SCP

Transportation Planning : Infrastructure Design

Transport Assessment

Proposed Residential Development

Land at Stakehill, Rochdale

REDROW

March 2023

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1.0 INTRODUCTION

1.1 SCP are retained by Redrow Homes Lancashire to provide transport planning consultancy services in relation to a proposed residential development on land at Stakehill, Rochdale.

1.2 The site forms part of the Policy JP Allocation 2 in the August 2021 publication stage of the Places for Everyone (PfE) Joint Development Plan Document.

1.3 A Scoping Study was submitted to Rochdale Borough Council (RBC) in August 2022 to seek to agree the scope and methodology of assessment for this Transport Assessment. This Transport Assessment has been prepared based on the methodology set out in the Scoping Study.

1.4 The TA has been prepared in line with the now archived Department for Transports (DfT's) March 2007 "*Guidance on Transport Assessment*" document and the Ministry of Housing Communities & Local Government's (MHCLG) planning practice guidance (PPG) "*Transport Evidence in Plan Making*" and *"Travel Plans, Transport Assessments and Statements"* documents.

Structure of Report

1.5 The structure of the TA is set out as follows:-

- Chapter 2 - describes in detail the site location and existing uses, surrounding area, local highway network, existing traffic conditions and road safety record;
- Chapter 3 - summarises the national, regional and local transport policies and describes how the proposed development accords with them;
- Chapter 4 – defines the development proposals including the proposed site access
- Chapter 5 – assesses the accessibility of the site by non-car transport modes
- Chapter 6 – describes the future baseline traffic conditions on the local highway network within the study area
- Chapter 7 – details the expected changes in vehicle trips at junctions within the study area
- Chapter 8 – details the options assessed for the proposed site access junction
- Chapter 9 – presents an assessment of the impact of the development on the operational performance of off-site junctions within the study area.
- Chapter 10 – provides summary and conclusions to this TA derived from the analysis presented in the above Chapters.

2.0 EXISTING CONDITIONS

Overview

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

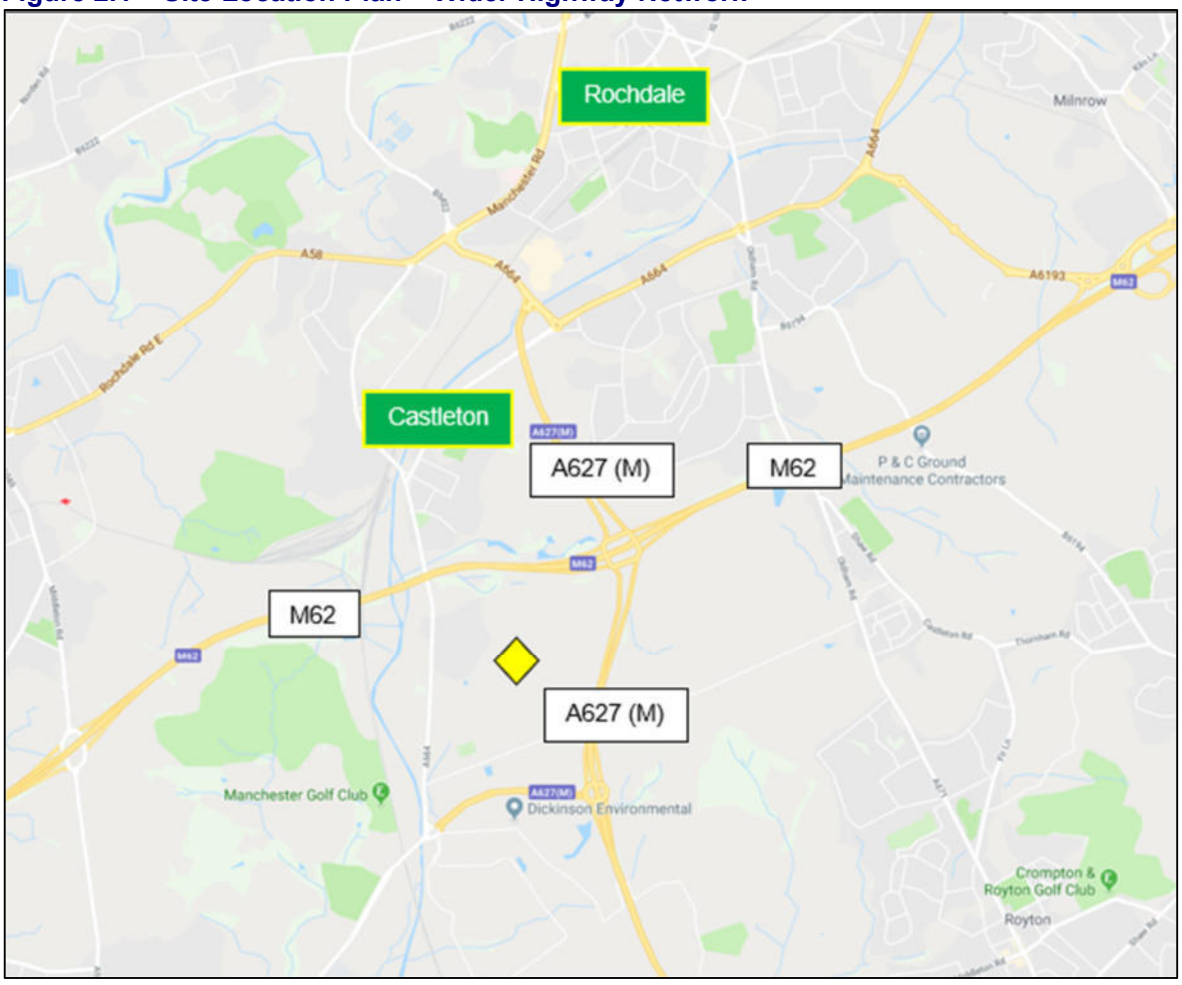
Site Location and Composition

2.2 The site is located approximately 2km to the south of Castleton and approximately 4km to the south of Rochdale Town Centre. The site is enclosed by the M62 to the norththe A627(M) to the east, A627(M) spur to the south (bisected by Thornham Lane) and housing and Rochdale Road to the west.

2.3 The site extends to approximately 89 hectares and predominantly comprises a series of fields which are currently used for pasture together with a garden centre fronting Rochdale Road to the west. There are several public rights of way and bridleways traversing the site.

2.4 The location of the site in relation to the wider area is shown on **Figure 2.1**.

Figure 2.1 – Site Location Plan – Wider Highway Network



Source: Google Maps

2.5 The red-line boundary is shown in detail on the Application Boundary plan at **Appendix A** and indicated on **Figure 2.2** as follows:

Figure 2.2 – Approximate Site Boundary



Source: Google Maps

2.6 The surrounding area is mixture of residential to the west, employment to the south and undeveloped land to the north and east, beyond the motorways bounding the site.

2.7 There are a number of Public Rights of Way (PROW's) which run through the site, as shown on the plan at **Appendix B**.

Local Highway Network

A664 Rochdale Road

2.8 The A664 Rochdale Road is located to the west of the site and connects Castleton and Rochdale to the north and Manchester to the south. Rochdale Road is subject to a 30mph speed limit in the vicinity of the site and the carriageway width varies between approximately 7m to 9m in this area, benefitting from footways, street lighting and dropped kerbs at the majority of side roads and crossing points.

2.9 Rochdale Road provides direct frontage access to a number of residential properties, commercial units and access to a number of residential cul-de-sacs.

2.10 The commercial units served include the former 'All-in-One' garden centre which is within the site forming part of the western boundary and is being demolished. It has an existing access onto Rochdale Road, which forms the minor arm of a ghost island major / minor priority junction. The garden centre frontage is approximately 220m long and double yellow line traffic regulation orders are in place along it.

2.11 There are pedestrian refuge islands located on Rochdale Road at intervals of approximately 160m to aid pedestrians crossing the road. **Figure 2.3**. below highlights one of the pedestrian refuge islands which is located approximately 115 m to the north of the site frontage

Figure 2.3 Rochdale Road pedestrian refuge island



Source: Google Street View

Thornham New Road

2.12 Thornham New Road forms the majority of northern site boundary with a small section of the site straddling Thornham New Road approximately centrally along the northern frontage. It provides access to residential properties and streets to either side. The carriageway is approximately 5m wide for the 330m from Rochdale Road to the west, where it forms the minor arm of a simple major / minor priority junction. Beyond this point to the east, Thornham New Road transitions to a rural access track serving local farm properties.

2.13 On -street car parking occurs along the south side of the carriageway, predominantly in the vicinity of the row of terraced properties approximately central along the formal section of Thornham New Road, which do not benefit from off-street car parking.

Thornham Lane

2.14 Thornham Lane bisects the southern section of the site and connects the A664 Rochdale Road to the west to the A671 Oldham Road to the east where Thornham Lane becomes Thornham Old Road. Thornham Lane is not fully surfaced with lighting columns and a footway along the north side provided along the row of residential properties extending approximately 150m from the junction with the A664, where it forms the minor arm of a ghost island major / minor priority junction. St John Thornham Church and St John's C.E Primary School are located further east and are also served by Thornham Lane in the vicinity of the site, which is understood to be used for pick up and drop-off car parking at the school

A627 (M)

2.15 The A627(M) is a two-way dual carriageway which runs in a west to east direction and borders the south-eastern portion and eastern portion of the proposed development. Rochdale Road connects to the A627 at the Slattocks roundabout approximately 600 m south of the proposed primary site access. From this roundabout, the A627(M) runs east for approximately 950m before reaching another roundabout where the A627(M) begins to head in a north to south direction.

2.16 From the second roundabout, the A627(M) runs north along the eastern site boundary and connects to the M62 at a roundabout approximately 1.3 km north of the roundabout and to the south it connects to Oldham approximately 5 km south of the roundabout.

M62

2.17 The M62 is a motorway which runs in a west to east direction, bordering the north-eastern portion of the proposed development. The M62 runs between Liverpool and Hull, through Manchester and Leeds and can be accessed from the site via Rochdale Road and the A627(M).

Off-Site Study Area

2.18 Based on the assigned development traffic flows set out in the Transport Assessment Scoping Study the following junctions form the study area for the Transport Assessment:

Local Highway Network

1. A664 Rochdale Road / Proposed Site Access signalised junction
2. A664 Rochdale Road / Thornham New Road simple priority junction
3. A664 Rochdale Road / Thornham Lane simple priority junction
4. Slattock's Roundabout
5. A664 Manchester Road / A664 Queensway signalised junction
6. A58 / A664 Manchester Road signalised junction
7. A58 / B6452 / A664 signalised junction
8. A664 / Assheton Way / A669 roundabout junction

Strategic Road Network

1. A627 (M) / A627 Chadderton Way / Burnley Lane roundabout (A627(M) Junction 1)
2. A627(M) / A627(M) Spur roundabout (A627(M) Junction 2)
3. M62 J20 roundabout

Road Safety Record

2.19 The MCLHG's Planning Practice Guidance 'Transport evidence bases in plan making and decision taking' document states that, "*Critical locations on the road network with poor accident records should be identified. This is to determine if the proposed development will exacerbate existing problems or, if proposed, whether highway mitigation works or traffic management measures will help to alleviate the problems*".

2.20 Personal injury accident data has been obtained from the online resource CrashMap for the most recent 5 full year period available and is summarised for the junctions within the study area in **Table 2.1**.

Table 2.1 – Personal Injury Accident Data Summary

Junction (at or near)	Fatal	Serious	Slight	Total
A664 Rochdale Road / Proposed Site Access signalised junction	0	0	0	**0**
A664 Rochdale Road / Thornham New Lane simple priority junction	0	1	1	**2**
Slattock's Roundabout	1	0	3	**4**
A664 Manchester Road / A664 Queensway signalised junction	0	0	4	**4**
A58 / A664 Manchester Road signalised junction	0	0	5	**5**
A58 / B6452 / A664 signalised junction	0	0	7	**7**
A664 / Assheton Way / A669 roundabout junction	0	1	3	**4**
A627 (M) / A627 Chadderton Way / Burnley Lane roundabout (A627(M) Junction 1)	0	2	16	**18**
A627(M) / A627(M) Spur roundabout (A627(M) Junction 2)	0	0	0	**0**
M62 J20 roundabout	0	1	10	**11**

2.21 More detailed analysis of Rochdale Road and Slattocks Roundabout is provided as follows:

Rochdale Road (A664)

2.22 The accident study area shown in **Figure 2.4** shows the A664 from Slattocks Roundabout, to the bridge passing under the M62. For this section of Rochdale Road, there was a total of nine accidents reported between 2017-2021. Six of these were categorised as 'slight', two as 'serios' and one fatality.

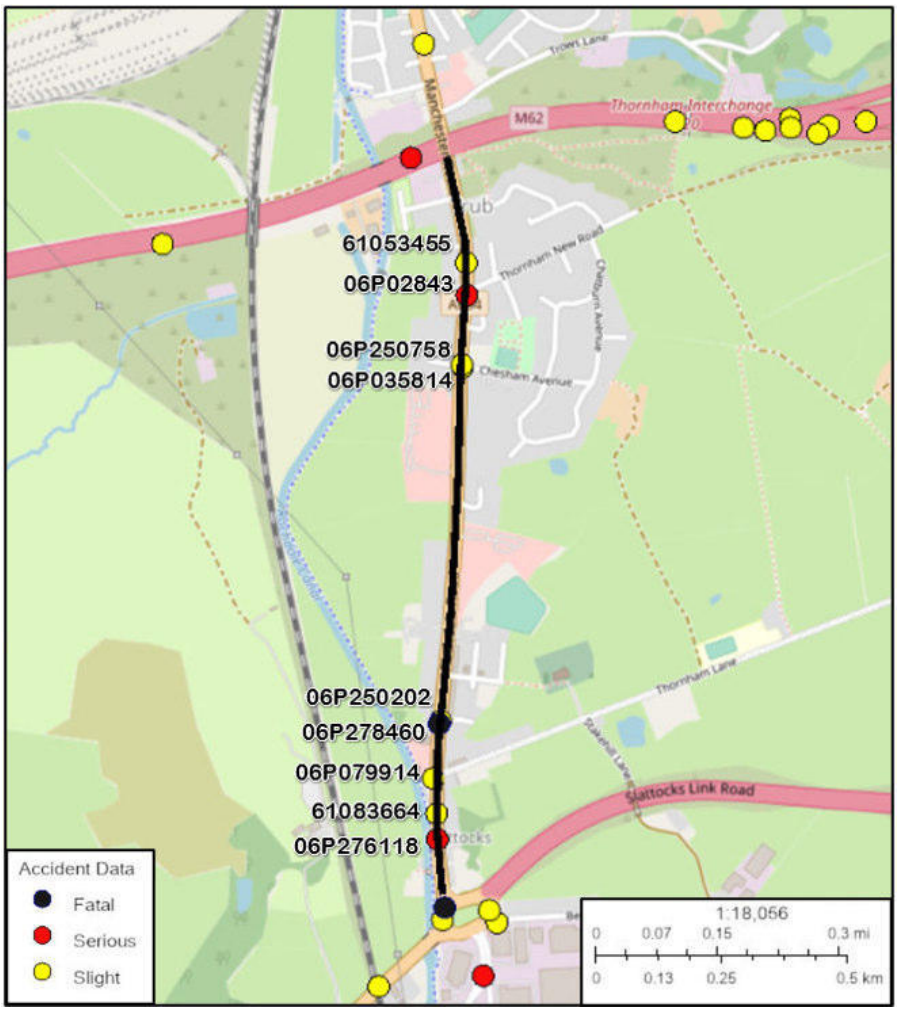
2.23 Of the slight accidents, two involved car collisions (ref. 06P035814 & 06P250202), two involved motorcycle and car collisions (ref. 61053455 & 61083664), one was a car and bus collision (ref. 06P079914), and the remaining accident involved a pedestrian and car collision (ref. 06P250758). The latter happened in 2018, when a pedestrian crossed the A664 and was hit by a car.

2.24 One of the serious accidents (ref. 06P276118) reported involved a pedal cycle and car collision. In October 2020, a car hit and injured a cyclist when performing a U-turn on the A664. The other serious accident happened in 2017, when three cars collided resulting in two driver casualties.

2.25 The fatality occurred on 24 December 2020 at 7:35 PM. A car travelling north on Rochdale Road collided with a parked car and subsequently a pedestrian, who was shielded by the parked car, resulting in the fatality of the pedestrian.

2.26 To summarise, Rochdale Road's accident analysis includes one fatality, two 'serious' accidents, and six 'slight' accidents. As shown in **Figure 2.4** below, the fatality occurred more than 300m from the site frontage. Also, the serious accident involving a cyclist, was caused through a driver performing a banned manoevre, as U turns are prohibited on this section of road.

Figure 2.4 Reported accidents on Rochdale Road



Slattocks Roundabout

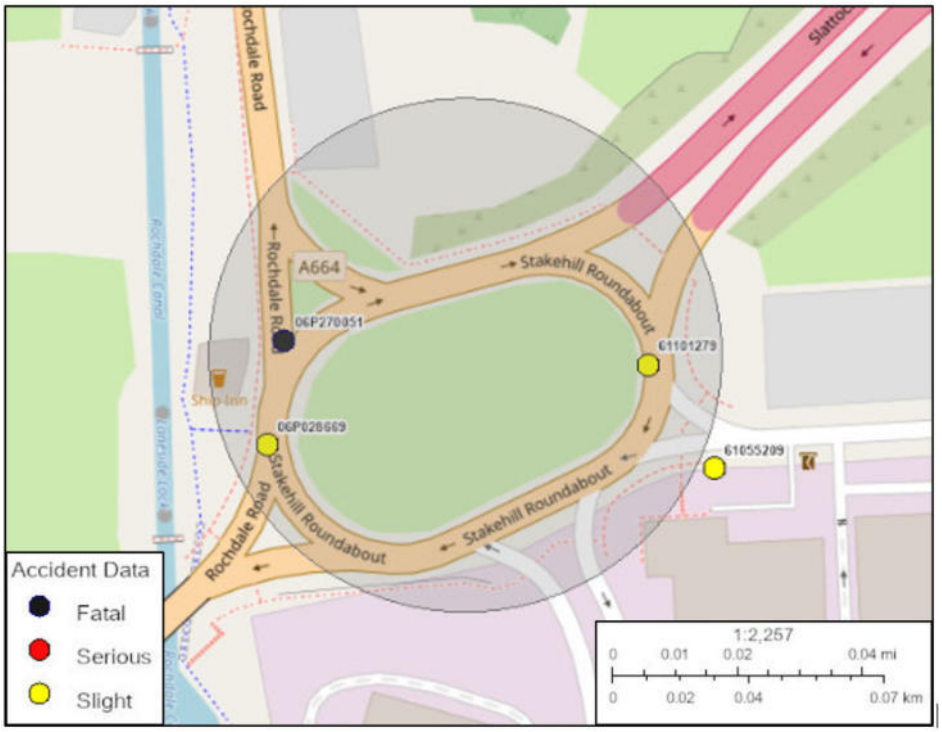
2.27 Slattocks Roundabout (previously named Stakehill Roundabout) has five arms accessing the A664, the A627, Bentley Avenue, and Whitbrook Way. Three accidents were reported here between 2017-2021; two categorised as slight, and one fatality.

2.28 The fatality occurred on a Friday in March 2020, at 10:33 PM and only involved one vehicle. The car overturned after skidding, causing three passengers to be seriously injured, one of which resulted in a fatality.

2.29 One of the slight accidents (ref. 06P028669) involved a cyclist casualty. In March 2017, a car entering the roundabout from the A664 (southwest of the site), collided with a pedal cycle already on the roundabout. The other slight accident happened in 2021 and involved one car overturning after skidding. The driver was injured.

2.30 There were only three accidents in total that were reported on Slattocks Roundabout within the five year period. The locations of these can be seen in **Figure 2.5** below. Two of the accidents were occurred by a car overturning without any other vehicles involved. The other 'slight' accident was an isolated incident.

Figure 2.5 Reported accidents at Slattocks Roundabout



Thornham Lane

2.31 Aside from the accidents located on Rochdale Road and Slattocks Roundabout, there is one other which lies on an area of interest, on Thornham Lane. In December 2017, two cars collided on Thornham Lane just west of the A627 overhead bridge. One of the cars skidded into the other when it was snowing, resulting in one 'slight' casualty.

Summary

2.32 Accidents occurred at a range of locations and no significant clusters appear on the local highway network. It is noted that a number of accidents occurred at or near the A627 (M) / A627 Chadderton Way / Burnley Lane roundabout (A627(M) Junction 1) and M62 J20 roundabouts, however these are existing highly trafficked motorway interchanges and the relative number of accidents does not present a material concern in relation to the application proposals

Traffic Surveys

2.33 Fully classified peak period traffic counts were undertaken at the following junctions between the hours of 0715-0915 and 1600-1800 on Wednesday 12th October 2022:

- A664 Rochdale Road / Thornham New Road simple priority junction
- A664 Rochdale Road / Thornham Lane simple priority junction
- Slattock's Roundabout
- A664 Manchester Rd / A664 Queensway
- A58 / A664 Manchester Rd
- A58 Manchester Rd / Rochdale Bypass
- A627 (M) A627 Spur Roundabout (A627(M)) Junction 2
- A664 / Assheton Way / A669
- A627 (M) / A627 Chadderton Way / Burnley Lane
- M62 J20

2.34 The survey observed that the peak hours on the network were between 07:45-08:45hrs and 16:30-17:30hrs.

2.35 The traffic survey data is presented in **Appendix C** with the peak hour traffic flows shown diagrammatically on **Traffic Flow Figure 1**.

3.0 PLANNING POLICY CONTEXT

Introduction

3.1 This chapter provides a summary of relevant national, regional and local transport policies and provides a brief analysis of how the proposed development will contribute towards their aims and objectives.

National Planning Policy Framework (NPPF)

3.2 NPPF is published by the Ministry for Communities and Local Government to set the framework under which local transport, parking and accessibility plans and policies are set. The NPPF has been revised most recently in July 2021.

3.3 At the heart of the National Planning Policy Framework is a presumption in favour of sustainable development which for decision-taking means:

- "approving development proposals that accord with an up-to-date development plan without delay; or
- where the there are no relevant development plan policies, or the policies which are most important for determining the application are out-of-date, granting permission unless:
  - the application of policies in this Framework that protect areas or assets of particular importance provides a clear reason for refusing the development proposed; or
  - any adverse impacts of doing so would significantly and demonstrably outweigh the benefits, when assessed against the policies in this Framework taken as a whole."

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

a) appropriate opportunities to promote sustainable transport modes can be – or have been – taken up, given the type of development and its location;
b) safe and suitable access to the site can be achieved for all users; and
c) the design of streets, parking areas, other transport elements and the content of associated standards reflects current national guidance, including the National Design Guide and the National Model Design Code 46; and
d) any significant impacts from the development on the transport network (in terms of capacity and congestion), or on highway safety, can be cost effectively mitigated to an acceptable degree.

3.5 Importantly, NPPF states that:

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

'Within this context, applications for development should:

a) give priority first to pedestrian and cycle movements, both within the scheme and with neighbouring areas; and second – so far as possible – to facilitating access to high quality public transport, with layouts that maximise the catchment area for bus or other public transport services, and appropriate facilities that encourage public transport use;
b) address the needs of people with disabilities and reduced mobility in relation to all modes of transport;
c) create places that are safe, secure and attractive – which minimise the scope for conflicts between pedestrians, cyclists and vehicles, avoid unnecessary street clutter, and respond to local character and design standards;
d) allow for the efficient delivery of goods, and access by service and emergency vehicles; and
e) be designed to enable charging of plug-in and other ultra-low emission vehicles in safe, accessible and convenient locations.

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

Regional Policy – Greater Manchester Transport Strategy 2040

3.6 In February 2017, Transport for Greater Manchester (TfGM) published the Greater Manchester Transport Strategy 2040 which sets out the vision for Greater Manchester and provides a plan to "*establish a fully integrated, high capacity transport system across Greater Manchester*".

3.7 The Transport Strategy has identified the following key challenges to help protect the environment:

- "*Increasing the use of sustainable transport to reduce the negative impacts of car use. Many people do not currently see sustainable modes as realistic alternatives and we must continue to work hard to improve the quality of our walking, cycling and public transport networks and to provide people with the facilities and training to make them natural, easy choices. The design of new development needs to make it easier for people to use sustainable modes.*

- *Reducing transport emissions is a particular challenge, given that economic and population growth will increase the demand for travel, hence more radical measures will be needed to enable Greater Manchester to meet challenging standards and targets, in terms of air quality and in response to the challenge of climate change.*
- *Making the best use of existing infrastructure will help to reduce environmental impacts. Locating new development where there is good access to public transport and services will reduce car travel and therefore emissions. Road and rail networks must also be used as efficiently as possible and be well maintained."*

3.8 As such, "*TfGM will continue to work with planning authorities and developers to better integrate transport and new development in accordance with the principles of:*

- *Reducing the need to travel by car, and the distance travelled;*
- *Maximising accessibility by sustainable modes;*
- *Making the best use of existing infrastructure, particularly through increasing the density of development close to public transport nodes;*
- *Maximising opportunities to provide additional public transport; and,*
- *Designing to encourage active travel*."

Regional Policy – Places for Everyone

3.9 Places for Everyone is a long-term plan of nine Greater Manchester districts (Bolton, Bury, Manchester, Oldham, Rochdale, Salford, Tameside, Trafford and Wigan) for jobs, new homes, and sustainable growth. It has been published by the Greater Manchester Combined Authority (GMCA) on behalf of the nine districts.

3.10 The plan is a joint development plan of the nine districts which will determine the kind of development that takes place in their boroughs, maximising the use of brownfield land and urban spaces while protecting Green Belt land from the risk of unplanned development.

3.11 Places for Everyone is at an advanced stage of preparation, having been subjected to a Regulation 19 Publication Version consultation in August and October 2021, and submitted to the Secretary of State for examination on 14th February 2022. The Examination is in progress at the time of writing.

3.12 With respect to site specific policies, the Site forms part of a draft allocation for mixed-use development under draft Policy Allocation JP 2 Stakehill, as denoted on the Policies Map which accompanies Places for Everyone.

3.13 As set out at draft Policy Allocation JP 2, Stakehill is to create a sustainable high-quality extension to the urban area and accommodate around 150,000 sqm of employment floorspace and around 1,680 residential dwellings to support new jobs within the North-East Growth Corridor. The scale of residential development on the northern part of the allocation (the application site) provides an opportunity to adopt a 'garden village' approach to create a locally distinctive residential offer.

Local Policy – Rochdale Adopted Core Strategy

3.14 The Rochdale Adopted Core Strategy was adopted in October 2016 and sets out the long-term spatial strategy for future development of Rochdale Borough until 2028.

3.15 In terms of accessibility, the main challenges are highlighted as follow:

- "*Ensuring transport improvements are co-ordinated with, and support, future development;*
- *Solving congestion at peak times across the borough;*
- *Improving transport links to the city centre for employment and leisure;*
- *Improving accessibility to jobs in the borough and elsewhere in Greater Manchester; and,*
- *Improving public transport and other forms sustainable transport to improve air quality along the M62 and A58 road corridors and to reduce emissions*."

3.16 Chapter 11 of the Core Strategy states that "*to improve accessibility and enhance sustainable travel, our policies seek to:*

- *deliver transport improvements at a strategic, borough-wide and local level to support development proposals;*
- *ensure that development is in the most appropriate and accessible locations;*
- *minimise trips, especially single occupancy car journeys, and trip length;*
- *promote wider travel choice and increase trips made by sustainable forms of travel, including public transport, cycling and walking;*
- *support measures that enhance safety and access for people with impaired mobility, protect traffic-sensitive town centres and residential communities; and,*
- *reduce emissions from traffic (particularly NOx gases, PM10 particulates and CO2 levels) contributing to Greater Manchester Local Transport Plan (GMLTP) and national targets by encouraging more sustainable travel choices and forms of travel, more active and healthier travel behaviour and take advantage of technological innovations*."

3.17 As a result, Policy T2 advocates that "[RBC] *will improve accessibility by locating development where good access to public transport is available or can be provided, backed by measures to reduce the need for travel and effective provision for cyclists, pedestrians and people with impaired mobility. Development will be appropriately located to minimise the need to travel by car and the number and length of car trips made to access local amenities."*

3.18 The push for sustainable transport is backed by other policies within the Core Strategy, such as G1 and P3.

3.19 Finally, Policy C2 also states that RBC will encourage the delivery of new housing at the Castleton corridor / Crown Business Park (Policy E3/2).

Consideration of the Application Site against Existing Policy Background

3.20 In general, the relevant transport policies set out above follow similar themes and promote common aims in respect of accessibility by non-car modes. These are to provide sustainable development with good access to encourage non-car modes of transport, to ensure that the highways impact of new developments is acceptable or mitigated against and to promote good site design with appropriate parking levels.

3.21 The later chapter on sustainable transport modes demonstrates that the proposed development is well located in relation to sustainable transport facilities making the development accessible by non-car modes of transport.

3.22 The above analysis of relevant national and local transport policies confirms that the proposed development is therefore compliant with the aspirations of relevant transport planning policies and can specifically help contribute to their objectives.

4.0 PROPOSED DEVELOPMENT

Overview

4.1 The development proposals comprise up to 1,380 dwellings and an ancillary local centre to serve the new housing. The application will be hybrid with approximately 400 units from the western section of the site in detail and the remainder in outline.

4.2 The Concept Masterplan for the site is included at **Appendix D**, whilst the proposed site layout for the detailed application is included at **Appendix E**.

Vehicular Access Arrangements

4.3 The primary site access is proposed to be a signalised junction with Rochdale Road and the preliminary layout design for this is shown on drawing SCP/190267/SK01 included at **Appendix F**. The junction proposes widening to provide dedicated left and right turn lanes into the site from Rochdale Road whilst retaining two ahead lanes in both directions.

4.4 A secondary access is also proposed via Thornham New Road to the north of the site, serving a limited section of the development expected to comprise a maximum of approximately 100 units. This access will comprise an extension of the adoptable section of Thornham New Road into the site.

4.5 The preliminary site layout has been designed to accommodate a bus service accessing the site within the main body of the site accessed from Rochdale Road, if appropriate.

Parking

4.6 RBC's maximum parking standards for C3 residential use are as follows:-

- Single bedroom houses – 1.25 spaces per dwelling
- 2+ bedroom houses – 2 spaces per dwelling (excluding garages)

4.7 These standards will be applied to the proposed development in the context of the location of the site and development proposals.

Servicing

4.8 The site layout has been designed to accommodate the movements of the Council's refuse vehicle without this being allowed to dominate the layout design. The swept path of a large refuse vehicle accessing the site layout has been undertaken as shown on drawing SCP/190267/ATR01 included at **Appendix G**.

Pedestrians / Cyclists

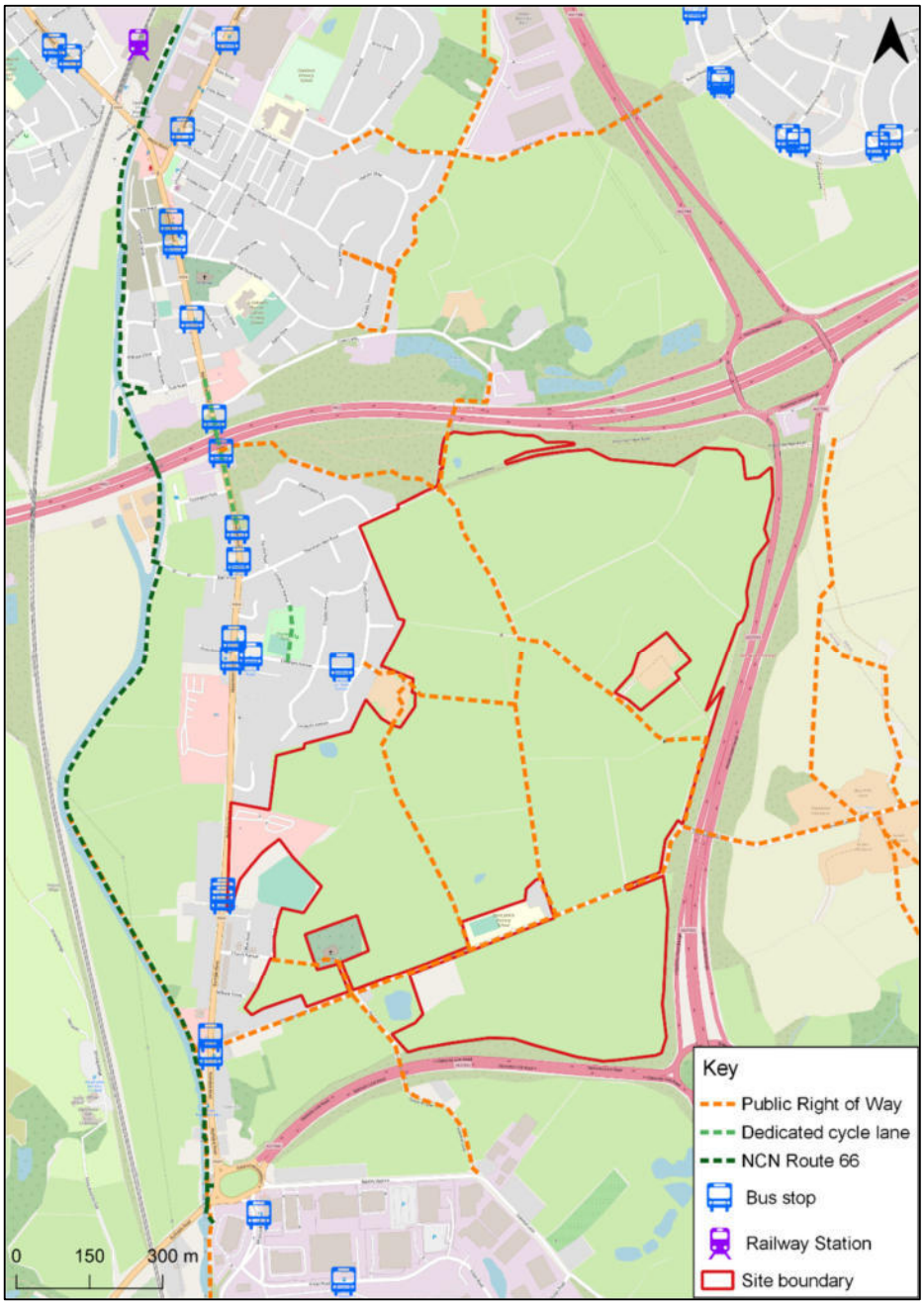
4.9 A number of public rights of way (PROWs) run through the site and these are to be improved as part of the proposed development to provide enhanced pedestrian and cycle paths as shown on the Concept Masterplan.

4.10 Additional off-road active travel routes are also proposed within the Masterplan through both the hill top park at the northern end of the site and community parkland and wildlife area to the south of the site.

5.0 ACCESSIBILITY BY SUSTAINABLE TRANSPORT MODES

5.1 The baseline accessibility of the development site for pedestrians, cyclists and via public transport is described in this section. A summary plan of the existing key transportation network is provided in the **Figure 5.1** to highlight the existing facilities for active travel and public transport in the vicinity of the site.

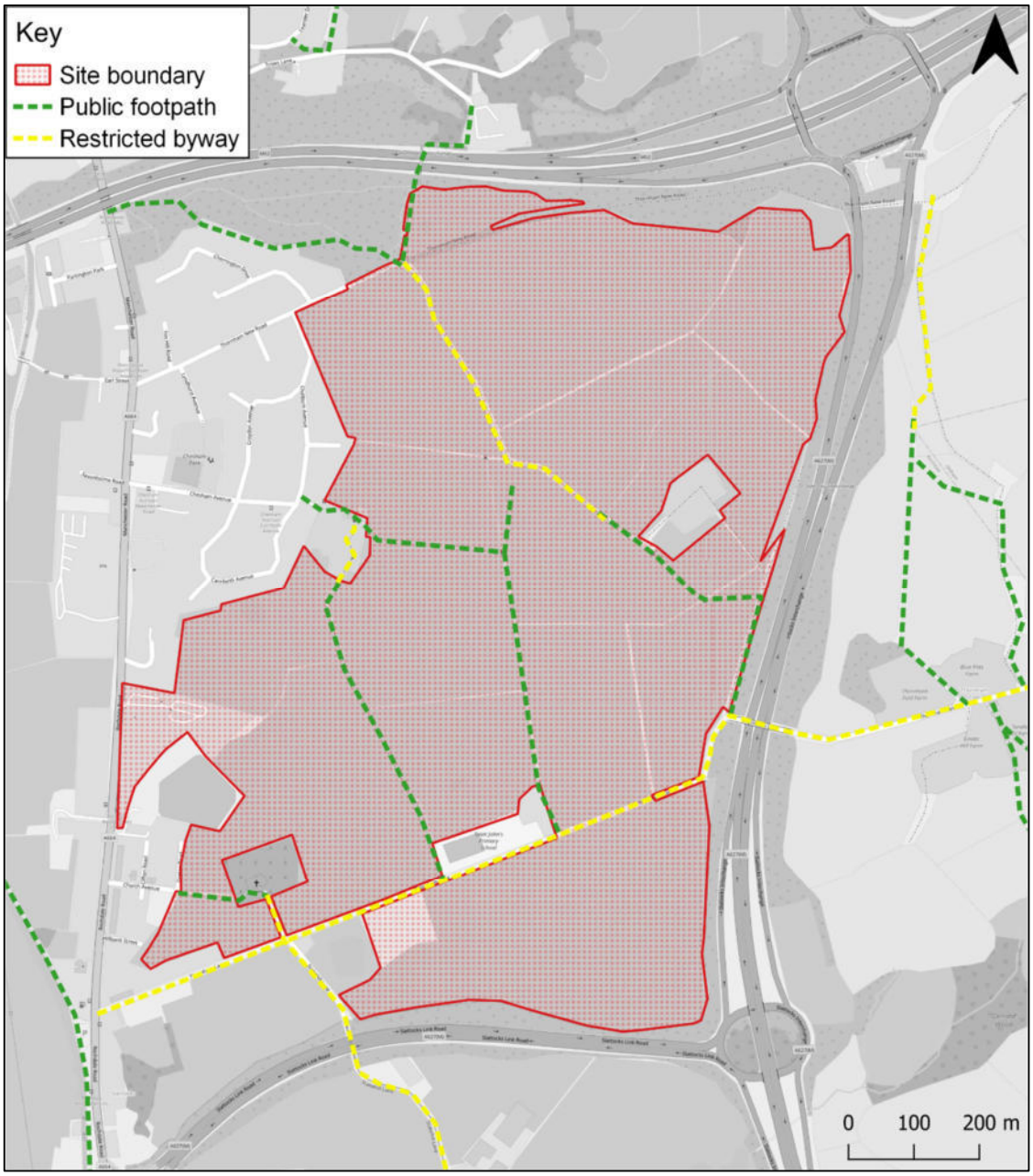
Figure 5.1 Baseline local transportation network summary



Pedestrian Network

5.2 As an undeveloped site currently pedestrian provision within the site is provided by Public Right of Way (PRoW) footpaths and restricted byways. **Figure 5.2** below highlights the existing PRoWs which run through the proposed development site, which are to be enhanced as set out in the previous chapter.

Figure 5.2 Public Right of Way (PRoW) network

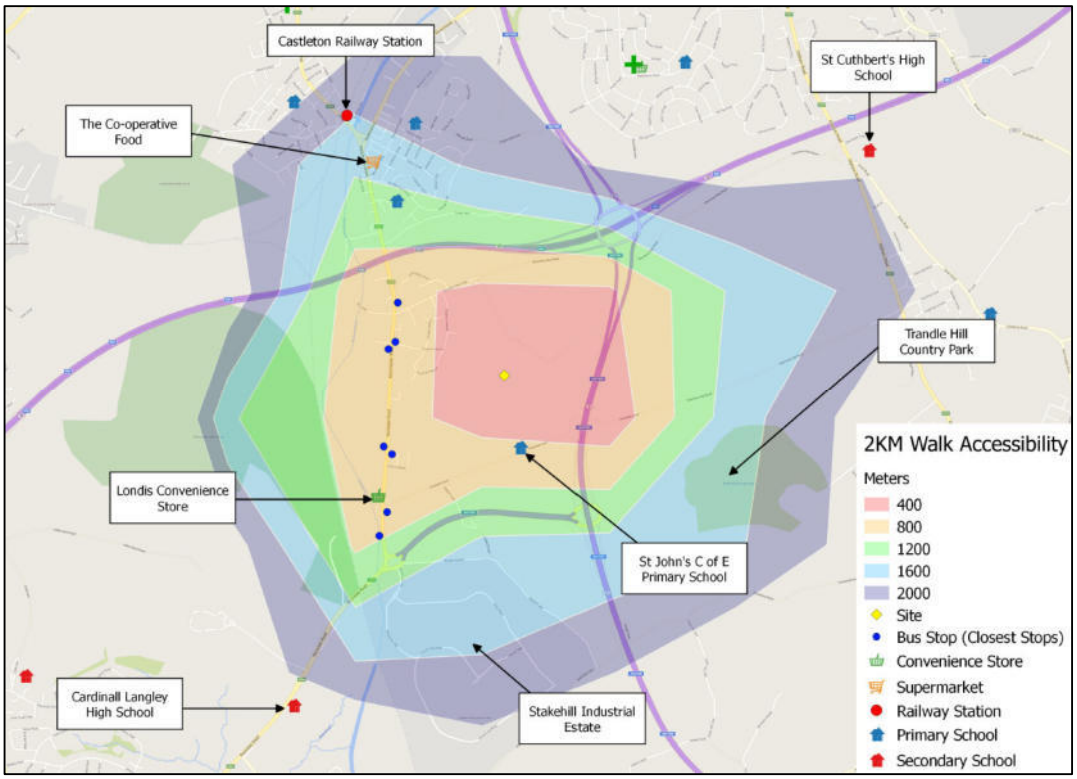


5.3 Beyond the site, surfaced footway provision is provided on both sides of the road on Rochdale Road, from which the primary site access will be taken. Rochdale Road is subject to a 30 mph speed limit and has street lighting from the roundabout located 600m south of the proposed primary access to the settlements of Castleton and Rochdale to the north. There are dropped kerbs where the footways cross access points and there are pedestrian refuge islands approximately every 160m.

5.4 Rochdale Road provides pedestrians with access to the existing local bus stops and is mostly lined with residential properties with occasional commercial uses. There are also a handful of existing services which serve the current residential properties in the area within walking distance, with a cricket club located 100m south of the proposed primary access, a public house 350m to the south and a petrol station with a small convenience store 400m to the south.

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 – 2km Walk Accessibility



NB- It should be noted that the above isochrone has been calculated from the centre of the site.

5.6 The plan above demonstrated the majority of Castleton can be reached within a 2km walk distance. **Table 5.1** demonstrates the facilities within this radius, however the list is not exhaustive but demonstrates the closest key local everyday facilities.

Table 5.1 – Accessibility of Facilities

Facility	Detail	Distance from north of site (m)	Distance from south of site (m)
Church	St John Thornham Church	490m	<100m
Primary School	St John's Church of England V A Primary School	490m	0m
Public Open Space	Park on Chesham Avenue	600m	750m
Sporting Facility	Thornham Cricket Club	650m	200m
Primary School	St Gabriel's RC Primary School Castleton	1.4km	1.9km
Employment Area	Stakehill Industrial Estate	1.6km	2km
Country Park	Tandle Hill Country Park	2.1km	1.8km
Secondary School	St Cuthbert's RC High School Rochdale	2.6km	3.2km
Secondary School	Cardinal Langley Roman Catholic High School, Stanycliffe	3km	2.2km
College	Hopwood Hall college Middleton Campus, Middleton	3.3km	2.5km

5.7 It should be noted that a local centre with community facilities is proposed within the proposed development.

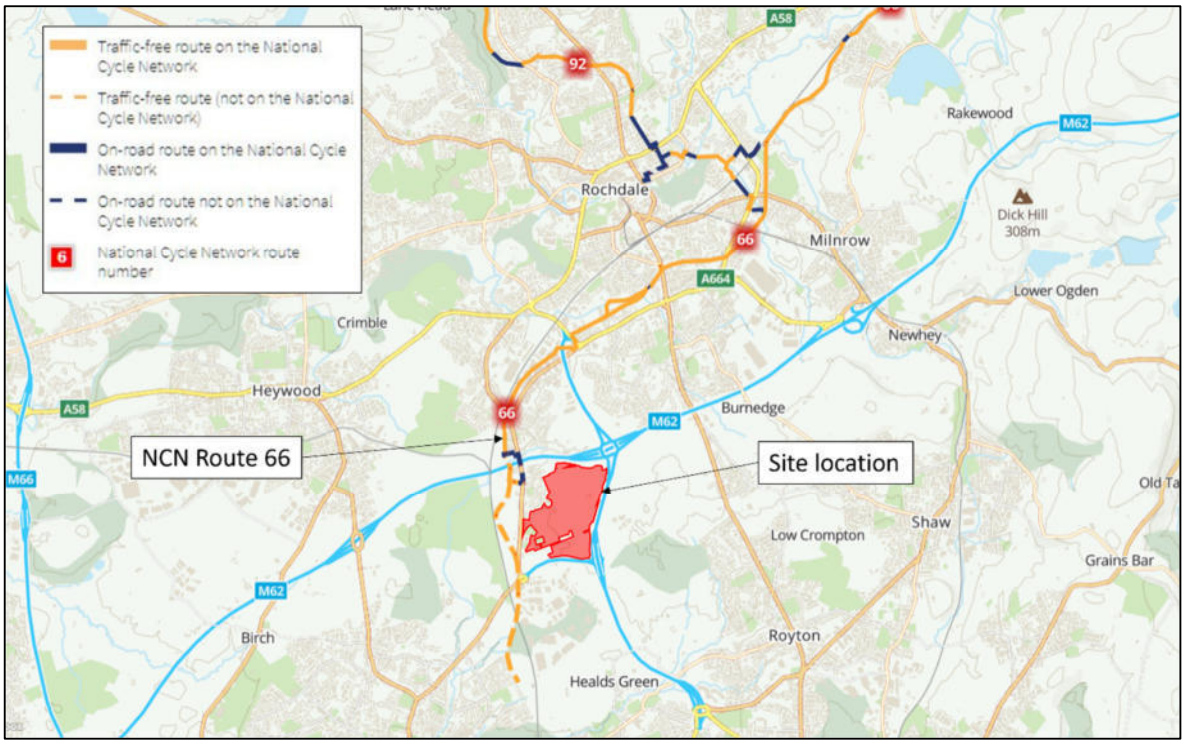
Cycle Network

5.8 There is a restricted byway within the site which can be used by cyclists, which runs south-east from Thornham New Road for approximately 475 m through the centre of the site which can be viewed in **Figure 5.2** above.

5.9 Beyond the site, there are currently no dedicated cycling lanes or facilities on the surrounding highway network in the direct vicinity of the site. However, National Cycle Network (NCN) route 66 runs in a north to south direction following the Rochdale Canal which runs approximately 350m east of the western site boundary. NCN route 66 can be accessed to the south-west via Rochdale Road approximately 620 metres to the south of the proposed primary site access or to the north-west via Manchester Road and Earl Street approximately 675 m to the north-west.

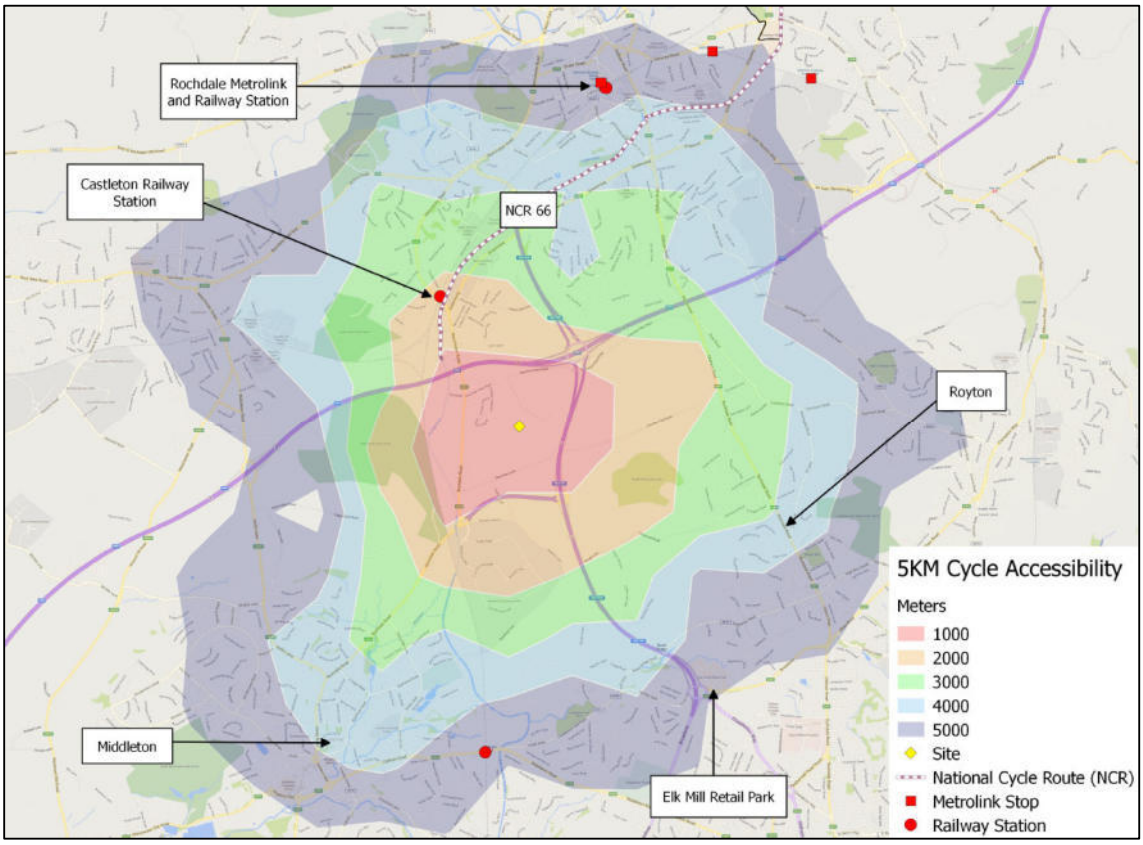
5.10 NCN route 66 runs in a north to south direction connecting to Rochdale and Littleborough to the north and to Middleton to the south. The route is made up of a mixture of on-road and off-road cycling trails, however, the section between Middleton and Rochdale, which will be most useful to those accessing the route from the site, is almost entirely off-road. **Figure 5.2** below shows NCN route 66 in relation to the development site.

Figure 5.2 National cycle network



5.11 GIS software has been used to model 5km cycle catchment from the site and is shown on **Figure 5.3**.

Figure 5.3 – Cycle Accessibility



NB- It should be noted that the above isochrone has been calculated from the centre of the site

5.12 The above plan shows that a number of areas can be accessed within a 5km cycle distance of the site including Middleton, Castleton and Rochdale.

Public Transport

Bus services

5.13 The closest bus services to the development site operate along Rochdale Road to the west of the site where there are bus stops at regular intervals. The nearest bus stops are the 'Garden Centre' stops, located approximately 115 m south of the proposed primary site access and the 'Chesham Avenue' stops which are 350 m to the north of the proposed primary site access.

5.14 The 'Garden Centre' stops are the closest to the proposed primary site access and benefit from bus shelters, seating and timetable information. The northbound 'Garden Centre' bus stop is illustrated in **Figure 5.4** below. Meanwhile, the 'Chesham Avenue' stops are located to the north of the site access and also both benefit from bus shelters, seating and timetable information.

5.15 Both the 'Garden Centre' and 'Chesham Avenue' bus stops are served by the same bus services, the 17 and the R7, operated by Go North West and Rosso, respectively. More details on the bus services currently from these stops can be found in **Table 5.1**.

Figure 5.4 Garden Centre bus stops



Table 5.2 Bus services

Service	Operator	Route	First Service	Last Service	Mon to Fri Frequency
17	Go North West	Shudehill – Middleton – Castleton - Rochdale	04:55 05:03	0:15 23:48	Every 10 minutes
R7	Rosso	Rochdale – Kirkholt - Middleton	06:31 05:29	22:44 23:29	Hourly

Rail services

5.16 At present, the closest railway station to the site is Castleton Station which is located in Castleton, approximately 1.7 km to the north of the proposed primary site access. From the access point, the station can be accessed via a 21 minute walk, 6 minute cycle, 8 minute bus journey or 4 minute drive.

5.17 The station has cycle parking facilities covered by CCTV for up to 10 bicycles and a small station car park for rail users with 22 car parking spaces.

5.18 Castleton Station is managed by Northern and lies on the Calder Valley Line which runs between Leeds and Manchester, with an additional line which runs to Blackpool. During Monday through to Saturday daytimes, there is a half-hourly service in each direction from Castleton Station. **Table 5.2** below details some of the key services available from the station.

Table 5.2 Rail services

Destination	Average Weekday Frequency	Approximate Journey Time
Rochdale	30 minutes	3 minutes
Mills Hill	30 minutes	5 minutes
Manchester Victoria	30 minutes	17 minutes
Salford Crescent	30 minutes	25 minutes
Bolton	30 minutes	37 minutes

Tram services

5.19 Whilst there are no Metrolink tram stops within Castleton or in the direct vicinity of the site, the closest tram stop is located in Rochdale at the railway station and lies approximately 4.6 km to the north-east of the proposed primary site access.

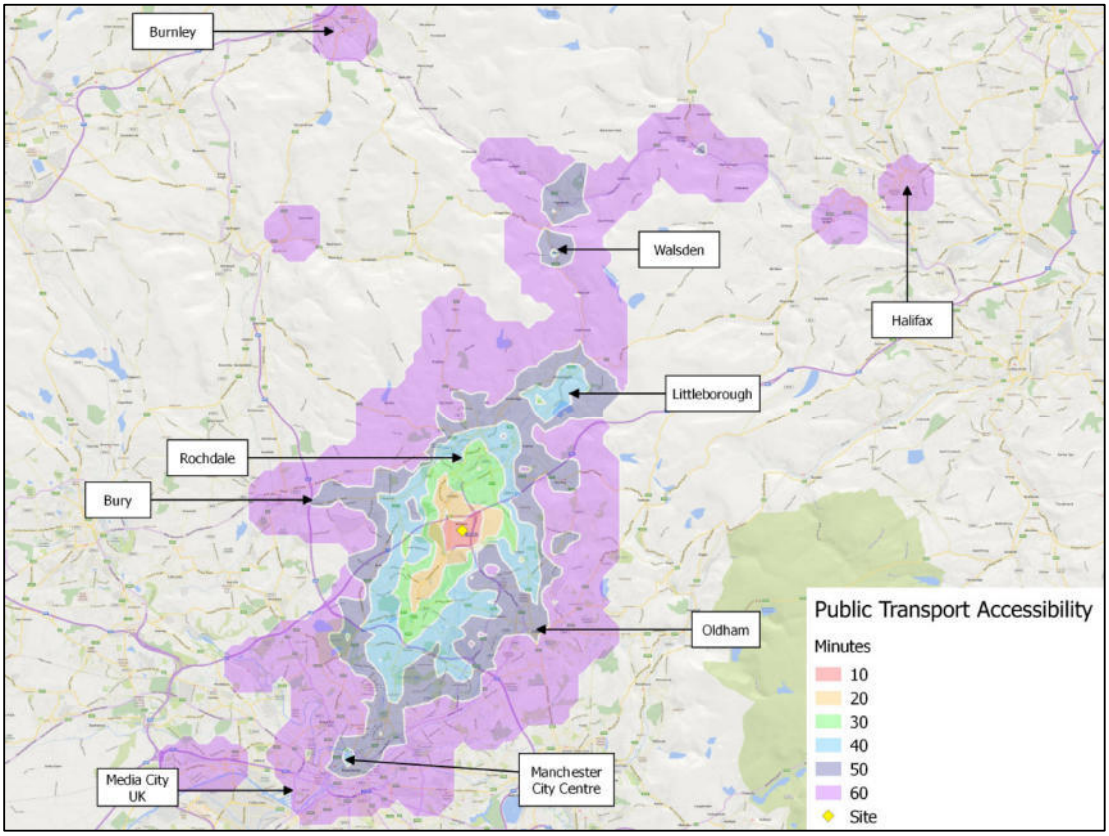
5.20 The Rochdale Railway tram stop lies at the end of the line in zone 4 and offers services from Rochdale to Manchester City Centre and beyond to East Didsbury. From this tram stop there are frequent services between the hours 06:00 AM to 00:00 AM Monday through to Saturday and between 07:00 AM to 00:00 AM on a Sunday. Some of the services and journey times are detailed in **Table 5.3**.

Table 5.3 Tram services

Destination	Approximate Journey Time	Destination	Approximate Journey Time
Rochdale Town Centre	3 minutes	Oldham Central	21 minutes
Kingsway Business Park	5 minutes	Manchester Victoria	45 minutes
Shaw and Crompton	13 minutes	Deansgate	56 minutes

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, tram and railway stations, and are presented in **Figure 5.5**. The analysis demonstrates that it is possible to reach areas such as Manchester, Oldham, Halifax, Burnley and Media City UK 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, tram and train services which provide travel to a range of destinations with a good frequency, making the site accessible without the use of a private car.

6.0 FUTURE BASELINE TRAFFIC CONDITIONS

Introduction

6.1 It is understood that the traffic data used on the assessments undertaken as part of the Places for Everyone Locality Assessments are not considered appropriate by RBC for use in assessing planning applications for individual sites.

6.2 Therefore, any recent traffic data available within the study area will be requested from RBC / Transport for Greater Manchester and where not available, new peak period traffic counts undertaken. New counts would be undertaken w/c 12th September once schools have returned following the summer holiday and traffic patterns have settled to being typical.

6.3 It is proposed that traffic counts would be instructed on a Tuesday / Wednesday / Thursday between 0730-0930hrs for the morning peak hour and 1600-1800hrs for the evening peak hour.

Committed Developments

6.4 Any committed developments in the vicinity of the study area will be taken into account in the capacity assessments within the TA, details of which are requested from RBC.

Future Baseline Traffic Flows

6.5 The capacity assessments in this TASS will be undertaken at future assessment year levels. An a future assessment year of 2033 has been applied; this being year of application + 10 years, which is in line with the expected build-out period for the development.

Traffic Growth

6.6 In order to quantify the level of background traffic growth that could occur on the local highway network between the date of the traffic surveys and the assessment years, National Traffic Model (NTM) growth factors, modified by TEMPRO local growth factors, have been used as summarised in **Table 6.1** below:-

Table 6.1 – Traffic Growth Factors

Period	AM Peak	PM Peak
2022-2033	1.0849	1.0838

7.0 TRIP GENERATION, DISTRIBUTION AND ASSIGNMENT

Introduction

7.1 This chapter provides an estimation of the likely trip-generating potential of the proposed site uses during the weekday peak hours, along with the distribution and assignment of the vehicular trips on the local highway network.

Trip Generation - Existing Use

Garden Centre

7.2 In order to estimate the trip generating potential of the existing garden centre use on the site, average trip rates from the industry-standard TRICS Database (7.9.2) have been obtained. The selection criteria for the TRICS based trip rates is as follows:-

i) Retail;

ii) Garden Centre;

iii) Selection by Gross Floor Area (GFA);

iv) Sites in Greater London and Ireland not selected; and,

v) Only sites in 'Edge of Town' and 'Suburban Area' locations have been selected.

7.3 The multi modal TRICS outputs for the proposed industrial site are presented in **Appendix H** and are summarised in **Table 7.1** below:-

Table 7.1 - Trip Rates (Per 100m2) – Garden Centre

Mode	Weekday AM Peak Hour		Weekday PM Peak Hour	
	Arrivals	Departures	Arrivals	Departures
Vehicles	0.423	0.079	0.556	1.117

7.4 When applied to the approximate 3,105sqm GFA of the existing garden centre buildings, the resulting number of trips are as set out in **Table 8.2**

Table 8.2 – Estimated Trip Generation – 3,105 m2 Garden Centre

Mode	Weekday AM Peak Hour		Weekday PM Peak Hour	
	Arrivals	Departures	Arrivals	Departures
Vehicles	13	2	17	35

Vehicle Trips – Proposed Development

7.5 In order to estimate the trip generating potential of the proposed residential development, average trip rates have been used. These trip rates were obtained from the industry-standard TRICS database and the selection criteria for the TRICS based trip rates is as follows:

i) Residential;

ii) Houses – Privately-owned;

iii) Multi-modal surveys;

iv) Selection by number of units (180 to 1500);

v) Weekday surveys only; and

vi) Only sites 'Edge of Town' locations have been selected.

7.6 The multi-modal TRICS outputs for the proposed residential development are presented in **Appendix I** and are summarised in **Table 7.3** below.

Table 7.3: Privately Owned Houses - Trip Rates

Mode	Weekday AM Peak Hour (08:00 to 09:00)		Weekday PM Peak Hour (17:00 to 18:00)	
	Arrivals	Departures	Arrivals	Departures
Vehicles	0.139	0.381	0.349	0.163
Pedestrians	0.005	0.011	0.008	0.005
Cyclists	0.024	0.115	0.040	0.024
Public Transport	0.003	0.038	0.020	0.004

7.7 The above trip rates have been applied to 1,500 dwellings, which is higher than the 1,380 dwellings proposed, to robustly determine the multimodal trip generation for the proposed development, as summarised in **Table 7.4**.

Table 7.4: Trip Generation – 1,500 Houses

Mode	Weekday AM Peak Hour (08:00 to 09:00)		Weekday PM Peak Hour (17:00 to 18:00)	
	Arrivals	Departures	Arrivals	Departures
Vehicles	209	572	524	245

7.8 The trip generation for the local centre would be internal and secondary trips ancillary to the residential development so would not generate external trips on the local highway network.

7.9 The relative net trip generation to the existing garden centre site is shown in **Table 7.5**.

Table 7.5: Net Trip Generation

Mode	Weekday AM Peak Hour (08:00 to 09:00)		Weekday PM Peak Hour (17:00 to 18:00)	
	Arrivals	Departures	Arrivals	Departures
Vehicles	196	570	507	210

Trip Distribution and Assignment

7.10 The trip distribution of the development-related traffic within the TA study area has been based on location of usual residence and place of work data, obtained from the national census for all "out-moves" from the Rochdale 017 ward (E02001148). This is presented in **Appendix J** and summarised in **Table 7.6** as follows:

Table 7.6 – Trip Distribution

Route Description	Percentage
A664 (South), A627(M) - North, M62 (West), via Junction 20	5.0%
A664 (South), A627(M) - North, M62 (West), via Junction 19	5.0%
A664 North to / from Castleton Moor	11.3%
A664 (South), Slattocks Roundabout, A664 (South-west)	4.9%
A664 (South), A627(M) - North, M62 (East)	3.3%
A664 (South), A627(M) - South, A663 Broadway South	3.3%
A664 (South), A627(M) - South, A663 Broadway East	2.7%
A664 (South), A627(M) - South, Burnley Lane West	0.2%
A664 (South), A627(M) - South, A627 Chadderton Way	6.5%
A664 (South), A627(M) - South, A663 Broadway, A669 Middleton Road (East)	1.2%
A664 (South), Slattocks Roundabout, Whitbrook Way	2.5%
A664 (South), Slattocks Roundabout, A664 (South-west), Assheton Way, Oldham Road (West)	11.6%
A664 (South), Slattocks Roundabout, A664 (South-west), Townley Street (South)	1.8%
A664 Rochdale Road (North), Manchester Road	6.5%
A664 Manchester Road, A664 Queensway, A664 Rochdale Bypass - Rochdale Town Centre	18.4%
A664 Manchester Road, A58 Manchester Road, B6452	6.5%
A664 Manchester Road, A58 Bolton Road	9.4%

7.11 This methodology is consistent with the distribution methodology used for the nearby Cowm Top Lane application; as part of this RBC and National Highways raised concerns with the distribution and NH recommended that sensitivity analysis was undertaken to account for the propensity for residents to be attracted to key employment areas which may route via the strategic road network, particularly Manchester, but also Bury and Oldham.

7.12 These comments were addressed in a Technical Note submitted to both RBC and NH which stated the following in relation to the presented trip distribution:

> *"The trip distribution presented in the TA is considered acceptable given that it is based on a widely accepted journey to work Census distribution methodology and whilst it is acknowledged that Census data is outdated, it is considered the best data available for the purpose of determining a suitable distribution. For this reason, the assessments within the TA are also considered acceptable particularly when considering the robustness of the trip rates, as detailed earlier.*
>
> *Notwithstanding the above and following the request of NH, a sensitivity test has been undertaken to account for the potential attractiveness of key employment areas to residents. The key employment areas considered in the sensitivity distribution analysis are listed below and the sensitivity distribution is presented diagrammatically in Traffic Figure 1, with the distribution spreadsheet / routing information provided at Appendix A.*
>
> - *Stakehill Industrial Estate*
> - *Heywood Distribution Park*
> - *Bridge Hall Trading Site*
> - *Pilsworth Industrial Estate*
> - *Bury town centre*
> - *Rochdale town centre*
> - *Manchester city centre*
> - *Oldham town centre*
> - *Stockport town centre*
> - *Widnes town centre and surrounding commercial area including Catalyst Industrial Estate*
> - *Birchwood Industrial Park*
> - *Broadway Industrial Estate*
> - *Agecroft Commerce Park"*

7.13 The submitted Technical Note was reviewed by a transport consultancy on behalf of NH who confirmed "*the revised approach has resulted in a logical distribution that is accepted for the purposes of this TA*" and RBC's subsequent email response to the submitted Technical Note raised no objections in relation to this. The methodology applied is therefore considered suitable.

7.14 The percentage distribution of vehicular trips generated by the proposed residential development is presented diagrammatically in **Traffic Flow Figures 2&3** for the two site access points respectively.

Traffic Assignment

7.15 The traffic assignment of the proposed development has been obtained by applying the trip distribution proportions to the relevant estimated traffic generation figures and are presented diagrammatically on **Traffic Flow Figures 4&5** for the two site access points respectively. The combined total traffic flows for both accesses are shown on **Traffic Figure 6**.

7.16 No allowance has been made for the traffic associated with the garden centre that would be removed as part of the proposed development.

Study Area

7.17 Based on the assigned development traffic flows it is proposed to include the following junctions in the study area for junction capacity assessment:

Local Highway Network

4. A664 Rochdale Road / Proposed Site Access signalised junction
5. A664 Rochdale Road / Thornham New Lane simple priority junction
6. Slattock's Roundabout
7. A664 Manchester Road / A664 Queensway signalised junction
8. A58 / A664 Manchester Road signalised junction
9. A58 / B6452 / A664 signalised junction
10. A664 / Assheton Way / A669 roundabout junction

Strategic Road Network

11. A627 (M) / A627 Chadderton Way / Burnley Lane roundabout (A627(M) Junction 1)
12. A627(M) / A627(M) Spur roundabout (A627(M) Junction 2)
13. M62 J20 roundabout

8.0 TRAFFIC IMPACT

General

8.1 This Chapter assesses the impact of the additional trips generated by the proposed development on the operation of the local highway network. The study area for the TA includes the following junctions:

Local Highway Network

- A664 Rochdale Road / Proposed Site Access signalised junction
- A664 Rochdale Road / Thornham New Road simple priority junction
- A664 Rochdale Road / Thornham Lane simple priority junction
- Slattock's Roundabout
- A664 Manchester Road / A664 Queensway signalised junction
- A58 / A664 Manchester Road signalised junction
- A58 / B6452 / A664 signalised junction
- A664 / Assheton Way / A669 roundabout junction

Strategic Road Network

- A627 (M) / A627 Chadderton Way / Burnley Lane roundabout (A627(M) Junction 1)
- A627(M) / A627(M) Spur roundabout (A627(M) Junction 2)
- M62 J20 roundabout

Assessment Methodology

8.2 Assessment of the priority-controlled junction within the study area has been undertaken using Junctions 9 (PICADY & ARCADY) software and for the signal junctions LINSIG software.

8.3 With the Junctions 9 models 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 1 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 1 represents saturated conditions (i.e. congested conditions).

8.4 LINSIG presents results as a percentage Degree of Saturation (DoS) and corresponding likely traffic queues for each modelled link at the junction. For Traffic Signals it is generally accepted that DoS of 90% or less on individual links represents satisfactory signal operation. DoS of between 90% and 100% represent variable operation which warrants further investigation and values in excess of 100% represent saturated conditions.

8.5 Capacity assessments have been undertaken in the future assessment year of 2033 in the 'with' and 'without' development scenarios. The 2033 'without development' baseline traffic flows are the sum of the relevant surveyed traffic flows adjusted to assessment year levels and any committed development traffic flows, as shown on **Traffic Flow Figure 7**.

8.6 The 2033 'with development' assessment traffic flows are the sum of the 2033 'without development' baseline traffic flows and the proposed development traffic flows, as shown on **Traffic Flow Figure 8**.

8.7 It should be noted that these assessments are based on 1,500 dwellings, which is a higher quantum than the 1,380 proposed and they therefore provide a robust assessment.

Proposed Site Access - A664 Rochdale Road

8.8 LINSIG has been used to assess the operation of proposed A664 Rochdale Road site access signalised junction. The results of the 'with' development assessments are presented in **Appendix K** and summarised in **Table 8.1** below.

Table 8.1 – Proposed Site Access, A664 Rochdale Road– 2033 Assessment Year

Link	2033 'With Development'			
	AM PEAK		PM PEAK	
	DoS	MMQ	DoS	MMQ
A664 South Ahead	33.0%	4.9	37.9%	6.0
A664 South Ahead	33.0%	4.9	38.0%	6.0
A664 South Right	19.6%	1.4	34.6%	3.4
A664 North Ahead Left	64.8%	11.4	45.5%	6.7
A664 North Ahead	63.9%	11.5	42.0%	7.0
Site Access Left	53.2%	5.8	34.1%	2.6
Site Access Right	63.2%	7.0	45.8%	3.1
PRC (%):	38.8%		96.6%	

8.9 The above results demonstrate that the proposed site access will operate comfortably within its practical capacity in the future assessment year of 2033, without significant queuing.

A664 Rochdale Road/ Thornham New Road

8.10 PICADY software has been used in the assessment of the proposed site access off A664 Rochdale Road/ Thornham New Road. The PICADY results are presented in **Appendix L** with the results summarised in **Table 8.2** below.

Table 8.2 – A664 Rochdale Road/ Thornham New Road PICADY Results

Approach	AM PEAK		PM PEAK	
	RFC	MMQ	RFC	MMQ
Base 2033				
Earl Street – A664 Rochdale Rd South, A664 Rochdale Rd South, Thornham New Road	0.06	0.1	0.02	0.0
A664 Rochdale Rd South – Earl Street, A664 Rochdale Rd South, Thornham New Road	0.03	0.0	0.09	0.2
Thornham New Road- A664 Rochdale Rd South, A664 Rochdale Rd South, A664 Rochdale Rd South	0.25	0.3	0.10	0.1
A664 Rochdale Rd South- A664 Rochdale Rd South, Earl Street, Thornham New Road	0.02	0.0	0.03	0.0
Assessment 2033				
Earl Street – A664 Rochdale Rd South, A664 Rochdale Rd South, Thornham New Road	0.09	0.1	0.03	0.0
A664 Rochdale Rd South – Earl Street, A664 Rochdale Rd South, Thornham New Road	0.08	0.2	0.23	0.9
Thornham New Road- A664 Rochdale Rd South, A664 Rochdale Rd South, A664 Rochdale Rd South	0.60	1.4	0.23	0.3
A664 Rochdale Rd South- A664 Rochdale Rd South, Earl Street, Thornham New Road	0.03	0.0	0.04	0.1

8.11 The above results demonstrate that the proposed site access will operate comfortably within practical capacity in the future assessment year of 2033, without significant queuing.

A664 Rochdale Road/ Thornham Lane

8.12 PICADY software has been used in the assessment of the proposed site access off A664 Rochdale Road/ Thornham New Lane. The PICADY results are presented in **Appendix M** with the results summarised in **Table 8.3** below.

Table 8.3 – A664 Rochdale Road/ Thornham Lane PICADY Results

Approach	AM PEAK		PM PEAK	
	RFC	MMQ	RFC	MMQ
Base 2033				
Thornham Lane - A664 Rochdale Rd (N), A664 Rochdale Rd (S)	0.16	0.2	0.10	0.1
A664 Rochdale Rd (S)- Thornham Lane	0.06	0.1	0.01	0.0
Assessment 2033				
Thornham Lane - A664 Rochdale Rd (N), A664 Rochdale Rd (S)	0.27	0.4	0.13	0.1
A664 Rochdale Rd (S)- Thornham Lane	0.08	0.1	0.01	0.0

8.13 The above results demonstrate that the junction will operate comfortable within practical capacity in the future assessment year of 2033, without significant queuing.

Slattocks Roundabout

8.14 ARCADY has been used in the assessment of Slattocks Roundabout. The ARCADY results are presented in **Appendix N** with the results summarised in **Table 8.4** below.

Table 8.4 – Slattocks Roundabout ARCADY Results

Approach	AM PEAK		PM PEAK	
	RFC	MMQ	RFC	MMQ
2033 Base				
A627 (M)	0.71	2.4	0.54	1.2
Bentley Avenue	0.13	0.1	0.22	0.3
Whitbrook Way	0.23	0.3	0.37	0.6
A664 Rochdale Road (W)	0.47	0.9	0.60	1.5
A664 Rochdale Road (N)	0.86	5.7	0.58	1.4
2033 With Development				
A627 (M)	0.78	3.4	0.63	1.7
Bentley Avenue	0.15	0.2	0.26	0.3
Whitbrook Way	0.24	0.3	0.41	0.7
A664 Rochdale Road (W)	0.51	1.0	0.72	2.5
A664 Rochdale Road (N)	1.07	63.5	0.68	2.1

8.15 The above results demonstrate that in the main the roundabout will continue to operate within capacity with the additional of the development traffic, with the exception of the Rochdale Road northern arm in the AM peak hour.

8.16 This approach is operating at capacity in the base scenario and the addition of the development traffic results in the theoretical capacity threshold being exceeded. Once this threshold is reached in Junctions 9 queuing increases exponentially, which is not commensurate with the number of vehicles being added to the approach flows and the software is unable to accurately predict the level of queuing.

8.17 Notwithstanding this, a significant increase in queuing is predicted by the model and mitigation has therefore been considered. It is proposed to signalise the Rochdale Road northern approach to the roundabout and conflicting section of circulatory carriageway as shown on drawing number SCP/190267/SK02, which is included at **Appendix O**.

8.18 LINSIG has been used to assess the operation of the junction with the proposed partial signalisation. The results of the 'with' development assessments are presented in **Appendix P** and summarised in **Table 8.5** below.

Table 8.6 – Slattocks Roundabout partial signalised junction – 2033 Assessment Year

Link	2033 'With Development'			
	AM PEAK		PM PEAK	
	DoS	MMQ	DoS	MMQ
A627(M) Left Ahead	31.6%	0.2	14.4%	0.1
A627(M) Ahead	55.4%	0.6	62.4%	0.8
Bentley Ave Left Ahead	6.6%	0.0	15.1%	0.1
Ahead	18.3%	0.1	30.6%	0.2
Whitbrook Way Left	12.6%	0.1	22.2%	0.1
Whitbrook Way Left	40.9%	5.5	55.5%	7.8
A664 Rochdale Rd West Left Ahead	41.1 : 41.1%	0.3	50.5 : 50.5%	0.5
A664 Rochdale Rd North Left	88.9 : 88.9%	34.0	62.8 : 62.8%	14.7
Ahead	31.0%	0.2	27.5%	0.2
Ahead	11.1%	0.1	14.7%	0.1
Whitbrook Way	4.0%	0.0	2.7%	0.0
Whitbrook Way	31.0%	0.2	15.2%	0.1
Ahead	0.0%	0.0	0.0%	0.0
Ahead	0.0%	0.0	0.0%	0.0
Ahead Right	0.0%	0.0	0.0%	0.0
Right	56.0%	0.6	48.0%	4.8
Left	55.7%	0.6	49.0%	0.5
Ahead	67.7%	1.0	58.8%	0.7
Ahead	35.4%	0.3	55.4%	0.6
Ahead	15.0%	0.0	8.2%	0.0
Ahead	42.6%	0.0	28.6%	0.0
Ahead	32.5%	0.0	15.8%	0.0
Ahead Right	29.3%	0.0	19.1%	0.0
Right	44.7%	0.0	49.3%	0.0
Ahead	30.0%	0.0	20.1%	0.0
Right	46.0%	0.0	54.3%	0.0
Right	35.4%	0.0	30.3%	0.0
Ahead	55.6%	0.0	65.4%	0.0
Ahead	4.1%	0.0	10.6%	0.0
Ahead	13.7%	0.0	25.1%	0.0
Right Ahead	6.7%	0.0	9.4%	0.0
Ahead	4.1%	0.0	10.6%	0.0
Ahead	79.1%	8.3	61.2%	9.9
PRC (%):	1.3%		37.7%	

8.19 This shows that the proposed improvement would mitigate the effects of the development traffic and bring the operation of the junction back to acceptable levels.

A664 Manchester Road / A664 Queensway signalised junction

8.20 LINSIG has been used to assess the operation of A664 Manchester Road / A664 Queensway signal-controlled junction with the model also including the Albion Street crossroads immediately to the north. The results of the 'without' and 'with' development assessments are presented in **Appendix Q** and summarised in **Table 8.6** below.

Table 8.6 – A664 Manchester Road / A664 Queensway signalised junction – 2033 Assessment Year

Link	2033 'With Development'			
	AM PEAK		PM PEAK	
	DoS	MMQ	DoS	MMQ
A664 Queensway Ahead U-Turn	79.4 : 79.4%	13.2	86.3 : 86.3%	16.8
A664 Manchester Rd (NB) Ahead Ahead2	81.5 : 81.5%	18.6	87.5 : 87.5%	23.6
A664 Manchester Rd (SB) Ahead	63.4%	15.7	61.0%	14.2
A664 Manchester Rd (SB) Ahead Left	44.9%	0.4	40.6%	0.3
Albion St (WB) Left Right	6.3%	0.0	8.6%	0.0
Albion St (EB) Right Left Ahead	31.4%	2.1	29.0%	1.6
PRC (%):	10.5%		2.8%	

8.21 The above results demonstrate that the junction will operate within practical capacity in the future assessment year of 2033, without significant queuing.

A58/ A664 Manchester Road signalised junction

8.22 LINSIG software has been used to assess the operation of A664 Manchester Road / A664 Queensway signalised junction signalised junction signal-controlled junction The results of the 'without' and 'with' development assessments are presented in **Appendix R** and summarised in **Table 8.7** below.

Table 9.6 – A664 Manchester Road / A664 Queensway signalised junction – 2033 Assessment Year

Link	2033 'Without Development'				2033 'With Development'			
	AM PEAK		PM PEAK		AM PEAK		PM PEAK	
	DoS	MMQ	DoS	MMQ	DoS	MMQ	DoS	MMQ
A58 (EB) Left	79.5%	24.2	63.0%	15.0	81.8%	25.5	58.6%	19.7
A58 (EB) Ahead Right Left	95.0%	9.2	84.0%	5.7	97.8%	11.2	87.6%	11.3
A58 Manchester Rd Left Ahead	60.1%	12.8	80.9%	18.4	66.7%	14.7	87.6%	32.0
A58 Manchester Rd Right	94.3%	31.6	85.6%	20.6	100.0%	40.7	81.7%	27.6
Silk St Left Ahead	40.3%	2.4	38.5%	2.9	40.3%	2.4	42.6%	4.6
Silk St Right	92.4%	9.0	83.6%	9.7	92.4%	9.0	88.2%	14.1
A664 Manchester Rd Ahead Left	95.4%	14.3	85.0%	11.1	101.2%	22.4	88.4%	17.6
A664 Manchester Rd Right Ahead	93.3%	12.7	81.4%	10.5	100.8%	19.5	85.4%	16.5
PRC (%):	-6.0%		5.1%		-12.5%		1.8%	

8.24 As can be seen from the above, in a future assessment year of 2033 without the proposed development in place, a number of links are predicted to operate over 90% DoS in the AM peak hour, whilst the PM peak hour is shown to work within capacity.

8.25 With the additional traffic generated by the development there is a modest increase in the DoS when compared to the without development scenario on the A58 right turn lane and A664 ahead and left lanes. The largest increase in queues on saturated links is predicted 7-8 PCUs which occurs along the A58 Manchester Road during the AM peak hour which would not have a severe impact on the local highway network.

A58 / B6452 / A664 signalised junction

8.26 LINSIG software has been used to assess the operation of the A58 / B6452 / A664 signalised-controlled junction. The results of the 'without' and 'with' development assessments are presented in **Appendix S** and summarised in **Table 8.8** below.

Table 8.8 – A58 / B6452 signalised junction– 2033 Assessment Year

Link	2033 'Without Development'				2033 'With Development'			
	AM PEAK		PM PEAK		AM PEAK		PM PEAK	
	DoS	MMQ	DoS	MMQ	DoS	MMQ	DoS	MMQ
B6452 Roch Valley Way Left Ahead	102.1%	22.4	78.5%	8.9	105.5%	27.8	86.6%	10.8
B6452 Roch Valley Way Ahead Right Right2	96.9%	17.9	77.7%	9.1	100.0%	21.2	85.0%	11.2
A58 Manchester Rd (WB) Left Ahead	97.0%	24.6	106.8%	55.4	93.8%	21.0	102.8%	41.7
A58 Manchester Rd (WB) Right Ahead Right2	83.6%	43.2	107.8%	87.3	83.6%	23.1	92.9%	58.1
Rochdale ByPass Ahead Left Ahead2	151.8%	175.6	146.6%	176.0	156.7%	185.2	151.1%	185.3
Rochdale ByPass Right	124.5%	111.8	115.5%	87.5	127.6%	120.5	118.0%	96.0
A58 Manchester Rd (EB) Left Left2	38.7%	6.8	34.6%	5.6	42.8%	7.8	36.1%	6.0
A58 Manchester Rd (EB) Ahead Right	153.4%	272.3	149.8%	230.7	155.7%	287.0	150.6%	236.1
Ahead	38.6%	2.4	38.4%	7.7	39.9%	3.7	38.7%	8.1
Ahead	25.8%	3.5	29.7%	5.4	26.2%	3.5	34.3%	6.5
Ahead	27.2%	3.7	31.2%	5.8	27.1%	3.6	34.4%	6.5
Manchester Rd Access Right Left	39.9%	2.5	49.9%	2.7	44.3%	2.5	49.9%	2.7
PRC (%):	-70.4%		-66.4%		-74.2%		-67.8%	

8.27 As can be seen from the above, in a future assessment year of 2033 without the proposed development in place, a number of links are predicted to operate significantly over 90% DoS during both peak hours.

8.28 With the additional traffic generated by the development there will be a slight increase in the DoS and exponential increases in queue lengths relative to the without development scenario. The greatest increase in queues is 15 PCUs, which occurs along the Manchester Road eastbound approach during the AM peak hour; this is disproportionate to the increase in trips that would be generated by the development due to the link being significantly oversaturated in the baseline scenario and does not represent a severe impact.

A664 Assheton Way (M)/ A669 Roundabout

8.29 ARCADY software has been used in the assessment of the proposed site access off A664 Assheton Way (M)/ A669 Roundabout. The ARCADY results are presented in **Appendix T** with the results summarised in **Table 8.9** below.

Table 8.9 – A664 Assheton Way (M)/ A669 Roundabout ARCADY Results

Approach	AM PEAK		PM PEAK	
	RFC	MMQ	RFC	MMQ
2033 Base				
Ashton Lane	0.02	0.0	0.02	0.0
Oldham Road (West)	0.56	1.3	0.76	3.1
Assheton Way	0.62	1.6	0.51	1.0
Oldham Road (East)	0.45	0.8	0.44	0.8
2033 With Development				
Ashton Lane	0.03	0.0	0.02	0.0
Oldham Road (West)	0.57	1.3	0.79	3.7
Assheton Way	0.66	1.9	0.53	1.1
Oldham Road (East)	0.46	0.8	0.45	0.8

8.30 The above results demonstrate that the roundabout will continue to operate within practical capacity in the future assessment year of 2033, without significant queuing.

A627 (M) A627 Chadderton Way/ Burnley Lane Roundabout (A627(M)) Junction 1

8.31 LINSIG has been used to assess the operation of the A627 (M) A627 Chadderton Way/ Burnley Lane Roundabout (A627(M)) Junction 1 signalised-controlled junction. The results of the 'without' and 'with' development assessments are presented in **Appendix U** and summarised in **Table 8.10** below.

Table 8.10 – A627 (M) A627 Chadderton Way/ Burnley Lane Roundabout (A627(M)) Junction 1 – 2033 Assessment Year

Link	2033 'Without Development'				2033 'With Development'			
	AM PEAK		PM PEAK		AM PEAK		PM PEAK	
	DoS	MMQ	DoS	MMQ	DoS	MMQ	DoS	MMQ
A627M N Off Left Ahead	98.1%	26.6	100.4%	28.5	100.9%	34.1	101.8%	32.6
A627M N Off Ahead	97.9%	26.1	100.3%	28.1	100.7%	33.4	101.7%	31.8
A663 Broadway (Entry) U-Turn Left	123.7%	68.4	71.0%	9.0	117.4%	53.3	70.7%	9.0
A663 Broadway (Entry) Left	123.4%	86.2	69.7%	5.0	116.9%	72.0	71.7%	5.2
A663 Broadway (Exit) Ahead Left	24.6%	0.2	44.6%	0.4	24.9%	0.2	44.5%	0.4
A663 Broadway (Exit) Ahead	19.5%	0.1	25.2%	0.2	19.7%	0.1	25.1%	0.2
A627 Chadderton Way (Entry) U-Turn Left	54.9%	8.3	90.8%	25.1	54.9%	8.2	90.1%	24.0
A627 Chadderton Way (Entry) Left	41.8%	4.8	94.7%	21.0	41.0%	4.6	98.8%	27.7
A627M S Off Left	5.1%	0.0	6.0%	0.0	5.1%	0.0	6.0%	0.0
A627M S Off Left	28.0%	1.0	55.7%	3.9	29.6%	1.1	62.2%	4.7
Burnley Lane (Entry) Ahead	61.7%	3.8	51.5%	3.0	63.0%	3.5	54.3%	3.2
RB 1 Ahead	24.3%	1.8	43.1%	2.9	23.4%	1.7	43.2%	3.0
RB 1 Ahead Right	99.2%	10.3	69.2%	7.0	99.8%	10.4	70.5%	7.2
RB 1 Right	46.7%	3.8	21.5%	2.0	46.9%	3.8	20.1%	1.9
RB 2 Ahead	69.9%	4.9	35.6%	1.0	70.0%	4.8	37.1%	1.2
RB 2 Ahead Ahead2	87.5%	12.2	83.8%	6.4	89.2%	12.2	82.8%	5.9
RB 2 Ahead	15.4%	0.2	24.7%	0.0	15.8%	0.2	24.5%	0.0
RB 3 Ahead	48.5%	1.8	60.9%	3.3	47.6%	1.7	60.7%	3.3
RB 3 Ahead Right	67.2%	4.8	61.3%	6.0	87.7%	6.5	61.2%	6.0
RB 3 Right	81.3%	4.8	64.3%	5.5	82.6%	5.9	66.4%	5.9
RB4 Left	28.8%	0.0	43.3%	0.0	29.3%	0.0	43.3%	0.0
RB4 Ahead	51.3%	4.2	70.6%	8.5	52.7%	3.8	70.4%	0.0
RB4 Ahead	24.3%	0.5	48.6%	12.4	24.5%	0.0	51.4%	13.5
RB 5 Right	53.1%	2.7	75.7%	10.7	55.2%	3.2	76.4%	9.0
RB 5 Right	34.4%	0.0	57.4%	0.0	34.4%	0.0	60.5%	1.7
Left Ahead	84.4 : 84.4%	8.3	109.4%	35.1	86.3%	8.9	110.2%	35.7
Ahead	83.5%	8.8	107.8%	32.9	84.6%	9.1	107.6%	32.4
Elk Mill (Exit) Right Left	6.1%	0.4	40.2%	3.4	6.1 : 6.1%	0.4	39.8%	3.4
Elk Mill (Exit) Right	6.4%	0.5	23.8%	2.1	6.4%	0.5	24.2%	2.2
Ahead	66.0%	8.1	48.6%	5.3	62.5%	7.5	48.7%	5.3
Ahead Right	83.6%	12.7	62.0%	6.7	87.8%	14.7	63.5%	7.0
PRC (%):	-37.4%		-21.5%		-30.4%		-22.5%	

8.32 As can be seen from the above, in a future assessment year of 2033 without the proposed development in place, a number of links are predicted to operate over 90% DoS in the baseline scenario during both peak hours.

8.33 With the additional traffic generated by the development there will be a slight increase in the DoS and queue lengths when compared to the without development scenario with the biggest increase in queues being 7 PCU which occurs along the A627(M) north during the AM peak hour. The total mean maximum queue of 34 PCUs would still extend less than half the length of the slip road and would therefore not have a severe impact.

A627(M) Spur Roundabout ARCADY software has been used in the assessment of the proposed site access off A627 (M) A627 Spur Roundabout (A627(M)) Junction 2. The ARCADY results are presented in **Appendix V** with the results summarised in **Table 8.11** below.

Table 8.11 – A627(M) Spur Roundabout - Junction 2 ARCADY Results

Approach	AM PEAK		PM PEAK	
	RFC	MMQ	RFC	MMQ
2033 Base				
A627 (M) NORTH	0.37	0.6	0.14	0.2
A627 (M) SOUTH	0.19	0.2	0.20	0.3
A627 (M) WEST	0.28	0.4	0.31	0.4
2033 With Development				
A627 (M) NORTH	0.38	0.6	0.16	0.2
A627 (M) SOUTH	0.20	0.2	0.23	0.3
A627 (M) WEST	0.33	0.5	0.33	0.5

8.34 The above results demonstrate that the roundabout will continue to operate within practical capacity in the future assessment year of 2033, without significant queuing.

M6 J20 Roundabout

8.35 LINSIG software has been used to assess the operation of M6 J20 Roundabout signalised junction signalised. The results of the 'without' and 'with' development assessments are presented in **Appendix W** and summarised in **Table 8.12** below.

Table 8.12 – M62 J20 Roundabout signalised junction – 2033 Assessment Year

Link	2033 'Without Development'				2033 'With Development'			
	AM PEAK		PM PEAK		AM PEAK		PM PEAK	
	DoS	MMQ	DoS	MMQ	DoS	MMQ	DoS	MMQ
A627(M) N Approach Ahead	0.0%	0.0	0.0%	0.0	0.0%	0.0	0.0%	0.0
A627(M) N Approach Ahead	0.0%	0.0	0.0%	0.0	0.0%	0.0	0.0%	0.0
A627(M) N Entry Left Ahead	70.6%	15.2	84.1%	23.4	70.5%	15.8	83.4%	23.1
A627(M) N Entry Ahead	65.9%	13.8	74.1%	18.5	53.7%	10.8	74.1%	18.5
A627(M) N Entry Ahead	69.9%	15.0	48.3%	9.8	69.4%	15.5	49.0%	10.1
A637(M) N Exit	0.0%	0.0	0.0%	0.0	0.0%	0.0	0.0%	0.0
A637(M) N Exit	0.0%	0.0	0.0%	0.0	0.0%	0.0	0.0%	0.0
M62 E Off Entry Left	112.1%	67.4	274.7%	190.6	112.5%	69.1	279.7%	195.9
M62 E Off Entry Left Ahead	112.1%	67.4	274.7%	190.6	112.7%	69.6	279.2%	195.3
M62 E On Exit	0.0%	0.0	0.0%	0.0	0.0%	0.0	0.0%	0.0
M62 E On Exit	0.0%	0.0	0.0%	0.0	0.0%	0.0	0.0%	0.0
A627(M) S Entry Left	97.3%	26.9	101.1%	46.6	102.1%	35.5	101.9%	49.3
A627(M) S Entry Left Ahead	141.4%	159.9	101.2%	47.0	141.4%	159.9	101.9%	49.3
A627(M) S Entry Ahead	98.5%	28.7	116.0%	111.8	101.5%	34.4	116.9%	116.2
A627(M) S Exit	0.0%	0.0	0.0%	0.0	0.0%	0.0	0.0%	0.0
A627(M) S Exit	0.0%	0.0	0.0%	0.0	0.0%	0.0	0.0%	0.0
M62 W Off Entry Left	121.3%	130.8	100.0%	37.1	121.3%	131.7	100.0%	37.1
M62 W Off Entry Ahead	56.6%	11.9	57.0%	11.3	56.3%	11.8	58.5%	11.6
M62 W Off Entry Ahead	60.2%	13.0	58.9%	11.8	61.8%	13.5	61.1%	12.4
M62 W Off Approach Ahead	78.9%	1.9	60.9%	0.8	78.7%	1.8	61.5%	0.8
M62 W Off Approach Ahead	26.7%	0.2	22.8%	0.1	27.4%	0.2	23.7%	0.2
M62 W On Exit	0.0%	0.0	0.0%	0.0	0.0%	0.0	0.0%	0.0
M62 W On Exit	0.0%	0.0	0.0%	0.0	0.0%	0.0	0.0%	0.0
A627(M) N Circ Ahead	41.5%	13.1	84.6%	23.2	46.4%	13.9	64.6%	17.7
A627(M) N Circ Ahead Right	65.8%	9.8	68.6%	9.4	67.1%	8.4	89.8%	14.8
A627(M) N Circ Right	51.1%	4.6	51.0%	4.4	55.3%	3.8	52.8%	4.4
A62 E Circ Ahead	72.7%	16.6	58.2%	1.7	75.5%	20.1	58.5%	1.8
A62 E Circ Ahead Right	88.7%	29.8	70.0%	1.9	84.3%	28.3	71.0%	2.3
A62 E Circ Right	46.3%	1.0	27.4%	0.0	49.0%	0.9	27.8%	0.0
A627(M) S Circ Ahead	2.6%	0.1	36.9%	2.8	0.0%	0.0	36.2%	2.8
A627(M) S Circ Ahead	45.7%	1.0	50.1%	9.8	48.3%	0.9	50.8%	10.1
A627(M) S Circ Right	17.5%	4.5	7.4%	2.0	17.4%	4.5	7.2%	2.0
M62 W Circ Ahead	89.0%	23.9	89.1%	28.2	88.8%	23.1	88.4%	28.1
M62 W Circ Right	45.8%	12.9	71.8%	22.5	48.7%	12.7	54.9%	10.6
M62 W Circ Right	19.8%	3.9	16.7%	1.7	18.0%	1.8	33.6%	3.9
PRC (%)	-57.1%		-20.5%		-57.1%		-210.8%	

8.36 As can be seen from the above, in a future assessment year of 2033 without the proposed development in place, there are a number of links which are predicted to operate close to or over 100% DoS and the junction is forecast to operate over its practical capacity in both peak hours.

8.37 With the additional traffic generated by the development there will be a slight increase in the DoS and exponential increases in queue lengths relative to the without development scenario. The greatest increase in queues is 8 PCUs, which occurs on the A627(M) approach from the south in the left turn lane; this does not affect any upstream junctions and would not have a severe impact.

8.38 The largest DoS and queue is recorded on the M62 westbound off-slip approach during the AM peak hour. The mean maximum queue is predicted to increase by 5 PCUs as a result of the proposed development from 191PCUs to 196PCUs equating to an increase of 2.6%. The predicted queue in the baseline already exceeds the length of the slip road and the minor increase resulting from the proposed development does not represent a severe impact.

9.0 SUMMARY AND CONCLUSIONS

9.1 SCP are retained by Redrow Homes Lancashire to provide transport planning consultancy services in relation to a proposed residential development on land at Stakehill, Rochdale.

9.2 The site forms part of the Policy JP Allocation 2 in the August 2021 publication stage of the Places for Everyone (PfE) Joint Development Plan Document.

9.3 A Scoping Study was submitted to Rochdale Borough Council (RBC) in August 2022 to seek to agree the scope and methodology of assessment for this Transport Assessment, which has been prepared based on the methodology set out in the Scoping Study.

9.4 The development proposals comprise up to 1,380 dwellings and an ancillary local centre to serve the new housing. The application will be hybrid with approximately 400 units from the western section of the site in detail and the remainder in outline.

9.5 The primary site access is proposed to be a signalised junction with Rochdale Road. The junction proposes widening to provide dedicated left and right turn lanes into the site from Rochdale Road whilst retaining two ahead lanes in both directions. Junction capacity modelling has shown that the proposed access can accommodate the level of traffic generated by the proposed development.

9.6 A secondary access is also proposed via Thornham New Road to the north of the site, serving a limited section of the development expected to comprise a maximum of approximately 100 units. This access will comprise an extension of the adoptable section of Thornham New Road into the site.

9.7 Car parking will be provided in line with local authority standards in the context of the site location and proposals.

9.8 The site layout has been designed to accommodate the movements of the Council's refuse vehicle without this being allowed to dominate the layout design.

9.9 A number of public rights of way (PROWs) run through the site and these are to be improved as part of the proposed development to provide enhanced pedestrian and cycle paths as shown on the Concept Masterplan.

9.10 Additional off-road active travel routes are also proposed within the Masterplan through both the hill top park at the northern end of the site and community parkland and wildlife area to the south of the site.

9.11 The site is accessible by a range of transport modes and improvements are proposed as part of the development in the form of enhanced pedestrian and cycle routes, whilst the preliminary site layout has been designed to accommodate a bus service accessing the site if appropriate.

9.12 Accident records have been reviewed within the study area and it is concluded that they do not present a material concern in relation to the application proposals.

9.13 Capacity modelling has been undertaken based on 1,500 units, rather than the 1,380 proposed to robustly assess the impact of the traffic generated by the development within the study area comprising both the local and strategic highway network. Improvements are proposed at the Slattocks roundabout to mitigate the effects of this traffic by signalising the Rochdale Road (north) where the development would have the greatest impact.

9.14 Beyond this junction, the capacity assessments have concluded that the additional traffic generated by proposed development would not have a severe impact and it is considered that the sustainable transport enhancements together with the improvements to the Slattocks roundabout would mitigate the effects of the development.

9.15 In line with the National Planning Policy Framework (NPPF) it is therefore concluded that there would not be an unacceptable impact on highways safety and the residual cumulative impacts on the road network would not be severe.

9.16 The proposed development is therefore considered acceptable with regard to transport.

S|C|P

APPENDIX A

Survey Information

Legend

Application Boundary

Item	Description

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Revision	Date	Amendment	Initials

Development	**Stakehill**		
Location	Middleton		
Marketing Name	-		
Drawing Title	Location Plan		
Drawing Number	**4159-LOC-001**		
Revision	-	Scale @ A1	1:2500
Drawn By	TW	Date Started	22/12/22
Checked by			Date

REDROW

Redrow Homes Lancashire

Redrow House, 14 Eaton Avenue, Buckshaw Village, Chorley, PR7 7NA

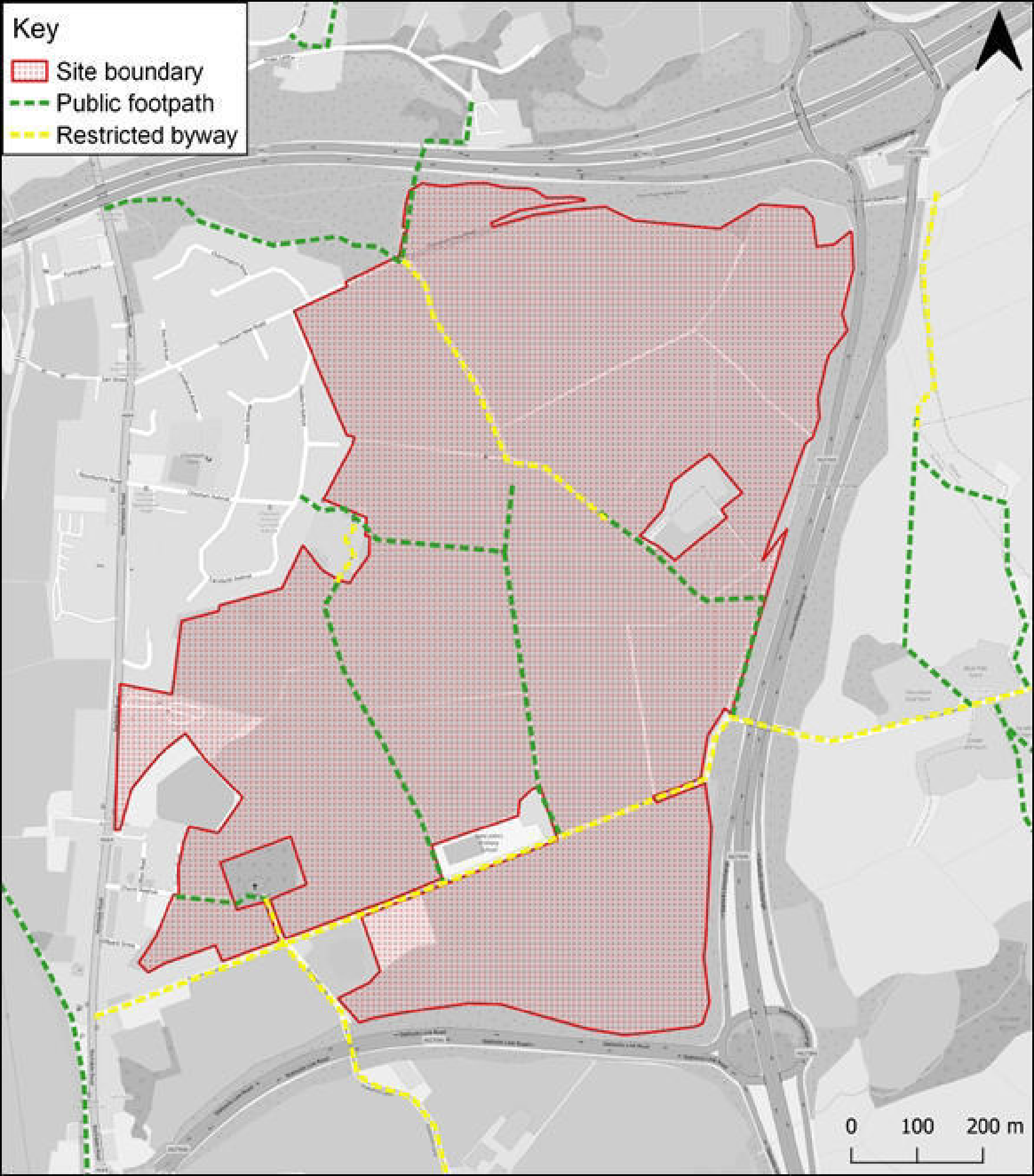
Tel: 01772 643700 Fax: 01772 643701 Web: www.redrow.co.uk

Legal Disclaimer TBC

This layout has been designed after due consideration of our Context & Constraints Plan

S|C|P

APPENDIX B


Key
Site boundary
Public footpath
Restricted byway
0
100
200 m

S|C|P

APPENDIX C

APPENDIX A
Vehicle Categories

COBA VEHICLE CATEGORIES

CAR	 SALOON  ESTATE  PEOPLE CARRIER  CAR TOWING CARAVAN / TRAILER
LIGHT GOODS VEHICLE (LGV)	 VAN  <3.5 TONNES – single rear tyres  PICK-UP
OTHER GOODS VEHICLE (OGV1)	 >3.5 TONNES > 3.5 TONNES – twin rear tyres  2 AXLES RIGID 2-AXLES RIGID  2 AXLES RIGID 2-AXLES RIGID  3 AXLES RIGID 3 AXLES-RIGID
OTHER GOODS VEHICLE (OGV2)	 4 OR MORE AXLES RIGID 4 OR MORE AXLES RIGID  3 AXLES ARTIC 3-AXLES ARTIC  4 OR MORE AXLES ARTIC 4 OR MORE AXLES ARTIC  OTHER GOODS VEHICLE WITH TRAILER OTHER GOODS VEHICLE WITH TRAILER
BUSES & COACHES (PSV)	 DOUBLE DECK BUS DOUBLE DECK BUS  SINGLE DECK BUS OR COACH SINGLE DECK BUS OR COACH

COBA VEHICLE CATEGORIES

Definition of Categories

The various components of traffic have different characteristics in terms of operating costs, growth and occupancy. The most common categories into which the traffic is split in COBA; these are defined as:

Cars (CARS)

Including taxis, estate cars, 'people carriers' and other passenger vehicles (for example, minibuses and camper vans) with a gross vehicle weight of less than 3.5 tonnes, normally ones which can accommodate not more than 15 seats. Three-wheeled cars, motor invalid carriages, Land Rovers, Range Rovers and Jeeps and smaller ambulances are included. Cars towing caravans or trailers are counted as one vehicle unless included as a separate class.

Light Goods Vehicles (LGV)

Includes all goods vehicles up to 3.5 tonnes gross vehicle weight (goods vehicles over 3.5 tonnes have sideguards fitted between axles), including those towing a trailer or caravan. This includes all car delivery vans and those of the next larger carrying capacity such as transit vans. Included here are small pickup vans, three-wheeled goods vehicles, milk floats and pedestrian controlled motor vehicles. Most of this group is delivery vans of one type or another.

Other Goods Vehicles (OGV 1)

Includes all rigid vehicles over 3.5 tonnes gross vehicle weight with two or three axles Includes larger ambulances, tractors (without trailers), road rollers for tarmac pressing, box vans and similar large vans. A two or three axle motor tractive unit without a trailer is also included.

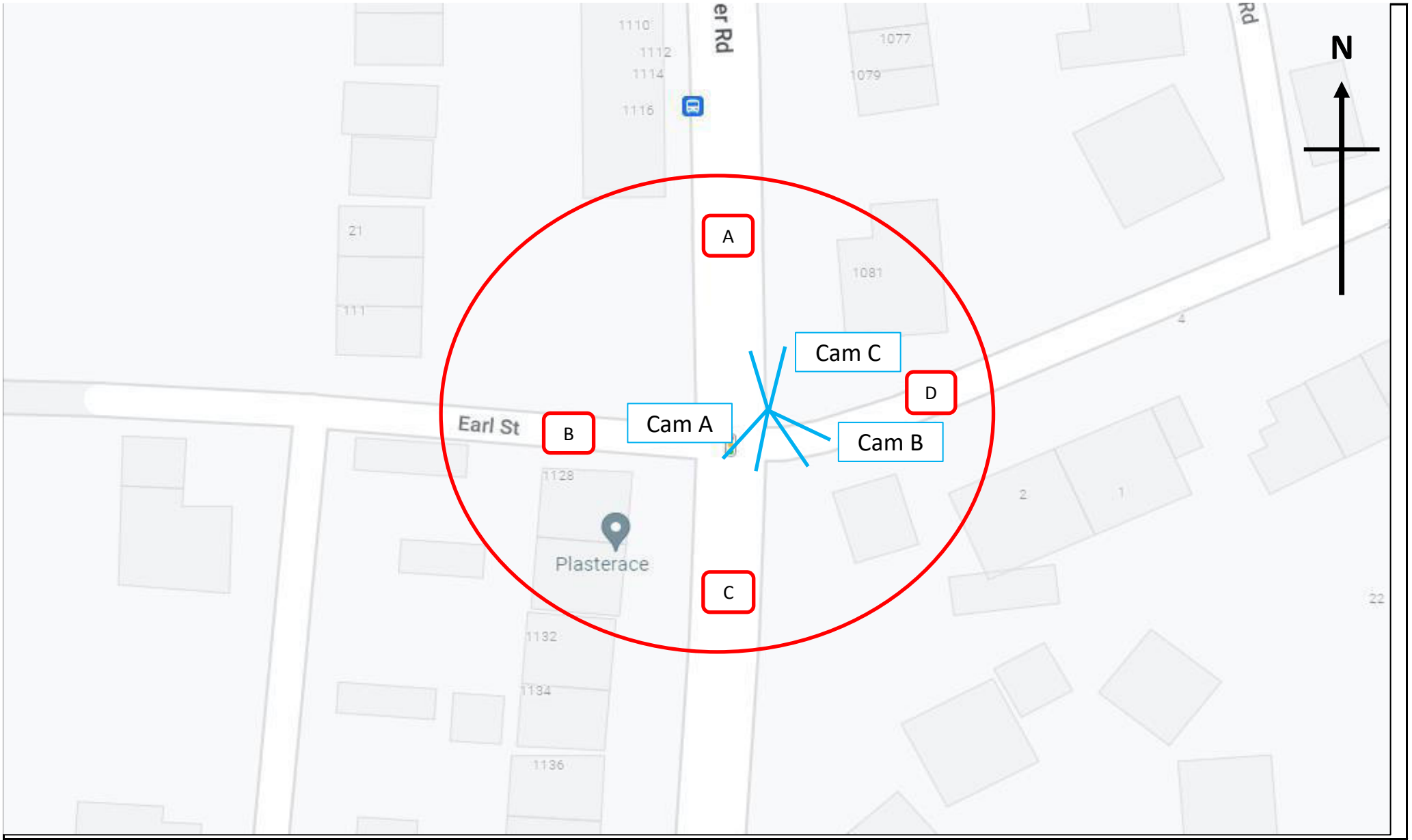
Other Goods Vehicles (OGV 2)

This category includes all rigid vehicles with four or more axles and all articulated vehicles. Also included in this class are OGV1 goods vehicles towing a caravan or trailer.

Buses and Coaches (PSV)

Includes all public service vehicles and works buses with a gross vehicle weight of 3.5 tonnes or more, usually vehicles with more than 16 seats.

APPENDIX B
Manual Classified Count



NDC NATIONWIDE DATA COLLECTION	**Site / Location:**	Site 1, A664 Manchester Rd / Thornham New Road	**Project No:**	13307	**Drawing No:**	13307-01	**Drawn By:** EA
	Survey Date:	Wednesday 12th October 2022	**Project Name:**	Stakehill			
	Survey Times:	07:30 to 09:30 and 16:00 to 18:00	**Drawing Title:**	Site Layout and Observed Movements			

13307 / STAKEHILL
OCTOBER 2022
CLASSIFIED TURNING COUNT

SITE: 1 DATE: 12/10/2022

LOCATION: A664 Manchester Rd / Thornham New Road DAY: Wednesday

	A to D								A to C							
TIME	**CAR**	**LGV**	**OGV1**	**OGV2**	**PSV**	**MCL**	**PCL**	**TOT**	**CAR**	**LGV**	**OGV1**	**OGV2**	**PSV**	**MCL**	**PCL**	**TOT**
07:30	2	1	0	0	0	0	0	3	184	35	13	0	3	0	0	235
07:45	1	0	1	0	0	0	0	2	200	29	8	1	0	1	0	239
H/TOT	3	1	1	0	0	0	0	5	384	64	21	1	3	1	0	474
08:00	3	0	0	0	0	0	0	3	199	38	5	3	3	2	2	252
08:15	2	0	0	0	0	0	0	2	152	16	2	0	3	1	1	175
08:30	1	0	1	0	0	0	0	2	127	23	8	0	3	0	2	163
08:45	3	1	0	0	0	0	0	4	156	22	4	2	4	1	0	189
H/TOT	9	1	1	0	0	0	0	11	634	99	19	5	13	4	5	779
09:00	4	1	1	0	0	0	0	6	126	10	6	1	3	0	0	146
09:15	2	1	0	0	0	0	0	3	79	15	3	1	2	0	1	101
H/TOT	6	2	1	0	0	0	0	9	205	25	9	2	5	0	1	247
P/TOT	18	4	3	0	0	0	0	25	1223	188	49	8	21	5	6	1500

	A to D								A to C							
TIME	**CAR**	**LGV**	**OGV1**	**OGV2**	**PSV**	**MCL**	**PCL**	**TOT**	**CAR**	**LGV**	**OGV1**	**OGV2**	**PSV**	**MCL**	**PCL**	**TOT**
16:00	6	0	0	0	0	0	0	6	99	24	1	1	1	1	0	127
16:15	8	0	0	0	0	0	0	8	112	18	3	1	1	0	0	135
16:30	5	0	0	0	0	0	0	5	142	21	1	2	2	2	0	170
16:45	7	1	0	0	0	0	0	8	127	10	2	0	2	0	0	141
H/TOT	26	1	0	0	0	0	0	27	480	73	7	4	6	3	0	573
17:00	6	0	0	0	0	0	0	6	107	11	3	0	2	0	1	124
17:15	12	0	0	0	0	0	0	12	125	12	2	0	1	2	0	142
17:30	11	0	0	0	0	0	0	11	142	11	4	0	0	1	0	158
17:45	8	0	0	0	0	0	0	8	104	12	1	1	4	0	1	123
H/TOT	37	0	0	0	0	0	0	37	478	46	10	1	7	3	2	547
P/TOT	63	1	0	0	0	0	0	64	958	119	17	5	13	6	2	1120

SITE: 1 DATE: 12/10/2022

LOCATION: A664 Manchester Rd / Thornham New Road DAY: Wednesday

	A to B								A to A							
TIME	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT
07:30	1	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0
07:45	0	1	0	0	0	0	0	1	0	0	0	0	0	0	0	0
H/TOT	1	1	0	0	0	0	0	2	0	0	0	0	0	0	0	0
08:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:30	2	1	0	0	0	0	0	3	0	0	0	0	0	0	0	0
08:45	0	1	0	0	0	0	0	1	0	0	0	0	0	0	0	0
H/TOT	2	2	0	0	0	0	0	4	0	0	0	0	0	0	0	0
09:00	2	0	0	0	0	0	1	3	0	0	0	0	0	0	0	0
09:15	1	1	0	0	0	0	0	2	0	0	0	0	0	0	0	0
H/TOT	3	1	0	0	0	0	1	5	0	0	0	0	0	0	0	0
P/TOT	6	4	0	0	0	0	1	11	0	0	0	0	0	0	0	0

	A to B								A to A							
TIME	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT
16:00	1	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0
16:15	2	1	0	0	0	0	0	3	0	0	0	0	0	0	0	0
16:30	1	1	0	0	0	0	0	2	0	0	0	0	0	0	0	0
16:45	1	1	0	0	0	0	0	2	0	0	0	0	0	0	0	0
H/TOT	5	3	0	0	0	0	0	8	0	0	0	0	0	0	0	0
17:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
17:15	2	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0
17:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
17:45	3	1	0	0	0	0	0	4	0	0	0	0	0	0	0	0
H/TOT	5	1	0	0	0	0	0	6	0	0	0	0	0	0	0	0
P/TOT	10	4	0	0	0	0	0	14	0	0	0	0	0	0	0	0

SITE: 1 DATE: 12/10/2022

LOCATION: A664 Manchester Rd / Thornham New Road DAY: Wednesday

	B to A								B to D							
TIME	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT
07:30	1	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0
07:45	3	0	0	0	0	0	0	3	0	0	0	0	0	0	0	0
H/TOT	4	0	0	0	0	0	0	4	0	0	0	0	0	0	0	0
08:00	3	0	0	0	0	0	0	3	0	0	0	0	0	0	0	0
08:15	1	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0
08:30	1	1	0	0	0	0	0	2	0	0	0	0	0	0	0	0
08:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
H/TOT	5	1	0	0	0	0	0	6	0	0	0	0	0	0	0	0
09:00	1	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0
09:15	1	1	0	0	0	0	0	2	0	0	1	0	0	0	0	1
H/TOT	2	1	0	0	0	0	0	3	0	0	1	0	0	0	0	1
P/TOT	11	2	0	0	0	0	0	13	0	0	1	0	0	0	0	1

	B to A								B to D							
TIME	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT
16:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
16:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
16:30	2	0	0	0	0	0	0	2	0	1	0	0	0	0	0	1
16:45	1	1	0	0	0	0	0	2	0	0	0	0	0	0	0	0
H/TOT	3	1	0	0	0	0	0	4	0	1	0	0	0	0	0	1
17:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
17:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
17:30	1	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0
17:45	0	1	0	0	0	0	0	1	0	0	0	0	0	0	0	0
H/TOT	1	1	0	0	0	0	0	2	0	0	0	0	0	0	0	0
P/TOT	4	2	0	0	0	0	0	6	0	1	0	0	0	0	0	1

SITE: 1 DATE: 12/10/2022

LOCATION: A664 Manchester Rd / Thornham New Road DAY: Wednesday

	B to C								B to B							
TIME	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT
07:30	5	0	0	0	0	0	0	5	0	0	0	0	0	0	0	0
07:45	1	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0
H/TOT	6	0	0	0	0	0	0	6	0	0	0	0	0	0	0	0
08:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:15	0	3	0	0	0	0	0	3	0	0	0	0	0	0	0	0
08:30	2	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0
08:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
H/TOT	2	3	0	0	0	0	0	5	0	0	0	0	0	0	0	0
09:00	1	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0
09:15	1	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0
H/TOT	2	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0
P/TOT	10	3	0	0	0	0	0	13	0	0	0	0	0	0	0	0

	B to C								B to B							
TIME	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT
16:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
16:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
16:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
16:45	0	1	0	0	0	0	0	1	0	0	0	0	0	0	0	0
H/TOT	0	1	0	0	0	0	0	1	0	0	0	0	0	0	0	0
17:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
17:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
17:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
17:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
H/TOT	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
P/TOT	0	1	0	0	0	0	0	1	0	0	0	0	0	0	0	0

SITE: 1 DATE: 12/10/2022

LOCATION: A664 Manchester Rd / Thornham New Road DAY: Wednesday

	C to B								C to A							
TIME	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT
07:30	0	1	0	0	0	0	0	1	77	17	5	0	3	1	0	103
07:45	1	0	0	0	0	0	0	1	129	14	2	1	1	0	1	148
H/TOT	1	1	0	0	0	0	0	2	206	31	7	1	4	1	1	251
08:00	0	0	0	0	0	0	0	0	96	10	4	0	1	0	0	111
08:15	0	0	0	0	0	0	0	0	91	19	3	2	1	0	0	116
08:30	1	0	0	0	0	0	0	1	115	18	5	0	4	0	0	142
08:45	0	0	0	0	0	0	0	0	90	15	1	2	2	1	0	111
H/TOT	1	0	0	0	0	0	0	1	392	62	13	4	8	1	0	480
09:00	1	0	0	0	0	0	0	1	121	22	5	2	3	1	0	154
09:15	0	0	0	0	0	0	0	0	86	13	3	0	3	4	0	109
H/TOT	1	0	0	0	0	0	0	1	207	35	8	2	6	5	0	263
P/TOT	3	1	0	0	0	0	0	4	805	128	28	7	18	7	1	994

	C to B								C to A							
TIME	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT
16:00	0	0	0	0	0	0	0	0	152	22	8	4	5	0	0	191
16:15	0	0	0	0	0	0	0	0	155	27	3	1	3	1	1	191
16:30	0	0	0	0	0	0	0	0	149	27	6	2	1	2	0	187
16:45	1	0	0	0	0	0	0	1	153	15	2	0	2	0	0	172
H/TOT	1	0	0	0	0	0	0	1	609	91	19	7	11	3	1	741
17:00	2	0	0	0	0	0	0	2	150	14	4	1	2	0	2	173
17:15	0	0	0	0	0	0	0	0	157	14	5	2	1	3	0	182
17:30	0	0	0	0	0	0	0	0	150	10	2	0	2	2	0	166
17:45	2	0	0	0	0	0	0	2	157	12	2	1	2	1	1	176
H/TOT	4	0	0	0	0	0	0	4	614	50	13	4	7	6	3	697
P/TOT	5	0	0	0	0	0	0	5	1223	141	32	11	18	9	4	1438

SITE: 1 DATE: 12/10/2022

LOCATION: A664 Manchester Rd / Thornham New Road DAY: Wednesday

	C to D								C to C							
TIME	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT
07:30	1	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0
07:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
H/TOT	1	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0
08:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:15	4	0	0	0	0	0	0	4	0	0	0	0	0	0	0	0
08:30	2	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0
08:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
H/TOT	6	0	0	0	0	0	0	6	0	0	0	0	0	0	0	0
09:00	3	1	0	0	0	0	0	4	0	0	0	0	0	0	0	0
09:15	2	1	1	0	0	0	0	4	0	0	0	0	0	0	0	0
H/TOT	5	2	1	0	0	0	0	8	0	0	0	0	0	0	0	0
P/TOT	12	2	1	0	0	0	0	15	0	0	0	0	0	0	0	0

	C to D								C to C							
TIME	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT
16:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
16:15	6	0	0	0	0	0	0	6	0	0	0	0	0	0	0	0
16:30	2	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0
16:45	8	1	0	0	0	0	0	9	0	0	0	0	0	0	0	0
H/TOT	16	1	0	0	0	0	0	17	0	0	0	0	0	0	0	0
17:00	3	1	0	0	0	0	0	4	0	0	0	0	0	0	0	0
17:15	2	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0
17:30	3	0	0	0	0	0	0	3	0	0	0	0	0	0	0	0
17:45	2	3	0	0	0	0	0	5	0	0	0	0	0	0	0	0
H/TOT	10	4	0	0	0	0	0	14	0	0	0	0	0	0	0	0
P/TOT	26	5	0	0	0	0	0	31	0	0	0	0	0	0	0	0

13307 / STAKEHILL
OCTOBER 2022
CLASSIFIED TURNING COUNT

SITE: 1 DATE: 12/10/2022

LOCATION: A664 Manchester Rd / Thornham New Road DAY: Wednesday

	D to C								D to B							
TIME	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT
07:30	3	0	0	0	0	0	0	3	0	0	0	0	0	0	0	0
07:45	7	0	0	0	0	0	0	7	0	0	0	0	0	0	0	0
H/TOT	10	0	0	0	0	0	0	10	0	0	0	0	0	0	0	0
08:00	4	1	0	0	0	0	0	5	0	0	0	0	0	0	0	0
08:15	4	0	0	0	0	0	0	4	0	0	0	0	0	0	0	0
08:30	4	0	0	0	0	0	0	4	0	0	0	0	0	0	0	0
08:45	3	0	0	0	0	0	0	3	0	0	0	0	0	0	0	0
H/TOT	15	1	0	0	0	0	0	16	0	0	0	0	0	0	0	0
09:00	3	0	2	0	0	0	0	5	0	0	1	0	0	0	0	1
09:15	3	0	0	0	0	0	0	3	0	0	0	0	0	0	0	0
H/TOT	6	0	2	0	0	0	0	8	0	0	1	0	0	0	0	1
P/TOT	31	1	2	0	0	0	0	34	0	0	1	0	0	0	0	1

	D to C								D to B							
TIME	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT
16:00	3	1	0	0	0	0	0	4	0	0	0	0	0	0	0	0
16:15	2	0	0	0	0	0	1	3	0	0	0	0	0	0	0	0
16:30	2	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0
16:45	3	0	0	0	0	0	0	3	0	0	0	0	0	0	0	0
H/TOT	10	1	0	0	0	0	1	12	0	0	0	0	0	0	0	0
17:00	6	0	0	0	0	0	0	6	0	0	0	0	0	0	0	0
17:15	6	0	0	0	0	0	0	6	0	0	0	0	0	0	0	0
17:30	4	1	0	0	0	0	0	5	0	0	0	0	0	0	0	0
17:45	2	1	0	0	0	0	0	3	0	0	0	0	0	0	0	0
H/TOT	18	2	0	0	0	0	0	20	0	0	0	0	0	0	0	0
P/TOT	28	3	0	0	0	0	1	32	0	0	0	0	0	0	0	0

SITE: 1 DATE: 12/10/2022

LOCATION: A664 Manchester Rd / Thornham New Road DAY: Wednesday

	D to A								D to D							
TIME	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT
07:30	3	1	0	0	0	0	0	4	0	0	0	0	0	0	0	0
07:45	2	3	1	0	0	0	0	6	0	0	0	0	0	0	0	0
H/TOT	5	4	1	0	0	0	0	10	0	0	0	0	0	0	0	0
08:00	6	1	0	0	0	0	0	7	0	0	0	0	0	0	0	0
08:15	10	0	0	0	0	0	0	10	0	0	0	0	0	0	0	0
08:30	5	0	0	0	0	0	0	5	0	0	0	0	0	0	0	0
08:45	10	2	0	0	0	0	0	12	0	0	0	0	0	0	0	0
H/TOT	31	3	0	0	0	0	0	34	0	0	0	0	0	0	0	0
09:00	4	1	0	0	0	0	0	5	0	0	0	0	0	0	0	0
09:15	2	1	0	0	0	0	0	3	0	0	0	0	0	0	0	0
H/TOT	6	2	0	0	0	0	0	8	0	0	0	0	0	0	0	0
P/TOT	42	9	1	0	0	0	0	52	0	0	0	0	0	0	0	0

	D to A								D to D							
TIME	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT
16:00	7	0	1	0	0	0	0	8	0	0	0	0	0	0	0	0
16:15	3	0	0	0	0	0	0	3	0	0	0	0	0	0	0	0
16:30	2	1	0	0	0	0	0	3	0	0	0	0	0	0	0	0
16:45	2	1	0	0	0	0	0	3	0	0	0	0	0	0	0	0
H/TOT	14	2	1	0	0	0	0	17	0	0	0	0	0	0	0	0
17:00	0	1	0	0	0	0	0	1	0	0	0	0	0	0	0	0
17:15	3	0	0	0	0	0	0	3	0	0	0	0	0	0	0	0
17:30	3	1	0	0	0	0	0	4	0	0	0	0	0	0	0	0
17:45	5	0	0	0	0	0	0	5	0	0	0	0	0	0	0	0
H/TOT	11	2	0	0	0	0	0	13	0	0	0	0	0	0	0	0
P/TOT	25	4	1	0	0	0	0	30	0	0	0	0	0	0	0	0

13307 / STAKEHILL
OCTOBER 2022
CLASSIFIED TURNING COUNT

SITE: 1 DATE: 12/10/2022

LOCATION: A664 Manchester Rd / Thornham New Road DAY: Wednesday

	TO ARM A								FROM ARM A							
TIME	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT
07:30	81	18	5	0	3	1	0	108	187	36	13	0	3	0	0	239
07:45	134	17	3	1	1	0	1	157	201	30	9	1	0	1	0	242
H/TOT	215	35	8	1	4	1	1	265	388	66	22	1	3	1	0	481
08:00	105	11	4	0	1	0	0	121	202	38	5	3	3	2	2	255
08:15	102	19	3	2	1	0	0	127	154	16	2	0	3	1	1	177
08:30	121	19	5	0	4	0	0	149	130	24	9	0	3	0	2	168
08:45	100	17	1	2	2	1	0	123	159	24	4	2	4	1	0	194
H/TOT	428	66	13	4	8	1	0	520	645	102	20	5	13	4	5	794
09:00	126	23	5	2	3	1	0	160	132	11	7	1	3	0	1	155
09:15	89	15	3	0	3	4	0	114	82	17	3	1	2	0	1	106
H/TOT	215	38	8	2	6	5	0	274	214	28	10	2	5	0	2	261
P/TOT	858	139	29	7	18	7	1	1059	1247	196	52	8	21	5	7	1536

	TO ARM A								FROM ARM A							
TIME	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT
16:00	159	22	9	4	5	0	0	199	106	24	1	1	1	1	0	134
16:15	158	27	3	1	3	1	1	194	122	19	3	1	1	0	0	146
16:30	153	28	6	2	1	2	0	192	148	22	1	2	2	2	0	177
16:45	156	17	2	0	2	0	0	177	135	12	2	0	2	0	0	151
H/TOT	626	94	20	7	11	3	1	762	511	77	7	4	6	3	0	608
17:00	150	15	4	1	2	0	2	174	113	11	3	0	2	0	1	130
17:15	160	14	5	2	1	3	0	185	139	12	2	0	1	2	0	156
17:30	154	11	2	0	2	2	0	171	153	11	4	0	0	1	0	169
17:45	162	13	2	1	2	1	1	182	115	13	1	1	4	0	1	135
H/TOT	626	53	13	4	7	6	3	712	520	47	10	1	7	3	2	590
P/TOT	1252	147	33	11	18	9	4	1474	1031	124	17	5	13	6	2	1198

SITE: 1 DATE: 12/10/2022

LOCATION: A664 Manchester Rd / Thornham New Road DAY: Wednesday

	TO ARM B								FROM ARM B							
TIME	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT
07:30	1	1	0	0	0	0	0	2	6	0	0	0	0	0	0	6
07:45	1	1	0	0	0	0	0	2	4	0	0	0	0	0	0	4
H/TOT	2	2	0	0	0	0	0	4	10	0	0	0	0	0	0	10
08:00	0	0	0	0	0	0	0	0	3	0	0	0	0	0	0	3
08:15	0	0	0	0	0	0	0	0	1	3	0	0	0	0	0	4
08:30	3	1	0	0	0	0	0	4	3	1	0	0	0	0	0	4
08:45	0	1	0	0	0	0	0	1	0	0	0	0	0	0	0	0
H/TOT	3	2	0	0	0	0	0	5	7	4	0	0	0	0	0	11
09:00	3	0	1	0	0	0	1	5	2	0	0	0	0	0	0	2
09:15	1	1	0	0	0	0	0	2	2	1	1	0	0	0	0	4
H/TOT	4	1	1	0	0	0	1	7	4	1	1	0	0	0	0	6
P/TOT	9	5	1	0	0	0	1	16	21	5	1	0	0	0	0	27

	TO ARM B								FROM ARM B							
TIME	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT
16:00	1	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0
16:15	2	1	0	0	0	0	0	3	0	0	0	0	0	0	0	0
16:30	1	1	0	0	0	0	0	2	2	1	0	0	0	0	0	3
16:45	2	1	0	0	0	0	0	3	1	2	0	0	0	0	0	3
H/TOT	6	3	0	0	0	0	0	9	3	3	0	0	0	0	0	6
17:00	2	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0
17:15	2	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0
17:30	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1
17:45	5	1	0	0	0	0	0	6	0	1	0	0	0	0	0	1
H/TOT	9	1	0	0	0	0	0	10	1	1	0	0	0	0	0	2
P/TOT	15	4	0	0	0	0	0	19	4	4	0	0	0	0	0	8

13307 / STAKEHILL
OCTOBER 2022
CLASSIFIED TURNING COUNT

SITE: 1 DATE: 12/10/2022

LOCATION: A664 Manchester Rd / Thornham New Road DAY: Wednesday

	TO ARM C								FROM ARM C							
TIME	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT
07:30	192	35	13	0	3	0	0	243	78	18	5	0	3	1	0	105
07:45	208	29	8	1	0	1	0	247	130	14	2	1	1	0	1	149
H/TOT	400	64	21	1	3	1	0	490	208	32	7	1	4	1	1	254
08:00	203	39	5	3	3	2	2	257	96	10	4	0	1	0	0	111
08:15	156	19	2	0	3	1	1	182	95	19	3	2	1	0	0	120
08:30	133	23	8	0	3	0	2	169	118	18	5	0	4	0	0	145
08:45	159	22	4	2	4	1	0	192	90	15	1	2	2	1	0	111
H/TOT	651	103	19	5	13	4	5	800	399	62	13	4	8	1	0	487
09:00	130	10	8	1	3	0	0	152	125	23	5	2	3	1	0	159
09:15	83	15	3	1	2	0	1	105	88	14	4	0	3	4	0	113
H/TOT	213	25	11	2	5	0	1	257	213	37	9	2	6	5	0	272
P/TOT	1264	192	51	8	21	5	6	1547	820	131	29	7	18	7	1	1013

	TO ARM C								FROM ARM C							
TIME	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT
16:00	102	25	1	1	1	1	0	131	152	22	8	4	5	0	0	191
16:15	114	18	3	1	1	0	1	138	161	27	3	1	3	1	1	197
16:30	144	21	1	2	2	2	0	172	151	27	6	2	1	2	0	189
16:45	130	11	2	0	2	0	0	145	162	16	2	0	2	0	0	182
H/TOT	490	75	7	4	6	3	1	586	626	92	19	7	11	3	1	759
17:00	113	11	3	0	2	0	1	130	155	15	4	1	2	0	2	179
17:15	131	12	2	0	1	2	0	148	159	14	5	2	1	3	0	184
17:30	146	12	4	0	0	1	0	163	153	10	2	0	2	2	0	169
17:45	106	13	1	1	4	0	1	126	161	15	2	1	2	1	1	183
H/TOT	496	48	10	1	7	3	2	567	628	54	13	4	7	6	3	715
P/TOT	986	123	17	5	13	6	3	1153	1254	146	32	11	18	9	4	1474

SITE: 1 DATE: 12/10/2022

LOCATION: A664 Manchester Rd / Thornham New Road DAY: Wednesday

	TO ARM D								FROM ARM D							
TIME	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT
07:30	3	1	0	0	0	0	0	4	6	1	0	0	0	0	0	7
07:45	1	0	1	0	0	0	0	2	9	3	1	0	0	0	0	13
H/TOT	4	1	1	0	0	0	0	6	15	4	1	0	0	0	0	20
08:00	3	0	0	0	0	0	0	3	10	2	0	0	0	0	0	12
08:15	6	0	0	0	0	0	0	6	14	0	0	0	0	0	0	14
08:30	3	0	1	0	0	0	0	4	9	0	0	0	0	0	0	9
08:45	3	1	0	0	0	0	0	4	13	2	0	0	0	0	0	15
H/TOT	15	1	1	0	0	0	0	17	46	4	0	0	0	0	0	50
09:00	7	2	1	0	0	0	0	10	7	1	3	0	0	0	0	11
09:15	4	2	2	0	0	0	0	8	5	1	0	0	0	0	0	6
H/TOT	11	4	3	0	0	0	0	18	12	2	3	0	0	0	0	17
P/TOT	30	6	5	0	0	0	0	41	73	10	4	0	0	0	0	87

	TO ARM D								FROM ARM D							
TIME	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT
16:00	6	0	0	0	0	0	0	6	10	1	1	0	0	0	0	12
16:15	14	0	0	0	0	0	0	14	5	0	0	0	0	0	1	6
16:30	7	1	0	0	0	0	0	8	4	1	0	0	0	0	0	5
16:45	15	2	0	0	0	0	0	17	5	1	0	0	0	0	0	6
H/TOT	42	3	0	0	0	0	0	45	24	3	1	0	0	0	1	29
17:00	9	1	0	0	0	0	0	10	6	1	0	0	0	0	0	7
17:15	14	0	0	0	0	0	0	14	9	0	0	0	0	0	0	9
17:30	14	0	0	0	0	0	0	14	7	2	0	0	0	0	0	9
17:45	10	3	0	0	0	0	0	13	7	1	0	0	0	0	0	8
H/TOT	47	4	0	0	0	0	0	51	29	4	0	0	0	0	0	33
P/TOT	89	7	0	0	0	0	0	96	53	7	1	0	0	0	1	62

13307 / STAKEHILL
OCTOBER 2022
CLASSIFIED TURNING COUNT

SITE: 1 DATE: 12/10/2022

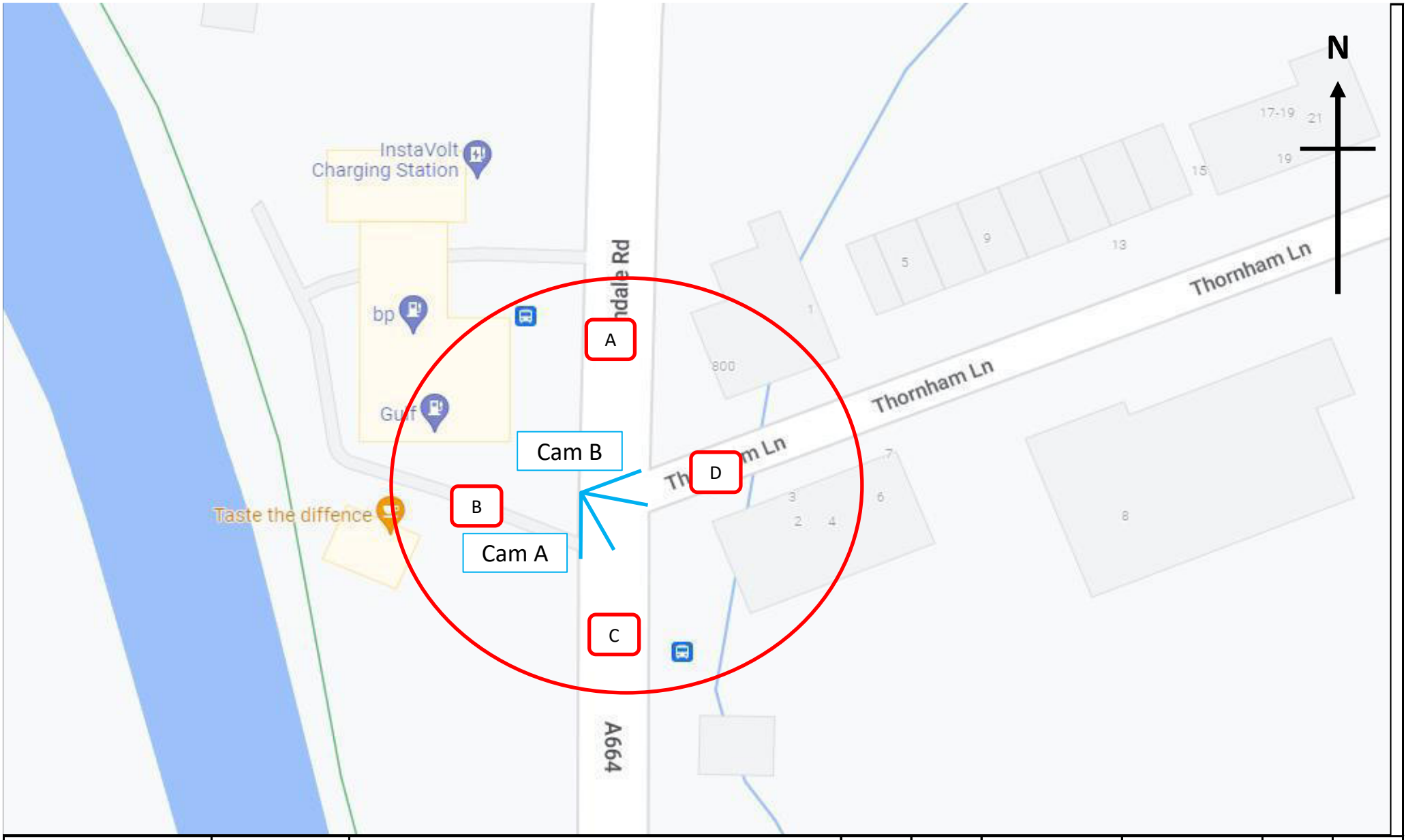
LOCATION: A664 Manchester Rd / Thornham New Road DAY: Wednesday

	JUNCTION TOTAL							
TIME	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT
07:30	277	55	18	0	6	1	0	357
07:45	344	47	12	2	1	1	1	408
H/TOT	621	102	30	2	7	2	1	765
08:00	311	50	9	3	4	2	2	381
08:15	264	38	5	2	4	1	1	315
08:30	260	43	14	0	7	0	2	326
08:45	262	41	5	4	6	2	0	320
H/TOT	1097	172	33	9	21	5	5	1342
09:00	266	35	15	3	6	1	1	327
09:15	177	33	8	1	5	4	1	229
H/TOT	443	68	23	4	11	5	2	556
P/TOT	2161	342	86	15	39	12	8	2663

PEAK HOUR CALCULATION	TOT
07:30 to 08:30	**1461**
07:45 to 08:45	1430
08:00 to 09:00	1342
08:15 to 09:15	1288
08:30 to 09:30	1202
AM PEAK VALUE	**1461**

	JUNCTION TOTAL							
TIME	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT
16:00	268	47	10	5	6	1	0	337
16:15	288	46	6	2	4	1	2	349
16:30	305	51	7	4	3	4	0	374
16:45	303	31	4	0	4	0	0	342
H/TOT	1164	175	27	11	17	6	2	1402
17:00	274	27	7	1	4	0	3	316
17:15	307	26	7	2	2	5	0	349
17:30	314	23	6	0	2	3	0	348
17:45	283	30	3	2	6	1	2	327
H/TOT	1178	106	23	5	14	9	5	1340
P/TOT	2342	281	50	16	31	15	7	2742

PEAK HOUR CALCULATION	TOT
16:00 to 17:00	**1402**
16:15 to 17:15	1381
16:30 to 17:30	1381
16:45 to 17:45	1355
17:00 to 18:00	1340
PM PEAK VALUE	**1402**



NDC NATIONWIDE DATA COLLECTION	**Site / Location:**	Site 2, A664 Rochdale Rd / Thornham Lane	**Project No:**	13307	**Drawing No:**	13307-02	**Drawn By:** EA
	Survey Date:	Wednesday 12th October 2022	**Project Name:**	Stakehill			
	Survey Times:	07:30 to 09:30 and 16:00 to 18:00	**Drawing Title:**	Site Layout and Observed Movements			

SITE: 2 DATE: 12/10/2022

LOCATION: A664 Rochdale Rd / Thornham Lane DAY: Wednesday

	A to D								A to C							
TIME	**CAR**	**LGV**	**OGV1**	**OGV2**	**PSV**	**MCL**	**PCL**	**TOT**	**CAR**	**LGV**	**OGV1**	**OGV2**	**PSV**	**MCL**	**PCL**	**TOT**
07:30	2	1	0	0	0	0	0	3	208	35	9	0	4	0	0	256
07:45	2	0	0	0	0	0	0	2	230	46	8	1	0	1	0	286
H/TOT	4	1	0	0	0	0	0	5	438	81	17	1	4	1	0	542
08:00	4	1	0	0	0	0	0	5	186	37	5	3	3	1	1	236
08:15	7	3	0	0	0	0	0	10	186	21	3	0	4	2	1	217
08:30	7	1	0	0	0	0	0	8	159	27	10	0	3	0	2	201
08:45	4	1	0	0	0	0	0	5	156	24	4	2	3	1	0	190
H/TOT	22	6	0	0	0	0	0	28	687	109	22	5	13	4	4	844
09:00	3	1	0	0	0	0	0	4	136	18	7	1	3	0	0	165
09:15	0	0	0	0	0	0	0	0	88	25	2	1	3	1	1	121
H/TOT	3	1	0	0	0	0	0	4	224	43	9	2	6	1	1	286
P/TOT	29	8	0	0	0	0	0	37	1349	233	48	8	23	6	5	1672

	A to D								A to C							
TIME	**CAR**	**LGV**	**OGV1**	**OGV2**	**PSV**	**MCL**	**PCL**	**TOT**	**CAR**	**LGV**	**OGV1**	**OGV2**	**PSV**	**MCL**	**PCL**	**TOT**
16:00	4	0	0	0	0	0	0	4	115	17	1	1	2	1	0	137
16:15	6	3	1	0	0	0	1	11	102	19	2	1	1	0	0	125
16:30	0	0	0	0	0	0	0	0	130	24	2	2	2	2	0	162
16:45	2	0	0	0	0	0	0	2	135	18	3	0	2	0	0	158
H/TOT	12	3	1	0	0	0	1	17	482	78	8	4	7	3	0	582
17:00	2	0	0	0	0	0	0	2	120	12	3	0	2	0	0	137
17:15	0	0	0	0	0	0	0	0	124	12	3	0	1	2	1	143
17:30	1	0	0	0	0	0	0	1	133	16	3	0	0	1	0	153
17:45	5	0	0	0	0	0	0	5	101	14	1	1	4	0	0	121
H/TOT	8	0	0	0	0	0	0	8	478	54	10	1	7	3	1	554
P/TOT	20	3	1	0	0	0	1	25	960	132	18	5	14	6	1	1136

SITE: 2 DATE: 12/10/2022

LOCATION: A664 Rochdale Rd / Thornham Lane DAY: Wednesday

	A to B								A to A							
TIME	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT
07:30	4	1	1	0	0	0	0	6	0	0	0	0	0	0	0	0
07:45	5	0	1	0	0	0	0	6	0	0	0	0	0	0	0	0
H/TOT	9	1	2	0	0	0	0	12	0	0	0	0	0	0	0	0
08:00	2	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0
08:15	6	0	0	0	0	0	0	6	0	0	0	0	0	0	0	0
08:30	4	1	0	0	0	0	0	5	0	0	0	0	0	0	0	0
08:45	1	1	0	0	0	0	0	2	0	0	0	0	0	0	0	0
H/TOT	13	2	0	0	0	0	0	15	0	0	0	0	0	0	0	0
09:00	3	0	0	0	0	0	0	3	0	0	0	0	0	0	0	0
09:15	6	1	0	0	0	0	0	7	0	0	0	0	0	0	0	0
H/TOT	9	1	0	0	0	0	0	10	0	0	0	0	0	0	0	0
P/TOT	31	4	2	0	0	0	0	37	0	0	0	0	0	0	0	0

	A to B								A to A							
TIME	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT
16:00	2	1	0	0	0	0	0	3	0	0	0	0	0	0	0	0
16:15	1	2	0	0	0	0	0	3	0	0	0	0	0	0	0	0
16:30	2	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0
16:45	5	0	0	0	0	0	0	5	0	0	0	0	0	0	0	0
H/TOT	10	3	0	0	0	0	0	13	0	0	0	0	0	0	0	0
17:00	2	0	1	0	0	0	0	3	0	0	0	0	0	0	0	0
17:15	7	0	0	0	0	0	0	7	0	0	0	0	0	0	0	0
17:30	3	0	0	0	0	0	0	3	0	0	0	0	0	0	0	0
17:45	2	2	0	0	0	0	0	4	0	0	0	0	0	0	0	0
H/TOT	14	2	1	0	0	0	0	17	0	0	0	0	0	0	0	0
P/TOT	24	5	1	0	0	0	0	30	0	0	0	0	0	0	0	0

SITE: 2 DATE: 12/10/2022

LOCATION: A664 Rochdale Rd / Thornham Lane DAY: Wednesday

	B to A								B to D							
TIME	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT
07:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
H/TOT	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
H/TOT	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
09:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
09:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
H/TOT	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
P/TOT	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

	B to A								B to D							
TIME	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT
16:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
16:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
16:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
16:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
H/TOT	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
17:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
17:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
17:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
17:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
H/TOT	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
P/TOT	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

SITE: 2 DATE: 12/10/2022

LOCATION: A664 Rochdale Rd / Thornham Lane DAY: Wednesday

	B to C								B to B							
TIME	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT
07:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
H/TOT	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
H/TOT	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
09:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
09:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
H/TOT	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
P/TOT	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

	B to C								B to B							
TIME	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT
16:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
16:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
16:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
16:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
H/TOT	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
17:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
17:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
17:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
17:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
H/TOT	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
P/TOT	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

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LOCATION: A664 Rochdale Rd / Thornham Lane DAY: Wednesday

	C to B								C to A							
TIME	**CAR**	**LGV**	**OGV1**	**OGV2**	**PSV**	**MCL**	**PCL**	**TOT**	**CAR**	**LGV**	**OGV1**	**OGV2**	**PSV**	**MCL**	**PCL**	**TOT**
07:30	6	3	1	0	0	0	0	10	80	19	2	1	3	1	0	106
07:45	5	5	0	0	0	0	0	10	107	13	3	1	1	0	1	126
H/TOT	11	8	1	0	0	0	0	20	187	32	5	2	4	1	1	232
08:00	7	1	0	0	0	0	0	8	81	11	1	0	4	0	0	97
08:15	6	7	2	0	0	0	0	15	94	17	4	1	1	0	0	117
08:30	5	3	0	0	0	0	0	8	105	21	3	1	4	0	3	137
08:45	7	3	0	0	0	0	0	10	77	13	2	0	3	1	0	96
H/TOT	25	14	2	0	0	0	0	41	357	62	10	2	12	1	3	447
09:00	4	6	1	0	0	0	0	11	123	18	7	3	2	1	0	154
09:15	5	4	1	0	0	0	0	10	86	15	1	0	3	4	0	109
H/TOT	9	10	2	0	0	0	0	21	209	33	8	3	5	5	0	263
P/TOT	45	32	5	0	0	0	0	82	753	127	23	7	21	7	4	942

	C to B								C to A							
TIME	**CAR**	**LGV**	**OGV1**	**OGV2**	**PSV**	**MCL**	**PCL**	**TOT**	**CAR**	**LGV**	**OGV1**	**OGV2**	**PSV**	**MCL**	**PCL**	**TOT**
16:00	11	2	0	0	0	0	0	13	154	21	8	3	5	0	0	191
16:15	11	3	0	0	0	0	0	14	153	22	3	1	3	0	2	184
16:30	4	2	1	0	0	0	0	7	135	26	5	2	1	2	0	171
16:45	11	2	1	0	0	0	0	14	155	18	2	0	2	0	0	177
H/TOT	37	9	2	0	0	0	0	48	597	87	18	6	11	2	2	723
17:00	5	1	2	0	0	0	0	8	162	16	3	1	2	1	1	186
17:15	8	0	0	0	0	0	0	8	157	14	5	1	1	4	1	183
17:30	7	4	1	0	0	0	0	12	160	9	1	0	2	1	2	175
17:45	8	0	2	0	0	0	0	10	142	11	3	1	2	1	1	161
H/TOT	28	5	5	0	0	0	0	38	621	50	12	3	7	7	5	705
P/TOT	65	14	7	0	0	0	0	86	1218	137	30	9	18	9	7	1428

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LOCATION: A664 Rochdale Rd / Thornham Lane DAY: Wednesday

	C to D								C to C							
TIME	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT
07:30	1	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0
07:45	4	0	0	0	0	0	0	4	0	0	0	0	0	0	0	0
H/TOT	5	0	0	0	0	0	0	5	0	0	0	0	0	0	0	0
08:00	2	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0
08:15	4	1	0	0	0	0	0	5	0	0	0	0	0	0	0	0
08:30	8	1	0	0	0	0	1	10	0	0	0	0	0	0	0	0
08:45	4	0	0	0	0	0	0	4	0	0	0	0	0	0	0	0
H/TOT	18	2	0	0	0	0	1	21	0	0	0	0	0	0	0	0
09:00	1	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0
09:15	0	1	0	0	0	0	0	1	0	0	0	0	0	0	0	0
H/TOT	1	1	0	0	0	0	0	2	0	0	0	0	0	0	0	0
P/TOT	24	3	0	0	0	0	1	28	0	0	0	0	0	0	0	0

