7. Transport

Appendix 7.1

TRANSPORT ASSESSMENT

MOTT MACDONALD

The People's Project - Goodison Park Legacy Project

Transport Assessment

February 2020

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The People's Project - Goodison Park Legacy Project

Transport Assessment

February 2020

Issue and Revision Record

Revision	Date	Originator	Checker	Approver	Description
A	July 2019	CR	KB/RB	DD	Draft issue to client
B	6 January 2020	CR	KB	DD	Draft issue for CBRE Review
C	29 January 2020	CR	KB	DD	Final
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Information class: Standard

1 Introduction

1.1 Background

1.1.1 Everton Stadium Development Limited (hereafter 'Everton') has appointed Mott MacDonald to prepare this Transport Assessment (TA) to support an outline planning application for the proposed redevelopment of Goodison Park following Everton's relocation to Bramley-Moore Dock as part of 'The People's Project'. The outline planning application is submitted with all matters reserved.

1.1.2 The People's Project encompasses the development of Everton's new stadium at Bramley-Moore Dock and the Goodison Park Legacy Project - the redevelopment of Goodison Park stadium to form a mixed-use development which includes a range of community-led facilities as well as residential dwellings and commercial space.

1.1.3 Goodison Park is located in L4, Walton: approximately 4km north of Liverpool city centre. The site is well connected to the local road network and is well placed to take advantage of established public transport, pedestrian and cycle connectivity. A comprehensive baseline review of the existing site conditions has been undertaken in Section 3.

1.1.4 The main aims of this TA are:

- Assess baseline conditions on the local transport network.
- Assess and analyse travel demand generated by the proposed development.
- Demonstrate safe and effective multi-modal accessibility to the proposed development site.
- Undertake junction modelling at key junctions adjacent to the site to assess development impact.
- Identify, evaluate and propose mitigation measures for any transport related impacts that may arise from the proposed development.

1.1.5 In addition to this TA, a Framework Travel Plan (ref. 15/A) has been produced too. The Travel Plan sets out a range of robust measures which will be implemented as part of the proposed development to encourage sustainable travel.

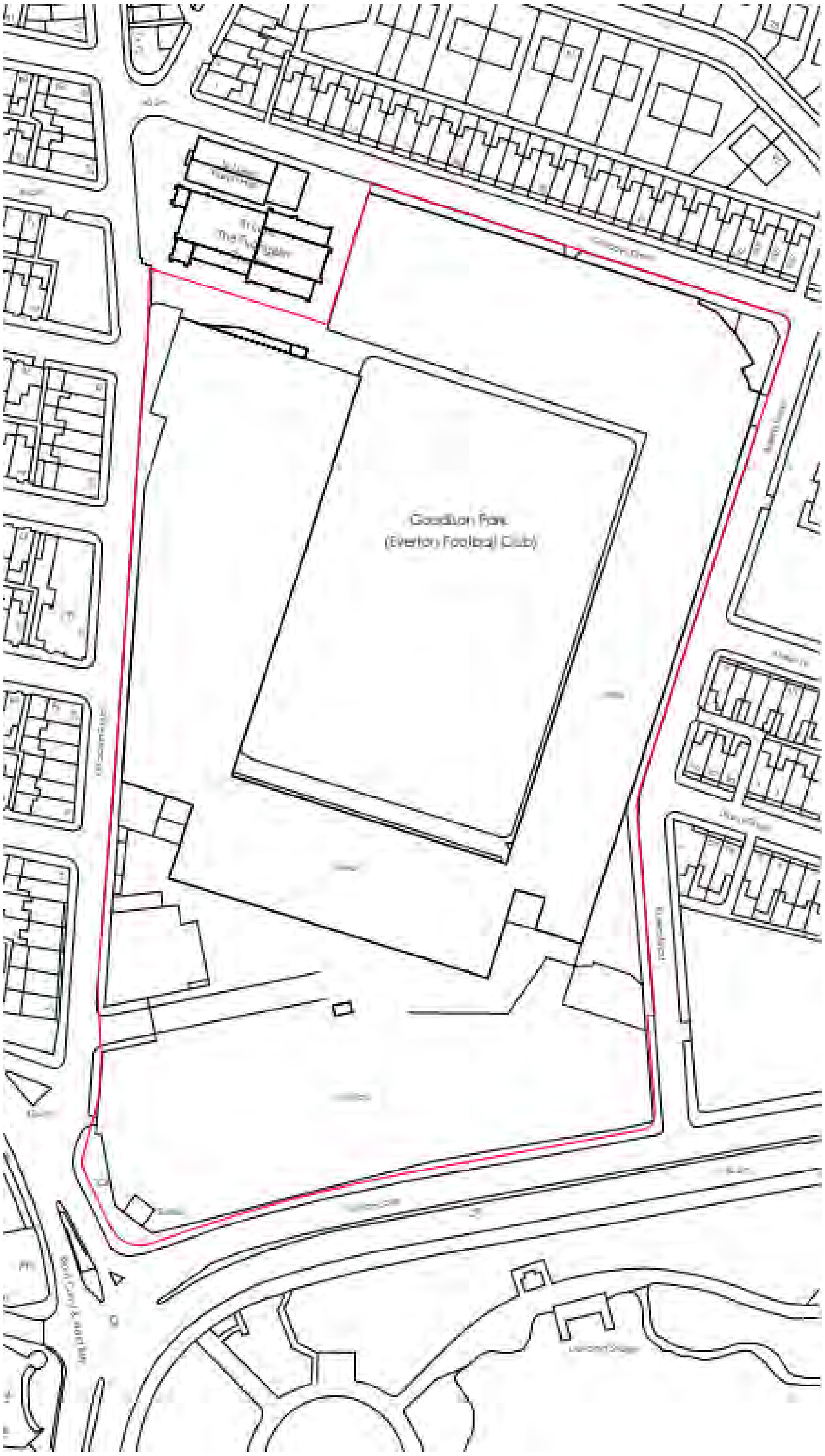
1.2 Proposed development

1.2.1 The proposals for the site's redevelopment comprise a range of uses including a mix of residential dwelling types alongside a variety of community-oriented facilities.

1.2.2 The approximate footprint of the existing football pitch is to be retained as a park which the surrounding development will overlook. Additionally, the Church of St. Luke the Evangelist located adjacent to the site (north-west corner) is also retained with enhancements to the public realm and open space made to the surrounding area.

1.2.3 Further details of the proposed development are provided in Section 6 including the proposed site layout and the quantum of development to be delivered. The red line boundary plan for the planning application is shown as Figure 1.

Figure 1: Planning application site boundary



Source: Condy Lofthouse Architects

1.3 Scope of assessment

1.3.1 The scope of this TA has been discussed with Liverpool City Council (LCC) as the local planning authority, prior to submission. The agreed elements to be included in the TA are as follows:

- A review of the baseline transport conditions in the area.
- A review of the proposed development, including site layout and access.
- Accident data analysis in the immediate vicinity of the site.
- A review of current traffic flows.
- Assessment of potential traffic generation of the development.
- Junction modelling and analysis for the following junctions:
  - Walton Lane/Spellow Lane/Langham Street.
  - Walton Lane/Priory Road.

1.3.2 Details of the scoping correspondence between Liverpool City Council and Mott MacDonald is includes as Appendix J

1.4 Public Consultation

1.4.1 The proposed development has been subject to two public consultation stages:

Stage One Public Consultation

1.4.2 Stage One public consultation was undertaken in November and December 2018. This achieved over 20,000 responses. The consultation focussed upon the basic principles of the People's Project including the principle of the Club moving to Bramley-Moore Dock (BMD) and the principle of redeveloping the existing stadium site at Goodison Park.

1.4.3 Members of the public were able to participate by attending a roadshow or review material online. For the Goodison Park proposals 95% of respondents said they agreed that the Club's existing Goodison Park home should be redeveloped to create a legacy the community can benefit from, including residential, educational, community and health amenities

Stage Two Public Consultation

1.4.4 Stage Two public consultation took place in July and August 2019. Members of the public were able to participate by attending a roadshow at multiple locations within the City Region. The public was also able to participate online via a consultation website. For residents and businesses located around Goodison Park and Bramley-Moore Dock, consultation materials were mailed as well as a survey that could be completed and returned by post. More than 43,000 people responded to the second stage public consultation. The following summarises the main findings of the consultation in relation to the GPLP:

- 91% support of the proposed mix of uses;
- 92% support for the overall design and layout of the proposals;

1.4.5 It should be noted that in terms of suggestions or negative feedback on the development, transport was not a key theme.

1.4.6 Further details can be found in the Statement of Community Engagement, submitted as part of this planning application.

Figure 2: Illustrative image of how the GPLP masterplan could look – used in the Stage 2 Public Consultation Material

Source: Everton / Condy Lofthouse Architects

1.5 Report structure

1.5.1 Based on the above requirements the TA is structured as follows:

- Section 2: Policy context.
- Section 3: Site location and baseline conditions.
- Section 4: Goodison Park baseline: Match day and non-match day operation.
- Section 5: Highway network traffic data
- Section 5: Proposed development.
- Section 6: Trip generation and distribution.
- Section 7: Traffic modelling.
- Section 8: Conclusions and recommendations.

2 Policy context

2.1 Introduction

2.1.1 This section reviews current national, regional and local policy and guidance and examines how the proposed development accords with the policies therein.

2.1.2 Section 38(6) of the Planning and Compulsory Purchase Act 2004 and Section 70(2) of the Town & Country Planning Act 1990 require planning applications to be determined in accordance with the statutory development plan unless material considerations indicate otherwise. The statutory development plan for the City of Liverpool currently comprises the Unitary Development Plan (adopted 2002).

