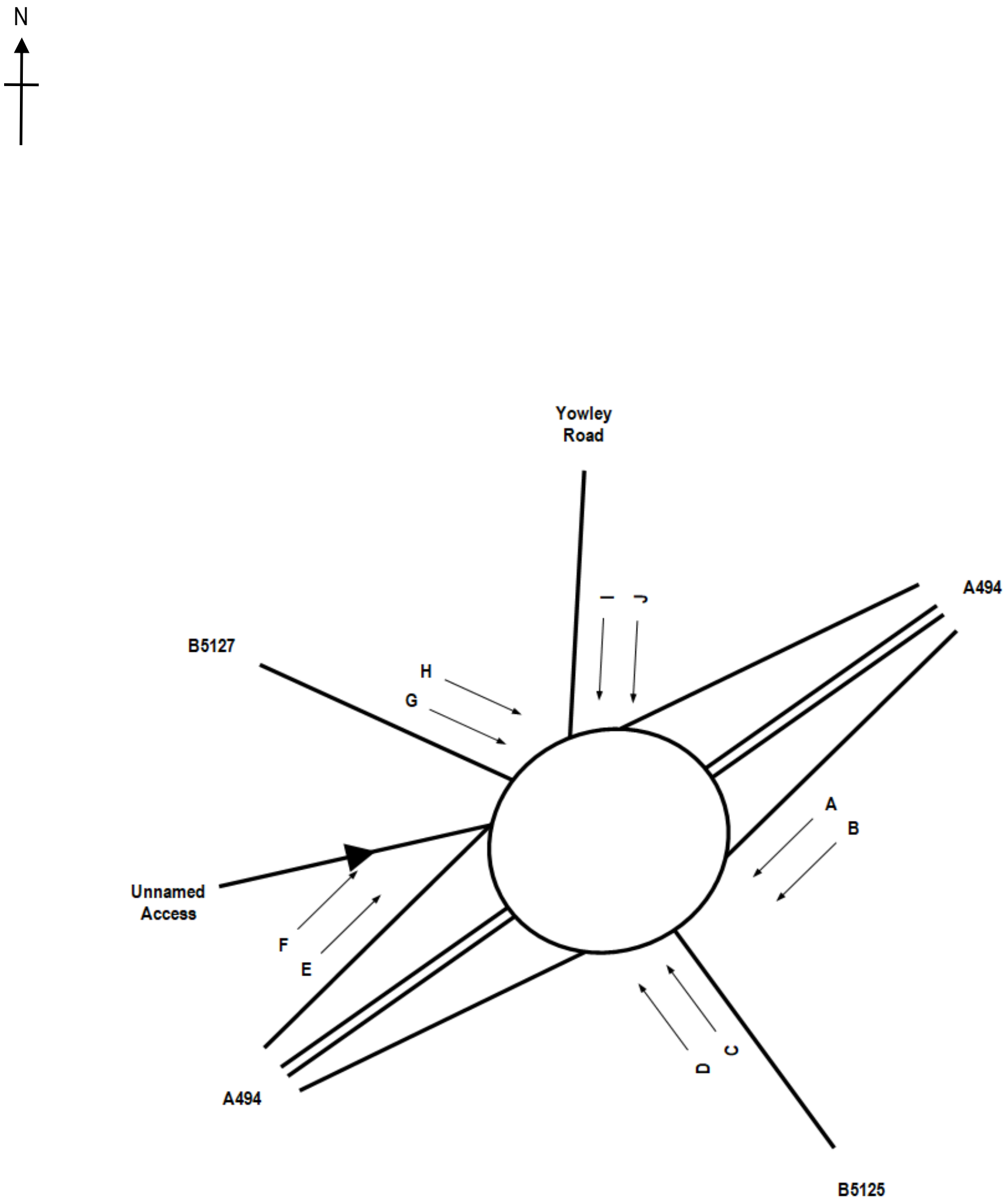
Time Beginning	B5127 Mold Road/Yelva Cottages/Maes Hewitt/Green Lane - Thursday 22nd February 2024																										
	43							44							45							46						
	PC	MC	CAR	LGV	OGV1	OGV2	PSV	PC	MC	CAR	LGV	OGV1	OGV2	PSV	PC	MC	CAR	LGV	OGV1	OGV2	PSV	PC	MC	CAR	LGV	OGV1	OGV2	PSV
0730	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	102	24	1	0	1	0	0	0	0	0	0	0
0745	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	78	16	2	2	2	0	0	0	0	0	0	0
0800	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	112	23	2	0	1	0	0	1	0	0	0	0
0815	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	108	12	5	0	0	0	0	1	0	0	0	0
0830	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	100	7	1	1	1	0	0	0	0	0	0	0
0845	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	102	12	1	0	1	0	0	1	0	0	0	0
0900	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	78	8	2	0	1	0	0	0	0	0	0	0
0915	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	50	8	2	0	1	0	0	0	0	0	0	0

Time Beginning	B5127 Mold Road/Yelva Cottages/Maes Hewitt/Green Lane - Thursday 22nd February 2024																										
	43							44							45							46						
	PC	MC	CAR	LGV	OGV1	OGV2	PSV	PC	MC	CAR	LGV	OGV1	OGV2	PSV	PC	MC	CAR	LGV	OGV1	OGV2	PSV	PC	MC	CAR	LGV	OGV1	OGV2	PSV
1600	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	65	10	0	0	0	0	0	1	0	0	0	0
1615	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	48	7	0	0	0	0	0	0	0	0	0	0
1630	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	66	10	1	0	1	0	0	1	0	0	0	0
1645	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	66	1	0	0	0	0	0	0	0	0	0	0
1700	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	86	15	2	0	1	0	0	2	0	0	0	0
1715	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	71	7	0	0	0	0	0	0	0	0	0	0
1730	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	58	7	0	0	0	0	0	0	0	0	0	0
1745	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	61	9	1	0	1	0	0	2	0	0	0	0

Time Beginning	B5127 Mold Road/Yelva Cottages/Maes Hewitt/Green Lane - Thursday 22nd February 2024																										
	47							48							49							50						
	PC	MC	CAR	LGV	OGV1	OGV2	PSV	PC	MC	CAR	LGV	OGV1	OGV2	PSV	PC	MC	CAR	LGV	OGV1	OGV2	PSV	PC	MC	CAR	LGV	OGV1	OGV2	PSV
0730	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0
0745	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	1	0	0	0
0800	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	1	0	0	0
0815	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	8	1	0	0	0
0830	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	8	1	0	0	0
0845	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	1	0	0	0
0900	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	1	0	0	0
0915	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0

Time Beginning	B5127 Mold Road/Yelva Cottages/Maes Hewitt/Green Lane - Thursday 22nd February 2024																										
	47							48							49							50						
	PC	MC	CAR	LGV	OGV1	OGV2	PSV	PC	MC	CAR	LGV	OGV1	OGV2	PSV	PC	MC	CAR	LGV	OGV1	OGV2	PSV	PC	MC	CAR	LGV	OGV1	OGV2	PSV
1600	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5	1	0	0	0
1615	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0
1630	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1645	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0
1700	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	1	0	0	0
1715	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	2	0	0	0
1730	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	0	0	0	0
1745	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0

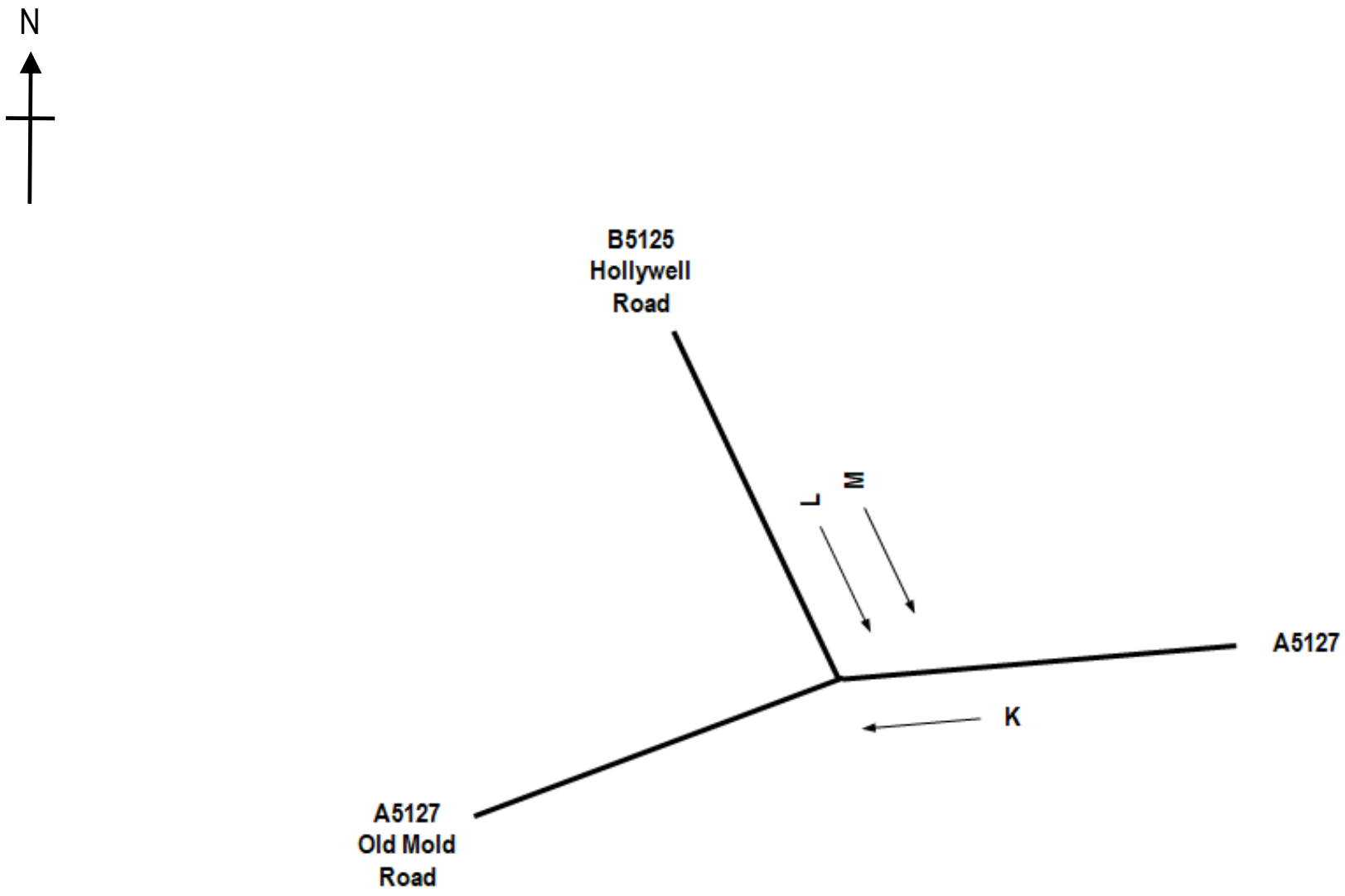
JUNCTION 1



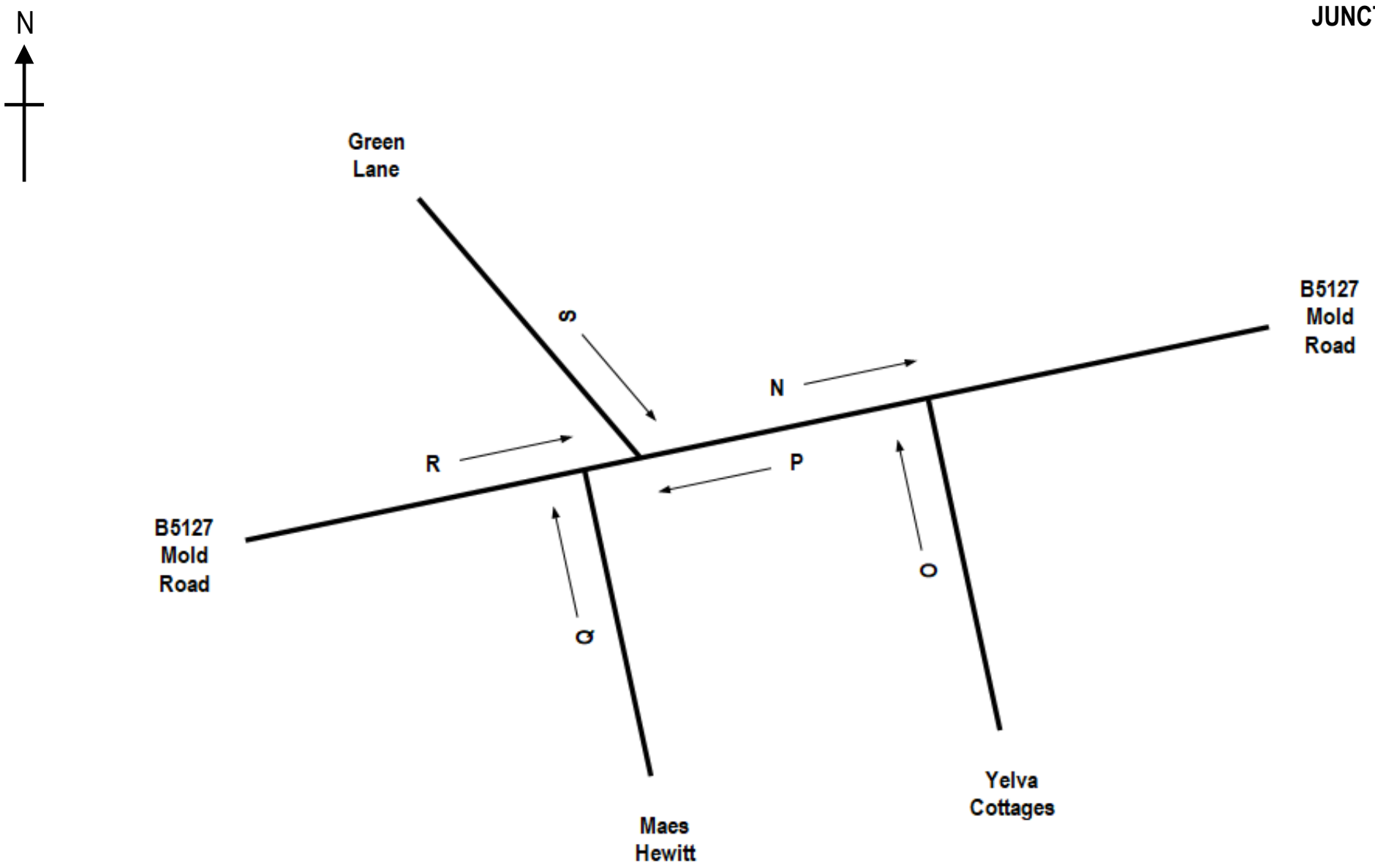
DRAWING TITLE: QUEUE REFERENCE			
JOB TITLE: 23.110 EWLOE			
DRAWN BY: CC	DATE: FEB 2024	SCALE: NTS	REF: FIGURE 3

Transport Data Specialists Ltd
W: www.transportds.co.uk
E: enquiries@transportds.co.uk
T: 0777 625 2475 T: 0794 007 1260

JUNCTION 2



JUNCTION 3



DRAWING TITLE: QUEUE REFERENCE			
JOB TITLE: 23.110 EWLOE			
DRAWN BY: CC	DATE: FEB 2024	SCALE: NTS	REF: FIGURE 4

Transport Data Specialists Ltd
W: www.transportds.co.uk
E: enquiries@transportds.co.uk
T: 0777 625 2475 T: 0794 007 1260

Time Beginning	A494/B5125/A494/B5127/Yowley Road, Queues (vehs) - Thursday 22nd February 2024									
	A	B	C	D	E	F	G	H	I	J
0730	0	0	0	0	0	0	0	6	0	0
0735	0	0	0	0	0	0	1	2	0	0
0740	0	0	0	0	0	0	1	4	0	0
0745	1	4	0	0	0	0	0	5	0	0
0750	2	0	0	0	2	0	2	5	0	0
0755	0	1	0	0	8	0	6	3	1	0
0800	0	0	0	0	3	0	2	5	1	0
0805	0	0	0	0	4	0	0	0	0	0
0810	0	3	0	0	4	0	3	5	0	0
0815	0	0	0	0	2	1	1	2	0	0
0820	1	1	1	1	5	0	7	6	0	1
0825	0	0	0	0	25+	5	1	3	0	1
0830	0	2	0	0	25+	3	2	3	1	0
0835	0	7	0	0	1	1	1	8	3	0
0840	0	0	0	0	1	0	1	0	0	0
0845	0	1	0	0	4	1	4	6	0	0
0850	3	2	0	0	3	1	3	13	0	0
0855	0	4	0	0	1	1	5	8	0	0
0900	0	0	0	0	4	1	1	2	0	0
0905	0	0	0	0	2	0	1	2	0	0
0910	0	0	0	0	2	1	0	0	0	0
0915	0	0	0	0	1	1	0	0	0	0
0920	0	0	0	0	1	0	0	0	0	0
0925	0	0	0	0	1	0	0	2	0	0
0930	0	0	0	0	0	0	0	0	0	0

Time Beginning	A494/B5125/A494/B5127/Yowley Road, Queues (vehs) - Thursday 22nd February 2024									
	A	B	C	D	E	F	G	H	I	J
1600	2	1	0	0	1	1	0	1	0	0
1605	3	1	0	0	1	0	0	0	0	0
1610	0	0	0	0	2	2	0	1	0	1
1615	0	4	0	0	3	12	1	1	0	0
1620	1	0	0	0	1	1	0	0	0	0
1625	10	1	0	0	6	3	2	1	0	0
1630	0	0	0	0	4	0	0	0	0	1
1635	0	0	0	0	0	1	2	1	0	0
1640	7	0	0	0	0	0	0	0	0	0
1645	0	0	0	0	1	0	1	1	0	0
1650	2	0	0	0	0	1	0	2	0	0
1655	0	0	0	0	2	0	0	1	0	0
1700	4	0	0	0	25+	25+	0	0	0	0
1705	2	2	0	0	18	6	1	2	0	0
1710	1	1	0	0	25+	6	0	4	1	0
1715	21	3	0	0	3	4	1	2	0	2
1720	6	0	0	0	25+	5	0	0	0	0
1725	2	3	0	0	25+	6	1	0	0	0
1730	5	6	0	0	9	1	0	1	0	0
1735	5	1	0	0	1	2	0	5	0	1
1740	0	0	0	0	4	2	2	2	1	1
1745	8	2	0	0	2	1	0	2	1	0
1750	2	2	0	0	4	2	1	0	2	0
1755	0	0	0	0	1	3	0	1	1	0
1800	1	0	0	0	1	3	1	0	1	0

Time Beginning	B5127/B5127 Old Mold Road/B5125 Holywell Road, Queues (vehs) - Thursday 22nd February 2024		
	K	L	M
0730	0	0	3
0735	0	0	4
0740	0	0	0
0745	0	0	2
0750	0	0	0
0755	0	0	0
0800	2	0	0
0805	1	1	0
0810	1	2	10
0815	5	0	16
0820	0	2	15
0825	6	2	6
0830	0	0	0
0835	2	2	3
0840	4	1	4
0845	2	0	11
0850	1	0	8
0855	1	2	9
0900	0	1	7
0905	1	0	3
0910	0	0	0
0915	0	0	0
0920	0	0	0
0925	0	0	0
0930	0	0	0

Time Beginning	B5127/B5127 Old Mold Road/B5125 Holywell Road, Queues (vehs) - Thursday 22nd February 2024		
	K	L	M
1600	0	0	0
1605	0	0	0
1610	7	1	2
1615	15+	1	5
1620	10	1	1
1625	0	2	0
1630	0	2	1
1635	0	0	0
1640	0	0	0
1645	2	2	2
1650	0	2	0
1655	0	0	0
1700	4	0	4
1705	15+	0	0
1710	5	0	1
1715	15+	1	0
1720	15+	0	1
1725	15+	1	1
1730	6	0	2
1735	0	0	0
1740	4	1	3
1745	5	2	3
1750	4	2	3
1755	6	3	4
1800	4	3	1

Key

Queue K from Junction 2 queued onto the roundabout and goes past the underpass during the fol

16:02

16:12

16:15

17:02

17:05

17:15

17:20

17:25

Time Beginning	B5127 Mold Road/Yelva Cottages/Maes Hewitt/Green Lane, Queues (vehs) - Thursday 22nd February 2024					
	N	O	P	Q	R	S
0730	0	0	0	0	0	0
0735	0	0	0	0	0	0
0740	0	0	0	0	0	0
0745	0	0	0	0	0	0
0750	0	0	0	0	0	0
0755	0	0	0	0	0	0
0800	0	0	0	0	0	0
0805	0	0	0	0	0	0
0810	0	0	0	0	0	0
0815	0	0	0	0	0	0
0820	0	0	0	1	0	0
0825	0	0	0	0	0	0
0830	0	0	1	0	0	1
0835	0	0	0	0	0	0
0840	0	1	0	0	0	0
0845	0	0	0	0	0	0
0850	0	0	0	0	0	0
0855	0	0	0	0	0	0
0900	0	0	0	0	0	0
0905	0	0	0	0	0	0
0910	0	0	0	0	0	0
0915	0	0	0	0	0	0
0920	0	0	0	0	0	0
0925	0	0	0	0	0	0
0930	0	0	0	0	0	0

Time Beginning	B5127 Mold Road/Yelva Cottages/Maes Hewitt/Green Lane, Queues (vehs) - Thursday 22nd February 2024					
	N	O	P	Q	R	S
1600	0	0	0	0	0	0
1605	0	0	0	0	0	0
1610	0	0	0	0	0	0
1615	0	0	0	0	0	0
1620	0	0	0	0	0	0
1625	0	0	0	0	0	0
1630	0	0	0	0	0	0
1635	0	0	0	0	0	0
1640	0	0	0	0	0	0
1645	0	0	0	0	0	0
1650	0	0	0	0	0	0
1655	0	0	0	0	0	0
1700	0	0	0	0	0	0
1705	0	0	0	0	0	0
1710	0	0	0	0	0	0
1715	0	0	0	0	0	1
1720	0	0	0	0	0	0
1725	0	0	0	0	0	0
1730	0	0	0	0	0	0
1735	0	0	0	0	0	0
1740	0	0	0	0	0	0
1745	0	0	0	0	0	0
1750	0	0	0	0	0	0
1755	0	0	0	0	0	0
1800	0	0	0	0	0	0

S|C|P

APPENDIX B

SCHEDULE OF ACCOMMODATION

HOUSETYPE	DESCRIPTION	SQFT	NUMBER	PERCENTAGE
OP1B (Affordable)	1 Bed, Walk up flat - Ground Floor	578 SQFT	4	1.27
OP1B (Affordable)	1 Bed, Walk up flat - First Floor	646 SQFT	4	1.27
AF2B (Affordable)	2 Bed, 2 Storey, End/Mid-Terrace	695 SQFT	74	23.49
SP3B (Affordable)	3 Bed, 2 Storey, End-Terrace	1015 SQFT	36	11.43
SP3B Corner (Affordable)	3 Bed, 2 Storey, End-Terrace	1015 SQFT	2	0.63
AP4B (Affordable)	4 Bed, 2 Storey, Semi- Detached	1197 SQFT	6	1.90
Oakley Mid	2 Bed, 2 Storey	691 SQFT	22	6.98
Highfield End	3 Bed, 2 Storey	811 SQFT	22	6.98
Hooley Semi	3 Bed, 2 Storey	882 SQFT	36	11.43
Hartford	3 Bed, 2 Storey	959 SQFT	15	4.76
Kingsley	3 Bed, 2 Storey	1023 SQFT	27	8.57
Henley	3 Bed, 2 Storey	1034 SQFT	5	1.59
Bexley	4 Bed, 2 Storey	1249 SQFT	5	1.59
Burlington	4 Bed, 2 Storey	1249 SQFT	5	1.59
Beaumont	4 Bed, 2 Storey	1222 SQFT	28	8.89
Wentworth	4 Bed, 2 Storey	1333 SQFT	24	7.62
TOTAL		**307958 SQFT**	**315**	**100.00**

Gross Site Area	24.7 Acres	10.00 Hectares	
Existing Landscape & ditch	0.69 Acres	0.28 Hectares	
POS	4.18 Acres	1.69 Hectares	
Undevelopable: Site Access, SSR & Pump station	0.69 Acres	0.28 Hectares	
NETT SITE AREA:	**18.14 ACRES**	**7.75 HECTARES**	
Gross Density:	12.75 Units/Acre	31.51 Units/Hectare	
NETT DENSITY:	**16.48 UNITS/ACRE**	**40.87 UNITS/HECTARE**	
Gross Footage:	12451.66 SQFT/Acre	2856.46 SQM/Hectare	
NETT FOOTAGE:	**16068.74 SQFT/ACRE**	**3688.84 SQM/HECTARE**	

Key:

- Site Boundary
- 1.8m high boundary fence
- 1.8m high screen wall / fence
- Private Drive
- Visibility Splays - 2.4x??m to Site Entrances
- Indicative Landscaping. - refer to landscaping design for exact details
- Number of parking spaces proposed to Semi-Detached and Detached Dwellings in accordance with LPA Parking Standards
- Parking space allocation to Frontage Parking Dwellings
- Existing retained hedges/landscaping

Rev:	Description:	Date:
-		

Castle Green,
Unit 20,
St. Asaph Business Park,
St Asaph,
Denbighshire. LL17 0LJ.
Tel. 01745 536677

Site:
Land off Holywell Road & Green Lane, Ewloe

Title:
Proposed Site Plan

Scale: 1:500@A0

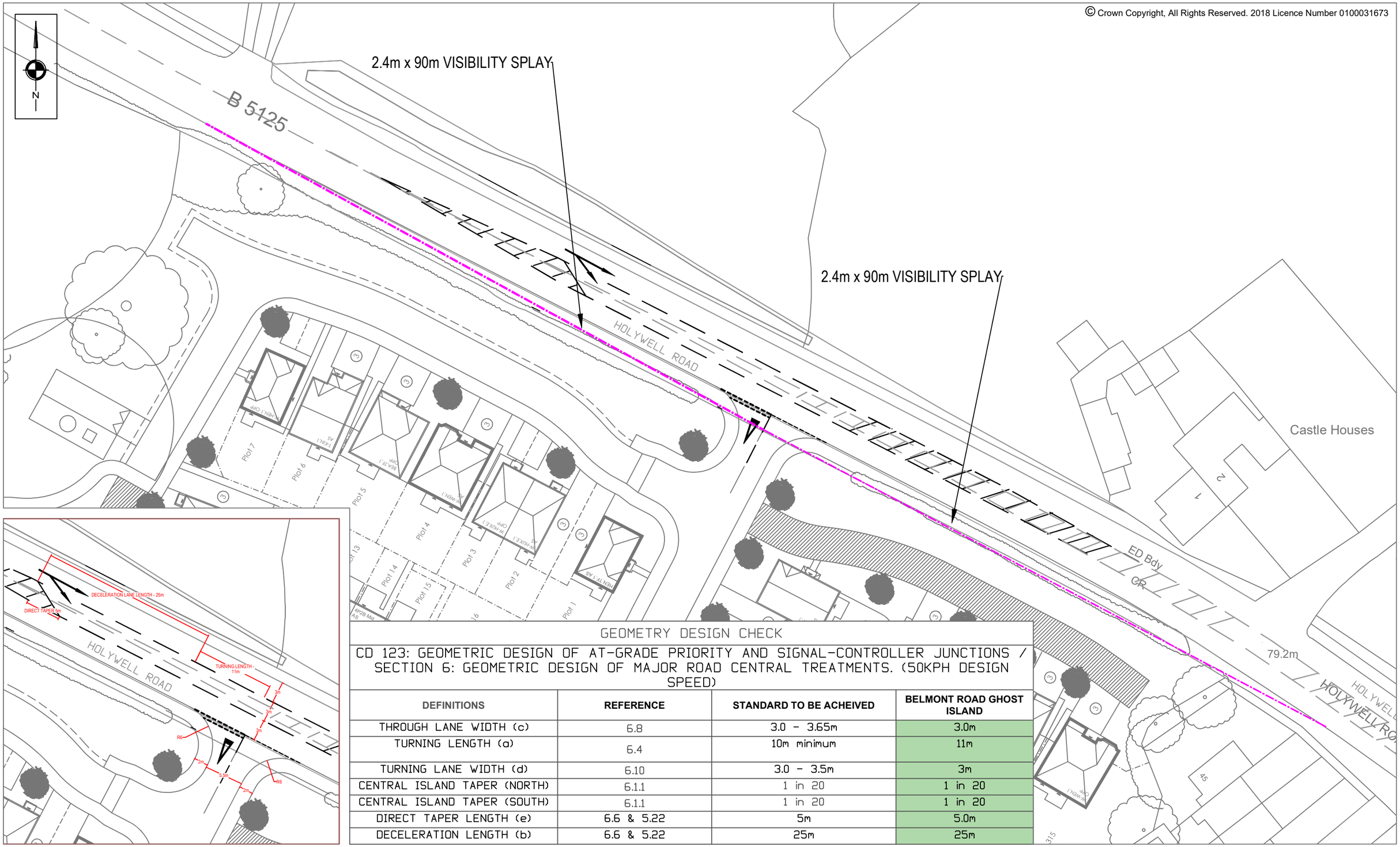
Date: 05.02.24

Ref: GRNLN-EWL-SP01

Rev: -

S|C|P

APPENDIX C



GEOMETRY DESIGN CHECK

CD 123: GEOMETRIC DESIGN OF AT-GRADE PRIORITY AND SIGNAL-CONTROLLER JUNCTIONS / SECTION 6: GEOMETRIC DESIGN OF MAJOR ROAD CENTRAL TREATMENTS. (50KPH DESIGN SPEED)