	C to D								C to C							
TIME	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT
16:00	4	0	0	0	0	0	0	4	0	0	0	0	0	0	0	0
16:15	4	0	0	0	0	0	0	4	0	0	0	0	0	0	0	0
16:30	1	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0
16:45	1	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0
H/TOT	10	0	0	0	0	0	0	10	0	0	0	0	0	0	0	0
17:00	2	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0
17:15	1	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0
17:30	2	1	1	0	0	0	0	4	0	0	0	0	0	0	0	0
17:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
H/TOT	5	1	1	0	0	0	0	7	0	0	0	0	0	0	0	0
P/TOT	15	1	1	0	0	0	0	17	0	0	0	0	0	0	0	0

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LOCATION: A664 Rochdale Rd / Thornham Lane DAY: Wednesday

	D to C								D to B							
TIME	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT
07:30	3	0	0	0	0	0	0	3	0	0	0	0	0	0	0	0
07:45	7	1	0	1	0	0	0	9	0	0	0	0	0	0	0	0
H/TOT	10	1	0	1	0	0	0	12	0	0	0	0	0	0	0	0
08:00	6	1	0	0	0	0	0	7	1	0	0	0	0	0	0	1
08:15	4	0	0	0	0	0	1	5	0	0	0	0	0	0	0	0
08:30	1	3	0	0	0	0	1	5	0	0	0	0	0	0	0	0
08:45	2	0	0	0	0	0	0	2	1	1	0	0	0	0	0	2
H/TOT	13	4	0	0	0	0	2	19	2	1	0	0	0	0	0	3
09:00	13	1	0	0	0	1	0	15	0	0	0	0	0	0	0	0
09:15	2	1	0	0	0	0	0	3	0	0	0	0	0	0	0	0
H/TOT	15	2	0	0	0	1	0	18	0	0	0	0	0	0	0	0
P/TOT	38	7	0	1	0	1	2	49	2	1	0	0	0	0	0	3

	D to C								D to B							
TIME	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT
16:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
16:15	1	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0
16:30	8	1	0	0	0	0	0	9	0	0	0	0	0	0	0	0
16:45	5	0	0	0	0	0	0	5	0	0	0	0	0	0	0	0
H/TOT	14	1	0	0	0	0	0	15	0	0	0	0	0	0	0	0
17:00	1	1	0	0	0	0	1	3	0	0	0	0	0	0	0	0
17:15	1	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0
17:30	5	0	1	0	0	0	0	6	0	0	0	0	0	0	0	0
17:45	3	1	0	0	0	0	0	4	0	0	0	0	0	0	0	0
H/TOT	10	2	1	0	0	0	1	14	0	0	0	0	0	0	0	0
P/TOT	24	3	1	0	0	0	1	29	0	0	0	0	0	0	0	0

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LOCATION: A664 Rochdale Rd / Thornham Lane DAY: Wednesday

	D to A								D to D							
TIME	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT
07:30	0	1	1	0	0	0	0	2	0	0	0	0	0	0	0	0
07:45	1	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0
H/TOT	1	1	1	0	0	0	0	3	0	0	0	0	0	0	0	0
08:00	4	0	0	1	0	0	0	5	0	0	0	0	0	0	0	0
08:15	0	1	0	0	0	0	0	1	0	0	0	0	0	0	0	0
08:30	1	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0
08:45	1	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0
H/TOT	6	1	0	1	0	0	0	8	0	0	0	0	0	0	0	0
09:00	10	0	0	0	0	0	0	10	0	0	0	0	0	0	0	0
09:15	1	1	0	0	0	0	0	2	0	0	0	0	0	0	0	0
H/TOT	11	1	0	0	0	0	0	12	0	0	0	0	0	0	0	0
P/TOT	18	3	1	1	0	0	0	23	0	0	0	0	0	0	0	0

	D to A								D to D							
TIME	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT
16:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
16:15	1	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0
16:30	9	1	0	0	0	0	0	10	0	0	0	0	0	0	0	0
16:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
H/TOT	10	1	0	0	0	0	0	11	0	0	0	0	0	0	0	0
17:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
17:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
17:30	2	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0
17:45	1	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0
H/TOT	3	0	0	0	0	0	0	3	0	0	0	0	0	0	0	0
P/TOT	13	1	0	0	0	0	0	14	0	0	0	0	0	0	0	0

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LOCATION: A664 Rochdale Rd / Thornham Lane DAY: Wednesday

	TO ARM A								FROM ARM A							
TIME	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT
07:30	80	20	3	1	3	1	0	108	214	37	10	0	4	0	0	265
07:45	108	13	3	1	1	0	1	127	237	46	9	1	0	1	0	294
H/TOT	188	33	6	2	4	1	1	235	451	83	19	1	4	1	0	559
08:00	85	11	1	1	4	0	0	102	192	38	5	3	3	1	1	243
08:15	94	18	4	1	1	0	0	118	199	24	3	0	4	2	1	233
08:30	106	21	3	1	4	0	3	138	170	29	10	0	3	0	2	214
08:45	78	13	2	0	3	1	0	97	161	26	4	2	3	1	0	197
H/TOT	363	63	10	3	12	1	3	455	722	117	22	5	13	4	4	887
09:00	133	18	7	3	2	1	0	164	142	19	7	1	3	0	0	172
09:15	87	16	1	0	3	4	0	111	94	26	2	1	3	1	1	128
H/TOT	220	34	8	3	5	5	0	275	236	45	9	2	6	1	1	300
P/TOT	771	130	24	8	21	7	4	965	1409	245	50	8	23	6	5	1746

	TO ARM A								FROM ARM A							
TIME	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT
16:00	154	21	8	3	5	0	0	191	121	18	1	1	2	1	0	144
16:15	154	22	3	1	3	0	2	185	109	24	3	1	1	0	1	139
16:30	144	27	5	2	1	2	0	181	132	24	2	2	2	2	0	164
16:45	155	18	2	0	2	0	0	177	142	18	3	0	2	0	0	165
H/TOT	607	88	18	6	11	2	2	734	504	84	9	4	7	3	1	612
17:00	162	16	3	1	2	1	1	186	124	12	4	0	2	0	0	142
17:15	157	14	5	1	1	4	1	183	131	12	3	0	1	2	1	150
17:30	162	9	1	0	2	1	2	177	137	16	3	0	0	1	0	157
17:45	143	11	3	1	2	1	1	162	108	16	1	1	4	0	0	130
H/TOT	624	50	12	3	7	7	5	708	500	56	11	1	7	3	1	579
P/TOT	1231	138	30	9	18	9	7	1442	1004	140	20	5	14	6	2	1191

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LOCATION: A664 Rochdale Rd / Thornham Lane DAY: Wednesday

	TO ARM B								FROM ARM B							
TIME	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT
07:30	10	4	2	0	0	0	0	16	0	0	0	0	0	0	0	0
07:45	10	5	1	0	0	0	0	16	0	0	0	0	0	0	0	0
H/TOT	20	9	3	0	0	0	0	32	0	0	0	0	0	0	0	0
08:00	10	1	0	0	0	0	0	11	0	0	0	0	0	0	0	0
08:15	12	7	2	0	0	0	0	21	0	0	0	0	0	0	0	0
08:30	9	4	0	0	0	0	0	13	0	0	0	0	0	0	0	0
08:45	9	5	0	0	0	0	0	14	0	0	0	0	0	0	0	0
H/TOT	40	17	2	0	0	0	0	59	0	0	0	0	0	0	0	0
09:00	7	6	1	0	0	0	0	14	0	0	0	0	0	0	0	0
09:15	11	5	1	0	0	0	0	17	0	0	0	0	0	0	0	0
H/TOT	18	11	2	0	0	0	0	31	0	0	0	0	0	0	0	0
P/TOT	78	37	7	0	0	0	0	122	0	0	0	0	0	0	0	0

	TO ARM B								FROM ARM B							
TIME	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT
16:00	13	3	0	0	0	0	0	16	0	0	0	0	0	0	0	0
16:15	12	5	0	0	0	0	0	17	0	0	0	0	0	0	0	0
16:30	6	2	1	0	0	0	0	9	0	0	0	0	0	0	0	0
16:45	16	2	1	0	0	0	0	19	0	0	0	0	0	0	0	0
H/TOT	47	12	2	0	0	0	0	61	0	0	0	0	0	0	0	0
17:00	7	1	3	0	0	0	0	11	0	0	0	0	0	0	0	0
17:15	15	0	0	0	0	0	0	15	0	0	0	0	0	0	0	0
17:30	10	4	1	0	0	0	0	15	0	0	0	0	0	0	0	0
17:45	10	2	2	0	0	0	0	14	0	0	0	0	0	0	0	0
H/TOT	42	7	6	0	0	0	0	55	0	0	0	0	0	0	0	0
P/TOT	89	19	8	0	0	0	0	116	0	0	0	0	0	0	0	0

SITE: 2 DATE: 12/10/2022

LOCATION: A664 Rochdale Rd / Thornham Lane DAY: Wednesday

	TO ARM C								FROM ARM C							
TIME	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT
07:30	211	35	9	0	4	0	0	259	87	22	3	1	3	1	0	117
07:45	237	47	8	2	0	1	0	295	116	18	3	1	1	0	1	140
H/TOT	448	82	17	2	4	1	0	554	203	40	6	2	4	1	1	257
08:00	192	38	5	3	3	1	1	243	90	12	1	0	4	0	0	107
08:15	190	21	3	0	4	2	2	222	104	25	6	1	1	0	0	137
08:30	160	30	10	0	3	0	3	206	118	25	3	1	4	0	4	155
08:45	158	24	4	2	3	1	0	192	88	16	2	0	3	1	0	110
H/TOT	700	113	22	5	13	4	6	863	400	78	12	2	12	1	4	509
09:00	149	19	7	1	3	1	0	180	128	24	8	3	2	1	0	166
09:15	90	26	2	1	3	1	1	124	91	20	2	0	3	4	0	120
H/TOT	239	45	9	2	6	2	1	304	219	44	10	3	5	5	0	286
P/TOT	1387	240	48	9	23	7	7	1721	822	162	28	7	21	7	5	1052

	TO ARM C								FROM ARM C							
TIME	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT
16:00	115	17	1	1	2	1	0	137	169	23	8	3	5	0	0	208
16:15	103	19	2	1	1	0	0	126	168	25	3	1	3	0	2	202
16:30	138	25	2	2	2	2	0	171	140	28	6	2	1	2	0	179
16:45	140	18	3	0	2	0	0	163	167	20	3	0	2	0	0	192
H/TOT	496	79	8	4	7	3	0	597	644	96	20	6	11	2	2	781
17:00	121	13	3	0	2	0	1	140	169	17	5	1	2	1	1	196
17:15	125	12	3	0	1	2	1	144	166	14	5	1	1	4	1	192
17:30	138	16	4	0	0	1	0	159	169	14	3	0	2	1	2	191
17:45	104	15	1	1	4	0	0	125	150	11	5	1	2	1	1	171
H/TOT	488	56	11	1	7	3	2	568	654	56	18	3	7	7	5	750
P/TOT	984	135	19	5	14	6	2	1165	1298	152	38	9	18	9	7	1531

SITE: 2 DATE: 12/10/2022

LOCATION: A664 Rochdale Rd / Thornham Lane DAY: Wednesday

	TO ARM D								FROM ARM D							
TIME	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT
07:30	3	1	0	0	0	0	0	4	3	1	1	0	0	0	0	5
07:45	6	0	0	0	0	0	0	6	8	1	0	1	0	0	0	10
H/TOT	9	1	0	0	0	0	0	10	11	2	1	1	0	0	0	15
08:00	6	1	0	0	0	0	0	7	11	1	0	1	0	0	0	13
08:15	11	4	0	0	0	0	0	15	4	1	0	0	0	0	1	6
08:30	15	2	0	0	0	0	1	18	2	3	0	0	0	0	1	6
08:45	8	1	0	0	0	0	0	9	4	1	0	0	0	0	0	5
H/TOT	40	8	0	0	0	0	1	49	21	6	0	1	0	0	2	30
09:00	4	1	0	0	0	0	0	5	23	1	0	0	0	1	0	25
09:15	0	1	0	0	0	0	0	1	3	2	0	0	0	0	0	5
H/TOT	4	2	0	0	0	0	0	6	26	3	0	0	0	1	0	30
P/TOT	53	11	0	0	0	0	1	65	58	11	1	2	0	1	2	75

	TO ARM D								FROM ARM D							
TIME	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT
16:00	8	0	0	0	0	0	0	8	0	0	0	0	0	0	0	0
16:15	10	3	1	0	0	0	1	15	2	0	0	0	0	0	0	2
16:30	1	0	0	0	0	0	0	1	17	2	0	0	0	0	0	19
16:45	3	0	0	0	0	0	0	3	5	0	0	0	0	0	0	5
H/TOT	22	3	1	0	0	0	1	27	24	2	0	0	0	0	0	26
17:00	4	0	0	0	0	0	0	4	1	1	0	0	0	0	1	3
17:15	1	0	0	0	0	0	0	1	1	0	0	0	0	0	0	1
17:30	3	1	1	0	0	0	0	5	7	0	1	0	0	0	0	8
17:45	5	0	0	0	0	0	0	5	4	1	0	0	0	0	0	5
H/TOT	13	1	1	0	0	0	0	15	13	2	1	0	0	0	1	17
P/TOT	35	4	2	0	0	0	1	42	37	4	1	0	0	0	1	43

13307 / STAKEHILL
OCTOBER 2022
CLASSIFIED TURNING COUNT

SITE: 2 DATE: 12/10/2022

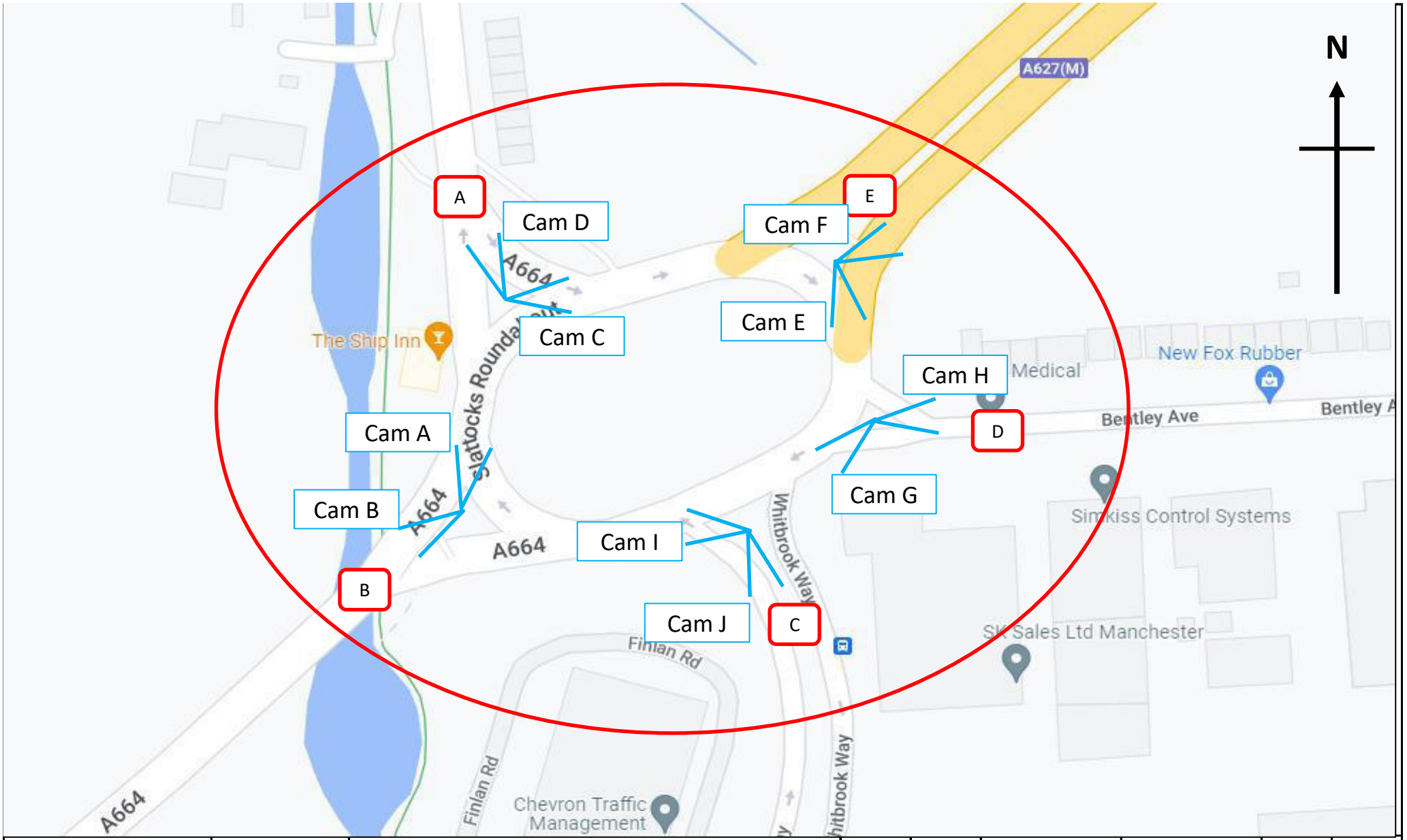
LOCATION: A664 Rochdale Rd / Thornham Lane DAY: Wednesday

TIME	JUNCTION TOTAL CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT
07:30	304	60	14	1	7	1	0	387
07:45	361	65	12	3	1	1	1	444
H/TOT	665	125	26	4	8	2	1	831
08:00	293	51	6	4	7	1	1	363
08:15	307	50	9	1	5	2	2	376
08:30	290	57	13	1	7	0	7	375
08:45	253	43	6	2	6	2	0	312
H/TOT	1143	201	34	8	25	5	10	1426
09:00	293	44	15	4	5	2	0	363
09:15	188	48	4	1	6	5	1	253
H/TOT	481	92	19	5	11	7	1	616
P/TOT	2289	418	79	17	44	14	12	2873

PEAK HOUR CALCULATION	TOT
07:30 to 08:30	**1570**
07:45 to 08:45	1558
08:00 to 09:00	1426
08:15 to 09:15	1426
08:30 to 09:30	1303
AM PEAK VALUE	**1570**

TIME	JUNCTION TOTAL CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT
16:00	290	41	9	4	7	1	0	352
16:15	279	49	6	2	4	0	3	343
16:30	289	54	8	4	3	4	0	362
16:45	314	38	6	0	4	0	0	362
H/TOT	1172	182	29	10	18	5	3	1419
17:00	294	30	9	1	4	1	2	341
17:15	298	26	8	1	2	6	2	343
17:30	313	30	7	0	2	2	2	356
17:45	262	28	6	2	6	1	1	306
H/TOT	1167	114	30	4	14	10	7	1346
P/TOT	2339	296	59	14	32	15	10	2765

PEAK HOUR CALCULATION	TOT
16:00 to 17:00	**1419**
16:15 to 17:15	1408
16:30 to 17:30	1408
16:45 to 17:45	1402
17:00 to 18:00	1346
PM PEAK VALUE	**1419**



NDC NATIONWIDE DATA COLLECTION	**Site / Location:**	Site 3, Slattocks Roundabout	**Project No:**	13307	**Drawing No:**	13307-03	**Drawn By:** EA
	Survey Date:	Wednesday 12th October 2022	**Project Name:**	Stakehill			
	Survey Times:	07:30 to 09:30 and 16:00 to 18:00	**Drawing Title:**	Site Layout and Observed Movements			

SITE: 3 DATE: 12/10/2022

LOCATION: Slattocks Roundabout DAY: Wednesday

	A to E								A to D							
TIME	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT
07:30	64	5	1	0	0	0	0	70	2	0	0	0	0	0	0	2
07:45	75	15	5	1	0	0	0	96	1	0	0	0	0	0	0	1
H/TOT	139	20	6	1	0	0	0	166	3	0	0	0	0	0	0	3
08:00	50	11	2	3	1	0	0	67	2	0	1	0	0	0	0	3
08:15	43	4	1	0	0	0	0	48	2	0	0	0	0	0	1	3
08:30	30	11	3	0	0	0	0	44	1	0	0	0	0	0	0	1
08:45	25	4	1	1	0	0	0	31	0	0	0	0	0	0	0	0
H/TOT	148	30	7	4	1	0	0	190	5	0	1	0	0	0	1	7
09:00	30	8	3	0	0	0	0	41	5	1	0	0	0	0	0	6
09:15	16	9	0	0	0	0	0	25	2	1	0	0	0	0	0	3
H/TOT	46	17	3	0	0	0	0	66	7	2	0	0	0	0	0	9
P/TOT	333	67	16	5	1	0	0	422	15	2	1	0	0	0	1	19

	A to E								A to D							
TIME	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT
16:00	25	9	1	1	0	0	0	36	4	0	0	0	0	0	0	4
16:15	28	6	0	0	0	0	0	34	1	0	0	0	0	0	0	1
16:30	30	7	2	2	0	0	0	41	0	0	0	0	0	0	0	0
16:45	30	4	0	0	0	0	0	34	2	0	0	0	0	0	0	2
H/TOT	113	26	3	3	0	0	0	145	7	0	0	0	0	0	0	7
17:00	29	4	0	0	0	0	0	33	4	0	0	0	0	0	0	4
17:15	23	7	2	0	0	0	0	32	2	0	0	0	0	0	0	2
17:30	33	4	0	0	0	0	0	37	0	0	0	0	0	0	0	0
17:45	38	3	0	1	0	0	0	42	1	1	0	0	0	0	0	2
H/TOT	123	18	2	1	0	0	0	144	7	1	0	0	0	0	0	8
P/TOT	236	44	5	4	0	0	0	289	14	1	0	0	0	0	0	15

SITE: 3 DATE: 12/10/2022

LOCATION: Slattocks Roundabout DAY: Wednesday

	A to C								A to B							
TIME	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT
07:30	13	3	0	0	1	0	0	17	127	24	7	0	3	0	0	161
07:45	28	9	1	0	0	0	0	38	133	21	4	1	0	1	0	160
H/TOT	41	12	1	0	1	0	0	55	260	45	11	1	3	1	0	321
08:00	14	8	2	0	0	1	0	25	123	22	0	0	2	0	1	148
08:15	20	6	0	0	0	0	0	26	128	10	1	0	3	2	0	144
08:30	14	4	1	0	1	0	0	20	118	15	6	0	3	0	1	143
08:45	19	3	0	1	0	0	0	23	117	17	3	0	3	1	0	141
H/TOT	67	21	3	1	1	1	0	94	486	64	10	0	11	3	2	576
09:00	15	2	1	1	0	0	0	19	102	10	2	0	3	1	0	118
09:15	13	5	0	0	0	0	0	18	61	11	1	1	3	1	0	78
H/TOT	28	7	1	1	0	0	0	37	163	21	3	1	6	2	0	196
P/TOT	136	40	5	2	2	1	0	186	909	130	24	2	20	6	2	1093

	A to C								A to B							
TIME	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT
16:00	5	2	0	0	0	0	0	7	77	7	0	0	2	1	0	87
16:15	3	3	0	0	0	0	0	6	74	8	2	1	1	0	0	86
16:30	3	4	0	0	0	0	0	7	98	13	0	0	2	2	0	115
16:45	8	3	2	0	1	0	0	14	103	10	1	0	1	0	0	115
H/TOT	19	12	2	0	1	0	0	34	352	38	3	1	6	3	0	403
17:00	11	0	2	0	0	0	0	13	82	6	0	0	2	0	0	90
17:15	6	0	1	0	0	0	0	7	98	5	1	0	1	1	0	106
17:30	5	1	1	0	0	0	0	7	102	10	3	0	0	1	0	116
17:45	9	0	0	0	1	0	0	10	58	12	1	0	3	0	0	74
H/TOT	31	1	4	0	1	0	0	37	340	33	5	0	6	2	0	386
P/TOT	50	13	6	0	2	0	0	71	692	71	8	1	12	5	0	789

SITE: 3 DATE: 12/10/2022

LOCATION: Slattocks Roundabout DAY: Wednesday

TIME	A to A CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT
07:30	1	0	0	0	0	0	0	1
07:45	0	0	0	0	0	0	0	0
H/TOT	1	0	0	0	0	0	0	1
08:00	1	0	0	0	0	0	0	1
08:15	0	0	0	0	0	0	0	0
08:30	0	0	0	0	0	0	0	0
08:45	0	0	0	0	0	0	0	0
H/TOT	1	0	0	0	0	0	0	1
09:00	0	0	0	0	0	0	0	0
09:15	0	0	0	0	0	0	0	0
H/TOT	0	0	0	0	0	0	0	0
P/TOT	2	0	0	0	0	0	0	2

TIME	A to A CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT
16:00	1	0	0	0	0	0	0	1
16:15	0	1	0	0	0	0	0	1
16:30	3	0	0	0	0	0	0	3
16:45	2	0	0	0	0	0	0	2
H/TOT	6	1	0	0	0	0	0	7
17:00	1	0	0	0	0	0	0	1
17:15	0	0	0	0	0	0	0	0
17:30	1	0	0	0	0	0	0	1
17:45	1	0	0	0	0	0	0	1
H/TOT	3	0	0	0	0	0	0	3
P/TOT	9	1	0	0	0	0	0	10

SITE: 3 DATE: 12/10/2022

LOCATION: Slattocks Roundabout DAY: Wednesday

	B to A								B to E							
TIME	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT
07:30	73	12	2	1	2	1	1	92	47	12	2	0	0	1	0	62
07:45	76	8	0	0	1	0	0	85	42	5	0	0	0	0	0	47
H/TOT	149	20	2	1	3	1	1	177	89	17	2	0	0	1	0	109
08:00	63	7	1	0	3	0	0	74	39	3	1	0	0	0	0	43
08:15	72	8	3	0	1	0	0	84	38	3	1	1	1	0	0	44
08:30	85	8	2	0	3	0	1	99	39	7	0	0	2	0	0	48
08:45	73	5	0	0	3	1	0	82	41	3	1	0	2	1	0	48
H/TOT	293	28	6	0	10	1	1	339	157	16	3	1	5	1	0	183
09:00	90	19	4	0	2	1	0	116	56	11	0	0	0	0	0	67
09:15	64	8	0	0	2	4	0	78	41	4	0	1	0	0	0	46
H/TOT	154	27	4	0	4	5	0	194	97	15	0	1	0	0	0	113
P/TOT	596	75	12	1	17	7	2	710	343	48	5	2	5	2	0	405

	B to A								B to E							
TIME	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT
16:00	110	15	5	0	5	0	0	135	78	7	1	1	1	0	0	88
16:15	108	15	1	1	3	0	0	128	63	9	2	0	1	0	0	75
16:30	81	14	3	1	0	1	0	100	46	7	0	0	0	0	0	53
16:45	104	10	1	0	2	0	0	117	55	7	0	0	0	0	0	62
H/TOT	403	54	10	2	10	1	0	480	242	30	3	1	2	0	0	278
17:00	104	7	2	1	2	1	0	117	55	3	1	1	1	0	0	61
17:15	94	9	1	0	1	3	1	109	33	7	2	0	0	0	0	42
17:30	98	9	0	0	1	0	2	110	40	8	0	0	0	0	0	48
17:45	94	6	1	0	2	1	1	105	44	4	0	0	0	1	0	49
H/TOT	390	31	4	1	6	5	4	441	172	22	3	1	1	1	0	200
P/TOT	793	85	14	3	16	6	4	921	414	52	6	2	3	1	0	478

SITE: 3 DATE: 12/10/2022

LOCATION: Slattocks Roundabout DAY: Wednesday

	B to D								B to C							
TIME	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT
07:30	1	0	0	0	0	0	0	1	29	4	0	1	0	0	0	34
07:45	2	0	0	0	0	0	0	2	27	5	0	1	0	0	0	33
H/TOT	3	0	0	0	0	0	0	3	56	9	0	2	0	0	0	67
08:00	0	0	1	0	0	0	0	1	19	2	1	0	0	0	0	22
08:15	6	0	0	0	0	0	0	6	26	4	1	0	1	0	0	32
08:30	1	0	0	0	0	0	0	1	14	0	1	0	0	0	0	15
08:45	4	0	0	0	0	0	0	4	16	3	2	0	0	0	0	21
H/TOT	11	0	1	0	0	0	0	12	75	9	5	0	1	0	0	90
09:00	8	0	0	0	0	0	0	8	23	1	1	1	0	0	0	26
09:15	1	1	0	0	0	0	0	2	21	2	1	0	1	0	0	25
H/TOT	9	1	0	0	0	0	0	10	44	3	2	1	1	0	0	51
P/TOT	23	1	1	0	0	0	0	25	175	21	7	3	2	0	0	208

	B to D								B to C							
TIME	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT
16:00	3	1	0	0	0	0	0	4	14	11	0	0	0	0	0	25
16:15	2	1	1	0	0	0	0	4	11	8	0	1	1	0	0	21
16:30	4	0	0	0	0	0	0	4	10	2	1	1	0	0	0	14
16:45	4	0	0	0	0	0	0	4	6	7	0	1	0	0	0	14
H/TOT	13	2	1	0	0	0	0	16	41	28	1	3	1	0	0	74
17:00	2	0	0	0	0	0	0	2	15	4	0	0	0	0	0	19
17:15	3	0	0	0	0	0	0	3	11	0	0	0	0	0	0	11
17:30	2	0	0	0	0	0	0	2	9	2	0	0	1	0	0	12
17:45	3	0	0	0	0	0	0	3	7	1	0	0	1	0	0	9
H/TOT	10	0	0	0	0	0	0	10	42	7	0	0	2	0	0	51
P/TOT	23	2	1	0	0	0	0	26	83	35	1	3	3	0	0	125

SITE: 3 DATE: 12/10/2022

LOCATION: Slattocks Roundabout DAY: Wednesday

TIME	B to B CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT
07:30	0	0	0	0	0	0	0	0
07:45	1	0	0	0	0	0	0	1
H/TOT	1	0	0	0	0	0	0	1
08:00	0	0	0	0	1	0	0	1
08:15	0	0	0	0	0	0	0	0
08:30	0	0	0	0	0	0	0	0
08:45	0	0	0	0	0	0	0	0
H/TOT	0	0	0	0	1	0	0	1
09:00	0	0	0	0	0	0	0	0
09:15	0	0	0	0	0	0	0	0
H/TOT	0	0	0	0	0	0	0	0
P/TOT	1	0	0	0	1	0	0	2

TIME	B to B CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT
16:00	0	0	0	0	0	0	0	0
16:15	0	0	0	0	0	0	0	0
16:30	0	1	0	0	0	0	0	1
16:45	3	0	0	0	0	0	0	3
H/TOT	3	1	0	0	0	0	0	4
17:00	2	0	0	0	0	0	0	2
17:15	1	0	0	0	0	0	0	1
17:30	1	1	0	0	0	0	0	2
17:45	0	0	0	0	0	0	0	0
H/TOT	4	1	0	0	0	0	0	5
P/TOT	7	2	0	0	0	0	0	9

SITE: 3 DATE: 12/10/2022

LOCATION: Slattocks Roundabout DAY: Wednesday

	C to B								C to A							
TIME	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT
07:30	22	11	3	0	0	0	0	36	6	5	1	0	1	0	0	13
07:45	13	7	0	1	1	0	0	22	8	4	0	0	0	0	0	12
H/TOT	35	18	3	1	1	0	0	58	14	9	1	0	1	0	0	25
08:00	13	3	0	0	0	0	0	16	8	2	0	0	1	0	0	11
08:15	10	5	0	1	0	1	1	18	4	11	1	0	0	0	0	16
08:30	12	14	3	0	1	0	0	30	6	8	1	1	1	0	0	17
08:45	11	13	1	1	0	0	0	26	4	5	0	0	0	0	0	9
H/TOT	46	35	4	2	1	1	1	90	22	26	2	1	2	0	0	53
09:00	13	8	3	2	0	0	0	26	9	7	1	1	0	0	0	18
09:15	10	9	3	2	0	0	0	24	6	6	2	0	1	0	0	15
H/TOT	23	17	6	4	0	0	0	50	15	13	3	1	1	0	0	33
P/TOT	104	70	13	7	2	1	1	198	51	48	6	2	4	0	0	111

	C to B								C to A							
TIME	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT
16:00	29	1	1	1	0	0	0	32	18	5	0	0	0	0	0	23
16:15	20	5	1	0	0	0	0	26	13	3	2	0	0	0	0	18
16:30	31	9	3	0	0	0	1	44	13	3	1	0	1	0	0	18
16:45	21	13	1	0	1	0	0	36	12	3	0	0	0	0	0	15
H/TOT	101	28	6	1	1	0	1	138	56	14	3	0	1	0	0	74
17:00	47	6	1	1	0	0	1	56	18	5	1	0	0	0	1	25
17:15	28	4	1	0	0	0	0	33	19	1	0	0	0	0	0	20
17:30	35	2	0	1	0	0	0	38	21	2	0	0	1	1	0	25
17:45	17	2	0	0	1	0	0	20	11	1	0	0	0	0	0	12
H/TOT	127	14	2	2	1	0	1	147	69	9	1	0	1	1	1	82
P/TOT	228	42	8	3	2	0	2	285	125	23	4	0	2	1	1	156

SITE: 3 DATE: 12/10/2022

LOCATION: Slattocks Roundabout DAY: Wednesday

	C to E								C to D							
TIME	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT
07:30	14	11	1	3	0	0	0	29	1	0	0	0	0	0	0	1
07:45	10	18	1	2	0	0	0	31	0	0	0	0	0	0	0	0
H/TOT	24	29	2	5	0	0	0	60	1	0	0	0	0	0	0	1
08:00	6	21	6	3	0	0	0	36	0	0	0	0	0	0	0	0
08:15	3	25	3	4	0	1	0	36	0	0	0	0	0	0	0	0
08:30	10	17	1	3	0	0	0	31	1	0	0	0	0	0	0	1
08:45	13	25	2	5	0	0	0	45	0	0	0	0	0	0	0	0
H/TOT	32	88	12	15	0	1	0	148	1	0	0	0	0	0	0	1
09:00	14	18	8	5	0	0	0	45	0	0	0	0	0	0	0	0
09:15	20	26	3	1	0	0	0	50	0	0	1	0	0	0	0	1
H/TOT	34	44	11	6	0	0	0	95	0	0	1	0	0	0	0	1
P/TOT	90	161	25	26	0	1	0	303	2	0	1	0	0	0	0	3

	C to E								C to D							
TIME	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT
16:00	55	13	2	4	0	0	0	74	2	0	0	0	0	0	0	2
16:15	24	14	3	1	0	0	0	42	0	0	0	0	0	0	0	0
16:30	35	13	1	7	0	0	0	56	0	1	0	0	0	0	0	1
16:45	35	13	0	4	0	0	0	52	0	0	2	0	0	0	0	2
H/TOT	149	53	6	16	0	0	0	224	2	1	2	0	0	0	0	5
17:00	82	8	1	3	0	0	0	94	0	0	0	0	0	0	0	0
17:15	42	7	0	2	0	0	0	51	0	0	0	0	0	0	0	0
17:30	28	7	0	4	0	0	0	39	4	0	0	0	0	0	0	4
17:45	24	6	0	4	0	0	0	34	0	0	0	0	0	0	0	0
H/TOT	176	28	1	13	0	0	0	218	4	0	0	0	0	0	0	4
P/TOT	325	81	7	29	0	0	0	442	6	1	2	0	0	0	0	9

SITE: 3 DATE: 12/10/2022

LOCATION: Slattocks Roundabout DAY: Wednesday

TIME	C to C CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT
07:30	0	0	0	0	0	0	0	0
07:45	0	0	0	0	0	0	0	0
H/TOT	0	0	0	0	0	0	0	0
08:00	0	0	1	1	0	0	0	2
08:15	0	0	0	0	0	0	0	0
08:30	0	0	0	0	0	0	0	0
08:45	0	0	0	0	0	0	0	0
H/TOT	0	0	1	1	0	0	0	2
09:00	1	0	0	0	0	0	0	1
09:15	0	0	0	0	0	0	0	0
H/TOT	1	0	0	0	0	0	0	1
P/TOT	1	0	1	1	0	0	0	3

TIME	C to C CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT
16:00	2	0	0	0	0	0	0	2
16:15	0	0	0	0	0	0	0	0
16:30	0	0	0	0	0	0	0	0
16:45	0	0	0	0	0	0	0	0
H/TOT	2	0	0	0	0	0	0	2
17:00	0	0	0	0	0	0	0	0
17:15	0	0	0	0	0	0	0	0
17:30	0	0	0	0	0	0	0	0
17:45	0	0	0	0	0	0	0	0
H/TOT	0	0	0	0	0	0	0	0
P/TOT	2	0	0	0	0	0	0	2

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LOCATION: Slattocks Roundabout DAY: Wednesday

	D to C								D to B							
TIME	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT
07:30	0	0	0	0	0	0	0	0	5	0	0	0	0	0	0	5
07:45	1	0	0	0	0	0	0	1	4	0	0	0	0	0	0	4
H/TOT	1	0	0	0	0	0	0	1	9	0	0	0	0	0	0	9
08:00	0	0	0	0	0	0	0	0	3	2	0	0	0	0	0	5
08:15	0	1	0	0	0	0	0	1	1	1	0	0	0	0	0	2
08:30	0	0	1	1	0	0	0	2	6	0	0	0	0	0	0	6
08:45	0	0	0	0	0	0	0	0	4	0	0	0	0	0	0	4
H/TOT	0	1	1	1	0	0	0	3	14	3	0	0	0	0	0	17
09:00	1	0	0	0	0	0	0	1	5	0	0	0	0	0	0	5
09:15	0	2	0	0	0	0	0	2	3	1	0	0	0	0	0	4
H/TOT	1	2	0	0	0	0	0	3	8	1	0	0	0	0	0	9
P/TOT	2	3	1	1	0	0	0	7	31	4	0	0	0	0	0	35

	D to C								D to B							
TIME	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT
16:00	1	0	0	0	0	0	0	1	8	1	0	0	0	1	1	11
16:15	0	1	1	0	0	0	0	2	7	1	0	0	0	0	0	8
16:30	1	2	0	0	0	0	0	3	6	1	0	0	0	0	0	7
16:45	1	0	0	0	0	0	0	1	11	1	0	0	0	0	0	12
H/TOT	3	3	1	0	0	0	0	7	32	4	0	0	0	1	1	38
17:00	0	1	0	0	0	0	0	1	9	0	0	0	0	0	0	9
17:15	0	0	0	0	0	0	0	0	5	1	0	0	0	0	0	6
17:30	0	0	0	0	0	0	0	0	4	0	0	0	0	0	0	4
17:45	0	0	0	0	0	0	0	0	2	1	0	0	0	0	0	3
H/TOT	0	1	0	0	0	0	0	1	20	2	0	0	0	0	0	22
P/TOT	3	4	1	0	0	0	0	8	52	6	0	0	0	1	1	60

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LOCATION: Slattocks Roundabout DAY: Wednesday

	D to A								D to E							
TIME	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT
07:30	1	1	0	0	0	0	0	2	1	0	0	0	0	0	0	1
07:45	2	1	0	0	0	0	0	3	3	0	0	0	0	0	0	3
H/TOT	3	2	0	0	0	0	0	5	4	0	0	0	0	0	0	4
08:00	0	0	0	0	0	0	0	0	3	0	0	0	0	0	0	3
08:15	1	1	0	0	0	0	0	2	0	0	1	0	0	0	0	1
08:30	1	0	0	0	0	0	0	1	3	0	0	0	0	0	0	3
08:45	1	1	1	0	0	0	0	3	0	0	0	0	0	0	0	0
H/TOT	3	2	1	0	0	0	0	6	6	0	1	0	0	0	0	7
09:00	3	1	1	0	0	0	0	5	2	0	0	1	0	0	0	3
09:15	0	0	0	0	0	0	0	0	3	1	1	0	0	0	0	5
H/TOT	3	1	1	0	0	0	0	5	5	1	1	1	0	0	0	8
P/TOT	9	5	2	0	0	0	0	16	15	1	2	1	0	0	0	19

	D to A								D to E							
TIME	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT
16:00	4	1	1	1	0	0	0	7	17	1	0	0	0	0	0	18
16:15	7	0	0	0	0	0	1	8	5	1	0	0	0	0	0	6
16:30	1	0	0	0	0	1	0	2	8	3	0	1	0	0	0	12
16:45	1	0	0	0	0	0	0	1	15	1	0	0	0	1	0	17
H/TOT	13	1	1	1	0	1	1	18	45	6	0	1	0	1	0	53
17:00	4	0	0	0	0	0	0	4	24	1	0	0	0	0	0	25
17:15	3	0	0	0	0	0	0	3	8	0	0	0	0	0	0	8
17:30	3	0	1	0	0	0	0	4	5	1	1	0	0	0	0	7
17:45	2	0	0	0	0	0	0	2	2	0	0	0	0	0	0	2
H/TOT	12	0	1	0	0	0	0	13	39	2	1	0	0	0	0	42
P/TOT	25	1	2	1	0	1	1	31	84	8	1	1	0	1	0	95

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LOCATION: Slattocks Roundabout DAY: Wednesday

TIME	D to D CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT
07:30	0	0	0	0	0	0	0	0
07:45	0	0	0	0	0	0	0	0
H/TOT	0	0	0	0	0	0	0	0
08:00	0	0	0	0	0	0	0	0
08:15	0	0	0	0	0	0	0	0
08:30	0	0	0	0	0	0	0	0
08:45	0	0	0	0	0	0	0	0
H/TOT	0	0	0	0	0	0	0	0
09:00	0	0	0	0	0	0	0	0
09:15	0	0	0	0	0	0	0	0
H/TOT	0	0	0	0	0	0	0	0
P/TOT	0	0	0	0	0	0	0	0

TIME	D to D CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT
16:00	0	0	0	0	0	0	0	0
16:15	1	0	0	0	0	0	0	1
16:30	0	0	0	0	0	0	0	0
16:45	0	0	0	0	0	0	0	0
H/TOT	1	0	0	0	0	0	0	1
17:00	0	0	0	0	0	0	0	0
17:15	0	0	0	0	0	0	0	0
17:30	0	0	0	0	0	0	0	0
17:45	0	0	0	0	0	0	0	0
H/TOT	0	0	0	0	0	0	0	0
P/TOT	1	0	0	0	0	0	0	1

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	E to D								E to C							
TIME	**CAR**	**LGV**	**OGV1**	**OGV2**	**PSV**	**MCL**	**PCL**	**TOT**	**CAR**	**LGV**	**OGV1**	**OGV2**	**PSV**	**MCL**	**PCL**	**TOT**
07:30	5	3	0	0	0	0	0	8	59	17	0	3	0	0	0	79
07:45	8	2	0	1	0	1	0	12	56	21	1	3	0	0	0	81
H/TOT	13	5	0	1	0	1	0	20	115	38	1	6	0	0	0	160
08:00	11	4	0	0	0	0	0	15	47	14	3	4	0	0	0	68
08:15	11	1	0	0	0	0	0	12	43	15	2	2	0	0	0	62
08:30	7	0	1	1	0	0	0	9	57	16	2	6	0	0	0	81
08:45	1	1	2	0	0	0	0	4	43	15	6	2	0	0	0	66
H/TOT	30	6	3	1	0	0	0	40	190	60	13	14	0	0	0	277
09:00	5	1	1	0	0	0	0	7	41	7	3	7	0	0	0	58
09:15	1	0	1	0	0	0	0	2	42	9	3	5	1	0	0	60
H/TOT	6	1	2	0	0	0	0	9	83	16	6	12	1	0	0	118
P/TOT	49	12	5	2	0	1	0	69	388	114	20	32	1	0	0	555

	E to D								E to C							
TIME	**CAR**	**LGV**	**OGV1**	**OGV2**	**PSV**	**MCL**	**PCL**	**TOT**	**CAR**	**LGV**	**OGV1**	**OGV2**	**PSV**	**MCL**	**PCL**	**TOT**
16:00	3	1	0	0	0	0	0	4	24	16	5	4	0	0	0	49
16:15	0	1	0	0	0	0	0	1	12	17	3	3	0	0	0	35
16:30	8	2	0	0	0	0	0	10	11	20	3	4	0	0	0	38
16:45	5	0	0	0	0	0	0	5	14	17	2	3	0	0	0	36
H/TOT	16	4	0	0	0	0	0	20	61	70	13	14	0	0	0	158
17:00	4	0	0	0	0	0	0	4	10	15	3	1	0	0	0	29
17:15	1	2	0	0	0	0	0	3	8	14	3	2	0	0	0	27
17:30	1	1	0	0	0	0	0	2	17	13	2	4	0	0	0	36
17:45	4	0	0	0	0	0	0	4	14	12	5	3	0	0	0	34
H/TOT	10	3	0	0	0	0	0	13	49	54	13	10	0	0	0	126
P/TOT	26	7	0	0	0	0	0	33	110	124	26	24	0	0	0	284

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LOCATION: Slattocks Roundabout DAY: Wednesday

	E to B								E to A							
TIME	**CAR**	**LGV**	**OGV1**	**OGV2**	**PSV**	**MCL**	**PCL**	**TOT**	**CAR**	**LGV**	**OGV1**	**OGV2**	**PSV**	**MCL**	**PCL**	**TOT**
07:30	54	11	1	2	0	0	0	68	11	2	0	0	0	0	0	13
07:45	74	10	0	0	1	1	0	86	18	5	3	1	0	0	0	27
H/TOT	128	21	1	2	1	1	0	154	29	7	3	1	0	0	0	40
08:00	65	12	3	1	0	0	0	81	16	5	0	0	0	0	0	21
08:15	63	14	2	0	0	0	0	79	19	3	2	1	0	0	0	25
08:30	88	25	3	0	1	0	0	117	32	8	0	0	0	0	0	40
08:45	73	15	0	2	2	1	0	93	18	8	0	2	0	0	0	28
H/TOT	289	66	8	3	3	1	0	370	85	24	2	3	0	0	0	114
09:00	54	8	0	2	0	0	0	64	16	1	1	0	0	0	0	18
09:15	41	9	2	2	0	0	0	54	17	5	0	0	0	0	0	22
H/TOT	95	17	2	4	0	0	0	118	33	6	1	0	0	0	0	40
P/TOT	512	104	11	9	4	2	0	642	147	37	6	4	0	0	0	194

	E to B								E to A							
TIME	**CAR**	**LGV**	**OGV1**	**OGV2**	**PSV**	**MCL**	**PCL**	**TOT**	**CAR**	**LGV**	**OGV1**	**OGV2**	**PSV**	**MCL**	**PCL**	**TOT**
16:00	39	10	0	0	0	0	0	49	29	6	2	2	0	0	0	39
16:15	53	9	0	2	0	0	0	64	37	5	1	0	0	0	0	43
16:30	65	13	2	0	0	0	0	80	37	11	1	1	0	0	0	50
16:45	59	7	1	0	0	0	0	67	44	7	2	0	0	0	0	53
H/TOT	216	39	3	2	0	0	0	260	147	29	6	3	0	0	0	185
17:00	79	14	0	1	1	0	0	95	42	5	2	0	0	0	0	49
17:15	101	9	2	0	0	1	0	113	46	4	4	1	0	0	0	55
17:30	72	8	5	1	0	0	0	86	49	4	2	1	0	0	0	56
17:45	54	5	0	0	0	0	0	59	41	6	3	0	0	0	0	50
H/TOT	306	36	7	2	1	1	0	353	178	19	11	2	0	0	0	210
P/TOT	522	75	10	4	1	1	0	613	325	48	17	5	0	0	0	395

SITE: 3 DATE: 12/10/2022

LOCATION: Slattocks Roundabout DAY: Wednesday

TIME	E to E CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT
07:30	0	0	0	0	0	0	0	0
07:45	0	0	0	0	0	0	0	0
H/TOT	0	0	0	0	0	0	0	0
08:00	0	0	1	0	0	0	0	1
08:15	1	0	0	0	0	0	0	1
08:30	2	0	0	0	0	0	0	2
08:45	0	0	0	0	0	0	0	0
H/TOT	3	0	1	0	0	0	0	4
09:00	0	0	0	0	0	0	0	0
09:15	0	0	0	0	0	0	0	0
H/TOT	0	0	0	0	0	0	0	0
P/TOT	3	0	1	0	0	0	0	4

TIME	E to E CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT
16:00	1	0	0	0	0	0	0	1
16:15	0	0	0	0	0	0	0	0
16:30	0	0	0	0	0	0	0	0
16:45	0	0	0	0	0	0	0	0
H/TOT	1	0	0	0	0	0	0	1
17:00	0	0	0	0	0	0	0	0
17:15	0	0	0	0	0	0	0	0
17:30	1	0	0	0	0	0	0	1
17:45	0	0	0	0	0	0	0	0
H/TOT	1	0	0	0	0	0	0	1
P/TOT	2	0	0	0	0	0	0	2

SITE: 3 DATE: 12/10/2022

LOCATION: Slattocks Roundabout DAY: Wednesday

	TO ARM A								FROM ARM A							
TIME	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT
07:30	92	20	3	1	3	1	1	121	207	32	8	0	4	0	0	251
07:45	104	18	3	1	1	0	0	127	237	45	10	2	0	1	0	295
H/TOT	196	38	6	2	4	1	1	248	444	77	18	2	4	1	0	546
08:00	88	14	1	0	4	0	0	107	190	41	5	3	3	1	1	244
08:15	96	23	6	1	1	0	0	127	193	20	2	0	3	2	1	221
08:30	124	24	3	1	4	0	1	157	163	30	10	0	4	0	1	208
08:45	96	19	1	2	3	1	0	122	161	24	4	2	3	1	0	195
H/TOT	404	80	11	4	12	1	1	513	707	115	21	5	13	4	3	868
09:00	118	28	7	1	2	1	0	157	152	21	6	1	3	1	0	184
09:15	87	19	2	0	3	4	0	115	92	26	1	1	3	1	0	124
H/TOT	205	47	9	1	5	5	0	272	244	47	7	2	6	2	0	308
P/TOT	805	165	26	7	21	7	2	1033	1395	239	46	9	23	7	3	1722

	TO ARM A								FROM ARM A							
TIME	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT
16:00	162	27	8	3	5	0	0	205	112	18	1	1	2	1	0	135
16:15	165	24	4	1	3	0	1	198	106	18	2	1	1	0	0	128
16:30	135	28	5	2	1	2	0	173	134	24	2	2	2	2	0	166
16:45	163	20	3	0	2	0	0	188	145	17	3	0	2	0	0	167
H/TOT	625	99	20	6	11	2	1	764	497	77	8	4	7	3	0	596
17:00	169	17	5	1	2	1	1	196	127	10	2	0	2	0	0	141
17:15	162	14	5	1	1	3	1	187	129	12	4	0	1	1	0	147
17:30	172	15	3	1	2	1	2	196	141	15	4	0	0	1	0	161
17:45	149	13	4	0	2	1	1	170	107	16	1	1	4	0	0	129
H/TOT	652	59	17	3	7	6	5	749	504	53	11	1	7	2	0	578
P/TOT	1277	158	37	9	18	8	6	1513	1001	130	19	5	14	5	0	1174

SITE: 3 DATE: 12/10/2022

LOCATION: Slattocks Roundabout DAY: Wednesday

	TO ARM B								FROM ARM B							
TIME	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT
07:30	208	46	11	2	3	0	0	270	150	28	4	2	2	2	1	189
07:45	225	38	4	2	2	2	0	273	148	18	0	1	1	0	0	168
H/TOT	433	84	15	4	5	2	0	543	298	46	4	3	3	2	1	357
08:00	204	39	3	1	3	0	1	251	121	12	4	0	4	0	0	141
08:15	202	30	3	1	3	3	1	243	142	15	5	1	3	0	0	166
08:30	224	54	12	0	5	0	1	296	139	15	3	0	5	0	1	163
08:45	205	45	4	3	5	2	0	264	134	11	3	0	5	2	0	155
H/TOT	835	168	22	5	16	5	3	1054	536	53	15	1	17	2	1	625
09:00	174	26	5	4	3	1	0	213	177	31	5	1	2	1	0	217
09:15	115	30	6	5	3	1	0	160	127	15	1	1	3	4	0	151
H/TOT	289	56	11	9	6	2	0	373	304	46	6	2	5	5	0	368
P/TOT	1557	308	48	18	27	9	3	1970	1138	145	25	6	25	9	2	1350

	TO ARM B								FROM ARM B							
TIME	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT
16:00	153	19	1	1	2	2	1	179	205	34	6	1	6	0	0	252
16:15	154	23	3	3	1	0	0	184	184	33	4	2	5	0	0	228
16:30	200	37	5	0	2	2	1	247	141	24	4	2	0	1	0	172
16:45	197	31	3	0	2	0	0	233	172	24	1	1	2	0	0	200
H/TOT	704	110	12	4	7	4	2	843	702	115	15	6	13	1	0	852
17:00	219	26	1	2	3	0	1	252	178	14	3	2	3	1	0	201
17:15	233	19	4	0	1	2	0	259	142	16	3	0	1	3	1	166
17:30	214	21	8	2	0	1	0	246	150	20	0	0	2	0	2	174
17:45	131	20	1	0	4	0	0	156	148	11	1	0	3	2	1	166
H/TOT	797	86	14	4	8	3	1	913	618	61	7	2	9	6	4	707
P/TOT	1501	196	26	8	15	7	3	1756	1320	176	22	8	22	7	4	1559

SITE: 3 DATE: 12/10/2022

LOCATION: Slattocks Roundabout DAY: Wednesday

	TO ARM C								FROM ARM C							
TIME	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT
07:30	101	24	0	4	1	0	0	130	43	27	5	3	1	0	0	79
07:45	112	35	2	4	0	0	0	153	31	29	1	3	1	0	0	65
H/TOT	213	59	2	8	1	0	0	283	74	56	6	6	2	0	0	144
08:00	80	24	7	5	0	1	0	117	27	26	7	4	1	0	0	65
08:15	89	26	3	2	1	0	0	121	17	41	4	5	0	2	1	70
08:30	85	20	5	7	1	0	0	118	29	39	5	4	2	0	0	79
08:45	78	21	8	3	0	0	0	110	28	43	3	6	0	0	0	80
H/TOT	332	91	23	17	2	1	0	466	101	149	19	19	3	2	1	294
09:00	81	10	5	9	0	0	0	105	37	33	12	8	0	0	0	90
09:15	76	18	4	5	2	0	0	105	36	41	9	3	1	0	0	90
H/TOT	157	28	9	14	2	0	0	210	73	74	21	11	1	0	0	180
P/TOT	702	178	34	39	5	1	0	959	248	279	46	36	6	2	1	618

	TO ARM C								FROM ARM C							
TIME	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT
16:00	46	29	5	4	0	0	0	84	106	19	3	5	0	0	0	133
16:15	26	29	4	4	1	0	0	64	57	22	6	1	0	0	0	86
16:30	25	28	4	5	0	0	0	62	79	26	5	7	1	0	1	119
16:45	29	27	4	4	1	0	0	65	68	29	3	4	1	0	0	105
H/TOT	126	113	17	17	2	0	0	275	310	96	17	17	2	0	1	443
17:00	36	20	5	1	0	0	0	62	147	19	3	4	0	0	2	175
17:15	25	14	4	2	0	0	0	45	89	12	1	2	0	0	0	104
17:30	31	16	3	4	1	0	0	55	88	11	0	5	1	1	0	106
17:45	30	13	5	3	2	0	0	53	52	9	0	4	1	0	0	66
H/TOT	122	63	17	10	3	0	0	215	376	51	4	15	2	1	2	451
P/TOT	248	176	34	27	5	0	0	490	686	147	21	32	4	1	3	894

SITE: 3 DATE: 12/10/2022

LOCATION: Slattocks Roundabout DAY: Wednesday

	TO ARM D								FROM ARM D							
TIME	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT
07:30	9	3	0	0	0	0	0	12	7	1	0	0	0	0	0	8
07:45	11	2	0	1	0	1	0	15	10	1	0	0	0	0	0	11
H/TOT	20	5	0	1	0	1	0	27	17	2	0	0	0	0	0	19
08:00	13	4	2	0	0	0	0	19	6	2	0	0	0	0	0	8
08:15	19	1	0	0	0	0	1	21	2	3	1	0	0	0	0	6
08:30	10	0	1	1	0	0	0	12	10	0	1	1	0	0	0	12
08:45	5	1	2	0	0	0	0	8	5	1	1	0	0	0	0	7
H/TOT	47	6	5	1	0	0	1	60	23	6	3	1	0	0	0	33
09:00	18	2	1	0	0	0	0	21	11	1	1	1	0	0	0	14
09:15	4	2	2	0	0	0	0	8	6	4	1	0	0	0	0	11
H/TOT	22	4	3	0	0	0	0	29	17	5	2	1	0	0	0	25
P/TOT	89	15	8	2	0	1	1	116	57	13	5	2	0	0	0	77

	TO ARM D								FROM ARM D							
TIME	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT
16:00	12	2	0	0	0	0	0	14	30	3	1	1	0	1	1	37
16:15	4	2	1	0	0	0	0	7	20	3	1	0	0	0	1	25
16:30	12	3	0	0	0	0	0	15	16	6	0	1	0	1	0	24
16:45	11	0	2	0	0	0	0	13	28	2	0	0	0	1	0	31
H/TOT	39	7	3	0	0	0	0	49	94	14	2	2	0	3	2	117
17:00	10	0	0	0	0	0	0	10	37	2	0	0	0	0	0	39
17:15	6	2	0	0	0	0	0	8	16	1	0	0	0	0	0	17
17:30	7	1	0	0	0	0	0	8	12	1	2	0	0	0	0	15
17:45	8	1	0	0	0	0	0	9	6	1	0	0	0	0	0	7
H/TOT	31	4	0	0	0	0	0	35	71	5	2	0	0	0	0	78
P/TOT	70	11	3	0	0	0	0	84	165	19	4	2	0	3	2	195

SITE: 3 DATE: 12/10/2022

LOCATION: Slattocks Roundabout DAY: Wednesday

	TO ARM E								FROM ARM E							
TIME	**CAR**	**LGV**	**OGV1**	**OGV2**	**PSV**	**MCL**	**PCL**	**TOT**	**CAR**	**LGV**	**OGV1**	**OGV2**	**PSV**	**MCL**	**PCL**	**TOT**
07:30	126	28	4	3	0	1	0	162	129	33	1	5	0	0	0	168
07:45	130	38	6	3	0	0	0	177	156	38	4	5	1	2	0	206
H/TOT	256	66	10	6	0	1	0	339	285	71	5	10	1	2	0	374
08:00	98	35	10	6	1	0	0	150	139	35	7	5	0	0	0	186
08:15	85	32	6	5	1	1	0	130	137	33	6	3	0	0	0	179
08:30	84	35	4	3	2	0	0	128	186	49	6	7	1	0	0	249
08:45	79	32	4	6	2	1	0	124	135	39	8	6	2	1	0	191
H/TOT	346	134	24	20	6	2	0	532	597	156	27	21	3	1	0	805
09:00	102	37	11	6	0	0	0	156	116	17	5	9	0	0	0	147
09:15	80	40	4	2	0	0	0	126	101	23	6	7	1	0	0	138
H/TOT	182	77	15	8	0	0	0	282	217	40	11	16	1	0	0	285
P/TOT	784	277	49	34	6	3	0	1153	1099	267	43	47	5	3	0	1464

	TO ARM E								FROM ARM E							
TIME	**CAR**	**LGV**	**OGV1**	**OGV2**	**PSV**	**MCL**	**PCL**	**TOT**	**CAR**	**LGV**	**OGV1**	**OGV2**	**PSV**	**MCL**	**PCL**	**TOT**
16:00	176	30	4	6	1	0	0	217	96	33	7	6	0	0	0	142
16:15	120	30	5	1	1	0	0	157	102	32	4	5	0	0	0	143
16:30	119	30	3	10	0	0	0	162	121	46	6	5	0	0	0	178
16:45	135	25	0	4	0	1	0	165	122	31	5	3	0	0	0	161
H/TOT	550	115	12	21	2	1	0	701	441	142	22	19	0	0	0	624
17:00	190	16	2	4	1	0	0	213	135	34	5	2	1	0	0	177
17:15	106	21	4	2	0	0	0	133	156	29	9	3	0	1	0	198
17:30	107	20	1	4	0	0	0	132	140	26	9	6	0	0	0	181
17:45	108	13	0	5	0	1	0	127	113	23	8	3	0	0	0	147
H/TOT	511	70	7	15	1	1	0	605	544	112	31	14	1	1	0	703
P/TOT	1061	185	19	36	3	2	0	1306	985	254	53	33	1	1	0	1327

13307 / STAKEHILL
OCTOBER 2022
CLASSIFIED TURNING COUNT

SITE: 3 DATE: 12/10/2022

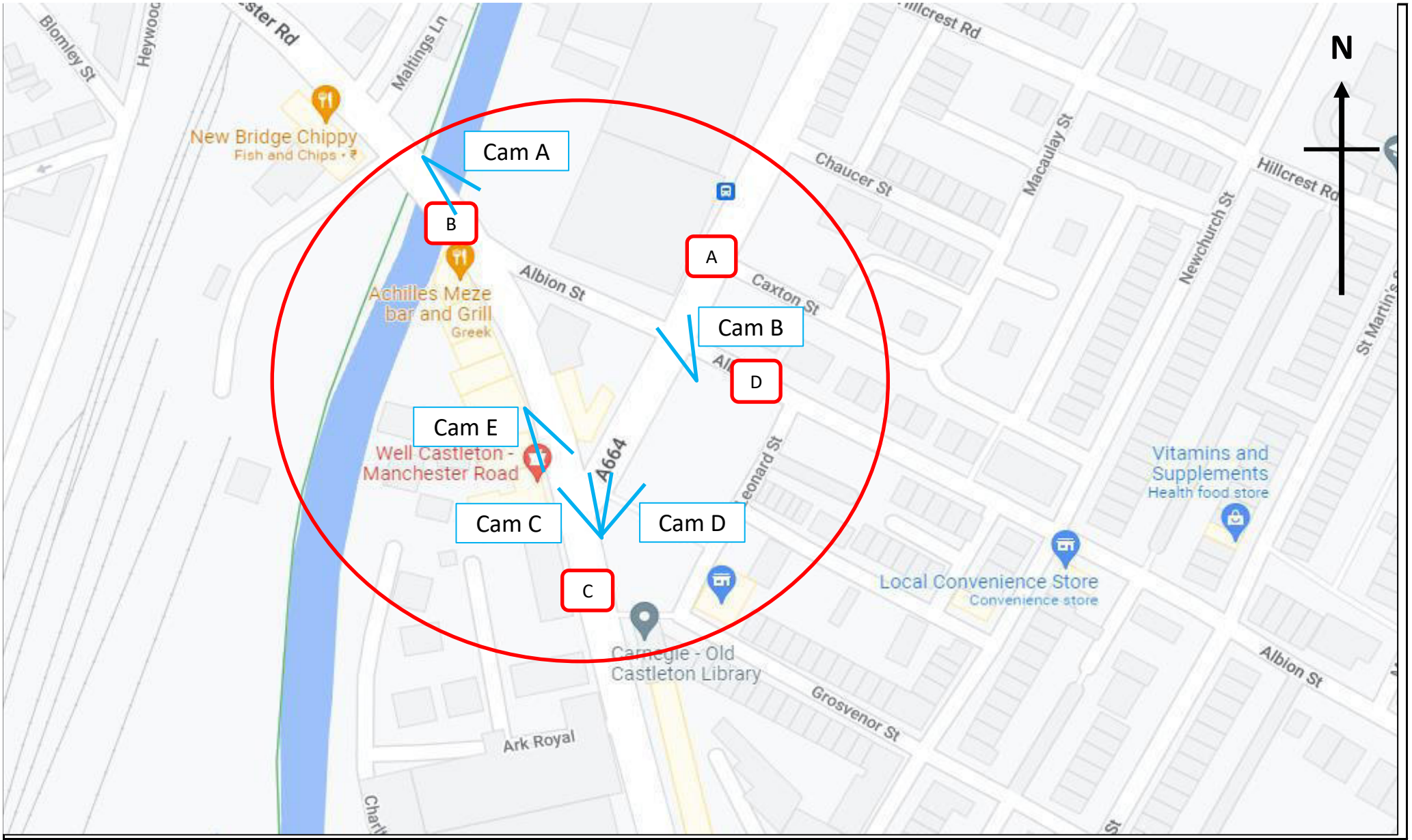
LOCATION: Slattocks Roundabout DAY: Wednesday

	JUNCTION TOTAL							
TIME	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT
07:30	536	121	18	10	7	2	1	695
07:45	582	131	15	11	3	3	0	745
H/TOT	1118	252	33	21	10	5	1	1440
08:00	483	116	23	12	8	1	1	644
08:15	491	112	18	9	6	4	2	642
08:30	527	133	25	12	12	0	2	711
08:45	463	118	19	14	10	4	0	628
H/TOT	1964	479	85	47	36	9	5	2625
09:00	493	103	29	20	5	2	0	652
09:15	362	109	18	12	8	5	0	514
H/TOT	855	212	47	32	13	7	0	1166
P/TOT	3937	943	165	100	59	21	6	5231

PEAK HOUR CALCULATION	TOT
07:30 to 08:30	2726
07:45 to 08:45	**2742**
08:00 to 09:00	2625
08:15 to 09:15	2633
08:30 to 09:30	2505
AM PEAK VALUE	**2742**

	JUNCTION TOTAL							
TIME	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT
16:00	549	107	18	14	8	2	1	699
16:15	469	108	17	9	6	0	1	610
16:30	491	126	17	17	3	4	1	659
16:45	535	103	12	8	5	1	0	664
H/TOT	2044	444	64	48	22	7	3	2632
17:00	624	79	13	8	6	1	2	733
17:15	532	70	17	5	2	5	1	632
17:30	531	73	15	11	3	2	2	637
17:45	426	60	10	8	8	2	1	515
H/TOT	2113	282	55	32	19	10	6	2517
P/TOT	4157	726	119	80	41	17	9	5149

PEAK HOUR CALCULATION	TOT
16:00 to 17:00	2632
16:15 to 17:15	2666
16:30 to 17:30	**2688**
16:45 to 17:45	2666
17:00 to 18:00	2517
PM PEAK VALUE	**2688**



NDC NATIONWIDE DATA COLLECTION	**Site / Location:**	Site 4, A664 Manchester Rd / A664 Queensway	**Project No:**	13307	**Drawing No:**	13307-04	**Drawn By:** EA
	Survey Date:	Wednesday 12th October 2022	**Project Name:**	Stakehill			
	Survey Times:	07:30 to 09:30 and 16:00 to 18:00	**Drawing Title:**	Site Layout and Observed Movements			

SITE: 4 DATE: 12/10/2022

LOCATION: A664 Manchester Rd / A664 Queensway DAY: Wednesday

	A to D								A to C							
TIME	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT
07:30	0	1	0	0	0	0	0	1	67	19	1	0	1	0	0	88
07:45	7	2	0	0	0	0	0	9	88	9	2	1	0	1	1	102
H/TOT	7	3	0	0	0	0	0	10	155	28	3	1	1	1	1	190
08:00	10	0	0	0	0	0	0	10	95	18	4	1	0	1	0	119
08:15	6	1	1	0	0	0	0	8	74	11	1	0	1	0	0	87
08:30	8	3	0	0	0	0	0	11	68	15	6	0	1	0	1	91
08:45	4	0	1	0	0	0	0	5	69	18	1	0	0	0	0	88
H/TOT	28	4	2	0	0	0	0	34	306	62	12	1	2	1	1	385
09:00	13	2	0	0	0	0	0	15	60	5	3	0	1	0	0	69
09:15	4	2	0	0	0	0	0	6	29	4	2	1	0	0	1	37
H/TOT	17	4	0	0	0	0	0	21	89	9	5	1	1	0	1	106
P/TOT	52	11	2	0	0	0	0	65	550	99	20	3	4	2	3	681

	A to D								A to C							
TIME	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT
16:00	9	4	0	0	0	0	0	13	51	8	0	0	0	0	0	59
16:15	14	3	0	0	0	0	0	17	54	6	2	0	0	0	0	62
16:30	12	0	0	0	0	0	0	12	53	7	0	0	0	1	0	61
16:45	10	3	0	0	0	0	0	13	72	8	3	0	1	0	0	84
H/TOT	45	10	0	0	0	0	0	55	230	29	5	0	1	1	0	266
17:00	14	0	0	0	0	0	0	14	67	1	3	0	0	0	1	72
17:15	10	2	0	0	0	0	0	12	70	9	0	0	0	0	0	79
17:30	12	0	0	0	0	0	0	12	72	7	2	0	1	1	0	83
17:45	10	1	0	0	0	0	0	11	45	4	1	0	0	0	0	50
H/TOT	46	3	0	0	0	0	0	49	254	21	6	0	1	1	1	284
P/TOT	91	13	0	0	0	0	0	104	484	50	11	0	2	2	1	550

SITE: 4 DATE: 12/10/2022

LOCATION: A664 Manchester Rd / A664 Queensway DAY: Wednesday

	A to B								A to A							
TIME	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT
07:30	38	1	0	1	0	0	0	40	0	0	0	0	0	0	0	0
07:45	30	9	2	0	1	0	0	42	0	0	0	0	0	0	0	0
H/TOT	68	10	2	1	1	0	0	82	0	0	0	0	0	0	0	0
08:00	63	9	1	0	0	0	0	73	0	0	0	0	0	0	0	0
08:15	71	8	1	1	0	0	0	81	0	0	0	0	0	0	0	0
08:30	39	9	4	3	0	0	0	55	0	0	0	0	0	0	0	0
08:45	48	6	1	1	0	0	0	56	0	0	0	0	0	0	0	0
H/TOT	221	32	7	5	0	0	0	265	0	0	0	0	0	0	0	0
09:00	29	4	2	0	0	0	0	35	0	0	0	0	0	0	0	0
09:15	24	6	1	0	1	0	0	32	0	0	0	0	0	0	0	0
H/TOT	53	10	3	0	1	0	0	67	0	0	0	0	0	0	0	0
P/TOT	342	52	12	6	2	0	0	414	0	0	0	0	0	0	0	0

	A to B								A to A							
TIME	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT
16:00	41	6	1	0	1	0	0	49	0	0	0	0	0	0	0	0
16:15	48	6	3	1	0	0	0	58	0	0	0	0	0	0	0	0
16:30	62	7	1	1	0	1	0	72	0	0	0	0	0	0	0	0
16:45	63	6	4	1	0	0	0	74	0	0	0	0	0	0	0	0
H/TOT	214	25	9	3	1	1	0	253	0	0	0	0	0	0	0	0
17:00	62	8	3	2	0	0	0	75	0	0	0	0	0	0	0	0
17:15	46	4	1	0	0	0	0	51	0	0	0	0	0	0	0	0
17:30	55	5	1	1	0	0	0	62	0	0	0	0	0	0	0	0
17:45	46	2	0	0	0	0	0	48	0	0	0	0	0	0	0	0
H/TOT	209	19	5	3	0	0	0	236	0	0	0	0	0	0	0	0
P/TOT	423	44	14	6	1	1	0	489	0	0	0	0	0	0	0	0

SITE: 4 DATE: 12/10/2022

LOCATION: A664 Manchester Rd / A664 Queensway DAY: Wednesday

	B to A								B to D							
TIME	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT
07:30	26	2	2	0	0	0	0	30	3	1	0	0	0	0	0	4
07:45	41	14	4	2	0	0	0	61	4	1	0	0	0	0	0	5
H/TOT	67	16	6	2	0	0	0	91	7	2	0	0	0	0	0	9
08:00	47	8	7	0	1	0	0	63	2	1	0	0	0	0	0	3
08:15	37	7	2	0	0	0	0	46	11	0	0	0	0	0	0	11
08:30	67	7	1	0	0	1	0	76	9	1	0	0	0	0	0	10
08:45	40	6	1	0	0	0	0	47	10	0	0	0	0	0	0	10
H/TOT	191	28	11	0	1	1	0	232	32	2	0	0	0	0	0	34
09:00	25	6	1	1	0	0	0	33	8	0	0	0	0	0	0	8
09:15	20	3	1	1	0	0	0	25	4	1	0	0	0	0	0	5
H/TOT	45	9	2	2	0	0	0	58	12	1	0	0	0	0	0	13
P/TOT	303	53	19	4	1	1	0	381	51	5	0	0	0	0	0	56

	B to A								B to D							
TIME	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT
16:00	44	5	1	1	0	1	0	52	15	3	0	0	0	0	0	18
16:15	54	4	1	0	0	0	0	59	8	2	0	0	0	0	0	10
16:30	45	14	1	0	0	0	0	60	12	0	0	0	0	0	1	13
16:45	31	3	0	2	0	0	0	36	17	1	0	0	0	0	0	18
H/TOT	174	26	3	3	0	1	0	207	52	6	0	0	0	0	1	59
17:00	46	9	1	1	0	0	0	57	10	0	1	0	0	0	0	11
17:15	44	7	0	0	0	0	0	51	9	1	1	0	0	0	0	11
17:30	38	0	0	1	0	0	0	39	10	0	0	0	0	0	0	10
17:45	50	3	0	0	0	1	0	54	12	1	0	0	0	0	0	13
H/TOT	178	19	1	2	0	1	0	201	41	2	2	0	0	0	0	45
P/TOT	352	45	4	5	0	2	0	408	93	8	2	0	0	0	1	104

SITE: 4 DATE: 12/10/2022

LOCATION: A664 Manchester Rd / A664 Queensway DAY: Wednesday

	B to C								B to B							
TIME	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT
07:30	105	20	10	0	2	0	0	137	0	0	0	0	0	0	0	0
07:45	108	18	5	1	2	0	0	134	0	0	0	0	0	0	0	0
H/TOT	213	38	15	1	4	0	0	271	0	0	0	0	0	0	0	0
08:00	103	14	1	1	3	1	0	123	0	0	0	0	0	0	0	0
08:15	71	11	1	0	3	1	1	88	0	0	0	0	0	0	0	0
08:30	93	15	2	0	3	0	0	113	0	0	0	0	0	0	0	0
08:45	95	10	1	2	2	1	0	111	0	0	0	0	0	0	0	0
H/TOT	362	50	5	3	11	3	1	435	0	0	0	0	0	0	0	0
09:00	64	7	3	1	1	0	0	76	0	0	0	0	0	0	0	0
09:15	61	13	0	0	2	0	0	76	0	0	0	0	0	0	0	0
H/TOT	125	20	3	1	3	0	0	152	0	0	0	0	0	0	0	0
P/TOT	700	108	23	5	18	3	1	858	0	0	0	0	0	0	0	0

	B to C								B to B							
TIME	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT
16:00	74	13	1	0	1	1	0	90	0	0	0	0	0	0	0	0
16:15	70	17	1	1	2	0	0	91	0	0	0	0	0	0	0	0
16:30	87	14	1	2	1	0	0	105	0	0	0	0	0	0	0	0
16:45	75	7	0	0	1	0	0	83	0	0	0	0	0	0	0	0
H/TOT	306	51	3	3	5	1	0	369	0	0	0	0	0	0	0	0
17:00	68	9	0	0	2	1	0	80	0	0	0	0	0	0	0	0
17:15	85	4	1	0	2	1	1	94	0	0	0	0	0	0	0	0
17:30	80	6	0	0	1	0	0	87	0	0	0	0	0	0	0	0
17:45	84	9	0	1	2	0	0	96	0	0	0	0	0	0	0	0
H/TOT	317	28	1	1	7	2	1	357	0	0	0	0	0	0	0	0
P/TOT	623	79	4	4	12	3	1	726	0	0	0	0	0	0	0	0

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LOCATION: A664 Manchester Rd / A664 Queensway DAY: Wednesday

	C to B								C to A							
TIME	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT
07:30	50	13	3	0	1	1	0	68	35	8	1	1	2	0	0	47
07:45	75	7	5	1	2	0	0	90	51	2	1	0	0	0	0	54
H/TOT	125	20	8	1	3	1	0	158	86	10	2	1	2	0	0	101
08:00	67	8	4	0	2	1	0	82	41	6	3	0	0	0	1	51
08:15	71	12	1	2	1	0	0	87	42	6	2	0	0	0	0	50
08:30	90	13	3	0	3	0	0	109	39	6	5	0	2	0	0	52
08:45	78	11	2	0	2	0	0	93	54	7	1	0	0	0	0	62
H/TOT	306	44	10	2	8	1	0	371	176	25	11	0	2	0	1	215
09:00	80	11	3	2	2	0	0	98	48	5	1	2	0	0	0	56
09:15	64	12	2	0	3	3	0	84	38	2	1	0	0	2	0	43
H/TOT	144	23	5	2	5	3	0	182	86	7	2	2	0	2	0	99
P/TOT	575	87	23	5	16	5	0	711	348	42	15	3	4	2	1	415

	C to B								C to A							
TIME	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT
16:00	94	13	4	4	2	0	0	117	53	10	1	0	0	0	0	64
16:15	96	16	3	0	6	0	1	122	44	8	4	1	1	1	0	59
16:30	109	17	3	1	0	0	1	131	46	10	1	1	1	2	0	61
16:45	102	13	2	0	2	0	0	119	49	8	0	0	0	1	0	58
H/TOT	401	59	12	5	10	0	2	489	192	36	6	2	2	4	0	242
17:00	106	9	4	1	2	0	1	123	49	6	0	0	0	0	0	55
17:15	100	7	2	1	2	2	0	114	41	5	1	0	0	1	0	48
17:30	98	7	2	0	1	0	1	109	52	6	2	0	1	3	0	64
17:45	84	5	1	0	1	0	0	91	55	5	0	0	0	0	1	61
H/TOT	388	28	9	2	6	2	2	437	197	22	3	0	1	4	1	228
P/TOT	789	87	21	7	16	2	4	926	389	58	9	2	3	8	1	470

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LOCATION: A664 Manchester Rd / A664 Queensway DAY: Wednesday

	C to D								C to C							
TIME	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT
07:30	1	1	0	0	0	0	0	2	0	0	0	0	0	0	0	0
07:45	2	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0
H/TOT	3	1	0	0	0	0	0	4	0	0	0	0	0	0	0	0
08:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:15	3	0	0	0	0	0	0	3	0	0	0	0	0	0	0	0
08:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
H/TOT	3	0	0	0	0	0	0	3	0	0	0	0	0	0	0	0
09:00	0	1	0	0	0	0	0	1	0	0	0	0	0	0	0	0
09:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
H/TOT	0	1	0	0	0	0	0	1	0	0	0	0	0	0	0	0
P/TOT	6	2	0	0	0	0	0	8	0	0	0	0	0	0	0	0

	C to D								C to C							
TIME	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT
16:00	2	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0
16:15	1	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0
16:30	2	1	0	0	0	0	0	3	0	0	0	0	0	0	0	0
16:45	1	1	0	0	0	0	0	2	0	0	0	0	0	0	0	0
H/TOT	6	2	0	0	0	0	0	8	0	0	0	0	0	0	0	0
17:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
17:15	1	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0
17:30	2	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0
17:45	3	1	0	0	0	0	0	4	0	0	0	0	0	0	0	0
H/TOT	6	1	0	0	0	0	0	7	0	0	0	0	0	0	0	0
P/TOT	12	3	0	0	0	0	0	15	0	0	0	0	0	0	0	0

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LOCATION: A664 Manchester Rd / A664 Queensway DAY: Wednesday

	D to C								D to B							
TIME	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT
07:30	2	0	0	0	0	0	0	2	13	2	1	0	0	0	0	16
07:45	5	0	0	0	0	0	0	5	9	0	0	0	0	0	0	9
H/TOT	7	0	0	0	0	0	0	7	22	2	1	0	0	0	0	25
08:00	1	0	0	0	0	0	0	1	19	0	0	0	0	0	0	19
08:15	1	0	0	0	0	0	0	1	8	0	0	0	0	0	0	8
08:30	3	0	1	0	0	0	0	4	7	0	0	0	0	0	0	7
08:45	3	0	0	0	0	0	0	3	36	0	0	0	0	0	0	36
H/TOT	8	0	1	0	0	0	0	9	70	0	0	0	0	0	0	70
09:00	3	0	0	0	0	0	0	3	4	0	0	0	0	0	0	4
09:15	2	0	0	0	0	0	0	2	9	0	0	0	0	0	0	9
H/TOT	5	0	0	0	0	0	0	5	13	0	0	0	0	0	0	13
P/TOT	20	0	1	0	0	0	0	21	105	2	1	0	0	0	0	108

	D to C								D to B							
TIME	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT
16:00	2	1	0	0	0	0	0	3	9	3	0	0	0	0	0	12
16:15	3	1	0	0	0	0	0	4	13	3	0	0	0	0	0	16
16:30	2	0	0	0	0	0	0	2	15	1	1	0	0	0	0	17
16:45	7	1	0	0	0	0	0	8	12	2	0	0	0	0	0	14
H/TOT	14	3	0	0	0	0	0	17	49	9	1	0	0	0	0	59
17:00	2	0	0	0	0	0	0	2	19	2	0	0	0	0	0	21
17:15	3	0	0	0	0	0	0	3	18	0	0	0	0	0	0	18
17:30	3	0	0	0	0	0	0	3	9	4	0	0	0	0	0	13
17:45	1	0	0	0	0	0	0	1	14	0	0	0	0	2	0	16
H/TOT	9	0	0	0	0	0	0	9	60	6	0	0	0	2	0	68
P/TOT	23	3	0	0	0	0	0	26	109	15	1	0	0	2	0	127

SITE: 4 DATE: 12/10/2022

LOCATION: A664 Manchester Rd / A664 Queensway DAY: Wednesday

	D to A								D to D							
TIME	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT
07:30	18	1	0	0	0	0	0	19	0	0	0	0	0	0	0	0
07:45	5	2	0	0	0	0	0	7	0	0	0	0	0	0	0	0
H/TOT	23	3	0	0	0	0	0	26	0	0	0	0	0	0	0	0
08:00	9	1	0	0	0	0	0	10	0	0	0	0	0	0	0	0
08:15	9	1	1	0	0	0	0	11	0	0	0	0	0	0	0	0
08:30	7	1	0	0	0	0	0	8	0	0	0	0	0	0	0	0
08:45	18	3	0	0	0	0	1	22	0	0	0	0	0	0	0	0
H/TOT	43	6	1	0	0	0	1	51	0	0	0	0	0	0	0	0
09:00	8	1	0	0	0	0	0	9	0	0	0	0	0	0	0	0
09:15	11	2	0	0	0	0	0	13	0	0	0	0	0	0	0	0
H/TOT	19	3	0	0	0	0	0	22	0	0	0	0	0	0	0	0
P/TOT	85	12	1	0	0	0	1	99	0	0	0	0	0	0	0	0

	D to A								D to D							
TIME	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT
16:00	9	0	0	0	0	0	0	9	0	0	0	0	0	0	0	0
16:15	5	3	0	0	0	0	0	8	0	0	0	0	0	0	0	0
16:30	10	2	0	0	0	0	0	12	0	0	0	0	0	0	0	0
16:45	6	2	0	0	0	0	0	8	0	0	0	0	0	0	0	0
H/TOT	30	7	0	0	0	0	0	37	0	0	0	0	0	0	0	0
17:00	4	0	1	0	0	0	0	5	0	0	0	0	0	0	0	0
17:15	13	1	0	0	0	0	0	14	0	0	0	0	0	0	0	0
17:30	5	1	0	0	0	0	0	6	0	0	0	0	0	0	0	0
17:45	3	0	0	0	0	0	0	3	0	0	0	0	0	0	0	0
H/TOT	25	2	1	0	0	0	0	28	0	0	0	0	0	0	0	0
P/TOT	55	9	1	0	0	0	0	65	0	0	0	0	0	0	0	0

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LOCATION: A664 Manchester Rd / A664 Queensway DAY: Wednesday

	TO ARM A								FROM ARM A							
TIME	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT
07:30	79	11	3	1	2	0	0	96	105	21	1	1	1	0	0	129
07:45	97	18	5	2	0	0	0	122	125	20	4	1	1	1	1	153
H/TOT	176	29	8	3	2	0	0	218	230	41	5	2	2	1	1	282
08:00	97	15	10	0	1	0	1	124	168	27	5	1	0	1	0	202
08:15	88	14	5	0	0	0	0	107	151	20	3	1	1	0	0	176
08:30	113	14	6	0	2	1	0	136	115	27	10	3	1	0	1	157
08:45	112	16	2	0	0	0	1	131	121	24	3	1	0	0	0	149
H/TOT	410	59	23	0	3	1	2	498	555	98	21	6	2	1	1	684
09:00	81	12	2	3	0	0	0	98	102	11	5	0	1	0	0	119
09:15	69	7	2	1	0	2	0	81	57	12	3	1	1	0	1	75
H/TOT	150	19	4	4	0	2	0	179	159	23	8	1	2	0	1	194
P/TOT	736	107	35	7	5	3	2	895	944	162	34	9	6	2	3	1160

	TO ARM A								FROM ARM A							
TIME	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT
16:00	106	15	2	1	0	1	0	125	101	18	1	0	1	0	0	121
16:15	103	15	5	1	1	1	0	126	116	15	5	1	0	0	0	137
16:30	101	26	2	1	1	2	0	133	127	14	1	1	0	2	0	145
16:45	86	13	0	2	0	1	0	102	145	17	7	1	1	0	0	171
H/TOT	396	69	9	5	2	5	0	486	489	64	14	3	2	2	0	574
17:00	99	15	2	1	0	0	0	117	143	9	6	2	0	0	1	161
17:15	98	13	1	0	0	1	0	113	126	15	1	0	0	0	0	142
17:30	95	7	2	1	1	3	0	109	139	12	3	1	1	1	0	157
17:45	108	8	0	0	0	1	1	118	101	7	1	0	0	0	0	109
H/TOT	400	43	5	2	1	5	1	457	509	43	11	3	1	1	1	569
P/TOT	796	112	14	7	3	10	1	943	998	107	25	6	3	3	1	1143

SITE: 4 DATE: 12/10/2022

LOCATION: A664 Manchester Rd / A664 Queensway DAY: Wednesday

	TO ARM B								FROM ARM B							
TIME	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT
07:30	101	16	4	1	1	1	0	124	134	23	12	0	2	0	0	171
07:45	114	16	7	1	3	0	0	141	153	33	9	3	2	0	0	200
H/TOT	215	32	11	2	4	1	0	265	287	56	21	3	4	0	0	371
08:00	149	17	5	0	2	1	0	174	152	23	8	1	4	1	0	189
08:15	150	20	2	3	1	0	0	176	119	18	3	0	3	1	1	145
08:30	136	22	7	3	3	0	0	171	169	23	3	0	3	1	0	199
08:45	162	17	3	1	2	0	0	185	145	16	2	2	2	1	0	168
H/TOT	597	76	17	7	8	1	0	706	585	80	16	3	12	4	1	701
09:00	113	15	5	2	2	0	0	137	97	13	4	2	1	0	0	117
09:15	97	18	3	0	4	3	0	125	85	17	1	1	2	0	0	106
H/TOT	210	33	8	2	6	3	0	262	182	30	5	3	3	0	0	223
P/TOT	1022	141	36	11	18	5	0	1233	1054	166	42	9	19	4	1	1295

	TO ARM B								FROM ARM B							
TIME	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT
16:00	144	22	5	4	3	0	0	178	133	21	2	1	1	2	0	160
16:15	157	25	6	1	6	0	1	196	132	23	2	1	2	0	0	160
16:30	186	25	5	2	0	1	1	220	144	28	2	2	1	0	1	178
16:45	177	21	6	1	2	0	0	207	123	11	0	2	1	0	0	137
H/TOT	664	93	22	8	11	1	2	801	532	83	6	6	5	2	1	635
17:00	187	19	7	3	2	0	1	219	124	18	2	1	2	1	0	148
17:15	164	11	3	1	2	2	0	183	138	12	2	0	2	1	1	156
17:30	162	16	3	1	1	0	1	184	128	6	0	1	1	0	0	136
17:45	144	7	1	0	1	2	0	155	146	13	0	1	2	1	0	163
H/TOT	657	53	14	5	6	4	2	741	536	49	4	3	7	3	1	603
P/TOT	1321	146	36	13	17	5	4	1542	1068	132	10	9	12	5	2	1238

SITE: 4 DATE: 12/10/2022

LOCATION: A664 Manchester Rd / A664 Queensway DAY: Wednesday

	TO ARM C								FROM ARM C							
TIME	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT
07:30	174	39	11	0	3	0	0	227	86	22	4	1	3	1	0	117
07:45	201	27	7	2	2	1	1	241	128	9	6	1	2	0	0	146
H/TOT	375	66	18	2	5	1	1	468	214	31	10	2	5	1	0	263
08:00	199	32	5	2	3	2	0	243	108	14	7	0	2	1	1	133
08:15	146	22	2	0	4	1	1	176	116	18	3	2	1	0	0	140
08:30	164	30	9	0	4	0	1	208	129	19	8	0	5	0	0	161
08:45	167	28	2	2	2	1	0	202	132	18	3	0	2	0	0	155
H/TOT	676	112	18	4	13	4	2	829	485	69	21	2	10	1	1	589
09:00	127	12	6	1	2	0	0	148	128	17	4	4	2	0	0	155
09:15	92	17	2	1	2	0	1	115	102	14	3	0	3	5	0	127
H/TOT	219	29	8	2	4	0	1	263	230	31	7	4	5	5	0	282
P/TOT	1270	207	44	8	22	5	4	1560	929	131	38	8	20	7	1	1134

	TO ARM C								FROM ARM C							
TIME	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT
16:00	127	22	1	0	1	1	0	152	149	23	5	4	2	0	0	183
16:15	127	24	3	1	2	0	0	157	141	24	7	1	7	1	1	182
16:30	142	21	1	2	1	1	0	168	157	28	4	2	1	2	1	195
16:45	154	16	3	0	2	0	0	175	152	22	2	0	2	1	0	179
H/TOT	550	83	8	3	6	2	0	652	599	97	18	7	12	4	2	739
17:00	137	10	3	0	2	1	1	154	155	15	4	1	2	0	1	178
17:15	158	13	1	0	2	1	1	176	142	12	3	1	2	3	0	163
17:30	155	13	2	0	2	1	0	173	152	13	4	0	2	3	1	175
17:45	130	13	1	1	2	0	0	147	142	11	1	0	1	0	1	156
H/TOT	580	49	7	1	8	3	2	650	591	51	12	2	7	6	3	672
P/TOT	1130	132	15	4	14	5	2	1302	1190	148	30	9	19	10	5	1411

SITE: 4 DATE: 12/10/2022

LOCATION: A664 Manchester Rd / A664 Queensway DAY: Wednesday

	TO ARM D								FROM ARM D							
TIME	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT
07:30	4	3	0	0	0	0	0	7	33	3	1	0	0	0	0	37
07:45	13	3	0	0	0	0	0	16	19	2	0	0	0	0	0	21
H/TOT	17	6	0	0	0	0	0	23	52	5	1	0	0	0	0	58
08:00	12	1	0	0	0	0	0	13	29	1	0	0	0	0	0	30
08:15	20	1	1	0	0	0	0	22	18	1	1	0	0	0	0	20
08:30	17	4	0	0	0	0	0	21	17	1	1	0	0	0	0	19
08:45	14	0	1	0	0	0	0	15	57	3	0	0	0	0	1	61
H/TOT	63	6	2	0	0	0	0	71	121	6	2	0	0	0	1	130
09:00	21	3	0	0	0	0	0	24	15	1	0	0	0	0	0	16
09:15	8	3	0	0	0	0	0	11	22	2	0	0	0	0	0	24
H/TOT	29	6	0	0	0	0	0	35	37	3	0	0	0	0	0	40
P/TOT	109	18	2	0	0	0	0	129	210	14	3	0	0	0	1	228

	TO ARM D								FROM ARM D							
TIME	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT
16:00	26	7	0	0	0	0	0	33	20	4	0	0	0	0	0	24
16:15	23	5	0	0	0	0	0	28	21	7	0	0	0	0	0	28
16:30	26	1	0	0	0	0	1	28	27	3	1	0	0	0	0	31
16:45	28	5	0	0	0	0	0	33	25	5	0	0	0	0	0	30
H/TOT	103	18	0	0	0	0	1	122	93	19	1	0	0	0	0	113
17:00	24	0	1	0	0	0	0	25	25	2	1	0	0	0	0	28
17:15	20	3	1	0	0	0	0	24	34	1	0	0	0	0	0	35
17:30	24	0	0	0	0	0	0	24	17	5	0	0	0	0	0	22
17:45	25	3	0	0	0	0	0	28	18	0	0	0	0	2	0	20
H/TOT	93	6	2	0	0	0	0	101	94	8	1	0	0	2	0	105
P/TOT	196	24	2	0	0	0	1	223	187	27	2	0	0	2	0	218

13307 / STAKEHILL
OCTOBER 2022
CLASSIFIED TURNING COUNT

SITE: 4 DATE: 12/10/2022

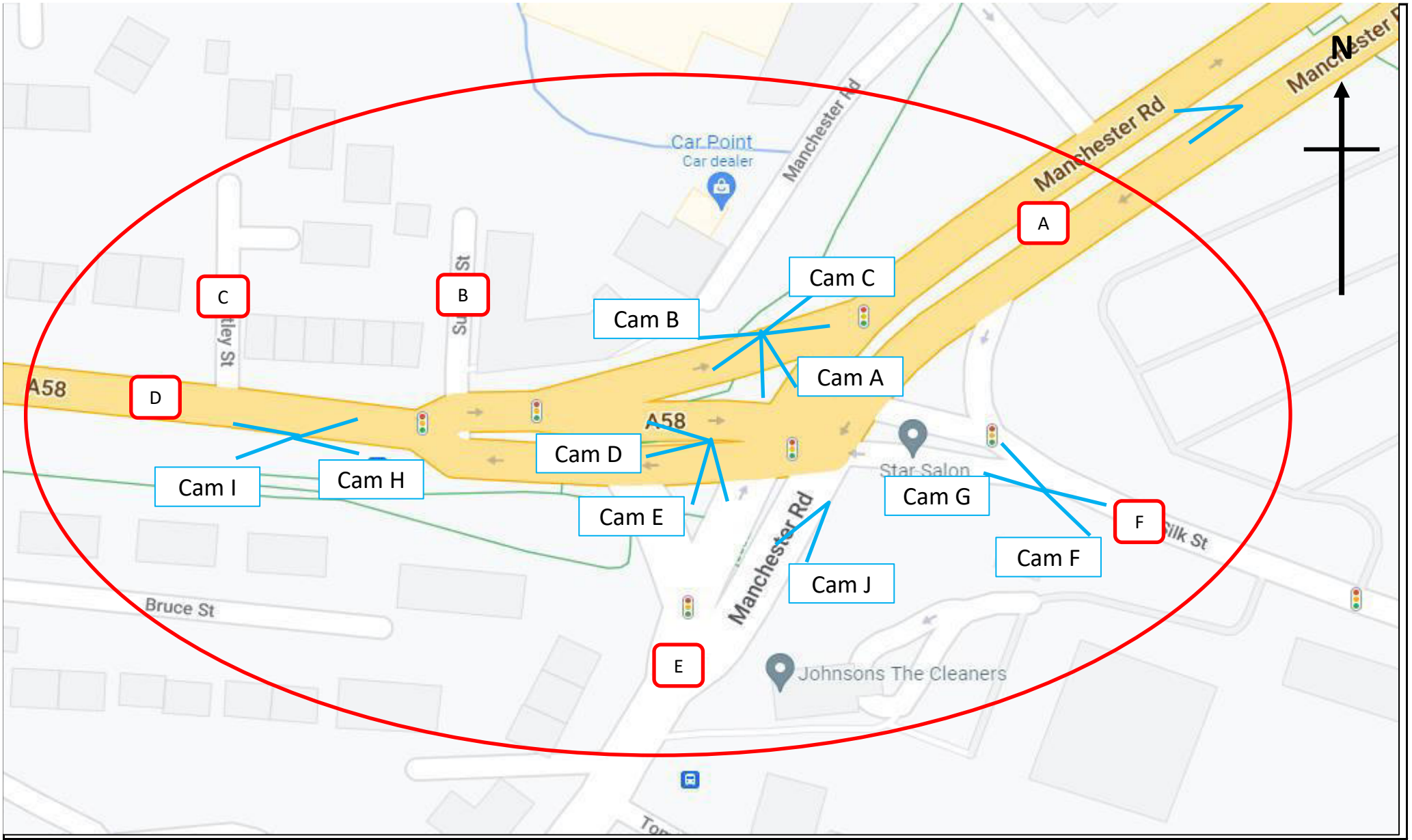
LOCATION: A664 Manchester Rd / A664 Queensway DAY: Wednesday

	JUNCTION TOTAL							
TIME	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT
07:30	358	69	18	2	6	1	0	454
07:45	425	64	19	5	5	1	1	520
H/TOT	783	133	37	7	11	2	1	974
08:00	457	65	20	2	6	3	1	554
08:15	404	57	10	3	5	1	1	481
08:30	430	70	22	3	9	1	1	536
08:45	455	61	8	3	4	1	1	533
H/TOT	1746	253	60	11	24	6	4	2104
09:00	342	42	13	6	4	0	0	407
09:15	266	45	7	2	6	5	1	332
H/TOT	608	87	20	8	10	5	1	739
P/TOT	3137	473	117	26	45	13	6	3817

PEAK HOUR CALCULATION	TOT
07:30 to 08:30	2009
07:45 to 08:45	2091
08:00 to 09:00	**2104**
08:15 to 09:15	1957
08:30 to 09:30	1808
AM PEAK VALUE	**2104**

	JUNCTION TOTAL							
TIME	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT
16:00	403	66	8	5	4	2	0	488
16:15	410	69	14	3	9	1	1	507
16:30	455	73	8	5	2	4	2	549
16:45	445	55	9	3	4	1	0	517
H/TOT	1713	263	39	16	19	8	3	2061
17:00	447	44	13	4	4	1	2	515
17:15	440	40	6	1	4	4	1	496
17:30	436	36	7	2	4	4	1	490
17:45	407	31	2	1	3	3	1	448
H/TOT	1730	151	28	8	15	12	5	1949
P/TOT	3443	414	67	24	34	20	8	4010

PEAK HOUR CALCULATION	TOT
16:00 to 17:00	2061
16:15 to 17:15	**2088**
16:30 to 17:30	2077
16:45 to 17:45	2018
17:00 to 18:00	1949
PM PEAK VALUE	**2088**



NDC NATIONWIDE DATA COLLECTION	**Site / Location:**	Site 5, A58 / A664 Manchester Rd	**Project No:**	13307	**Drawing No:**	13307-05	**Drawn By:** EA
	Survey Date:	Wednesday 12th October 2022	**Project Name:**	Stakehill			
	Survey Times:	07:30 to 09:30 and 16:00 to 18:00	**Drawing Title:**	Site Layout and Observed Movements			

SITE: 5 DATE: 12/10/2022

LOCATION: A58 / A664 Manchester Rd DAY: Wednesday

	A to F								A to E							
TIME	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT
07:30	25	9	1	1	0	0	0	36	77	15	3	1	2	0	0	98
07:45	34	6	3	1	0	0	0	44	81	12	1	0	3	0	0	97
H/TOT	59	15	4	2	0	0	0	80	158	27	4	1	5	0	0	195
08:00	28	7	2	0	0	0	0	37	61	10	2	4	2	1	0	80
08:15	39	4	1	1	0	0	0	45	48	5	1	0	3	1	0	58
08:30	31	5	1	1	0	0	0	38	72	14	2	1	3	0	0	92
08:45	43	4	3	1	0	0	0	51	68	11	0	0	2	2	0	83
H/TOT	141	20	7	3	0	0	0	171	249	40	5	5	10	4	0	313
09:00	58	8	2	0	0	0	0	68	65	6	2	0	2	0	0	75
09:15	48	5	0	1	0	0	0	54	63	6	2	3	2	0	0	76
H/TOT	106	13	2	1	0	0	0	122	128	12	4	3	4	0	0	151
P/TOT	306	48	13	6	0	0	0	373	535	79	13	9	19	4	0	659

	A to F								A to E							
TIME	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT
16:00	55	10	2	0	0	0	0	67	71	9	0	0	1	0	0	81
16:15	43	3	2	1	0	1	0	50	71	10	1	1	2	0	0	85
16:30	42	6	1	0	0	0	0	49	75	5	2	1	2	0	0	85
16:45	61	6	0	1	0	1	0	69	68	6	0	0	1	0	0	75
H/TOT	201	25	5	2	0	2	0	235	285	30	3	2	6	0	0	326
17:00	61	4	0	2	0	0	0	67	72	9	2	0	0	1	0	84
17:15	55	6	0	0	0	0	0	61	83	1	1	0	1	1	0	87
17:30	63	3	0	0	0	0	0	66	76	6	0	0	2	0	0	84
17:45	68	5	0	1	0	0	0	74	71	5	0	0	1	0	0	77
H/TOT	247	18	0	3	0	0	0	268	302	21	3	0	4	2	0	332
P/TOT	448	43	5	5	0	2	0	503	587	51	6	2	10	2	0	658

SITE: 5 DATE: 12/10/2022

LOCATION: A58 / A664 Manchester Rd DAY: Wednesday

	A to D								A to C							
TIME	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT
07:30	152	33	7	2	1	1	0	196	0	0	0	0	0	0	0	0
07:45	162	27	7	1	1	1	1	200	0	0	0	0	0	0	0	0
H/TOT	314	60	14	3	2	2	1	396	0	0	0	0	0	0	0	0
08:00	189	16	2	2	2	0	0	211	0	0	0	0	0	0	0	0
08:15	176	14	3	0	0	2	0	195	0	0	0	0	0	0	0	0
08:30	101	20	9	1	4	1	1	137	0	0	0	0	0	0	0	0
08:45	92	12	4	1	1	1	0	111	0	1	0	0	0	0	0	1
H/TOT	558	62	18	4	7	4	1	654	0	1	0	0	0	0	0	1
09:00	107	15	7	1	2	0	0	132	0	0	0	0	0	0	0	0
09:15	90	20	6	1	2	1	0	120	0	0	0	0	0	0	0	0
H/TOT	197	35	13	2	4	1	0	252	0	0	0	0	0	0	0	0
P/TOT	1069	157	45	9	13	7	2	1302	0	1	0	0	0	0	0	1

	A to D								A to C							
TIME	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT
16:00	117	11	4	2	3	0	1	138	1	0	0	0	0	0	0	1
16:15	123	10	3	0	2	1	0	139	0	0	0	0	0	0	0	0
16:30	107	5	1	1	1	1	0	116	0	0	0	0	0	0	0	0
16:45	127	12	4	0	3	0	0	146	0	0	0	0	0	0	0	0
H/TOT	474	38	12	3	9	2	1	539	1	0	0	0	0	0	0	1
17:00	111	8	3	2	0	2	1	127	0	0	0	0	0	0	0	0
17:15	148	11	3	0	2	0	0	164	0	0	0	0	0	0	0	0
17:30	137	9	3	0	1	2	0	152	0	0	0	0	0	0	0	0
17:45	113	8	1	1	0	1	0	124	0	0	0	0	0	0	0	0
H/TOT	509	36	10	3	3	5	1	567	0	0	0	0	0	0	0	0
P/TOT	983	74	22	6	12	7	2	1106	1	0	0	0	0	0	0	1

SITE: 5 DATE: 12/10/2022

LOCATION: A58 / A664 Manchester Rd DAY: Wednesday

	A to B								A to A							
TIME	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT
07:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
H/TOT	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
H/TOT	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
09:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
09:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
H/TOT	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
P/TOT	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

	A to B								A to A							
TIME	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT
16:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
16:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
16:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
16:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
H/TOT	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
17:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
17:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
17:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
17:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
H/TOT	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
P/TOT	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

SITE: 5 DATE: 12/10/2022

LOCATION: A58 / A664 Manchester Rd DAY: Wednesday

	B to A								B to F							
TIME	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT
07:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
H/TOT	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:45	1	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0
H/TOT	1	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0
09:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
09:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
H/TOT	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
P/TOT	1	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0

	B to A								B to F							
TIME	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT
16:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
16:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
16:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
16:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
H/TOT	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
17:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
17:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
17:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
17:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
H/TOT	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
P/TOT	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

SITE: 5 DATE: 12/10/2022

LOCATION: A58 / A664 Manchester Rd DAY: Wednesday

	B to E								B to D							
TIME	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT
07:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
H/TOT	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
H/TOT	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
09:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
09:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
H/TOT	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
P/TOT	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

	B to E								B to D							
TIME	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT
16:00	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1
16:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
16:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
16:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
H/TOT	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1
17:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
17:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
17:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
17:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
H/TOT	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
P/TOT	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1

SITE: 5 DATE: 12/10/2022

LOCATION: A58 / A664 Manchester Rd DAY: Wednesday

	B to C								B to B							
TIME	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT
07:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:45	0	1	0	0	0	0	0	1	0	0	0	0	0	0	0	0
H/TOT	0	1	0	0	0	0	0	1	0	0	0	0	0	0	0	0
08:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
H/TOT	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
09:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
09:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
H/TOT	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
P/TOT	0	1	0	0	0	0	0	1	0	0	0	0	0	0	0	0

	B to C								B to B							
TIME	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT
16:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
16:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
16:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
16:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
H/TOT	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
17:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
17:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
17:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
17:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
H/TOT	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
P/TOT	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

SITE: 5 DATE: 12/10/2022

LOCATION: A58 / A664 Manchester Rd DAY: Wednesday

	C to B								C to A							
TIME	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT
07:30	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1
07:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
H/TOT	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1
08:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:15	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1
08:30	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1
08:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
H/TOT	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	2
09:00	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1
09:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
H/TOT	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1
P/TOT	0	0	0	0	0	0	0	0	3	1	0	0	0	0	0	4

	C to B								C to A							
TIME	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT
16:00	1	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0
16:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
16:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
16:45	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1
H/TOT	1	0	0	0	0	0	0	1	0	1	0	0	0	0	0	1
17:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
17:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
17:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
17:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
H/TOT	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
P/TOT	1	0	0	0	0	0	0	1	0	1	0	0	0	0	0	1

SITE: 5 DATE: 12/10/2022

LOCATION: A58 / A664 Manchester Rd DAY: Wednesday

	C to F								C to E							
TIME	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT
07:30	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1
07:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
H/TOT	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1
08:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
H/TOT	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
09:00	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1
09:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
H/TOT	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1
P/TOT	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0	2

	C to F								C to E							
TIME	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT
16:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
16:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
16:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
16:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
H/TOT	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
17:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
17:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
17:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
17:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
H/TOT	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
P/TOT	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

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LOCATION: A58 / A664 Manchester Rd DAY: Wednesday

	C to D								C to C							
TIME	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT
07:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
H/TOT	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
H/TOT	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
09:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
09:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
H/TOT	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
P/TOT	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

	C to D								C to C							
TIME	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT
16:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
16:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
16:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
16:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
H/TOT	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
17:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
17:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
17:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
17:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
H/TOT	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
P/TOT	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

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LOCATION: A58 / A664 Manchester Rd DAY: Wednesday

	D to C								D to B							
TIME	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT
07:30	1	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0
07:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
H/TOT	1	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0
08:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:15	1	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0
08:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
H/TOT	1	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0
09:00	1	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0
09:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
H/TOT	1	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0
P/TOT	3	0	0	0	0	0	0	3	0	0	0	0	0	0	0	0

	D to C								D to B							
TIME	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT
16:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
16:15	1	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0
16:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
16:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
H/TOT	1	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0
17:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
17:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
17:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
17:45	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1
H/TOT	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1
P/TOT	1	0	0	0	0	0	0	1	1	0	0	0	0	0	0	1

SITE: 5 DATE: 12/10/2022

LOCATION: A58 / A664 Manchester Rd DAY: Wednesday

	D to A								D to F							
TIME	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT
07:30	114	11	8	0	2	1	1	137	4	4	0	0	0	0	0	8
07:45	111	21	4	0	3	0	0	139	7	2	0	0	0	1	0	10
H/TOT	225	32	12	0	5	1	1	276	11	6	0	0	0	1	0	18
08:00	180	20	17	2	1	2	0	222	6	2	0	0	0	0	0	8
08:15	199	23	7	0	1	0	0	230	11	1	1	0	0	0	0	13
08:30	224	12	5	0	1	0	0	242	15	1	0	0	0	0	0	16
08:45	101	14	7	0	2	0	0	124	15	1	1	1	0	0	0	18
H/TOT	704	69	36	2	5	2	0	818	47	5	2	1	0	0	0	55
09:00	81	14	5	2	0	0	1	103	12	1	1	0	0	0	0	14
09:15	96	17	6	4	3	0	0	126	6	0	0	0	0	0	0	6
H/TOT	177	31	11	6	3	0	1	229	18	1	1	0	0	0	0	20
P/TOT	1106	132	59	8	13	3	2	1323	76	12	3	1	0	1	0	93

	D to A								D to F							
TIME	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT
16:00	116	24	4	0	3	2	0	149	11	3	0	0	0	0	0	14
16:15	137	12	2	3	0	0	0	154	15	0	0	0	0	0	0	15
16:30	127	19	2	0	1	0	0	149	12	4	1	0	0	0	1	18
16:45	100	17	1	0	3	0	3	124	13	1	3	0	0	0	0	17
H/TOT	480	72	9	3	7	2	3	576	51	8	4	0	0	0	1	64
17:00	129	15	0	0	1	0	0	145	9	1	0	0	0	0	0	10
17:15	156	9	1	0	0	0	0	166	19	0	2	1	0	0	0	22
17:30	116	12	0	0	2	1	0	131	14	2	0	0	0	0	0	16
17:45	141	8	2	0	0	0	0	151	17	2	1	0	0	0	0	20
H/TOT	542	44	3	0	3	1	0	593	59	5	3	1	0	0	0	68
P/TOT	1022	116	12	3	10	3	3	1169	110	13	7	1	0	0	1	132

SITE: 5 DATE: 12/10/2022

LOCATION: A58 / A664 Manchester Rd DAY: Wednesday

	D to E								D to D							
TIME	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT
07:30	15	3	2	0	0	0	0	20	0	0	0	0	0	0	0	0
07:45	24	8	4	0	0	0	0	36	0	0	0	0	0	0	0	0
H/TOT	39	11	6	0	0	0	0	56	0	0	0	0	0	0	0	0
08:00	24	4	2	0	0	0	0	30	0	0	0	0	0	0	0	0
08:15	23	0	1	0	0	0	0	24	0	0	0	0	0	0	0	0
08:30	29	0	0	0	0	0	0	29	0	0	0	0	0	0	0	0
08:45	16	4	1	1	0	0	0	22	0	0	0	0	0	0	0	0
H/TOT	92	8	4	1	0	0	0	105	0	0	0	0	0	0	0	0
09:00	19	0	0	0	0	0	0	19	0	0	0	0	0	0	0	0
09:15	16	2	1	1	0	0	0	20	0	0	0	0	0	0	0	0
H/TOT	35	2	1	1	0	0	0	39	0	0	0	0	0	0	0	0
P/TOT	166	21	11	2	0	0	0	200	0	0	0	0	0	0	0	0

	D to E								D to D							
TIME	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT
16:00	19	5	1	0	0	0	0	25	0	0	0	0	0	0	0	0
16:15	28	4	0	0	0	0	0	32	0	0	0	0	0	0	0	0
16:30	13	3	1	0	0	0	0	17	0	0	0	0	0	0	0	0
16:45	25	4	1	0	0	0	0	30	0	0	0	0	0	0	0	0
H/TOT	85	16	3	0	0	0	0	104	0	0	0	0	0	0	0	0
17:00	25	1	1	0	0	0	0	27	0	0	0	0	0	0	0	0
17:15	21	2	0	0	0	0	0	23	0	0	0	0	0	0	0	0
17:30	13	3	0	0	0	0	0	16	0	0	0	0	0	0	0	0
17:45	27	2	0	0	0	0	0	29	0	0	0	0	0	0	0	0
H/TOT	86	8	1	0	0	0	0	95	0	0	0	0	0	0	0	0
P/TOT	171	24	4	0	0	0	0	199	0	0	0	0	0	0	0	0

SITE: 5 DATE: 12/10/2022

LOCATION: A58 / A664 Manchester Rd DAY: Wednesday

	E to D								E to C							
TIME	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT
07:30	40	4	0	0	0	0	0	44	0	0	0	0	0	0	0	0
07:45	35	3	3	0	0	0	0	41	0	0	0	0	0	0	0	0
H/TOT	75	7	3	0	0	0	0	85	0	0	0	0	0	0	0	0
08:00	38	4	1	0	1	0	0	44	0	0	0	0	0	0	0	0
08:15	31	3	2	2	0	0	0	38	0	0	0	0	0	0	0	0
08:30	20	3	0	3	0	0	0	26	0	0	0	0	0	0	0	0
08:45	23	4	0	1	0	0	0	28	0	0	0	0	0	0	0	0
H/TOT	112	14	3	6	1	0	0	136	0	0	0	0	0	0	0	0
09:00	20	3	1	2	0	0	0	26	1	0	0	0	0	0	0	1
09:15	14	6	1	0	0	0	0	21	0	0	0	0	0	0	0	0
H/TOT	34	9	2	2	0	0	0	47	1	0	0	0	0	0	0	1
P/TOT	221	30	8	8	1	0	0	268	1	0	0	0	0	0	0	1

	E to D								E to C							
TIME	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT
16:00	29	3	3	1	0	0	0	36	0	0	0	0	0	0	0	0
16:15	31	3	0	0	0	0	0	34	0	0	0	0	0	0	0	0
16:30	37	2	1	1	0	0	0	41	0	0	0	0	0	0	0	0
16:45	31	4	1	0	0	0	0	36	0	0	0	0	0	0	0	0
H/TOT	128	12	5	2	0	0	0	147	0	0	0	0	0	0	0	0
17:00	34	4	1	0	0	0	0	39	0	0	0	0	0	0	0	0
17:15	36	1	0	0	0	0	1	38	0	0	0	0	0	0	0	0
17:30	26	1	1	0	0	0	0	28	0	0	0	0	0	0	0	0
17:45	33	3	0	0	0	0	0	36	0	0	0	0	0	0	0	0
H/TOT	129	9	2	0	0	0	1	141	0	0	0	0	0	0	0	0
P/TOT	257	21	7	2	0	0	1	288	0	0	0	0	0	0	0	0

SITE: 5 DATE: 12/10/2022

LOCATION: A58 / A664 Manchester Rd DAY: Wednesday

	E to B								E to A							
TIME	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT
07:30	0	0	0	0	0	0	0	0	47	10	2	1	2	2	1	65
07:45	0	0	0	0	0	0	0	0	74	8	1	0	3	0	0	86
H/TOT	0	0	0	0	0	0	0	0	121	18	3	1	5	2	1	151
08:00	0	0	0	0	0	0	0	0	71	5	4	1	2	1	0	84
08:15	0	0	0	0	0	0	0	0	72	2	0	1	1	0	0	76
08:30	0	0	0	0	0	0	0	0	72	14	2	0	1	0	1	90
08:45	0	0	0	0	0	0	0	0	83	11	1	0	3	0	0	98
H/TOT	0	0	0	0	0	0	0	0	298	32	7	2	7	1	1	348
09:00	0	0	0	0	0	0	0	0	66	12	0	2	3	0	0	83
09:15	0	0	0	0	0	0	0	0	57	6	2	0	2	2	0	69
H/TOT	0	0	0	0	0	0	0	0	123	18	2	2	5	2	0	152
P/TOT	0	0	0	0	0	0	0	0	542	68	12	5	17	5	2	651

	E to B								E to A							
TIME	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT
16:00	0	0	0	0	0	0	0	0	81	9	2	0	3	0	0	95
16:15	0	0	0	0	0	0	0	0	82	11	2	0	5	1	0	101
16:30	0	0	0	0	0	0	0	0	88	11	0	1	1	0	0	101
16:45	0	0	0	0	0	0	0	0	74	8	0	0	2	0	0	84
H/TOT	0	0	0	0	0	0	0	0	325	39	4	1	11	1	0	381
17:00	0	0	0	0	0	0	0	0	68	12	1	1	1	0	0	83
17:15	0	0	0	0	0	0	0	0	94	3	0	0	2	0	0	99
17:30	0	0	0	0	0	0	0	0	87	12	0	0	1	0	0	100
17:45	0	0	0	0	0	0	0	0	78	6	0	0	0	0	0	84
H/TOT	0	0	0	0	0	0	0	0	327	33	1	1	4	0	0	366
P/TOT	0	0	0	0	0	0	0	0	652	72	5	2	15	1	0	747

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LOCATION: A58 / A664 Manchester Rd DAY: Wednesday

	E to F								E to E							
TIME	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT
07:30	5	0	0	0	0	0	0	5	0	0	0	0	0	0	0	0
07:45	4	1	0	0	0	0	0	5	0	0	0	0	0	0	0	0
H/TOT	9	1	0	0	0	0	0	10	0	0	0	0	0	0	0	0
08:00	8	1	0	0	0	0	0	9	0	0	0	0	0	0	0	0
08:15	6	1	1	0	0	0	0	8	0	0	0	0	0	0	0	0
08:30	9	0	0	0	0	0	0	9	0	0	0	0	0	0	0	0
08:45	4	0	0	0	0	0	0	4	0	0	0	0	0	0	0	0
H/TOT	27	2	1	0	0	0	0	30	0	0	0	0	0	0	0	0
09:00	8	0	0	0	0	0	0	8	0	0	0	0	0	0	0	0
09:15	9	1	0	0	0	0	0	10	0	0	0	0	0	0	0	0
H/TOT	17	1	0	0	0	0	0	18	0	0	0	0	0	0	0	0
P/TOT	53	4	1	0	0	0	0	58	0	0	0	0	0	0	0	0

	E to F								E to E							
TIME	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT
16:00	6	0	0	0	0	0	0	6	0	0	0	0	0	0	0	0
16:15	11	0	0	0	0	0	0	11	0	0	0	0	0	0	0	0
16:30	4	1	0	0	0	0	0	5	0	0	0	0	0	0	0	0
16:45	11	2	0	1	0	0	0	14	0	0	0	0	0	0	0	0
H/TOT	32	3	0	1	0	0	0	36	0	0	0	0	0	0	0	0
17:00	10	2	0	0	0	0	0	12	0	0	0	0	0	0	0	0
17:15	15	0	0	0	0	0	1	16	0	0	0	0	0	0	0	0
17:30	6	1	0	0	0	0	0	7	0	0	0	0	0	0	0	0
17:45	9	0	1	0	0	0	0	10	0	0	0	0	0	0	0	0
H/TOT	40	3	1	0	0	0	1	45	0	0	0	0	0	0	0	0
P/TOT	72	6	1	1	0	0	1	81	0	0	0	0	0	0	0	0

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LOCATION: A58 / A664 Manchester Rd DAY: Wednesday

	F to E								F to D							
TIME	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT
07:30	5	1	1	0	0	0	0	7	10	1	0	0	0	0	0	11
07:45	2	1	1	0	0	0	0	4	12	0	0	0	0	0	0	12
H/TOT	7	2	2	0	0	0	0	11	22	1	0	0	0	0	0	23
08:00	5	1	0	0	0	0	0	6	9	1	0	1	0	0	0	11
08:15	2	1	0	0	0	0	0	3	18	3	1	1	0	0	0	23
08:30	3	2	0	0	0	0	0	5	7	1	1	2	0	0	0	11
08:45	3	0	0	0	0	0	0	3	5	2	0	0	0	0	0	7
H/TOT	13	4	0	0	0	0	0	17	39	7	2	4	0	0	0	52
09:00	8	2	0	0	0	0	0	10	13	0	2	0	0	0	0	15
09:15	3	1	0	0	0	0	0	4	13	1	0	0	0	0	0	14
H/TOT	11	3	0	0	0	0	0	14	26	1	2	0	0	0	0	29
P/TOT	31	9	2	0	0	0	0	42	87	9	4	4	0	0	0	104

	F to E								F to D							
TIME	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT
16:00	7	2	0	0	0	0	0	9	10	3	0	0	0	1	0	14
16:15	7	2	0	0	0	0	0	9	23	3	0	2	0	0	0	28
16:30	9	1	0	0	0	0	0	10	19	3	0	0	0	1	0	23
16:45	6	0	0	0	0	0	0	6	12	0	0	0	0	0	0	12
H/TOT	29	5	0	0	0	0	0	34	64	9	0	2	0	2	0	77
17:00	12	1	0	0	0	0	0	13	28	3	0	0	0	0	0	31
17:15	11	1	1	0	0	0	0	13	18	1	0	1	0	0	0	20
17:30	7	0	0	0	0	0	0	7	20	0	0	0	0	0	0	20
17:45	5	0	0	0	0	0	0	5	12	0	0	0	0	0	0	12
H/TOT	35	2	1	0	0	0	0	38	78	4	0	1	0	0	0	83
P/TOT	64	7	1	0	0	0	0	72	142	13	0	3	0	2	0	160

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	F to C								F to B							
TIME	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT
07:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
H/TOT	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
H/TOT	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
09:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
09:15	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1
H/TOT	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1
P/TOT	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1

	F to C								F to B							
TIME	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT
16:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
16:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
16:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
16:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
H/TOT	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
17:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
17:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
17:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
17:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
H/TOT	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
P/TOT	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

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	F to A								F to F							
TIME	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT
07:30	22	7	1	0	0	0	0	30	0	0	0	0	0	0	0	0
07:45	21	6	2	0	0	0	0	29	0	0	0	0	0	0	0	0
H/TOT	43	13	3	0	0	0	0	59	0	0	0	0	0	0	0	0
08:00	29	9	2	0	0	0	0	40	0	0	0	0	0	0	0	0
08:15	18	6	2	1	0	0	0	27	0	0	0	0	0	0	0	0
08:30	29	4	5	1	0	0	0	39	0	0	0	0	0	0	0	0
08:45	23	3	3	0	0	0	0	29	0	0	0	0	0	0	0	0
H/TOT	99	22	12	2	0	0	0	135	0	0	0	0	0	0	0	0
09:00	28	6	3	1	0	0	0	38	0	0	0	0	0	0	0	0
09:15	35	6	3	2	0	0	0	46	0	0	0	0	0	0	0	0
H/TOT	63	12	6	3	0	0	0	84	0	0	0	0	0	0	0	0
P/TOT	205	47	21	5	0	0	0	278	0	0	0	0	0	0	0	0

	F to A								F to F							
TIME	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT
16:00	40	6	0	0	0	0	0	46	0	0	0	0	0	0	0	0
16:15	63	6	0	0	0	0	0	69	0	0	0	0	0	0	0	0
16:30	49	6	1	0	0	0	0	56	0	0	0	0	0	0	0	0
16:45	39	5	0	1	0	0	0	45	0	0	0	0	0	0	0	0
H/TOT	191	23	1	1	0	0	0	216	0	0	0	0	0	0	0	0
17:00	59	7	0	0	0	0	0	66	0	0	0	0	0	0	0	0
17:15	46	7	1	0	0	1	0	55	0	0	0	0	0	0	0	0
17:30	58	4	0	0	0	0	0	62	0	0	0	0	0	0	0	0
17:45	50	5	0	0	0	0	0	55	0	0	0	0	0	0	0	0
H/TOT	213	23	1	0	0	1	0	238	0	0	0	0	0	0	0	0
P/TOT	404	46	2	1	0	1	0	454	0	0	0	0	0	0	0	0

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	TO ARM A								FROM ARM A							
TIME	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT
07:30	184	28	11	1	4	3	2	233	254	57	11	4	3	1	0	330
07:45	206	35	7	0	6	0	0	254	277	45	11	2	4	1	1	341
H/TOT	390	63	18	1	10	3	2	487	531	102	22	6	7	2	1	671
08:00	280	34	23	3	3	3	0	346	278	33	6	6	4	1	0	328
08:15	290	31	9	2	2	0	0	334	263	23	5	1	3	3	0	298
08:30	326	30	12	1	2	0	1	372	204	39	12	3	7	1	1	267
08:45	208	28	11	0	5	0	0	252	203	28	7	2	3	3	0	246
H/TOT	1104	123	55	6	12	3	1	1304	948	123	30	12	17	8	1	1139
09:00	175	33	8	5	3	0	1	225	230	29	11	1	4	0	0	275
09:15	188	29	11	6	5	2	0	241	201	31	8	5	4	1	0	250
H/TOT	363	62	19	11	8	2	1	466	431	60	19	6	8	1	0	525
P/TOT	1857	248	92	18	30	8	4	2257	1910	285	71	24	32	11	2	2335

	TO ARM A								FROM ARM A							
TIME	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT
16:00	237	39	6	0	6	2	0	290	244	30	6	2	4	0	1	287
16:15	282	29	4	3	5	1	0	324	237	23	6	2	4	2	0	274
16:30	264	36	3	1	2	0	0	306	224	16	4	2	3	1	0	250
16:45	213	31	1	1	5	0	3	254	256	24	4	1	4	1	0	290
H/TOT	996	135	14	5	18	3	3	1174	961	93	20	7	15	4	1	1101
17:00	256	34	1	1	2	0	0	294	244	21	5	4	0	3	1	278
17:15	296	19	2	0	2	1	0	320	286	18	4	0	3	1	0	312
17:30	261	28	0	0	3	1	0	293	276	18	3	0	3	2	0	302
17:45	269	19	2	0	0	0	0	290	252	18	1	2	1	1	0	275
H/TOT	1082	100	5	1	7	2	0	1197	1058	75	13	6	7	7	1	1167
P/TOT	2078	235	19	6	25	5	3	2371	2019	168	33	13	22	11	2	2268

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	TO ARM B								FROM ARM B							
TIME	**CAR**	**LGV**	**OGV1**	**OGV2**	**PSV**	**MCL**	**PCL**	**TOT**	**CAR**	**LGV**	**OGV1**	**OGV2**	**PSV**	**MCL**	**PCL**	**TOT**
07:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:45	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1
H/TOT	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1
08:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:45	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1
H/TOT	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1
09:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
09:15	1	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0
H/TOT	1	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0
P/TOT	1	0	0	0	0	0	0	1	1	1	0	0	0	0	0	2

	TO ARM B								FROM ARM B							
TIME	**CAR**	**LGV**	**OGV1**	**OGV2**	**PSV**	**MCL**	**PCL**	**TOT**	**CAR**	**LGV**	**OGV1**	**OGV2**	**PSV**	**MCL**	**PCL**	**TOT**
16:00	1	0	0	0	0	0	0	1	1	0	0	0	0	0	0	1
16:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
16:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
16:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
H/TOT	1	0	0	0	0	0	0	1	1	0	0	0	0	0	0	1
17:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
17:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
17:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
17:45	1	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0
H/TOT	1	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0
P/TOT	2	0	0	0	0	0	0	2	1	0	0	0	0	0	0	1

SITE: 5 DATE: 12/10/2022

LOCATION: A58 / A664 Manchester Rd DAY: Wednesday

	TO ARM C								FROM ARM C							
TIME	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT
07:30	1	0	0	0	0	0	0	1	1	0	1	0	0	0	0	2
07:45	0	1	0	0	0	0	0	1	0	0	0	0	0	0	0	0
H/TOT	1	1	0	0	0	0	0	2	1	0	1	0	0	0	0	2
08:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:15	1	0	0	0	0	0	0	1	1	0	0	0	0	0	0	1
08:30	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1
08:45	0	1	0	0	0	0	0	1	0	0	0	0	0	0	0	0
H/TOT	1	1	0	0	0	0	0	2	2	0	0	0	0	0	0	2
09:00	2	0	0	0	0	0	0	2	1	1	0	0	0	0	0	2
09:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
H/TOT	2	0	0	0	0	0	0	2	1	1	0	0	0	0	0	2
P/TOT	4	2	0	0	0	0	0	6	4	1	1	0	0	0	0	6

	TO ARM C								FROM ARM C							
TIME	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT
16:00	1	0	0	0	0	0	0	1	1	0	0	0	0	0	0	1
16:15	1	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0
16:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
16:45	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1
H/TOT	2	0	0	0	0	0	0	2	1	1	0	0	0	0	0	2
17:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
17:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
17:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
17:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
H/TOT	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
P/TOT	2	0	0	0	0	0	0	2	1	1	0	0	0	0	0	2

SITE: 5 DATE: 12/10/2022

LOCATION: A58 / A664 Manchester Rd DAY: Wednesday

	TO ARM D								FROM ARM D							
TIME	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT
07:30	202	38	7	2	1	1	0	251	134	18	10	0	2	1	1	166
07:45	209	30	10	1	1	1	1	253	142	31	8	0	3	1	0	185
H/TOT	411	68	17	3	2	2	1	504	276	49	18	0	5	2	1	351
08:00	236	21	3	3	3	0	0	266	210	26	19	2	1	2	0	260
08:15	225	20	6	3	0	2	0	256	234	24	9	0	1	0	0	268
08:30	128	24	10	6	4	1	1	174	268	13	5	0	1	0	0	287
08:45	120	18	4	2	1	1	0	146	132	19	9	2	2	0	0	164
H/TOT	709	83	23	14	8	4	1	842	844	82	42	4	5	2	0	979
09:00	140	18	10	3	2	0	0	173	113	15	6	2	0	0	1	137
09:15	117	27	7	1	2	1	0	155	118	19	7	5	3	0	0	152
H/TOT	257	45	17	4	4	1	0	328	231	34	13	7	3	0	1	289
P/TOT	1377	196	57	21	14	7	2	1674	1351	165	73	11	13	4	2	1619

	TO ARM D								FROM ARM D							
TIME	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT
16:00	157	17	7	3	3	1	1	189	146	32	5	0	3	2	0	188
16:15	177	16	3	2	2	1	0	201	181	16	2	3	0	0	0	202
16:30	163	10	2	2	1	2	0	180	152	26	4	0	1	0	1	184
16:45	170	16	5	0	3	0	0	194	138	22	5	0	3	0	3	171
H/TOT	667	59	17	7	9	4	1	764	617	96	16	3	7	2	4	745
17:00	173	15	4	2	0	2	1	197	163	17	1	0	1	0	0	182
17:15	202	13	3	1	2	0	1	222	196	11	3	1	0	0	0	211
17:30	183	10	4	0	1	2	0	200	143	17	0	0	2	1	0	163
17:45	158	11	1	1	0	1	0	172	186	12	3	0	0	0	0	201
H/TOT	716	49	12	4	3	5	2	791	688	57	7	1	3	1	0	757
P/TOT	1383	108	29	11	12	9	3	1555	1305	153	23	4	10	3	4	1502

SITE: 5 DATE: 12/10/2022

LOCATION: A58 / A664 Manchester Rd DAY: Wednesday

	TO ARM E								FROM ARM E							
TIME	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT
07:30	97	19	7	1	2	0	0	126	92	14	2	1	2	2	1	114
07:45	107	21	6	0	3	0	0	137	113	12	4	0	3	0	0	132
H/TOT	204	40	13	1	5	0	0	263	205	26	6	1	5	2	1	246
08:00	90	15	4	4	2	1	0	116	117	10	5	1	3	1	0	137
08:15	73	6	2	0	3	1	0	85	109	6	3	3	1	0	0	122
08:30	104	16	2	1	3	0	0	126	101	17	2	3	1	0	1	125
08:45	87	15	1	1	2	2	0	108	110	15	1	1	3	0	0	130
H/TOT	354	52	9	6	10	4	0	435	437	48	11	8	8	1	1	514
09:00	93	8	2	0	2	0	0	105	95	15	1	4	3	0	0	118
09:15	82	9	3	4	2	0	0	100	80	13	3	0	2	2	0	100
H/TOT	175	17	5	4	4	0	0	205	175	28	4	4	5	2	0	218
P/TOT	733	109	27	11	19	4	0	903	817	102	21	13	18	5	2	978

	TO ARM E								FROM ARM E							
TIME	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT
16:00	97	16	1	0	1	0	0	115	116	12	5	1	3	0	0	137
16:15	106	16	1	1	2	0	0	126	124	14	2	0	5	1	0	146
16:30	97	9	3	1	2	0	0	112	129	14	1	2	1	0	0	147
16:45	99	10	1	0	1	0	0	111	116	14	1	1	2	0	0	134
H/TOT	399	51	6	2	6	0	0	464	485	54	9	4	11	1	0	564
17:00	109	11	3	0	0	1	0	124	112	18	2	1	1	0	0	134
17:15	115	4	2	0	1	1	0	123	145	4	0	0	2	0	2	153
17:30	96	9	0	0	2	0	0	107	119	14	1	0	1	0	0	135
17:45	103	7	0	0	1	0	0	111	120	9	1	0	0	0	0	130
H/TOT	423	31	5	0	4	2	0	465	496	45	4	1	4	0	2	552
P/TOT	822	82	11	2	10	2	0	929	981	99	13	5	15	1	2	1116

SITE: 5 DATE: 12/10/2022

LOCATION: A58 / A664 Manchester Rd DAY: Wednesday

	TO ARM F								FROM ARM F							
TIME	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT
07:30	34	13	1	1	0	0	0	49	37	9	2	0	0	0	0	48
07:45	45	9	3	1	0	1	0	59	35	7	3	0	0	0	0	45
H/TOT	79	22	4	2	0	1	0	108	72	16	5	0	0	0	0	93
08:00	42	10	2	0	0	0	0	54	43	11	2	1	0	0	0	57
08:15	56	6	3	1	0	0	0	66	38	10	3	2	0	0	0	53
08:30	55	6	1	1	0	0	0	63	39	7	6	3	0	0	0	55
08:45	62	5	4	2	0	0	0	73	31	5	3	0	0	0	0	39
H/TOT	215	27	10	4	0	0	0	256	151	33	14	6	0	0	0	204
09:00	78	9	3	0	0	0	0	90	49	8	5	1	0	0	0	63
09:15	63	6	0	1	0	0	0	70	52	8	3	2	0	0	0	65
H/TOT	141	15	3	1	0	0	0	160	101	16	8	3	0	0	0	128
P/TOT	435	64	17	7	0	1	0	524	324	65	27	9	0	0	0	425

	TO ARM F								FROM ARM F							
TIME	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT
16:00	72	13	2	0	0	0	0	87	57	11	0	0	0	1	0	69
16:15	69	3	2	1	0	1	0	76	93	11	0	2	0	0	0	106
16:30	58	11	2	0	0	0	1	72	77	10	1	0	0	1	0	89
16:45	85	9	3	2	0	1	0	100	57	5	0	1	0	0	0	63
H/TOT	284	36	9	3	0	2	1	335	284	37	1	3	0	2	0	327
17:00	80	7	0	2	0	0	0	89	99	11	0	0	0	0	0	110
17:15	89	6	2	1	0	0	1	99	75	9	2	1	0	1	0	88
17:30	83	6	0	0	0	0	0	89	85	4	0	0	0	0	0	89
17:45	94	7	2	1	0	0	0	104	67	5	0	0	0	0	0	72
H/TOT	346	26	4	4	0	0	1	381	326	29	2	1	0	1	0	359
P/TOT	630	62	13	7	0	2	2	716	610	66	3	4	0	3	0	686

13307 / STAKEHILL
OCTOBER 2022
CLASSIFIED TURNING COUNT

SITE: 5 DATE: 12/10/2022

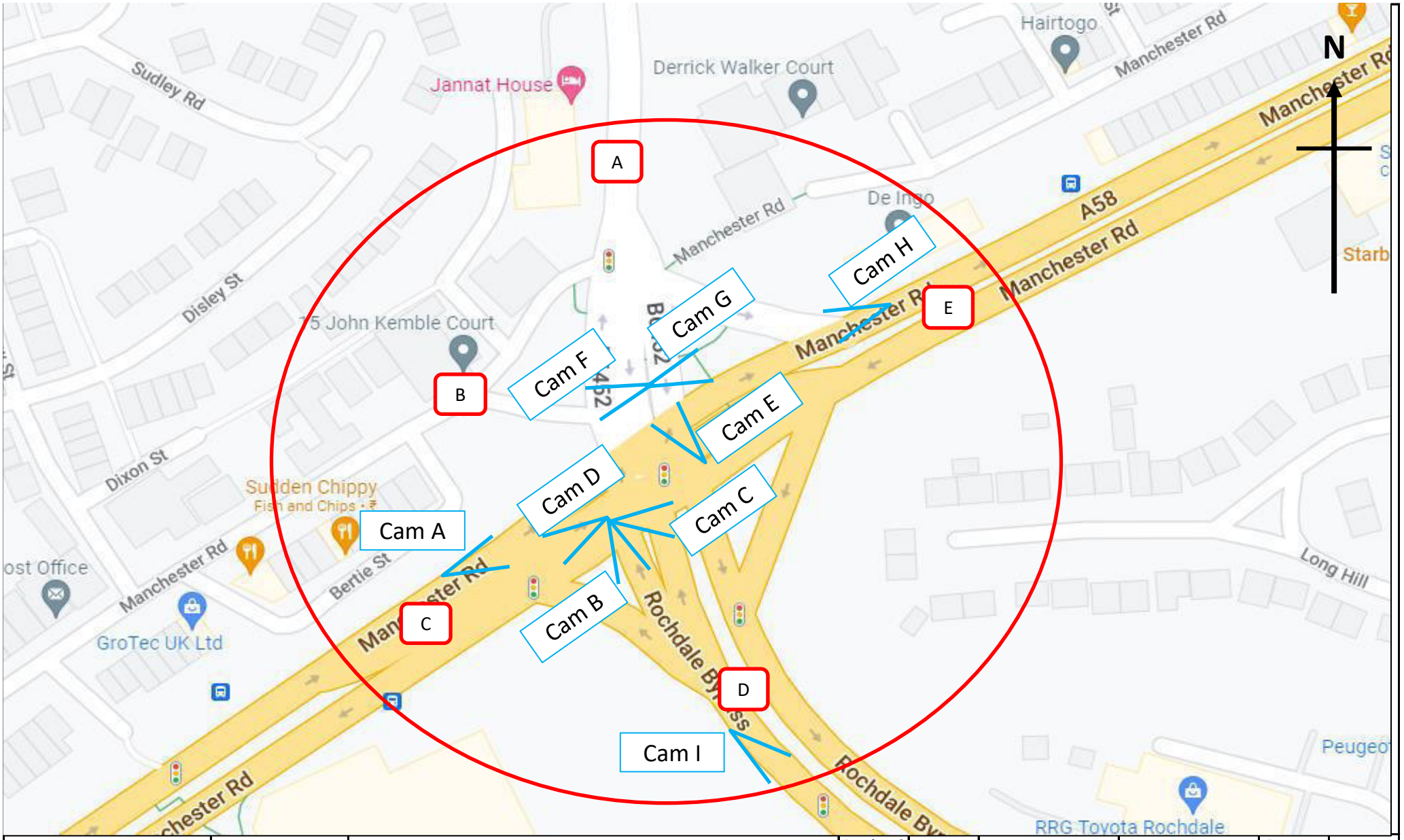
LOCATION: A58 / A664 Manchester Rd DAY: Wednesday

	JUNCTION TOTAL							
TIME	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT
07:30	518	98	26	5	7	4	2	660
07:45	567	96	26	2	10	2	1	704
H/TOT	1085	194	52	7	17	6	3	1364
08:00	648	80	32	10	8	4	0	782
08:15	645	63	20	6	5	3	0	742
08:30	613	76	25	9	9	1	2	735
08:45	477	67	20	5	8	3	0	580
H/TOT	2383	286	97	30	30	11	2	2839
09:00	488	68	23	8	7	0	1	595
09:15	451	71	21	12	9	3	0	567
H/TOT	939	139	44	20	16	3	1	1162
P/TOT	4407	619	193	57	63	20	6	5365

PEAK HOUR CALCULATION	TOT
07:30 to 08:30	2888
07:45 to 08:45	**2963**
08:00 to 09:00	2839
08:15 to 09:15	2652
08:30 to 09:30	2477
AM PEAK VALUE	**2963**

	JUNCTION TOTAL							
TIME	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT
16:00	565	85	16	3	10	3	1	683
16:15	635	64	10	7	9	3	0	728
16:30	582	66	10	4	5	2	1	670
16:45	567	66	10	3	9	1	3	659
H/TOT	2349	281	46	17	33	9	5	2740
17:00	618	67	8	5	2	3	1	704
17:15	702	42	9	2	5	2	2	764
17:30	623	53	4	0	6	3	0	689
17:45	625	44	5	2	1	1	0	678
H/TOT	2568	206	26	9	14	9	3	2835
P/TOT	4917	487	72	26	47	18	8	5575

PEAK HOUR CALCULATION	TOT
16:00 to 17:00	2740
16:15 to 17:15	2761
16:30 to 17:30	2797
16:45 to 17:45	2816
17:00 to 18:00	**2835**
PM PEAK VALUE	**2835**



NDC NATIONWIDE DATA COLLECTION	**Site / Location:**	Site 6, A58 Manchester Rd / Rochdale Bypass	**Project No:**	13307	**Drawing No:**	13307-06	**Drawn By:** EA
	Survey Date:	Wednesday 12th October 2022	**Project Name:**	Stakehill			
	Survey Times:	07:30 to 09:30 and 16:00 to 18:00	**Drawing Title:**	Site Layout and Observed Movements			

SITE: 6 DATE: 12/10/2022

LOCATION: A58 Manchester Rd / Rochdale Bypass DAY: Wednesday

	A to E								A to D							
TIME	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT
07:30	11	4	0	0	0	0	0	15	105	16	3	0	0	0	0	124
07:45	16	2	0	0	0	0	0	18	110	10	7	1	1	0	0	129
H/TOT	27	6	0	0	0	0	0	33	215	26	10	1	1	0	0	253
08:00	14	2	1	0	0	0	0	17	95	14	0	0	0	0	0	109
08:15	17	2	1	0	0	0	0	20	77	1	5	0	0	0	0	83
08:30	23	6	0	0	0	0	0	29	82	8	1	0	0	0	1	92
08:45	41	1	1	0	0	1	0	44	76	6	1	0	1	0	0	84
H/TOT	95	11	3	0	0	1	0	110	330	29	7	0	1	0	1	368
09:00	28	2	0	0	0	0	0	30	91	12	3	1	0	0	0	107
09:15	16	5	0	0	0	0	0	21	60	8	7	0	0	0	0	75
H/TOT	44	7	0	0	0	0	0	51	151	20	10	1	0	0	0	182
P/TOT	166	24	3	0	0	1	0	194	696	75	27	2	2	0	1	803

	A to E								A to D							
TIME	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT
16:00	33	2	0	0	0	0	0	35	68	9	2	0	1	0	0	80
16:15	17	1	0	0	0	0	0	18	79	9	1	0	0	1	0	90
16:30	19	1	0	0	0	0	0	20	75	7	2	0	0	1	0	85
16:45	24	1	1	0	0	0	0	26	82	11	2	0	0	1	0	96
H/TOT	93	5	1	0	0	0	0	99	304	36	7	0	1	3	0	351
17:00	13	0	1	0	0	0	0	14	64	6	1	1	0	1	1	74
17:15	13	2	0	0	0	0	0	15	71	4	0	0	0	0	0	75
17:30	13	2	0	0	0	0	0	15	60	4	1	0	0	0	0	65
17:45	17	1	0	0	0	0	0	18	72	8	0	0	0	0	0	80
H/TOT	56	5	1	0	0	0	0	62	267	22	2	1	0	1	1	294
P/TOT	149	10	2	0	0	0	0	161	571	58	9	1	1	4	1	645

SITE: 6 DATE: 12/10/2022

LOCATION: A58 Manchester Rd / Rochdale Bypass DAY: Wednesday

	A to C								A to B							
TIME	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT
07:30	36	6	2	0	1	0	0	45	2	0	0	0	0	0	0	2
07:45	46	2	2	0	0	0	0	50	2	0	0	0	0	0	0	2
H/TOT	82	8	4	0	1	0	0	95	4	0	0	0	0	0	0	4
08:00	52	7	0	0	0	0	0	59	1	0	0	0	0	0	0	1
08:15	50	3	0	0	1	0	0	54	3	0	0	0	0	0	0	3
08:30	29	4	2	0	0	0	0	35	2	0	0	0	0	0	0	2
08:45	52	4	2	0	0	0	0	58	3	0	0	0	0	0	0	3
H/TOT	183	18	4	0	1	0	0	206	9	0	0	0	0	0	0	9
09:00	42	2	0	0	0	0	0	44	4	0	0	0	0	0	0	4
09:15	30	2	1	0	0	0	0	33	0	0	1	0	0	0	0	1
H/TOT	72	4	1	0	0	0	0	77	4	0	1	0	0	0	0	5
P/TOT	337	30	9	0	2	0	0	378	17	0	1	0	0	0	0	18

	A to C								A to B							
TIME	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT
16:00	29	7	0	0	0	0	0	36	6	0	0	0	0	0	0	6
16:15	44	1	1	0	0	0	0	46	3	2	0	0	0	0	0	5
16:30	26	2	2	0	0	0	0	30	2	0	0	0	0	0	0	2
16:45	30	4	0	0	0	1	0	35	2	0	0	0	0	0	0	2
H/TOT	129	14	3	0	0	1	0	147	13	2	0	0	0	0	0	15
17:00	36	4	2	0	0	0	0	42	2	0	0	0	0	0	0	2
17:15	44	3	0	0	0	0	0	47	2	0	0	0	0	0	0	2
17:30	32	3	1	0	0	0	0	36	0	0	0	0	0	0	0	0
17:45	39	2	0	0	0	0	0	41	1	0	0	0	0	0	0	1
H/TOT	151	12	3	0	0	0	0	166	5	0	0	0	0	0	0	5
P/TOT	280	26	6	0	0	1	0	313	18	2	0	0	0	0	0	20

SITE: 6 DATE: 12/10/2022

LOCATION: A58 Manchester Rd / Rochdale Bypass DAY: Wednesday

TIME	A to A CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT
07:30	0	0	0	0	0	0	0	0
07:45	0	0	0	0	0	0	0	0
H/TOT	0	0	0	0	0	0	0	0
08:00	0	0	0	0	0	0	0	0
08:15	0	0	0	0	0	0	0	0
08:30	0	0	0	0	0	0	0	0
08:45	0	0	0	0	0	0	0	0
H/TOT	0	0	0	0	0	0	0	0
09:00	0	0	0	0	0	0	0	0
09:15	0	0	0	0	0	0	0	0
H/TOT	0	0	0	0	0	0	0	0
P/TOT	0	0	0	0	0	0	0	0

TIME	A to A CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT
16:00	0	0	0	0	0	0	0	0
16:15	0	0	0	0	0	0	0	0
16:30	0	0	0	0	0	0	0	0
16:45	0	0	0	0	0	0	0	0
H/TOT	0	0	0	0	0	0	0	0
17:00	0	0	0	0	0	0	0	0
17:15	0	0	0	0	0	0	0	0
17:30	0	0	0	0	0	0	0	0
17:45	0	0	0	0	0	0	0	0
H/TOT	0	0	0	0	0	0	0	0
P/TOT	0	0	0	0	0	0	0	0

SITE: 6 DATE: 12/10/2022

LOCATION: A58 Manchester Rd / Rochdale Bypass DAY: Wednesday

	B to A								B to E							
TIME	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT
07:30	6	1	0	0	0	0	0	7	3	0	0	0	0	0	0	3
07:45	5	0	0	0	0	0	0	5	3	1	0	0	0	0	0	4
H/TOT	11	1	0	0	0	0	0	12	6	1	0	0	0	0	0	7
08:00	8	1	0	0	0	0	0	9	4	0	0	0	0	0	0	4
08:15	3	0	0	0	0	0	0	3	8	0	0	0	0	0	0	8
08:30	1	0	0	0	0	0	0	1	7	0	0	0	0	0	0	7
08:45	1	0	0	0	0	0	0	1	9	1	0	0	0	0	0	10
H/TOT	13	1	0	0	0	0	0	14	28	1	0	0	0	0	0	29
09:00	4	0	0	0	0	0	0	4	8	0	0	0	0	0	0	8
09:15	2	0	1	0	0	0	0	3	2	1	1	0	0	0	0	4
H/TOT	6	0	1	0	0	0	0	7	10	1	1	0	0	0	0	12
P/TOT	30	2	1	0	0	0	0	33	44	3	1	0	0	0	0	48

	B to A								B to E							
TIME	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT
16:00	4	0	0	0	0	1	0	5	2	2	0	0	0	0	0	4
16:15	4	0	0	0	0	0	0	4	7	0	0	0	0	0	0	7
16:30	3	1	0	0	0	0	0	4	6	2	0	0	0	0	0	8
16:45	1	0	0	0	0	0	0	1	8	0	0	0	0	0	0	8
H/TOT	12	1	0	0	0	1	0	14	23	4	0	0	0	0	0	27
17:00	2	0	0	0	0	0	0	2	3	0	0	0	0	0	0	3
17:15	4	0	0	0	0	0	0	4	7	0	0	0	0	0	0	7
17:30	3	1	0	0	0	0	0	4	2	1	0	0	0	0	0	3
17:45	4	0	0	0	0	0	0	4	7	2	0	0	0	0	0	9
H/TOT	13	1	0	0	0	0	0	14	19	3	0	0	0	0	0	22
P/TOT	25	2	0	0	0	1	0	28	42	7	0	0	0	0	0	49

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LOCATION: A58 Manchester Rd / Rochdale Bypass DAY: Wednesday

	B to D								B to C							
TIME	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT
07:30	6	0	0	0	0	0	0	6	6	0	0	0	0	0	0	6
07:45	5	0	0	0	0	0	0	5	6	2	0	0	0	0	0	8
H/TOT	11	0	0	0	0	0	0	11	12	2	0	0	0	0	0	14
08:00	1	0	0	0	0	0	0	1	9	1	1	0	0	0	0	11
08:15	2	1	0	0	1	0	0	4	7	0	0	0	0	0	0	7
08:30	1	0	1	0	0	0	0	2	10	1	1	0	0	0	0	12
08:45	3	0	0	0	0	0	0	3	14	0	0	0	0	0	0	14
H/TOT	7	1	1	0	1	0	0	10	40	2	2	0	0	0	0	44
09:00	2	0	0	0	0	0	0	2	11	1	0	0	0	0	0	12
09:15	3	1	0	0	0	0	0	4	6	0	0	0	0	0	0	6
H/TOT	5	1	0	0	0	0	0	6	17	1	0	0	0	0	0	18
P/TOT	23	2	1	0	1	0	0	27	69	5	2	0	0	0	0	76