2.1.3 The statutory development plan transport policies relevant to the application proposal are summarised below. The following policies and guidance are material considerations which also inform the Transport Assessment:

- Liverpool Local Plan (Submission Draft, May 2018);
- National Planning Policy Framework (February 2019);
- Planning Practice Guidance (March 2014); and
- Supplementary Planning Documents (SPDs).

2.1.4 In addition to planning policy guidance, there are overarching transport strategies relevant in the development of the application proposal, as follows:

- Merseyside Local Transport Plan (2011);
- Liverpool City Region Transport Plan for Growth (2015);
- Liverpool City Region Local Journeys Strategy (2018);
- Liverpool City Region Long Term Rail Strategy (2018); and
- Merseyside Active Travel Strategy (2011).

2.1.5 A summary of the relevant policies and guidance is provided below.

2.2 Unitary Development Plan (UDP) – Statutory Development Plan

2.2.1 The UDP was adopted in November 2002 and is a statutory document which provides the planning framework for the city. In 2007 the City Council discounted four of its policies, and the Joint Merseyside and Halton Waste Local Plan (adopted in 2013) replaced a further six. Under the new planning system, the remaining UDP policies form part of a 'saved plan', now acting as a Local Plan Document within the Local Plan Framework.

2.2.2 The aims of the Plan, with respect to transport issues, are covered under General Policy 6 (GEN6). GEN6 aims to provide a balanced provision of transport infrastructure which is inclusive, safe and accessible which meets the following:

- Provides access to employment, leisure, retail and other facilities for all of the City's residents;
- Meets the transport needs of people who are economically and socially disadvantaged;
- Allows for the safe, efficient and easy movement of goods into and throughout the City, in order to help secure the regeneration of the local economy;

- Protects & enhances the environment through reducing the reliance on the private car;
- Promotes, in conjunction with the Passenger Transport Authority, investment in the public transport network and associated facilities;
- Improves facilities for cyclists and pedestrians;
- Provides a framework for investment in the efficiency of the road system; and
- Reduces the availability of car parking facilities which would attract car borne commuters.

2.2.3 **Policy T4 (**Taxis**)** states that developments which are likely to be used by the public will be required to incorporate provision for taxi and Hackney Carriage facilities where there are no existing facilities in close proximity to the site, or where the scale and nature of development will generate a demand for taxi and Hackney Carriage facilities.

2.2.4 **Policy T6 (Cycling)** seeks to promote initiatives designed to maximise the role of cycling as a transport mode by: improving the condition of designated cycle routes in the City; catering for cyclists' needs in the design of all new highway improvement schemes, traffic management schemes, road safety schemes, the road maintenance programme, and giving consideration to the provision of safe cycling routes through all major development and redevelopment sites; improving road signage; introducing traffic calming measures, where appropriate; and requiring new developments to provide secure cycle parking facilities.

2.2.5 **Policy T7 (Walking and Pedestrians)** supports measures to encourage walking and make the pedestrian environment safer by improving signing, lighting, surfaces and visibility. All major development and redevelopment sites should cater for pedestrians' needs in the design of all new highway improvement schemes, traffic management schemes, the road maintenance programme, and giving consideration to the provision of safe and convenient walking routes.

2.2.6 **Policy T8 (Traffic Management)** paragraph 11.94 identifies football as an area of concern in this respect, relating to traffic and particularly car parking on match days. **Policy C7** (Football Clubs) deals specifically with these issues, identifying traffic management measures which might alleviate the problems.

2.2.7 **Policy T9 (Road Safety)** reducing the number of road accident casualties and fatalities and minimising the risk of these accidents on the roads.

2.2.8 **Policy T11 (Major Road Corridors)** Riverside Corridor North: (including the A5036 Waterloo Road/Regent Road, A565 Great Howard Street/Derby Road and A5038 Vauxhall Road) has been identified for improvement measures. Along these corridors, resources will be targeted for the design and implementation of measures designed to improve the image of the City; improve conditions; facilitate the efficient operation of public transport services; and ensure the most efficient and effective use of the Major Road Corridors, in order to relieve sensitive locations of heavy traffic.

2.2.9 **Policy T12 (Car Parking Provision in New Developments)** states that all new developments including changes of use, which generate a demand for car parking will be required to make provision for car parking on site, to meet the minimum operational needs of the development. Additional space for non-operational car parking will be permitted up to a maximum standard. The need will be determined by: the nature and type of use; whether off-site car parking would result in a danger to highway and pedestrian safety; whether the locality in which the proposed development is located is served by public car parking facilities; whether off-site parking would result in demonstrable harm to residential amenity; the relative accessibility of the development site by public transport services; and the feasibility of levying commuted sums from developers in lieu of car parking provision for developments within the City Centre controlled parking zone.

2.2.10 **Policy T13 (Car Parking for the Disabled)** car parking for the disabled should be provided in accordance with the following specific standards: a minimum of 6% of the first hundred parking spaces in a development should be reserved for Orange Badge holders; thereafter, the number of spaces will be negotiable. Parking bays should be wide enough to facilitate the easy transfer of a wheelchair to and from a car; disabled parking bays should be clearly marked as such and be located close to the point of access to and from the development served; and within multi-storey car parks, disabled parking bays must be adjacent to lifts.

2.2.11 **Policy T15 (Traffic Impact Assessment)** where planning permission is sought for new development which is likely to result in a material change in the character or volume of traffic on the surrounding highway network, the applicant will be required to submit a full Traffic Impact Assessment (TIA). Proposals which exceed any of the parameters as set out in this policy, will generally require a TIA as part of the planning application. Where extra traffic generated by a proposed development requires road or public transport improvements in the vicinity of the scheme (or beyond), to the extent that works are necessary to enable the proposed development to proceed, conditions may be imposed on any planning permission making its implementation subject to the completion of the works. Where transport improvements will be needed to enable the proposal to go ahead, these should be provided first.

2.3 Ensuring a Choice of Travel SPD (2008)

2.3.1 This SPD was developed through a collaboration of the Merseyside local authorities and Merseytravel and was adopted in December 2008. The document provides guidance on the access and transport requirements for new development. The document identifies maximum car parking standards and minimum cycle parking standards applicable to development in Liverpool.

2.3.2 Transport Assessments will need to address sustainable access, the impact on the existing network and mitigating residual impacts.

2.3.3 The SPD recognises that good design can contribute to sustainable modes of travel and enhance the environmental quality of a scheme. The SPD requires new developments to be supported by a MASA (Minimum Accessibility Standard Assessment).

2.4 Design for Access for All SPD (2011)

2.4.1 Liverpool City Council’s Design for Access for All Supplementary Planning Document (SPD) was designed to “highlight the most important principles in designing inclusive buildings, which meet the needs of all users including disabled people” (p.3).

2.4.2 Within Chapter 3, the SPD sets out design guidance for providing an inclusive approach for access to new developments. A particular focus is given to providing accessible pathways noting key requirements such as a minimum width of 2 metres for pavements to accommodate wheelchairs, as well as the provision of dropped kerbs complemented with tactile paving at all crossing points.

2.4.3 The provision of disabled parking is also identified as a key consideration whereby spaces should be reserved for disabled drivers.

2.4.4 This TA acknowledges the importance of providing inclusive access to the proposed development and strives to meet minimum provisions outlined in this, and other, inclusive mobility planning documents.

2.5 National Planning Policy Framework (2019)

2.5.1 The most recent iteration of the National Planning Policy Framework (NPPF) was published in February 2019. The framework sets out the government's policies on planning for England and how it expects these to be applied. The NPPF also provides a framework for local authorities and people to work within whilst still reflecting the needs of the local community.

2.5.2 The purpose of the planning system is to contribute to the achievement of sustainable development and there is therefore a presumption in favour of sustainable development, in economic, social and environmental terms, within the NPPF. It is recognised, however, that proposals must still be considered against the latest Local Plan and be approved where they fall in line with it or refused if they conflict (unless other material considerations indicate otherwise).

2.5.3 Chapter 9 paragraphs 108-111 of the NPPF discuss the importance of promoting sustainable transport within new developments by setting out key issues, planning policy requirements and necessary development proposal assessments.

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

- Appropriate opportunities to promote sustainable transport modes have been taken up, given the type of development and its location.
- Safe and suitable access can be achieved for all users.
- Any significant impacts from the development on the transport network (in terms of capacity and congestion), or on the highway safety, can be cost effectively mitigated to an acceptable degree.

2.5.5 The NPPF also 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 impact on the road network would be severe" (para. 109).

2.5.6 Within this context, the NPPF also states that applications for development should:

- "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.
- Address the needs of people with disabilities and reducing mobility in relation to all modes of transport.
- Create places that are safe, secure and attractive – which minimise the scope of conflicts between pedestrians, cyclists and vehicles, avoid unnecessary street clutter, and respond to local character and design standards.
- Allow for the efficient delivery of goods, and access by service and emergency vehicles.
- Be designed to enable charging of plug-in and other ultra-low emission vehicles in safe, accessible and convenient locations" (para. 110).

2.5.7 Finally, the NPPF states that "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" (para. 111).

2.6 Liverpool Local Plan (May 2018 Submission Version)

2.6.1 The Liverpool Local Plan, as consulted on in 2018 as a pre-submission draft, provides a "long-term spatial vision, strategic priorities and policies for future development in the city over the next 15-20 years" (para. 1.2).