DEFINITIONS	REFERENCE	STANDARD TO BE ACHEIVED	BELMONT ROAD GHOST ISLAND
THROUGH LANE WIDTH (c)	6.8	3.0 - 3.65m	3.0m
TURNING LENGTH (a)	6.4	10m minimum	11m
TURNING LANE WIDTH (d)	6.10	3.0 - 3.5m	3m
CENTRAL ISLAND TAPER (NORTH)	6.1.1	1 in 20	1 in 20
CENTRAL ISLAND TAPER (SOUTH)	6.1.1	1 in 20	1 in 20
DIRECT TAPER LENGTH (e)	6.6 & 5.22	5m	5.0m
DECELERATION LENGTH (b)	6.6 & 5.22	25m	25m

S|C|P
Transportation Planning : Infrastructure Design
Colwyn Chambers, 19 York Street, Manchester, M2 3BA, Tel 0161 832 4400,
www.scptransport.co.uk, Email info@scptransport.co.uk

Client: CASTLE GREEN HOMES LTD

Project Title: GREEN LANE, EWLOE

Drawing Title: PROPOSED ACCESS ARRANGEMENT + GHOST ISLAND RIGHT TURN

Scale: 1:500 @ A3

By: AM

Date: 21.02.2024

Checked: PT

Approved/ Unapproved: -

Status: PLANNING

Rev	Description	Date	By
-	-	-	-
-	-	-	-
-	-	-	-
-	-	-	-

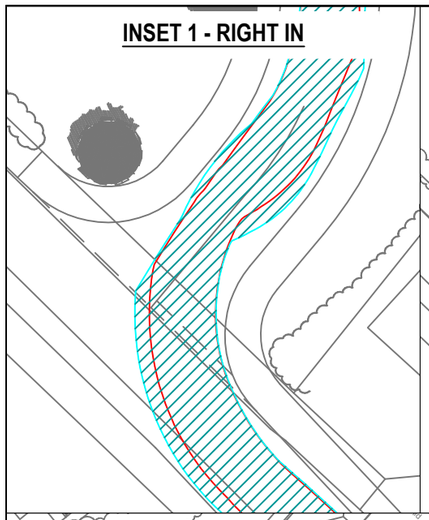
Drawing No.: SCP/230836/D04

Revision: -

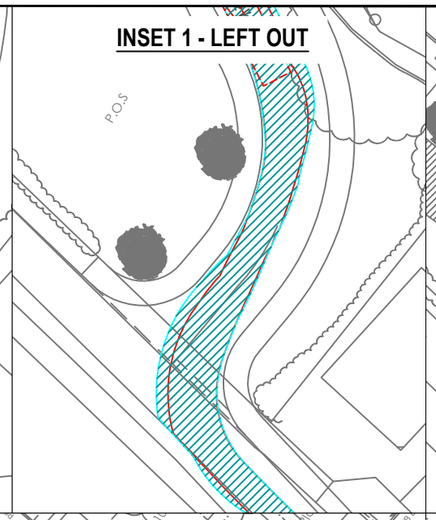
S|C|P

APPENDIX D

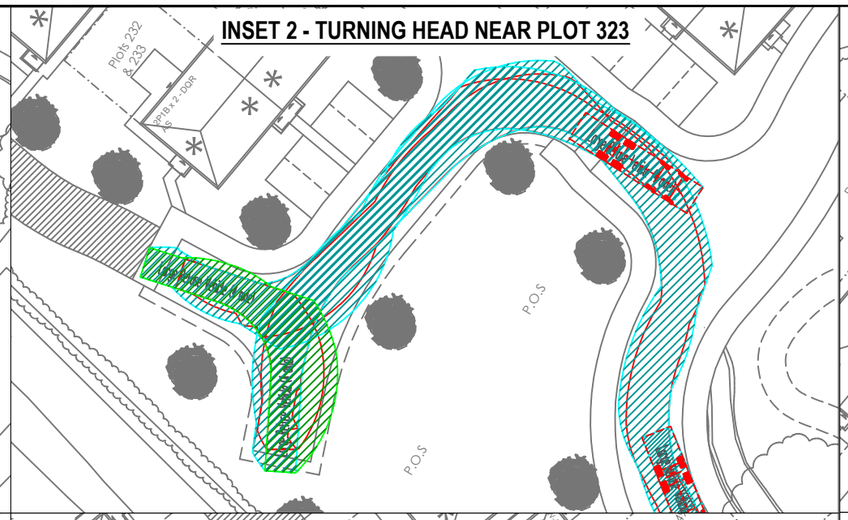
INSET 1 - RIGHT IN



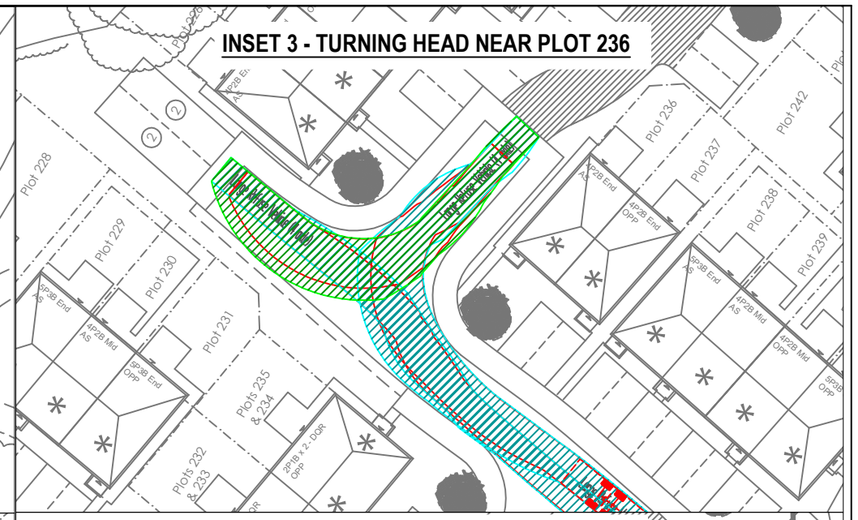
INSET 1 - LEFT OUT



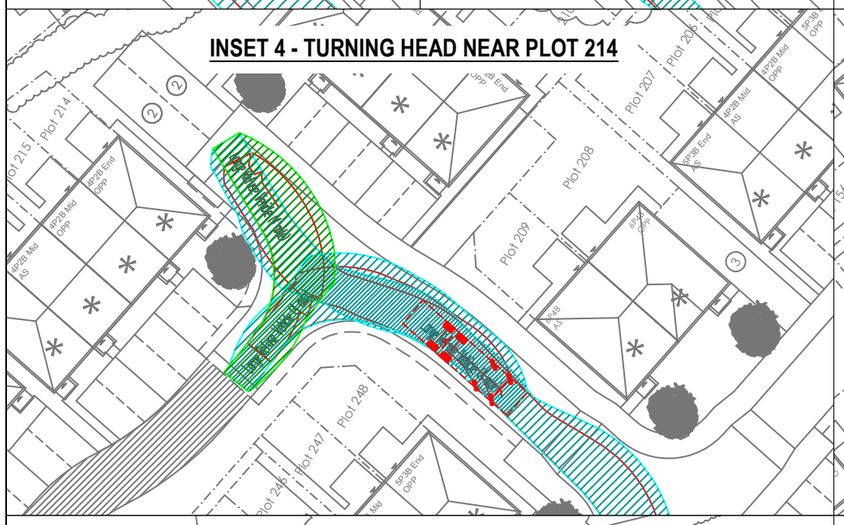
INSET 2 - TURNING HEAD NEAR PLOT 323



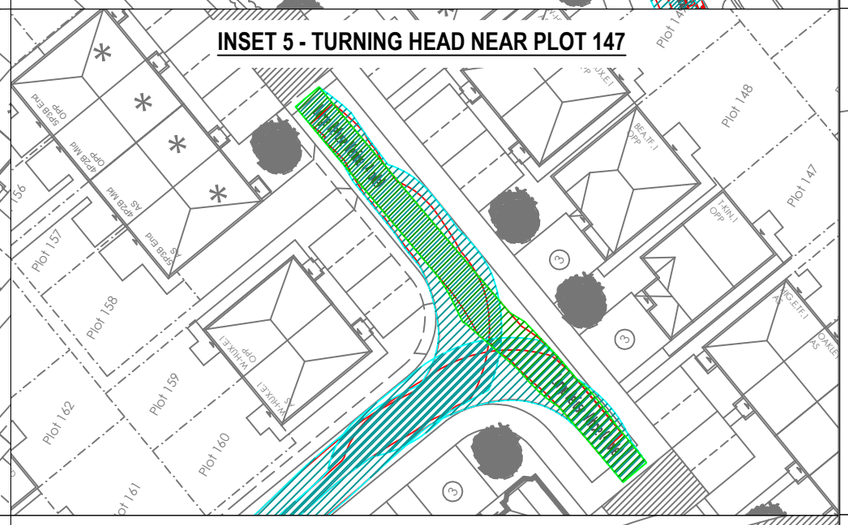
INSET 3 - TURNING HEAD NEAR PLOT 236



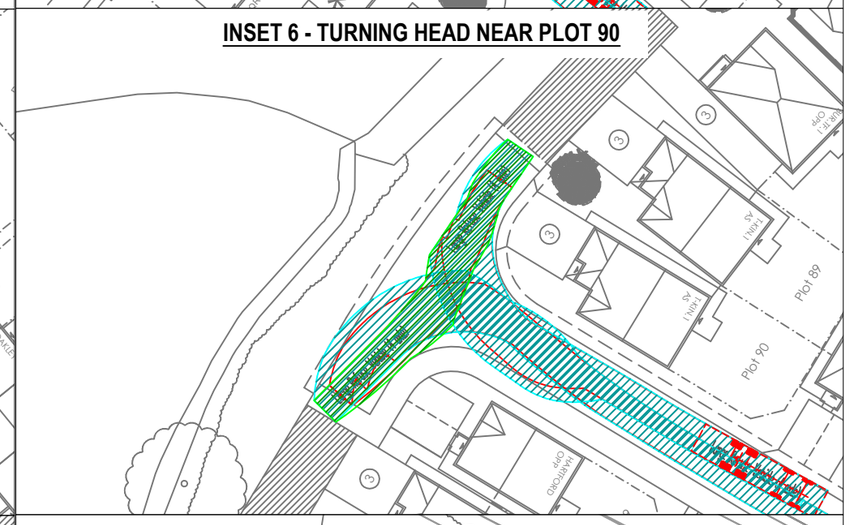
INSET 4 - TURNING HEAD NEAR PLOT 214



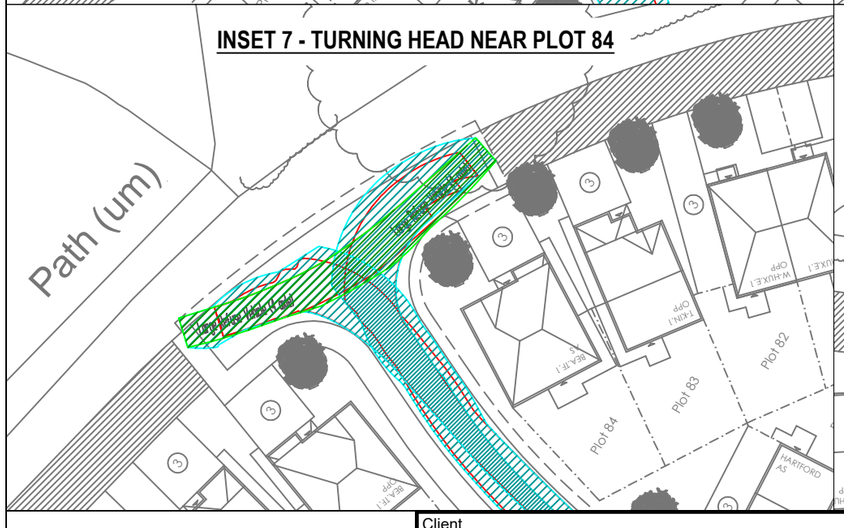
INSET 5 - TURNING HEAD NEAR PLOT 147



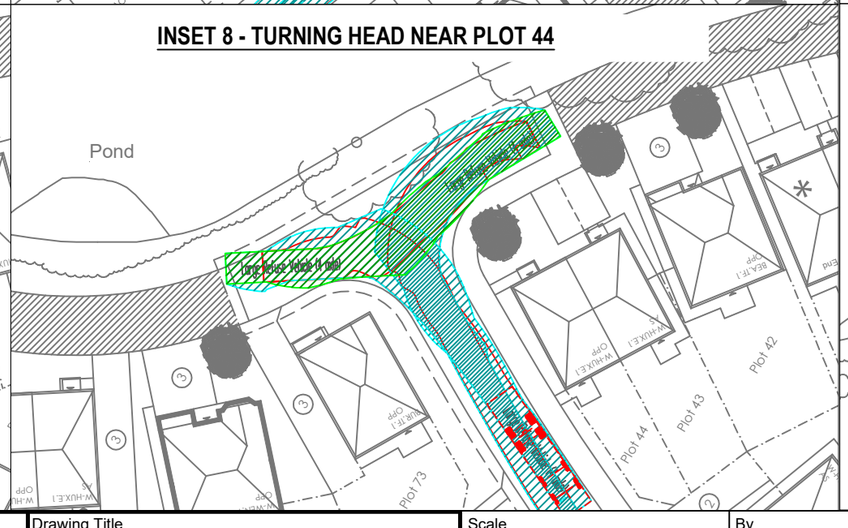
INSET 6 - TURNING HEAD NEAR PLOT 90



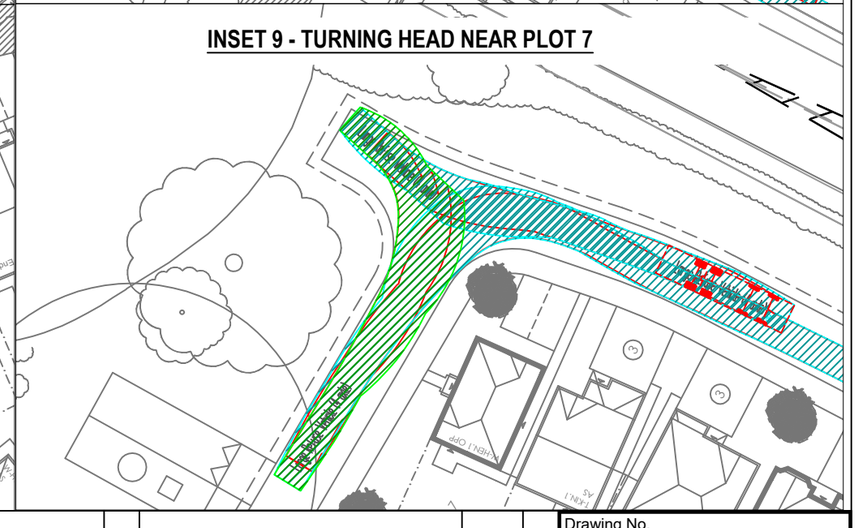
INSET 7 - TURNING HEAD NEAR PLOT 84



INSET 8 - TURNING HEAD NEAR PLOT 44



INSET 9 - TURNING HEAD NEAR PLOT 7



S C P

Transportation Planning : Infrastructure Design

Colwyn Chambers, 19 York Street, Manchester, M2 3BA, Tel 0161 832 4400,
www.scptransport.co.uk, Email info@scptransport.co.uk

Client: CASTLE GREEN HOMES LTD

Project Title: GREEN LANE, EWLOE

Drawing Title: SWEPT PATH ANALYSIS - LARGE REFUSE VEHICLE (REFERENCING DRAWING SCP/23086/ATR02)

Scale	1:500 @ A3
By	AM
Date	20.02.2024
Checked	PT
Approved/ Unapproved	-
Status	PLANNING

Rev	Description	Date	By
–	–	–	–
–	–	–	–
–	–	–	–
–	–	–	–

Drawing No.: SCP/230836/ATR03

Revision: –

NOT TO SCALE

SEE INSET 7

SEE INSET 5

SEE INSET 3

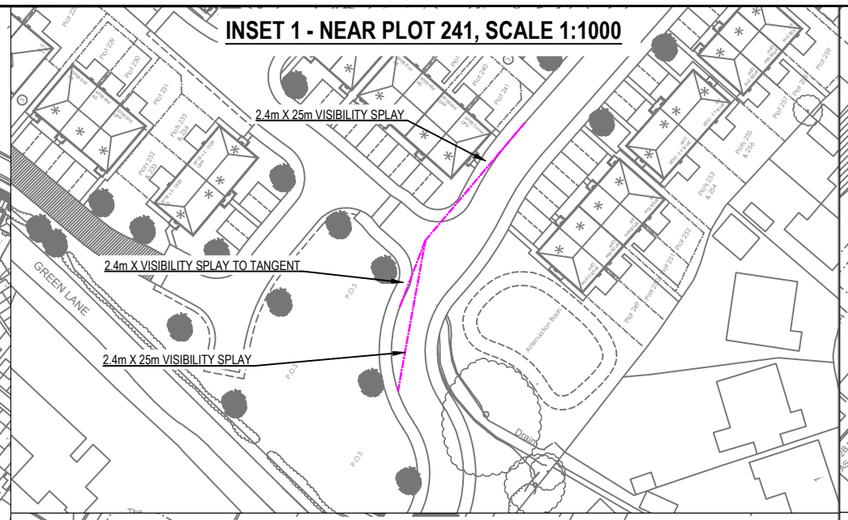
SEE INSET 6

SEE INSET 4

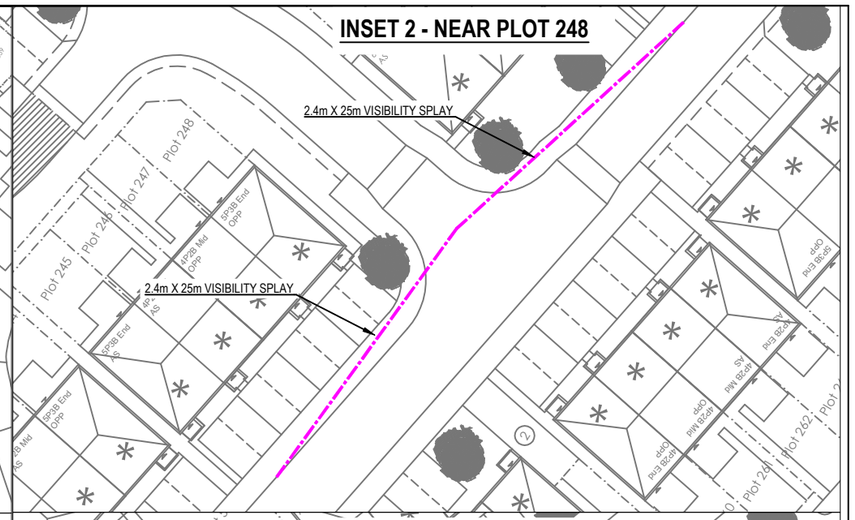
SEE INSET 2

SEE INSET 1

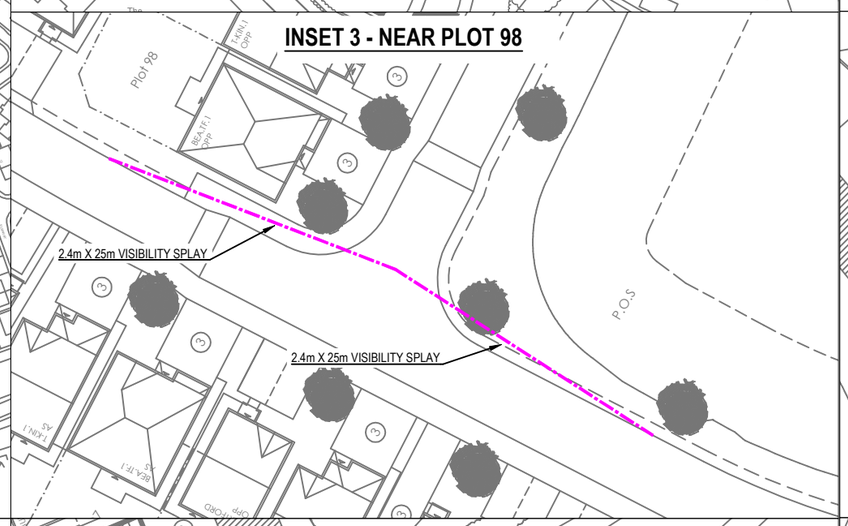
INSET 1 - NEAR PLOT 241, SCALE 1:1000



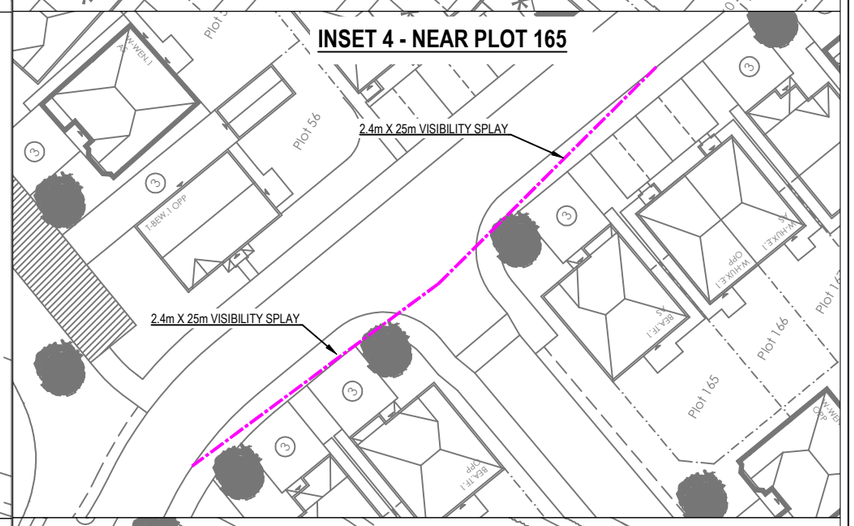
INSET 2 - NEAR PLOT 248



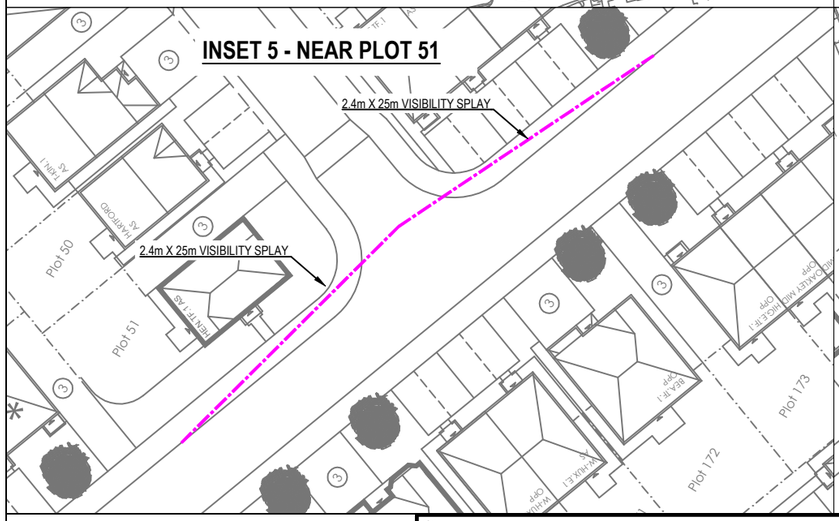
INSET 3 - NEAR PLOT 98



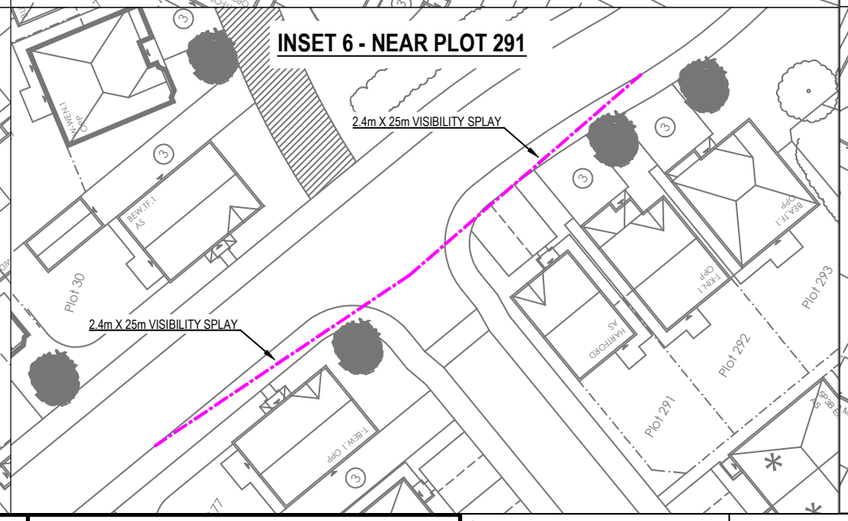
INSET 4 - NEAR PLOT 165



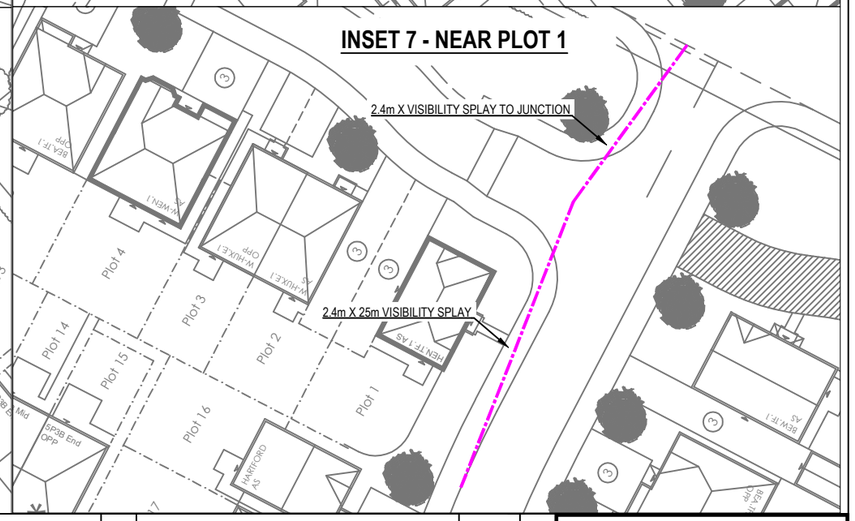
INSET 5 - NEAR PLOT 51



INSET 6 - NEAR PLOT 291



INSET 7 - NEAR PLOT 1



Transportation Planning : Infrastructure Design

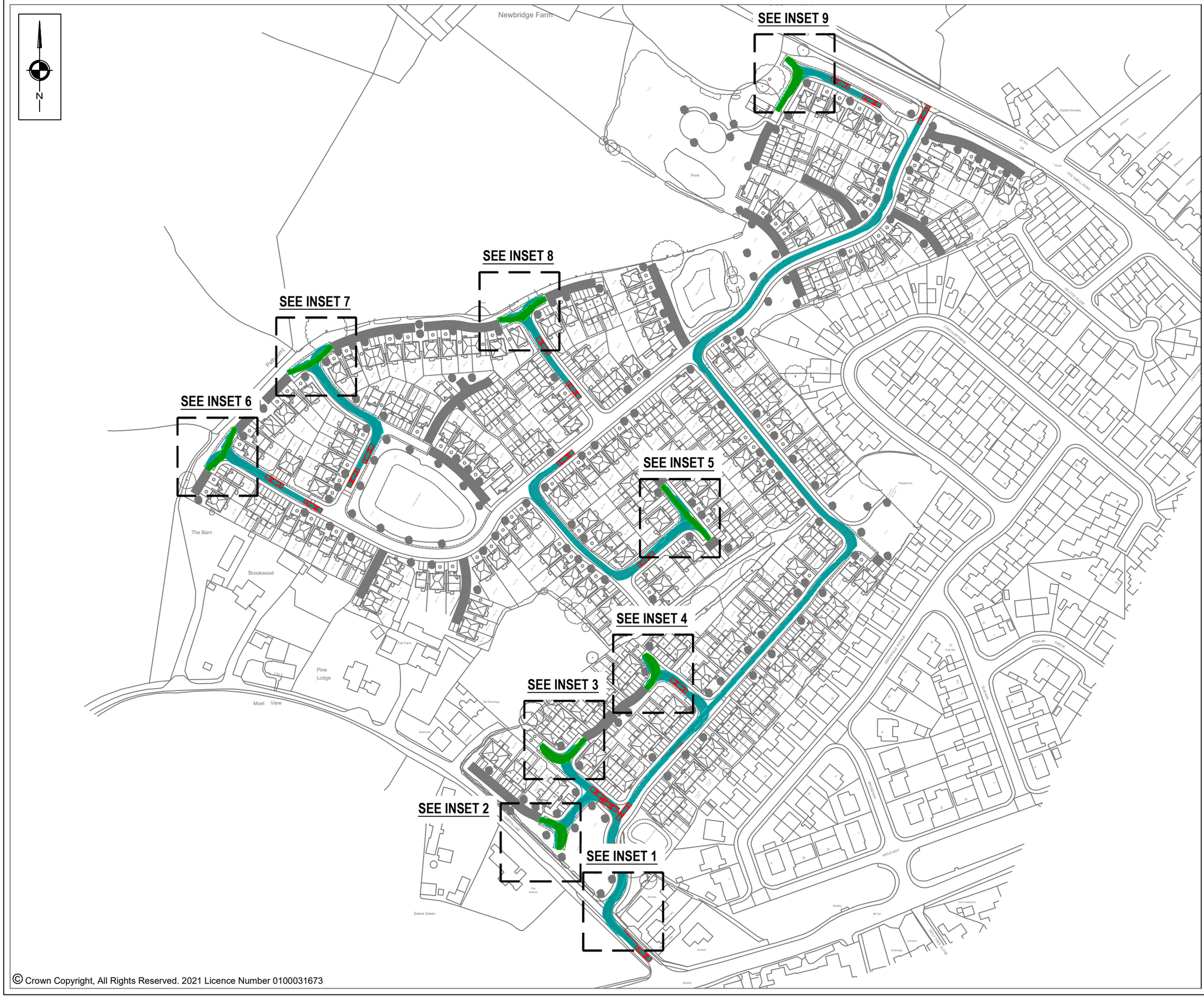
Colwyn Chambers, 19 York Street, Manchester, M2 3BA, Tel 0161 832 4400,
www.scptransport.co.uk, Email info@scptransport.co.uk

Client	CASTLE GREEN HOMES LTD
Project Title	GREEN LANE, EWLOE
Drawing Title	VISIBILITY SPLAYS
Scale	1:500 @ A3
By	AM
Date	20.02.2024
Checked	PT
Approved/ Unapproved	-
Status	PLANNING

Rev	Description	Date	By
–	–	–	–
–	–	–	–
–	–	–	–
–	–	–	–

Drawing No. SCP/230836/D03

Revision –



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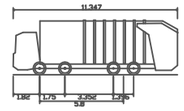


Large Refuse Vehicle (4 axle)

Overall Length	11.347m
Overall Width	2.500m
Overall Body Height	3.751m
Min Body Ground Clearance	0.304m
Track Width	2.500m
Lock to lock time	5.00s
Wall to Wall Turning Radius	11.330m

REVISIONS

REV	DESCRIPTION	DATE	BY
-	-	-	-

S C P
Transportation Planning : Infrastructure Design
Colwyn Chambers, 19 York Street, Manchester, M2 3BA, Tel 0161 832 4400,
www.scptransport.co.uk, Email info@scptransport.co.uk

Client Name:
CASTLE GREEN HOMES LTD

Project Title:
GREEN LANE, EWLOE

Drawing Title:
SWEPT PATH ANALYSIS - LARGE REFUSE VEHICLE

Drawn By:	Date:
AM	20.02.2024
Checked:	**Scale:**
PT	1:500 @ A3
Status:	**Approved/Unapproved:**
PLANNING	-

Drawing No.	Rev.
SCP/230836/ATR02	

S|C|P

APPENDIX E

Calculation Reference: AUDIT-726001-190131-0129

TRIP RATE CALCULATION SELECTION PARAMETERS:

Land Use : 03 - RESIDENTIAL
Category : A - HOUSES PRIVATELY OWNED
MULTI-MODAL VEHICLES

Selected regions and areas:

02	**SOUTH EAST**		
	ES	EAST SUSSEX	2 days
	KC	KENT	3 days
	WS	WEST SUSSEX	4 days
03	**SOUTH WEST**		
	DV	DEVON	1 days
04	**EAST ANGLIA**		
	NF	NORFOLK	1 days
06	**WEST MIDLANDS**		
	ST	STAFFORDSHIRE	1 days
07	**YORKSHIRE & NORTH LINCOLNSHIRE**		
	NE	NORTH EAST LINCOLNSHIRE	1 days
	NY	NORTH YORKSHIRE	1 days
11	**SCOTLAND**		
	FA	FALKIRK	1 days

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

Secondary Filtering 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: 98 to 805 (units:)
Range Selected by User: 75 to 805 (units:)

Parking Spaces Range: Selected: 12 to 1726 Actual: 12 to 1726

Percentage of dwellings privately owned: All Surveys Included

Public Transport Provision:
Selection by: Include all surveys

Date Range: 01/01/10 to 05/07/18

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	3 days
Wednesday	4 days
Thursday	4 days
Friday	4 days

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

Selected survey types:

Manual count	15 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:

Suburban Area (PPS6 Out of Centre)	5
Edge of Town	10

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
No Sub Category	1

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.