	B to D								B to C							
TIME	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT
16:00	2	0	0	0	0	0	0	2	5	4	0	0	0	0	0	9
16:15	5	0	0	0	0	0	0	5	6	1	0	0	0	0	0	7
16:30	3	0	0	0	0	0	0	3	4	0	0	0	0	0	0	4
16:45	2	0	0	0	0	0	0	2	3	2	0	0	0	0	0	5
H/TOT	12	0	0	0	0	0	0	12	18	7	0	0	0	0	0	25
17:00	1	0	0	0	0	0	0	1	5	1	0	0	0	0	0	6
17:15	5	1	0	0	0	0	0	6	3	0	0	0	0	0	0	3
17:30	3	0	0	0	0	0	0	3	2	1	0	0	0	0	0	3
17:45	3	0	0	0	0	0	0	3	9	0	0	0	0	0	0	9
H/TOT	12	1	0	0	0	0	0	13	19	2	0	0	0	0	0	21
P/TOT	24	1	0	0	0	0	0	25	37	9	0	0	0	0	0	46

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TIME	CAR	LGV	OGV1	B to B OGV2	PSV	MCL	PCL	TOT
07:30	0	0	0	0	0	0	0	0
07:45	0	0	0	0	0	0	0	0
H/TOT	0	0	0	0	0	0	0	0
08:00	0	0	0	0	0	0	0	0
08:15	0	0	0	0	0	0	0	0
08:30	0	0	0	0	0	0	0	0
08:45	0	0	0	0	0	0	0	0
H/TOT	0	0	0	0	0	0	0	0
09:00	0	0	0	0	0	0	0	0
09:15	0	0	0	0	0	0	0	0
H/TOT	0	0	0	0	0	0	0	0
P/TOT	0	0	0	0	0	0	0	0

TIME	CAR	LGV	OGV1	B to B OGV2	PSV	MCL	PCL	TOT
16:00	0	0	0	0	0	0	0	0
16:15	0	0	0	0	0	0	0	0
16:30	0	0	0	0	0	0	0	0
16:45	0	0	0	0	0	0	0	0
H/TOT	0	0	0	0	0	0	0	0
17:00	0	0	0	0	0	0	0	0
17:15	0	0	0	0	0	0	0	0
17:30	0	0	0	0	0	0	0	0
17:45	0	0	0	0	0	0	0	0
H/TOT	0	0	0	0	0	0	0	0
P/TOT	0	0	0	0	0	0	0	0

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	C to B								C to A							
TIME	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT
07:30	4	0	0	0	0	0	0	4	28	3	1	0	1	0	0	33
07:45	1	0	0	0	0	0	0	1	28	8	1	0	0	0	0	37
H/TOT	5	0	0	0	0	0	0	5	56	11	2	0	1	0	0	70
08:00	4	1	2	0	1	0	0	8	47	5	4	1	0	0	0	57
08:15	14	1	0	0	0	0	0	15	46	5	2	1	0	0	0	54
08:30	22	0	0	0	0	0	0	22	45	8	3	0	0	0	0	56
08:45	6	1	0	0	0	0	0	7	43	2	1	0	0	0	0	46
H/TOT	46	3	2	0	1	0	0	52	181	20	10	2	0	0	0	213
09:00	4	0	1	0	0	0	0	5	34	5	1	0	1	0	0	41
09:15	6	2	0	0	0	0	0	8	20	4	0	0	0	0	0	24
H/TOT	10	2	1	0	0	0	0	13	54	9	1	0	1	0	0	65
P/TOT	61	5	3	0	1	0	0	70	291	40	13	2	2	0	0	348

	C to B								C to A							
TIME	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT
16:00	8	3	1	0	0	0	0	12	40	8	2	0	0	0	0	50
16:15	11	1	0	0	0	0	0	12	45	2	2	0	1	0	0	50
16:30	8	0	0	0	0	0	0	8	25	5	1	0	1	0	0	32
16:45	6	2	0	0	0	0	0	8	41	0	0	0	0	0	0	41
H/TOT	33	6	1	0	0	0	0	40	151	15	5	0	2	0	0	173
17:00	11	3	0	0	0	0	0	14	46	5	0	0	0	0	0	51
17:15	10	2	0	0	0	1	0	13	41	4	0	0	0	0	1	46
17:30	10	0	0	0	0	0	0	10	50	4	1	0	0	0	0	55
17:45	9	2	0	0	0	0	0	11	39	5	0	0	0	0	0	44
H/TOT	40	7	0	0	0	1	0	48	176	18	1	0	0	0	1	196
P/TOT	73	13	1	0	0	1	0	88	327	33	6	0	2	0	1	369

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	C to E								C to D							
TIME	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT
07:30	106	22	7	0	4	3	1	143	41	9	3	0	0	0	0	53
07:45	141	20	5	0	4	0	0	170	30	6	1	1	0	0	1	39
H/TOT	247	42	12	0	8	3	1	313	71	15	4	1	0	0	1	92
08:00	186	19	9	2	4	3	0	223	52	7	5	0	0	0	0	64
08:15	190	17	6	0	2	0	0	215	49	11	3	1	0	0	0	64
08:30	205	16	4	0	2	0	1	228	63	11	5	1	0	0	0	80
08:45	127	20	4	0	5	0	0	156	43	9	7	0	0	0	0	59
H/TOT	708	72	23	2	13	3	1	822	207	38	20	2	0	0	0	267
09:00	110	15	2	2	2	0	1	132	32	10	2	1	0	0	0	45
09:15	123	17	9	4	4	2	0	159	47	12	4	4	0	0	0	67
H/TOT	233	32	11	6	6	2	1	291	79	22	6	5	0	0	0	112
P/TOT	1188	146	46	8	27	8	3	1426	357	75	30	8	0	0	1	471

	C to E								C to D							
TIME	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT
16:00	144	20	2	0	5	0	0	171	61	14	1	0	0	0	0	76
16:15	164	17	1	3	5	1	0	191	67	12	1	0	0	2	0	82
16:30	179	22	1	0	1	1	0	204	68	11	1	1	0	0	0	81
16:45	131	19	0	0	5	1	0	156	41	5	1	1	0	0	1	49
H/TOT	618	78	4	3	16	3	0	722	237	42	4	2	0	2	1	288
17:00	155	21	1	0	1	1	0	179	48	7	0	1	0	0	0	56
17:15	178	11	1	0	3	0	0	193	70	8	0	0	0	0	0	78
17:30	151	14	0	0	3	1	0	169	61	7	0	0	0	1	0	69
17:45	170	7	1	0	0	0	0	178	63	4	1	0	0	0	0	68
H/TOT	654	53	3	0	7	2	0	719	242	26	1	1	0	1	0	271
P/TOT	1272	131	7	3	23	5	0	1441	479	68	5	3	0	3	1	559

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TIME	C to C CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT
07:30	0	0	0	0	0	0	0	0
07:45	0	0	0	0	0	0	0	0
H/TOT	0	0	0	0	0	0	0	0
08:00	0	0	0	0	0	0	0	0
08:15	0	0	0	0	0	0	0	0
08:30	0	0	0	0	0	0	0	0
08:45	0	0	0	0	0	0	0	0
H/TOT	0	0	0	0	0	0	0	0
09:00	0	0	0	0	0	0	0	0
09:15	0	0	0	0	0	0	0	0
H/TOT	0	0	0	0	0	0	0	0
P/TOT	0	0	0	0	0	0	0	0

TIME	C to C CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT
16:00	0	0	0	0	0	0	0	0
16:15	0	0	0	0	0	0	0	0
16:30	0	0	0	0	0	0	0	0
16:45	0	0	0	0	0	0	0	0
H/TOT	0	0	0	0	0	0	0	0
17:00	0	0	0	0	0	0	0	0
17:15	0	0	0	0	0	0	0	0
17:30	0	0	0	0	0	0	0	0
17:45	0	0	0	0	0	0	0	0
H/TOT	0	0	0	0	0	0	0	0
P/TOT	0	0	0	0	0	0	0	0

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LOCATION: A58 Manchester Rd / Rochdale Bypass DAY: Wednesday

	D to C								D to B							
TIME	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT
07:30	73	22	6	2	0	1	0	104	3	1	0	0	0	0	0	4
07:45	61	18	5	2	0	0	0	86	2	0	0	0	0	0	0	2
H/TOT	134	40	11	4	0	1	0	190	5	1	0	0	0	0	0	6
08:00	63	10	1	6	0	0	0	80	1	1	0	0	0	0	0	2
08:15	60	4	3	1	0	1	0	69	4	0	0	0	0	0	0	4
08:30	59	15	4	1	1	0	1	81	5	0	0	0	0	0	0	5
08:45	51	8	2	2	0	1	0	64	4	1	0	0	0	0	0	5
H/TOT	233	37	10	10	1	2	1	294	14	2	0	0	0	0	0	16
09:00	59	14	6	0	1	0	0	80	7	0	0	0	0	0	0	7
09:15	56	8	6	5	0	0	0	75	1	0	0	0	0	0	0	1
H/TOT	115	22	12	5	1	0	0	155	8	0	0	0	0	0	0	8
P/TOT	482	99	33	19	2	3	1	639	27	3	0	0	0	0	0	30

	D to C								D to B							
TIME	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT
16:00	60	7	5	2	1	0	0	75	3	1	0	0	0	0	0	4
16:15	40	11	4	1	1	2	0	59	5	1	0	0	0	0	0	6
16:30	66	5	1	0	0	0	0	72	1	1	0	0	0	0	0	2
16:45	56	5	1	1	0	0	0	63	4	3	0	0	0	0	0	7
H/TOT	222	28	11	4	2	2	0	269	13	6	0	0	0	0	0	19
17:00	78	4	1	3	0	0	0	86	5	0	0	0	0	0	0	5
17:15	68	10	1	0	0	0	0	79	7	0	0	0	0	0	0	7
17:30	91	5	0	0	0	1	0	97	2	1	0	0	0	0	0	3
17:45	76	6	0	1	0	0	0	83	4	0	0	0	0	0	0	4
H/TOT	313	25	2	4	0	1	0	345	18	1	0	0	0	0	0	19
P/TOT	535	53	13	8	2	3	0	614	31	7	0	0	0	0	0	38

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	D to A								D to E							
TIME	**CAR**	**LGV**	**OGV1**	**OGV2**	**PSV**	**MCL**	**PCL**	**TOT**	**CAR**	**LGV**	**OGV1**	**OGV2**	**PSV**	**MCL**	**PCL**	**TOT**
07:30	80	13	3	1	0	1	0	98	189	25	5	2	0	0	0	221
07:45	86	20	3	0	0	0	0	109	163	19	6	3	0	1	0	192
H/TOT	166	33	6	1	0	1	0	207	352	44	11	5	0	1	0	413
08:00	72	10	3	1	0	0	0	86	141	21	6	1	0	0	0	169
08:15	73	9	2	2	0	0	0	86	137	12	9	5	3	1	0	167
08:30	81	12	2	4	0	0	0	99	170	20	6	3	3	0	0	202
08:45	83	14	1	1	0	0	0	99	166	29	9	6	3	1	0	214
H/TOT	309	45	8	8	0	0	0	370	614	82	30	15	9	2	0	752
09:00	67	15	6	1	0	0	0	89	160	22	10	4	2	1	0	199
09:15	65	10	2	1	0	0	0	78	145	16	10	4	3	0	0	178
H/TOT	132	25	8	2	0	0	0	167	305	38	20	8	5	1	0	377
P/TOT	607	103	22	11	0	1	0	744	1271	164	61	28	14	4	0	1542

	D to A								D to E							
TIME	**CAR**	**LGV**	**OGV1**	**OGV2**	**PSV**	**MCL**	**PCL**	**TOT**	**CAR**	**LGV**	**OGV1**	**OGV2**	**PSV**	**MCL**	**PCL**	**TOT**
16:00	85	22	4	0	0	1	0	112	152	34	4	2	4	0	0	196
16:15	85	14	1	0	0	2	0	102	145	25	5	1	3	0	0	179
16:30	84	13	3	1	0	1	0	102	157	19	2	1	2	0	0	181
16:45	91	14	5	0	0	0	0	110	173	23	2	0	3	0	0	201
H/TOT	345	63	13	1	0	4	0	426	627	101	13	4	12	0	0	757
17:00	113	13	5	0	0	0	0	131	186	18	3	3	0	0	0	210
17:15	104	6	2	0	0	0	0	112	179	19	1	3	0	0	0	202
17:30	97	13	0	0	0	0	0	110	171	15	2	1	0	0	0	189
17:45	92	12	0	0	0	0	0	104	191	15	1	1	0	0	0	208
H/TOT	406	44	7	0	0	0	0	457	727	67	7	8	0	0	0	809
P/TOT	751	107	20	1	0	4	0	883	1354	168	20	12	12	0	0	1566

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LOCATION: A58 Manchester Rd / Rochdale Bypass DAY: Wednesday

TIME	CAR	LGV	OGV1	D to D OGV2	PSV	MCL	PCL	TOT
07:30	0	0	0	0	0	0	0	0
07:45	0	0	0	0	0	0	0	0
H/TOT	0	0	0	0	0	0	0	0
08:00	0	0	0	0	0	0	0	0
08:15	0	0	0	0	0	0	0	0
08:30	0	0	0	0	0	0	0	0
08:45	0	0	0	0	0	0	0	0
H/TOT	0	0	0	0	0	0	0	0
09:00	0	0	0	0	0	0	0	0
09:15	0	0	0	0	0	0	0	0
H/TOT	0	0	0	0	0	0	0	0
P/TOT	0	0	0	0	0	0	0	0

TIME	CAR	LGV	OGV1	D to D OGV2	PSV	MCL	PCL	TOT
16:00	0	0	0	0	0	0	0	0
16:15	0	0	0	0	0	0	0	0
16:30	0	0	0	0	0	0	0	0
16:45	0	0	0	0	0	0	0	0
H/TOT	0	0	0	0	0	0	0	0
17:00	0	0	0	0	0	0	0	0
17:15	0	0	0	0	0	0	0	0
17:30	0	0	0	0	0	0	0	0
17:45	0	0	0	0	0	0	0	0
H/TOT	0	0	0	0	0	0	0	0
P/TOT	0	0	0	0	0	0	0	0

SITE: 6 DATE: 12/10/2022

LOCATION: A58 Manchester Rd / Rochdale Bypass DAY: Wednesday

	E to D								E to C							
TIME	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT
07:30	179	27	7	1	0	0	0	214	136	28	2	1	1	0	0	168
07:45	162	21	6	2	0	0	0	191	160	26	6	0	4	1	0	197
H/TOT	341	48	13	3	0	0	0	405	296	54	8	1	5	1	0	365
08:00	133	13	1	3	0	2	0	152	164	12	2	0	5	2	0	185
08:15	94	13	3	1	0	1	0	112	139	19	3	0	2	1	0	164
08:30	126	26	5	1	0	0	0	158	99	17	5	2	5	1	0	129
08:45	150	12	4	0	0	0	0	166	105	15	2	0	3	2	0	127
H/TOT	503	64	13	5	0	3	0	588	507	63	12	2	15	6	0	605
09:00	107	26	6	3	2	1	0	145	103	13	5	1	2	1	0	125
09:15	125	17	11	6	0	0	0	159	108	19	3	0	5	0	0	135
H/TOT	232	43	17	9	2	1	0	304	211	32	8	1	7	1	0	260
P/TOT	1076	155	43	17	2	4	0	1297	1014	149	28	4	27	8	0	1230

	E to D								E to C							
TIME	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT
16:00	162	24	4	0	2	0	0	192	138	9	1	0	3	0	1	152
16:15	192	15	5	1	0	0	0	213	161	13	1	1	3	1	0	180
16:30	171	20	4	4	1	0	0	200	117	7	1	2	3	0	0	130
16:45	183	20	5	2	0	2	0	212	155	11	4	0	4	0	0	174
H/TOT	708	79	18	7	3	2	0	817	571	40	7	3	13	1	1	636
17:00	166	22	6	1	0	0	0	195	134	14	2	1	0	3	1	155
17:15	201	18	2	1	0	1	0	223	173	7	2	0	3	1	0	186
17:30	178	13	2	3	1	1	0	198	143	9	2	0	3	2	0	159
17:45	156	12	2	0	1	0	0	171	130	8	2	1	2	0	0	143
H/TOT	701	65	12	5	2	2	0	787	580	38	8	2	8	6	1	643
P/TOT	1409	144	30	12	5	4	0	1604	1151	78	15	5	21	7	2	1279

SITE: 6 DATE: 12/10/2022

LOCATION: A58 Manchester Rd / Rochdale Bypass DAY: Wednesday

	E to B								E to A							
TIME	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT
07:30	2	0	0	0	0	0	0	2	12	1	0	0	0	0	0	13
07:45	3	1	0	0	0	0	0	4	11	2	0	0	0	0	0	13
H/TOT	5	1	0	0	0	0	0	6	23	3	0	0	0	0	0	26
08:00	3	0	0	0	0	0	0	3	21	3	0	0	0	0	0	24
08:15	5	0	1	0	0	0	0	6	10	1	1	0	0	0	0	12
08:30	15	0	0	0	0	0	0	15	21	3	0	0	0	0	0	24
08:45	9	1	0	0	0	0	0	10	15	1	0	0	0	1	0	17
H/TOT	32	1	1	0	0	0	0	34	67	8	1	0	0	1	0	77
09:00	3	0	0	0	0	0	0	3	12	2	0	0	0	0	0	14
09:15	3	1	0	0	0	0	0	4	7	5	1	0	0	0	0	13
H/TOT	6	1	0	0	0	0	0	7	19	7	1	0	0	0	0	27
P/TOT	43	3	1	0	0	0	0	47	109	18	2	0	0	1	0	130

	E to B								E to A							
TIME	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT
16:00	6	1	1	0	0	0	0	8	23	0	0	0	0	0	0	23
16:15	11	1	0	0	0	0	0	12	13	2	0	0	0	0	0	15
16:30	12	1	0	0	0	0	0	13	13	1	0	0	0	0	0	14
16:45	10	2	0	0	0	0	0	12	16	1	0	0	0	0	0	17
H/TOT	39	5	1	0	0	0	0	45	65	4	0	0	0	0	0	69
17:00	7	0	0	0	0	0	0	7	16	0	0	0	0	0	0	16
17:15	8	1	0	0	0	0	0	9	15	1	0	0	1	0	0	17
17:30	9	0	0	0	0	0	0	9	9	1	1	0	0	0	0	11
17:45	11	0	0	0	0	0	0	11	13	1	0	0	0	0	0	14
H/TOT	35	1	0	0	0	0	0	36	53	3	1	0	1	0	0	58
P/TOT	74	6	1	0	0	0	0	81	118	7	1	0	1	0	0	127

SITE: 6 DATE: 12/10/2022

LOCATION: A58 Manchester Rd / Rochdale Bypass DAY: Wednesday

	E to E							
TIME	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT
07:30	0	1	0	0	0	0	0	1
07:45	0	0	0	0	0	0	0	0
H/TOT	0	1	0	0	0	0	0	1
08:00	0	0	0	0	0	0	0	0
08:15	1	0	0	0	0	0	0	1
08:30	1	0	0	0	0	0	0	1
08:45	2	0	0	0	0	0	0	2
H/TOT	4	0	0	0	0	0	0	4
09:00	1	0	0	0	0	0	0	1
09:15	1	0	0	0	0	0	0	1
H/TOT	2	0	0	0	0	0	0	2
P/TOT	6	1	0	0	0	0	0	7

	E to E							
TIME	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT
16:00	0	0	0	0	0	0	0	0
16:15	0	0	0	0	0	0	0	0
16:30	0	0	0	0	0	0	0	0
16:45	0	0	0	0	0	0	0	0
H/TOT	0	0	0	0	0	0	0	0
17:00	0	0	0	0	0	0	0	0
17:15	0	0	0	0	0	0	0	0
17:30	0	0	0	0	0	0	0	0
17:45	2	0	0	0	0	0	0	2
H/TOT	2	0	0	0	0	0	0	2
P/TOT	2	0	0	0	0	0	0	2

SITE: 6 DATE: 12/10/2022

LOCATION: A58 Manchester Rd / Rochdale Bypass DAY: Wednesday

	TO ARM A								FROM ARM A							
TIME	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT
07:30	126	18	4	1	1	1	0	151	154	26	5	0	1	0	0	186
07:45	130	30	4	0	0	0	0	164	174	14	9	1	1	0	0	199
H/TOT	256	48	8	1	1	1	0	315	328	40	14	1	2	0	0	385
08:00	148	19	7	2	0	0	0	176	162	23	1	0	0	0	0	186
08:15	132	15	5	3	0	0	0	155	147	6	6	0	1	0	0	160
08:30	148	23	5	4	0	0	0	180	136	18	3	0	0	0	1	158
08:45	142	17	2	1	0	1	0	163	172	11	4	0	1	1	0	189
H/TOT	570	74	19	10	0	1	0	674	617	58	14	0	2	1	1	693
09:00	117	22	7	1	1	0	0	148	165	16	3	1	0	0	0	185
09:15	94	19	4	1	0	0	0	118	106	15	9	0	0	0	0	130
H/TOT	211	41	11	2	1	0	0	266	271	31	12	1	0	0	0	315
P/TOT	1037	163	38	13	2	2	0	1255	1216	129	40	2	4	1	1	1393

	TO ARM A								FROM ARM A							
TIME	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT
16:00	152	30	6	0	0	2	0	190	136	18	2	0	1	0	0	157
16:15	147	18	3	0	1	2	0	171	143	13	2	0	0	1	0	159
16:30	125	20	4	1	1	1	0	152	122	10	4	0	0	1	0	137
16:45	149	15	5	0	0	0	0	169	138	16	3	0	0	2	0	159
H/TOT	573	83	18	1	2	5	0	682	539	57	11	0	1	4	0	612
17:00	177	18	5	0	0	0	0	200	115	10	4	1	0	1	1	132
17:15	164	11	2	0	1	0	1	179	130	9	0	0	0	0	0	139
17:30	159	19	2	0	0	0	0	180	105	9	2	0	0	0	0	116
17:45	148	18	0	0	0	0	0	166	129	11	0	0	0	0	0	140
H/TOT	648	66	9	0	1	0	1	725	479	39	6	1	0	1	1	527
P/TOT	1221	149	27	1	3	5	1	1407	1018	96	17	1	1	5	1	1139

SITE: 6 DATE: 12/10/2022

LOCATION: A58 Manchester Rd / Rochdale Bypass DAY: Wednesday

	TO ARM B								FROM ARM B							
TIME	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT
07:30	11	1	0	0	0	0	0	128	21	1	0	0	0	0	0	22
07:45	8	1	0	0	0	0	0	130	19	3	0	0	0	0	0	22
H/TOT	19	2	0	0	0	0	0	258	40	4	0	0	0	0	0	44
08:00	9	2	2	0	1	0	0	117	22	2	1	0	0	0	0	25
08:15	26	1	1	0	0	0	0	98	20	1	0	0	1	0	0	22
08:30	44	0	0	0	0	0	0	114	19	1	2	0	0	0	0	22
08:45	22	3	0	0	0	0	0	91	27	1	0	0	0	0	0	28
H/TOT	101	6	3	0	1	0	0	420	88	5	3	0	1	0	0	97
09:00	18	0	1	0	0	0	0	112	25	1	0	0	0	0	0	26
09:15	10	3	1	0	0	0	0	83	13	2	2	0	0	0	0	17
H/TOT	28	3	2	0	0	0	0	195	38	3	2	0	0	0	0	43
P/TOT	148	11	5	0	1	0	0	873	166	12	5	0	1	0	0	184

	TO ARM B								FROM ARM B							
TIME	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT
16:00	23	5	2	0	0	0	0	92	13	6	0	0	0	1	0	20
16:15	30	5	0	0	0	0	0	102	22	1	0	0	0	0	0	23
16:30	23	2	0	0	0	0	0	93	16	3	0	0	0	0	0	19
16:45	22	7	0	0	0	0	0	104	14	2	0	0	0	0	0	16
H/TOT	98	19	2	0	0	0	0	391	65	12	0	0	0	1	0	78
17:00	25	3	0	0	0	0	0	88	11	1	0	0	0	0	0	12
17:15	27	3	0	0	0	1	0	88	19	1	0	0	0	0	0	20
17:30	21	1	0	0	0	0	0	75	10	3	0	0	0	0	0	13
17:45	25	2	0	0	0	0	0	91	23	2	0	0	0	0	0	25
H/TOT	98	9	0	0	0	1	0	342	63	7	0	0	0	0	0	70
P/TOT	196	28	2	0	0	1	0	733	128	19	0	0	0	1	0	148

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LOCATION: A58 Manchester Rd / Rochdale Bypass DAY: Wednesday

	TO ARM C								FROM ARM C							
TIME	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT
07:30	251	56	10	3	2	1	0	323	179	34	11	0	5	3	1	233
07:45	273	48	13	2	4	1	0	341	200	34	7	1	4	0	1	247
H/TOT	524	104	23	5	6	2	0	664	379	68	18	1	9	3	2	480
08:00	288	30	4	6	5	2	0	335	289	32	20	3	5	3	0	352
08:15	256	26	6	1	3	2	0	294	299	34	11	2	2	0	0	348
08:30	197	37	12	3	6	1	1	257	335	35	12	1	2	0	1	386
08:45	222	27	6	2	3	3	0	263	219	32	12	0	5	0	0	268
H/TOT	963	120	28	12	17	8	1	1149	1142	133	55	6	14	3	1	1354
09:00	215	30	11	1	3	1	0	261	180	30	6	3	3	0	1	223
09:15	200	29	10	5	5	0	0	249	196	35	13	8	4	2	0	258
H/TOT	415	59	21	6	8	1	0	510	376	65	19	11	7	2	1	481
P/TOT	1902	283	72	23	31	11	1	2323	1897	266	92	18	30	8	4	2315

	TO ARM C								FROM ARM C							
TIME	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT
16:00	232	27	6	2	4	0	1	272	253	45	6	0	5	0	0	309
16:15	251	26	6	2	4	3	0	292	287	32	4	3	6	3	0	335
16:30	213	14	4	2	3	0	0	236	280	38	3	1	2	1	0	325
16:45	244	22	5	1	4	1	0	277	219	26	1	1	5	1	1	254
H/TOT	940	89	21	7	15	4	1	1077	1039	141	14	5	18	5	1	1223
17:00	253	23	5	4	0	3	1	289	260	36	1	1	1	1	0	300
17:15	288	20	3	0	3	1	0	315	299	25	1	0	3	1	1	330
17:30	268	18	3	0	3	3	0	295	272	25	1	0	3	2	0	303
17:45	254	16	2	2	2	0	0	276	281	18	2	0	0	0	0	301
H/TOT	1063	77	13	6	8	7	1	1175	1112	104	5	1	7	4	1	1234
P/TOT	2003	166	34	13	23	11	2	2252	2151	245	19	6	25	9	2	2457

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LOCATION: A58 Manchester Rd / Rochdale Bypass DAY: Wednesday

	TO ARM D								FROM ARM D							
TIME	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT
07:30	331	52	13	1	0	0	0	0	345	61	14	5	0	2	0	427
07:45	307	37	14	4	1	0	1	0	312	57	14	5	0	1	0	389
H/TOT	638	89	27	5	1	0	1	0	657	118	28	10	0	3	0	816
08:00	281	34	6	3	0	2	0	0	277	42	10	8	0	0	0	337
08:15	222	26	11	2	1	1	0	0	274	25	14	8	3	2	0	326
08:30	272	45	12	2	0	0	1	0	315	47	12	8	4	0	1	387
08:45	272	27	12	0	1	0	0	0	304	52	12	9	3	2	0	382
H/TOT	1047	132	41	7	2	3	1	0	1170	166	48	33	10	4	1	1432
09:00	232	48	11	5	2	1	0	0	293	51	22	5	3	1	0	375
09:15	235	38	22	10	0	0	0	1	267	34	18	10	3	0	0	332
H/TOT	467	86	33	15	2	1	0	1	560	85	40	15	6	1	0	707
P/TOT	2152	307	101	27	5	4	2	1	2387	369	116	58	16	8	1	2955

	TO ARM D								FROM ARM D							
TIME	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT
16:00	293	47	7	0	3	0	0	0	300	64	13	4	5	1	0	387
16:15	343	36	7	1	0	3	0	2	275	51	10	2	4	4	0	346
16:30	317	38	7	5	1	1	0	0	308	38	6	2	2	1	0	357
16:45	308	36	8	3	0	3	1	0	324	45	8	1	3	0	0	381
H/TOT	1261	157	29	9	4	7	1	2	1207	198	37	9	14	6	0	1471
17:00	279	35	7	3	0	1	1	0	382	35	9	6	0	0	0	432
17:15	347	31	2	1	0	1	0	0	358	35	4	3	0	0	0	400
17:30	302	24	3	3	1	2	0	1	361	34	2	1	0	1	0	399
17:45	294	24	3	0	1	0	0	0	363	33	1	2	0	0	0	399
H/TOT	1222	114	15	7	2	4	1	1	1464	137	16	12	0	1	0	1630
P/TOT	2483	271	44	16	6	11	2	3	2671	335	53	21	14	7	0	3101

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LOCATION: A58 Manchester Rd / Rochdale Bypass DAY: Wednesday

	TO ARM E								FROM ARM E							
TIME	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT
07:30	309	52	12	2	4	3	1	383	329	57	9	2	1	0	0	398
07:45	323	42	11	3	4	1	0	384	336	50	12	2	4	1	0	405
H/TOT	632	94	23	5	8	4	1	767	665	107	21	4	5	1	0	803
08:00	345	42	16	3	4	3	0	413	321	28	3	3	5	4	0	364
08:15	353	31	16	5	5	1	0	411	249	33	8	1	2	2	0	295
08:30	406	42	10	3	5	0	1	467	262	46	10	3	5	1	0	327
08:45	345	51	14	6	8	2	0	426	281	29	6	0	3	3	0	322
H/TOT	1449	166	56	17	22	6	1	1717	1113	136	27	7	15	10	0	1308
09:00	307	39	12	6	4	1	1	370	226	41	11	4	4	2	0	288
09:15	287	39	20	8	7	2	0	363	244	42	15	6	5	0	0	312
H/TOT	594	78	32	14	11	3	1	733	470	83	26	10	9	2	0	600
P/TOT	2675	338	111	36	41	13	3	3217	2248	326	74	21	29	13	0	2711

	TO ARM E								FROM ARM E							
TIME	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT
16:00	331	58	6	2	9	0	0	406	329	34	6	0	5	0	1	375
16:15	333	43	6	4	8	1	0	395	377	31	6	2	3	1	0	420
16:30	361	44	3	1	3	1	0	413	313	29	5	6	4	0	0	357
16:45	336	43	3	0	8	1	0	391	364	34	9	2	4	2	0	415
H/TOT	1361	188	18	7	28	3	0	1605	1383	128	26	10	16	3	1	1567
17:00	357	39	5	3	1	1	0	406	323	36	8	2	0	3	1	373
17:15	377	32	2	3	3	0	0	417	397	27	4	1	4	2	0	435
17:30	337	32	2	1	3	1	0	376	339	23	5	3	4	3	0	377
17:45	387	25	2	1	0	0	0	415	312	21	4	1	3	0	0	341
H/TOT	1458	128	11	8	7	2	0	1614	1371	107	21	7	11	8	1	1526
P/TOT	2819	316	29	15	35	5	0	3219	2754	235	47	17	27	11	2	3093

SITE: 6 DATE: 12/10/2022

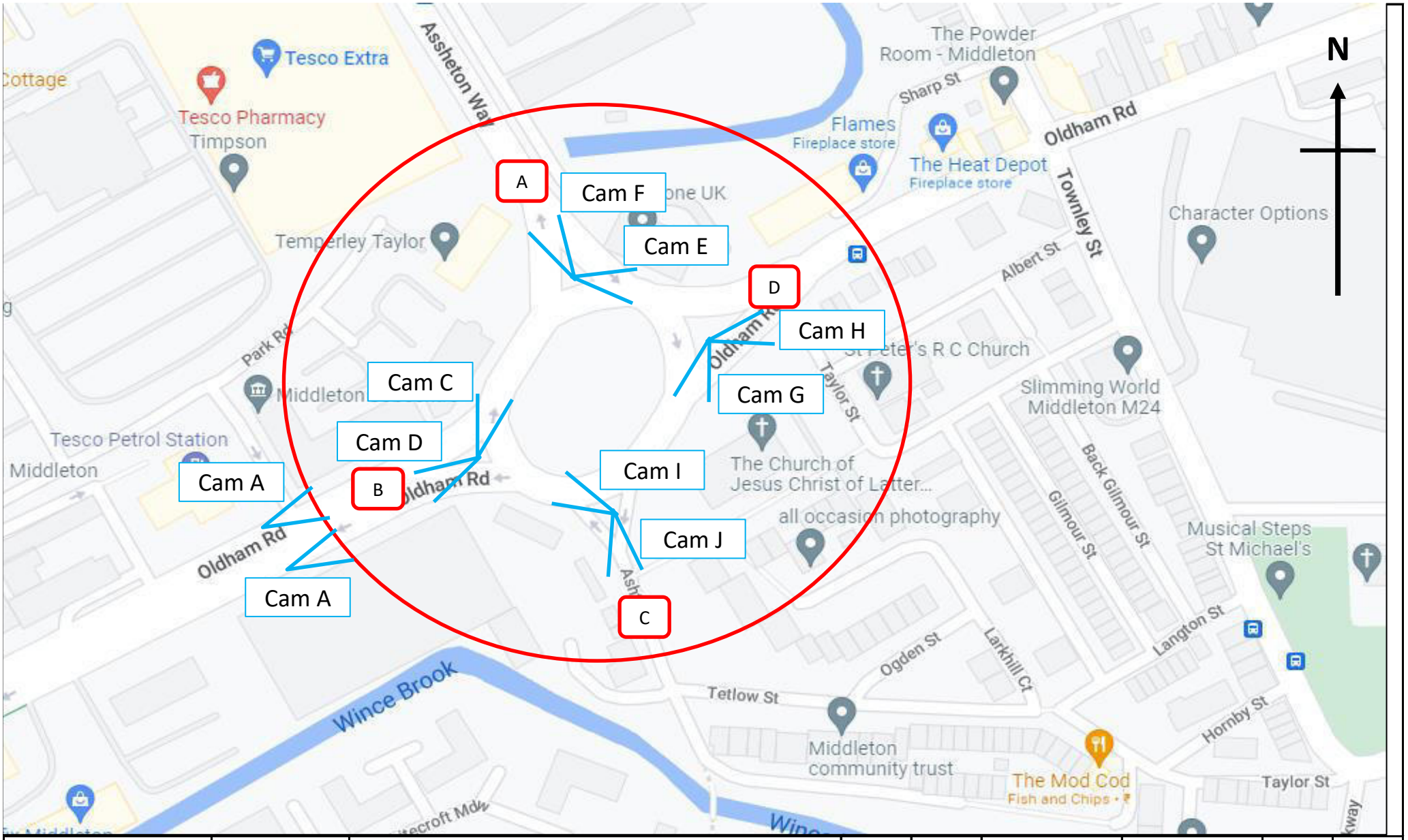
LOCATION: A58 Manchester Rd / Rochdale Bypass DAY: Wednesday

	JUNCTION TOTAL							
TIME	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT
07:30	1028	179	39	7	7	5	1	602
07:45	1041	158	42	9	9	2	1	635
H/TOT	2069	337	81	16	16	7	2	1237
08:00	1071	127	35	14	10	7	0	628
08:15	989	99	39	11	9	4	0	547
08:30	1067	147	39	12	11	1	3	551
08:45	1003	125	34	9	12	6	0	517
H/TOT	4130	498	147	46	42	18	3	2243
09:00	889	139	42	13	10	3	1	521
09:15	826	128	57	24	12	2	0	450
H/TOT	1715	267	99	37	22	5	1	971
P/TOT	7914	1102	327	99	80	30	6	4451

PEAK HOUR CALCULATION	TOT
07:30 to 08:30	**2412**
07:45 to 08:45	2361
08:00 to 09:00	2243
08:15 to 09:15	2136
08:30 to 09:30	2039
AM PEAK VALUE	**2412**

	JUNCTION TOTAL							
TIME	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT
16:00	1031	167	27	4	16	2	1	554
16:15	1104	128	22	7	13	9	0	565
16:30	1039	118	18	9	8	3	0	481
16:45	1059	123	21	4	12	5	1	550
H/TOT	4233	536	88	24	49	19	2	2150
17:00	1091	118	22	10	1	5	2	577
17:15	1203	97	9	4	7	3	1	582
17:30	1087	94	10	4	7	6	0	550
17:45	1108	85	7	3	3	0	0	533
H/TOT	4489	394	48	21	18	14	3	2242
P/TOT	8722	930	136	45	67	33	5	4392

PEAK HOUR CALCULATION	TOT
16:00 to 17:00	2150
16:15 to 17:15	2173
16:30 to 17:30	2190
16:45 to 17:45	**2259**
17:00 to 18:00	2242
PM PEAK VALUE	**2259**



NDC NATIONWIDE DATA COLLECTION	**Site / Location:**	Site 7, A664 / Assheton Way / A669	**Project No:**	13307	**Drawing No:**	13307-07	**Drawn By:** EA
	Survey Date:	Wednesday 12th October 2022	**Project Name:**	Stakehill			
	Survey Times:	07:30 to 09:30 and 16:00 to 18:00	**Drawing Title:**	Site Layout and Observed Movements			

SITE: 7 DATE: 12/10/2022

LOCATION: A664 / Assheton Way / A669 DAY: Wednesday

	A to D								A to C							
TIME	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT
07:30	9	0	0	1	0	0	0	10	2	0	1	0	0	0	0	3
07:45	4	2	2	1	0	0	0	9	2	1	0	0	0	0	0	3
H/TOT	13	2	2	2	0	0	0	19	4	1	1	0	0	0	0	6
08:00	6	1	0	0	0	0	0	7	2	0	0	0	0	0	0	2
08:15	5	3	0	0	0	0	0	8	2	1	0	0	0	0	0	3
08:30	7	5	1	0	0	0	0	13	1	1	0	0	0	0	0	2
08:45	6	2	1	0	0	0	0	9	3	0	0	0	0	0	0	3
H/TOT	24	11	2	0	0	0	0	37	8	2	0	0	0	0	0	10
09:00	5	5	0	1	0	0	0	11	1	0	0	0	0	0	0	1
09:15	3	2	0	1	0	0	0	6	2	0	0	0	0	0	0	2
H/TOT	8	7	0	2	0	0	0	17	3	0	0	0	0	0	0	3
P/TOT	45	20	4	4	0	0	0	73	15	3	1	0	0	0	0	19

	A to D								A to C							
TIME	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT
16:00	8	0	0	0	0	0	0	8	2	0	0	0	0	0	0	2
16:15	6	0	0	0	0	0	0	6	2	0	0	0	0	0	0	2
16:30	2	0	0	0	0	0	0	2	3	0	0	0	0	0	0	3
16:45	6	0	1	0	0	0	0	7	1	0	0	0	0	0	0	1
H/TOT	22	0	1	0	0	0	0	23	8	0	0	0	0	0	0	8
17:00	8	0	0	0	0	0	0	8	2	0	0	0	0	0	0	2
17:15	5	1	0	1	0	0	0	7	1	0	0	0	0	0	0	1
17:30	4	1	0	0	0	0	0	5	2	1	0	0	0	0	0	3
17:45	3	0	0	0	0	0	0	3	0	0	0	0	0	0	0	0
H/TOT	20	2	0	1	0	0	0	23	5	1	0	0	0	0	0	6
P/TOT	42	2	1	1	0	0	0	46	13	1	0	0	0	0	0	14

SITE: 7 DATE: 12/10/2022

LOCATION: A664 / Assheton Way / A669 DAY: Wednesday

	A to B								A to A							
TIME	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT
07:30	118	29	5	0	5	0	1	158	0	0	0	0	0	0	0	0
07:45	130	34	5	1	3	0	0	173	0	0	0	0	0	0	0	0
H/TOT	248	63	10	1	8	0	1	331	0	0	0	0	0	0	0	0
08:00	145	26	3	3	3	1	1	182	0	0	0	0	0	0	0	0
08:15	143	23	0	0	8	2	2	178	0	0	0	0	0	0	0	0
08:30	145	29	4	1	4	0	0	183	0	0	0	0	0	0	0	0
08:45	127	26	9	1	4	0	0	167	0	0	0	0	0	0	0	0
H/TOT	560	104	16	5	19	3	3	710	0	0	0	0	0	0	0	0
09:00	150	34	2	0	6	1	0	193	0	0	0	0	0	0	0	0
09:15	133	27	1	3	6	0	0	170	0	0	0	0	0	0	0	0
H/TOT	283	61	3	3	12	1	0	363	0	0	0	0	0	0	0	0
P/TOT	1091	228	29	9	39	4	4	1404	0	0	0	0	0	0	0	0

	A to B								A to A							
TIME	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT
16:00	140	16	2	1	4	1	0	164	0	0	0	0	0	0	0	0
16:15	132	9	2	0	5	0	0	148	0	0	0	0	0	0	0	0
16:30	123	16	1	2	4	0	0	146	0	0	0	0	0	0	0	0
16:45	133	17	0	0	6	1	0	157	0	0	0	0	0	0	0	0
H/TOT	528	58	5	3	19	2	0	615	0	0	0	0	0	0	0	0
17:00	131	20	1	0	3	1	0	156	0	0	0	0	0	0	0	0
17:15	103	9	0	0	3	1	0	116	0	0	0	0	0	0	0	0
17:30	157	8	3	0	6	1	0	175	0	0	0	0	0	0	0	0
17:45	148	3	0	1	4	0	0	156	0	0	0	0	0	0	0	0
H/TOT	539	40	4	1	16	3	0	603	0	0	0	0	0	0	0	0
P/TOT	1067	98	9	4	35	5	0	1218	0	0	0	0	0	0	0	0

SITE: 7 DATE: 12/10/2022

LOCATION: A664 / Assheton Way / A669 DAY: Wednesday

	B to A								B to D							
TIME	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT
07:30	102	12	2	2	8	0	1	127	83	9	1	5	1	1	1	101
07:45	109	21	4	0	8	0	0	142	89	10	3	1	3	0	0	106
H/TOT	211	33	6	2	16	0	1	269	172	19	4	6	4	1	1	207
08:00	103	15	1	0	5	1	0	125	81	11	3	0	2	0	0	97
08:15	109	9	3	0	6	0	0	127	73	11	3	1	2	0	0	90
08:30	110	14	6	1	9	1	0	141	65	14	2	0	1	0	0	82
08:45	113	17	3	0	5	0	0	138	50	18	7	1	3	0	0	79
H/TOT	435	55	13	1	25	2	0	531	269	54	15	2	8	0	0	348
09:00	107	11	3	1	8	1	0	131	54	11	5	3	2	0	0	75
09:15	68	7	0	1	4	3	0	83	64	8	3	0	1	2	0	78
H/TOT	175	18	3	2	12	4	0	214	118	19	8	3	3	2	0	153
P/TOT	821	106	22	5	53	6	1	1014	559	92	27	11	15	3	1	708

	B to A								B to D							
TIME	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT
16:00	135	15	7	1	6	0	0	164	104	15	2	0	3	0	0	124
16:15	159	25	4	2	5	1	0	196	103	24	0	0	0	2	1	130
16:30	156	15	5	2	6	1	0	185	112	21	2	1	0	4	1	141
16:45	181	16	0	0	6	0	0	203	109	10	2	0	4	1	0	126
H/TOT	631	71	16	5	23	2	0	748	428	70	6	1	7	7	2	521
17:00	164	15	4	1	5	0	1	190	100	10	1	1	0	1	0	113
17:15	177	18	1	0	10	2	0	208	122	18	1	1	4	0	0	146
17:30	188	16	0	0	4	2	0	210	123	8	1	1	2	1	0	136
17:45	174	9	2	0	8	0	0	193	113	11	2	0	1	0	0	127
H/TOT	703	58	7	1	27	4	1	801	458	47	5	3	7	2	0	522
P/TOT	1334	129	23	6	50	6	1	1549	886	117	11	4	14	9	2	1043

SITE: 7 DATE: 12/10/2022

LOCATION: A664 / Assheton Way / A669 DAY: Wednesday

	B to C								B to B							
TIME	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT
07:30	1	0	0	0	0	0	0	1	3	2	1	0	0	0	0	6
07:45	2	0	0	0	0	0	0	2	4	3	0	0	0	0	0	7
H/TOT	3	0	0	0	0	0	0	3	7	5	1	0	0	0	0	13
08:00	3	1	0	0	0	0	0	4	2	1	0	0	0	0	0	3
08:15	2	1	1	0	0	0	0	4	1	4	0	0	0	0	0	5
08:30	0	0	0	0	0	0	0	0	4	2	0	0	0	0	0	6
08:45	2	0	0	0	0	0	0	2	10	2	0	0	0	0	0	12
H/TOT	7	2	1	0	0	0	0	10	17	9	0	0	0	0	0	26
09:00	2	0	0	0	0	0	0	2	6	1	0	0	0	0	0	7
09:15	2	1	0	0	0	0	0	3	1	1	0	0	0	0	0	2
H/TOT	4	1	0	0	0	0	0	5	7	2	0	0	0	0	0	9
P/TOT	14	3	1	0	0	0	0	18	31	16	1	0	0	0	0	48

	B to C								B to B							
TIME	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT
16:00	3	0	0	0	0	0	0	3	4	4	0	0	0	0	0	8
16:15	0	0	0	0	0	0	0	0	2	3	1	0	0	0	0	6
16:30	0	1	0	0	0	0	0	1	5	2	0	0	0	0	0	7
16:45	0	0	0	0	0	0	0	0	5	2	0	0	0	0	0	7
H/TOT	3	1	0	0	0	0	0	4	16	11	1	0	0	0	0	28
17:00	0	0	0	0	0	0	0	0	4	2	0	0	0	0	0	6
17:15	0	1	0	0	0	0	0	1	4	1	0	0	0	0	0	5
17:30	3	0	0	0	0	0	0	3	9	1	0	0	0	0	0	10
17:45	0	0	0	0	0	0	0	0	4	1	0	0	0	0	0	5
H/TOT	3	1	0	0	0	0	0	4	21	5	0	0	0	0	0	26
P/TOT	6	2	0	0	0	0	0	8	37	16	1	0	0	0	0	54

SITE: 7 DATE: 12/10/2022

LOCATION: A664 / Assheton Way / A669 DAY: Wednesday

	C to B								C to A							
TIME	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT
07:30	2	0	0	0	0	0	0	2	2	0	1	0	0	0	0	3
07:45	2	1	0	0	0	0	0	3	0	0	0	0	0	0	0	0
H/TOT	4	1	0	0	0	0	0	5	2	0	1	0	0	0	0	3
08:00	0	1	0	0	0	0	0	1	1	0	0	0	0	0	0	1
08:15	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0	2
08:30	2	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0
08:45	1	0	0	0	0	0	0	1	2	0	0	0	0	0	0	2
H/TOT	3	1	0	0	0	0	0	4	4	0	1	0	0	0	0	5
09:00	4	0	0	0	0	0	0	4	0	0	0	0	0	0	0	0
09:15	1	0	0	0	0	0	0	1	1	0	0	0	0	0	0	1
H/TOT	5	0	0	0	0	0	0	5	1	0	0	0	0	0	0	1
P/TOT	12	2	0	0	0	0	0	14	7	0	2	0	0	0	0	9

	C to B								C to A							
TIME	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT
16:00	1	0	0	0	0	0	0	1	1	0	0	0	0	0	1	2
16:15	2	0	0	0	0	0	0	2	2	0	0	0	0	0	0	2
16:30	2	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0
16:45	1	0	0	0	0	0	0	1	1	0	0	0	0	0	0	1
H/TOT	6	0	0	0	0	0	0	6	4	0	0	0	0	0	1	5
17:00	2	0	0	0	0	0	0	2	2	0	0	0	0	0	0	2
17:15	6	0	0	0	0	0	0	6	1	0	0	0	0	0	0	1
17:30	3	2	0	0	0	0	0	5	0	0	0	0	0	0	0	0
17:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
H/TOT	11	2	0	0	0	0	0	13	3	0	0	0	0	0	0	3
P/TOT	17	2	0	0	0	0	0	19	7	0	0	0	0	0	1	8

SITE: 7 DATE: 12/10/2022

LOCATION: A664 / Assheton Way / A669 DAY: Wednesday

	C to D								C to C							
TIME	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT
07:30	1	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0
07:45	0	1	0	0	0	0	0	1	0	0	0	0	0	0	0	0
H/TOT	1	1	0	0	0	0	0	2	0	0	0	0	0	0	0	0
08:00	3	0	0	0	0	0	0	3	0	0	0	0	0	0	0	0
08:15	2	1	0	0	0	0	0	3	0	0	0	0	0	0	0	0
08:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
H/TOT	5	1	0	0	0	0	0	6	0	0	0	0	0	0	0	0
09:00	1	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0
09:15	2	1	0	0	0	0	0	3	0	0	0	0	0	0	0	0
H/TOT	3	1	0	0	0	0	0	4	0	0	0	0	0	0	0	0
P/TOT	9	3	0	0	0	0	0	12	0	0	0	0	0	0	0	0

	C to D								C to C							
TIME	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT
16:00	2	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0
16:15	1	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0
16:30	1	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0
16:45	0	1	0	0	0	0	0	1	0	0	0	0	0	0	0	0
H/TOT	4	1	0	0	0	0	0	5	0	0	0	0	0	0	0	0
17:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
17:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
17:30	1	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0
17:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
H/TOT	1	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0
P/TOT	5	1	0	0	0	0	0	6	0	0	0	0	0	0	0	0

SITE: 7 DATE: 12/10/2022

LOCATION: A664 / Assheton Way / A669 DAY: Wednesday

	D to C								D to B							
TIME	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT
07:30	2	1	0	0	0	0	0	3	106	17	4	0	4	1	0	132
07:45	1	1	0	0	0	0	0	2	89	16	4	0	3	0	0	112
H/TOT	3	2	0	0	0	0	0	5	195	33	8	0	7	1	0	244
08:00	2	0	0	0	0	0	0	2	107	13	4	1	3	1	2	131
08:15	1	0	0	0	0	0	0	1	101	24	4	2	2	1	2	136
08:30	1	0	0	0	0	0	0	1	92	22	8	0	4	0	0	126
08:45	0	0	0	0	0	0	0	0	109	13	7	0	3	1	0	133
H/TOT	4	0	0	0	0	0	0	4	409	72	23	3	12	3	4	526
09:00	2	0	0	0	0	0	0	2	122	13	5	0	4	1	0	145
09:15	0	1	0	0	0	0	0	1	114	13	8	0	4	0	0	139
H/TOT	2	1	0	0	0	0	0	3	236	26	13	0	8	1	0	284
P/TOT	9	3	0	0	0	0	0	12	840	131	44	3	27	5	4	1054

	D to C								D to B							
TIME	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT
16:00	1	0	0	0	0	0	0	1	121	20	1	0	4	1	0	147
16:15	0	0	0	0	0	0	0	0	127	10	0	1	4	4	0	146
16:30	2	1	0	0	0	0	0	3	111	11	4	1	0	0	0	127
16:45	2	1	0	0	0	0	0	3	130	15	3	2	0	0	0	150
H/TOT	5	2	0	0	0	0	0	7	489	56	8	4	8	5	0	570
17:00	4	0	0	0	0	0	0	4	145	7	2	1	6	0	0	161
17:15	3	0	0	0	0	0	0	3	113	15	2	1	3	1	1	136
17:30	3	0	0	0	0	0	0	3	116	9	2	0	1	0	2	130
17:45	2	0	0	0	0	0	0	2	118	6	3	0	4	0	1	132
H/TOT	12	0	0	0	0	0	0	12	492	37	9	2	14	1	4	559
P/TOT	17	2	0	0	0	0	0	19	981	93	17	6	22	6	4	1129

SITE: 7 DATE: 12/10/2022

LOCATION: A664 / Assheton Way / A669 DAY: Wednesday

	D to A								D to D							
TIME	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT
07:30	7	0	0	0	0	0	0	7	0	0	0	0	0	0	0	0
07:45	5	3	2	0	0	0	0	10	0	0	0	0	0	0	0	0
H/TOT	12	3	2	0	0	0	0	17	0	0	0	0	0	0	0	0
08:00	11	1	0	0	0	0	0	12	0	0	0	0	0	0	0	0
08:15	13	3	1	1	0	0	0	18	0	0	0	0	0	0	0	0
08:30	13	0	0	0	0	0	0	13	0	0	0	0	0	0	0	0
08:45	14	1	3	0	0	0	0	18	0	0	0	0	0	0	0	0
H/TOT	51	5	4	1	0	0	0	61	0	0	0	0	0	0	0	0
09:00	13	2	3	0	0	0	0	18	0	0	0	0	0	0	0	0
09:15	12	2	0	0	0	0	0	14	0	0	0	0	0	0	0	0
H/TOT	25	4	3	0	0	0	0	32	0	0	0	0	0	0	0	0
P/TOT	88	12	9	1	0	0	0	110	0	0	0	0	0	0	0	0

	D to A								D to D							
TIME	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT
16:00	13	2	0	0	0	0	0	15	0	0	0	0	0	0	0	0
16:15	6	2	0	0	0	0	0	8	0	0	0	0	0	0	0	0
16:30	9	1	0	0	0	0	0	10	0	0	0	0	0	0	0	0
16:45	9	0	1	1	0	0	0	11	0	0	0	0	0	0	0	0
H/TOT	37	5	1	1	0	0	0	44	0	0	0	0	0	0	0	0
17:00	14	0	0	0	0	0	0	14	0	0	0	0	0	0	0	0
17:15	5	0	0	0	0	0	0	5	0	0	0	0	0	0	0	0
17:30	21	1	0	0	0	0	0	22	0	0	0	0	0	0	0	0
17:45	16	3	0	0	0	0	0	19	0	0	0	0	0	0	0	0
H/TOT	56	4	0	0	0	0	0	60	0	0	0	0	0	0	0	0
P/TOT	93	9	1	1	0	0	0	104	0	0	0	0	0	0	0	0

13307 / STAKEHILL
OCTOBER 2022
CLASSIFIED TURNING COUNT

SITE: 7 DATE: 12/10/2022

LOCATION: A664 / Assheton Way / A669 DAY: Wednesday

	TO ARM A								FROM ARM A							
TIME	**CAR**	**LGV**	**OGV1**	**OGV2**	**PSV**	**MCL**	**PCL**	**TOT**	**CAR**	**LGV**	**OGV1**	**OGV2**	**PSV**	**MCL**	**PCL**	**TOT**
07:30	111	12	3	2	8	0	1	137	129	29	6	1	5	0	1	171
07:45	114	24	6	0	8	0	0	152	136	37	7	2	3	0	0	185
H/TOT	225	36	9	2	16	0	1	289	265	66	13	3	8	0	1	356
08:00	115	16	1	0	5	1	0	138	153	27	3	3	3	1	1	191
08:15	123	12	5	1	6	0	0	147	150	27	0	0	8	2	2	189
08:30	123	14	6	1	9	1	0	154	153	35	5	1	4	0	0	198
08:45	129	18	6	0	5	0	0	158	136	28	10	1	4	0	0	179
H/TOT	490	60	18	2	25	2	0	597	592	117	18	5	19	3	3	757
09:00	120	13	6	1	8	1	0	149	156	39	2	1	6	1	0	205
09:15	81	9	0	1	4	3	0	98	138	29	1	4	6	0	0	178
H/TOT	201	22	6	2	12	4	0	247	294	68	3	5	12	1	0	383
P/TOT	916	118	33	6	53	6	1	1133	1151	251	34	13	39	4	4	1496

	TO ARM A								FROM ARM A							
TIME	**CAR**	**LGV**	**OGV1**	**OGV2**	**PSV**	**MCL**	**PCL**	**TOT**	**CAR**	**LGV**	**OGV1**	**OGV2**	**PSV**	**MCL**	**PCL**	**TOT**
16:00	149	17	7	1	6	0	1	181	150	16	2	1	4	1	0	174
16:15	167	27	4	2	5	1	0	206	140	9	2	0	5	0	0	156
16:30	165	16	5	2	6	1	0	195	128	16	1	2	4	0	0	151
16:45	191	16	1	1	6	0	0	215	140	17	1	0	6	1	0	165
H/TOT	672	76	17	6	23	2	1	797	558	58	6	3	19	2	0	646
17:00	180	15	4	1	5	0	1	206	141	20	1	0	3	1	0	166
17:15	183	18	1	0	10	2	0	214	109	10	0	1	3	1	0	124
17:30	209	17	0	0	4	2	0	232	163	10	3	0	6	1	0	183
17:45	190	12	2	0	8	0	0	212	151	3	0	1	4	0	0	159
H/TOT	762	62	7	1	27	4	1	864	564	43	4	2	16	3	0	632
P/TOT	1434	138	24	7	50	6	2	1661	1122	101	10	5	35	5	0	1278

SITE: 7 DATE: 12/10/2022

LOCATION: A664 / Assheton Way / A669 DAY: Wednesday

	TO ARM B								FROM ARM B							
TIME	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT
07:30	229	48	10	0	9	1	1	298	189	23	4	7	9	1	2	235
07:45	225	54	9	1	6	0	0	295	204	34	7	1	11	0	0	257
H/TOT	454	102	19	1	15	1	1	593	393	57	11	8	20	1	2	492
08:00	254	41	7	4	6	2	3	317	189	28	4	0	7	1	0	229
08:15	245	51	4	2	10	3	4	319	185	25	7	1	8	0	0	226
08:30	243	53	12	1	8	0	0	317	179	30	8	1	10	1	0	229
08:45	247	41	16	1	7	1	0	313	175	37	10	1	8	0	0	231
H/TOT	989	186	39	8	31	6	7	1266	728	120	29	3	33	2	0	915
09:00	282	48	7	0	10	2	0	349	169	23	8	4	10	1	0	215
09:15	249	41	9	3	10	0	0	312	135	17	3	1	5	5	0	166
H/TOT	531	89	16	3	20	2	0	661	304	40	11	5	15	6	0	381
P/TOT	1974	377	74	12	66	9	8	2520	1425	217	51	16	68	9	2	1788

	TO ARM B								FROM ARM B							
TIME	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT
16:00	266	40	3	1	8	2	0	320	246	34	9	1	9	0	0	299
16:15	263	22	3	1	9	4	0	302	264	52	5	2	5	3	1	332
16:30	241	29	5	3	4	0	0	282	273	39	7	3	6	5	1	334
16:45	269	34	3	2	6	1	0	315	295	28	2	0	10	1	0	336
H/TOT	1039	125	14	7	27	7	0	1219	1078	153	23	6	30	9	2	1301
17:00	282	29	3	1	9	1	0	325	268	27	5	2	5	1	1	309
17:15	226	25	2	1	6	2	1	263	303	38	2	1	14	2	0	360
17:30	285	20	5	0	7	1	2	320	323	25	1	1	6	3	0	359
17:45	270	10	3	1	8	0	1	293	291	21	4	0	9	0	0	325
H/TOT	1063	84	13	3	30	4	4	1201	1185	111	12	4	34	6	1	1353
P/TOT	2102	209	27	10	57	11	4	2420	2263	264	35	10	64	15	3	2654

SITE: 7 DATE: 12/10/2022

LOCATION: A664 / Assheton Way / A669 DAY: Wednesday

	TO ARM C								FROM ARM C							
TIME	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT
07:30	5	1	1	0	0	0	0	7	5	0	1	0	0	0	0	6
07:45	5	2	0	0	0	0	0	7	2	2	0	0	0	0	0	4
H/TOT	10	3	1	0	0	0	0	14	7	2	1	0	0	0	0	10
08:00	7	1	0	0	0	0	0	8	4	1	0	0	0	0	0	5
08:15	5	2	1	0	0	0	0	8	3	1	1	0	0	0	0	5
08:30	2	1	0	0	0	0	0	3	2	0	0	0	0	0	0	2
08:45	5	0	0	0	0	0	0	5	3	0	0	0	0	0	0	3
H/TOT	19	4	1	0	0	0	0	24	12	2	1	0	0	0	0	15
09:00	5	0	0	0	0	0	0	5	5	0	0	0	0	0	0	5
09:15	4	2	0	0	0	0	0	6	4	1	0	0	0	0	0	5
H/TOT	9	2	0	0	0	0	0	11	9	1	0	0	0	0	0	10
P/TOT	38	9	2	0	0	0	0	49	28	5	2	0	0	0	0	35

	TO ARM C								FROM ARM C							
TIME	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT
16:00	6	0	0	0	0	0	0	6	4	0	0	0	0	0	1	5
16:15	2	0	0	0	0	0	0	2	5	0	0	0	0	0	0	5
16:30	5	2	0	0	0	0	0	7	3	0	0	0	0	0	0	3
16:45	3	1	0	0	0	0	0	4	2	1	0	0	0	0	0	3
H/TOT	16	3	0	0	0	0	0	19	14	1	0	0	0	0	1	16
17:00	6	0	0	0	0	0	0	6	4	0	0	0	0	0	0	4
17:15	4	1	0	0	0	0	0	5	7	0	0	0	0	0	0	7
17:30	8	1	0	0	0	0	0	9	4	2	0	0	0	0	0	6
17:45	2	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0
H/TOT	20	2	0	0	0	0	0	22	15	2	0	0	0	0	0	17
P/TOT	36	5	0	0	0	0	0	41	29	3	0	0	0	0	1	33

SITE: 7 DATE: 12/10/2022

LOCATION: A664 / Assheton Way / A669 DAY: Wednesday

	TO ARM D								FROM ARM D							
TIME	**CAR**	**LGV**	**OGV1**	**OGV2**	**PSV**	**MCL**	**PCL**	**TOT**	**CAR**	**LGV**	**OGV1**	**OGV2**	**PSV**	**MCL**	**PCL**	**TOT**
07:30	93	9	1	6	1	1	1	112	115	18	4	0	4	1	0	142
07:45	93	13	5	2	3	0	0	116	95	20	6	0	3	0	0	124
H/TOT	186	22	6	8	4	1	1	228	210	38	10	0	7	1	0	266
08:00	90	12	3	0	2	0	0	107	120	14	4	1	3	1	2	145
08:15	80	15	3	1	2	0	0	101	115	27	5	3	2	1	2	155
08:30	72	19	3	0	1	0	0	95	106	22	8	0	4	0	0	140
08:45	56	20	8	1	3	0	0	88	123	14	10	0	3	1	0	151
H/TOT	298	66	17	2	8	0	0	391	464	77	27	4	12	3	4	591
09:00	60	16	5	4	2	0	0	87	137	15	8	0	4	1	0	165
09:15	69	11	3	1	1	2	0	87	126	16	8	0	4	0	0	154
H/TOT	129	27	8	5	3	2	0	174	263	31	16	0	8	1	0	319
P/TOT	613	115	31	15	15	3	1	793	937	146	53	4	27	5	4	1176

	TO ARM D								FROM ARM D							
TIME	**CAR**	**LGV**	**OGV1**	**OGV2**	**PSV**	**MCL**	**PCL**	**TOT**	**CAR**	**LGV**	**OGV1**	**OGV2**	**PSV**	**MCL**	**PCL**	**TOT**
16:00	114	15	2	0	3	0	0	134	135	22	1	0	4	1	0	163
16:15	110	24	0	0	0	2	1	137	133	12	0	1	4	4	0	154
16:30	115	21	2	1	0	4	1	144	122	13	4	1	0	0	0	140
16:45	115	11	3	0	4	1	0	134	141	16	4	3	0	0	0	164
H/TOT	454	71	7	1	7	7	2	549	531	63	9	5	8	5	0	621
17:00	108	10	1	1	0	1	0	121	163	7	2	1	6	0	0	179
17:15	127	19	1	2	4	0	0	153	121	15	2	1	3	1	1	144
17:30	128	9	1	1	2	1	0	142	140	10	2	0	1	0	2	155
17:45	116	11	2	0	1	0	0	130	136	9	3	0	4	0	1	153
H/TOT	479	49	5	4	7	2	0	546	560	41	9	2	14	1	4	631
P/TOT	933	120	12	5	14	9	2	1095	1091	104	18	7	22	6	4	1252

13307 / STAKEHILL
OCTOBER 2022
CLASSIFIED TURNING COUNT

SITE: 7 DATE: 12/10/2022

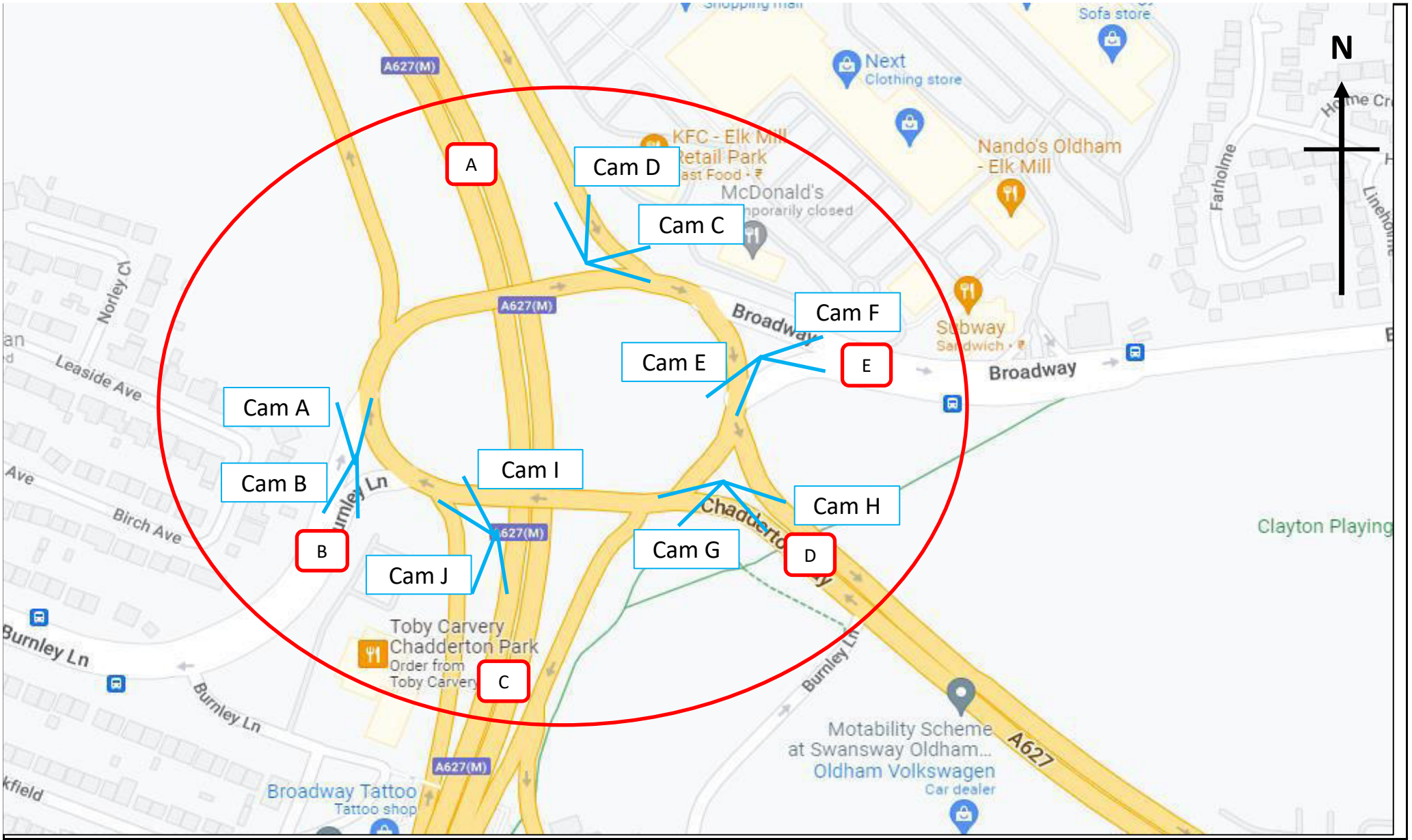
LOCATION: A664 / Assheton Way / A669 DAY: Wednesday

	JUNCTION TOTAL							
TIME	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT
07:30	438	70	15	8	18	2	3	554
07:45	437	93	20	3	17	0	0	570
H/TOT	875	163	35	11	35	2	3	1124
08:00	466	70	11	4	13	3	3	570
08:15	453	80	13	4	18	3	4	575
08:30	440	87	21	2	18	1	0	569
08:45	437	79	30	2	15	1	0	564
H/TOT	1796	316	75	12	64	8	7	2278
09:00	467	77	18	5	20	3	0	590
09:15	403	63	12	5	15	5	0	503
H/TOT	870	140	30	10	35	8	0	1093
P/TOT	3541	619	140	33	134	18	10	4495

PEAK HOUR CALCULATION	TOT
07:30 to 08:30	2269
07:45 to 08:45	2284
08:00 to 09:00	2278
08:15 to 09:15	**2298**
08:30 to 09:30	2226
AM PEAK VALUE	**2298**

	JUNCTION TOTAL							
TIME	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT
16:00	535	72	12	2	17	2	1	641
16:15	542	73	7	3	14	7	1	647
16:30	526	68	12	6	10	5	1	628
16:45	578	62	7	3	16	2	0	668
H/TOT	2181	275	38	14	57	16	3	2584
17:00	576	54	8	3	14	2	1	658
17:15	540	63	4	3	20	4	1	635
17:30	630	47	6	1	13	4	2	703
17:45	578	33	7	1	17	0	1	637
H/TOT	2324	197	25	8	64	10	5	2633
P/TOT	4505	472	63	22	121	26	8	5217

PEAK HOUR CALCULATION	TOT
16:00 to 17:00	2584
16:15 to 17:15	2601
16:30 to 17:30	2589
16:45 to 17:45	**2664**
17:00 to 18:00	2633
PM PEAK VALUE	**2664**



NDC NATIONWIDE DATA COLLECTION	**Site / Location:**	Site 8, A627 (M) / A627 Chadderton Way / Burnley Lane	**Project No:**	13307	**Drawing No:**	13307-08	**Drawn By:** EA
	Survey Date:	Wednesday 12th October 2022	**Project Name:**	Stakehill			
	Survey Times:	07:30 to 09:30 and 16:00 to 18:00	**Drawing Title:**	Site Layout and Observed Movements			

SITE: 8 DATE: 12/10/2022

LOCATION: A627 (M) / A627 Chadderton Way / Burnley Lane DAY: Wednesday

	A to E								A to D							
TIME	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT
07:30	56	14	3	3	0	0	0	76	257	47	7	5	0	0	0	316
07:45	57	18	4	3	0	0	0	82	246	43	9	6	0	1	0	305
H/TOT	113	32	7	6	0	0	0	158	503	90	16	11	0	1	0	621
08:00	46	11	1	4	0	0	0	62	252	29	5	5	0	0	0	291
08:15	48	7	0	4	0	0	0	59	213	26	6	7	0	0	0	252
08:30	46	15	3	4	0	0	0	68	284	29	12	3	1	0	0	329
08:45	69	11	3	7	0	0	0	90	228	44	17	4	1	1	0	295
H/TOT	209	44	7	19	0	0	0	279	977	128	40	19	2	1	0	1167
09:00	65	18	9	4	0	0	0	96	184	42	13	8	0	1	0	248
09:15	63	13	7	5	0	0	0	88	170	52	13	5	0	0	0	240
H/TOT	128	31	16	9	0	0	0	184	354	94	26	13	0	1	0	488
P/TOT	450	107	30	34	0	0	0	621	1834	312	82	43	2	3	0	2276

	A to E								A to D							
TIME	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT
16:00	91	24	4	3	0	1	0	123	107	45	4	0	5	0	0	161
16:15	92	29	8	2	1	0	0	132	125	26	1	1	2	0	0	155
16:30	98	28	4	5	0	0	0	135	137	33	5	2	1	0	0	178
16:45	87	12	5	1	0	0	0	105	145	29	2	2	0	1	0	179
H/TOT	368	93	21	11	1	1	0	495	514	133	12	5	8	1	0	673
17:00	98	12	6	2	0	0	0	118	149	27	3	0	0	1	0	180
17:15	89	9	2	2	0	0	0	102	172	25	5	2	0	0	0	204
17:30	90	12	4	6	0	0	0	112	141	20	3	0	1	1	0	166
17:45	107	8	5	5	0	1	0	126	173	16	2	2	1	0	0	194
H/TOT	384	41	17	15	0	1	0	458	635	88	13	4	2	2	0	744
P/TOT	752	134	38	26	1	2	0	953	1149	221	25	9	10	3	0	1417

SITE: 8 DATE: 12/10/2022

LOCATION: A627 (M) / A627 Chadderton Way / Burnley Lane DAY: Wednesday

	A to C								A to B							
TIME	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT
07:30	17	1	0	0	0	1	0	19	36	6	2	0	0	1	0	45
07:45	28	0	0	0	0	0	0	28	20	2	0	0	0	0	0	22
H/TOT	45	1	0	0	0	1	0	47	56	8	2	0	0	1	0	67
08:00	25	4	1	0	0	0	0	30	16	4	0	0	0	0	0	20
08:15	21	1	0	0	0	1	0	23	12	1	0	0	0	0	0	13
08:30	3	4	0	0	0	0	0	7	7	1	1	0	0	0	0	9
08:45	8	3	1	0	0	0	0	12	14	4	0	0	0	0	0	18
H/TOT	57	12	2	0	0	1	0	72	49	10	1	0	0	0	0	60
09:00	14	2	0	0	0	0	0	16	12	8	1	0	0	0	0	21
09:15	8	1	0	0	0	0	0	9	14	1	0	0	0	0	0	15
H/TOT	22	3	0	0	0	0	0	25	26	9	1	0	0	0	0	36
P/TOT	124	16	2	0	0	2	0	144	131	27	4	0	0	1	0	163

	A to C								A to B							
TIME	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT
16:00	12	1	1	0	0	0	0	14	19	6	2	0	0	0	0	27
16:15	11	0	0	0	0	0	0	11	15	7	0	0	0	0	0	22
16:30	10	2	0	0	0	0	0	12	18	6	0	0	0	0	0	24
16:45	7	1	0	0	0	0	0	8	29	6	1	0	0	0	0	36
H/TOT	40	4	1	0	0	0	0	45	81	25	3	0	0	0	0	109
17:00	16	1	0	0	0	0	0	17	30	6	0	0	0	0	0	36
17:15	10	2	0	0	0	0	0	12	44	7	1	0	0	0	0	52
17:30	7	0	0	0	0	0	0	7	27	6	0	1	0	0	0	34
17:45	4	1	0	0	0	0	0	5	23	9	0	0	0	0	0	32
H/TOT	37	4	0	0	0	0	0	41	124	28	1	1	0	0	0	154
P/TOT	77	8	1	0	0	0	0	86	205	53	4	1	0	0	0	263

SITE: 8 DATE: 12/10/2022

LOCATION: A627 (M) / A627 Chadderton Way / Burnley Lane DAY: Wednesday

TIME	A to A CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT
07:30	2	0	0	0	0	0	0	2
07:45	1	0	0	0	0	0	0	1
H/TOT	3	0	0	0	0	0	0	3
08:00	0	0	0	0	0	0	0	0
08:15	1	1	1	0	0	0	0	3
08:30	0	0	0	0	0	0	0	0
08:45	1	2	0	0	0	0	0	3
H/TOT	2	3	1	0	0	0	0	6
09:00	0	0	0	0	0	0	0	0
09:15	1	0	0	0	0	0	0	1
H/TOT	1	0	0	0	0	0	0	1
P/TOT	6	3	1	0	0	0	0	10

TIME	A to A CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT
16:00	0	0	0	0	0	0	0	0
16:15	0	0	0	0	0	0	0	0
16:30	2	0	0	0	0	0	0	2
16:45	1	0	0	0	0	0	0	1
H/TOT	3	0	0	0	0	0	0	3
17:00	0	0	0	0	0	0	0	0
17:15	1	1	0	0	0	0	0	2
17:30	0	0	0	0	0	0	0	0
17:45	1	0	0	0	0	0	0	1
H/TOT	2	1	0	0	0	0	0	3
P/TOT	5	1	0	0	0	0	0	6

SITE: 8 DATE: 12/10/2022

LOCATION: A627 (M) / A627 Chadderton Way / Burnley Lane DAY: Wednesday

	B to A								B to E							
TIME	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT
07:30	18	2	0	2	0	0	0	22	25	8	1	0	0	1	0	35
07:45	23	9	0	0	0	0	0	32	16	2	1	0	0	0	1	20
H/TOT	41	11	0	2	0	0	0	54	41	10	2	0	0	1	1	55
08:00	31	6	1	0	0	0	0	38	38	3	0	0	0	0	0	41
08:15	28	5	1	0	1	0	0	35	51	6	0	0	1	0	0	58
08:30	20	4	1	0	0	0	0	25	36	3	0	0	0	0	0	39
08:45	38	5	3	0	0	0	0	46	31	4	1	0	0	0	0	36
H/TOT	117	20	6	0	1	0	0	144	156	16	1	0	1	0	0	174
09:00	19	2	0	0	0	0	0	21	38	6	1	1	0	0	0	46
09:15	23	2	0	0	0	0	0	25	22	8	2	1	1	0	0	34
H/TOT	42	4	0	0	0	0	0	46	60	14	3	2	1	0	0	80
P/TOT	200	35	6	2	1	0	0	244	257	40	6	2	2	1	1	309

	B to A								B to E							
TIME	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT
16:00	27	9	1	0	0	0	0	37	34	3	1	0	0	0	0	38
16:15	26	2	2	1	0	0	0	31	29	6	1	0	1	0	0	37
16:30	36	10	1	0	0	0	0	47	34	3	0	0	0	0	0	37
16:45	22	7	0	0	0	0	0	29	30	3	1	0	0	0	0	34
H/TOT	111	28	4	1	0	0	0	144	127	15	3	0	1	0	0	146
17:00	25	4	1	0	0	0	0	30	39	6	3	0	0	0	0	48
17:15	28	5	0	0	0	0	0	33	40	4	0	0	1	0	0	45
17:30	23	2	1	1	0	0	0	27	30	6	1	0	0	0	0	37
17:45	30	5	0	0	0	0	0	35	34	6	0	0	0	0	1	41
H/TOT	106	16	2	1	0	0	0	125	143	22	4	0	1	0	1	171
P/TOT	217	44	6	2	0	0	0	269	270	37	7	0	2	0	1	317

SITE: 8 DATE: 12/10/2022

LOCATION: A627 (M) / A627 Chadderton Way / Burnley Lane DAY: Wednesday

	B to D								B to C							
TIME	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT
07:30	52	9	0	0	0	0	0	61	3	1	0	0	0	0	0	4
07:45	51	8	1	1	0	1	0	62	7	0	1	0	0	0	0	8
H/TOT	103	17	1	1	0	1	0	123	10	1	1	0	0	0	0	12
08:00	89	6	1	2	0	0	0	98	10	0	0	0	1	0	0	11
08:15	62	3	1	0	1	0	0	67	32	1	0	0	1	0	0	34
08:30	71	5	0	0	0	0	0	76	20	0	0	0	0	0	0	20
08:45	67	8	0	0	0	0	0	75	17	3	0	0	0	0	0	20
H/TOT	289	22	2	2	1	0	0	316	79	4	0	0	2	0	0	85
09:00	44	2	2	0	0	0	0	48	8	1	0	0	1	0	0	10
09:15	32	10	2	0	1	0	0	45	8	1	0	1	0	0	0	10
H/TOT	76	12	4	0	1	0	0	93	16	2	0	1	1	0	0	20
P/TOT	468	51	7	3	2	1	0	532	105	7	1	1	3	0	0	117

	B to D								B to C							
TIME	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT
16:00	30	0	0	0	1	0	0	31	11	0	0	0	1	0	0	12
16:15	31	4	1	0	0	1	0	37	10	1	0	0	0	0	0	11
16:30	35	0	0	0	0	0	0	35	6	3	0	0	0	0	0	9
16:45	27	5	0	0	0	1	0	33	11	3	0	0	1	0	0	15
H/TOT	123	9	1	0	1	2	0	136	38	7	0	0	2	0	0	47
17:00	29	2	1	0	0	0	0	32	5	0	0	0	0	0	0	5
17:15	25	3	1	0	0	0	0	29	5	1	0	0	1	0	0	7
17:30	29	3	0	0	0	0	0	32	7	2	0	0	0	0	0	9
17:45	31	3	0	0	0	0	0	34	11	1	0	0	1	0	0	13
H/TOT	114	11	2	0	0	0	0	127	28	4	0	0	2	0	0	34
P/TOT	237	20	3	0	1	2	0	263	66	11	0	0	4	0	0	81

SITE: 8 DATE: 12/10/2022

LOCATION: A627 (M) / A627 Chadderton Way / Burnley Lane DAY: Wednesday

TIME	B to B CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT
07:30	0	0	0	0	0	0	0	0
07:45	0	0	0	0	0	0	0	0
H/TOT	0	0	0	0	0	0	0	0
08:00	0	0	0	0	0	0	0	0
08:15	0	0	0	0	0	0	0	0
08:30	0	0	0	0	0	0	0	0
08:45	0	0	0	0	0	0	0	0
H/TOT	0	0	0	0	0	0	0	0
09:00	0	0	0	0	0	0	0	0
09:15	0	0	0	0	0	0	0	0
H/TOT	0	0	0	0	0	0	0	0
P/TOT	0	0	0	0	0	0	0	0

TIME	B to B CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT
16:00	0	0	0	0	0	0	0	0
16:15	0	0	0	0	0	0	0	0
16:30	0	0	0	0	0	0	0	0
16:45	0	0	0	0	0	0	0	0
H/TOT	0	0	0	0	0	0	0	0
17:00	0	0	0	0	0	0	0	0
17:15	0	0	0	0	0	0	0	0
17:30	0	0	0	0	0	0	0	0
17:45	0	0	0	0	0	0	0	0
H/TOT	0	0	0	0	0	0	0	0
P/TOT	0	0	0	0	0	0	0	0

SITE: 8 DATE: 12/10/2022

LOCATION: A627 (M) / A627 Chadderton Way / Burnley Lane DAY: Wednesday

	C to B								C to A							
TIME	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT
07:30	7	2	0	0	0	0	0	9	3	0	0	0	0	0	0	3
07:45	9	0	1	0	0	0	0	10	0	0	0	0	0	0	0	0
H/TOT	16	2	1	0	0	0	0	19	3	0	0	0	0	0	0	3
08:00	7	0	0	0	0	0	0	7	0	0	0	0	0	0	0	0
08:15	8	0	0	0	2	0	0	10	1	0	0	0	0	0	0	1
08:30	24	2	1	0	0	0	0	27	0	0	0	0	0	0	0	0
08:45	13	3	0	0	0	0	0	16	0	0	0	0	0	0	0	0
H/TOT	52	5	1	0	2	0	0	60	1	0	0	0	0	0	0	1
09:00	6	0	1	1	0	0	0	8	0	0	0	0	0	0	0	0
09:15	5	0	0	0	1	0	0	6	1	0	0	0	0	0	0	1
H/TOT	11	0	1	1	1	0	0	14	1	0	0	0	0	0	0	1
P/TOT	79	7	3	1	3	0	0	93	5	0	0	0	0	0	0	5

	C to B								C to A							
TIME	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT
16:00	9	2	0	0	0	0	0	11	1	0	1	0	0	0	0	2
16:15	8	1	0	0	0	0	0	9	0	0	0	0	0	0	0	0
16:30	16	0	0	0	1	0	0	17	0	0	0	0	0	0	0	0
16:45	11	1	0	0	0	0	0	12	1	0	0	0	0	0	0	1
H/TOT	44	4	0	0	1	0	0	49	2	0	1	0	0	0	0	3
17:00	16	0	0	0	0	0	0	16	2	0	0	0	0	0	0	2
17:15	15	1	0	0	1	0	0	17	0	0	0	0	0	0	0	0
17:30	13	2	0	0	0	0	0	15	1	0	0	0	0	0	0	1
17:45	8	2	0	0	0	0	0	10	0	0	0	0	0	0	0	0
H/TOT	52	5	0	0	1	0	0	58	3	0	0	0	0	0	0	3
P/TOT	96	9	0	0	2	0	0	107	5	0	1	0	0	0	0	6

SITE: 8 DATE: 12/10/2022

LOCATION: A627 (M) / A627 Chadderton Way / Burnley Lane DAY: Wednesday

	C to E								C to D							
TIME	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT
07:30	28	5	2	1	0	0	0	36	17	2	0	0	0	0	0	19
07:45	38	3	1	0	0	0	0	42	32	1	0	0	0	0	0	33
H/TOT	66	8	3	1	0	0	0	78	49	3	0	0	0	0	0	52
08:00	37	7	0	1	0	0	0	45	14	2	0	0	0	0	0	16
08:15	47	4	2	0	1	0	0	54	14	2	1	0	0	0	0	17
08:30	40	2	1	0	0	0	0	43	21	1	1	0	0	0	0	23
08:45	32	3	1	1	0	0	0	37	13	0	0	0	0	0	0	13
H/TOT	156	16	4	2	1	0	0	179	62	5	2	0	0	0	0	69
09:00	43	8	3	1	0	0	0	55	17	0	0	0	0	0	0	17
09:15	41	2	3	1	0	0	0	47	9	2	2	0	0	0	0	13
H/TOT	84	10	6	2	0	0	0	102	26	2	2	0	0	0	0	30
P/TOT	306	34	13	5	1	0	0	359	137	10	4	0	0	0	0	151

	C to E								C to D							
TIME	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT
16:00	61	6	1	1	0	0	0	69	8	1	0	0	0	0	0	9
16:15	46	8	4	1	0	0	0	59	7	0	0	0	0	0	0	7
16:30	56	7	0	0	0	0	0	63	7	1	0	0	0	0	0	8
16:45	38	3	0	1	0	0	0	42	4	2	0	0	0	0	0	6
H/TOT	201	24	5	3	0	0	0	233	26	4	0	0	0	0	0	30
17:00	47	2	0	1	0	0	0	50	4	0	0	0	0	0	0	4
17:15	40	3	0	2	0	0	0	45	4	2	0	0	0	0	0	6
17:30	44	6	1	0	0	1	0	52	9	1	0	0	0	0	0	10
17:45	57	1	0	1	0	0	0	59	8	0	0	0	0	0	0	8
H/TOT	188	12	1	4	0	1	0	206	25	3	0	0	0	0	0	28
P/TOT	389	36	6	7	0	1	0	439	51	7	0	0	0	0	0	58

SITE: 8 DATE: 12/10/2022

LOCATION: A627 (M) / A627 Chadderton Way / Burnley Lane DAY: Wednesday

TIME	C to C CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT
07:30	0	0	0	0	0	0	0	0
07:45	3	0	0	0	0	0	0	3
H/TOT	3	0	0	0	0	0	0	3
08:00	0	0	0	0	0	0	0	0
08:15	3	0	0	0	0	0	0	3
08:30	8	0	0	0	0	0	0	8
08:45	5	0	0	0	0	0	0	5
H/TOT	16	0	0	0	0	0	0	16
09:00	0	0	0	0	0	0	0	0
09:15	1	0	0	0	0	0	0	1
H/TOT	1	0	0	0	0	0	0	1
P/TOT	20	0	0	0	0	0	0	20

TIME	C to C CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT
16:00	0	0	0	0	0	0	0	0
16:15	1	0	0	0	0	0	0	1
16:30	5	0	0	0	0	0	0	5
16:45	1	0	0	0	0	0	0	1
H/TOT	7	0	0	0	0	0	0	7
17:00	3	0	0	0	0	0	0	3
17:15	1	0	0	0	0	0	0	1
17:30	0	1	0	0	0	0	0	1
17:45	0	0	0	0	0	0	0	0
H/TOT	4	1	0	0	0	0	0	5
P/TOT	11	1	0	0	0	0	0	12

SITE: 8 DATE: 12/10/2022

LOCATION: A627 (M) / A627 Chadderton Way / Burnley Lane DAY: Wednesday

	D to C								D to B							
TIME	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT
07:30	4	0	0	0	0	0	0	4	34	6	0	0	0	0	0	40
07:45	7	1	0	1	0	0	0	9	44	5	3	0	0	0	0	52
H/TOT	11	1	0	1	0	0	0	13	78	11	3	0	0	0	0	92
08:00	9	1	0	0	0	0	0	10	75	4	0	0	0	0	0	79
08:15	9	2	1	0	0	0	0	12	105	6	0	0	1	0	0	112
08:30	6	2	1	0	0	0	0	9	47	4	1	0	0	0	0	52
08:45	5	2	1	0	0	0	0	8	54	11	3	0	0	0	0	68
H/TOT	29	7	3	0	0	0	0	39	281	25	4	0	1	0	0	311
09:00	7	1	1	0	0	0	0	9	33	12	1	0	0	0	0	46
09:15	7	1	0	0	0	0	0	8	40	7	0	0	1	0	0	48
H/TOT	14	2	1	0	0	0	0	17	73	19	1	0	1	0	0	94
P/TOT	54	10	4	1	0	0	0	69	432	55	8	0	2	0	0	497

	D to C								D to B							
TIME	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT
16:00	24	4	0	0	0	0	1	29	68	7	1	0	0	0	0	76
16:15	29	0	1	0	0	0	0	30	81	5	1	0	0	0	0	87
16:30	18	0	0	0	0	0	0	18	81	8	1	0	0	0	0	90
16:45	23	0	0	0	0	0	0	23	91	5	0	1	1	1	0	99
H/TOT	94	4	1	0	0	0	1	100	321	25	3	1	1	1	0	352
17:00	33	1	2	0	0	0	0	36	100	14	0	0	0	0	0	114
17:15	16	0	0	0	0	0	0	16	85	10	2	1	0	1	0	99
17:30	22	2	0	0	0	0	0	24	85	4	0	0	0	0	0	89
17:45	14	1	0	0	0	0	0	15	78	10	1	0	1	0	0	90
H/TOT	85	4	2	0	0	0	0	91	348	38	3	1	1	1	0	392
P/TOT	179	8	3	0	0	0	1	191	669	63	6	2	2	2	0	744

SITE: 8 DATE: 12/10/2022

LOCATION: A627 (M) / A627 Chadderton Way / Burnley Lane DAY: Wednesday

	D to A								D to E							
TIME	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT
07:30	141	26	2	1	0	0	0	170	16	4	1	0	1	0	0	22
07:45	151	37	3	0	0	1	0	192	22	7	0	0	0	0	0	29
H/TOT	292	63	5	1	0	1	0	362	38	11	1	0	1	0	0	51
08:00	155	23	6	4	0	0	0	188	56	4	1	0	0	0	0	61
08:15	175	26	11	5	0	0	0	217	103	7	0	0	0	0	0	110
08:30	129	27	5	2	2	0	0	165	28	1	1	0	0	0	0	30
08:45	120	30	7	6	1	0	0	164	33	3	1	0	0	0	0	37
H/TOT	579	106	29	17	3	0	0	734	220	15	3	0	0	0	0	238
09:00	124	39	7	4	1	0	0	175	33	8	0	0	1	0	0	42
09:15	113	27	5	5	1	0	0	151	35	4	1	0	0	0	0	40
H/TOT	237	66	12	9	2	0	0	326	68	12	1	0	1	0	0	82
P/TOT	1108	235	46	27	5	1	0	1422	326	38	5	0	2	0	0	371

	D to A								D to E							
TIME	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT
16:00	234	53	4	3	3	0	0	297	72	5	1	0	1	0	0	79
16:15	287	31	4	3	0	0	0	325	66	6	0	0	0	0	0	72
16:30	244	31	5	3	0	1	0	284	72	7	0	0	0	0	0	79
16:45	269	47	9	5	2	0	0	332	81	13	0	0	0	0	0	94
H/TOT	1034	162	22	14	5	1	0	1238	291	31	1	0	1	0	0	324
17:00	281	34	6	3	0	0	0	324	101	9	1	0	0	0	0	111
17:15	255	27	1	1	1	0	0	285	97	9	0	0	1	0	0	107
17:30	274	17	7	1	0	1	0	300	93	2	1	0	1	0	0	97
17:45	242	24	1	1	0	0	0	268	79	5	1	0	0	0	0	85
H/TOT	1052	102	15	6	1	1	0	1177	370	25	3	0	2	0	0	400
P/TOT	2086	264	37	20	6	2	0	2415	661	56	4	0	3	0	0	724

SITE: 8 DATE: 12/10/2022

LOCATION: A627 (M) / A627 Chadderton Way / Burnley Lane DAY: Wednesday

TIME	CAR	LGV	OGV1	D to D OGV2	PSV	MCL	PCL	TOT
07:30	0	0	0	0	0	0	0	0
07:45	0	0	0	0	0	0	0	0
H/TOT	0	0	0	0	0	0	0	0
08:00	0	0	0	0	0	0	0	0
08:15	0	0	0	0	0	0	0	0
08:30	0	0	0	0	0	0	0	0
08:45	0	0	0	0	0	0	0	0
H/TOT	0	0	0	0	0	0	0	0
09:00	0	0	0	0	0	0	0	0
09:15	0	0	0	0	0	0	0	0
H/TOT	0	0	0	0	0	0	0	0
P/TOT	0	0	0	0	0	0	0	0

TIME	CAR	LGV	OGV1	D to D OGV2	PSV	MCL	PCL	TOT
16:00	0	0	0	0	0	0	0	0
16:15	0	0	0	0	0	0	0	0
16:30	0	0	0	0	0	0	0	0
16:45	0	0	0	0	0	0	0	0
H/TOT	0	0	0	0	0	0	0	0
17:00	0	0	0	0	0	0	0	0
17:15	0	0	0	0	0	0	0	0
17:30	0	0	0	0	0	0	0	0
17:45	0	0	0	0	0	0	0	0
H/TOT	0	0	0	0	0	0	0	0
P/TOT	0	0	0	0	0	0	0	0

SITE: 8 DATE: 12/10/2022

LOCATION: A627 (M) / A627 Chadderton Way / Burnley Lane DAY: Wednesday

	E to D								E to C							
TIME	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT
07:30	29	9	1	0	0	0	0	39	70	8	1	4	1	0	0	84
07:45	37	6	0	0	0	0	0	43	88	9	1	0	0	0	1	99
H/TOT	66	15	1	0	0	0	0	82	158	17	2	4	1	0	1	183
08:00	40	3	0	2	0	0	0	45	91	10	7	1	0	3	0	112
08:15	109	2	0	0	0	0	0	111	69	7	2	0	0	0	0	78
08:30	108	8	1	0	0	0	0	117	79	7	2	1	0	0	0	89
08:45	52	5	4	0	0	1	0	62	57	10	2	4	2	2	0	77
H/TOT	309	18	5	2	0	1	0	335	296	34	13	6	2	5	0	356
09:00	42	3	5	0	0	0	0	50	60	17	0	4	0	1	0	82
09:15	41	4	1	0	0	0	0	46	47	8	5	2	1	0	0	63
H/TOT	83	7	6	0	0	0	0	96	107	25	5	6	1	1	0	145
P/TOT	458	40	12	2	0	1	0	513	561	76	20	16	4	6	1	684

	E to D								E to C							
TIME	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT
16:00	55	1	0	0	1	0	0	57	63	9	1	0	1	0	0	74
16:15	36	0	1	0	0	0	0	37	85	5	0	1	2	0	0	93
16:30	41	1	1	0	0	0	0	43	72	6	3	4	0	0	0	85
16:45	28	0	1	0	0	0	0	29	72	7	2	1	0	0	0	82
H/TOT	160	2	3	0	1	0	0	166	292	27	6	6	3	0	0	334
17:00	48	3	0	0	0	0	0	51	73	6	1	0	1	0	0	81
17:15	44	1	1	0	0	0	0	46	71	4	0	0	0	0	0	75
17:30	48	2	0	0	0	0	0	50	75	3	0	0	0	0	0	78
17:45	49	4	0	0	0	0	0	53	66	6	2	0	0	0	0	74
H/TOT	189	10	1	0	0	0	0	200	285	19	3	0	1	0	0	308
P/TOT	349	12	4	0	1	0	0	366	577	46	9	6	4	0	0	642

SITE: 8 DATE: 12/10/2022

LOCATION: A627 (M) / A627 Chadderton Way / Burnley Lane DAY: Wednesday

	E to B								E to A							
TIME	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT
07:30	52	7	0	0	1	0	0	60	80	15	5	8	0	0	0	108
07:45	36	6	1	0	0	0	1	44	63	9	1	3	0	0	0	76
H/TOT	88	13	1	0	1	0	1	104	143	24	6	11	0	0	0	184
08:00	34	3	1	0	1	0	0	39	56	13	5	4	0	0	0	78
08:15	45	4	0	0	0	0	0	49	49	13	1	4	0	0	0	67
08:30	24	3	1	0	0	0	0	28	54	9	2	2	1	0	0	68
08:45	27	4	0	0	0	0	0	31	52	9	2	2	0	0	0	65
H/TOT	130	14	2	0	1	0	0	147	211	44	10	12	1	0	0	278
09:00	22	6	3	1	1	0	0	33	47	9	5	5	0	1	0	67
09:15	17	5	0	0	0	0	0	22	49	11	4	3	0	0	0	67
H/TOT	39	11	3	1	1	0	0	55	96	20	9	8	0	1	0	134
P/TOT	257	38	6	1	3	0	1	306	450	88	25	31	1	1	0	596

	E to B								E to A							
TIME	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT
16:00	35	7	1	1	0	1	0	45	95	11	3	2	0	0	0	111
16:15	25	10	2	0	1	0	0	38	69	15	2	2	0	0	0	88
16:30	50	4	0	0	0	0	0	54	80	16	2	0	0	0	0	98
16:45	38	6	0	0	0	0	0	44	73	12	3	3	0	0	0	91
H/TOT	148	27	3	1	1	1	0	181	317	54	10	7	0	0	0	388
17:00	40	6	0	0	0	0	0	46	83	18	2	1	0	0	0	104
17:15	43	3	1	1	1	0	0	49	82	12	1	1	0	0	0	96
17:30	47	1	0	0	1	0	0	49	65	8	1	2	0	0	0	76
17:45	41	4	0	0	0	0	0	45	78	8	1	1	0	0	0	88
H/TOT	171	14	1	1	2	0	0	189	308	46	5	5	0	0	0	364
P/TOT	319	41	4	2	3	1	0	370	625	100	15	12	0	0	0	752

SITE: 8 DATE: 12/10/2022

LOCATION: A627 (M) / A627 Chadderton Way / Burnley Lane DAY: Wednesday

	E to E							
TIME	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT
07:30	0	0	0	0	0	0	0	0
07:45	0	0	0	0	0	0	0	0
H/TOT	0	0	0	0	0	0	0	0
08:00	0	0	0	0	0	0	0	0
08:15	0	0	0	0	0	0	0	0
08:30	0	0	0	0	0	0	0	0
08:45	0	0	0	0	0	0	0	0
H/TOT	0	0	0	0	0	0	0	0
09:00	0	0	0	0	0	0	0	0
09:15	0	0	0	0	0	0	0	0
H/TOT	0	0	0	0	0	0	0	0
P/TOT	0	0	0	0	0	0	0	0

	E to E							
TIME	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT
16:00	0	0	0	0	0	0	0	0
16:15	0	0	0	0	0	0	0	0
16:30	0	0	0	0	0	0	0	0
16:45	0	0	0	0	0	0	0	0
H/TOT	0	0	0	0	0	0	0	0
17:00	0	0	0	0	0	0	0	0
17:15	0	0	0	0	0	0	0	0
17:30	0	0	0	0	0	0	0	0
17:45	0	0	0	0	0	0	0	0
H/TOT	0	0	0	0	0	0	0	0
P/TOT	0	0	0	0	0	0	0	0

SITE: 8 DATE: 12/10/2022

LOCATION: A627 (M) / A627 Chadderton Way / Burnley Lane DAY: Wednesday

	TO ARM A								FROM ARM A							
TIME	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT
07:30	244	43	7	11	0	0	0	305	368	68	12	8	0	2	0	458
07:45	238	55	4	3	0	1	0	301	352	63	13	9	0	1	0	438
H/TOT	482	98	11	14	0	1	0	606	720	131	25	17	0	3	0	896
08:00	242	42	12	8	0	0	0	304	339	48	7	9	0	0	0	403
08:15	254	45	14	9	1	0	0	323	295	36	7	11	0	1	0	350
08:30	203	40	8	4	3	0	0	258	340	49	16	7	1	0	0	413
08:45	211	46	12	8	1	0	0	278	320	64	21	11	1	1	0	418
H/TOT	910	173	46	29	5	0	0	1163	1294	197	51	38	2	2	0	1584
09:00	190	50	12	9	1	1	0	263	275	70	23	12	0	1	0	381
09:15	187	40	9	8	1	0	0	245	256	67	20	10	0	0	0	353
H/TOT	377	90	21	17	2	1	0	508	531	137	43	22	0	1	0	734
P/TOT	1769	361	78	60	7	2	0	2277	2545	465	119	77	2	6	0	3214

	TO ARM A								FROM ARM A							
TIME	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT
16:00	357	73	9	5	3	0	0	447	229	76	11	3	5	1	0	325
16:15	382	48	8	6	0	0	0	444	243	62	9	3	3	0	0	320
16:30	362	57	8	3	0	1	0	431	265	69	9	7	1	0	0	351
16:45	366	66	12	8	2	0	0	454	269	48	8	3	0	1	0	329
H/TOT	1467	244	37	22	5	1	0	1776	1006	255	37	16	9	2	0	1325
17:00	391	56	9	4	0	0	0	460	293	46	9	2	0	1	0	351
17:15	366	45	2	2	1	0	0	416	316	44	8	4	0	0	0	372
17:30	363	27	9	4	0	1	0	404	265	38	7	7	1	1	0	319
17:45	351	37	2	2	0	0	0	392	308	34	7	7	1	1	0	358
H/TOT	1471	165	22	12	1	1	0	1672	1182	162	31	20	2	3	0	1400
P/TOT	2938	409	59	34	6	2	0	3448	2188	417	68	36	11	5	0	2725

SITE: 8 DATE: 12/10/2022

LOCATION: A627 (M) / A627 Chadderton Way / Burnley Lane DAY: Wednesday

	TO ARM B								FROM ARM B							
TIME	**CAR**	**LGV**	**OGV1**	**OGV2**	**PSV**	**MCL**	**PCL**	**TOT**	**CAR**	**LGV**	**OGV1**	**OGV2**	**PSV**	**MCL**	**PCL**	**TOT**
07:30	129	21	2	0	1	1	0	154	98	20	1	2	0	1	0	122
07:45	109	13	5	0	0	0	1	128	97	19	3	1	0	1	1	122
H/TOT	238	34	7	0	1	1	1	282	195	39	4	3	0	2	1	244
08:00	132	11	1	0	1	0	0	145	168	15	2	2	1	0	0	188
08:15	170	11	0	0	3	0	0	184	173	15	2	0	4	0	0	194
08:30	102	10	4	0	0	0	0	116	147	12	1	0	0	0	0	160
08:45	108	22	3	0	0	0	0	133	153	20	4	0	0	0	0	177
H/TOT	512	54	8	0	4	0	0	578	641	62	9	2	5	0	0	719
09:00	73	26	6	2	1	0	0	108	109	11	3	1	1	0	0	125
09:15	76	13	0	0	2	0	0	91	85	21	4	2	2	0	0	114
H/TOT	149	39	6	2	3	0	0	199	194	32	7	3	3	0	0	239
P/TOT	899	127	21	2	8	1	1	1059	1030	133	20	8	8	2	1	1202

	TO ARM B								FROM ARM B							
TIME	**CAR**	**LGV**	**OGV1**	**OGV2**	**PSV**	**MCL**	**PCL**	**TOT**	**CAR**	**LGV**	**OGV1**	**OGV2**	**PSV**	**MCL**	**PCL**	**TOT**
16:00	131	22	4	1	0	1	0	159	102	12	2	0	2	0	0	118
16:15	129	23	3	0	1	0	0	156	96	13	4	1	1	1	0	116
16:30	165	18	1	0	1	0	0	185	111	16	1	0	0	0	0	128
16:45	169	18	1	1	1	1	0	191	90	18	1	0	1	1	0	111
H/TOT	594	81	9	2	3	2	0	691	399	59	8	1	4	2	0	473
17:00	186	26	0	0	0	0	0	212	98	12	5	0	0	0	0	115
17:15	187	21	4	2	2	1	0	217	98	13	1	0	2	0	0	114
17:30	172	13	0	1	1	0	0	187	89	13	2	1	0	0	0	105
17:45	150	25	1	0	1	0	0	177	106	15	0	0	1	0	1	123
H/TOT	695	85	5	3	4	1	0	793	391	53	8	1	3	0	1	457
P/TOT	1289	166	14	5	7	3	0	1484	790	112	16	2	7	2	1	930

SITE: 8 DATE: 12/10/2022

LOCATION: A627 (M) / A627 Chadderton Way / Burnley Lane DAY: Wednesday

	TO ARM C								FROM ARM C							
TIME	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT
07:30	94	10	1	4	1	1	0	111	55	9	2	1	0	0	0	67
07:45	133	10	2	1	0	0	1	147	82	4	2	0	0	0	0	88
H/TOT	227	20	3	5	1	1	1	258	137	13	4	1	0	0	0	155
08:00	135	15	8	1	1	3	0	163	58	9	0	1	0	0	0	68
08:15	134	11	3	0	1	1	0	150	73	6	3	0	3	0	0	85
08:30	116	13	3	1	0	0	0	133	93	5	3	0	0	0	0	101
08:45	92	18	4	4	2	2	0	122	63	6	1	1	0	0	0	71
H/TOT	477	57	18	6	4	6	0	568	287	26	7	2	3	0	0	325
09:00	89	21	1	4	1	1	0	117	66	8	4	2	0	0	0	80
09:15	71	11	5	3	1	0	0	91	57	4	5	1	1	0	0	68
H/TOT	160	32	6	7	2	1	0	208	123	12	9	3	1	0	0	148
P/TOT	864	109	27	18	7	8	1	1034	547	51	20	6	4	0	0	628

	TO ARM C								FROM ARM C							
TIME	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT
16:00	110	14	2	0	2	0	1	129	79	9	2	1	0	0	0	91
16:15	136	6	1	1	2	0	0	146	62	9	4	1	0	0	0	76
16:30	111	11	3	4	0	0	0	129	84	8	0	0	1	0	0	93
16:45	114	11	2	1	1	0	0	129	55	6	0	1	0	0	0	62
H/TOT	471	42	8	6	5	0	1	533	280	32	6	3	1	0	0	322
17:00	130	8	3	0	1	0	0	142	72	2	0	1	0	0	0	75
17:15	103	7	0	0	1	0	0	111	60	6	0	2	1	0	0	69
17:30	111	8	0	0	0	0	0	119	67	10	1	0	0	1	0	79
17:45	95	9	2	0	1	0	0	107	73	3	0	1	0	0	0	77
H/TOT	439	32	5	0	3	0	0	479	272	21	1	4	1	1	0	300
P/TOT	910	74	13	6	8	0	1	1012	552	53	7	7	2	1	0	622

SITE: 8 DATE: 12/10/2022

LOCATION: A627 (M) / A627 Chadderton Way / Burnley Lane DAY: Wednesday

	TO ARM D								FROM ARM D							
TIME	**CAR**	**LGV**	**OGV1**	**OGV2**	**PSV**	**MCL**	**PCL**	**TOT**	**CAR**	**LGV**	**OGV1**	**OGV2**	**PSV**	**MCL**	**PCL**	**TOT**
07:30	355	67	8	5	0	0	0	435	195	36	3	1	1	0	0	236
07:45	366	58	10	7	0	2	0	443	224	50	6	1	0	1	0	282
H/TOT	721	125	18	12	0	2	0	878	419	86	9	2	1	1	0	518
08:00	395	40	6	9	0	0	0	450	295	32	7	4	0	0	0	338
08:15	398	33	8	7	1	0	0	447	392	41	12	5	1	0	0	451
08:30	484	43	14	3	1	0	0	545	210	34	8	2	2	0	0	256
08:45	360	57	21	4	1	2	0	445	212	46	12	6	1	0	0	277
H/TOT	1637	173	49	23	3	2	0	1887	1109	153	39	17	4	0	0	1322
09:00	287	47	20	8	0	1	0	363	197	60	9	4	2	0	0	272
09:15	252	68	18	5	1	0	0	344	195	39	6	5	2	0	0	247
H/TOT	539	115	38	13	1	1	0	707	392	99	15	9	4	0	0	519
P/TOT	2897	413	105	48	4	5	0	3472	1920	338	63	28	9	1	0	2359

	TO ARM D								FROM ARM D							
TIME	**CAR**	**LGV**	**OGV1**	**OGV2**	**PSV**	**MCL**	**PCL**	**TOT**	**CAR**	**LGV**	**OGV1**	**OGV2**	**PSV**	**MCL**	**PCL**	**TOT**
16:00	200	47	4	0	7	0	0	258	398	69	6	3	4	0	1	481
16:15	199	30	3	1	2	1	0	236	463	42	6	3	0	0	0	514
16:30	220	35	6	2	1	0	0	264	415	46	6	3	0	1	0	471
16:45	204	36	3	2	0	2	0	247	464	65	9	6	3	1	0	548
H/TOT	823	148	16	5	10	3	0	1005	1740	222	27	15	7	2	1	2014
17:00	230	32	4	0	0	1	0	267	515	58	9	3	0	0	0	585
17:15	245	31	7	2	0	0	0	285	453	46	3	2	2	1	0	507
17:30	227	26	3	0	1	1	0	258	474	25	8	1	1	1	0	510
17:45	261	23	2	2	1	0	0	289	413	40	3	1	1	0	0	458
H/TOT	963	112	16	4	2	2	0	1099	1855	169	23	7	4	2	0	2060
P/TOT	1786	260	32	9	12	5	0	2104	3595	391	50	22	11	4	1	4074

SITE: 8 DATE: 12/10/2022

LOCATION: A627 (M) / A627 Chadderton Way / Burnley Lane DAY: Wednesday

	TO ARM E								FROM ARM E							
TIME	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT
07:30	125	31	7	4	1	1	0	169	231	39	7	12	2	0	0	291
07:45	133	30	6	3	0	0	1	173	224	30	3	3	0	0	2	262
H/TOT	258	61	13	7	1	1	1	342	455	69	10	15	2	0	2	553
08:00	177	25	2	5	0	0	0	209	221	29	13	7	1	3	0	274
08:15	249	24	2	4	2	0	0	281	272	26	3	4	0	0	0	305
08:30	150	21	5	4	0	0	0	180	265	27	6	3	1	0	0	302
08:45	165	21	6	8	0	0	0	200	188	28	8	6	2	3	0	235
H/TOT	741	91	15	21	2	0	0	870	946	110	30	20	4	6	0	1116
09:00	179	40	13	6	1	0	0	239	171	35	13	10	1	2	0	232
09:15	161	27	13	7	1	0	0	209	154	28	10	5	1	0	0	198
H/TOT	340	67	26	13	2	0	0	448	325	63	23	15	2	2	0	430
P/TOT	1339	219	54	41	5	1	1	1660	1726	242	63	50	8	8	2	2099

	TO ARM E								FROM ARM E							
TIME	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT
16:00	258	38	7	4	1	1	0	309	248	28	5	3	2	1	0	287
16:15	233	49	13	3	2	0	0	300	215	30	5	3	3	0	0	256
16:30	260	45	4	5	0	0	0	314	243	27	6	4	0	0	0	280
16:45	236	31	6	2	0	0	0	275	211	25	6	4	0	0	0	246
H/TOT	987	163	30	14	3	1	0	1198	917	110	22	14	5	1	0	1069
17:00	285	29	10	3	0	0	0	327	244	33	3	1	1	0	0	282
17:15	266	25	2	4	2	0	0	299	240	20	3	2	1	0	0	266
17:30	257	26	7	6	1	1	0	298	235	14	1	2	1	0	0	253
17:45	277	20	6	6	0	1	1	311	234	22	3	1	0	0	0	260
H/TOT	1085	100	25	19	3	2	1	1235	953	89	10	6	3	0	0	1061
P/TOT	2072	263	55	33	6	3	1	2433	1870	199	32	20	8	1	0	2130

SITE: 8 DATE: 12/10/2022

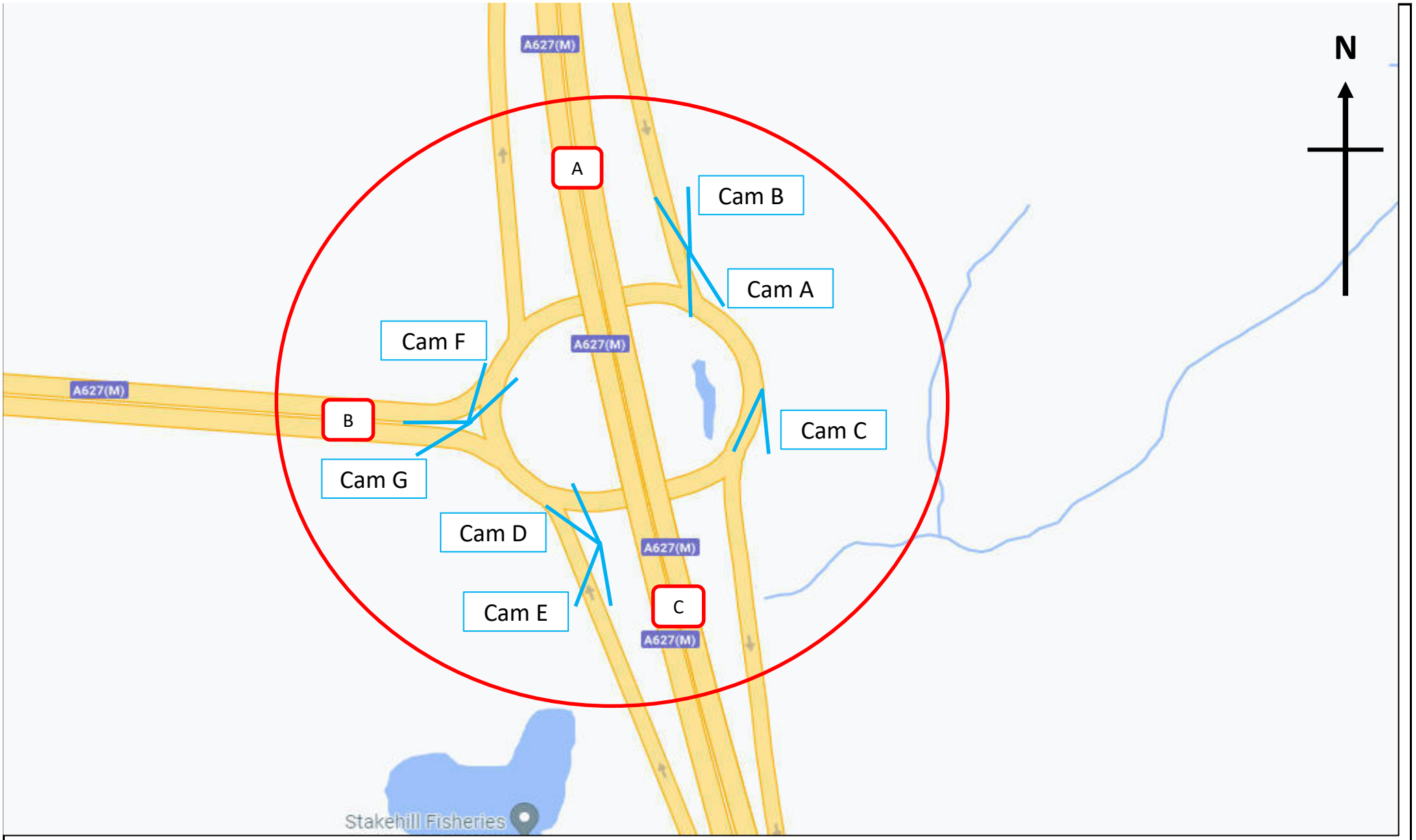
LOCATION: A627 (M) / A627 Chadderton Way / Burnley Lane DAY: Wednesday

	JUNCTION TOTAL							
TIME	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT
07:30	947	172	25	24	3	3	0	1174
07:45	979	166	27	14	0	3	3	1192
H/TOT	1926	338	52	38	3	6	3	2366
08:00	1081	133	29	23	2	3	0	1271
08:15	1205	124	27	20	8	1	0	1385
08:30	1055	127	34	12	4	0	0	1232
08:45	936	164	46	24	4	4	0	1178
H/TOT	4277	548	136	79	18	8	0	5066
09:00	818	184	52	29	4	3	0	1090
09:15	747	159	45	23	6	0	0	980
H/TOT	1565	343	97	52	10	3	0	2070
P/TOT	7768	1229	285	169	31	17	3	9502

PEAK HOUR CALCULATION	TOT
07:30 to 08:30	5022
07:45 to 08:45	**5080**
08:00 to 09:00	5066
08:15 to 09:15	4885
08:30 to 09:30	4480
AM PEAK VALUE	**5080**

	JUNCTION TOTAL							
TIME	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT
16:00	1056	194	26	10	13	2	1	1302
16:15	1079	156	28	11	7	1	0	1282
16:30	1118	166	22	14	2	1	0	1323
16:45	1089	162	24	14	4	3	0	1296
H/TOT	4342	678	100	49	26	7	1	5203
17:00	1222	151	26	7	1	1	0	1408
17:15	1167	129	15	10	6	1	0	1328
17:30	1130	100	19	11	3	3	0	1266
17:45	1134	114	13	10	3	1	1	1276
H/TOT	4653	494	73	38	13	6	1	5278
P/TOT	8995	1172	173	87	39	13	2	10481

PEAK HOUR CALCULATION	TOT
16:00 to 17:00	5203
16:15 to 17:15	5309
16:30 to 17:30	**5355**
16:45 to 17:45	5298
17:00 to 18:00	5278
PM PEAK VALUE	**5355**



NDC NATIONWIDE DATA COLLECTION	**Site / Location:**	Site 9, Spur Roundabout	**Project No:**	13307	**Drawing No:**	13307-09	**Drawn By:** EA
	Survey Date:	Wednesday 12th October 2022	**Project Name:**	Stakehill			
	Survey Times:	07:30 to 09:30 and 16:00 to 18:00	**Drawing Title:**	Site Layout and Observed Movements			

SITE: 9 DATE: 12/10/2022

LOCATION: Spur Roundabout DAY: Wednesday

	A to C								A to B							
TIME	**CAR**	**LGV**	**OGV1**	**OGV2**	**PSV**	**MCL**	**PCL**	**TOT**	**CAR**	**LGV**	**OGV1**	**OGV2**	**PSV**	**MCL**	**PCL**	**TOT**
07:30	1	0	0	1	0	0	0	2	49	21	1	3	0	0	0	74
07:45	44	6	1	1	0	0	0	52	68	20	2	4	0	1	0	95
H/TOT	45	6	1	2	0	0	0	54	117	41	3	7	0	1	0	169
08:00	74	5	1	2	0	0	0	82	80	25	3	4	0	0	0	112
08:15	48	14	4	3	0	0	0	69	94	36	5	3	0	0	0	138
08:30	23	2	0	0	0	0	0	25	87	27	6	6	1	0	0	127
08:45	3	2	0	0	0	0	0	5	74	20	5	3	0	1	0	103
H/TOT	148	23	5	5	0	0	0	181	335	108	19	16	1	1	0	480
09:00	0	0	0	0	0	0	0	0	42	5	3	7	0	0	0	57
09:15	1	1	0	0	0	0	0	2	41	7	0	5	1	0	0	54
H/TOT	1	1	0	0	0	0	0	2	83	12	3	12	1	0	0	111
P/TOT	194	30	6	7	0	0	0	237	535	161	25	35	2	2	0	760

	A to C								A to B							
TIME	**CAR**	**LGV**	**OGV1**	**OGV2**	**PSV**	**MCL**	**PCL**	**TOT**	**CAR**	**LGV**	**OGV1**	**OGV2**	**PSV**	**MCL**	**PCL**	**TOT**
16:00	1	0	0	0	0	0	0	1	24	11	4	3	0	0	0	42
16:15	0	1	0	0	0	0	0	1	33	14	1	3	0	0	0	51
16:30	2	0	0	0	0	0	0	2	45	19	4	4	0	0	0	72
16:45	0	0	0	0	0	0	0	0	33	10	2	3	0	0	0	48
H/TOT	3	1	0	0	0	0	0	4	135	54	11	13	0	0	0	213
17:00	0	0	0	0	0	0	0	0	47	11	3	2	0	0	0	63
17:15	0	0	0	0	0	0	0	0	61	16	5	1	0	1	0	84
17:30	0	0	0	0	0	0	0	0	55	12	7	4	0	0	0	78
17:45	0	0	1	0	0	0	0	1	35	9	3	3	0	0	0	50
H/TOT	0	0	1	0	0	0	0	1	198	48	18	10	0	1	0	275
P/TOT	3	1	1	0	0	0	0	5	333	102	29	23	0	1	0	488

SITE: 9 DATE: 12/10/2022

LOCATION: Spur Roundabout DAY: Wednesday

TIME	A to A CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT
07:30	0	0	0	0	0	0	0	0
07:45	2	2	0	0	0	0	0	4
H/TOT	2	2	0	0	0	0	0	4
08:00	2	1	0	0	0	0	0	3
08:15	4	0	0	2	0	0	0	6
08:30	2	0	0	0	0	0	0	2
08:45	0	0	0	0	0	0	0	0
H/TOT	8	1	0	2	0	0	0	11
09:00	0	0	0	0	0	0	0	0
09:15	0	0	0	0	0	0	0	0
H/TOT	0	0	0	0	0	0	0	0
P/TOT	10	3	0	2	0	0	0	15

TIME	A to A CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT
16:00	0	0	0	0	0	0	0	0
16:15	0	0	0	0	0	0	0	0
16:30	0	0	0	0	0	0	0	0
16:45	2	0	0	0	0	0	0	2
H/TOT	2	0	0	0	0	0	0	2
17:00	0	0	0	0	0	0	0	0
17:15	0	0	0	0	0	0	0	0
17:30	1	0	0	0	0	0	0	1
17:45	0	0	0	0	0	0	0	0
H/TOT	1	0	0	0	0	0	0	1
P/TOT	3	0	0	0	0	0	0	3

SITE: 9 DATE: 12/10/2022

LOCATION: Spur Roundabout DAY: Wednesday

	B to A								B to C							
TIME	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT
07:30	24	12	4	3	0	0	0	43	92	16	2	1	0	1	0	112
07:45	28	15	2	2	0	0	0	47	107	22	4	1	0	0	0	134
H/TOT	52	27	6	5	0	0	0	90	199	38	6	2	0	1	0	246
08:00	29	20	4	3	0	0	0	56	74	16	5	2	0	0	0	97
08:15	29	18	4	6	1	0	0	58	56	10	3	0	1	1	0	71
08:30	36	17	0	2	0	0	0	55	47	17	3	1	2	0	0	70
08:45	30	17	3	4	0	1	0	55	48	19	2	2	1	0	0	72
H/TOT	124	72	11	15	1	1	0	224	225	62	13	5	4	1	0	310
09:00	34	16	7	6	0	0	0	63	70	21	3	0	1	0	0	95
09:15	30	14	2	2	0	0	0	48	53	26	3	0	0	0	0	82
H/TOT	64	30	9	8	0	0	0	111	123	47	6	0	1	0	0	177
P/TOT	240	129	26	28	1	1	0	425	547	147	25	7	5	2	0	733

	B to A								B to C							
TIME	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT
16:00	83	8	2	4	0	0	0	97	93	26	3	0	1	0	0	123
16:15	46	11	2	3	0	0	0	62	79	17	1	0	1	0	0	98
16:30	42	17	2	8	0	0	0	69	73	13	2	1	0	0	0	89
16:45	53	14	0	2	0	0	0	69	74	12	0	1	0	1	0	88
H/TOT	224	50	6	17	0	0	0	297	319	68	6	2	2	1	0	398
17:00	71	2	1	5	0	0	0	79	128	12	1	0	0	0	0	141
17:15	38	13	1	2	0	0	0	54	72	11	3	1	1	0	0	88
17:30	26	10	1	2	0	0	0	39	74	9	0	2	0	0	0	85
17:45	26	8	0	3	0	1	0	38	78	6	0	1	0	0	0	85
H/TOT	161	33	3	12	0	1	0	210	352	38	4	4	1	0	0	399
P/TOT	385	83	9	29	0	1	0	507	671	106	10	6	3	1	0	797

SITE: 9 DATE: 12/10/2022

LOCATION: Spur Roundabout DAY: Wednesday

TIME	B to B CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT
07:30	0	0	0	0	0	0	0	0
07:45	0	0	0	0	0	0	0	0
H/TOT	0	0	0	0	0	0	0	0
08:00	0	0	0	0	0	0	0	0
08:15	0	0	0	0	0	0	0	0
08:30	0	0	0	0	0	0	0	0
08:45	0	0	0	0	0	0	0	0
H/TOT	0	0	0	0	0	0	0	0
09:00	0	0	0	0	0	0	0	0
09:15	0	0	0	0	0	0	0	0
H/TOT	0	0	0	0	0	0	0	0
P/TOT	0	0	0	0	0	0	0	0

TIME	B to B CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT
16:00	0	0	0	0	0	0	0	0
16:15	0	0	0	0	0	0	0	0
16:30	0	0	0	0	0	0	0	0
16:45	0	0	0	0	0	0	0	0
H/TOT	0	0	0	0	0	0	0	0
17:00	0	0	0	0	0	0	0	0
17:15	0	0	0	0	0	0	0	0
17:30	0	0	0	0	0	0	0	0
17:45	0	0	0	0	0	0	0	0
H/TOT	0	0	0	0	0	0	0	0
P/TOT	0	0	0	0	0	0	0	0

SITE: 9 DATE: 12/10/2022

LOCATION: Spur Roundabout DAY: Wednesday

	C to B								C to A							
TIME	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT
07:30	77	15	0	2	0	0	0	94	0	0	0	0	0	0	0	0
07:45	94	17	2	1	1	1	0	116	0	0	0	0	0	0	0	0
H/TOT	171	32	2	3	1	1	0	210	0	0	0	0	0	0	0	0
08:00	76	14	4	1	0	0	0	95	0	0	0	0	0	0	0	0
08:15	71	13	1	1	0	0	0	86	0	0	0	0	0	0	0	0
08:30	81	14	0	0	0	0	0	95	0	0	0	0	0	0	0	0
08:45	70	14	3	4	2	0	0	93	1	0	0	0	0	0	0	1
H/TOT	298	55	8	6	2	0	0	369	1	0	0	0	0	0	0	1
09:00	58	6	2	1	0	0	0	67	0	0	0	0	0	0	0	0
09:15	53	18	6	2	0	0	0	79	0	0	0	0	0	0	0	0
H/TOT	111	24	8	3	0	0	0	146	0	0	0	0	0	0	0	0
P/TOT	580	111	18	12	3	1	0	725	1	0	0	0	0	0	0	1

	C to B								C to A							
TIME	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT
16:00	72	22	3	3	0	0	0	100	1	0	0	0	0	0	0	1
16:15	67	17	3	2	0	0	0	89	1	0	0	0	0	0	0	1
16:30	77	28	2	1	0	0	0	108	0	0	0	0	0	0	0	0
16:45	86	19	3	0	0	0	0	108	0	0	0	0	0	0	0	0
H/TOT	302	86	11	6	0	0	0	405	2	0	0	0	0	0	0	2
17:00	88	23	2	1	1	0	0	115	0	0	0	0	0	0	0	0
17:15	99	11	4	1	0	0	0	115	2	0	0	0	0	0	0	2
17:30	80	16	2	2	0	0	0	100	0	0	0	0	0	0	0	0
17:45	77	13	5	0	0	0	0	95	1	0	0	0	0	0	0	1
H/TOT	344	63	13	4	1	0	0	425	3	0	0	0	0	0	0	3
P/TOT	646	149	24	10	1	0	0	830	5	0	0	0	0	0	0	5

SITE: 9 DATE: 12/10/2022

LOCATION: Spur Roundabout DAY: Wednesday

TIME	C to C CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT
07:30	0	0	0	0	0	0	0	0
07:45	0	0	0	0	0	0	0	0
H/TOT	0	0	0	0	0	0	0	0
08:00	1	0	0	0	0	0	0	1
08:15	0	0	0	0	0	0	0	0
08:30	0	0	0	0	0	0	0	0
08:45	0	0	0	0	0	0	0	0
H/TOT	1	0	0	0	0	0	0	1
09:00	0	0	0	0	0	0	0	0
09:15	0	0	0	0	0	0	0	0
H/TOT	0	0	0	0	0	0	0	0
P/TOT	1	0	0	0	0	0	0	1

TIME	C to C CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT
16:00	1	0	0	0	0	0	0	1
16:15	0	0	0	0	0	0	0	0
16:30	0	1	0	0	0	0	0	1
16:45	1	0	0	0	0	0	0	1
H/TOT	2	1	0	0	0	0	0	3
17:00	0	0	0	0	0	0	0	0
17:15	1	0	0	0	0	0	0	1
17:30	1	0	0	0	0	0	0	1
17:45	0	0	0	0	0	0	0	0
H/TOT	2	0	0	0	0	0	0	2
P/TOT	4	1	0	0	0	0	0	5

SITE: 9 DATE: 12/10/2022

LOCATION: Spur Roundabout DAY: Wednesday

	TO ARM A								FROM ARM A							
TIME	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT
07:30	24	12	4	3	0	0	0	43	50	21	1	4	0	0	0	76
07:45	30	17	2	2	0	0	0	51	114	28	3	5	0	1	0	151
H/TOT	54	29	6	5	0	0	0	94	164	49	4	9	0	1	0	227
08:00	31	21	4	3	0	0	0	59	156	31	4	6	0	0	0	197
08:15	33	18	4	8	1	0	0	64	146	50	9	8	0	0	0	213
08:30	38	17	0	2	0	0	0	57	112	29	6	6	1	0	0	154
08:45	31	17	3	4	0	1	0	56	77	22	5	3	0	1	0	108
H/TOT	133	73	11	17	1	1	0	236	491	132	24	23	1	1	0	672
09:00	34	16	7	6	0	0	0	63	42	5	3	7	0	0	0	57
09:15	30	14	2	2	0	0	0	48	42	8	0	5	1	0	0	56
H/TOT	64	30	9	8	0	0	0	111	84	13	3	12	1	0	0	113
P/TOT	251	132	26	30	1	1	0	441	739	194	31	44	2	2	0	1012

	TO ARM A								FROM ARM A							
TIME	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT
16:00	84	8	2	4	0	0	0	98	25	11	4	3	0	0	0	43
16:15	47	11	2	3	0	0	0	63	33	15	1	3	0	0	0	52
16:30	42	17	2	8	0	0	0	69	47	19	4	4	0	0	0	74
16:45	55	14	0	2	0	0	0	71	35	10	2	3	0	0	0	50
H/TOT	228	50	6	17	0	0	0	301	140	55	11	13	0	0	0	219
17:00	71	2	1	5	0	0	0	79	47	11	3	2	0	0	0	63
17:15	40	13	1	2	0	0	0	56	61	16	5	1	0	1	0	84
17:30	27	10	1	2	0	0	0	40	56	12	7	4	0	0	0	79
17:45	27	8	0	3	0	1	0	39	35	9	4	3	0	0	0	51
H/TOT	165	33	3	12	0	1	0	214	199	48	19	10	0	1	0	277
P/TOT	393	83	9	29	0	1	0	515	339	103	30	23	0	1	0	496

SITE: 9 DATE: 12/10/2022

LOCATION: Spur Roundabout DAY: Wednesday

	TO ARM B								FROM ARM B							
TIME	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT
07:30	126	36	1	5	0	0	0	168	116	28	6	4	0	1	0	155
07:45	162	37	4	5	1	2	0	211	135	37	6	3	0	0	0	181
H/TOT	288	73	5	10	1	2	0	379	251	65	12	7	0	1	0	336
08:00	156	39	7	5	0	0	0	207	103	36	9	5	0	0	0	153
08:15	165	49	6	4	0	0	0	224	85	28	7	6	2	1	0	129
08:30	168	41	6	6	1	0	0	222	83	34	3	3	2	0	0	125
08:45	144	34	8	7	2	1	0	196	78	36	5	6	1	1	0	127
H/TOT	633	163	27	22	3	1	0	849	349	134	24	20	5	2	0	534
09:00	100	11	5	8	0	0	0	124	104	37	10	6	1	0	0	158
09:15	94	25	6	7	1	0	0	133	83	40	5	2	0	0	0	130
H/TOT	194	36	11	15	1	0	0	257	187	77	15	8	1	0	0	288
P/TOT	1115	272	43	47	5	3	0	1485	787	276	51	35	6	3	0	1158

	TO ARM B								FROM ARM B							
TIME	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT
16:00	96	33	7	6	0	0	0	142	176	34	5	4	1	0	0	220
16:15	100	31	4	5	0	0	0	140	125	28	3	3	1	0	0	160
16:30	122	47	6	5	0	0	0	180	115	30	4	9	0	0	0	158
16:45	119	29	5	3	0	0	0	156	127	26	0	3	0	1	0	157
H/TOT	437	140	22	19	0	0	0	618	543	118	12	19	2	1	0	695
17:00	135	34	5	3	1	0	0	178	199	14	2	5	0	0	0	220
17:15	160	27	9	2	0	1	0	199	110	24	4	3	1	0	0	142
17:30	135	28	9	6	0	0	0	178	100	19	1	4	0	0	0	124
17:45	112	22	8	3	0	0	0	145	104	14	0	4	0	1	0	123
H/TOT	542	111	31	14	1	1	0	700	513	71	7	16	1	1	0	609
P/TOT	979	251	53	33	1	1	0	1318	1056	189	19	35	3	2	0	1304

SITE: 9 DATE: 12/10/2022

LOCATION: Spur Roundabout DAY: Wednesday

	TO ARM C								FROM ARM C							
TIME	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT
07:30	93	16	2	2	0	1	0	114	77	15	0	2	0	0	0	94
07:45	151	28	5	2	0	0	0	186	94	17	2	1	1	1	0	116
H/TOT	244	44	7	4	0	1	0	300	171	32	2	3	1	1	0	210
08:00	149	21	6	4	0	0	0	180	77	14	4	1	0	0	0	96
08:15	104	24	7	3	1	1	0	140	71	13	1	1	0	0	0	86
08:30	70	19	3	1	2	0	0	95	81	14	0	0	0	0	0	95
08:45	51	21	2	2	1	0	0	77	71	14	3	4	2	0	0	94
H/TOT	374	85	18	10	4	1	0	492	300	55	8	6	2	0	0	371
09:00	70	21	3	0	1	0	0	95	58	6	2	1	0	0	0	67
09:15	54	27	3	0	0	0	0	84	53	18	6	2	0	0	0	79
H/TOT	124	48	6	0	1	0	0	179	111	24	8	3	0	0	0	146
P/TOT	742	177	31	14	5	2	0	971	582	111	18	12	3	1	0	727

	TO ARM C								FROM ARM C							
TIME	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT
16:00	95	26	3	0	1	0	0	125	74	22	3	3	0	0	0	102
16:15	79	18	1	0	1	0	0	99	68	17	3	2	0	0	0	90
16:30	75	14	2	1	0	0	0	92	77	29	2	1	0	0	0	109
16:45	75	12	0	1	0	1	0	89	87	19	3	0	0	0	0	109
H/TOT	324	70	6	2	2	1	0	405	306	87	11	6	0	0	0	410
17:00	128	12	1	0	0	0	0	141	88	23	2	1	1	0	0	115
17:15	73	11	3	1	1	0	0	89	102	11	4	1	0	0	0	118
17:30	75	9	0	2	0	0	0	86	81	16	2	2	0	0	0	101
17:45	78	6	1	1	0	0	0	86	78	13	5	0	0	0	0	96
H/TOT	354	38	5	4	1	0	0	402	349	63	13	4	1	0	0	430
P/TOT	678	108	11	6	3	1	0	807	655	150	24	10	1	0	0	840

SITE: 9 DATE: 12/10/2022

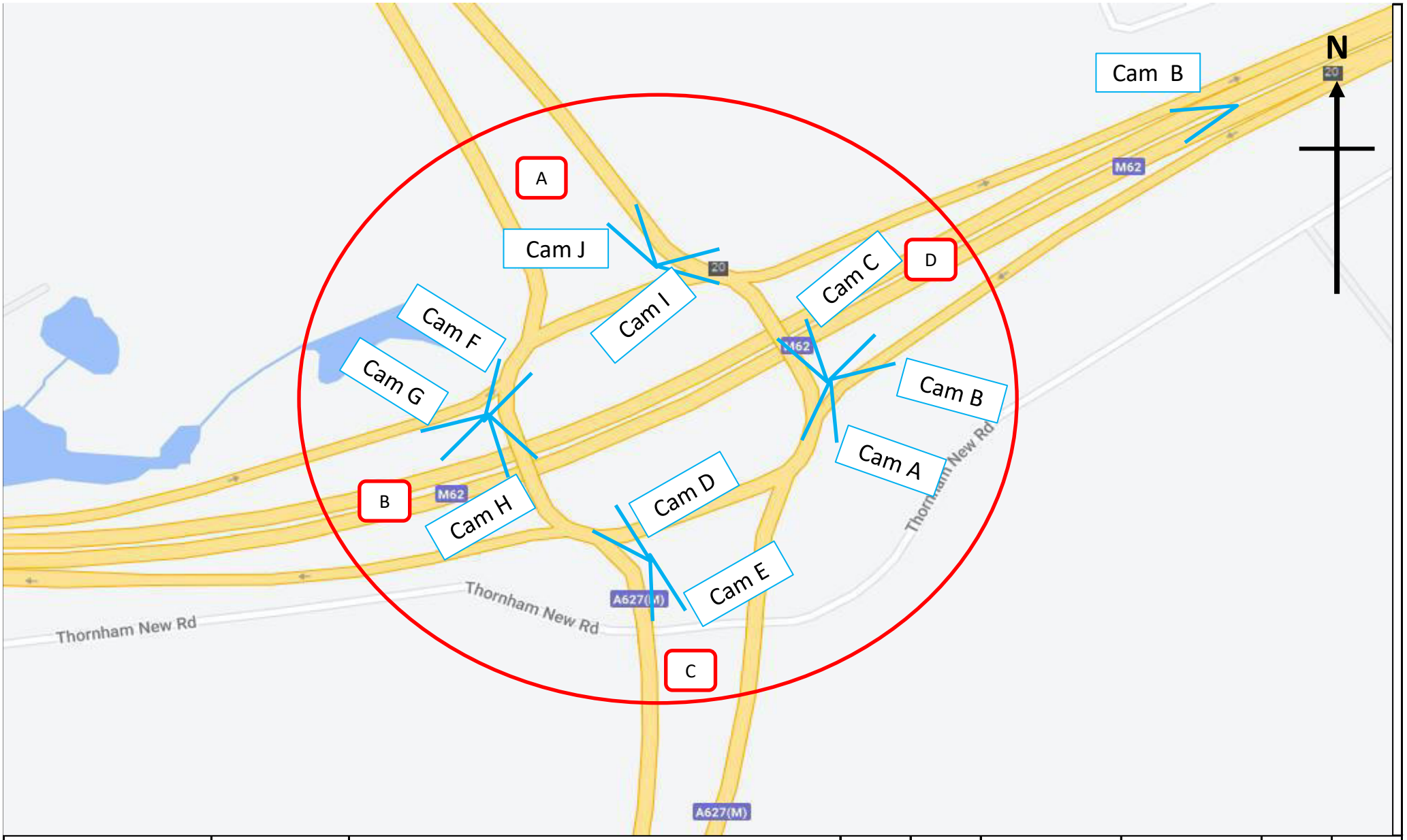
LOCATION: Spur Roundabout DAY: Wednesday

TIME	JUNCTION TOTAL CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT
07:30	243	64	7	10	0	1	0	325
07:45	343	82	11	9	1	2	0	448
H/TOT	586	146	18	19	1	3	0	773
08:00	336	81	17	12	0	0	0	446
08:15	302	91	17	15	2	1	0	428
08:30	276	77	9	9	3	0	0	374
08:45	226	72	13	13	3	2	0	329
H/TOT	1140	321	56	49	8	3	0	1577
09:00	204	48	15	14	1	0	0	282
09:15	178	66	11	9	1	0	0	265
H/TOT	382	114	26	23	2	0	0	547
P/TOT	2108	581	100	91	11	6	0	2897

PEAK HOUR CALCULATION	TOT
07:30 to 08:30	1647
07:45 to 08:45	**1696**
08:00 to 09:00	1577
08:15 to 09:15	1413
08:30 to 09:30	1250
AM PEAK VALUE	**1696**

TIME	JUNCTION TOTAL CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT
16:00	275	67	12	10	1	0	0	365
16:15	226	60	7	8	1	0	0	302
16:30	239	78	10	14	0	0	0	341
16:45	249	55	5	6	0	1	0	316
H/TOT	989	260	34	38	2	1	0	1324
17:00	334	48	7	8	1	0	0	398
17:15	273	51	13	5	1	1	0	344
17:30	237	47	10	10	0	0	0	304
17:45	217	36	9	7	0	1	0	270
H/TOT	1061	182	39	30	2	2	0	1316
P/TOT	2050	442	73	68	4	3	0	2640

PEAK HOUR CALCULATION	TOT
16:00 to 17:00	1324
16:15 to 17:15	1357
16:30 to 17:30	**1399**
16:45 to 17:45	1362
17:00 to 18:00	1316
PM PEAK VALUE	**1399**



NDC NATIONWIDE DATA COLLECTION	**Site / Location:**	Site 10, M62 J20	**Project No:**	13307	**Drawing No:**	13307-10	**Drawn By:** EA
	Survey Date:	Wednesday 12th October 2022	**Project Name:**	Stakehill			
	Survey Times:	07:30 to 09:30 and 16:00 to 18:00	**Drawing Title:**	Site Layout and Observed Movements			

SITE: 10 DATE: 12/10/2022

LOCATION: M62 J20 DAY: Wednesday

	A to D								A to C							
TIME	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT
07:30	17	1	1	1	0	0	0	20	161	26	4	0	0	0	0	191
07:45	19	5	4	1	0	0	0	29	169	26	3	3	0	1	0	202
H/TOT	36	6	5	2	0	0	0	49	330	52	7	3	0	1	0	393
08:00	37	1	7	3	0	0	0	48	201	22	6	4	0	1	0	234
08:15	22	9	0	0	0	0	0	31	101	18	3	3	0	0	0	125
08:30	28	8	1	0	0	0	0	37	112	23	4	0	0	0	0	139
08:45	26	6	4	0	0	0	0	36	124	15	10	1	0	0	0	150
H/TOT	113	24	12	3	0	0	0	152	538	78	23	8	0	1	0	648
09:00	33	5	1	1	0	0	0	40	123	32	4	4	0	1	0	164
09:15	17	6	4	3	1	0	0	31	121	20	5	3	0	0	0	149
H/TOT	50	11	5	4	1	0	0	71	244	52	9	7	0	1	0	313
P/TOT	199	41	22	9	1	0	0	272	1112	182	39	18	0	3	0	1354

	A to D								A to C							
TIME	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT
16:00	28	5	1	1	0	0	0	35	138	24	3	1	6	0	0	172
16:15	40	2	0	0	0	0	0	42	156	18	1	0	0	0	0	175
16:30	40	8	2	1	0	0	0	51	193	22	3	1	1	0	0	220
16:45	42	5	1	3	0	0	0	51	159	14	1	0	0	3	0	177
H/TOT	150	20	4	5	0	0	0	179	646	78	8	2	7	3	0	744
17:00	49	9	1	0	0	0	0	59	119	18	3	1	0	1	0	142
17:15	45	9	1	2	0	0	0	57	198	8	1	0	1	1	0	209
17:30	42	3	0	0	0	0	0	45	150	14	2	1	2	2	0	171
17:45	39	4	1	0	0	0	0	44	138	12	4	1	1	0	0	156
H/TOT	175	25	3	2	0	0	0	205	605	52	10	3	4	4	0	678
P/TOT	325	45	7	7	0	0	0	384	1251	130	18	5	11	7	0	1422

SITE: 10 DATE: 12/10/2022

LOCATION: M62 J20 DAY: Wednesday

	A to B								A to A							
TIME	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT
07:30	60	18	4	3	0	0	0	85	0	0	0	0	0	0	0	0
07:45	75	21	9	0	0	0	0	105	0	0	0	0	0	0	0	0
H/TOT	135	39	13	3	0	0	0	190	0	0	0	0	0	0	0	0
08:00	98	26	6	4	0	0	0	134	0	0	0	0	0	0	0	0
08:15	88	16	7	3	0	1	0	115	0	0	0	0	0	0	0	0
08:30	63	24	6	4	0	0	0	97	0	0	0	0	0	0	0	0
08:45	67	16	7	2	0	0	0	92	0	0	0	0	0	0	0	0
H/TOT	316	82	26	13	0	1	0	438	0	0	0	0	0	0	0	0
09:00	69	13	5	3	1	0	0	91	0	0	0	0	0	0	0	0
09:15	56	19	10	5	0	0	0	90	0	0	0	0	0	0	0	0
H/TOT	125	32	15	8	1	0	0	181	0	0	0	0	0	0	0	0
P/TOT	576	153	54	24	1	1	0	809	0	0	0	0	0	0	0	0

	A to B								A to A							
TIME	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT
16:00	123	31	11	2	1	0	0	168	0	0	0	0	0	0	0	0
16:15	144	20	9	2	0	0	0	175	0	0	0	0	0	0	0	0
16:30	148	12	1	3	0	0	0	164	0	0	0	0	0	0	0	0
16:45	125	21	2	9	0	0	0	157	0	0	0	0	0	0	0	0
H/TOT	540	84	23	16	1	0	0	664	0	0	0	0	0	0	0	0
17:00	128	16	8	6	0	1	0	159	0	0	0	0	0	0	0	0
17:15	135	17	3	0	0	0	0	155	0	0	0	0	0	0	0	0
17:30	147	14	1	2	0	0	0	164	0	0	0	0	0	0	0	0
17:45	103	11	1	3	0	0	0	118	0	0	0	0	0	0	0	0
H/TOT	513	58	13	11	0	1	0	596	0	0	0	0	0	0	0	0
P/TOT	1053	142	36	27	1	1	0	1260	0	0	0	0	0	0	0	0

SITE: 10 DATE: 12/10/2022

LOCATION: M62 J20 DAY: Wednesday

	B to A								B to D							
TIME	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT
07:30	145	20	5	3	0	1	0	174	0	1	0	0	0	0	0	1
07:45	178	25	10	3	0	2	0	218	2	0	0	0	0	0	0	2
H/TOT	323	45	15	6	0	3	0	392	2	1	0	0	0	0	0	3
08:00	131	26	8	10	0	0	0	175	0	0	0	0	0	0	0	0
08:15	185	32	12	6	1	0	0	236	1	0	0	0	0	0	0	1
08:30	173	30	8	7	0	0	0	218	0	0	0	0	0	0	0	0
08:45	156	31	8	9	1	0	0	205	0	0	0	0	0	0	0	0
H/TOT	645	119	36	32	2	0	0	834	1	0	0	0	0	0	0	1
09:00	132	19	11	4	0	2	0	168	0	0	0	0	0	0	0	0
09:15	121	21	10	9	1	0	0	162	0	0	0	0	0	0	0	0
H/TOT	253	40	21	13	1	2	0	330	0	0	0	0	0	0	0	0
P/TOT	1221	204	72	51	3	5	0	1556	3	1	0	0	0	0	0	4

	B to A								B to D							
TIME	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT
16:00	110	37	7	3	1	0	0	158	0	0	0	0	0	0	0	0
16:15	127	43	4	4	0	0	0	178	0	0	0	0	0	0	0	0
16:30	118	27	3	1	1	1	0	151	1	0	0	0	0	0	0	1
16:45	103	23	8	5	1	0	0	140	0	0	0	0	0	0	0	0
H/TOT	458	130	22	13	3	1	0	627	1	0	0	0	0	0	0	1
17:00	143	17	6	4	0	0	0	170	0	0	0	0	0	0	0	0
17:15	132	21	8	2	0	0	0	163	2	0	0	0	0	0	0	2
17:30	141	16	2	3	0	0	0	162	0	0	0	0	0	0	0	0
17:45	139	25	1	1	0	0	0	166	1	0	0	0	0	0	0	1
H/TOT	555	79	17	10	0	0	0	661	3	0	0	0	0	0	0	3
P/TOT	1013	209	39	23	3	1	0	1288	4	0	0	0	0	0	0	4

SITE: 10 DATE: 12/10/2022

LOCATION: M62 J20 DAY: Wednesday

	B to C								B to B							
TIME	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT
07:30	196	37	7	7	0	0	0	247	0	0	0	0	0	0	0	0
07:45	218	34	8	4	0	0	0	264	0	0	0	0	0	0	0	0
H/TOT	414	71	15	11	0	0	0	511	0	0	0	0	0	0	0	0
08:00	189	35	4	6	0	0	0	234	0	0	0	0	0	0	0	0
08:15	151	19	6	6	0	0	0	182	0	0	0	0	0	0	0	0
08:30	118	21	7	6	0	0	0	152	0	0	0	0	0	0	0	0
08:45	93	27	12	7	0	0	0	139	0	0	0	0	0	0	0	0
H/TOT	551	102	29	25	0	0	0	707	0	0	0	0	0	0	0	0
09:00	89	20	10	7	0	0	0	126	0	0	0	0	0	0	0	0
09:15	85	24	8	5	0	0	0	122	0	0	0	0	0	0	0	0
H/TOT	174	44	18	12	0	0	0	248	0	0	0	0	0	0	0	0
P/TOT	1139	217	62	48	0	0	0	1466	0	0	0	0	0	0	0	0

	B to C								B to B							
TIME	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT
16:00	104	48	12	5	0	0	0	169	0	0	0	0	0	0	0	0
16:15	131	41	4	4	0	0	0	180	0	0	0	0	0	0	0	0
16:30	135	45	5	7	0	0	0	192	0	0	0	0	0	0	0	0
16:45	133	22	8	5	1	0	0	169	0	0	0	0	0	0	0	0
H/TOT	503	156	29	21	1	0	0	710	0	0	0	0	0	0	0	0
17:00	134	23	4	7	0	1	0	169	0	0	0	0	0	0	0	0
17:15	145	38	5	2	0	0	0	190	0	0	0	0	0	0	0	0
17:30	109	24	2	9	0	0	0	144	0	0	0	0	0	0	0	0
17:45	136	19	4	10	0	1	0	170	0	0	0	0	0	0	0	0
H/TOT	524	104	15	28	0	2	0	673	0	0	0	0	0	0	0	0
P/TOT	1027	260	44	49	1	2	0	1383	0	0	0	0	0	0	0	0