2.6.2 The Plan recognises the high level of expected growth across the city, with £14bn worth of regeneration projects on site or in the pipeline. The consequences for the Local Plan are ultimately to manage this growth and where it should be allocated.

2.6.3 In relation to transport, the Local Plan outlines several policies as summarised below.

2.6.4 **Policy TP1 (Improving Accessibility and Managing Demand for Travel)** states that:

- Development proposals should make the best use of existing transport infrastructure. Where this cannot be achieved, development should be phased to coincide with new transport infrastructure provision
- Developments which singly or in combination have a significant impact on the movement of people or goods, should, through the provision of Travel Plans, positively manage travel demand and contribute to the improvement of accessibility in general, particularly by more sustainable modes of transport including walking, cycling and public transport
- Development proposals should not compromise existing transport infrastructure or schemes programmed in "A Transport Plan for Growth", "The Local Cycling and Walking Infrastructure Plan", "The Liverpool City Region Local Journeys Strategy" and actions that are planned. These include: Protecting routes where necessary and supporting improvement of facilities that support the use of public transport; increasing the network of, and protecting and enhancing, safe cycling and walking routes, based on programmes in the Local Transport Plan's (LTP) Active Travel Strategy and the longer term plan to complete the comprehensive Liverpool City Region Cycle Network; and initiatives designed to provide car and cycling facilities at rail stations by protecting land where necessary;
- All developments should address the accessibility of pedestrians and cyclists, as well as public transport users and other users of the transport and movement networks within the City and make a positive contribution to the connection between different transport modes, the reduction and mitigation of climate change and road safety issues.
- The City Council will support and facilitate proposals involving the construction or upgrading of passenger bus, ferry and rail facilities and those which will improve the efficiency of the movement of freight transport to, through and across the City.

2.6.5 **Policy TP2 (Transport Assessments)** requires development proposals that generate significant amounts of movement to be supported by a Transport Statement or Transport Assessment. In order to ensure that free and safe movement is not compromised consideration will be given to the effect on safety, congestion and the environment when dealing with development proposals that involve:

- New or altered access to the transport network.
- Improvement work to the transport network.
- The creation of new transport infrastructure.
- The generation of additional trips on the transport network

2.6.6 Development proposals will only be permitted where:

- Accesses, junctions and new road layouts would be safe and operate efficiently;

- The development would not have a individually or cumulatively with other projects, have a severe impact on the functioning of the network;
- The proposal would not be detrimental to the safety of all users of the transport network, and in particular pedestrians and cyclists.
- The proposal makes provision for walking, cycling and the use of public transport.
- The proposal would not generate regular movement of heavy goods vehicles (HGVs) on unsuitable roads, or on roads without easy access to Liverpool City Region's Freight Route Network.
- Vehicle and cycle parking, turning and servicing appropriate to the scale and nature of the development is provided.

2.6.7 **Policy TP5 (Cycling**) states that proposals for new development should:

- Demonstrate that they will have a positive impact on the cycling network and its users;
- Be designed to encourage cycling.
- Provide appropriate cycle access and sufficient, secure cycle parking facilities in accordance with the City Council's current standards.
- Demonstrate best practice in design for cyclists and ensure that the layout is fully accessible for cyclists and encourages and facilitates cycle usage.

2.6.8 **Policy TP6 (Walking and Pedestrians)** states that new development proposals should

- Be designed to actively encourage walking through a well-designed pedestrian environment within the development site;
- Provide appropriate pedestrian access in accordance with the City Council's current standards; and
- Demonstrate best practice in design for pedestrians and ensure that the layout is fully accessible for pedestrians, and encourages and facilitates walking.

2.6.9 **Policy TP7 (Taxis)** developments which are likely to be used by the public and where it would be practicable to do so, will be required to make provision for taxi and Hackney Carriage facilities where there are no existing facilities in close proximity to the site, or where the scale and nature of development will generate a demand for taxi and Hackney Carriage facilities.

2.6.10 **Policy TP8 (Car Parking and Servicing)** states that new developments which generate a demand for car parking or servicing will be required to make provision to meet such demand on site, appropriate to the scale and nature of the development, having regard to road safety considerations and the City Council's standards (including disabled parking), and should incorporate a reasonable percentage of spaces with charging points available at the time the site is first occupied together with provision for additional points over time.

2.6.11 Car Parking should be considered as an integral part of the overall design of the scheme. Development proposals should consider the following key principles in the design to address car parking issues:

- Ensure car parking is usable, safe and secure.
- Avoid car parking dominating the street-scene.
- Use discreet and innovative solutions for car parking.
- Ensure parked cars are unobtrusive.
- Set car parking behind the front of the dwellings where possible.
- Not impede cycling infrastructure

2.6.12 All development proposals should ensure that emergency and refuse vehicles are not impeded by car parking. Within commercial. industrial and non-residential developments adequate provision should be made for parking, servicing and loading without having an impact on the operational effectiveness of development and safe movement of people, vehicles and goods. Proposals should also provide a minimum of 5% of all parking spaces in the development with an electric charging point. Other spaces should also have the capacity to easily retrofit a recharge point for communal use.

2.6.13 **Policy TP9 (Public Transport)** states that public transport usage is an integral part of the design process and in particular should be considered within transport assessments and it should be clear how the issue of ensuring public transport usage as a realistic alternative to private car trips has been addressed wherever appropriate.

- Where a development proposal is of sufficient scale to include an internal highway circulation system for vehicles the design should ensure that it can accommodate bus access.
- Where a development proposal would require the introduction of new public transport infrastructure, including the creation of a new bus service, or the extension of an existing service, then the development should provide suitable financial support for the construction or implementation of appropriate facilities including bringing all properties within 400m of the bus network wherever possible;
- Transport assessments should consider how opportunities could be taken to provide good access to the bus network, including where appropriate provide and improve the infrastructure necessary to support such greater accessibility.. Where this is not upon a new highway layout created by the development, then the development should introduce new infrastructure, or enhance existing infrastructure including where possible the quality of the services available, at appropriate locations on the current public transport network, if this is required to create good access arrangements
- Transport assessments should consider how opportunities could be taken to provide good access to the rail network, including where appropriate the infrastructure necessary to support such access. Design and Access Statements should address how the proposed development relates to and improves access to rail services and networks in terms of:
  – Walking distance and walking routes to stations
  – Cycling distance and cycling routes to stations
  – Convenience of bus access to stations
  – Principal destinations served from the rail stations (covering those destinations with frequent trains and then other appropriate destinations where a change of train may be required)
  – Details of the service frequencies, hours of operation and principal destinations compared with the opening hours and demands of the development during the day, and
  – Whether the station offers attractive waiting facilities, adequate shelter, perceived social safety and facilities for ease of access for all.

2.7 Liverpool City Centre Strategic Investment Framework (2012)

2.7.1 The Liverpool City Centre Strategic Investment Framework (SIF) presents an ambitious strategy to guide investment across the City Centre over the 15 years following its adoption in 2012.The SIF has been designed to *“promote strategically identified economic priorities… to play to, and enhance, the city’s competitive strengths”* (p. 7).

2.7.2 The SIF recognises the City Centre’s relationship with the recently created Mayoral Development Zones, particularly North Liverpool Zone in which Goodison Park lies.

2.8 Merseyside Local Transport Plan 3 (2011)

2.8.1 The Merseyside Local Transport Plan 3 (LTP3) became active in April 2011 with a vision to provide “a city region committed to a low carbon future, which has a transport network and mobility culture that positively contributes to a thriving economy and the health and wellbeing of its citizens and where sustainable travel is the option of choice” (para. 8).

2.8.2 To achieve this vision, six goals have been set out which include the need to “provide and promote a clean, low emission transport system”, “ensure the transport system promotes and enables improved health, wellbeing and road safety” and “ensure equality of travel opportunity for all, through a transport system that allows people to connect easily with employment, education, healthcare, other essential services and leisure and recreational opportunities” (para. 10).

2.8.3 Both short and long-term aspirations to support the wider regeneration of North Liverpool emerged as priorities for the LCR, with Chapter 5 – ‘The Strategy’ of the LTP3 calling for; *“highway and/or UTC improvements to support commercial, leisure and residential schemes”* with specific recognition of supporting football stadium developments (p.106).

2.9 Liverpool City Region Transport Plan for Growth (2015)

2.9.1 A Transport Plan for Growth sets out the City Region’s strategic vision and delivery plan for transport and strives to foster greater collaborative working across the Combined Authority. The plan consolidates the Merseyside and Halton Local Transport Plans into one unified vision as a *“strategic direction for transport which supports growth, regeneration and carbon reduction.”* The plan’s framework to realise this vision is illustrated below in Figure 3.