Secondary Filtering selection:

Use Class:

C3	15 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®.

Population within 1 mile:

1,000 or Less	1 days
1,001 to 5,000	1 days
5,001 to 10,000	2 days
10,001 to 15,000	6 days
15,001 to 20,000	2 days
20,001 to 25,000	3 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
50,001 to 75,000	3 days
75,001 to 100,000	3 days
100,001 to 125,000	1 days
125,001 to 250,000	5 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	3 days
1.1 to 1.5	12 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	4 days
No	11 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.

PTAL Rating:

No PTAL Present	15 days

This data displays the number of selected surveys with PTAL Ratings.

LIST OF SITES relevant to selection parameters

1 **DV-03-A-02** **HOUSES & BUNGALOWS** **DEVON**
MILLHEAD ROAD
HONITON

Suburban Area (PPS6 Out of Centre)
Residential Zone
Total Number of dwellings: 116
Survey date: FRIDAY *25/09/15* *Survey Type: MANUAL*

2 **ES-03-A-03** **MIXED HOUSES & FLATS** **EAST SUSSEX**
SHEPHAM LANE
POLEGATE

Edge of Town
Residential Zone
Total Number of dwellings: 212
Survey date: MONDAY *11/07/16* *Survey Type: MANUAL*

3 **ES-03-A-04** **MIXED HOUSES & FLATS** **EAST SUSSEX**
NEW LYDD ROAD
CAMBER

Edge of Town
Residential Zone
Total Number of dwellings: 134
Survey date: FRIDAY *15/07/16* *Survey Type: MANUAL*

4 **FA-03-A-02** **MIXED HOUSES** **FALKIRK**
ROSEBANK AVENUE & SPRINGFIELD DRIVE
FALKIRK

Suburban Area (PPS6 Out of Centre)
Residential Zone
Total Number of dwellings: 161
Survey date: WEDNESDAY *29/05/13* *Survey Type: MANUAL*

5 **KC-03-A-04** **SEMI-DETACHED & TERRACED** **KENT**
KILN BARN ROAD
AYLESFORD
DITTON
Edge of Town
Residential Zone
Total Number of dwellings: 110
Survey date: FRIDAY *22/09/17* *Survey Type: MANUAL*

6 **KC-03-A-06** **MIXED HOUSES & FLATS** **KENT**
MARGATE ROAD
HERNE BAY

Suburban Area (PPS6 Out of Centre)
Residential Zone
Total Number of dwellings: 363
Survey date: WEDNESDAY *27/09/17* *Survey Type: MANUAL*

7 **KC-03-A-07** **MIXED HOUSES** **KENT**
RECULVER ROAD
HERNE BAY

Edge of Town
Residential Zone
Total Number of dwellings: 288
Survey date: WEDNESDAY *27/09/17* *Survey Type: MANUAL*

8 **NE-03-A-02** **SEMI DETACHED & DETACHED** **NORTH EAST LINCOLNSHIRE**
HANOVER WALK
SCUNTHORPE

Edge of Town
No Sub Category
Total Number of dwellings: 432
Survey date: MONDAY *12/05/14* *Survey Type: MANUAL*

LIST OF SITES relevant to selection parameters (Cont.)

9 **NF-03-A-02** **HOUSES & FLATS** **NORFOLK**
DEREHAM ROAD
NORWICH

Suburban Area (PPS6 Out of Centre)
Residential Zone
Total Number of dwellings: 98
Survey date: MONDAY *22/10/12* *Survey Type: MANUAL*

10 **NY-03-A-06** **BUNGALOWS & SEMI DET.** **NORTH YORKSHIRE**
HORSEFAIR
BOROUGHBRIDGE

Suburban Area (PPS6 Out of Centre)
Residential Zone
Total Number of dwellings: 115
Survey date: FRIDAY *14/10/11* *Survey Type: MANUAL*

11 **ST-03-A-07** **DETACHED & SEMI-DETACHED** **STAFFORDSHIRE**
BEACONSIDE
STAFFORD
MARSTON GATE
Edge of Town
Residential Zone
Total Number of dwellings: 248
Survey date: WEDNESDAY *22/11/17* *Survey Type: MANUAL*

12 **WS-03-A-04** **MIXED HOUSES** **WEST SUSSEX**
HILLS FARM LANE
HORSHAM
BROADBRIDGE HEATH
Edge of Town
Residential Zone
Total Number of dwellings: 151
Survey date: THURSDAY *11/12/14* *Survey Type: MANUAL*

13 **WS-03-A-06** **MIXED HOUSES** **WEST SUSSEX**
ELLIS ROAD
WEST HORSHAM
S BROADBRIDGE HEATH
Edge of Town
Residential Zone
Total Number of dwellings: 805
Survey date: THURSDAY *02/03/17* *Survey Type: MANUAL*

14 **WS-03-A-08** **MIXED HOUSES** **WEST SUSSEX**
ROUNDSTONE LANE
ANGMERING

Edge of Town
Residential Zone
Total Number of dwellings: 180
Survey date: THURSDAY *19/04/18* *Survey Type: MANUAL*

15 **WS-03-A-09** **MIXED HOUSES & FLATS** **WEST SUSSEX**
LITTLEHAMPTON ROAD
WORTHING
WEST DURRINGTON
Edge of Town
Residential Zone
Total Number of dwellings: 197
Survey date: THURSDAY *05/07/18* *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

MULTI-MODAL 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	15	241	0.078	15	241	0.281	15	241	0.359
08:00 - 09:00	15	241	0.124	**15**	**241**	**0.377**	**15**	**241**	**0.501**
09:00 - 10:00	15	241	0.148	15	241	0.164	15	241	0.312
10:00 - 11:00	15	241	0.126	15	241	0.159	15	241	0.285
11:00 - 12:00	15	241	0.133	15	241	0.150	15	241	0.283
12:00 - 13:00	15	241	0.161	15	241	0.148	15	241	0.309
13:00 - 14:00	15	241	0.166	15	241	0.160	15	241	0.326
14:00 - 15:00	15	241	0.164	15	241	0.189	15	241	0.353
15:00 - 16:00	15	241	0.258	15	241	0.173	15	241	0.431
16:00 - 17:00	15	241	0.272	15	241	0.171	15	241	0.443
17:00 - 18:00	**15**	**241**	**0.330**	15	241	0.163	15	241	0.493
18:00 - 19:00	15	241	0.297	15	241	0.188	15	241	0.485
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			2.257			2.323			4.580

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:	98 - 805 (units:)
Survey date date range:	01/01/10 - 05/07/18
Number of weekdays (Monday-Friday):	15
Number of Saturdays:	0
Number of Sundays:	0
Surveys automatically removed from selection:	0
Surveys manually removed from selection:	0

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

MULTI-MODAL 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	15	241	0.004	15	241	0.007	15	241	0.011
08:00 - 09:00	15	241	0.005	**15**	**241**	**0.009**	15	241	0.014
09:00 - 10:00	15	241	0.000	15	241	0.002	15	241	0.002
10:00 - 11:00	15	241	0.001	15	241	0.003	15	241	0.004
11:00 - 12:00	15	241	0.003	15	241	0.002	15	241	0.005
12:00 - 13:00	15	241	0.003	15	241	0.004	15	241	0.007
13:00 - 14:00	15	241	0.002	15	241	0.003	15	241	0.005
14:00 - 15:00	15	241	0.002	15	241	0.003	15	241	0.005
15:00 - 16:00	15	241	0.005	15	241	0.004	15	241	0.009
16:00 - 17:00	15	241	0.005	15	241	0.008	15	241	0.013
17:00 - 18:00	**15**	**241**	**0.013**	15	241	0.009	**15**	**241**	**0.022**
18:00 - 19:00	15	241	0.009	15	241	0.006	15	241	0.015
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.052			0.060			0.112

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.*

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

MULTI-MODAL PEDESTRIANS

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	15	241	0.017	15	241	0.027	15	241	0.044
08:00 - 09:00	15	241	0.027	**15**	**241**	**0.097**	15	241	0.124
09:00 - 10:00	15	241	0.039	15	241	0.041	15	241	0.080
10:00 - 11:00	15	241	0.039	15	241	0.041	15	241	0.080
11:00 - 12:00	15	241	0.026	15	241	0.027	15	241	0.053
12:00 - 13:00	15	241	0.036	15	241	0.030	15	241	0.066
13:00 - 14:00	15	241	0.027	15	241	0.027	15	241	0.054
14:00 - 15:00	15	241	0.034	15	241	0.045	15	241	0.079
15:00 - 16:00	**15**	**241**	**0.099**	15	241	0.046	**15**	**241**	**0.145**
16:00 - 17:00	15	241	0.065	15	241	0.037	15	241	0.102
17:00 - 18:00	15	241	0.054	15	241	0.032	15	241	0.086
18:00 - 19:00	15	241	0.038	15	241	0.041	15	241	0.079
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.501			0.491			0.992

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.*

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

MULTI-MODAL PUBLIC TRANSPORT USERS

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	15	241	0.002	15	241	0.014	15	241	0.016
08:00 - 09:00	15	241	0.000	**15**	**241**	**0.025**	**15**	**241**	**0.025**
09:00 - 10:00	15	241	0.001	15	241	0.011	15	241	0.012
10:00 - 11:00	15	241	0.002	15	241	0.003	15	241	0.005
11:00 - 12:00	15	241	0.001	15	241	0.004	15	241	0.005
12:00 - 13:00	15	241	0.002	15	241	0.005	15	241	0.007
13:00 - 14:00	15	241	0.004	15	241	0.003	15	241	0.007
14:00 - 15:00	15	241	0.004	15	241	0.003	15	241	0.007
15:00 - 16:00	**15**	**241**	**0.017**	15	241	0.006	15	241	0.023
16:00 - 17:00	15	241	0.014	15	241	0.005	15	241	0.019
17:00 - 18:00	15	241	0.016	15	241	0.003	15	241	0.019
18:00 - 19:00	15	241	0.016	15	241	0.004	15	241	0.020
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.079			0.086			0.165

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.*

S|C|P

APPENDIX F

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

Site A

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

Left out of the site along B5125	Right out of site then right at Old Mold Road Junction then south west along B5127	Right out of site then left at Old Mold Road Junction then north east along A494	Right out of site then left at Old Mold Road Junction then South west along A494	Right out of site then left at Old Mold Road Junction then straight ahead to B5125
A	B	C	D	E
5%	3%	34%	41%	17%

place of work : 2011 super output area - middle layer	usual residence W02000070 : Flintshire 013	Distribution	Route
W02000072 : Flintshire 015	115	3%	C
W02000072 : Flintshire 015	115	3%	D
W02000072 : Flintshire 015	115	3%	E
W02000066 : Flintshire 009	311	9%	C
W02000070 : Flintshire 013	290	8%	E
E02003803 : Cheshire West and Chester	89	3%	C
E02003803 : Cheshire West and Chester	89	3%	D
E02003803 : Cheshire West and Chester	89	3%	E
W02000073 : Flintshire 016	225	7%	D
W02000068 : Flintshire 011	77	2%	C
W02000068 : Flintshire 011	77	2%	E
E02003809 : Cheshire West and Chester	62	2%	D
E02003809 : Cheshire West and Chester	62	2%	C
W02000074 : Flintshire 017	47	1%	B
W02000074 : Flintshire 017	47	1%	D
W02000069 : Flintshire 012	31	1%	A
W02000069 : Flintshire 012	31	1%	B
W02000069 : Flintshire 012	31	1%	D
W02000061 : Flintshire 004	45	1%	A
W02000061 : Flintshire 004	45	1%	D
W02000064 : Flintshire 007	40	1%	A
W02000064 : Flintshire 007	40	1%	C
W02000420 : Wrexham 020	74	2%	D
E02003797 : Cheshire West and Chester	36	1%	C
E02003797 : Cheshire West and Chester	36	1%	D
E02003802 : Cheshire West and Chester	33	1%	C
E02003802 : Cheshire West and Chester	33	1%	D
W02000088 : Wrexham 011	63	2%	D
W02000060 : Flintshire 003	58	2%	D
E02003845 : Cheshire West and Chester	27	1%	C
E02003845 : Cheshire West and Chester	27	1%	D
W02000065 : Flintshire 008	27	1%	A
W02000065 : Flintshire 008	27	1%	C
W02000085 : Wrexham 008	48	1%	D
W02000050 : Denbighshire 009	44	1%	D
E02003795 : Cheshire West and Chester	38	1%	C
E02003849 : Cheshire West and Chester	17	0%	C
E02003849 : Cheshire West and Chester	17	0%	D
W02000071 : Flintshire 014	12	0%	B
W02000071 : Flintshire 014	12	0%	D
E02003807 : Cheshire West and Chester	8	0%	C
E02003807 : Cheshire West and Chester	8	0%	D
E02003807 : Cheshire West and Chester	8	0%	E
E02002251 : Calderdale 008	22	1%	C
E02002582 : Halton 009	11	0%	C
E02002582 : Halton 009	11	0%	D
E02003851 : Cheshire West and Chester	10	0%	C
E02003851 : Cheshire West and Chester	10	0%	D
W02000067 : Flintshire 010	6	0%	A
W02000067 : Flintshire 010	6	0%	C
W02000067 : Flintshire 010	6	0%	E
W02000051 : Denbighshire 010	18	1%	D
E02001097 : Manchester 053	9	0%	C
E02001097 : Manchester 053	9	0%	D
E02001502 : Wirral 036	8	0%	C
E02001502 : Wirral 036	8	0%	D
E02003805 : Cheshire West and Chester	7	0%	C
E02003805 : Cheshire West and Chester	7	0%	D
E02003887 : Cheshire West and Chester	7	0%	C
E02003887 : Cheshire West and Chester	7	0%	D
E02001505 : Wirral 039	7	0%	C
E02001505 : Wirral 039	7	0%	D
W02000063 : Flintshire 006	14	0%	D
W02000076 : Flintshire 019	7	0%	D
W02000076 : Flintshire 019	7	0%	B
E02003794 : Cheshire West and Chester	7	0%	C
E02003794 : Cheshire West and Chester	7	0%	D
E02003808 : Cheshire West and Chester	7	0%	D
E02003808 : Cheshire West and Chester	7	0%	E
E02006934 : Liverpool 062	7	0%	C
E02006934 : Liverpool 062	7	0%	D
W02000045 : Denbighshire 004	13	0%	D
W02000055 : Denbighshire 014	13	0%	D
W02000062 : Flintshire 005	7	0%	A
W02000062 : Flintshire 005	7	0%	D
E02003841 : Cheshire West and Chester	12	0%	C
E02002593 : Warrington 004	6	0%	C
E02002593 : Warrington 004	6	0%	D
W02000077 : Flintshire 020	6	0%	B
W02000077 : Flintshire 020	6	0%	D
E02002607 : Warrington 018	6	0%	C
E02002607 : Warrington 018	6	0%	D
E02005778 : Harrogate 018	11	0%	C
W02000059 : Flintshire 002	6	0%	A
W02000059 : Flintshire 002	6	0%	D
E02003796 : Cheshire West and Chester	5	0%	C
E02003796 : Cheshire West and Chester	5	0%	D
E02003798 : Cheshire West and Chester	10	0%	C
W02000033 : Conwy 007	10	0%	D
W02000091 : Wrexham 014	10	0%	D
W02000086 : Wrexham 009	9	0%	D
E02003863 : Cheshire East 010	4	0%	C
E02003863 : Cheshire East 010	4	0%	D
E02003800 : Cheshire West and Chester	4	0%	D
E02003800 : Cheshire West and Chester	4	0%	C
W02000093 : Wrexham 016	8	0%	D
E02003799 : Cheshire West and Chester	7	0%	C
E02003850 : Cheshire West and Chester	7	0%	C
E02003877 : Cheshire West and Chester	4	0%	C
E02003877 : Cheshire West and Chester	4	0%	D
E02002585 : Halton 012	4	0%	C
E02002585 : Halton 012	4	0%	D
E02001491 : Wirral 025	4	0%	C
E02001491 : Wirral 025	4	0%	D
E02001504 : Wirral 038	4	0%	C
E02001504 : Wirral 038	4	0%	D
W02000054 : Denbighshire 013	7	0%	D
W02000075 : Flintshire 018	4	0%	D
W02000075 : Flintshire 018	4	0%	E
E02003859 : Cheshire East 007	3	0%	C
E02003859 : Cheshire East 007	3	0%	D
E02003804 : Cheshire West and Chester	3	0%	C
E02003804 : Cheshire West and Chester	3	0%	D
E02003806 : Cheshire West and Chester	3	0%	C
E02003806 : Cheshire West and Chester	3	0%	D
E02003842 : Cheshire West and Chester	6	0%	C
E02002598 : Warrington 009	3	0%	C
E02002598 : Warrington 009	3	0%	D
E02004022 : South Lakeland 008	6	0%	C
E02001264 : Trafford 006	6	0%	C
E02001331 : Knowsley 005	3	0%	C
E02001331 : Knowsley 005	3	0%	D
E02006932 : Liverpool 060	3	0%	C
E02006932 : Liverpool 060	3	0%	D
E02001508 : Wirral 042	6	0%	C
W02000036 : Conwy 010	6	0%	D
W02000089 : Wrexham 012	6	0%	D
W02000090 : Wrexham 013	6	0%	D
E02003814 : Cheshire East 025	3	0%	C
E02003814 : Cheshire East 025	3	0%	D
E02003829 : Cheshire East 038	5	0%	D
E02003801 : Cheshire West and Chester	3	0%	C
E02003801 : Cheshire West and Chester	3	0%	D
E02003847 : Cheshire West and Chester	5	0%	C
E02003848 : Cheshire West and Chester	5	0%	C
E02003874 : Cheshire West and Chester	5	0%	C
E02003878 : Cheshire West and Chester	3	0%	C
E02003878 : Cheshire West and Chester	3	0%	D
E02003890 : Cheshire West and Chester	3	0%	C
E02003890 : Cheshire West and Chester	3	0%	D
E02003891 : Cheshire West and Chester	3	0%	C
E02003891 : Cheshire West and Chester	3	0%	D
E02002603 : Warrington 014	3	0%	C
E02002603 : Warrington 014	3	0%	D
E02006902 : Manchester 054	3	0%	C
E02006902 : Manchester 054	3	0%	D
E02005256 : Preston 004	5	0%	C
E02001404 : Liverpool 058	3	0%	C
E02001404 : Liverpool 058	3	0%	D
E02001482 : Wirral 016	5	0%	C
W02000037 : Conwy 011	5	0%	D
W02000047 : Denbighshire 006	5	0%	D
W02000058 : Flintshire 001	5	0%	D
W02000092 : Wrexham 015	5	0%	D
E02003888 : Cheshire West and Chester	2	0%	C
E02003888 : Cheshire West and Chester	2	0%	D
E02002588 : Halton 015	2	0%	C
E02002588 : Halton 015	2	0%	D
E02002606 : Warrington 017	2	0%	C
E02002606 : Warrington 017	2	0%	D
E02001096 : Manchester 052	2	0%	C
E02001096 : Manchester 052	2	0%	D
E02001368 : Liverpool 022	2	0%	C
E02001368 : Liverpool 022	2	0%	D
E02006023 : Shropshire 003	4	0%	D
E02006025 : Shropshire 007	4	0%	D
W02000027 : Conwy 001	4	0%	D
W02000038 : Conwy 012	4	0%	D
W02000049 : Denbighshire 008	4	0%	D
W02000419 : Denbighshire 017	4	0%	D
W02000080 : Wrexham 003	4	0%	D
W02000094 : Wrexham 017	4	0%	D
W02000096 : Wrexham 019	4	0%	D
	3,420		

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

Site B

population	All usual residents aged 16 and over in employment the week before the census
units	Persons
date	2011

Right out of Green lane and west along Mold Road	Left out of Green Lane and west along mold Road and left at junction of Holywell Road	Left out of Green Lane and west along Mold Road/Old Mold Road then left at roundabout and North-east along A494	Left out of Green Lane and west along Mold Road/Old Mold Road then stright ahead at roundabout along B5125	Left out of Green Lane and west along Mold Road/Old Mold Road then south west along A494
A	B	C	D	E
11%	4%	36%	16%	33%

method of travel to work	Driving a car or van

place of work : 2011 super output area - middle layer	usual residence: W02000070 : Flintshire 013	Distribution	Route
W02000072 : Flintshire 015	172	5%	D
W02000072 : Flintshire 015	172	5%	E
W02000066 : Flintshire 009	311	9%	C
W02000070 : Flintshire 013	290	8%	D
E02003803 : Cheshire West and Chester 034	134	4%	C
E02003803 : Cheshire West and Chester 034	134	4%	E
W02000073 : Flintshire 016	113	3%	A
W02000073 : Flintshire 016	113	3%	E
W02000068 : Flintshire 011	154	4%	C
E02003809 : Cheshire West and Chester 046	62	2%	D
E02003809 : Cheshire West and Chester 046	62	2%	E
W02000074 : Flintshire 017	47	1%	A
W02000074 : Flintshire 017	47	1%	C
W02000069 : Flintshire 012	31	1%	A
W02000069 : Flintshire 012	31	1%	B
W02000069 : Flintshire 012	31	1%	E
W02000061 : Flintshire 004	30	1%	B
W02000061 : Flintshire 004	30	1%	C
W02000061 : Flintshire 004	30	1%	E
W02000064 : Flintshire 007	40	1%	B
W02000064 : Flintshire 007	40	1%	C
W02000420 : Wrexham 020	74	2%	E
E02003797 : Cheshire West and Chester 028	36	1%	C
E02003797 : Cheshire West and Chester 028	36	1%	E
E02003802 : Cheshire West and Chester 033	33	1%	C
E02003802 : Cheshire West and Chester 033	33	1%	E
W02000088 : Wrexham 011	32	1%	E
W02000088 : Wrexham 011	32	1%	A
W02000060 : Flintshire 003	58	2%	E
E02003845 : Cheshire West and Chester 007	54	2%	C
W02000065 : Flintshire 008	27	1%	B
W02000065 : Flintshire 008	27	1%	C
W02000085 : Wrexham 008	24	1%	A
W02000085 : Wrexham 008	24	1%	E
W02000050 : Denbighshire 009	44	1%	E
E02003795 : Cheshire West and Chester 025	38	1%	C
E02003849 : Cheshire West and Chester 011	17	0%	C
E02003849 : Cheshire West and Chester 011	17	0%	E
W02000071 : Flintshire 014	24	1%	A
E02003807 : Cheshire West and Chester 043	12	0%	D
E02003807 : Cheshire West and Chester 043	12	0%	E
E02002251 : Calderdale 008	11	0%	A
E02002251 : Calderdale 008	11	0%	E
E02002582 : Halton 009	11	0%	C
E02002582 : Halton 009	11	0%	E
E02003851 : Cheshire West and Chester 014	19	1%	C
W02000067 : Flintshire 010	5	0%	A
W02000067 : Flintshire 010	5	0%	B
W02000067 : Flintshire 010	5	0%	C
W02000067 : Flintshire 010	5	0%	E
W02000051 : Denbighshire 010	18	1%	E
E02001097 : Manchester 053	17	0%	C
E02001502 : Wirral 036	15	0%	C
E02003805 : Cheshire West and Chester 039	7	0%	C
E02003805 : Cheshire West and Chester 039	7	0%	E
E02003887 : Cheshire West and Chester 037	7	0%	C
E02003887 : Cheshire West and Chester 037	7	0%	E
E02001505 : Wirral 039	14	0%	C
W02000063 : Flintshire 006	7	0%	A
W02000063 : Flintshire 006	7	0%	E
W02000076 : Flintshire 019	7	0%	A
W02000076 : Flintshire 019	7	0%	E
E02003794 : Cheshire West and Chester 022	7	0%	C
E02003794 : Cheshire West and Chester 022	7	0%	E
E02003808 : Cheshire West and Chester 044	4	0%	C
E02003808 : Cheshire West and Chester 044	4	0%	D
E02003808 : Cheshire West and Chester 044	4	0%	E
E02006934 : Liverpool 062	7	0%	C
E02006934 : Liverpool 062	7	0%	E
W02000045 : Denbighshire 004	13	0%	E
W02000055 : Denbighshire 014	13	0%	A
W02000062 : Flintshire 005	7	0%	A
W02000062 : Flintshire 005	7	0%	E
E02003841 : Cheshire West and Chester 001	12	0%	C
E02002593 : Warrington 004	12	0%	C
W02000077 : Flintshire 020	6	0%	A
W02000077 : Flintshire 020	6	0%	E
E02002607 : Warrington 018	11	0%	C
E02005778 : Harrogate 018	11	0%	C
W02000059 : Flintshire 002	6	0%	A
W02000059 : Flintshire 002	6	0%	E
E02003796 : Cheshire West and Chester 027	5	0%	C
E02003796 : Cheshire West and Chester 027	5	0%	E
E02003798 : Cheshire West and Chester 029	10	0%	C
W02000033 : Conwy 007	5	0%	A
W02000033 : Conwy 007	5	0%	E
W02000091 : Wrexham 014	10	0%	E
W02000086 : Wrexham 009	10	0%	A
W02000086 : Wrexham 009	9	0%	E
E02003863 : Cheshire East 010	4	0%	C
E02003863 : Cheshire East 010	4	0%	E
E02003800 : Cheshire West and Chester 030	4	0%	C
E02003800 : Cheshire West and Chester 030	4	0%	E
W02000093 : Wrexham 016	8	0%	E
E02003799 : Cheshire West and Chester 031	7	0%	C
E02003850 : Cheshire West and Chester 013	7	0%	C
E02003877 : Cheshire West and Chester 015	4	0%	C
E02003877 : Cheshire West and Chester 015	4	0%	E
E02002585 : Halton 012	4	0%	C
E02002585 : Halton 012	4	0%	E
E02001491 : Wirral 025	4	0%	C
E02001491 : Wirral 025	4	0%	E
E02001504 : Wirral 038	7	0%	C
W02000054 : Denbighshire 013	7	0%	A
W02000075 : Flintshire 018	7	0%	E
E02003859 : Cheshire East 007	3	0%	C
E02003859 : Cheshire East 007	3	0%	E
E02003804 : Cheshire West and Chester 036	3	0%	C
E02003804 : Cheshire West and Chester 036	3	0%	E
E02003806 : Cheshire West and Chester 041	3	0%	C
E02003806 : Cheshire West and Chester 041	3	0%	E
E02003842 : Cheshire West and Chester 004	6	0%	C
E02002598 : Warrington 009	6	0%	C
E02004022 : South Lakeland 008	6	0%	C
E02001264 : Trafford 006	6	0%	C
E02001331 : Knowsley 005	3	0%	C
E02001331 : Knowsley 005	3	0%	E
E02006932 : Liverpool 060	3	0%	C
E02006932 : Liverpool 060	3	0%	E
E02001508 : Wirral 042	6	0%	C
W02000036 : Conwy 010	3	0%	A
W02000036 : Conwy 010	3	0%	E
W02000089 : Wrexham 012	3	0%	A
W02000089 : Wrexham 012	3	0%	E
W02000090 : Wrexham 013	3	0%	A
W02000090 : Wrexham 013	3	0%	E
E02003814 : Cheshire East 025	3	0%	C
E02003814 : Cheshire East 025	3	0%	E
E02003829 : Cheshire East 038	3	0%	C
E02003829 : Cheshire East 038	3	0%	E
E02003801 : Cheshire West and Chester 032	3	0%	C
E02003801 : Cheshire West and Chester 032	3	0%	E
E02003847 : Cheshire West and Chester 009	5	0%	C
E02003848 : Cheshire West and Chester 010	5	0%	C
E02003874 : Cheshire West and Chester 002	5	0%	C
E02003878 : Cheshire West and Chester 017	3	0%	C
E02003878 : Cheshire West and Chester 017	3	0%	E
E02003890 : Cheshire West and Chester 042	3	0%	C
E02003890 : Cheshire West and Chester 042	3	0%	E
E02003891 : Cheshire West and Chester 045	3	0%	C
E02003891 : Cheshire West and Chester 045	3	0%	E
E02002603 : Warrington 014	5	0%	C
E02006902 : Manchester 054	5	0%	C
E02005256 : Preston 004	5	0%	C
E02001404 : Liverpool 058	3	0%	C
E02001404 : Liverpool 058	3	0%	E
E02001482 : Wirral 016	5	0%	C
W02000037 : Conwy 011	3	0%	E
W02000037 : Conwy 011	3	0%	A
W02000047 : Denbighshire 006	5	0%	E
W02000058 : Flintshire 001	5	0%	E
W02000092 : Wrexham 015	5	0%	E
E02003888 : Cheshire West and Chester 038	2	0%	C
E02003888 : Cheshire West and Chester 038	2	0%	E
E02002588 : Halton 015	2	0%	C
E02002588 : Halton 015	2	0%	E
E02002606 : Warrington 017	4	0%	C
E02001096 : Manchester 052	4	0%	C
E02001368 : Liverpool 022	2	0%	C
E02001368 : Liverpool 022	2	0%	E
E02006023 : Shropshire 003	2	0%	C
E02006023 : Shropshire 003	2	0%	A
E02006025 : Shropshire 007	2	0%	A
E02006025 : Shropshire 007	2	0%	E
W02000027 : Conwy 001	2	0%	A
W02000027 : Conwy 001	4	0%	E
W02000038 : Conwy 012	2	0%	A
W02000038 : Conwy 012	2	0%	E
W02000049 : Denbighshire 008	4	0%	E
W02000419 : Denbighshire 017	4	0%	E
W02000080 : Wrexham 003	2	0%	D
W02000080 : Wrexham 003	2	0%	E
W02000094 : Wrexham 017	2	0%	A
W02000094 : Wrexham 017	2	0%	E
W02000096 : Wrexham 019	2	0%	A
W02000096 : Wrexham 019	2	0%	E
	3,432		