SITE: 10 DATE: 12/10/2022

LOCATION: M62 J20 DAY: Wednesday

	C to B								C to A							
TIME	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT
07:30	68	24	6	7	0	0	0	105	162	24	8	0	1	0	0	195
07:45	74	22	1	7	0	0	0	104	189	18	8	1	0	0	0	216
H/TOT	142	46	7	14	0	0	0	209	351	42	16	1	1	0	0	411
08:00	105	34	4	5	0	0	0	148	125	18	5	0	1	0	0	149
08:15	89	25	5	11	0	0	0	130	154	17	9	1	0	1	0	182
08:30	65	18	2	5	0	0	0	90	161	12	7	0	1	0	0	181
08:45	59	22	8	10	0	0	0	99	151	25	3	3	3	1	0	186
H/TOT	318	99	19	31	0	0	0	467	591	72	24	4	5	2	0	698
09:00	60	29	8	9	1	0	0	107	158	25	13	3	1	0	0	200
09:15	63	32	3	7	0	0	0	105	125	12	4	3	2	0	0	146
H/TOT	123	61	11	16	1	0	0	212	283	37	17	6	3	0	0	346
P/TOT	583	206	37	61	1	0	0	888	1225	151	57	11	9	2	0	1455

	C to B								C to A							
TIME	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT
16:00	108	44	10	5	0	0	0	167	147	24	2	3	1	0	0	177
16:15	210	31	4	6	0	0	0	251	164	16	6	1	4	0	0	191
16:30	162	33	5	8	0	0	0	208	178	21	7	0	0	0	0	206
16:45	152	32	2	3	0	1	0	190	148	21	3	0	2	0	0	174
H/TOT	632	140	21	22	0	1	0	816	637	82	18	4	7	0	0	748
17:00	179	29	5	5	0	0	0	218	152	17	6	4	0	1	0	180
17:15	182	17	2	5	1	0	0	207	160	19	0	0	0	0	0	179
17:30	152	17	5	0	0	0	0	174	189	17	1	1	0	1	0	209
17:45	141	16	3	5	0	0	0	165	174	14	2	0	0	0	0	190
H/TOT	654	79	15	15	1	0	0	764	675	67	9	5	0	2	0	758
P/TOT	1286	219	36	37	1	1	0	1580	1312	149	27	9	7	2	0	1506

SITE: 10 DATE: 12/10/2022

LOCATION: M62 J20 DAY: Wednesday

	C to D								C to C							
TIME	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT
07:30	85	17	8	8	0	1	0	119	0	0	0	0	0	0	0	0
07:45	91	22	6	3	0	0	0	122	0	0	0	0	0	0	0	0
H/TOT	176	39	14	11	0	1	0	241	0	0	0	0	0	0	0	0
08:00	71	30	6	6	0	0	0	113	0	0	0	0	0	0	0	0
08:15	91	21	6	6	1	0	0	125	0	0	0	0	0	0	0	0
08:30	74	29	7	4	0	0	0	114	0	0	0	0	0	0	0	0
08:45	70	16	4	2	0	0	0	92	0	0	0	0	0	0	0	0
H/TOT	306	96	23	18	1	0	0	444	0	0	0	0	0	0	0	0
09:00	65	19	10	3	0	0	0	97	0	0	0	0	0	0	0	0
09:15	71	23	9	7	0	0	0	110	0	0	0	0	0	0	0	0
H/TOT	136	42	19	10	0	0	0	207	0	0	0	0	0	0	0	0
P/TOT	618	177	56	39	1	1	0	892	0	0	0	0	0	0	0	0

	C to D								C to C							
TIME	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT
16:00	158	24	8	6	0	0	0	196	0	0	0	0	0	0	0	0
16:15	181	32	6	4	0	0	0	223	0	0	0	0	0	0	0	0
16:30	165	40	3	4	0	0	0	212	0	0	0	0	0	0	0	0
16:45	188	39	6	5	1	1	0	240	0	0	0	0	0	0	0	0
H/TOT	692	135	23	19	1	1	0	871	0	0	0	0	0	0	0	0
17:00	188	37	4	4	0	0	0	233	0	0	0	0	0	0	0	0
17:15	171	30	5	2	0	2	0	210	0	0	0	0	0	0	0	0
17:30	188	26	3	3	0	0	0	220	0	0	0	0	0	0	0	0
17:45	184	21	3	3	0	1	0	212	0	0	0	0	0	0	0	0
H/TOT	731	114	15	12	0	3	0	875	0	0	0	0	0	0	0	0
P/TOT	1423	249	38	31	1	4	0	1746	0	0	0	0	0	0	0	0

SITE: 10 DATE: 12/10/2022

LOCATION: M62 J20 DAY: Wednesday

	D to C								D to B							
TIME	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT
07:30	245	62	12	10	0	2	0	331	0	0	0	0	0	0	0	0
07:45	203	46	11	18	1	1	0	280	0	0	0	0	0	0	0	0
H/TOT	448	108	23	28	1	3	0	611	0	0	0	0	0	0	0	0
08:00	155	30	9	15	0	0	0	209	0	0	0	0	0	0	0	0
08:15	158	28	13	10	0	0	0	209	0	0	0	0	0	0	0	0
08:30	153	33	13	10	1	0	0	210	1	0	0	0	0	0	0	1
08:45	143	27	11	11	1	1	0	194	0	0	0	0	0	0	0	0
H/TOT	609	118	46	46	2	1	0	822	1	0	0	0	0	0	0	1
09:00	143	27	11	17	1	0	0	199	0	0	0	0	0	0	0	0
09:15	133	32	12	8	0	0	0	185	0	0	0	0	0	0	0	0
H/TOT	276	59	23	25	1	0	0	384	0	0	0	0	0	0	0	0
P/TOT	1333	285	92	99	4	4	0	1817	1	0	0	0	0	0	0	1

	D to C								D to B							
TIME	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT
16:00	88	23	7	5	0	0	0	123	0	0	0	0	0	0	0	0
16:15	123	28	8	10	0	0	0	169	0	0	0	0	0	0	0	0
16:30	107	31	4	4	1	0	0	147	0	0	0	0	0	0	0	0
16:45	125	22	4	5	0	0	0	156	0	0	0	0	0	0	0	0
H/TOT	443	104	23	24	1	0	0	595	0	0	0	0	0	0	0	0
17:00	148	24	4	6	1	0	0	183	0	0	0	0	0	0	0	0
17:15	167	23	10	2	3	0	0	205	0	0	0	0	0	0	0	0
17:30	149	21	8	4	1	0	0	183	0	0	0	0	0	0	0	0
17:45	146	23	8	3	0	0	0	180	0	0	0	0	0	0	0	0
H/TOT	610	91	30	15	5	0	0	751	0	0	0	0	0	0	0	0
P/TOT	1053	195	53	39	6	0	0	1346	0	0	0	0	0	0	0	0

SITE: 10 DATE: 12/10/2022

LOCATION: M62 J20 DAY: Wednesday

	D to A								D to D							
TIME	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT
07:30	18	11	3	1	0	0	0	33	0	0	0	0	0	0	0	0
07:45	18	9	2	2	0	0	0	31	0	0	0	0	0	0	0	0
H/TOT	36	20	5	3	0	0	0	64	0	0	0	0	0	0	0	0
08:00	28	5	1	1	0	0	0	35	0	0	0	0	0	0	0	0
08:15	32	9	1	7	0	0	0	49	0	0	0	0	0	0	0	0
08:30	46	11	1	3	1	0	0	62	0	0	0	0	0	0	0	0
08:45	30	2	0	1	0	0	0	33	0	0	0	0	0	0	0	0
H/TOT	136	27	3	12	1	0	0	179	0	0	0	0	0	0	0	0
09:00	26	5	0	3	0	0	0	34	0	0	0	0	0	0	0	0
09:15	22	3	4	3	0	0	0	32	0	0	0	0	0	0	0	0
H/TOT	48	8	4	6	0	0	0	66	0	0	0	0	0	0	0	0
P/TOT	220	55	12	21	1	0	0	309	0	0	0	0	0	0	0	0

	D to A								D to D							
TIME	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT
16:00	33	10	2	3	0	0	0	48	0	0	0	0	0	0	0	0
16:15	25	4	3	1	0	1	0	34	0	0	0	0	0	0	0	0
16:30	30	6	1	1	0	0	0	38	0	0	0	0	0	0	0	0
16:45	23	3	3	1	0	0	0	30	0	0	0	0	0	0	0	0
H/TOT	111	23	9	6	0	1	0	150	0	0	0	0	0	0	0	0
17:00	29	9	2	0	0	0	0	40	0	0	0	0	0	0	0	0
17:15	25	7	1	2	0	0	0	35	0	0	0	0	0	0	0	0
17:30	35	2	0	0	0	0	0	37	0	0	0	0	0	0	0	0
17:45	39	2	0	0	0	0	0	41	0	0	0	0	0	0	0	0
H/TOT	128	20	3	2	0	0	0	153	0	0	0	0	0	0	0	0
P/TOT	239	43	12	8	0	1	0	303	0	0	0	0	0	0	0	0

SITE: 10 DATE: 12/10/2022

LOCATION: M62 J20 DAY: Wednesday

	TO ARM A								FROM ARM A							
TIME	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT
07:30	325	55	16	4	1	1	0	402	238	45	9	4	0	0	0	296
07:45	385	52	20	6	0	2	0	465	263	52	16	4	0	1	0	336
H/TOT	710	107	36	10	1	3	0	867	501	97	25	8	0	1	0	632
08:00	284	49	14	11	1	0	0	359	336	49	19	11	0	1	0	416
08:15	371	58	22	14	1	1	0	467	211	43	10	6	0	1	0	271
08:30	380	53	16	10	2	0	0	461	203	55	11	4	0	0	0	273
08:45	337	58	11	13	4	1	0	424	217	37	21	3	0	0	0	278
H/TOT	1372	218	63	48	8	2	0	1711	967	184	61	24	0	2	0	1238
09:00	316	49	24	10	1	2	0	402	225	50	10	8	1	1	0	295
09:15	268	36	18	15	3	0	0	340	194	45	19	11	1	0	0	270
H/TOT	584	85	42	25	4	2	0	742	419	95	29	19	2	1	0	565
P/TOT	2666	410	141	83	13	7	0	3320	1887	376	115	51	2	4	0	2435

	TO ARM A								FROM ARM A							
TIME	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT
16:00	290	71	11	9	2	0	0	383	289	60	15	4	7	0	0	375
16:15	316	63	13	6	4	1	0	403	340	40	10	2	0	0	0	392
16:30	326	54	11	2	1	1	0	395	381	42	6	5	1	0	0	435
16:45	274	47	14	6	3	0	0	344	326	40	4	12	0	3	0	385
H/TOT	1206	235	49	23	10	2	0	1525	1336	182	35	23	8	3	0	1587
17:00	324	43	14	8	0	1	0	390	296	43	12	7	0	2	0	360
17:15	317	47	9	4	0	0	0	377	378	34	5	2	1	1	0	421
17:30	365	35	3	4	0	1	0	408	339	31	3	3	2	2	0	380
17:45	352	41	3	1	0	0	0	397	280	27	6	4	1	0	0	318
H/TOT	1358	166	29	17	0	2	0	1572	1293	135	26	16	4	5	0	1479
P/TOT	2564	401	78	40	10	4	0	3097	2629	317	61	39	12	8	0	3066

SITE: 10 DATE: 12/10/2022

LOCATION: M62 J20 DAY: Wednesday

	TO ARM B								FROM ARM B							
TIME	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT
07:30	128	42	10	10	0	0	0	190	341	58	12	10	0	1	0	422
07:45	149	43	10	7	0	0	0	209	398	59	18	7	0	2	0	484
H/TOT	277	85	20	17	0	0	0	399	739	117	30	17	0	3	0	906
08:00	203	60	10	9	0	0	0	282	320	61	12	16	0	0	0	409
08:15	177	41	12	14	0	1	0	245	337	51	18	12	1	0	0	419
08:30	129	42	8	9	0	0	0	188	291	51	15	13	0	0	0	370
08:45	126	38	15	12	0	0	0	191	249	58	20	16	1	0	0	344
H/TOT	635	181	45	44	0	1	0	906	1197	221	65	57	2	0	0	1542
09:00	129	42	13	12	2	0	0	198	221	39	21	11	0	2	0	294
09:15	119	51	13	12	0	0	0	195	206	45	18	14	1	0	0	284
H/TOT	248	93	26	24	2	0	0	393	427	84	39	25	1	2	0	578
P/TOT	1160	359	91	85	2	1	0	1698	2363	422	134	99	3	5	0	3026

	TO ARM B								FROM ARM B							
TIME	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT
16:00	231	75	21	7	1	0	0	335	214	85	19	8	1	0	0	327
16:15	354	51	13	8	0	0	0	426	258	84	8	8	0	0	0	358
16:30	310	45	6	11	0	0	0	372	254	72	8	8	1	1	0	344
16:45	277	53	4	12	0	1	0	347	236	45	16	10	2	0	0	309
H/TOT	1172	224	44	38	1	1	0	1480	962	286	51	34	4	1	0	1338
17:00	307	45	13	11	0	1	0	377	277	40	10	11	0	1	0	339
17:15	317	34	5	5	1	0	0	362	279	59	13	4	0	0	0	355
17:30	299	31	6	2	0	0	0	338	250	40	4	12	0	0	0	306
17:45	244	27	4	8	0	0	0	283	276	44	5	11	0	1	0	337
H/TOT	1167	137	28	26	1	1	0	1360	1082	183	32	38	0	2	0	1337
P/TOT	2339	361	72	64	2	2	0	2840	2044	469	83	72	4	3	0	2675

13307 / STAKEHILL
OCTOBER 2022
CLASSIFIED TURNING COUNT

SITE: 10 DATE: 12/10/2022

LOCATION: M62 J20 DAY: Wednesday

	TO ARM C								FROM ARM C							
TIME	**CAR**	**LGV**	**OGV1**	**OGV2**	**PSV**	**MCL**	**PCL**	**TOT**	**CAR**	**LGV**	**OGV1**	**OGV2**	**PSV**	**MCL**	**PCL**	**TOT**
07:30	602	125	23	17	0	2	0	769	315	65	22	15	1	1	0	419
07:45	590	106	22	25	1	2	0	746	354	62	15	11	0	0	0	442
H/TOT	1192	231	45	42	1	4	0	1515	669	127	37	26	1	1	0	861
08:00	545	87	19	25	0	1	0	677	301	82	15	11	1	0	0	410
08:15	410	65	22	19	0	0	0	516	334	63	20	18	1	1	0	437
08:30	383	77	24	16	1	0	0	501	300	59	16	9	1	0	0	385
08:45	360	69	33	19	1	1	0	483	280	63	15	15	3	1	0	377
H/TOT	1698	298	98	79	2	2	0	2177	1215	267	66	53	6	2	0	1609
09:00	355	79	25	28	1	1	0	489	283	73	31	15	2	0	0	404
09:15	339	76	25	16	0	0	0	456	259	67	16	17	2	0	0	361
H/TOT	694	155	50	44	1	1	0	945	542	140	47	32	4	0	0	765
P/TOT	3584	684	193	165	4	7	0	4637	2426	534	150	111	11	3	0	3235

	TO ARM C								FROM ARM C							
TIME	**CAR**	**LGV**	**OGV1**	**OGV2**	**PSV**	**MCL**	**PCL**	**TOT**	**CAR**	**LGV**	**OGV1**	**OGV2**	**PSV**	**MCL**	**PCL**	**TOT**
16:00	330	95	22	11	6	0	0	464	413	92	20	14	1	0	0	540
16:15	410	87	13	14	0	0	0	524	555	79	16	11	4	0	0	665
16:30	435	98	12	12	2	0	0	559	505	94	15	12	0	0	0	626
16:45	417	58	13	10	1	3	0	502	488	92	11	8	3	2	0	604
H/TOT	1592	338	60	47	9	3	0	2049	1961	357	62	45	8	2	0	2435
17:00	401	65	11	14	1	2	0	494	519	83	15	13	0	1	0	631
17:15	510	69	16	4	4	1	0	604	513	66	7	7	1	2	0	596
17:30	408	59	12	14	3	2	0	498	529	60	9	4	0	1	0	603
17:45	420	54	16	14	1	1	0	506	499	51	8	8	0	1	0	567
H/TOT	1739	247	55	46	9	6	0	2102	2060	260	39	32	1	5	0	2397
P/TOT	3331	585	115	93	18	9	0	4151	4021	617	101	77	9	7	0	4832

SITE: 10 DATE: 12/10/2022

LOCATION: M62 J20 DAY: Wednesday

	TO ARM D								FROM ARM D							
TIME	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT
07:30	102	19	9	9	0	1	0	140	263	73	15	11	0	2	0	364
07:45	112	27	10	4	0	0	0	153	221	55	13	20	1	1	0	311
H/TOT	214	46	19	13	0	1	0	293	484	128	28	31	1	3	0	675
08:00	108	31	13	9	0	0	0	161	183	35	10	16	0	0	0	244
08:15	114	30	6	6	1	0	0	157	190	37	14	17	0	0	0	258
08:30	102	37	8	4	0	0	0	151	200	44	14	13	2	0	0	273
08:45	96	22	8	2	0	0	0	128	173	29	11	12	1	1	0	227
H/TOT	420	120	35	21	1	0	0	597	746	145	49	58	3	1	0	1002
09:00	98	24	11	4	0	0	0	137	169	32	11	20	1	0	0	233
09:15	88	29	13	10	1	0	0	141	155	35	16	11	0	0	0	217
H/TOT	186	53	24	14	1	0	0	278	324	67	27	31	1	0	0	450
P/TOT	820	219	78	48	2	1	0	1168	1554	340	104	120	5	4	0	2127

	TO ARM D								FROM ARM D							
TIME	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT	CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT
16:00	186	29	9	7	0	0	0	231	121	33	9	8	0	0	0	171
16:15	221	34	6	4	0	0	0	265	148	32	11	11	0	1	0	203
16:30	206	48	5	5	0	0	0	264	137	37	5	5	1	0	0	185
16:45	230	44	7	8	1	1	0	291	148	25	7	6	0	0	0	186
H/TOT	843	155	27	24	1	1	0	1051	554	127	32	30	1	1	0	745
17:00	237	46	5	4	0	0	0	292	177	33	6	6	1	0	0	223
17:15	218	39	6	4	0	2	0	269	192	30	11	4	3	0	0	240
17:30	230	29	3	3	0	0	0	265	184	23	8	4	1	0	0	220
17:45	224	25	4	3	0	1	0	257	185	25	8	3	0	0	0	221
H/TOT	909	139	18	14	0	3	0	1083	738	111	33	17	5	0	0	904
P/TOT	1752	294	45	38	1	4	0	2134	1292	238	65	47	6	1	0	1649

SITE: 10 DATE: 12/10/2022

LOCATION: M62 J20 DAY: Wednesday

TIME	JUNCTION TOTAL CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT
07:30	1157	241	58	40	1	4	0	1501
07:45	1236	228	62	42	1	4	0	1573
H/TOT	2393	469	120	82	2	8	0	3074
08:00	1140	227	56	54	1	1	0	1479
08:15	1072	194	62	53	2	2	0	1385
08:30	994	209	56	39	3	0	0	1301
08:45	919	187	67	46	5	2	0	1226
H/TOT	4125	817	241	192	11	5	0	5391
09:00	898	194	73	54	4	3	0	1226
09:15	814	192	69	53	4	0	0	1132
H/TOT	1712	386	142	107	8	3	0	2358
P/TOT	8230	1672	503	381	21	16	0	10823

PEAK HOUR CALCULATION	TOT
07:30 to 08:30	**5938**
07:45 to 08:45	5738
08:00 to 09:00	5391
08:15 to 09:15	5138
08:30 to 09:30	4885
AM PEAK VALUE	**5938**

TIME	JUNCTION TOTAL CAR	LGV	OGV1	OGV2	PSV	MCL	PCL	TOT
16:00	1037	270	63	34	9	0	0	1413
16:15	1301	235	45	32	4	1	0	1618
16:30	1277	245	34	30	3	1	0	1590
16:45	1198	202	38	36	5	5	0	1484
H/TOT	4813	952	180	132	21	7	0	6105
17:00	1269	199	43	37	1	4	0	1553
17:15	1362	189	36	17	5	3	0	1612
17:30	1302	154	24	23	3	3	0	1509
17:45	1240	147	27	26	1	2	0	1443
H/TOT	5173	689	130	103	10	12	0	6117
P/TOT	9986	1641	310	235	31	19	0	12222

PEAK HOUR CALCULATION	TOT
16:00 to 17:00	6105
16:15 to 17:15	**6245**
16:30 to 17:30	6239
16:45 to 17:45	6158
17:00 to 18:00	6117
PM PEAK VALUE	**6245**

S|C|P

APPENDIX D

1. St John's Thornham CE Primary School
1a. Thornham House (residential dwelling)
2. St John's Thornham Church
3. Thornham Cricket Club
4. Richard Bentley Smalley Memorial Hall
5. Existing farm (with potential for future residential development)
6. M627(M)
7. M62
8. A664 (Rochdale/ Manchester Road)
9. Thornham Lane
10. Thornham New Road
11. Petrol station and local shop

ACTIVE TRAVEL ROUTE TO THE POTENTIAL SLATTOCKS TRAIN STATION

North

- Site Boundary (c.87.52ha)
- Enhanced Green infrastructure (see Landscape Strategy within DAS for details)
- Retained trees
- Retained pond
- Existing watercourse
- Stakehill community heart (Character Area)
- Newhey neighbourhood (Character Area)
- Thornfields hamlets (Character Area)
- St Johns (Character Area)
- Local centre
- Land provided for school extension
- Primary point of highway access
- Secondary/ emergency point of highway access (c.100 homes only)
- Pedestrian access point
- Public footpath (retained for pedestrian/ cycle connectivity
- Pedestrian/ cycle connection
- Pedestrian/ cycle connection (See DAS for additional connections/routes)
- Boulevard frontage
- Informal avenue frontage
- Landscape frontage
- Community links frontage
- St John's frontage
- Indicative street trees (shown along the Boulevard and Informal avenue only)
- Play area (MUGA)
- Play area (LEAP)
- SuDS attenuation areas
- Allotments
- External views
- St John's Church views

Project
Land at Stakehill, Rochdale

Drawing Title
Illustrative Masterplan

Date	Scale	Drawn by	Check by
16.03.23	1:5000@A3	AT	SW

Project No	Drawing No	Revision
33961	Ai24	B

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APPENDIX E

Survey Information

Legend

	Line to delineate application Site Boundary
	Line to delineate extent of 1.8 metre high close boarded fencing. Refer to Redrow standard detail no. F-SD0906
	Indicates 0.6m Knee Rail. Refer to Redrow Standard Detail No. D-SD0902
	Indicates 1.8mm high brick, garden wall. Refer to Redrow standard detail no. F-SD0808
	Refer to Landscape Architect's layouts for landscaping proposals layout / planting schedules
	Denotes existing tree / group of trees to be removed
	Denotes existing tree / group of trees to be retained
	Indicates areas of turf surface finish to dwellings. For open space, refer to Landscape Architect's layouts
	Indicates position of timber gate for rear garden access
	Indicates tarmac shared drive surface
	Indicates area of 'grasscrete' along shared private drive for the Fire Service appliance turning
●	Indicates 'handed' house type
*	Indicates affordable dwellings
□ □ bollards	Indicates timber bollards to end of POS footpath
⊙ LB	Indicates position of LYCO 'Lucide Lori' outdoor post light with Dusk to Dawn sensor; item code 43077. Switch to be located internally adjacent front entrance

Item	Description

Accommodation Schedule

House Type Name	Sq.ft	No Beds	Garage	Quantity
MARKET HOUSING				
Shrewsbury	1,159	04	ISG	21
Marlow	1,288	04	ISG	15
Oxford	1,312	04	ISG	15
Oxford Lifestyle	1,312	03	ISG	18
Overton	1,392	04	ISG	07
Leamington Lifestyle	1,412	03	DSG	18
Shaftesbury	1,423	04	DSG	13
Chester	1,449	04	ISG	24
Harrogate	1,553	04	DSG	10
Henley	1,768	04	IDG	18
Ledsham	1,841	04	IDG	12
Hampstead	1,850	05	IDG	24
Sub Total				195
AFFORDABLE HOUSING				
Buxton	716	02	PS	16
Bakewell	832	03	PS	14
Weaver GF	644	01	PS	04
Weaver FF	697	01	PS	04
Sub Total				38
TOTAL				233

SG = Detached Single Garage
ISG = Integral Single Garage
IDG = Integral Double Garage
PS = Parking space(s)

Revision	Date	Amendment	Initials
B	02/03/23	Affordable *'s corrected	TW
A	23/02/23	- Replot to area north of the Local Centre - Accommodation schedule updated - Addition of ponds and re-contouring	TW

Development: **Stakehill**
Location: Middleton
Marketing Name: -
Drawing Title: Detailed Site Plan
Drawing Number: **4159-DSL-001**
Revision: **B**
Scale @ A1: 1:1000
Drawn By: TW
Date Started: 22/12/22
Checked by:
Date:

Redrow Homes Lancashire
Redrow House, 14 Eaton Avenue, Buckshaw Village, Chorley, PR7 7NA
Tel: 01772 643700 Fax: 01772 643701 Web: www.redrow.co.uk

Legal Disclaimer TBC

This layout has been designed after due consideration of our Context & Constraints Plan

0m 25m 50m 100m

Scale: 1:1000

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APPENDIX F

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N

867
865
861
855
845
841

Garden Centre

ROCHDALE ROAD

3.0m
7.3m
3.0m

Licence number 100022432

Pavili

REVISIONS

Rev	Description	Date	By
A	–AMENDMENTS TO SITE LAYOUT –	31.01.20	MC
B	–AMENDMENTS TO SITE LAYOUT –	5.02.20	MC
C	–AMENDMENTS TO SITE LAYOUT –	6.02.20	MC

SCP
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: REDROW HOMES NORTH WEST

Project Title: MANCHESTER ROAD, ROCHDALE, GMSF LOCALITY ASSESSMENT

Drawing Title: GENERAL ARRANGEMENT - SIGNALS

Scale: 1:500 @ A3

By: MC

Drawing No.: SCP/190267/SK01

Date: 31.01.2020

Checked: MD

Approved/ Unapproved: -

Status: PLANNING

Revision: C

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APPENDIX G



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NOTES

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

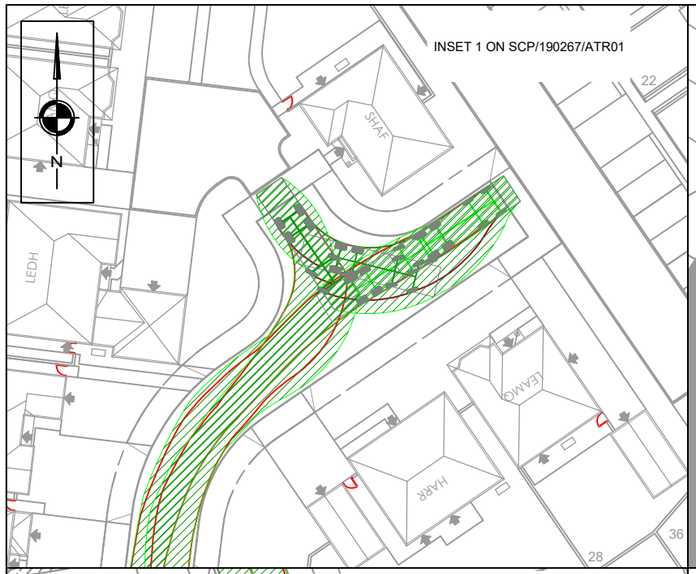
Client Name:
REDROW HOMES LANCASHIRE

Project Title:
MANCHESTER ROAD, ROCHDALE

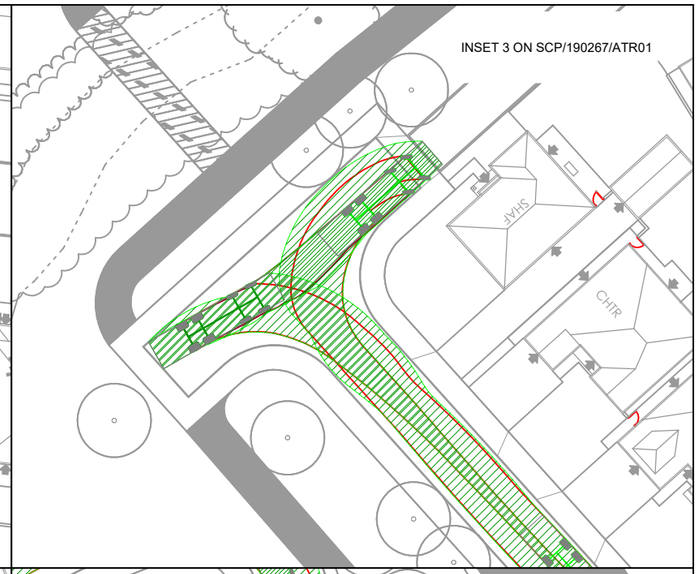
Drawing Title:
SWEPT PATH ANALYSIS

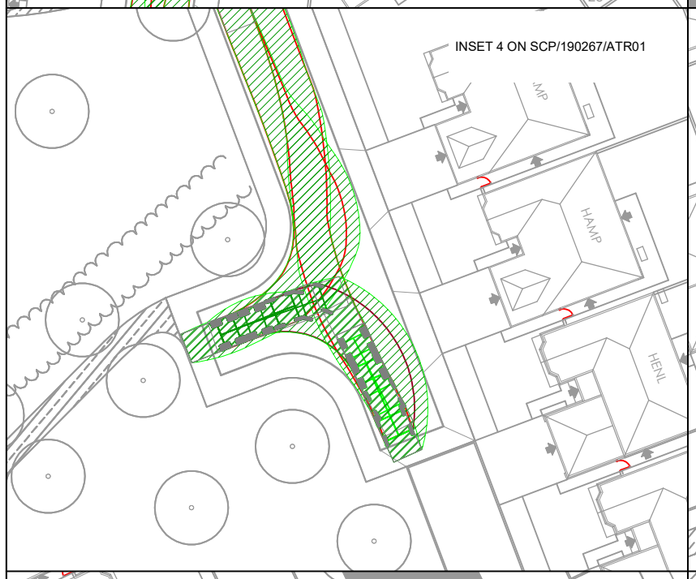
Drawn By:	Date:
AM	24.03.2023
Checked: MD	Scale: 1:1500 @ A3
Status: PLANNING	Approved/Unapproved: -

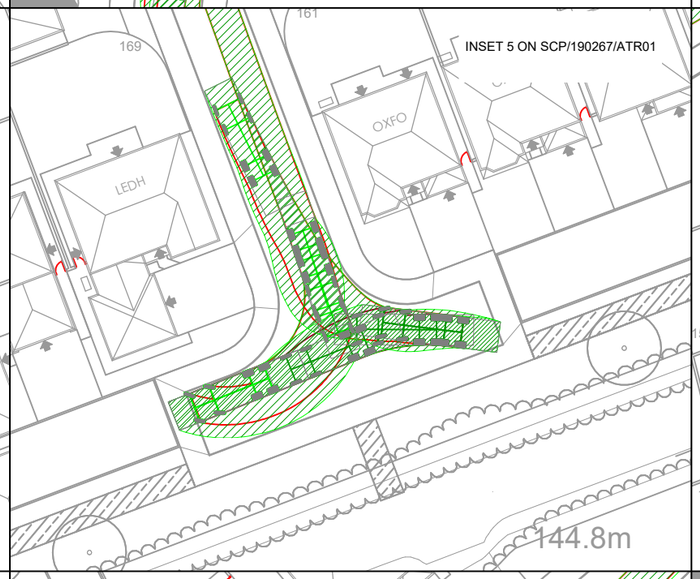
Drawing No. SCP/190267/ATR01 | Rev. -

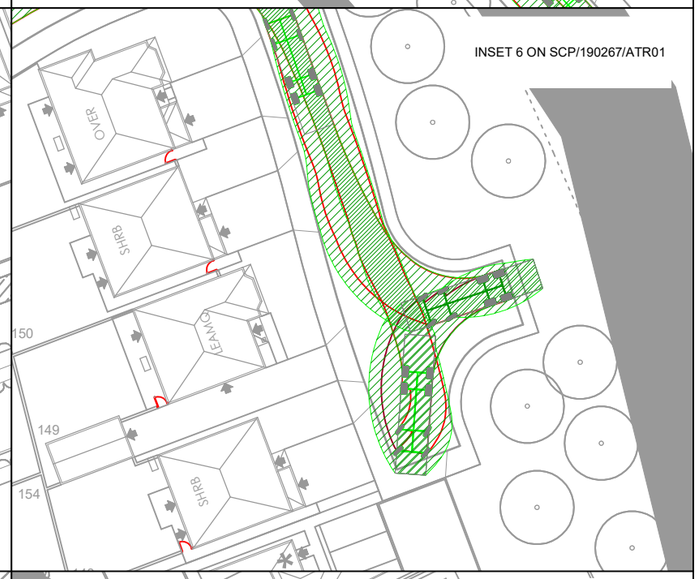


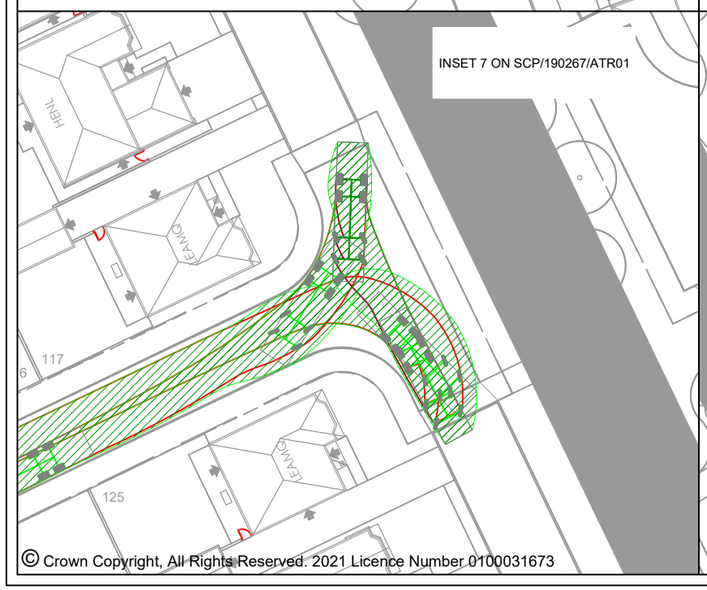


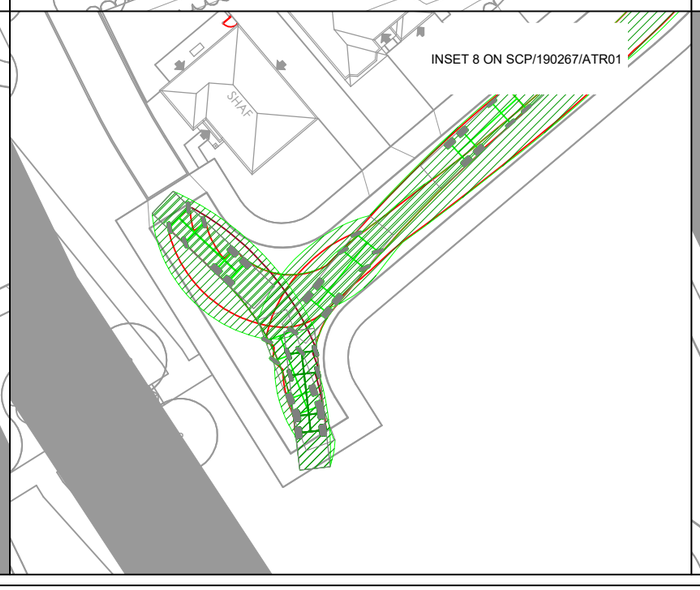


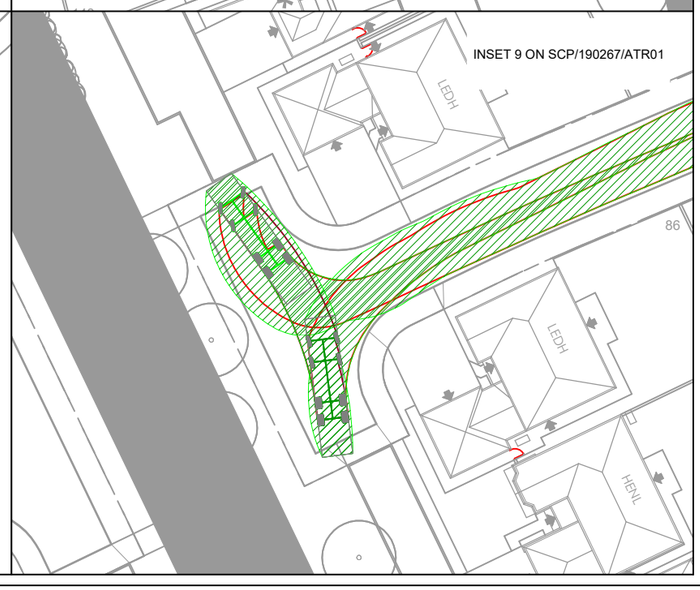






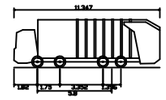






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NOTES



Large Refuse Vehicle (4 axle)

Overall Length	11.347m
Overall Width	2.500m
Overall Body Height	3.473m
Min Body Ground Clearance	0.303m
Track Width	2.500m
Lock to lock time	5.00S
Kerb to Kerb 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:

REDROW HOMES LANCASHIRE

Project Title:

MANCHESTER ROAD, ROCHDALE

Drawing Title:

SWEPT PATH ANALYSIS

Drawn By: AM	Date: 24.03.2023
Checked: MD	Scale: 1:500 @ A3
Status:	Approved/Unapproved: -

Drawing No. SCP/190267/ATR02 | Rev. -

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APPENDIX H

Calculation Reference: AUDIT-726001-220816-0821

TRIP RATE CALCULATION SELECTION PARAMETERS:

Land Use : 01 - RETAIL
Category : H - GARDEN CENTRE

TOTAL VEHICLES

Selected regions and areas:

02	**SOUTH EAST**		
	HC	HAMPSHIRE	1 days
	KC	KENT	1 days
03	**SOUTH WEST**		
	DC	DORSET	1 days
08	**NORTH WEST**		
	GM	GREATER MANCHESTER	2 days
11	**SCOTLAND**		
	MO	MORAY	1 days

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

Primary 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: Gross floor area
Actual Range: 1858 to 7920 (units: sqm)
Range Selected by User: 400 to 23465 (units: sqm)

Parking Spaces Range: All Surveys Included

Public Transport Provision:
Selection by: Include all surveys

Date Range: 01/01/95 to 27/06/21

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	1 days
Wednesday	2 days
Thursday	2 days
Friday	1 days

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

Selected survey types:

Manual count	6 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)	2
Edge of Town	4

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:

Retail Zone	1
Built-Up Zone	1
No Sub Category	4

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:

E(a)	6 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 500m Range:

All Surveys Included

Population within 1 mile:

1,001 to 5,000	2 days
10,001 to 15,000	2 days
15,001 to 20,000	2 days

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

Population within 5 miles:

5,001 to 25,000	1 days
50,001 to 75,000	2 days
100,001 to 125,000	1 days
125,001 to 250,000	1 days
250,001 to 500,000	1 days

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

Car ownership within 5 miles:

0.6 to 1.0	3 days
1.1 to 1.5	3 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.

Petrol filling station:

Included in the survey count	0 days
Excluded from count or no filling station	6 days

This data displays the number of surveys within the selected set that include petrol filling station activity, and the number of surveys that do not.

Travel Plan:

Not Known	5 days
No	1 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	6 days

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

LIST OF SITES relevant to selection parameters

1 **DC-01-H-02** **GARDEN CEN.** **DORSET**
A35 LYNDHURST ROAD
CHRISTCHURCH
SOMERFORD
Edge of Town
Retail Zone
Total Gross floor area: 2323 sqm
Survey date: FRIDAY *19/09/97* *Survey Type: MANUAL*

2 **GM-01-H-04** **GARDEN CENTRE** **GREATER MANCHESTER**
BRADLEY FOLD ROAD
BURY
AINSWORTH
Edge of Town
No Sub Category
Total Gross floor area: 2787 sqm
Survey date: WEDNESDAY *03/05/95* *Survey Type: MANUAL*

3 **GM-01-H-05** **GARDEN CENTRE** **GREATER MANCHESTER**
GREEN LANE
ALTRINCHAM

Edge of Town
No Sub Category
Total Gross floor area: 1858 sqm
Survey date: WEDNESDAY *26/04/95* *Survey Type: MANUAL*

4 **HC-01-H-03** **GARDEN CENTRE** **HAMPSHIRE**
ROMSEY ROAD
WINCHESTER

Suburban Area (PPS6 Out of Centre)
No Sub Category
Total Gross floor area: 3700 sqm
Survey date: MONDAY *19/11/07* *Survey Type: MANUAL*

5 **KC-01-H-02** **GARDEN CENTRE** **KENT**
LONDON ROAD
MAIDSTONE
ALLINGTON
Suburban Area (PPS6 Out of Centre)
Built-Up Zone
Total Gross floor area: 2100 sqm
Survey date: THURSDAY *09/11/95* *Survey Type: MANUAL*

6 **MO-01-H-01** **GARDEN CENTRE** **MORAY**
A98
FOCHABERS

Edge of Town
No Sub Category
Total Gross floor area: 7920 sqm
Survey date: THURSDAY *02/07/98* *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 01 - RETAIL/H - GARDEN CENTRE

TOTAL VEHICLES

Calculation factor: 100 sqm

BOLD print indicates peak (busiest) period

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	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	2	5122	0.351	2	5122	0.010	2	5122	0.361
08:00 - 09:00	3	4648	0.423	3	4648	0.079	3	4648	0.502
09:00 - 10:00	6	3448	0.831	6	3448	0.503	6	3448	1.334
10:00 - 11:00	6	3448	1.706	6	3448	1.170	6	3448	2.876
11:00 - 12:00	6	3448	1.972	6	3448	1.929	6	3448	3.901
12:00 - 13:00	6	3448	1.663	6	3448	1.701	6	3448	3.364
13:00 - 14:00	6	3448	1.755	6	3448	1.595	6	3448	3.350
14:00 - 15:00	**6**	**3448**	**2.088**	6	3448	1.851	**6**	**3448**	**3.939**
15:00 - 16:00	6	3448	1.779	**6**	**3448**	**2.117**	6	3448	3.896
16:00 - 17:00	6	3448	1.088	6	3448	1.677	6	3448	2.765
17:00 - 18:00	6	3448	0.556	6	3448	1.117	6	3448	1.673
18:00 - 19:00	2	2555	0.978	2	2555	1.331	2	2555	2.309
19:00 - 20:00	2	2555	0.470	2	2555	0.763	2	2555	1.233
20:00 - 21:00	1	2323	0.000	1	2323	0.000	1	2323	0.000
21:00 - 22:00	1	2323	0.000	1	2323	0.000	1	2323	0.000
22:00 - 23:00	1	2323	0.000	1	2323	0.000	1	2323	0.000
23:00 - 24:00									
Total Rates:			15.660			15.843			31.503

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.*

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Parameter summary

Trip rate parameter range selected:	1858 - 7920 (units: sqm)
Survey date date range:	01/01/95 - 27/06/21
Number of weekdays (Monday-Friday):	6
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.

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APPENDIX I

Calculation Reference: AUDIT-726001-190612-0620

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	1 days
	KC	KENT	2 days
	WS	WEST SUSSEX	3 days
05	**EAST MIDLANDS**		
	DS	DERBYSHIRE	1 days
06	**WEST MIDLANDS**		
	ST	STAFFORDSHIRE	1 days
07	**YORKSHIRE & NORTH LINCOLNSHIRE**		
	NE	NORTH EAST LINCOLNSHIRE	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: 180 to 805 (units:)
Range Selected by User: 180 to 1500 (units:)

Parking Spaces Range: All Surveys Included

Percentage of dwellings privately owned: All Surveys Included

Public Transport Provision:
Selection by: Include all surveys

Date Range: 01/01/11 to 10/07/18

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	2 days
Tuesday	1 days
Wednesday	3 days
Thursday	3 days

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

Selected survey types:

Manual count	9 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)	1
Edge of Town	8

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	8
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	9 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:

5,001 to 10,000	2 days
10,001 to 15,000	5 days
20,001 to 25,000	2 days

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

Population within 5 miles:

50,001 to 75,000	3 days
75,001 to 100,000	2 days
125,001 to 250,000	4 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	2 days
1.1 to 1.5	7 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	3 days
No	6 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	9 days

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

LIST OF SITES relevant to selection parameters

1 **DS-03-A-02** **MIXED HOUSES** **DERBYSHIRE**
RADBOURNE LANE
DERBY

Edge of Town
Residential Zone
Total Number of dwellings: 371
Survey date: TUESDAY *10/07/18* *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 **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*

4 **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*

5 **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*

6 **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*

7 **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*

8 **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*

LIST OF SITES relevant to selection parameters (Cont.)

9 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	9	344	0.082	9	344	0.332	9	344	0.414
08:00 - 09:00	9	344	0.128	**9**	**344**	**0.402**	**9**	**344**	**0.530**
09:00 - 10:00	9	344	0.147	9	344	0.163	9	344	0.310
10:00 - 11:00	9	344	0.121	9	344	0.150	9	344	0.271
11:00 - 12:00	9	344	0.135	9	344	0.146	9	344	0.281
12:00 - 13:00	9	344	0.157	9	344	0.149	9	344	0.306
13:00 - 14:00	9	344	0.154	9	344	0.151	9	344	0.305
14:00 - 15:00	9	344	0.166	9	344	0.186	9	344	0.352
15:00 - 16:00	9	344	0.260	9	344	0.175	9	344	0.435
16:00 - 17:00	9	344	0.279	9	344	0.166	9	344	0.445
17:00 - 18:00	**9**	**344**	**0.356**	9	344	0.156	9	344	0.512
18:00 - 19:00	9	344	0.337	9	344	0.190	9	344	0.527
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			2.322			2.366			4.688

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.*

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Parameter summary

Trip rate parameter range selected:	180 - 805 (units:)
Survey date date range:	01/01/11 - 10/07/18
Number of weekdays (Monday-Friday):	9
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	9	344	0.003	9	344	0.007	9	344	0.010
08:00 - 09:00	9	344	0.003	9	344	0.008	9	344	0.011
09:00 - 10:00	9	344	0.000	9	344	0.002	9	344	0.002
10:00 - 11:00	9	344	0.001	9	344	0.001	9	344	0.002
11:00 - 12:00	9	344	0.002	9	344	0.003	9	344	0.005
12:00 - 13:00	9	344	0.002	9	344	0.003	9	344	0.005
13:00 - 14:00	9	344	0.002	9	344	0.003	9	344	0.005
14:00 - 15:00	9	344	0.002	9	344	0.002	9	344	0.004
15:00 - 16:00	9	344	0.005	9	344	0.003	9	344	0.008
16:00 - 17:00	9	344	0.007	9	344	0.006	9	344	0.013
17:00 - 18:00	**9**	**344**	**0.011**	**9**	**344**	**0.009**	**9**	**344**	**0.020**
18:00 - 19:00	9	344	0.008	9	344	0.007	9	344	0.015
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.046			0.054			0.100

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	9	344	0.010	9	344	0.024	9	344	0.034
08:00 - 09:00	9	344	0.016	**9**	**344**	**0.077**	9	344	0.093
09:00 - 10:00	9	344	0.024	9	344	0.026	9	344	0.050
10:00 - 11:00	9	344	0.020	9	344	0.022	9	344	0.042
11:00 - 12:00	9	344	0.022	9	344	0.018	9	344	0.040
12:00 - 13:00	9	344	0.025	9	344	0.019	9	344	0.044
13:00 - 14:00	9	344	0.020	9	344	0.021	9	344	0.041
14:00 - 15:00	9	344	0.024	9	344	0.034	9	344	0.058
15:00 - 16:00	**9**	**344**	**0.081**	9	344	0.027	**9**	**344**	**0.108**
16:00 - 17:00	9	344	0.051	9	344	0.021	9	344	0.072
17:00 - 18:00	9	344	0.043	9	344	0.028	9	344	0.071
18:00 - 19:00	9	344	0.030	9	344	0.035	9	344	0.065
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.366			0.352			0.718

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	9	344	0.002	9	344	0.016	9	344	0.018
08:00 - 09:00	9	344	0.000	**9**	**344**	**0.020**	9	344	0.020
09:00 - 10:00	9	344	0.001	9	344	0.012	9	344	0.013
10:00 - 11:00	9	344	0.001	9	344	0.004	9	344	0.005
11:00 - 12:00	9	344	0.002	9	344	0.005	9	344	0.007
12:00 - 13:00	9	344	0.002	9	344	0.003	9	344	0.005
13:00 - 14:00	9	344	0.005	9	344	0.004	9	344	0.009
14:00 - 15:00	9	344	0.003	9	344	0.002	9	344	0.005
15:00 - 16:00	9	344	0.015	9	344	0.005	9	344	0.020
16:00 - 17:00	**9**	**344**	**0.017**	9	344	0.004	**9**	**344**	**0.021**
17:00 - 18:00	9	344	0.016	9	344	0.003	9	344	0.019
18:00 - 19:00	9	344	0.016	9	344	0.005	9	344	0.021
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.080			0.083			0.163

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 J

WU03EW - Location of usual residence and place of work b

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population	All usual residents aged 16 and over in empl
units	Persons
date	2011
method of travel to work	Driving a car or van

	usual residence		
place of work : 2011 super output area - middle layer	**E02001148 : Rochdale 017**	**%**	Route
E02002580 : Halton 007	6	0.2%	A
E02002593 : Warrington 004	9	0.2%	A
E02001019 : Bury 001	7	0.2%	A
E02001022 : Bury 004	4	0.1%	A
E02001025 : Bury 007	15	0.4%	A
E02001025 : Bury 007	15	0.8%	O
E02001026 : Bury 008	11	0.3%	A
E02001026 : Bury 008	11	0.6%	O
E02001027 : Bury 009	3	0.1%	A
E02001027 : Bury 009	3	0.2%	P
E02001029 : Bury 011	11	0.3%	A
E02001029 : Bury 011	11	0.6%	P
E02001031 : Bury 013	31	1.6%	C
E02001033 : Bury 015	2	0.1%	C
E02001033 : Bury 015	2	0.1%	A
E02001034 : Bury 016	5	0.1%	A
E02001038 : Bury 020	4	0.1%	A
E02001046 : Manchester 002	6	0.3%	K
E02001050 : Manchester 006	18	0.9%	K
E02001052 : Manchester 008	4	0.2%	K
E02001053 : Manchester 009	4	0.2%	K
E02001056 : Manchester 012	4	0.2%	E
E02001059 : Manchester 015	5	0.3%	K
E02001059 : Manchester 015	5	0.3%	E
E02001061 : Manchester 017	4	0.2%	E
E02001062 : Manchester 018	9	0.5%	K
E02001063 : Manchester 019	7	0.4%	K
E02001066 : Manchester 022	9	0.5%	E
E02001097 : Manchester 053	6	0.3%	E
E02006902 : Manchester 054	35	1.8%	K
E02006912 : Manchester 055	18	0.9%	K
E02006914 : Manchester 057	6	0.3%	K
E02006915 : Manchester 058	5	0.3%	K
E02006917 : Manchester 060	19	1.0%	K
E02001098 : Oldham 001	4	0.2%	N
E02001099 : Oldham 002	13	0.7%	F
E02001100 : Oldham 003	9	0.5%	F
E02001105 : Oldham 008	8	0.4%	F
E02001106 : Oldham 009	22	1.2%	F
E02001107 : Oldham 010	4	0.2%	G
E02001108 : Oldham 011	9	0.5%	H
E02001110 : Oldham 013	4	0.2%	H
E02001111 : Oldham 014	31	1.6%	H
E02001112 : Oldham 015	12	0.6%	L
E02001113 : Oldham 016	27	1.4%	H
E02001114 : Oldham 017	22	1.2%	I
E02001116 : Oldham 019	4	0.2%	H
E02001119 : Oldham 022	9	0.5%	H
E02001121 : Oldham 024	22	1.2%	H
E02001124 : Oldham 027	9	0.5%	H
E02001125 : Oldham 028	22	1.2%	L
E02001126 : Oldham 029	4	0.2%	H
E02001127 : Oldham 030	4	0.2%	H
E02001128 : Oldham 031	4	0.2%	E
E02001129 : Oldham 032	9	0.5%	E
E02001132 : Rochdale 001	13	0.7%	M
E02001132 : Rochdale 001	13	0.7%	D
E02001133 : Rochdale 002	8	0.4%	N
E02001134 : Rochdale 003	10	0.5%	D

E02001135 : Rochdale 004	12	0.6%	N
E02001136 : Rochdale 005	45	2.4%	M
E02001137 : Rochdale 006	9	0.5%	O
E02001138 : Rochdale 007	17	0.9%	O
E02001139 : Rochdale 008	33	1.7%	N
E02001140 : Rochdale 009	55	2.9%	O
E02001141 : Rochdale 010	156	8.2%	N
E02001142 : Rochdale 011	12	0.6%	O
E02001143 : Rochdale 012	51	2.7%	M
E02001144 : Rochdale 013	23	1.2%	D
E02001145 : Rochdale 014	7	0.4%	D
E02001146 : Rochdale 015	95	5.0%	N
E02001147 : Rochdale 016	44	2.3%	N
E02001148 : Rochdale 017	215	11.3%	B
E02001149 : Rochdale 018	73	3.8%	P
E02001150 : Rochdale 019	33	1.7%	C
E02001151 : Rochdale 020	93	4.9%	P
E02001152 : Rochdale 021	48	2.5%	J
E02001153 : Rochdale 022	16	0.8%	C
E02001154 : Rochdale 023	11	0.6%	C
E02001155 : Rochdale 024	71	3.7%	K
E02001156 : Rochdale 025	4	0.2%	K
E02001164 : Salford 008	5	0.1%	A
E02001168 : Salford 012	4	0.1%	A
E02001176 : Salford 020	4	0.1%	A
E02001177 : Salford 021	7	0.2%	A
E02001178 : Salford 022	10	0.5%	K
E02001184 : Salford 028	20	0.5%	A
E02001186 : Salford 030	6	0.2%	A
E02001200 : Stockport 014	7	0.4%	E
E02001241 : Tameside 013	8	0.4%	E
E02001245 : Tameside 017	7	0.4%	E
E02001259 : Trafford 001	12	0.3%	A
E02001260 : Trafford 002	11	0.3%	A
E02001261 : Trafford 003	4	0.1%	A
E02001262 : Trafford 004	4	0.1%	A
E02001264 : Trafford 006	16	0.4%	A
E02001270 : Trafford 012	5	0.1%	A
E02001273 : Trafford 015	4	0.1%	A
E02005279 : Rossendale 002	4	0.1%	A
E02005280 : Rossendale 003	5	0.3%	M
E02005281 : Rossendale 004	6	0.2%	A
E02005285 : Rossendale 008	5	0.3%	O
E02005286 : Rossendale 009	8	0.4%	M
E02006884 : Rossendale 010	2	0.1%	A
E02006884 : Rossendale 010	2	0.1%	M
E02002299 : Kirklees 029	5	0.3%	D
E02006875 : Leeds 111	4	0.2%	D
E02001135 : Rochdale 004	12	0.6%	O
E02001139 : Rochdale 008	33	1.7%	O
E02001141 : Rochdale 010	156	8.2%	O
E02002580 : Halton 007	6	0.2%	Q
E02002593 : Warrington 004	9	0.2%	Q
E02001019 : Bury 001	7	0.2%	Q
E02001022 : Bury 004	4	0.1%	Q
E02001025 : Bury 007	15	0.4%	Q
E02001026 : Bury 008	11	0.3%	Q
E02001027 : Bury 009	3	0.1%	Q
E02001029 : Bury 011	11	0.3%	Q
E02001033 : Bury 015	2	0.1%	Q
E02001034 : Bury 016	5	0.1%	Q
E02001038 : Bury 020	4	0.1%	Q
E02001164 : Salford 008	5	0.1%	Q
E02001168 : Salford 012	4	0.1%	Q
E02001176 : Salford 020	4	0.1%	Q
E02001177 : Salford 021	7	0.2%	Q
E02001184 : Salford 028	20	0.5%	Q
E02001186 : Salford 030	6	0.2%	Q
E02001259 : Trafford 001	12	0.3%	Q
E02001260 : Trafford 002	11	0.3%	Q
E02001261 : Trafford 003	4	0.1%	Q
E02001262 : Trafford 004	4	0.1%	Q
E02001264 : Trafford 006	16	0.4%	Q
E02001270 : Trafford 012	5	0.1%	Q

E02001273 : Trafford 015	4	0.1%	Q
E02005279 : Rossendale 002	4	0.1%	Q
E02005281 : Rossendale 004	6	0.2%	Q
E02006884 : Rossendale 010	2	0.1%	Q
	1,906		

y method of travel to work (MSOA level)

oyment the week before the census

	A	B	C	D	E	F	G	H	I	J
South Access	A664 (South), A627(M) - North, M62 (West), west through M62 Junction 19	A664 North	A664 (South), Slattocks Roundabout, A664 (South-west)	A664 (South), A627(M) - North, M62 (East)	A664 (South), A627(M) - South, A663 Broadway South	A664 (South), A627(M) - South, A663 Broadway East (LOSE ON NETWORK)	A664 (South), A627(M) - South, Burnley Lane West (LOSE ON NETWORK)	A664 (South), A627(M) - South, A627 Chadderton Way (LOSE ON NETWORK)	A664 (South), A627(M) - South, A663 Broadway, A669 Middleton Road (East)	A664 (South), Slattocks Roundabout, Whitbrook Way
	5.0%	11.3%	4.9%	3.3%	3.3%	2.7%	0.2%	6.5%	1.2%	2.5%

Key Employment Areas

- *Stakehill Industrial Estate*
- *Heywood Distribution Park*
- *Bridge Hall Trading Site*
- *Pilsworth Industrial Estate*
- *Bury town centre*
- *Rochdale town centre*
- *Manchester city centre*
- *Oldham town centre*
- *Stockport town centre*
- *Widnes town centre and surrounding commercial area including Catalyst Industrial Estate*
- *Birchwood Industrial Park*
- *Broadway Industrial Estate*
- *Agecroft Commerce Park"*

K	L	M	N	O	P	Q
A664 (South), Slattocks Roundabout, A664 (South-west), Assheton Way, Oldham Road (West)	A664 (South), Slattocks Roundabout, A664 (South-west), Townley Street (South)	A664 Manchester Road (North), Manchester Road	A664 Manchester Road, A664 Queensway, A664 Rochdale Bypass	A664 Manchester Road, A58 Manchester Road, B6452	A664 Manchester Road, A58 Bolton Road	Slattocks Roundabout, A664 (South-
11.6%	1.8%	6.5%	18.4%	6.5%	9.4%	5.0%

S|C|P

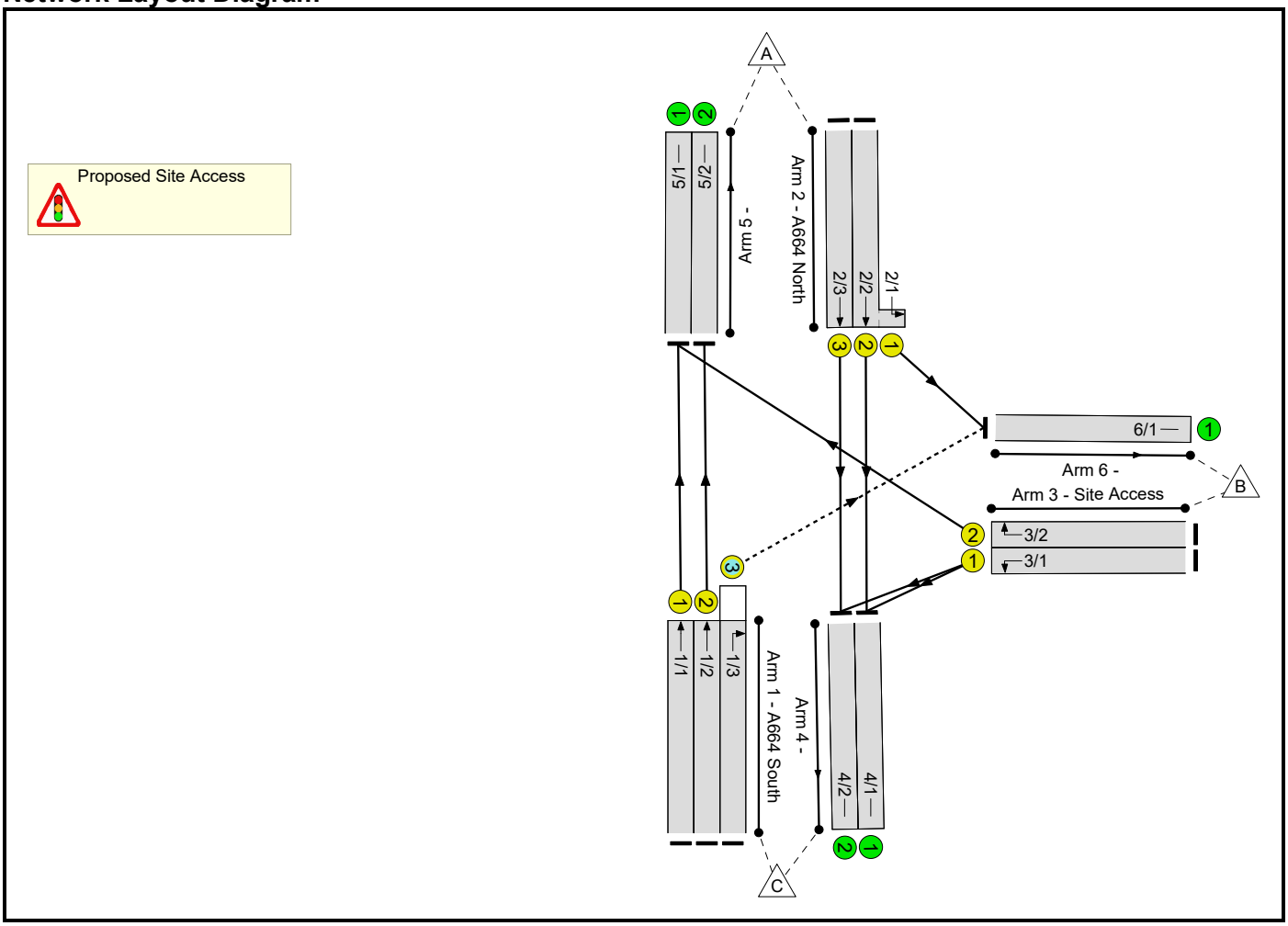
APPENDIX K

Full Input Data And Results

User and Project Details

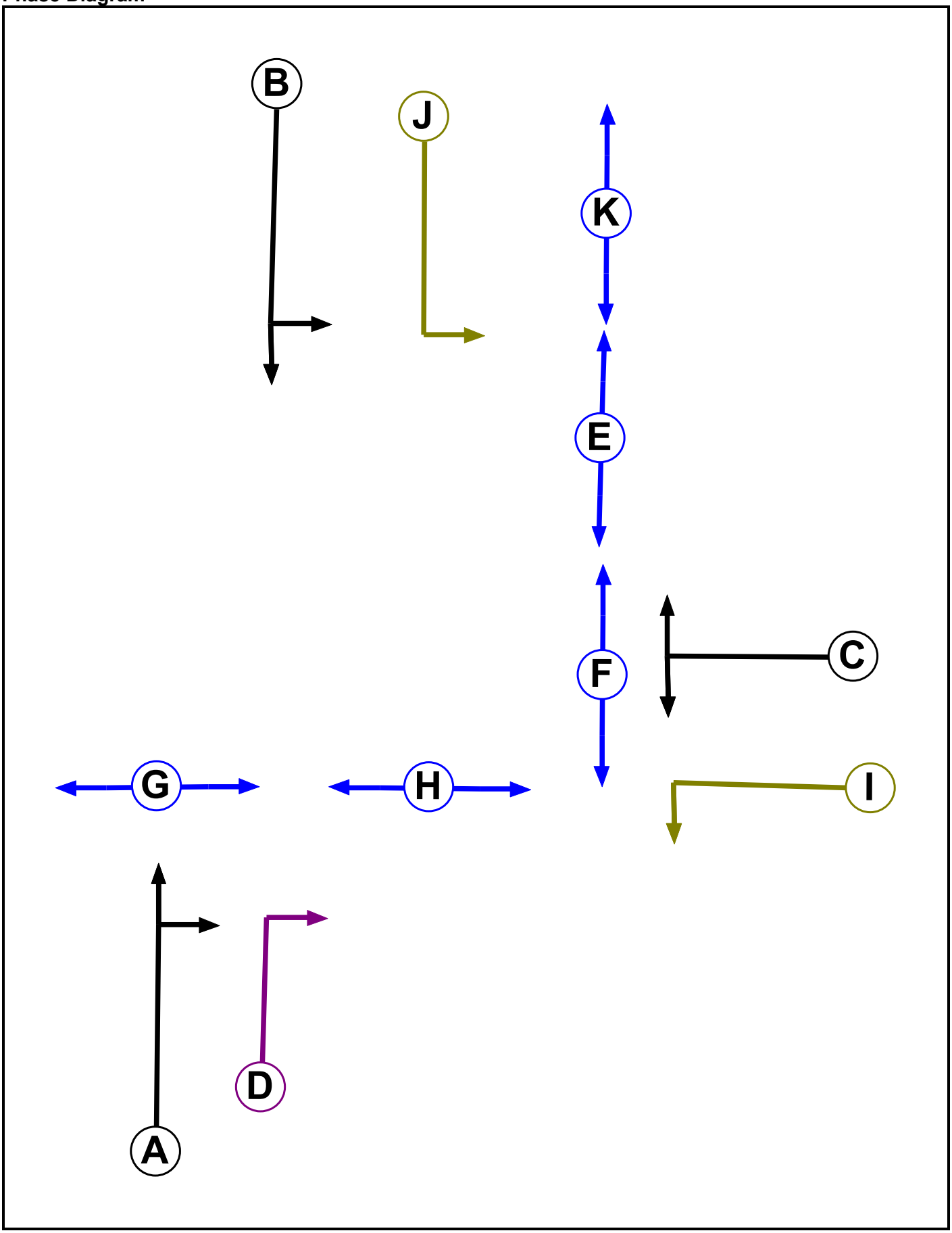
Project:	
Title:	
Location:	
Additional detail:	
File name:	J3 Northern Access SCP Model - WSP 3rd Run.lsg3x
Author:	
Company:	
Address:	

Network Layout Diagram



Full Input Data And Results

Phase Diagram



Full Input Data And Results

Phase Input Data

Phase Name	Phase Type	Assoc. Phase	Street Min	Cont Min
A	Traffic		7	7
B	Traffic		7	7
C	Traffic		7	7
D	Ind. Arrow	A	4	4
E	Pedestrian		4	4
F	Pedestrian		4	4
G	Pedestrian		4	4
H	Pedestrian		4	4
I	Filter	C	4	2
J	Filter	B	4	0
K	Pedestrian		4	4

Phase Intergreens Matrix

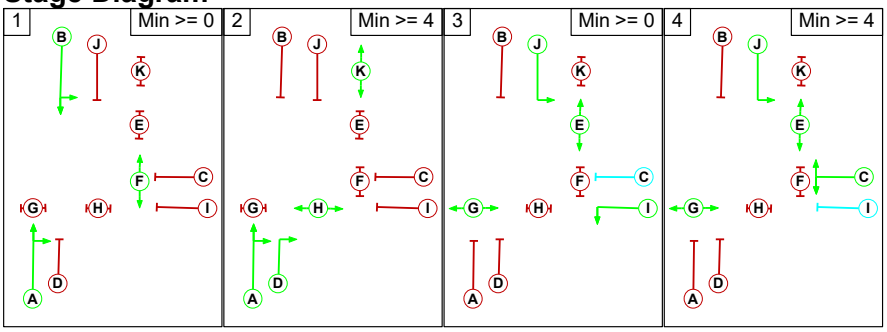
Terminating Phase \ Starting Phase	A	B	C	D	E	F	G	H	I	J	K
A		-	5	-	6	-	5	-	-	8	-
B	-		5	8	5	-	8	8	5	-	5
C	5	5		5	-	5	-	5	-	-	-
D	-	8	5		7	5	5	-	-	-	-
E	6	5	-	7		-	-	-	-	-	-
F	-	-	5	5	-		-	-	5	-	-
G	5	9	-	5	-	-		-	-	-	-
H	-	9	5	-	-	-	-		5	-	-
I	-	5	-	-	-	5	-	5		-	-
J	8	-	-	-	-	-	-	-	-		5
K	-	5	-	-	-	-	-	-	-	5	

Phases in Stage

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

Full Input Data And Results

Stage Diagram



Phase Delays

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

Prohibited Stage Change

From Stage \ To Stage	1	2	3	4
1		8	8	8
2	9		8	8
3	X	X		2
4	17	X	0	

Full Input Data And Results

Give-Way Lane Input Data

Junction: Proposed Site Access

Lane	Movement	Max Flow when Giving Way (PCU/Hr)	Min Flow when Giving Way (PCU/Hr)	Opposing Lane	Opp. Lane Coeff.	Opp. Mvmnts.	Right Turn Storage (PCU)	Non-Blocking Storage (PCU)	RTF	Right Turn Move up (s)	Max Turns in Intergreen (PCU)
1/3 (A664 South)	6/1 (Right)	1439	0	2/3	1.09	All	2.00	-	0.50	2	2.00

Full Input Data And Results

Lane Input Data

Junction: Proposed Site Access												
Lane	**Lane Type**	**Phases**	**Start Disp.**	**End Disp.**	**Physical Length (PCU)**	**Sat Flow Type**	**Def User Saturation Flow (PCU/Hr)**	**Lane Width (m)**	**Gradient**	**Nearside Lane**	**Turns**	**Turning Radius (m)**
1/1 (A664 South)	U	A	2	3	60.0	Geom	-	3.25	0.00	Y	Arm 5 Ahead	Inf
1/2 (A664 South)	U	A	2	3	60.0	Geom	-	3.25	0.00	Y	Arm 5 Ahead	Inf
1/3 (A664 South)	O	A D	2	3	60.0	Geom	-	3.25	0.00	Y	Arm 6 Right	Inf
2/1 (A664 North)	U	B J	2	3	1.0	Geom	-	3.25	0.00	Y	Arm 6 Left	Inf
2/2 (A664 North)	U	B	2	3	60.0	Geom	-	3.25	0.00	Y	Arm 4 Ahead	Inf
2/3 (A664 North)	U	B	2	3	60.0	Geom	-	3.58	0.00	Y	Arm 4 Ahead	Inf
3/1 (Site Access)	U	C I	2	3	60.0	Geom	-	3.25	0.00	Y	Arm 4 Left	7.00
3/2 (Site Access)	U	C	2	3	60.0	User	1800	-	-	-	-	-
4/1	U		2	3	60.0	Inf	-	-	-	-	-	-
4/2	U		2	3	60.0	Inf	-	-	-	-	-	-
5/1	U		2	3	60.0	Inf	-	-	-	-	-	-
5/2	U		2	3	60.0	Inf	-	-	-	-	-	-
6/1	U		2	3	60.0	Inf	-	-	-	-	-	-

Traffic Flow Groups

Flow Group	Start Time	End Time	Duration	Formula
1: '2033 WITH DEV AM'	07:45	08:45	01:00	
2: '2033 WITH DEV PM'	16:30	17:30	01:00	

Scenario 1: '2032 WITH DEV AM' (FG1: '2033 WITH DEV AM', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired

Desired Flow :

		Destination			
		A	B	C	Tot.
Origin	A	0	101	994	1095
	B	278	0	255	533
	C	612	93	0	705
	Tot.	890	194	1249	2333

Full Input Data And Results

Traffic Lane Flows

Lane	Scenario 1: 2032 WITH DEV AM
Junction: Proposed Site Access	
1/1	306
1/2	306
1/3	93
2/1 (short)	101
2/2 (with short)	549(In) 448(Out)
2/3	546
3/1	255
3/2	278
4/1	576
4/2	673
5/1	584
5/2	306
6/1	194

Lane Saturation Flows

Junction: Proposed Site Access

Lane	Lane Width (m)	Gradient	Nearside Lane	Allowed Turns	Turning Radius (m)	Turning Prop.	Sat Flow (PCU/Hr)	Flared Sat Flow (PCU/Hr)
1/1 (A664 South)	3.25	0.00	Y	Arm 5 Ahead	Inf	100.0 %	1940	1940
1/2 (A664 South)	3.25	0.00	Y	Arm 5 Ahead	Inf	100.0 %	1940	1940
1/3 (A664 South)	3.25	0.00	Y	Arm 6 Right	Inf	100.0 %	1940	1940
2/1 (A664 North)	3.25	0.00	Y	Arm 6 Left	Inf	100.0 %	1940	1940
2/2 (A664 North)	3.25	0.00	Y	Arm 4 Ahead	Inf	100.0 %	1940	1940
2/3 (A664 North)	3.58	0.00	Y	Arm 4 Ahead	Inf	100.0 %	1973	1973
3/1 (Site Access)	3.25	0.00	Y	Arm 4 Left	7.00	100.0 %	1598	1598
3/2 (Site Access Lane 2)	This lane uses a directly entered Saturation Flow						1800	1800
4/1	Infinite Saturation Flow						Inf	Inf
4/2	Infinite Saturation Flow						Inf	Inf
5/1	Infinite Saturation Flow						Inf	Inf
5/2	Infinite Saturation Flow						Inf	Inf
6/1	Infinite Saturation Flow						Inf	Inf

Full Input Data And Results

Scenario 2: '2032 WITH DEV PM' (FG2: '2033 WITH DEV PM', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired

Desired Flow :

		Destination			
		A	B	C	Tot.
Origin	A	0	255	676	931
	B	119	0	109	228
	C	851	234	0	1085
	Tot.	970	489	785	2244

Traffic Lane Flows

Lane	Scenario 2: 2032 WITH DEV PM
Junction: Proposed Site Access	
1/1	425
1/2	426
1/3	234
2/1 (short)	255
2/2 (with short)	489(In) 234(Out)
2/3	442
3/1	109
3/2	119
4/1	289
4/2	496
5/1	544
5/2	426
6/1	489

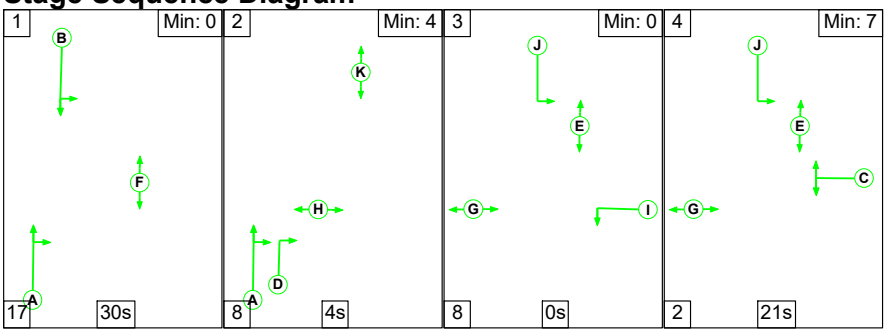
Full Input Data And Results

Lane Saturation Flows

Junction: Proposed Site Access								
Lane	**Lane Width (m)**	**Gradient**	**Nearside Lane**	**Allowed Turns**	**Turning Radius (m)**	**Turning Prop.**	**Sat Flow (PCU/Hr)**	**Flared Sat Flow (PCU/Hr)**
1/1 (A664 South)	3.25	0.00	Y	Arm 5 Ahead	Inf	100.0 %	1940	1940
1/2 (A664 South)	3.25	0.00	Y	Arm 5 Ahead	Inf	100.0 %	1940	1940
1/3 (A664 South)	3.25	0.00	Y	Arm 6 Right	Inf	100.0 %	1940	1940
2/1 (A664 North)	3.25	0.00	Y	Arm 6 Left	Inf	100.0 %	1940	1940
2/2 (A664 North)	3.25	0.00	Y	Arm 4 Ahead	Inf	100.0 %	1940	1940
2/3 (A664 North)	3.58	0.00	Y	Arm 4 Ahead	Inf	100.0 %	1973	1973
3/1 (Site Access)	3.25	0.00	Y	Arm 4 Left	7.00	100.0 %	1598	1598
3/2 (Site Access Lane 2)	This lane uses a directly entered Saturation Flow						1800	1800
4/1	Infinite Saturation Flow						Inf	Inf
4/2	Infinite Saturation Flow						Inf	Inf
5/1	Infinite Saturation Flow						Inf	Inf
5/2	Infinite Saturation Flow						Inf	Inf
6/1	Infinite Saturation Flow						Inf	Inf

Scenario 1: '2032 WITH DEV AM' (FG1: '2033 WITH DEV AM', Plan 1: 'Network Control Plan 1')

Stage Sequence Diagram

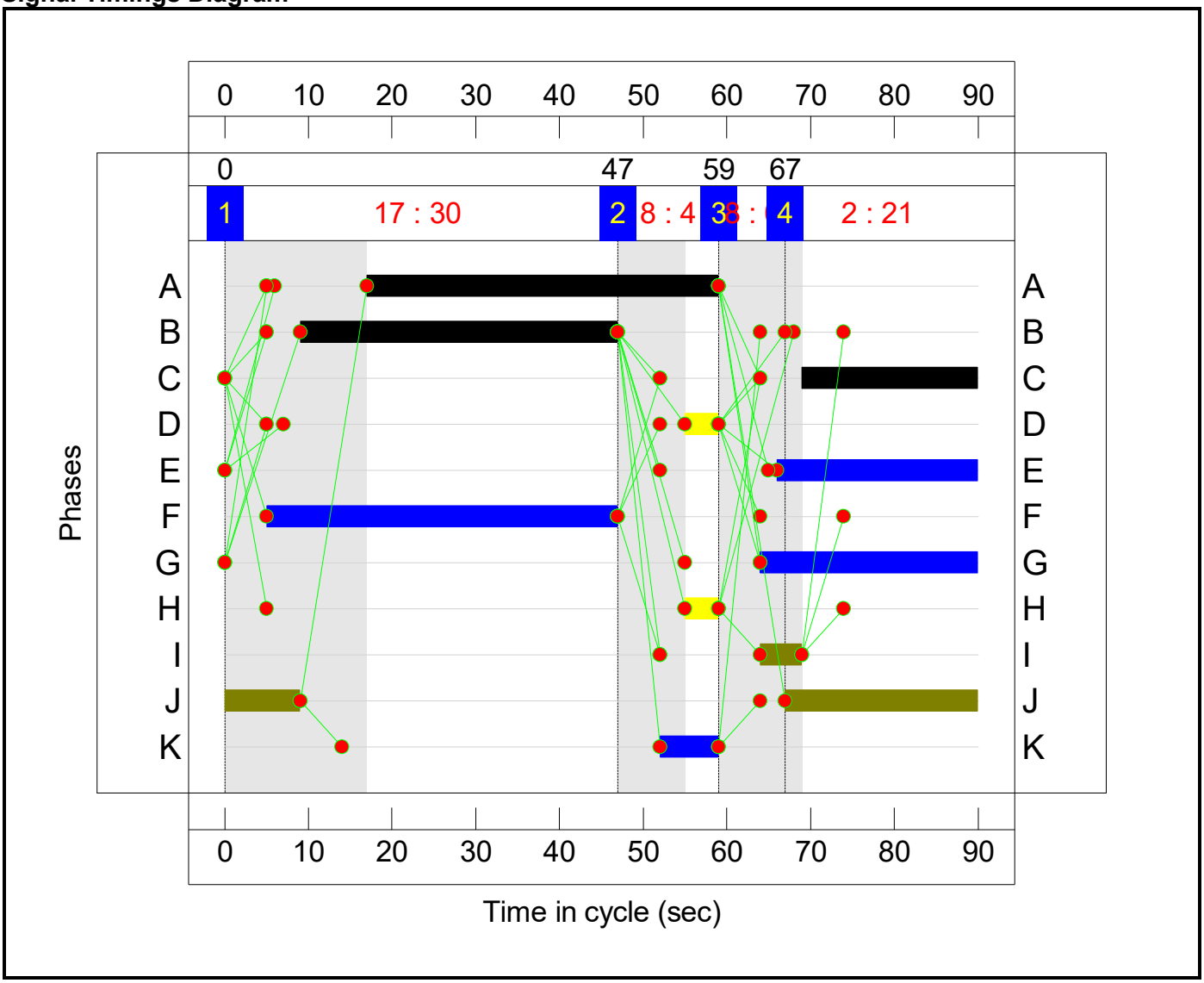


Stage Timings

Stage	1	2	3	4
Duration	30	4	0	21
Change Point	0	47	59	67

Full Input Data And Results

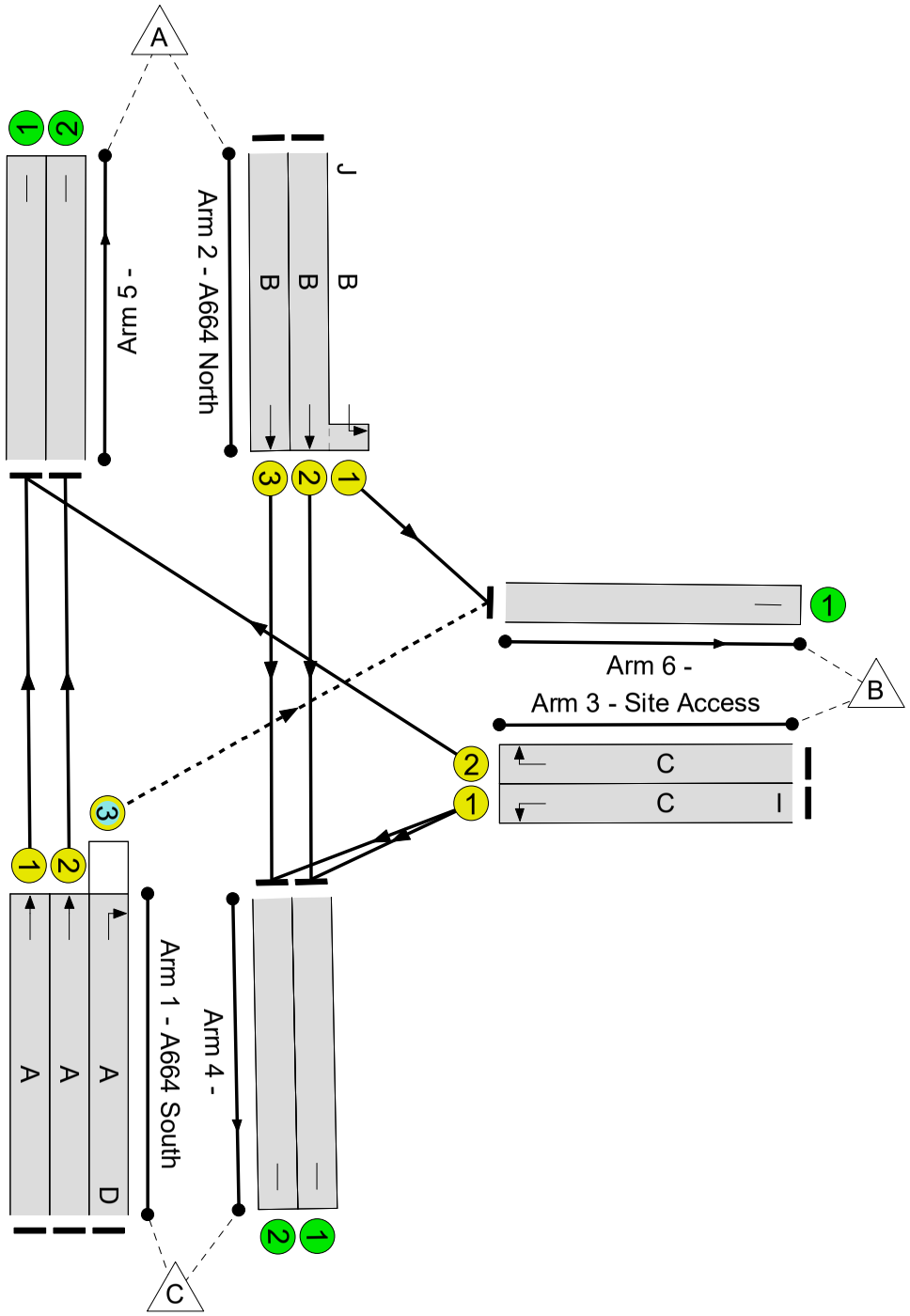
Signal Timings Diagram



Full Input Data And Results

Network Layout Diagram

Proposed Site Access
PRC: 38.8 %
Total Traffic Delay: 17.1 pcuHr



Full Input Data And Results

Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network	-	-	**N/A**	-	-		-	-	-	-	-	-	**64.8%**
Proposed Site Access	-	-	**N/A**	-	-		-	-	-	-	-	-	**64.8%**
1/1	A664 South Ahead	U	N/A	N/A	A		1	42	-	306	1940	927	33.0%
1/2	A664 South Ahead	U	N/A	N/A	A		1	42	-	306	1940	927	33.0%
1/3	A664 South Right	O	N/A	N/A	A	D	1	42	4	93	1940	474	19.6%
2/2+2/1	A664 North Ahead Left	U	N/A	N/A	B	J	1	38:70	32	549	1940:1940	847	64.8%
2/3	A664 North Ahead	U	N/A	N/A	B		1	38	-	546	1973	855	63.9%
3/1	Site Access Left	U	N/A	N/A	C	I	1	26	5	255	1598	479	53.2%
3/2	Site Access Right	U	N/A	N/A	C		1	21	-	278	1800	440	63.2%
4/1		U	N/A	N/A	-		-	-	-	576	Inf	Inf	0.0%
4/2		U	N/A	N/A	-		-	-	-	673	Inf	Inf	0.0%
5/1		U	N/A	N/A	-		-	-	-	584	Inf	Inf	0.0%
5/2		U	N/A	N/A	-		-	-	-	306	Inf	Inf	0.0%
6/1		U	N/A	N/A	-		-	-	-	194	Inf	Inf	0.0%

Full Input Data And Results

Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network	**-**	**-**	**81**	**10**	**2**	**13.0**	**3.8**	**0.2**	**17.1**	**-**	**-**	**-**	**-**
Proposed Site Access	**-**	**-**	**81**	**10**	**2**	**13.0**	**3.8**	**0.2**	**17.1**	**-**	**-**	**-**	**-**
1/1	306	306	-	-	-	1.2	0.2	-	1.5	17.5	4.7	0.2	4.9
1/2	306	306	-	-	-	1.2	0.2	-	1.5	17.5	4.7	0.2	4.9
1/3	93	93	81	10	2	0.3	0.1	0.2	0.7	26.4	1.3	0.1	1.4
2/2+2/1	549	549	-	-	-	3.0	0.9	-	3.9	25.4	10.4	0.9	11.4
2/3	546	546	-	-	-	3.0	0.9	-	3.9	25.8	10.6	0.9	11.5
3/1	255	255	-	-	-	1.9	0.6	-	2.4	34.2	5.2	0.6	5.8
3/2	278	278	-	-	-	2.3	0.8	-	3.2	41.4	6.2	0.8	7.0
4/1	576	576	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
4/2	673	673	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/1	584	584	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/2	306	306	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/1	194	194	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0

C1

PRC for Signalled Lanes (%): 38.8
PRC Over All Lanes (%): 38.8

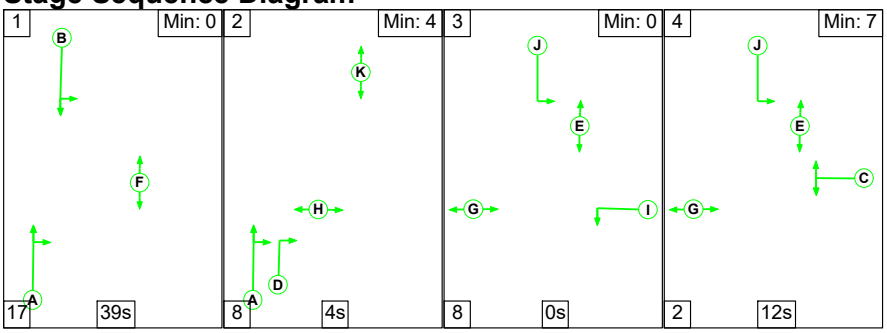
Total Delay for Signalled Lanes (pcuHr): 17.06
Total Delay Over All Lanes(pcuHr): 17.06

Cycle Time (s): 90

Full Input Data And Results

Scenario 2: '2032 WITH DEV PM' (FG2: '2033 WITH DEV PM', Plan 1: 'Network Control Plan 1')

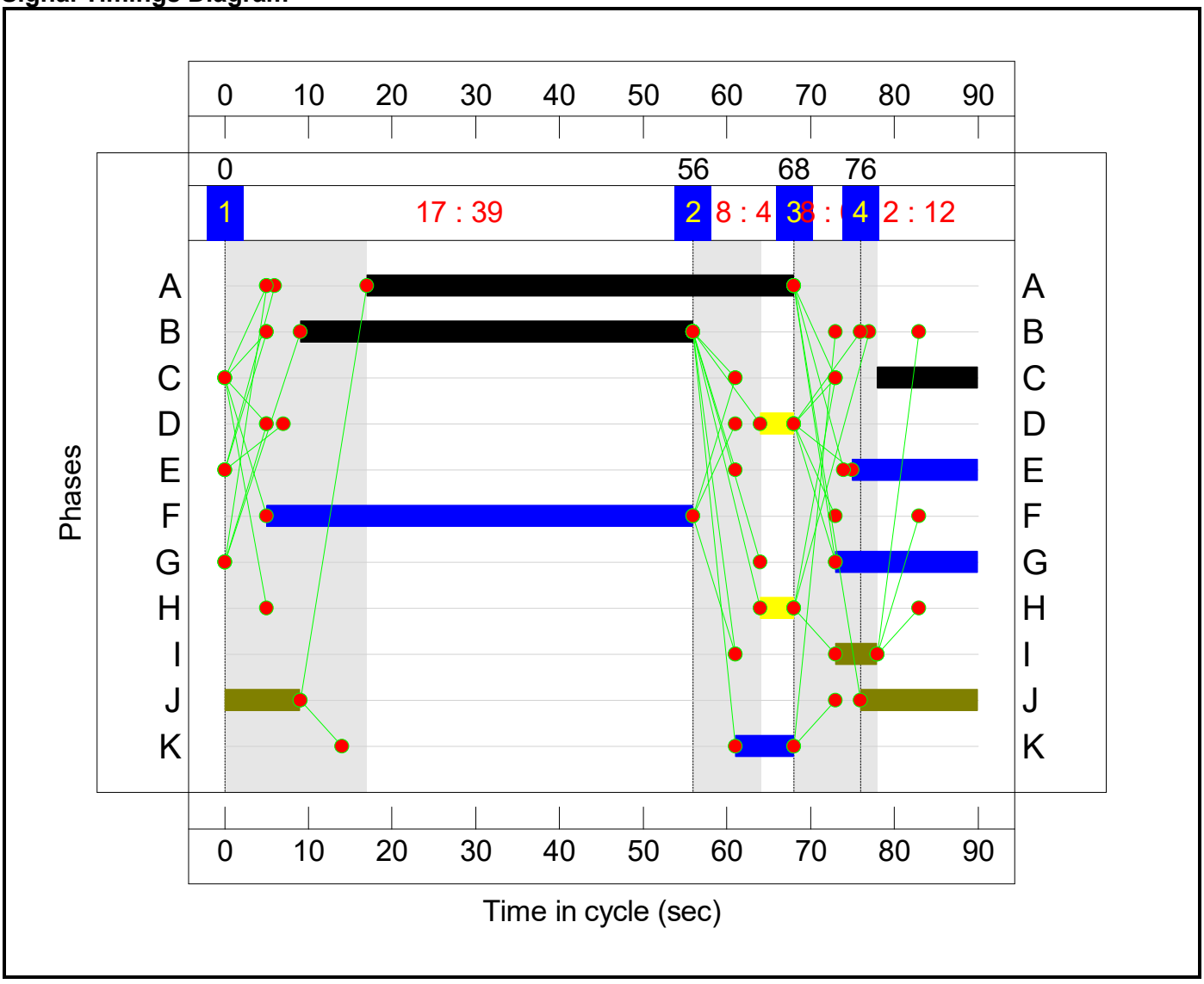
Stage Sequence Diagram



Stage Timings

Stage	1	2	3	4
Duration	39	4	0	12
Change Point	0	56	68	76

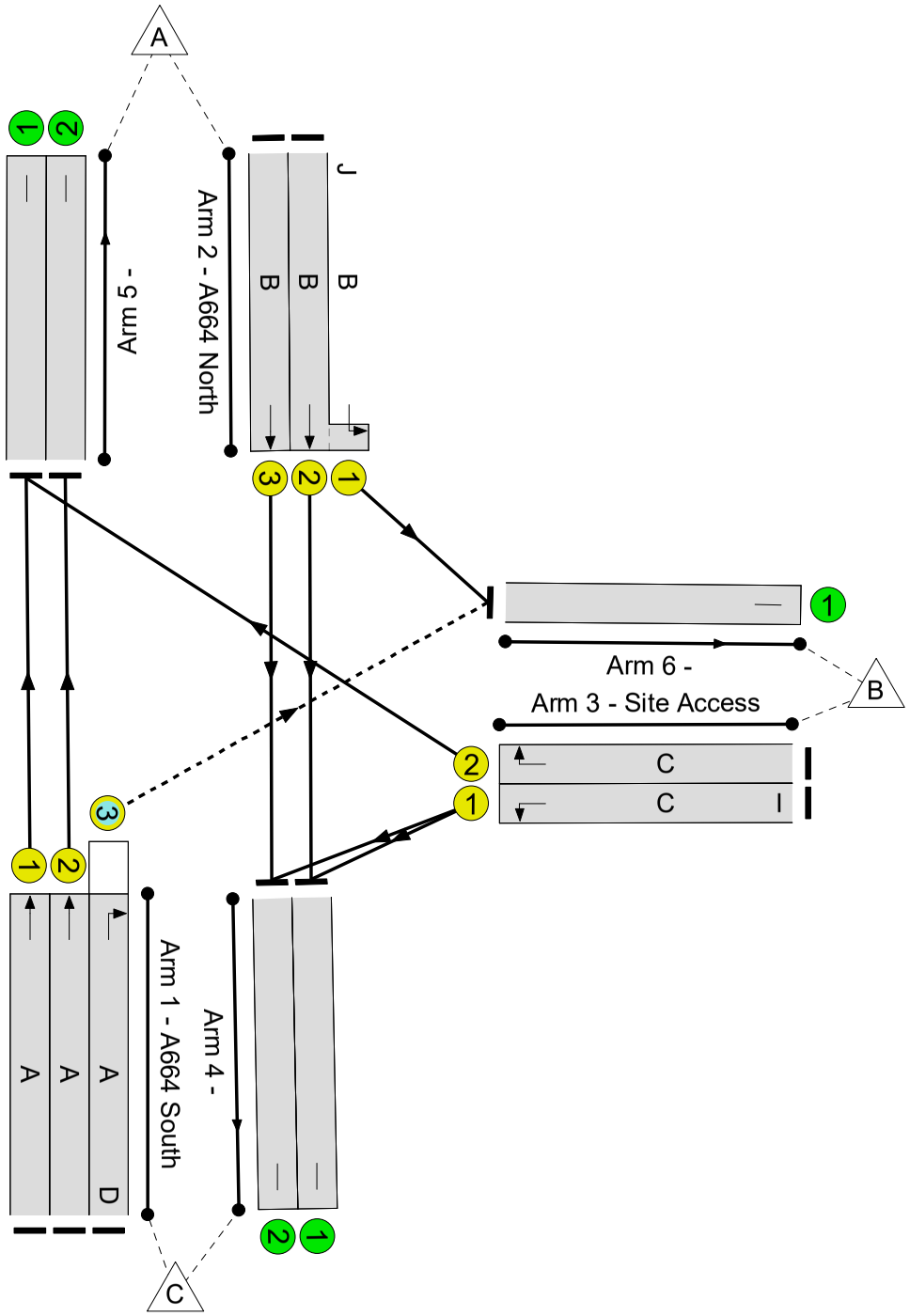
Signal Timings Diagram



Full Input Data And Results

Network Layout Diagram

Proposed Site Access
PRC: 96.6 %
Total Traffic Delay: 10.6 pcuHr



Full Input Data And Results

Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network	-	-	**N/A**	-	-		-	-	-	-	-	-	**45.8%**
Proposed Site Access	-	-	**N/A**	-	-		-	-	-	-	-	-	**45.8%**
1/1	A664 South Ahead	U	N/A	N/A	A		1	51	-	425	1940	1121	37.9%
1/2	A664 South Ahead	U	N/A	N/A	A		1	51	-	426	1940	1121	38.0%
1/3	A664 South Right	O	N/A	N/A	A	D	1	51	4	234	1940	676	34.6%
2/2+2/1	A664 North Ahead Left	U	N/A	N/A	B	J	1	47:70	23	489	1940:1940	1075	45.5%
2/3	A664 North Ahead	U	N/A	N/A	B		1	47	-	442	1973	1052	42.0%
3/1	Site Access Left	U	N/A	N/A	C	I	1	17	5	109	1598	320	34.1%
3/2	Site Access Right	U	N/A	N/A	C		1	12	-	119	1800	260	45.8%
4/1		U	N/A	N/A	-		-	-	-	289	Inf	Inf	0.0%
4/2		U	N/A	N/A	-		-	-	-	496	Inf	Inf	0.0%
5/1		U	N/A	N/A	-		-	-	-	544	Inf	Inf	0.0%
5/2		U	N/A	N/A	-		-	-	-	426	Inf	Inf	0.0%
6/1		U	N/A	N/A	-		-	-	-	489	Inf	Inf	0.0%

Full Input Data And Results

Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network	**-**	**-**	**203**	**26**	**5**	**8.1**	**2.3**	**0.2**	**10.6**	**-**	**-**	**-**	**-**
Proposed Site Access	**-**	**-**	**203**	**26**	**5**	**8.1**	**2.3**	**0.2**	**10.6**	**-**	**-**	**-**	**-**
1/1	425	425	-	-	-	1.2	0.3	-	1.5	12.9	5.7	0.3	6.0
1/2	426	426	-	-	-	1.2	0.3	-	1.5	12.9	5.7	0.3	6.0
1/3	234	234	203	26	5	0.6	0.3	0.2	1.1	17.2	3.1	0.3	3.4
2/2+2/1	489	489	-	-	-	1.4	0.4	-	1.8	13.1	6.3	0.4	6.7
2/3	442	442	-	-	-	1.6	0.4	-	1.9	15.6	6.6	0.4	7.0
3/1	109	109	-	-	-	0.9	0.3	-	1.2	39.4	2.3	0.3	2.6
3/2	119	119	-	-	-	1.2	0.4	-	1.6	48.0	2.7	0.4	3.1
4/1	289	289	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
4/2	496	496	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/1	544	544	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/2	426	426	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/1	489	489	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0

C1

PRC for Signalled Lanes (%): 96.6
PRC Over All Lanes (%): 96.6

Total Delay for Signalled Lanes (pcuHr): 10.64
Total Delay Over All Lanes(pcuHr): 10.64

Cycle Time (s): 90

S|C|P

APPENDIX L

Junctions 9

PICADY 9 - Priority Intersection Module

Version: 9.5.2.1013
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Filename: Thornham New Rd.j9
Path: Z:\Job Library\2019\190267 - Manchester Road, Rochdale\Traffic Data\Planning Application\PICADY\A664 Manchester Road _ Thornham New Road
Report generation date: 26/01/2023 15:55:20

»Base 2033, AM
»Base 2033, PM
»Assessment 2033, AM
»Assessment 2033, PM

Summary of junction performance

	AM					PM				
	Set ID	Queue (PCU)	Delay (s)	RFC	LOS	Set ID	Queue (PCU)	Delay (s)	RFC	LOS
	Base 2033									
Stream B-ACD	D1	0.1	11.84	0.06	B	D2	0.0	11.44	0.02	B
Stream A-BCD		0.0	4.55	0.03	A		0.2	3.94	0.09	A
Stream D-ABC		0.3	20.63	0.25	C		0.1	12.34	0.10	B
Stream C-ABD		0.0	3.43	0.02	A		0.0	4.12	0.03	A
	Assessment 2033									
Stream B-ACD	D4	0.1	17.99	0.09	C	D5	0.0	14.94	0.03	B
Stream A-BCD		0.2	3.94	0.08	A		0.9	4.01	0.23	A
Stream D-ABC		1.4	52.12	0.60	F		0.3	21.31	0.23	C
Stream C-ABD		0.0	3.34	0.03	A		0.1	3.60	0.04	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	A664 Manchester Road/ Thornham New Road/ Earl St
Location	
Site number	
Date	26/01/2023
Version	
Status	(new file)
Identifier	
Client	
Jobnumber	
Enumerator	SCP\abbie.moore
Description	

Units

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

Analysis Options

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

Demand Set Summary

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D1	Base 2033	AM	ONE HOUR	07:30	09:00	15
D2	Base 2033	PM	ONE HOUR	16:15	17:45	15
D4	Assessment 2033	AM	ONE HOUR	07:30	09:00	15
D5	Assessment 2033	PM	ONE HOUR	16:15	17:45	15

Analysis Set Details

ID	Network flow scaling factor (%)
A1	100.000

Base 2033, 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	A664 Manchester Road/ Thornham New Road/ Earl St	Crossroads	Two-way		0.90	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Name	Description	Arm type
A	A664 Manchester Rd South		Major
B	Earl Street		Minor
C	A664 Manchester Rd South		Major
D	Thornham New Road		Minor

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)
A	8.25			98.0	✓	0.00
C	8.25			168.0	✓	0.00

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

Minor Arm Geometry

Arm	Minor arm type	Lane width (m)	Visibility to left (m)	Visibility to right (m)
B	One lane	3.02	44	20
D	One lane	2.70	20	25

Slope / Intercept / Capacity

Priority Intersection Slopes and Intercepts

Stream	Intercept (PCU/hr)	Slope for A-B	Slope for A-C	Slope for A-D	Slope for B-A	Slope for B-C	Slope for B-D	Slope for C-A	Slope for C-B	Slope for C-D	Slope for D-A	Slope for D-B	Slope for D-C
A-D	631	-	-	-	-	-	-	0.220	0.315	0.220	-	-	-
B-A	503	0.083	0.209	0.209	-	-	-	0.131	0.298	-	0.209	0.209	0.104
B-C	638	0.088	0.223	-	-	-	-	-	-	-	-	-	-
B-D, nearside lane	503	0.083	0.209	0.209	-	-	-	0.131	0.298	0.131	-	-	-
B-D, offside lane	503	0.083	0.209	0.209	-	-	-	0.131	0.298	0.131	-	-	-
C-B	671	0.235	0.235	0.335	-	-	-	-	-	-	-	-	-
D-A	620	-	-	-	-	-	-	0.217	-	0.086	-	-	-
D-B, nearside lane	481	0.126	0.126	0.286	-	-	-	0.200	0.200	0.079	-	-	-
D-B, offside lane	481	0.126	0.126	0.286	-	-	-	0.200	0.200	0.079	-	-	-
D-C	481	-	0.126	0.286	0.100	0.200	0.200	0.200	0.200	0.079	-	-	-

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

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

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

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D1	Base 2033	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 (%)
A		✓	605	100.000
B		✓	17	100.000
C		✓	965	100.000
D		✓	54	100.000

Origin-Destination Data

Demand (PCU/hr)

		To			
		A	B	C	D
From	A	0	2	596	7
	B	7	0	10	0
	C	948	4	0	13
	D	22	0	32	0

Vehicle Mix

Heavy Vehicle Percentages

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

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
B-ACD	0.06	11.84	0.1	B
A-BCD	0.03	4.55	0.0	A
A-B				
A-C				
D-ABC	0.25	20.63	0.3	C
C-ABD	0.02	3.43	0.0	A
C-D				
C-A				

Main Results for each time segment

07:30 - 07:45

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	13	411	0.031	13	0.0	9.041	A
A-BCD	12	803	0.015	12	0.0	4.551	A
A-B	1			1			
A-C	442			442			
D-ABC	41	332	0.122	40	0.1	12.315	B
C-ABD	9	1061	0.009	9	0.0	3.423	A
C-D	10			10			
C-A	707			707			

07:45 - 08:00

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	15	375	0.041	15	0.0	10.000	A
A-BCD	17	846	0.020	17	0.0	4.346	A
A-B	2			2			
A-C	525			525			
D-ABC	49	292	0.167	48	0.2	14.783	B
C-ABD	15	1146	0.013	15	0.0	3.180	A
C-D	12			12			
C-A	841			841			

08:00 - 08:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	19	323	0.058	19	0.1	11.835	B
A-BCD	28	910	0.031	28	0.0	4.082	A
A-B	2			2			
A-C	636			636			
D-ABC	59	234	0.254	59	0.3	20.512	C
C-ABD	26	1270	0.021	26	0.0	2.894	A
C-D	14			14			
C-A	1022			1022			

08:15 - 08:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	19	323	0.058	19	0.1	11.843	B
A-BCD	28	910	0.031	28	0.0	4.083	A
A-B	2			2			
A-C	636			636			
D-ABC	59	234	0.254	59	0.3	20.635	C
C-ABD	26	1270	0.021	26	0.0	2.894	A
C-D	14			14			
C-A	1022			1022			

08:30 - 08:45

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	15	375	0.041	15	0.0	10.011	B
A-BCD	17	846	0.021	17	0.0	4.346	A
A-B	2			2			
A-C	525			525			
D-ABC	49	292	0.167	49	0.2	14.880	B
C-ABD	15	1146	0.013	15	0.0	3.183	A
C-D	12			12			
C-A	841			841			

08:45 - 09:00

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	13	411	0.031	13	0.0	9.052	A
A-BCD	12	803	0.015	12	0.0	4.553	A
A-B	1			1			
A-C	442			442			
D-ABC	41	332	0.123	41	0.1	12.382	B
C-ABD	10	1061	0.009	10	0.0	3.426	A
C-D	10			10			
C-A	707			707			

Base 2033, 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	A664 Manchester Road/ Thornham New Road/ Earl St	Crossroads	Two-way		0.53	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D2	Base 2033	PM	ONE HOUR	16:15	17:45	15

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

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		✓	835	100.000
B		✓	6	100.000
C		✓	689	100.000
D		✓	30	100.000

Origin-Destination Data

Demand (PCU/hr)

		To			
		A	B	C	D
From	A	0	3	813	19
	B	1	0	4	1
	C	648	7	0	34
	D	19	0	11	0

Vehicle Mix

Heavy Vehicle Percentages

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

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
B-ACD	0.02	11.44	0.0	B
A-BCD	0.09	3.94	0.2	A
A-B				
A-C				
D-ABC	0.10	12.34	0.1	B
C-ABD	0.03	4.12	0.0	A
C-D				
C-A				

Main Results for each time segment

16:15 - 16:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	5	411	0.011	4	0.0	8.851	A
A-BCD	40	954	0.042	40	0.1	3.938	A
A-B	2			2			
A-C	586			586			
D-ABC	23	406	0.056	22	0.1	9.375	A
C-ABD	13	887	0.014	12	0.0	4.117	A
C-D	25			25			
C-A	481			481			

16:30 - 16:45

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	5	375	0.014	5	0.0	9.750	A
A-BCD	60	1026	0.059	60	0.1	3.725	A
A-B	3			3			
A-C	688			688			
D-ABC	27	373	0.072	27	0.1	10.397	B
C-ABD	18	938	0.019	18	0.0	3.911	A
C-D	30			30			
C-A	571			571			

16:45 - 17:00

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	7	321	0.021	7	0.0	11.436	B
A-BCD	102	1130	0.091	102	0.2	3.501	A
A-B	3			3			
A-C	814			814			
D-ABC	33	325	0.102	33	0.1	12.330	B
C-ABD	30	1015	0.029	30	0.0	3.652	A
C-D	36			36			
C-A	693			693			

17:00 - 17:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	7	321	0.021	7	0.0	11.439	B
A-BCD	103	1131	0.091	103	0.2	3.506	A
A-B	3			3			
A-C	814			814			
D-ABC	33	325	0.102	33	0.1	12.342	B
C-ABD	30	1015	0.029	30	0.0	3.652	A
C-D	36			36			
C-A	693			693			

17:15 - 17:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	5	374	0.014	5	0.0	9.755	A
A-BCD	60	1026	0.059	61	0.1	3.732	A
A-B	3			3			
A-C	688			688			
D-ABC	27	373	0.072	27	0.1	10.411	B
C-ABD	18	938	0.019	18	0.0	3.912	A
C-D	30			30			
C-A	571			571			

17:30 - 17:45

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	5	411	0.011	5	0.0	8.856	A
A-BCD	40	954	0.042	41	0.1	3.942	A
A-B	2			2			
A-C	586			586			
D-ABC	23	406	0.056	23	0.1	9.392	A
C-ABD	13	887	0.014	13	0.0	4.118	A
C-D	25			25			
C-A	481			481			

Assessment 2033, 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	A664 Manchester Road/ Thornham New Road/ Earl St	Crossroads	Two-way		2.63	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D4	Assessment 2033	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 (%)
A		✓	889	100.000
B		✓	17	100.000
C		✓	1073	100.000
D		✓	92	100.000

Origin-Destination Data

Demand (PCU/hr)

		To			
		A	B	C	D
From	A	0	2	874	13
	B	7	0	10	0
	C	1049	4	0	20
	D	40	0	52	0

Vehicle Mix

Heavy Vehicle Percentages

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

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
B-ACD	0.09	17.99	0.1	C
A-BCD	0.08	3.94	0.2	A
A-B				
A-C				
D-ABC	0.60	52.12	1.4	F
C-ABD	0.03	3.34	0.0	A
C-D				
C-A				

Main Results for each time segment

07:30 - 07:45

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	13	350	0.037	13	0.0	10.668	B
A-BCD	32	946	0.034	32	0.0	3.939	A
A-B	1			1			
A-C	636			636			
D-ABC	69	295	0.234	68	0.3	15.753	C
C-ABD	12	1089	0.011	12	0.0	3.341	A
C-D	15			15			
C-A	781			781			

07:45 - 08:00

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	15	299	0.051	15	0.1	12.690	B
A-BCD	51	1023	0.050	51	0.1	3.704	A
A-B	2			2			
A-C	746			746			
D-ABC	83	245	0.338	82	0.5	22.009	C
C-ABD	19	1186	0.016	19	0.0	3.084	A
C-D	18			18			
C-A	928			928			

08:00 - 08:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	19	219	0.085	19	0.1	17.906	C
A-BCD	95	1136	0.084	95	0.2	3.456	A
A-B	2			2			
A-C	882			882			
D-ABC	101	169	0.598	98	1.3	48.407	E
C-ABD	39	1329	0.029	38	0.0	2.788	A
C-D	21			21			
C-A	1121			1121			

08:15 - 08:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	19	219	0.086	19	0.1	17.993	C
A-BCD	95	1137	0.084	95	0.2	3.458	A
A-B	2			2			
A-C	881			881			
D-ABC	101	169	0.598	101	1.4	52.119	F
C-ABD	39	1329	0.029	39	0.0	2.790	A
C-D	21			21			
C-A	1121			1121			

08:30 - 08:45

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	15	298	0.051	15	0.1	12.741	B
A-BCD	51	1023	0.050	52	0.1	3.710	A
A-B	2			2			
A-C	746			746			
D-ABC	83	245	0.338	86	0.5	23.175	C
C-ABD	19	1186	0.016	19	0.0	3.084	A
C-D	18			18			
C-A	928			928			

08:45 - 09:00

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	13	350	0.037	13	0.0	10.694	B
A-BCD	32	946	0.034	33	0.0	3.942	A
A-B	1			1			
A-C	635			635			
D-ABC	69	295	0.235	70	0.3	16.044	C
C-ABD	12	1089	0.011	12	0.0	3.344	A
C-D	15			15			
C-A	781			781			

Assessment 2033, 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	A664 Manchester Road/ Thornham New Road/ Earl St	Crossroads	Two-way		0.97	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)
D5	Assessment 2033	PM	ONE HOUR	16:15	17:45	15

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

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		✓	970	100.000
B		✓	6	100.000
C		✓	962	100.000
D		✓	45	100.000

Origin-Destination Data

Demand (PCU/hr)

		To			
		A	B	C	D
From	A	0	3	932	35
	B	1	0	4	1
	C	903	7	0	52
	D	26	0	19	0

Vehicle Mix

Heavy Vehicle Percentages

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

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
B-ACD	0.03	14.94	0.0	B
A-BCD	0.23	4.01	0.9	A
A-B				
A-C				
D-ABC	0.23	21.31	0.3	C
C-ABD	0.04	3.60	0.1	A
C-D				
C-A				

Main Results for each time segment

16:15 - 16:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	5	371	0.012	4	0.0	9.824	A
A-BCD	91	990	0.092	90	0.2	3.999	A
A-B	2			2			
A-C	637			637			
D-ABC	34	338	0.100	33	0.1	11.789	B
C-ABD	18	1018	0.018	18	0.0	3.600	A
C-D	38			38			
C-A	668			668			

16:30 - 16:45

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	5	323	0.017	5	0.0	11.343	B
A-BCD	145	1075	0.135	145	0.3	3.873	A
A-B	2			2			
A-C	724			724			
D-ABC	40	291	0.139	40	0.2	14.349	B
C-ABD	29	1101	0.026	29	0.0	3.356	A
C-D	46			46			
C-A	791			791			

16:45 - 17:00

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	7	248	0.027	7	0.0	14.897	B
A-BCD	274	1200	0.229	272	0.9	3.890	A
A-B	3			3			
A-C	791			791			
D-ABC	50	219	0.227	49	0.3	21.151	C
C-ABD	55	1225	0.045	55	0.1	3.076	A
C-D	55			55			
C-A	950			950			

17:00 - 17:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	7	248	0.027	7	0.0	14.941	B
A-BCD	276	1202	0.230	276	0.9	3.911	A
A-B	3			3			
A-C	789			789			
D-ABC	50	218	0.227	50	0.3	21.312	C
C-ABD	55	1225	0.045	55	0.1	3.077	A
C-D	55			55			
C-A	950			950			

17:15 - 17:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	5	322	0.017	5	0.0	11.375	B
A-BCD	147	1077	0.136	149	0.4	3.893	A
A-B	2			2			
A-C	723			723			
D-ABC	40	291	0.139	41	0.2	14.452	B
C-ABD	29	1101	0.026	29	0.0	3.361	A
C-D	46			46			
C-A	791			791			

17:30 - 17:45

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	5	370	0.012	5	0.0	9.837	A
A-BCD	92	991	0.093	93	0.2	4.011	A
A-B	2			2			
A-C	636			636			
D-ABC	34	338	0.100	34	0.1	11.846	B
C-ABD	18	1017	0.018	18	0.0	3.601	A
C-D	38			38			
C-A	668			668			

S|C|P

APPENDIX M

Junctions 9

PICADY 9 - Priority Intersection Module

Version: 9.5.2.1013
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Filename: A664 Manchester Road _ Thornham Lane.j9
Path: Z:\Job Library\2019\190267 - Manchester Road, Rochdale\Traffic Data\Planning Application\PICADY
Report generation date: 13/12/2022 14:56:35

»Base 2033, AM
»Base 2033, PM
»Assessment 2033, AM
»Assessment 2033, PM

Summary of junction performance

	AM					PM				
	Set ID	Queue (PCU)	Delay (s)	RFC	LOS	Set ID	Queue (PCU)	Delay (s)	RFC	LOS
	Base 2033									
Stream B-AC	D1	0.2	16.43	0.16	C	D2	0.1	12.39	0.10	B
Stream C-B		0.1	9.65	0.06	A		0.0	7.00	0.01	A
	Assessment 2033									
Stream B-AC	D3	0.4	32.35	0.27	D	D4	0.1	16.48	0.13	C
Stream C-B		0.1	12.28	0.08	B		0.0	7.50	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	A664 Manchester Road/ Thornham Lane
Location	A664 Manchester Road/ Thornham Lane
Site number	
Date	02/12/2022
Version	
Status	(new file)
Identifier	
Client	
Jobnumber	
Enumerator	SCP\abbie.moore
Description	

Units

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

Analysis Options

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

Demand Set Summary

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D1	Base 2033	AM	ONE HOUR	07:30	09:00	15
D2	Base 2033	PM	ONE HOUR	16:15	17:45	15
D3	Assessment 2033	AM	ONE HOUR	07:30	09:00	15
D4	Assessment 2033	PM	ONE HOUR	16:15	17:45	15

Analysis Set Details

ID	Network flow scaling factor (%)
A1	100.000

Base 2033, 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	A664 Manchester Road/ Thornham Lane	T-Junction	Two-way		0.49	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Name	Description	Arm type
A	A664 Rochdale Rd (N)		Major
B	Thornham Lane		Minor
C	A664 Rochdale Rd (S)		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	7.12		✓	2.20	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 (m)	Visibility to left (m)	Visibility to right (m)
B	One lane	3.20	20	12

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	500	0.087	0.219	0.138	0.313
B-C	644	0.094	0.237	-	-
C-B	719	0.265	0.265	-	-

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

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

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

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D1	Base 2033	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 (%)
A		✓	1102	100.000
B		✓	38	100.000
C		✓	571	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		A	B	C
From	A	0	27	1075
	B	10	0	28
	C	549	22	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
B-AC	0.16	16.43	0.2	C
C-A				
C-B	0.06	9.65	0.1	A
A-B				
A-C				

Main Results for each time segment

07:30 - 07:45

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	29	377	0.076	28	0.1	10.320	B
C-A	413			413			
C-B	17	499	0.033	16	0.0	7.458	A
A-B	20			20			
A-C	809			809			

07:45 - 08:00

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	34	330	0.103	34	0.1	12.148	B
C-A	494			494			
C-B	20	456	0.043	20	0.0	8.245	A
A-B	24			24			
A-C	966			966			

08:00 - 08:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	42	261	0.160	42	0.2	16.382	C
C-A	604			604			
C-B	24	397	0.061	24	0.1	9.644	A
A-B	30			30			
A-C	1184			1184			

08:15 - 08:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	42	261	0.160	42	0.2	16.425	C
C-A	604			604			
C-B	24	397	0.061	24	0.1	9.648	A
A-B	30			30			
A-C	1184			1184			

08:30 - 08:45

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	34	330	0.103	34	0.1	12.182	B
C-A	494			494			
C-B	20	456	0.043	20	0.0	8.251	A
A-B	24			24			
A-C	966			966			

08:45 - 09:00

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	29	377	0.076	29	0.1	10.347	B
C-A	413			413			
C-B	17	499	0.033	17	0.0	7.466	A
A-B	20			20			
A-C	809			809			

Base 2033, 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	A664 Manchester Road/ Thornham Lane	T-Junction	Two-way		0.27	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D2	Base 2033	PM	ONE HOUR	16:15	17:45	15

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

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		✓	682	100.000
B		✓	30	100.000
C		✓	815	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		A	B	C
From	A	0	4	678
	B	11	0	19
	C	810	5	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
B-AC	0.10	12.39	0.1	B
C-A				
C-B	0.01	7.00	0.0	A
A-B				
A-C				

Main Results for each time segment

16:15 - 16:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	23	413	0.055	22	0.1	9.219	A
C-A	610			610			
C-B	4	583	0.006	4	0.0	6.217	A
A-B	3			3			
A-C	510			510			

16:30 - 16:45

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	27	377	0.072	27	0.1	10.293	B
C-A	728			728			
C-B	4	556	0.008	4	0.0	6.522	A
A-B	4			4			
A-C	610			610			

16:45 - 17:00

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	33	323	0.102	33	0.1	12.381	B
C-A	892			892			
C-B	6	520	0.011	5	0.0	6.998	A
A-B	4			4			
A-C	746			746			

17:00 - 17:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	33	323	0.102	33	0.1	12.393	B
C-A	892			892			
C-B	6	520	0.011	6	0.0	6.998	A
A-B	4			4			
A-C	746			746			

17:15 - 17:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	27	377	0.072	27	0.1	10.305	B
C-A	728			728			
C-B	4	556	0.008	5	0.0	6.525	A
A-B	4			4			
A-C	610			610			

17:30 - 17:45

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	23	413	0.055	23	0.1	9.231	A
C-A	610			610			
C-B	4	583	0.006	4	0.0	6.217	A
A-B	3			3			
A-C	510			510			

Assessment 2033, 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	A664 Manchester Road/ Thornham Lane	T-Junction	Two-way		0.72	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D3	Assessment 2033	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 (%)
A		✓	1376	100.000
B		✓	38	100.000
C		✓	671	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		A	B	C
From	A	0	27	1349
	B	10	0	28
	C	649	22	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
B-AC	0.27	32.35	0.4	D
C-A				
C-B	0.08	12.28	0.1	B
A-B				
A-C				

Main Results for each time segment

07:30 - 07:45

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	29	319	0.090	28	0.1	12.350	B
C-A	489			489			
C-B	17	444	0.037	16	0.0	8.410	A
A-B	20			20			
A-C	1016			1016			

07:45 - 08:00

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	34	257	0.133	34	0.2	16.110	C
C-A	583			583			
C-B	20	391	0.051	20	0.1	9.694	A
A-B	24			24			
A-C	1213			1213			

08:00 - 08:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	42	153	0.273	41	0.4	31.898	D
C-A	715			715			
C-B	24	317	0.076	24	0.1	12.265	B
A-B	30			30			
A-C	1485			1485			

08:15 - 08:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	42	153	0.273	42	0.4	32.348	D
C-A	715			715			
C-B	24	317	0.076	24	0.1	12.278	B
A-B	30			30			
A-C	1485			1485			

08:30 - 08:45

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	34	257	0.133	35	0.2	16.265	C
C-A	583			583			
C-B	20	391	0.051	20	0.1	9.701	A
A-B	24			24			
A-C	1213			1213			

08:45 - 09:00

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	29	319	0.090	29	0.1	12.405	B
C-A	489			489			
C-B	17	444	0.037	17	0.0	8.418	A
A-B	20			20			
A-C	1016			1016			

Assessment 2033, 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	A664 Manchester Road/ Thornham Lane	T-Junction	Two-way		0.28	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D4	Assessment 2033	PM	ONE HOUR	16:15	17:45	15

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

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		✓	799	100.000
B		✓	30	100.000
C		✓	1066	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		A	B	C
From	A	0	4	795
	B	11	0	19
	C	1061	5	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
B-AC	0.13	16.48	0.1	C
C-A				
C-B	0.01	7.50	0.0	A
A-B				
A-C				

Main Results for each time segment

16:15 - 16:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	23	372	0.061	22	0.1	10.282	B
C-A	799			799			
C-B	4	559	0.007	4	0.0	6.478	A
A-B	3			3			
A-C	599			599			

16:30 - 16:45

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	27	325	0.083	27	0.1	12.081	B
C-A	954			954			
C-B	4	528	0.009	4	0.0	6.869	A
A-B	4			4			
A-C	715			715			

16:45 - 17:00

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	33	251	0.131	33	0.1	16.448	C
C-A	1168			1168			
C-B	6	486	0.011	5	0.0	7.496	A
A-B	4			4			
A-C	875			875			

17:00 - 17:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	33	251	0.131	33	0.1	16.482	C
C-A	1168			1168			
C-B	6	486	0.011	6	0.0	7.496	A
A-B	4			4			
A-C	875			875			

17:15 - 17:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	27	325	0.083	27	0.1	12.107	B
C-A	954			954			
C-B	4	528	0.009	5	0.0	6.872	A
A-B	4			4			
A-C	715			715			

17:30 - 17:45

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	23	372	0.061	23	0.1	10.305	B
C-A	799			799			
C-B	4	559	0.007	4	0.0	6.478	A
A-B	3			3			
A-C	599			599			

S|C|P

APPENDIX N

Junctions 9

ARCADY 9 - Roundabout Module

Version: 9.5.2.1013
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Filename: J4 Slattocks Ref.j9
Path: Z:\Job Library\2019\190267 - Manchester Road, Rochdale\Traffic Data\Planning Application\ARCADY\Slattock's Roundabout
Report generation date: 13/12/2022 15:09:29

»2033 Base, AM
»2033 Base, PM
»Assessment 2033 + Dev, AM
»Assessment 2033 + Dev, PM

Summary of junction performance

	AM					PM				
	Set ID	Queue (PCU)	Delay (s)	RFC	LOS	Set ID	Queue (PCU)	Delay (s)	RFC	LOS
	2033 Base									
1 - A627(M)	D1	2.4	8.42	0.71	A	D2	1.2	4.65	0.54	A
2 - Bentley Ave		0.1	10.50	0.13	B		0.3	7.52	0.22	A
3 - Whitbrook Way		0.3	2.69	0.23	A		0.6	3.28	0.37	A
4 - A664 Rochdale Rd W		0.9	3.91	0.47	A		1.5	5.78	0.60	A
5 - A664 Rochdale Rd N		5.7	17.62	0.86	C		1.4	6.51	0.58	A
	Assessment 2033 + Dev									
1 - A627(M)	D9	3.4	11.16	0.78	B	D10	1.7	5.96	0.63	A
2 - Bentley Ave		0.2	13.13	0.15	B		0.3	9.41	0.26	A
3 - Whitbrook Way		0.3	2.87	0.24	A		0.7	3.72	0.41	A
4 - A664 Rochdale Rd W		1.0	4.30	0.51	A		2.5	8.72	0.72	A
5 - A664 Rochdale Rd N		63.5	135.46	1.07	F		2.1	8.48	0.68	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.

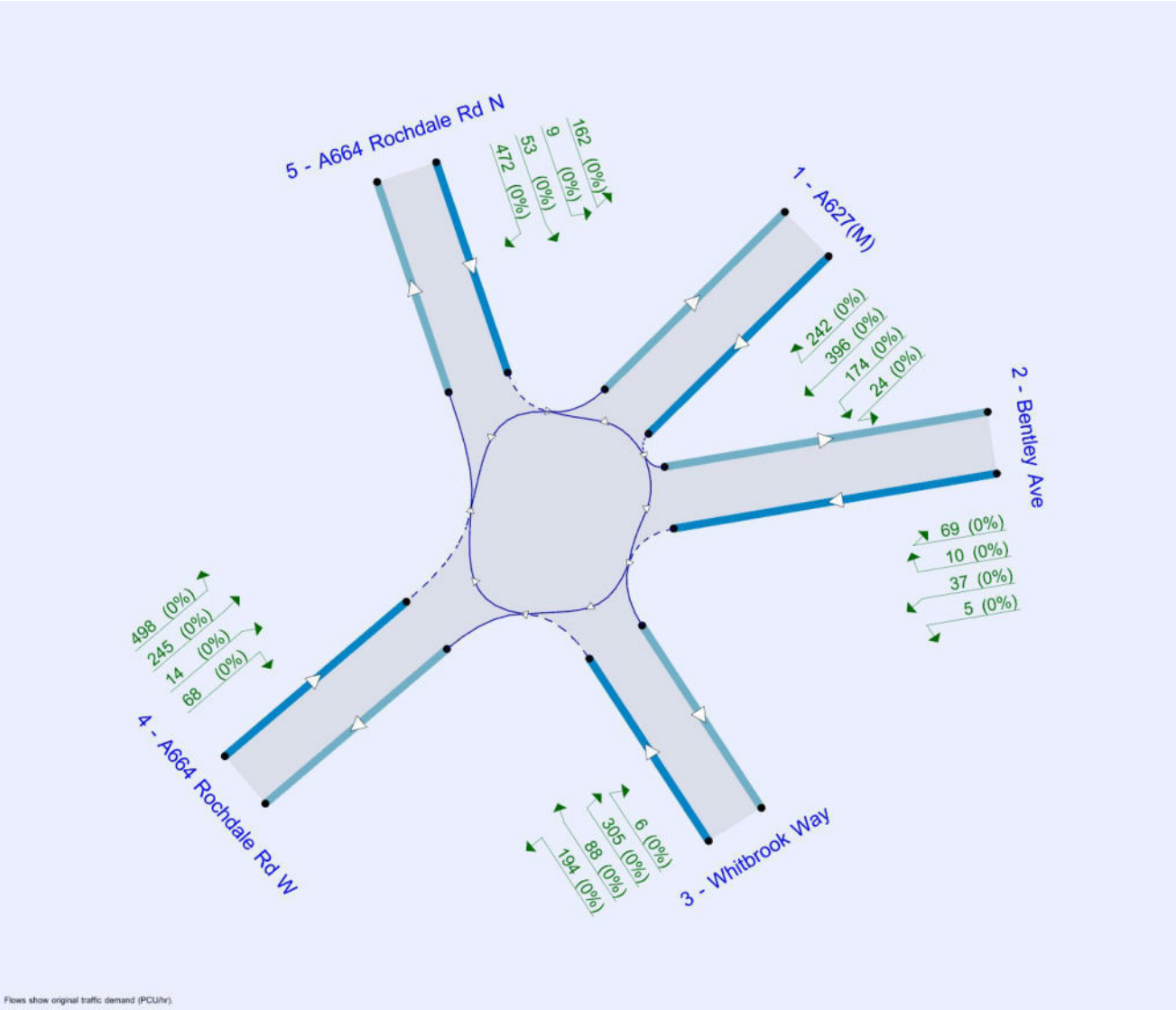
File summary

File Description

Title	Slattocks Roundabout
Location	Stakehill
Site number	Junction 4
Date	19/11/2019
Version	
Status	(new file)
Identifier	
Client	
Jobnumber	
Enumerator	CORP\UKAPF002
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



The junction diagram reflects the last run of Junctions.