Figure 3: A Transport Plan for Growth

Source: Merseytravel

2.10 Liverpool City Region Local Journeys Strategy (2018)

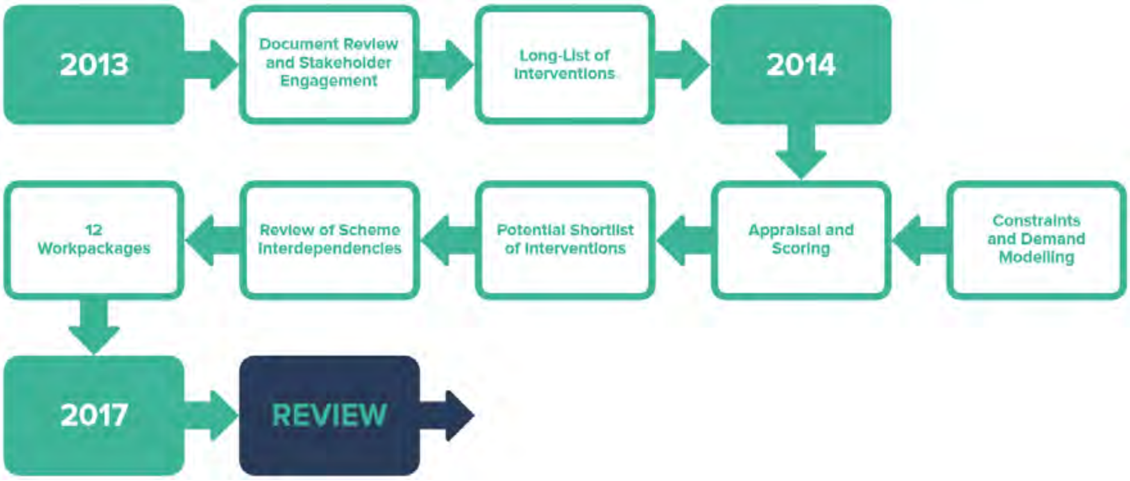
2.10.1 The Local Journeys Strategy presents the Liverpool City Region Combined Authority's framework for guiding the development of services and infrastructure that support sustainable short trips across the City Region. The Strategy assists the City Region in delivering its aspirations for economic growth by supporting the use of low-carbon modes and improving access to jobs and services.

2.10.2 As part of the key objectives for achieving its long-term vision, the plan states that; "Planning and promoting sustainable transport options as part of an integrated approach to development and regeneration can help create the conditions for healthier, happier and more economically productive places where people have a genuine choice about how they get around" (para. 5.1).

2.11 Liverpool City Region Long Term Rail Strategy (2018)

2.11.1 The Liverpool City Region (LCR) Long Term Rail Strategy sets out a "systematic and evidence-based approach to developing the rail network" (p.1) across the LCR. In short, the strategy presents "an ambitious vision of a network that meets future passenger needs and opens up economic opportunity" (p.5), developed via the process summarised in Figure 4.

Figure 4: The Long-Term Rail Strategy Process



Source: Liverpool City Region Combined Authority

2.11.2 For the City Region, a range of developments for the rail network are put forward with the aim to ensure the network meets the LCR's needs over the next 30 years and beyond. Within the committed projects package, the replacement of the current Merseyrail rolling stock, expected to commence delivery from 2020, would see both increased capacity and reduced journey time on the network.

2.12 Merseyside Active Travel Strategy (2011)

2.12.1 The Merseyside Active Travel Strategy (MATS) is included within Appendix 6 of the LTP3 and is concerned with walking and cycling, collectively known as active travel.

2.12.2 It seeks "to deliver health, economic, low carbon and social benefits through improving the walking and cycling environment, enabling interventions and targeted marketing to incite behavioural change."

2.12.3 Its aims are:

(a) Improving the cycling and walking environment by creating a clear route network, infrastructure improvements and facilities that will encourage a greater number of walking and cycling trips;

(b) To support adults and children to be able to choose cycling and walking by providing enabling interventions and information; and

(c) Behaviour change marketing of active travel modes to raise awareness of, encourage and sustain walking and cycling so that they become the mode of choice for short distance trips.

2.12.4 To achieve these aims a number of interventions have been proposed. Those which are of particular interest to the proposed redevelopment of Goodison Park are:

(a) ensuring the road user hierarchy is used to create safe pedestrian and cycle friendly environments in residential areas and centres;

(d) providing connections between cycle and pedestrian friendly areas to create routes for active travellers;

(l) continuing to provide information in the most relevant and accessible format.

2.13 Summary

2.13.1 This section has outlined the statutory policies as well as transport strategies and guidance relevant to the proposed development.

2.13.2 The proposed development, as set out in detail in the Planning Statement and Design and Access Statement, which are included in the suite of planning application documents, aligns with and complements many of the policies, guidance and strategies summarised within this Section. It is important to note that the proposals within this TA seek to ensure that residents, visitors and staff at the site will have a range of transport options available to them.

2.13.3 A review of how the proposed development complies with the appropriate policies is presented within our conclusions in Section 9.

3 Baseline transport conditions

3.1 Introduction

3.1.1 This section provides details of the existing transport conditions in the vicinity of the proposed development site, in particular this section highlights highway access and accessibility through sustainable modes including public transport, walking and cycling.

3.2 Site observations

3.2.1 A site visit was undertaken on Tuesday 2nd April 2019 to understand existing conditions on a non-matchday. The visit covered a morning and consisted of a walkover of the local roads around the site, the key highway routes in the area, as well as exploring the active travel links to Kirkdale Station.

3.2.2 Our site visit and traffic surveys (explored in more detail in Section 5) have informed the development of this TA, and the production of this baseline section which details the existing transport conditions around the proposed site.

Figure 5: Goodison Road

Source: Mott MacDonald

Figure 6: Gwladys Street

Source: Mott MacDonald

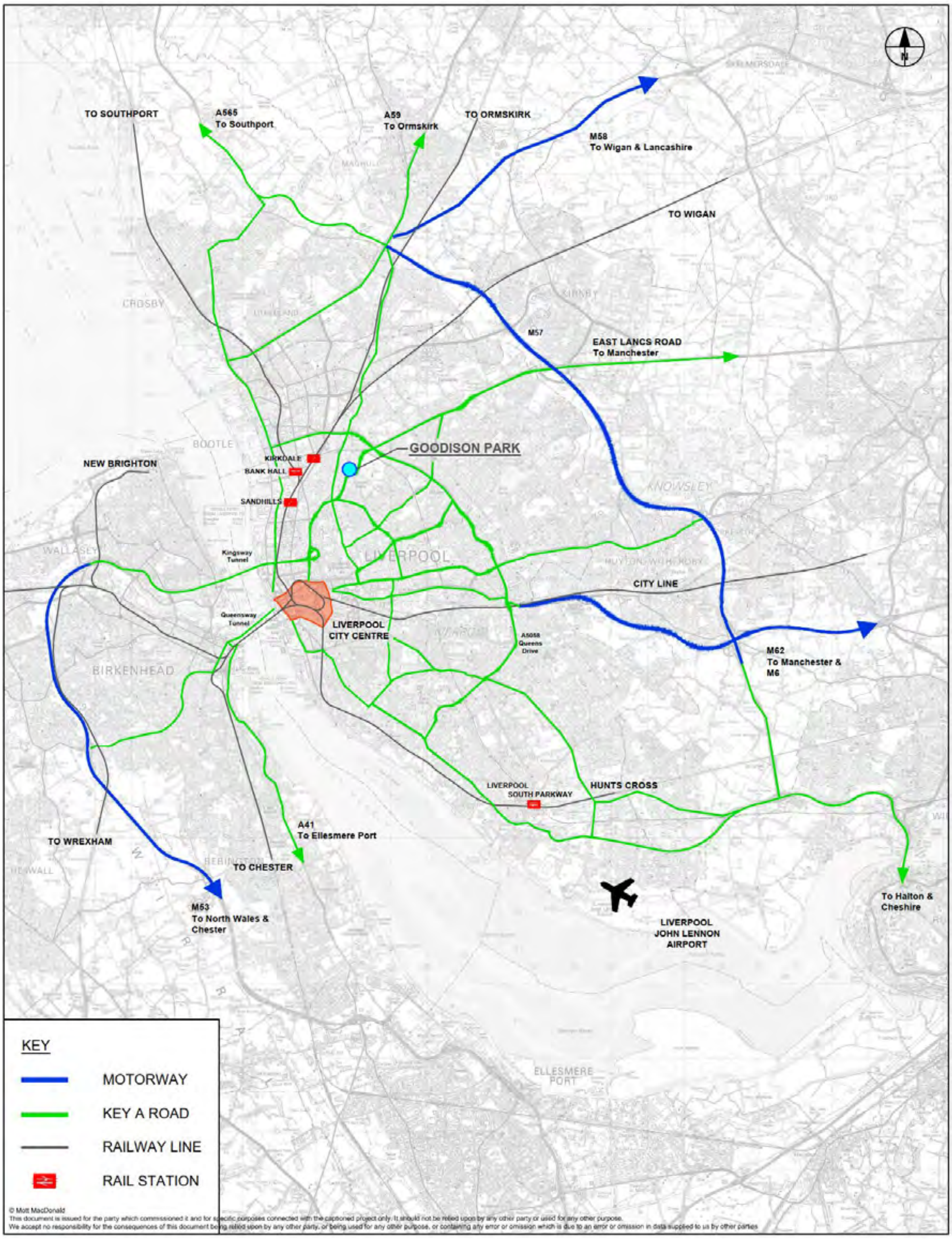
3.3 Site location

3.3.1 The proposed site is located in Walton, an inner suburb of Liverpool approximately 4km north of the City Centre. This area of Walton is predominantly residential, characterised by compact terraced housing on the surrounding streets. Goodison Road and Gwladys Street in Figure 5 and Figure 6 are typical of the residential streets that the surround the stadium.

3.3.2 The Church of St Luke the Evangelist is located adjacent to the north west corner of the site and several pubs and shops are situated in the area, supporting current matchday activities and local residents. The Club's community facilities: the Blue Base, the People's Hub, and Everton Free School and Football College are all located to the west of the stadium. Within the local area, there are large open spaces with Stanley Park and Anfield Cemetery situated to the east and south of the site.