S|C|P

APPENDIX G

Junctions 9

PICADY 9 - Priority Intersection Module

Version: 9.5.2.1013

For sales and distribution information, program advice and maintenance, contact TRL:
+44 (0)1344 379777 software@trl.co.uk www.trlsoftware.co.uk

Filename: Site Access A and Holywell Road Junction SURVEY UPDATED.j9
Path: Z:\Job Library\2023\230836 - Green Lane, Ewloe\Traffic Data\Junctions Assessments\PICADY\Northern Site Access along Holywell Rd
Report generation date: 04/03/2024 10:22:02

Summary of junction performance

	AM					PM				
	Set ID	Queue (PCU)	Delay (s)	RFC	LOS	Set ID	Queue (PCU)	Delay (s)	RFC	LOS
	Assess 2025									
Stream B-C	D1	0.0	6.88	0.01	A	D2	0.0	7.35	0.00	A
Stream B-A		0.3	12.00	0.23	B		0.1	11.80	0.11	B
Stream C-B		0.0	5.63	0.00	A		0.0	6.40	0.01	A
	Assess 2035									
Stream B-C	D3	0.0	6.94	0.01	A	D4	0.0	7.45	0.00	A
Stream B-A		0.3	12.29	0.23	B		0.1	12.13	0.11	B
Stream C-B		0.0	5.67	0.00	A		0.0	6.48	0.01	A

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

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

File summary

File Description

Title	Site Access/Holywell Road
Location	Ewloe
Site number	
Date	03/10/2018
Version	
Status	(new file)
Identifier	
Client	
Jobnumber	18415
Enumerator	SCP\vicky.lomas
Description	

Units

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

Analysis Options

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

Demand Set Summary

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D1	Assess 2025	AM	ONE HOUR	07:30	09:00	15	✓
D2	Assess 2025	PM	ONE HOUR	16:45	18:15	15	✓
D3	Assess 2035	AM	ONE HOUR	07:30	09:00	15	✓
D4	Assess 2035	PM	ONE HOUR	16:45	18:15	15	✓

Analysis Set Details

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

Assess 2025, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Minor arm flare	Arm B - Minor arm geometry	Is flare very short? Estimated flare length is zero but has been increased to 1 because a zero flare length is not allowed.
Warning	Vehicle Mix		HV% is zero for all movements / time segments. Vehicle Mix matrix should be completed whether working in PCUs or Vehs. If HV% at the junction is genuinely zero, please ignore this warning.

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way		1.26	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Name	Description	Arm type
A	Holywell Road East		Major
B	Site A Access		Minor
C	Holywell Road West		Major

Major Arm Geometry

Arm	Width of carriageway (m)	Has kerbed central reserve	Has right turn bay	Width for right turn (m)	Visibility for right turn (m)	Blocks?	Blocking queue (PCU)
C	9.20		✓	3.00	151.0		-

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

Minor Arm Geometry

Arm	Minor arm type	Width at give-way (m)	Width at 5m (m)	Width at 10m (m)	Width at 15m (m)	Width at 20m (m)	Estimate flare length	Flare length (PCU)	Visibility to left (m)	Visibility to right (m)
B	One lane plus flare	7.90	2.80	2.80	2.80	2.80	✓	1.00	24	20

Slope / Intercept / Capacity

Priority Intersection Slopes and Intercepts

Stream	Intercept (PCU/hr)	Slope for A-B	Slope for A-C	Slope for C-A	Slope for C-B
B-A	507	0.079	0.201	0.126	0.287
B-C	630	0.083	0.210	-	-
C-B	719	0.240	0.240	-	-

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

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

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

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D1	Assess 2025	AM	ONE HOUR	07:30	09:00	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		ONE HOUR	✓	294	100.000
B		ONE HOUR	✓	84	100.000
C		ONE HOUR	✓	416	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		A	B	C
From	A	0	32	262
	B	80	0	4
	C	414	2	0

Vehicle Mix

Heavy Vehicle Percentages

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

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
B-C	0.01	6.88	0.0	A	4	6
B-A	0.23	12.00	0.3	B	73	110
C-A					380	570
C-B	0.00	5.63	0.0	A	2	3
A-B					29	44
A-C					240	361

Main Results for each time segment

07:30 - 07:45

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	3	0.75	564	0.005	3	0.0	0.0	6.412	A
B-A	60	15	426	0.142	60	0.0	0.2	9.820	A
C-A	312	78			312				
C-B	2	0.38	666	0.002	1	0.0	0.0	5.417	A
A-B	24	6			24				
A-C	197	49			197				

07:45 - 08:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	4	0.90	550	0.007	4	0.0	0.0	6.591	A
B-A	72	18	410	0.175	72	0.2	0.2	10.643	B
C-A	372	93			372				
C-B	2	0.45	656	0.003	2	0.0	0.0	5.505	A
A-B	29	7			29				
A-C	236	59			236				

08:00 - 08:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	4	1	528	0.008	4	0.0	0.0	6.875	A
B-A	88	22	388	0.227	88	0.2	0.3	11.978	B
C-A	456	114			456				
C-B	2	0.55	641	0.003	2	0.0	0.0	5.631	A
A-B	35	9			35				
A-C	288	72			288				

08:15 - 08:30

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	4	1	528	0.008	4	0.0	0.0	6.878	A
B-A	88	22	388	0.227	88	0.3	0.3	12.003	B
C-A	456	114			456				
C-B	2	0.55	641	0.003	2	0.0	0.0	5.631	A
A-B	35	9			35				
A-C	288	72			288				

08:30 - 08:45

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	4	0.90	549	0.007	4	0.0	0.0	6.597	A
B-A	72	18	410	0.175	72	0.3	0.2	10.675	B
C-A	372	93			372				
C-B	2	0.45	656	0.003	2	0.0	0.0	5.505	A
A-B	29	7			29				
A-C	236	59			236				

08:45 - 09:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	3	0.75	564	0.005	3	0.0	0.0	6.418	A
B-A	60	15	426	0.142	60	0.2	0.2	9.865	A
C-A	312	78			312				
C-B	2	0.38	666	0.002	2	0.0	0.0	5.419	A
A-B	24	6			24				
A-C	197	49			197				

Assess 2025, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Minor arm flare	Arm B - Minor arm geometry	Is flare very short? Estimated flare length is zero but has been increased to 1 because a zero flare length is not allowed.
Warning	Vehicle Mix		HV% is zero for all movements / time segments. Vehicle Mix matrix should be completed whether working in PCUs or Vehs. If HV% at the junction is genuinely zero, please ignore this warning.

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way		0.48	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D2	Assess 2025	PM	ONE HOUR	16:45	18:15	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		ONE HOUR	✓	577	100.000
B		ONE HOUR	✓	37	100.000
C		ONE HOUR	✓	323	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		A	B	C
From	A	0	75	502
	B	35	0	2
	C	319	4	0

Vehicle Mix

Heavy Vehicle Percentages

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

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
B-C	0.00	7.35	0.0	A	2	3
B-A	0.11	11.80	0.1	B	32	48
C-A					293	439
C-B	0.01	6.40	0.0	A	4	6
A-B					69	103
A-C					461	691

Main Results for each time segment

16:45 - 17:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	2	0.38	537	0.003	1	0.0	0.0	6.724	A
B-A	26	7	395	0.067	26	0.0	0.1	9.742	A
C-A	240	60			240				
C-B	3	0.75	615	0.005	3	0.0	0.0	5.883	A
A-B	56	14			56				
A-C	378	94			378				

17:00 - 17:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	2	0.45	518	0.003	2	0.0	0.0	6.971	A
B-A	31	8	374	0.084	31	0.1	0.1	10.515	B
C-A	287	72			287				
C-B	4	0.90	595	0.006	4	0.0	0.0	6.090	A
A-B	67	17			67				
A-C	451	113			451				

17:15 - 17:30

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	2	0.55	492	0.004	2	0.0	0.0	7.347	A
B-A	39	10	344	0.112	38	0.1	0.1	11.786	B
C-A	351	88			351				
C-B	4	1	567	0.008	4	0.0	0.0	6.402	A
A-B	83	21			83				
A-C	553	138			553				

17:30 - 17:45

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	2	0.55	492	0.004	2	0.0	0.0	7.348	A
B-A	39	10	344	0.112	39	0.1	0.1	11.796	B
C-A	351	88			351				
C-B	4	1	567	0.008	4	0.0	0.0	6.402	A
A-B	83	21			83				
A-C	553	138			553				

17:45 - 18:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	2	0.45	518	0.003	2	0.0	0.0	6.975	A
B-A	31	8	374	0.084	32	0.1	0.1	10.529	B
C-A	287	72			287				
C-B	4	0.90	595	0.006	4	0.0	0.0	6.090	A
A-B	67	17			67				
A-C	451	113			451				

18:00 - 18:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	2	0.38	537	0.003	2	0.0	0.0	6.729	A
B-A	26	7	395	0.067	26	0.1	0.1	9.760	A
C-A	240	60			240				
C-B	3	0.75	615	0.005	3	0.0	0.0	5.885	A
A-B	56	14			56				
A-C	378	94			378				

Assess 2035, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Minor arm flare	Arm B - Minor arm geometry	Is flare very short? Estimated flare length is zero but has been increased to 1 because a zero flare length is not allowed.
Warning	Vehicle Mix		HV% is zero for all movements / time segments. Vehicle Mix matrix should be completed whether working in PCUs or Vehs. If HV% at the junction is genuinely zero, please ignore this warning.

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way		1.23	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D3	Assess 2035	AM	ONE HOUR	07:30	09:00	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		ONE HOUR	✓	310	100.000
B		ONE HOUR	✓	84	100.000
C		ONE HOUR	✓	440	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		A	B	C
From	A	0	32	278
	B	80	0	4
	C	438	2	0

Vehicle Mix

Heavy Vehicle Percentages

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

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
B-C	0.01	6.94	0.0	A	4	6
B-A	0.23	12.29	0.3	B	73	110
C-A					402	603
C-B	0.00	5.67	0.0	A	2	3
A-B					29	44
A-C					255	383

Main Results for each time segment

07:30 - 07:45

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	3	0.75	562	0.005	3	0.0	0.0	6.443	A
B-A	60	15	421	0.143	60	0.0	0.2	9.945	A
C-A	330	82			330				
C-B	2	0.38	663	0.002	1	0.0	0.0	5.441	A
A-B	24	6			24				
A-C	209	52			209				

07:45 - 08:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	4	0.90	546	0.007	4	0.0	0.0	6.632	A
B-A	72	18	404	0.178	72	0.2	0.2	10.821	B
C-A	394	98			394				
C-B	2	0.45	652	0.003	2	0.0	0.0	5.534	A
A-B	29	7			29				
A-C	250	62			250				

08:00 - 08:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	4	1	524	0.008	4	0.0	0.0	6.933	A
B-A	88	22	381	0.231	88	0.2	0.3	12.259	B
C-A	482	121			482				
C-B	2	0.55	637	0.003	2	0.0	0.0	5.669	A
A-B	35	9			35				
A-C	306	77			306				

08:15 - 08:30

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	4	1	523	0.008	4	0.0	0.0	6.936	A
B-A	88	22	381	0.231	88	0.3	0.3	12.285	B
C-A	482	121			482				
C-B	2	0.55	637	0.003	2	0.0	0.0	5.669	A
A-B	35	9			35				
A-C	306	77			306				

08:30 - 08:45

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	4	0.90	546	0.007	4	0.0	0.0	6.638	A
B-A	72	18	404	0.178	72	0.3	0.2	10.856	B
C-A	394	98			394				
C-B	2	0.45	652	0.003	2	0.0	0.0	5.534	A
A-B	29	7			29				
A-C	250	62			250				

08:45 - 09:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	3	0.75	561	0.005	3	0.0	0.0	6.447	A
B-A	60	15	421	0.143	60	0.2	0.2	9.994	A
C-A	330	82			330				
C-B	2	0.38	663	0.002	2	0.0	0.0	5.443	A
A-B	24	6			24				
A-C	209	52			209				

Assess 2035, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Minor arm flare	Arm B - Minor arm geometry	Is flare very short? Estimated flare length is zero but has been increased to 1 because a zero flare length is not allowed.
Warning	Vehicle Mix		HV% is zero for all movements / time segments. Vehicle Mix matrix should be completed whether working in PCUs or Vehs. If HV% at the junction is genuinely zero, please ignore this warning.

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way		0.47	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D4	Assess 2035	PM	ONE HOUR	16:45	18:15	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		ONE HOUR	✓	604	100.000
B		ONE HOUR	✓	37	100.000
C		ONE HOUR	✓	341	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		A	B	C
From	A	0	75	529
	B	35	0	2
	C	337	4	0

Vehicle Mix

Heavy Vehicle Percentages

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

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
B-C	0.00	7.45	0.0	A	2	3
B-A	0.11	12.13	0.1	B	32	48
C-A					309	464
C-B	0.01	6.48	0.0	A	4	6
A-B					69	103
A-C					485	728

Main Results for each time segment

16:45 - 17:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	2	0.38	532	0.003	1	0.0	0.0	6.779	A
B-A	26	7	390	0.068	26	0.0	0.1	9.904	A
C-A	254	63			254				
C-B	3	0.75	610	0.005	3	0.0	0.0	5.930	A
A-B	56	14			56				
A-C	398	100			398				

17:00 - 17:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	2	0.45	513	0.004	2	0.0	0.0	7.042	A
B-A	31	8	367	0.086	31	0.1	0.1	10.732	B
C-A	303	76			303				
C-B	4	0.90	589	0.006	4	0.0	0.0	6.151	A
A-B	67	17			67				
A-C	476	119			476				

17:15 - 17:30

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	2	0.55	486	0.005	2	0.0	0.0	7.446	A
B-A	39	10	335	0.115	38	0.1	0.1	12.123	B
C-A	371	93			371				
C-B	4	1	560	0.008	4	0.0	0.0	6.484	A
A-B	83	21			83				
A-C	582	146			582				

17:30 - 17:45

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	2	0.55	486	0.005	2	0.0	0.0	7.447	A
B-A	39	10	335	0.115	39	0.1	0.1	12.133	B
C-A	371	93			371				
C-B	4	1	560	0.008	4	0.0	0.0	6.484	A
A-B	83	21			83				
A-C	582	146			582				

17:45 - 18:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	2	0.45	513	0.004	2	0.0	0.0	7.043	A
B-A	31	8	367	0.086	32	0.1	0.1	10.745	B
C-A	303	76			303				
C-B	4	0.90	589	0.006	4	0.0	0.0	6.151	A
A-B	67	17			67				
A-C	476	119			476				

18:00 - 18:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	2	0.38	532	0.003	2	0.0	0.0	6.784	A
B-A	26	7	390	0.068	26	0.1	0.1	9.916	A
C-A	254	63			254				
C-B	3	0.75	610	0.005	3	0.0	0.0	5.930	A
A-B	56	14			56				
A-C	398	100			398				

S|C|P

APPENDIX H

Junctions 9

PICADY 9 - Priority Intersection Module

Version: 9.5.2.1013

For sales and distribution information, program advice and maintenance, contact TRL:
+44 (0)1344 379777 software@trl.co.uk www.trlsoftware.co.uk

Filename: Southern Site Access along Green Ln - Copy.j9
Path: Z:\Job Library\2023\230836 - Green Lane, Ewloe\Traffic Data\Junctions Assessments\PICADY\Southern Site Access along Green Ln
Report generation date: 04/03/2024 10:32:21

Summary of junction performance

	AM					PM				
	Set ID	Queue (PCU)	Delay (s)	RFC	LOS	Set ID	Queue (PCU)	Delay (s)	RFC	LOS
	Assess 2025									
Stream B-C	D3	0.1	5.95	0.06	A	D4	0.0	5.72	0.02	A
Stream B-A		0.0	0.00	0.00	A		0.0	0.00	0.00	A
Stream C-AB		0.0	5.65	0.02	A		0.1	5.83	0.05	A
	Assess 2035									
Stream B-C	D5	0.1	5.96	0.06	A	D6	0.0	5.72	0.02	A
Stream B-A		0.0	0.00	0.00	A		0.0	0.00	0.00	A
Stream C-AB		0.0	5.65	0.02	A		0.1	5.83	0.05	A

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

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

File summary

File Description

Title	Green Lane/Proposed Site Access
Location	Ewloe
Site number	
Date	15/10/2018
Version	
Status	(new file)
Identifier	
Client	
Jobnumber	18415
Enumerator	SCP\vicky.lomas
Description	

Units

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

Analysis Options

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

Demand Set Summary

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D3	Assess 2025	AM	ONE HOUR	07:30	09:00	15	✓
D4	Assess 2025	PM	ONE HOUR	16:45	18:15	15	✓
D5	Assess 2035	AM	ONE HOUR	07:30	09:00	15	✓
D6	Assess 2035	PM	ONE HOUR	16:45	18:15	15	✓

Analysis Set Details

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

Assess 2025, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Major arm width	Arm C - Major arm geometry	For two-way major roads, please interpret results with caution if the total major carriageway width is less than 6m.
Warning	Vehicle Mix		HV% is zero for all movements / time segments. Vehicle Mix matrix should be completed whether working in PCUs or Vehs. If HV% at the junction is genuinely zero, please ignore this warning.

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way		2.87	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Name	Description	Arm type
A	Green Lane North		Major
B	Proposed Site Access		Minor
C	Green Lane South		Major

Major Arm Geometry

Arm	Width of carriageway (m)	Has kerbed central reserve	Has right turn bay	Visibility for right turn (m)	Blocks?	Blocking queue (PCU)
C	5.50			122.0	✓	0.00

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

Minor Arm Geometry

Arm	Minor arm type	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	7.00	2.75	2.75	2.75	2.75		1.00	17	19

Slope / Intercept / Capacity

Priority Intersection Slopes and Intercepts

Stream	Intercept (PCU/hr)	Slope for A-B	Slope for A-C	Slope for C-A	Slope for C-B
B-A	443	0.083	0.209	0.131	0.298
B-C	649	0.102	0.257	-	-
C-B	645	0.255	0.255	-	-

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

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

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

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D3	Assess 2025	AM	ONE HOUR	07:30	09:00	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		ONE HOUR	✓	28	100.000
B		ONE HOUR	✓	33	100.000
C		ONE HOUR	✓	34	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		A	B	C
From	A	0	0	28
	B	0	0	33
	C	21	13	0

Vehicle Mix

Heavy Vehicle Percentages

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

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
B-C	0.06	5.95	0.1	A	30	45
B-A	0.00	0.00	0.0	A	0	0
C-AB	0.02	5.65	0.0	A	12	18
C-A					19	28
A-B					0	0
A-C					26	39

Main Results for each time segment

07:30 - 07:45

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	25	6	643	0.039	25	0.0	0.0	5.817	A
B-A	0	0	434	0.000	0	0.0	0.0	0.000	A
C-AB	10	3	649	0.015	10	0.0	0.0	5.629	A
C-A	16	4			16				
A-B	0	0			0				
A-C	21	5			21				

07:45 - 08:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	30	7	642	0.046	30	0.0	0.0	5.875	A
B-A	0	0	432	0.000	0	0.0	0.0	0.000	A
C-AB	12	3	650	0.019	12	0.0	0.0	5.639	A
C-A	19	5			19				
A-B	0	0			0				
A-C	25	6			25				

08:00 - 08:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	36	9	641	0.057	36	0.0	0.1	5.953	A
B-A	0	0	430	0.000	0	0.0	0.0	0.000	A
C-AB	15	4	652	0.023	15	0.0	0.0	5.652	A
C-A	23	6			23				
A-B	0	0			0				
A-C	31	8			31				

08:15 - 08:30

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	36	9	641	0.057	36	0.1	0.1	5.953	A
B-A	0	0	430	0.000	0	0.0	0.0	0.000	A
C-AB	15	4	652	0.023	15	0.0	0.0	5.654	A
C-A	23	6			23				
A-B	0	0			0				
A-C	31	8			31				

08:30 - 08:45

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	30	7	642	0.046	30	0.1	0.0	5.878	A
B-A	0	0	432	0.000	0	0.0	0.0	0.000	A
C-AB	12	3	650	0.019	12	0.0	0.0	5.641	A
C-A	19	5			19				
A-B	0	0			0				
A-C	25	6			25				

08:45 - 09:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	25	6	643	0.039	25	0.0	0.0	5.819	A
B-A	0	0	434	0.000	0	0.0	0.0	0.000	A
C-AB	10	3	649	0.015	10	0.0	0.0	5.632	A
C-A	16	4			16				
A-B	0	0			0				
A-C	21	5			21				

Assess 2025, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Major arm width	Arm C - Major arm geometry	For two-way major roads, please interpret results with caution if the total major carriageway width is less than 6m.
Warning	Vehicle Mix		HV% is zero for all movements / time segments. Vehicle Mix matrix should be completed whether working in PCUs or Vehs. If HV% at the junction is genuinely zero, please ignore this warning.

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way		3.59	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D4	Assess 2025	PM	ONE HOUR	16:45	18:15	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		ONE HOUR	✓	13	100.000
B		ONE HOUR	✓	14	100.000
C		ONE HOUR	✓	45	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		A	B	C
From	A	0	0	13
	B	0	0	14
	C	15	30	0

Vehicle Mix

Heavy Vehicle Percentages

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

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
B-C	0.02	5.72	0.0	A	13	19
B-A	0.00	0.00	0.0	A	0	0
C-AB	0.05	5.83	0.1	A	28	42
C-A					13	20
A-B					0	0
A-C					12	18

Main Results for each time segment

16:45 - 17:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	11	3	646	0.016	10	0.0	0.0	5.661	A
B-A	0	0	433	0.000	0	0.0	0.0	0.000	A
C-AB	23	6	649	0.035	23	0.0	0.0	5.744	A
C-A	11	3			11				
A-B	0	0			0				
A-C	10	2			10				

17:00 - 17:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	13	3	646	0.019	13	0.0	0.0	5.684	A
B-A	0	0	431	0.000	0	0.0	0.0	0.000	A
C-AB	28	7	650	0.042	28	0.0	0.0	5.780	A
C-A	13	3			13				
A-B	0	0			0				
A-C	12	3			12				

17:15 - 17:30

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	15	4	645	0.024	15	0.0	0.0	5.716	A
B-A	0	0	428	0.000	0	0.0	0.0	0.000	A
C-AB	34	8	652	0.052	34	0.0	0.1	5.827	A
C-A	16	4			16				
A-B	0	0			0				
A-C	14	4			14				

17:30 - 17:45

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	15	4	645	0.024	15	0.0	0.0	5.716	A
B-A	0	0	428	0.000	0	0.0	0.0	0.000	A
C-AB	34	8	652	0.052	34	0.1	0.1	5.829	A
C-A	16	4			16				
A-B	0	0			0				
A-C	14	4			14				

17:45 - 18:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	13	3	646	0.019	13	0.0	0.0	5.687	A
B-A	0	0	431	0.000	0	0.0	0.0	0.000	A
C-AB	28	7	650	0.042	28	0.1	0.0	5.780	A
C-A	13	3			13				
A-B	0	0			0				
A-C	12	3			12				

18:00 - 18:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	11	3	646	0.016	11	0.0	0.0	5.664	A
B-A	0	0	433	0.000	0	0.0	0.0	0.000	A
C-AB	23	6	649	0.035	23	0.0	0.0	5.747	A
C-A	11	3			11				
A-B	0	0			0				
A-C	10	2			10				

Assess 2035, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Major arm width	Arm C - Major arm geometry	For two-way major roads, please interpret results with caution if the total major carriageway width is less than 6m.
Warning	Vehicle Mix		HV% is zero for all movements / time segments. Vehicle Mix matrix should be completed whether working in PCUs or Vehs. If HV% at the junction is genuinely zero, please ignore this warning.

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way		2.78	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D5	Assess 2035	AM	ONE HOUR	07:30	09:00	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		ONE HOUR	✓	30	100.000
B		ONE HOUR	✓	33	100.000
C		ONE HOUR	✓	35	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		A	B	C
From	A	0	0	30
	B	0	0	33
	C	22	13	0

Vehicle Mix

Heavy Vehicle Percentages

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

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
B-C	0.06	5.96	0.1	A	30	45
B-A	0.00	0.00	0.0	A	0	0
C-AB	0.02	5.65	0.0	A	12	18
C-A					20	30
A-B					0	0
A-C					28	41

Main Results for each time segment

07:30 - 07:45

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	25	6	643	0.039	25	0.0	0.0	5.820	A
B-A	0	0	434	0.000	0	0.0	0.0	0.000	A
C-AB	10	3	650	0.015	10	0.0	0.0	5.628	A
C-A	16	4			16				
A-B	0	0			0				
A-C	23	6			23				

07:45 - 08:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	30	7	642	0.046	30	0.0	0.0	5.879	A
B-A	0	0	432	0.000	0	0.0	0.0	0.000	A
C-AB	12	3	651	0.019	12	0.0	0.0	5.638	A
C-A	19	5			19				
A-B	0	0			0				
A-C	27	7			27				

08:00 - 08:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	36	9	640	0.057	36	0.0	0.1	5.959	A
B-A	0	0	429	0.000	0	0.0	0.0	0.000	A
C-AB	15	4	652	0.023	15	0.0	0.0	5.651	A
C-A	24	6			24				
A-B	0	0			0				
A-C	33	8			33				

08:15 - 08:30

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	36	9	640	0.057	36	0.1	0.1	5.959	A
B-A	0	0	429	0.000	0	0.0	0.0	0.000	A
C-AB	15	4	652	0.023	15	0.0	0.0	5.651	A
C-A	24	6			24				
A-B	0	0			0				
A-C	33	8			33				

08:30 - 08:45

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	30	7	642	0.046	30	0.1	0.0	5.882	A
B-A	0	0	432	0.000	0	0.0	0.0	0.000	A
C-AB	12	3	651	0.019	12	0.0	0.0	5.640	A
C-A	19	5			19				
A-B	0	0			0				
A-C	27	7			27				

08:45 - 09:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	25	6	643	0.039	25	0.0	0.0	5.823	A
B-A	0	0	434	0.000	0	0.0	0.0	0.000	A
C-AB	10	3	650	0.015	10	0.0	0.0	5.629	A
C-A	16	4			16				
A-B	0	0			0				
A-C	23	6			23				

Assess 2035, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Major arm width	Arm C - Major arm geometry	For two-way major roads, please interpret results with caution if the total major carriageway width is less than 6m.
Warning	Vehicle Mix		HV% is zero for all movements / time segments. Vehicle Mix matrix should be completed whether working in PCUs or Vehs. If HV% at the junction is genuinely zero, please ignore this warning.