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	2033 Base	AM	ONE HOUR	07:30	09:00	15	✓
D2	2033 Base	PM	ONE HOUR	16:15	17:45	15	✓
D9	Assessment 2033 + Dev	AM	ONE HOUR	07:30	09:00	15	✓
D10	Assessment 2033 + Dev	PM	ONE HOUR	16:15	17:45	15	✓

Analysis Set Details

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

2033 Base, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	2 - Bentley Ave - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Geometry	4 - A664 Rochdale Rd W - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
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	Slattocks Roundabout	Standard Roundabout		1, 2, 3, 4, 5	9.97	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Name	Description
1	A627(M)	
2	Bentley Ave	
3	Whitbrook Way	
4	A664 Rochdale Rd W	
5	A664 Rochdale Rd N	

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 - A627(M)	7.00	7.00	0.0	30.4	62.5	34.0	
2 - Bentley Ave	4.20	4.70	46.0	27.0	61.0	43.0	
3 - Whitbrook Way	7.80	9.40	29.4	18.5	75.8	51.0	
4 - A664 Rochdale Rd W	4.00	6.70	34.4	55.8	75.8	23.0	
5 - A664 Rochdale Rd N	3.40	7.00	17.6	30.2	72.8	29.0	

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Arm	Final slope	Final intercept (PCU/hr)
1 - A627(M)	0.616	2127
2 - Bentley Ave	0.487	1373
3 - Whitbrook Way	0.596	2563
4 - A664 Rochdale Rd W	0.537	1970
5 - A664 Rochdale Rd N	0.502	1722

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)	Run automatically
D1	2033 Base	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 (%)
1 - A627(M)		ONE HOUR	✓	962	100.000
2 - Bentley Ave		ONE HOUR	✓	45	100.000
3 - Whitbrook Way		ONE HOUR	✓	357	100.000
4 - A664 Rochdale Rd W		ONE HOUR	✓	730	100.000
5 - A664 Rochdale Rd N		ONE HOUR	✓	1109	100.000

Origin-Destination Data

Demand (PCU/hr)

		To				
		1 - A627(M)	2 - Bentley Ave	3 - Whitbrook Way	4 - A664 Rochdale Rd W	5 - A664 Rochdale Rd N
From	1 - A627(M)	6	56	355	411	134
	2 - Bentley Ave	12	0	7	19	7
	3 - Whitbrook Way	181	1	5	102	68
	4 - A664 Rochdale Rd W	207	12	118	3	390
	5 - A664 Rochdale Rd N	302	9	125	672	1

Vehicle Mix

Heavy Vehicle Percentages

		To				
		1 - A627(M)	2 - Bentley Ave	3 - Whitbrook Way	4 - A664 Rochdale Rd W	5 - A664 Rochdale Rd N
From	1 - A627(M)	0	0	0	0	0
	2 - Bentley Ave	0	0	0	0	0
	3 - Whitbrook Way	0	0	0	0	0
	4 - A664 Rochdale Rd W	0	0	0	0	0
	5 - A664 Rochdale Rd N	0	0	0	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
1 - A627(M)	0.71	8.42	2.4	A	883	1324
2 - Bentley Ave	0.13	10.50	0.1	B	41	62
3 - Whitbrook Way	0.23	2.69	0.3	A	328	491
4 - A664 Rochdale Rd W	0.47	3.91	0.9	A	670	1005
5 - A664 Rochdale Rd N	0.86	17.62	5.7	C	1018	1526

2033 Base, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	2 - Bentley Ave - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Geometry	4 - A664 Rochdale Rd W - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
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	Slattocks Roundabout	Standard Roundabout		1, 2, 3, 4, 5	5.23	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
D2	2033 Base	PM	ONE HOUR	16:15	17:45	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 (%)
1 - A627(M)		ONE HOUR	✓	836	100.000
2 - Bentley Ave		ONE HOUR	✓	121	100.000
3 - Whitbrook Way		ONE HOUR	✓	593	100.000
4 - A664 Rochdale Rd W		ONE HOUR	✓	833	100.000
5 - A664 Rochdale Rd N		ONE HOUR	✓	703	100.000

Origin-Destination Data

Demand (PCU/hr)

		To				
		1 - A627(M)	2 - Bentley Ave	3 - Whitbrook Way	4 - A664 Rochdale Rd W	5 - A664 Rochdale Rd N
From	1 - A627(M)	0	24	174	396	242
	2 - Bentley Ave	69	0	5	37	10
	3 - Whitbrook Way	305	6	0	194	88
	4 - A664 Rochdale Rd W	245	14	68	8	498
	5 - A664 Rochdale Rd N	162	9	53	472	7

Vehicle Mix

Heavy Vehicle Percentages

		To				
		1 - A627(M)	2 - Bentley Ave	3 - Whitbrook Way	4 - A664 Rochdale Rd W	5 - A664 Rochdale Rd N
From	1 - A627(M)	0	0	0	0	0
	2 - Bentley Ave	0	0	0	0	0
	3 - Whitbrook Way	0	0	0	0	0
	4 - A664 Rochdale Rd W	0	0	0	0	0
	5 - A664 Rochdale Rd N	0	0	0	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
1 - A627(M)	0.54	4.65	1.2	A	767	1151
2 - Bentley Ave	0.22	7.52	0.3	A	111	167
3 - Whitbrook Way	0.37	3.28	0.6	A	544	816
4 - A664 Rochdale Rd W	0.60	5.78	1.5	A	764	1147
5 - A664 Rochdale Rd N	0.58	6.51	1.4	A	645	968

Assessment 2033 + Dev, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	2 - Bentley Ave - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Geometry	4 - A664 Rochdale Rd W - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
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	Slattocks Roundabout	Standard Roundabout		1, 2, 3, 4, 5	56.91	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
D9	Assessment 2033 + Dev	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 (%)
1 - A627(M)		ONE HOUR	✓	1008	100.000
2 - Bentley Ave		ONE HOUR	✓	45	100.000
3 - Whitbrook Way		ONE HOUR	✓	362	100.000
4 - A664 Rochdale Rd W		ONE HOUR	✓	779	100.000
5 - A664 Rochdale Rd N		ONE HOUR	✓	1383	100.000

Origin-Destination Data

Demand (PCU/hr)

		To				
		1 - A627(M)	2 - Bentley Ave	3 - Whitbrook Way	4 - A664 Rochdale Rd W	5 - A664 Rochdale Rd N
From	1 - A627(M)	6	56	355	411	180
	2 - Bentley Ave	12	0	7	19	7
	3 - Whitbrook Way	181	1	5	102	73
	4 - A664 Rochdale Rd W	207	12	118	3	439
	5 - A664 Rochdale Rd N	428	9	140	805	1

Vehicle Mix

Heavy Vehicle Percentages

		To				
		1 - A627(M)	2 - Bentley Ave	3 - Whitbrook Way	4 - A664 Rochdale Rd W	5 - A664 Rochdale Rd N
From	1 - A627(M)	0	0	0	0	0
	2 - Bentley Ave	0	0	0	0	0
	3 - Whitbrook Way	0	0	0	0	0
	4 - A664 Rochdale Rd W	0	0	0	0	0
	5 - A664 Rochdale Rd N	0	0	0	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
1 - A627(M)	0.78	11.16	3.4	B	925	1387
2 - Bentley Ave	0.15	13.13	0.2	B	41	62
3 - Whitbrook Way	0.24	2.87	0.3	A	332	498
4 - A664 Rochdale Rd W	0.51	4.30	1.0	A	715	1072
5 - A664 Rochdale Rd N	1.07	135.46	63.5	F	1269	1904

Assessment 2033 + Dev, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	2 - Bentley Ave - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Geometry	4 - A664 Rochdale Rd W - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
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	Slattocks Roundabout	Standard Roundabout		1, 2, 3, 4, 5	7.05	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
D10	Assessment 2033 + Dev	PM	ONE HOUR	16:15	17:45	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 (%)
1 - A627(M)		ONE HOUR	✓	952	100.000
2 - Bentley Ave		ONE HOUR	✓	121	100.000
3 - Whitbrook Way		ONE HOUR	✓	606	100.000
4 - A664 Rochdale Rd W		ONE HOUR	✓	955	100.000
5 - A664 Rochdale Rd N		ONE HOUR	✓	820	100.000

Origin-Destination Data

Demand (PCU/hr)

		To				
		1 - A627(M)	2 - Bentley Ave	3 - Whitbrook Way	4 - A664 Rochdale Rd W	5 - A664 Rochdale Rd N
From	1 - A627(M)	0	24	174	396	358
	2 - Bentley Ave	69	0	5	37	10
	3 - Whitbrook Way	305	6	0	194	101
	4 - A664 Rochdale Rd W	245	14	68	8	620
	5 - A664 Rochdale Rd N	216	9	59	529	7

Vehicle Mix

Heavy Vehicle Percentages

		To				
		1 - A627(M)	2 - Bentley Ave	3 - Whitbrook Way	4 - A664 Rochdale Rd W	5 - A664 Rochdale Rd N
From	1 - A627(M)	0	0	0	0	0
	2 - Bentley Ave	0	0	0	0	0
	3 - Whitbrook Way	0	0	0	0	0
	4 - A664 Rochdale Rd W	0	0	0	0	0
	5 - A664 Rochdale Rd N	0	0	0	0	0

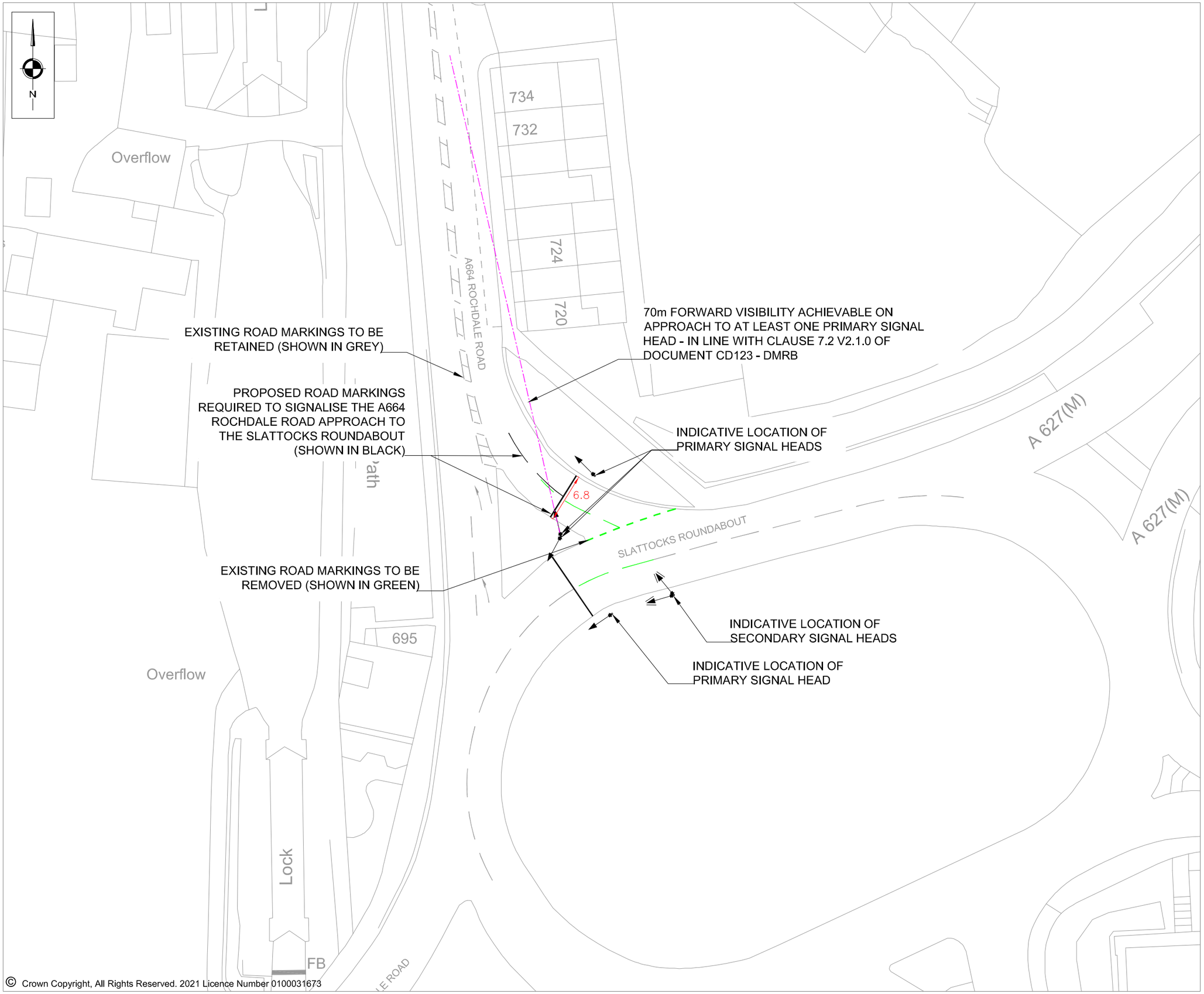
Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
1 - A627(M)	0.63	5.96	1.7	A	874	1310
2 - Bentley Ave	0.26	9.41	0.3	A	111	167
3 - Whitbrook Way	0.41	3.72	0.7	A	556	834
4 - A664 Rochdale Rd W	0.72	8.72	2.5	A	876	1314
5 - A664 Rochdale Rd N	0.68	8.48	2.1	A	752	1129

S|C|P

APPENDIX O



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NOTES

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:
REDROW HOMES NORTH WEST

Project Title:
MANCHESTER ROAD, ROCHDALE

Drawing Title:
POTENTIAL SIGNALISATION OF THE A664 ROCHDALE ROAD ARM OF THE SLATTOCKS ROUNDABOUT

Drawn By:	Date:
BA	20.01.2023
Checked:	Scale:
MD	1:500 @ A3
Status:	Approved/Unapproved:
PLANNING	-

Drawing No.	Rev.
SCP/190267/SK02	-

S|C|P

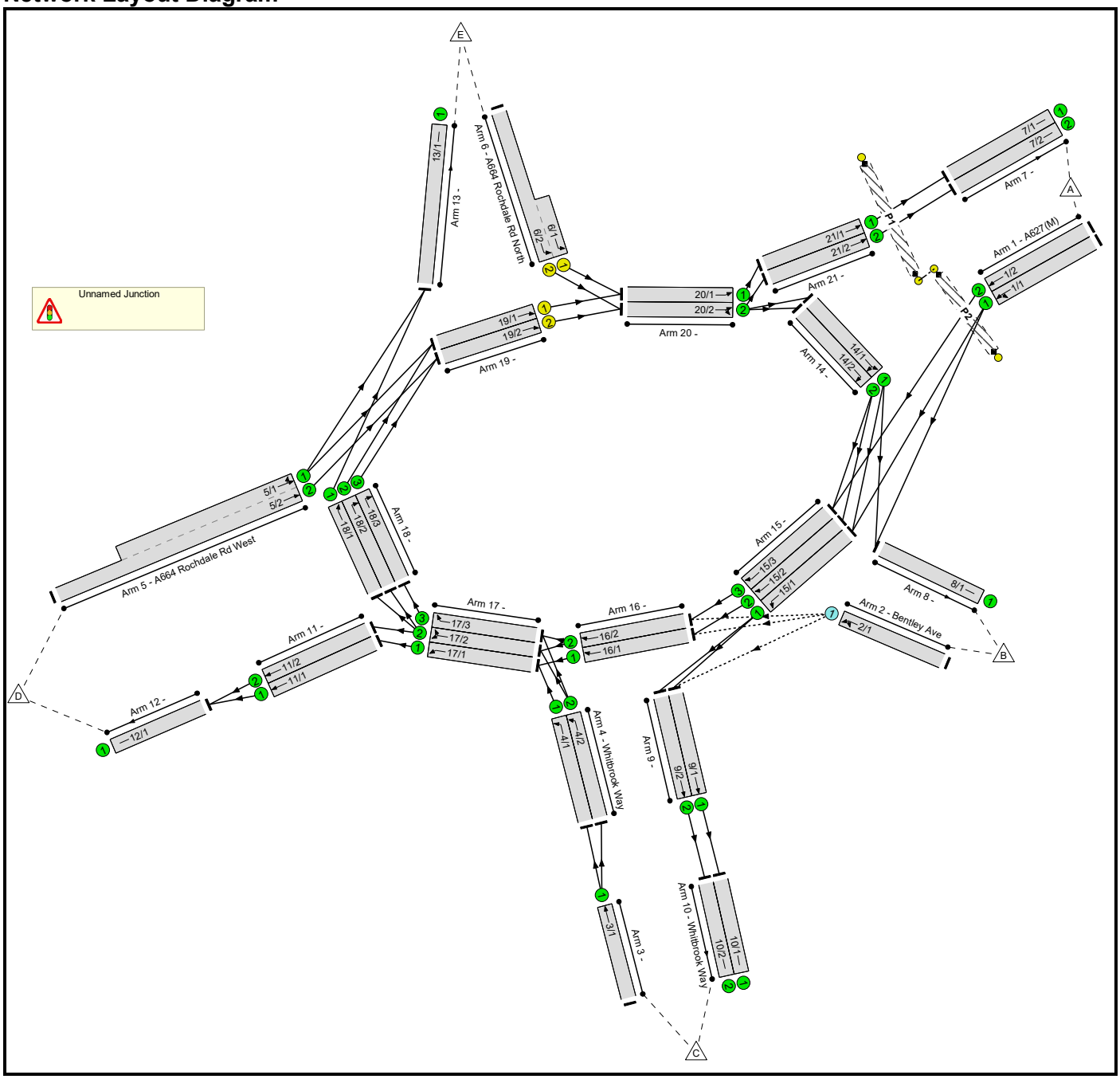
APPENDIX P

Full Input Data And Results

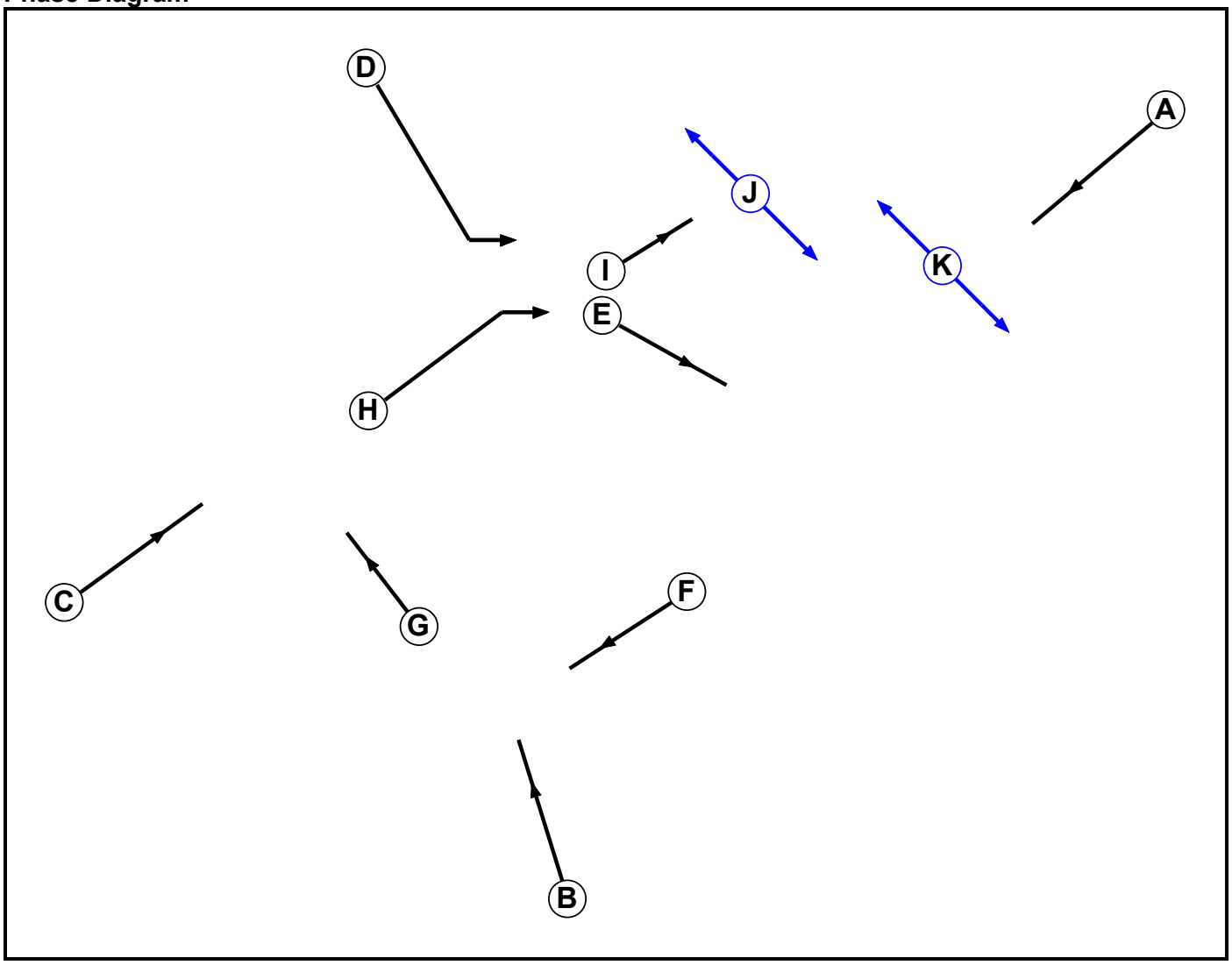
User and Project Details

Project:	**GMSF GM2 Stakehill**
Title:	
Location:	
Site Ref(s):	A627(M) / A664
Additional detail:	
File name:	J4 Slattocks Signalised 3rd Run.lsg3x
Author:	
Company:	
Address:	

Network Layout Diagram



Phase Diagram



Phase Input Data

Phase Name	Phase Type	Stage Stream	Assoc. Phase	Street Min	Cont Min
A	Traffic	1		7	7
B	Traffic	4		7	7
C	Traffic	3		7	7
D	Traffic	2		7	7
E	Traffic	1		7	7
F	Traffic	4		7	7
G	Traffic	3		7	7
H	Traffic	2		7	7
I	Traffic	1		7	7
J	Pedestrian	1		7	7
K	Pedestrian	1		7	7

Full Input Data And Results

Phase Intergreens Matrix

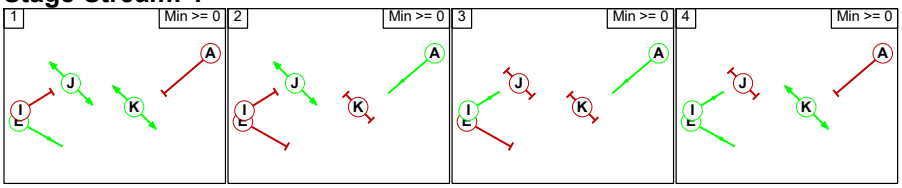
Terminating Phase \ Starting Phase	A	B	C	D	E	F	G	H	I	J	K
A		-	-	-	5	-	-	-	-	-	7
B	-		-	-	-	5	-	-	-	-	-
C	-	-		-	-	-	5	-	-	-	-
D	-	-	-		-	-	-	5	-	-	-
E	5	-	-	-		-	-	-	-	-	-
F	-	5	-	-	-		-	-	-	-	-
G	-	-	5	-	-	-		-	-	-	-
H	-	-	-	5	-	-	-		-	-	-
I	-	-	-	-	-	-	-	-		7	-
J	-	-	-	-	-	-	-	-	5		-
K	5	-	-	-	-	-	-	-	-	-	

Phases in Stage

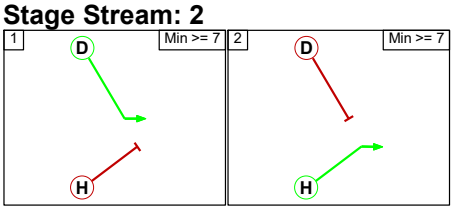
Stream	Stage No.	Phases in Stage
1	1	E J K
1	2	A J
1	3	A I
1	4	E I K
2	1	D
2	2	H
3	1	C
3	2	G
4	1	B
4	2	F

Stage Diagram

Stage Stream: 1

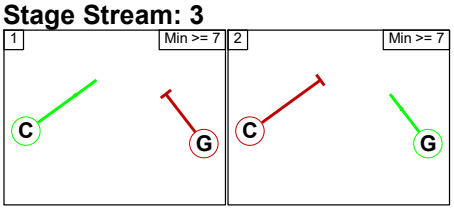


Stage Stream: 2

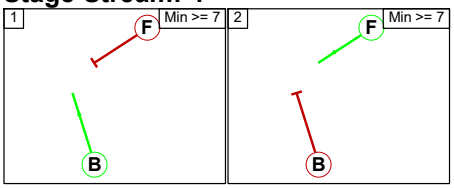


Full Input Data And Results

Stage Stream: 3



Stage Stream: 4



Phase Delays

Stage Stream: 1

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

Stage Stream: 2

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

Stage Stream: 3

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

Stage Stream: 4

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

Prohibited Stage Change

Stage Stream: 1

From Stage	To Stage 1	2	3	4
1		5	5	5
2	7		5	7
3	7	7		7
4	7	7	5	

Stage Stream: 2

From Stage	To Stage 1	2
1		5
2	5	

Full Input Data And Results

Stage Stream: 3

	To Stage		
		1	2
From Stage	1		5
	2	5	

Stage Stream: 4

	To Stage		
		1	2
From Stage	1		5
	2	5	

Full Input Data And Results

Give-Way Lane Input Data

Junction: Unnamed Junction

Lane	Movement	Max Flow when Giving Way (PCU/Hr)	Min Flow when Giving Way (PCU/Hr)	Opposing Lane	Opp. Lane Coeff.	Opp. Mvmnts.	Right Turn Storage (PCU)	Non-Blocking Storage (PCU)	RTF	Right Turn Move up (s)	Max Turns in Intergreen (PCU)
2/1 (Bentley Ave)	9/1 (Left)	1000	0	15/1	0.33	All	-	-	-	-	-
	16/1 (Ahead)	1000	0	15/1	0.33	All					
	16/2 (Ahead)	1000	0	15/1	0.33	All					
				15/2	0.33	All					

Full Input Data And Results

Lane Input Data

Junction: Unnamed Junction												
Lane	**Lane Type**	**Phases**	**Start Disp.**	**End Disp.**	**Physical Length (PCU)**	**Sat Flow Type**	**Def User Saturation Flow (PCU/Hr)**	**Lane Width (m)**	**Gradient**	**Nearside Lane**	**Turns**	**Turning Radius (m)**
1/1 (A627(M))	U		2	3	60.0	Geom	-	3.65	0.00	Y	Arm 8 Left	28.00
											Arm 15 Ahead	38.00
1/2 (A627(M))	U		2	3	60.0	Geom	-	3.65	0.00	Y	Arm 15 Ahead	50.00
2/1 (Bentley Ave)	O		2	3	60.0	Geom	-	3.20	0.00	Y	Arm 9 Left	31.00
											Arm 16 Ahead	49.50
3/1	U		2	3	60.0	Geom	-	3.65	0.00	Y	Arm 4 Ahead	Inf
4/1 (Whitbrook Way)	U		2	3	60.0	Geom	-	4.00	0.00	Y	Arm 17 Left	51.00
4/2 (Whitbrook Way)	U		2	3	60.0	Geom	-	4.00	0.00	Y	Arm 17 Left	42.00
5/1 (A664 Rochdale Rd West)	U		2	3	19.1	Geom	-	3.20	0.00	Y	Arm 13 Left	52.00
											Arm 19 Ahead	52.00
5/2 (A664 Rochdale Rd West)	U		2	3	60.0	Geom	-	3.65	0.00	Y	Arm 19 Ahead	63.00
6/1 (A664 Rochdale Rd North)	U	D	2	3	6.1	Geom	-	3.40	0.00	Y	Arm 20 Left	33.00
6/2 (A664 Rochdale Rd North)	U	D	2	3	60.0	Geom	-	3.40	0.00	Y	Arm 20 Left	33.00
7/1	U		2	3	60.0	Geom	-	3.65	0.00	Y		
7/2	U		2	3	60.0	Geom	-	3.65	0.00	Y		
8/1	U		2	3	60.0	Geom	-	3.20	0.00	Y		
9/1	U		2	3	60.0	Geom	-	4.00	0.00	Y	Arm 10 Ahead	Inf
9/2	U		2	3	60.0	Geom	-	4.00	0.00	Y	Arm 10 Ahead	Inf
10/1 (Whitbrook Way)	U		2	3	60.0	Inf	-	-	-	-	-	-
10/2 (Whitbrook Way)	U		2	3	60.0	Geom	-	3.65	0.00	Y		
11/1	U		2	3	8.7	User	1200	-	-	-	-	-

11/2	U		2	3	8.7	User	1200	-	-	-	-	-
12/1	U		2	3	60.0	Geom	-	3.65	0.00	Y		
13/1	U		2	3	60.0	Geom	-	3.65	0.00	Y		
14/1	U		2	3	3.0	User	1900	-	-	-	-	-
14/2	U		2	3	3.0	User	1900	-	-	-	-	-
15/1	U		2	3	12.0	User	1900	-	-	-	-	-
15/2	U		2	3	12.0	User	1900	-	-	-	-	-
15/3	U		2	3	12.0	User	1900	-	-	-	-	-
16/1	U		2	3	2.0	User	1900	-	-	-	-	-
16/2	U		2	3	2.0	User	1900	-	-	-	-	-
17/1	U		2	3	8.7	User	1900	-	-	-	-	-
17/2	U		2	3	8.7	User	1900	-	-	-	-	-
17/3	U		2	3	8.7	User	1900	-	-	-	-	-
18/1	U		2	3	3.0	User	1900	-	-	-	-	-
18/2	U		2	3	3.0	User	1900	-	-	-	-	-
18/3	U		2	3	3.0	User	1900	-	-	-	-	-
19/1	U	H	2	3	11.0	User	1900	-	-	-	-	-
19/2	U	H	2	3	11.0	User	1900	-	-	-	-	-
20/1	U		2	3	10.4	User	1900	-	-	-	-	-
20/2	U		2	3	10.4	User	1900	-	-	-	-	-
21/1	U		2	3	60.0	Geom	-	3.65	0.00	Y	Arm 7 Ahead	Inf
21/2	U		2	3	60.0	Geom	-	3.65	0.00	Y	Arm 7 Ahead	Inf

Traffic Flow Groups

Flow Group	Start Time	End Time	Duration	Formula
1: '2033 WITH DEV AM'	07:45	08:45	01:00	
2: '2033 WITH DEV PM'	16:30	17:30	01:00	

Scenario 1: '2033 WITH DEV AM' (FG1: '2033 WITH DEV AM', Plan 1: 'AM')

Traffic Flows, Desired

Desired Flow :

		Destination					
		A	B	C	D	E	Tot.
Origin	A	6	56	355	411	180	1008
	B	12	0	7	19	7	45
	C	181	1	5	102	73	362
	D	207	12	118	3	439	779
	E	428	9	140	805	1	1383
	Tot.	834	78	625	1340	700	3577

Full Input Data And Results

Traffic Lane Flows

Lane	Scenario 1: 2033 WITH DEV AM
Junction: Unnamed Junction	
1/1	411
1/2	597
2/1	45
3/1	362
4/1	74
4/2	288
5/1 (short)	572
5/2 (with short)	779(In) 207(Out)
6/1 (short)	364
6/2 (with short)	1383(In) 1019(Out)
7/1	625
7/2	209
8/1	78
9/1	625
9/2	0
10/1	625
10/2	0
11/1	673
11/2	667
12/1	1340
13/1	700
14/1	285
14/2	809
15/1	618
15/2	585
15/3	821
16/1	599
16/2	845
17/1	673
17/2	1056
17/3	77
18/1	261
18/2	128
18/3	77
19/1	261
19/2	284
20/1	625

Full Input Data And Results

20/2	1303
21/1	625
21/2	209

Lane Saturation Flows

Junction: Unnamed Junction								
Lane	**Lane Width (m)**	**Gradient**	**Nearside Lane**	**Allowed Turns**	**Turning Radius (m)**	**Turning Prop.**	**Sat Flow (PCU/Hr)**	**Flared Sat Flow (PCU/Hr)**
1/1 (A627(M))	3.65	0.00	Y	Arm 8 Left	28.00	13.6 %	1901	1901
				Arm 15 Ahead	38.00	86.4 %		
1/2 (A627(M))	3.65	0.00	Y	Arm 15 Ahead	50.00	100.0 %	1922	1922
2/1 (Bentley Ave)	3.20	0.00	Y	Arm 9 Left	31.00	15.6 %	1873	1873
				Arm 16 Ahead	49.50	84.4 %		
3/1	3.65	0.00	Y	Arm 4 Ahead	Inf	100.0 %	1980	1980
4/1 (Whitbrook Way)	4.00	0.00	Y	Arm 17 Left	51.00	100.0 %	1957	1957
4/2 (Whitbrook Way)	4.00	0.00	Y	Arm 17 Left	42.00	100.0 %	1946	1946
5/1 (A664 Rochdale Rd West)	3.20	0.00	Y	Arm 13 Left	52.00	76.7 %	1881	1881
				Arm 19 Ahead	52.00	23.3 %		
5/2 (A664 Rochdale Rd West)	3.65	0.00	Y	Arm 19 Ahead	63.00	100.0 %	1934	1934
6/1 (A664 Rochdale Rd North)	3.40	0.00	Y	Arm 20 Left	33.00	100.0 %	1870	1870
6/2 (A664 Rochdale Rd North)	3.40	0.00	Y	Arm 20 Left	33.00	100.0 %	1870	1870
7/1	3.65	0.00	Y				1980	1980
7/2	3.65	0.00	Y				1980	1980
8/1	3.20	0.00	Y				1935	1935
9/1	4.00	0.00	Y	Arm 10 Ahead	Inf	100.0 %	2015	2015
9/2	4.00	0.00	Y	Arm 10 Ahead	Inf	0.0 %	2015	2015
10/1 (Whitbrook Way Lane 1)	Infinite Saturation Flow						Inf	Inf
10/2 (Whitbrook Way)	3.65	0.00	Y				1980	1980
11/1	This lane uses a directly entered Saturation Flow						1200	1200
11/2	This lane uses a directly entered Saturation Flow						1200	1200
12/1	3.65	0.00	Y				1980	1980
13/1	3.65	0.00	Y				1980	1980
14/1	This lane uses a directly entered Saturation Flow						1900	1900
14/2	This lane uses a directly entered Saturation Flow						1900	1900
15/1	This lane uses a directly entered Saturation Flow						1900	1900
15/2	This lane uses a directly entered Saturation Flow						1900	1900
15/3	This lane uses a directly entered Saturation Flow						1900	1900
16/1	This lane uses a directly entered Saturation Flow						1900	1900
16/2	This lane uses a directly entered Saturation Flow						1900	1900
17/1	This lane uses a directly entered Saturation Flow						1900	1900

17/2	This lane uses a directly entered Saturation Flow						1900	1900
17/3	This lane uses a directly entered Saturation Flow						1900	1900
18/1	This lane uses a directly entered Saturation Flow						1900	1900
18/2	This lane uses a directly entered Saturation Flow						1900	1900
18/3	This lane uses a directly entered Saturation Flow						1900	1900
19/1	This lane uses a directly entered Saturation Flow						1900	1900
19/2	This lane uses a directly entered Saturation Flow						1900	1900
20/1	This lane uses a directly entered Saturation Flow						1900	1900
20/2	This lane uses a directly entered Saturation Flow						1900	1900
21/1	3.65	0.00	Y	Arm 7 Ahead	Inf	100.0 %	1980	1980
21/2	3.65	0.00	Y	Arm 7 Ahead	Inf	100.0 %	1980	1980

Scenario 2: '2033 WITH DEV PM' (FG2: '2033 WITH DEV PM', Plan 2: 'PM')

Traffic Flows, Desired

Desired Flow :

		Destination					
		A	B	C	D	E	Tot.
Origin	A	0	24	174	396	358	952
	B	69	0	5	37	10	121
	C	305	6	0	194	101	606
	D	245	14	68	8	620	955
	E	216	9	59	529	7	820
	Tot.	835	53	306	1164	1096	3454

Full Input Data And Results

Traffic Lane Flows

Lane	Scenario 2: 2033 WITH DEV PM
Junction: Unnamed Junction	
1/1	198
1/2	754
2/1	121
3/1	606
4/1	151
4/2	455
5/1 (short)	791
5/2 (with short)	955(In) 164(Out)
6/1 (short)	216
6/2 (with short)	820(In) 604(Out)
7/1	561
7/2	274
8/1	53
9/1	306
9/2	0
10/1	306
10/2	0
11/1	568
11/2	596
12/1	1164
13/1	1096
14/1	156
14/2	544
15/1	301
15/2	392
15/3	906
16/1	417
16/2	997
17/1	568
17/2	1246
17/3	206
18/1	476
18/2	174
18/3	206
19/1	345
19/2	370
20/1	561

Full Input Data And Results

20/2	974
21/1	561
21/2	274

Lane Saturation Flows

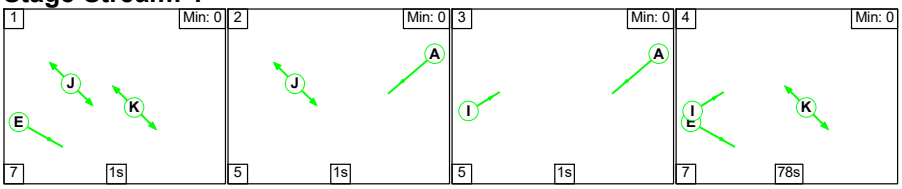
Junction: Unnamed Junction								
Lane	**Lane Width (m)**	**Gradient**	**Nearside Lane**	**Allowed Turns**	**Turning Radius (m)**	**Turning Prop.**	**Sat Flow (PCU/Hr)**	**Flared Sat Flow (PCU/Hr)**
1/1 (A627(M))	3.65	0.00	Y	Arm 8 Left	28.00	12.1 %	1902	1902
				Arm 15 Ahead	38.00	87.9 %		
1/2 (A627(M))	3.65	0.00	Y	Arm 15 Ahead	50.00	100.0 %	1922	1922
2/1 (Bentley Ave)	3.20	0.00	Y	Arm 9 Left	31.00	4.1 %	1877	1877
				Arm 16 Ahead	49.50	95.9 %		
3/1	3.65	0.00	Y	Arm 4 Ahead	Inf	100.0 %	1980	1980
4/1 (Whitbrook Way)	4.00	0.00	Y	Arm 17 Left	51.00	100.0 %	1957	1957
4/2 (Whitbrook Way)	4.00	0.00	Y	Arm 17 Left	42.00	100.0 %	1946	1946
5/1 (A664 Rochdale Rd West)	3.20	0.00	Y	Arm 13 Left	52.00	78.4 %	1881	1881
				Arm 19 Ahead	52.00	21.6 %		
5/2 (A664 Rochdale Rd West)	3.65	0.00	Y	Arm 19 Ahead	63.00	100.0 %	1934	1934
6/1 (A664 Rochdale Rd North)	3.40	0.00	Y	Arm 20 Left	33.00	100.0 %	1870	1870
6/2 (A664 Rochdale Rd North)	3.40	0.00	Y	Arm 20 Left	33.00	100.0 %	1870	1870
7/1	3.65	0.00	Y				1980	1980
7/2	3.65	0.00	Y				1980	1980
8/1	3.20	0.00	Y				1935	1935
9/1	4.00	0.00	Y	Arm 10 Ahead	Inf	100.0 %	2015	2015
9/2	4.00	0.00	Y	Arm 10 Ahead	Inf	0.0 %	2015	2015
10/1 (Whitbrook Way Lane 1)	Infinite Saturation Flow						Inf	Inf
10/2 (Whitbrook Way)	3.65	0.00	Y				1980	1980
11/1	This lane uses a directly entered Saturation Flow						1200	1200
11/2	This lane uses a directly entered Saturation Flow						1200	1200
12/1	3.65	0.00	Y				1980	1980
13/1	3.65	0.00	Y				1980	1980
14/1	This lane uses a directly entered Saturation Flow						1900	1900
14/2	This lane uses a directly entered Saturation Flow						1900	1900
15/1	This lane uses a directly entered Saturation Flow						1900	1900
15/2	This lane uses a directly entered Saturation Flow						1900	1900
15/3	This lane uses a directly entered Saturation Flow						1900	1900
16/1	This lane uses a directly entered Saturation Flow						1900	1900
16/2	This lane uses a directly entered Saturation Flow						1900	1900
17/1	This lane uses a directly entered Saturation Flow						1900	1900

17/2	This lane uses a directly entered Saturation Flow						1900	1900
17/3	This lane uses a directly entered Saturation Flow						1900	1900
18/1	This lane uses a directly entered Saturation Flow						1900	1900
18/2	This lane uses a directly entered Saturation Flow						1900	1900
18/3	This lane uses a directly entered Saturation Flow						1900	1900
19/1	This lane uses a directly entered Saturation Flow						1900	1900
19/2	This lane uses a directly entered Saturation Flow						1900	1900
20/1	This lane uses a directly entered Saturation Flow						1900	1900
20/2	This lane uses a directly entered Saturation Flow						1900	1900
21/1	3.65	0.00	Y	Arm 7 Ahead	Inf	100.0 %	1980	1980
21/2	3.65	0.00	Y	Arm 7 Ahead	Inf	100.0 %	1980	1980

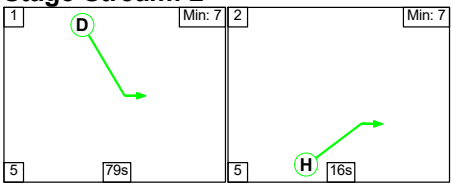
Scenario 1: '2033 WITH DEV AM' (FG1: '2033 WITH DEV AM', Plan 1: 'AM')

Stage Sequence Diagram

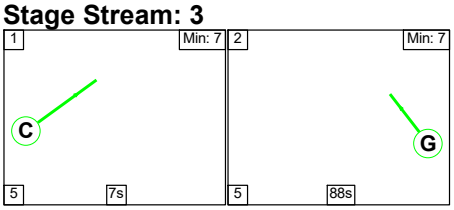
Stage Stream: 1



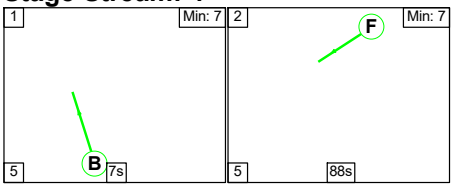
Stage Stream: 2



Stage Stream: 3



Stage Stream: 4



Stage Timings

Stage Stream: 1

Stage	1	2	3	4
Duration	1	1	1	78
Change Point	47	55	61	67

Full Input Data And Results

Stage Stream: 2

Stage	1	2
Duration	79	16
Change Point	47	26

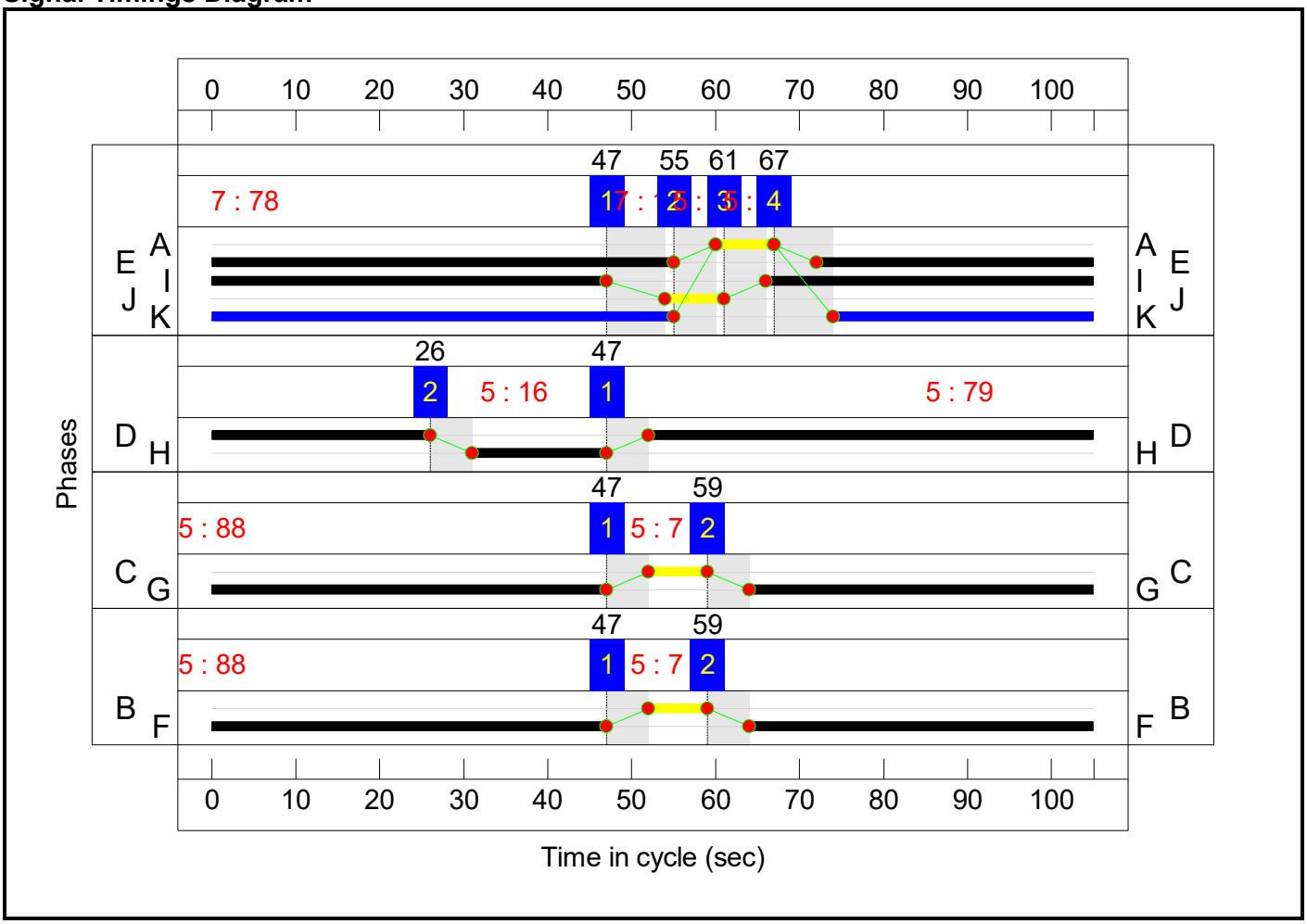
Stage Stream: 3

Stage	1	2
Duration	7	88
Change Point	47	59

Stage Stream: 4

Stage	1	2
Duration	7	88
Change Point	47	59

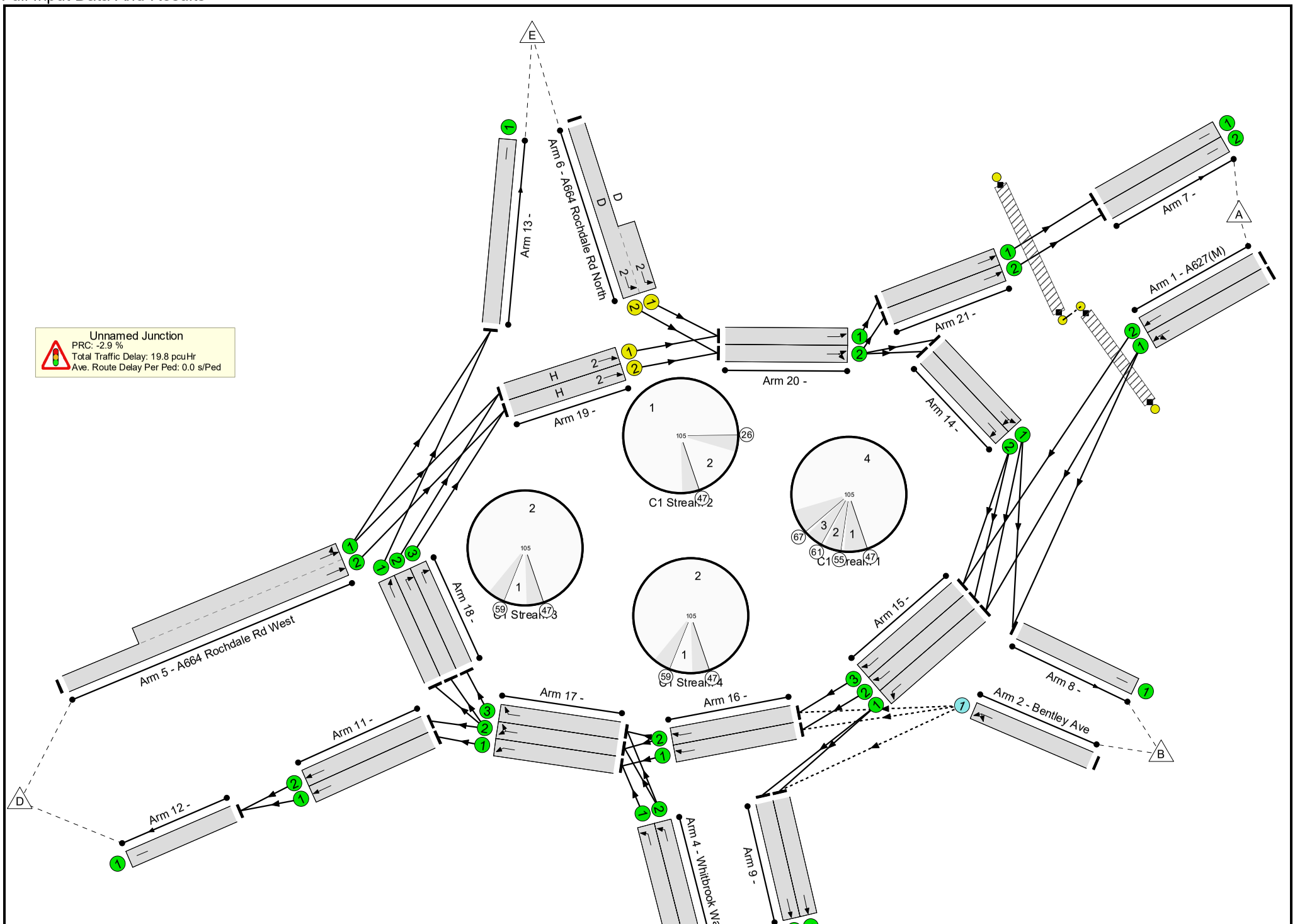
Signal Timings Diagram



Full Input Data And Results

Network Layout Diagram

Full Input Data And Results



Full Input Data And Results

Full Input Data And Results

Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network	-	-	**N/A**	-	-		-	-	-	-	-	-	**92.6%**
Unnamed Junction	-	-	**N/A**	-	-		-	-	-	-	-	-	**92.6%**
1/1	A627(M) Left Ahead	U	N/A	N/A	-		-	-	-	411	1901	1901	21.6%
1/2	A627(M) Ahead	U	N/A	N/A	-		-	-	-	597	1922	1922	31.1%
2/1	Bentley Ave Left Ahead	O	N/A	N/A	-		-	-	-	45	1873	675	6.7%
3/1	Ahead	U	N/A	N/A	-		-	-	-	362	1980	1980	18.3%
4/1	Whitbrook Way Left	U	N/A	N/A	-		-	-	-	74	1957	1957	3.8%
4/2	Whitbrook Way Left	U	N/A	N/A	-		-	-	-	288	1946	1946	14.8%
5/2+5/1	A664 Rochdale Rd West Left Ahead	U	N/A	N/A	-		-	-	-	779	1934:1881	503+1391	41.1 : 41.1%
6/2+6/1	A664 Rochdale Rd North Left	U	2	N/A	D		1	79	-	1383	1870:1870	1100+393	92.6 : 92.6%
7/1		U	N/A	N/A	-		-	-	-	625	1980	1980	31.6%
7/2		U	N/A	N/A	-		-	-	-	209	1980	1980	10.6%
8/1		U	N/A	N/A	-		-	-	-	78	1935	1935	4.0%
9/1	Ahead	U	N/A	N/A	-		-	-	-	625	2015	2015	31.0%
9/2	Ahead	U	N/A	N/A	-		-	-	-	0	2015	2015	0.0%
10/1	Whitbrook Way	U	N/A	N/A	-		-	-	-	625	Inf	Inf	0.0%
10/2	Whitbrook Way	U	N/A	N/A	-		-	-	-	0	1980	1980	0.0%
11/1	Ahead	U	N/A	N/A	-		-	-	-	673	1200	1200	56.1%
11/2	Ahead	U	N/A	N/A	-		-	-	-	667	1200	1200	55.6%
12/1		U	N/A	N/A	-		-	-	-	1340	1980	1980	67.7%
13/1		U	N/A	N/A	-		-	-	-	700	1980	1980	35.4%
14/1	Ahead Right	U	N/A	N/A	-		-	-	-	285	1900	1900	15.0%

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14/2	Right	U	N/A	N/A	-		-	-	-	809	1900	1900	42.6%
15/1	Left	U	N/A	N/A	-		-	-	-	618	1900	1900	32.5%
15/2	Ahead	U	N/A	N/A	-		-	-	-	585	1900	1900	30.8%
15/3	Ahead	U	N/A	N/A	-		-	-	-	821	1900	1900	43.2%
16/1	Ahead	U	N/A	N/A	-		-	-	-	599	1900	1900	31.5%
16/2	Ahead	U	N/A	N/A	-		-	-	-	845	1900	1900	44.5%
17/1	Ahead	U	N/A	N/A	-		-	-	-	673	1900	1900	35.4%
17/2	Ahead Right	U	N/A	N/A	-		-	-	-	1056	1900	1900	55.6%
17/3	Right	U	N/A	N/A	-		-	-	-	77	1900	1900	4.1%
18/1	Ahead	U	N/A	N/A	-		-	-	-	261	1900	1900	13.7%
18/2	Right	U	N/A	N/A	-		-	-	-	128	1900	1900	6.7%
18/3	Right	U	N/A	N/A	-		-	-	-	77	1900	1900	4.1%
19/1	Ahead	U	2	N/A	H		1	16	-	261	1900	308	84.8%
19/2	Ahead	U	2	N/A	H		1	16	-	284	1900	308	92.3%
20/1	Ahead	U	N/A	N/A	-		-	-	-	625	1900	1900	32.9%
20/2	Right Ahead	U	N/A	N/A	-		-	-	-	1303	1900	1900	68.6%
21/1	Ahead	U	N/A	N/A	-		-	-	-	625	1980	1980	31.6%
21/2	Ahead	U	N/A	N/A	-		-	-	-	209	1980	1980	10.6%
Ped Link: P1	Unnamed Ped Link	-	1	-	J		1	7	-	0	-	0	0.0%
Ped Link: P2	Unnamed Ped Link	-	1	-	K		1	86	-	0	-	0	0.0%

Full Input Data And Results

Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network	**-**	**-**	**45**	**0**	**0**	**9.7**	**10.0**	**0.0**	**19.8**	**-**	**-**	**-**	**-**
Unnamed Junction	**-**	**-**	**45**	**0**	**0**	**9.7**	**10.0**	**0.0**	**19.8**	**-**	**-**	**-**	**-**
1/1	411	411	-	-	-	0.0	0.1	-	0.1	1.2	0.0	0.1	0.1
1/2	597	597	-	-	-	0.0	0.2	-	0.2	1.4	0.0	0.2	0.2
2/1	45	45	45	0	0	0.0	0.0	-	0.0	2.9	0.0	0.0	0.0
3/1	362	362	-	-	-	0.0	0.1	-	0.1	1.1	0.0	0.1	0.1
4/1	74	74	-	-	-	0.0	0.0	-	0.0	1.0	0.0	0.0	0.0
4/2	288	288	-	-	-	0.0	0.1	-	0.1	1.1	0.0	0.1	0.1
5/2+5/1	779	779	-	-	-	0.0	0.3	-	0.3	1.6	0.0	0.3	0.3
6/2+6/1	1383	1383	-	-	-	3.2	5.7	-	8.9	23.1	28.9	5.7	34.6
7/1	625	625	-	-	-	0.0	0.2	-	0.2	1.3	0.0	0.2	0.2
7/2	209	209	-	-	-	0.0	0.1	-	0.1	1.0	0.0	0.1	0.1
8/1	78	78	-	-	-	0.0	0.0	-	0.0	1.0	0.0	0.0	0.0
9/1	625	625	-	-	-	0.0	0.2	-	0.2	1.3	0.0	0.2	0.2
9/2	0	0	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
10/1	625	625	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
10/2	0	0	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
11/1	673	673	-	-	-	0.0	0.6	-	0.6	3.4	0.0	0.6	0.6
11/2	667	667	-	-	-	0.0	0.6	-	0.6	3.4	0.0	0.6	0.6
12/1	1340	1340	-	-	-	0.0	1.0	-	1.0	2.8	0.0	1.0	1.0
13/1	700	700	-	-	-	0.0	0.3	-	0.3	1.4	0.0	0.3	0.3
14/1	285	285	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
14/2	809	809	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
15/1	618	618	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
15/2	585	585	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
15/3	821	821	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0

Full Input Data And Results

16/1	599	599	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
16/2	845	845	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
17/1	673	673	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
17/2	1056	1056	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
17/3	77	77	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
18/1	261	261	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
18/2	128	128	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
18/3	77	77	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
19/1	261	261	-	-	-	3.1	0.0	-	3.1	42.7	7.4	0.0	7.4
19/2	284	284	-	-	-	3.4	0.0	-	3.4	43.4	8.1	0.0	8.1
20/1	625	625	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
20/2	1303	1303	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
21/1	625	625	-	-	-	0.0	0.2	-	0.2	1.3	0.0	0.2	0.2
21/2	209	209	-	-	-	0.0	0.1	-	0.1	1.0	0.0	0.1	0.1
Ped Link: P1	0	0	-	-	-	-	-	-	-	-	-	-	-
Ped Link: P2	0	0	-	-	-	-	-	-	-	-	-	-	-

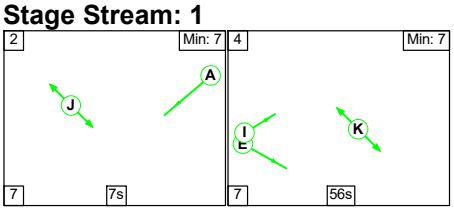
C1	Stream: 1 PRC for Signalled Lanes (%):	0.0	Total Delay for Signalled Lanes (pcuHr):	0.00	Cycle Time (s): 105
C1	Stream: 2 PRC for Signalled Lanes (%):	-2.9	Total Delay for Signalled Lanes (pcuHr):	15.39	Cycle Time (s): 105
C1	Stream: 3 PRC for Signalled Lanes (%):	0.0	Total Delay for Signalled Lanes (pcuHr):	0.00	Cycle Time (s): 105
C1	Stream: 4 PRC for Signalled Lanes (%):	0.0	Total Delay for Signalled Lanes (pcuHr):	0.00	Cycle Time (s): 105
	PRC Over All Lanes (%):	-2.9	Total Delay Over All Lanes(pcuHr):	19.76	

Full Input Data And Results

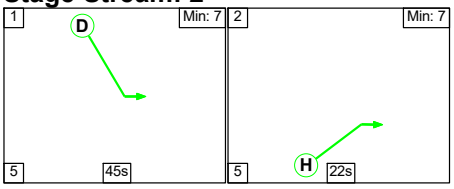
Scenario 2: '2033 WITH DEV PM' (FG2: '2033 WITH DEV PM', Plan 2: 'PM')

Stage Sequence Diagram

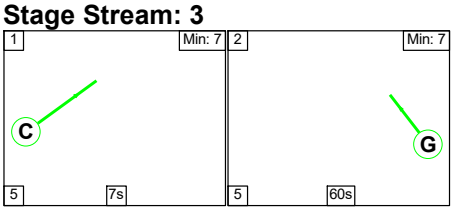
Stage Stream: 1



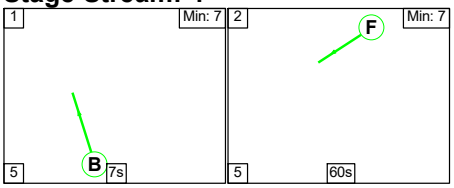
Stage Stream: 2



Stage Stream: 3



Stage Stream: 4



Stage Timings

Stage Stream: 1

Stage	2	4
Duration	7	56
Change Point	0	14

Stage Stream: 2

Stage	1	2
Duration	45	22
Change Point	0	50

Stage Stream: 3

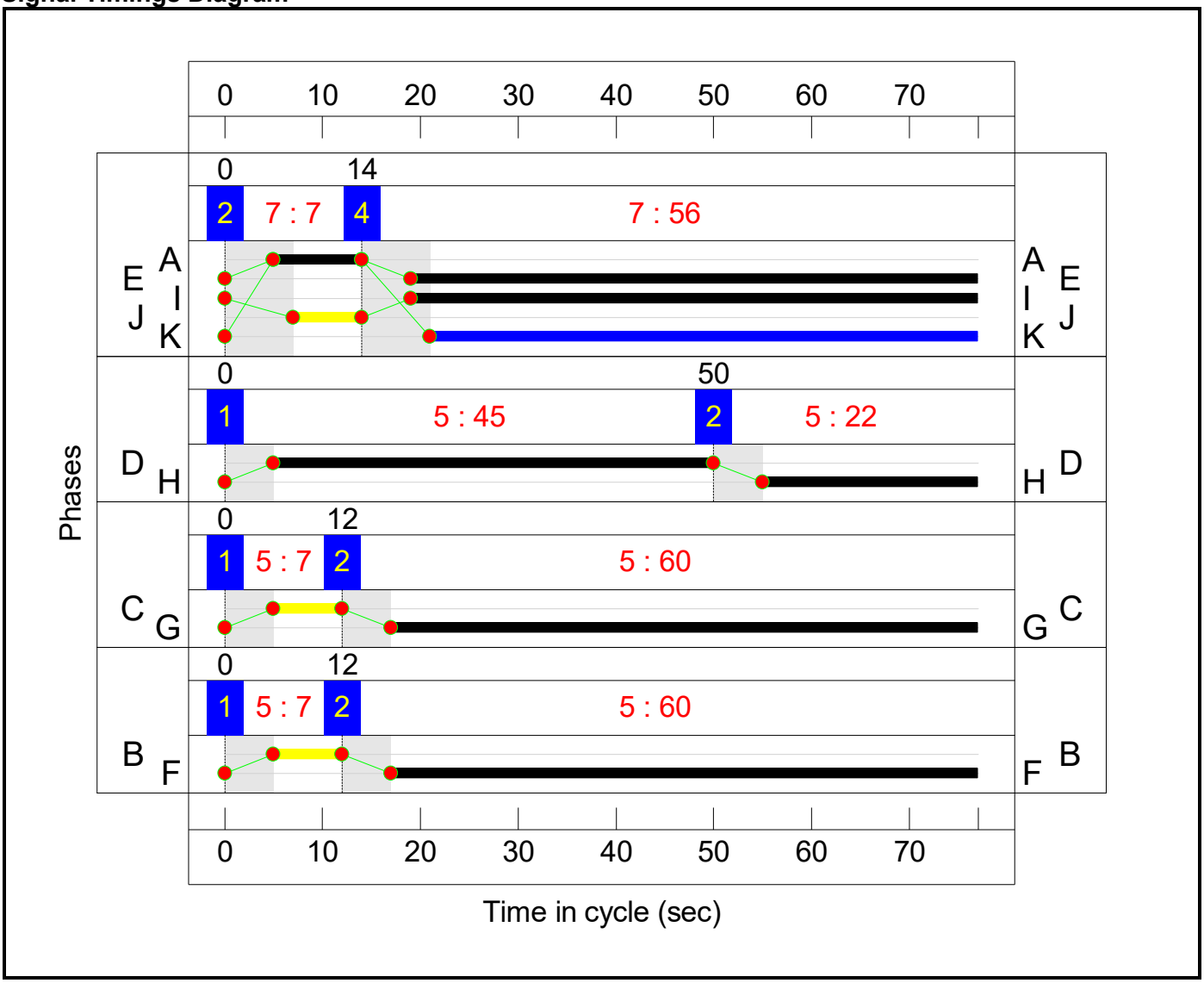
Stage	1	2
Duration	7	60
Change Point	0	12

Stage Stream: 4

Stage	1	2
Duration	7	60
Change Point	0	12

Full Input Data And Results

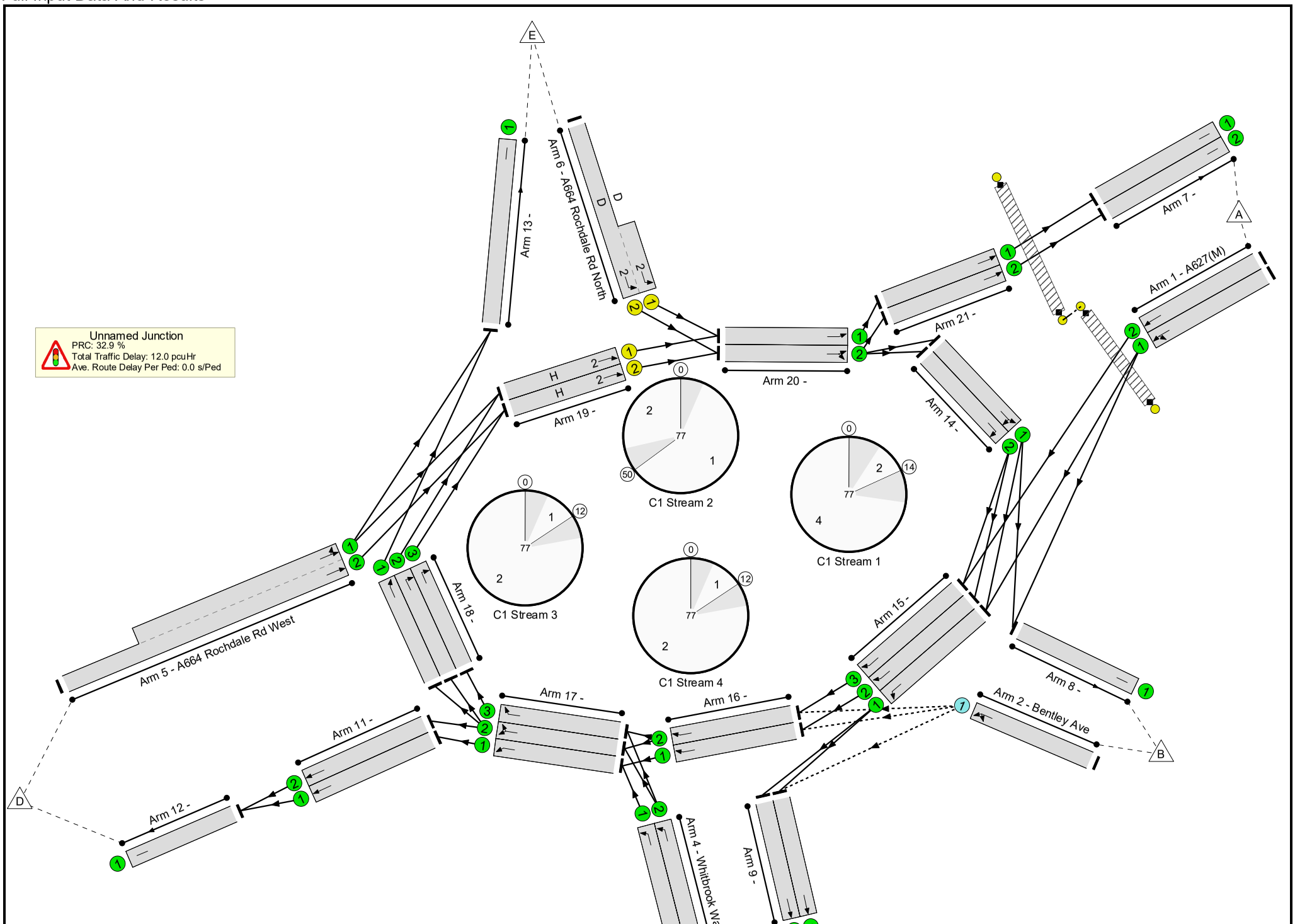
Signal Timings Diagram



Full Input Data And Results

Network Layout Diagram

Full Input Data And Results



Full Input Data And Results

Full Input Data And Results

Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network	-	-	**N/A**	-	-		-	-	-	-	-	-	**67.7%**
Unnamed Junction	-	-	**N/A**	-	-		-	-	-	-	-	-	**67.7%**
1/1	A627(M) Left Ahead	U	N/A	N/A	-		-	-	-	198	1902	1902	10.4%
1/2	A627(M) Ahead	U	N/A	N/A	-		-	-	-	754	1922	1922	39.2%
2/1	Bentley Ave Left Ahead	O	N/A	N/A	-		-	-	-	121	1877	796	15.2%
3/1	Ahead	U	N/A	N/A	-		-	-	-	606	1980	1980	30.6%
4/1	Whitbrook Way Left	U	N/A	N/A	-		-	-	-	151	1957	1957	7.7%
4/2	Whitbrook Way Left	U	N/A	N/A	-		-	-	-	455	1946	1946	23.4%
5/2+5/1	A664 Rochdale Rd West Left Ahead	U	N/A	N/A	-		-	-	-	955	1934:1881	325+1565	50.5 : 50.5%
6/2+6/1	A664 Rochdale Rd North Left	U	2	N/A	D		1	45	-	820	1870:1870	892+319	67.7 : 67.7%
7/1		U	N/A	N/A	-		-	-	-	561	1980	1980	28.3%
7/2		U	N/A	N/A	-		-	-	-	274	1980	1980	13.8%
8/1		U	N/A	N/A	-		-	-	-	53	1935	1935	2.7%
9/1	Ahead	U	N/A	N/A	-		-	-	-	306	2015	2015	15.2%
9/2	Ahead	U	N/A	N/A	-		-	-	-	0	2015	2015	0.0%
10/1	Whitbrook Way	U	N/A	N/A	-		-	-	-	306	Inf	Inf	0.0%
10/2	Whitbrook Way	U	N/A	N/A	-		-	-	-	0	1980	1980	0.0%
11/1	Ahead	U	N/A	N/A	-		-	-	-	568	1200	1200	47.3%
11/2	Ahead	U	N/A	N/A	-		-	-	-	596	1200	1200	49.7%
12/1		U	N/A	N/A	-		-	-	-	1164	1980	1980	58.8%
13/1		U	N/A	N/A	-		-	-	-	1096	1980	1980	55.4%
14/1	Ahead Right	U	N/A	N/A	-		-	-	-	156	1900	1900	8.2%

Full Input Data And Results

14/2	Right	U	N/A	N/A	-		-	-	-	544	1900	1900	28.6%
15/1	Left	U	N/A	N/A	-		-	-	-	301	1900	1900	15.8%
15/2	Ahead	U	N/A	N/A	-		-	-	-	392	1900	1900	20.6%
15/3	Ahead	U	N/A	N/A	-		-	-	-	906	1900	1900	47.7%
16/1	Ahead	U	N/A	N/A	-		-	-	-	417	1900	1900	21.9%
16/2	Ahead	U	N/A	N/A	-		-	-	-	997	1900	1900	52.5%
17/1	Ahead	U	N/A	N/A	-		-	-	-	568	1900	1900	29.9%
17/2	Ahead Right	U	N/A	N/A	-		-	-	-	1246	1900	1900	65.6%
17/3	Right	U	N/A	N/A	-		-	-	-	206	1900	1900	10.8%
18/1	Ahead	U	N/A	N/A	-		-	-	-	476	1900	1900	25.1%
18/2	Right	U	N/A	N/A	-		-	-	-	174	1900	1900	9.2%
18/3	Right	U	N/A	N/A	-		-	-	-	206	1900	1900	10.8%
19/1	Ahead	U	2	N/A	H		1	22	-	345	1900	568	60.8%
19/2	Ahead	U	2	N/A	H		1	22	-	370	1900	568	65.2%
20/1	Ahead	U	N/A	N/A	-		-	-	-	561	1900	1900	29.5%
20/2	Right Ahead	U	N/A	N/A	-		-	-	-	974	1900	1900	51.3%
21/1	Ahead	U	N/A	N/A	-		-	-	-	561	1980	1980	28.3%
21/2	Ahead	U	N/A	N/A	-		-	-	-	274	1980	1980	13.8%
Ped Link: P1	Unnamed Ped Link	-	1	-	J		1	7	-	0	-	0	0.0%
Ped Link: P2	Unnamed Ped Link	-	1	-	K		1	56	-	0	-	0	0.0%

Full Input Data And Results

Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network	**-**	**-**	**121**	**0**	**0**	**6.7**	**5.4**	**0.0**	**12.0**	**-**	**-**	**-**	**-**
Unnamed Junction	**-**	**-**	**121**	**0**	**0**	**6.7**	**5.4**	**0.0**	**12.0**	**-**	**-**	**-**	**-**
1/1	198	198	-	-	-	0.0	0.1	-	0.1	1.1	0.0	0.1	0.1
1/2	754	754	-	-	-	0.0	0.3	-	0.3	1.5	0.0	0.3	0.3
2/1	121	121	121	0	0	0.0	0.1	-	0.1	2.7	0.0	0.1	0.1
3/1	606	606	-	-	-	0.0	0.2	-	0.2	1.3	0.0	0.2	0.2
4/1	151	151	-	-	-	0.0	0.0	-	0.0	1.0	0.0	0.0	0.0
4/2	455	455	-	-	-	0.0	0.2	-	0.2	1.2	0.0	0.2	0.2
5/2+5/1	955	955	-	-	-	0.0	0.5	-	0.5	1.9	0.0	0.5	0.5
6/2+6/1	820	820	-	-	-	2.0	1.0	-	3.1	13.5	8.8	1.0	9.8
7/1	561	561	-	-	-	0.0	0.2	-	0.2	1.3	0.0	0.2	0.2
7/2	274	274	-	-	-	0.0	0.1	-	0.1	1.1	0.0	0.1	0.1
8/1	53	53	-	-	-	0.0	0.0	-	0.0	1.0	0.0	0.0	0.0
9/1	306	306	-	-	-	0.0	0.1	-	0.1	1.1	0.0	0.1	0.1
9/2	0	0	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
10/1	306	306	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
10/2	0	0	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
11/1	568	568	-	-	-	0.0	0.4	-	0.5	3.0	4.3	0.4	4.8
11/2	596	596	-	-	-	0.0	0.5	-	0.5	3.0	0.0	0.5	0.5
12/1	1164	1164	-	-	-	0.0	0.7	-	0.7	2.2	0.0	0.7	0.7
13/1	1096	1096	-	-	-	0.0	0.6	-	0.6	2.0	0.0	0.6	0.6
14/1	156	156	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
14/2	544	544	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
15/1	301	301	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
15/2	392	392	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
15/3	906	906	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0

Full Input Data And Results

16/1	417	417	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
16/2	997	997	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
17/1	568	568	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
17/2	1246	1246	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
17/3	206	206	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
18/1	476	476	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
18/2	174	174	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
18/3	206	206	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
19/1	345	345	-	-	-	2.2	0.0	-	2.2	23.1	6.2	0.0	6.2
19/2	370	370	-	-	-	2.4	0.0	-	2.4	23.5	6.9	0.0	6.9
20/1	561	561	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
20/2	974	974	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
21/1	561	561	-	-	-	0.0	0.2	-	0.2	1.3	0.0	0.2	0.2
21/2	274	274	-	-	-	0.0	0.1	-	0.1	1.1	0.0	0.1	0.1
Ped Link: P1	0	0	-	-	-	-	-	-	-	-	-	-	-
Ped Link: P2	0	0	-	-	-	-	-	-	-	-	-	-	-

C1	Stream: 1 PRC for Signalled Lanes (%):	0.0	Total Delay for Signalled Lanes (pcuHr):	0.00	Cycle Time (s): 77
C1	Stream: 2 PRC for Signalled Lanes (%):	32.9	Total Delay for Signalled Lanes (pcuHr):	7.70	Cycle Time (s): 77
C1	Stream: 3 PRC for Signalled Lanes (%):	0.0	Total Delay for Signalled Lanes (pcuHr):	0.00	Cycle Time (s): 77
C1	Stream: 4 PRC for Signalled Lanes (%):	0.0	Total Delay for Signalled Lanes (pcuHr):	0.00	Cycle Time (s): 77
	PRC Over All Lanes (%):	32.9	Total Delay Over All Lanes(pcuHr):	12.05	

S|C|P

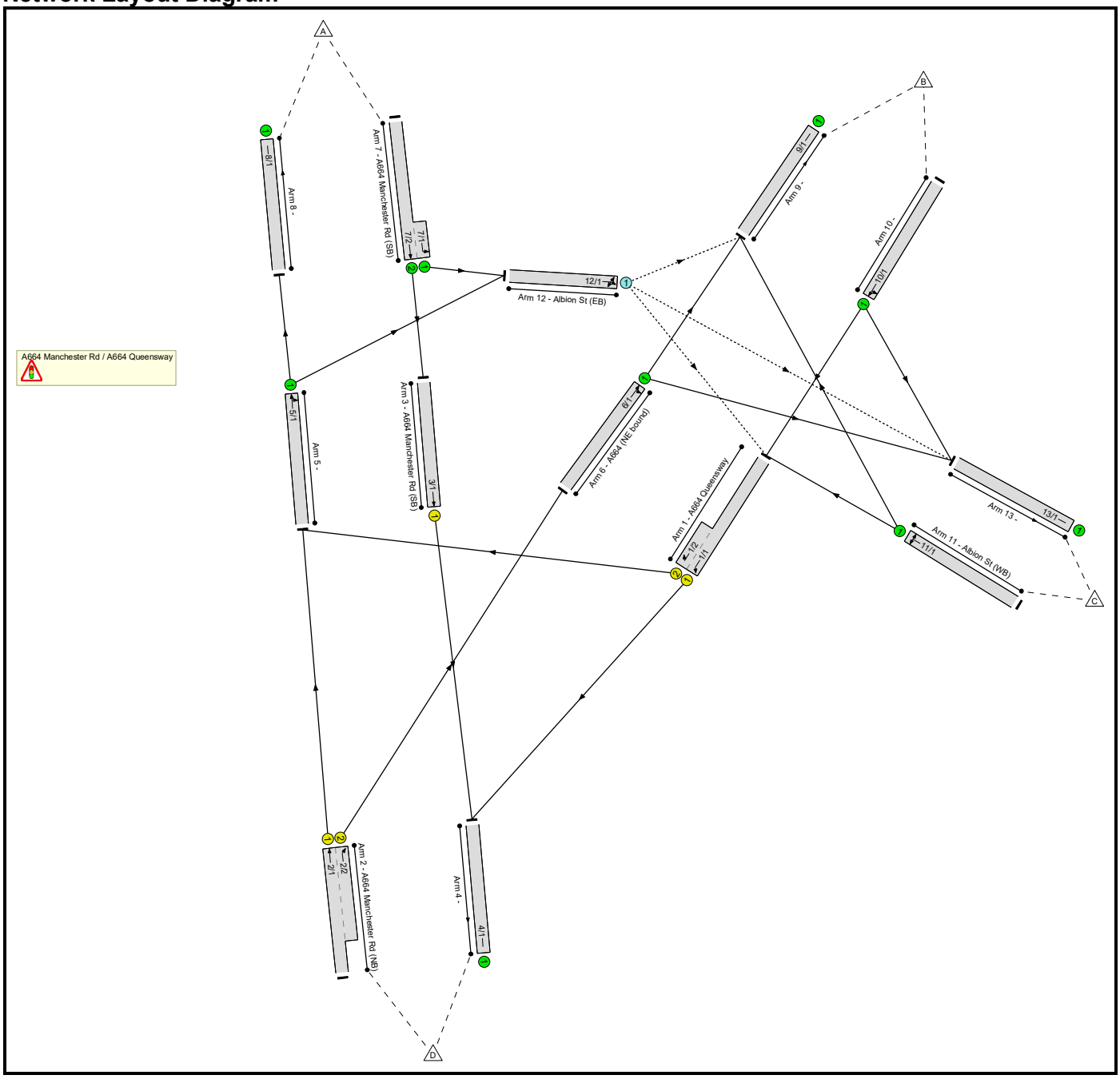
APPENDIX Q

Full Input Data And Results

User and Project Details

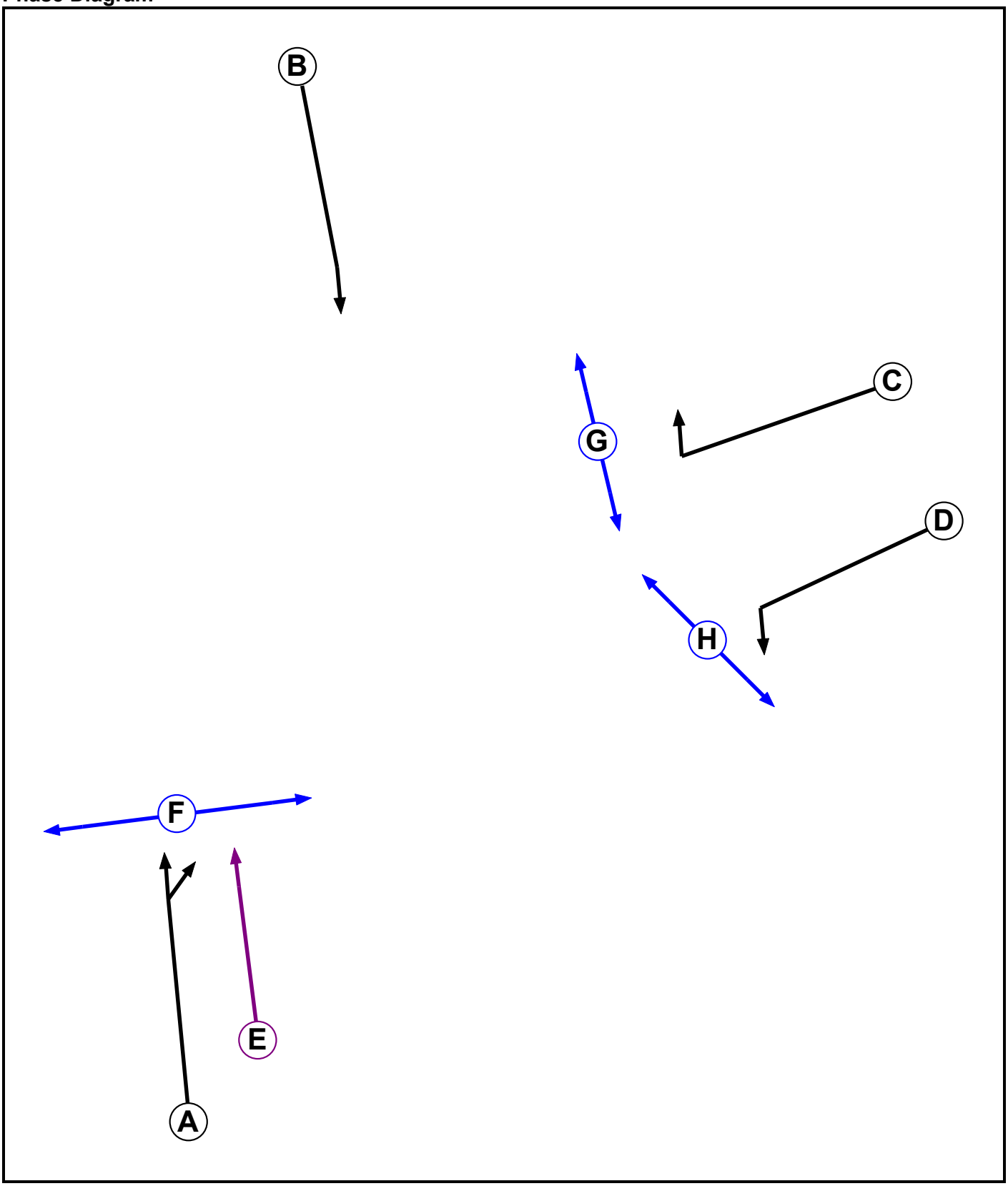
Project:	
Title:	
Location:	
Additional detail:	
File name:	A664 Manc Rd _ A664 Queensway LB - INCLU PRIORITY JUNCTION.lsg3x
Author:	
Company:	
Address:	

Network Layout Diagram



Full Input Data And Results

Phase Diagram



Full Input Data And Results

Phase Input Data

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

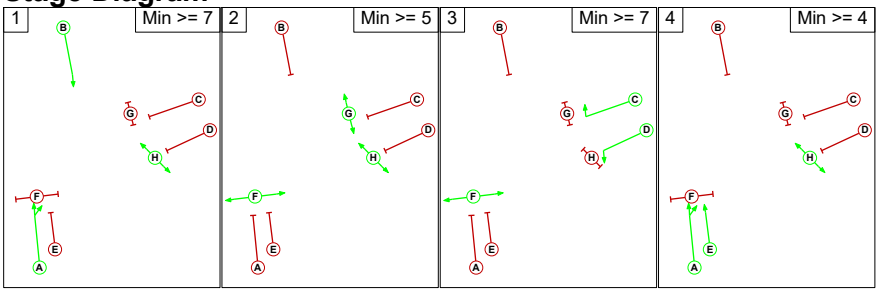
Phase Intergreens Matrix

		Starting Phase							
		A	B	C	D	E	F	G	H
Terminating Phase	A		-	6	-	-	-	8	-
	B	-		5	7	4	7	-	-
	C	6	7		-	6	-	5	-
	D	-	4	-		-	-	-	5
	E	-	3	6	-		5	8	-
	F	9	9	-	-	9		-	-
	G	7	-	8	-	7	-		-
	H	-	-	-	5	-	-	-	

Phases in Stage

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

Stage Diagram



Phase Delays

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

Full Input Data And Results

Prohibited Stage Change

From Stage	To Stage				
		1	2	3	4
	1		8	7	4
	2	9		8	9
	3	9	5		9
	4	3	8	6	

Full Input Data And Results

Give-Way Lane Input Data

Junction: A664 Manchester Rd / A664 Queensway

Lane	Movement	Max Flow when Giving Way (PCU/Hr)	Min Flow when Giving Way (PCU/Hr)	Opposing Lane	Opp. Lane Coeff.	Opp. Mvmnts.	Right Turn Storage (PCU)	Non-Blocking Storage (PCU)	RTF	Right Turn Move up (s)	Max Turns in Intergreen (PCU)
12/1 (Albion St (EB))	1/1 (Right)	1439	0	10/1	1.09	To 1/1 (Ahead)	-	-	-	-	-
				11/1	1.09	To 1/1 (Left)					
	9/1 (Left)	1439	0	6/1	1.09	To 9/1 (Ahead)					
	13/1 (Ahead)	1439	0	6/1	1.09	All					
				10/1	1.09	All					

Full Input Data And Results

Lane Input Data

Junction: A664 Manchester Rd / A664 Queensway												
Lane	**Lane Type**	**Phases**	**Start Disp.**	**End Disp.**	**Physical Length (PCU)**	**Sat Flow Type**	**Def User Saturation Flow (PCU/Hr)**	**Lane Width (m)**	**Gradient**	**Nearside Lane**	**Turns**	**Turning Radius (m)**
1/1 (A664 Queensway)	U	D	2	3	5.7	Geom	-	4.40	0.00	Y	Arm 4 Ahead	23.00
1/2 (A664 Queensway)	U	C	2	3	5.7	Geom	-	3.20	0.00	Y	Arm 5 U-Turn	12.00
2/1 (A664 Manchester Rd (NB))	U	A	2	3	60.0	Geom	-	2.90	0.00	Y	Arm 5 Ahead	Inf
2/2 (A664 Manchester Rd (NB))	U	A E	2	3	11.1	Geom	-	2.90	0.00	Y	Arm 6 Ahead	9.00
3/1 (A664 Manchester Rd (SB))	U	B	2	3	13.6	Geom	-	4.30	0.00	Y	Arm 4 Ahead	Inf
4/1	U		2	3	60.0	Inf	-	-	-	-	-	-
5/1	U		2	3	60.0	Inf	-	-	-	-	-	-
6/1 (A664 (NE bound))	U		2	3	7.3	Inf	-	-	-	-	-	-
7/1 (A664 Manchester Rd (SB))	U		2	3	4.3	Geom	-	4.00	0.00	Y	Arm 12 Left	Inf
7/2 (A664 Manchester Rd (SB))	U		2	3	60.0	Geom	-	3.70	0.00	Y	Arm 3 Ahead	Inf
8/1	U		2	3	60.0	Inf	-	-	-	-	-	-
9/1	U		2	3	60.0	Inf	-	-	-	-	-	-
10/1	U		2	3	60.0	Inf	-	-	-	-	-	-
11/1 (Albion St (WB))	U		2	3	60.0	Geom	-	3.40	0.00	Y	Arm 1 Left	6.00
											Arm 9 Right	10.00
12/1 (Albion St (EB))	O		2	3	8.7	Geom	-	4.00	0.00	Y	Arm 1 Right	12.00
											Arm 9 Left	5.00
											Arm 13 Ahead	Inf
13/1	U		2	3	60.0	Inf	-	-	-	-	-	-

Full Input Data And Results

Traffic Flow Groups

Flow Group	Start Time	End Time	Duration	Formula
1: '2033 WITHOUT DEV AM'	07:45	08:45	01:00	
2: '2033 WITHOUT DEV PM'	16:30	17:30	01:00	
3: '2033 WITH DEV AM'	07:45	08:45	01:00	
4: '2033 WITH DEV PM'	16:30	17:30	01:00	

Scenario 1: '2033 WITHOUT DEV AM' (FG1: '2033 WITHOUT DEV AM', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired

Desired Flow :

		Destination				
		A	B	C	D	Tot.
Origin	A	0	292	32	526	850
	B	315	0	43	35	393
	C	25	41	0	35	101
	D	434	243	5	0	682
	Tot.	774	576	80	596	2026

Traffic Lane Flows

Lane	Scenario 1: 2033 WITHOUT DEV AM
Junction: A664 Manchester Rd / A664 Queensway	
1/1 (with short)	410(In) 70(Out)
1/2 (short)	340
2/1 (with short)	682(In) 434(Out)
2/2 (short)	248
3/1	526
4/1	596
5/1	774
6/1	248
7/1 (short)	324
7/2 (with short)	850(In) 526(Out)
8/1	774
9/1	576
10/1	393
11/1	101
12/1	324
13/1	80

Full Input Data And Results

Lane Saturation Flows

Junction: A664 Manchester Rd / A664 Queensway								
Lane	**Lane Width (m)**	**Gradient**	**Nearside Lane**	**Allowed Turns**	**Turning Radius (m)**	**Turning Prop.**	**Sat Flow (PCU/Hr)**	**Flared Sat Flow (PCU/Hr)**
1/1 (A664 Queensway)	4.40	0.00	Y	Arm 4 Ahead	23.00	100.0 %	1929	1929
1/2 (A664 Queensway)	3.20	0.00	Y	Arm 5 U-Turn	12.00	100.0 %	1720	1720
2/1 (A664 Manchester Rd (NB))	2.90	0.00	Y	Arm 5 Ahead	Inf	100.0 %	1905	1905
2/2 (A664 Manchester Rd (NB))	2.90	0.00	Y	Arm 6 Ahead	9.00	100.0 %	1633	1633
3/1 (A664 Manchester Rd (SB))	4.30	0.00	Y	Arm 4 Ahead	Inf	100.0 %	2045	2045
4/1	Infinite Saturation Flow						Inf	Inf
5/1	Infinite Saturation Flow						Inf	Inf
6/1 (A664 (NE bound) Lane 1)	Infinite Saturation Flow						Inf	Inf
7/1 (A664 Manchester Rd (SB))	4.00	0.00	Y	Arm 12 Left	Inf	100.0 %	2015	2015
7/2 (A664 Manchester Rd (SB))	3.70	0.00	Y	Arm 3 Ahead	Inf	100.0 %	1985	1985
8/1	Infinite Saturation Flow						Inf	Inf
9/1	Infinite Saturation Flow						Inf	Inf
10/1	Infinite Saturation Flow						Inf	Inf
11/1 (Albion St (WB))	3.40	0.00	Y	Arm 1 Left	6.00	59.4 %	1616	1616
				Arm 9 Right	10.00	40.6 %		
12/1 (Albion St (EB))	4.00	0.00	Y	Arm 1 Right	12.00	0.0 %	1586	1586
				Arm 9 Left	5.00	90.1 %		
				Arm 13 Ahead	Inf	9.9 %		
13/1	Infinite Saturation Flow						Inf	Inf

Scenario 2: '2033 WITHOUT DEV PM' (FG2: '2033 WITHOUT DEV PM', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired

Desired Flow :

		Destination				
		A	B	C	D	Tot.
Origin	A	0	230	60	403	693
	B	343	0	55	44	442
	C	50	44	0	44	138
	D	555	245	7	0	807
	Tot.	948	519	122	491	2080

Full Input Data And Results

Traffic Lane Flows

Lane	Scenario 2: 2033 WITHOUT DEV PM
Junction: A664 Manchester Rd / A664 Queensway	
1/1 (with short)	481(In) 88(Out)
1/2 (short)	393
2/1 (with short)	807(In) 555(Out)
2/2 (short)	252
3/1	403
4/1	491
5/1	948
6/1	252
7/1 (short)	290
7/2 (with short)	693(In) 403(Out)
8/1	948
9/1	519
10/1	442
11/1	138
12/1	290
13/1	122

Full Input Data And Results

Lane Saturation Flows

Junction: A664 Manchester Rd / A664 Queensway								
Lane	**Lane Width (m)**	**Gradient**	**Nearside Lane**	**Allowed Turns**	**Turning Radius (m)**	**Turning Prop.**	**Sat Flow (PCU/Hr)**	**Flared Sat Flow (PCU/Hr)**
1/1 (A664 Queensway)	4.40	0.00	Y	Arm 4 Ahead	23.00	100.0 %	1929	1929
1/2 (A664 Queensway)	3.20	0.00	Y	Arm 5 U-Turn	12.00	100.0 %	1720	1720
2/1 (A664 Manchester Rd (NB))	2.90	0.00	Y	Arm 5 Ahead	Inf	100.0 %	1905	1905
2/2 (A664 Manchester Rd (NB))	2.90	0.00	Y	Arm 6 Ahead	9.00	100.0 %	1633	1633
3/1 (A664 Manchester Rd (SB))	4.30	0.00	Y	Arm 4 Ahead	Inf	100.0 %	2045	2045
4/1	Infinite Saturation Flow						Inf	Inf
5/1	Infinite Saturation Flow						Inf	Inf
6/1 (A664 (NE bound) Lane 1)	Infinite Saturation Flow						Inf	Inf
7/1 (A664 Manchester Rd (SB))	4.00	0.00	Y	Arm 12 Left	Inf	100.0 %	2015	2015
7/2 (A664 Manchester Rd (SB))	3.70	0.00	Y	Arm 3 Ahead	Inf	100.0 %	1985	1985
8/1	Infinite Saturation Flow						Inf	Inf
9/1	Infinite Saturation Flow						Inf	Inf
10/1	Infinite Saturation Flow						Inf	Inf
11/1 (Albion St (WB))	3.40	0.00	Y	Arm 1 Left	6.00	68.1 %	1605	1605
				Arm 9 Right	10.00	31.9 %		
12/1 (Albion St (EB))	4.00	0.00	Y	Arm 1 Right	12.00	0.0 %	1628	1628
				Arm 9 Left	5.00	79.3 %		
				Arm 13 Ahead	Inf	20.7 %		
13/1	Infinite Saturation Flow						Inf	Inf

Scenario 3: '2033 WITH DEV AM' (FG3: '2033 WITH DEV AM', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired

Desired Flow :

		Destination				
		A	B	C	D	Tot.
Origin	A	0	292	32	573	897
	B	316	0	43	36	395
	C	24	41	0	36	101
	D	562	348	5	0	915
	Tot.	902	681	80	645	2308

Full Input Data And Results

Traffic Lane Flows

Lane	Scenario 3: 2033 WITH DEV AM
Junction: A664 Manchester Rd / A664 Queensway	
1/1 (with short)	412(In) 72(Out)
1/2 (short)	340
2/1 (with short)	915(In) 562(Out)
2/2 (short)	353
3/1	573
4/1	645
5/1	902
6/1	353
7/1 (short)	324
7/2 (with short)	897(In) 573(Out)
8/1	902
9/1	681
10/1	395
11/1	101
12/1	324
13/1	80

Full Input Data And Results

Lane Saturation Flows

Junction: A664 Manchester Rd / A664 Queensway								
Lane	**Lane Width (m)**	**Gradient**	**Nearside Lane**	**Allowed Turns**	**Turning Radius (m)**	**Turning Prop.**	**Sat Flow (PCU/Hr)**	**Flared Sat Flow (PCU/Hr)**
1/1 (A664 Queensway)	4.40	0.00	Y	Arm 4 Ahead	23.00	100.0 %	1929	1929
1/2 (A664 Queensway)	3.20	0.00	Y	Arm 5 U-Turn	12.00	100.0 %	1720	1720
2/1 (A664 Manchester Rd (NB))	2.90	0.00	Y	Arm 5 Ahead	Inf	100.0 %	1905	1905
2/2 (A664 Manchester Rd (NB))	2.90	0.00	Y	Arm 6 Ahead	9.00	100.0 %	1633	1633
3/1 (A664 Manchester Rd (SB))	4.30	0.00	Y	Arm 4 Ahead	Inf	100.0 %	2045	2045
4/1	Infinite Saturation Flow						Inf	Inf
5/1	Infinite Saturation Flow						Inf	Inf
6/1 (A664 (NE bound) Lane 1)	Infinite Saturation Flow						Inf	Inf
7/1 (A664 Manchester Rd (SB))	4.00	0.00	Y	Arm 12 Left	Inf	100.0 %	2015	2015
7/2 (A664 Manchester Rd (SB))	3.70	0.00	Y	Arm 3 Ahead	Inf	100.0 %	1985	1985
8/1	Infinite Saturation Flow						Inf	Inf
9/1	Infinite Saturation Flow						Inf	Inf
10/1	Infinite Saturation Flow						Inf	Inf
11/1 (Albion St (WB))	3.40	0.00	Y	Arm 1 Left	6.00	59.4 %	1616	1616
				Arm 9 Right	10.00	40.6 %		
12/1 (Albion St (EB))	4.00	0.00	Y	Arm 1 Right	12.00	0.0 %	1586	1586
				Arm 9 Left	5.00	90.1 %		
				Arm 13 Ahead	Inf	9.9 %		
13/1	Infinite Saturation Flow						Inf	Inf

Scenario 4: '2033 WITH DEV PM' (FG4: '2033 WITH DEV PM', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired

Desired Flow :

		Destination				
		A	B	C	D	Tot.
Origin	A	0	230	60	520	810
	B	349	0	55	50	454
	C	44	44	0	50	138
	D	610	290	7	0	907
	Tot.	1003	564	122	620	2309

Full Input Data And Results

Traffic Lane Flows

Lane	Scenario 4: 2033 WITH DEV PM
Junction: A664 Manchester Rd / A664 Queensway	
1/1 (with short)	493(In) 100(Out)
1/2 (short)	393
2/1 (with short)	907(In) 610(Out)
2/2 (short)	297
3/1	520
4/1	620
5/1	1003
6/1	297
7/1 (short)	290
7/2 (with short)	810(In) 520(Out)
8/1	1003
9/1	564
10/1	454
11/1	138
12/1	290
13/1	122

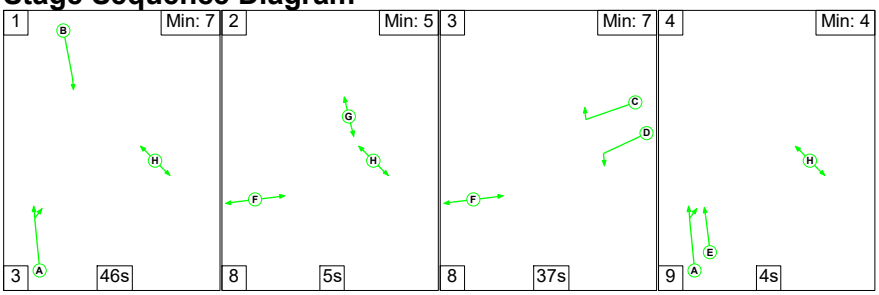
Full Input Data And Results

Lane Saturation Flows

Junction: A664 Manchester Rd / A664 Queensway								
Lane	**Lane Width (m)**	**Gradient**	**Nearside Lane**	**Allowed Turns**	**Turning Radius (m)**	**Turning Prop.**	**Sat Flow (PCU/Hr)**	**Flared Sat Flow (PCU/Hr)**
1/1 (A664 Queensway)	4.40	0.00	Y	Arm 4 Ahead	23.00	100.0 %	1929	1929
1/2 (A664 Queensway)	3.20	0.00	Y	Arm 5 U-Turn	12.00	100.0 %	1720	1720
2/1 (A664 Manchester Rd (NB))	2.90	0.00	Y	Arm 5 Ahead	Inf	100.0 %	1905	1905
2/2 (A664 Manchester Rd (NB))	2.90	0.00	Y	Arm 6 Ahead	9.00	100.0 %	1633	1633
3/1 (A664 Manchester Rd (SB))	4.30	0.00	Y	Arm 4 Ahead	Inf	100.0 %	2045	2045
4/1	Infinite Saturation Flow						Inf	Inf
5/1	Infinite Saturation Flow						Inf	Inf
6/1 (A664 (NE bound) Lane 1)	Infinite Saturation Flow						Inf	Inf
7/1 (A664 Manchester Rd (SB))	4.00	0.00	Y	Arm 12 Left	Inf	100.0 %	2015	2015
7/2 (A664 Manchester Rd (SB))	3.70	0.00	Y	Arm 3 Ahead	Inf	100.0 %	1985	1985
8/1	Infinite Saturation Flow						Inf	Inf
9/1	Infinite Saturation Flow						Inf	Inf
10/1	Infinite Saturation Flow						Inf	Inf
11/1 (Albion St (WB))	3.40	0.00	Y	Arm 1 Left	6.00	68.1 %	1605	1605
				Arm 9 Right	10.00	31.9 %		
12/1 (Albion St (EB))	4.00	0.00	Y	Arm 1 Right	12.00	0.0 %	1628	1628
				Arm 9 Left	5.00	79.3 %		
				Arm 13 Ahead	Inf	20.7 %		
13/1	Infinite Saturation Flow						Inf	Inf

Scenario 1: '2033 WITHOUT DEV AM' (FG1: '2033 WITHOUT DEV AM', Plan 1: 'Network Control Plan 1')

Stage Sequence Diagram

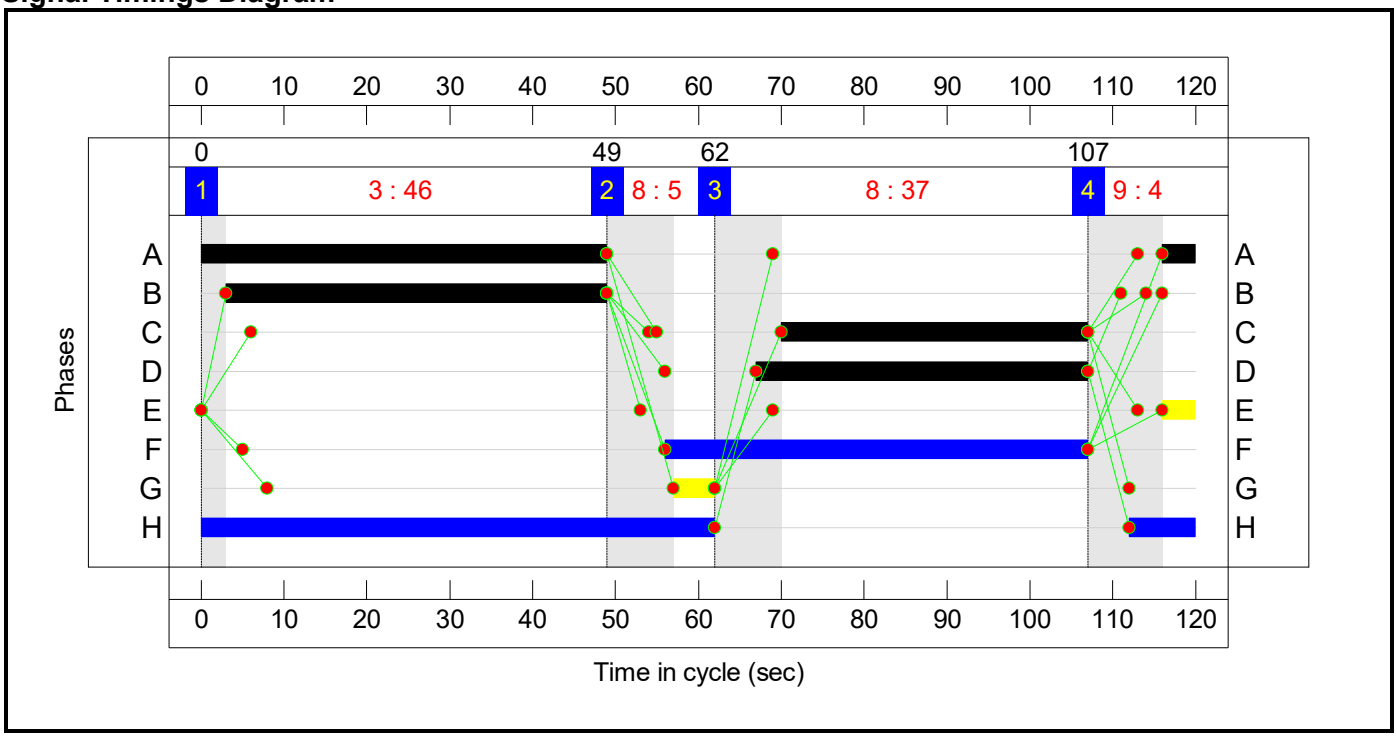


Stage Timings

Stage	1	2	3	4
Duration	46	5	37	4
Change Point	0	49	62	107

Full Input Data And Results

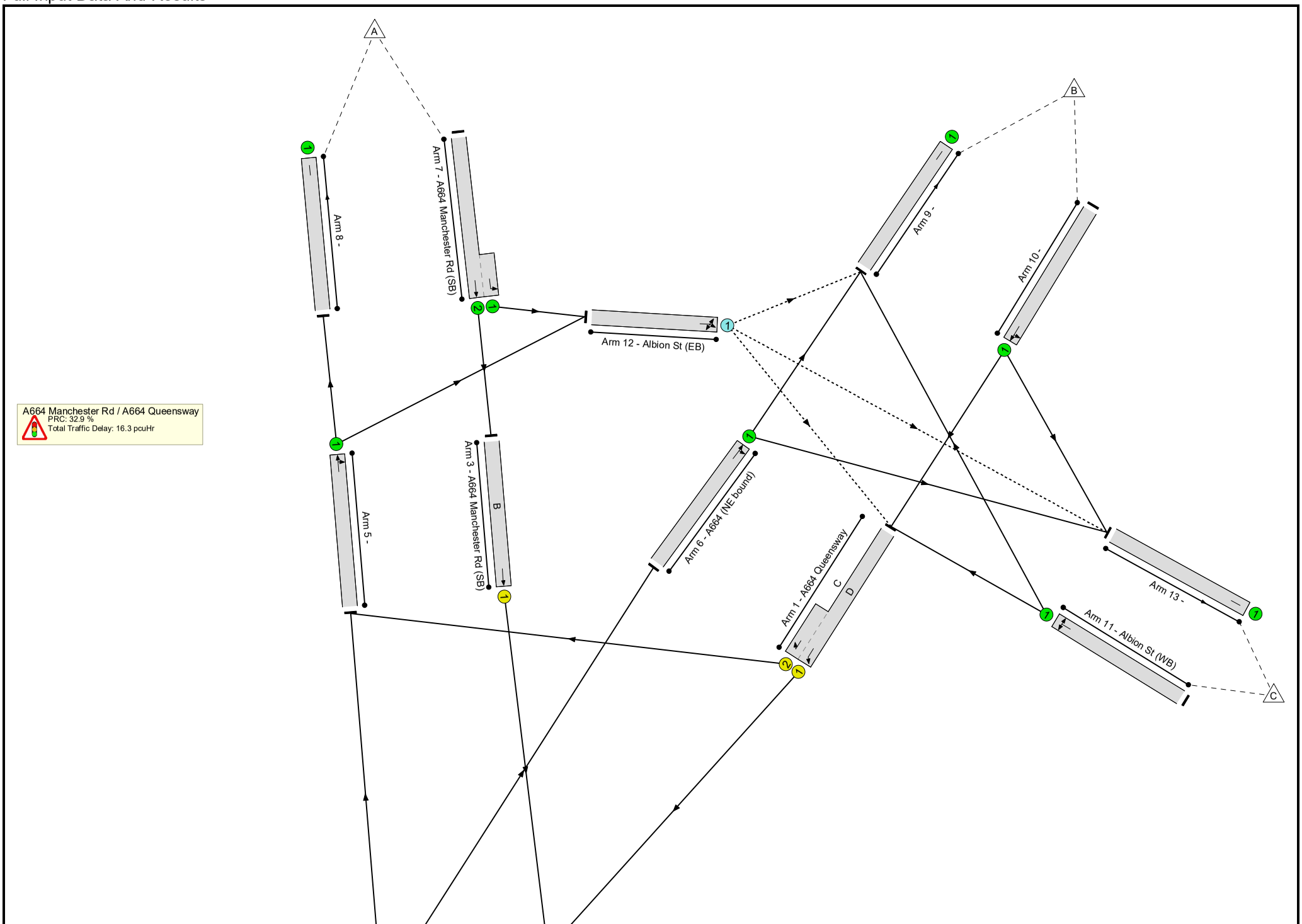
Signal Timings Diagram



Full Input Data And Results

Network Layout Diagram

Full Input Data And Results



Full Input Data And Results

Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network	-	-	**N/A**	-	-		-	-	-	-	-	-	**67.7%**
A664 Manchester Rd / A664 Queensway	-	-	**N/A**	-	-		-	-	-	-	-	-	**67.7%**
1/1+1/2	A664 Queensway Ahead U-Turn	U	N/A	N/A	D C		1	40:37	-	410	1929:1720	103+502	67.7 : 67.7%
2/1+2/2	A664 Manchester Rd (NB) Ahead Ahead2	U	N/A	N/A	A	E	1	53	4	682	1905:1633	647+370	67.1 : 67.1%
3/1	A664 Manchester Rd (SB) Ahead	U	N/A	N/A	B		1	46	-	526	2045	801	65.7%
4/1		U	N/A	N/A	-		-	-	-	596	Inf	Inf	0.0%
5/1	Ahead Right	U	N/A	N/A	-		-	-	-	774	Inf	Inf	0.0%
6/1	A664 (NE bound) Ahead Right	U	N/A	N/A	-		-	-	-	248	Inf	Inf	0.0%
7/2+7/1	A664 Manchester Rd (SB) Ahead Left	U	N/A	N/A	-		-	-	-	850	1985:2015	1235+761	42.6 : 42.6%
8/1		U	N/A	N/A	-		-	-	-	774	Inf	Inf	0.0%
9/1		U	N/A	N/A	-		-	-	-	576	Inf	Inf	0.0%
10/1	Ahead Left	U	N/A	N/A	-		-	-	-	393	Inf	Inf	0.0%
11/1	Albion St (WB) Left Right	U	N/A	N/A	-		-	-	-	101	1616	1616	6.3%
12/1	Albion St (EB) Right Left Ahead	O	N/A	N/A	-		-	-	-	324	1586	1136	28.5%
13/1		U	N/A	N/A	-		-	-	-	80	Inf	Inf	0.0%

Full Input Data And Results

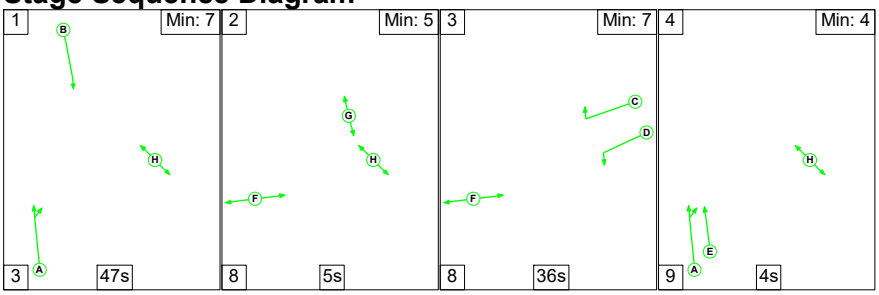
Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network	**-**	**-**	**324**	**0**	**0**	**12.7**	**3.6**	**0.0**	**16.3**	**-**	**-**	**-**	**-**
A664 Manchester Rd / A664 Queensway	**-**	**-**	**324**	**0**	**0**	**12.7**	**3.6**	**0.0**	**16.3**	**-**	**-**	**-**	**-**
1/1+1/2	410	410	-	-	-	3.9	1.0	-	4.9	43.3	10.4	1.0	11.5
2/1+2/2	682	682	-	-	-	4.3	1.0	-	5.3	28.1	10.2	1.0	11.3
3/1	526	526	-	-	-	4.4	0.9	-	5.3	36.4	14.3	0.9	15.3
4/1	596	596	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/1	774	774	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/1	248	248	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
7/2+7/1	850	850	-	-	-	0.0	0.4	-	0.4	1.6	0.0	0.4	0.4
8/1	774	774	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
9/1	576	576	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
10/1	393	393	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
11/1	101	101	-	-	-	0.0	0.0	-	0.0	1.2	0.0	0.0	0.0
12/1	324	324	324	0	0	0.1	0.2	-	0.3	3.1	1.5	0.2	1.7
13/1	80	80	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0

C1 PRC for Signalled Lanes (%): 32.9 Total Delay for Signalled Lanes (pcuHr): 15.57 Cycle Time (s): 120
PRC Over All Lanes (%): 32.9 Total Delay Over All Lanes(pcuHr): 16.26

Full Input Data And Results

Scenario 2: '2033 WITHOUT DEV PM' (FG2: '2033 WITHOUT DEV PM', Plan 1: 'Network Control Plan 1')

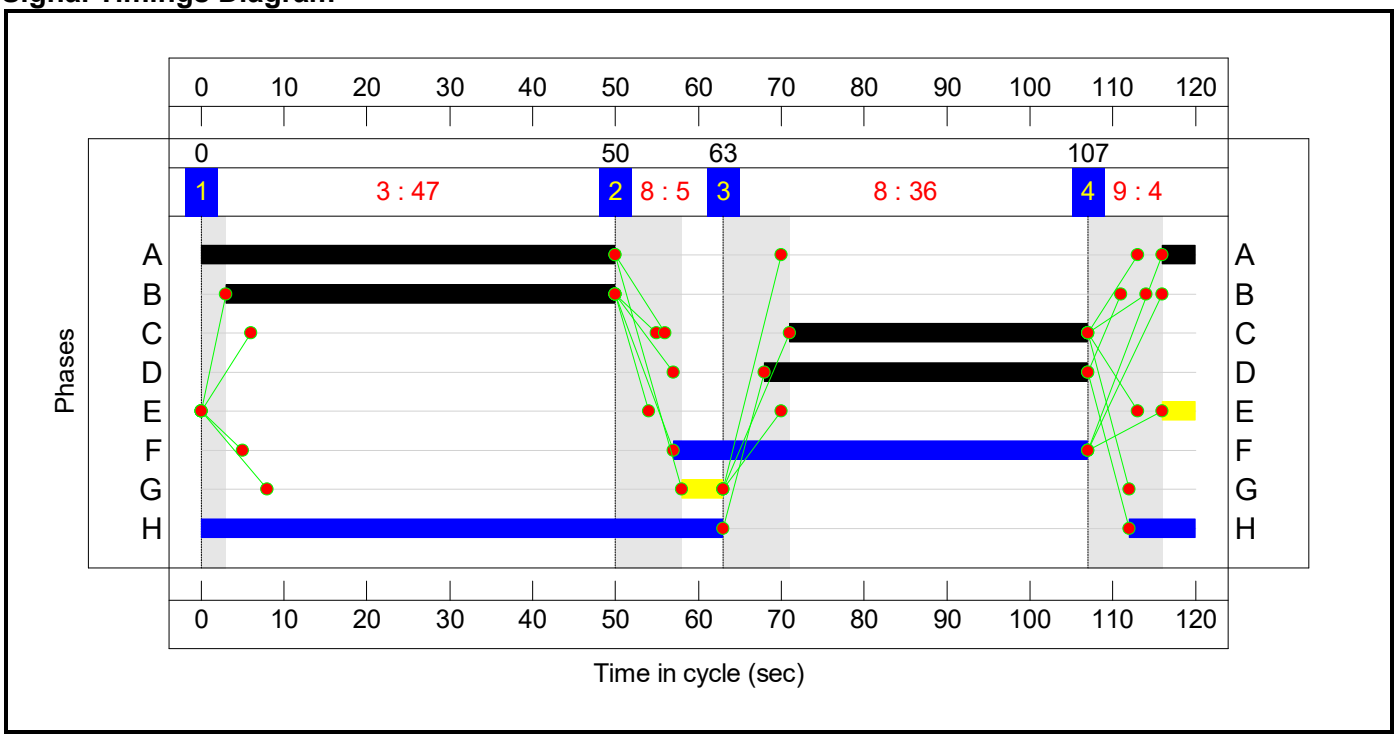
Stage Sequence Diagram



Stage Timings

Stage	1	2	3	4
Duration	47	5	36	4
Change Point	0	50	63	107

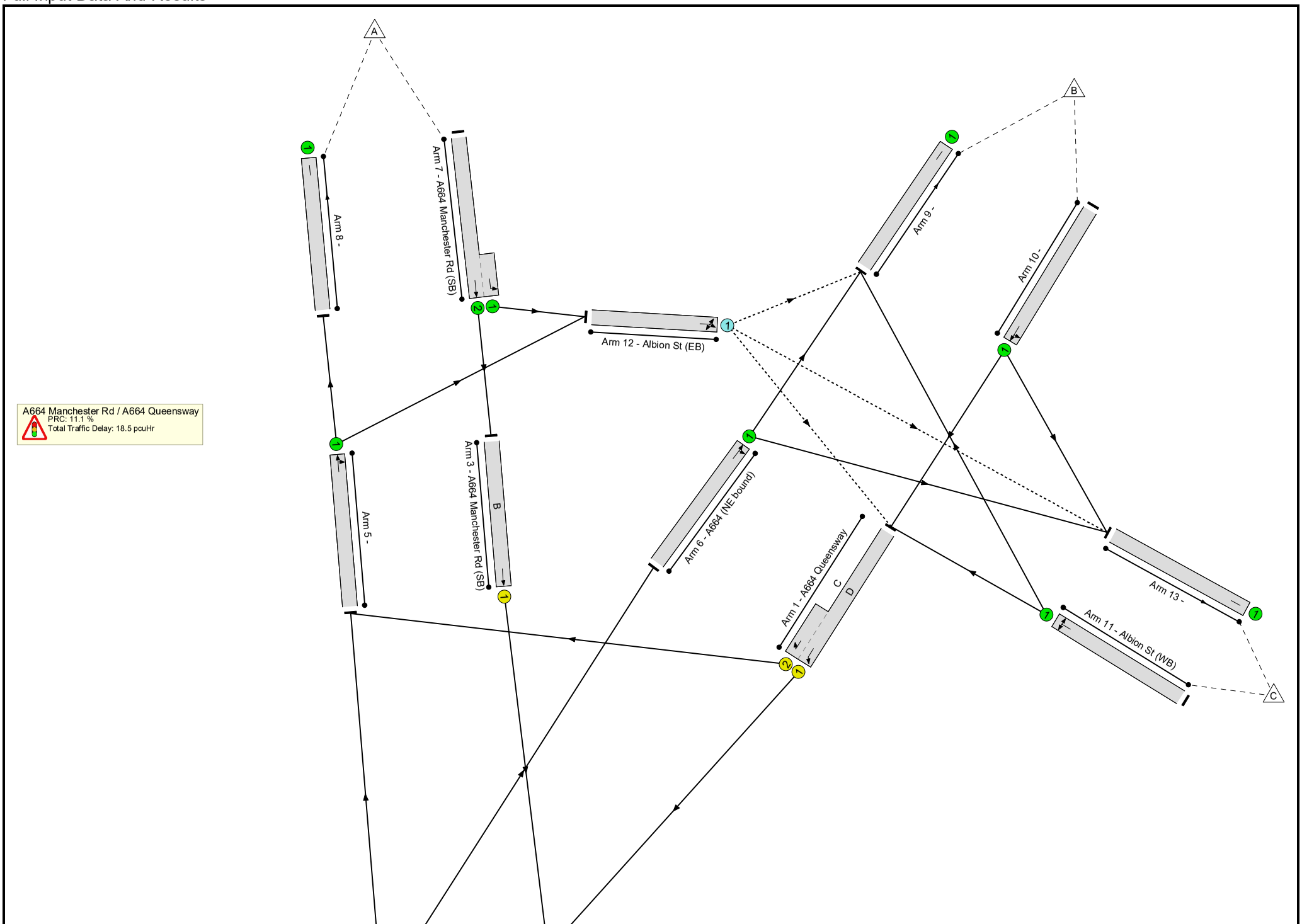
Signal Timings Diagram



Full Input Data And Results

Network Layout Diagram

Full Input Data And Results



Full Input Data And Results

Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network	-	-	**N/A**	-	-		-	-	-	-	-	-	**81.0%**
A664 Manchester Rd / A664 Queensway	-	-	**N/A**	-	-		-	-	-	-	-	-	**81.0%**
1/1+1/2	A664 Queensway Ahead U-Turn	U	N/A	N/A	D C		1	39:36	-	481	1929:1720	109+486	80.9 : 80.9%
2/1+2/2	A664 Manchester Rd (NB) Ahead Ahead2	U	N/A	N/A	A	E	1	54	4	807	1905:1633	685+311	81.0 : 81.0%
3/1	A664 Manchester Rd (SB) Ahead	U	N/A	N/A	B		1	47	-	403	2045	818	49.3%
4/1		U	N/A	N/A	-		-	-	-	491	Inf	Inf	0.0%
5/1	Ahead Right	U	N/A	N/A	-		-	-	-	948	Inf	Inf	0.0%
6/1	A664 (NE bound) Ahead Right	U	N/A	N/A	-		-	-	-	252	Inf	Inf	0.0%
7/2+7/1	A664 Manchester Rd (SB) Ahead Left	U	N/A	N/A	-		-	-	-	693	1985:2015	1162+836	34.7 : 34.7%
8/1		U	N/A	N/A	-		-	-	-	948	Inf	Inf	0.0%
9/1		U	N/A	N/A	-		-	-	-	519	Inf	Inf	0.0%
10/1	Ahead Left	U	N/A	N/A	-		-	-	-	442	Inf	Inf	0.0%
11/1	Albion St (WB) Left Right	U	N/A	N/A	-		-	-	-	138	1605	1605	8.6%
12/1	Albion St (EB) Right Left Ahead	O	N/A	N/A	-		-	-	-	290	1628	1054	27.5%
13/1		U	N/A	N/A	-		-	-	-	122	Inf	Inf	0.0%

Full Input Data And Results

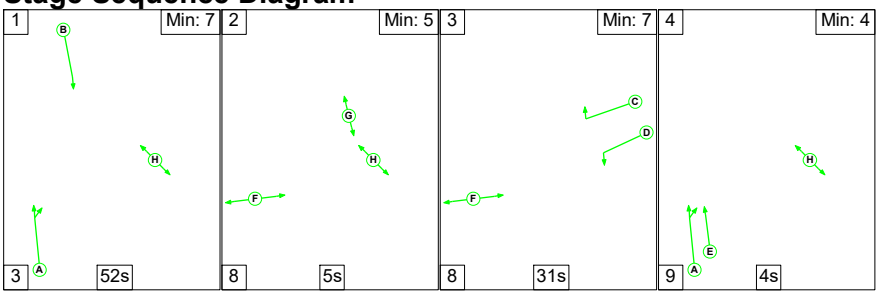
Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network	**-**	**-**	**290**	**0**	**0**	**13.4**	**5.1**	**0.0**	**18.5**	**-**	**-**	**-**	**-**
A664 Manchester Rd / A664 Queensway	**-**	**-**	**290**	**0**	**0**	**13.4**	**5.1**	**0.0**	**18.5**	**-**	**-**	**-**	**-**
1/1+1/2	481	481	-	-	-	4.9	2.0	-	6.9	52.0	13.3	2.0	15.3
2/1+2/2	807	807	-	-	-	5.4	2.1	-	7.5	33.6	16.7	2.1	18.8
3/1	403	403	-	-	-	3.0	0.5	-	3.5	31.2	10.0	0.5	10.4
4/1	491	491	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/1	948	948	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/1	252	252	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
7/2+7/1	693	693	-	-	-	0.0	0.3	-	0.3	1.4	0.0	0.3	0.3
8/1	948	948	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
9/1	519	519	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
10/1	442	442	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
11/1	138	138	-	-	-	0.0	0.0	-	0.0	1.2	0.0	0.0	0.0
12/1	290	290	290	0	0	0.1	0.2	-	0.3	3.1	1.3	0.2	1.5
13/1	122	122	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0

C1 PRC for Signalled Lanes (%): 11.1 Total Delay for Signalled Lanes (pcuHr): 17.97 Cycle Time (s): 120
PRC Over All Lanes (%): 11.1 Total Delay Over All Lanes(pcuHr): 18.54

Full Input Data And Results

Scenario 3: '2033 WITH DEV AM' (FG3: '2033 WITH DEV AM', Plan 1: 'Network Control Plan 1')

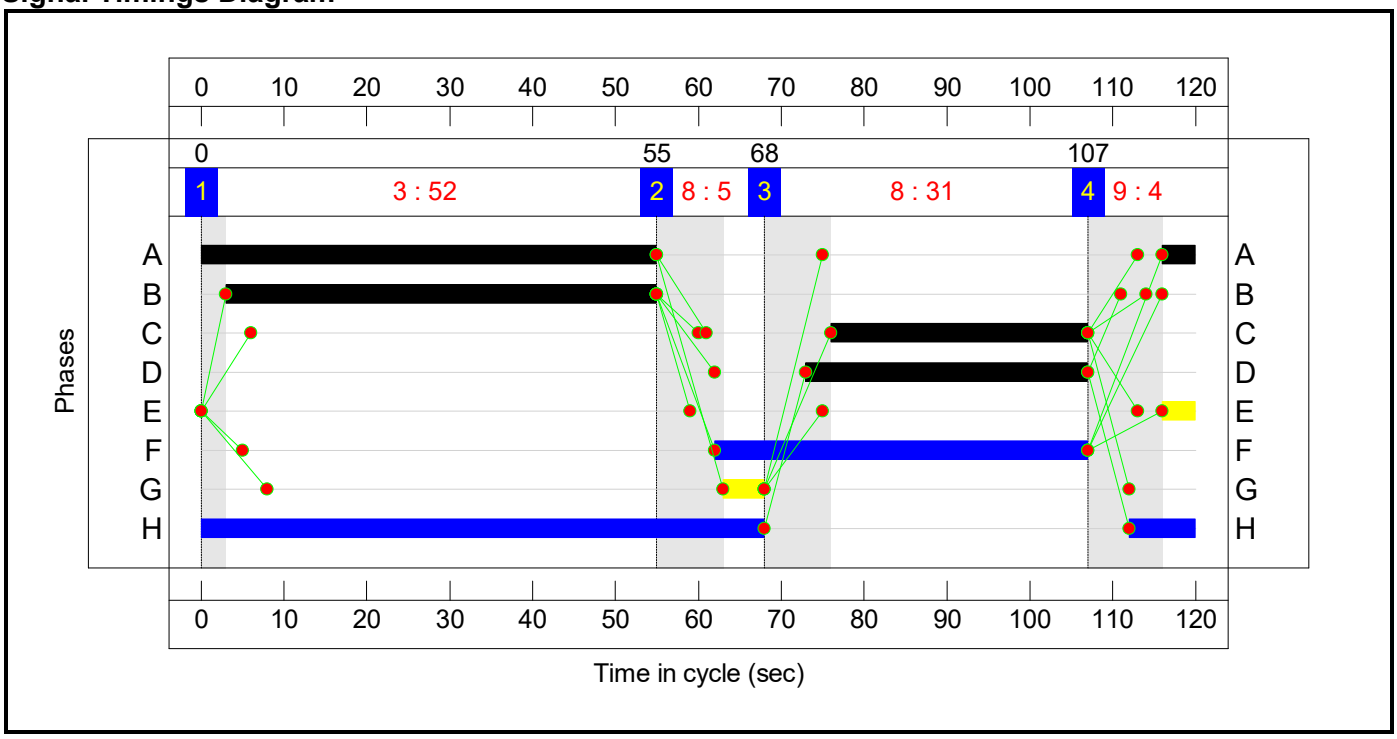
Stage Sequence Diagram



Stage Timings

Stage	1	2	3	4
Duration	52	5	31	4
Change Point	0	55	68	107

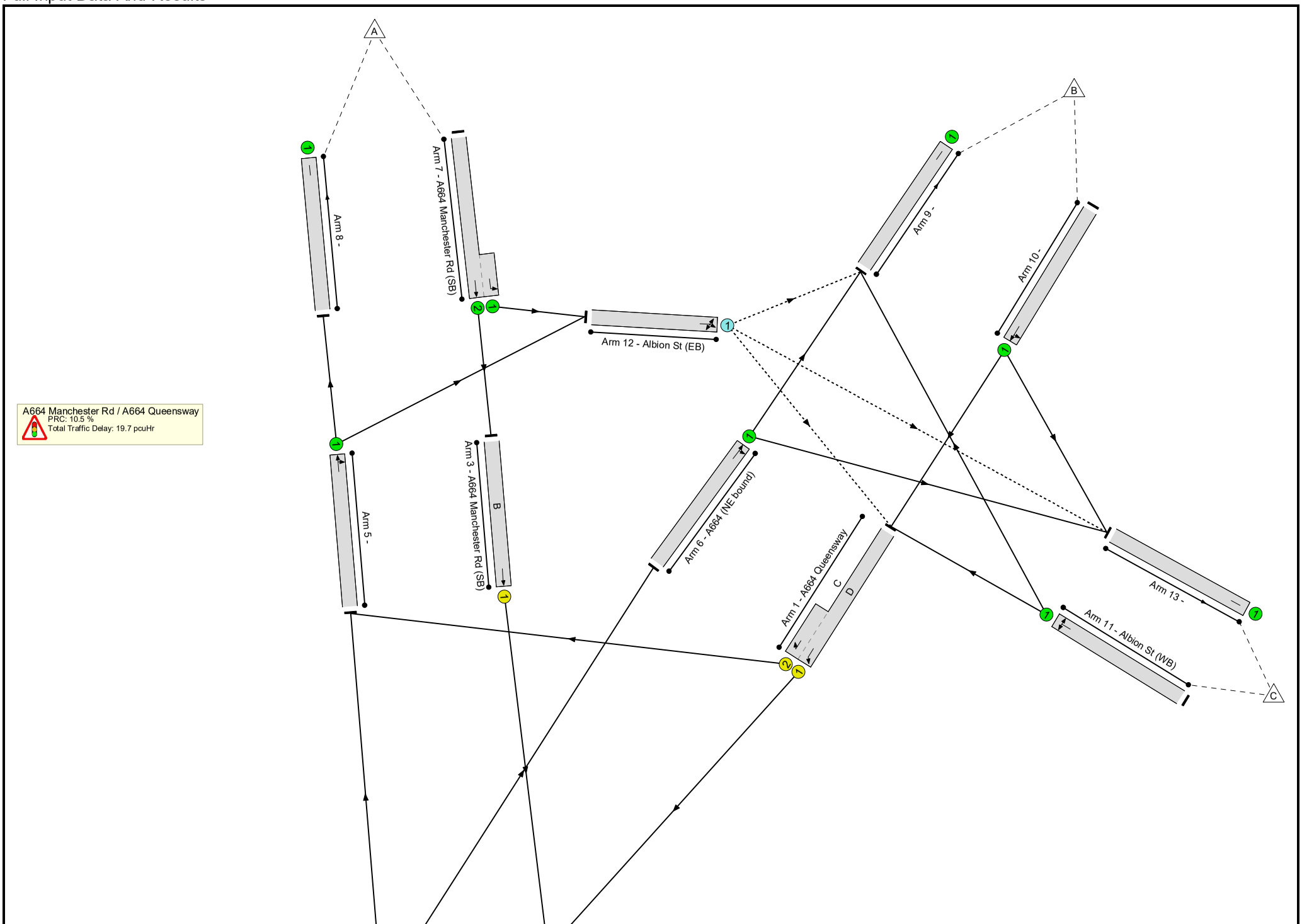
Signal Timings Diagram



Full Input Data And Results

Network Layout Diagram

Full Input Data And Results



Full Input Data And Results

Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network	-	-	**N/A**	-	-		-	-	-	-	-	-	**81.5%**
A664 Manchester Rd / A664 Queensway	-	-	**N/A**	-	-		-	-	-	-	-	-	**81.5%**
1/1+1/2	A664 Queensway Ahead U-Turn	U	N/A	N/A	D C		1	34:31	-	412	1929:1720	91+428	79.4 : 79.4%
2/1+2/2	A664 Manchester Rd (NB) Ahead Ahead2	U	N/A	N/A	A	E	1	59	4	915	1905:1633	690+433	81.5 : 81.5%
3/1	A664 Manchester Rd (SB) Ahead	U	N/A	N/A	B		1	52	-	573	2045	903	63.4%
4/1		U	N/A	N/A	-		-	-	-	645	Inf	Inf	0.0%
5/1	Ahead Right	U	N/A	N/A	-		-	-	-	902	Inf	Inf	0.0%
6/1	A664 (NE bound) Ahead Right	U	N/A	N/A	-		-	-	-	353	Inf	Inf	0.0%
7/2+7/1	A664 Manchester Rd (SB) Ahead Left	U	N/A	N/A	-		-	-	-	897	1985:2015	1275+721	44.9 : 44.9%
8/1		U	N/A	N/A	-		-	-	-	902	Inf	Inf	0.0%
9/1		U	N/A	N/A	-		-	-	-	681	Inf	Inf	0.0%
10/1	Ahead Left	U	N/A	N/A	-		-	-	-	395	Inf	Inf	0.0%
11/1	Albion St (WB) Left Right	U	N/A	N/A	-		-	-	-	101	1616	1616	6.3%
12/1	Albion St (EB) Right Left Ahead	O	N/A	N/A	-		-	-	-	324	1586	1033	31.4%
13/1		U	N/A	N/A	-		-	-	-	80	Inf	Inf	0.0%

Full Input Data And Results

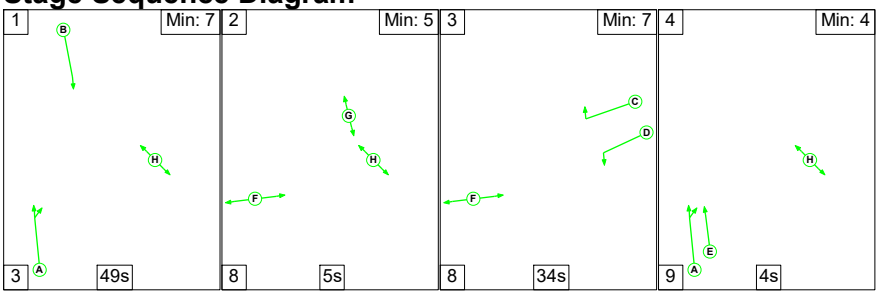
Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network	**-**	**-**	**324**	**0**	**0**	**14.1**	**5.5**	**0.0**	**19.7**	**-**	**-**	**-**	**-**
A664 Manchester Rd / A664 Queensway	**-**	**-**	**324**	**0**	**0**	**14.1**	**5.5**	**0.0**	**19.7**	**-**	**-**	**-**	**-**
1/1+1/2	412	412	-	-	-	4.5	1.9	-	6.4	55.8	11.4	1.9	13.2
2/1+2/2	915	915	-	-	-	5.3	2.2	-	7.5	29.4	16.4	2.2	18.6
3/1	573	573	-	-	-	4.1	0.9	-	5.0	31.4	14.8	0.9	15.7
4/1	645	645	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/1	902	902	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/1	353	353	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
7/2+7/1	897	897	-	-	-	0.0	0.4	-	0.4	1.6	0.0	0.4	0.4
8/1	902	902	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
9/1	681	681	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
10/1	395	395	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
11/1	101	101	-	-	-	0.0	0.0	-	0.0	1.2	0.0	0.0	0.0
12/1	324	324	324	0	0	0.1	0.2	-	0.4	4.0	1.9	0.2	2.1
13/1	80	80	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0

C1 PRC for Signalled Lanes (%): 10.5 Total Delay for Signalled Lanes (pcuHr): 18.85 Cycle Time (s): 120
PRC Over All Lanes (%): 10.5 Total Delay Over All Lanes(pcuHr): 19.66

Full Input Data And Results

Scenario 4: '2033 WITH DEV PM' (FG4: '2033 WITH DEV PM', Plan 1: 'Network Control Plan 1')

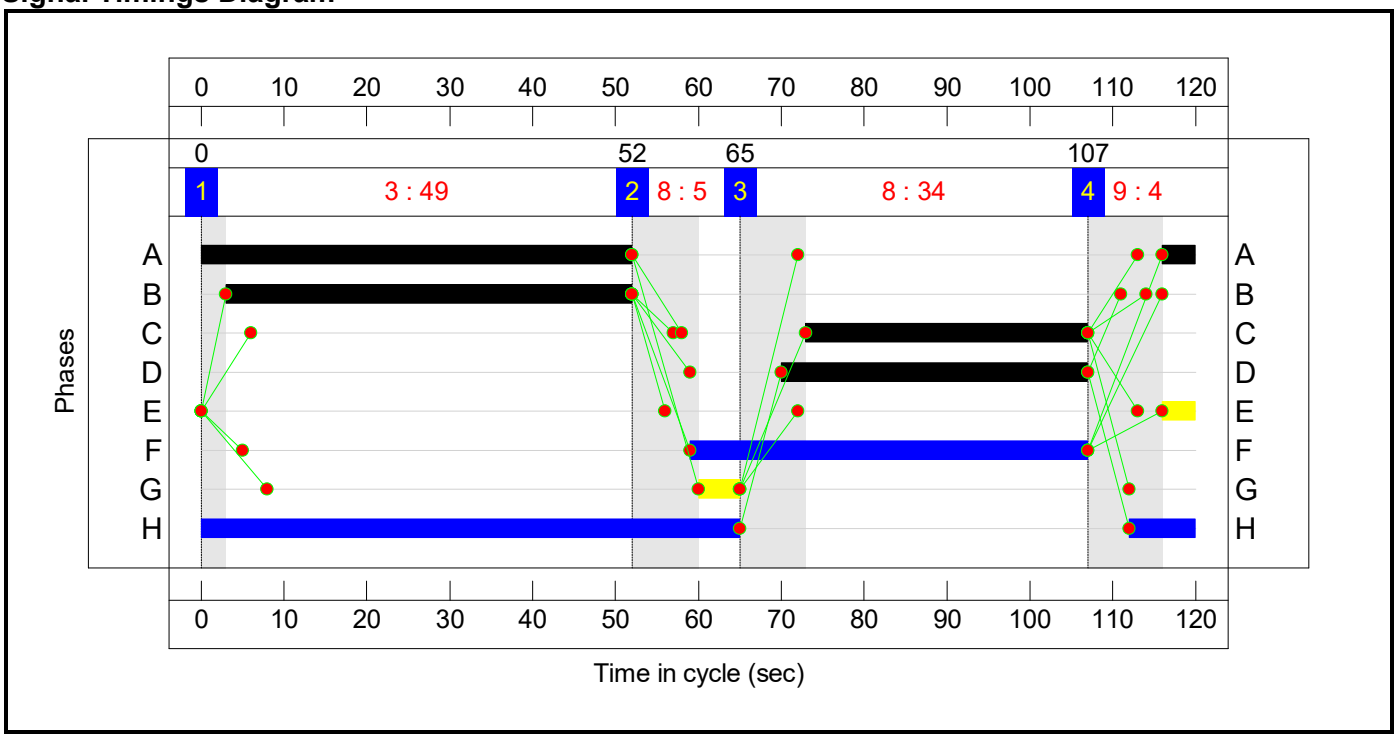
Stage Sequence Diagram



Stage Timings

Stage	1	2	3	4
Duration	49	5	34	4
Change Point	0	52	65	107

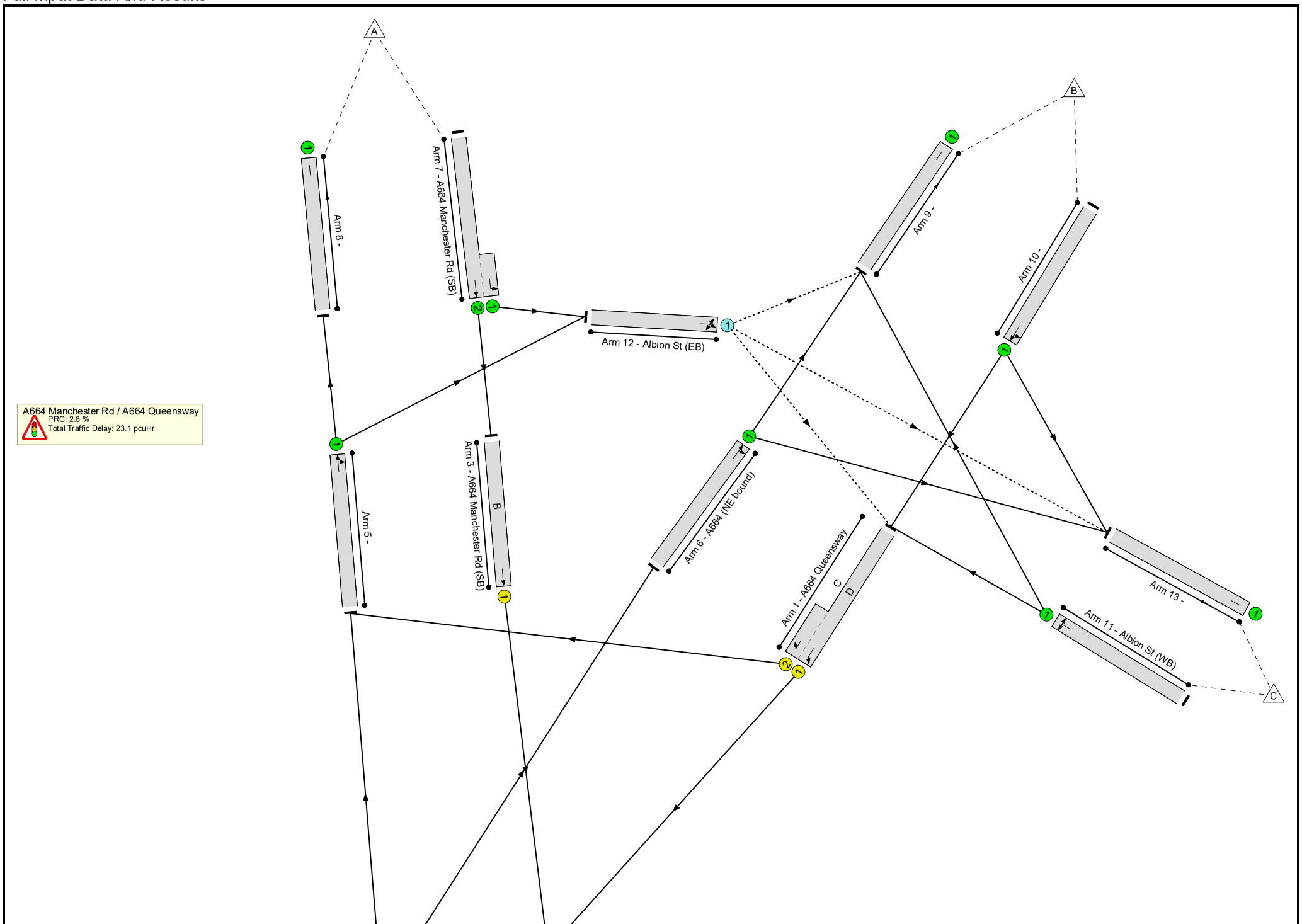
Signal Timings Diagram



Full Input Data And Results

Network Layout Diagram

Full Input Data And Results



Full Input Data And Results

Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network	-	-	**N/A**	-	-		-	-	-	-	-	-	**87.5%**
A664 Manchester Rd / A664 Queensway	-	-	**N/A**	-	-		-	-	-	-	-	-	**87.5%**
1/1+1/2	A664 Queensway Ahead U-Turn	U	N/A	N/A	D C		1	37:34	-	493	1929:1720	116+455	86.3 : 86.3%
2/1+2/2	A664 Manchester Rd (NB) Ahead Ahead2	U	N/A	N/A	A	E	1	56	4	907	1905:1633	697+339	87.5 : 87.5%
3/1	A664 Manchester Rd (SB) Ahead	U	N/A	N/A	B		1	49	-	520	2045	852	61.0%
4/1		U	N/A	N/A	-		-	-	-	620	Inf	Inf	0.0%
5/1	Ahead Right	U	N/A	N/A	-		-	-	-	1003	Inf	Inf	0.0%
6/1	A664 (NE bound) Ahead Right	U	N/A	N/A	-		-	-	-	297	Inf	Inf	0.0%
7/2+7/1	A664 Manchester Rd (SB) Ahead Left	U	N/A	N/A	-		-	-	-	810	1985:2015	1281+714	40.6 : 40.6%
8/1		U	N/A	N/A	-		-	-	-	1003	Inf	Inf	0.0%
9/1		U	N/A	N/A	-		-	-	-	564	Inf	Inf	0.0%
10/1	Ahead Left	U	N/A	N/A	-		-	-	-	454	Inf	Inf	0.0%
11/1	Albion St (WB) Left Right	U	N/A	N/A	-		-	-	-	138	1605	1605	8.6%
12/1	Albion St (EB) Right Left Ahead	O	N/A	N/A	-		-	-	-	290	1628	999	29.0%
13/1		U	N/A	N/A	-		-	-	-	122	Inf	Inf	0.0%

Full Input Data And Results

Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network	**-**	**-**	**290**	**0**	**0**	**15.4**	**7.6**	**0.0**	**23.1**	**-**	**-**	**-**	**-**
A664 Manchester Rd / A664 Queensway	**-**	**-**	**290**	**0**	**0**	**15.4**	**7.6**	**0.0**	**23.1**	**-**	**-**	**-**	**-**
1/1+1/2	493	493	-	-	-	5.3	2.9	-	8.2	59.9	13.9	2.9	16.8
2/1+2/2	907	907	-	-	-	6.1	3.3	-	9.5	37.6	20.3	3.3	23.6
3/1	520	520	-	-	-	4.0	0.8	-	4.7	32.8	13.4	0.8	14.2
4/1	620	620	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/1	1003	1003	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/1	297	297	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
7/2+7/1	810	810	-	-	-	0.0	0.3	-	0.3	1.5	0.0	0.3	0.3
8/1	1003	1003	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
9/1	564	564	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
10/1	454	454	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
11/1	138	138	-	-	-	0.0	0.0	-	0.0	1.2	0.0	0.0	0.0
12/1	290	290	290	0	0	0.1	0.2	-	0.3	3.4	1.4	0.2	1.6
13/1	122	122	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0

C1 PRC for Signalled Lanes (%): 2.8 Total Delay for Signalled Lanes (pcuHr): 22.42 Cycle Time (s): 120
PRC Over All Lanes (%): 2.8 Total Delay Over All Lanes(pcuHr): 23.09

S|C|P

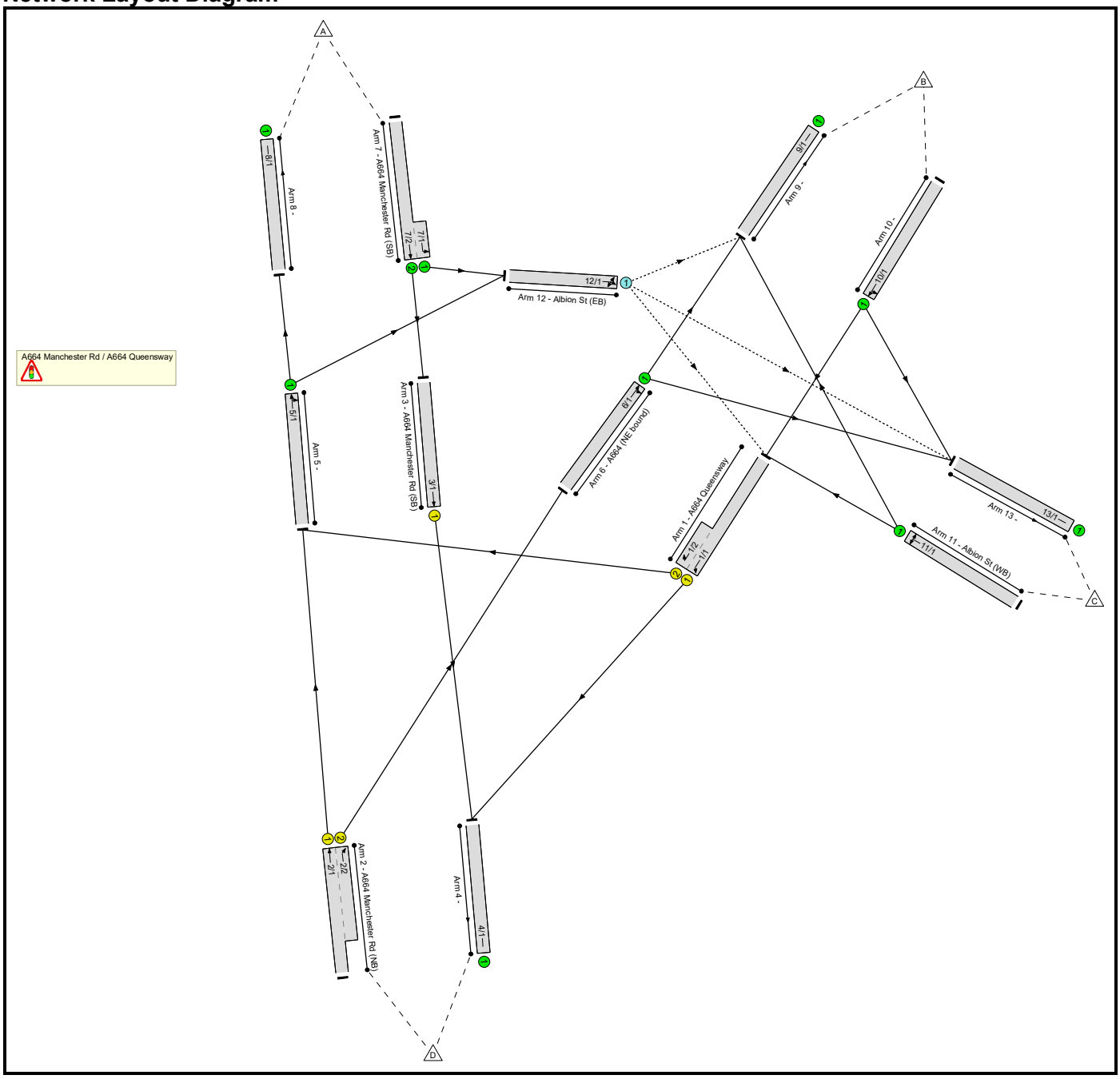
APPENDIX R

Full Input Data And Results

User and Project Details

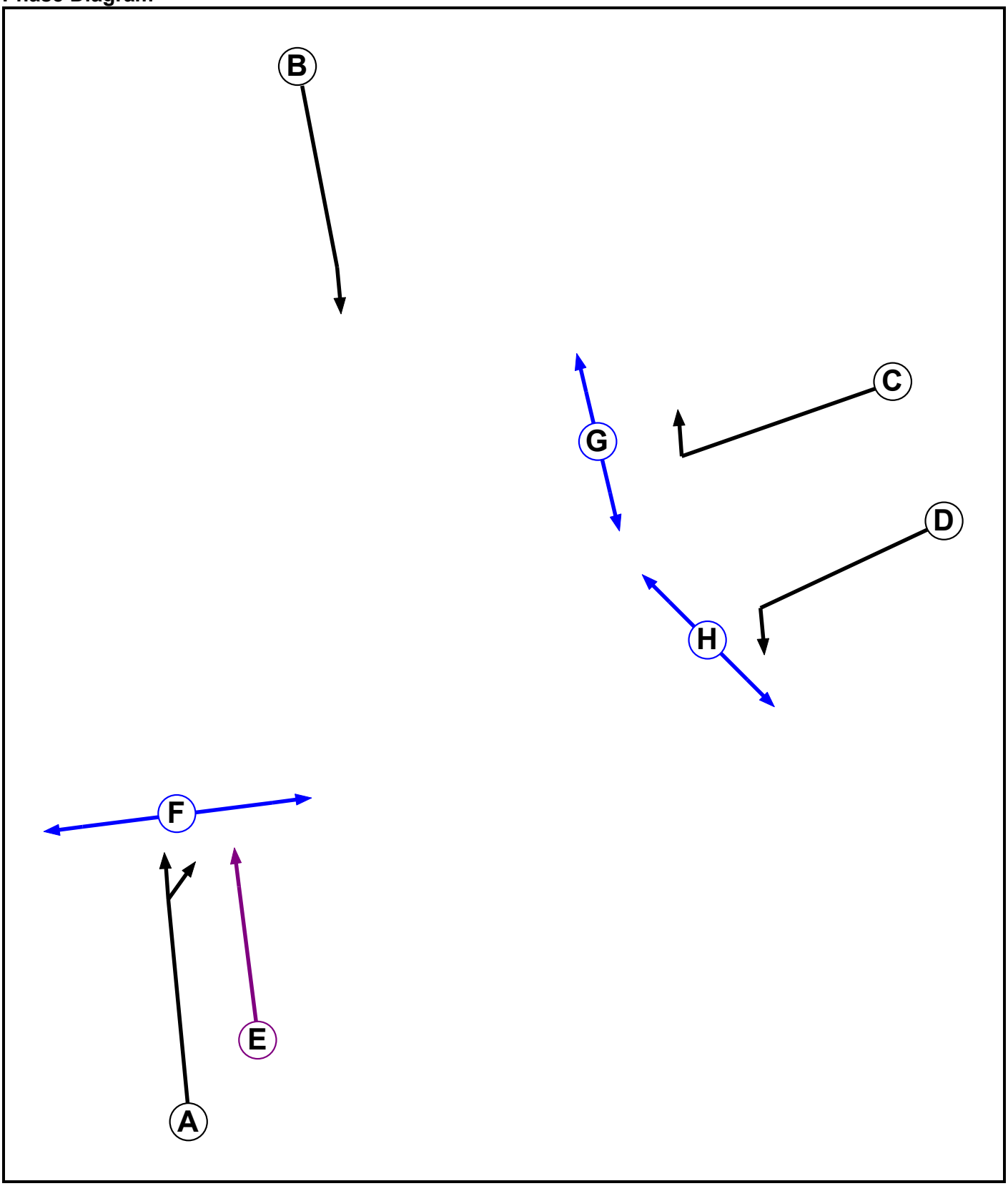
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Author:	
Company:	
Address:	

Network Layout Diagram



Full Input Data And Results

Phase Diagram



Full Input Data And Results

Phase Input Data

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

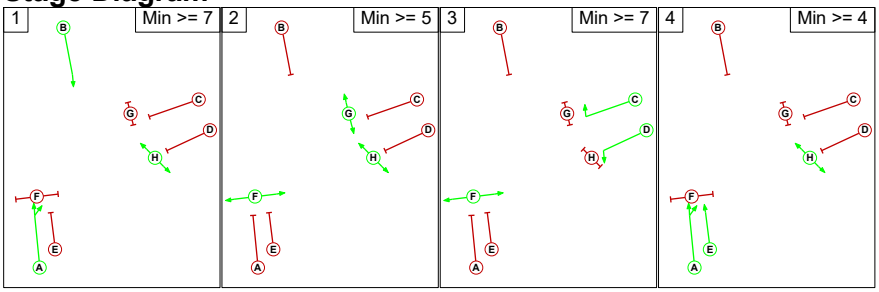
Phase Intergreens Matrix

		Starting Phase							
		A	B	C	D	E	F	G	H
Terminating Phase	A		-	6	-	-	-	8	-
	B	-		5	7	4	7	-	-
	C	6	7		-	6	-	5	-
	D	-	4	-		-	-	-	5
	E	-	3	6	-		5	8	-
	F	9	9	-	-	9		-	-
	G	7	-	8	-	7	-		-
	H	-	-	-	5	-	-	-	

Phases in Stage

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

Stage Diagram



Phase Delays

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

Full Input Data And Results

Prohibited Stage Change

From Stage	To Stage				
		1	2	3	4
	1		8	7	4
	2	9		8	9
	3	9	5		9
	4	3	8	6	

Full Input Data And Results

Give-Way Lane Input Data

Junction: A664 Manchester Rd / A664 Queensway

Lane	Movement	Max Flow when Giving Way (PCU/Hr)	Min Flow when Giving Way (PCU/Hr)	Opposing Lane	Opp. Lane Coeff.	Opp. Mvmnts.	Right Turn Storage (PCU)	Non-Blocking Storage (PCU)	RTF	Right Turn Move up (s)	Max Turns in Intergreen (PCU)
12/1 (Albion St (EB))	1/1 (Right)	1439	0	10/1	1.09	To 1/1 (Ahead)	-	-	-	-	-
				11/1	1.09	To 1/1 (Left)					
	9/1 (Left)	1439	0	6/1	1.09	To 9/1 (Ahead)					
	13/1 (Ahead)	1439	0	6/1	1.09	All					
				10/1	1.09	All					

Full Input Data And Results

Lane Input Data

Junction: A664 Manchester Rd / A664 Queensway												
Lane	**Lane Type**	**Phases**	**Start Disp.**	**End Disp.**	**Physical Length (PCU)**	**Sat Flow Type**	**Def User Saturation Flow (PCU/Hr)**	**Lane Width (m)**	**Gradient**	**Nearside Lane**	**Turns**	**Turning Radius (m)**
1/1 (A664 Queensway)	U	D	2	3	5.7	Geom	-	4.40	0.00	Y	Arm 4 Ahead	23.00
1/2 (A664 Queensway)	U	C	2	3	5.7	Geom	-	3.20	0.00	Y	Arm 5 U-Turn	12.00
2/1 (A664 Manchester Rd (NB))	U	A	2	3	60.0	Geom	-	2.90	0.00	Y	Arm 5 Ahead	Inf
2/2 (A664 Manchester Rd (NB))	U	A E	2	3	11.1	Geom	-	2.90	0.00	Y	Arm 6 Ahead	9.00
3/1 (A664 Manchester Rd (SB))	U	B	2	3	13.6	Geom	-	4.30	0.00	Y	Arm 4 Ahead	Inf
4/1	U		2	3	60.0	Inf	-	-	-	-	-	-
5/1	U		2	3	60.0	Inf	-	-	-	-	-	-
6/1 (A664 (NE bound))	U		2	3	7.3	Inf	-	-	-	-	-	-
7/1 (A664 Manchester Rd (SB))	U		2	3	4.3	Geom	-	4.00	0.00	Y	Arm 12 Left	Inf
7/2 (A664 Manchester Rd (SB))	U		2	3	60.0	Geom	-	3.70	0.00	Y	Arm 3 Ahead	Inf
8/1	U		2	3	60.0	Inf	-	-	-	-	-	-
9/1	U		2	3	60.0	Inf	-	-	-	-	-	-
10/1	U		2	3	60.0	Inf	-	-	-	-	-	-
11/1 (Albion St (WB))	U		2	3	60.0	Geom	-	3.40	0.00	Y	Arm 1 Left	6.00
											Arm 9 Right	10.00
12/1 (Albion St (EB))	O		2	3	8.7	Geom	-	4.00	0.00	Y	Arm 1 Right	12.00
											Arm 9 Left	5.00
											Arm 13 Ahead	Inf
13/1	U		2	3	60.0	Inf	-	-	-	-	-	-

Full Input Data And Results

Traffic Flow Groups

Flow Group	Start Time	End Time	Duration	Formula
1: '2033 WITHOUT DEV AM'	07:45	08:45	01:00	
2: '2033 WITHOUT DEV PM'	16:30	17:30	01:00	
3: '2033 WITH DEV AM'	07:45	08:45	01:00	
4: '2033 WITH DEV PM'	16:30	17:30	01:00	

Scenario 1: '2033 WITHOUT DEV AM' (FG1: '2033 WITHOUT DEV AM', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired

Desired Flow :

		Destination				
		A	B	C	D	Tot.
Origin	A	0	292	32	526	850
	B	315	0	43	35	393
	C	25	41	0	35	101
	D	434	243	5	0	682
	Tot.	774	576	80	596	2026

Traffic Lane Flows

Lane	Scenario 1: 2033 WITHOUT DEV AM
Junction: A664 Manchester Rd / A664 Queensway	
1/1 (with short)	410(In) 70(Out)
1/2 (short)	340
2/1 (with short)	682(In) 434(Out)
2/2 (short)	248
3/1	526
4/1	596
5/1	774
6/1	248
7/1 (short)	324
7/2 (with short)	850(In) 526(Out)
8/1	774
9/1	576
10/1	393
11/1	101
12/1	324
13/1	80

Full Input Data And Results

Lane Saturation Flows

Junction: A664 Manchester Rd / A664 Queensway								
Lane	**Lane Width (m)**	**Gradient**	**Nearside Lane**	**Allowed Turns**	**Turning Radius (m)**	**Turning Prop.**	**Sat Flow (PCU/Hr)**	**Flared Sat Flow (PCU/Hr)**
1/1 (A664 Queensway)	4.40	0.00	Y	Arm 4 Ahead	23.00	100.0 %	1929	1929
1/2 (A664 Queensway)	3.20	0.00	Y	Arm 5 U-Turn	12.00	100.0 %	1720	1720
2/1 (A664 Manchester Rd (NB))	2.90	0.00	Y	Arm 5 Ahead	Inf	100.0 %	1905	1905
2/2 (A664 Manchester Rd (NB))	2.90	0.00	Y	Arm 6 Ahead	9.00	100.0 %	1633	1633
3/1 (A664 Manchester Rd (SB))	4.30	0.00	Y	Arm 4 Ahead	Inf	100.0 %	2045	2045
4/1	Infinite Saturation Flow						Inf	Inf
5/1	Infinite Saturation Flow						Inf	Inf
6/1 (A664 (NE bound) Lane 1)	Infinite Saturation Flow						Inf	Inf
7/1 (A664 Manchester Rd (SB))	4.00	0.00	Y	Arm 12 Left	Inf	100.0 %	2015	2015
7/2 (A664 Manchester Rd (SB))	3.70	0.00	Y	Arm 3 Ahead	Inf	100.0 %	1985	1985
8/1	Infinite Saturation Flow						Inf	Inf
9/1	Infinite Saturation Flow						Inf	Inf
10/1	Infinite Saturation Flow						Inf	Inf
11/1 (Albion St (WB))	3.40	0.00	Y	Arm 1 Left	6.00	59.4 %	1616	1616
				Arm 9 Right	10.00	40.6 %		
12/1 (Albion St (EB))	4.00	0.00	Y	Arm 1 Right	12.00	0.0 %	1586	1586
				Arm 9 Left	5.00	90.1 %		
				Arm 13 Ahead	Inf	9.9 %		
13/1	Infinite Saturation Flow						Inf	Inf

Scenario 2: '2033 WITHOUT DEV PM' (FG2: '2033 WITHOUT DEV PM', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired

Desired Flow :

		Destination				
		A	B	C	D	Tot.
Origin	A	0	230	60	403	693
	B	343	0	55	44	442
	C	50	44	0	44	138
	D	555	245	7	0	807
	Tot.	948	519	122	491	2080

Full Input Data And Results

Traffic Lane Flows

Lane	Scenario 2: 2033 WITHOUT DEV PM
Junction: A664 Manchester Rd / A664 Queensway	
1/1 (with short)	481(In) 88(Out)
1/2 (short)	393
2/1 (with short)	807(In) 555(Out)
2/2 (short)	252
3/1	403
4/1	491
5/1	948
6/1	252
7/1 (short)	290
7/2 (with short)	693(In) 403(Out)
8/1	948
9/1	519
10/1	442
11/1	138
12/1	290
13/1	122

Full Input Data And Results

Lane Saturation Flows

Junction: A664 Manchester Rd / A664 Queensway								
Lane	**Lane Width (m)**	**Gradient**	**Nearside Lane**	**Allowed Turns**	**Turning Radius (m)**	**Turning Prop.**	**Sat Flow (PCU/Hr)**	**Flared Sat Flow (PCU/Hr)**
1/1 (A664 Queensway)	4.40	0.00	Y	Arm 4 Ahead	23.00	100.0 %	1929	1929
1/2 (A664 Queensway)	3.20	0.00	Y	Arm 5 U-Turn	12.00	100.0 %	1720	1720
2/1 (A664 Manchester Rd (NB))	2.90	0.00	Y	Arm 5 Ahead	Inf	100.0 %	1905	1905
2/2 (A664 Manchester Rd (NB))	2.90	0.00	Y	Arm 6 Ahead	9.00	100.0 %	1633	1633
3/1 (A664 Manchester Rd (SB))	4.30	0.00	Y	Arm 4 Ahead	Inf	100.0 %	2045	2045
4/1	Infinite Saturation Flow						Inf	Inf
5/1	Infinite Saturation Flow						Inf	Inf
6/1 (A664 (NE bound) Lane 1)	Infinite Saturation Flow						Inf	Inf
7/1 (A664 Manchester Rd (SB))	4.00	0.00	Y	Arm 12 Left	Inf	100.0 %	2015	2015
7/2 (A664 Manchester Rd (SB))	3.70	0.00	Y	Arm 3 Ahead	Inf	100.0 %	1985	1985
8/1	Infinite Saturation Flow						Inf	Inf
9/1	Infinite Saturation Flow						Inf	Inf
10/1	Infinite Saturation Flow						Inf	Inf
11/1 (Albion St (WB))	3.40	0.00	Y	Arm 1 Left	6.00	68.1 %	1605	1605
				Arm 9 Right	10.00	31.9 %		
12/1 (Albion St (EB))	4.00	0.00	Y	Arm 1 Right	12.00	0.0 %	1628	1628
				Arm 9 Left	5.00	79.3 %		
				Arm 13 Ahead	Inf	20.7 %		
13/1	Infinite Saturation Flow						Inf	Inf

Scenario 3: '2033 WITH DEV AM' (FG3: '2033 WITH DEV AM', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired

Desired Flow :

		Destination				
		A	B	C	D	Tot.
Origin	A	0	292	32	573	897
	B	316	0	43	36	395
	C	24	41	0	36	101
	D	562	348	5	0	915
	Tot.	902	681	80	645	2308

Full Input Data And Results

Traffic Lane Flows

Lane	Scenario 3: 2033 WITH DEV AM
Junction: A664 Manchester Rd / A664 Queensway	
1/1 (with short)	412(In) 72(Out)
1/2 (short)	340
2/1 (with short)	915(In) 562(Out)
2/2 (short)	353
3/1	573
4/1	645
5/1	902
6/1	353
7/1 (short)	324
7/2 (with short)	897(In) 573(Out)
8/1	902
9/1	681
10/1	395
11/1	101
12/1	324
13/1	80

Full Input Data And Results

Lane Saturation Flows

Junction: A664 Manchester Rd / A664 Queensway								
Lane	**Lane Width (m)**	**Gradient**	**Nearside Lane**	**Allowed Turns**	**Turning Radius (m)**	**Turning Prop.**	**Sat Flow (PCU/Hr)**	**Flared Sat Flow (PCU/Hr)**
1/1 (A664 Queensway)	4.40	0.00	Y	Arm 4 Ahead	23.00	100.0 %	1929	1929
1/2 (A664 Queensway)	3.20	0.00	Y	Arm 5 U-Turn	12.00	100.0 %	1720	1720
2/1 (A664 Manchester Rd (NB))	2.90	0.00	Y	Arm 5 Ahead	Inf	100.0 %	1905	1905
2/2 (A664 Manchester Rd (NB))	2.90	0.00	Y	Arm 6 Ahead	9.00	100.0 %	1633	1633
3/1 (A664 Manchester Rd (SB))	4.30	0.00	Y	Arm 4 Ahead	Inf	100.0 %	2045	2045
4/1	Infinite Saturation Flow						Inf	Inf
5/1	Infinite Saturation Flow						Inf	Inf
6/1 (A664 (NE bound) Lane 1)	Infinite Saturation Flow						Inf	Inf
7/1 (A664 Manchester Rd (SB))	4.00	0.00	Y	Arm 12 Left	Inf	100.0 %	2015	2015
7/2 (A664 Manchester Rd (SB))	3.70	0.00	Y	Arm 3 Ahead	Inf	100.0 %	1985	1985
8/1	Infinite Saturation Flow						Inf	Inf
9/1	Infinite Saturation Flow						Inf	Inf
10/1	Infinite Saturation Flow						Inf	Inf
11/1 (Albion St (WB))	3.40	0.00	Y	Arm 1 Left	6.00	59.4 %	1616	1616
				Arm 9 Right	10.00	40.6 %		
12/1 (Albion St (EB))	4.00	0.00	Y	Arm 1 Right	12.00	0.0 %	1586	1586
				Arm 9 Left	5.00	90.1 %		
				Arm 13 Ahead	Inf	9.9 %		
13/1	Infinite Saturation Flow						Inf	Inf

Scenario 4: '2033 WITH DEV PM' (FG4: '2033 WITH DEV PM', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired

Desired Flow :

		Destination				
		A	B	C	D	Tot.
Origin	A	0	230	60	520	810
	B	349	0	55	50	454
	C	44	44	0	50	138
	D	610	290	7	0	907
	Tot.	1003	564	122	620	2309

Full Input Data And Results

Traffic Lane Flows

Lane	Scenario 4: 2033 WITH DEV PM
Junction: A664 Manchester Rd / A664 Queensway	
1/1 (with short)	493(In) 100(Out)
1/2 (short)	393
2/1 (with short)	907(In) 610(Out)
2/2 (short)	297
3/1	520
4/1	620
5/1	1003
6/1	297
7/1 (short)	290
7/2 (with short)	810(In) 520(Out)
8/1	1003
9/1	564
10/1	454
11/1	138
12/1	290
13/1	122