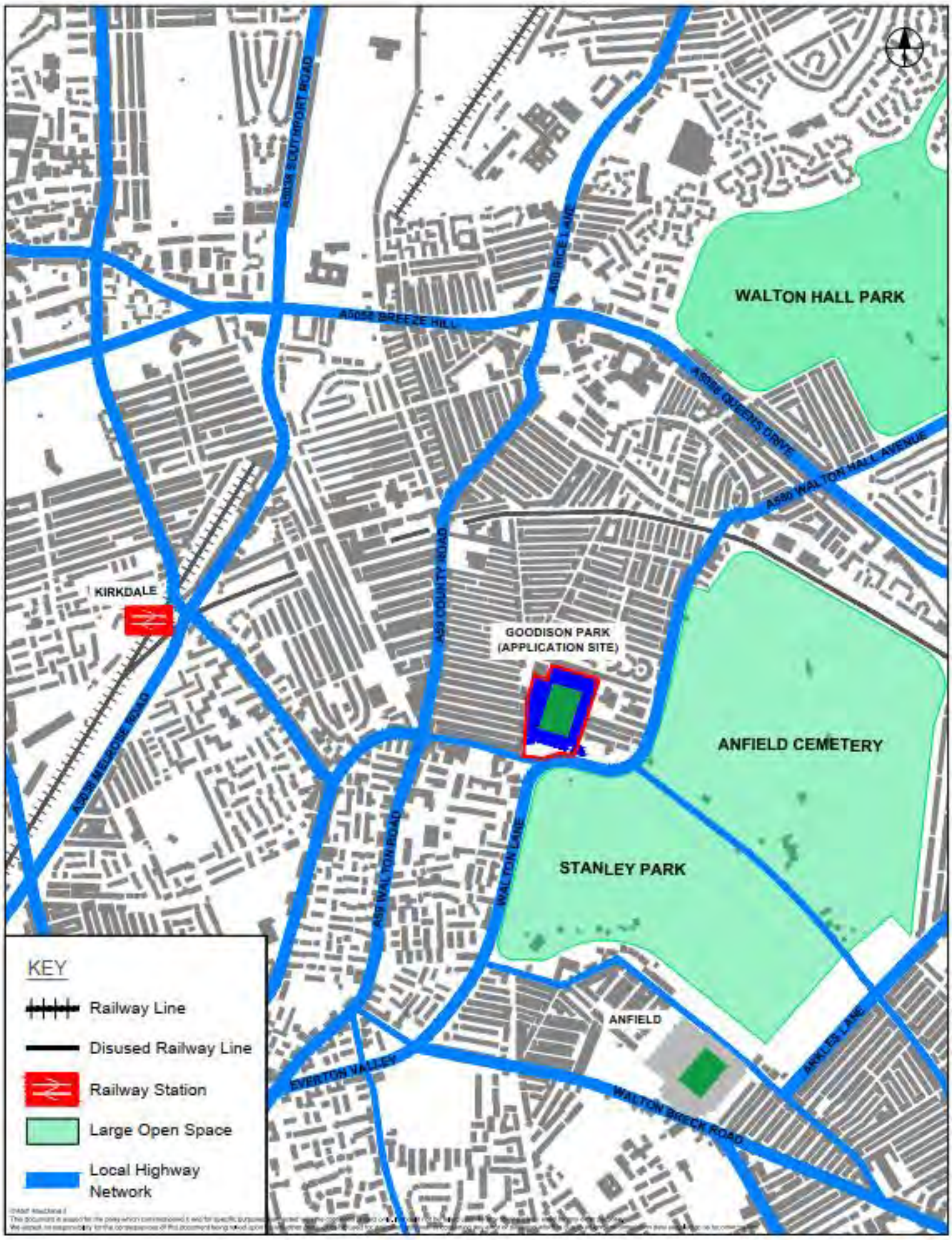
3.3.3 The site is well served by road with three primary routes situated close to the site; namely the A59 County Road to the west, A580 Walton Lane to the east and south and A5058 Queens Drive located further north. Figure 7 shows the strategic location of Goodison Park in relation to the highway and rail network in the region. Figure 8 illustrates the site location in more local context with Figure 9 highlighting the local road network.

Figure 7: Strategic Site Context



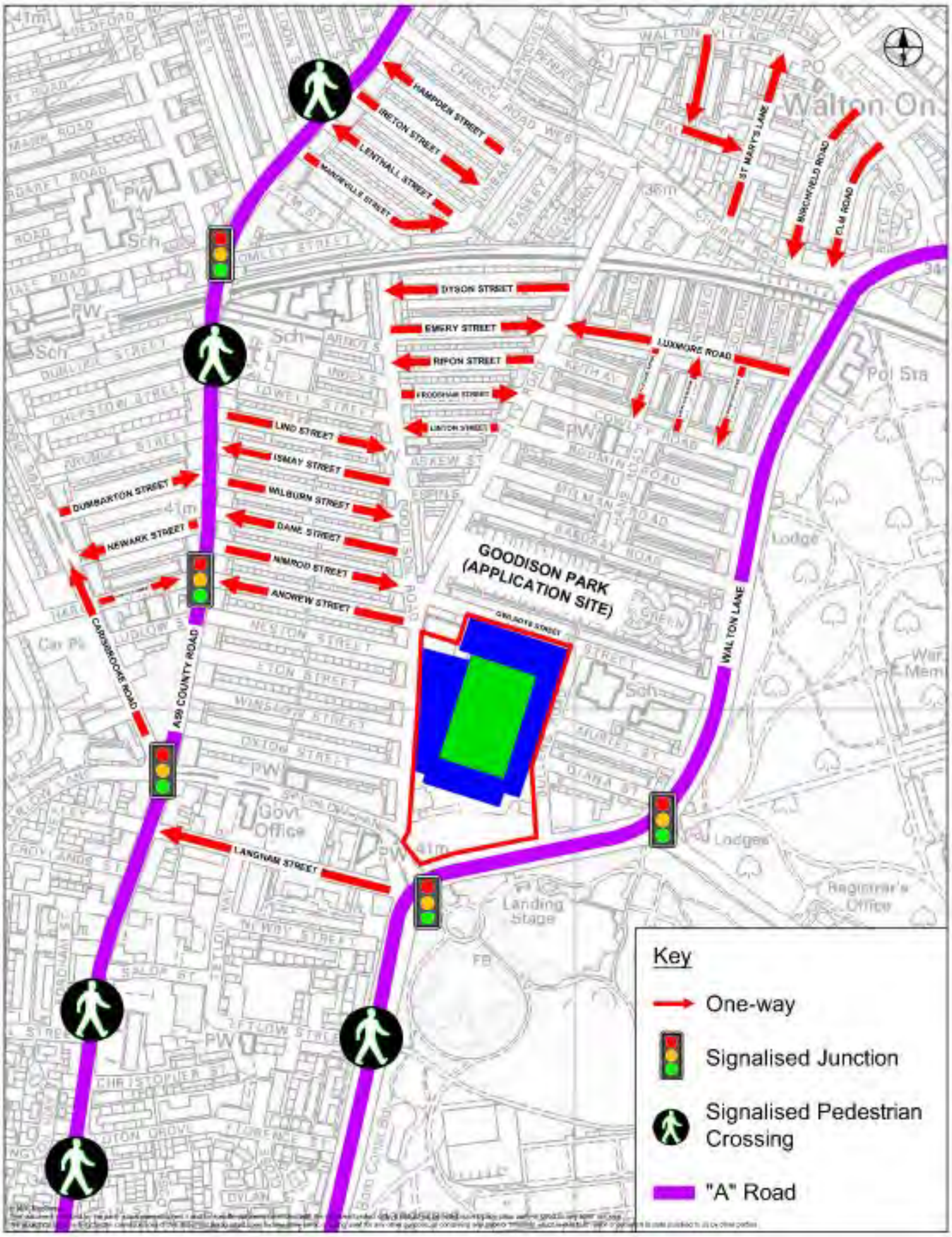
Source: Mott MacDonald

Figure 8: Local Context



Source: Mott MacDonald

Figure 9: Local Road Network



Source: Mott MacDonald

3.4 Highway access

Strategic routes

3.4.1 A580 Walton Lane runs to the southern and eastern boundary of the site and forms part of the Liverpool City Region's 'Key Route Network'. A580 Walton Lane runs northwards past the development site to the junction with the A5058 Queens Drive, which is the inner-city ring road for Liverpool. Queens Drive connects Bootle and the Port of Liverpool to the north of the city centre with Aigburth to the south of the city centre and includes a direct link to The M62. From the junction with the A5058 Queens Drive, Walton Lane becomes the A580 Walton Hall Avenue which continues eastwards to Greater Manchester (this section is more commonly known as the East Lancashire Road). In the vicinity of the site Walton Lane is a four-lane dual carriageway subject to a 30mph speed limit (pictured in Figure 10).

3.4.2 A59 County Road is located approximately 250m west of the site and runs from the city centre in the south to Switch Island in the north for access to the M57 and M58. County Road forms part of the Liverpool City Region's 'Key Route Network'. In the vicinity of the development site A59 County Road is a four-lane single carriageway road subject to a 30mph speed limit (Figure 11).

Figure 10: A580 Walton Lane

Source: Mott MacDonald

Figure 11: A59 County Road

Source: Mott MacDonald

Local Access

3.4.3 Highway access to the site is from Goodison Road, Bullens Road and Gwladys Street which form boundaries to the development site. All these streets are residential streets with footways along both sides of the carriageway. The streets are subject to a 30mph speed limit.

3.4.4 Vehicular access to the site is via Goodison Road to the stadium car park, to the south of the stadium building. A secondary access is also available on Bullens Road however this is typically only used on match days.

3.4.5 Spellow Lane, Barlows Lane and Westminster Road are also 30mph, which provide connectivity between the area's A-road network.