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way		3.50	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D6	Assess 2035	PM	ONE HOUR	16:45	18:15	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		ONE HOUR	✓	14	100.000
B		ONE HOUR	✓	14	100.000
C		ONE HOUR	✓	46	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		A	B	C
From	A	0	0	14
	B	0	0	14
	C	16	30	0

Vehicle Mix

Heavy Vehicle Percentages

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

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
B-C	0.02	5.72	0.0	A	13	19
B-A	0.00	0.00	0.0	A	0	0
C-AB	0.05	5.83	0.1	A	28	42
C-A					14	21
A-B					0	0
A-C					13	19

Main Results for each time segment

16:45 - 17:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	11	3	646	0.016	10	0.0	0.0	5.663	A
B-A	0	0	433	0.000	0	0.0	0.0	0.000	A
C-AB	23	6	650	0.035	23	0.0	0.0	5.741	A
C-A	12	3			12				
A-B	0	0			0				
A-C	11	3			11				

17:00 - 17:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	13	3	646	0.019	13	0.0	0.0	5.686	A
B-A	0	0	431	0.000	0	0.0	0.0	0.000	A
C-AB	28	7	651	0.042	28	0.0	0.0	5.777	A
C-A	14	3			14				
A-B	0	0			0				
A-C	13	3			13				

17:15 - 17:30

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	15	4	645	0.024	15	0.0	0.0	5.718	A
B-A	0	0	428	0.000	0	0.0	0.0	0.000	A
C-AB	34	8	652	0.052	34	0.0	0.1	5.823	A
C-A	17	4			17				
A-B	0	0			0				
A-C	15	4			15				

17:30 - 17:45

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	15	4	645	0.024	15	0.0	0.0	5.718	A
B-A	0	0	428	0.000	0	0.0	0.0	0.000	A
C-AB	34	8	652	0.052	34	0.1	0.1	5.826	A
C-A	17	4			17				
A-B	0	0			0				
A-C	15	4			15				

17:45 - 18:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	13	3	646	0.019	13	0.0	0.0	5.686	A
B-A	0	0	431	0.000	0	0.0	0.0	0.000	A
C-AB	28	7	651	0.042	28	0.1	0.0	5.780	A
C-A	14	3			14				
A-B	0	0			0				
A-C	13	3			13				

18:00 - 18:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	11	3	646	0.016	11	0.0	0.0	5.666	A
B-A	0	0	433	0.000	0	0.0	0.0	0.000	A
C-AB	23	6	650	0.035	23	0.0	0.0	5.747	A
C-A	12	3			12				
A-B	0	0			0				
A-C	11	3			11				

S|C|P

APPENDIX I

Junctions 9

PICADY 9 - Priority Intersection Module

Version: 9.5.2.1013

For sales and distribution information, program advice and maintenance, contact TRL:
+44 (0)1344 379777 software@trl.co.uk www.trlsoftware.co.uk

Filename: Existing Layout - Copy.j9
Path: Z:\Job Library\2023\230836 - Green Lane, Ewloe\Traffic Data\Junctions Assessments\PICADY\Old Mold Road . Holywell Road
Report generation date: 04/03/2024 10:38:49

Summary of junction performance

	AM					PM				
	Set ID	Queue (PCU)	Delay (s)	RFC	LOS	Set ID	Queue (PCU)	Delay (s)	RFC	LOS
	Base 2025									
Stream B-C	D1	3.4	34.55	0.79	D	D2	1.1	14.19	0.53	B
Stream B-A		0.9	41.93	0.49	E		0.5	29.21	0.35	D
Stream C-B		0.7	12.87	0.42	B		5.9	48.53	0.88	E
	Base 2035									
Stream B-C	D3	5.8	56.99	0.88	F	D4	1.4	16.98	0.59	C
Stream B-A		1.9	86.87	0.70	F		0.7	37.79	0.42	E
Stream C-B		0.8	13.90	0.45	B		9.0	70.36	0.93	F
	Assess 2025									
Stream B-C	D5	18.6	141.74	1.04	F	D6	1.8	20.76	0.65	C
Stream B-A		5.5	247.41	1.01	F		0.9	51.12	0.50	F
Stream C-B		1.0	15.08	0.50	C		21.3	138.65	1.03	F
	Assess 2035									
Stream B-C	D7	32.3	227.24	1.13	F	D8	3.0	34.19	0.78	D
Stream B-A		7.6	336.96	1.09	F		1.7	91.55	0.67	F
Stream C-B		1.1	16.42	0.53	C		33.9	202.93	1.09	F

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

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

File summary

File Description

Title	Holywell Road/Old Mold Road Junction
Location	Ewloe
Site number	
Date	02/10/2018
Version	
Status	(new file)
Identifier	
Client	
Jobnumber	18415
Enumerator	SCP\vicky.lomas
Description	

Units

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

Analysis Options

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

Demand Set Summary

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D1	Base 2025	AM	ONE HOUR	07:30	09:00	15	✓
D2	Base 2025	PM	ONE HOUR	16:45	18:15	15	✓
D3	Base 2035	AM	ONE HOUR	07:30	09:00	15	✓
D4	Base 2035	PM	ONE HOUR	16:45	18:15	15	✓
D5	Assess 2025	AM	ONE HOUR	07:30	09:00	15	✓
D6	Assess 2025	PM	ONE HOUR	16:45	18:15	15	✓
D7	Assess 2035	AM	ONE HOUR	07:30	09:00	15	✓
D8	Assess 2035	PM	ONE HOUR	16:45	18:15	15	✓

Analysis Set Details

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

Base 2025, AM

Data Errors and Warnings

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

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way		10.85	B

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Name	Description	Arm type
A	Old Mold Road West		Major
B	Holywell Road		Minor
C	Old Mold Road East		Major

Major Arm Geometry

Arm	Width of carriageway (m)	Has kerbed central reserve	Has right turn bay	Visibility for right turn (m)	Blocks?	Blocking queue (PCU)
C	9.00			100.0		-

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

Minor Arm Geometry

Arm	Minor arm type	Width at give-way (m)	Width at 5m (m)	Width at 10m (m)	Width at 15m (m)	Width at 20m (m)	Estimate flare length	Flare length (PCU)	Visibility to left (m)	Visibility to right (m)
B	One lane plus flare	10.00	4.80	3.70	3.50	3.40	✓	1.00	80	40

Slope / Intercept / Capacity

Priority Intersection Slopes and Intercepts

Stream	Intercept (PCU/hr)	Slope for A-B	Slope for A-C	Slope for C-A	Slope for C-B
B-A	519	0.082	0.208	0.131	0.297
B-C	708	0.094	0.239	-	-
C-B	632	0.213	0.213	-	-

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

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

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

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D1	Base 2025	AM	ONE HOUR	07:30	09:00	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		ONE HOUR	✓	648	100.000
B		ONE HOUR	✓	414	100.000
C		ONE HOUR	✓	522	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		A	B	C
From	A	0	80	568
	B	73	0	341
	C	340	182	0

Vehicle Mix

Heavy Vehicle Percentages

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

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
B-C	0.79	34.55	3.4	D	313	469
B-A	0.49	41.93	0.9	E	67	100
C-A					312	468
C-B	0.42	12.87	0.7	B	167	251
A-B					73	110
A-C					521	782

Main Results for each time segment

07:30 - 07:45

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	257	64	572	0.449	254	0.0	0.8	11.212	B
B-A	55	14	324	0.170	54	0.0	0.2	13.301	B
C-A	256	64			256				
C-B	137	34	528	0.259	136	0.0	0.3	9.143	A
A-B	60	15			60				
A-C	428	107			428				

07:45 - 08:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	307	77	538	0.570	305	0.8	1.3	15.326	C
B-A	66	16	268	0.245	65	0.2	0.3	17.711	C
C-A	306	76			306				
C-B	164	41	508	0.322	163	0.3	0.5	10.428	B
A-B	72	18			72				
A-C	511	128			511				

08:00 - 08:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	375	94	479	0.783	368	1.3	3.1	30.460	D
B-A	80	20	172	0.467	78	0.3	0.8	37.620	E
C-A	374	94			374				
C-B	200	50	480	0.417	199	0.5	0.7	12.788	B
A-B	88	22			88				
A-C	625	156			625				

08:15 - 08:30

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	375	94	476	0.788	374	3.1	3.4	34.545	D
B-A	80	20	165	0.486	80	0.8	0.9	41.926	E
C-A	374	94			374				
C-B	200	50	480	0.417	200	0.7	0.7	12.869	B
A-B	88	22			88				
A-C	625	156			625				

08:30 - 08:45

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	307	77	535	0.573	315	3.4	1.4	16.907	C
B-A	66	16	262	0.251	68	0.9	0.3	18.739	C
C-A	306	76			306				
C-B	164	41	508	0.322	165	0.7	0.5	10.513	B
A-B	72	18			72				
A-C	511	128			511				

08:45 - 09:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	257	64	570	0.450	259	1.4	0.8	11.637	B
B-A	55	14	322	0.171	55	0.3	0.2	13.554	B
C-A	256	64			256				
C-B	137	34	528	0.259	138	0.5	0.4	9.232	A
A-B	60	15			60				
A-C	428	107			428				

Base 2025, PM

Data Errors and Warnings

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

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way		15.55	C

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D2	Base 2025	PM	ONE HOUR	16:45	18:15	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		ONE HOUR	✓	407	100.000
B		ONE HOUR	✓	318	100.000
C		ONE HOUR	✓	955	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		A	B	C
From	A	0	74	333
	B	59	0	259
	C	528	427	0

Vehicle Mix

Heavy Vehicle Percentages

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

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
B-C	0.53	14.19	1.1	B	238	356
B-A	0.35	29.21	0.5	D	54	81
C-A					485	727
C-B	0.88	48.53	5.9	E	392	588
A-B					68	102
A-C					306	458

Main Results for each time segment

16:45 - 17:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	195	49	617	0.316	193	0.0	0.5	8.465	A
B-A	44	11	307	0.145	44	0.0	0.2	13.637	B
C-A	398	99			398				
C-B	321	80	567	0.567	316	0.0	1.3	14.120	B
A-B	56	14			56				
A-C	251	63			251				

17:00 - 17:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	233	58	591	0.394	232	0.5	0.6	10.006	B
B-A	53	13	260	0.204	53	0.2	0.3	17.356	C
C-A	475	119			475				
C-B	384	96	554	0.693	380	1.3	2.1	20.333	C
A-B	67	17			67				
A-C	299	75			299				

17:15 - 17:30

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	285	71	542	0.526	283	0.6	1.1	13.830	B
B-A	65	16	192	0.338	64	0.3	0.5	27.926	D
C-A	581	145			581				
C-B	470	118	536	0.876	458	2.1	5.3	40.250	E
A-B	81	20			81				
A-C	367	92			367				

17:30 - 17:45

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	285	71	539	0.530	285	1.1	1.1	14.187	B
B-A	65	16	188	0.346	65	0.5	0.5	29.215	D
C-A	581	145			581				
C-B	470	118	536	0.876	468	5.3	5.9	48.527	E
A-B	81	20			81				
A-C	367	92			367				

17:45 - 18:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	233	58	589	0.396	235	1.1	0.7	10.218	B
B-A	53	13	254	0.209	54	0.5	0.3	18.085	C
C-A	475	119			475				
C-B	384	96	554	0.693	398	5.9	2.4	24.764	C
A-B	67	17			67				
A-C	299	75			299				

18:00 - 18:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	195	49	616	0.317	196	0.7	0.5	8.594	A
B-A	44	11	304	0.146	45	0.3	0.2	13.908	B
C-A	398	99			398				
C-B	321	80	567	0.567	326	2.4	1.4	15.191	C
A-B	56	14			56				
A-C	251	63			251				

Base 2035, AM

Data Errors and Warnings

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

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way		17.85	C

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D3	Base 2035	AM	ONE HOUR	07:30	09:00	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		ONE HOUR	✓	685	100.000
B		ONE HOUR	✓	437	100.000
C		ONE HOUR	✓	552	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		A	B	C
From	A	0	84	601
	B	77	0	360
	C	359	193	0

Vehicle Mix

Heavy Vehicle Percentages

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

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
B-C	0.88	56.99	5.8	F	330	496
B-A	0.70	86.87	1.9	F	71	106
C-A					329	494
C-B	0.45	13.90	0.8	B	177	266
A-B					77	116
A-C					551	827

Main Results for each time segment

07:30 - 07:45

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	271	68	562	0.482	267	0.0	0.9	12.067	B
B-A	58	14	309	0.188	57	0.0	0.2	14.243	B
C-A	270	68			270				
C-B	145	36	522	0.278	144	0.0	0.4	9.479	A
A-B	63	16			63				
A-C	452	113			452				

07:45 - 08:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	324	81	524	0.617	321	0.9	1.5	17.486	C
B-A	69	17	246	0.281	69	0.2	0.4	20.205	C
C-A	323	81			323				
C-B	174	43	501	0.346	173	0.4	0.5	10.959	B
A-B	76	19			76				
A-C	540	135			540				

08:00 - 08:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	396	99	457	0.868	383	1.5	4.8	43.008	E
B-A	85	21	136	0.622	81	0.4	1.4	61.094	F
C-A	395	99			395				
C-B	212	53	471	0.451	211	0.5	0.8	13.788	B
A-B	92	23			92				
A-C	662	165			662				

08:15 - 08:30

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	396	99	449	0.883	392	4.8	5.8	56.992	F
B-A	85	21	122	0.696	83	1.4	1.9	86.875	F
C-A	395	99			395				
C-B	212	53	471	0.451	212	0.8	0.8	13.899	B
A-B	92	23			92				
A-C	662	165			662				

08:30 - 08:45

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	324	81	517	0.626	340	5.8	1.8	21.953	C
B-A	69	17	233	0.297	75	1.9	0.4	23.533	C
C-A	323	81			323				
C-B	174	43	501	0.346	175	0.8	0.5	11.071	B
A-B	76	19			76				
A-C	540	135			540				

08:45 - 09:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	271	68	561	0.483	274	1.8	1.0	12.701	B
B-A	58	14	306	0.190	59	0.4	0.2	14.623	B
C-A	270	68			270				
C-B	145	36	522	0.278	146	0.5	0.4	9.586	A
A-B	63	16			63				
A-C	452	113			452				

Base 2035, PM

Data Errors and Warnings

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

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way		21.82	C

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D4	Base 2035	PM	ONE HOUR	16:45	18:15	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		ONE HOUR	✓	430	100.000
B		ONE HOUR	✓	336	100.000
C		ONE HOUR	✓	1007	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		A	B	C
From	A	0	78	352
	B	63	0	273
	C	557	450	0

Vehicle Mix

Heavy Vehicle Percentages

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

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
B-C	0.59	16.98	1.4	C	251	376
B-A	0.42	37.79	0.7	E	58	87
C-A					511	767
C-B	0.93	70.36	9.0	F	413	619
A-B					72	107
A-C					323	485

Main Results for each time segment

16:45 - 17:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	206	51	610	0.337	204	0.0	0.5	8.824	A
B-A	47	12	295	0.161	47	0.0	0.2	14.483	B
C-A	419	105			419				
C-B	339	85	563	0.602	333	0.0	1.4	15.299	C
A-B	59	15			59				
A-C	265	66			265				

17:00 - 17:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	245	61	580	0.423	245	0.5	0.7	10.694	B
B-A	57	14	244	0.232	56	0.2	0.3	19.157	C
C-A	501	125			501				
C-B	405	101	550	0.736	400	1.4	2.6	23.370	C
A-B	70	18			70				
A-C	316	79			316				

17:15 - 17:30

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	301	75	519	0.579	298	0.7	1.3	16.139	C
B-A	69	17	170	0.407	68	0.3	0.6	34.694	D
C-A	613	153			613				
C-B	495	124	531	0.933	476	2.6	7.4	52.267	F
A-B	86	21			86				
A-C	388	97			388				

17:30 - 17:45

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	301	75	512	0.587	300	1.3	1.4	16.984	C
B-A	69	17	164	0.423	69	0.6	0.7	37.795	E
C-A	613	153			613				
C-B	495	124	531	0.933	489	7.4	9.0	70.360	F
A-B	86	21			86				
A-C	388	97			388				

17:45 - 18:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	245	61	576	0.426	248	1.4	0.8	11.064	B
B-A	57	14	234	0.242	58	0.7	0.3	20.596	C
C-A	501	125			501				
C-B	405	101	550	0.736	428	9.0	3.1	33.904	D
A-B	70	18			70				
A-C	316	79			316				

18:00 - 18:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	206	51	608	0.338	206	0.8	0.5	8.986	A
B-A	47	12	291	0.163	48	0.3	0.2	14.870	B
C-A	419	105			419				
C-B	339	85	563	0.602	345	3.1	1.6	16.920	C
A-B	59	15			59				
A-C	265	66			265				

Assess 2025, AM

Data Errors and Warnings

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

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way		46.81	E

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D5	Assess 2025	AM	ONE HOUR	07:30	09:00	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		ONE HOUR	✓	678	100.000
B		ONE HOUR	✓	494	100.000
C		ONE HOUR	✓	564	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		A	B	C
From	A	0	82	596
	B	76	0	418
	C	351	213	0

Vehicle Mix

Heavy Vehicle Percentages

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

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
B-C	1.04	141.74	18.6	F	384	575
B-A	1.01	247.41	5.5	F	70	105
C-A					322	483
C-B	0.50	15.08	1.0	C	195	293
A-B					75	113
A-C					547	820

Main Results for each time segment

07:30 - 07:45

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	315	79	563	0.559	310	0.0	1.2	13.951	B
B-A	57	14	287	0.199	56	0.0	0.2	15.507	C
C-A	264	66			264				
C-B	160	40	523	0.306	159	0.0	0.4	9.829	A
A-B	62	15			62				
A-C	449	112			449				

07:45 - 08:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	376	94	524	0.717	371	1.2	2.3	22.920	C
B-A	68	17	209	0.326	67	0.2	0.5	25.188	D
C-A	316	79			316				
C-B	191	48	502	0.381	191	0.4	0.6	11.538	B
A-B	74	18			74				
A-C	536	134			536				

08:00 - 08:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	460	115	455	1.011	425	2.3	11.2	77.484	F
B-A	84	21	83	1.009	68	0.5	4.3	176.250	F
C-A	386	97			386				
C-B	235	59	473	0.496	233	0.6	1.0	14.919	B
A-B	90	23			90				
A-C	656	164			656				

08:15 - 08:30

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	460	115	442	1.040	431	11.2	18.6	141.744	F
B-A	84	21	88	0.949	79	4.3	5.5	247.406	F
C-A	386	97			386				
C-B	235	59	473	0.496	234	1.0	1.0	15.084	C
A-B	90	23			90				
A-C	656	164			656				

08:30 - 08:45

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	376	94	496	0.758	435	18.6	3.7	76.074	F
B-A	68	17	140	0.488	86	5.5	1.1	80.075	F
C-A	316	79			316				
C-B	191	48	502	0.381	193	1.0	0.6	11.689	B
A-B	74	18			74				
A-C	536	134			536				

08:45 - 09:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	315	79	559	0.562	324	3.7	1.3	15.889	C
B-A	57	14	279	0.205	60	1.1	0.3	16.703	C
C-A	264	66			264				
C-B	160	40	523	0.306	161	0.6	0.4	9.962	A
A-B	62	15			62				
A-C	449	112			449				

Assess 2025, PM

Data Errors and Warnings

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

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way		42.88	E

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D6	Assess 2025	PM	ONE HOUR	16:45	18:15	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		ONE HOUR	✓	422	100.000
B		ONE HOUR	✓	354	100.000
C		ONE HOUR	✓	1053	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		A	B	C
From	A	0	77	345
	B	62	0	292
	C	554	499	0

Vehicle Mix

Heavy Vehicle Percentages

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

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
B-C	0.65	20.76	1.8	C	268	402
B-A	0.50	51.12	0.9	F	57	85
C-A					508	763
C-B	1.03	138.65	21.3	F	458	687
A-B					71	106
A-C					317	475

Main Results for each time segment

16:45 - 17:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	220	55	611	0.360	218	0.0	0.6	9.112	A
B-A	47	12	282	0.165	46	0.0	0.2	15.176	C
C-A	417	104			417				
C-B	376	94	564	0.666	368	0.0	1.9	17.749	C
A-B	58	14			58				
A-C	260	65			260				

17:00 - 17:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	263	66	580	0.453	261	0.6	0.8	11.277	B
B-A	56	14	228	0.244	55	0.2	0.3	20.738	C
C-A	498	125			498				
C-B	449	112	551	0.814	441	1.9	3.7	30.731	D
A-B	69	17			69				
A-C	310	78			310				

17:15 - 17:30

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	321	80	510	0.631	318	0.8	1.6	18.504	C
B-A	68	17	150	0.455	66	0.3	0.8	42.138	E
C-A	610	152			610				
C-B	549	137	533	1.031	507	3.7	14.3	82.657	F
A-B	85	21			85				
A-C	380	95			380				

17:30 - 17:45

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	321	80	493	0.652	321	1.6	1.8	20.759	C
B-A	68	17	137	0.497	68	0.8	0.9	51.119	F
C-A	610	152			610				
C-B	549	137	533	1.031	521	14.3	21.3	138.652	F
A-B	85	21			85				
A-C	380	95			380				

17:45 - 18:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	263	66	569	0.461	266	1.8	0.9	12.027	B
B-A	56	14	205	0.271	58	0.9	0.4	24.733	C
C-A	498	125			498				
C-B	449	112	551	0.814	511	21.3	5.7	93.541	F
A-B	69	17			69				
A-C	310	78			310				

18:00 - 18:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	220	55	608	0.361	221	0.9	0.6	9.326	A
B-A	47	12	275	0.170	47	0.4	0.2	15.841	C
C-A	417	104			417				
C-B	376	94	564	0.666	390	5.7	2.1	22.146	C
A-B	58	14			58				
A-C	260	65			260				

Assess 2035, AM

Data Errors and Warnings

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

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way		71.31	F

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D7	Assess 2035	AM	ONE HOUR	07:30	09:00	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		ONE HOUR	✓	714	100.000
B		ONE HOUR	✓	518	100.000
C		ONE HOUR	✓	593	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		A	B	C
From	A	0	86	628
	B	80	0	438
	C	370	223	0

Vehicle Mix

Heavy Vehicle Percentages

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

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
B-C	1.13	227.24	32.3	F	402	603
B-A	1.09	336.96	7.6	F	73	110
C-A					340	509
C-B	0.53	16.42	1.1	C	205	307
A-B					79	118
A-C					576	864

Main Results for each time segment

07:30 - 07:45

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	330	82	554	0.596	324	0.0	1.4	15.338	C
B-A	60	15	270	0.223	59	0.0	0.3	16.994	C
C-A	279	70			279				
C-B	168	42	517	0.324	166	0.0	0.5	10.191	B
A-B	65	16			65				
A-C	473	118			473				

07:45 - 08:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	394	98	509	0.773	387	1.4	3.0	28.078	D
B-A	72	18	182	0.395	71	0.3	0.6	31.903	D
C-A	333	83			333				
C-B	200	50	495	0.405	200	0.5	0.7	12.147	B
A-B	77	19			77				
A-C	565	141			565				

08:00 - 08:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	482	121	441	1.094	424	3.0	17.6	109.390	F
B-A	88	22	81	1.091	69	0.6	5.3	207.617	F
C-A	407	102			407				
C-B	246	61	465	0.529	244	0.7	1.1	16.188	C
A-B	95	24			95				
A-C	691	173			691				

08:15 - 08:30

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	482	121	427	1.129	423	17.6	32.3	227.237	F
B-A	88	22	84	1.044	79	5.3	7.6	336.961	F
C-A	407	102			407				
C-B	246	61	465	0.529	245	1.1	1.1	16.416	C
A-B	95	24			95				
A-C	691	173			691				

08:30 - 08:45

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	394	98	474	0.830	460	32.3	15.7	192.693	F
B-A	72	18	93	0.776	82	7.6	5.0	272.063	F
C-A	333	83			333				
C-B	200	50	495	0.405	202	1.1	0.7	12.349	B
A-B	77	19			77				
A-C	565	141			565				

08:45 - 09:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	330	82	533	0.619	386	15.7	1.7	33.050	D
B-A	60	15	225	0.268	79	5.0	0.4	27.502	D
C-A	279	70			279				
C-B	168	42	517	0.324	169	0.7	0.5	10.347	B
A-B	65	16			65				
A-C	473	118			473				

Assess 2035, PM

Data Errors and Warnings

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

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way		63.74	F

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D8	Assess 2035	PM	ONE HOUR	16:45	18:15	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		ONE HOUR	✓	445	100.000
B		ONE HOUR	✓	372	100.000
C		ONE HOUR	✓	1106	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		A	B	C
From	A	0	81	364
	B	65	0	307
	C	583	523	0

Vehicle Mix

Heavy Vehicle Percentages

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

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
B-C	0.78	34.19	3.0	D	282	423
B-A	0.67	91.55	1.7	F	60	89
C-A					535	802
C-B	1.09	202.93	33.9	F	480	720
A-B					74	111
A-C					334	501

Main Results for each time segment

16:45 - 17:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	231	58	603	0.383	229	0.0	0.6	9.544	A
B-A	49	12	269	0.182	48	0.0	0.2	16.227	C
C-A	439	110			439				
C-B	394	98	561	0.702	385	0.0	2.2	19.633	C
A-B	61	15			61				
A-C	274	69			274				

17:00 - 17:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	276	69	568	0.486	275	0.6	0.9	12.235	B
B-A	58	15	211	0.277	58	0.2	0.4	23.374	C
C-A	524	131			524				
C-B	470	118	547	0.860	460	2.2	4.8	37.350	E
A-B	73	18			73				
A-C	327	82			327				

17:15 - 17:30

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	338	85	476	0.710	333	0.9	2.2	24.289	C
B-A	72	18	126	0.566	69	0.4	1.1	59.444	F
C-A	642	160			642				
C-B	576	144	528	1.091	512	4.8	20.7	108.965	F
A-B	89	22			89				
A-C	401	100			401				

17:30 - 17:45

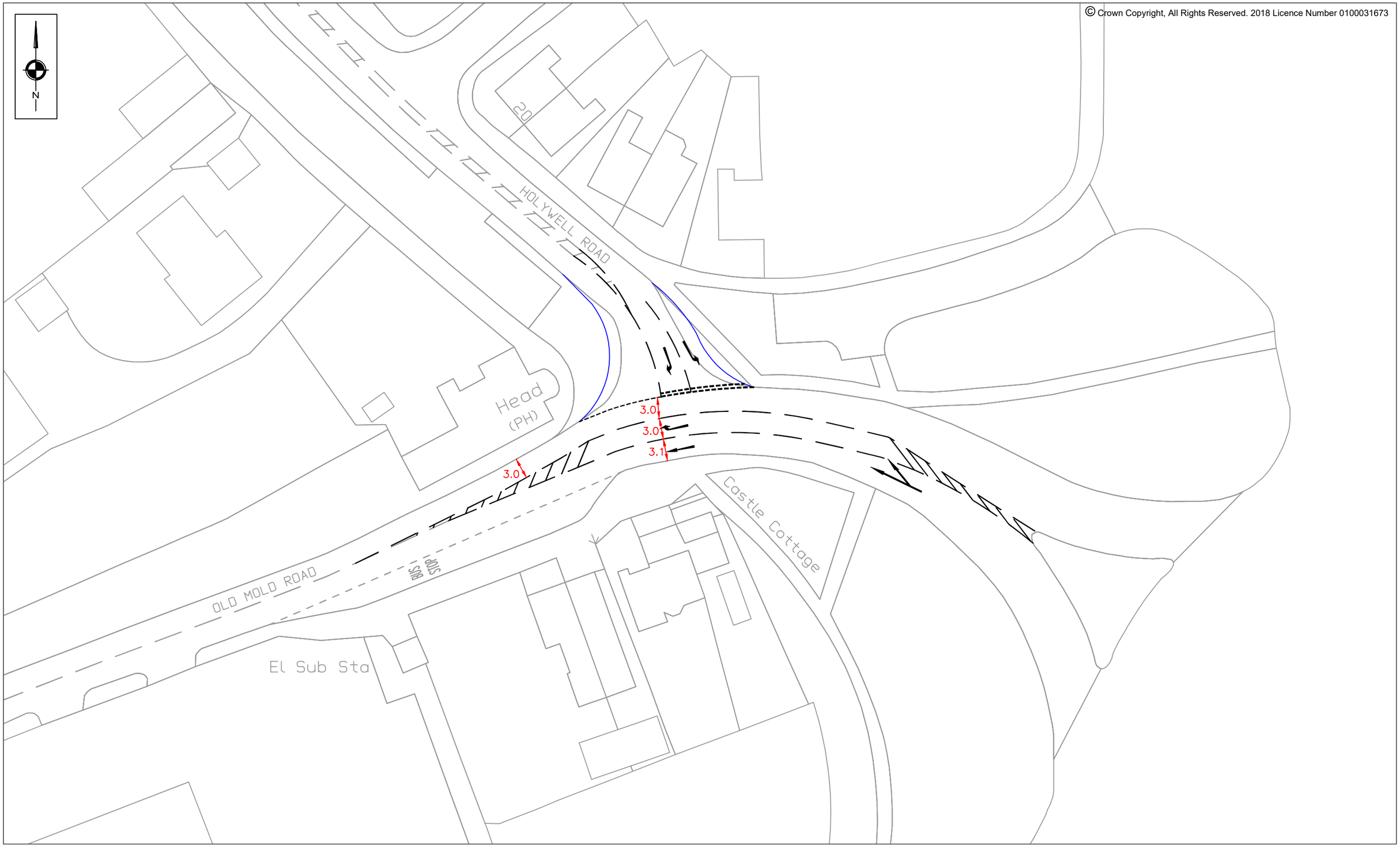
Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	338	85	436	0.775	335	2.2	3.0	34.189	D
B-A	72	18	106	0.673	69	1.1	1.7	91.548	F
C-A	642	160			642				
C-B	576	144	528	1.091	523	20.7	33.9	202.929	F
A-B	89	22			89				
A-C	401	100			401				

17:45 - 18:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	276	69	541	0.510	284	3.0	1.1	14.376	B
B-A	58	15	173	0.338	63	1.7	0.5	33.858	D
C-A	524	131			524				
C-B	470	118	547	0.860	531	33.9	18.7	182.611	F
A-B	73	18			73				
A-C	327	82			327				

18:00 - 18:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	231	58	598	0.387	233	1.1	0.6	9.914	A
B-A	49	12	247	0.198	50	0.5	0.3	18.374	C
C-A	439	110			439				
C-B	394	98	561	0.702	458	18.7	2.6	50.071	F
A-B	61	15			61				
A-C	274	69			274				



S C P

Transportation Planning : Infrastructure Design

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Client	CASTLE GREEN HOMES LTD
Project Title	HOLYWELL ROAD, EWLOE
Drawing Title	PROPOSED AMENDMENTS TO HOLYWELL ROAD / OLD MOLD ROAD JUNCTION
Scale	1:500 @ A3
By	WD
Date	12.10.2018
Checked	DR
Approved/ Unapproved	-
Status	PLANNING