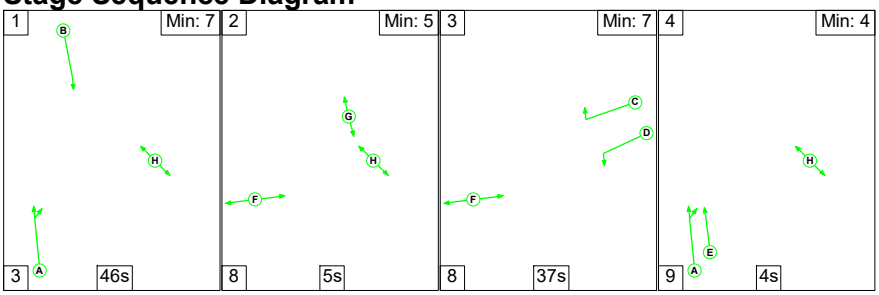
Full Input Data And Results

Lane Saturation Flows

Junction: A664 Manchester Rd / A664 Queensway								
Lane	**Lane Width (m)**	**Gradient**	**Nearside Lane**	**Allowed Turns**	**Turning Radius (m)**	**Turning Prop.**	**Sat Flow (PCU/Hr)**	**Flared Sat Flow (PCU/Hr)**
1/1 (A664 Queensway)	4.40	0.00	Y	Arm 4 Ahead	23.00	100.0 %	1929	1929
1/2 (A664 Queensway)	3.20	0.00	Y	Arm 5 U-Turn	12.00	100.0 %	1720	1720
2/1 (A664 Manchester Rd (NB))	2.90	0.00	Y	Arm 5 Ahead	Inf	100.0 %	1905	1905
2/2 (A664 Manchester Rd (NB))	2.90	0.00	Y	Arm 6 Ahead	9.00	100.0 %	1633	1633
3/1 (A664 Manchester Rd (SB))	4.30	0.00	Y	Arm 4 Ahead	Inf	100.0 %	2045	2045
4/1	Infinite Saturation Flow						Inf	Inf
5/1	Infinite Saturation Flow						Inf	Inf
6/1 (A664 (NE bound) Lane 1)	Infinite Saturation Flow						Inf	Inf
7/1 (A664 Manchester Rd (SB))	4.00	0.00	Y	Arm 12 Left	Inf	100.0 %	2015	2015
7/2 (A664 Manchester Rd (SB))	3.70	0.00	Y	Arm 3 Ahead	Inf	100.0 %	1985	1985
8/1	Infinite Saturation Flow						Inf	Inf
9/1	Infinite Saturation Flow						Inf	Inf
10/1	Infinite Saturation Flow						Inf	Inf
11/1 (Albion St (WB))	3.40	0.00	Y	Arm 1 Left	6.00	68.1 %	1605	1605
				Arm 9 Right	10.00	31.9 %		
12/1 (Albion St (EB))	4.00	0.00	Y	Arm 1 Right	12.00	0.0 %	1628	1628
				Arm 9 Left	5.00	79.3 %		
				Arm 13 Ahead	Inf	20.7 %		
13/1	Infinite Saturation Flow						Inf	Inf

Scenario 1: '2033 WITHOUT DEV AM' (FG1: '2033 WITHOUT DEV AM', Plan 1: 'Network Control Plan 1')

Stage Sequence Diagram

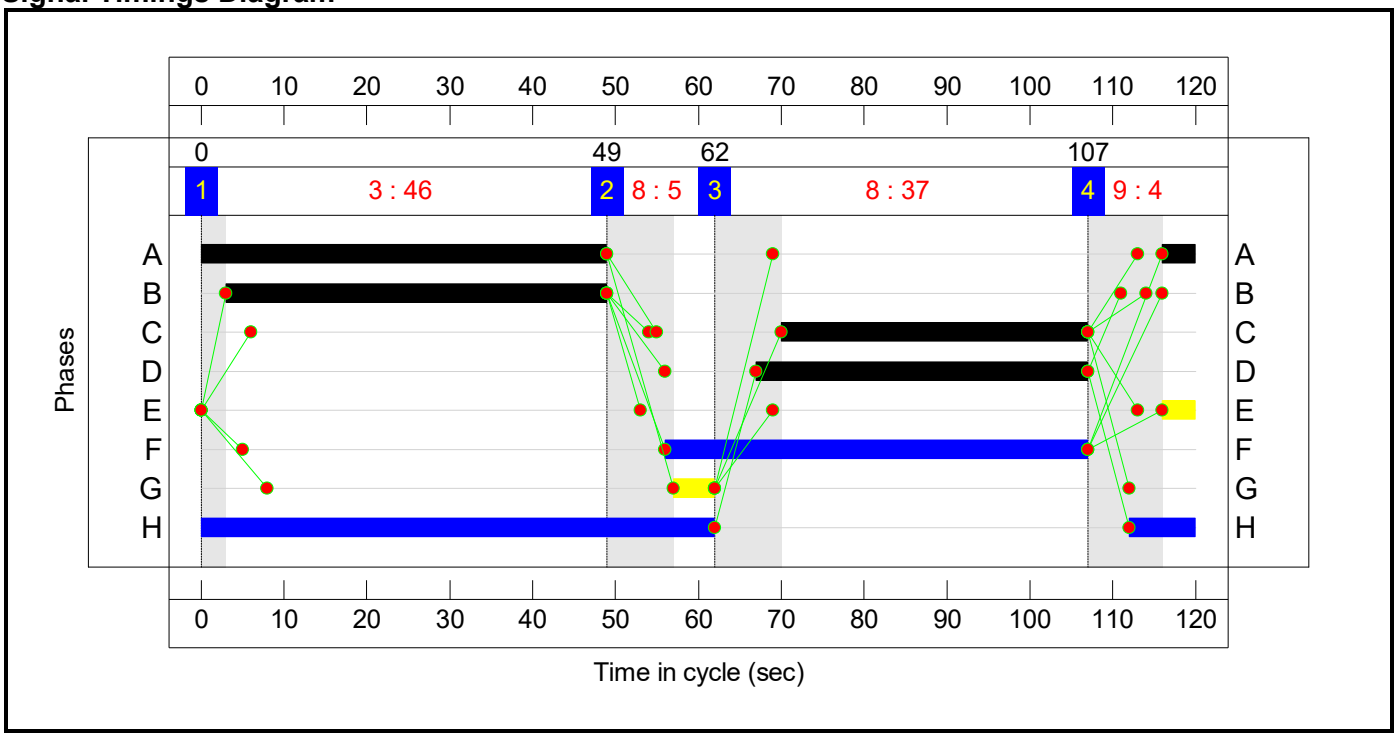


Stage Timings

Stage	1	2	3	4
Duration	46	5	37	4
Change Point	0	49	62	107

Full Input Data And Results

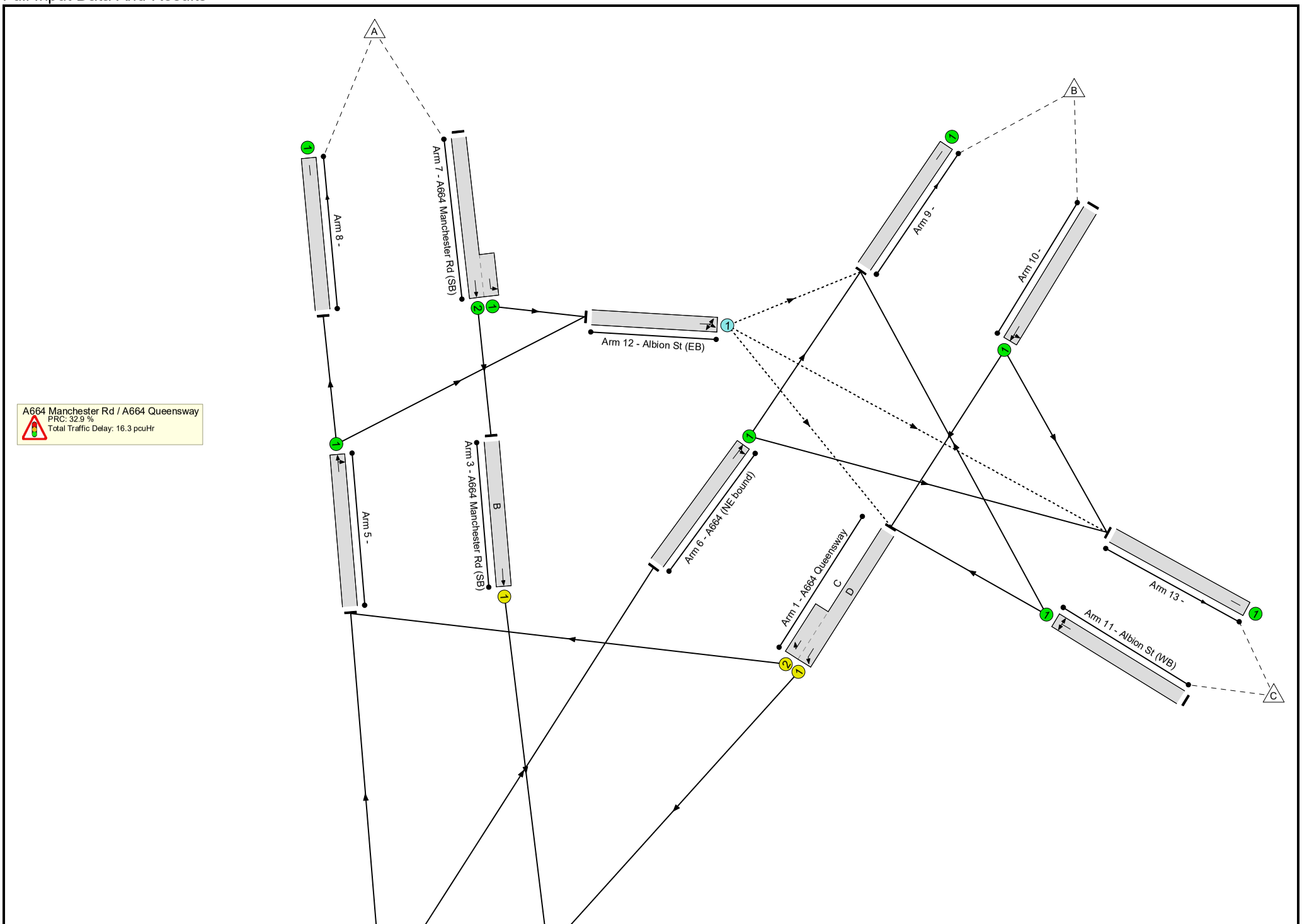
Signal Timings Diagram



Full Input Data And Results

Network Layout Diagram

Full Input Data And Results



Full Input Data And Results

Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network	-	-	**N/A**	-	-		-	-	-	-	-	-	**67.7%**
A664 Manchester Rd / A664 Queensway	-	-	**N/A**	-	-		-	-	-	-	-	-	**67.7%**
1/1+1/2	A664 Queensway Ahead U-Turn	U	N/A	N/A	D C		1	40:37	-	410	1929:1720	103+502	67.7 : 67.7%
2/1+2/2	A664 Manchester Rd (NB) Ahead Ahead2	U	N/A	N/A	A	E	1	53	4	682	1905:1633	647+370	67.1 : 67.1%
3/1	A664 Manchester Rd (SB) Ahead	U	N/A	N/A	B		1	46	-	526	2045	801	65.7%
4/1		U	N/A	N/A	-		-	-	-	596	Inf	Inf	0.0%
5/1	Ahead Right	U	N/A	N/A	-		-	-	-	774	Inf	Inf	0.0%
6/1	A664 (NE bound) Ahead Right	U	N/A	N/A	-		-	-	-	248	Inf	Inf	0.0%
7/2+7/1	A664 Manchester Rd (SB) Ahead Left	U	N/A	N/A	-		-	-	-	850	1985:2015	1235+761	42.6 : 42.6%
8/1		U	N/A	N/A	-		-	-	-	774	Inf	Inf	0.0%
9/1		U	N/A	N/A	-		-	-	-	576	Inf	Inf	0.0%
10/1	Ahead Left	U	N/A	N/A	-		-	-	-	393	Inf	Inf	0.0%
11/1	Albion St (WB) Left Right	U	N/A	N/A	-		-	-	-	101	1616	1616	6.3%
12/1	Albion St (EB) Right Left Ahead	O	N/A	N/A	-		-	-	-	324	1586	1136	28.5%
13/1		U	N/A	N/A	-		-	-	-	80	Inf	Inf	0.0%

Full Input Data And Results

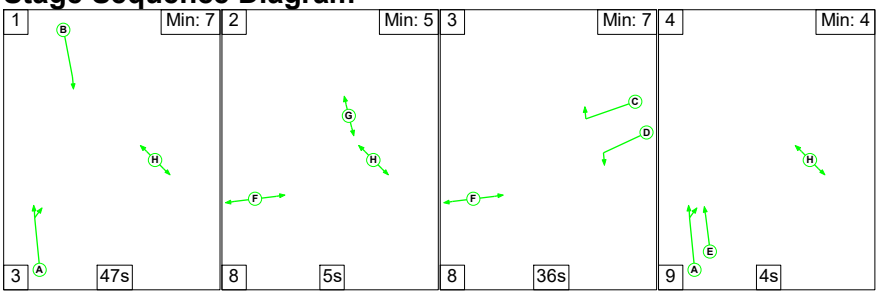
Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network	**-**	**-**	**324**	**0**	**0**	**12.7**	**3.6**	**0.0**	**16.3**	**-**	**-**	**-**	**-**
A664 Manchester Rd / A664 Queensway	**-**	**-**	**324**	**0**	**0**	**12.7**	**3.6**	**0.0**	**16.3**	**-**	**-**	**-**	**-**
1/1+1/2	410	410	-	-	-	3.9	1.0	-	4.9	43.3	10.4	1.0	11.5
2/1+2/2	682	682	-	-	-	4.3	1.0	-	5.3	28.1	10.2	1.0	11.3
3/1	526	526	-	-	-	4.4	0.9	-	5.3	36.4	14.3	0.9	15.3
4/1	596	596	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/1	774	774	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/1	248	248	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
7/2+7/1	850	850	-	-	-	0.0	0.4	-	0.4	1.6	0.0	0.4	0.4
8/1	774	774	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
9/1	576	576	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
10/1	393	393	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
11/1	101	101	-	-	-	0.0	0.0	-	0.0	1.2	0.0	0.0	0.0
12/1	324	324	324	0	0	0.1	0.2	-	0.3	3.1	1.5	0.2	1.7
13/1	80	80	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0

C1 PRC for Signalled Lanes (%): 32.9 Total Delay for Signalled Lanes (pcuHr): 15.57 Cycle Time (s): 120
PRC Over All Lanes (%): 32.9 Total Delay Over All Lanes(pcuHr): 16.26

Full Input Data And Results

Scenario 2: '2033 WITHOUT DEV PM' (FG2: '2033 WITHOUT DEV PM', Plan 1: 'Network Control Plan 1')

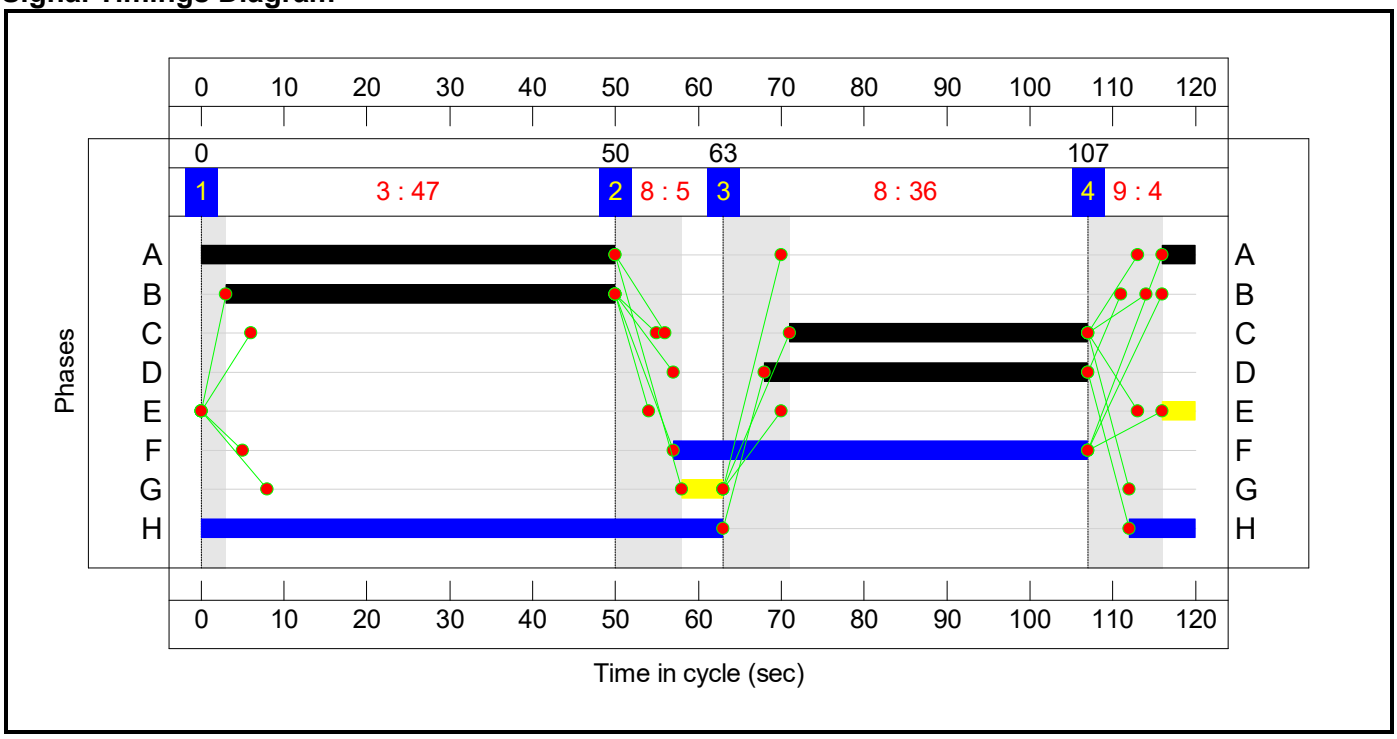
Stage Sequence Diagram



Stage Timings

Stage	1	2	3	4
Duration	47	5	36	4
Change Point	0	50	63	107

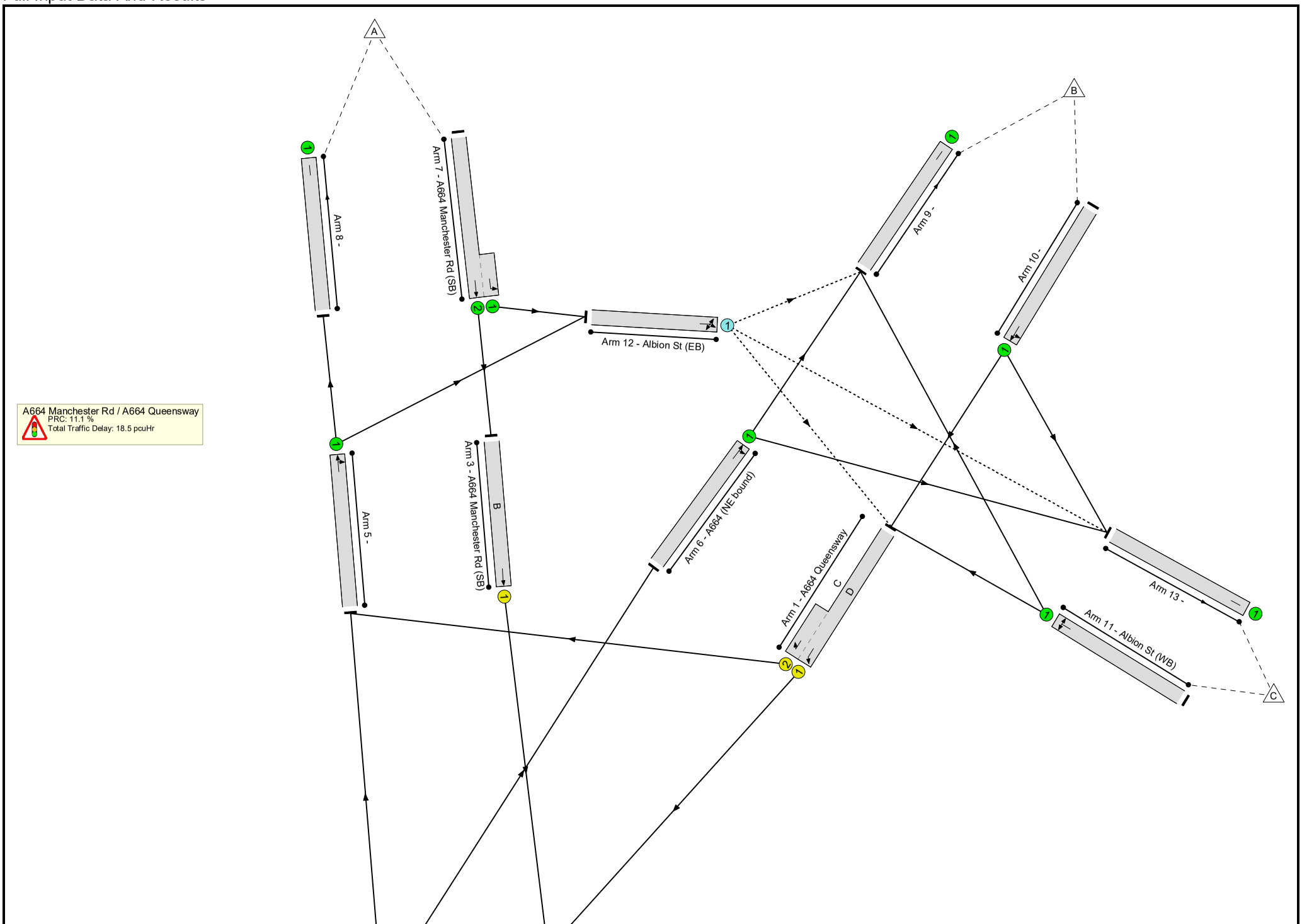
Signal Timings Diagram



Full Input Data And Results

Network Layout Diagram

Full Input Data And Results



Full Input Data And Results

Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network	-	-	**N/A**	-	-		-	-	-	-	-	-	**81.0%**
A664 Manchester Rd / A664 Queensway	-	-	**N/A**	-	-		-	-	-	-	-	-	**81.0%**
1/1+1/2	A664 Queensway Ahead U-Turn	U	N/A	N/A	D C		1	39:36	-	481	1929:1720	109+486	80.9 : 80.9%
2/1+2/2	A664 Manchester Rd (NB) Ahead Ahead2	U	N/A	N/A	A	E	1	54	4	807	1905:1633	685+311	81.0 : 81.0%
3/1	A664 Manchester Rd (SB) Ahead	U	N/A	N/A	B		1	47	-	403	2045	818	49.3%
4/1		U	N/A	N/A	-		-	-	-	491	Inf	Inf	0.0%
5/1	Ahead Right	U	N/A	N/A	-		-	-	-	948	Inf	Inf	0.0%
6/1	A664 (NE bound) Ahead Right	U	N/A	N/A	-		-	-	-	252	Inf	Inf	0.0%
7/2+7/1	A664 Manchester Rd (SB) Ahead Left	U	N/A	N/A	-		-	-	-	693	1985:2015	1162+836	34.7 : 34.7%
8/1		U	N/A	N/A	-		-	-	-	948	Inf	Inf	0.0%
9/1		U	N/A	N/A	-		-	-	-	519	Inf	Inf	0.0%
10/1	Ahead Left	U	N/A	N/A	-		-	-	-	442	Inf	Inf	0.0%
11/1	Albion St (WB) Left Right	U	N/A	N/A	-		-	-	-	138	1605	1605	8.6%
12/1	Albion St (EB) Right Left Ahead	O	N/A	N/A	-		-	-	-	290	1628	1054	27.5%
13/1		U	N/A	N/A	-		-	-	-	122	Inf	Inf	0.0%

Full Input Data And Results

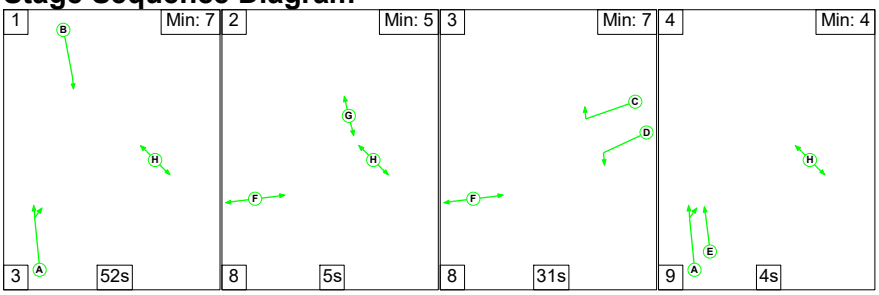
Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network	**-**	**-**	**290**	**0**	**0**	**13.4**	**5.1**	**0.0**	**18.5**	**-**	**-**	**-**	**-**
A664 Manchester Rd / A664 Queensway	**-**	**-**	**290**	**0**	**0**	**13.4**	**5.1**	**0.0**	**18.5**	**-**	**-**	**-**	**-**
1/1+1/2	481	481	-	-	-	4.9	2.0	-	6.9	52.0	13.3	2.0	15.3
2/1+2/2	807	807	-	-	-	5.4	2.1	-	7.5	33.6	16.7	2.1	18.8
3/1	403	403	-	-	-	3.0	0.5	-	3.5	31.2	10.0	0.5	10.4
4/1	491	491	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/1	948	948	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/1	252	252	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
7/2+7/1	693	693	-	-	-	0.0	0.3	-	0.3	1.4	0.0	0.3	0.3
8/1	948	948	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
9/1	519	519	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
10/1	442	442	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
11/1	138	138	-	-	-	0.0	0.0	-	0.0	1.2	0.0	0.0	0.0
12/1	290	290	290	0	0	0.1	0.2	-	0.3	3.1	1.3	0.2	1.5
13/1	122	122	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0

C1 PRC for Signalled Lanes (%): 11.1 Total Delay for Signalled Lanes (pcuHr): 17.97 Cycle Time (s): 120
PRC Over All Lanes (%): 11.1 Total Delay Over All Lanes(pcuHr): 18.54

Full Input Data And Results

Scenario 3: '2033 WITH DEV AM' (FG3: '2033 WITH DEV AM', Plan 1: 'Network Control Plan 1')

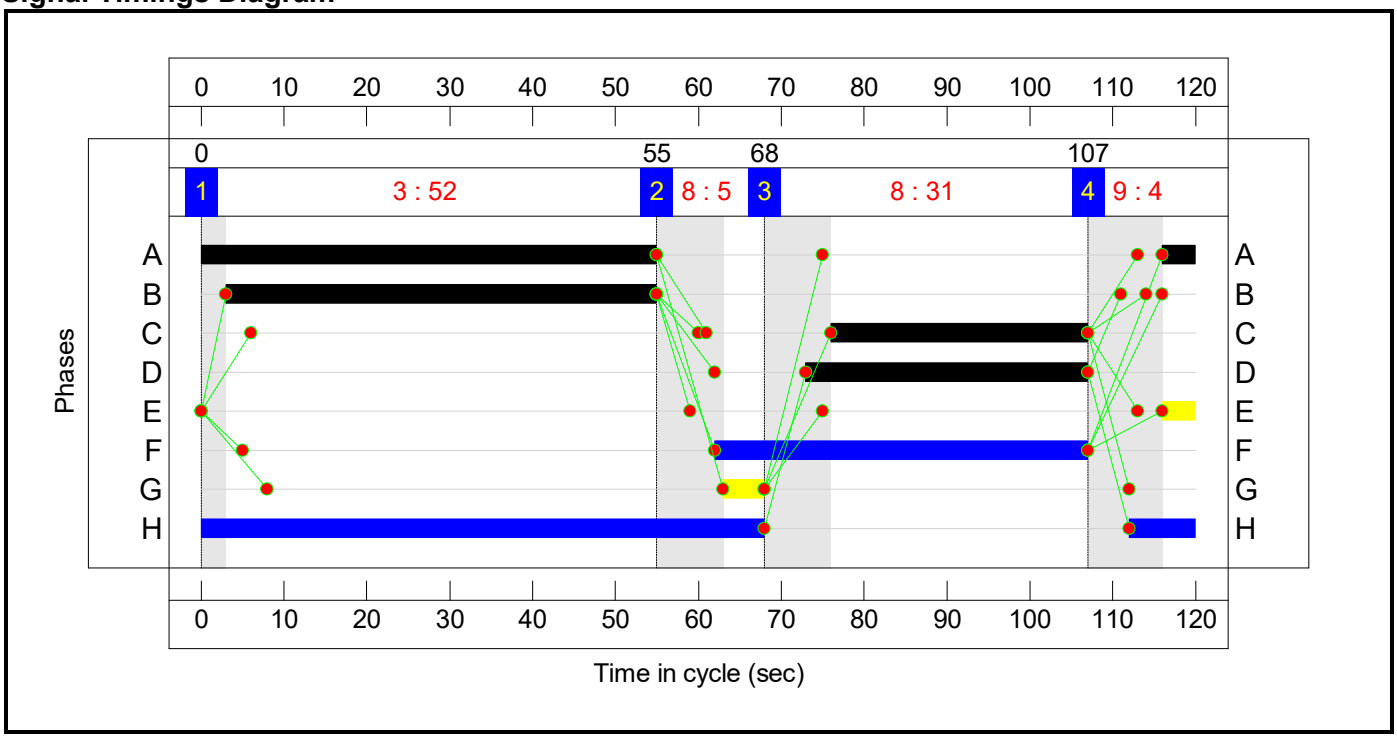
Stage Sequence Diagram



Stage Timings

Stage	1	2	3	4
Duration	52	5	31	4
Change Point	0	55	68	107

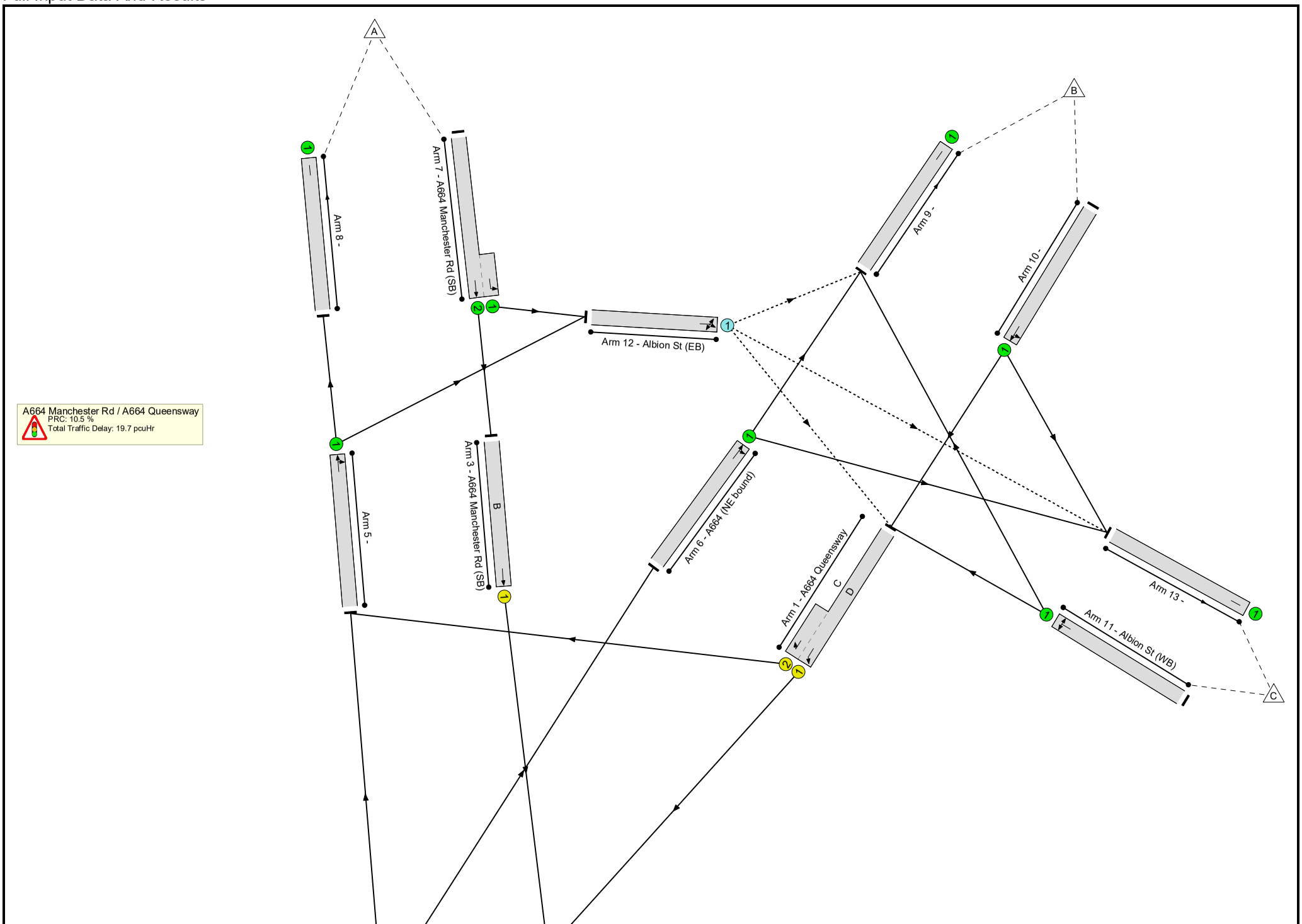
Signal Timings Diagram



Full Input Data And Results

Network Layout Diagram

Full Input Data And Results



Full Input Data And Results

Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network	-	-	**N/A**	-	-		-	-	-	-	-	-	**81.5%**
A664 Manchester Rd / A664 Queensway	-	-	**N/A**	-	-		-	-	-	-	-	-	**81.5%**
1/1+1/2	A664 Queensway Ahead U-Turn	U	N/A	N/A	D C		1	34:31	-	412	1929:1720	91+428	79.4 : 79.4%
2/1+2/2	A664 Manchester Rd (NB) Ahead Ahead2	U	N/A	N/A	A	E	1	59	4	915	1905:1633	690+433	81.5 : 81.5%
3/1	A664 Manchester Rd (SB) Ahead	U	N/A	N/A	B		1	52	-	573	2045	903	63.4%
4/1		U	N/A	N/A	-		-	-	-	645	Inf	Inf	0.0%
5/1	Ahead Right	U	N/A	N/A	-		-	-	-	902	Inf	Inf	0.0%
6/1	A664 (NE bound) Ahead Right	U	N/A	N/A	-		-	-	-	353	Inf	Inf	0.0%
7/2+7/1	A664 Manchester Rd (SB) Ahead Left	U	N/A	N/A	-		-	-	-	897	1985:2015	1275+721	44.9 : 44.9%
8/1		U	N/A	N/A	-		-	-	-	902	Inf	Inf	0.0%
9/1		U	N/A	N/A	-		-	-	-	681	Inf	Inf	0.0%
10/1	Ahead Left	U	N/A	N/A	-		-	-	-	395	Inf	Inf	0.0%
11/1	Albion St (WB) Left Right	U	N/A	N/A	-		-	-	-	101	1616	1616	6.3%
12/1	Albion St (EB) Right Left Ahead	O	N/A	N/A	-		-	-	-	324	1586	1033	31.4%
13/1		U	N/A	N/A	-		-	-	-	80	Inf	Inf	0.0%

Full Input Data And Results

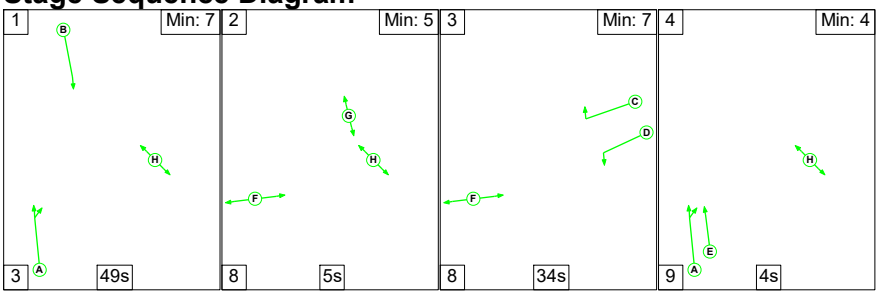
Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network	**-**	**-**	**324**	**0**	**0**	**14.1**	**5.5**	**0.0**	**19.7**	**-**	**-**	**-**	**-**
A664 Manchester Rd / A664 Queensway	**-**	**-**	**324**	**0**	**0**	**14.1**	**5.5**	**0.0**	**19.7**	**-**	**-**	**-**	**-**
1/1+1/2	412	412	-	-	-	4.5	1.9	-	6.4	55.8	11.4	1.9	13.2
2/1+2/2	915	915	-	-	-	5.3	2.2	-	7.5	29.4	16.4	2.2	18.6
3/1	573	573	-	-	-	4.1	0.9	-	5.0	31.4	14.8	0.9	15.7
4/1	645	645	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/1	902	902	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/1	353	353	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
7/2+7/1	897	897	-	-	-	0.0	0.4	-	0.4	1.6	0.0	0.4	0.4
8/1	902	902	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
9/1	681	681	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
10/1	395	395	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
11/1	101	101	-	-	-	0.0	0.0	-	0.0	1.2	0.0	0.0	0.0
12/1	324	324	324	0	0	0.1	0.2	-	0.4	4.0	1.9	0.2	2.1
13/1	80	80	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0

C1 PRC for Signalled Lanes (%): 10.5 Total Delay for Signalled Lanes (pcuHr): 18.85 Cycle Time (s): 120
PRC Over All Lanes (%): 10.5 Total Delay Over All Lanes(pcuHr): 19.66

Full Input Data And Results

Scenario 4: '2033 WITH DEV PM' (FG4: '2033 WITH DEV PM', Plan 1: 'Network Control Plan 1')

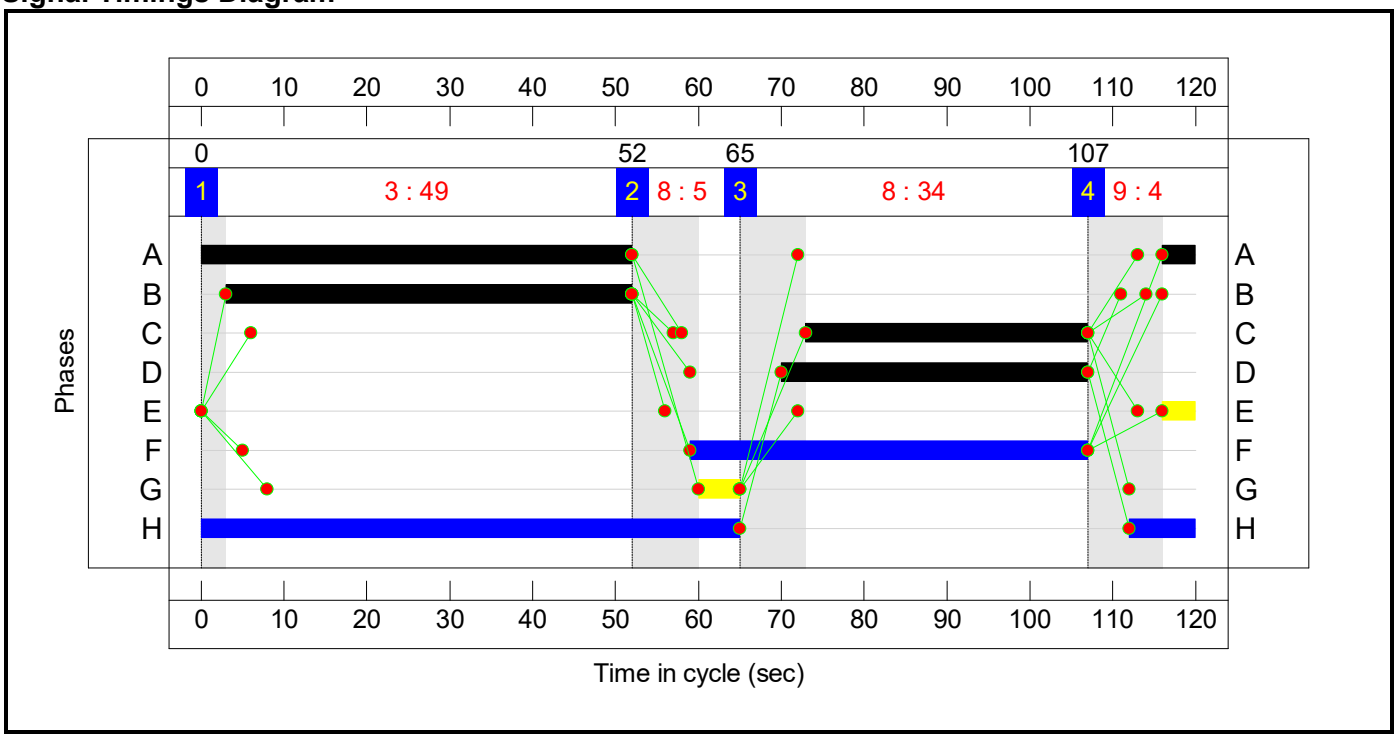
Stage Sequence Diagram



Stage Timings

Stage	1	2	3	4
Duration	49	5	34	4
Change Point	0	52	65	107

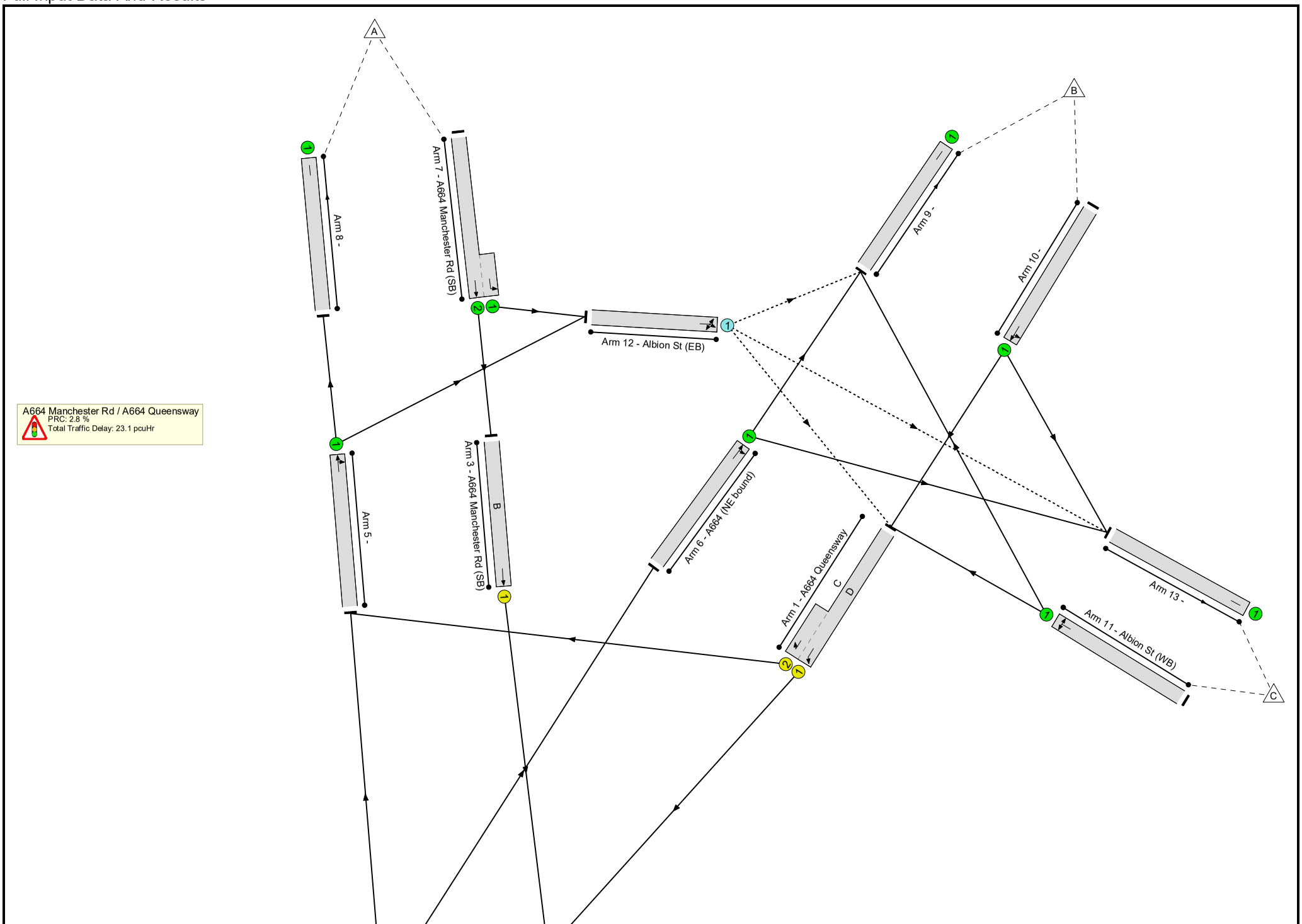
Signal Timings Diagram



Full Input Data And Results

Network Layout Diagram

Full Input Data And Results



Full Input Data And Results

Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network	-	-	**N/A**	-	-		-	-	-	-	-	-	**87.5%**
A664 Manchester Rd / A664 Queensway	-	-	**N/A**	-	-		-	-	-	-	-	-	**87.5%**
1/1+1/2	A664 Queensway Ahead U-Turn	U	N/A	N/A	D C		1	37:34	-	493	1929:1720	116+455	86.3 : 86.3%
2/1+2/2	A664 Manchester Rd (NB) Ahead Ahead2	U	N/A	N/A	A	E	1	56	4	907	1905:1633	697+339	87.5 : 87.5%
3/1	A664 Manchester Rd (SB) Ahead	U	N/A	N/A	B		1	49	-	520	2045	852	61.0%
4/1		U	N/A	N/A	-		-	-	-	620	Inf	Inf	0.0%
5/1	Ahead Right	U	N/A	N/A	-		-	-	-	1003	Inf	Inf	0.0%
6/1	A664 (NE bound) Ahead Right	U	N/A	N/A	-		-	-	-	297	Inf	Inf	0.0%
7/2+7/1	A664 Manchester Rd (SB) Ahead Left	U	N/A	N/A	-		-	-	-	810	1985:2015	1281+714	40.6 : 40.6%
8/1		U	N/A	N/A	-		-	-	-	1003	Inf	Inf	0.0%
9/1		U	N/A	N/A	-		-	-	-	564	Inf	Inf	0.0%
10/1	Ahead Left	U	N/A	N/A	-		-	-	-	454	Inf	Inf	0.0%
11/1	Albion St (WB) Left Right	U	N/A	N/A	-		-	-	-	138	1605	1605	8.6%
12/1	Albion St (EB) Right Left Ahead	O	N/A	N/A	-		-	-	-	290	1628	999	29.0%
13/1		U	N/A	N/A	-		-	-	-	122	Inf	Inf	0.0%

Full Input Data And Results

Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network	**-**	**-**	**290**	**0**	**0**	**15.4**	**7.6**	**0.0**	**23.1**	**-**	**-**	**-**	**-**
A664 Manchester Rd / A664 Queensway	**-**	**-**	**290**	**0**	**0**	**15.4**	**7.6**	**0.0**	**23.1**	**-**	**-**	**-**	**-**
1/1+1/2	493	493	-	-	-	5.3	2.9	-	8.2	59.9	13.9	2.9	16.8
2/1+2/2	907	907	-	-	-	6.1	3.3	-	9.5	37.6	20.3	3.3	23.6
3/1	520	520	-	-	-	4.0	0.8	-	4.7	32.8	13.4	0.8	14.2
4/1	620	620	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/1	1003	1003	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/1	297	297	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
7/2+7/1	810	810	-	-	-	0.0	0.3	-	0.3	1.5	0.0	0.3	0.3
8/1	1003	1003	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
9/1	564	564	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
10/1	454	454	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
11/1	138	138	-	-	-	0.0	0.0	-	0.0	1.2	0.0	0.0	0.0
12/1	290	290	290	0	0	0.1	0.2	-	0.3	3.4	1.4	0.2	1.6
13/1	122	122	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0

C1 PRC for Signalled Lanes (%): 2.8 Total Delay for Signalled Lanes (pcuHr): 22.42 Cycle Time (s): 120
PRC Over All Lanes (%): 2.8 Total Delay Over All Lanes(pcuHr): 23.09

S|C|P

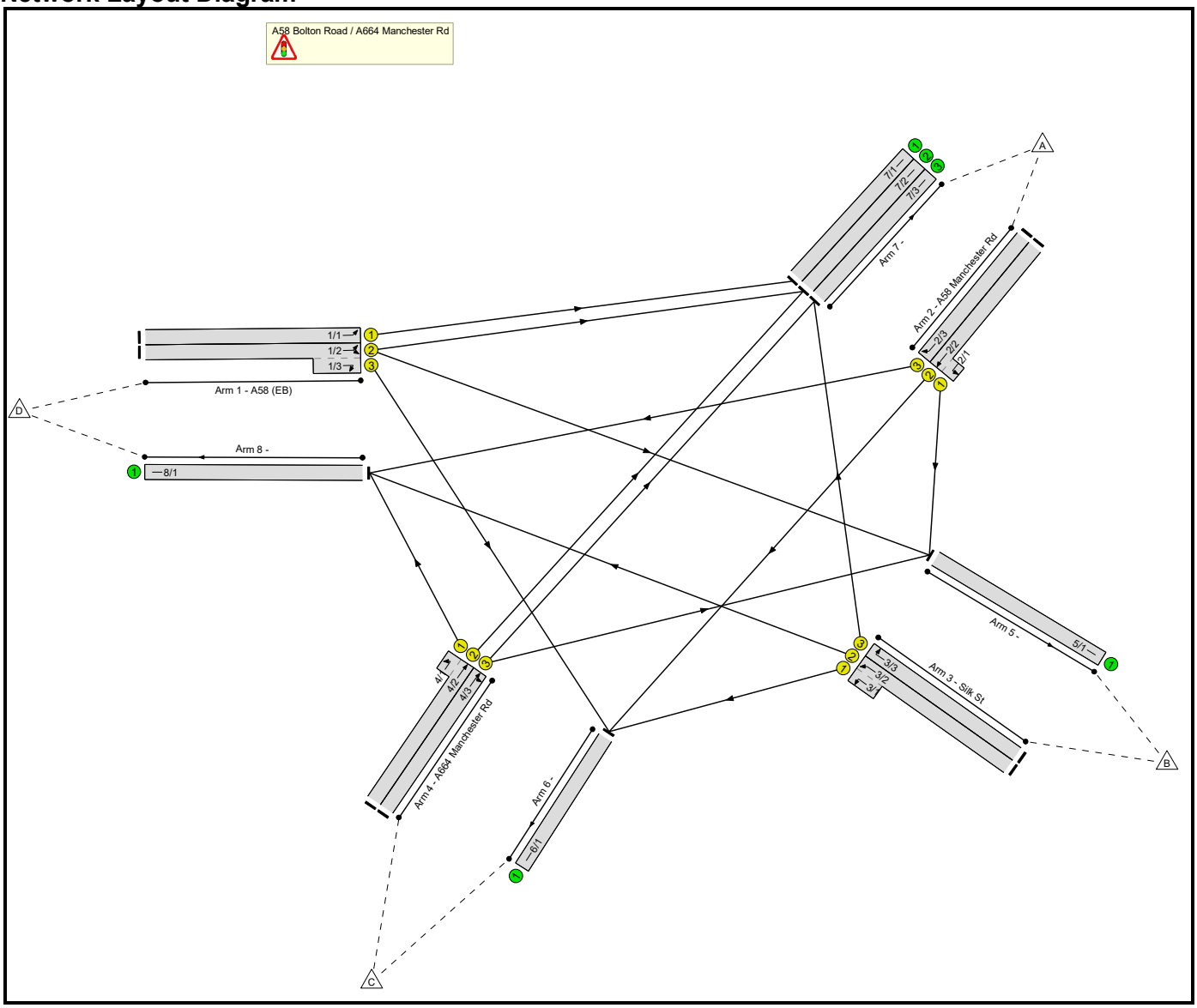
APPENDIX S

Full Input Data And Results

User and Project Details

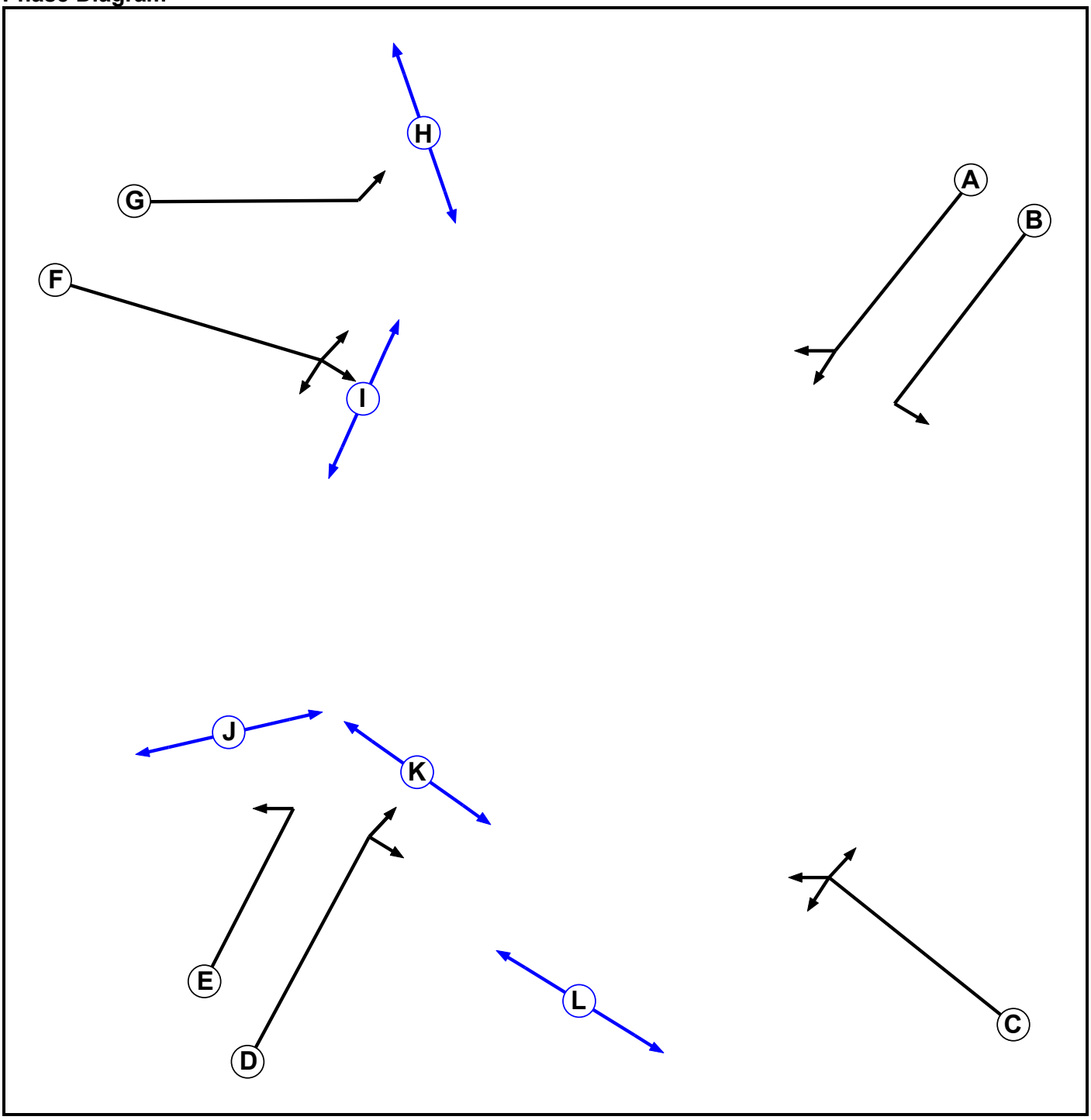
Project:	
Title:	
Location:	
Additional detail:	
File name:	A58 _ A664 _ Silk St.lsg3x
Author:	
Company:	
Address:	

Network Layout Diagram



Full Input Data And Results

Phase Diagram



Full Input Data And Results

Phase Input Data

Phase Name	Phase Type	Assoc. Phase	Street Min	Cont Min
A	Traffic		7	7
B	Traffic		7	7
C	Traffic		7	7
D	Traffic		7	7
E	Traffic		3	0
F	Traffic		7	7
G	Traffic		7	6
H	Pedestrian		5	5
I	Pedestrian		5	5
J	Pedestrian		5	5
K	Pedestrian		5	5
L	Pedestrian		3	0

Phase Intergreens Matrix

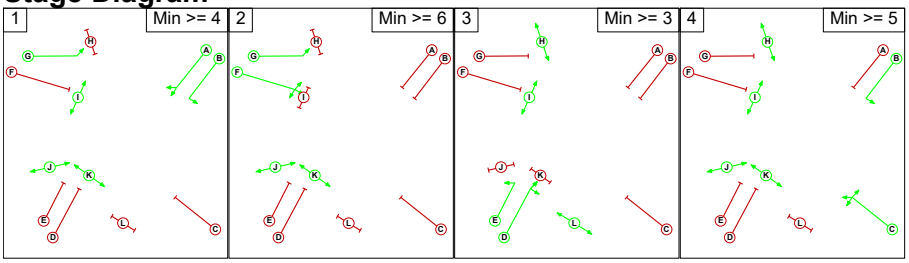
		Starting Phase											
		A	B	C	D	E	F	G	H	I	J	K	L
Terminating Phase	A		-	6	8	10	7	-	-	-	-	-	10
	B	-		-	4	-	4	-	-	-	-	-	-
	C	6	-		7	9	5	6	-	-	-	-	10
	D	6	10	8		-	5	7	-	-	-	5	-
	E	4	-	4	-		5	-	-	-	5	-	-
	F	7	10	8	6	5		-	-	5	-	-	10
	G	-	-	5	4	-	-		5	-	-	-	-
	H	-	-	-	-	-	-	6		-	-	-	-
	I	-	-	-	-	-	5	-	-		-	-	-
	J	-	-	-	-	6	-	-	-	-		-	-
	K	-	-	-	6	-	-	-	-	-	-		-
	L	3	-	3	-	-	3	-	-	-	-	-	

Phases in Stage

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

Full Input Data And Results

Stage Diagram



Phase Delays

Term. Stage	Start Stage	Phase	Type	Value	Cont value
1	2	B	Losing	3	3
1	2	I	Losing	2	2
1	3	B	Losing	4	4
1	3	G	Losing	4	4
1	3	J	Losing	4	4
1	3	K	Losing	2	2
1	4	G	Losing	1	1
2	3	G	Losing	2	2
2	4	G	Losing	3	3
3	1	E	Losing	4	4
3	1	H	Losing	1	1
3	1	L	Losing	5	5
3	2	E	Losing	4	4
3	2	H	Losing	1	1
3	2	I	Losing	4	4
3	2	L	Losing	6	6
3	4	E	Losing	4	4
3	4	L	Losing	5	5
4	3	J	Losing	3	3
4	3	K	Losing	1	1

Prohibited Stage Change

		To Stage			
		1	2	3	4
From Stage	1		7	10	6
	2	10		10	10
	3	10	9		10
	4	6	6	10	

Full Input Data And Results

Give-Way Lane Input Data

Junction: A58 Bolton Road / A664 Manchester Rd
There are no Opposed Lanes in this Junction

Full Input Data And Results

Lane Input Data

Junction: A58 Bolton Road / A664 Manchester Rd												
Lane	**Lane Type**	**Phases**	**Start Disp.**	**End Disp.**	**Physical Length (PCU)**	**Sat Flow Type**	**Def User Saturation Flow (PCU/Hr)**	**Lane Width (m)**	**Gradient**	**Nearside Lane**	**Turns**	**Turning Radius (m)**
1/1 (A58 (EB))	U	G	2	3	60.0	Geom	-	3.50	0.00	Y	Arm 7 Left	145.00
1/2 (A58 (EB))	U	F	2	3	60.0	Geom	-	3.50	0.00	Y	Arm 5 Ahead Arm 7 Left	Inf Inf
1/3 (A58 (EB))	U	F	2	3	4.7	Geom	-	3.80	0.00	Y	Arm 6 Right	17.00
2/1 (A58 Manchester Rd)	U	B	2	3	1.7	Geom	-	4.80	0.00	Y	Arm 5 Left	17.00
2/2 (A58 Manchester Rd)	U	A	2	3	60.0	Geom	-	3.60	0.00	Y	Arm 6 Ahead	Inf
2/3 (A58 Manchester Rd)	U	A	2	3	60.0	Geom	-	3.60	0.00	Y	Arm 8 Right	42.00
3/1 (Silk St)	U	C	2	3	3.1	Geom	-	3.60	0.00	Y	Arm 6 Left	13.00
3/2 (Silk St)	U	C	2	3	19.5	Geom	-	3.60	0.00	Y	Arm 8 Ahead	Inf
3/3 (Silk St)	U	C	2	3	60.0	Geom	-	3.60	0.00	Y	Arm 7 Right	19.00
4/1 (A664 Manchester Rd)	U	E	2	3	2.1	Geom	-	5.00	0.00	Y	Arm 8 Left	22.00
4/2 (A664 Manchester Rd)	U	D	2	3	60.0	Geom	-	3.80	0.00	Y	Arm 7 Ahead	Inf
4/3 (A664 Manchester Rd)	U	D	2	3	60.0	Geom	-	3.80	0.00	Y	Arm 5 Right Arm 7 Ahead	13.00 Inf
5/1	U		2	3	60.0	Inf	-	-	-	-	-	-
6/1	U		2	3	60.0	Inf	-	-	-	-	-	-
7/1	U		2	3	60.0	Inf	-	-	-	-	-	-
7/2	U		2	3	60.0	Inf	-	-	-	-	-	-
7/3	U		2	3	60.0	Inf	-	-	-	-	-	-
8/1	U		2	3	60.0	Inf	-	-	-	-	-	-

Full Input Data And Results

Traffic Flow Groups

Flow Group	Start Time	End Time	Duration	Formula
1: '2033 WITHOUT DEV AM'	07:45	08:45	01:00	
2: '2033 WITHOUT DEV PM'	16:30	17:30	01:00	
3: '2033 WITH DEV AM'	07:45	08:45	01:00	
4: '2033 WITH DEV PM'	16:30	17:30	01:00	

Scenario 1: '2033 WITHOUT DEV AM' (FG1: '2033 WITHOUT DEV AM', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired

Desired Flow :

		Destination				
		A	B	C	D	Tot.
Origin	A	0	194	385	851	1430
	B	166	0	21	72	259
	C	386	35	0	181	602
	D	966	52	140	0	1158
	Tot.	1518	281	546	1104	3449

Full Input Data And Results

Traffic Lane Flows

Lane	Scenario 1: 2033 WITHOUT DEV AM
Junction: A58 Bolton Road / A664 Manchester Rd	
1/1	966
1/2 (with short)	192(In) 52(Out)
1/3 (short)	140
2/1 (short)	194
2/2 (with short)	579(In) 385(Out)
2/3	851
3/1 (short)	21
3/2 (with short)	93(In) 72(Out)
3/3	166
4/1 (short)	181
4/2 (with short)	340(In) 159(Out)
4/3	262
5/1	281
6/1	546
7/1	966
7/2	159
7/3	393
8/1	1104

Full Input Data And Results

Lane Saturation Flows

Junction: A58 Bolton Road / A664 Manchester Rd								
Lane	**Lane Width (m)**	**Gradient**	**Nearside Lane**	**Allowed Turns**	**Turning Radius (m)**	**Turning Prop.**	**Sat Flow (PCU/Hr)**	**Flared Sat Flow (PCU/Hr)**
1/1 (A58 (EB))	3.50	0.00	Y	Arm 7 Left	145.00	100.0 %	1945	1945
1/2 (A58 (EB))	3.50	0.00	Y	Arm 5 Ahead	Inf	100.0 %	1965	1965
				Arm 7 Left	Inf	0.0 %		
1/3 (A58 (EB))	3.80	0.00	Y	Arm 6 Right	17.00	100.0 %	1833	1833
2/1 (A58 Manchester Rd)	4.80	0.00	Y	Arm 5 Left	17.00	100.0 %	1925	1925
2/2 (A58 Manchester Rd)	3.60	0.00	Y	Arm 6 Ahead	Inf	100.0 %	1975	1975
2/3 (A58 Manchester Rd)	3.60	0.00	Y	Arm 8 Right	42.00	100.0 %	1907	1907
3/1 (Silk St)	3.60	0.00	Y	Arm 6 Left	13.00	100.0 %	1771	1771
3/2 (Silk St)	3.60	0.00	Y	Arm 8 Ahead	Inf	100.0 %	1975	1975
3/3 (Silk St)	3.60	0.00	Y	Arm 7 Right	19.00	100.0 %	1830	1830
4/1 (A664 Manchester Rd)	5.00	0.00	Y	Arm 8 Left	22.00	100.0 %	1980	1980
4/2 (A664 Manchester Rd)	3.80	0.00	Y	Arm 7 Ahead	Inf	100.0 %	1995	1995
4/3 (A664 Manchester Rd)	3.80	0.00	Y	Arm 5 Right	13.00	13.4 %	1965	1965
				Arm 7 Ahead	Inf	86.6 %		
5/1	Infinite Saturation Flow						Inf	Inf
6/1	Infinite Saturation Flow						Inf	Inf
7/1	Infinite Saturation Flow						Inf	Inf
7/2	Infinite Saturation Flow						Inf	Inf
7/3	Infinite Saturation Flow						Inf	Inf
8/1	Infinite Saturation Flow						Inf	Inf

Scenario 2: '2033 WITHOUT DEV PM' (FG2: '2033 WITHOUT DEV PM', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired

Desired Flow :

	Destination					
Origin		A	B	C	D	Tot.
	A	0	274	373	627	1274
	B	246	0	47	95	388
	C	412	52	0	173	637
	D	646	82	110	0	838
	Tot.	1304	408	530	895	3137

Full Input Data And Results

Traffic Lane Flows

Lane	Scenario 2: 2033 WITHOUT DEV PM
Junction: A58 Bolton Road / A664 Manchester Rd	
1/1	646
1/2 (with short)	192(In) 82(Out)
1/3 (short)	110
2/1 (short)	274
2/2 (with short)	647(In) 373(Out)
2/3	627
3/1 (short)	47
3/2 (with short)	142(In) 95(Out)
3/3	246
4/1 (short)	173
4/2 (with short)	353(In) 180(Out)
4/3	284
5/1	408
6/1	530
7/1	646
7/2	180
7/3	478
8/1	895

Full Input Data And Results

Lane Saturation Flows

Junction: A58 Bolton Road / A664 Manchester Rd								
Lane	**Lane Width (m)**	**Gradient**	**Nearside Lane**	**Allowed Turns**	**Turning Radius (m)**	**Turning Prop.**	**Sat Flow (PCU/Hr)**	**Flared Sat Flow (PCU/Hr)**
1/1 (A58 (EB))	3.50	0.00	Y	Arm 7 Left	145.00	100.0 %	1945	1945
1/2 (A58 (EB))	3.50	0.00	Y	Arm 5 Ahead	Inf	100.0 %	1965	1965
				Arm 7 Left	Inf	0.0 %		
1/3 (A58 (EB))	3.80	0.00	Y	Arm 6 Right	17.00	100.0 %	1833	1833
2/1 (A58 Manchester Rd)	4.80	0.00	Y	Arm 5 Left	17.00	100.0 %	1925	1925
2/2 (A58 Manchester Rd)	3.60	0.00	Y	Arm 6 Ahead	Inf	100.0 %	1975	1975
2/3 (A58 Manchester Rd)	3.60	0.00	Y	Arm 8 Right	42.00	100.0 %	1907	1907
3/1 (Silk St)	3.60	0.00	Y	Arm 6 Left	13.00	100.0 %	1771	1771
3/2 (Silk St)	3.60	0.00	Y	Arm 8 Ahead	Inf	100.0 %	1975	1975
3/3 (Silk St)	3.60	0.00	Y	Arm 7 Right	19.00	100.0 %	1830	1830
4/1 (A664 Manchester Rd)	5.00	0.00	Y	Arm 8 Left	22.00	100.0 %	1980	1980
4/2 (A664 Manchester Rd)	3.80	0.00	Y	Arm 7 Ahead	Inf	100.0 %	1995	1995
4/3 (A664 Manchester Rd)	3.80	0.00	Y	Arm 5 Right	13.00	18.3 %	1954	1954
				Arm 7 Ahead	Inf	81.7 %		
5/1	Infinite Saturation Flow						Inf	Inf
6/1	Infinite Saturation Flow						Inf	Inf
7/1	Infinite Saturation Flow						Inf	Inf
7/2	Infinite Saturation Flow						Inf	Inf
7/3	Infinite Saturation Flow						Inf	Inf
8/1	Infinite Saturation Flow						Inf	Inf

Scenario 3: '2033 WITH DEV AM' (FG3: '2033 WITH DEV AM', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired

Desired Flow :

		Destination				
		A	B	C	D	Tot.
Origin	A	0	194	412	851	1457
	B	166	0	21	72	259
	C	461	35	0	231	727
	D	966	52	160	0	1178
	Tot.	1593	281	593	1154	3621

Full Input Data And Results

Traffic Lane Flows

Lane	Scenario 3: 2033 WITH DEV AM
Junction: A58 Bolton Road / A664 Manchester Rd	
1/1	966
1/2 (with short)	212(In) 52(Out)
1/3 (short)	160
2/1 (short)	194
2/2 (with short)	606(In) 412(Out)
2/3	851
3/1 (short)	21
3/2 (with short)	93(In) 72(Out)
3/3	166
4/1 (short)	231
4/2 (with short)	408(In) 177(Out)
4/3	319
5/1	281
6/1	593
7/1	966
7/2	177
7/3	450
8/1	1154

Full Input Data And Results

Lane Saturation Flows

Junction: A58 Bolton Road / A664 Manchester Rd								
Lane	**Lane Width (m)**	**Gradient**	**Nearside Lane**	**Allowed Turns**	**Turning Radius (m)**	**Turning Prop.**	**Sat Flow (PCU/Hr)**	**Flared Sat Flow (PCU/Hr)**
1/1 (A58 (EB))	3.50	0.00	Y	Arm 7 Left	145.00	100.0 %	1945	1945
1/2 (A58 (EB))	3.50	0.00	Y	Arm 5 Ahead	Inf	100.0 %	1965	1965
				Arm 7 Left	Inf	0.0 %		
1/3 (A58 (EB))	3.80	0.00	Y	Arm 6 Right	17.00	100.0 %	1833	1833
2/1 (A58 Manchester Rd)	4.80	0.00	Y	Arm 5 Left	17.00	100.0 %	1925	1925
2/2 (A58 Manchester Rd)	3.60	0.00	Y	Arm 6 Ahead	Inf	100.0 %	1975	1975
2/3 (A58 Manchester Rd)	3.60	0.00	Y	Arm 8 Right	42.00	100.0 %	1907	1907
3/1 (Silk St)	3.60	0.00	Y	Arm 6 Left	13.00	100.0 %	1771	1771
3/2 (Silk St)	3.60	0.00	Y	Arm 8 Ahead	Inf	100.0 %	1975	1975
3/3 (Silk St)	3.60	0.00	Y	Arm 7 Right	19.00	100.0 %	1830	1830
4/1 (A664 Manchester Rd)	5.00	0.00	Y	Arm 8 Left	22.00	100.0 %	1980	1980
4/2 (A664 Manchester Rd)	3.80	0.00	Y	Arm 7 Ahead	Inf	100.0 %	1995	1995
4/3 (A664 Manchester Rd)	3.80	0.00	Y	Arm 5 Right	13.00	11.0 %	1970	1970
				Arm 7 Ahead	Inf	89.0 %		
5/1	Infinite Saturation Flow						Inf	Inf
6/1	Infinite Saturation Flow						Inf	Inf
7/1	Infinite Saturation Flow						Inf	Inf
7/2	Infinite Saturation Flow						Inf	Inf
7/3	Infinite Saturation Flow						Inf	Inf
8/1	Infinite Saturation Flow						Inf	Inf

Scenario 4: '2033 WITH DEV PM' (FG4: '2033 WITH DEV PM', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired

Desired Flow :

	Destination					
Origin		A	B	C	D	Tot.
	A	0	274	441	627	1342
	B	246	0	47	95	388
	C	443	52	0	195	690
	D	646	82	159	0	887
	Tot.	1335	408	647	917	3307

Full Input Data And Results

Traffic Lane Flows

Lane	Scenario 4: 2033 WITH DEV PM
Junction: A58 Bolton Road / A664 Manchester Rd	
1/1	646
1/2 (with short)	241(In) 82(Out)
1/3 (short)	159
2/1 (short)	274
2/2 (with short)	715(In) 441(Out)
2/3	627
3/1 (short)	47
3/2 (with short)	142(In) 95(Out)
3/3	246
4/1 (short)	195
4/2 (with short)	374(In) 179(Out)
4/3	316
5/1	408
6/1	647
7/1	646
7/2	179
7/3	510
8/1	917

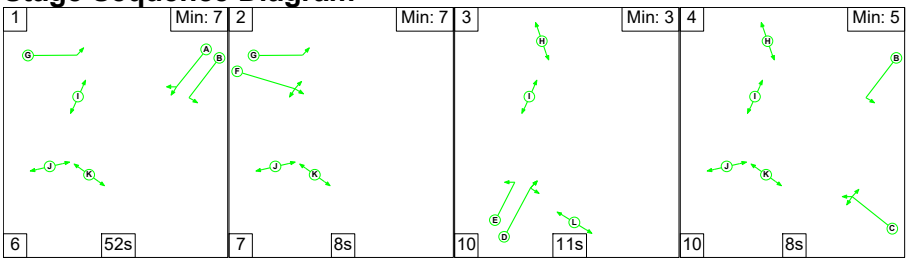
Full Input Data And Results

Lane Saturation Flows

Junction: A58 Bolton Road / A664 Manchester Rd								
Lane	**Lane Width (m)**	**Gradient**	**Nearside Lane**	**Allowed Turns**	**Turning Radius (m)**	**Turning Prop.**	**Sat Flow (PCU/Hr)**	**Flared Sat Flow (PCU/Hr)**
1/1 (A58 (EB))	3.50	0.00	Y	Arm 7 Left	145.00	100.0 %	1945	1945
1/2 (A58 (EB))	3.50	0.00	Y	Arm 5 Ahead	Inf	100.0 %	1965	1965
				Arm 7 Left	Inf	0.0 %		
1/3 (A58 (EB))	3.80	0.00	Y	Arm 6 Right	17.00	100.0 %	1833	1833
2/1 (A58 Manchester Rd)	4.80	0.00	Y	Arm 5 Left	17.00	100.0 %	1925	1925
2/2 (A58 Manchester Rd)	3.60	0.00	Y	Arm 6 Ahead	Inf	100.0 %	1975	1975
2/3 (A58 Manchester Rd)	3.60	0.00	Y	Arm 8 Right	42.00	100.0 %	1907	1907
3/1 (Silk St)	3.60	0.00	Y	Arm 6 Left	13.00	100.0 %	1771	1771
3/2 (Silk St)	3.60	0.00	Y	Arm 8 Ahead	Inf	100.0 %	1975	1975
3/3 (Silk St)	3.60	0.00	Y	Arm 7 Right	19.00	100.0 %	1830	1830
4/1 (A664 Manchester Rd)	5.00	0.00	Y	Arm 8 Left	22.00	100.0 %	1980	1980
4/2 (A664 Manchester Rd)	3.80	0.00	Y	Arm 7 Ahead	Inf	100.0 %	1995	1995
4/3 (A664 Manchester Rd)	3.80	0.00	Y	Arm 5 Right	13.00	16.5 %	1958	1958
				Arm 7 Ahead	Inf	83.5 %		
5/1	Infinite Saturation Flow						Inf	Inf
6/1	Infinite Saturation Flow						Inf	Inf
7/1	Infinite Saturation Flow						Inf	Inf
7/2	Infinite Saturation Flow						Inf	Inf
7/3	Infinite Saturation Flow						Inf	Inf
8/1	Infinite Saturation Flow						Inf	Inf

Scenario 1: '2033 WITHOUT DEV AM' (FG1: '2033 WITHOUT DEV AM', Plan 1: 'Network Control Plan 1')

Stage Sequence Diagram

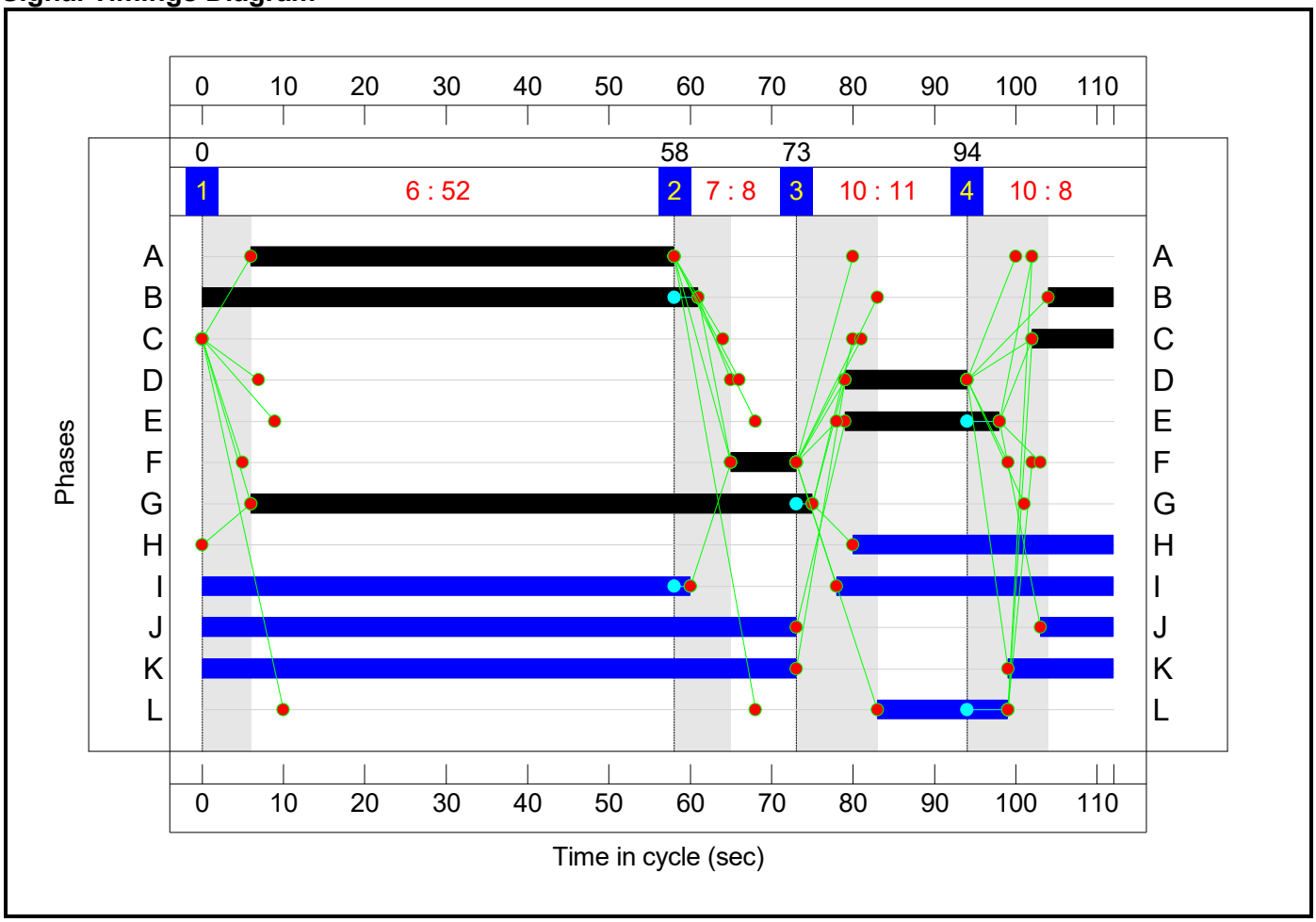


Full Input Data And Results

Stage Timings

Stage	1	2	3	4
Duration	52	8	11	8
Change Point	0	58	73	94

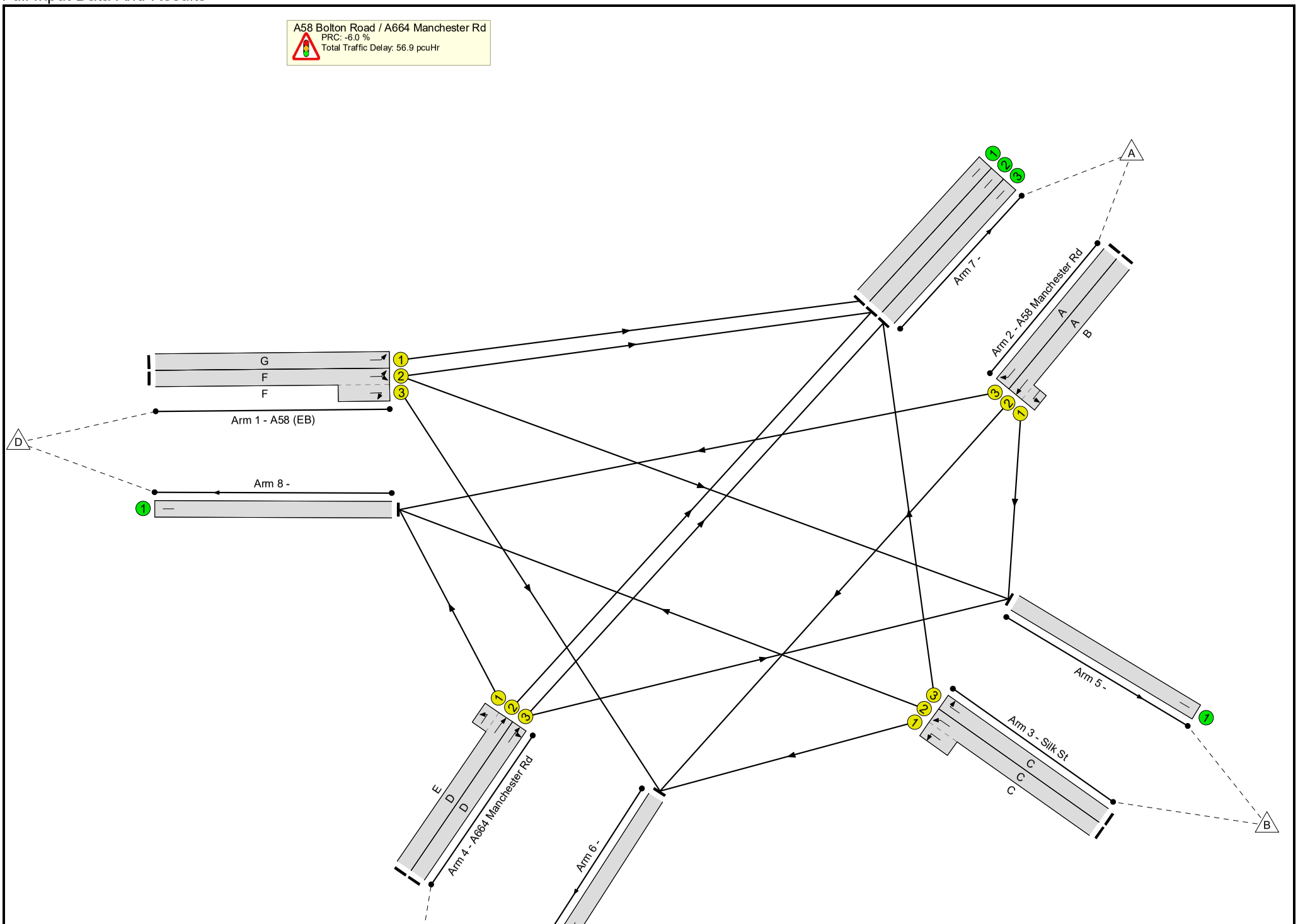
Signal Timings Diagram



Full Input Data And Results

Network Layout Diagram

Full Input Data And Results



Full Input Data And Results

Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network	-	-	**N/A**	-	-		-	-	-	-	-	-	**95.4%**
A58 Bolton Road / A664 Manchester Rd	-	-	**N/A**	-	-		-	-	-	-	-	-	**95.4%**
1/1	A58 (EB) Left	U	N/A	N/A	G		1	69	-	966	1945	1216	79.5%
1/2+1/3	A58 (EB) Ahead Right Left	U	N/A	N/A	F		1	8	-	192	1965:1833	55+147	95.0 : 95.0%
2/2+2/1	A58 Manchester Rd Left Ahead	U	N/A	N/A	A B		1	52:69	-	579	1975:1925	640+323	60.1 : 60.1%
2/3	A58 Manchester Rd Right	U	N/A	N/A	A		1	52	-	851	1907	902	94.3%
3/2+3/1	Silk St Left Ahead	U	N/A	N/A	C		1	10	-	93	1975:1771	178+52	40.3 : 40.3%
3/3	Silk St Right	U	N/A	N/A	C		1	10	-	166	1830	180	92.4%
4/2+4/1	A664 Manchester Rd Ahead Left	U	N/A	N/A	D E		1	15:19	-	340	1995:1980	167+190	95.4 : 95.4%
4/3	A664 Manchester Rd Right Ahead	U	N/A	N/A	D		1	15	-	262	1965	281	93.3%
5/1		U	N/A	N/A	-		-	-	-	281	Inf	Inf	0.0%
6/1		U	N/A	N/A	-		-	-	-	546	Inf	Inf	0.0%
7/1		U	N/A	N/A	-		-	-	-	966	Inf	Inf	0.0%
7/2		U	N/A	N/A	-		-	-	-	159	Inf	Inf	0.0%
7/3		U	N/A	N/A	-		-	-	-	393	Inf	Inf	0.0%
8/1		U	N/A	N/A	-		-	-	-	1104	Inf	Inf	0.0%

Full Input Data And Results

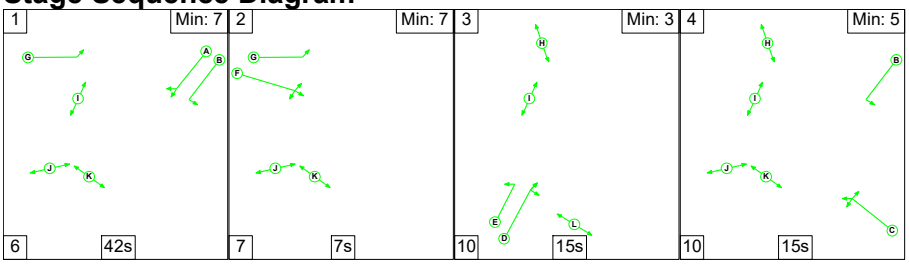
Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network	**-**	**-**	**0**	**0**	**0**	**27.9**	**29.0**	**0.0**	**56.9**	**-**	**-**	**-**	**-**
A58 Bolton Road / A664 Manchester Rd	**-**	**-**	**0**	**0**	**0**	**27.9**	**29.0**	**0.0**	**56.9**	**-**	**-**	**-**	**-**
1/1	966	966	-	-	-	4.2	1.9	-	6.1	22.7	22.3	1.9	24.2
1/2+1/3	192	192	-	-	-	2.7	4.9	-	7.6	141.8	4.3	4.9	9.2
2/2+2/1	579	579	-	-	-	3.2	0.8	-	3.9	24.3	12.0	0.8	12.8
2/3	851	851	-	-	-	6.6	6.6	-	13.2	55.9	25.1	6.6	31.6
3/2+3/1	93	93	-	-	-	1.2	0.3	-	1.6	60.1	2.1	0.3	2.4
3/3	166	166	-	-	-	2.3	3.9	-	6.2	133.9	5.1	3.9	9.0
4/2+4/1	340	340	-	-	-	4.2	6.0	-	10.2	108.2	8.3	6.0	14.3
4/3	262	262	-	-	-	3.5	4.7	-	8.1	111.6	8.0	4.7	12.7
5/1	281	281	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/1	546	546	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
7/1	966	966	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
7/2	159	159	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
7/3	393	393	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
8/1	1104	1104	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0

C1 PRC for Signalled Lanes (%): -6.0 Total Delay for Signalled Lanes (pcuHr): 56.86 Cycle Time (s): 112
PRC Over All Lanes (%): -6.0 Total Delay Over All Lanes(pcuHr): 56.86

Full Input Data And Results

Scenario 2: '2033 WITHOUT DEV PM' (FG2: '2033 WITHOUT DEV PM', Plan 1: 'Network Control Plan 1')

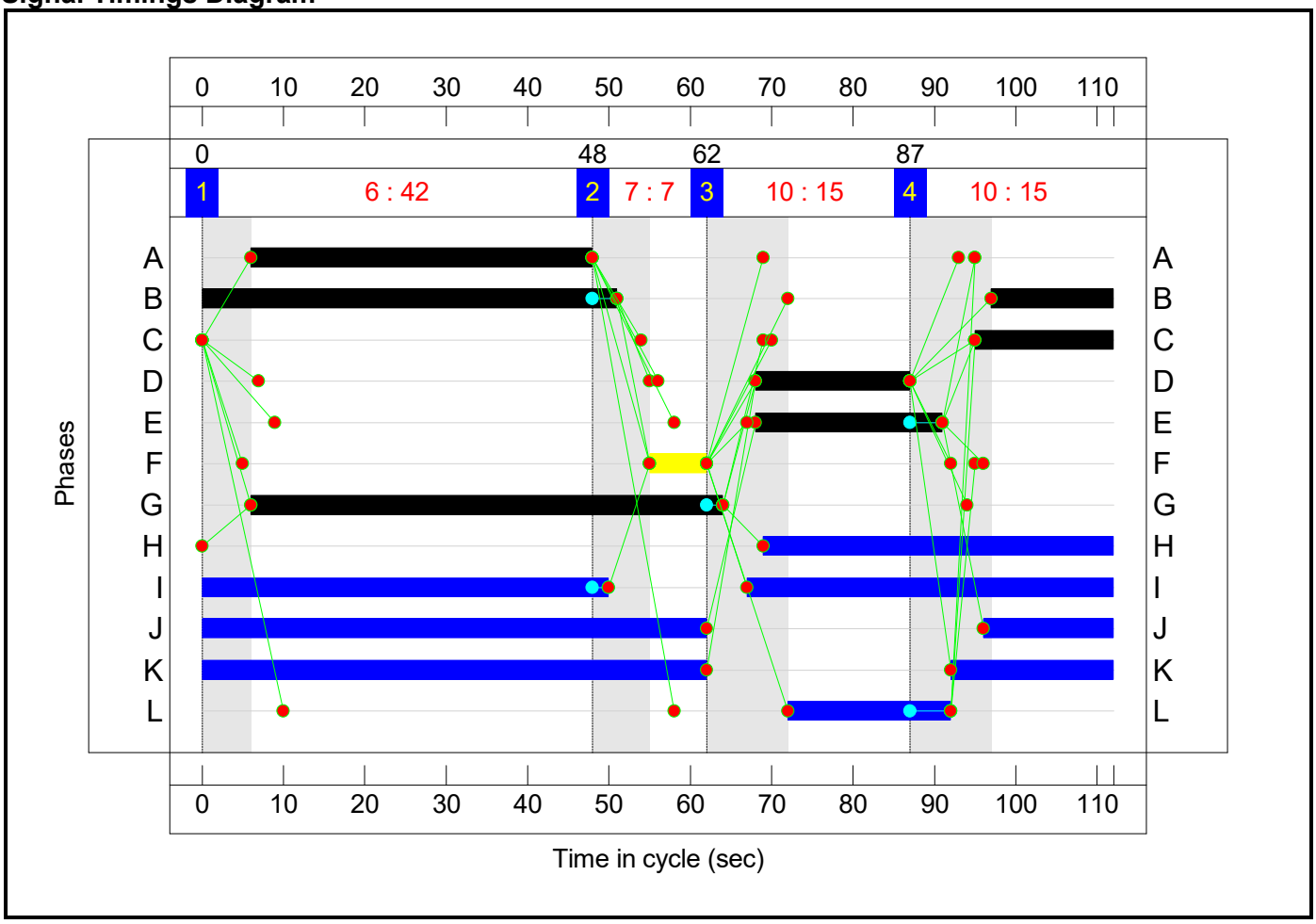
Stage Sequence Diagram



Stage Timings

Stage	1	2	3	4
Duration	42	7	15	15
Change Point	0	48	62	87

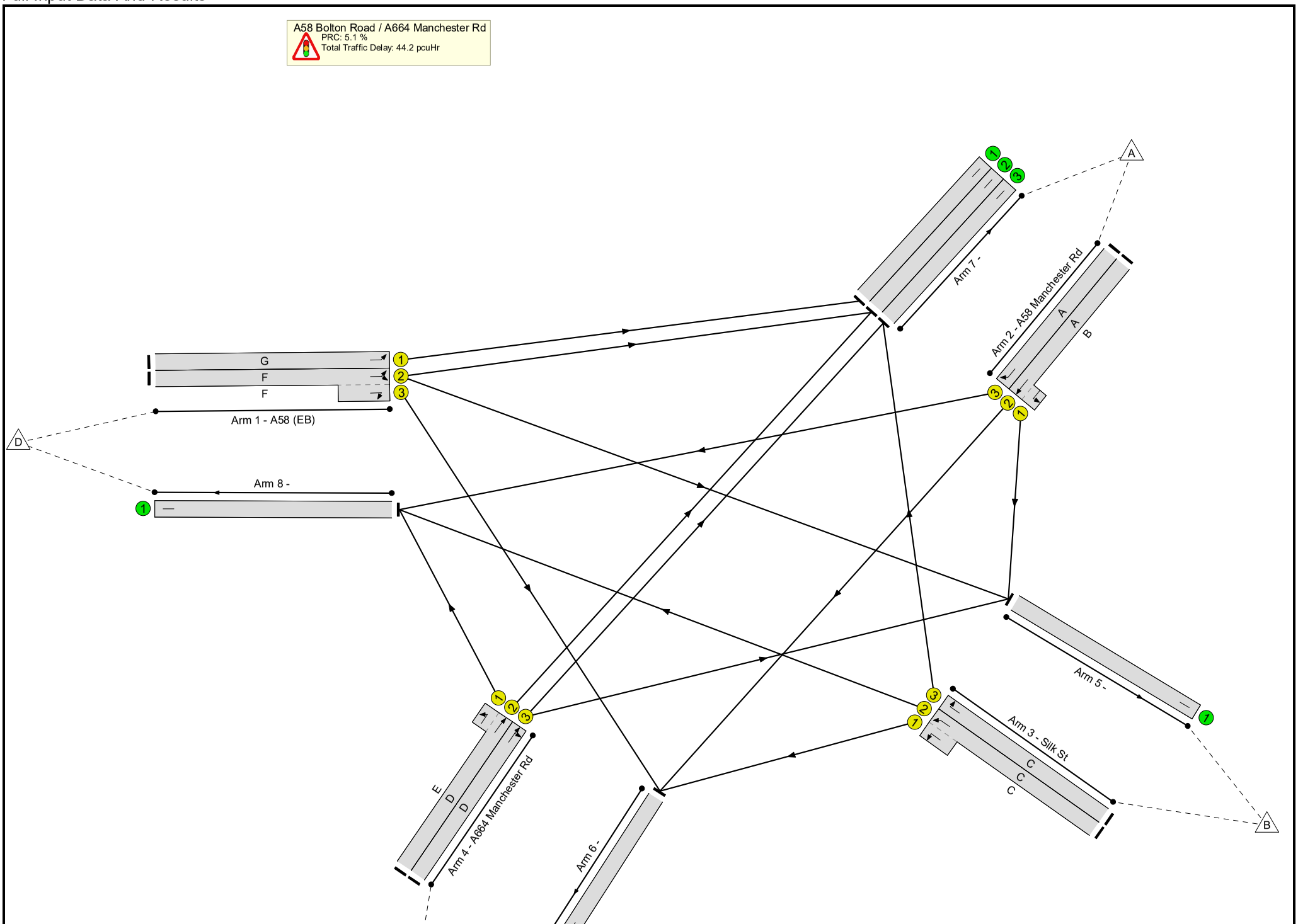
Signal Timings Diagram



Full Input Data And Results

Network Layout Diagram

Full Input Data And Results



Full Input Data And Results

Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network	-	-	**N/A**	-	-		-	-	-	-	-	-	**85.6%**
A58 Bolton Road / A664 Manchester Rd	-	-	**N/A**	-	-		-	-	-	-	-	-	**85.6%**
1/1	A58 (EB) Left	U	N/A	N/A	G		1	58	-	646	1945	1025	63.0%
1/2+1/3	A58 (EB) Ahead Right Left	U	N/A	N/A	F		1	7	-	192	1965:1833	98+131	84.0 : 84.0%
2/2+2/1	A58 Manchester Rd Left Ahead	U	N/A	N/A	A B		1	42:66	-	647	1975:1925	461+339	80.9 : 80.9%
2/3	A58 Manchester Rd Right	U	N/A	N/A	A		1	42	-	627	1907	732	85.6%
3/2+3/1	Silk St Left Ahead	U	N/A	N/A	C		1	17	-	142	1975:1771	247+122	38.5 : 38.5%
3/3	Silk St Right	U	N/A	N/A	C		1	17	-	246	1830	294	83.6%
4/2+4/1	A664 Manchester Rd Ahead Left	U	N/A	N/A	D E		1	19:23	-	353	1995:1980	212+204	85.0 : 85.0%
4/3	A664 Manchester Rd Right Ahead	U	N/A	N/A	D		1	19	-	284	1954	349	81.4%
5/1		U	N/A	N/A	-		-	-	-	408	Inf	Inf	0.0%
6/1		U	N/A	N/A	-		-	-	-	530	Inf	Inf	0.0%
7/1		U	N/A	N/A	-		-	-	-	646	Inf	Inf	0.0%
7/2		U	N/A	N/A	-		-	-	-	180	Inf	Inf	0.0%
7/3		U	N/A	N/A	-		-	-	-	478	Inf	Inf	0.0%
8/1		U	N/A	N/A	-		-	-	-	895	Inf	Inf	0.0%

Full Input Data And Results

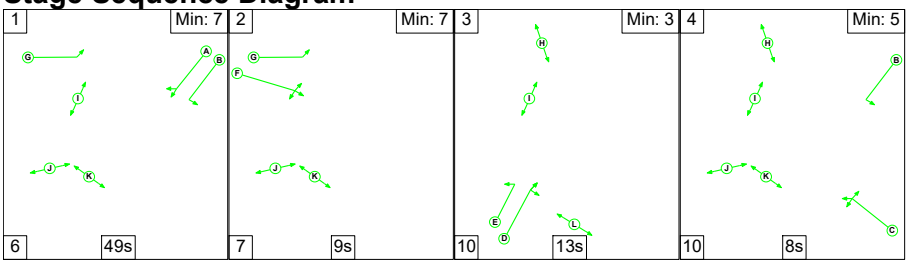
Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network	**-**	**-**	**0**	**0**	**0**	**28.9**	**15.4**	**0.0**	**44.2**	**-**	**-**	**-**	**-**
A58 Bolton Road / A664 Manchester Rd	**-**	**-**	**0**	**0**	**0**	**28.9**	**15.4**	**0.0**	**44.2**	**-**	**-**	**-**	**-**
1/1	646	646	-	-	-	3.4	0.8	-	4.2	23.5	14.2	0.8	15.0
1/2+1/3	192	192	-	-	-	2.7	2.3	-	5.0	94.7	3.4	2.3	5.7
2/2+2/1	647	647	-	-	-	5.0	2.1	-	7.0	39.0	16.4	2.1	18.4
2/3	627	627	-	-	-	5.5	2.8	-	8.3	47.9	17.8	2.8	20.6
3/2+3/1	142	142	-	-	-	1.6	0.3	-	1.9	49.1	2.6	0.3	2.9
3/3	246	246	-	-	-	3.1	2.3	-	5.4	79.7	7.4	2.3	9.7
4/2+4/1	353	353	-	-	-	4.1	2.6	-	6.7	68.2	8.5	2.6	11.1
4/3	284	284	-	-	-	3.5	2.1	-	5.5	70.3	8.4	2.1	10.5
5/1	408	408	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/1	530	530	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
7/1	646	646	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
7/2	180	180	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
7/3	478	478	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
8/1	895	895	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0

C1 PRC for Signalled Lanes (%): 5.1 Total Delay for Signalled Lanes (pcuHr): 44.24 Cycle Time (s): 112
PRC Over All Lanes (%): 5.1 Total Delay Over All Lanes(pcuHr): 44.24

Full Input Data And Results

Scenario 3: '2033 WITH DEV AM' (FG3: '2033 WITH DEV AM', Plan 1: 'Network Control Plan 1')

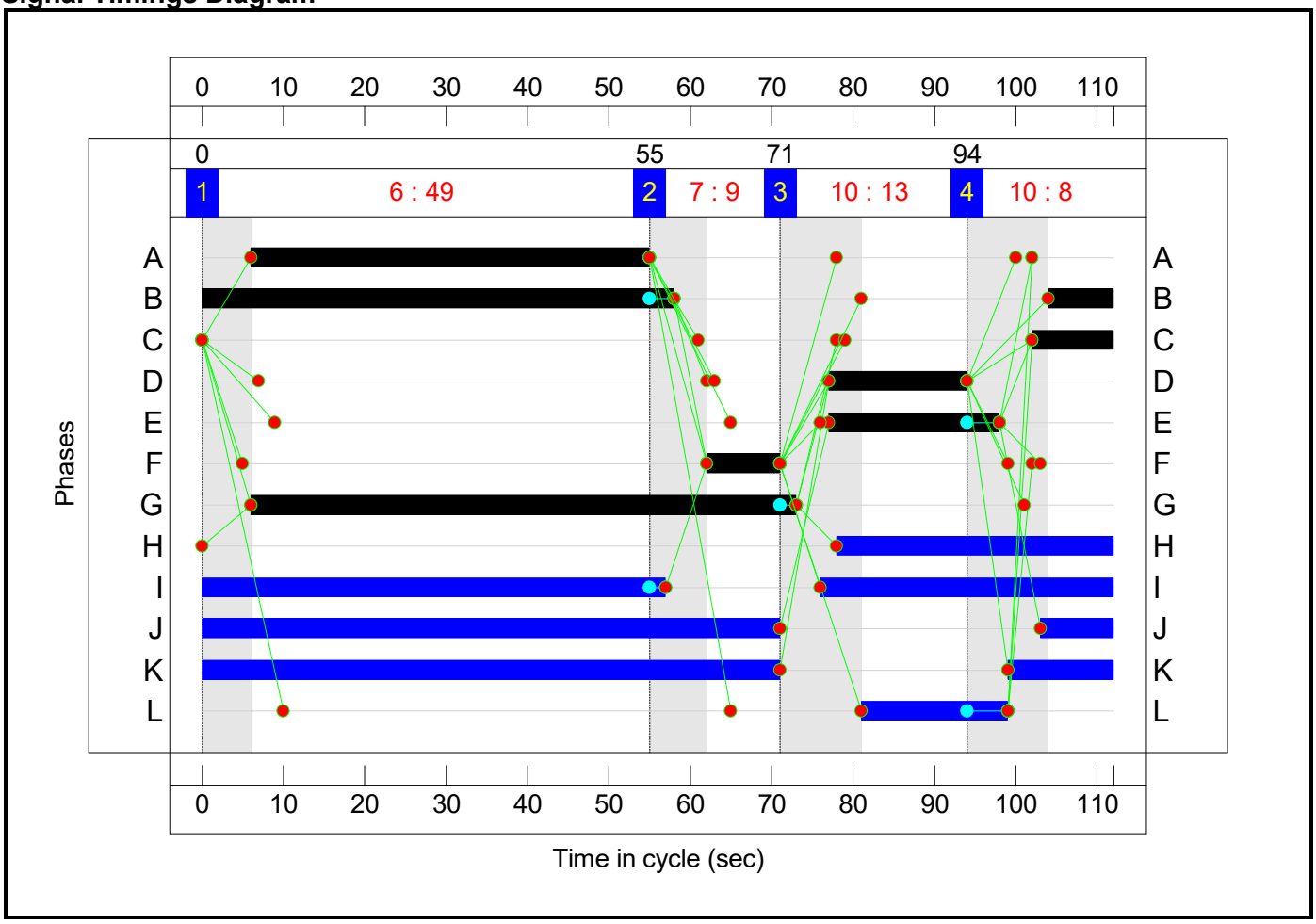
Stage Sequence Diagram



Stage Timings

Stage	1	2	3	4
Duration	49	9	13	8
Change Point	0	55	71	94

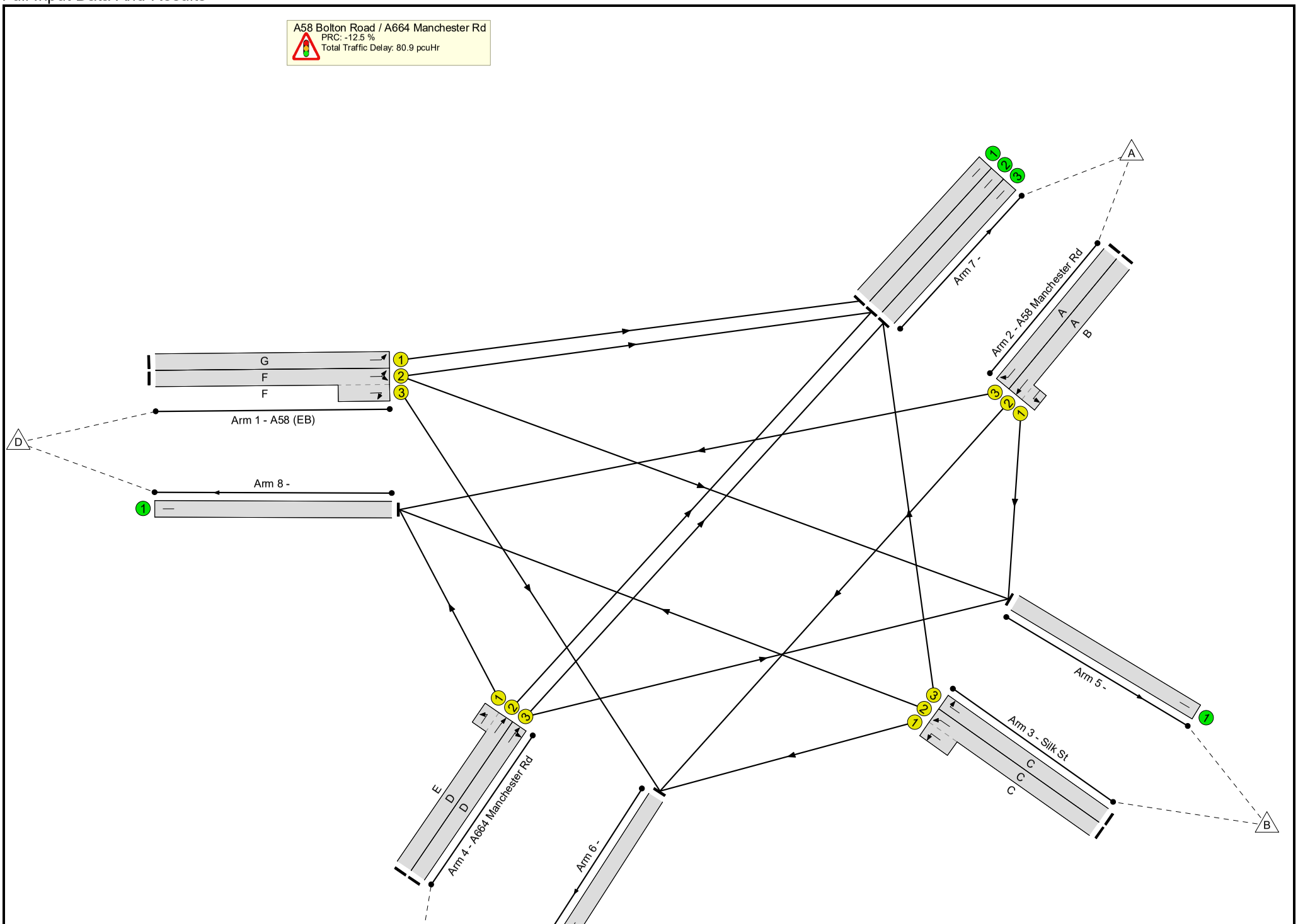
Signal Timings Diagram



Full Input Data And Results

Network Layout Diagram

Full Input Data And Results



Full Input Data And Results

Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network	-	-	**N/A**	-	-		-	-	-	-	-	-	**101.2%**
A58 Bolton Road / A664 Manchester Rd	-	-	**N/A**	-	-		-	-	-	-	-	-	**101.2%**
1/1	A58 (EB) Left	U	N/A	N/A	G		1	67	-	966	1945	1181	81.8%
1/2+1/3	A58 (EB) Ahead Right Left	U	N/A	N/A	F		1	9	-	212	1965:1833	53+164	97.8 : 97.8%
2/2+2/1	A58 Manchester Rd Left Ahead	U	N/A	N/A	A B		1	49:66	-	606	1975:1925	618+291	66.7 : 66.7%
2/3	A58 Manchester Rd Right	U	N/A	N/A	A		1	49	-	851	1907	851	100.0%
3/2+3/1	Silk St Left Ahead	U	N/A	N/A	C		1	10	-	93	1975:1771	178+52	40.3 : 40.3%
3/3	Silk St Right	U	N/A	N/A	C		1	10	-	166	1830	180	92.4%
4/2+4/1	A664 Manchester Rd Ahead Left	U	N/A	N/A	D E		1	17:21	-	408	1995:1980	175+228	101.2 : 101.2%
4/3	A664 Manchester Rd Right Ahead	U	N/A	N/A	D		1	17	-	319	1970	317	100.8%
5/1		U	N/A	N/A	-		-	-	-	281	Inf	Inf	0.0%
6/1		U	N/A	N/A	-		-	-	-	593	Inf	Inf	0.0%
7/1		U	N/A	N/A	-		-	-	-	966	Inf	Inf	0.0%
7/2		U	N/A	N/A	-		-	-	-	177	Inf	Inf	0.0%
7/3		U	N/A	N/A	-		-	-	-	450	Inf	Inf	0.0%
8/1		U	N/A	N/A	-		-	-	-	1154	Inf	Inf	0.0%

Full Input Data And Results

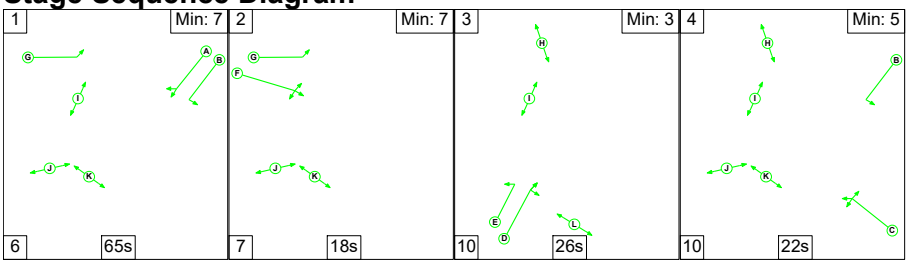
Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network	**-**	**-**	**0**	**0**	**0**	**31.8**	**49.0**	**0.0**	**80.9**	**-**	**-**	**-**	**-**
A58 Bolton Road / A664 Manchester Rd	**-**	**-**	**0**	**0**	**0**	**31.8**	**49.0**	**0.0**	**80.9**	**-**	**-**	**-**	**-**
1/1	966	966	-	-	-	4.6	2.2	-	6.8	25.4	23.3	2.2	25.5
1/2+1/3	212	212	-	-	-	3.0	6.2	-	9.1	154.9	5.0	6.2	11.2
2/2+2/1	606	606	-	-	-	3.8	1.0	-	4.8	28.3	13.7	1.0	14.7
2/3	851	851	-	-	-	7.3	14.5	-	21.8	92.3	26.2	14.5	40.7
3/2+3/1	93	93	-	-	-	1.2	0.3	-	1.6	60.1	2.1	0.3	2.4
3/3	166	166	-	-	-	2.3	3.9	-	6.2	133.9	5.1	3.9	9.0
4/2+4/1	408	406	-	-	-	5.4	11.4	-	16.8	148.3	11.0	11.4	22.4
4/3	319	317	-	-	-	4.3	9.5	-	13.8	155.8	10.0	9.5	19.5
5/1	281	281	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/1	593	593	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
7/1	966	966	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
7/2	175	175	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
7/3	448	448	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
8/1	1154	1154	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0

C1 PRC for Signalled Lanes (%): -12.5 Total Delay for Signalled Lanes (pcuHr): 80.86 Cycle Time (s): 112
PRC Over All Lanes (%): -12.5 Total Delay Over All Lanes(pcuHr): 80.86

Full Input Data And Results

Scenario 4: '2033 WITH DEV PM' (FG4: '2033 WITH DEV PM', Plan 1: 'Network Control Plan 1')

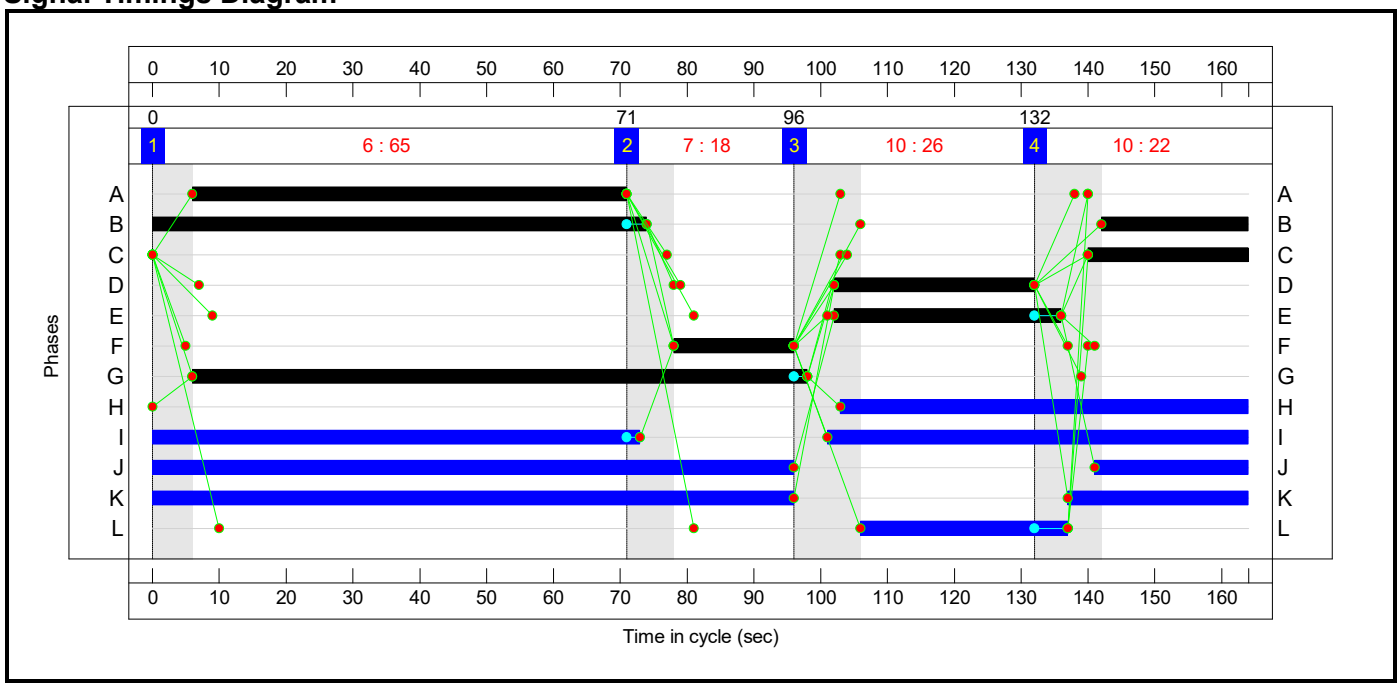
Stage Sequence Diagram



Stage Timings

Stage	1	2	3	4
Duration	65	18	26	22
Change Point	0	71	96	132

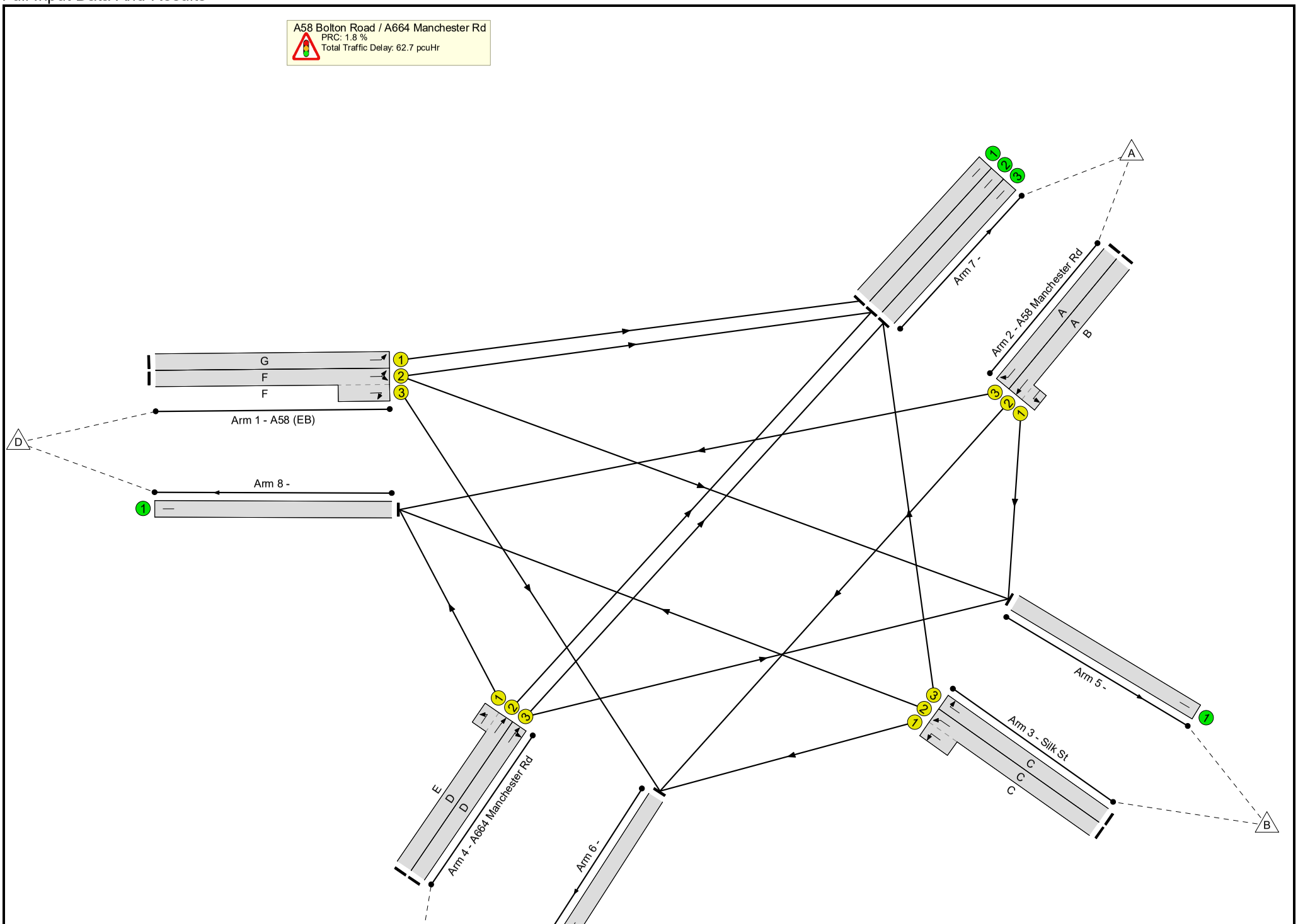
Signal Timings Diagram



Full Input Data And Results

Network Layout Diagram

Full Input Data And Results



Full Input Data And Results

Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network	-	-	**N/A**	-	-		-	-	-	-	-	-	**88.4%**
A58 Bolton Road / A664 Manchester Rd	-	-	**N/A**	-	-		-	-	-	-	-	-	**88.4%**
1/1	A58 (EB) Left	U	N/A	N/A	G		1	92	-	646	1945	1103	58.6%
1/2+1/3	A58 (EB) Ahead Right Left	U	N/A	N/A	F		1	18	-	241	1965:1833	94+182	87.6 : 87.6%
2/2+2/1	A58 Manchester Rd Left Ahead	U	N/A	N/A	A B		1	65:96	-	715	1975:1925	504+313	87.6 : 87.6%
2/3	A58 Manchester Rd Right	U	N/A	N/A	A		1	65	-	627	1907	767	81.7%
3/2+3/1	Silk St Left Ahead	U	N/A	N/A	C		1	24	-	142	1975:1771	223+110	42.6 : 42.6%
3/3	Silk St Right	U	N/A	N/A	C		1	24	-	246	1830	279	88.2%
4/2+4/1	A664 Manchester Rd Ahead Left	U	N/A	N/A	D E		1	30:34	-	374	1995:1980	202+220	88.4 : 88.4%
4/3	A664 Manchester Rd Right Ahead	U	N/A	N/A	D		1	30	-	316	1958	370	85.4%
5/1		U	N/A	N/A	-		-	-	-	408	Inf	Inf	0.0%
6/1		U	N/A	N/A	-		-	-	-	647	Inf	Inf	0.0%
7/1		U	N/A	N/A	-		-	-	-	646	Inf	Inf	0.0%
7/2		U	N/A	N/A	-		-	-	-	179	Inf	Inf	0.0%
7/3		U	N/A	N/A	-		-	-	-	510	Inf	Inf	0.0%
8/1		U	N/A	N/A	-		-	-	-	917	Inf	Inf	0.0%

Full Input Data And Results

Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network	**-**	**-**	**0**	**0**	**0**	**44.0**	**18.7**	**0.0**	**62.7**	**-**	**-**	**-**	**-**
A58 Bolton Road / A664 Manchester Rd	**-**	**-**	**0**	**0**	**0**	**44.0**	**18.7**	**0.0**	**62.7**	**-**	**-**	**-**	**-**
1/1	646	646	-	-	-	4.1	0.7	-	4.8	26.9	19.0	0.7	19.7
1/2+1/3	241	241	-	-	-	4.7	3.0	-	7.7	114.5	8.3	3.0	11.3
2/2+2/1	715	715	-	-	-	8.5	3.3	-	11.8	59.2	28.7	3.3	32.0
2/3	627	627	-	-	-	7.6	2.2	-	9.8	56.1	25.4	2.2	27.6
3/2+3/1	142	142	-	-	-	2.4	0.4	-	2.8	71.0	4.2	0.4	4.6
3/3	246	246	-	-	-	4.7	3.1	-	7.8	113.9	10.9	3.1	14.1
4/2+4/1	374	374	-	-	-	6.4	3.4	-	9.7	93.8	14.2	3.4	17.6
4/3	316	316	-	-	-	5.6	2.7	-	8.3	94.6	13.9	2.7	16.5
5/1	408	408	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/1	647	647	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
7/1	646	646	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
7/2	179	179	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
7/3	510	510	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
8/1	917	917	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0

C1 PRC for Signalled Lanes (%): 1.8 Total Delay for Signalled Lanes (pcuHr): 62.65 Cycle Time (s): 164
PRC Over All Lanes (%): 1.8 Total Delay Over All Lanes(pcuHr): 62.65

S|C|P

APPENDIX T

Junctions 9

ARCADY 9 - Roundabout Module

Version: 9.5.2.1013
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Filename: A664 Assheton Way RB Model.j9
Path: Z:\Job Library\2019\190267 - Manchester Road, Rochdale\Traffic Data\Planning Application\ARCADY\A664 Assheton Way A669 roundabout
Report generation date: 13/12/2022 15:11:54

»Base 2033, AM
»Base 2033, PM
»Assessment 2033 + Dev, AM
»Assessment 2033 + Dev, PM

Summary of junction performance

	AM					PM				
	Set ID	Queue (PCU)	Delay (s)	RFC	LOS	Set ID	Queue (PCU)	Delay (s)	RFC	LOS
	Base 2033									
Arm 1	D1	0.0	4.05	0.02	A	D2	0.0	3.72	0.02	A
Arm 2		1.3	3.73	0.56	A		3.1	6.86	0.76	A
Arm 3		1.6	5.98	0.62	A		1.0	4.94	0.51	A
Arm 4		0.8	3.95	0.45	A		0.8	3.64	0.44	A
	Assessment 2033 + Dev									
Arm 1	D5	0.0	4.24	0.03	A	D6	0.0	3.79	0.02	A
Arm 2		1.3	3.84	0.57	A		3.7	7.86	0.79	A
Arm 3		1.9	6.79	0.66	A		1.1	5.16	0.53	A
Arm 4		0.8	4.17	0.46	A		0.8	3.72	0.45	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.

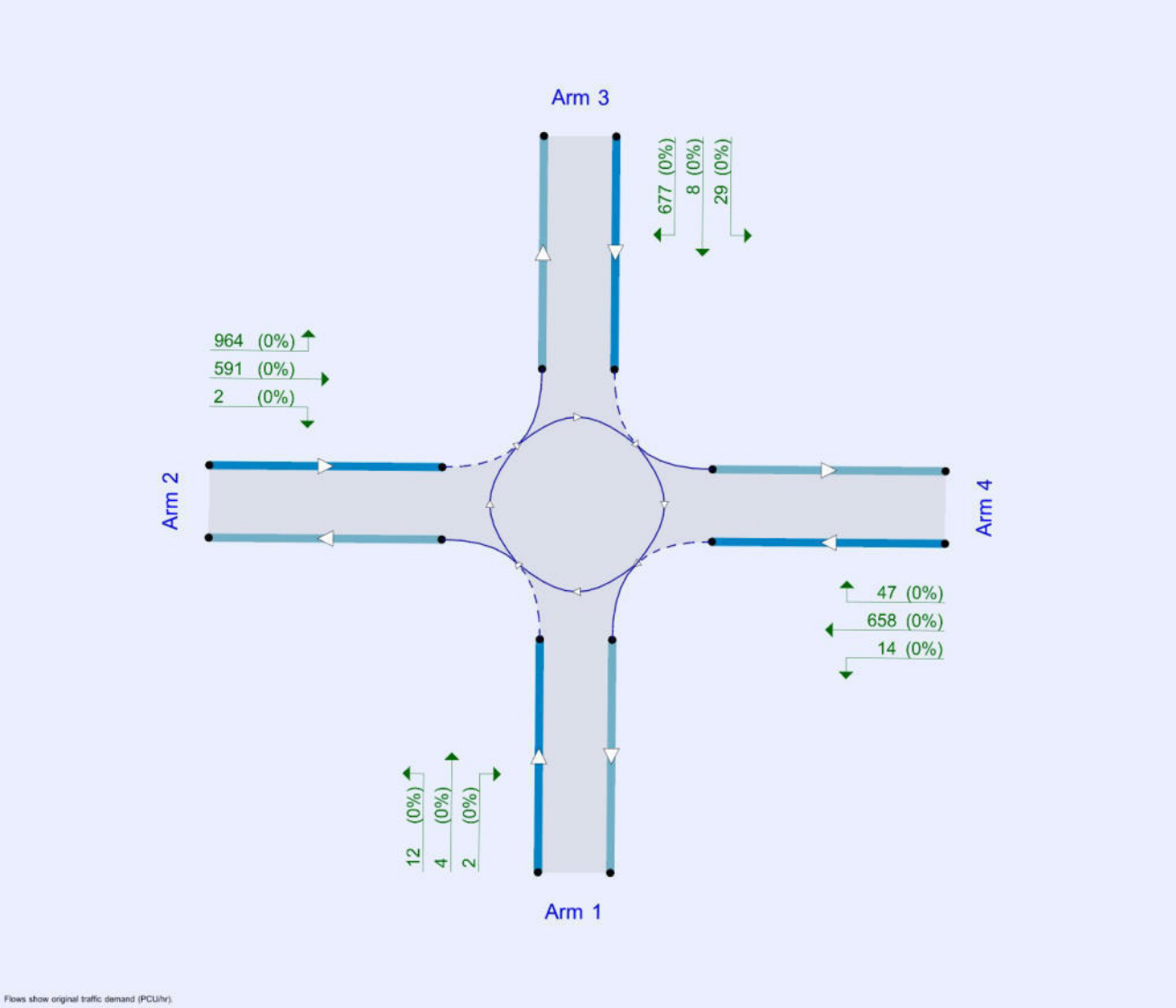
File summary

File Description

Title	Assheton Way RB
Location	Middleton
Site number	
Date	26/11/2019
Version	
Status	(new file)
Identifier	
Client	
Jobnumber	190267
Enumerator	SCP\Matthew Cross
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



The junction diagram reflects the last run of Junctions.