3.4.6 The local highway network is identified in Figure 9. There are a series of one-way streets that operate throughout the residential streets in the surrounding area, these are identified in Figure 9 showing the direction of movement. Most of the local residential roads close to Goodison Park which join County Road such as Andrew Street (Figure 12) and Nimrod Street (Figure 13) are subject to a 20mph speed limit and are used primarily for local access.

Figure 12: Andrew Street

Source: Mott MacDonald

Figure 13: Nimrod Street

Source: Mott MacDonald

Parking

3.4.7 The local road network in the immediate vicinity of the site is subject to parking restrictions in the form of a Football Match Parking Zone (FMPZ). This extent of this area described in more detail in Section 4.6.

3.4.8 The restrictions mean that parking on the streets surrounding Goodison Park and also nearby Anfield Stadium is limited to residents, businesses and their visitors only (displaying a permit). The restrictions are in place:

- Monday to Friday 5pm to 10pm; and
- Saturday and Sunday 10am to 6pm;
- Between 1st August and 31st May.

The reason the restrictions are in place is to protect the amenity of residents and businesses local to Goodison Park and Anfield Stadium so that when matches are played, or major events held that local streets do not become congested with traffic.

3.5 Public transport

Bus travel

3.5.1 Goodison Park is served by multiple bus routes that offer frequent services running from Liverpool City Centre to a range of local centres within the city region. Bus services provide access to a range of destinations including Kirkby, Bootle, Aigburth, Aintree, Maghull, Netherton, Wavertree, Croxteth and Skelmersdale, most of which link directly to Liverpool City Centre.

3.5.2 Table 1 shows the key bus routes that have been reviewed as part of this baseline analysis, outlining the routes and levels of frequency that serve Goodison Park. The routes are illustrated in Figure 14. All these services can be caught from A580 Walton Lane or the A59 County Road.

Table 1: Bus Services Serving Goodison Park

Route No.	Route	Frequency Per Hour			Operator
		Peak	Mon-Sat Daytime	Evening and Sun	
19	Liverpool – Gilmoss, Croxteth, Kirkby or Kirkby Admin	6	6	4	Stagecoach
20	Liverpool – Tower Hill	5	5	3	Stagecoach
21	Liverpool - Northwood	5	5	3	Stagecoach
58/58A	Liverpool – Netherton	2	2	1	Arriva
68/68A/68E	Bootle - Aigburth Vale or Old Swan	4	3	2	Arriva
159	Aintree University Hospital – Walton Park, Bootle	2	2	1	Merseytravel
310	Liverpool – Maghull or Skelmersdale	2	2	1	Arriva
345	Liverpool – Waddicar	2	2	1	Arriva
X3	Liverpool – Kirkby/Knowsley Industrial Park	1	1	0	Stagecoach

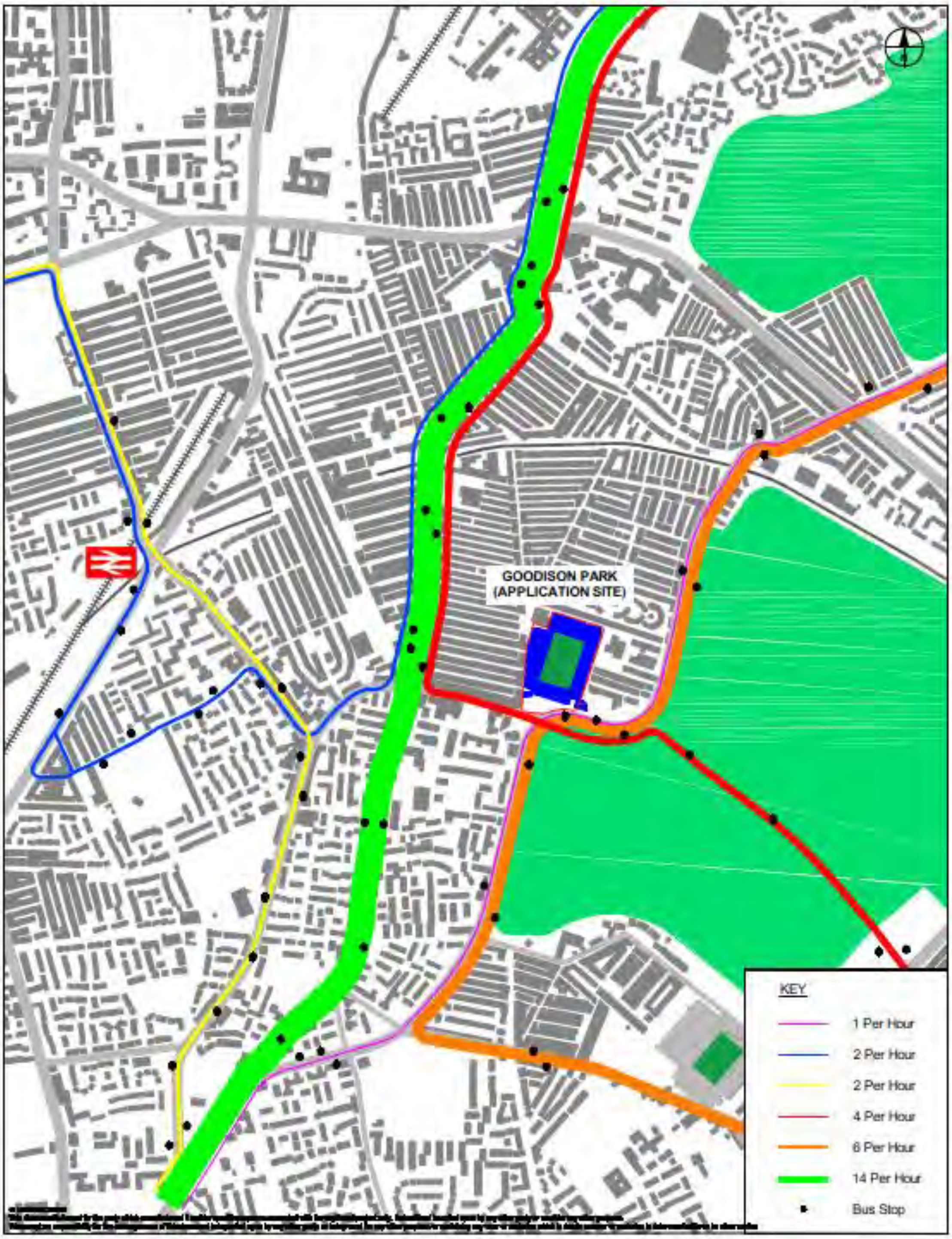
Source: Merseytravel

3.5.3 The key bus corridor is along the A59 County Road which has up to 20 services operating along the route at peak periods in each direction. There are also services operating along Walton Lane and Priory Road, albeit of less frequency, linking to areas to the east of Goodison Park. The levels of frequency are shown in Figure 15, as well as the bus stops that are situated in the area around the site.

Figure 14: Local Bus Routes

Source: Mott MacDonald

Figure 15: Local Bus Frequencies



Source: Mott MacDonald

Train travel

3.5.4 The closest rail station to Goodison Park is Kirkdale. This is situated on Merseyrail's Northern Line and supports services from Liverpool Central to both Ormskirk and Kirkby. The station is located approximately 1km (around 12 minutes' walk) to the west of the site.

3.5.5 Trains operate throughout the day from Kirkdale Monday to Saturday at a frequency of 8 trains per hour towards Liverpool. This equates to 15-minute frequency towards Kirkby and Ormskirk respectively. This level of service is reduced by half on both lines (30-minute frequency) in early morning and evenings, as well as on Sundays.

3.5.6 From Kirkdale, interchange with Liverpool Lime Street for regional and national services including to Manchester, Wigan, Preston, St. Helens and Warrington is available via Moorfields (change to the Wirral Line) or Liverpool Central (a short connecting walk). All services running to the city centre from Kirkdale call at Moorfields and Liverpool Central.

3.5.7 Sandhills station situated one stop south of Kirkdale offers interchange on the Merseyrail network to access services between Southport and Hunts Cross, including onward connectivity to Liverpool John Lennon Airport. Bank Hall is also located on this line, one stop north of Sandhills and is approximately 2km to the west of the site (around 25 minute walk).

3.5.8 Services run between Hunts Cross and Southport at a 15-minute frequency in each direction Monday to Saturday daytime and evening. On Sunday services run at 30-minute frequency in each direction.

3.5.9 Although both Kirkdale and Bank Hall stations may be outside of some people's comfortable walking distance, they are both located well within cycling distance. Furthermore, at Kirkdale station the 159 bus stops directly outside. This service also stops on the A59 County Road, close to the development site, so connecting travel by bus to the train station is available.

3.6 Active travel

3.6.1 The study area benefits from a well-connected network of walking routes. The site is located within a well-established residential area and the local standard of footways near the site reflect this. The roads in the immediate area consisting of Goodison Road, Bullens Road and Gwladys Street feature footways on both sides of the carriageway with dropped kerbs and tactile paving to provide suitable crossing points within the area.