Rev	Description	Date	By
–	–	–	–
–	–	–	–
–	–	–	–
–	–	–	–

Drawing No.	SCP/230836/F04
Revision	-

Junctions 9

PICADY 9 - Priority Intersection Module

Version: 9.5.2.1013

For sales and distribution information, program advice and maintenance, contact TRL:
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Filename: Improvement Scheme - Copy.j9
Path: Z:\Job Library\2023\230836 - Green Lane, Ewloe\Traffic Data\Junctions Assessments\PICADY\Old Mold Road . Holywell Road
Report generation date: 04/03/2024 10:45:32

Summary of junction performance

	AM					PM				
	Set ID	Queue (PCU)	Delay (s)	RFC	LOS	Set ID	Queue (PCU)	Delay (s)	RFC	LOS
	Assess 2025									
Stream B-C	D3	4.4	36.81	0.83	E	D4	1.1	12.28	0.52	B
Stream B-A		0.4	17.99	0.30	C		0.5	25.83	0.33	D
Stream C-B		0.7	10.24	0.40	B		4.5	31.44	0.83	D
	Assess 2035									
Stream B-C	D7	6.7	53.63	0.89	F	D8	1.3	13.74	0.56	B
Stream B-A		0.5	19.95	0.33	C		0.6	31.05	0.38	D
Stream C-B		0.7	10.91	0.43	B		6.3	42.21	0.88	E

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

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

File summary

File Description

Title	Holywell Road/Old Mold Road Junction Improvements
Location	Ewloe
Site number	
Date	12/10/2018
Version	
Status	(new file)
Identifier	
Client	
Jobnumber	18415
Enumerator	SCP\vicky.lomas
Description	

Units

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

Analysis Options

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

Demand Set Summary

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D3	Assess 2025	AM	ONE HOUR	07:30	09:00	15	✓
D4	Assess 2025	PM	ONE HOUR	16:45	18:15	15	✓
D7	Assess 2035	AM	ONE HOUR	07:30	09:00	15	✓
D8	Assess 2035	PM	ONE HOUR	16:45	18:15	15	✓

Analysis Set Details

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

Assess 2025, AM

Data Errors and Warnings

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

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way		10.91	B

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Name	Description	Arm type
A	Old Mold Road West		Major
B	Holywell Road		Minor
C	Old Mold Road East		Major

Major Arm Geometry

Arm	Width of carriageway (m)	Has kerbed central reserve	Has right turn bay	Width for right turn (m)	Visibility for right turn (m)	Blocks?	Blocking queue (PCU)
C	9.10		✓	3.00	250.0		-

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

Minor Arm Geometry

Arm	Minor arm type	Lane Width (Left) (m)	Lane Width (Right) (m)	Visibility to left (m)	Visibility to right (m)
B	Two lanes	5.00	4.00	80	40

Slope / Intercept / Capacity

Priority Intersection Slopes and Intercepts

Stream	Intercept (PCU/hr)	Slope for A-B	Slope for A-C	Slope for C-A	Slope for C-B
B-A	576	0.091	0.229	0.144	0.328
B-C	779	0.103	0.261	-	-
C-B	781	0.262	0.262	-	-

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

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

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

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D3	Assess 2025	AM	ONE HOUR	07:30	09:00	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		ONE HOUR	✓	678	100.000
B		ONE HOUR	✓	494	100.000
C		ONE HOUR	✓	564	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		A	B	C
From	A	0	82	596
	B	76	0	418
	C	351	213	0

Vehicle Mix

Heavy Vehicle Percentages

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

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
B-C	0.83	36.81	4.4	E	384	575
B-A	0.30	17.99	0.4	C	70	105
C-A					322	483
C-B	0.40	10.24	0.7	B	195	293
A-B					75	113
A-C					547	820

Main Results for each time segment

07:30 - 07:45

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	315	79	631	0.499	311	0.0	1.0	11.126	B
B-A	57	14	377	0.152	57	0.0	0.2	11.222	B
C-A	264	66			264				
C-B	160	40	648	0.248	159	0.0	0.3	7.349	A
A-B	62	15			62				
A-C	449	112			449				

07:45 - 08:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	376	94	599	0.627	373	1.0	1.6	15.742	C
B-A	68	17	338	0.202	68	0.2	0.2	13.343	B
C-A	316	79			316				
C-B	191	48	622	0.308	191	0.3	0.4	8.349	A
A-B	74	18			74				
A-C	536	134			536				

08:00 - 08:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	460	115	554	0.831	450	1.6	4.1	32.094	D
B-A	84	21	284	0.295	83	0.2	0.4	17.864	C
C-A	386	97			386				
C-B	235	59	586	0.400	234	0.4	0.7	10.197	B
A-B	90	23			90				
A-C	656	164			656				

08:15 - 08:30

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	460	115	553	0.832	459	4.1	4.4	36.806	E
B-A	84	21	284	0.295	84	0.4	0.4	17.994	C
C-A	386	97			386				
C-B	235	59	586	0.400	234	0.7	0.7	10.245	B
A-B	90	23			90				
A-C	656	164			656				

08:30 - 08:45

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	376	94	599	0.628	386	4.4	1.8	17.723	C
B-A	68	17	337	0.203	69	0.4	0.3	13.457	B
C-A	316	79			316				
C-B	191	48	622	0.308	192	0.7	0.5	8.400	A
A-B	74	18			74				
A-C	536	134			536				

08:45 - 09:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	315	79	630	0.499	318	1.8	1.0	11.628	B
B-A	57	14	376	0.152	58	0.3	0.2	11.315	B
C-A	264	66			264				
C-B	160	40	648	0.248	161	0.5	0.3	7.401	A
A-B	62	15			62				
A-C	449	112			449				

Assess 2025, PM

Data Errors and Warnings

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

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way		11.41	B

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D4	Assess 2025	PM	ONE HOUR	16:45	18:15	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		ONE HOUR	✓	422	100.000
B		ONE HOUR	✓	354	100.000
C		ONE HOUR	✓	1053	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		A	B	C
From	A	0	77	345
	B	62	0	292
	C	554	499	0

Vehicle Mix

Heavy Vehicle Percentages

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

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
B-C	0.52	12.28	1.1	B	268	402
B-A	0.33	25.83	0.5	D	57	85
C-A					508	763
C-B	0.83	31.44	4.5	D	458	687
A-B					71	106
A-C					317	475

Main Results for each time segment

16:45 - 17:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	220	55	680	0.323	218	0.0	0.5	7.757	A
B-A	47	12	328	0.142	46	0.0	0.2	12.752	B
C-A	417	104			417				
C-B	376	94	698	0.538	371	0.0	1.1	10.867	B
A-B	58	14			58				
A-C	260	65			260				

17:00 - 17:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	263	66	656	0.400	262	0.5	0.7	9.116	A
B-A	56	14	278	0.200	55	0.2	0.2	16.144	C
C-A	498	125			498				
C-B	449	112	682	0.658	446	1.1	1.8	15.056	C
A-B	69	17			69				
A-C	310	78			310				

17:15 - 17:30

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	321	80	616	0.522	320	0.7	1.1	12.091	B
B-A	68	17	211	0.324	67	0.2	0.5	24.991	C
C-A	610	152			610				
C-B	549	137	660	0.833	540	1.8	4.2	28.000	D
A-B	85	21			85				
A-C	380	95			380				

17:30 - 17:45

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	321	80	614	0.523	321	1.1	1.1	12.279	B
B-A	68	17	207	0.329	68	0.5	0.5	25.827	D
C-A	610	152			610				
C-B	549	137	660	0.833	548	4.2	4.5	31.443	D
A-B	85	21			85				
A-C	380	95			380				

17:45 - 18:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	263	66	655	0.401	264	1.1	0.7	9.257	A
B-A	56	14	274	0.204	57	0.5	0.3	16.653	C
C-A	498	125			498				
C-B	449	112	682	0.658	459	4.5	2.0	16.784	C
A-B	69	17			69				
A-C	310	78			310				

18:00 - 18:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	220	55	679	0.324	221	0.7	0.5	7.860	A
B-A	47	12	325	0.144	47	0.3	0.2	12.967	B
C-A	417	104			417				
C-B	376	94	698	0.538	379	2.0	1.2	11.393	B
A-B	58	14			58				
A-C	260	65			260				

Assess 2035, AM

Data Errors and Warnings

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

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way		15.08	C

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D7	Assess 2035	AM	ONE HOUR	07:30	09:00	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		ONE HOUR	✓	714	100.000
B		ONE HOUR	✓	518	100.000
C		ONE HOUR	✓	593	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		A	B	C
From	A	0	86	628
	B	80	0	438
	C	370	223	0

Vehicle Mix

Heavy Vehicle Percentages

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

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
B-C	0.89	53.63	6.7	F	402	603
B-A	0.33	19.95	0.5	C	73	110
C-A					340	509
C-B	0.43	10.91	0.7	B	205	307
A-B					79	118
A-C					576	864

Main Results for each time segment

07:30 - 07:45

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	330	82	622	0.530	325	0.0	1.1	11.958	B
B-A	60	15	366	0.164	59	0.0	0.2	11.704	B
C-A	279	70			279				
C-B	168	42	641	0.262	166	0.0	0.4	7.573	A
A-B	65	16			65				
A-C	473	118			473				

07:45 - 08:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	394	98	589	0.669	390	1.1	1.9	17.853	C
B-A	72	18	325	0.221	72	0.2	0.3	14.179	B
C-A	333	83			333				
C-B	200	50	613	0.327	200	0.4	0.5	8.701	A
A-B	77	19			77				
A-C	565	141			565				

08:00 - 08:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	482	121	540	0.893	467	1.9	5.8	42.296	E
B-A	88	22	269	0.328	87	0.3	0.5	19.744	C
C-A	407	102			407				
C-B	246	61	575	0.427	245	0.5	0.7	10.845	B
A-B	95	24			95				
A-C	691	173			691				

08:15 - 08:30

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	482	121	539	0.894	479	5.8	6.7	53.630	F
B-A	88	22	268	0.328	88	0.5	0.5	19.946	C
C-A	407	102			407				
C-B	246	61	575	0.427	245	0.7	0.7	10.909	B
A-B	95	24			95				
A-C	691	173			691				

08:30 - 08:45

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	394	98	588	0.669	412	6.7	2.1	22.211	C
B-A	72	18	325	0.222	73	0.5	0.3	14.331	B
C-A	333	83			333				
C-B	200	50	613	0.327	201	0.7	0.5	8.764	A
A-B	77	19			77				
A-C	565	141			565				

08:45 - 09:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	330	82	622	0.530	334	2.1	1.2	12.666	B
B-A	60	15	366	0.165	61	0.3	0.2	11.817	B
C-A	279	70			279				
C-B	168	42	641	0.262	168	0.5	0.4	7.635	A
A-B	65	16			65				
A-C	473	118			473				

Assess 2035, PM

Data Errors and Warnings

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

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way		14.72	B

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D8	Assess 2035	PM	ONE HOUR	16:45	18:15	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		ONE HOUR	✓	445	100.000
B		ONE HOUR	✓	372	100.000
C		ONE HOUR	✓	1106	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		A	B	C
From	A	0	81	364
	B	65	0	307
	C	583	523	0

Vehicle Mix

Heavy Vehicle Percentages

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

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
B-C	0.56	13.74	1.3	B	282	423
B-A	0.38	31.05	0.6	D	60	89
C-A					535	802
C-B	0.88	42.21	6.3	E	480	720
A-B					74	111
A-C					334	501

Main Results for each time segment

16:45 - 17:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	231	58	674	0.343	229	0.0	0.5	8.055	A
B-A	49	12	315	0.155	48	0.0	0.2	13.454	B
C-A	439	110			439				
C-B	394	98	694	0.568	389	0.0	1.3	11.623	B
A-B	61	15			61				
A-C	274	69			274				

17:00 - 17:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	276	69	648	0.426	275	0.5	0.7	9.644	A
B-A	58	15	263	0.222	58	0.2	0.3	17.539	C
C-A	524	131			524				
C-B	470	118	677	0.695	467	1.3	2.2	16.860	C
A-B	73	18			73				
A-C	327	82			327				

17:15 - 17:30

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	338	85	602	0.561	336	0.7	1.2	13.420	B
B-A	72	18	192	0.373	70	0.3	0.6	29.406	D
C-A	642	160			642				
C-B	576	144	653	0.882	562	2.2	5.6	35.028	E
A-B	89	22			89				
A-C	401	100			401				

17:30 - 17:45

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	338	85	600	0.564	338	1.2	1.3	13.742	B
B-A	72	18	187	0.382	71	0.6	0.6	31.049	D
C-A	642	160			642				
C-B	576	144	653	0.882	573	5.6	6.3	42.208	E
A-B	89	22			89				
A-C	401	100			401				

17:45 - 18:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	276	69	645	0.428	278	1.3	0.8	9.853	A
B-A	58	15	256	0.228	60	0.6	0.3	18.415	C
C-A	524	131			524				
C-B	470	118	677	0.695	486	6.3	2.4	20.193	C
A-B	73	18			73				
A-C	327	82			327				

18:00 - 18:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	231	58	673	0.343	232	0.8	0.5	8.181	A
B-A	49	12	312	0.157	49	0.3	0.2	13.738	B
C-A	439	110			439				
C-B	394	98	694	0.568	398	2.4	1.4	12.350	B
A-B	61	15			61				
A-C	274	69			274				

S|C|P

APPENDIX J

Junctions 9

PICADY 9 - Priority Intersection Module

Filename: Green Lane and Old Mold Road Junction_SURVEY UPDATED.j9
Path: Z:\Job Library\2023\230836 - Green Lane, Ewloe\Traffic Data\Junctions Assessments\PICADY\Green Ln . Old Mold Rd
Report generation date: 04/03/2024 10:49:12

Summary of junction performance

	AM					PM				
	Set ID	Queue (PCU)	Delay (s)	RFC	LOS	Set ID	Queue (PCU)	Delay (s)	RFC	LOS
	Assess 2025									
Stream B-C	D1	0.1	7.51	0.11	A	D2	0.0	6.48	0.04	A
Stream B-A		0.0	11.64	0.02	B		0.0	10.82	0.02	B
Stream C-AB		0.1	4.89	0.07	A		0.2	4.36	0.10	A
	Assess 2035									
Stream B-C	D3	0.1	7.67	0.12	A	D4	0.0	6.54	0.04	A
Stream B-A		0.0	12.03	0.03	B		0.0	11.11	0.02	B
Stream C-AB		0.1	4.88	0.07	A		0.2	4.33	0.10	A

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

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

File summary

File Description

Title	Green Lane/Old Mold Road Junction
Location	Ewloe
Site number	
Date	15/10/2018
Version	
Status	(new file)
Identifier	
Client	
Jobnumber	18415
Enumerator	SCP\vicky.lomas
Description	

Units

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

Analysis Options

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

Demand Set Summary

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D1	Assess 2025	AM	ONE HOUR	07:30	09:00	15	✓
D2	Assess 2025	PM	ONE HOUR	16:45	18:15	15	✓
D3	Assess 2035	AM	ONE HOUR	07:30	09:00	15	✓
D4	Assess 2035	PM	ONE HOUR	16:45	18:15	15	✓

Analysis Set Details

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

Assess 2025, AM

Data Errors and Warnings

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

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way		0.78	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Name	Description	Arm type
A	Old Mold Road East		Major
B	Green Lane		Minor
C	Old Mold Road West		Major

Major Arm Geometry

Arm	Width of carriageway (m)	Has kerbed central reserve	Has right turn bay	Visibility for right turn (m)	Blocks?	Blocking queue (PCU)
C	7.40			250.0	✓	0.00

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

Minor Arm Geometry

Arm	Minor arm type	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	5.50	3.20	2.75	2.75		1.00	45	22

Slope / Intercept / Capacity

Priority Intersection Slopes and Intercepts

Stream	Intercept (PCU/hr)	Slope for A-B	Slope for A-C	Slope for C-A	Slope for C-B
B-A	493	0.084	0.213	0.134	0.305
B-C	683	0.098	0.249	-	-
C-B	719	0.262	0.262	-	-

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

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

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

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D1	Assess 2025	AM	ONE HOUR	07:30	09:00	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		ONE HOUR	✓	518	100.000
B		ONE HOUR	✓	61	100.000
C		ONE HOUR	✓	335	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		A	B	C
From	A	0	4	514
	B	7	0	54
	C	306	29	0

Vehicle Mix

Heavy Vehicle Percentages

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

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
B-C	0.11	7.51	0.1	A	50	74
B-A	0.02	11.64	0.0	B	6	10
C-AB	0.07	4.89	0.1	A	42	63
C-A					265	398
A-B					4	6
A-C					472	707

Main Results for each time segment

07:30 - 07:45

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	41	10	585	0.070	40	0.0	0.1	6.612	A
B-A	5	1	373	0.014	5	0.0	0.0	9.788	A
C-AB	31	8	768	0.041	31	0.0	0.1	4.882	A
C-A	221	55			221				
A-B	3	0.75			3				
A-C	387	97			387				

07:45 - 08:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	49	12	565	0.086	48	0.1	0.1	6.965	A
B-A	6	2	349	0.018	6	0.0	0.0	10.489	B
C-AB	40	10	781	0.052	40	0.1	0.1	4.863	A
C-A	261	65			261				
A-B	4	0.90			4				
A-C	462	116			462				

08:00 - 08:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	59	15	539	0.110	59	0.1	0.1	7.508	A
B-A	8	2	317	0.024	8	0.0	0.0	11.640	B
C-AB	55	14	800	0.069	55	0.1	0.1	4.836	A
C-A	314	78			314				
A-B	4	1			4				
A-C	566	141			566				

08:15 - 08:30

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	59	15	539	0.110	59	0.1	0.1	7.511	A
B-A	8	2	317	0.024	8	0.0	0.0	11.640	B
C-AB	55	14	800	0.069	55	0.1	0.1	4.836	A
C-A	313	78			313				
A-B	4	1			4				
A-C	566	141			566				

08:30 - 08:45

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	49	12	565	0.086	49	0.1	0.1	6.971	A
B-A	6	2	349	0.018	6	0.0	0.0	10.493	B
C-AB	40	10	781	0.052	41	0.1	0.1	4.866	A
C-A	261	65			261				
A-B	4	0.90			4				
A-C	462	116			462				

08:45 - 09:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	41	10	585	0.070	41	0.1	0.1	6.620	A
B-A	5	1	373	0.014	5	0.0	0.0	9.793	A
C-AB	31	8	768	0.041	31	0.1	0.1	4.888	A
C-A	221	55			221				
A-B	3	0.75			3				
A-C	387	97			387				

Assess 2025, PM

Data Errors and Warnings

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

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way		0.61	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D2	Assess 2025	PM	ONE HOUR	16:45	18:15	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		ONE HOUR	✓	349	100.000
B		ONE HOUR	✓	28	100.000
C		ONE HOUR	✓	506	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		A	B	C
From	A	0	6	343
	B	6	0	22
	C	467	39	0

Vehicle Mix

Heavy Vehicle Percentages

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

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
B-C	0.04	6.48	0.0	A	20	30
B-A	0.02	10.82	0.0	B	6	8
C-AB	0.10	4.36	0.2	A	69	104
C-A					395	592
A-B					6	8
A-C					315	472

Main Results for each time segment

16:45 - 17:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	17	4	610	0.027	16	0.0	0.0	6.061	A
B-A	5	1	393	0.012	4	0.0	0.0	9.276	A
C-AB	49	12	875	0.056	49	0.0	0.1	4.358	A
C-A	332	83			332				
A-B	5	1			5				
A-C	258	65			258				

17:00 - 17:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	20	5	598	0.033	20	0.0	0.0	6.230	A
B-A	5	1	370	0.015	5	0.0	0.0	9.867	A
C-AB	65	16	908	0.072	65	0.1	0.1	4.272	A
C-A	389	97			389				
A-B	5	1			5				
A-C	308	77			308				

17:15 - 17:30

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	24	6	580	0.042	24	0.0	0.0	6.479	A
B-A	7	2	339	0.019	7	0.0	0.0	10.818	B
C-AB	93	23	956	0.098	93	0.1	0.2	4.174	A
C-A	464	116			464				
A-B	7	2			7				
A-C	378	94			378				

17:30 - 17:45

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	24	6	580	0.042	24	0.0	0.0	6.480	A
B-A	7	2	339	0.019	7	0.0	0.0	10.819	B
C-AB	93	23	956	0.098	93	0.2	0.2	4.176	A
C-A	464	116			464				
A-B	7	2			7				
A-C	378	94			378				

17:45 - 18:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	20	5	598	0.033	20	0.0	0.0	6.233	A
B-A	5	1	370	0.015	5	0.0	0.0	9.872	A
C-AB	66	16	908	0.072	66	0.2	0.1	4.276	A
C-A	389	97			389				
A-B	5	1			5				
A-C	308	77			308				

18:00 - 18:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	17	4	610	0.027	17	0.0	0.0	6.062	A
B-A	5	1	392	0.012	5	0.0	0.0	9.281	A
C-AB	49	12	875	0.056	49	0.1	0.1	4.363	A
C-A	332	83			332				
A-B	5	1			5				
A-C	258	65			258				

Assess 2035, AM

Data Errors and Warnings

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

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way		0.78	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D3	Assess 2035	AM	ONE HOUR	07:30	09:00	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		ONE HOUR	✓	548	100.000
B		ONE HOUR	✓	63	100.000
C		ONE HOUR	✓	353	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		A	B	C
From	A	0	5	543
	B	7	0	56
	C	323	30	0

Vehicle Mix

Heavy Vehicle Percentages

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

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
B-C	0.12	7.67	0.1	A	51	77
B-A	0.03	12.03	0.0	B	6	10
C-AB	0.07	4.88	0.1	A	45	68
C-A					279	418
A-B					5	7
A-C					498	747

Main Results for each time segment

07:30 - 07:45

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	42	11	579	0.073	42	0.0	0.1	6.696	A
B-A	5	1	366	0.014	5	0.0	0.0	9.979	A
C-AB	33	8	771	0.043	33	0.0	0.1	4.872	A
C-A	233	58			233				
A-B	4	0.94			4				
A-C	409	102			409				

07:45 - 08:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	50	13	559	0.090	50	0.1	0.1	7.077	A
B-A	6	2	341	0.018	6	0.0	0.0	10.750	B
C-AB	43	11	785	0.055	43	0.1	0.1	4.851	A
C-A	274	69			274				
A-B	4	1			4				
A-C	488	122			488				

08:00 - 08:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	62	15	531	0.116	62	0.1	0.1	7.669	A
B-A	8	2	307	0.025	8	0.0	0.0	12.033	B
C-AB	59	15	806	0.074	59	0.1	0.1	4.823	A
C-A	329	82			329				
A-B	6	1			6				
A-C	598	149			598				

08:15 - 08:30

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	62	15	531	0.116	62	0.1	0.1	7.673	A
B-A	8	2	307	0.025	8	0.0	0.0	12.034	B
C-AB	59	15	806	0.074	59	0.1	0.1	4.826	A
C-A	329	82			329				
A-B	6	1			6				
A-C	598	149			598				

08:30 - 08:45

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	50	13	559	0.090	50	0.1	0.1	7.084	A
B-A	6	2	341	0.018	6	0.0	0.0	10.755	B
C-AB	43	11	785	0.055	43	0.1	0.1	4.855	A
C-A	274	69			274				
A-B	4	1			4				
A-C	488	122			488				

08:45 - 09:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	42	11	579	0.073	42	0.1	0.1	6.704	A
B-A	5	1	366	0.014	5	0.0	0.0	9.983	A
C-AB	33	8	772	0.043	33	0.1	0.1	4.876	A
C-A	233	58			233				
A-B	4	0.94			4				
A-C	409	102			409				

Assess 2035, PM

Data Errors and Warnings

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

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way		0.60	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D4	Assess 2035	PM	ONE HOUR	16:45	18:15	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		ONE HOUR	✓	368	100.000
B		ONE HOUR	✓	28	100.000
C		ONE HOUR	✓	533	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		A	B	C
From	A	0	7	361
	B	6	0	22
	C	493	40	0

Vehicle Mix

Heavy Vehicle Percentages

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

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
B-C	0.04	6.54	0.0	A	20	30
B-A	0.02	11.11	0.0	B	6	8
C-AB	0.10	4.33	0.2	A	74	111
C-A					415	623
A-B					6	10
A-C					331	497

Main Results for each time segment

16:45 - 17:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	17	4	607	0.027	16	0.0	0.0	6.096	A
B-A	5	1	387	0.012	4	0.0	0.0	9.421	A
C-AB	52	13	884	0.059	52	0.0	0.1	4.323	A
C-A	349	87			349				
A-B	5	1			5				
A-C	272	68			272				

17:00 - 17:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	20	5	593	0.033	20	0.0	0.0	6.274	A
B-A	5	1	363	0.015	5	0.0	0.0	10.064	B
C-AB	70	17	920	0.076	69	0.1	0.1	4.235	A
C-A	410	102			410				
A-B	6	2			6				
A-C	325	81			325				

17:15 - 17:30

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	24	6	575	0.042	24	0.0	0.0	6.539	A
B-A	7	2	331	0.020	7	0.0	0.0	11.109	B
C-AB	100	25	971	0.103	100	0.1	0.2	4.135	A
C-A	487	122			487				
A-B	8	2			8				
A-C	397	99			397				

17:30 - 17:45

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	24	6	575	0.042	24	0.0	0.0	6.539	A
B-A	7	2	331	0.020	7	0.0	0.0	11.111	B
C-AB	100	25	971	0.103	100	0.2	0.2	4.139	A
C-A	486	122			486				
A-B	8	2			8				
A-C	397	99			397				

17:45 - 18:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	20	5	593	0.033	20	0.0	0.0	6.278	A
B-A	5	1	363	0.015	5	0.0	0.0	10.069	B
C-AB	70	17	920	0.076	70	0.2	0.1	4.240	A
C-A	409	102			409				
A-B	6	2			6				
A-C	325	81			325				

18:00 - 18:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	17	4	607	0.027	17	0.0	0.0	6.100	A
B-A	5	1	386	0.012	5	0.0	0.0	9.426	A
C-AB	52	13	884	0.059	52	0.1	0.1	4.328	A
C-A	349	87			349				
A-B	5	1			5				
A-C	272	68			272				

S|C|P

APPENDIX K

Junctions 9

ARCADY 9 - Roundabout Module

Filename: A494 B5125 roundabout_LB UPDATE.j9
Path: Z:\Job Library\2023\230836 - Green Lane, Ewloe\Traffic Data\Junctions Assessments\ARCADY
Report generation date: 06/03/2024 11:23:17

Summary of junction performance

	AM					PM				
	Set ID	Queue (PCU)	Delay (s)	RFC	LOS	Set ID	Queue (PCU)	Delay (s)	RFC	LOS
	Assess 2025									
1 - A494 (Eastern Arms)	D5	0.5	2.90	0.32	A	D6	0.0	2.02	0.02	A
2 - B5125 (Southern Arm)		0.6	2.28	0.39	A		0.3	1.78	0.25	A
3 - A494 (Western Arms)		0.7	3.32	0.43	A		0.6	2.74	0.39	A
4 - B5127 (North Western Arm)		2.1	6.77	0.68	A		1.6	5.43	0.61	A
5 - Yowley Road (Northern Arm)		0.1	5.86	0.11	A		0.1	4.27	0.08	A
	Assess 2035									
1 - A494 (Eastern Arms)	D7	0.5	3.08	0.34	A	D8	0.9	3.31	0.47	A
2 - B5125 (Southern Arm)		0.7	2.39	0.41	A		0.9	2.83	0.48	A
3 - A494 (Western Arms)		0.8	3.56	0.46	A		0.9	4.10	0.48	A
4 - B5127 (North Western Arm)		2.6	8.14	0.73	A		0.7	3.50	0.42	A
5 - Yowley Road (Northern Arm)		0.1	6.45	0.13	A		0.1	3.97	0.08	A

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

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

File summary

File Description

Title	A494/B5127 Roundabout
Location	Ewloe
Site number	
Date	13/03/2019
Version	
Status	(new file)
Identifier	
Client	
Jobnumber	18415
Enumerator	SCP\anna.stephens
Description	

Units

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

Analysis Options

Calculate Queue Percentiles	Calculate residual capacity	RFC Threshold	Average Delay threshold (s)	Queue threshold (PCU)
		0.85	36.00	20.00

Demand Set Summary

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D5	Assess 2025	AM	ONE HOUR	07:30	09:00	15
D6	Assess 2025	PM	ONE HOUR	16:30	18:00	15
D7	Assess 2035	AM	ONE HOUR	07:30	09:00	15
D8	Assess 2035	PM	ONE HOUR	16:30	18:00	15

Analysis Set Details

ID	Network flow scaling factor (%)
A1	100.000

Assess 2025, AM

Data Errors and Warnings

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

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout		1, 2, 3, 4, 5	4.09	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Name	Description
1	A494 (Eastern Arms)	
2	B5125 (Southern Arm)	
3	A494 (Western Arms)	
4	B5127 (North Western Arm)	
5	Yowley Road (Northern Arm)	

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 - A494 (Eastern Arms)	6.50	8.50	16.0	36.0	100.0	18.0	
2 - B5125 (Southern Arm)	7.50	10.00	10.0	90.0	100.0	18.0	
3 - A494 (Western Arms)	6.00	8.00	10.0	124.0	100.0	14.0	
4 - B5127 (North Western Arm)	6.50	8.50	5.0	15.0	100.0	29.0	
5 - Yowley Road (Northern Arm)	4.50	6.00	4.0	57.0	100.0	22.0	

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Arm	Final slope	Final intercept (PCU/hr)
1 - A494 (Eastern Arms)	0.583	2555
2 - B5125 (Southern Arm)	0.635	2908
3 - A494 (Western Arms)	0.568	2399
4 - B5127 (North Western Arm)	0.518	2207
5 - Yowley Road (Northern Arm)	0.457	1664

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

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D5	Assess 2025	AM	ONE HOUR	07:30	09:00	15