Analysis Options

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

Demand Set Summary

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D1	Base 2033	AM	ONE HOUR	07:30	09:00	15
D2	Base 2033	PM	ONE HOUR	16:15	17:45	15
D5	Assessment 2033 + Dev	AM	ONE HOUR	07:30	09:00	15
D6	Assessment 2033 + Dev	PM	ONE HOUR	16:15	17:45	15

Analysis Set Details

ID	Network flow scaling factor (%)
A1	100.000

Base 2033, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	Arm 4 - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
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	4.53	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Name	Description
1	Ashton Lane	
2	Oldham Road (West)	
3	Assheton Way	
4	Oldham Road (East)	

Roundabout Geometry

Arm	V - Approach road half-width (m)	E - Entry width (m)	l' - Effective flare length (m)	R - Entry radius (m)	D - Inscribed circle diameter (m)	PHI - Conflict (entry) angle (deg)	Exit only
1	4.20	7.20	20.1	21.0	62.0	37.0	
2	6.50	7.38	10.1	46.4	62.0	30.0	
3	5.55	7.28	3.5	26.3	64.0	36.0	
4	4.83	7.57	38.0	64.2	60.0	19.0	

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Arm	Final slope	Final intercept (PCU/hr)
1	0.565	1846
2	0.645	2239
3	0.561	1868
4	0.678	2292

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

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D1	Base 2033	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		✓	20	100.000
2		✓	1107	100.000
3		✓	880	100.000
4		✓	664	100.000

Origin-Destination Data

Demand (PCU/hr)

		To			
		1	2	3	4
From	1	0	7	5	8
	2	12	23	635	437
	3	11	823	0	46
	4	7	593	64	0

Vehicle Mix

Heavy Vehicle Percentages

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

Detailed Demand Data

Demand for each time segment

Arm	Time Segment	Demand (PCU/hr)	Demand in PCU (PCU/hr)
1	07:30-07:45	15	15
	07:45-08:00	18	18
	08:00-08:15	22	22
	08:15-08:30	22	22
	08:30-08:45	18	18
	08:45-09:00	15	15
2	07:30-07:45	833	833
	07:45-08:00	995	995
	08:00-08:15	1219	1219
	08:15-08:30	1219	1219
	08:30-08:45	995	995
	08:45-09:00	833	833
3	07:30-07:45	663	663
	07:45-08:00	791	791
	08:00-08:15	969	969
	08:15-08:30	969	969
	08:30-08:45	791	791
	08:45-09:00	663	663
4	07:30-07:45	500	500
	07:45-08:00	597	597
	08:00-08:15	731	731
	08:15-08:30	731	731
	08:30-08:45	597	597
	08:45-09:00	500	500

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
1	0.02	4.05	0.0	A
2	0.56	3.73	1.3	A
3	0.62	5.98	1.6	A
4	0.45	3.95	0.8	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	15	1128	1209	0.012	15	0.0	3.014	A
2	833	58	2201	0.379	831	0.6	2.622	A
3	663	360	1666	0.398	660	0.7	3.571	A
4	500	652	1850	0.270	498	0.4	2.662	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	18	1350	1084	0.017	18	0.0	3.377	A
2	995	69	2194	0.454	994	0.8	2.999	A
3	791	431	1626	0.487	790	0.9	4.300	A
4	597	780	1762	0.339	596	0.5	3.085	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	22	1651	913	0.024	22	0.0	4.039	A
2	1219	85	2184	0.558	1217	1.3	3.717	A
3	969	528	1572	0.616	966	1.6	5.923	A
4	731	954	1644	0.445	730	0.8	3.932	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	22	1655	911	0.024	22	0.0	4.048	A
2	1219	85	2184	0.558	1219	1.3	3.729	A
3	969	528	1571	0.617	969	1.6	5.976	A
4	731	957	1643	0.445	731	0.8	3.949	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	18	1355	1081	0.017	18	0.0	3.389	A
2	995	69	2194	0.454	997	0.8	3.010	A
3	791	432	1625	0.487	794	1.0	4.343	A
4	597	784	1760	0.339	598	0.5	3.100	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	15	1133	1206	0.012	15	0.0	3.022	A
2	833	58	2201	0.379	834	0.6	2.636	A
3	663	362	1665	0.398	664	0.7	3.599	A
4	500	655	1847	0.271	500	0.4	2.676	A

Base 2033, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	Arm 4 - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
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	5.61	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)
D2	Base 2033	PM	ONE HOUR	16:15	17:45	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		✓	18	100.000
2		✓	1523	100.000
3		✓	686	100.000
4		✓	719	100.000

Origin-Destination Data

Demand (PCU/hr)

		To			
		1	2	3	4
From	1	0	12	4	2
	2	2	27	903	591
	3	8	649	0	29
	4	14	658	47	0

Vehicle Mix

Heavy Vehicle Percentages

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

Detailed Demand Data

Demand for each time segment

Arm	Time Segment	Demand (PCU/hr)	Demand in PCU (PCU/hr)
1	16:15-16:30	14	14
	16:30-16:45	16	16
	16:45-17:00	20	20
	17:00-17:15	20	20
	17:15-17:30	16	16
	17:30-17:45	14	14
2	16:15-16:30	1147	1147
	16:30-16:45	1369	1369
	16:45-17:00	1677	1677
	17:00-17:15	1677	1677
	17:15-17:30	1369	1369
	17:30-17:45	1147	1147
3	16:15-16:30	516	516
	16:30-16:45	617	617
	16:45-17:00	755	755
	17:00-17:15	755	755
	17:15-17:30	617	617
	17:30-17:45	516	516
4	16:15-16:30	541	541
	16:30-16:45	646	646
	16:45-17:00	792	792
	17:00-17:15	792	792
	17:15-17:30	646	646
	17:30-17:45	541	541

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
1	0.02	3.72	0.0	A
2	0.76	6.86	3.1	A
3	0.51	4.94	1.0	A
4	0.44	3.64	0.8	A

Main Results for each time segment

16:15 - 16:30

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	14	1036	1261	0.011	14	0.0	2.886	A
2	1147	40	2213	0.518	1142	1.1	3.348	A
3	516	467	1606	0.322	515	0.5	3.293	A
4	541	515	1943	0.279	540	0.4	2.564	A

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	16	1240	1145	0.014	16	0.0	3.187	A
2	1369	48	2208	0.620	1367	1.6	4.269	A
3	617	558	1555	0.397	616	0.7	3.830	A
4	646	616	1874	0.345	646	0.5	2.930	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	20	1518	988	0.020	20	0.0	3.715	A
2	1677	58	2201	0.762	1671	3.1	6.713	A
3	755	682	1485	0.509	754	1.0	4.914	A
4	792	754	1780	0.445	791	0.8	3.634	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	20	1520	987	0.020	20	0.0	3.721	A
2	1677	58	2201	0.762	1677	3.1	6.859	A
3	755	685	1484	0.509	755	1.0	4.942	A
4	792	755	1779	0.445	792	0.8	3.644	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	16	1244	1143	0.014	16	0.0	3.196	A
2	1369	48	2208	0.620	1375	1.7	4.353	A
3	617	562	1553	0.397	618	0.7	3.859	A
4	646	618	1872	0.345	647	0.5	2.941	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	14	1041	1258	0.011	14	0.0	2.892	A
2	1147	40	2213	0.518	1149	1.1	3.392	A
3	516	469	1604	0.322	517	0.5	3.312	A
4	541	517	1941	0.279	542	0.4	2.576	A

Assessment 2033 + Dev, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	Arm 4 - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
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	4.93	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)
D5	Assessment 2033 + Dev	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		✓	20	100.000
2		✓	1132	100.000
3		✓	946	100.000
4		✓	664	100.000

Origin-Destination Data

Demand (PCU/hr)

		To			
		1	2	3	4
From	1	0	7	5	8
	2	12	23	660	437
	3	11	889	0	46
	4	7	593	64	0

Vehicle Mix

Heavy Vehicle Percentages

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

Detailed Demand Data

Demand for each time segment

Arm	Time Segment	Demand (PCU/hr)	Demand in PCU (PCU/hr)
1	07:30-07:45	15	15
	07:45-08:00	18	18
	08:00-08:15	22	22
	08:15-08:30	22	22
	08:30-08:45	18	18
	08:45-09:00	15	15
2	07:30-07:45	852	852
	07:45-08:00	1018	1018
	08:00-08:15	1246	1246
	08:15-08:30	1246	1246
	08:30-08:45	1018	1018
	08:45-09:00	852	852
3	07:30-07:45	712	712
	07:45-08:00	850	850
	08:00-08:15	1042	1042
	08:15-08:30	1042	1042
	08:30-08:45	850	850
	08:45-09:00	712	712
4	07:30-07:45	500	500
	07:45-08:00	597	597
	08:00-08:15	731	731
	08:15-08:30	731	731
	08:30-08:45	597	597
	08:45-09:00	500	500

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
1	0.03	4.24	0.0	A
2	0.57	3.84	1.3	A
3	0.66	6.79	1.9	A
4	0.46	4.17	0.8	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	15	1177	1181	0.013	15	0.0	3.086	A
2	852	58	2201	0.387	850	0.6	2.659	A
3	712	360	1666	0.428	709	0.7	3.754	A
4	500	701	1816	0.275	498	0.4	2.730	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	18	1409	1050	0.017	18	0.0	3.486	A
2	1018	69	2194	0.464	1017	0.9	3.054	A
3	850	431	1626	0.523	849	1.1	4.626	A
4	597	839	1722	0.347	596	0.5	3.195	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	22	1723	873	0.025	22	0.0	4.232	A
2	1246	85	2184	0.571	1245	1.3	3.823	A
3	1042	528	1572	0.663	1038	1.9	6.705	A
4	731	1026	1595	0.458	730	0.8	4.153	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	22	1727	870	0.025	22	0.0	4.244	A
2	1246	85	2184	0.571	1246	1.3	3.838	A
3	1042	528	1571	0.663	1041	1.9	6.793	A
4	731	1029	1593	0.459	731	0.8	4.174	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	18	1415	1047	0.017	18	0.0	3.501	A
2	1018	69	2194	0.464	1019	0.9	3.071	A
3	850	432	1625	0.523	854	1.1	4.688	A
4	597	844	1719	0.347	598	0.5	3.214	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	15	1183	1178	0.013	15	0.0	3.098	A
2	852	58	2201	0.387	853	0.6	2.673	A
3	712	362	1665	0.428	714	0.8	3.789	A
4	500	705	1813	0.276	501	0.4	2.743	A

Assessment 2033 + Dev, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	Arm 4 - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
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	6.22	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	Assessment 2033 + Dev	PM	ONE HOUR	16:15	17:45	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		✓	18	100.000
2		✓	1584	100.000
3		✓	714	100.000
4		✓	719	100.000

Origin-Destination Data

Demand (PCU/hr)

		To			
		1	2	3	4
From	1	0	12	4	2
	2	2	27	964	591
	3	8	677	0	29
	4	14	658	47	0

Vehicle Mix

Heavy Vehicle Percentages

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

Detailed Demand Data

Demand for each time segment

Arm	Time Segment	Demand (PCU/hr)	Demand in PCU (PCU/hr)
1	16:15-16:30	14	14
	16:30-16:45	16	16
	16:45-17:00	20	20
	17:00-17:15	20	20
	17:15-17:30	16	16
	17:30-17:45	14	14
2	16:15-16:30	1193	1193
	16:30-16:45	1424	1424
	16:45-17:00	1744	1744
	17:00-17:15	1744	1744
	17:15-17:30	1424	1424
	17:30-17:45	1193	1193
3	16:15-16:30	538	538
	16:30-16:45	642	642
	16:45-17:00	786	786
	17:00-17:15	786	786
	17:15-17:30	642	642
	17:30-17:45	538	538
4	16:15-16:30	541	541
	16:30-16:45	646	646
	16:45-17:00	792	792
	17:00-17:15	792	792
	17:15-17:30	646	646
	17:30-17:45	541	541

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
1	0.02	3.79	0.0	A
2	0.79	7.86	3.7	A
3	0.53	5.16	1.1	A
4	0.45	3.72	0.8	A

Main Results for each time segment

16:15 - 16:30

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	14	1057	1249	0.011	14	0.0	2.913	A
2	1193	40	2213	0.539	1188	1.2	3.496	A
3	538	466	1606	0.335	536	0.5	3.357	A
4	541	536	1928	0.281	540	0.4	2.590	A

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	16	1265	1131	0.014	16	0.0	3.227	A
2	1424	48	2208	0.645	1421	1.8	4.562	A
3	642	558	1555	0.413	641	0.7	3.937	A
4	646	641	1857	0.348	646	0.5	2.971	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	20	1549	971	0.020	20	0.0	3.783	A
2	1744	58	2201	0.792	1737	3.7	7.627	A
3	786	682	1485	0.529	784	1.1	5.124	A
4	792	784	1759	0.450	791	0.8	3.712	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	20	1551	970	0.020	20	0.0	3.789	A
2	1744	58	2201	0.792	1744	3.7	7.858	A
3	786	685	1484	0.530	786	1.1	5.160	A
4	792	786	1758	0.450	792	0.8	3.723	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	16	1269	1129	0.014	16	0.0	3.237	A
2	1424	48	2208	0.645	1432	1.8	4.683	A
3	642	562	1552	0.413	644	0.7	3.969	A
4	646	644	1855	0.348	647	0.5	2.983	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	14	1062	1246	0.011	14	0.0	2.922	A
2	1193	40	2213	0.539	1195	1.2	3.548	A
3	538	469	1604	0.335	538	0.5	3.378	A
4	541	538	1926	0.281	542	0.4	2.602	A

S|C|P

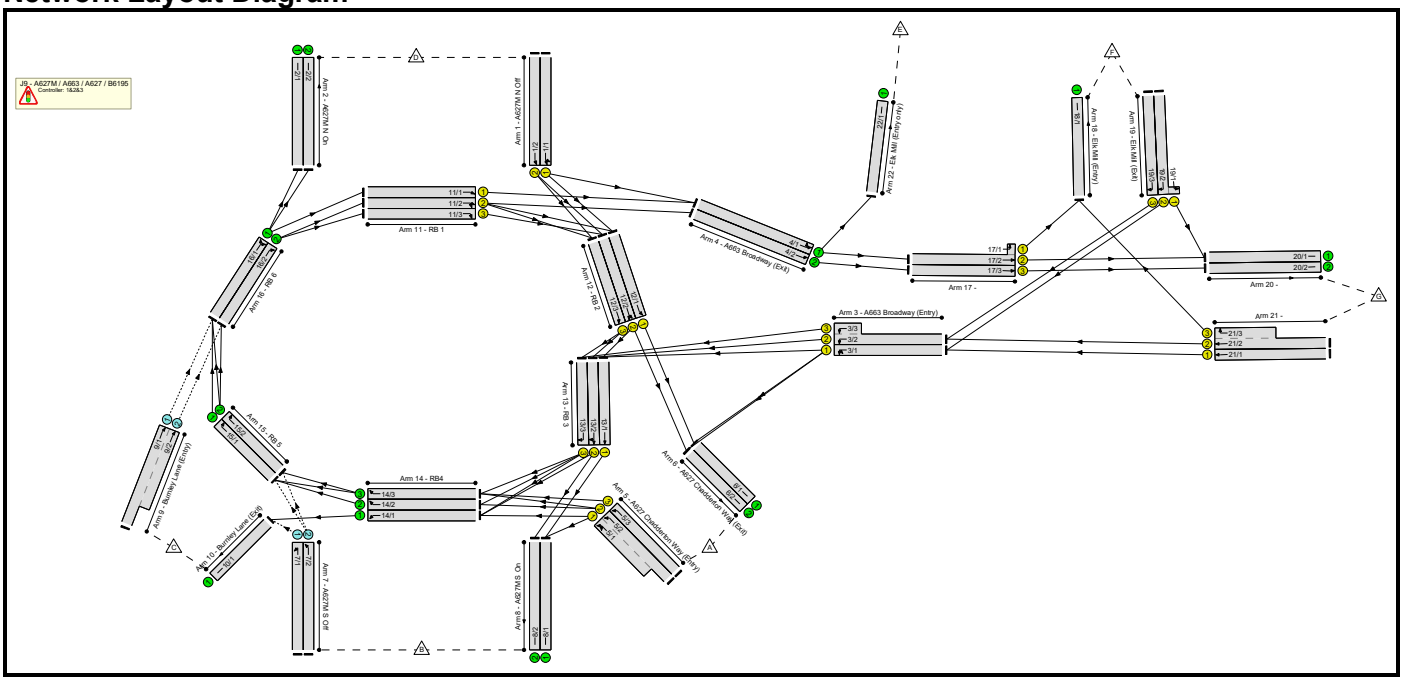
APPENDIX U

Full Input Data And Results

User and Project Details

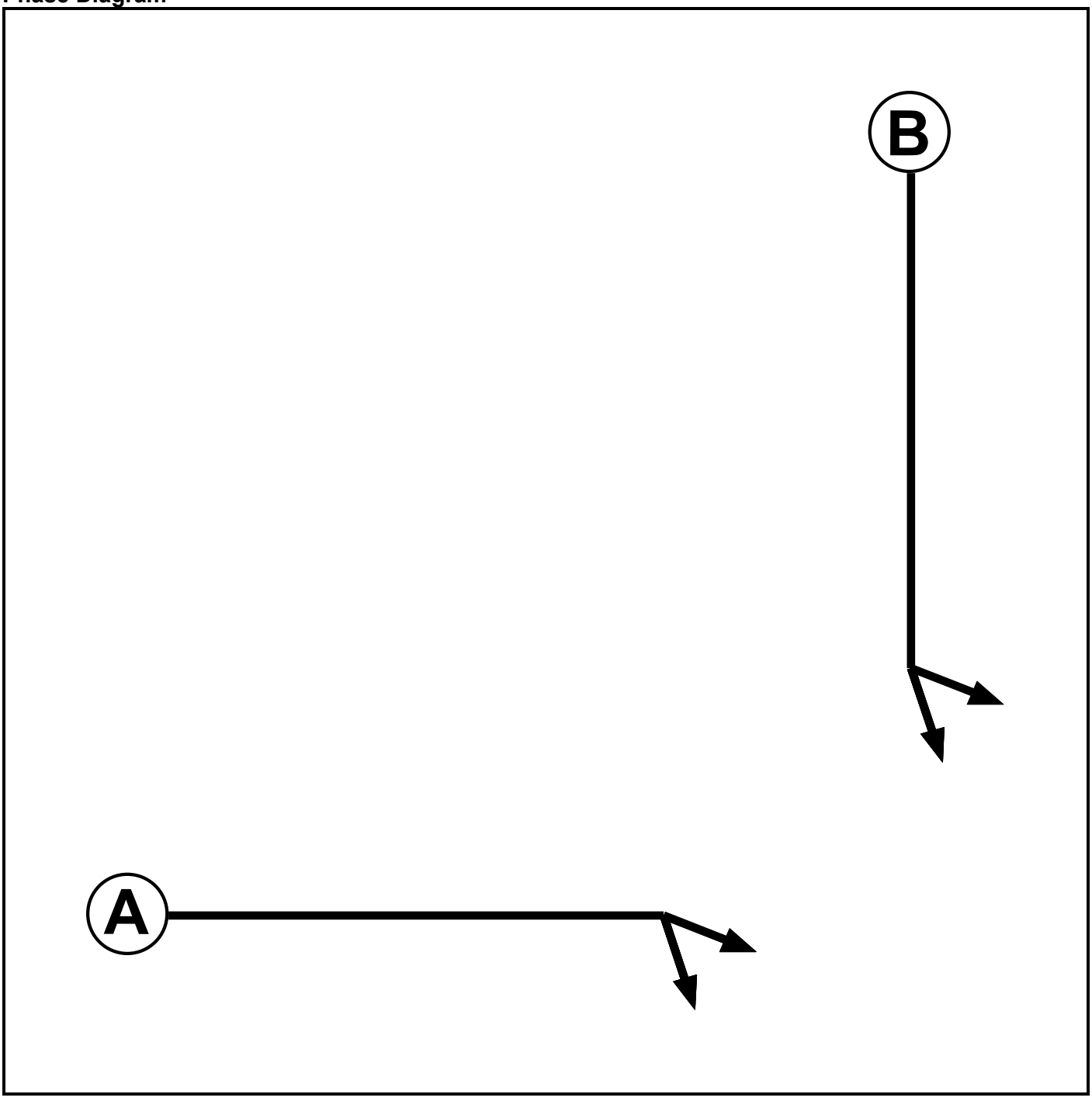
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Location:	
Additional detail:	
File name:	A627(M) _ Broadway 3rd Run incl Elm Mill Access_Jan update.lsg3x
Author:	
Company:	
Address:	

Network Layout Diagram



C1

Phase Diagram



Phase Input Data

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

Full Input Data And Results

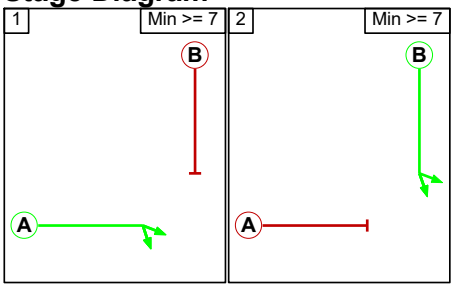
Phase Intergreens Matrix

Terminating Phase	Starting Phase		
		A	B
	A		5
	B	7	

Phases in Stage

Stage No.	Phases in Stage
1	A
2	B

Stage Diagram



Phase Delays

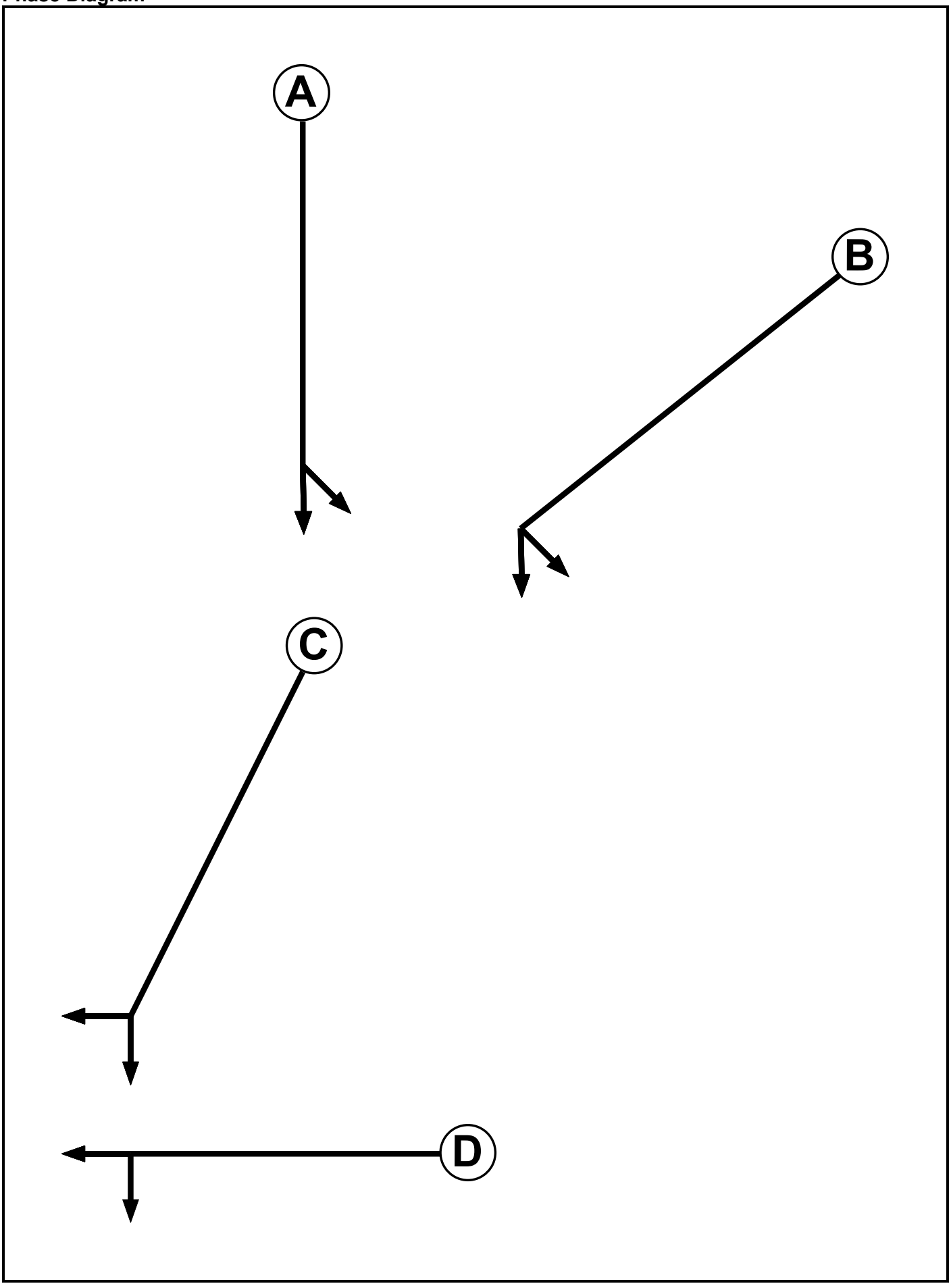
Term. Stage	Start Stage	Phase	Type	Value	Cont value
There are no Phase Delays defined					

Prohibited Stage Change

From Stage	To Stage		
		1	2
	1		5
	2	7	

C2

Phase Diagram



Full Input Data And Results

Phase Input Data

Phase Name	Phase Type	Stage Stream	Assoc. Phase	Street Min	Cont Min
A	Traffic	1		7	7
B	Traffic	1		7	7
C	Traffic	2		7	7
D	Traffic	2		7	7

Phase Intergreens Matrix

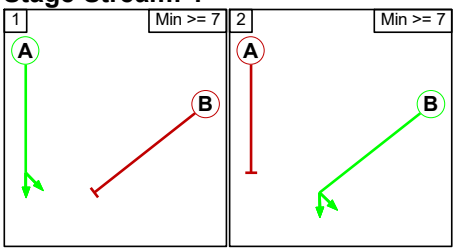
		Starting Phase			
		A	B	C	D
Terminating Phase	A		5	-	-
	B	5		-	-
	C	-	-		7
	D	-	-	5	

Phases in Stage

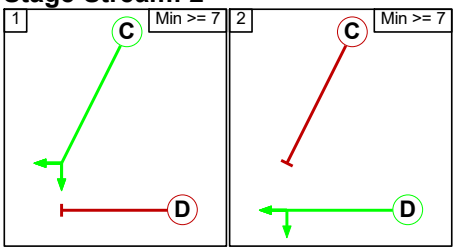
Stream	Stage No.	Phases in Stage
1	1	A
1	2	B
2	1	C
2	2	D

Stage Diagram

Stage Stream: 1



Stage Stream: 2



Phase Delays

Stage Stream: 1

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

Stage Stream: 2

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

Full Input Data And Results

Prohibited Stage Change

Stage Stream: 1

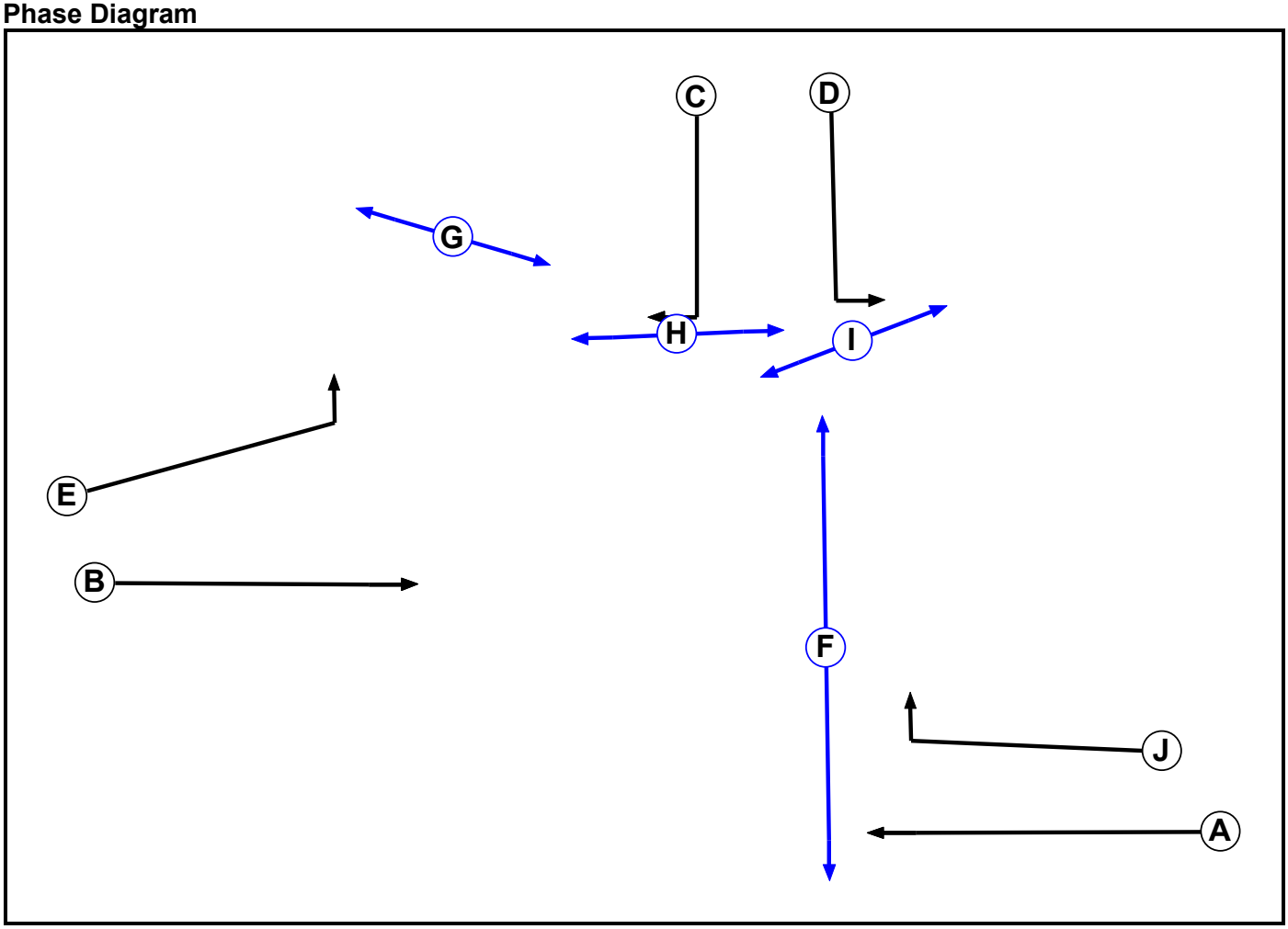
	To Stage		
From Stage		1	2
	1		5
	2	5	

Stage Stream: 2

	To Stage		
From Stage		1	2
	1		7
	2	5	

C3

Phase Diagram



Full Input Data And Results

Phase Input Data

Phase Name	Phase Type	Stage Stream	Assoc. Phase	Street Min	Cont Min
A	Traffic	1		7	7
B	Traffic	1		7	7
C	Traffic	1		7	7
D	Traffic	1		7	7
E	Traffic	1		7	7
F	Pedestrian	1		10	10
G	Pedestrian	1		5	5
H	Pedestrian	1		5	5
I	Pedestrian	1		5	5
J	Traffic	1		7	7

Phase Intergreens Matrix

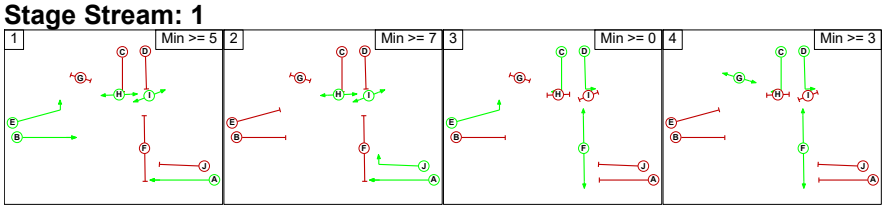
Terminating Phase \ Starting Phase	A	B	C	D	E	F	G	H	I	J
A		-	6	-	-	5	-	-	-	-
B	-		6	7	-	8	-	-	-	5
C	6	6		-	-	-	-	5	-	5
D	-	5	-		-	-	-	-	5	-
E	-	-	-	-		-	6	-	-	5
F	8	8	-	-	-		-	-	-	8
G	-	-	-	-	5	-		-	-	5
H	-	-	5	-	-	-	-		-	-
I	-	-	-	5	-	-	-	-		-
J	-	7	5	-	9	5	10	-	-	

Phases in Stage

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

Stage Diagram

Stage Stream: 1



Full Input Data And Results

Phase Delays

Stage Stream: 1

Term. Stage	Start Stage	Phase	Type	Value	Cont value
3	1	C	Losing	2	2
3	1	D	Losing	3	3
4	1	C	Losing	2	2
4	1	D	Losing	3	3

Prohibited Stage Change

Stage Stream: 1

		To Stage			
		1	2	3	4
From Stage	1		5	8	8
	2	9		9	10
	3	8	8		6
	4	8	8	5	

Full Input Data And Results

Give-Way Lane Input Data

Junction: J9 - A627M / A663 / A627 / B6195

Lane	Movement	Max Flow when Giving Way (PCU/Hr)	Min Flow when Giving Way (PCU/Hr)	Opposing Lane	Opp. Lane Coeff.	Opp. Mvmnts.	Right Turn Storage (PCU)	Non-Blocking Storage (PCU)	RTF	Right Turn Move up (s)	Max Turns in Intergreen (PCU)
7/1 (A627M S Off)	10/1 (Left)	1439	0	14/1	0.33	All	-	-	-	-	-
7/2 (A627M S Off)	15/1 (Left)	1439	0	14/1	0.33	All	-	-	-	-	-
				14/2	0.33	All					
	15/2 (Left)	1439	0	14/1	0.33	All					
				14/2	0.33	All					
				14/3	0.33	All					
9/1 (Burnley Lane (Entry))	16/1 (Ahead)	1439	0	15/1	0.33	All	-	-	-	-	-
9/2 (Burnley Lane (Entry))	16/2 (Ahead)	1439	0	15/1	0.33	All	-	-	-	-	-
				15/2	0.33	All					

Full Input Data And Results

Lane Input Data

Junction: J9 - A627M / A663 / A627 / B6195

Lane	Lane Type	Phases	Start Disp.	End Disp.	Physical Length (PCU)	Sat Flow Type	Def User Saturation Flow (PCU/Hr)	Lane Width (m)	Gradient	Nearside Lane	Turns	Turning Radius (m)
1/1 (A627M N Off)	U	B	2	3	60.0	Geom	-	3.26	0.00	Y	Arm 4 Left	Inf
											Arm 12 Ahead	84.63
1/2 (A627M N Off)	U	B	2	3	60.0	Geom	-	3.26	0.00	Y	Arm 12 Ahead	73.66
2/1 (A627M N On)	U		2	3	60.0	Inf	-	-	-	-	-	-
2/2 (A627M N On)	U		2	3	60.0	Inf	-	-	-	-	-	-
3/1 (A663 Broadway (Entry))	U	B	2	3	22.3	Geom	-	4.03	0.00	Y	Arm 6 U-Turn	41.07
											Arm 13 Left	68.41
3/2 (A663 Broadway (Entry))	U	B	2	3	22.3	Geom	-	4.03	0.00	Y	Arm 13 Left	79.09
3/3 (A663 Broadway (Entry))	U	B	2	3	3.8	Geom	-	4.03	0.00	Y	Arm 13 Left	80.05
4/1 (A663 Broadway (Exit))	U		2	3	12.2	Geom	-	3.60	0.00	Y	Arm 17 Ahead	Inf
											Arm 22 Left	Inf
4/2 (A663 Broadway (Exit))	U		2	3	12.2	Geom	-	3.60	0.00	Y	Arm 17 Ahead	Inf
5/1 (A627 Chadderton Way (Entry))	U	D	2	3	23.8	Geom	-	3.85	0.00	Y	Arm 8 U-Turn	56.00
											Arm 14 Left	Inf
5/2 (A627 Chadderton Way (Entry))	U	D	2	3	60.0	Geom	-	3.85	0.00	Y	Arm 14 Left	Inf
5/3 (A627 Chadderton Way (Entry))	U	D	2	3	60.0	Geom	-	3.85	0.00	Y	Arm 14 Left	Inf
6/1 (A627 Chadderton Way (Exit))	U		2	3	60.0	Inf	-	-	-	-	-	-
6/2 (A627 Chadderton Way (Exit))	U		2	3	60.0	Inf	-	-	-	-	-	-

Full Input Data And Results

7/1 (A627M S Off)	O		2	3	60.0	Geom	-	3.52	0.00	Y	Arm 10 Left	25.32
7/2 (A627M S Off)	O		2	3	60.0	Geom	-	3.52	0.00	Y	Arm 15 Left	38.38
8/1 (A627M S On)	U		2	3	60.0	Inf	-	-	-	-	-	-
8/2 (A627M S On)	U		2	3	60.0	Inf	-	-	-	-	-	-
9/1 (Burnley Lane (Entry))	O		2	3	60.0	Geom	-	3.61	0.00	Y	Arm 16 Ahead	Inf
9/2 (Burnley Lane (Entry))	O		2	3	21.9	Geom	-	3.60	0.00	Y	Arm 16 Ahead	Inf
10/1 (Burnley Lane (Exit))	U		2	3	60.0	Inf	-	-	-	-	-	-
11/1 (RB 1)	U	A	2	3	19.0	User	1900	-	-	-	-	-
11/2 (RB 1)	U	A	2	3	18.7	User	1900	-	-	-	-	-
11/3 (RB 1)	U	A	2	3	15.1	User	1900	-	-	-	-	-
12/1 (RB 2)	U	A	2	3	15.8	User	1900	-	-	-	-	-
12/2 (RB 2)	U	A	2	3	14.7	User	1900	-	-	-	-	-
12/3 (RB 2)	U	A	2	3	6.2	User	1900	-	-	-	-	-
13/1 (RB 3)	U	C	2	3	10.8	User	1900	-	-	-	-	-
13/2 (RB 3)	U	C	2	3	10.8	User	1900	-	-	-	-	-
13/3 (RB 3)	U	C	2	3	3.8	User	1900	-	-	-	-	-
14/1 (RB4)	U		2	3	21.3	User	1900	-	-	-	-	-
14/2 (RB4)	U		2	3	21.1	User	1900	-	-	-	-	-
14/3 (RB4)	U		2	3	20.6	User	1900	-	-	-	-	-
15/1 (RB 5)	U		2	3	10.9	User	1900	-	-	-	-	-
15/2 (RB 5)	U		2	3	10.1	User	1900	-	-	-	-	-
16/1 (RB 6)	U		2	3	9.0	Inf	-	-	-	-	-	-
16/2 (RB 6)	U		2	3	9.1	Inf	-	-	-	-	-	-
17/1	U	E	2	3	1.1	Geom	-	3.70	0.00	Y	Arm 18 Left	Inf
17/2	U	B	2	3	14.8	Geom	-	3.60	0.00	Y	Arm 20 Ahead	Inf

17/3	U	B	2	3	14.8	Geom	-	3.60	0.00	Y	Arm 20 Ahead	Inf
18/1 (Elk Mill (Entry))	U		2	3	60.0	Inf	-	-	-	-	-	-
19/1 (Elk Mill (Exit))	U	D	2	3	1.0	Geom	-	5.00	0.00	Y	Arm 20 Left	Inf
19/2 (Elk Mill (Exit))	U	C	2	3	60.0	Geom	-	3.00	0.00	Y	Arm 3 Right	Inf
19/3 (Elk Mill (Exit))	U	C	2	3	60.0	Geom	-	3.00	0.00	Y	Arm 3 Right	Inf
20/1	U		2	3	60.0	Inf	-	-	-	-	-	-
20/2	U		2	3	60.0	Inf	-	-	-	-	-	-
21/1	U	A	2	3	60.0	Geom	-	3.00	0.00	Y	Arm 3 Ahead	Inf
21/2	U	A	2	3	60.0	Geom	-	3.00	0.00	Y	Arm 3 Ahead	Inf
21/3	U	J	2	3	8.5	Geom	-	3.25	0.00	Y	Arm 18 Right	Inf
22/1 (Elk Mill (Entry only))	U		2	3	60.0	Inf	-	-	-	-	-	-

Traffic Flow Groups

Flow Group	Start Time	End Time	Duration	Formula
1: '2033 WITHOUT DEV AM'	08:00	09:00	01:00	
2: '2033 WITHOUT DEV PM'	17:00	18:00	01:00	
3: '2033 WITH DEV AM'	08:00	09:00	01:00	
4: '2033 WITH DEV PM'	17:00	18:00	01:00	

Scenario 1: '2033 WITHOUT DEV AM' (FG1: '2033 WITHOUT DEV AM', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired

Desired Flow :

		Destination							
		A	B	C	D	E	F	G	Tot.
Origin	A	0	48	329	888	26	1	226	1518
	B	100	15	64	1	21	1	89	291
	C	341	83	0	147	18	1	156	746
	D	1366	97	71	6	34	2	296	1872
	E	0	0	0	0	0	0	0	0
	F	17	22	9	18	0	0	38	104
	G	331	408	170	332	0	36	0	1277
	Tot.	2155	673	643	1392	99	41	805	5808

Full Input Data And Results

Traffic Lane Flows

Lane	Scenario 1: 2033 WITHOUT DEV AM
Junction: J9 - A627M / A663 / A627 / B6195	
1/1	941
1/2	931
2/1	695
2/2	697
3/1	565
3/2 (with short)	742(In) 227(Out)
3/3 (short)	515
4/1	486
4/2	385
5/1 (short)	377
5/2 (with short)	1058(In) 681(Out)
5/3	460
6/1	845
6/2	1310
7/1	64
7/2	227
8/1	352
8/2	321
9/1 (with short)	746(In) 197(Out)
9/2 (short)	549
10/1	643
11/1	154
11/2	628
11/3	296
12/1	841
12/2	1053
12/3	185
13/1	304
13/2	398
13/3	529
14/1	579
14/2	1036
14/3	461
15/1	1070
15/2	654
16/1	1546

Full Input Data And Results

16/2	924
17/1 (short)	5
17/2 (with short)	387(In) 382(Out)
17/3	385
18/1	41
19/1 (short)	38
19/2 (with short)	55(In) 17(Out)
19/3	49
20/1	420
20/2	385
21/1	548
21/2 (with short)	729(In) 693(Out)
21/3 (short)	36
22/1	99

Full Input Data And Results

Lane Saturation Flows

Junction: J9 - A627M / A663 / A627 / B6195								
Lane	**Lane Width (m)**	**Gradient**	**Nearside Lane**	**Allowed Turns**	**Turning Radius (m)**	**Turning Prop.**	**Sat Flow (PCU/Hr)**	**Flared Sat Flow (PCU/Hr)**
1/1 (A627M N Off)	3.26	0.00	Y	Arm 4 Left	Inf	35.3 %	1919	1919
				Arm 12 Ahead	84.63	64.7 %		
1/2 (A627M N Off)	3.26	0.00	Y	Arm 12 Ahead	73.66	100.0 %	1902	1902
2/1 (A627M N On Lane 1)	Infinite Saturation Flow						Inf	Inf
2/2 (A627M N On Lane 2)	Infinite Saturation Flow						Inf	Inf
3/1 (A663 Broadway (Entry))	4.03	0.00	Y	Arm 6 U-Turn	41.07	61.6 %	1958	1958
				Arm 13 Left	68.41	38.4 %		
3/2 (A663 Broadway (Entry))	4.03	0.00	Y	Arm 13 Left	79.09	100.0 %	1981	1981
3/3 (A663 Broadway (Entry))	4.03	0.00	Y	Arm 13 Left	80.05	100.0 %	1981	1981
4/1 (A663 Broadway (Exit))	3.60	0.00	Y	Arm 17 Ahead	Inf	79.6 %	1975	1975
				Arm 22 Left	Inf	20.4 %		
4/2 (A663 Broadway (Exit))	3.60	0.00	Y	Arm 17 Ahead	Inf	100.0 %	1975	1975
5/1 (A627 Chadderton Way (Entry))	3.85	0.00	Y	Arm 8 U-Turn	56.00	12.7 %	1993	1993
				Arm 14 Left	Inf	87.3 %		
5/2 (A627 Chadderton Way (Entry))	3.85	0.00	Y	Arm 14 Left	Inf	100.0 %	2000	2000
5/3 (A627 Chadderton Way (Entry))	3.85	0.00	Y	Arm 14 Left	Inf	100.0 %	2000	2000
6/1 (A627 Chadderton Way (Exit) Lane 1)	Infinite Saturation Flow						Inf	Inf
6/2 (A627 Chadderton Way (Exit) Lane 2)	Infinite Saturation Flow						Inf	Inf
7/1 (A627M S Off)	3.52	0.00	Y	Arm 10 Left	25.32	100.0 %	1857	1857
7/2 (A627M S Off)	3.52	0.00	Y	Arm 15 Left	38.38	100.0 %	1893	1893
8/1 (A627M S On Lane 1)	Infinite Saturation Flow						Inf	Inf
8/2 (A627M S On Lane 2)	Infinite Saturation Flow						Inf	Inf
9/1 (Burnley Lane (Entry))	3.61	0.00	Y	Arm 16 Ahead	Inf	100.0 %	1976	1976
9/2 (Burnley Lane (Entry))	3.60	0.00	Y	Arm 16 Ahead	Inf	100.0 %	1975	1975
10/1 (Burnley Lane (Exit) Lane 1)	Infinite Saturation Flow						Inf	Inf

Full Input Data And Results

11/1 (RB 1 Lane 1)	This lane uses a directly entered Saturation Flow						1900	1900
11/2 (RB 1 Lane 2)	This lane uses a directly entered Saturation Flow						1900	1900
11/3 (RB 1 Lane 3)	This lane uses a directly entered Saturation Flow						1900	1900
12/1 (RB 2 Lane 1)	This lane uses a directly entered Saturation Flow						1900	1900
12/2 (RB 2 Lane 2)	This lane uses a directly entered Saturation Flow						1900	1900
12/3 (RB 2 Lane 3)	This lane uses a directly entered Saturation Flow						1900	1900
13/1 (RB 3 Lane 1)	This lane uses a directly entered Saturation Flow						1900	1900
13/2 (RB 3 Lane 2)	This lane uses a directly entered Saturation Flow						1900	1900
13/3 (RB 3 Lane 3)	This lane uses a directly entered Saturation Flow						1900	1900
14/1 (RB4 Lane 1)	This lane uses a directly entered Saturation Flow						1900	1900
14/2 (RB4 Lane 2)	This lane uses a directly entered Saturation Flow						1900	1900
14/3 (RB4 Lane 3)	This lane uses a directly entered Saturation Flow						1900	1900
15/1 (RB 5 Lane 1)	This lane uses a directly entered Saturation Flow						1900	1900
15/2 (RB 5 Lane 2)	This lane uses a directly entered Saturation Flow						1900	1900
16/1 (RB 6 Lane 1)	Infinite Saturation Flow						Inf	Inf
16/2 (RB 6 Lane 2)	Infinite Saturation Flow						Inf	Inf
17/1	3.70	0.00	Y	Arm 18 Left	Inf	100.0 %	1985	1985
17/2	3.60	0.00	Y	Arm 20 Ahead	Inf	100.0 %	1975	1975
17/3	3.60	0.00	Y	Arm 20 Ahead	Inf	100.0 %	1975	1975
18/1 (Elk Mill (Entry) Lane 1)	Infinite Saturation Flow						Inf	Inf
19/1 (Elk Mill (Exit))	5.00	0.00	Y	Arm 20 Left	Inf	100.0 %	2115	2115
19/2 (Elk Mill (Exit))	3.00	0.00	Y	Arm 3 Right	Inf	100.0 %	1915	1915
19/3 (Elk Mill (Exit))	3.00	0.00	Y	Arm 3 Right	Inf	100.0 %	1915	1915
20/1	Infinite Saturation Flow						Inf	Inf
20/2	Infinite Saturation Flow						Inf	Inf
21/1	3.00	0.00	Y	Arm 3 Ahead	Inf	100.0 %	1915	1915
21/2	3.00	0.00	Y	Arm 3 Ahead	Inf	100.0 %	1915	1915
21/3	3.25	0.00	Y	Arm 18 Right	Inf	100.0 %	1940	1940

22/1 (Elk Mill (Entry only) Lane 1)	Infinite Saturation Flow	Inf	Inf

Scenario 2: '2033 WITHOUT DEV PM' (FG2: '2033 WITHOUT DEV PM', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired

Desired Flow :

		Destination							
		A	B	C	D	E	F	G	Tot.
Origin	A	0	104	446	1388	117	11	301	2367
	B	26	11	70	3	61	6	158	335
	C	143	41	0	154	50	4	130	522
	D	839	53	164	5	147	14	380	1602
	E	0	0	0	0	0	0	0	0
	F	52	103	59	123	0	0	198	535
	G	136	267	154	320	0	155	0	1032
	Tot.	1196	579	893	1993	375	190	1167	6393

Full Input Data And Results

Traffic Lane Flows

Lane	Scenario 2: 2033 WITHOUT DEV PM
Junction: J9 - A627M / A663 / A627 / B6195	
1/1	807
1/2	795
2/1	995
2/2	998
3/1	558
3/2 (with short)	656(In) 213(Out)
3/3 (short)	443
4/1	882
4/2	497
5/1 (short)	550
5/2 (with short)	1483(In) 933(Out)
5/3	884
6/1	317
6/2	879
7/1	70
7/2	265
8/1	528
8/2	51
9/1 (with short)	522(In) 211(Out)
9/2 (short)	311
10/1	893
11/1	341
11/2	548
11/3	170
12/1	317
12/2	745
12/3	220
13/1	424
13/2	428
13/3	448
14/1	823
14/2	1342
14/3	923
15/1	1439
15/2	1091
16/1	2334

Full Input Data And Results

16/2	718
17/1 (short)	35
17/2 (with short)	507(In) 472(Out)
17/3	497
18/1	190
19/1 (short)	198
19/2 (with short)	353(In) 155(Out)
19/3	182
20/1	670
20/2	497
21/1	403
21/2 (with short)	629(In) 474(Out)
21/3 (short)	155
22/1	375

Full Input Data And Results

Lane Saturation Flows

Junction: J9 - A627M / A663 / A627 / B6195								
Lane	**Lane Width (m)**	**Gradient**	**Nearside Lane**	**Allowed Turns**	**Turning Radius (m)**	**Turning Prop.**	**Sat Flow (PCU/Hr)**	**Flared Sat Flow (PCU/Hr)**
1/1 (A627M N Off)	3.26	0.00	Y	Arm 4 Left	Inf	67.0 %	1930	1930
				Arm 12 Ahead	84.63	33.0 %		
1/2 (A627M N Off)	3.26	0.00	Y	Arm 12 Ahead	73.66	100.0 %	1902	1902
2/1 (A627M N On Lane 1)	Infinite Saturation Flow						Inf	Inf
2/2 (A627M N On Lane 2)	Infinite Saturation Flow						Inf	Inf
3/1 (A663 Broadway (Entry))	4.03	0.00	Y	Arm 6 U-Turn	41.07	33.7 %	1965	1965
				Arm 13 Left	68.41	66.3 %		
3/2 (A663 Broadway (Entry))	4.03	0.00	Y	Arm 13 Left	79.09	100.0 %	1981	1981
3/3 (A663 Broadway (Entry))	4.03	0.00	Y	Arm 13 Left	80.05	100.0 %	1981	1981
4/1 (A663 Broadway (Exit))	3.60	0.00	Y	Arm 17 Ahead	Inf	57.5 %	1975	1975
				Arm 22 Left	Inf	42.5 %		
4/2 (A663 Broadway (Exit))	3.60	0.00	Y	Arm 17 Ahead	Inf	100.0 %	1975	1975
5/1 (A627 Chadderton Way (Entry))	3.85	0.00	Y	Arm 8 U-Turn	56.00	18.9 %	1990	1990
				Arm 14 Left	Inf	81.1 %		
5/2 (A627 Chadderton Way (Entry))	3.85	0.00	Y	Arm 14 Left	Inf	100.0 %	2000	2000
5/3 (A627 Chadderton Way (Entry))	3.85	0.00	Y	Arm 14 Left	Inf	100.0 %	2000	2000
6/1 (A627 Chadderton Way (Exit) Lane 1)	Infinite Saturation Flow						Inf	Inf
6/2 (A627 Chadderton Way (Exit) Lane 2)	Infinite Saturation Flow						Inf	Inf
7/1 (A627M S Off)	3.52	0.00	Y	Arm 10 Left	25.32	100.0 %	1857	1857
7/2 (A627M S Off)	3.52	0.00	Y	Arm 15 Left	38.38	100.0 %	1893	1893
8/1 (A627M S On Lane 1)	Infinite Saturation Flow						Inf	Inf
8/2 (A627M S On Lane 2)	Infinite Saturation Flow						Inf	Inf
9/1 (Burnley Lane (Entry))	3.61	0.00	Y	Arm 16 Ahead	Inf	100.0 %	1976	1976
9/2 (Burnley Lane (Entry))	3.60	0.00	Y	Arm 16 Ahead	Inf	100.0 %	1975	1975
10/1 (Burnley Lane (Exit) Lane 1)	Infinite Saturation Flow						Inf	Inf

Full Input Data And Results

11/1 (RB 1 Lane 1)	This lane uses a directly entered Saturation Flow						1900	1900
11/2 (RB 1 Lane 2)	This lane uses a directly entered Saturation Flow						1900	1900
11/3 (RB 1 Lane 3)	This lane uses a directly entered Saturation Flow						1900	1900
12/1 (RB 2 Lane 1)	This lane uses a directly entered Saturation Flow						1900	1900
12/2 (RB 2 Lane 2)	This lane uses a directly entered Saturation Flow						1900	1900
12/3 (RB 2 Lane 3)	This lane uses a directly entered Saturation Flow						1900	1900
13/1 (RB 3 Lane 1)	This lane uses a directly entered Saturation Flow						1900	1900
13/2 (RB 3 Lane 2)	This lane uses a directly entered Saturation Flow						1900	1900
13/3 (RB 3 Lane 3)	This lane uses a directly entered Saturation Flow						1900	1900
14/1 (RB4 Lane 1)	This lane uses a directly entered Saturation Flow						1900	1900
14/2 (RB4 Lane 2)	This lane uses a directly entered Saturation Flow						1900	1900
14/3 (RB4 Lane 3)	This lane uses a directly entered Saturation Flow						1900	1900
15/1 (RB 5 Lane 1)	This lane uses a directly entered Saturation Flow						1900	1900
15/2 (RB 5 Lane 2)	This lane uses a directly entered Saturation Flow						1900	1900
16/1 (RB 6 Lane 1)	Infinite Saturation Flow						Inf	Inf
16/2 (RB 6 Lane 2)	Infinite Saturation Flow						Inf	Inf
17/1	3.70	0.00	Y	Arm 18 Left	Inf	100.0 %	1985	1985
17/2	3.60	0.00	Y	Arm 20 Ahead	Inf	100.0 %	1975	1975
17/3	3.60	0.00	Y	Arm 20 Ahead	Inf	100.0 %	1975	1975
18/1 (Elk Mill (Entry) Lane 1)	Infinite Saturation Flow						Inf	Inf
19/1 (Elk Mill (Exit))	5.00	0.00	Y	Arm 20 Left	Inf	100.0 %	2115	2115
19/2 (Elk Mill (Exit))	3.00	0.00	Y	Arm 3 Right	Inf	100.0 %	1915	1915
19/3 (Elk Mill (Exit))	3.00	0.00	Y	Arm 3 Right	Inf	100.0 %	1915	1915
20/1	Infinite Saturation Flow						Inf	Inf
20/2	Infinite Saturation Flow						Inf	Inf
21/1	3.00	0.00	Y	Arm 3 Ahead	Inf	100.0 %	1915	1915
21/2	3.00	0.00	Y	Arm 3 Ahead	Inf	100.0 %	1915	1915
21/3	3.25	0.00	Y	Arm 18 Right	Inf	100.0 %	1940	1940

22/1 (Elk Mill (Entry only) Lane 1)	Infinite Saturation Flow	Inf	Inf

Scenario 3: '2033 WITH DEV AM' (FG3: '2033 WITH DEV AM', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired

Desired Flow :

		Destination							
		A	B	C	D	E	F	G	Tot.
Origin	A	0	48	329	901	25	1	227	1531
	B	100	15	64	10	21	1	89	300
	C	341	83	0	148	17	1	156	746
	D	1403	97	73	6	35	2	310	1926
	E	0	0	0	0	0	0	0	0
	F	17	22	9	18	0	0	38	104
	G	332	408	170	338	0	36	0	1284
	Tot.	2193	673	645	1421	98	41	820	5891

Full Input Data And Results

Traffic Lane Flows

Lane	Scenario 3: 2033 WITH DEV AM
Junction: J9 - A627M / A663 / A627 / B6195	
1/1	968
1/2	958
2/1	710
2/2	711
3/1	536
3/2 (with short)	778(In) 325(Out)
3/3 (short)	453
4/1	495
4/2	390
5/1 (short)	377
5/2 (with short)	1066(In) 689(Out)
5/3	465
6/1	852
6/2	1341
7/1	64
7/2	236
8/1	318
8/2	355
9/1 (with short)	746(In) 194(Out)
9/2 (short)	552
10/1	645
11/1	148
11/2	632
11/3	297
12/1	848
12/2	1079
12/3	191
13/1	270
13/2	488
13/3	481
14/1	581
14/2	1050
14/3	466
15/1	1098
15/2	654
16/1	1569
16/2	929

Full Input Data And Results

17/1 (short)	5
17/2 (with short)	397(In) 392(Out)
17/3	390
18/1	41
19/1 (short)	38
19/2 (with short)	55(In) 17(Out)
19/3	49
20/1	430
20/2	390
21/1	519
21/2 (with short)	765(In) 729(Out)
21/3 (short)	36
22/1	98

Full Input Data And Results

Lane Saturation Flows

Junction: J9 - A627M / A663 / A627 / B6195								
Lane	**Lane Width (m)**	**Gradient**	**Nearside Lane**	**Allowed Turns**	**Turning Radius (m)**	**Turning Prop.**	**Sat Flow (PCU/Hr)**	**Flared Sat Flow (PCU/Hr)**
1/1 (A627M N Off)	3.26	0.00	Y	Arm 4 Left	Inf	35.8 %	1919	1919
				Arm 12 Ahead	84.63	64.2 %		
1/2 (A627M N Off)	3.26	0.00	Y	Arm 12 Ahead	73.66	100.0 %	1902	1902
2/1 (A627M N On Lane 1)	Infinite Saturation Flow						Inf	Inf
2/2 (A627M N On Lane 2)	Infinite Saturation Flow						Inf	Inf
3/1 (A663 Broadway (Entry))	4.03	0.00	Y	Arm 6 U-Turn	41.07	65.1 %	1957	1957
				Arm 13 Left	68.41	34.9 %		
3/2 (A663 Broadway (Entry))	4.03	0.00	Y	Arm 13 Left	79.09	100.0 %	1981	1981
3/3 (A663 Broadway (Entry))	4.03	0.00	Y	Arm 13 Left	80.05	100.0 %	1981	1981
4/1 (A663 Broadway (Exit))	3.60	0.00	Y	Arm 17 Ahead	Inf	80.2 %	1975	1975
				Arm 22 Left	Inf	19.8 %		
4/2 (A663 Broadway (Exit))	3.60	0.00	Y	Arm 17 Ahead	Inf	100.0 %	1975	1975
5/1 (A627 Chadderton Way (Entry))	3.85	0.00	Y	Arm 8 U-Turn	56.00	12.7 %	1993	1993
				Arm 14 Left	Inf	87.3 %		
5/2 (A627 Chadderton Way (Entry))	3.85	0.00	Y	Arm 14 Left	Inf	100.0 %	2000	2000
5/3 (A627 Chadderton Way (Entry))	3.85	0.00	Y	Arm 14 Left	Inf	100.0 %	2000	2000
6/1 (A627 Chadderton Way (Exit) Lane 1)	Infinite Saturation Flow						Inf	Inf
6/2 (A627 Chadderton Way (Exit) Lane 2)	Infinite Saturation Flow						Inf	Inf
7/1 (A627M S Off)	3.52	0.00	Y	Arm 10 Left	25.32	100.0 %	1857	1857
7/2 (A627M S Off)	3.52	0.00	Y	Arm 15 Left	38.38	100.0 %	1893	1893
8/1 (A627M S On Lane 1)	Infinite Saturation Flow						Inf	Inf
8/2 (A627M S On Lane 2)	Infinite Saturation Flow						Inf	Inf
9/1 (Burnley Lane (Entry))	3.61	0.00	Y	Arm 16 Ahead	Inf	100.0 %	1976	1976
9/2 (Burnley Lane (Entry))	3.60	0.00	Y	Arm 16 Ahead	Inf	100.0 %	1975	1975
10/1 (Burnley Lane (Exit) Lane 1)	Infinite Saturation Flow						Inf	Inf

Full Input Data And Results

11/1 (RB 1 Lane 1)	This lane uses a directly entered Saturation Flow						1900	1900
11/2 (RB 1 Lane 2)	This lane uses a directly entered Saturation Flow						1900	1900
11/3 (RB 1 Lane 3)	This lane uses a directly entered Saturation Flow						1900	1900
12/1 (RB 2 Lane 1)	This lane uses a directly entered Saturation Flow						1900	1900
12/2 (RB 2 Lane 2)	This lane uses a directly entered Saturation Flow						1900	1900
12/3 (RB 2 Lane 3)	This lane uses a directly entered Saturation Flow						1900	1900
13/1 (RB 3 Lane 1)	This lane uses a directly entered Saturation Flow						1900	1900
13/2 (RB 3 Lane 2)	This lane uses a directly entered Saturation Flow						1900	1900
13/3 (RB 3 Lane 3)	This lane uses a directly entered Saturation Flow						1900	1900
14/1 (RB4 Lane 1)	This lane uses a directly entered Saturation Flow						1900	1900
14/2 (RB4 Lane 2)	This lane uses a directly entered Saturation Flow						1900	1900
14/3 (RB4 Lane 3)	This lane uses a directly entered Saturation Flow						1900	1900
15/1 (RB 5 Lane 1)	This lane uses a directly entered Saturation Flow						1900	1900
15/2 (RB 5 Lane 2)	This lane uses a directly entered Saturation Flow						1900	1900
16/1 (RB 6 Lane 1)	Infinite Saturation Flow						Inf	Inf
16/2 (RB 6 Lane 2)	Infinite Saturation Flow						Inf	Inf
17/1	3.70	0.00	Y	Arm 18 Left	Inf	100.0 %	1985	1985
17/2	3.60	0.00	Y	Arm 20 Ahead	Inf	100.0 %	1975	1975
17/3	3.60	0.00	Y	Arm 20 Ahead	Inf	100.0 %	1975	1975
18/1 (Elk Mill (Entry) Lane 1)	Infinite Saturation Flow						Inf	Inf
19/1 (Elk Mill (Exit))	5.00	0.00	Y	Arm 20 Left	Inf	100.0 %	2115	2115
19/2 (Elk Mill (Exit))	3.00	0.00	Y	Arm 3 Right	Inf	100.0 %	1915	1915
19/3 (Elk Mill (Exit))	3.00	0.00	Y	Arm 3 Right	Inf	100.0 %	1915	1915
20/1	Infinite Saturation Flow						Inf	Inf
20/2	Infinite Saturation Flow						Inf	Inf
21/1	3.00	0.00	Y	Arm 3 Ahead	Inf	100.0 %	1915	1915
21/2	3.00	0.00	Y	Arm 3 Ahead	Inf	100.0 %	1915	1915
21/3	3.25	0.00	Y	Arm 18 Right	Inf	100.0 %	1940	1940

22/1 (Elk Mill (Entry only) Lane 1)	Infinite Saturation Flow	Inf	Inf

Scenario 4: '2033 WITH DEV PM' (FG4: '2033 WITH DEV PM', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired

Desired Flow :

		Destination							
		A	B	C	D	E	F	G	Tot.
Origin	A	0	104	446	1422	116	11	301	2400
	B	26	11	70	27	61	6	158	359
	C	143	41	0	156	50	4	131	525
	D	855	53	165	5	148	14	385	1625
	E	0	0	0	0	0	0	0	0
	F	51	101	59	126	0	0	198	535
	G	136	268	155	332	0	155	0	1046
	Tot.	1211	578	895	2068	375	190	1173	6490

Full Input Data And Results

Traffic Lane Flows

Lane	Scenario 4: 2033 WITH DEV PM
Junction: J9 - A627M / A663 / A627 / B6195	
1/1	819
1/2	806
2/1	1033
2/2	1035
3/1	556
3/2 (with short)	672(In) 214(Out)
3/3 (short)	458
4/1	889
4/2	496
5/1 (short)	550
5/2 (with short)	1478(In) 928(Out)
5/3	922
6/1	334
6/2	877
7/1	70
7/2	289
8/1	527
8/2	51
9/1 (with short)	525(In) 210(Out)
9/2 (short)	315
10/1	895
11/1	342
11/2	558
11/3	159
12/1	334
12/2	744
12/3	221
13/1	423
13/2	430
13/3	463
14/1	825
14/2	1337
14/3	976
15/1	1452
15/2	1150
16/1	2410
16/2	717

Full Input Data And Results

17/1 (short)	35
17/2 (with short)	514(In) 479(Out)
17/3	496
18/1	190
19/1 (short)	198
19/2 (with short)	350(In) 152(Out)
19/3	185
20/1	677
20/2	496
21/1	404
21/2 (with short)	642(In) 487(Out)
21/3 (short)	155
22/1	375

Full Input Data And Results

Lane Saturation Flows

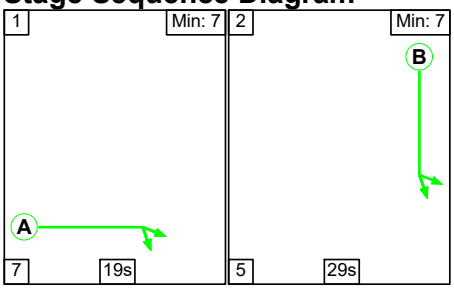
Junction: J9 - A627M / A663 / A627 / B6195								
Lane	**Lane Width (m)**	**Gradient**	**Nearside Lane**	**Allowed Turns**	**Turning Radius (m)**	**Turning Prop.**	**Sat Flow (PCU/Hr)**	**Flared Sat Flow (PCU/Hr)**
1/1 (A627M N Off)	3.26	0.00	Y	Arm 4 Left	Inf	66.8 %	1930	1930
				Arm 12 Ahead	84.63	33.2 %		
1/2 (A627M N Off)	3.26	0.00	Y	Arm 12 Ahead	73.66	100.0 %	1902	1902
2/1 (A627M N On Lane 1)	Infinite Saturation Flow						Inf	Inf
2/2 (A627M N On Lane 2)	Infinite Saturation Flow						Inf	Inf
3/1 (A663 Broadway (Entry))	4.03	0.00	Y	Arm 6 U-Turn	41.07	33.6 %	1965	1965
				Arm 13 Left	68.41	66.4 %		
3/2 (A663 Broadway (Entry))	4.03	0.00	Y	Arm 13 Left	79.09	100.0 %	1981	1981
3/3 (A663 Broadway (Entry))	4.03	0.00	Y	Arm 13 Left	80.05	100.0 %	1981	1981
4/1 (A663 Broadway (Exit))	3.60	0.00	Y	Arm 17 Ahead	Inf	57.8 %	1975	1975
				Arm 22 Left	Inf	42.2 %		
4/2 (A663 Broadway (Exit))	3.60	0.00	Y	Arm 17 Ahead	Inf	100.0 %	1975	1975
5/1 (A627 Chadderton Way (Entry))	3.85	0.00	Y	Arm 8 U-Turn	56.00	18.9 %	1990	1990
				Arm 14 Left	Inf	81.1 %		
5/2 (A627 Chadderton Way (Entry))	3.85	0.00	Y	Arm 14 Left	Inf	100.0 %	2000	2000
5/3 (A627 Chadderton Way (Entry))	3.85	0.00	Y	Arm 14 Left	Inf	100.0 %	2000	2000
6/1 (A627 Chadderton Way (Exit) Lane 1)	Infinite Saturation Flow						Inf	Inf
6/2 (A627 Chadderton Way (Exit) Lane 2)	Infinite Saturation Flow						Inf	Inf
7/1 (A627M S Off)	3.52	0.00	Y	Arm 10 Left	25.32	100.0 %	1857	1857
7/2 (A627M S Off)	3.52	0.00	Y	Arm 15 Left	38.38	100.0 %	1893	1893
8/1 (A627M S On Lane 1)	Infinite Saturation Flow						Inf	Inf
8/2 (A627M S On Lane 2)	Infinite Saturation Flow						Inf	Inf
9/1 (Burnley Lane (Entry))	3.61	0.00	Y	Arm 16 Ahead	Inf	100.0 %	1976	1976
9/2 (Burnley Lane (Entry))	3.60	0.00	Y	Arm 16 Ahead	Inf	100.0 %	1975	1975
10/1 (Burnley Lane (Exit) Lane 1)	Infinite Saturation Flow						Inf	Inf

Full Input Data And Results

11/1 (RB 1 Lane 1)	This lane uses a directly entered Saturation Flow						1900	1900
11/2 (RB 1 Lane 2)	This lane uses a directly entered Saturation Flow						1900	1900
11/3 (RB 1 Lane 3)	This lane uses a directly entered Saturation Flow						1900	1900
12/1 (RB 2 Lane 1)	This lane uses a directly entered Saturation Flow						1900	1900
12/2 (RB 2 Lane 2)	This lane uses a directly entered Saturation Flow						1900	1900
12/3 (RB 2 Lane 3)	This lane uses a directly entered Saturation Flow						1900	1900
13/1 (RB 3 Lane 1)	This lane uses a directly entered Saturation Flow						1900	1900
13/2 (RB 3 Lane 2)	This lane uses a directly entered Saturation Flow						1900	1900
13/3 (RB 3 Lane 3)	This lane uses a directly entered Saturation Flow						1900	1900
14/1 (RB4 Lane 1)	This lane uses a directly entered Saturation Flow						1900	1900
14/2 (RB4 Lane 2)	This lane uses a directly entered Saturation Flow						1900	1900
14/3 (RB4 Lane 3)	This lane uses a directly entered Saturation Flow						1900	1900
15/1 (RB 5 Lane 1)	This lane uses a directly entered Saturation Flow						1900	1900
15/2 (RB 5 Lane 2)	This lane uses a directly entered Saturation Flow						1900	1900
16/1 (RB 6 Lane 1)	Infinite Saturation Flow						Inf	Inf
16/2 (RB 6 Lane 2)	Infinite Saturation Flow						Inf	Inf
17/1	3.70	0.00	Y	Arm 18 Left	Inf	100.0 %	1985	1985
17/2	3.60	0.00	Y	Arm 20 Ahead	Inf	100.0 %	1975	1975
17/3	3.60	0.00	Y	Arm 20 Ahead	Inf	100.0 %	1975	1975
18/1 (Elk Mill (Entry) Lane 1)	Infinite Saturation Flow						Inf	Inf
19/1 (Elk Mill (Exit))	5.00	0.00	Y	Arm 20 Left	Inf	100.0 %	2115	2115
19/2 (Elk Mill (Exit))	3.00	0.00	Y	Arm 3 Right	Inf	100.0 %	1915	1915
19/3 (Elk Mill (Exit))	3.00	0.00	Y	Arm 3 Right	Inf	100.0 %	1915	1915
20/1	Infinite Saturation Flow						Inf	Inf
20/2	Infinite Saturation Flow						Inf	Inf
21/1	3.00	0.00	Y	Arm 3 Ahead	Inf	100.0 %	1915	1915
21/2	3.00	0.00	Y	Arm 3 Ahead	Inf	100.0 %	1915	1915
21/3	3.25	0.00	Y	Arm 18 Right	Inf	100.0 %	1940	1940

22/1 (Elk Mill (Entry only) Lane 1)	Infinite Saturation Flow	Inf	Inf

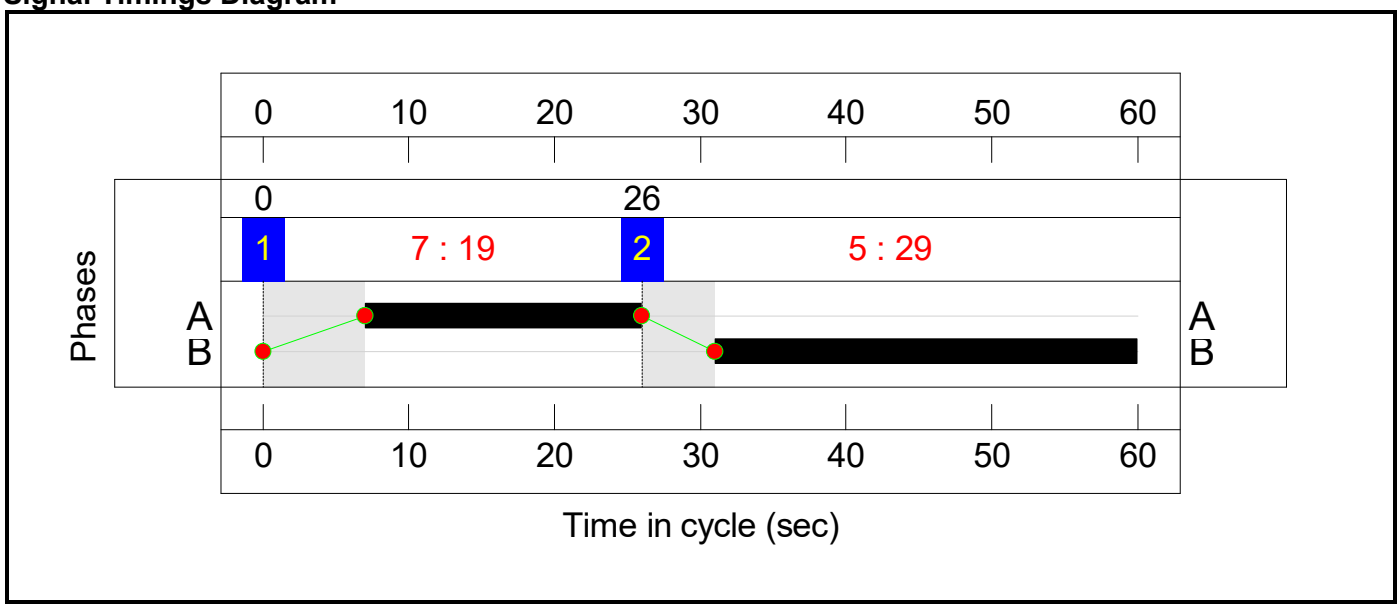
Scenario 1: '2033 WITHOUT DEV AM' (FG1: '2033 WITHOUT DEV AM', Plan 1: 'Network Control Plan 1')
C1
Stage Sequence Diagram



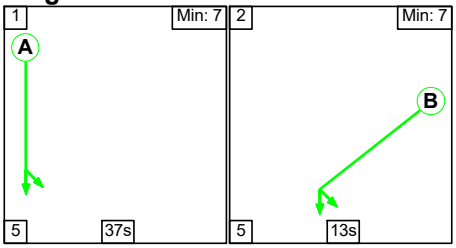
Stage Timings

Stage	1	2
Duration	19	29
Change Point	0	26

Signal Timings Diagram

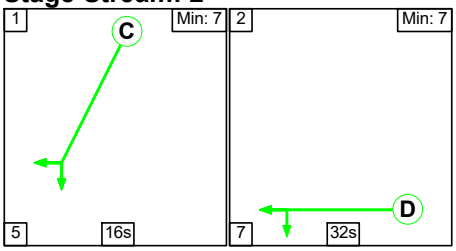


C2
Stage Sequence Diagram
Stage Stream: 1



Full Input Data And Results

Stage Stream: 2



Stage Timings

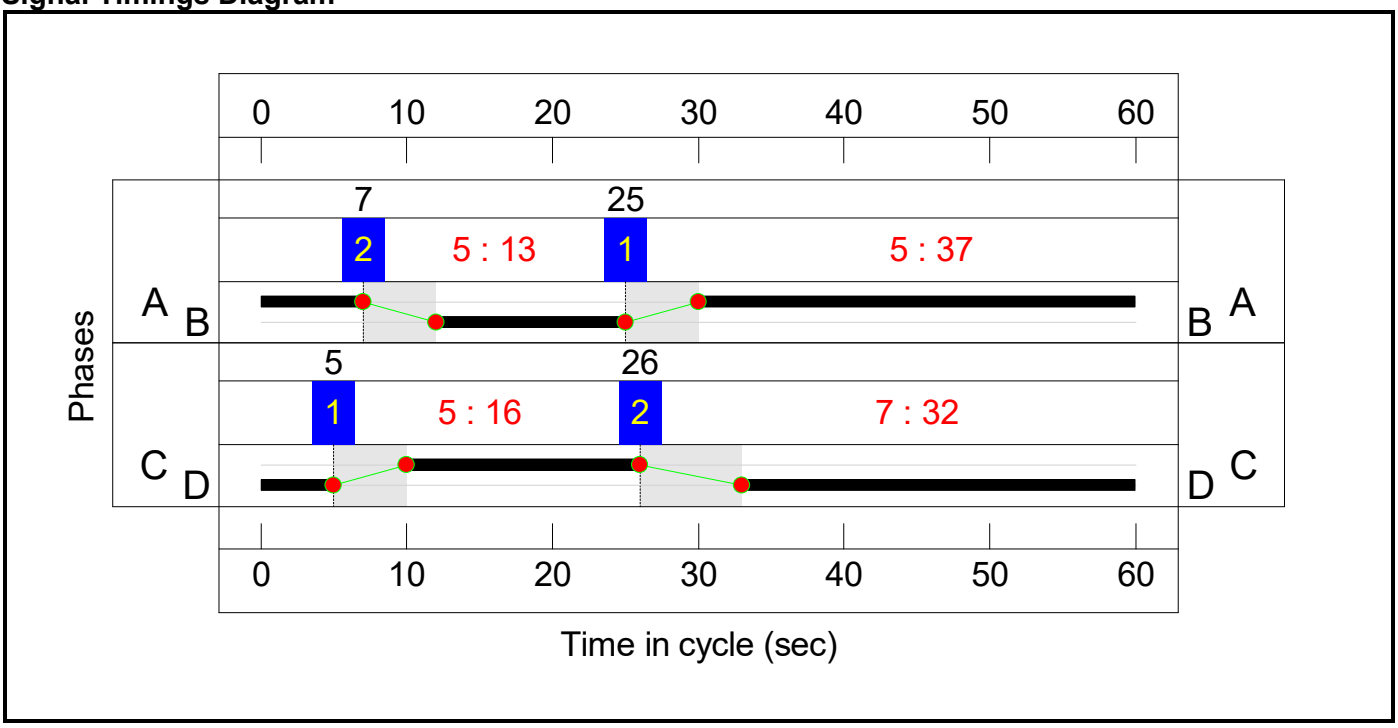
Stage Stream: 1

Stage	1	2
Duration	37	13
Change Point	25	7

Stage Stream: 2

Stage	1	2
Duration	16	32
Change Point	5	26

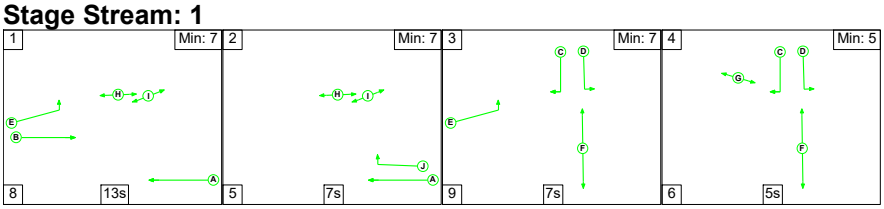
Signal Timings Diagram



C3

Stage Sequence Diagram

Stage Stream: 1



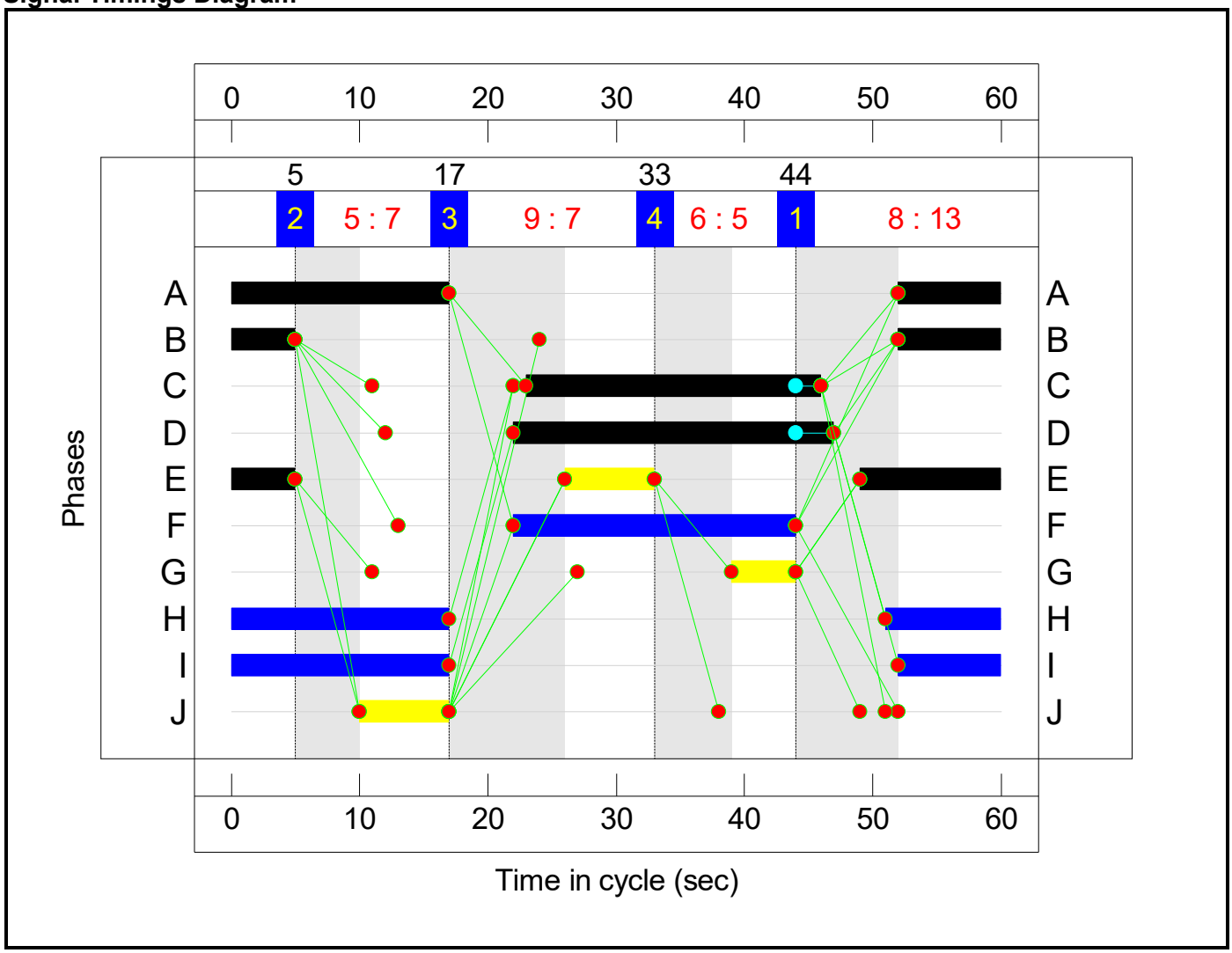
Full Input Data And Results

Stage Timings

Stage Stream: 1

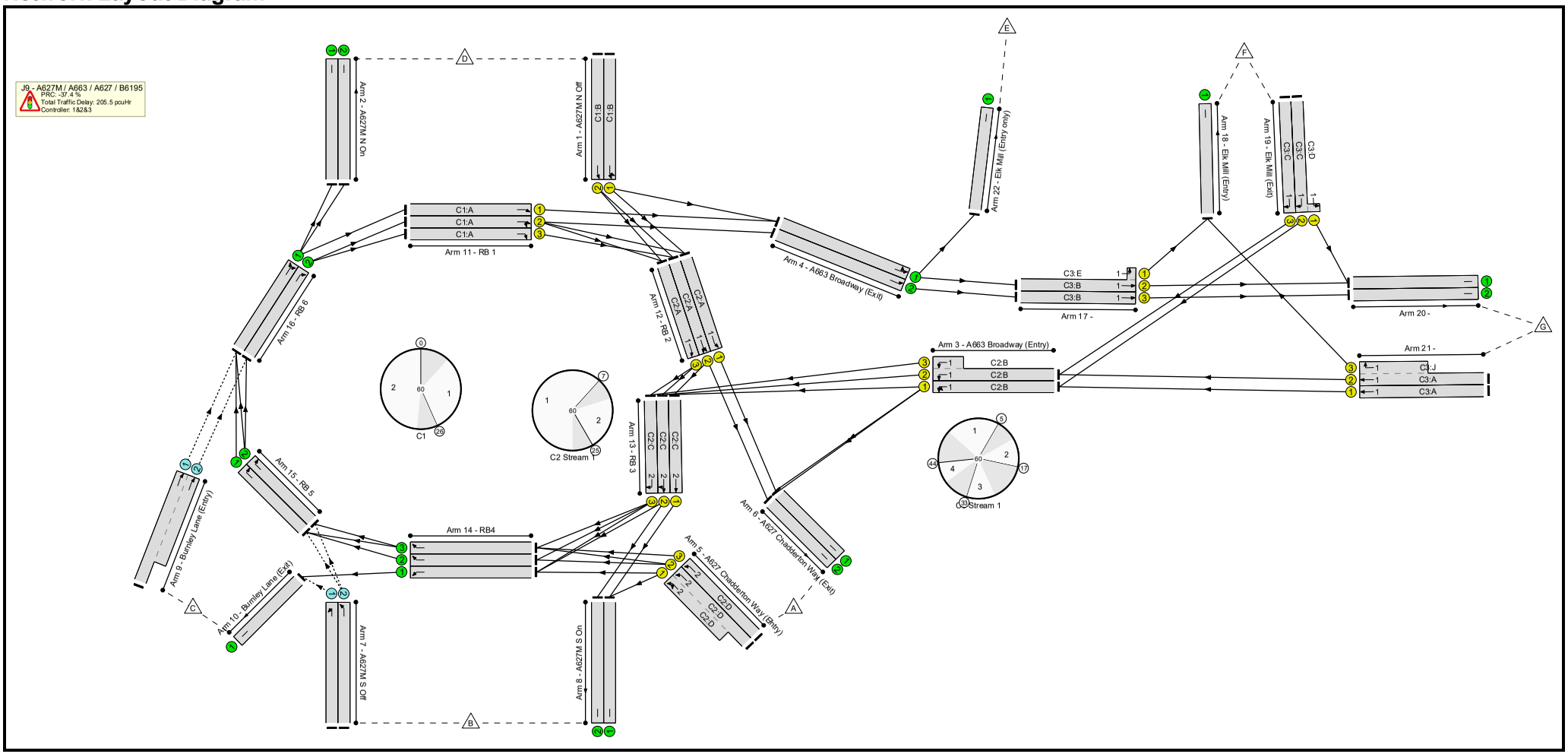
Stage	1	2	3	4
Duration	13	7	7	5
Change Point	44	5	17	33

Signal Timings Diagram



Full Input Data And Results

Network Layout Diagram



Full Input Data And Results

Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network	-	-	**N/A**	-	-		-	-	-	-	-	-	**123.7%**
J9 - A627M / A663 / A627 / B6195	-	-	**N/A**	-	-		-	-	-	-	-	-	**123.7%**
1/1	A627M N Off Left Ahead	U	N/A	N/A	C1:B		1	29	-	941	1919	960	98.1%
1/2	A627M N Off Ahead	U	N/A	N/A	C1:B		1	29	-	931	1902	951	97.9%
2/1	A627M N On	U	N/A	N/A	-		-	-	-	695	Inf	Inf	0.0%
2/2	A627M N On	U	N/A	N/A	-		-	-	-	697	Inf	Inf	0.0%
3/1	A663 Broadway (Entry) U-Turn Left	U	2:1	N/A	C2:B		1	13	-	565	1958	457	123.7%
3/2+3/3	A663 Broadway (Entry) Left	U	2:1	N/A	C2:B		1	13	-	742	1981:1981	184+417	123.4 : 123.4%
4/1	A663 Broadway (Exit) Ahead Left	U	N/A	N/A	-		-	-	-	486	1975	1975	24.6%
4/2	A663 Broadway (Exit) Ahead	U	N/A	N/A	-		-	-	-	385	1975	1975	19.5%
5/2+5/1	A627 Chadderton Way (Entry) U-Turn Left	U	2:2	N/A	C2:D		1	32	-	1058	2000:1993	1100+687	61.9 : 54.9%
5/3	A627 Chadderton Way (Entry) Left	U	2:2	N/A	C2:D		1	32	-	460	2000	1100	41.8%
6/1	A627 Chadderton Way (Exit)	U	N/A	N/A	-		-	-	-	845	Inf	Inf	0.0%
6/2	A627 Chadderton Way (Exit)	U	N/A	N/A	-		-	-	-	1310	Inf	Inf	0.0%
7/1	A627M S Off Left	O	N/A	N/A	-		-	-	-	64	1857	1258	5.1%
7/2	A627M S Off Left	O	N/A	N/A	-		-	-	-	227	1893	811	28.0%
8/1	A627M S On	U	N/A	N/A	-		-	-	-	352	Inf	Inf	0.0%
8/2	A627M S On	U	N/A	N/A	-		-	-	-	321	Inf	Inf	0.0%

Full Input Data And Results

9/1+9/2	Burnley Lane (Entry) Ahead	O	N/A	N/A	-		-	-	-	746	1976:1975	382+890	51.5 : 61.7%
10/1	Burnley Lane (Exit)	U	N/A	N/A	-		-	-	-	643	Inf	Inf	0.0%
11/1	RB 1 Ahead	U	N/A	N/A	C1:A		1	19	-	154	1900	633	24.3%
11/2	RB 1 Ahead Right	U	N/A	N/A	C1:A		1	19	-	628	1900	633	99.2%
11/3	RB 1 Right	U	N/A	N/A	C1:A		1	19	-	296	1900	633	46.7%
12/1	RB 2 Ahead	U	2:1	N/A	C2:A		1	37	-	841	1900	1203	69.9%
12/2	RB 2 Ahead Ahead2	U	2:1	N/A	C2:A		1	37	-	1053	1900	1203	87.5%
12/3	RB 2 Ahead	U	2:1	N/A	C2:A		1	37	-	185	1900	1203	15.4%
13/1	RB 3 Ahead	U	2:2	N/A	C2:C		1	16	-	304	1900	538	48.5%
13/2	RB 3 Ahead Right	U	2:2	N/A	C2:C		1	16	-	398	1900	538	67.2%
13/3	RB 3 Right	U	2:2	N/A	C2:C		1	16	-	529	1900	538	81.3%
14/1	RB4 Left	U	N/A	N/A	-		-	-	-	579	1900	1900	28.8%
14/2	RB4 Ahead	U	N/A	N/A	-		-	-	-	1036	1900	1900	51.3%
14/3	RB4 Ahead	U	N/A	N/A	-		-	-	-	461	1900	1900	24.3%
15/1	RB 5 Right	U	N/A	N/A	-		-	-	-	1070	1900	1900	53.1%
15/2	RB 5 Right	U	N/A	N/A	-		-	-	-	654	1900	1900	34.4%
16/1	RB 6 Ahead Right	U	N/A	N/A	-		-	-	-	1546	Inf	Inf	0.0%
16/2	RB 6 Right	U	N/A	N/A	-		-	-	-	924	Inf	Inf	0.0%
17/2+17/1	Left Ahead	U	3:1	N/A	C3:B C3:E		1:2	13:23	-	387	1975:1985	453+6	84.4 : 84.4%
17/3	Ahead	U	3:1	N/A	C3:B		1	13	-	385	1975	461	83.5%
18/1	Elk Mill (Entry)	U	N/A	N/A	-		-	-	-	41	Inf	Inf	0.0%
19/2+19/1	Elk Mill (Exit) Right Left	U	3:1	N/A	C3:C C3:D		1	23:25	-	55	1915:2115	280+626	6.1 : 6.1%
19/3	Elk Mill (Exit) Right	U	3:1	N/A	C3:C		1	23	-	49	1915	766	6.4%
20/1		U	N/A	N/A	-		-	-	-	420	Inf	Inf	0.0%
20/2		U	N/A	N/A	-		-	-	-	385	Inf	Inf	0.0%

Full Input Data And Results

21/1	Ahead	U	3:1	N/A	C3:A		1	25	-	548	1915	830	66.0%
21/2+21/3	Ahead Right	U	3:1	N/A	C3:A C3:J		1	25:7	-	729	1915:1940	829+43	83.6 : 83.6%
22/1	Elk Mill (Entry only)	U	N/A	N/A	-		-	-	-	99	Inf	Inf	0.0%

Full Input Data And Results

Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network	**-**	**-**	**1783**	**0**	**0**	**42.9**	**162.6**	**0.0**	**205.5**	**-**	**-**	**-**	**-**
J9 - A627M / A663 / A627 / B6195	**-**	**-**	**1783**	**0**	**0**	**42.9**	**162.6**	**0.0**	**205.5**	**-**	**-**	**-**	**-**
1/1	941	941	-	-	-	3.8	11.4	-	15.2	58.3	15.2	11.4	26.6
1/2	931	931	-	-	-	3.8	11.1	-	14.9	57.4	15.0	11.1	26.1
2/1	664	664	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
2/2	666	666	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
3/1	565	457	-	-	-	5.3	56.6	-	61.9	394.2	11.8	56.6	68.4
3/2+3/3	742	614	-	-	-	5.9	72.9	-	78.8	382.2	13.3	72.9	86.2
4/1	486	486	-	-	-	0.0	0.2	-	0.2	1.2	0.0	0.2	0.2
4/2	385	385	-	-	-	0.0	0.1	-	0.1	1.1	0.0	0.1	0.1
5/2+5/1	1058	1058	-	-	-	2.5	0.7	-	3.3	11.1	7.6	0.7	8.3
5/3	460	460	-	-	-	1.0	0.4	-	1.4	10.7	4.5	0.4	4.8
6/1	844	844	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/2	1245	1245	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
7/1	64	64	64	0	0	0.0	0.0	-	0.0	1.5	0.0	0.0	0.0
7/2	227	227	227	0	0	0.1	0.2	-	0.2	3.9	0.8	0.2	1.0
8/1	309	309	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
8/2	286	286	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
9/1+9/2	746	746	1492	0	0	0.1	0.7	-	0.8	3.9	3.1	0.7	3.8
10/1	612	612	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
11/1	154	154	-	-	-	0.4	0.0	-	0.4	10.5	1.8	0.0	1.8
11/2	628	628	-	-	-	3.1	0.0	-	3.1	17.7	10.3	0.0	10.3
11/3	296	296	-	-	-	1.2	0.0	-	1.2	15.1	3.8	0.0	3.8
12/1	841	841	-	-	-	0.8	0.0	-	0.8	3.5	4.9	0.0	4.9
12/2	1053	1053	-	-	-	1.6	0.0	-	1.6	5.5	12.2	0.0	12.2
12/3	185	185	-	-	-	0.0	0.0	-	0.0	0.6	0.2	0.0	0.2

Full Input Data And Results

13/1	261	261	-	-	-	1.1	0.0	-	1.1	15.1	1.8	0.0	1.8
13/2	362	362	-	-	-	1.4	0.0	-	1.4	14.0	4.8	0.0	4.8
13/3	437	437	-	-	-	0.2	0.0	-	0.2	1.5	4.8	0.0	4.8
14/1	548	548	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
14/2	975	975	-	-	-	0.0	0.0	-	0.0	0.0	4.2	0.0	4.2
14/3	461	461	-	-	-	0.0	0.0	-	0.0	0.0	0.5	0.0	0.5
15/1	1009	1009	-	-	-	0.0	0.0	-	0.0	0.0	2.7	0.0	2.7
15/2	654	654	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
16/1	1485	1485	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
16/2	924	924	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
17/2+17/1	387	387	-	-	-	2.0	2.5	-	4.6	42.4	5.8	2.5	8.3
17/3	385	385	-	-	-	2.9	2.4	-	5.3	49.5	6.4	2.4	8.8
18/1	41	41	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
19/2+19/1	55	55	-	-	-	0.2	0.0	-	0.2	12.4	0.4	0.0	0.4
19/3	49	49	-	-	-	0.2	0.0	-	0.2	13.6	0.5	0.0	0.5
20/1	420	420	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
20/2	385	385	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
21/1	548	548	-	-	-	2.1	1.0	-	3.0	19.8	7.2	1.0	8.1
21/2+21/3	729	729	-	-	-	3.1	2.5	-	5.6	27.6	10.2	2.5	12.7
22/1	99	99	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0

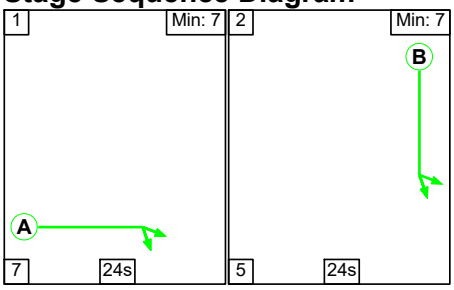
C1	PRC for Signalled Lanes (%):	-10.2	Total Delay for Signalled Lanes (pcuHr):	34.87	Cycle Time (s):	60
C2	Stream: 1 PRC for Signalled Lanes (%):	-37.4	Total Delay for Signalled Lanes (pcuHr):	143.09	Cycle Time (s):	60
C2	Stream: 2 PRC for Signalled Lanes (%):	10.7	Total Delay for Signalled Lanes (pcuHr):	7.30	Cycle Time (s):	60
C3	Stream: 1 PRC for Signalled Lanes (%):	6.7	Total Delay for Signalled Lanes (pcuHr):	18.84	Cycle Time (s):	60
	PRC Over All Lanes (%):	-37.4	Total Delay Over All Lanes(pcuHr):	205.48		

Full Input Data And Results

Scenario 2: '2033 WITHOUT DEV PM' (FG2: '2033 WITHOUT DEV PM', Plan 1: 'Network Control Plan 1')

C1

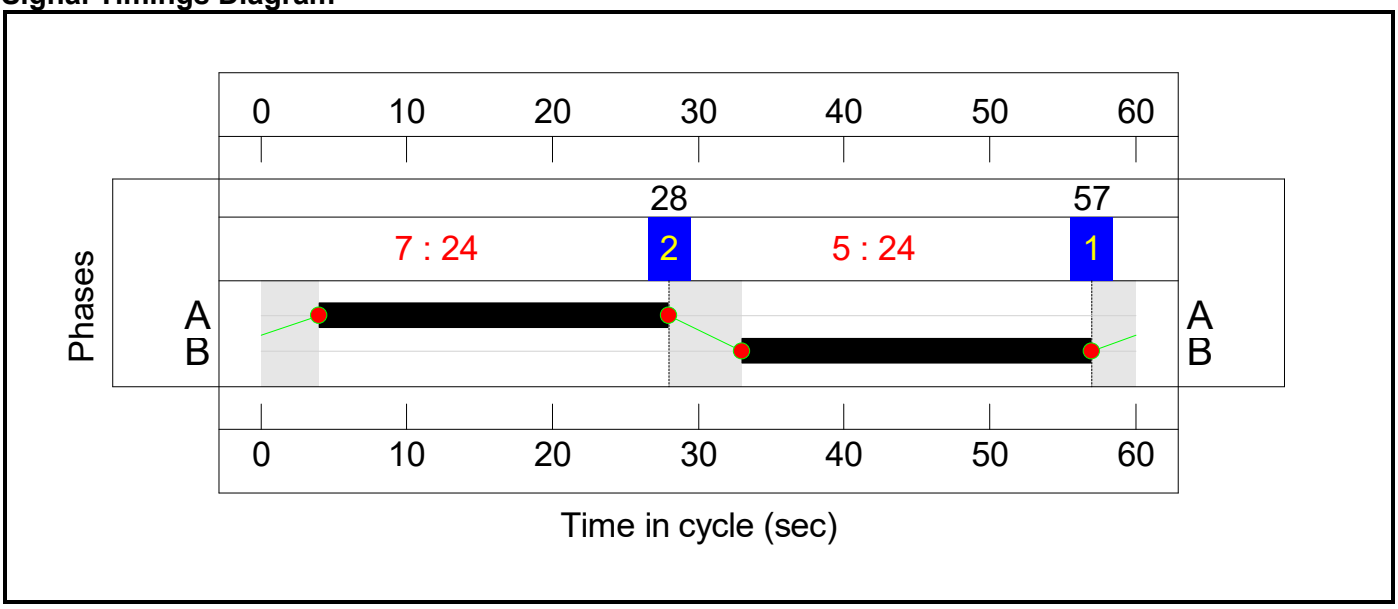
Stage Sequence Diagram



Stage Timings

Stage	1	2
Duration	24	24
Change Point	57	28

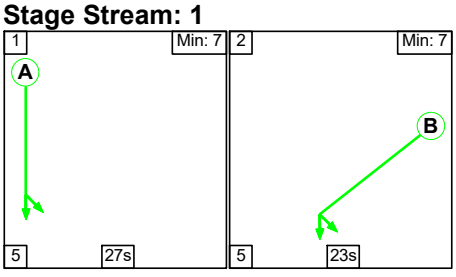
Signal Timings Diagram



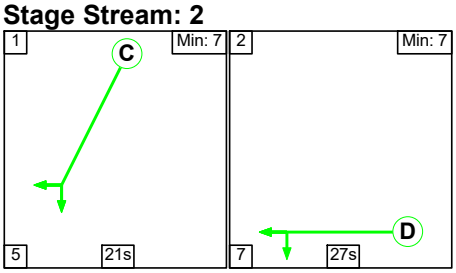
C2

Stage Sequence Diagram

Stage Stream: 1



Stage Stream: 2



Full Input Data And Results

Stage Timings

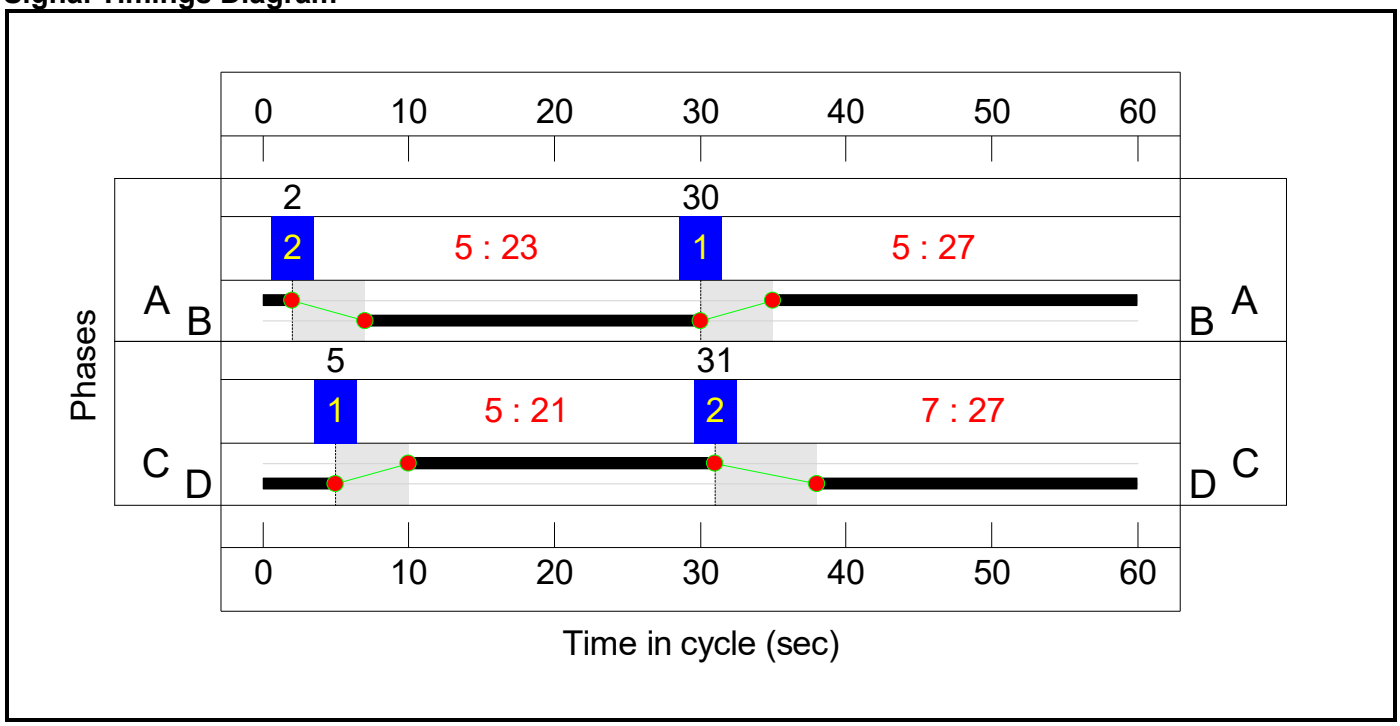
Stage Stream: 1

Stage	1	2
Duration	27	23
Change Point	30	2

Stage Stream: 2

Stage	1	2
Duration	21	27
Change Point	5	31

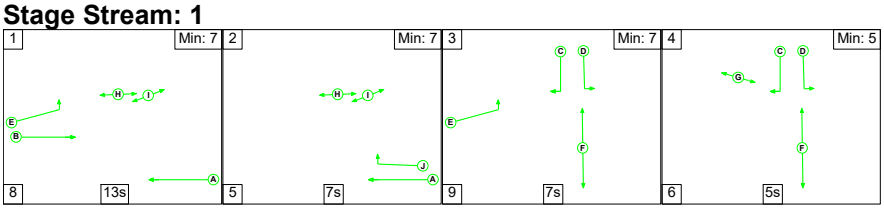
Signal Timings Diagram



C3

Stage Sequence Diagram

Stage Stream: 1



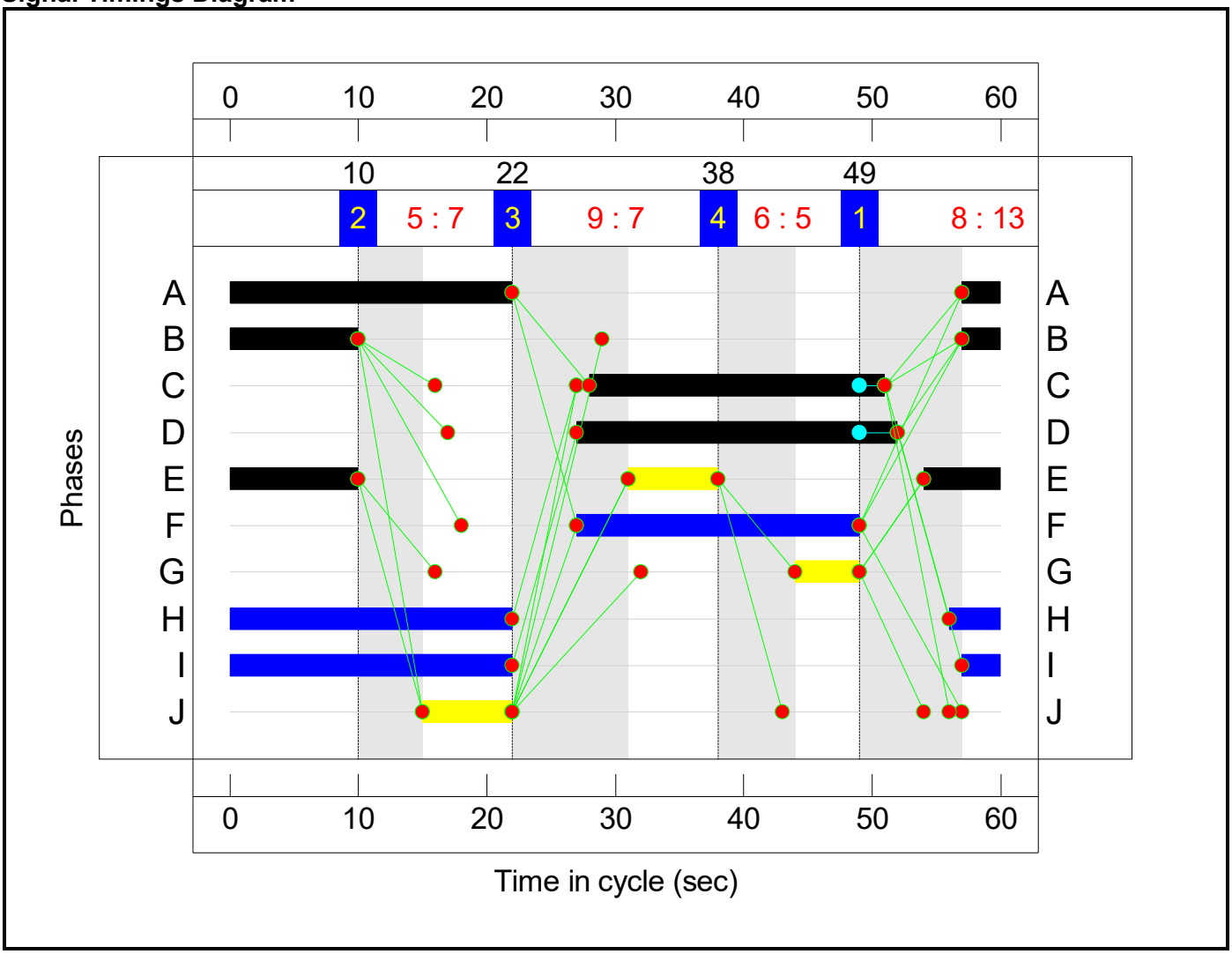
Stage Timings

Stage Stream: 1

Stage	1	2	3	4
Duration	13	7	7	5
Change Point	49	10	22	38

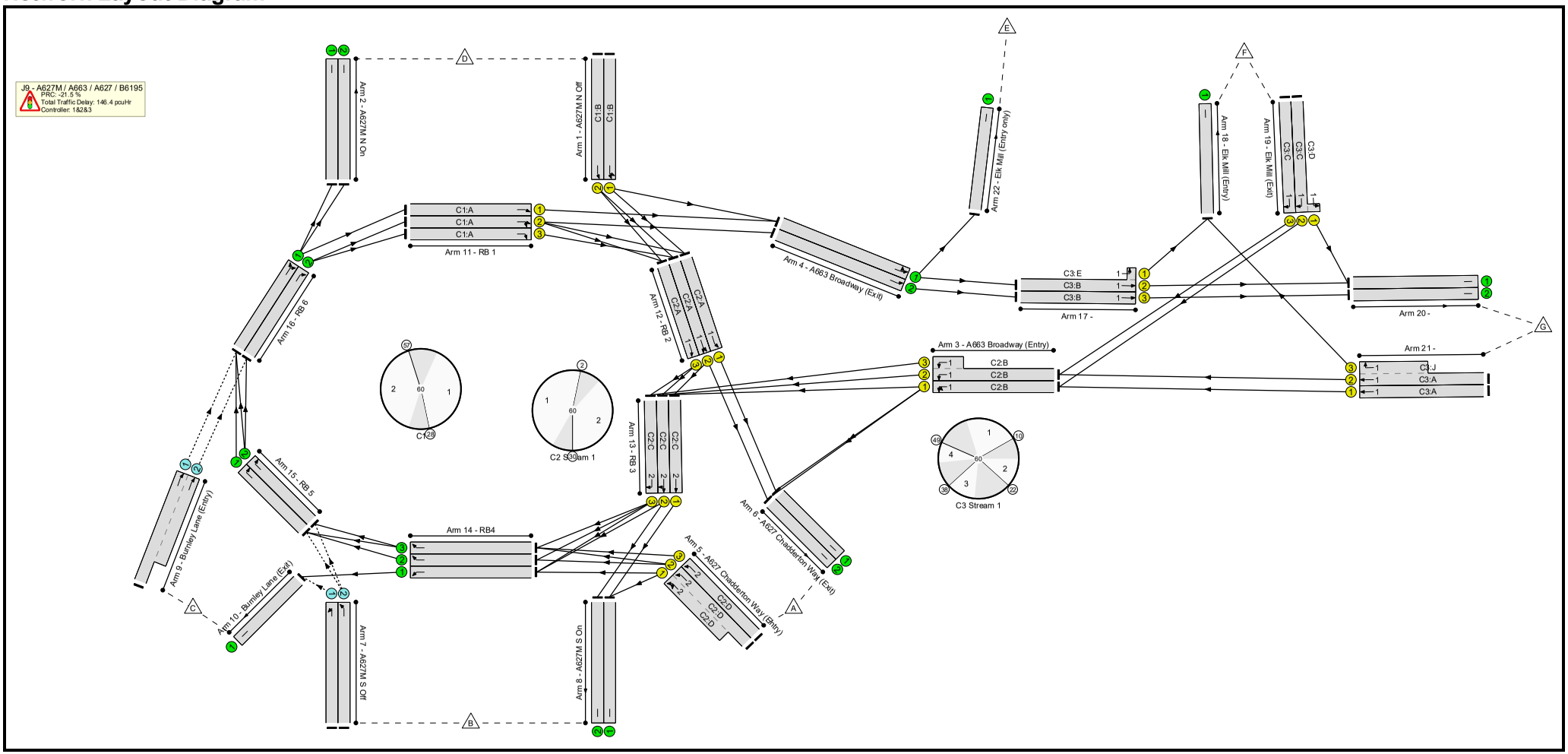
Full Input Data And Results

Signal Timings Diagram



Full Input Data And Results

Network Layout Diagram



Full Input Data And Results

Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network	-	-	**N/A**	-	-		-	-	-	-	-	-	**109.4%**
J9 - A627M / A663 / A627 / B6195	-	-	**N/A**	-	-		-	-	-	-	-	-	**109.4%**
1/1	A627M N Off Left Ahead	U	N/A	N/A	C1:B		1	24	-	807	1930	804	100.4%
1/2	A627M N Off Ahead	U	N/A	N/A	C1:B		1	24	-	795	1902	793	100.3%
2/1	A627M N On	U	N/A	N/A	-		-	-	-	995	Inf	Inf	0.0%
2/2	A627M N On	U	N/A	N/A	-		-	-	-	998	Inf	Inf	0.0%
3/1	A663 Broadway (Entry) U-Turn Left	U	2:1	N/A	C2:B		1	23	-	558	1965	786	71.0%
3/2+3/3	A663 Broadway (Entry) Left	U	2:1	N/A	C2:B		1	23	-	656	1981:1981	305+635	69.7 : 69.7%
4/1	A663 Broadway (Exit) Ahead Left	U	N/A	N/A	-		-	-	-	882	1975	1975	44.6%
4/2	A663 Broadway (Exit) Ahead	U	N/A	N/A	-		-	-	-	497	1975	1975	25.2%
5/2+5/1	A627 Chadderton Way (Entry) U-Turn Left	U	2:2	N/A	C2:D		1	27	-	1483	2000:1990	933+606	100.0 : 90.8%
5/3	A627 Chadderton Way (Entry) Left	U	2:2	N/A	C2:D		1	27	-	884	2000	933	94.7%
6/1	A627 Chadderton Way (Exit)	U	N/A	N/A	-		-	-	-	317	Inf	Inf	0.0%
6/2	A627 Chadderton Way (Exit)	U	N/A	N/A	-		-	-	-	879	Inf	Inf	0.0%
7/1	A627M S Off Left	O	N/A	N/A	-		-	-	-	70	1857	1168	6.0%
7/2	A627M S Off Left	O	N/A	N/A	-		-	-	-	265	1893	476	55.7%
8/1	A627M S On	U	N/A	N/A	-		-	-	-	528	Inf	Inf	0.0%
8/2	A627M S On	U	N/A	N/A	-		-	-	-	51	Inf	Inf	0.0%

Full Input Data And Results

9/1+9/2	Burnley Lane (Entry) Ahead	O	N/A	N/A	-		-	-	-	522	1976:1975	546+604	38.6 : 51.5%
10/1	Burnley Lane (Exit)	U	N/A	N/A	-		-	-	-	893	Inf	Inf	0.0%
11/1	RB 1 Ahead	U	N/A	N/A	C1:A		1	24	-	341	1900	792	43.1%
11/2	RB 1 Ahead Right	U	N/A	N/A	C1:A		1	24	-	548	1900	792	69.2%
11/3	RB 1 Right	U	N/A	N/A	C1:A		1	24	-	170	1900	792	21.5%
12/1	RB 2 Ahead	U	2:1	N/A	C2:A		1	27	-	317	1900	887	35.6%
12/2	RB 2 Ahead Ahead2	U	2:1	N/A	C2:A		1	27	-	745	1900	887	83.8%
12/3	RB 2 Ahead	U	2:1	N/A	C2:A		1	27	-	220	1900	887	24.7%
13/1	RB 3 Ahead	U	2:2	N/A	C2:C		1	21	-	424	1900	697	60.9%
13/2	RB 3 Ahead Right	U	2:2	N/A	C2:C		1	21	-	428	1900	697	61.3%
13/3	RB 3 Right	U	2:2	N/A	C2:C		1	21	-	448	1900	697	64.3%
14/1	RB4 Left	U	N/A	N/A	-		-	-	-	823	1900	1900	43.3%
14/2	RB4 Ahead	U	N/A	N/A	-		-	-	-	1342	1900	1900	70.6%
14/3	RB4 Ahead	U	N/A	N/A	-		-	-	-	923	1900	1900	48.6%
15/1	RB 5 Right	U	N/A	N/A	-		-	-	-	1439	1900	1900	75.7%
15/2	RB 5 Right	U	N/A	N/A	-		-	-	-	1091	1900	1900	57.4%
16/1	RB 6 Ahead Right	U	N/A	N/A	-		-	-	-	2334	Inf	Inf	0.0%
16/2	RB 6 Right	U	N/A	N/A	-		-	-	-	718	Inf	Inf	0.0%
17/2+17/1	Left Ahead	U	3:1	N/A	C3:B C3:E		1:2	13:23	-	507	1975:1985	431+32	109.2 : 109.4%
17/3	Ahead	U	3:1	N/A	C3:B		1	13	-	497	1975	461	107.8%
18/1	Elk Mill (Entry)	U	N/A	N/A	-		-	-	-	190	Inf	Inf	0.0%
19/2+19/1	Elk Mill (Exit) Right Left	U	3:1	N/A	C3:C C3:D		1	23:25	-	353	1915:2115	386+493	40.2 : 40.2%
19/3	Elk Mill (Exit) Right	U	3:1	N/A	C3:C		1	23	-	182	1915	766	23.8%
20/1		U	N/A	N/A	-		-	-	-	670	Inf	Inf	0.0%
20/2		U	N/A	N/A	-		-	-	-	497	Inf	Inf	0.0%
21/1	Ahead	U	3:1	N/A	C3:A		1	25	-	403	1915	830	48.6%

Full Input Data And Results

21/2+21/3	Ahead Right	U	3:1	N/A	C3:A C3:J		1	25:7	-	629	1915:1940	765+250	62.0 : 62.0%
22/1	Elk Mill (Entry only)	U	N/A	N/A	-		-	-	-	375	Inf	Inf	0.0%

Full Input Data And Results

Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network	**-**	**-**	**1379**	**0**	**0**	**44.6**	**101.8**	**0.0**	**146.4**	**-**	**-**	**-**	**-**
J9 - A627M / A663 / A627 / B6195	**-**	**-**	**1379**	**0**	**0**	**44.6**	**101.8**	**0.0**	**146.4**	**-**	**-**	**-**	**-**
1/1	807	804	-	-	-	4.0	14.9	-	19.0	84.6	13.5	14.9	28.5
1/2	795	792	-	-	-	4.0	14.7	-	18.7	84.7	13.3	14.7	28.1
2/1	995	995	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
2/2	998	998	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
3/1	558	558	-	-	-	1.6	1.2	-	2.8	17.9	7.8	1.2	9.0
3/2+3/3	656	656	-	-	-	1.6	1.1	-	2.7	14.9	3.9	1.1	5.0
4/1	880	880	-	-	-	0.0	0.4	-	0.4	1.6	0.0	0.4	0.4
4/2	497	497	-	-	-	0.0	0.2	-	0.2	1.2	0.0	0.2	0.2
5/2+5/1	1483	1483	-	-	-	5.9	9.8	-	15.7	38.2	15.3	9.8	25.1
5/3	884	884	-	-	-	3.8	7.0	-	10.7	43.7	14.0	7.0	21.0
6/1	316	316	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/2	877	877	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
7/1	70	70	70	0	0	0.0	0.0	-	0.0	1.6	0.0	0.0	0.0
7/2	265	265	265	0	0	0.6	0.6	-	1.3	17.3	3.3	0.6	3.9
8/1	528	528	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
8/2	51	51	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
9/1+9/2	522	522	1044	0	0	0.2	0.4	-	0.6	4.0	2.6	0.4	3.0
10/1	892	892	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
11/1	341	341	-	-	-	0.7	0.0	-	0.7	7.8	2.9	0.0	2.9
11/2	548	548	-	-	-	2.1	0.0	-	2.1	13.8	7.0	0.0	7.0
11/3	170	170	-	-	-	0.7	0.0	-	0.7	14.8	2.0	0.0	2.0
12/1	316	316	-	-	-	0.3	0.0	-	0.3	3.8	1.0	0.0	1.0
12/2	743	743	-	-	-	1.3	0.0	-	1.3	6.3	6.4	0.0	6.4
12/3	219	219	-	-	-	0.0	0.0	-	0.0	0.1	0.0	0.0	0.0

Full Input Data And Results

13/1	424	424	-	-	-	0.6	0.0	-	0.6	5.0	3.3	0.0	3.3
13/2	427	427	-	-	-	1.6	0.0	-	1.6	13.1	6.0	0.0	6.0
13/3	448	448	-	-	-	0.2	0.0	-	0.2	1.7	5.5	0.0	5.5
14/1	822	822	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
14/2	1342	1342	-	-	-	0.0	0.0	-	0.0	0.0	8.5	0.0	8.5
14/3	923	923	-	-	-	0.2	0.0	-	0.2	0.6	12.4	0.0	12.4
15/1	1439	1439	-	-	-	0.0	0.0	-	0.0	0.1	10.7	0.0	10.7
15/2	1091	1091	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
16/1	2334	2334	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
16/2	718	718	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
17/2+17/1	506	461	-	-	-	3.1	26.2	-	29.3	208.7	8.9	26.2	35.1
17/3	497	461	-	-	-	6.2	23.4	-	29.6	214.5	9.5	23.4	32.9
18/1	182	182	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
19/2+19/1	353	353	-	-	-	1.1	0.3	-	1.5	14.9	3.0	0.3	3.4
19/3	182	182	-	-	-	0.6	0.2	-	0.8	15.0	2.0	0.2	2.1
20/1	632	632	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
20/2	461	461	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
21/1	403	403	-	-	-	1.4	0.5	-	1.8	16.4	4.8	0.5	5.3
21/2+21/3	629	629	-	-	-	2.7	0.8	-	3.6	20.3	5.9	0.8	6.7
22/1	374	374	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0

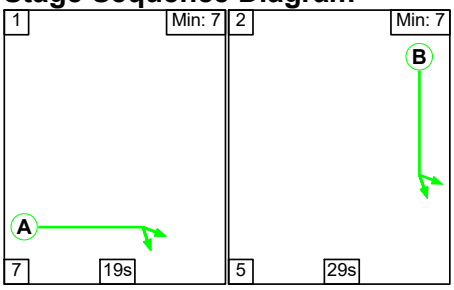
C1	PRC for Signalled Lanes (%):	-11.5	Total Delay for Signalled Lanes (pcuHr):	41.19	Cycle Time (s):	60
C2	Stream: 1 PRC for Signalled Lanes (%):	7.4	Total Delay for Signalled Lanes (pcuHr):	7.13	Cycle Time (s):	60
C2	Stream: 2 PRC for Signalled Lanes (%):	-11.1	Total Delay for Signalled Lanes (pcuHr):	28.83	Cycle Time (s):	60
C3	Stream: 1 PRC for Signalled Lanes (%):	-21.5	Total Delay for Signalled Lanes (pcuHr):	66.54	Cycle Time (s):	60
	PRC Over All Lanes (%):	-21.5	Total Delay Over All Lanes(pcuHr):	146.35		

Full Input Data And Results

Scenario 3: '2033 WITH DEV AM' (FG3: '2033 WITH DEV AM', Plan 1: 'Network Control Plan 1')

C1

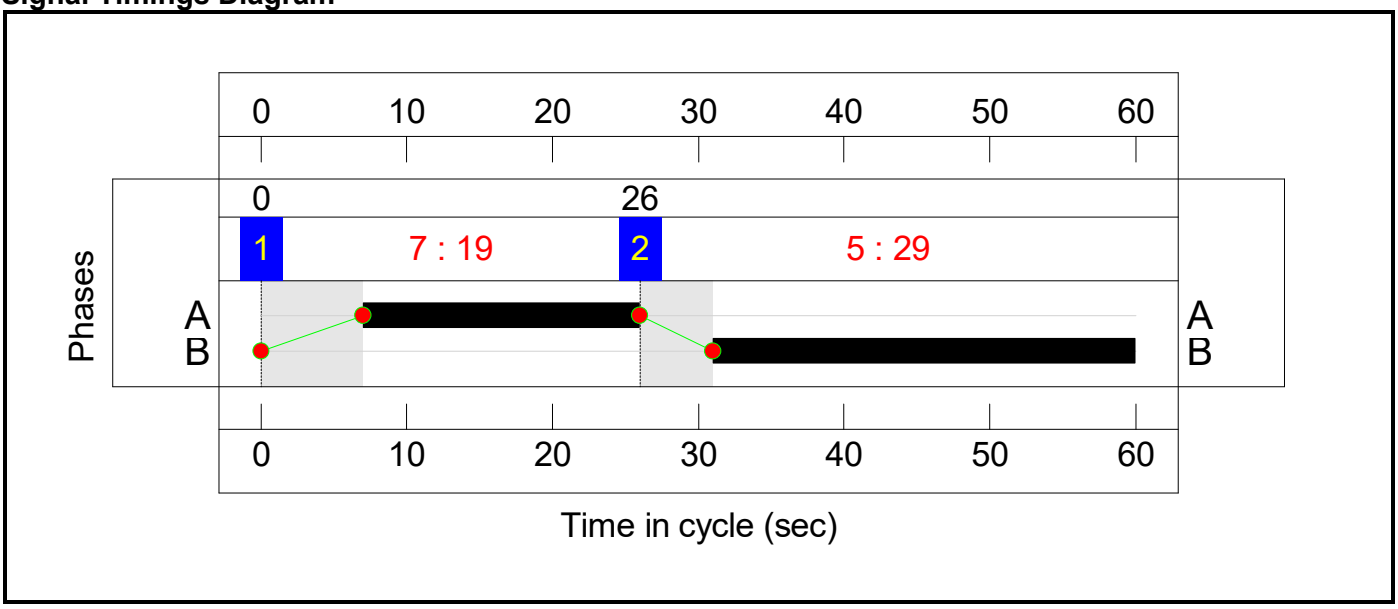
Stage Sequence Diagram



Stage Timings

Stage	1	2
Duration	19	29
Change Point	0	26

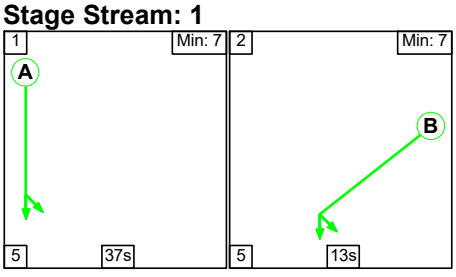
Signal Timings Diagram



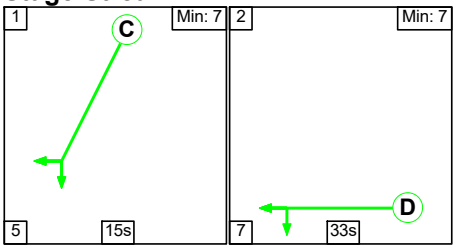
C2

Stage Sequence Diagram

Stage Stream: 1



Stage Stream: 2



Full Input Data And Results

Stage Timings

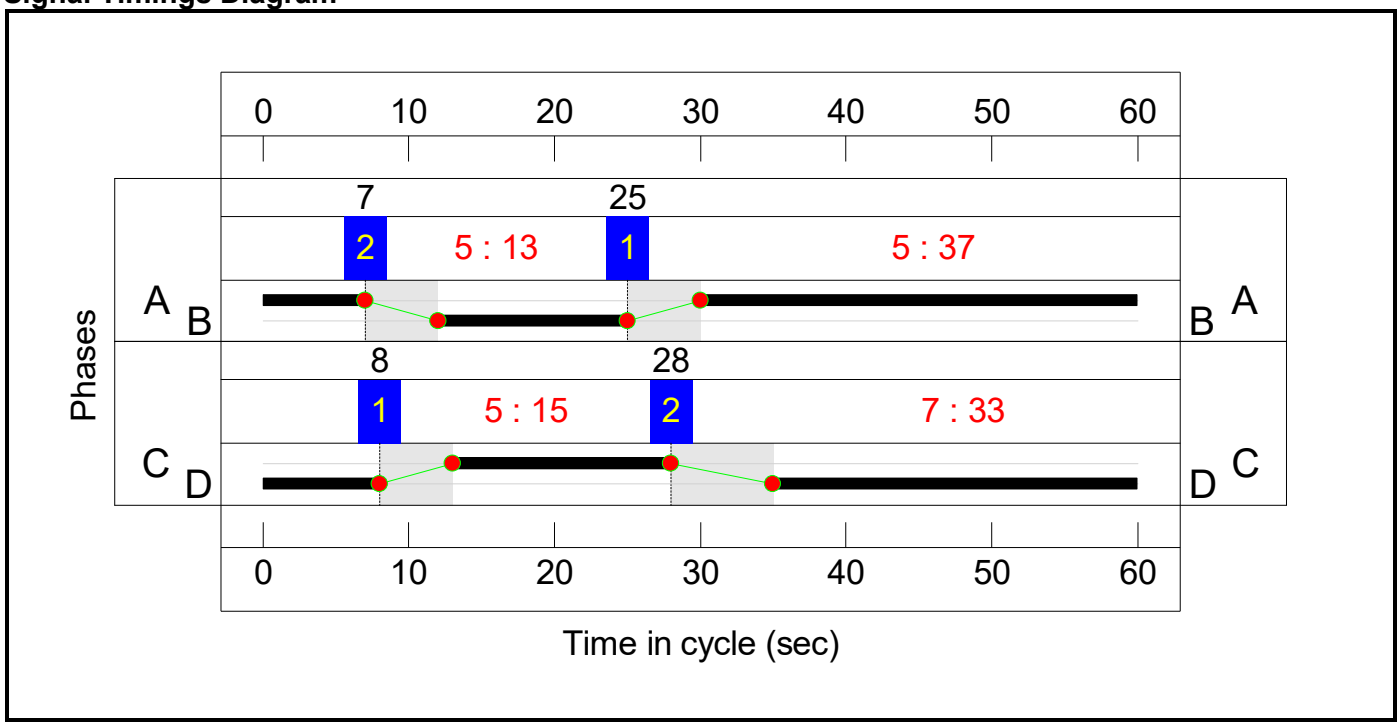
Stage Stream: 1

Stage	1	2
Duration	37	13
Change Point	25	7

Stage Stream: 2

Stage	1	2
Duration	15	33
Change Point	8	28

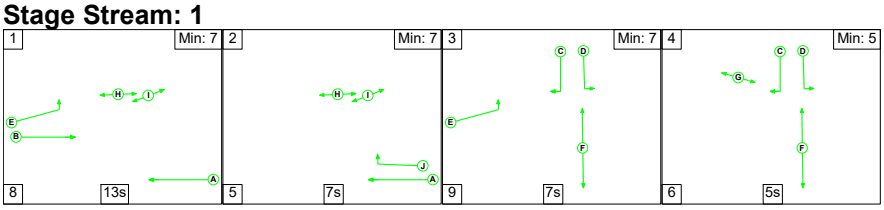
Signal Timings Diagram



C3

Stage Sequence Diagram

Stage Stream: 1



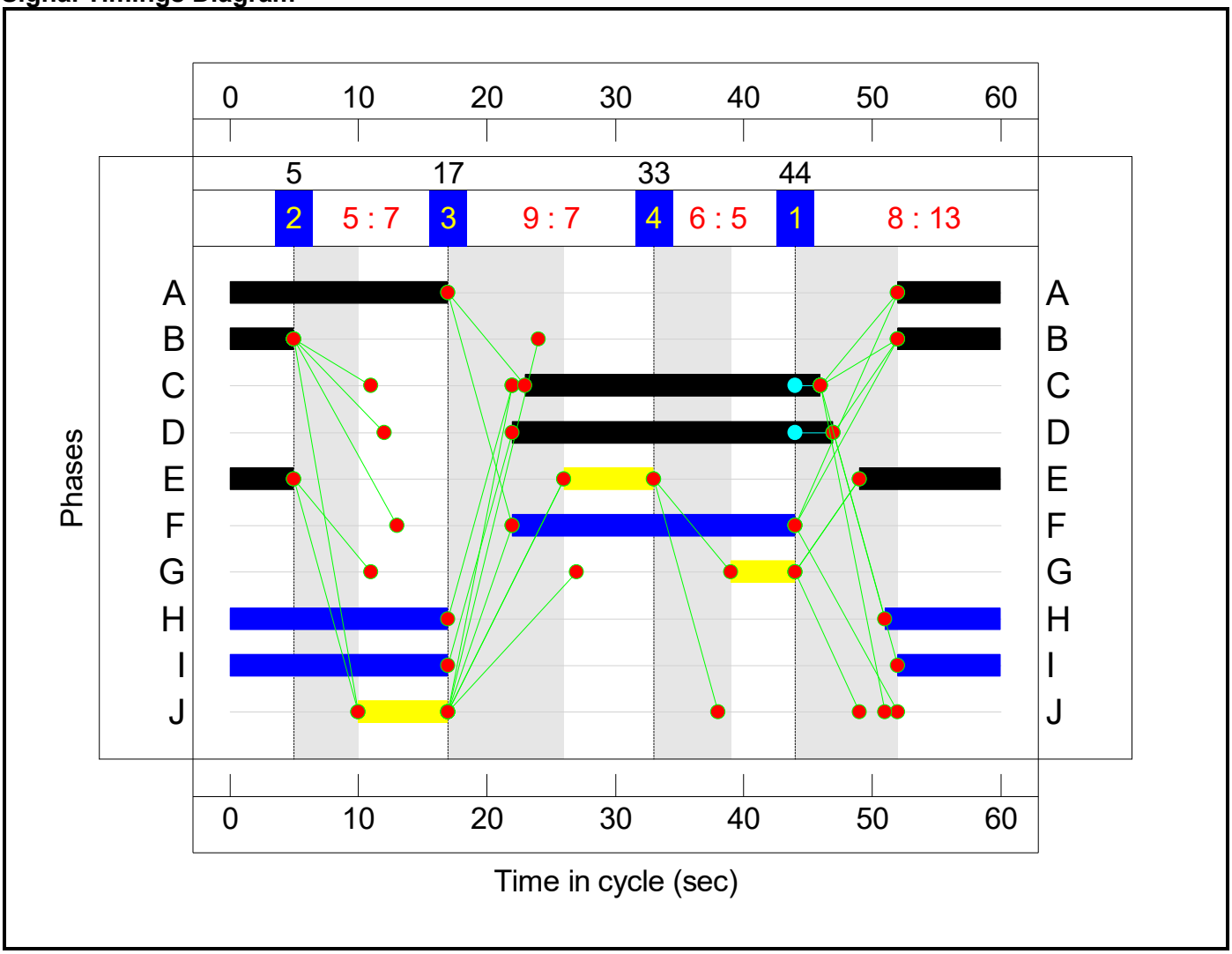
Stage Timings

Stage Stream: 1

Stage	1	2	3	4
Duration	13	7	7	5
Change Point	44	5	17	33

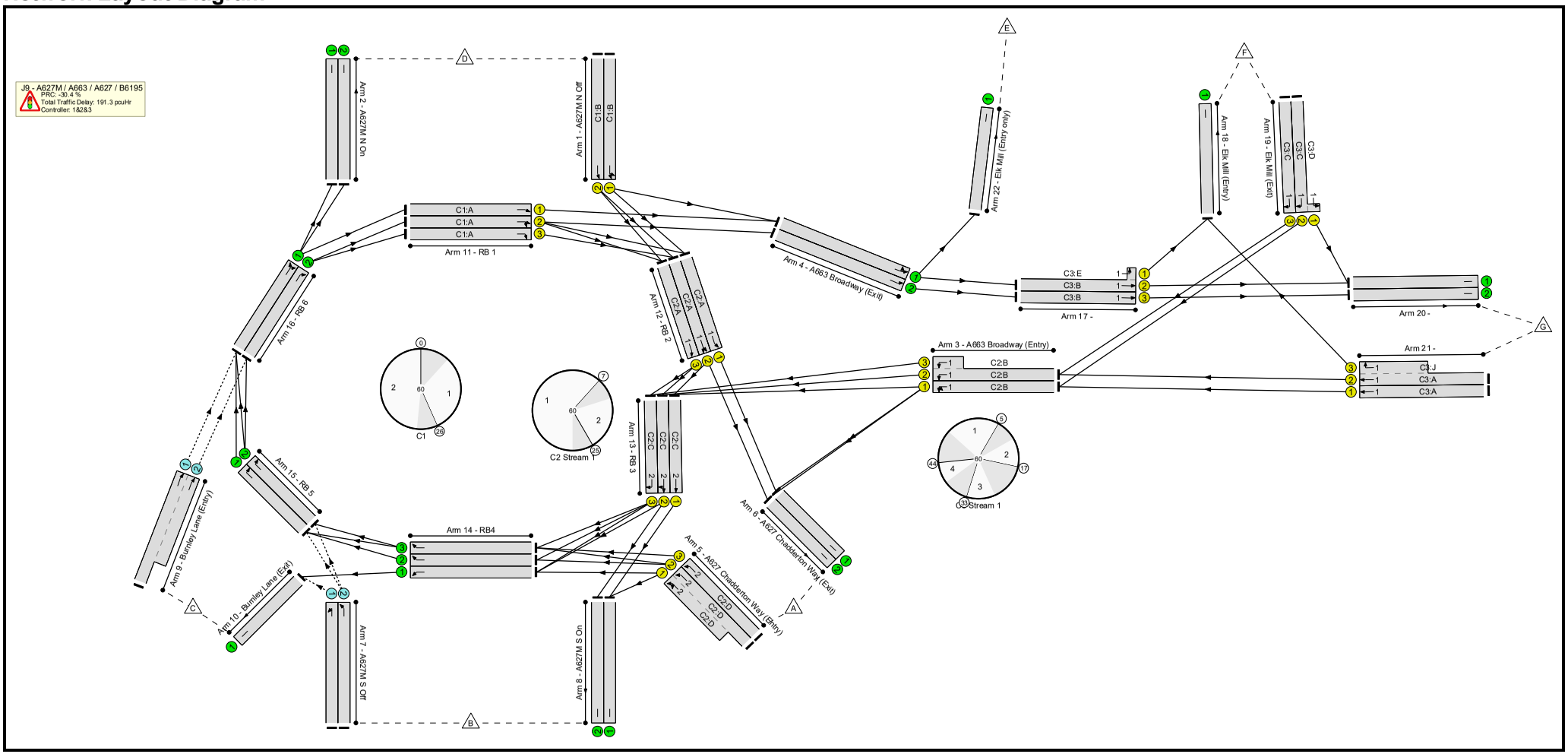
Full Input Data And Results

Signal Timings Diagram



Full Input Data And Results

Network Layout Diagram



Full Input Data And Results

Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network	-	-	**N/A**	-	-		-	-	-	-	-	-	**117.4%**
J9 - A627M / A663 / A627 / B6195	-	-	**N/A**	-	-		-	-	-	-	-	-	**117.4%**
1/1	A627M N Off Left Ahead	U	N/A	N/A	C1:B		1	29	-	968	1919	960	100.9%
1/2	A627M N Off Ahead	U	N/A	N/A	C1:B		1	29	-	958	1902	951	100.7%
2/1	A627M N On	U	N/A	N/A	-		-	-	-	710	Inf	Inf	0.0%
2/2	A627M N On	U	N/A	N/A	-		-	-	-	711	Inf	Inf	0.0%
3/1	A663 Broadway (Entry) U-Turn Left	U	2:1	N/A	C2:B		1	13	-	536	1957	457	117.4%
3/2+3/3	A663 Broadway (Entry) Left	U	2:1	N/A	C2:B		1	13	-	778	1981:1981	278+388	116.9 : 116.9%
4/1	A663 Broadway (Exit) Ahead Left	U	N/A	N/A	-		-	-	-	495	1975	1975	24.9%
4/2	A663 Broadway (Exit) Ahead	U	N/A	N/A	-		-	-	-	390	1975	1975	19.7%
5/2+5/1	A627 Chadderton Way (Entry) U-Turn Left	U	2:2	N/A	C2:D		1	33	-	1066	2000:1993	1133+687	60.8 : 54.9%
5/3	A627 Chadderton Way (Entry) Left	U	2:2	N/A	C2:D		1	33	-	465	2000	1133	41.0%
6/1	A627 Chadderton Way (Exit)	U	N/A	N/A	-		-	-	-	852	Inf	Inf	0.0%
6/2	A627 Chadderton Way (Exit)	U	N/A	N/A	-		-	-	-	1341	Inf	Inf	0.0%
7/1	A627M S Off Left	O	N/A	N/A	-		-	-	-	64	1857	1255	5.1%
7/2	A627M S Off Left	O	N/A	N/A	-		-	-	-	236	1893	799	29.6%
8/1	A627M S On	U	N/A	N/A	-		-	-	-	318	Inf	Inf	0.0%
8/2	A627M S On	U	N/A	N/A	-		-	-	-	355	Inf	Inf	0.0%

Full Input Data And Results

9/1+9/2	Burnley Lane (Entry) Ahead	O	N/A	N/A	-		-	-	-	746	1976:1975	351+877	55.2 : 63.0%
10/1	Burnley Lane (Exit)	U	N/A	N/A	-		-	-	-	645	Inf	Inf	0.0%
11/1	RB 1 Ahead	U	N/A	N/A	C1:A		1	19	-	148	1900	633	23.4%
11/2	RB 1 Ahead Right	U	N/A	N/A	C1:A		1	19	-	632	1900	633	99.8%
11/3	RB 1 Right	U	N/A	N/A	C1:A		1	19	-	297	1900	633	46.9%
12/1	RB 2 Ahead	U	2:1	N/A	C2:A		1	37	-	848	1900	1203	70.0%
12/2	RB 2 Ahead Ahead2	U	2:1	N/A	C2:A		1	37	-	1079	1900	1203	89.2%
12/3	RB 2 Ahead	U	2:1	N/A	C2:A		1	37	-	191	1900	1203	15.8%
13/1	RB 3 Ahead	U	2:2	N/A	C2:C		1	15	-	270	1900	507	47.6%
13/2	RB 3 Ahead Right	U	2:2	N/A	C2:C		1	15	-	488	1900	507	87.7%
13/3	RB 3 Right	U	2:2	N/A	C2:C		1	15	-	481	1900	507	82.6%
14/1	RB4 Left	U	N/A	N/A	-		-	-	-	581	1900	1900	29.3%
14/2	RB4 Ahead	U	N/A	N/A	-		-	-	-	1050	1900	1900	52.7%
14/3	RB4 Ahead	U	N/A	N/A	-		-	-	-	466	1900	1900	24.5%
15/1	RB 5 Right	U	N/A	N/A	-		-	-	-	1098	1900	1900	55.2%
15/2	RB 5 Right	U	N/A	N/A	-		-	-	-	654	1900	1900	34.4%
16/1	RB 6 Ahead Right	U	N/A	N/A	-		-	-	-	1569	Inf	Inf	0.0%
16/2	RB 6 Right	U	N/A	N/A	-		-	-	-	929	Inf	Inf	0.0%
17/2+17/1	Left Ahead	U	3:1	N/A	C3:B C3:E		1:2	13:23	-	397	1975:1985	453+6	86.0 : 86.3%
17/3	Ahead	U	3:1	N/A	C3:B		1	13	-	390	1975	461	84.6%
18/1	Elk Mill (Entry)	U	N/A	N/A	-		-	-	-	41	Inf	Inf	0.0%
19/2+19/1	Elk Mill (Exit) Right Left	U	3:1	N/A	C3:C C3:D		1	23:25	-	55	1915:2115	280+626	6.1 : 6.1%
19/3	Elk Mill (Exit) Right	U	3:1	N/A	C3:C		1	23	-	49	1915	766	6.4%
20/1		U	N/A	N/A	-		-	-	-	430	Inf	Inf	0.0%
20/2		U	N/A	N/A	-		-	-	-	390	Inf	Inf	0.0%

Full Input Data And Results

21/1	Ahead	U	3:1	N/A	C3:A		1	25	-	519	1915	830	62.5%
21/2+21/3	Ahead Right	U	3:1	N/A	C3:A C3:J		1	25:7	-	765	1915:1940	830+41	87.8 : 87.8%
22/1	Elk Mill (Entry only)	U	N/A	N/A	-		-	-	-	98	Inf	Inf	0.0%

Full Input Data And Results

Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network	**-**	**-**	**1792**	**0**	**0**	**41.8**	**149.4**	**0.0**	**191.3**	**-**	**-**	**-**	**-**
J9 - A627M / A663 / A627 / B6195	**-**	**-**	**1792**	**0**	**0**	**41.8**	**149.4**	**0.0**	**191.3**	**-**	**-**	**-**	**-**
1/1	968	960	-	-	-	4.3	17.8	-	22.2	82.5	16.3	17.8	34.1
1/2	958	951	-	-	-	4.2	17.3	-	21.6	81.1	16.1	17.3	33.4
2/1	686	686	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
2/2	687	687	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
3/1	536	457	-	-	-	4.0	42.8	-	46.9	314.7	10.4	42.8	53.3
3/2+3/3	778	673	-	-	-	5.3	59.5	-	64.7	299.6	12.5	59.5	72.0
4/1	492	492	-	-	-	0.0	0.2	-	0.2	1.2	0.0	0.2	0.2
4/2	390	390	-	-	-	0.0	0.1	-	0.1	1.1	0.0	0.1	0.1
5/2+5/1	1066	1066	-	-	-	2.4	0.7	-	3.1	10.4	7.5	0.7	8.2
5/3	465	465	-	-	-	0.9	0.3	-	1.3	10.0	4.3	0.3	4.6
6/1	846	846	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/2	1285	1285	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
7/1	64	64	64	0	0	0.0	0.0	-	0.0	1.5	0.0	0.0	0.0
7/2	236	236	236	0	0	0.0	0.2	-	0.3	4.0	0.9	0.2	1.1
8/1	289	289	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
8/2	322	322	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
9/1+9/2	746	746	1492	0	0	0.1	0.8	-	0.9	4.2	2.8	0.8	3.5
10/1	620	620	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
11/1	148	148	-	-	-	0.4	0.0	-	0.4	10.5	1.7	0.0	1.7
11/2	632	632	-	-	-	3.1	0.0	-	3.1	17.5	10.4	0.0	10.4
11/3	297	297	-	-	-	1.3	0.0	-	1.3	15.2	3.8	0.0	3.8
12/1	843	843	-	-	-	0.8	0.0	-	0.8	3.4	4.8	0.0	4.8
12/2	1073	1073	-	-	-	1.6	0.0	-	1.6	5.5	12.2	0.0	12.2
12/3	190	190	-	-	-	0.0	0.0	-	0.0	0.8	0.2	0.0	0.2

Full Input Data And Results

13/1	241	241	-	-	-	0.9	0.0	-	0.9	13.3	1.7	0.0	1.7
13/2	444	444	-	-	-	1.4	0.0	-	1.4	11.6	6.5	0.0	6.5
13/3	418	418	-	-	-	0.2	0.0	-	0.2	2.1	5.9	0.0	5.9
14/1	556	556	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
14/2	1001	1001	-	-	-	0.0	0.0	-	0.0	0.0	3.8	0.0	3.8
14/3	466	466	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
15/1	1049	1049	-	-	-	0.0	0.0	-	0.0	0.0	3.2	0.0	3.2
15/2	654	654	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
16/1	1520	1520	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
16/2	929	929	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
17/2+17/1	394	394	-	-	-	2.1	2.8	-	4.9	44.9	6.0	2.8	8.9
17/3	390	390	-	-	-	2.9	2.6	-	5.5	50.8	6.5	2.6	9.1
18/1	41	41	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
19/2+19/1	55	55	-	-	-	0.2	0.0	-	0.2	12.4	0.4	0.0	0.4
19/3	49	49	-	-	-	0.2	0.0	-	0.2	13.6	0.5	0.0	0.5
20/1	427	427	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
20/2	390	390	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
21/1	519	519	-	-	-	1.9	0.8	-	2.7	19.0	6.6	0.8	7.5
21/2+21/3	765	765	-	-	-	3.4	3.4	-	6.8	31.9	11.3	3.4	14.7
22/1	98	98	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0

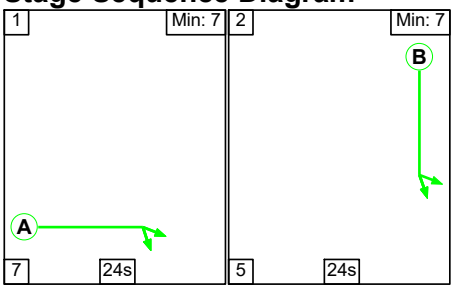
C1	PRC for Signalled Lanes (%):	-12.1	Total Delay for Signalled Lanes (pcuHr):	48.50	Cycle Time (s):	60
C2	Stream: 1 PRC for Signalled Lanes (%):	-30.4	Total Delay for Signalled Lanes (pcuHr):	114.07	Cycle Time (s):	60
C2	Stream: 2 PRC for Signalled Lanes (%):	2.6	Total Delay for Signalled Lanes (pcuHr):	6.94	Cycle Time (s):	60
C3	Stream: 1 PRC for Signalled Lanes (%):	2.4	Total Delay for Signalled Lanes (pcuHr):	20.31	Cycle Time (s):	60
	PRC Over All Lanes (%):	-30.4	Total Delay Over All Lanes(pcuHr):	191.27		

Full Input Data And Results

Scenario 4: '2033 WITH DEV PM' (FG4: '2033 WITH DEV PM', Plan 1: 'Network Control Plan 1')

C1

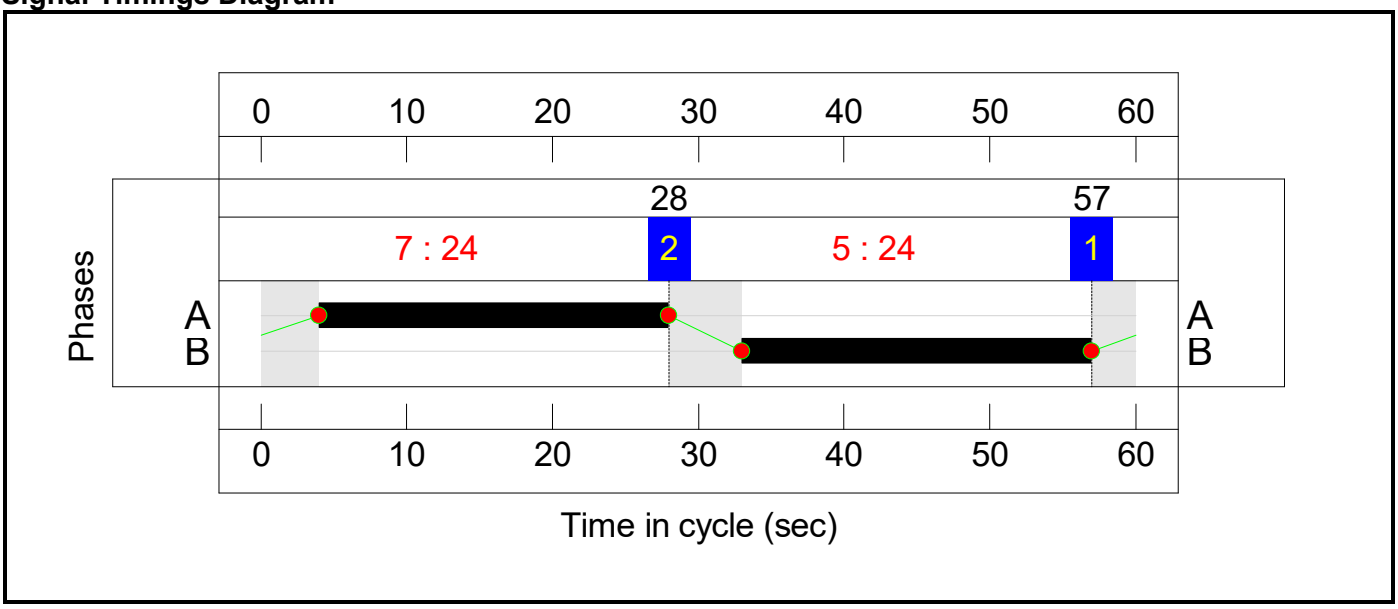
Stage Sequence Diagram



Stage Timings

Stage	1	2
Duration	24	24
Change Point	57	28

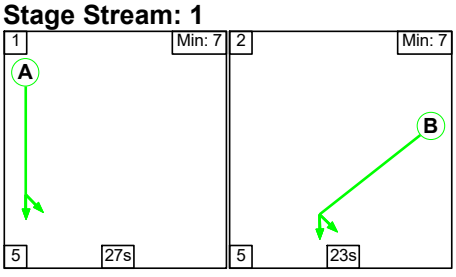
Signal Timings Diagram



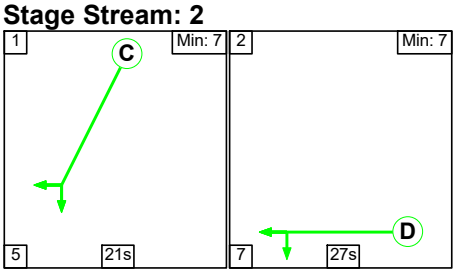
C2

Stage Sequence Diagram

Stage Stream: 1



Stage Stream: 2



Full Input Data And Results

Stage Timings

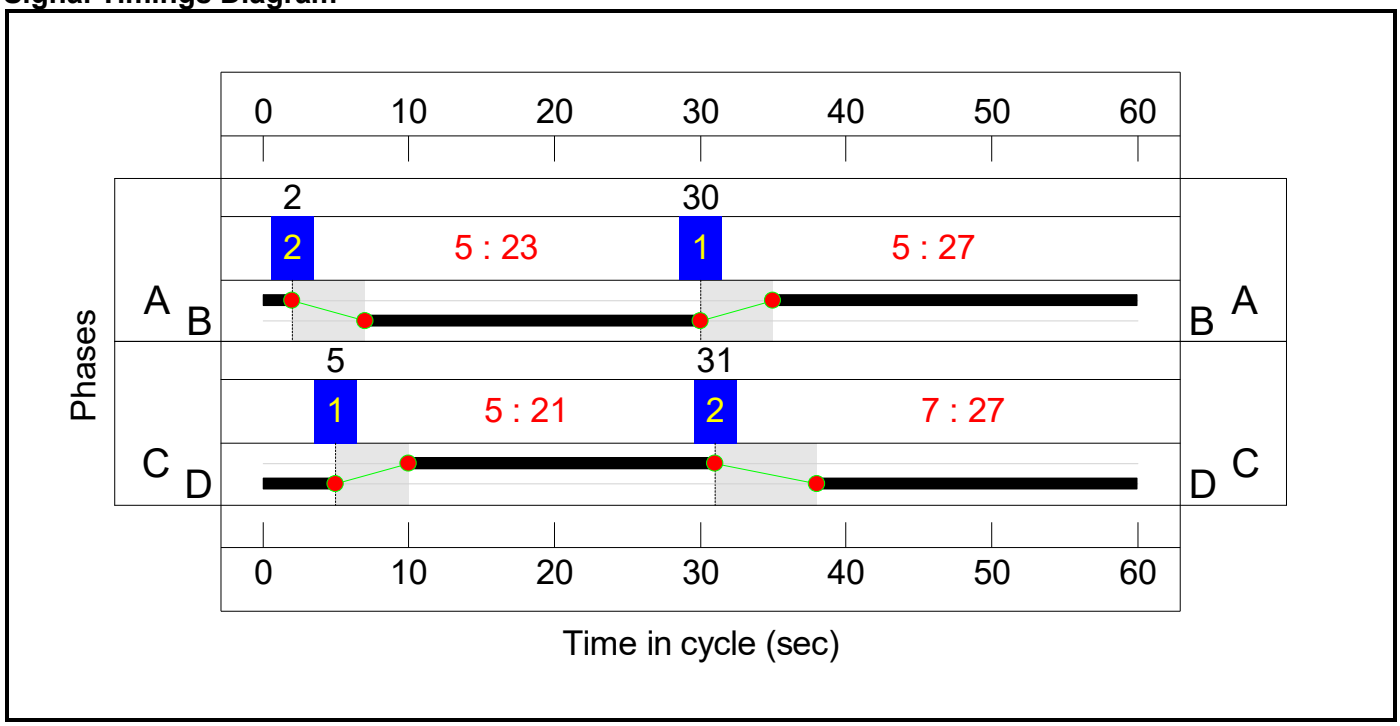
Stage Stream: 1

Stage	1	2
Duration	27	23
Change Point	30	2

Stage Stream: 2

Stage	1	2
Duration	21	27
Change Point	5	31

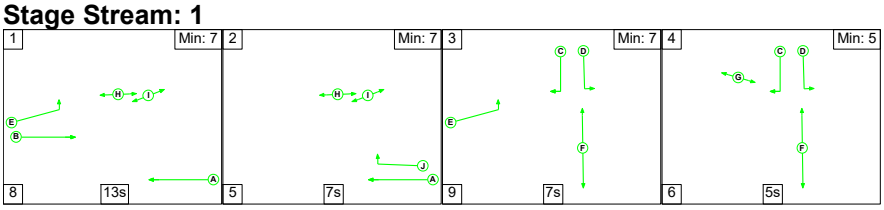
Signal Timings Diagram



C3

Stage Sequence Diagram

Stage Stream: 1



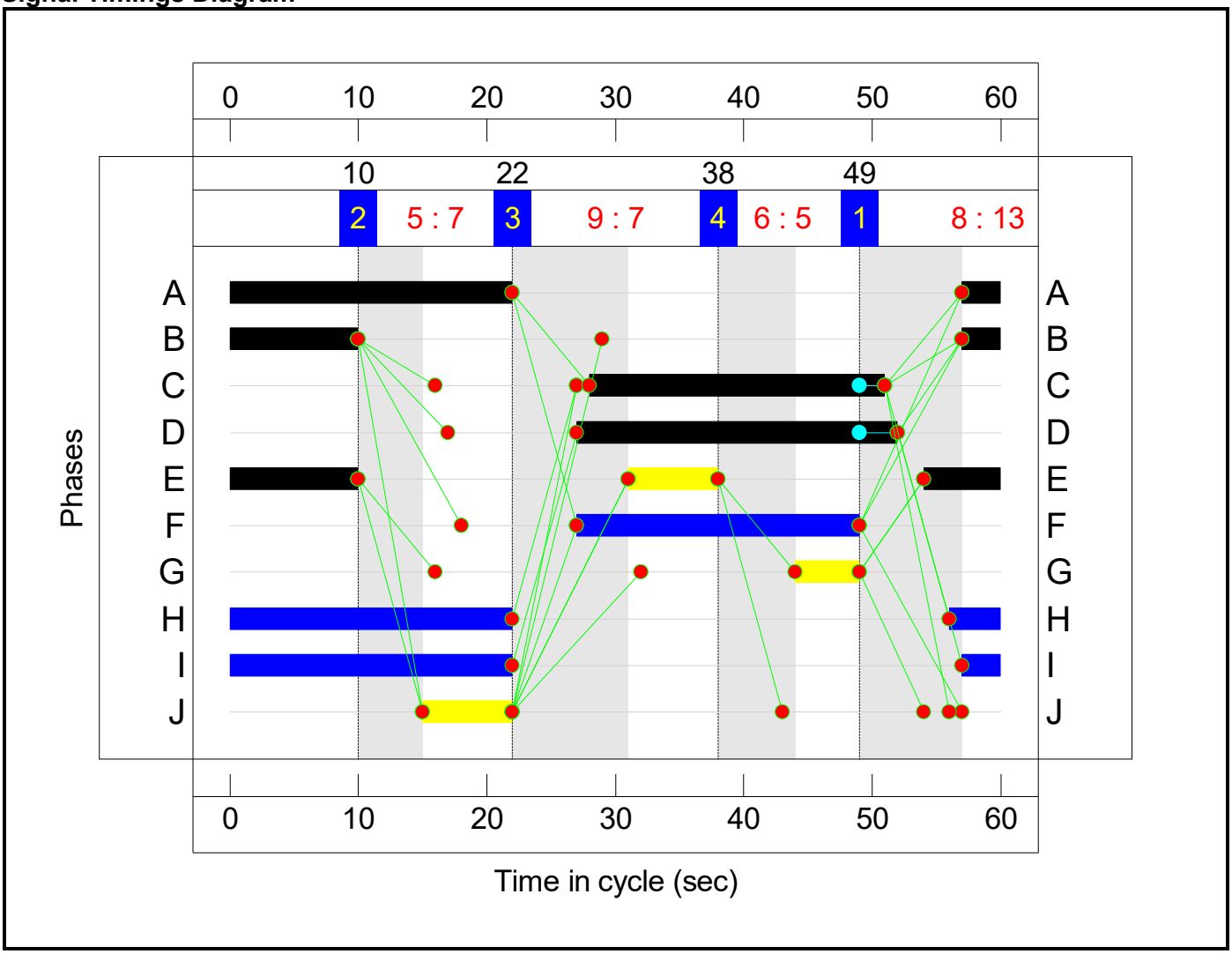
Stage Timings

Stage Stream: 1

Stage	1	2	3	4
Duration	13	7	7	5
Change Point	49	10	22	38

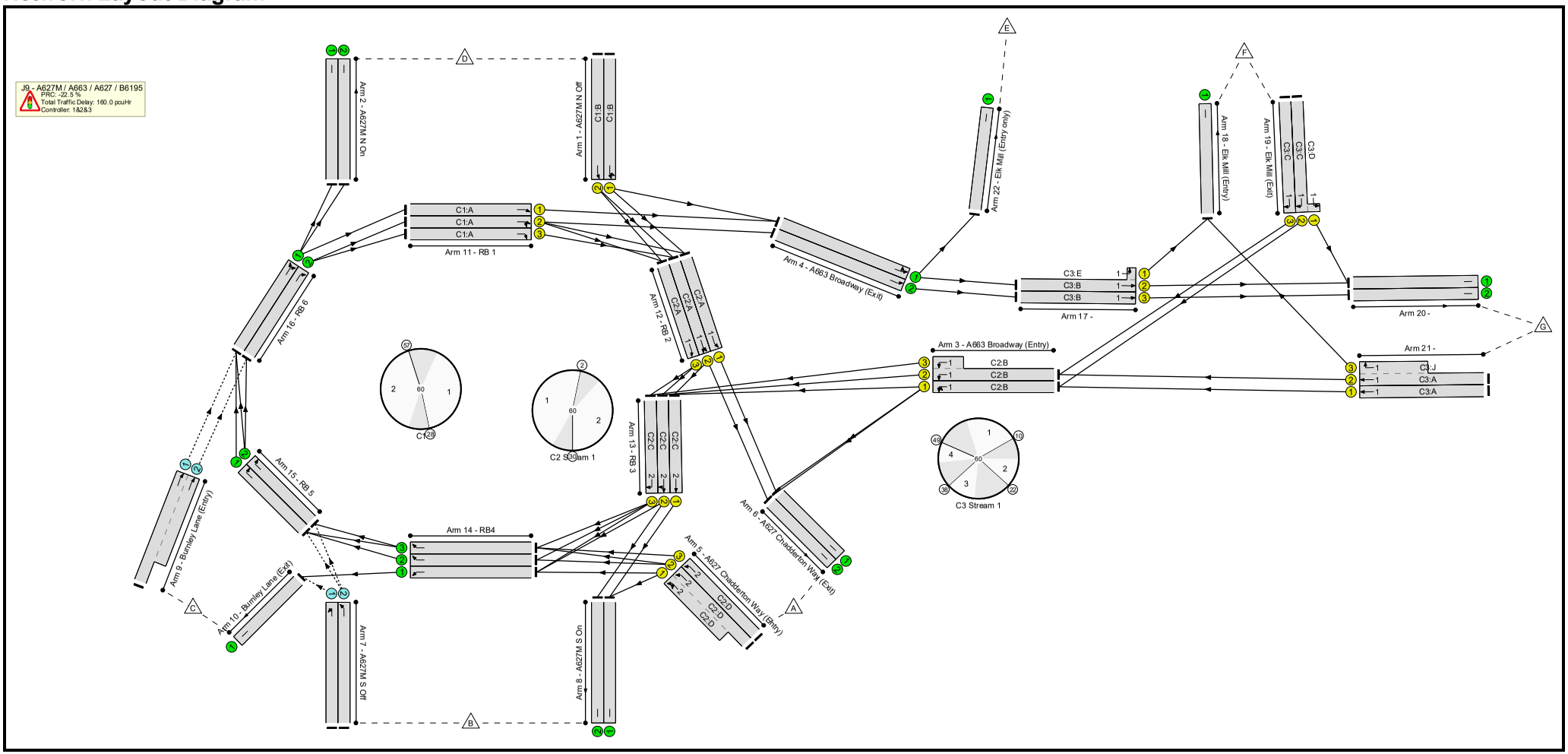
Full Input Data And Results

Signal Timings Diagram



Full Input Data And Results

Network Layout Diagram



Full Input Data And Results

Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network	-	-	**N/A**	-	-		-	-	-	-	-	-	**110.2%**
J9 - A627M / A663 / A627 / B6195	-	-	**N/A**	-	-		-	-	-	-	-	-	**110.2%**
1/1	A627M N Off Left Ahead	U	N/A	N/A	C1:B		1	24	-	819	1930	804	101.8%
1/2	A627M N Off Ahead	U	N/A	N/A	C1:B		1	24	-	806	1902	793	101.7%
2/1	A627M N On	U	N/A	N/A	-		-	-	-	1033	Inf	Inf	0.0%
2/2	A627M N On	U	N/A	N/A	-		-	-	-	1035	Inf	Inf	0.0%
3/1	A663 Broadway (Entry) U-Turn Left	U	2:1	N/A	C2:B		1	23	-	556	1965	786	70.7%
3/2+3/3	A663 Broadway (Entry) Left	U	2:1	N/A	C2:B		1	23	-	672	1981:1981	299+639	71.7 : 71.7%
4/1	A663 Broadway (Exit) Ahead Left	U	N/A	N/A	-		-	-	-	889	1975	1975	44.5%
4/2	A663 Broadway (Exit) Ahead	U	N/A	N/A	-		-	-	-	496	1975	1975	25.1%
5/2+5/1	A627 Chadderton Way (Entry) U-Turn Left	U	2:2	N/A	C2:D		1	27	-	1478	2000:1990	933+611	99.4 : 90.1%
5/3	A627 Chadderton Way (Entry) Left	U	2:2	N/A	C2:D		1	27	-	922	2000	933	98.8%
6/1	A627 Chadderton Way (Exit)	U	N/A	N/A	-		-	-	-	334	Inf	Inf	0.0%
6/2	A627 Chadderton Way (Exit)	U	N/A	N/A	-		-	-	-	877	Inf	Inf	0.0%
7/1	A627M S Off Left	O	N/A	N/A	-		-	-	-	70	1857	1168	6.0%
7/2	A627M S Off Left	O	N/A	N/A	-		-	-	-	289	1893	465	62.2%
8/1	A627M S On	U	N/A	N/A	-		-	-	-	527	Inf	Inf	0.0%
8/2	A627M S On	U	N/A	N/A	-		-	-	-	51	Inf	Inf	0.0%

Full Input Data And Results

9/1+9/2	Burnley Lane (Entry) Ahead	O	N/A	N/A	-		-	-	-	525	1976:1975	485+580	43.3 : 54.3%
10/1	Burnley Lane (Exit)	U	N/A	N/A	-		-	-	-	895	Inf	Inf	0.0%
11/1	RB 1 Ahead	U	N/A	N/A	C1:A		1	24	-	342	1900	792	43.2%
11/2	RB 1 Ahead Right	U	N/A	N/A	C1:A		1	24	-	558	1900	792	70.5%
11/3	RB 1 Right	U	N/A	N/A	C1:A		1	24	-	159	1900	792	20.1%
12/1	RB 2 Ahead	U	2:1	N/A	C2:A		1	27	-	334	1900	887	37.1%
12/2	RB 2 Ahead Ahead2	U	2:1	N/A	C2:A		1	27	-	744	1900	887	82.8%
12/3	RB 2 Ahead	U	2:1	N/A	C2:A		1	27	-	221	1900	887	24.5%
13/1	RB 3 Ahead	U	2:2	N/A	C2:C		1	21	-	423	1900	697	60.7%
13/2	RB 3 Ahead Right	U	2:2	N/A	C2:C		1	21	-	430	1900	697	61.2%
13/3	RB 3 Right	U	2:2	N/A	C2:C		1	21	-	463	1900	697	66.4%
14/1	RB4 Left	U	N/A	N/A	-		-	-	-	825	1900	1900	43.3%
14/2	RB4 Ahead	U	N/A	N/A	-		-	-	-	1337	1900	1900	70.4%
14/3	RB4 Ahead	U	N/A	N/A	-		-	-	-	976	1900	1900	51.4%
15/1	RB 5 Right	U	N/A	N/A	-		-	-	-	1452	1900	1900	76.4%
15/2	RB 5 Right	U	N/A	N/A	-		-	-	-	1150	1900	1900	60.5%
16/1	RB 6 Ahead Right	U	N/A	N/A	-		-	-	-	2410	Inf	Inf	0.0%
16/2	RB 6 Right	U	N/A	N/A	-		-	-	-	717	Inf	Inf	0.0%
17/2+17/1	Left Ahead	U	3:1	N/A	C3:B C3:E		1:2	13:23	-	514	1975:1985	431+32	109.4 : 110.2%
17/3	Ahead	U	3:1	N/A	C3:B		1	13	-	496	1975	461	107.6%
18/1	Elk Mill (Entry)	U	N/A	N/A	-		-	-	-	190	Inf	Inf	0.0%
19/2+19/1	Elk Mill (Exit) Right Left	U	3:1	N/A	C3:C C3:D		1	23:25	-	350	1915:2115	382+498	39.8 : 39.8%
19/3	Elk Mill (Exit) Right	U	3:1	N/A	C3:C		1	23	-	185	1915	766	24.2%
20/1		U	N/A	N/A	-		-	-	-	677	Inf	Inf	0.0%
20/2		U	N/A	N/A	-		-	-	-	496	Inf	Inf	0.0%
21/1	Ahead	U	3:1	N/A	C3:A		1	25	-	404	1915	830	48.7%

Full Input Data And Results

21/2+21/3	Ahead Right	U	3:1	N/A	C3:A C3:J		1	25:7	-	642	1915:1940	767+244	63.5 : 63.5%
22/1	Elk Mill (Entry only)	U	N/A	N/A	-		-	-	-	375	Inf	Inf	0.0%