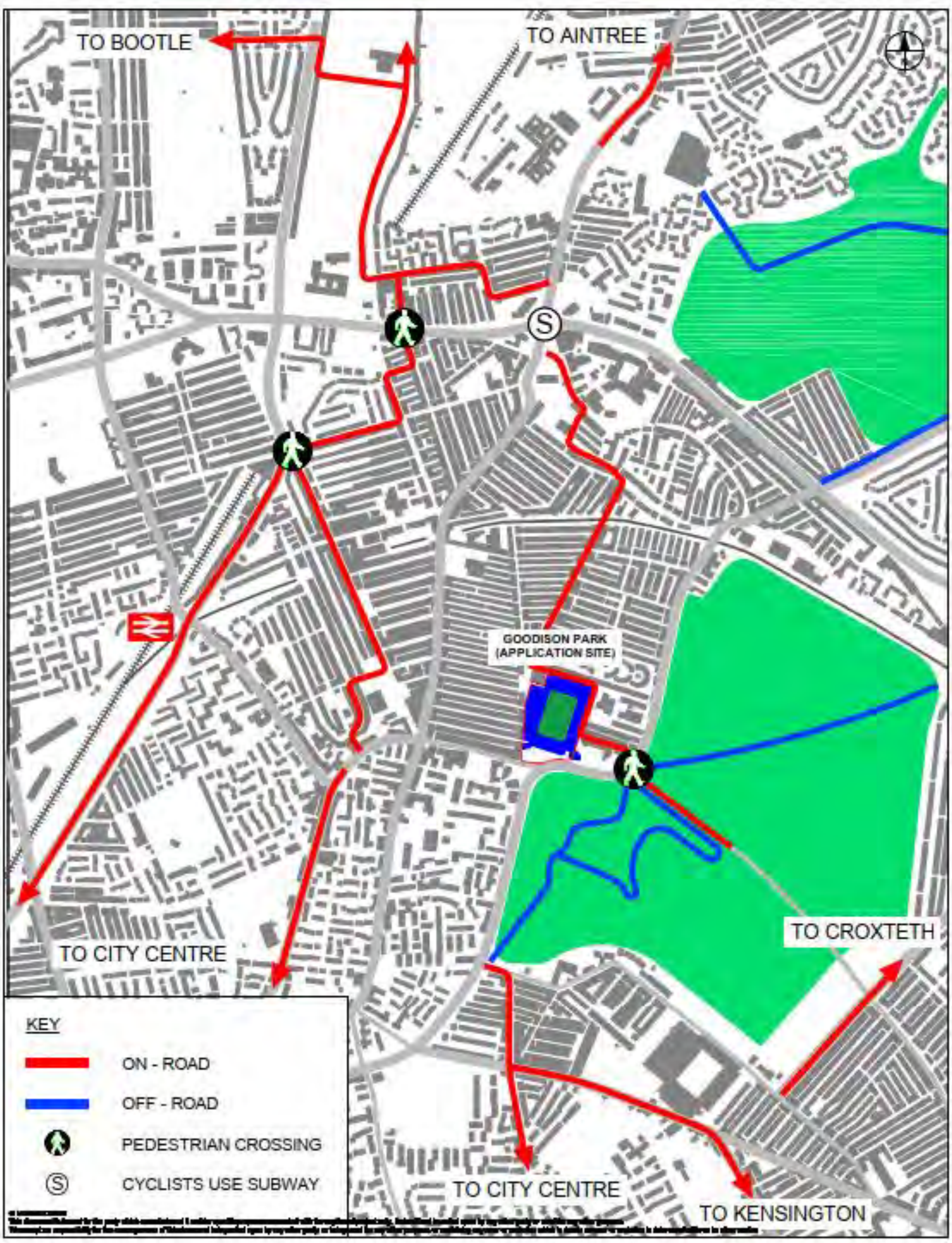
3.6.2 There are also several signalised crossings in the wider area, particularly on key highway routes including the A59 County Road and A580 Walton Lane. Several of these crossings are signal controlled and support safe pedestrian and cyclist movements across the roads. This limits severance in the area caused by highways and encourages pedestrian movements between key destinations to/from the site including Kirkdale station, Stanley Park and local shops and services particularly along the A59 County Road.

3.6.3 The importance of high-quality pedestrian and cyclist crossing points ensures that communities remain connected in the area and reduce road traffic collisions, particularly involving vulnerable road users. The location of signalised pedestrian crossings where provided as standalone facilities or as part of signal junctions is shown in Figure 8.

3.6.4 Figure 16 shows the on-road and off-road cycle routes that are signed within the study area, as well as marked crossing points that support cycle movements to cross the highway network at certain locations.

3.6.5 There is an on-road cycle route signed from Stanley Park past the stadium via Bullens Road, Gwladys Street and Goodison Road, northwards to the A59/A5058 junction. This route provides a signed route linking from the city centre via Stanley Park northwards towards Bootle and Aintree. There are several other signed routes in the area that are signed on-road for cyclists including on Walton Breck Road to the south and to the west along Melrose Road and Westminster Road.

Figure 16: Cycle Routes



Source: Mott MacDonald

3.7 Access to amenities

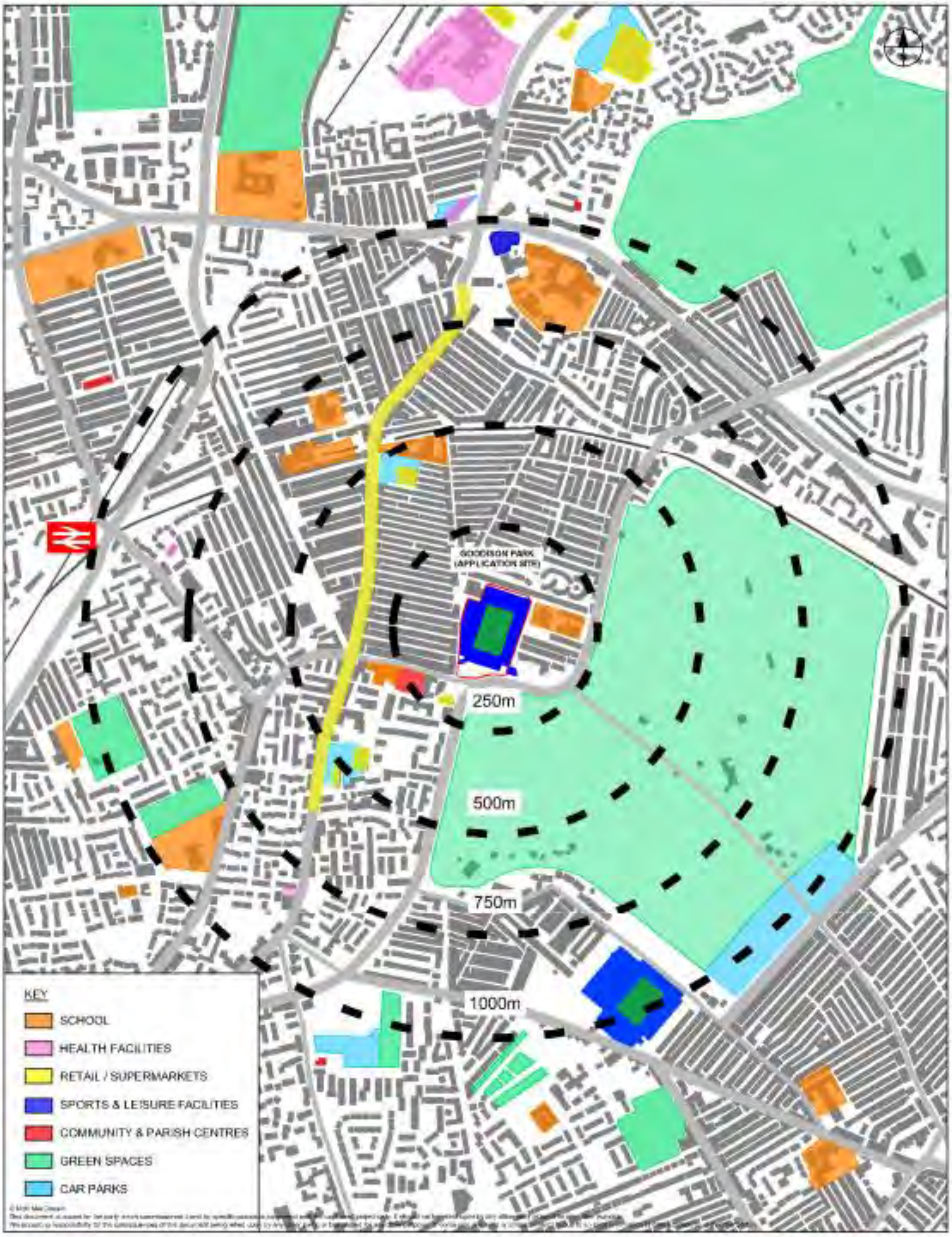
3.7.1 Figure 17 shows the proximity to amenities from the site, including distances to retail and supermarkets, health facilities, schools and rail stations. Overall, Goodison Park is well served by local amenities with the A59 County Road serving as a local centre featuring many retail uses and related services. This local centre is situated within 500m of Goodison Park

3.7.2 There are large parcels of open space surrounding Goodison Park, including Stanley Park and Walton Hall Park, as well as smaller pockets of green space extending beyond 1km. Within 1km of the site there are a variety of schools, with the Everton Free School & Football College and Gwladys Street Primary School within 250m of the site.

3.7.3 There are several medical centres in the area, both Westminster and Kirkdale Medical Centres are situated approximately 750m away from the site. There is also a large medical centre situated 1000m north of the site at the A5058/A59 junction, which is Breeze Hill Neighbourhood Health Centre.

3.7.4 We consider that the site is well located for access to local amenities within a reasonable walking distance. We consider that on account of this many future residents will not resort to car travel for day to day shopping or leisure trips. Similarly, the uses proposed within this application, which could include a new healthcare centre, open space, education facility and other community uses, are to be located in a residential area, which means that existing residents in the local area will be able to travel to these new facilities by active modes or public transport.