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

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1 - A494 (Eastern Arms)		✓	520	100.000
2 - B5125 (Southern Arm)		✓	905	100.000
3 - A494 (Western Arms)		✓	731	100.000
4 - B5127 (North Western Arm)		✓	1008	100.000
5 - Yowley Road (Northern Arm)		✓	70	100.000

Origin-Destination Data

Demand (PCU/hr)

		To				
		1 - A494 (Eastern Arms)	2 - B5125 (Southern Arm)	3 - A494 (Western Arms)	4 - B5127 (North Western Arm)	5 - Yowley Road (Northern Arm)
From	1 - A494 (Eastern Arms)	0	315	0	189	16
	2 - B5125 (Southern Arm)	388	0	304	196	17
	3 - A494 (Western Arms)	0	488	69	160	14
	4 - B5127 (North Western Arm)	438	372	177	0	21
	5 - Yowley Road (Northern Arm)	19	24	16	11	0

Vehicle Mix

Heavy Vehicle Percentages

		To				
		1 - A494 (Eastern Arms)	2 - B5125 (Southern Arm)	3 - A494 (Western Arms)	4 - B5127 (North Western Arm)	5 - Yowley Road (Northern Arm)
From	1 - A494 (Eastern Arms)	0	0	0	0	0
	2 - B5125 (Southern Arm)	0	0	0	0	0
	3 - A494 (Western Arms)	0	0	0	0	0
	4 - B5127 (North Western Arm)	0	0	0	0	0
	5 - Yowley Road (Northern Arm)	0	0	0	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
1 - A494 (Eastern Arms)	0.32	2.90	0.5	A
2 - B5125 (Southern Arm)	0.39	2.28	0.6	A
3 - A494 (Western Arms)	0.43	3.32	0.7	A
4 - B5127 (North Western Arm)	0.68	6.77	2.1	A
5 - Yowley Road (Northern Arm)	0.11	5.86	0.1	A

Main Results for each time segment

07:30 - 07:45

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A494 (Eastern Arms)	391	868	2049	0.191	391	0.2	2.170	A
2 - B5125 (Southern Arm)	681	359	2680	0.254	680	0.3	1.800	A
3 - A494 (Western Arms)	550	614	2050	0.268	549	0.4	2.396	A
4 - B5127 (North Western Arm)	759	745	1821	0.417	756	0.7	3.373	A
5 - Yowley Road (Northern Arm)	53	1450	1001	0.053	52	0.1	3.796	A

07:45 - 08:00

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A494 (Eastern Arms)	467	1039	1949	0.240	467	0.3	2.428	A
2 - B5125 (Southern Arm)	814	429	2635	0.309	813	0.4	1.976	A
3 - A494 (Western Arms)	657	734	1982	0.332	657	0.5	2.717	A
4 - B5127 (North Western Arm)	906	891	1745	0.519	905	1.1	4.277	A
5 - Yowley Road (Northern Arm)	63	1735	870	0.072	63	0.1	4.457	A

08:00 - 08:15

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A494 (Eastern Arms)	573	1271	1814	0.316	572	0.5	2.896	A
2 - B5125 (Southern Arm)	996	525	2574	0.387	996	0.6	2.279	A
3 - A494 (Western Arms)	805	899	1888	0.426	804	0.7	3.316	A
4 - B5127 (North Western Arm)	1110	1091	1642	0.676	1106	2.0	6.673	A
5 - Yowley Road (Northern Arm)	77	2122	693	0.111	77	0.1	5.839	A

08:15 - 08:30

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A494 (Eastern Arms)	573	1274	1812	0.316	573	0.5	2.902	A
2 - B5125 (Southern Arm)	996	526	2573	0.387	996	0.6	2.282	A
3 - A494 (Western Arms)	805	900	1888	0.426	805	0.7	3.323	A
4 - B5127 (North Western Arm)	1110	1092	1641	0.676	1110	2.1	6.772	A
5 - Yowley Road (Northern Arm)	77	2127	691	0.112	77	0.1	5.862	A

08:30 - 08:45

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A494 (Eastern Arms)	467	1043	1947	0.240	468	0.3	2.436	A
2 - B5125 (Southern Arm)	814	431	2634	0.309	814	0.4	1.980	A
3 - A494 (Western Arms)	657	735	1981	0.332	658	0.5	2.722	A
4 - B5127 (North Western Arm)	906	893	1744	0.520	910	1.1	4.336	A
5 - Yowley Road (Northern Arm)	63	1742	867	0.073	63	0.1	4.479	A

08:45 - 09:00

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A494 (Eastern Arms)	391	872	2046	0.191	392	0.2	2.177	A
2 - B5125 (Southern Arm)	681	360	2679	0.254	682	0.3	1.804	A
3 - A494 (Western Arms)	550	616	2049	0.269	551	0.4	2.403	A
4 - B5127 (North Western Arm)	759	747	1820	0.417	760	0.7	3.405	A
5 - Yowley Road (Northern Arm)	53	1457	998	0.053	53	0.1	3.809	A

Assess 2025, PM

Data Errors and Warnings

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

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout		1, 2, 3, 4, 5	3.58	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D6	Assess 2025	PM	ONE HOUR	16:30	18:00	15

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

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1 - A494 (Eastern Arms)		✓	38	100.000
2 - B5125 (Southern Arm)		✓	611	100.000
3 - A494 (Western Arms)		✓	756	100.000
4 - B5127 (North Western Arm)		✓	948	100.000
5 - Yowley Road (Northern Arm)		✓	67	100.000

Origin-Destination Data

Demand (PCU/hr)

		To				
		1 - A494 (Eastern Arms)	2 - B5125 (Southern Arm)	3 - A494 (Western Arms)	4 - B5127 (North Western Arm)	5 - Yowley Road (Northern Arm)
From	1 - A494 (Eastern Arms)	0	0	0	38	0
	2 - B5125 (Southern Arm)	0	0	272	40	299
	3 - A494 (Western Arms)	0	488	69	185	14
	4 - B5127 (North Western Arm)	415	360	152	0	21
	5 - Yowley Road (Northern Arm)	0	19	24	16	8

Vehicle Mix

Heavy Vehicle Percentages

		To				
		1 - A494 (Eastern Arms)	2 - B5125 (Southern Arm)	3 - A494 (Western Arms)	4 - B5127 (North Western Arm)	5 - Yowley Road (Northern Arm)
From	1 - A494 (Eastern Arms)	0	0	0	0	0
	2 - B5125 (Southern Arm)	0	0	0	0	0
	3 - A494 (Western Arms)	0	0	0	0	0
	4 - B5127 (North Western Arm)	0	0	0	0	0
	5 - Yowley Road (Northern Arm)	0	0	0	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
1 - A494 (Eastern Arms)	0.02	2.02	0.0	A
2 - B5125 (Southern Arm)	0.25	1.78	0.3	A
3 - A494 (Western Arms)	0.39	2.74	0.6	A
4 - B5127 (North Western Arm)	0.61	5.43	1.6	A
5 - Yowley Road (Northern Arm)	0.08	4.27	0.1	A

Main Results for each time segment

16:30 - 16:45

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A494 (Eastern Arms)	29	853	2058	0.014	29	0.0	1.773	A
2 - B5125 (Southern Arm)	460	230	2761	0.167	459	0.2	1.563	A
3 - A494 (Western Arms)	569	301	2228	0.256	568	0.3	2.167	A
4 - B5127 (North Western Arm)	714	660	1865	0.383	711	0.6	3.113	A
5 - Yowley Road (Northern Arm)	50	1114	1154	0.044	50	0.0	3.260	A

16:45 - 17:00

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A494 (Eastern Arms)	34	1020	1960	0.017	34	0.0	1.868	A
2 - B5125 (Southern Arm)	549	276	2733	0.201	549	0.3	1.647	A
3 - A494 (Western Arms)	680	360	2194	0.310	679	0.4	2.376	A
4 - B5127 (North Western Arm)	852	789	1798	0.474	851	0.9	3.795	A
5 - Yowley Road (Northern Arm)	60	1333	1054	0.057	60	0.1	3.620	A

17:00 - 17:15

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A494 (Eastern Arms)	42	1249	1827	0.023	42	0.0	2.016	A
2 - B5125 (Southern Arm)	673	337	2693	0.250	672	0.3	1.780	A
3 - A494 (Western Arms)	832	441	2148	0.387	832	0.6	2.733	A
4 - B5127 (North Western Arm)	1044	966	1706	0.612	1041	1.6	5.389	A
5 - Yowley Road (Northern Arm)	74	1631	918	0.080	74	0.1	4.264	A

17:15 - 17:30

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A494 (Eastern Arms)	42	1251	1826	0.023	42	0.0	2.017	A
2 - B5125 (Southern Arm)	673	338	2693	0.250	673	0.3	1.780	A
3 - A494 (Western Arms)	832	442	2148	0.388	832	0.6	2.735	A
4 - B5127 (North Western Arm)	1044	967	1706	0.612	1044	1.6	5.435	A
5 - Yowley Road (Northern Arm)	74	1634	917	0.080	74	0.1	4.271	A

17:30 - 17:45

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A494 (Eastern Arms)	34	1023	1958	0.017	34	0.0	1.869	A
2 - B5125 (Southern Arm)	549	277	2732	0.201	550	0.3	1.651	A
3 - A494 (Western Arms)	680	361	2194	0.310	680	0.5	2.381	A
4 - B5127 (North Western Arm)	852	790	1798	0.474	855	0.9	3.831	A
5 - Yowley Road (Northern Arm)	60	1337	1052	0.057	60	0.1	3.628	A

17:45 - 18:00

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A494 (Eastern Arms)	29	856	2056	0.014	29	0.0	1.777	A
2 - B5125 (Southern Arm)	460	231	2761	0.167	460	0.2	1.564	A
3 - A494 (Western Arms)	569	302	2227	0.256	570	0.3	2.173	A
4 - B5127 (North Western Arm)	714	661	1864	0.383	715	0.6	3.134	A
5 - Yowley Road (Northern Arm)	50	1119	1152	0.044	51	0.0	3.269	A

Assess 2035, AM

Data Errors and Warnings

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

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout		1, 2, 3, 4, 5	4.64	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D7	Assess 2035	AM	ONE HOUR	07:30	09:00	15

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

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1 - A494 (Eastern Arms)		✓	549	100.000
2 - B5125 (Southern Arm)		✓	957	100.000
3 - A494 (Western Arms)		✓	772	100.000
4 - B5127 (North Western Arm)		✓	1060	100.000
5 - Yowley Road (Northern Arm)		✓	73	100.000

Origin-Destination Data

Demand (PCU/hr)

		To				
		1 - A494 (Eastern Arms)	2 - B5125 (Southern Arm)	3 - A494 (Western Arms)	4 - B5127 (North Western Arm)	5 - Yowley Road (Northern Arm)
From	1 - A494 (Eastern Arms)	0	333	0	199	17
	2 - B5125 (Southern Arm)	410	0	322	207	18
	3 - A494 (Western Arms)	0	516	73	168	15
	4 - B5127 (North Western Arm)	461	392	185	0	22
	5 - Yowley Road (Northern Arm)	20	26	16	11	0

Vehicle Mix

Heavy Vehicle Percentages

		To				
		1 - A494 (Eastern Arms)	2 - B5125 (Southern Arm)	3 - A494 (Western Arms)	4 - B5127 (North Western Arm)	5 - Yowley Road (Northern Arm)
From	1 - A494 (Eastern Arms)	0	0	0	0	0
	2 - B5125 (Southern Arm)	0	0	0	0	0
	3 - A494 (Western Arms)	0	0	0	0	0
	4 - B5127 (North Western Arm)	0	0	0	0	0
	5 - Yowley Road (Northern Arm)	0	0	0	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
1 - A494 (Eastern Arms)	0.34	3.08	0.5	A
2 - B5125 (Southern Arm)	0.41	2.39	0.7	A
3 - A494 (Western Arms)	0.46	3.56	0.8	A
4 - B5127 (North Western Arm)	0.73	8.14	2.6	A
5 - Yowley Road (Northern Arm)	0.13	6.45	0.1	A

Main Results for each time segment

07:30 - 07:45

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A494 (Eastern Arms)	413	915	2022	0.204	412	0.3	2.236	A
2 - B5125 (Southern Arm)	720	376	2669	0.270	719	0.4	1.846	A
3 - A494 (Western Arms)	581	648	2031	0.286	580	0.4	2.478	A
4 - B5127 (North Western Arm)	798	788	1799	0.444	795	0.8	3.586	A
5 - Yowley Road (Northern Arm)	55	1529	965	0.057	55	0.1	3.955	A

07:45 - 08:00

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A494 (Eastern Arms)	494	1094	1917	0.257	493	0.3	2.528	A
2 - B5125 (Southern Arm)	860	450	2622	0.328	860	0.5	2.043	A
3 - A494 (Western Arms)	694	774	1959	0.354	693	0.5	2.843	A
4 - B5127 (North Western Arm)	953	942	1719	0.554	951	1.2	4.680	A
5 - Yowley Road (Northern Arm)	66	1829	827	0.079	66	0.1	4.725	A

08:00 - 08:15

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A494 (Eastern Arms)	604	1338	1775	0.341	604	0.5	3.072	A
2 - B5125 (Southern Arm)	1054	550	2558	0.412	1053	0.7	2.390	A
3 - A494 (Western Arms)	850	948	1860	0.457	849	0.8	3.556	A
4 - B5127 (North Western Arm)	1167	1154	1609	0.725	1162	2.6	7.952	A
5 - Yowley Road (Northern Arm)	80	2236	641	0.125	80	0.1	6.413	A

08:15 - 08:30

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A494 (Eastern Arms)	604	1342	1773	0.341	604	0.5	3.080	A
2 - B5125 (Southern Arm)	1054	552	2557	0.412	1054	0.7	2.393	A
3 - A494 (Western Arms)	850	949	1860	0.457	850	0.8	3.564	A
4 - B5127 (North Western Arm)	1167	1155	1609	0.726	1167	2.6	8.142	A
5 - Yowley Road (Northern Arm)	80	2243	638	0.126	80	0.1	6.451	A

08:30 - 08:45

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A494 (Eastern Arms)	494	1100	1914	0.258	494	0.3	2.536	A
2 - B5125 (Southern Arm)	860	452	2621	0.328	861	0.5	2.046	A
3 - A494 (Western Arms)	694	776	1958	0.354	695	0.6	2.852	A
4 - B5127 (North Western Arm)	953	944	1718	0.555	958	1.3	4.775	A
5 - Yowley Road (Northern Arm)	66	1838	823	0.080	66	0.1	4.753	A

08:45 - 09:00

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A494 (Eastern Arms)	413	919	2019	0.205	414	0.3	2.242	A
2 - B5125 (Southern Arm)	720	378	2668	0.270	721	0.4	1.848	A
3 - A494 (Western Arms)	581	649	2030	0.286	582	0.4	2.488	A
4 - B5127 (North Western Arm)	798	790	1797	0.444	800	0.8	3.617	A
5 - Yowley Road (Northern Arm)	55	1536	961	0.057	55	0.1	3.974	A

Assess 2035, PM

Data Errors and Warnings

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

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout		1, 2, 3, 4, 5	3.38	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D8	Assess 2035	PM	ONE HOUR	16:30	18:00	15

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

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1 - A494 (Eastern Arms)		✓	864	100.000
2 - B5125 (Southern Arm)		✓	1069	100.000
3 - A494 (Western Arms)		✓	738	100.000
4 - B5127 (North Western Arm)		✓	671	100.000
5 - Yowley Road (Northern Arm)		✓	70	100.000

Origin-Destination Data

Demand (PCU/hr)

		To				
		1 - A494 (Eastern Arms)	2 - B5125 (Southern Arm)	3 - A494 (Western Arms)	4 - B5127 (North Western Arm)	5 - Yowley Road (Northern Arm)
From	1 - A494 (Eastern Arms)	0	381	0	453	30
	2 - B5125 (Southern Arm)	315	0	427	305	22
	3 - A494 (Western Arms)	0	339	43	334	22
	4 - B5127 (North Western Arm)	283	264	107	0	17
	5 - Yowley Road (Northern Arm)	20	25	17	8	0

Vehicle Mix

Heavy Vehicle Percentages

		To				
		1 - A494 (Eastern Arms)	2 - B5125 (Southern Arm)	3 - A494 (Western Arms)	4 - B5127 (North Western Arm)	5 - Yowley Road (Northern Arm)
From	1 - A494 (Eastern Arms)	0	0	0	0	0
	2 - B5125 (Southern Arm)	0	0	0	0	0
	3 - A494 (Western Arms)	0	0	0	0	0
	4 - B5127 (North Western Arm)	0	0	0	0	0
	5 - Yowley Road (Northern Arm)	0	0	0	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
1 - A494 (Eastern Arms)	0.47	3.31	0.9	A
2 - B5125 (Southern Arm)	0.48	2.83	0.9	A
3 - A494 (Western Arms)	0.48	4.10	0.9	A
4 - B5127 (North Western Arm)	0.42	3.50	0.7	A
5 - Yowley Road (Northern Arm)	0.08	3.97	0.1	A

Main Results for each time segment

16:30 - 16:45

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A494 (Eastern Arms)	650	603	2203	0.295	649	0.4	2.314	A
2 - B5125 (Southern Arm)	805	494	2594	0.310	803	0.4	2.008	A
3 - A494 (Western Arms)	556	851	1915	0.290	554	0.4	2.640	A
4 - B5127 (North Western Arm)	505	579	1907	0.265	504	0.4	2.563	A
5 - Yowley Road (Northern Arm)	53	1014	1200	0.044	53	0.0	3.137	A

16:45 - 17:00

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A494 (Eastern Arms)	777	721	2134	0.364	776	0.6	2.648	A
2 - B5125 (Southern Arm)	961	591	2532	0.380	960	0.6	2.288	A
3 - A494 (Western Arms)	663	1018	1821	0.364	663	0.6	3.107	A
4 - B5127 (North Western Arm)	603	693	1848	0.326	603	0.5	2.889	A
5 - Yowley Road (Northern Arm)	63	1214	1109	0.057	63	0.1	3.441	A

17:00 - 17:15

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A494 (Eastern Arms)	951	883	2040	0.466	950	0.9	3.299	A
2 - B5125 (Southern Arm)	1177	724	2448	0.481	1176	0.9	2.827	A
3 - A494 (Western Arms)	813	1246	1691	0.480	811	0.9	4.084	A
4 - B5127 (North Western Arm)	739	848	1768	0.418	738	0.7	3.492	A
5 - Yowley Road (Northern Arm)	77	1485	984	0.078	77	0.1	3.967	A

17:15 - 17:30

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A494 (Eastern Arms)	951	884	2040	0.466	951	0.9	3.307	A
2 - B5125 (Southern Arm)	1177	724	2448	0.481	1177	0.9	2.832	A
3 - A494 (Western Arms)	813	1247	1690	0.481	813	0.9	4.100	A
4 - B5127 (North Western Arm)	739	849	1767	0.418	739	0.7	3.500	A
5 - Yowley Road (Northern Arm)	77	1487	984	0.078	77	0.1	3.971	A

17:30 - 17:45

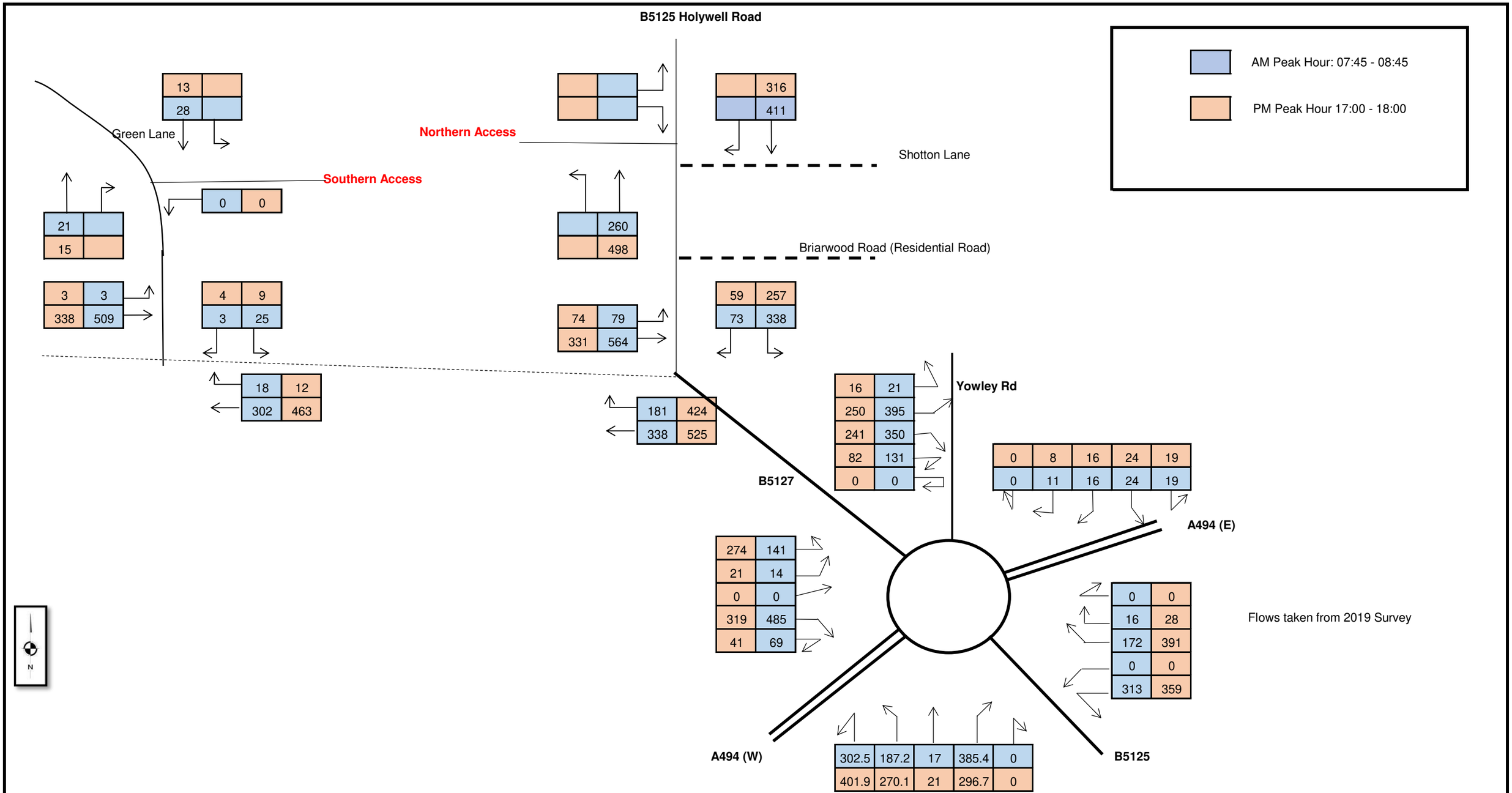
Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A494 (Eastern Arms)	777	723	2133	0.364	778	0.6	2.659	A
2 - B5125 (Southern Arm)	961	592	2531	0.380	962	0.6	2.295	A
3 - A494 (Western Arms)	663	1020	1820	0.365	665	0.6	3.120	A
4 - B5127 (North Western Arm)	603	694	1847	0.327	604	0.5	2.900	A
5 - Yowley Road (Northern Arm)	63	1216	1107	0.057	63	0.1	3.446	A

17:45 - 18:00

Arm	Total Demand (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A494 (Eastern Arms)	650	605	2202	0.295	651	0.4	2.323	A
2 - B5125 (Southern Arm)	805	496	2593	0.310	805	0.5	2.014	A
3 - A494 (Western Arms)	556	854	1914	0.290	556	0.4	2.654	A
4 - B5127 (North Western Arm)	505	581	1906	0.265	506	0.4	2.571	A
5 - Yowley Road (Northern Arm)	53	1018	1198	0.044	53	0.0	3.142	A

S|C|P

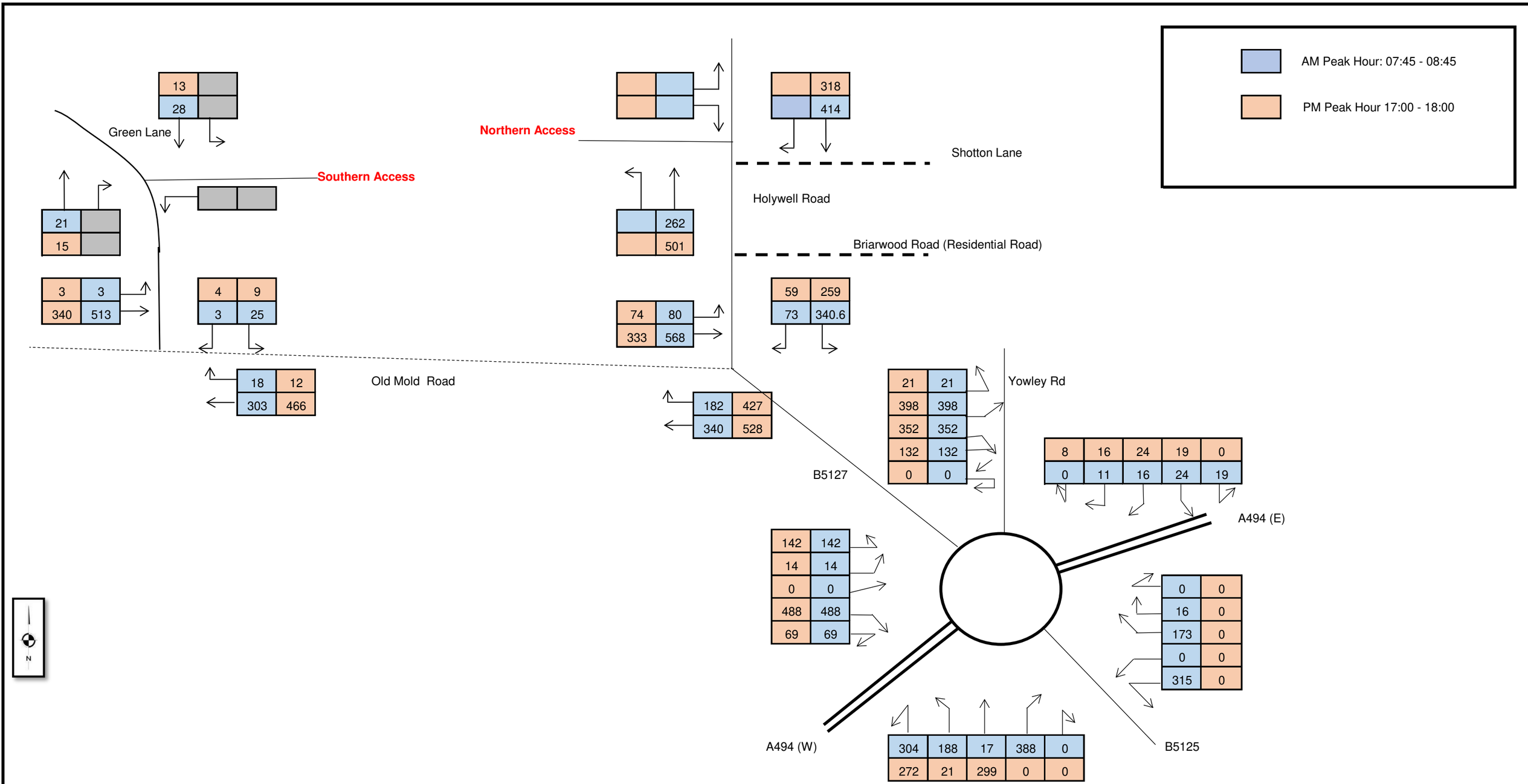
FIGURES



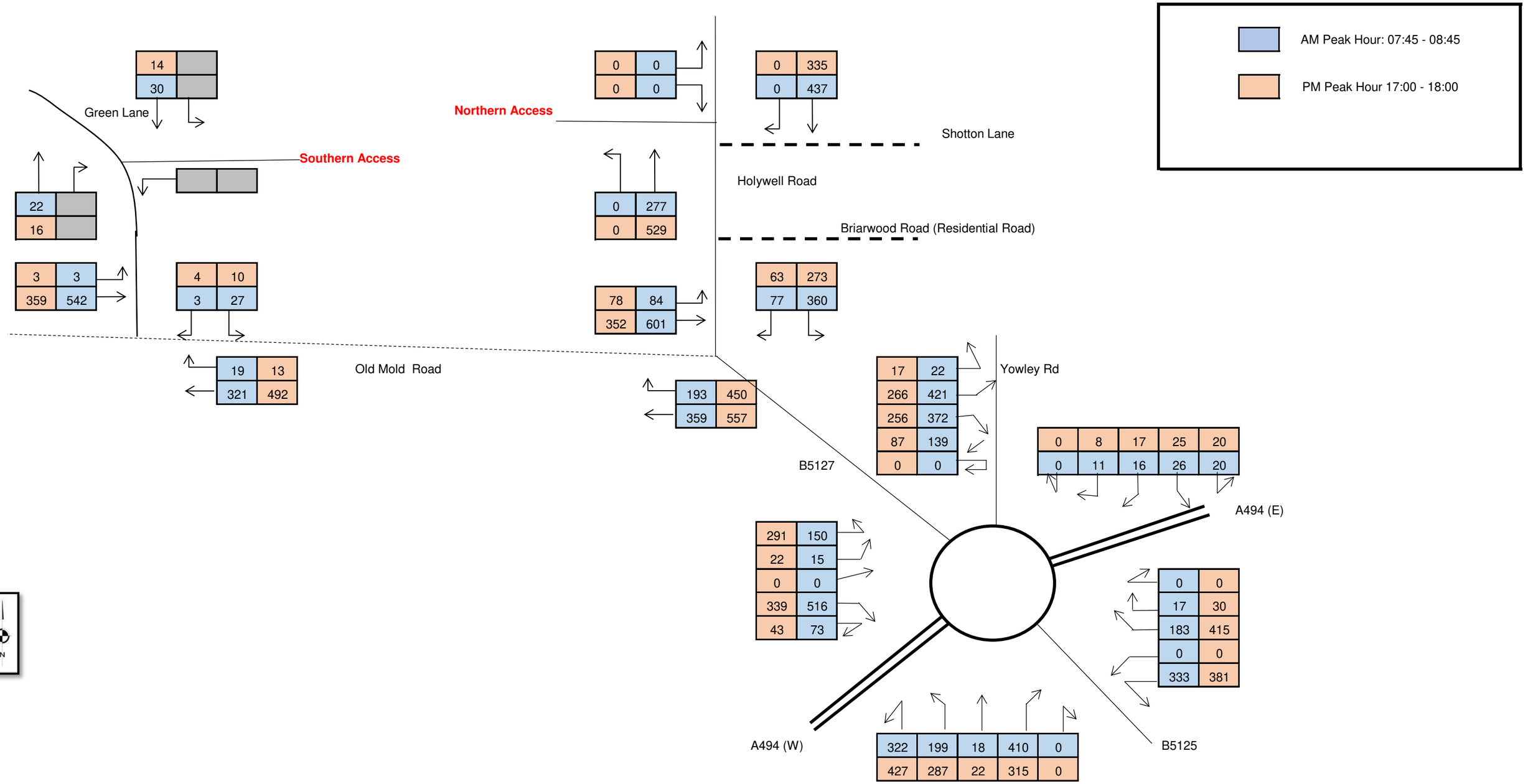
Flows taken from 2019 Survey

S C P Transportation Planning : Infrastructure Design	**Observed Traffic Survey Flows 2024**	**04/03/2024**
	Proposed Residential Development, Holywell Road, Ewloe	Traffic Figure 1