Full Input Data And Results

Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network	**-**	**-**	**1409**	**0**	**0**	**46.2**	**113.8**	**0.0**	**160.0**	**-**	**-**	**-**	**-**
J9 - A627M / A663 / A627 / B6195	**-**	**-**	**1409**	**0**	**0**	**46.2**	**113.8**	**0.0**	**160.0**	**-**	**-**	**-**	**-**
1/1	819	804	-	-	-	4.5	18.5	-	23.0	101.2	14.1	18.5	32.6
1/2	806	792	-	-	-	4.4	18.0	-	22.4	100.0	13.9	18.0	31.8
2/1	1033	1033	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
2/2	1035	1035	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
3/1	556	556	-	-	-	1.5	1.2	-	2.7	17.7	7.8	1.2	9.0
3/2+3/3	672	672	-	-	-	1.6	1.3	-	2.9	15.3	3.9	1.3	5.2
4/1	879	879	-	-	-	0.0	0.4	-	0.4	1.6	0.0	0.4	0.4
4/2	496	496	-	-	-	0.0	0.2	-	0.2	1.2	0.0	0.2	0.2
5/2+5/1	1478	1478	-	-	-	5.9	8.8	-	14.7	35.9	15.2	8.8	24.0
5/3	922	922	-	-	-	4.1	12.6	-	16.7	65.1	15.1	12.6	27.7
6/1	329	329	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/2	867	867	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
7/1	70	70	70	0	0	0.0	0.0	-	0.0	1.6	0.0	0.0	0.0
7/2	289	289	289	0	0	0.8	0.8	-	1.6	20.1	3.9	0.8	4.7
8/1	527	527	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
8/2	50	50	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
9/1+9/2	525	525	1050	0	0	0.2	0.5	-	0.7	4.6	2.7	0.5	3.2
10/1	892	892	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
11/1	342	342	-	-	-	0.7	0.0	-	0.7	7.7	3.0	0.0	3.0
11/2	558	558	-	-	-	2.2	0.0	-	2.2	14.5	7.2	0.0	7.2
11/3	159	159	-	-	-	0.7	0.0	-	0.7	15.5	1.9	0.0	1.9
12/1	329	329	-	-	-	0.4	0.0	-	0.4	4.3	1.2	0.0	1.2
12/2	734	734	-	-	-	1.2	0.0	-	1.2	6.1	5.9	0.0	5.9
12/3	217	217	-	-	-	0.0	0.0	-	0.0	0.1	0.0	0.0	0.0

Full Input Data And Results

13/1	423	423	-	-	-	0.6	0.0	-	0.6	5.0	3.3	0.0	3.3
13/2	426	426	-	-	-	1.5	0.0	-	1.5	13.0	6.0	0.0	6.0
13/3	463	463	-	-	-	0.2	0.0	-	0.2	1.7	5.9	0.0	5.9
14/1	822	822	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
14/2	1337	1337	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
14/3	976	976	-	-	-	0.2	0.0	-	0.2	0.8	13.5	0.0	13.5
15/1	1452	1452	-	-	-	0.0	0.0	-	0.0	0.0	9.0	0.0	9.0
15/2	1150	1150	-	-	-	0.0	0.0	-	0.0	0.0	1.7	0.0	1.7
16/1	2410	2410	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
16/2	717	717	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
17/2+17/1	507	461	-	-	-	3.2	26.7	-	29.9	212.4	9.0	26.7	35.7
17/3	496	461	-	-	-	6.2	23.0	-	29.1	211.5	9.4	23.0	32.4
18/1	181	181	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
19/2+19/1	350	350	-	-	-	1.1	0.3	-	1.4	14.8	3.0	0.3	3.4
19/3	185	185	-	-	-	0.6	0.2	-	0.8	15.1	2.0	0.2	2.2
20/1	632	632	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
20/2	461	461	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
21/1	404	404	-	-	-	1.4	0.5	-	1.8	16.4	4.8	0.5	5.3
21/2+21/3	642	642	-	-	-	2.8	0.9	-	3.7	20.6	6.1	0.9	7.0
22/1	372	372	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0

C1		PRC for Signalled Lanes (%):	-13.2	Total Delay for Signalled Lanes (pcuHr):	49.06	Cycle Time (s):	60
C2	Stream: 1	PRC for Signalled Lanes (%):	8.7	Total Delay for Signalled Lanes (pcuHr):	7.24	Cycle Time (s):	60
C2	Stream: 2	PRC for Signalled Lanes (%):	-10.5	Total Delay for Signalled Lanes (pcuHr):	33.76	Cycle Time (s):	60
C3	Stream: 1	PRC for Signalled Lanes (%):	-22.5	Total Delay for Signalled Lanes (pcuHr):	66.77	Cycle Time (s):	60
		PRC Over All Lanes (%):	-22.5	Total Delay Over All Lanes(pcuHr):	159.96		

S|C|P

APPENDIX V

Junctions 9

ARCADY 9 - Roundabout Module

Version: 9.5.2.1013
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Filename: J2 A627(M) Rbt 3rd Run.j9
Path: Z:\Job Library\2019\190267 - Manchester Road, Rochdale\Traffic Data\Planning Application\ARCADY\A627(M) A627(M) Spur roundabout (A627(M) Junction 2)
Report generation date: 13/12/2022 15:15:13

»Base 2033, AM
»Base 2033, PM
»Assessment 2033 + dev, AM
»Assessment 2033 + dev, PM

Summary of junction performance

	AM					PM				
	Set ID	Queue (PCU)	Delay (s)	RFC	LOS	Set ID	Queue (PCU)	Delay (s)	RFC	LOS
	Base 2033									
Arm 1	D1	0.6	2.23	0.37	A	D2	0.2	1.65	0.14	A
Arm 2		0.2	1.68	0.19	A		0.3	1.60	0.20	A
Arm 3		0.4	1.78	0.28	A		0.4	1.84	0.31	A
	Assessment 2033 + dev									
Arm 1	D3	0.6	2.33	0.38	A	D4	0.2	1.71	0.16	A
Arm 2		0.2	1.71	0.20	A		0.3	1.68	0.23	A
Arm 3		0.5	1.91	0.33	A		0.5	1.90	0.33	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	A627 (M) Junction 2
Location	
Site number	
Date	11/11/2022
Version	
Status	(new file)
Identifier	
Client	
Jobnumber	
Enumerator	SCP\abbie.moore
Description	

Units

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

Analysis Options

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

Demand Set Summary

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D1	Base 2033	AM	ONE HOUR	07:30	09:00	15
D2	Base 2033	PM	ONE HOUR	16:15	17:45	15
D3	Assessment 2033 + dev	AM	ONE HOUR	07:30	09:00	15
D4	Assessment 2033 + dev	PM	ONE HOUR	16:15	17:45	15

Analysis Set Details

ID	Network flow scaling factor (%)
A1	100.000

Base 2033, 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	A627 (M) Junction 2	Standard Roundabout		1, 2, 3	1.95	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Name	Description
1	A627 (M) NORTH	
2	A627 (M) SOUTH	
3	A627 (M) WEST	

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	8.80	8.80	0.0	42.6	114.4	17.0	
2	9.60	9.60	0.0	34.5	117.0	22.0	
3	9.00	9.00	0.0	54.0	117.0	29.0	

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Arm	Final slope	Final intercept (PCU/hr)
1	0.622	2856
2	0.644	3049
3	0.609	2820

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

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D1	Base 2033	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		✓	854	100.000
2		✓	445	100.000
3		✓	710	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		1	2	3
From	1	20	267	567
	2	0	1	444
	3	273	437	0

Vehicle Mix

Heavy Vehicle Percentages

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

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
1	0.37	2.23	0.6	A
2	0.19	1.68	0.2	A
3	0.28	1.78	0.4	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	643	329	2651	0.243	642	0.3	1.791	A
2	335	441	2765	0.121	334	0.1	1.480	A
3	535	16	2811	0.190	534	0.2	1.580	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	768	394	2611	0.294	767	0.4	1.952	A
2	400	527	2710	0.148	400	0.2	1.557	A
3	638	19	2809	0.227	638	0.3	1.657	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	940	482	2556	0.368	940	0.6	2.226	A
2	490	646	2633	0.186	490	0.2	1.678	A
3	782	23	2806	0.279	781	0.4	1.777	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	940	482	2556	0.368	940	0.6	2.227	A
2	490	646	2633	0.186	490	0.2	1.678	A
3	782	23	2806	0.279	782	0.4	1.777	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	768	394	2611	0.294	768	0.4	1.955	A
2	400	528	2709	0.148	400	0.2	1.558	A
3	638	19	2809	0.227	639	0.3	1.660	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	643	330	2651	0.243	643	0.3	1.795	A
2	335	442	2765	0.121	335	0.1	1.481	A
3	535	16	2811	0.190	535	0.2	1.581	A

Base 2033, 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	A627 (M) Junction 2	Standard Roundabout		1, 2, 3	1.73	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D2	Base 2033	PM	ONE HOUR	16:15	17:45	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		✓	331	100.000
2		✓	513	100.000
3		✓	786	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		1	2	3
From	1	2	2	327
	2	2	3	508
	3	329	457	0

Vehicle Mix

Heavy Vehicle Percentages

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

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
1	0.14	1.65	0.2	A
2	0.20	1.60	0.3	A
3	0.31	1.84	0.4	A

Main Results for each time segment

16:15 - 16:30

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	249	346	2641	0.094	249	0.1	1.504	A
2	386	247	2890	0.134	386	0.2	1.437	A
3	592	5	2817	0.210	591	0.3	1.616	A

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	298	413	2599	0.115	297	0.1	1.563	A
2	461	296	2859	0.161	461	0.2	1.500	A
3	707	6	2817	0.251	706	0.3	1.705	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	364	506	2541	0.143	364	0.2	1.653	A
2	565	362	2816	0.201	565	0.3	1.598	A
3	865	8	2816	0.307	865	0.4	1.844	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	364	506	2541	0.143	364	0.2	1.653	A
2	565	362	2816	0.201	565	0.3	1.598	A
3	865	8	2816	0.307	865	0.4	1.844	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	298	414	2598	0.115	298	0.1	1.566	A
2	461	296	2859	0.161	461	0.2	1.501	A
3	707	6	2817	0.251	707	0.3	1.708	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	249	346	2640	0.094	249	0.1	1.507	A
2	386	248	2890	0.134	386	0.2	1.437	A
3	592	5	2817	0.210	592	0.3	1.619	A

Assessment 2033 + dev, AM

Data Errors and Warnings

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

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	A627 (M) Junction 2	Standard Roundabout		1, 2, 3	2.04	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D3	Assessment 2033 + dev	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		✓	871	100.000
2		✓	473	100.000
3		✓	836	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		1	2	3
From	1	20	267	584
	2	0	1	472
	3	320	516	0

Vehicle Mix

Heavy Vehicle Percentages

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

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
1	0.38	2.33	0.6	A
2	0.20	1.71	0.2	A
3	0.33	1.91	0.5	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	656	389	2614	0.251	654	0.3	1.837	A
2	356	454	2757	0.129	356	0.1	1.498	A
3	629	16	2811	0.224	628	0.3	1.649	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	783	465	2567	0.305	783	0.4	2.017	A
2	425	543	2700	0.157	425	0.2	1.581	A
3	752	19	2809	0.268	751	0.4	1.748	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	959	569	2502	0.383	958	0.6	2.331	A
2	521	665	2621	0.199	521	0.2	1.712	A
3	920	23	2806	0.328	920	0.5	1.907	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	959	569	2502	0.383	959	0.6	2.333	A
2	521	665	2621	0.199	521	0.2	1.713	A
3	920	23	2806	0.328	920	0.5	1.907	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	783	465	2567	0.305	784	0.4	2.019	A
2	425	543	2699	0.158	425	0.2	1.582	A
3	752	19	2809	0.268	752	0.4	1.749	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	656	389	2614	0.251	656	0.3	1.838	A
2	356	455	2756	0.129	356	0.1	1.501	A
3	629	16	2811	0.224	630	0.3	1.652	A

Assessment 2033 + dev, 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	A627 (M) Junction 2	Standard Roundabout		1, 2, 3	1.79	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D4	Assessment 2033 + dev	PM	ONE HOUR	16:15	17:45	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		✓	374	100.000
2		✓	586	100.000
3		✓	840	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		1	2	3
From	1	2	2	370
	2	2	3	581
	3	349	491	0

Vehicle Mix

Heavy Vehicle Percentages

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

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
1	0.16	1.71	0.2	A
2	0.23	1.68	0.3	A
3	0.33	1.90	0.5	A

Main Results for each time segment

16:15 - 16:30

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	282	371	2625	0.107	281	0.1	1.535	A
2	441	280	2869	0.154	440	0.2	1.481	A
3	632	5	2817	0.224	631	0.3	1.646	A

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	336	444	2580	0.130	336	0.1	1.603	A
2	527	334	2834	0.186	527	0.2	1.559	A
3	755	6	2817	0.268	755	0.4	1.745	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	412	544	2518	0.164	412	0.2	1.708	A
2	645	409	2786	0.232	645	0.3	1.681	A
3	925	8	2816	0.328	924	0.5	1.902	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	412	544	2517	0.164	412	0.2	1.708	A
2	645	410	2786	0.232	645	0.3	1.681	A
3	925	8	2816	0.328	925	0.5	1.902	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	336	444	2579	0.130	336	0.2	1.604	A
2	527	335	2834	0.186	527	0.2	1.562	A
3	755	6	2817	0.268	756	0.4	1.749	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	282	372	2624	0.107	282	0.1	1.536	A
2	441	280	2869	0.154	441	0.2	1.482	A
3	632	5	2817	0.224	633	0.3	1.647	A

S|C|P

APPENDIX W

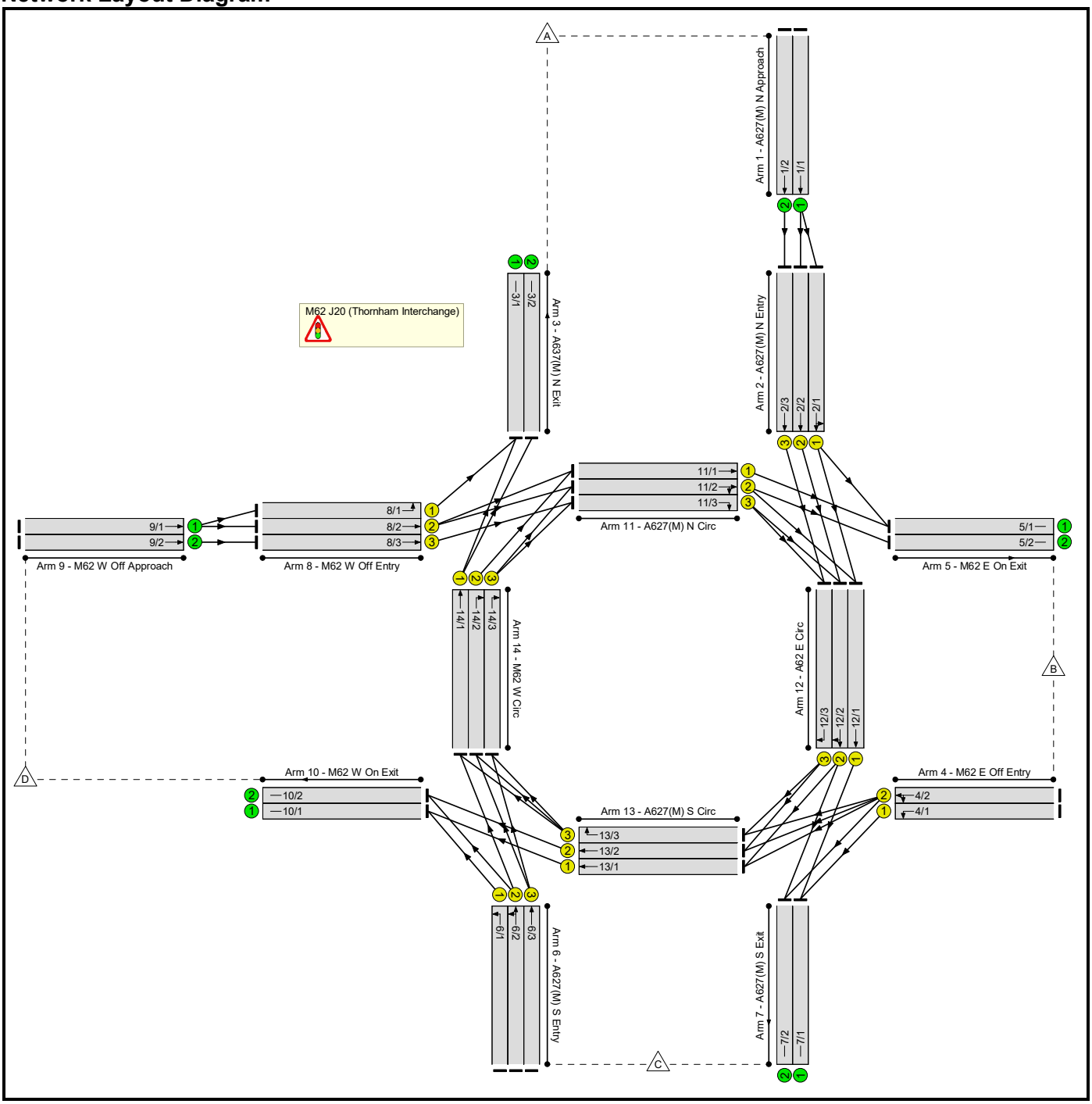
Full Input Data And Results

User and Project Details

Project:	**M62 J20 (Thornham Interchange)**
Title:	**Northern Gateway (Stakehill)**
Location:	Castleton
Client:	Oldham / Rochdale / TfGM
Site Ref(s):	Junction 2
Date Started:	06/11/2019
Additional detail:	
File name:	J2 M62 J20 Ref.lsg3x
Author:	UKDJS002
Company:	WSP
Address:	8 First Street

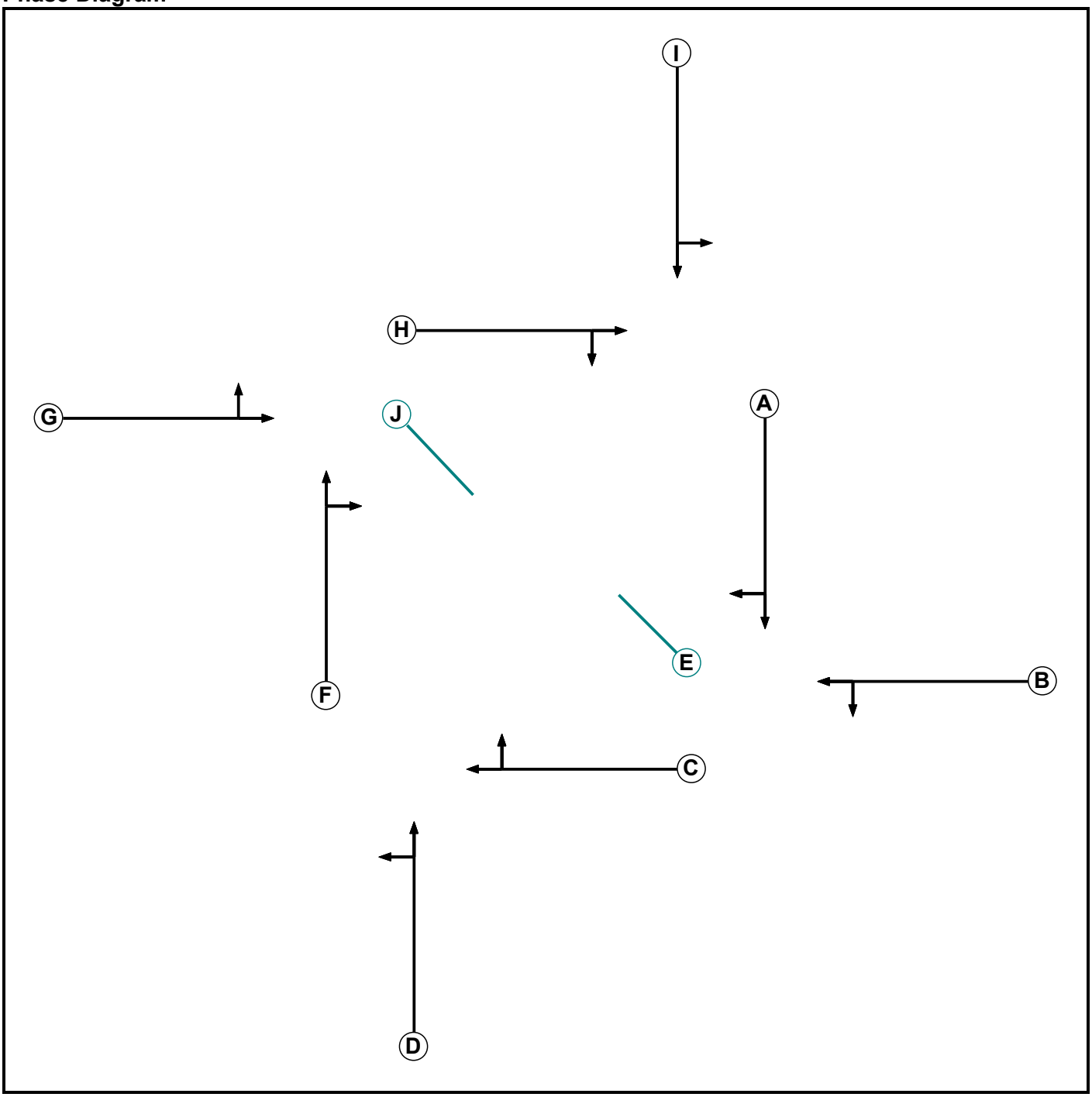
Full Input Data And Results

Network Layout Diagram



Full Input Data And Results

Phase Diagram



Full Input Data And Results

Phase Input Data

Phase Name	Phase Type	Stage Stream	Assoc. Phase	Street Min	Cont Min
A	Traffic	1		7	7
B	Traffic	1		7	7
C	Traffic	1		7	7
D	Traffic	1		7	7
E	Dummy	1		7	7
F	Traffic	2		7	7
G	Traffic	2		7	7
H	Traffic	2		7	7
I	Traffic	2		7	7
J	Dummy	2		7	7

Phase Intergreens Matrix

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

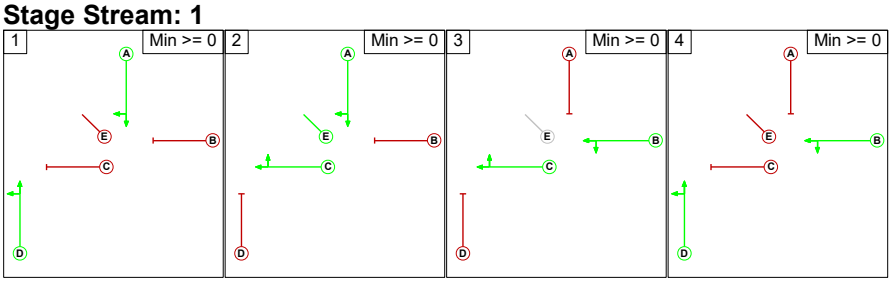
Phases in Stage

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

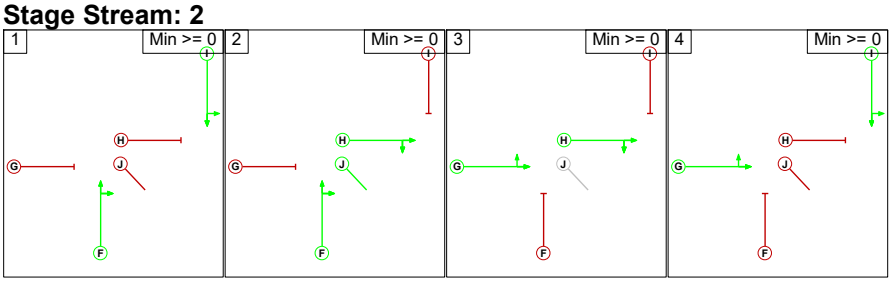
Full Input Data And Results

Stage Diagram

Stage Stream: 1



Stage Stream: 2



Phase Delays

Stage Stream: 1

Term. Stage	Start Stage	Phase	Type	Value	Cont value
3	1	C	Losing	10	10

Stage Stream: 2

Term. Stage	Start Stage	Phase	Type	Value	Cont value
3	1	H	Losing	10	10

Prohibited Stage Change

Stage Stream: 1

		To Stage			
		1	2	3	4
From Stage	1		7	7	5
	2	5		5	5
	3	15	7		5
	4	7	7	7	

Stage Stream: 2

		To Stage			
		1	2	3	4
From Stage	1		7	7	5
	2	5		5	5
	3	15	7		5
	4	7	7	7	

Full Input Data And Results

Give-Way Lane Input Data

Junction: M62 J20 (Thornham Interchange)
There are no Opposed Lanes in this Junction

Full Input Data And Results

Lane Input Data

Junction: M62 J20 (Thornham Interchange)												
Lane	**Lane Type**	**Phases**	**Start Disp.**	**End Disp.**	**Physical Length (PCU)**	**Sat Flow Type**	**Def User Saturation Flow (PCU/Hr)**	**Lane Width (m)**	**Gradient**	**Nearside Lane**	**Turns**	**Turning Radius (m)**
1/1 (A627(M) N Approach)	U		2	3	60.0	Inf	-	-	-	-	-	-
1/2 (A627(M) N Approach)	U		2	3	60.0	Inf	-	-	-	-	-	-
2/1 (A627(M) N Entry)	U	I	2	3	60.0	User	1900	-	-	-	-	-
2/2 (A627(M) N Entry)	U	I	2	3	60.0	User	1900	-	-	-	-	-
2/3 (A627(M) N Entry)	U	I	2	3	60.0	User	1900	-	-	-	-	-
3/1 (A637(M) N Exit)	U		2	3	60.0	Inf	-	-	-	-	-	-
3/2 (A637(M) N Exit)	U		2	3	60.0	Inf	-	-	-	-	-	-
4/1 (M62 E Off Entry)	U	B	2	3	60.0	User	1900	-	-	-	-	-
4/2 (M62 E Off Entry)	U	B	2	3	60.0	User	1900	-	-	-	-	-
5/1 (M62 E On Exit)	U		2	3	60.0	Inf	-	-	-	-	-	-
5/2 (M62 E On Exit)	U		2	3	60.0	Inf	-	-	-	-	-	-
6/1 (A627(M) S Entry)	U	D	2	3	60.0	User	1900	-	-	-	-	-
6/2 (A627(M) S Entry)	U	D	2	3	60.0	User	1900	-	-	-	-	-
6/3 (A627(M) S Entry)	U	D	2	3	60.0	User	1900	-	-	-	-	-
7/1 (A627(M) S Exit)	U		2	3	60.0	Inf	-	-	-	-	-	-
7/2 (A627(M) S Exit)	U		2	3	60.0	Inf	-	-	-	-	-	-
8/1 (M62 W Off Entry)	U	G	2	3	60.0	User	1900	-	-	-	-	-

8/2 (M62 W Off Entry)	U	G	2	3	60.0	User	1900	-	-	-	-	-
8/3 (M62 W Off Entry)	U	G	2	3	60.0	User	1900	-	-	-	-	-
9/1 (M62 W Off Approach)	U		2	3	60.0	User	1900	-	-	-	-	-
9/2 (M62 W Off Approach)	U		2	3	60.0	User	1900	-	-	-	-	-
10/1 (M62 W On Exit)	U		2	3	60.0	Inf	-	-	-	-	-	-
10/2 (M62 W On Exit)	U		2	3	60.0	Inf	-	-	-	-	-	-
11/1 (A627(M) N Circ)	U	H	2	3	60.0	User	1900	-	-	-	-	-
11/2 (A627(M) N Circ)	U	H	2	3	60.0	User	1900	-	-	-	-	-
11/3 (A627(M) N Circ)	U	H	2	3	60.0	User	1900	-	-	-	-	-
12/1 (A62 E Circ)	U	A	2	3	60.0	User	1900	-	-	-	-	-
12/2 (A62 E Circ)	U	A	2	3	60.0	User	1900	-	-	-	-	-
12/3 (A62 E Circ)	U	A	2	3	60.0	User	1900	-	-	-	-	-
13/1 (A627(M) S Circ)	U	C	2	3	60.0	User	1900	-	-	-	-	-
13/2 (A627(M) S Circ)	U	C	2	3	60.0	User	1900	-	-	-	-	-
13/3 (A627(M) S Circ)	U	C	2	3	60.0	User	1900	-	-	-	-	-
14/1 (M62 W Circ)	U	F	2	3	60.0	User	1900	-	-	-	-	-
14/2 (M62 W Circ)	U	F	2	3	60.0	User	1900	-	-	-	-	-
14/3 (M62 W Circ)	U	F	2	3	60.0	User	1900	-	-	-	-	-

Traffic Flow Groups

Flow Group	Start Time	End Time	Duration	Formula
1: '2033 WITHOUT DEV AM'	08:00	09:00	01:00	
2: '2033 WITHOUT DEV PM'	17:00	18:00	01:00	
3: '2033 WITH DEV AM'	08:00	09:00	01:00	
4: '2033 WITH DEV PM'	17:00	18:00	01:00	

Scenario 1: '2033 WITHOUT DEV AM' (FG1: '2033 WITHOUT DEV AM', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired

Desired Flow :

		Destination				
		A	B	C	D	Tot.
Origin	A	0	182	803	550	1535
	B	223	0	1146	1	1370
	C	841	586	0	579	2006
	D	1022	3	981	0	2006
	Tot.	2086	771	2930	1130	6917

Full Input Data And Results

Traffic Lane Flows

Lane	Scenario 1: 2033 WITHOUT DEV AM
Junction: M62 J20 (Thornham Interchange)	
1/1	1015
1/2	520
2/1	525
2/2	490
2/3	520
3/1	1554
3/2	532
4/1	685
4/2	685
5/1	593
5/2	178
6/1	579
6/2	841
6/3	586
7/1	1502
7/2	1428
8/1	1022
8/2	477
8/3	507
9/1	1499
9/2	507
10/1	609
10/2	521
11/1	411
11/2	652
11/3	507
12/1	817
12/2	997
12/3	520
13/1	30
13/2	521
13/3	223
14/1	1064
14/2	409
14/3	177

Full Input Data And Results

Lane Saturation Flows

Junction: M62 J20 (Thornham Interchange)								
Lane	**Lane Width (m)**	**Gradient**	**Nearside Lane**	**Allowed Turns**	**Turning Radius (m)**	**Turning Prop.**	**Sat Flow (PCU/Hr)**	**Flared Sat Flow (PCU/Hr)**
1/1 (A627(M) N Approach Lane 1)	Infinite Saturation Flow						Inf	Inf
1/2 (A627(M) N Approach Lane 2)	Infinite Saturation Flow						Inf	Inf
2/1 (A627(M) N Entry Lane 1)	This lane uses a directly entered Saturation Flow						1900	1900
2/2 (A627(M) N Entry Lane 2)	This lane uses a directly entered Saturation Flow						1900	1900
2/3 (A627(M) N Entry Lane 3)	This lane uses a directly entered Saturation Flow						1900	1900
3/1 (A637(M) N Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
3/2 (A637(M) N Exit Lane 2)	Infinite Saturation Flow						Inf	Inf
4/1 (M62 E Off Entry Lane 1)	This lane uses a directly entered Saturation Flow						1900	1900
4/2 (M62 E Off Entry Lane 2)	This lane uses a directly entered Saturation Flow						1900	1900
5/1 (M62 E On Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
5/2 (M62 E On Exit Lane 2)	Infinite Saturation Flow						Inf	Inf
6/1 (A627(M) S Entry Lane 1)	This lane uses a directly entered Saturation Flow						1900	1900
6/2 (A627(M) S Entry Lane 2)	This lane uses a directly entered Saturation Flow						1900	1900
6/3 (A627(M) S Entry Lane 3)	This lane uses a directly entered Saturation Flow						1900	1900
7/1 (A627(M) S Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
7/2 (A627(M) S Exit Lane 2)	Infinite Saturation Flow						Inf	Inf
8/1 (M62 W Off Entry Lane 1)	This lane uses a directly entered Saturation Flow						1900	1900
8/2 (M62 W Off Entry Lane 2)	This lane uses a directly entered Saturation Flow						1900	1900
8/3 (M62 W Off Entry Lane 3)	This lane uses a directly entered Saturation Flow						1900	1900
9/1 (M62 W Off Approach Lane 1)	This lane uses a directly entered Saturation Flow						1900	1900
9/2 (M62 W Off Approach Lane 2)	This lane uses a directly entered Saturation Flow						1900	1900
10/1 (M62 W On Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
10/2 (M62 W On Exit Lane 2)	Infinite Saturation Flow						Inf	Inf

11/1 (A627(M) N Circ Lane 1)	This lane uses a directly entered Saturation Flow	1900	1900
11/2 (A627(M) N Circ Lane 2)	This lane uses a directly entered Saturation Flow	1900	1900
11/3 (A627(M) N Circ Lane 3)	This lane uses a directly entered Saturation Flow	1900	1900
12/1 (A62 E Circ Lane 1)	This lane uses a directly entered Saturation Flow	1900	1900
12/2 (A62 E Circ Lane 2)	This lane uses a directly entered Saturation Flow	1900	1900
12/3 (A62 E Circ Lane 3)	This lane uses a directly entered Saturation Flow	1900	1900
13/1 (A627(M) S Circ Lane 1)	This lane uses a directly entered Saturation Flow	1900	1900
13/2 (A627(M) S Circ Lane 2)	This lane uses a directly entered Saturation Flow	1900	1900
13/3 (A627(M) S Circ Lane 3)	This lane uses a directly entered Saturation Flow	1900	1900
14/1 (M62 W Circ Lane 1)	This lane uses a directly entered Saturation Flow	1900	1900
14/2 (M62 W Circ Lane 2)	This lane uses a directly entered Saturation Flow	1900	1900
14/3 (M62 W Circ Lane 3)	This lane uses a directly entered Saturation Flow	1900	1900

Scenario 2: '2033 WITHOUT DEV PM' (FG2: '2033 WITHOUT DEV PM', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired

Desired Flow :

		Destination				
		A	B	C	D	Tot.
Origin	A	0	255	830	741	1826
	B	172	0	818	0	990
	C	837	1026	0	952	2815
	D	737	3	851	0	1591
	Tot.	1746	1284	2499	1693	7222

Full Input Data And Results

Traffic Lane Flows

Lane	Scenario 2: 2033 WITHOUT DEV PM
Junction: M62 J20 (Thornham Interchange)	
1/1	1399
1/2	427
2/1	744
2/2	655
2/3	427
3/1	1241
3/2	505
4/1	495
4/2	495
5/1	1090
5/2	194
6/1	894
6/2	895
6/3	1026
7/1	1401
7/2	1098
8/1	737
8/2	420
8/3	434
9/1	1157
9/2	434
10/1	1208
10/2	485
11/1	835
11/2	611
11/3	434
12/1	906
12/2	1089
12/3	427
13/1	314
13/2	427
13/3	172
14/1	1009
14/2	832
14/3	194

Full Input Data And Results

Lane Saturation Flows

Junction: M62 J20 (Thornham Interchange)								
Lane	**Lane Width (m)**	**Gradient**	**Nearside Lane**	**Allowed Turns**	**Turning Radius (m)**	**Turning Prop.**	**Sat Flow (PCU/Hr)**	**Flared Sat Flow (PCU/Hr)**
1/1 (A627(M) N Approach Lane 1)	Infinite Saturation Flow						Inf	Inf
1/2 (A627(M) N Approach Lane 2)	Infinite Saturation Flow						Inf	Inf
2/1 (A627(M) N Entry Lane 1)	This lane uses a directly entered Saturation Flow						1900	1900
2/2 (A627(M) N Entry Lane 2)	This lane uses a directly entered Saturation Flow						1900	1900
2/3 (A627(M) N Entry Lane 3)	This lane uses a directly entered Saturation Flow						1900	1900
3/1 (A637(M) N Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
3/2 (A637(M) N Exit Lane 2)	Infinite Saturation Flow						Inf	Inf
4/1 (M62 E Off Entry Lane 1)	This lane uses a directly entered Saturation Flow						1900	1900
4/2 (M62 E Off Entry Lane 2)	This lane uses a directly entered Saturation Flow						1900	1900
5/1 (M62 E On Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
5/2 (M62 E On Exit Lane 2)	Infinite Saturation Flow						Inf	Inf
6/1 (A627(M) S Entry Lane 1)	This lane uses a directly entered Saturation Flow						1900	1900
6/2 (A627(M) S Entry Lane 2)	This lane uses a directly entered Saturation Flow						1900	1900
6/3 (A627(M) S Entry Lane 3)	This lane uses a directly entered Saturation Flow						1900	1900
7/1 (A627(M) S Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
7/2 (A627(M) S Exit Lane 2)	Infinite Saturation Flow						Inf	Inf
8/1 (M62 W Off Entry Lane 1)	This lane uses a directly entered Saturation Flow						1900	1900
8/2 (M62 W Off Entry Lane 2)	This lane uses a directly entered Saturation Flow						1900	1900
8/3 (M62 W Off Entry Lane 3)	This lane uses a directly entered Saturation Flow						1900	1900
9/1 (M62 W Off Approach Lane 1)	This lane uses a directly entered Saturation Flow						1900	1900
9/2 (M62 W Off Approach Lane 2)	This lane uses a directly entered Saturation Flow						1900	1900
10/1 (M62 W On Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
10/2 (M62 W On Exit Lane 2)	Infinite Saturation Flow						Inf	Inf

11/1 (A627(M) N Circ Lane 1)	This lane uses a directly entered Saturation Flow	1900	1900
11/2 (A627(M) N Circ Lane 2)	This lane uses a directly entered Saturation Flow	1900	1900
11/3 (A627(M) N Circ Lane 3)	This lane uses a directly entered Saturation Flow	1900	1900
12/1 (A62 E Circ Lane 1)	This lane uses a directly entered Saturation Flow	1900	1900
12/2 (A62 E Circ Lane 2)	This lane uses a directly entered Saturation Flow	1900	1900
12/3 (A62 E Circ Lane 3)	This lane uses a directly entered Saturation Flow	1900	1900
13/1 (A627(M) S Circ Lane 1)	This lane uses a directly entered Saturation Flow	1900	1900
13/2 (A627(M) S Circ Lane 2)	This lane uses a directly entered Saturation Flow	1900	1900
13/3 (A627(M) S Circ Lane 3)	This lane uses a directly entered Saturation Flow	1900	1900
14/1 (M62 W Circ Lane 1)	This lane uses a directly entered Saturation Flow	1900	1900
14/2 (M62 W Circ Lane 2)	This lane uses a directly entered Saturation Flow	1900	1900
14/3 (M62 W Circ Lane 3)	This lane uses a directly entered Saturation Flow	1900	1900

Scenario 3: '2033 WITH DEV AM' (FG3: '2033 WITH DEV AM', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired

Desired Flow :

		Destination				
		A	B	C	D	Tot.
Origin	A	0	182	803	550	1535
	B	223	0	1153	1	1377
	C	841	604	0	607	2052
	D	1022	3	992	0	2017
	Tot.	2086	789	2948	1158	6981

Full Input Data And Results

Traffic Lane Flows

Lane	Scenario 3: 2033 WITH DEV AM
Junction: M62 J20 (Thornham Interchange)	
1/1	985
1/2	550
2/1	559
2/2	426
2/3	550
3/1	1554
3/2	532
4/1	688
4/2	689
5/1	626
5/2	163
6/1	607
6/2	841
6/3	604
7/1	1536
7/2	1412
8/1	1022
8/2	474
8/3	521
9/1	1496
9/2	521
10/1	607
10/2	551
11/1	444
11/2	634
11/3	521
12/1	848
12/2	947
12/3	550
13/1	0
13/2	551
13/3	223
14/1	1064
14/2	441
14/3	163

Full Input Data And Results

Lane Saturation Flows

Junction: M62 J20 (Thornham Interchange)								
Lane	**Lane Width (m)**	**Gradient**	**Nearside Lane**	**Allowed Turns**	**Turning Radius (m)**	**Turning Prop.**	**Sat Flow (PCU/Hr)**	**Flared Sat Flow (PCU/Hr)**
1/1 (A627(M) N Approach Lane 1)	Infinite Saturation Flow						Inf	Inf
1/2 (A627(M) N Approach Lane 2)	Infinite Saturation Flow						Inf	Inf
2/1 (A627(M) N Entry Lane 1)	This lane uses a directly entered Saturation Flow						1900	1900
2/2 (A627(M) N Entry Lane 2)	This lane uses a directly entered Saturation Flow						1900	1900
2/3 (A627(M) N Entry Lane 3)	This lane uses a directly entered Saturation Flow						1900	1900
3/1 (A637(M) N Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
3/2 (A637(M) N Exit Lane 2)	Infinite Saturation Flow						Inf	Inf
4/1 (M62 E Off Entry Lane 1)	This lane uses a directly entered Saturation Flow						1900	1900
4/2 (M62 E Off Entry Lane 2)	This lane uses a directly entered Saturation Flow						1900	1900
5/1 (M62 E On Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
5/2 (M62 E On Exit Lane 2)	Infinite Saturation Flow						Inf	Inf
6/1 (A627(M) S Entry Lane 1)	This lane uses a directly entered Saturation Flow						1900	1900
6/2 (A627(M) S Entry Lane 2)	This lane uses a directly entered Saturation Flow						1900	1900
6/3 (A627(M) S Entry Lane 3)	This lane uses a directly entered Saturation Flow						1900	1900
7/1 (A627(M) S Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
7/2 (A627(M) S Exit Lane 2)	Infinite Saturation Flow						Inf	Inf
8/1 (M62 W Off Entry Lane 1)	This lane uses a directly entered Saturation Flow						1900	1900
8/2 (M62 W Off Entry Lane 2)	This lane uses a directly entered Saturation Flow						1900	1900
8/3 (M62 W Off Entry Lane 3)	This lane uses a directly entered Saturation Flow						1900	1900
9/1 (M62 W Off Approach Lane 1)	This lane uses a directly entered Saturation Flow						1900	1900
9/2 (M62 W Off Approach Lane 2)	This lane uses a directly entered Saturation Flow						1900	1900
10/1 (M62 W On Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
10/2 (M62 W On Exit Lane 2)	Infinite Saturation Flow						Inf	Inf

11/1 (A627(M) N Circ Lane 1)	This lane uses a directly entered Saturation Flow	1900	1900
11/2 (A627(M) N Circ Lane 2)	This lane uses a directly entered Saturation Flow	1900	1900
11/3 (A627(M) N Circ Lane 3)	This lane uses a directly entered Saturation Flow	1900	1900
12/1 (A62 E Circ Lane 1)	This lane uses a directly entered Saturation Flow	1900	1900
12/2 (A62 E Circ Lane 2)	This lane uses a directly entered Saturation Flow	1900	1900
12/3 (A62 E Circ Lane 3)	This lane uses a directly entered Saturation Flow	1900	1900
13/1 (A627(M) S Circ Lane 1)	This lane uses a directly entered Saturation Flow	1900	1900
13/2 (A627(M) S Circ Lane 2)	This lane uses a directly entered Saturation Flow	1900	1900
13/3 (A627(M) S Circ Lane 3)	This lane uses a directly entered Saturation Flow	1900	1900
14/1 (M62 W Circ Lane 1)	This lane uses a directly entered Saturation Flow	1900	1900
14/2 (M62 W Circ Lane 2)	This lane uses a directly entered Saturation Flow	1900	1900
14/3 (M62 W Circ Lane 3)	This lane uses a directly entered Saturation Flow	1900	1900

Scenario 4: '2033 WITH DEV PM' (FG4: '2033 WITH DEV PM', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired

Desired Flow :

		Destination				
		A	B	C	D	Tot.
Origin	A	0	255	830	741	1826
	B	172	0	835	0	1007
	C	837	1034	0	965	2836
	D	737	3	878	0	1618
	Tot.	1746	1292	2543	1706	7287

Full Input Data And Results

Traffic Lane Flows

Lane	Scenario 4: 2033 WITH DEV PM
Junction: M62 J20 (Thornham Interchange)	
1/1	1393
1/2	433
2/1	738
2/2	655
2/3	433
3/1	1241
3/2	505
4/1	504
4/2	503
5/1	898
5/2	394
6/1	901
6/2	901
6/3	1034
7/1	1415
7/2	1128
8/1	737
8/2	431
8/3	450
9/1	1168
9/2	450
10/1	1209
10/2	497
11/1	643
11/2	822
11/3	450
12/1	911
12/2	1105
12/3	433
13/1	308
13/2	433
13/3	172
14/1	1009
14/2	641
14/3	393

Full Input Data And Results

Lane Saturation Flows

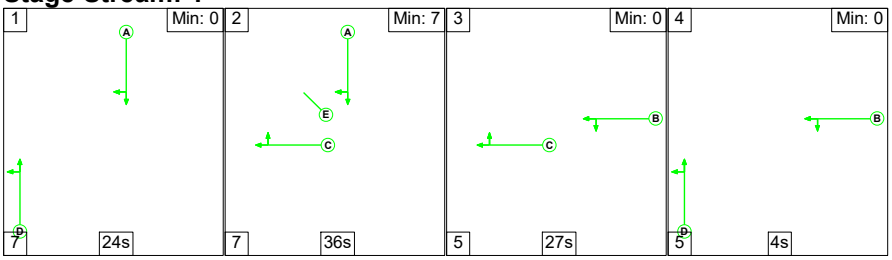
Junction: M62 J20 (Thornham Interchange)								
Lane	**Lane Width (m)**	**Gradient**	**Nearside Lane**	**Allowed Turns**	**Turning Radius (m)**	**Turning Prop.**	**Sat Flow (PCU/Hr)**	**Flared Sat Flow (PCU/Hr)**
1/1 (A627(M) N Approach Lane 1)	Infinite Saturation Flow						Inf	Inf
1/2 (A627(M) N Approach Lane 2)	Infinite Saturation Flow						Inf	Inf
2/1 (A627(M) N Entry Lane 1)	This lane uses a directly entered Saturation Flow						1900	1900
2/2 (A627(M) N Entry Lane 2)	This lane uses a directly entered Saturation Flow						1900	1900
2/3 (A627(M) N Entry Lane 3)	This lane uses a directly entered Saturation Flow						1900	1900
3/1 (A637(M) N Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
3/2 (A637(M) N Exit Lane 2)	Infinite Saturation Flow						Inf	Inf
4/1 (M62 E Off Entry Lane 1)	This lane uses a directly entered Saturation Flow						1900	1900
4/2 (M62 E Off Entry Lane 2)	This lane uses a directly entered Saturation Flow						1900	1900
5/1 (M62 E On Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
5/2 (M62 E On Exit Lane 2)	Infinite Saturation Flow						Inf	Inf
6/1 (A627(M) S Entry Lane 1)	This lane uses a directly entered Saturation Flow						1900	1900
6/2 (A627(M) S Entry Lane 2)	This lane uses a directly entered Saturation Flow						1900	1900
6/3 (A627(M) S Entry Lane 3)	This lane uses a directly entered Saturation Flow						1900	1900
7/1 (A627(M) S Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
7/2 (A627(M) S Exit Lane 2)	Infinite Saturation Flow						Inf	Inf
8/1 (M62 W Off Entry Lane 1)	This lane uses a directly entered Saturation Flow						1900	1900
8/2 (M62 W Off Entry Lane 2)	This lane uses a directly entered Saturation Flow						1900	1900
8/3 (M62 W Off Entry Lane 3)	This lane uses a directly entered Saturation Flow						1900	1900
9/1 (M62 W Off Approach Lane 1)	This lane uses a directly entered Saturation Flow						1900	1900
9/2 (M62 W Off Approach Lane 2)	This lane uses a directly entered Saturation Flow						1900	1900
10/1 (M62 W On Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
10/2 (M62 W On Exit Lane 2)	Infinite Saturation Flow						Inf	Inf

11/1 (A627(M) N Circ Lane 1)	This lane uses a directly entered Saturation Flow	1900	1900
11/2 (A627(M) N Circ Lane 2)	This lane uses a directly entered Saturation Flow	1900	1900
11/3 (A627(M) N Circ Lane 3)	This lane uses a directly entered Saturation Flow	1900	1900
12/1 (A62 E Circ Lane 1)	This lane uses a directly entered Saturation Flow	1900	1900
12/2 (A62 E Circ Lane 2)	This lane uses a directly entered Saturation Flow	1900	1900
12/3 (A62 E Circ Lane 3)	This lane uses a directly entered Saturation Flow	1900	1900
13/1 (A627(M) S Circ Lane 1)	This lane uses a directly entered Saturation Flow	1900	1900
13/2 (A627(M) S Circ Lane 2)	This lane uses a directly entered Saturation Flow	1900	1900
13/3 (A627(M) S Circ Lane 3)	This lane uses a directly entered Saturation Flow	1900	1900
14/1 (M62 W Circ Lane 1)	This lane uses a directly entered Saturation Flow	1900	1900
14/2 (M62 W Circ Lane 2)	This lane uses a directly entered Saturation Flow	1900	1900
14/3 (M62 W Circ Lane 3)	This lane uses a directly entered Saturation Flow	1900	1900

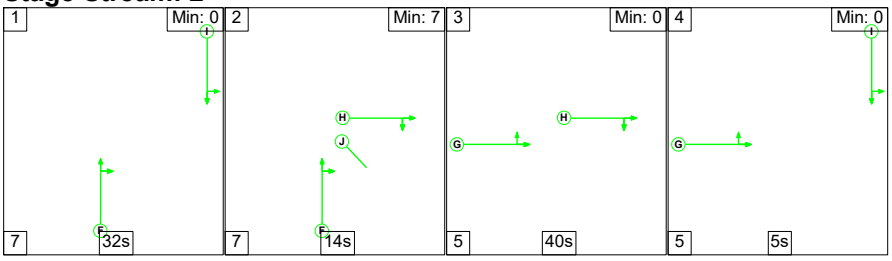
Scenario 1: '2033 WITHOUT DEV AM' (FG1: '2033 WITHOUT DEV AM', Plan 1: 'Network Control Plan 1')

Stage Sequence Diagram

Stage Stream: 1



Stage Stream: 2



Stage Timings

Stage Stream: 1

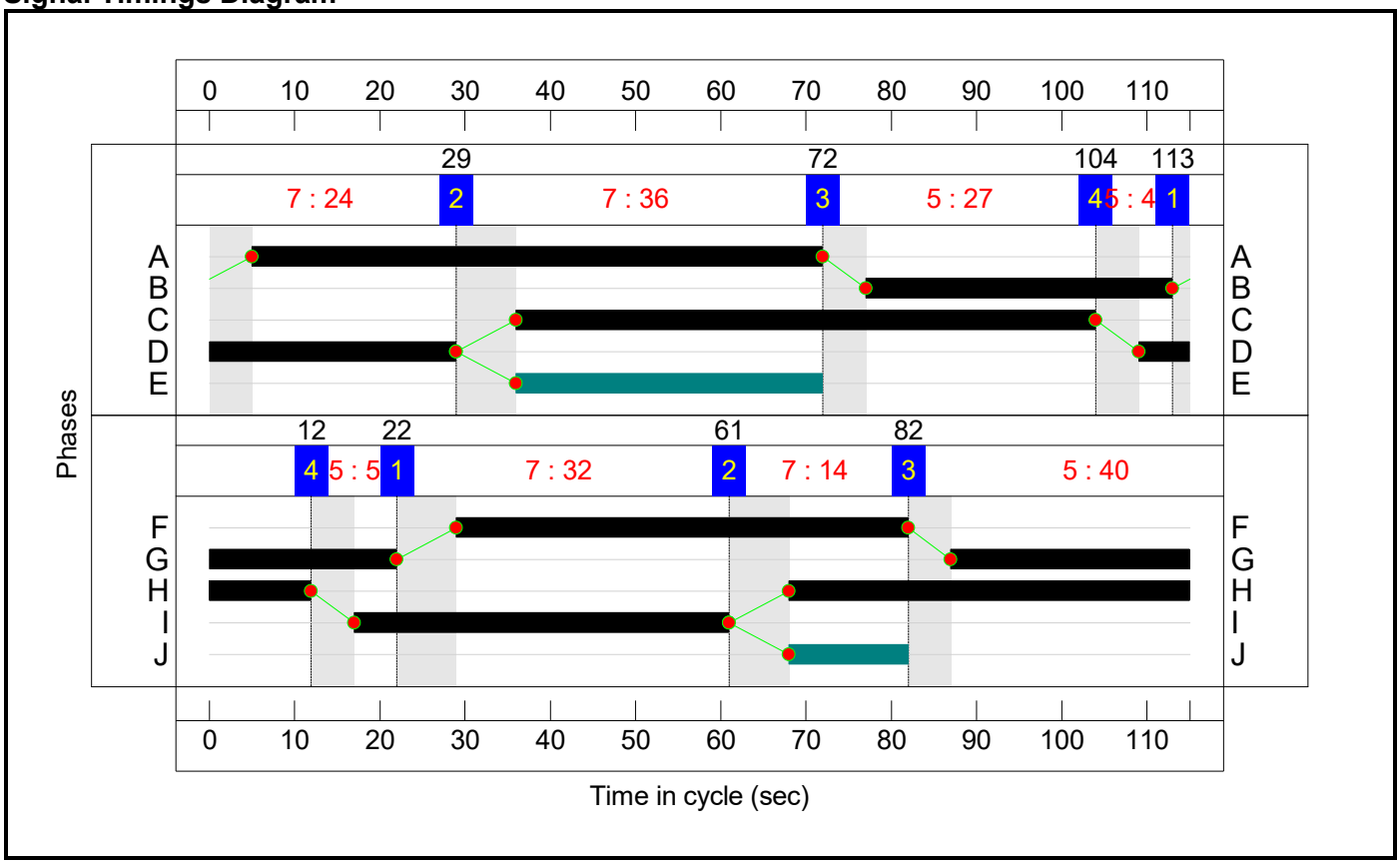
Stage	1	2	3	4
Duration	24	36	27	4
Change Point	113	29	72	104

Full Input Data And Results

Stage Stream: 2

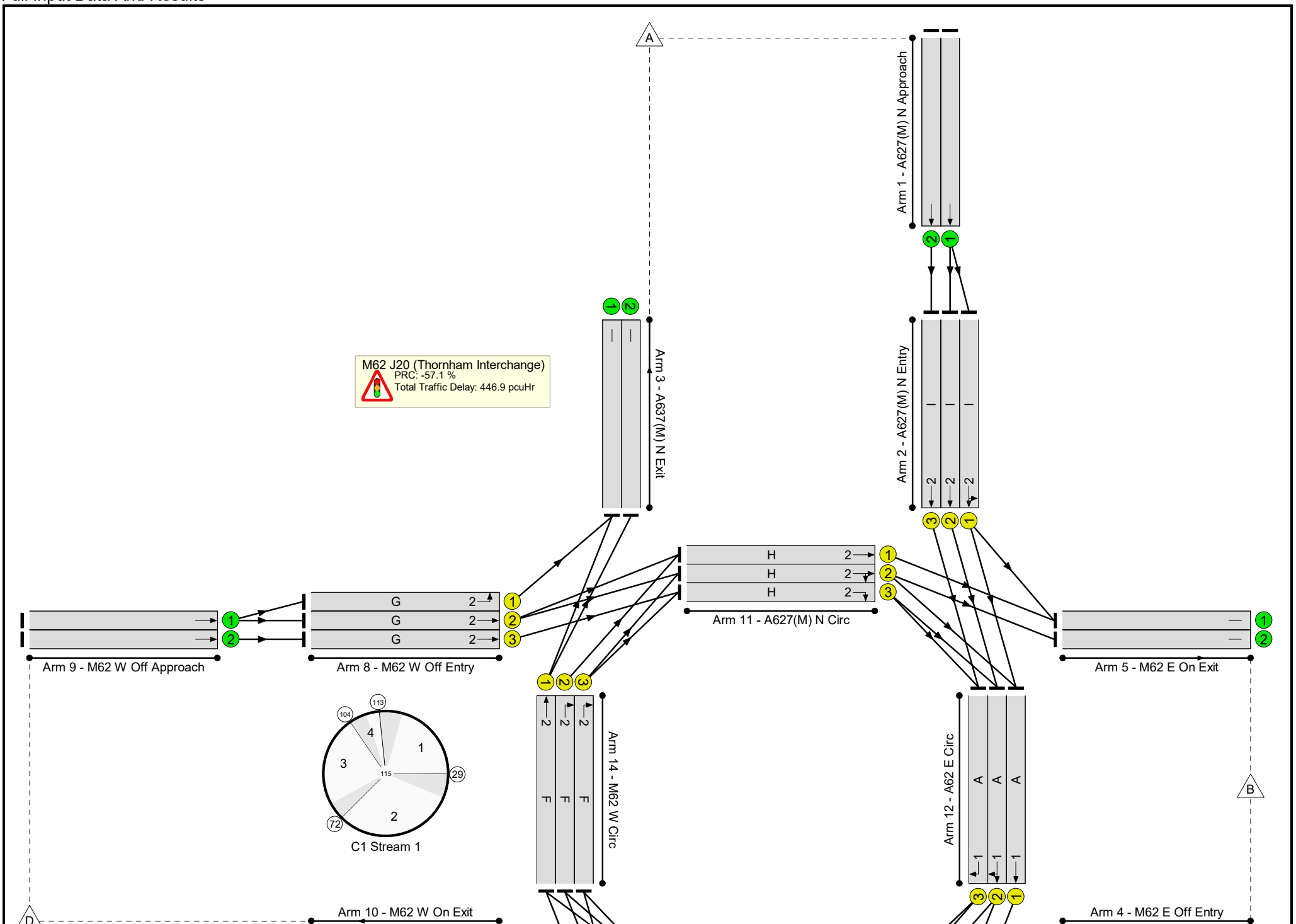
Stage	1	2	3	4
Duration	32	14	40	5
Change Point	22	61	82	12

Signal Timings Diagram



Network Layout Diagram

Full Input Data And Results



Full Input Data And Results

Full Input Data And Results

Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network: Northern Gateway (Stakehill)	-	-	**N/A**	-	-		-	-	-	-	-	-	**141.4%**
M62 J20 (Thornham Interchange)	-	-	**N/A**	-	-		-	-	-	-	-	-	**141.4%**
1/1	A627(M) N Approach Ahead	U	N/A	N/A	-		-	-	-	1015	Inf	Inf	0.0%
1/2	A627(M) N Approach Ahead	U	N/A	N/A	-		-	-	-	520	Inf	Inf	0.0%
2/1	A627(M) N Entry Left Ahead	U	2	N/A	I		1	44	-	525	1900	743	70.6%
2/2	A627(M) N Entry Ahead	U	2	N/A	I		1	44	-	490	1900	743	65.9%
2/3	A627(M) N Entry Ahead	U	2	N/A	I		1	44	-	520	1900	743	69.9%
3/1	A637(M) N Exit	U	N/A	N/A	-		-	-	-	1554	Inf	Inf	0.0%
3/2	A637(M) N Exit	U	N/A	N/A	-		-	-	-	532	Inf	Inf	0.0%
4/1	M62 E Off Entry Left	U	1	N/A	B		1	36	-	685	1900	611	112.1%
4/2	M62 E Off Entry Left Ahead	U	1	N/A	B		1	36	-	685	1900	611	112.1%
5/1	M62 E On Exit	U	N/A	N/A	-		-	-	-	593	Inf	Inf	0.0%
5/2	M62 E On Exit	U	N/A	N/A	-		-	-	-	178	Inf	Inf	0.0%
6/1	A627(M) S Entry Left	U	1	N/A	D		1	35	-	579	1900	595	97.3%
6/2	A627(M) S Entry Left Ahead	U	1	N/A	D		1	35	-	841	1900	595	141.4%
6/3	A627(M) S Entry Ahead	U	1	N/A	D		1	35	-	586	1900	595	98.5%

Full Input Data And Results

7/1	A627(M) S Exit	U	N/A	N/A	-		-	-	-	1502	Inf	Inf	0.0%
7/2	A627(M) S Exit	U	N/A	N/A	-		-	-	-	1428	Inf	Inf	0.0%
8/1	M62 W Off Entry Left	U	2	N/A	G		1	50	-	1022	1900	843	121.3%
8/2	M62 W Off Entry Ahead	U	2	N/A	G		1	50	-	477	1900	843	56.6%
8/3	M62 W Off Entry Ahead	U	2	N/A	G		1	50	-	507	1900	843	60.2%
9/1	M62 W Off Approach Ahead	U	N/A	N/A	-		-	-	-	1499	1900	1900	78.9%
9/2	M62 W Off Approach Ahead	U	N/A	N/A	-		-	-	-	507	1900	1900	26.7%
10/1	M62 W On Exit	U	N/A	N/A	-		-	-	-	609	Inf	Inf	0.0%
10/2	M62 W On Exit	U	N/A	N/A	-		-	-	-	521	Inf	Inf	0.0%
11/1	A627(M) N Circ Ahead	U	2	N/A	H		1	59	-	411	1900	991	41.5%
11/2	A627(M) N Circ Ahead Right	U	2	N/A	H		1	59	-	652	1900	991	65.8%
11/3	A627(M) N Circ Right	U	2	N/A	H		1	59	-	507	1900	991	51.1%
12/1	A62 E Circ Ahead	U	1	N/A	A		1	67	-	817	1900	1123	72.7%
12/2	A62 E Circ Ahead Right	U	1	N/A	A		1	67	-	997	1900	1123	88.7%
12/3	A62 E Circ Right	U	1	N/A	A		1	67	-	520	1900	1123	46.3%
13/1	A627(M) S Circ Ahead	U	1	N/A	C		1	68	-	30	1900	1140	2.6%
13/2	A627(M) S Circ Ahead	U	1	N/A	C		1	68	-	521	1900	1140	45.7%
13/3	A627(M) S Circ Right	U	1	N/A	C		1	68	-	223	1900	1140	17.5%
14/1	M62 W Circ Ahead	U	2	N/A	F		1	53	-	1064	1900	892	89.0%

Full Input Data And Results

14/2	M62 W Circ Right	U	2	N/A	F		1	53	-	409	1900	892	45.8%
14/3	M62 W Circ Right	U	2	N/A	F		1	53	-	177	1900	892	19.8%

Full Input Data And Results

Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network: Northern Gateway (Stakehill)	**-**	**-**	**0**	**0**	**0**	**122.0**	**324.9**	**0.0**	**446.9**	**-**	**-**	**-**	**-**
M62 J20 (Thornham Interchange)	**-**	**-**	**0**	**0**	**0**	**122.0**	**324.9**	**0.0**	**446.9**	**-**	**-**	**-**	**-**
1/1	1015	1015	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
1/2	520	520	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
2/1	525	525	-	-	-	4.3	1.2	-	5.5	37.6	14.0	1.2	15.2
2/2	490	490	-	-	-	3.9	1.0	-	4.9	35.8	12.8	1.0	13.8
2/3	520	520	-	-	-	4.2	1.2	-	5.4	37.3	13.9	1.2	15.0
3/1	1240	1240	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
3/2	397	397	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
4/1	685	611	-	-	-	12.5	41.0	-	53.5	281.3	26.4	41.0	67.4
4/2	685	611	-	-	-	12.5	41.0	-	53.5	281.3	26.4	41.0	67.4
5/1	593	593	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/2	178	178	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/1	579	579	-	-	-	6.3	8.7	-	15.0	93.2	18.2	8.7	26.9
6/2	841	595	-	-	-	24.0	124.8	-	148.8	637.1	35.1	124.8	159.9
6/3	586	586	-	-	-	6.4	10.1	-	16.5	101.3	18.6	10.1	28.7
7/1	1428	1428	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
7/2	1378	1378	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
8/1	1022	843	-	-	-	20.6	92.5	-	113.1	398.2	38.4	92.5	130.8
8/2	477	477	-	-	-	3.2	0.7	-	3.8	28.7	11.3	0.7	11.9
8/3	507	507	-	-	-	3.4	0.8	-	4.2	29.6	12.3	0.8	13.0
9/1	1499	1499	-	-	-	0.0	1.9	-	1.9	4.4	0.0	1.9	1.9
9/2	507	507	-	-	-	0.0	0.2	-	0.2	1.3	0.0	0.2	0.2
10/1	609	609	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0

Full Input Data And Results

10/2	521	521	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
11/1	411	411	-	-	-	2.4	0.0	-	2.4	21.4	13.1	0.0	13.1
11/2	652	652	-	-	-	3.0	0.0	-	3.0	16.6	9.8	0.0	9.8
11/3	507	507	-	-	-	1.8	0.0	-	1.8	13.1	4.6	0.0	4.6
12/1	817	817	-	-	-	2.2	0.0	-	2.2	9.9	16.6	0.0	16.6
12/2	997	997	-	-	-	3.0	0.0	-	3.0	11.0	29.8	0.0	29.8
12/3	520	520	-	-	-	0.4	0.0	-	0.4	2.6	1.0	0.0	1.0
13/1	30	30	-	-	-	0.0	0.0	-	0.0	0.8	0.1	0.0	0.1
13/2	521	521	-	-	-	0.1	0.0	-	0.1	0.9	1.0	0.0	1.0
13/3	199	199	-	-	-	1.4	0.0	-	1.4	25.9	4.5	0.0	4.5
14/1	794	794	-	-	-	4.5	0.0	-	4.5	20.4	23.9	0.0	23.9
14/2	409	409	-	-	-	1.4	0.0	-	1.4	12.2	12.9	0.0	12.9
14/3	177	177	-	-	-	0.3	0.0	-	0.3	6.5	3.9	0.0	3.9

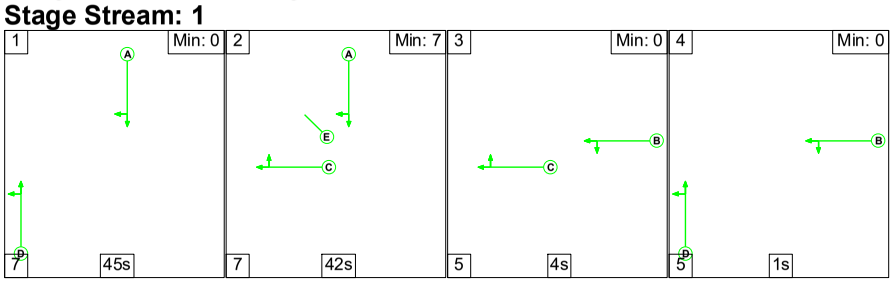
C1 Stream: 1 PRC for Signalled Lanes (%):	-57.1	Total Delay for Signalled Lanes (pcuHr):	294.59	Cycle Time (s):	115
C1 Stream: 2 PRC for Signalled Lanes (%):	-34.8	Total Delay for Signalled Lanes (pcuHr):	150.25	Cycle Time (s):	115
PRC Over All Lanes (%):	-57.1	Total Delay Over All Lanes(pcuHr):	446.87		

Full Input Data And Results

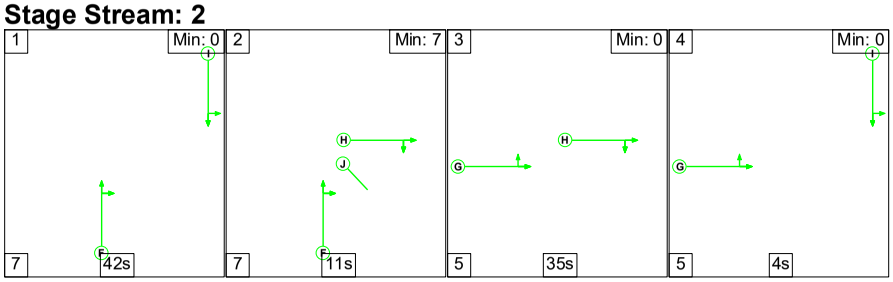
Scenario 2: '2033 WITHOUT DEV PM' (FG2: '2033 WITHOUT DEV PM', Plan 1: 'Network Control Plan 1')

Stage Sequence Diagram

Stage Stream: 1



Stage Stream: 2



Stage Timings

Stage Stream: 1

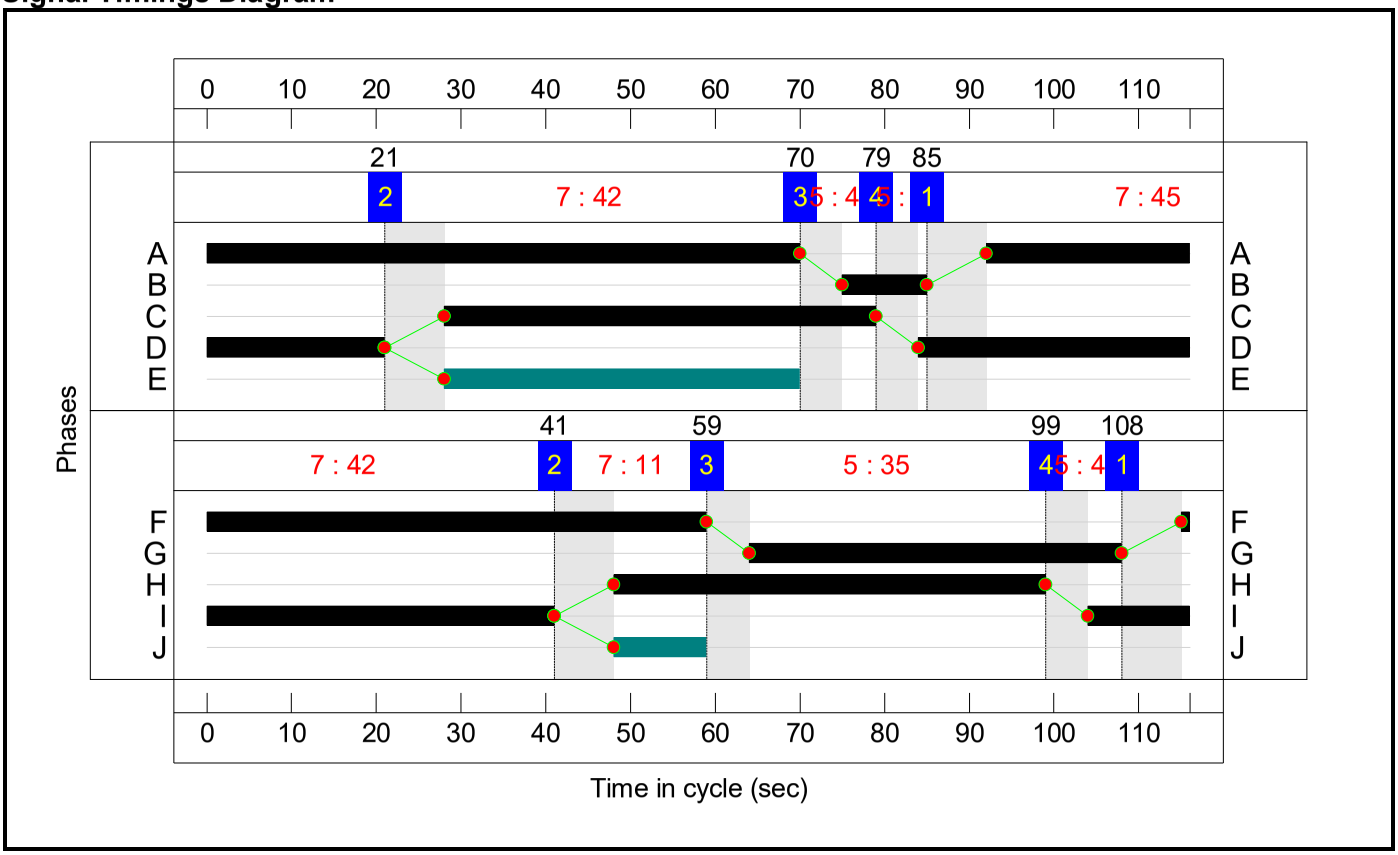
Stage	1	2	3	4
Duration	45	42	4	1
Change Point	85	21	70	79

Stage Stream: 2

Stage	1	2	3	4
Duration	42	11	35	4
Change Point	108	41	59	99

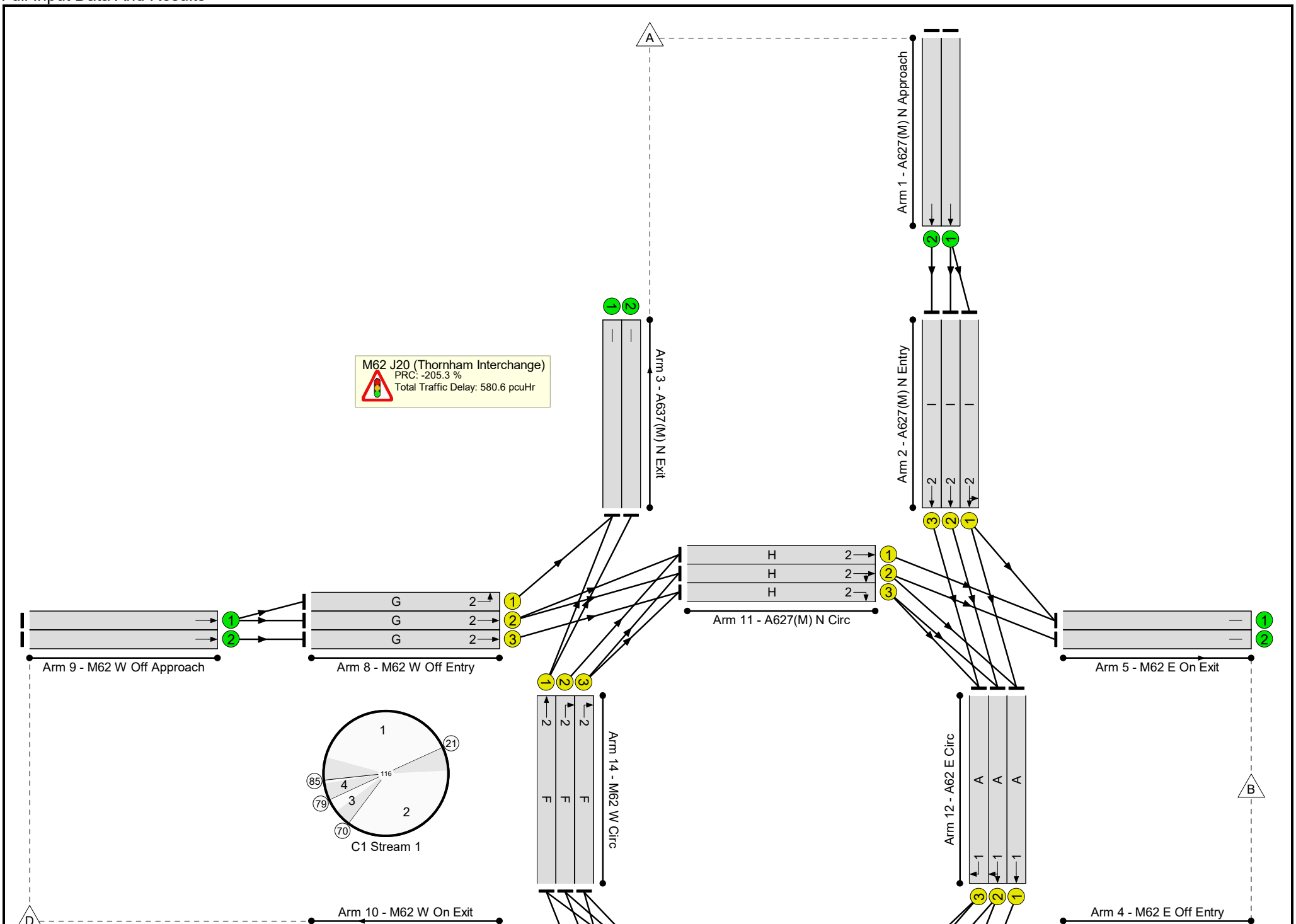
Full Input Data And Results

Signal Timings Diagram



Network Layout Diagram

Full Input Data And Results



Full Input Data And Results

Full Input Data And Results

Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network: Northern Gateway (Stakehill)	-	-	**N/A**	-	-		-	-	-	-	-	-	**274.7%**
M62 J20 (Thornham Interchange)	-	-	**N/A**	-	-		-	-	-	-	-	-	**274.7%**
1/1	A627(M) N Approach Ahead	U	N/A	N/A	-		-	-	-	1399	Inf	Inf	0.0%
1/2	A627(M) N Approach Ahead	U	N/A	N/A	-		-	-	-	427	Inf	Inf	0.0%
2/1	A627(M) N Entry Left Ahead	U	2	N/A	I		1	53	-	744	1900	884	84.1%
2/2	A627(M) N Entry Ahead	U	2	N/A	I		1	53	-	655	1900	884	74.1%
2/3	A627(M) N Entry Ahead	U	2	N/A	I		1	53	-	427	1900	884	48.3%
3/1	A637(M) N Exit	U	N/A	N/A	-		-	-	-	1241	Inf	Inf	0.0%
3/2	A637(M) N Exit	U	N/A	N/A	-		-	-	-	505	Inf	Inf	0.0%
4/1	M62 E Off Entry Left	U	1	N/A	B		1	10	-	495	1900	180	274.7%
4/2	M62 E Off Entry Left Ahead	U	1	N/A	B		1	10	-	495	1900	180	274.7%
5/1	M62 E On Exit	U	N/A	N/A	-		-	-	-	1090	Inf	Inf	0.0%
5/2	M62 E On Exit	U	N/A	N/A	-		-	-	-	194	Inf	Inf	0.0%
6/1	A627(M) S Entry Left	U	1	N/A	D		1	53	-	894	1900	884	101.1%
6/2	A627(M) S Entry Left Ahead	U	1	N/A	D		1	53	-	895	1900	884	101.2%
6/3	A627(M) S Entry Ahead	U	1	N/A	D		1	53	-	1026	1900	884	116.0%

Full Input Data And Results

7/1	A627(M) S Exit	U	N/A	N/A	-		-	-	-	1401	Inf	Inf	0.0%
7/2	A627(M) S Exit	U	N/A	N/A	-		-	-	-	1098	Inf	Inf	0.0%
8/1	M62 W Off Entry Left	U	2	N/A	G		1	44	-	737	1900	737	100.0%
8/2	M62 W Off Entry Ahead	U	2	N/A	G		1	44	-	420	1900	737	57.0%
8/3	M62 W Off Entry Ahead	U	2	N/A	G		1	44	-	434	1900	737	58.9%
9/1	M62 W Off Approach Ahead	U	N/A	N/A	-		-	-	-	1157	1900	1900	60.9%
9/2	M62 W Off Approach Ahead	U	N/A	N/A	-		-	-	-	434	1900	1900	22.8%
10/1	M62 W On Exit	U	N/A	N/A	-		-	-	-	1208	Inf	Inf	0.0%
10/2	M62 W On Exit	U	N/A	N/A	-		-	-	-	485	Inf	Inf	0.0%
11/1	A627(M) N Circ Ahead	U	2	N/A	H		1	51	-	835	1900	852	84.6%
11/2	A627(M) N Circ Ahead Right	U	2	N/A	H		1	51	-	611	1900	852	68.6%
11/3	A627(M) N Circ Right	U	2	N/A	H		1	51	-	434	1900	852	51.0%
12/1	A62 E Circ Ahead	U	1	N/A	A		1	94	-	906	1900	1556	58.2%
12/2	A62 E Circ Ahead Right	U	1	N/A	A		1	94	-	1089	1900	1556	70.0%
12/3	A62 E Circ Right	U	1	N/A	A		1	94	-	427	1900	1556	27.4%
13/1	A627(M) S Circ Ahead	U	1	N/A	C		1	51	-	314	1900	852	36.9%
13/2	A627(M) S Circ Ahead	U	1	N/A	C		1	51	-	427	1900	852	50.1%
13/3	A627(M) S Circ Right	U	1	N/A	C		1	51	-	172	1900	852	7.4%
14/1	M62 W Circ Ahead	U	2	N/A	F		1	60	-	1009	1900	999	89.1%

Full Input Data And Results

14/2	M62 W Circ Right	U	2	N/A	F		1	60	-	832	1900	999	71.8%
14/3	M62 W Circ Right	U	2	N/A	F		1	60	-	194	1900	999	16.7%

Full Input Data And Results

Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network: Northern Gateway (Stakehill)	**-**	**-**	**0**	**0**	**0**	**134.4**	**446.2**	**0.0**	**580.6**	**-**	**-**	**-**	**-**
M62 J20 (Thornham Interchange)	**-**	**-**	**0**	**0**	**0**	**134.4**	**446.2**	**0.0**	**580.6**	**-**	**-**	**-**	**-**
1/1	1399	1399	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
1/2	427	427	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
2/1	744	744	-	-	-	5.6	2.6	-	8.2	39.6	20.9	2.6	23.4
2/2	655	655	-	-	-	4.6	1.4	-	6.0	33.0	17.1	1.4	18.5
2/3	427	427	-	-	-	2.5	0.5	-	3.0	25.3	9.4	0.5	9.8
3/1	1181	1181	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
3/2	445	445	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
4/1	495	180	-	-	-	26.6	158.2	-	184.8	1344.2	32.4	158.2	190.6
4/2	495	180	-	-	-	26.6	158.2	-	184.8	1344.2	32.4	158.2	190.6
5/1	975	975	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/2	167	167	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/1	894	884	-	-	-	8.3	17.5	-	25.8	104.0	29.1	17.5	46.6
6/2	895	884	-	-	-	8.4	17.8	-	26.2	105.4	29.2	17.8	47.0
6/3	1026	884	-	-	-	18.1	74.2	-	92.3	323.9	37.6	74.2	111.8
7/1	1086	1086	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
7/2	893	893	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
8/1	737	737	-	-	-	7.3	13.6	-	20.8	101.7	23.5	13.6	37.1
8/2	420	420	-	-	-	3.3	0.7	-	3.9	33.6	10.6	0.7	11.3
8/3	434	434	-	-	-	3.4	0.7	-	4.1	34.1	11.1	0.7	11.8
9/1	1157	1157	-	-	-	0.0	0.8	-	0.8	2.4	0.0	0.8	0.8
9/2	434	434	-	-	-	0.0	0.1	-	0.1	1.2	0.0	0.1	0.1
10/1	1198	1198	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0

Full Input Data And Results

10/2	484	484	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
11/1	720	720	-	-	-	6.3	0.0	-	6.3	31.4	23.2	0.0	23.2
11/2	584	584	-	-	-	3.3	0.0	-	3.3	20.5	9.4	0.0	9.4
11/3	434	434	-	-	-	2.2	0.0	-	2.2	18.0	4.4	0.0	4.4
12/1	906	906	-	-	-	0.2	0.0	-	0.2	0.8	1.7	0.0	1.7
12/2	1089	1089	-	-	-	0.2	0.0	-	0.2	0.7	1.9	0.0	1.9
12/3	427	427	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
13/1	314	314	-	-	-	0.2	0.0	-	0.2	2.1	2.8	0.0	2.8
13/2	427	427	-	-	-	0.6	0.0	-	0.6	5.0	9.8	0.0	9.8
13/3	63	63	-	-	-	0.8	0.0	-	0.8	47.9	2.0	0.0	2.0
14/1	890	890	-	-	-	4.0	0.0	-	4.0	16.3	28.2	0.0	28.2
14/2	717	717	-	-	-	1.7	0.0	-	1.7	8.5	22.5	0.0	22.5
14/3	167	167	-	-	-	0.1	0.0	-	0.1	2.3	1.7	0.0	1.7

C1 Stream: 1 PRC for Signalled Lanes (%): -205.3
C1 Stream: 2 PRC for Signalled Lanes (%): -11.1
PRC Over All Lanes (%): -205.3

Total Delay for Signalled Lanes (pcuHr): 516.05
Total Delay for Signalled Lanes (pcuHr): 63.63
Total Delay Over All Lanes(pcuHr): 580.61

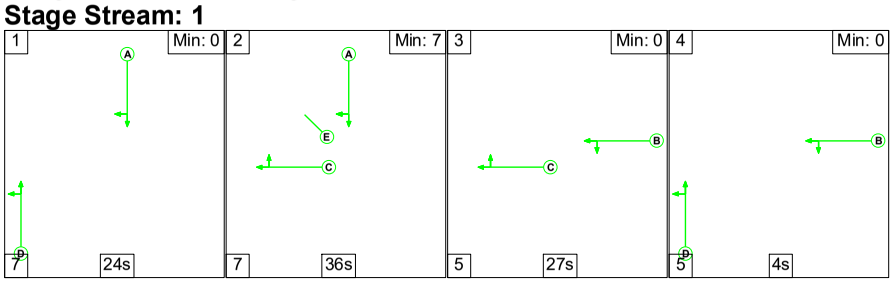
Cycle Time (s): 116
Cycle Time (s): 116

Full Input Data And Results

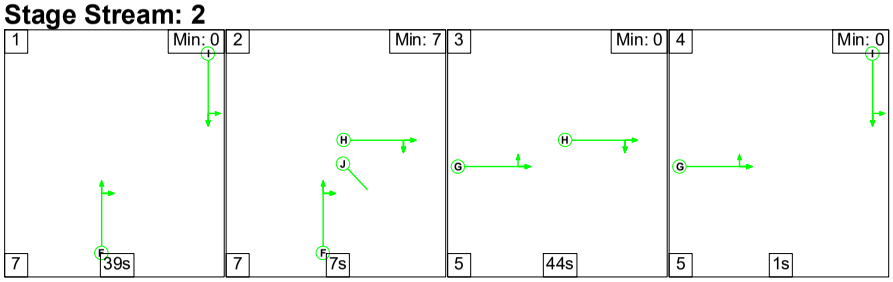
Scenario 3: '2033 WITH DEV AM' (FG3: '2033 WITH DEV AM', Plan 1: 'Network Control Plan 1')

Stage Sequence Diagram

Stage Stream: 1



Stage Stream: 2



Stage Timings

Stage Stream: 1

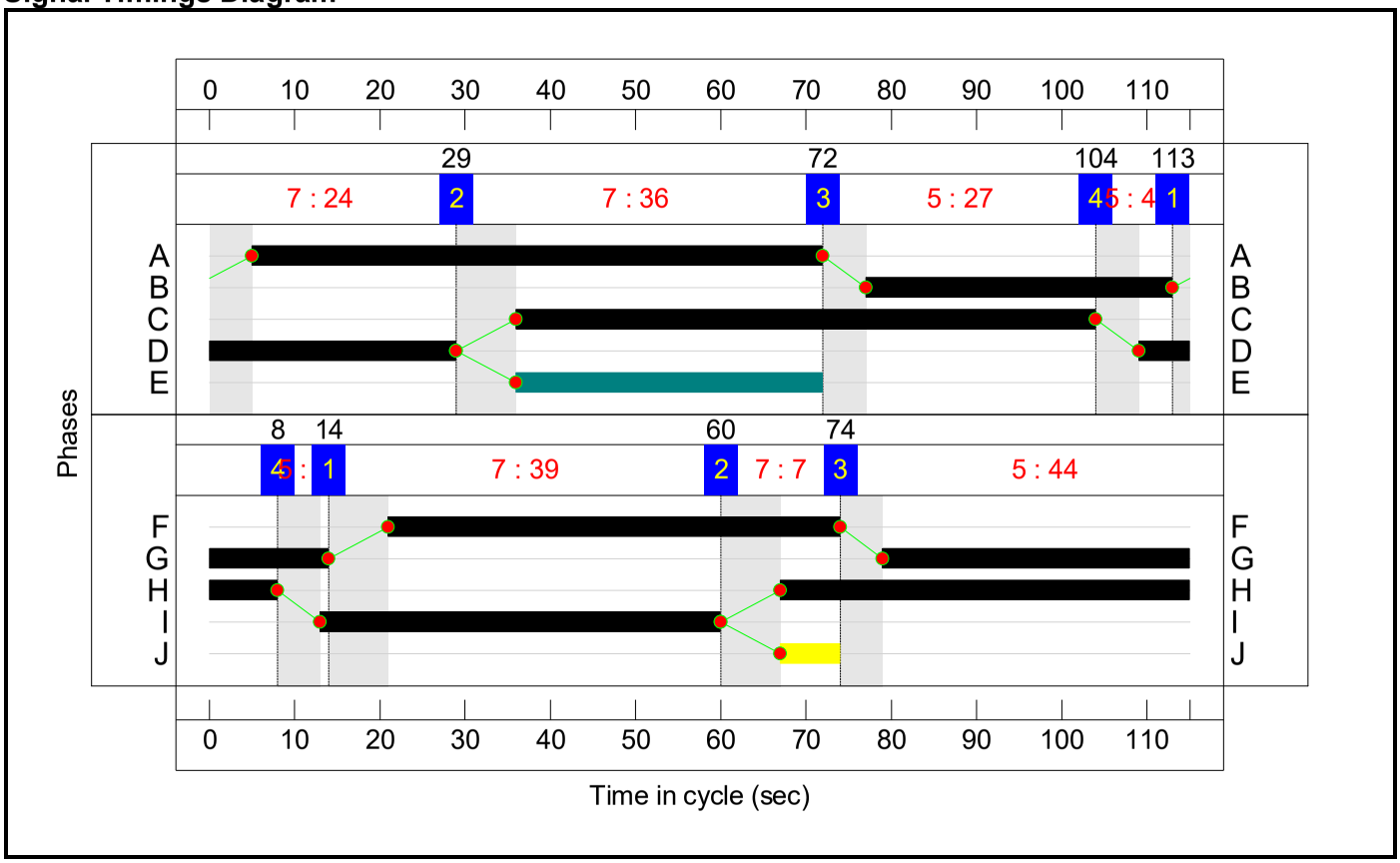
Stage	1	2	3	4
Duration	24	36	27	4
Change Point	113	29	72	104

Stage Stream: 2

Stage	1	2	3	4
Duration	39	7	44	1
Change Point	14	60	74	8

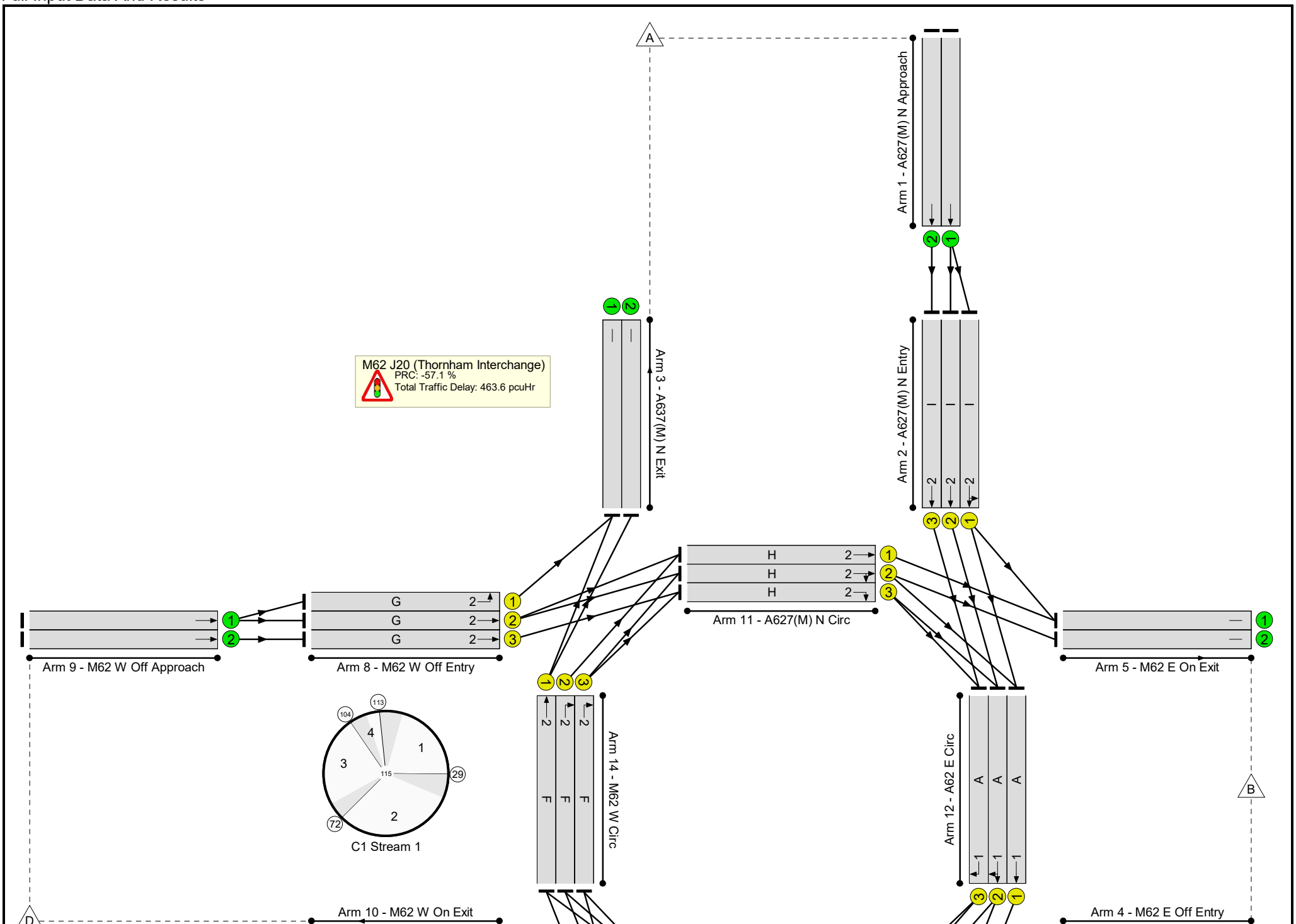
Full Input Data And Results

Signal Timings Diagram



Network Layout Diagram

Full Input Data And Results



Full Input Data And Results

Full Input Data And Results

Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network: Northern Gateway (Stakehill)	-	-	**N/A**	-	-		-	-	-	-	-	-	**141.4%**
M62 J20 (Thornham Interchange)	-	-	**N/A**	-	-		-	-	-	-	-	-	**141.4%**
1/1	A627(M) N Approach Ahead	U	N/A	N/A	-		-	-	-	985	Inf	Inf	0.0%
1/2	A627(M) N Approach Ahead	U	N/A	N/A	-		-	-	-	550	Inf	Inf	0.0%
2/1	A627(M) N Entry Left Ahead	U	2	N/A	I		1	47	-	559	1900	793	70.5%
2/2	A627(M) N Entry Ahead	U	2	N/A	I		1	47	-	426	1900	793	53.7%
2/3	A627(M) N Entry Ahead	U	2	N/A	I		1	47	-	550	1900	793	69.4%
3/1	A637(M) N Exit	U	N/A	N/A	-		-	-	-	1554	Inf	Inf	0.0%
3/2	A637(M) N Exit	U	N/A	N/A	-		-	-	-	532	Inf	Inf	0.0%
4/1	M62 E Off Entry Left	U	1	N/A	B		1	36	-	688	1900	611	112.5%
4/2	M62 E Off Entry Left Ahead	U	1	N/A	B		1	36	-	689	1900	611	112.7%
5/1	M62 E On Exit	U	N/A	N/A	-		-	-	-	626	Inf	Inf	0.0%
5/2	M62 E On Exit	U	N/A	N/A	-		-	-	-	163	Inf	Inf	0.0%
6/1	A627(M) S Entry Left	U	1	N/A	D		1	35	-	607	1900	595	102.1%
6/2	A627(M) S Entry Left Ahead	U	1	N/A	D		1	35	-	841	1900	595	141.4%
6/3	A627(M) S Entry Ahead	U	1	N/A	D		1	35	-	604	1900	595	101.5%

Full Input Data And Results

7/1	A627(M) S Exit	U	N/A	N/A	-		-	-	-	1536	Inf	Inf	0.0%
7/2	A627(M) S Exit	U	N/A	N/A	-		-	-	-	1412	Inf	Inf	0.0%
8/1	M62 W Off Entry Left	U	2	N/A	G		1	50	-	1022	1900	843	121.3%
8/2	M62 W Off Entry Ahead	U	2	N/A	G		1	50	-	474	1900	843	56.3%
8/3	M62 W Off Entry Ahead	U	2	N/A	G		1	50	-	521	1900	843	61.8%
9/1	M62 W Off Approach Ahead	U	N/A	N/A	-		-	-	-	1496	1900	1900	78.7%
9/2	M62 W Off Approach Ahead	U	N/A	N/A	-		-	-	-	521	1900	1900	27.4%
10/1	M62 W On Exit	U	N/A	N/A	-		-	-	-	607	Inf	Inf	0.0%
10/2	M62 W On Exit	U	N/A	N/A	-		-	-	-	551	Inf	Inf	0.0%
11/1	A627(M) N Circ Ahead	U	2	N/A	H		1	56	-	444	1900	942	46.4%
11/2	A627(M) N Circ Ahead Right	U	2	N/A	H		1	56	-	634	1900	942	67.1%
11/3	A627(M) N Circ Right	U	2	N/A	H		1	56	-	521	1900	942	55.3%
12/1	A62 E Circ Ahead	U	1	N/A	A		1	67	-	848	1900	1123	75.5%
12/2	A62 E Circ Ahead Right	U	1	N/A	A		1	67	-	947	1900	1123	84.3%
12/3	A62 E Circ Right	U	1	N/A	A		1	67	-	550	1900	1123	49.0%
13/1	A627(M) S Circ Ahead	U	1	N/A	C		1	68	-	0	1900	1140	0.0%
13/2	A627(M) S Circ Ahead	U	1	N/A	C		1	68	-	551	1900	1140	48.3%
13/3	A627(M) S Circ Right	U	1	N/A	C		1	68	-	223	1900	1140	17.4%
14/1	M62 W Circ Ahead	U	2	N/A	F		1	53	-	1064	1900	892	88.8%

Full Input Data And Results

14/2	M62 W Circ Right	U	2	N/A	F		1	53	-	441	1900	892	48.7%
14/3	M62 W Circ Right	U	2	N/A	F		1	53	-	163	1900	892	18.0%

Full Input Data And Results

Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network: Northern Gateway (Stakehill)	**-**	**-**	**0**	**0**	**0**	**124.1**	**339.4**	**0.0**	**463.6**	**-**	**-**	**-**	**-**
M62 J20 (Thornham Interchange)	**-**	**-**	**0**	**0**	**0**	**124.1**	**339.4**	**0.0**	**463.6**	**-**	**-**	**-**	**-**
1/1	985	985	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
1/2	550	550	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
2/1	559	559	-	-	-	4.3	1.2	-	5.5	35.3	14.6	1.2	15.8
2/2	426	426	-	-	-	3.0	0.6	-	3.6	30.1	10.2	0.6	10.8
2/3	550	550	-	-	-	4.2	1.1	-	5.3	34.8	14.4	1.1	15.5
3/1	1239	1239	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
3/2	396	396	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
4/1	688	611	-	-	-	12.7	42.4	-	55.1	288.5	26.7	42.4	69.1
4/2	689	611	-	-	-	12.8	42.9	-	55.7	290.9	26.8	42.9	69.6
5/1	619	619	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/2	161	161	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/1	607	595	-	-	-	7.4	15.7	-	23.1	137.2	19.8	15.7	35.5
6/2	841	595	-	-	-	24.0	124.8	-	148.8	637.1	35.1	124.8	159.9
6/3	604	595	-	-	-	7.2	14.8	-	22.0	131.1	19.6	14.8	34.4
7/1	1459	1459	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
7/2	1360	1360	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
8/1	1022	843	-	-	-	21.0	92.5	-	113.5	399.6	39.3	92.5	131.7
8/2	474	474	-	-	-	3.1	0.6	-	3.8	28.6	11.2	0.6	11.8
8/3	521	521	-	-	-	3.6	0.8	-	4.4	30.1	12.7	0.8	13.5
9/1	1496	1496	-	-	-	0.0	1.8	-	1.8	4.4	0.0	1.8	1.8
9/2	521	521	-	-	-	0.0	0.2	-	0.2	1.3	0.0	0.2	0.2
10/1	595	595	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0

Full Input Data And Results

10/2	551	551	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
11/1	437	437	-	-	-	3.4	0.0	-	3.4	28.0	13.9	0.0	13.9
11/2	632	632	-	-	-	2.7	0.0	-	2.7	15.4	8.4	0.0	8.4
11/3	521	521	-	-	-	1.6	0.0	-	1.6	11.3	3.8	0.0	3.8
12/1	848	848	-	-	-	2.8	0.0	-	2.8	11.7	20.1	0.0	20.1
12/2	947	947	-	-	-	3.8	0.0	-	3.8	14.4	28.3	0.0	28.3
12/3	550	550	-	-	-	0.3	0.0	-	0.3	2.2	0.9	0.0	0.9
13/1	0	0	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
13/2	551	551	-	-	-	0.1	0.0	-	0.1	0.8	0.9	0.0	0.9
13/3	198	198	-	-	-	1.4	0.0	-	1.4	25.9	4.5	0.0	4.5
14/1	793	793	-	-	-	4.0	0.0	-	4.0	18.2	23.1	0.0	23.1
14/2	434	434	-	-	-	0.6	0.0	-	0.6	4.9	12.7	0.0	12.7
14/3	161	161	-	-	-	0.1	0.0	-	0.1	2.1	1.8	0.0	1.8

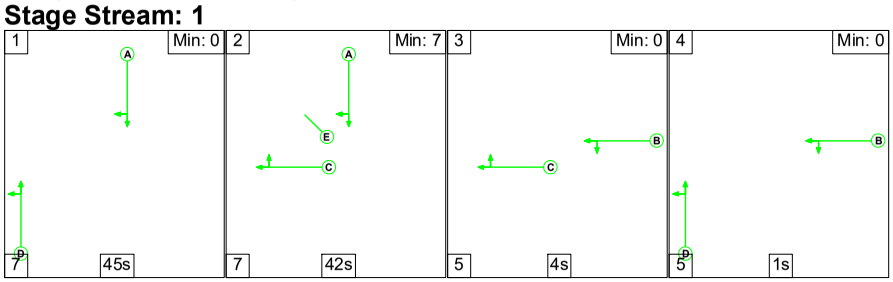
C1 Stream: 1 PRC for Signalled Lanes (%):	-57.1	Total Delay for Signalled Lanes (pcuHr):	313.19	Cycle Time (s):	115
C1 Stream: 2 PRC for Signalled Lanes (%):	-34.8	Total Delay for Signalled Lanes (pcuHr):	148.36	Cycle Time (s):	115
PRC Over All Lanes (%):	-57.1	Total Delay Over All Lanes(pcuHr):	463.58		

Full Input Data And Results

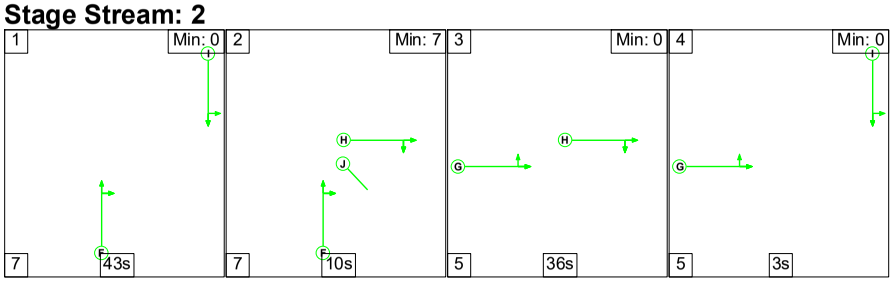
Scenario 4: '2033 WITH DEV PM' (FG4: '2033 WITH DEV PM', Plan 1: 'Network Control Plan 1')

Stage Sequence Diagram

Stage Stream: 1



Stage Stream: 2



Stage Timings

Stage Stream: 1

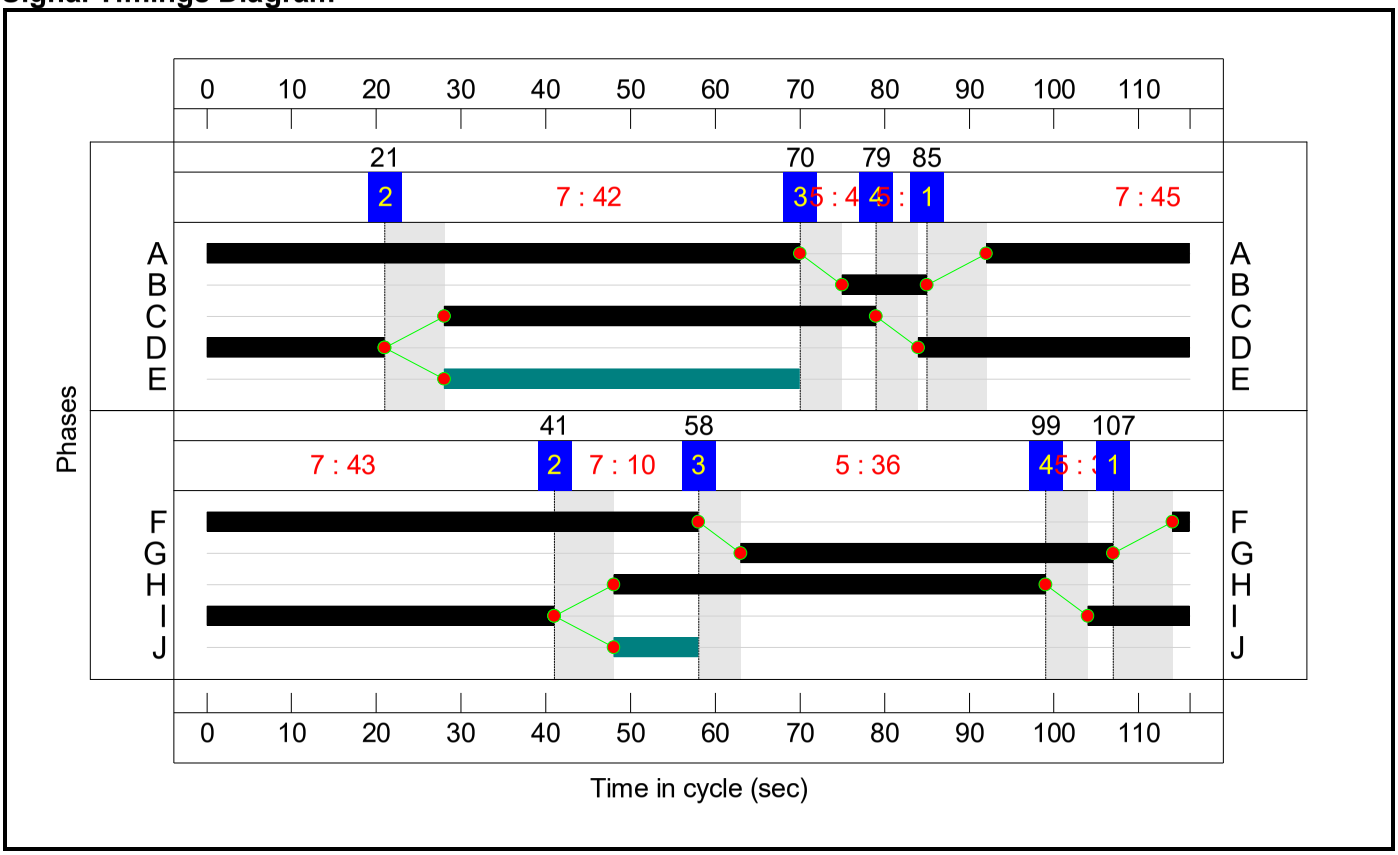
Stage	1	2	3	4
Duration	45	42	4	1
Change Point	85	21	70	79

Stage Stream: 2

Stage	1	2	3	4
Duration	43	10	36	3
Change Point	107	41	58	99

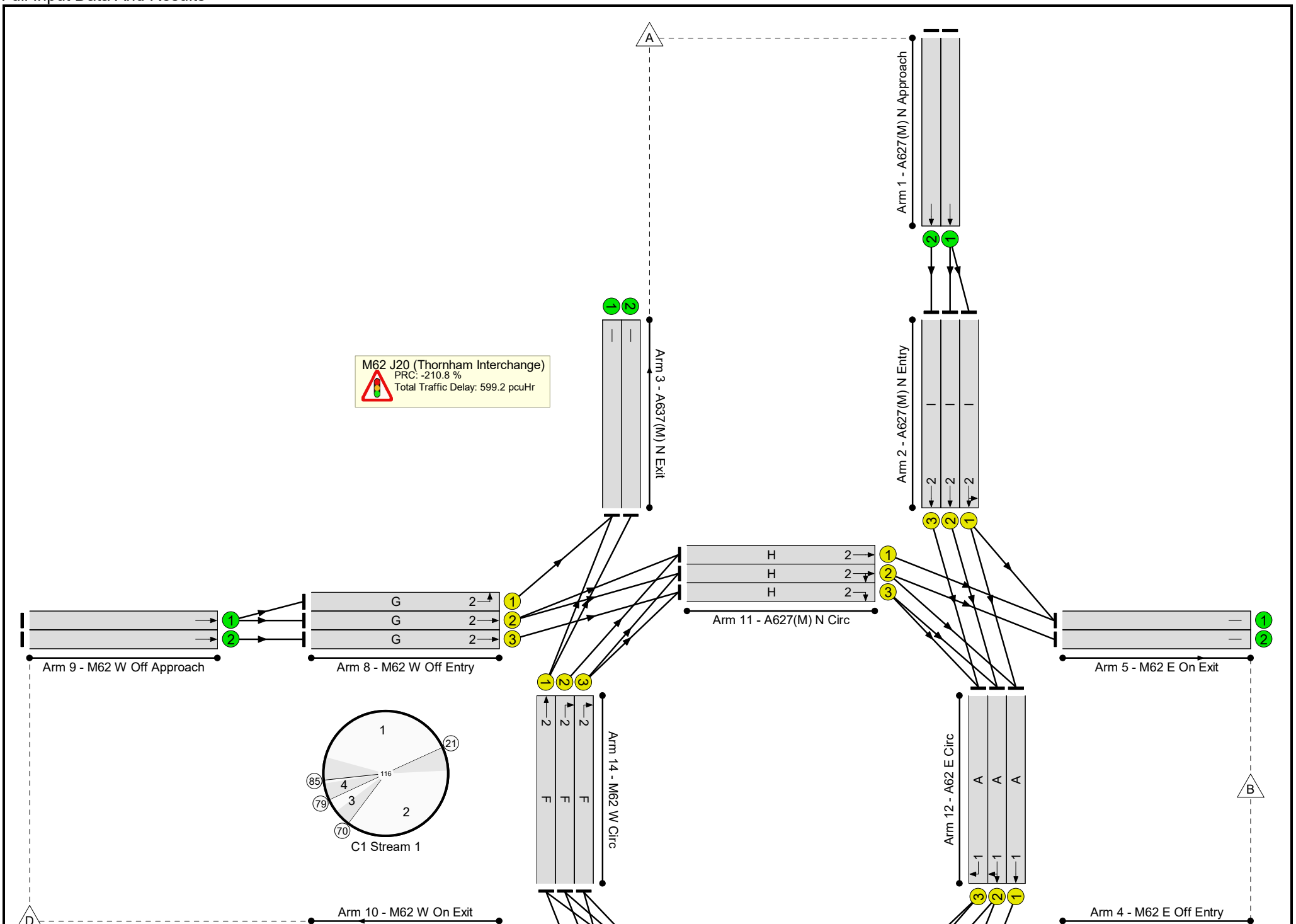
Full Input Data And Results

Signal Timings Diagram



Network Layout Diagram

Full Input Data And Results



Full Input Data And Results

Full Input Data And Results

Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network: Northern Gateway (Stakehill)	-	-	**N/A**	-	-		-	-	-	-	-	-	**279.7%**
M62 J20 (Thornham Interchange)	-	-	**N/A**	-	-		-	-	-	-	-	-	**279.7%**
1/1	A627(M) N Approach Ahead	U	N/A	N/A	-		-	-	-	1393	Inf	Inf	0.0%
1/2	A627(M) N Approach Ahead	U	N/A	N/A	-		-	-	-	433	Inf	Inf	0.0%
2/1	A627(M) N Entry Left Ahead	U	2	N/A	I		1	53	-	738	1900	884	83.4%
2/2	A627(M) N Entry Ahead	U	2	N/A	I		1	53	-	655	1900	884	74.1%
2/3	A627(M) N Entry Ahead	U	2	N/A	I		1	53	-	433	1900	884	49.0%
3/1	A637(M) N Exit	U	N/A	N/A	-		-	-	-	1241	Inf	Inf	0.0%
3/2	A637(M) N Exit	U	N/A	N/A	-		-	-	-	505	Inf	Inf	0.0%
4/1	M62 E Off Entry Left	U	1	N/A	B		1	10	-	504	1900	180	279.7%
4/2	M62 E Off Entry Left Ahead	U	1	N/A	B		1	10	-	503	1900	180	279.2%
5/1	M62 E On Exit	U	N/A	N/A	-		-	-	-	898	Inf	Inf	0.0%
5/2	M62 E On Exit	U	N/A	N/A	-		-	-	-	394	Inf	Inf	0.0%
6/1	A627(M) S Entry Left	U	1	N/A	D		1	53	-	901	1900	884	101.9%
6/2	A627(M) S Entry Left Ahead	U	1	N/A	D		1	53	-	901	1900	884	101.9%
6/3	A627(M) S Entry Ahead	U	1	N/A	D		1	53	-	1034	1900	884	116.9%

Full Input Data And Results

7/1	A627(M) S Exit	U	N/A	N/A	-		-	-	-	1415	Inf	Inf	0.0%
7/2	A627(M) S Exit	U	N/A	N/A	-		-	-	-	1128	Inf	Inf	0.0%
8/1	M62 W Off Entry Left	U	2	N/A	G		1	44	-	737	1900	737	100.0%
8/2	M62 W Off Entry Ahead	U	2	N/A	G		1	44	-	431	1900	737	58.5%
8/3	M62 W Off Entry Ahead	U	2	N/A	G		1	44	-	450	1900	737	61.1%
9/1	M62 W Off Approach Ahead	U	N/A	N/A	-		-	-	-	1168	1900	1900	61.5%
9/2	M62 W Off Approach Ahead	U	N/A	N/A	-		-	-	-	450	1900	1900	23.7%
10/1	M62 W On Exit	U	N/A	N/A	-		-	-	-	1209	Inf	Inf	0.0%
10/2	M62 W On Exit	U	N/A	N/A	-		-	-	-	497	Inf	Inf	0.0%
11/1	A627(M) N Circ Ahead	U	2	N/A	H		1	51	-	643	1900	852	64.6%
11/2	A627(M) N Circ Ahead Right	U	2	N/A	H		1	51	-	822	1900	852	89.8%
11/3	A627(M) N Circ Right	U	2	N/A	H		1	51	-	450	1900	852	52.8%
12/1	A62 E Circ Ahead	U	1	N/A	A		1	94	-	911	1900	1556	58.5%
12/2	A62 E Circ Ahead Right	U	1	N/A	A		1	94	-	1105	1900	1556	71.0%
12/3	A62 E Circ Right	U	1	N/A	A		1	94	-	433	1900	1556	27.8%
13/1	A627(M) S Circ Ahead	U	1	N/A	C		1	51	-	308	1900	852	36.2%
13/2	A627(M) S Circ Ahead	U	1	N/A	C		1	51	-	433	1900	852	50.8%
13/3	A627(M) S Circ Right	U	1	N/A	C		1	51	-	172	1900	852	7.2%
14/1	M62 W Circ Ahead	U	2	N/A	F		1	60	-	1009	1900	999	88.4%

Full Input Data And Results

14/2	M62 W Circ Right	U	2	N/A	F		1	60	-	641	1900	999	54.9%
14/3	M62 W Circ Right	U	2	N/A	F		1	60	-	393	1900	999	33.6%

Full Input Data And Results

Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network: Northern Gateway (Stakehill)	**-**	**-**	**0**	**0**	**0**	**136.6**	**462.7**	**0.0**	**599.2**	**-**	**-**	**-**	**-**
M62 J20 (Thornham Interchange)	**-**	**-**	**0**	**0**	**0**	**136.6**	**462.7**	**0.0**	**599.2**	**-**	**-**	**-**	**-**
1/1	1393	1393	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
1/2	433	433	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
2/1	738	738	-	-	-	5.6	2.4	-	8.0	39.0	20.7	2.4	23.1
2/2	655	655	-	-	-	4.6	1.4	-	6.0	33.0	17.1	1.4	18.5
2/3	433	433	-	-	-	2.6	0.5	-	3.1	25.4	9.6	0.5	10.1
3/1	1178	1178	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
3/2	442	442	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
4/1	504	180	-	-	-	27.4	162.7	-	190.0	1357.5	33.2	162.7	195.9
4/2	503	180	-	-	-	27.3	162.2	-	189.5	1356.0	33.1	162.2	195.3
5/1	805	805	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/2	337	337	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/1	901	884	-	-	-	8.8	19.7	-	28.5	114.0	29.6	19.7	49.3
6/2	901	884	-	-	-	8.8	19.7	-	28.5	114.0	29.6	19.7	49.3
6/3	1034	884	-	-	-	18.7	78.1	-	96.8	336.9	38.1	78.1	116.2
7/1	1091	1091	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
7/2	916	916	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
8/1	737	737	-	-	-	7.3	13.6	-	20.8	101.7	23.5	13.6	37.1
8/2	431	431	-	-	-	3.4	0.7	-	4.1	34.0	10.9	0.7	11.6
8/3	450	450	-	-	-	3.6	0.8	-	4.3	34.7	11.6	0.8	12.4
9/1	1168	1168	-	-	-	0.0	0.8	-	0.8	2.5	0.0	0.8	0.8
9/2	450	450	-	-	-	0.0	0.2	-	0.2	1.2	0.0	0.2	0.2
10/1	1192	1192	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0

Full Input Data And Results

10/2	496	496	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
11/1	550	550	-	-	-	4.7	0.0	-	4.7	30.6	17.7	0.0	17.7
11/2	765	765	-	-	-	5.1	0.0	-	5.1	23.8	14.8	0.0	14.8
11/3	450	450	-	-	-	2.2	0.0	-	2.2	17.4	4.4	0.0	4.4
12/1	911	911	-	-	-	0.2	0.0	-	0.2	0.8	1.8	0.0	1.8
12/2	1105	1105	-	-	-	0.2	0.0	-	0.2	0.8	2.3	0.0	2.3
12/3	433	433	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
13/1	308	308	-	-	-	0.2	0.0	-	0.2	2.1	2.8	0.0	2.8
13/2	433	433	-	-	-	0.6	0.0	-	0.6	5.1	10.1	0.0	10.1
13/3	62	62	-	-	-	0.8	0.0	-	0.8	47.9	2.0	0.0	2.0
14/1	883	883	-	-	-	3.8	0.0	-	3.8	15.7	28.1	0.0	28.1
14/2	548	548	-	-	-	0.6	0.0	-	0.6	4.1	10.6	0.0	10.6
14/3	336	336	-	-	-	0.2	0.0	-	0.2	2.6	3.9	0.0	3.9

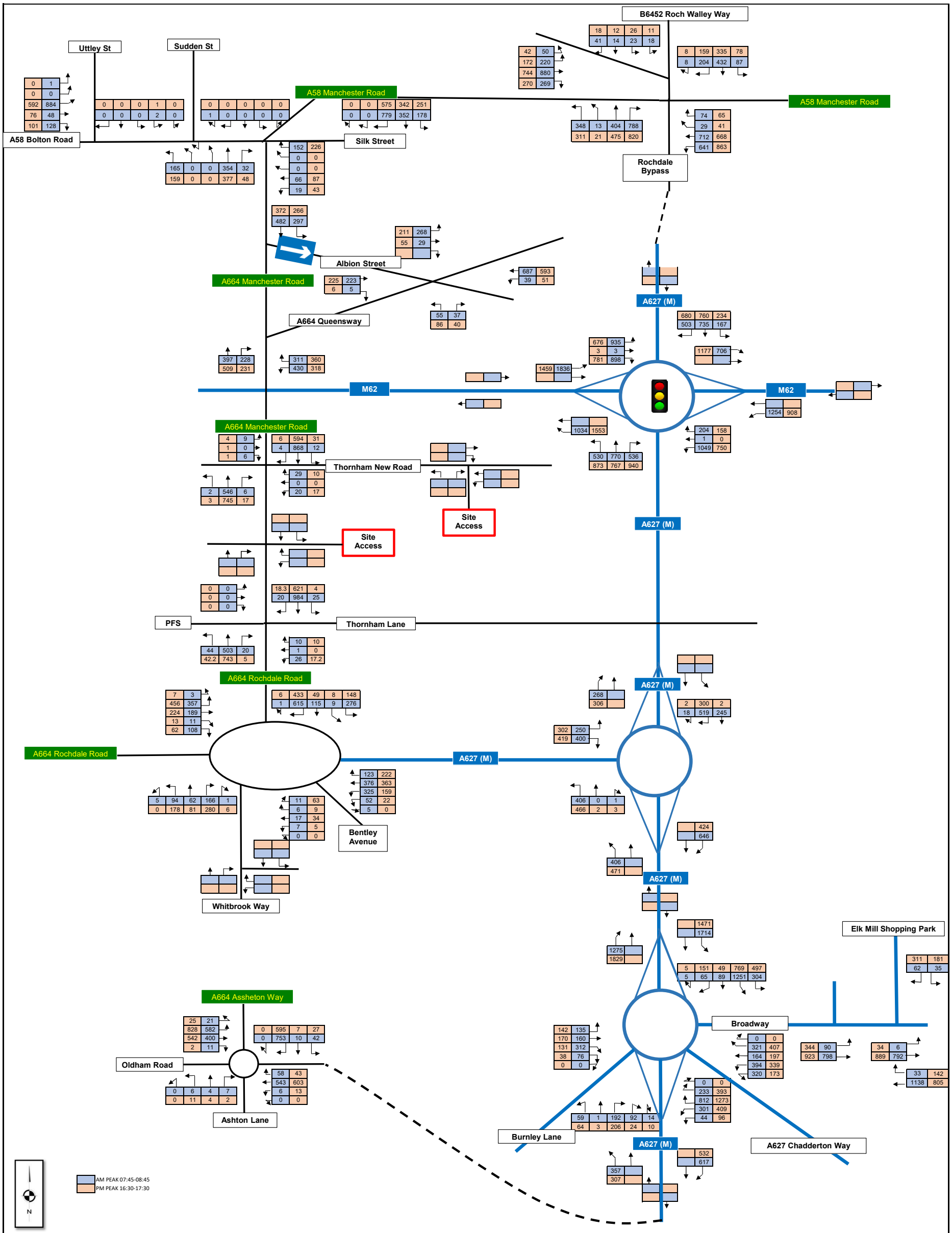
C1 Stream: 1 PRC for Signalled Lanes (%): -210.8
C1 Stream: 2 PRC for Signalled Lanes (%): -11.1
PRC Over All Lanes (%): -210.8

Total Delay for Signalled Lanes (pcuHr): 535.37
Total Delay for Signalled Lanes (pcuHr): 62.92
Total Delay Over All Lanes(pcuHr): 599.24

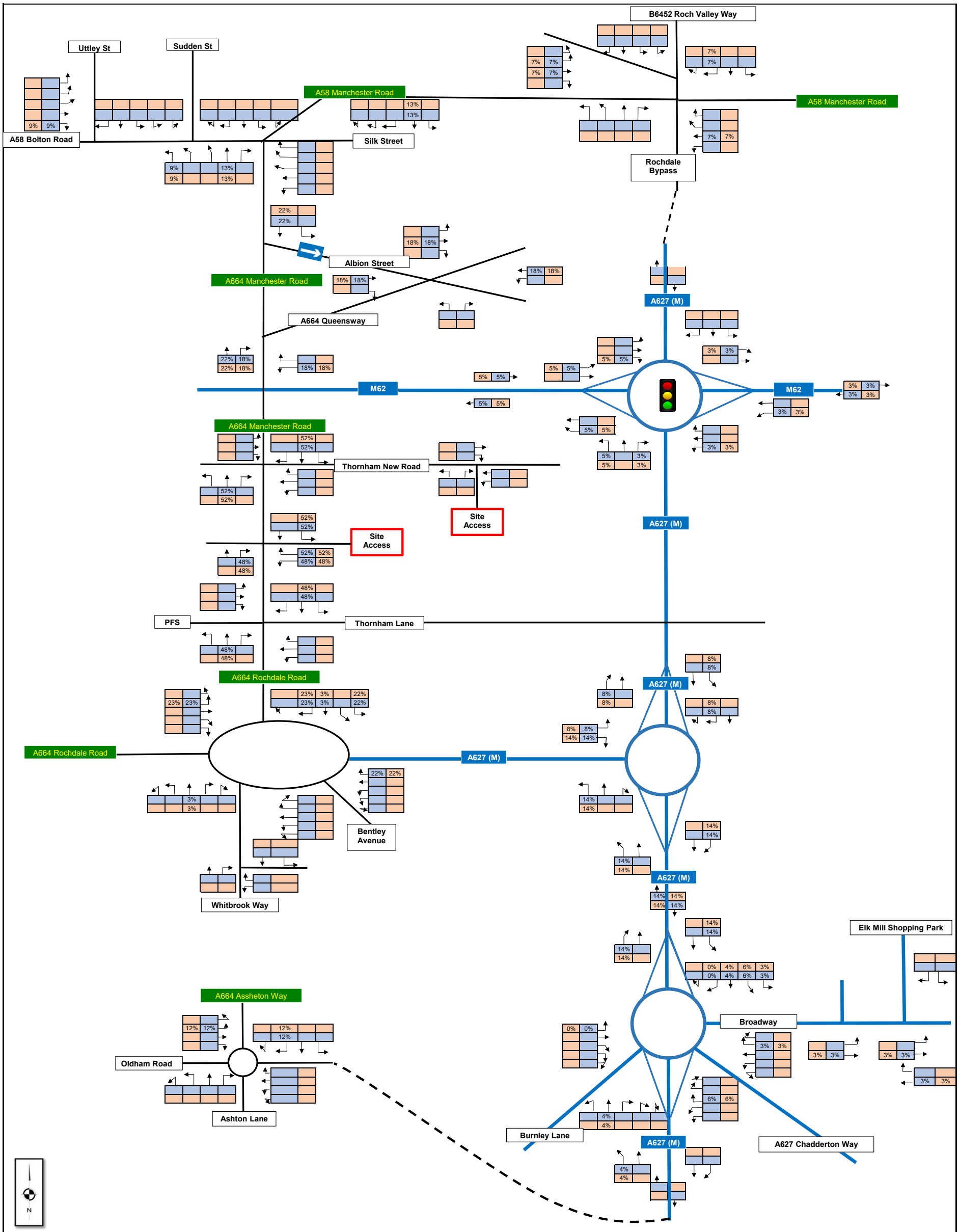
Cycle Time (s): 116
Cycle Time (s): 116

S|C|P

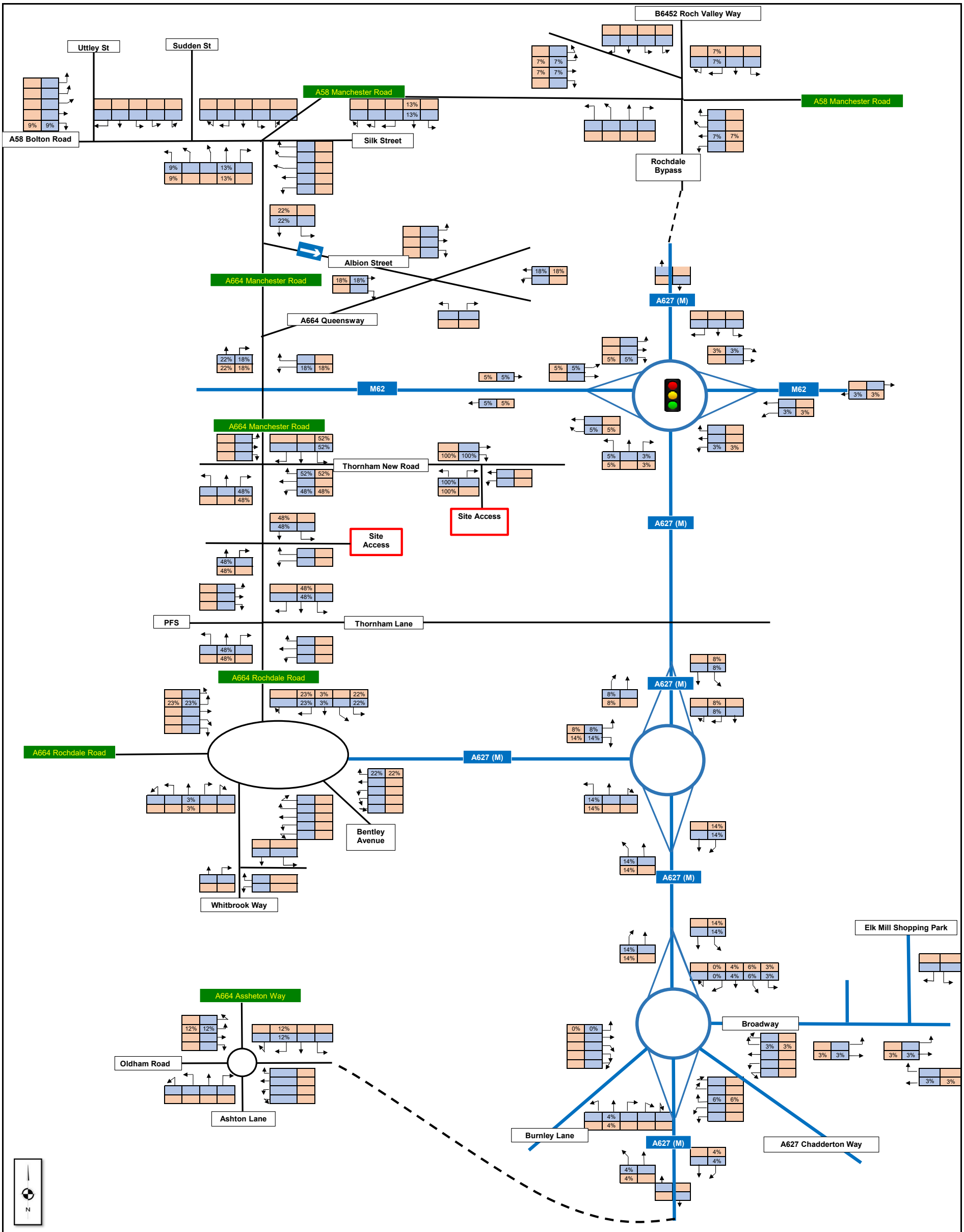
FIGURES



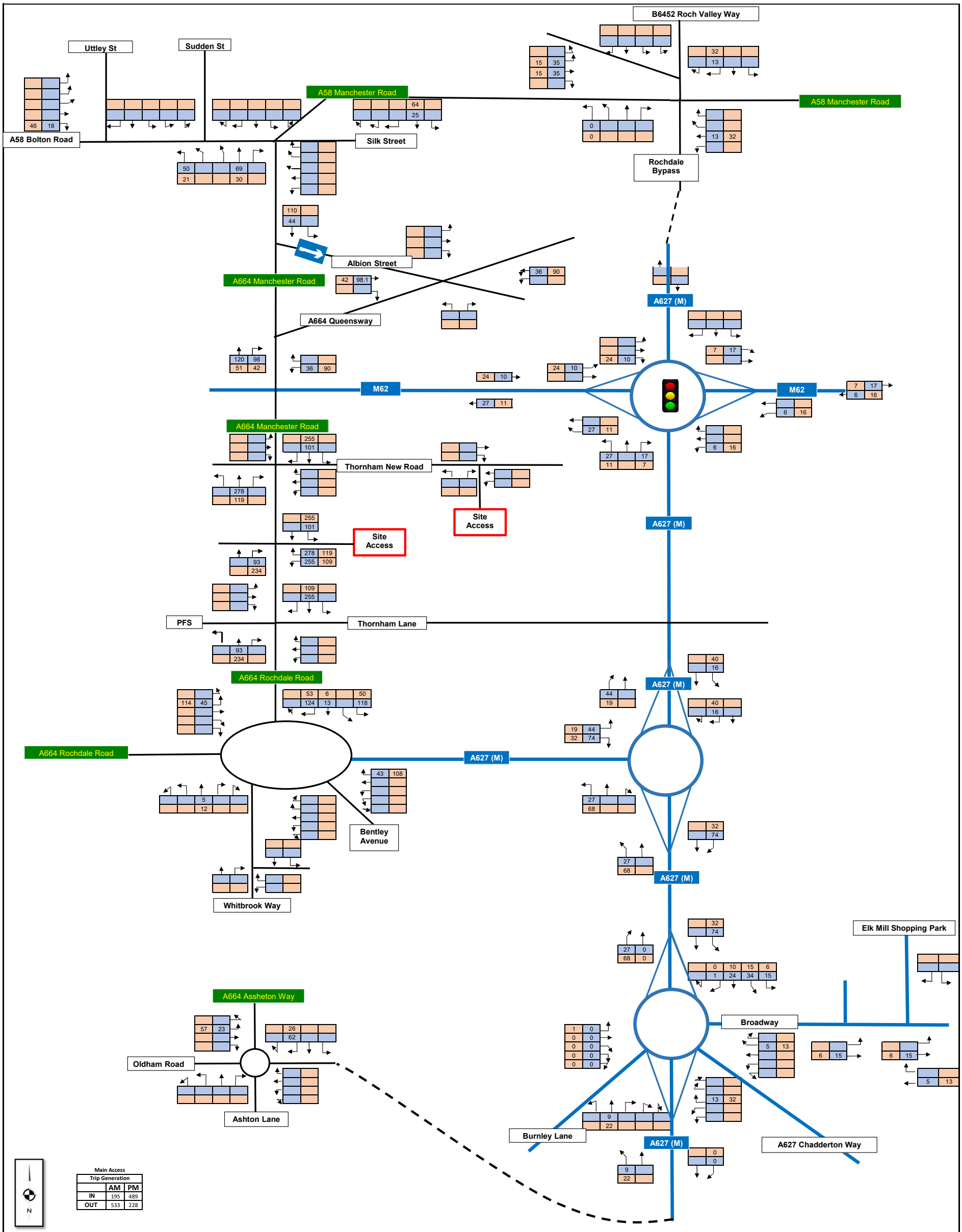
S C P Transportation Planning : Infrastructure Design	Base 2022	27 January 2023
		Job Number - SCP/190267
	Proposed Residential Development, Manchester Road, Rochdale	Traffic Figure 1



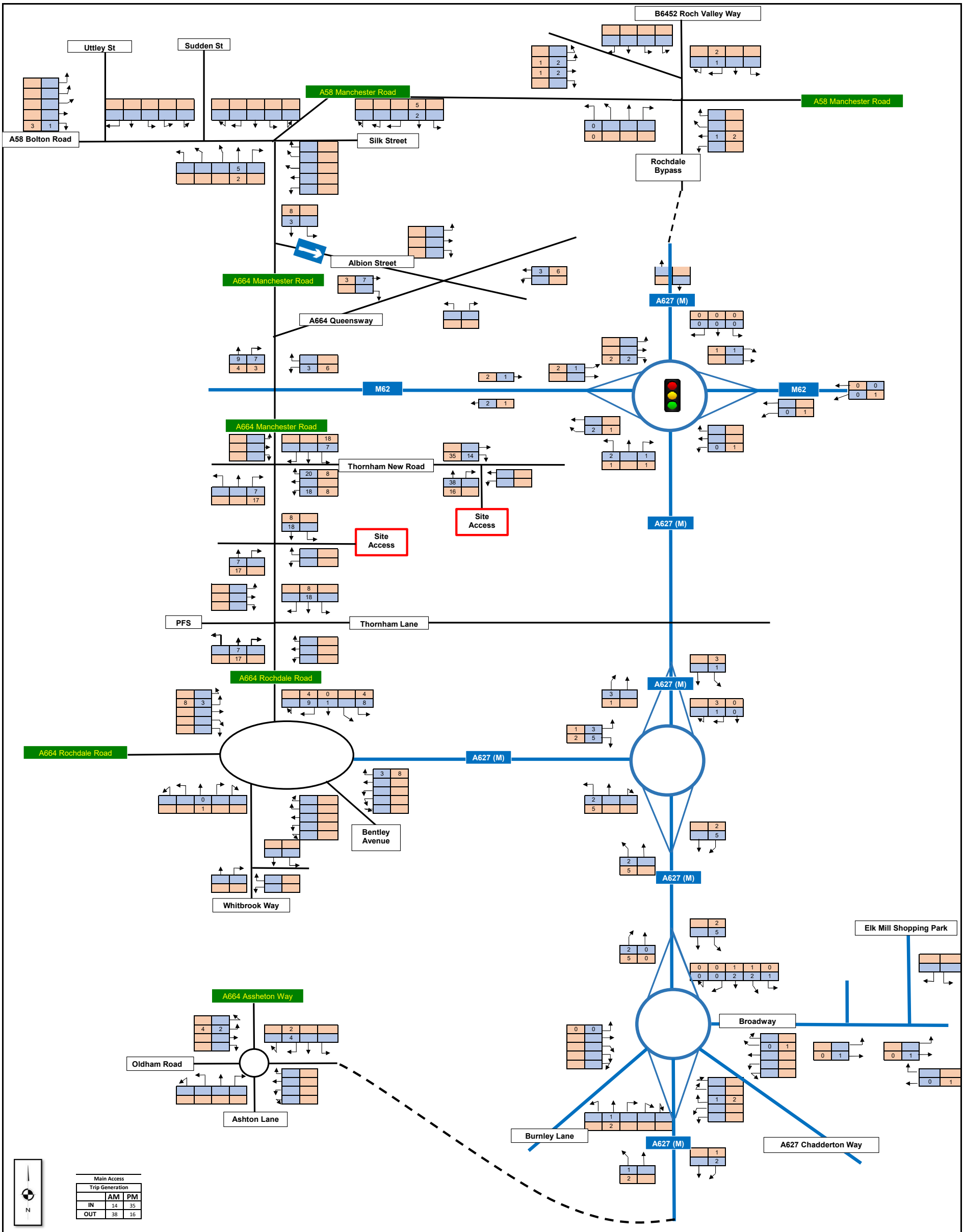
S C P Transportation Planning : Infrastructure Design	**Main Access Trip Distribution %**	**27 January 2023**
		Job Number - SCP/190267
	Proposed Residential Development, Manchester Road, Rochdale	**Traffic Figure 2**



S C P Transportation Planning : Infrastructure Design	**North Access Trip Distribution %**	**27 January 2023**
		Job Number - SCP/190267
	Proposed Residential Development, Manchester Road, Rochdale	**Traffic Figure 3**



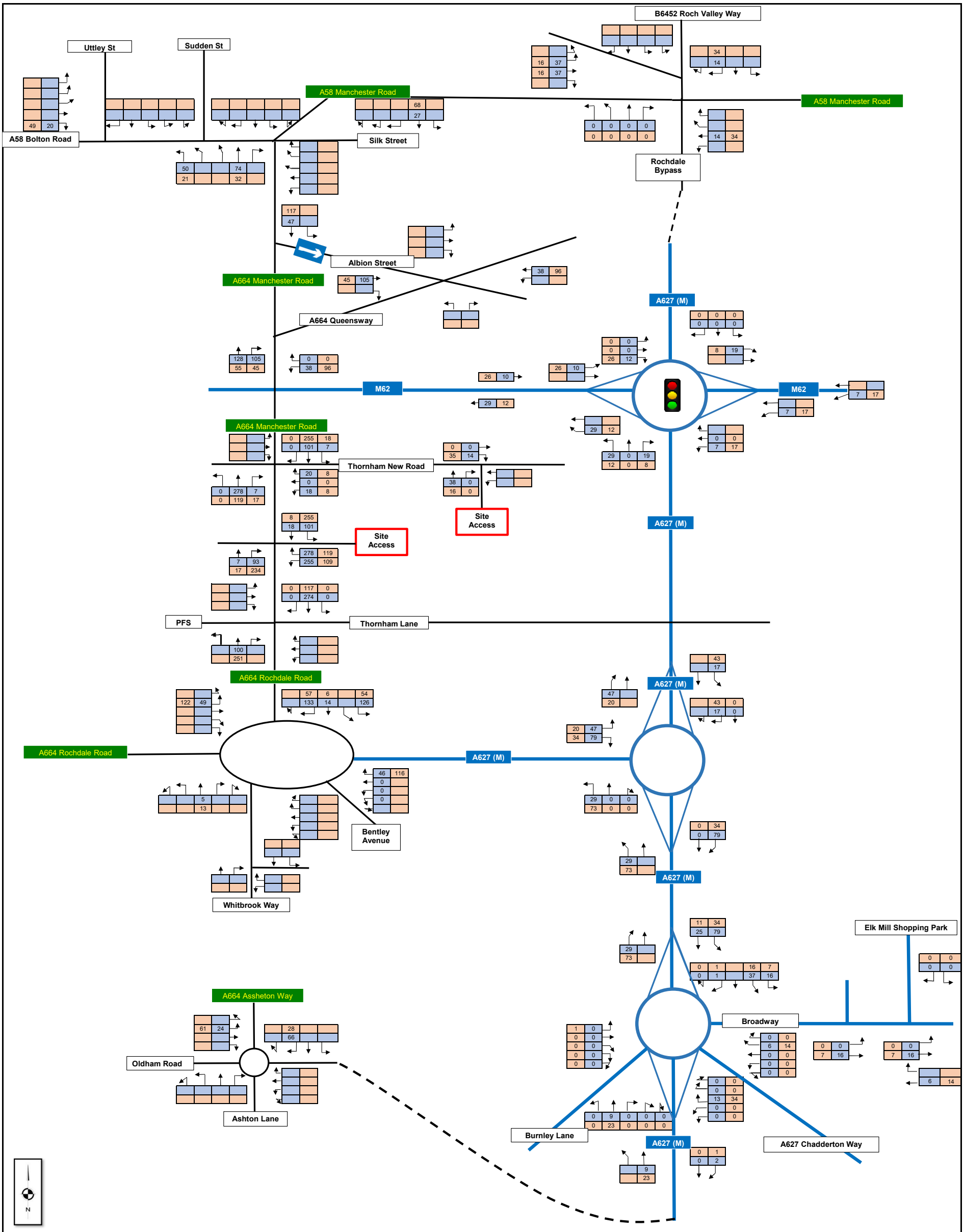
S C P Transportation Planning : Infrastructure Design	**Main Access Proposed Flows**	**27 January 2023**
		Job Number - SCP/190267
	Proposed Residential Development, Manchester Road, Rochdale	**Traffic Figure 4**



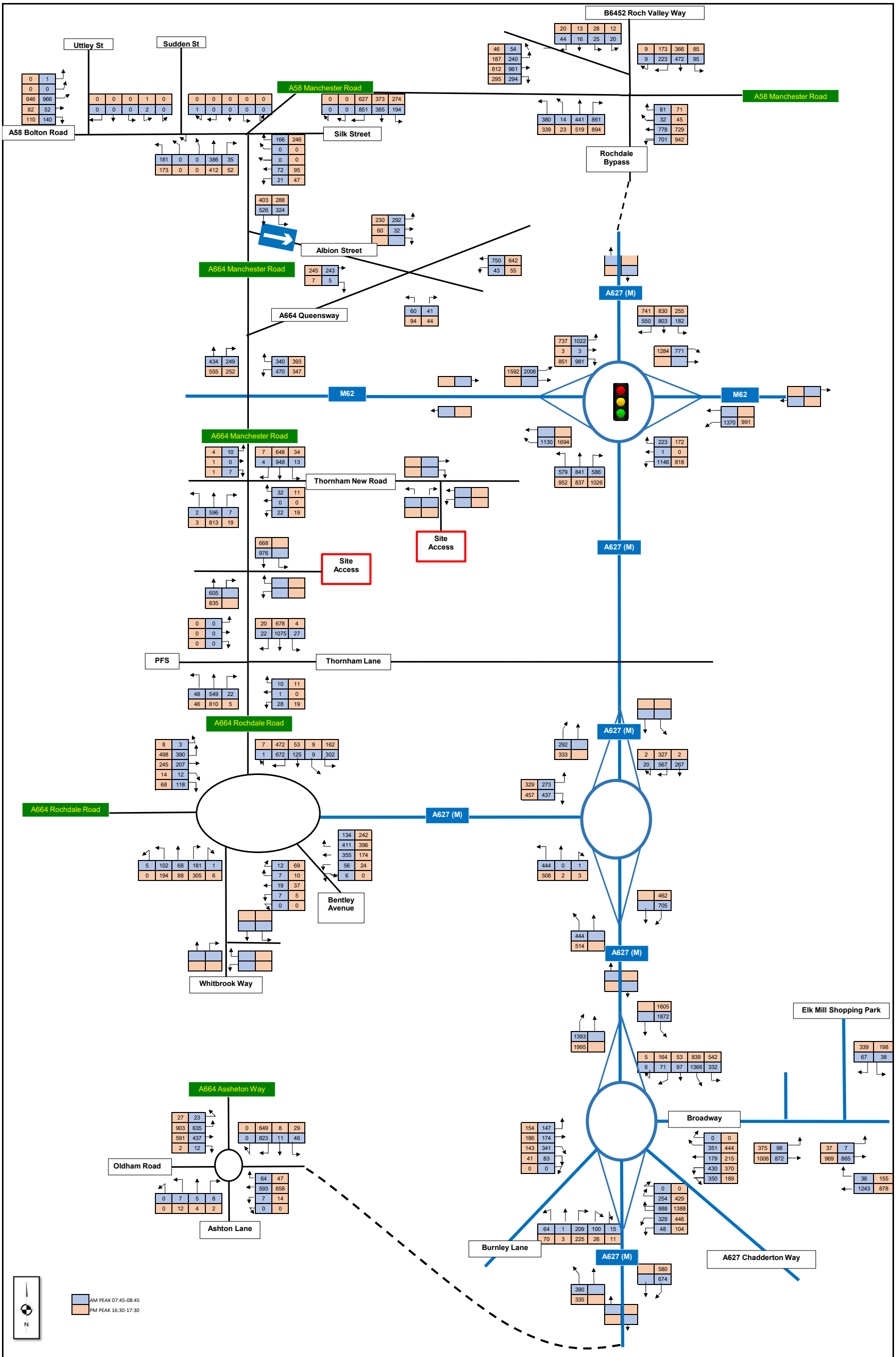
Main Access Trip Generation	AM	PM
IN	14	35
OUT	38	16

Transportation Planning : Infrastructure Design

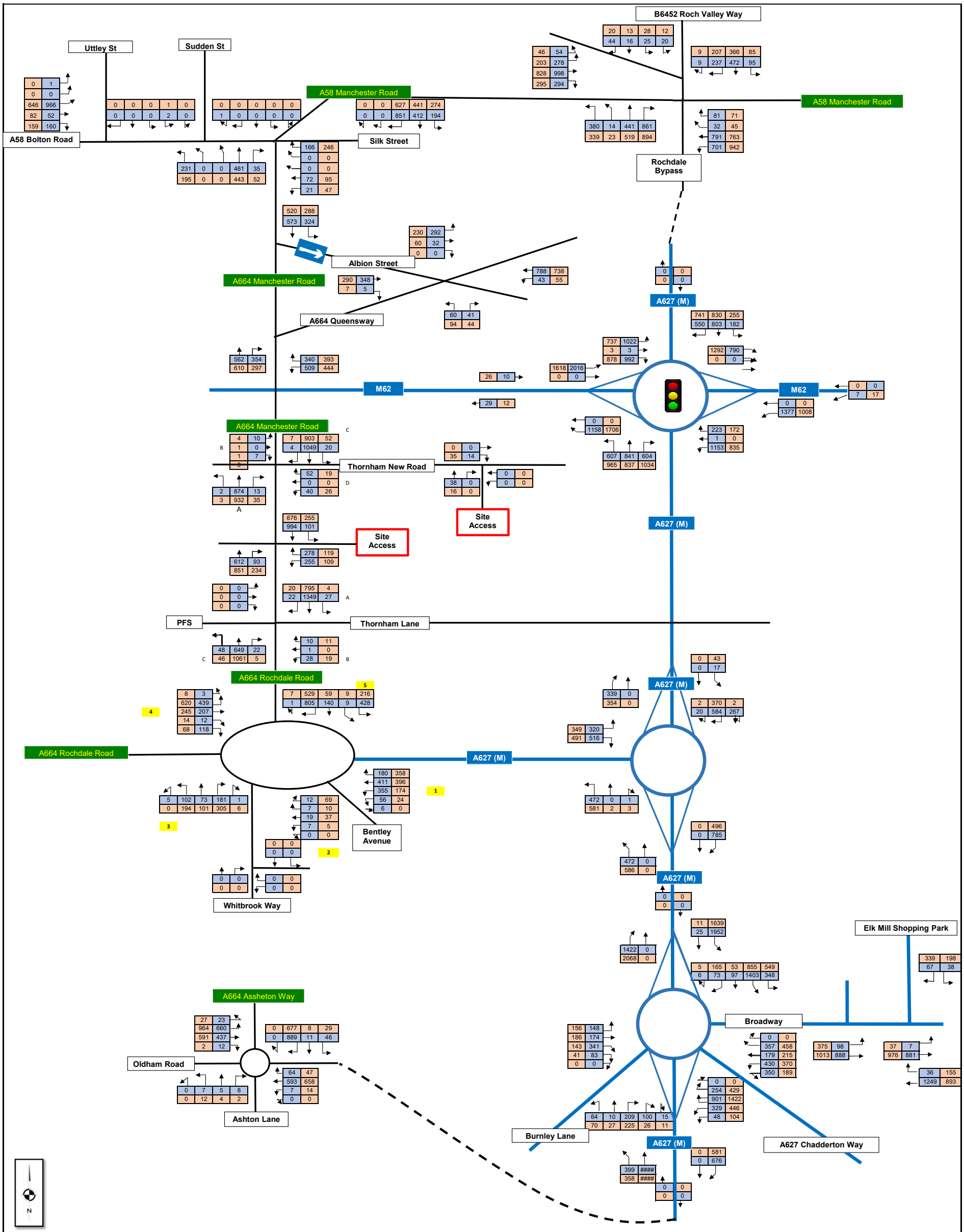
North Access Proposed Flows	27 January 2023
	Job Number - SCP/190267
Proposed Residential Development, Manchester Road, Rochdale	Traffic Figure 5



S C P Transportation Planning : Infrastructure Design	**Total Proposed Trip Generation**	**27 January 2023**
		Job Number - SCP/190267
	Proposed Residential Development, Manchester Road, Rochdale	**Traffic Figure 6**



S C P Transportation Planning : Infrastructure Design	**2033 Baseline Traffic Flows**	**27 January 2023**
		Job Number - SCP/190267
	Proposed Residential Development, Manchester Road, Rochdale	**Traffic Figure 7**



S C P Transportation Planning : Infrastructure Design	**2033 With Development**	**27 January 2023** Job Number - SCP/190267
	Proposed Residential Development, Manchester Road, Rochdale	**Traffic Figure 8**