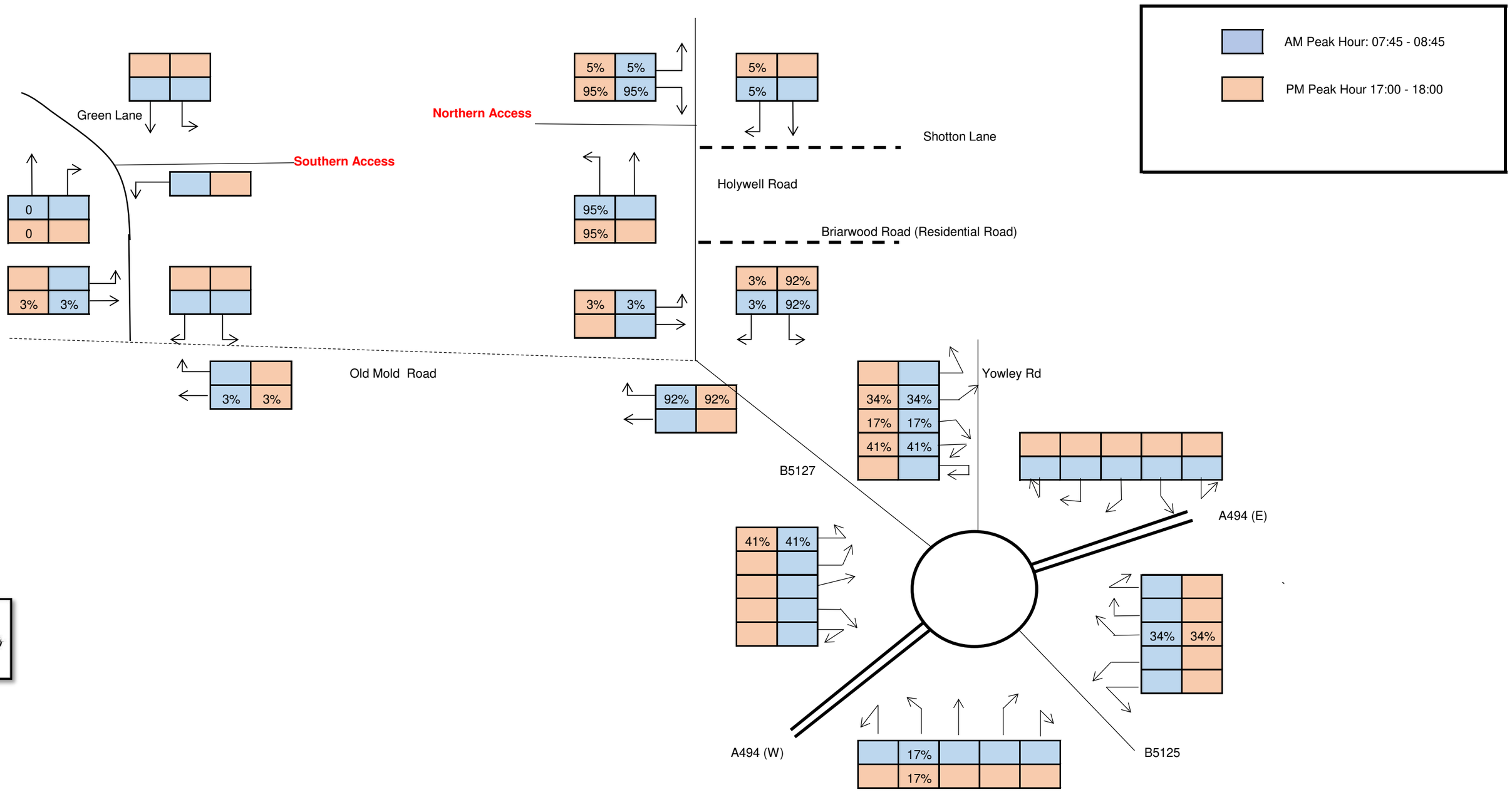
Job Number
SCP/230836



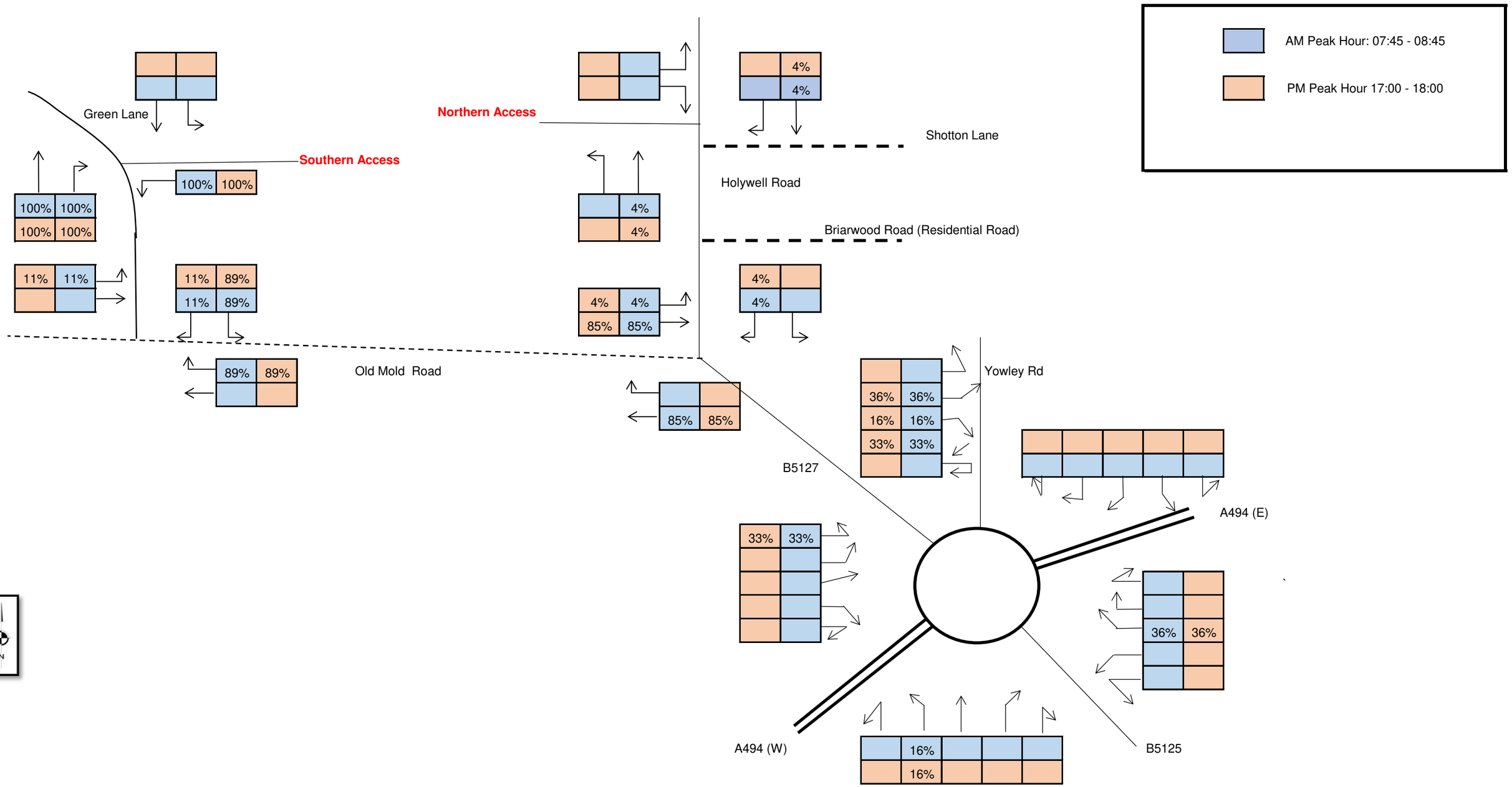
S C P Transportation Planning : Infrastructure Design	**Growthed Traffic Flows 2025**	**04/03/2024**	Job Number SCP/230836
	Proposed Residential Development, Holywell Road, Ewloe		Traffic Figure 2



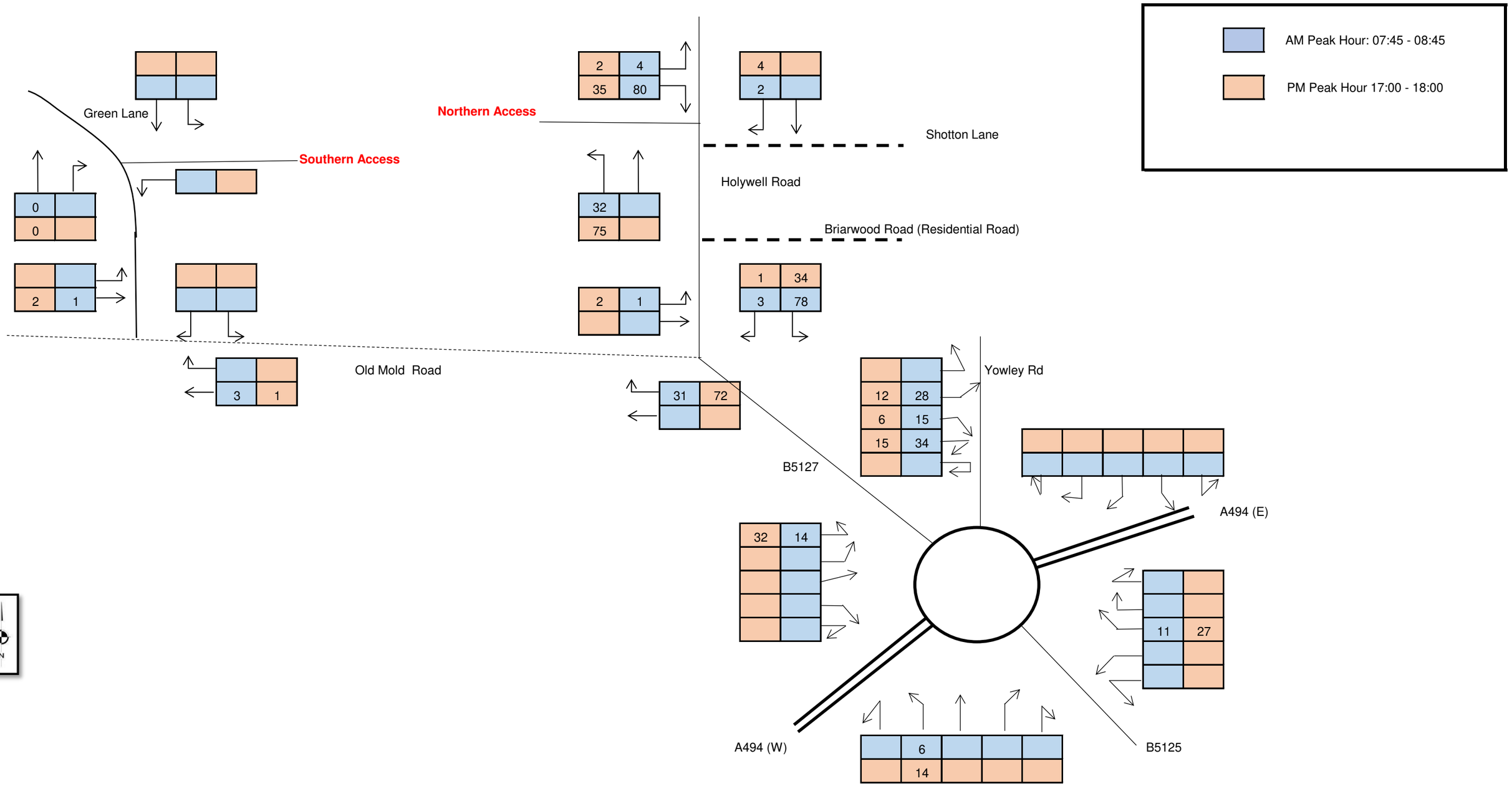
S C P Transportation Planning : Infrastructure Design	**Growthed Traffic Flows 2035**	**04/03/2024**	Job Number SCP/230836
	Proposed Residential Development, Holywell Road, Ewloe		Traffic Figure 3



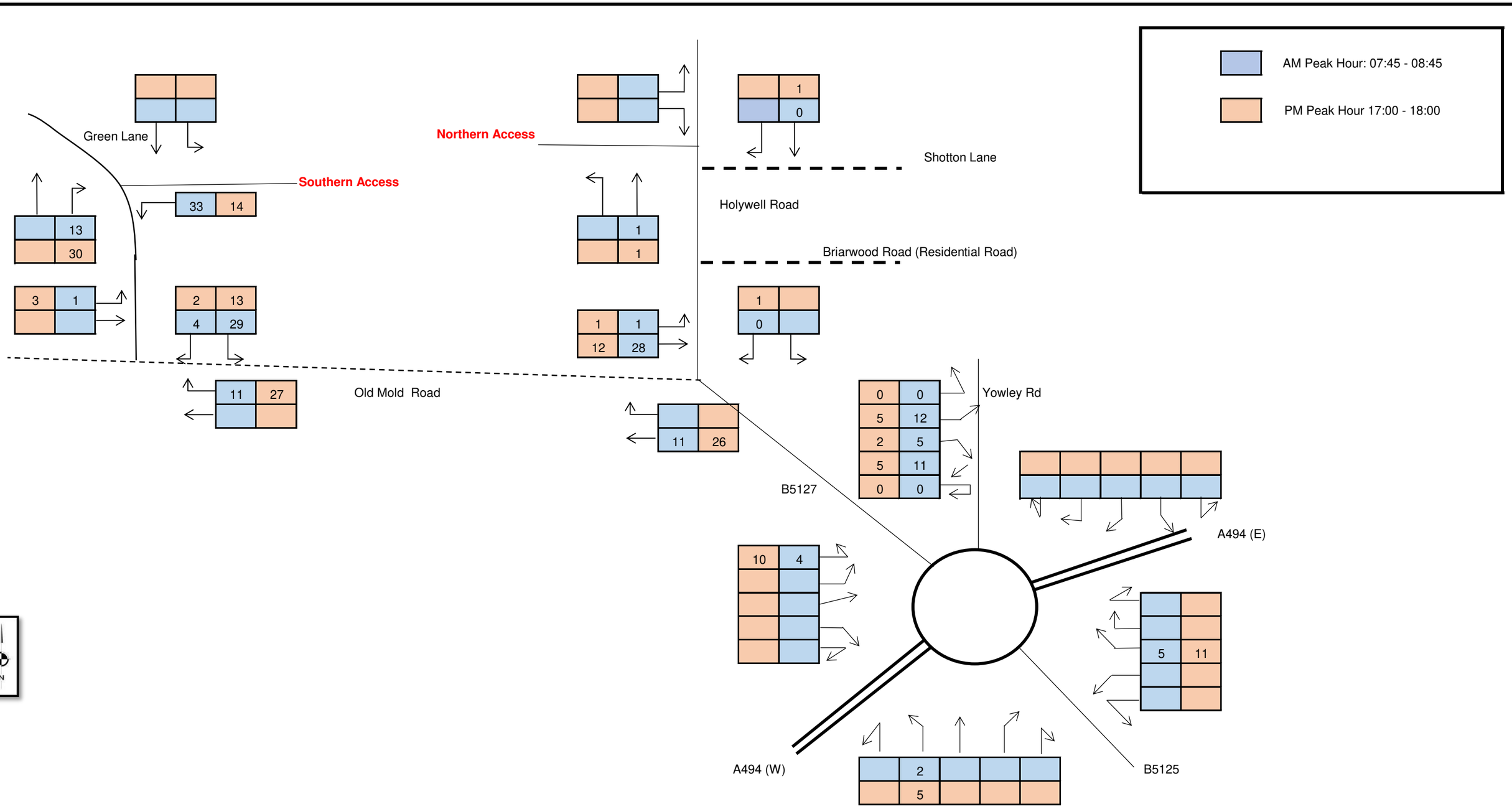
Transportation Planning : Infrastructure Design	**Trip Distribution - Northern Access**	**04/03/2024**	Job Number SCP/230836
	Proposed Residential Development, Holywell Road, Ewloe		Traffic Figure 4



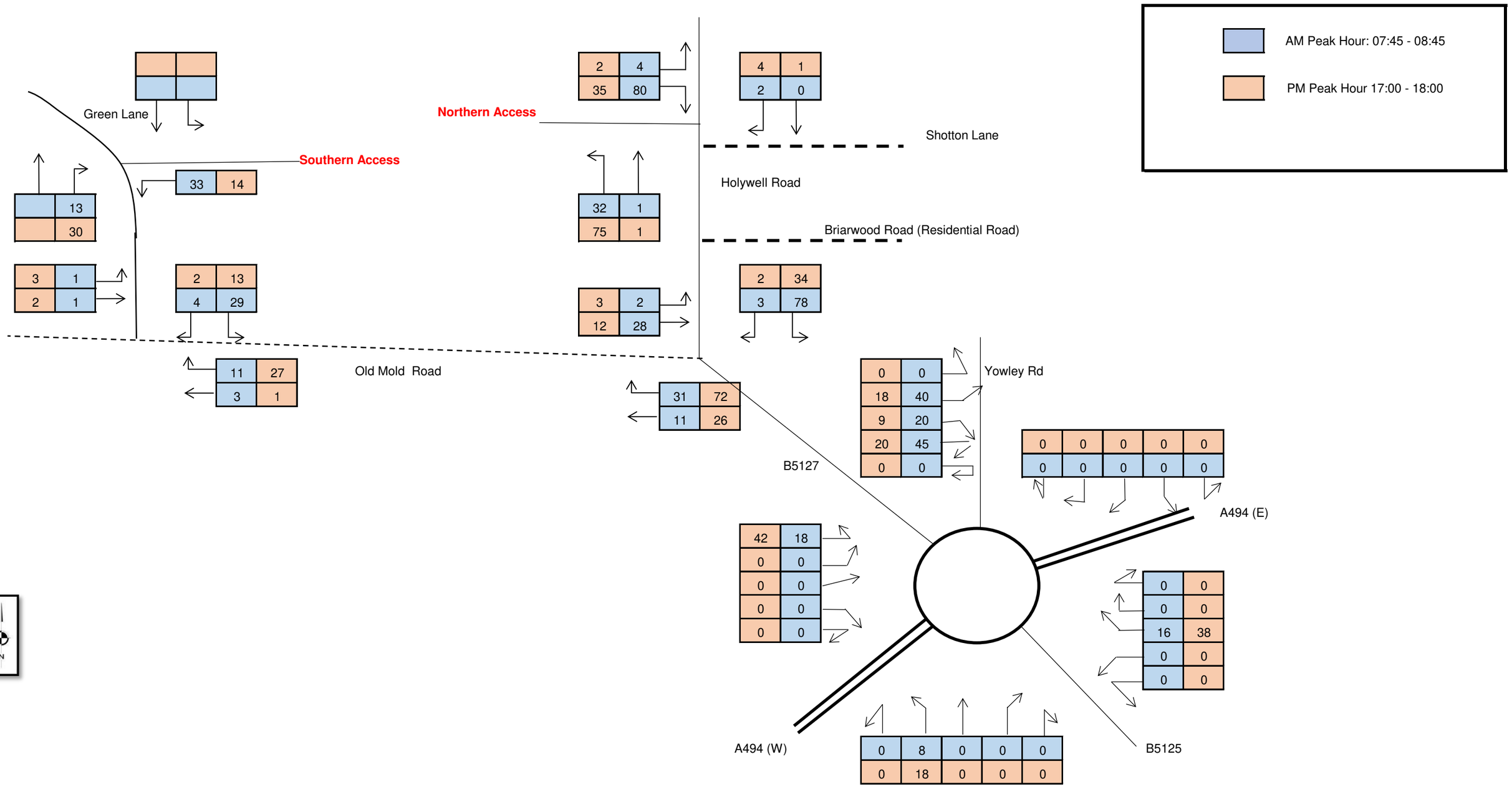
S C P Transportation Planning : Infrastructure Design	**Trip Distribution - Southern Access**	**04/03/2024**	Job Number SCP/230836
	Proposed Residential Development, Holywell Road, Ewloe		Traffic Figure 5



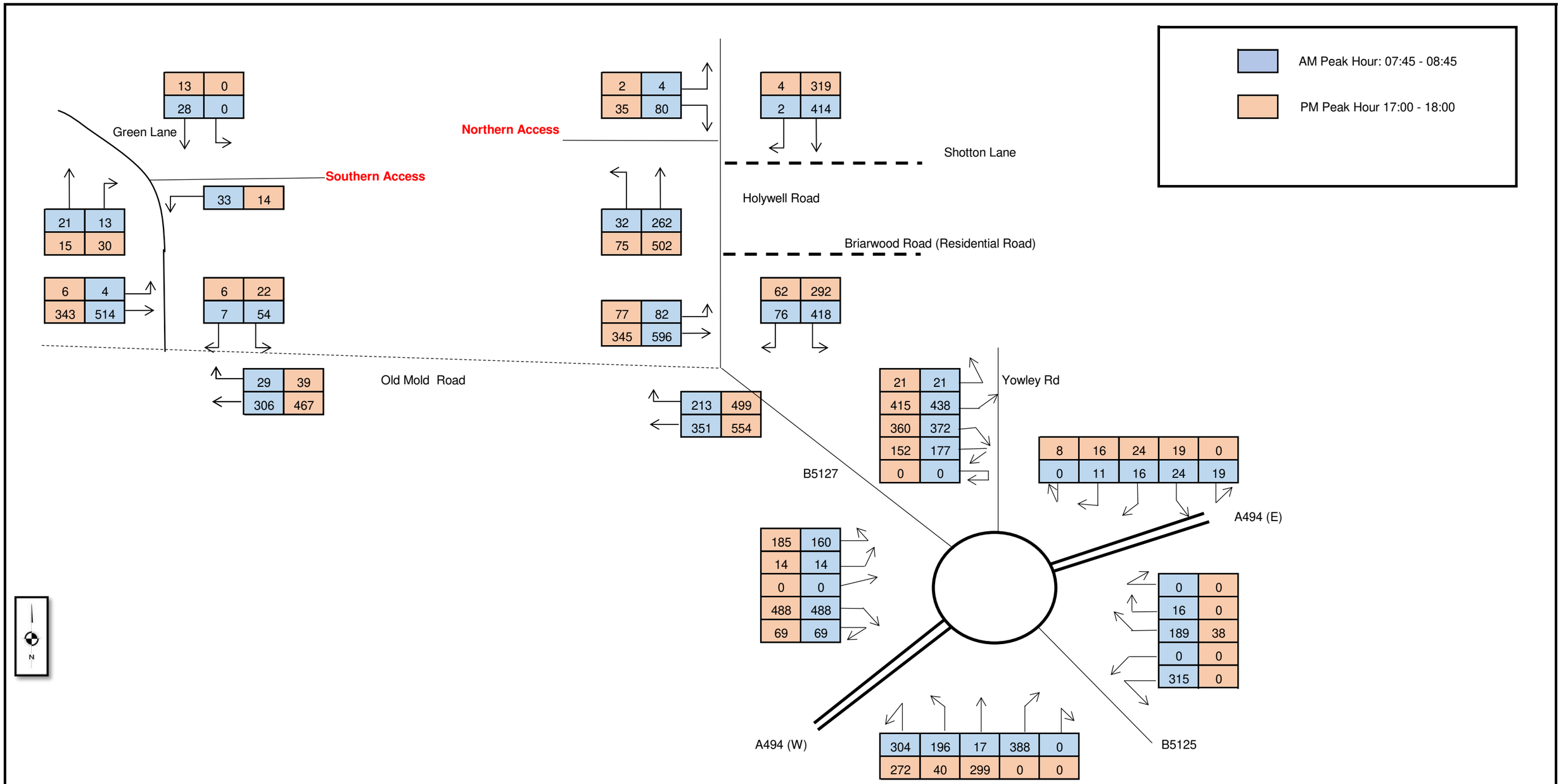
S C P Transportation Planning : Infrastructure Design	**Traffic Assignment - Northern Access**	**04/03/2024**	Job Number SCP/230836
	Proposed Residential Development, Holywell Road, Ewloe		Traffic Figure 6



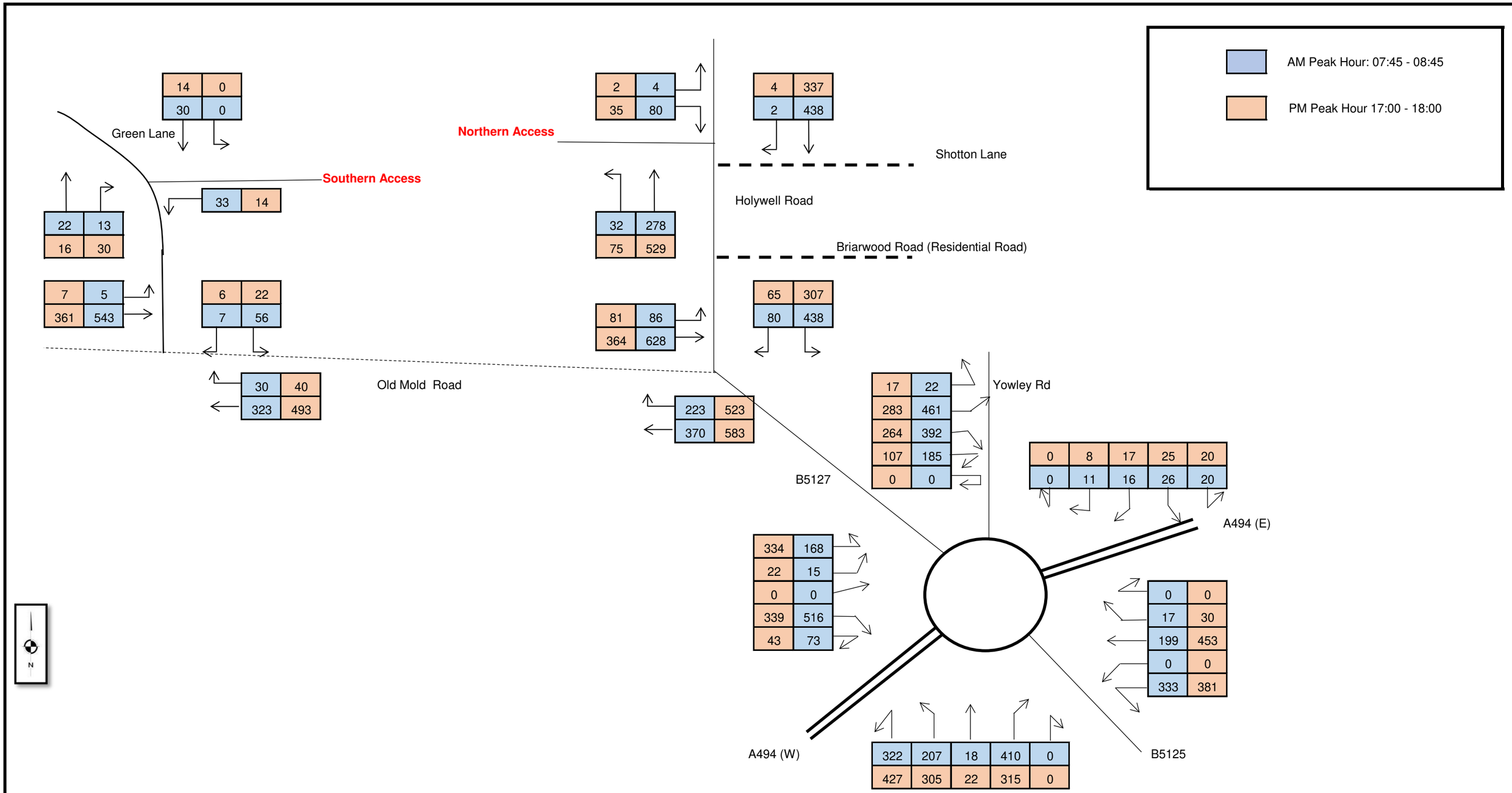
S C P Transportation Planning : Infrastructure Design	**Traffic Assignment - Southern Access**	**04/03/2024**	Job Number SCP/230836
	Proposed Residential Development, Holywell Road, Ewloe		Traffic Figure 7



S C P Transportation Planning : Infrastructure Design	**Total Traffic Assignment**	**04/03/2024**	Job Number SCP/230836
	Proposed Residential Development, Holywell Road, Ewloe		Traffic Figure 8



S C P Transportation Planning : Infrastructure Design	**Assessment Traffic Flows 2025**	**04/03/2024**	Job Number SCP/230836
	Proposed Residential Development, Holywell Road, Ewloe		Traffic Figure 9



S C P Transportation Planning : Infrastructure Design	**Assessment Traffic Flows 2035**	**04/03/2024**	Job Number SCP/230836
	Proposed Residential Development, Holywell Road, Ewloe		Traffic Figure 10