Figure 17: Access to Local Amenities



Source: Mott MacDonald

3.8 Road traffic collisions (RTCs)

3.8.1 A review of RTC data provided by LCC for the immediate area surrounding the stadium has been undertaken. The area includes parts of Walton Lane, Spellow Lane, Goodison Park Road, Gwladys Street and Bullens Street. The data obtained covers a 5-year period of January 2014-December 2018. Figure 18 shows the distribution of RTCs across this 5-year period.

3.8.2 In total, 26 RTCs have been recorded of which 20 resulted in slight injuries and 6 resulted in serious injuries. No RTCs resulting in fatalities have been recorded within this period. A further breakdown of RTC severity by year is also provided below in Table 2.

3.8.3 Of the 26 collisions, 8 involved pedestrians, 3 involved cyclists and 6 involved motorcyclists. There are a few clusters of incidents which have been observed, the most notable being at the Walton Lane/Spellow Lane/Langham Street junction. This junction has experienced a total of 7 collisions including 1 serious collision involving a pedestrian. The junctions of Walton Lane/Priory Road and Goodison Road/City Road/Gwladys Street both show small clusters of RTCs with a total of four RTCs at both sites respectively.

3.8.4 We consider that given the volume of traffic that passes on Walton Lane (approximately 24,000 vehicles per day), this level of accident frequency is not unusual for an urban network. It should be noted that Liverpool City Council are committed to improving the Walton Lane junctions with the A59 and Priory Road. These improvements will be implemented by the end of 2019 / early 2020 and will include enhanced pedestrian crossing facilities at the junctions.

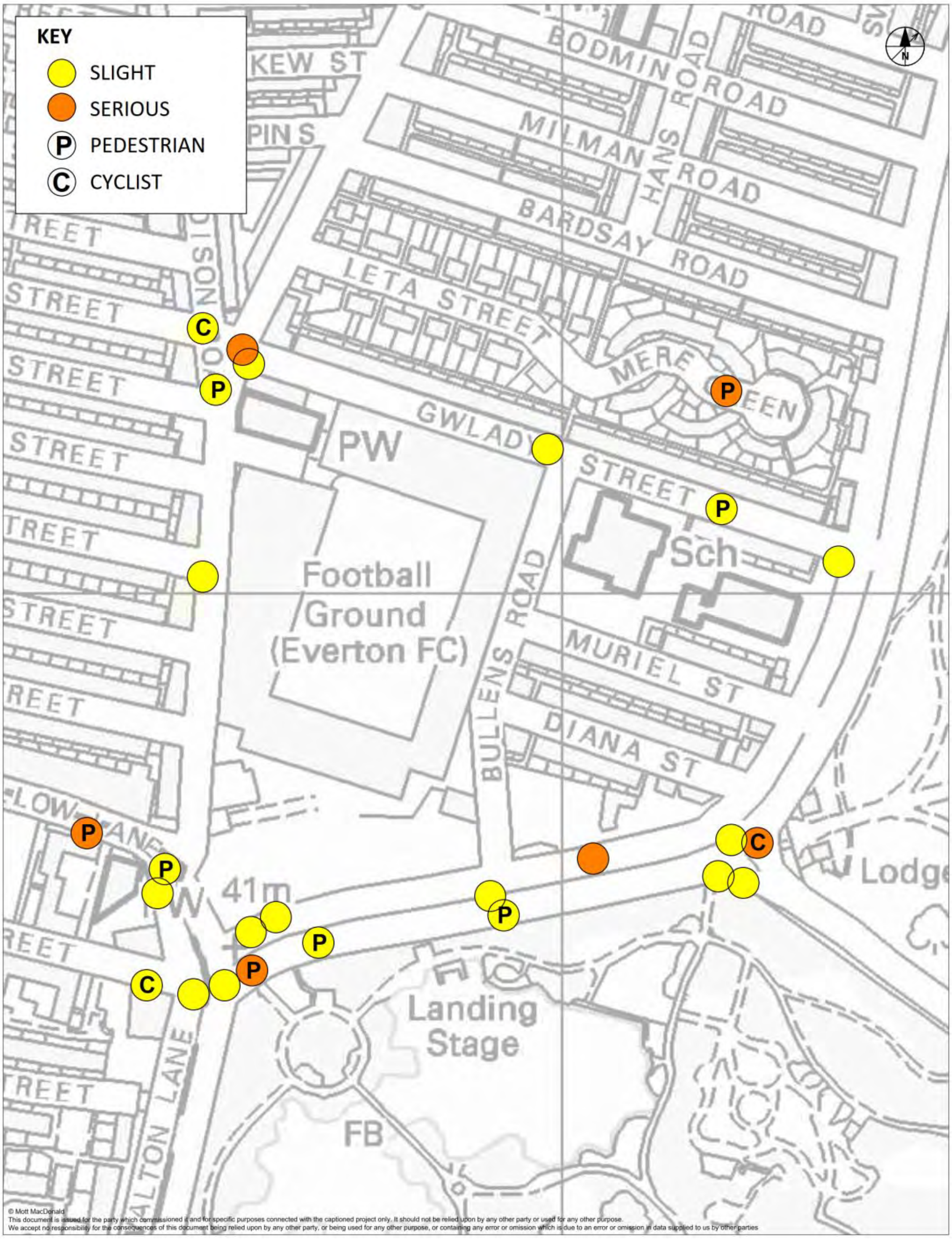
3.8.5 It should be noted that in scoping the Transport Assessment, LCC did not identify that there was an existing RTC problem within the study area nor that there were any known accidents. This review of RTCs concludes that there are not any significant road safety issues that exist on the local highway network surrounding the site. As such, the proposed development is not expected to negatively impact upon local road safety in the area.

Table 2: Collision Severity Overview

Year	Slight	Serious	Fatal	Total
2014	2	2	0	4
2015	7	0	0	7
2016	7	0	0	7
2017	3	3	0	6
2018	1	1	0	2
Total	20	6	0	26

Source: Liverpool City Council

Figure 18: Road Traffic Collisions



Source: Mott MacDonald

3.9 Future development

3.9.1 This section provides an overview of the committed developments in the area, taking into account any proposed transport interventions that have been included within the proposals. In scoping MM has discussed with LCC Highways the proposals in the vicinity of the development site which could have an impact on the transport network.

Walton Lane 18F/1316

3.9.2 Application reference 18F/1316 has been approved by Committee and is awaiting the completion of a Section 106 Agreement before the decision notice is issued. The scheme is a residential development located directly to the east of Goodison Park. The site is bounded by Walton Lane, Bullens Road and Diana Street, as shown in Figure 19.

Figure 19: Walton Lane Development – Proposed Site Plan

Source: AFL Architects

3.9.3 The proposals are for a multi-storey block comprising 106 flats together with associated landscaping and ancillary works and including a surface level car park with 42-spaces. Vehicular access is proposed via Bullens Road.

3.9.4 The application states that the development would not be considered to have a material impact on the functioning of the surrounding highway network. There is no assessment of traffic impact of the development in the Transport Statement which accompanied the planning application on account of the moderate scale of development and limited parking spaces provided.

3.9.5 The site is currently in use as a car park for match day use. Outside of match days the site is not currently in use.

Liverpool City Council highway improvements

3.9.6 LCC have commissioned two highway improvement schemes at the following junctions listed below:

- Walton Lane / Spellow Lane- Improved pedestrian facilities and new traffic signal equipment
- Walton Lane/Priory Road- Improved pedestrian facilities and new traffic signal equipment

3.9.7 The two Walton Lane schemes, which will be completed this year are focussed at enhancing pedestrian facilities at these locations. LCC has provided details of the schemes at Priory Road and Spellow Lane for inclusion in Mott MacDonald's junction assessments (Section 8).

3.10 Summary

1.1.1 This section has reviewed the accessibility of Goodison Park by road, public transport, walking and cycling. It also provides an overview of RTCs occurring in the local area and future developments.

- Goodison Park is well located for access by road with good connections to the A580 Walton Lane and A59 County Road and wider strategic routes.
- The development site is located within a 15-minute walk (1km) of Kirkdale train station which provides high frequency services between Liverpool City Centre, Ormskirk and Kirkby. The site is located within 2km of Bank Hall train station which provides high frequency services between Southport and Hunts Cross.
- A59 County Road and A580 Walton Lane are both key bus corridors and are located close to the site. Between these routes bus service frequency is around 28 buses per hour through the day.
- The site is well located for active travel. As a well-established residential area pedestrian provision is of a good standard and there are a variety of on and off-street cycle routes in the area.
- Goodison Park is well located for access to local amenities with local shops, health facilities, schools and community facilities within walking distance. We consider that on account of this many future residents will not resort to car travel for day to day shopping or leisure trips. Similarly, the uses proposed within this application, which could include a new healthcare centre, open space, education facility and other community uses, are to be located in a residential area, which means that existing residents in the local area will be able to travel to these new facilities by active modes or public transport.
- A review of RTC's in the local area demonstrates that there is not a serious road safety issue in the vicinity of the development site.
- Future developments in the local area include a residential development adjacent to the site on Bullens Road and junction improvements to be implemented by Liverpool City Council on Walton Lane. These will be taken account of in the impact assessments included in Section 8.

4 Goodison Park baseline: matchday and non-matchday operation

4.1 Introduction

4.1.1 This section provides an overview of the current operation and use of the stadium on match days and non-match days in transport terms. The review provides detailed context to the baseline transport conditions explored in the previous section and the review of traffic data which is included as Section 5. The section covers the following topics:

- Everton related community facilities in the local area.
- Stadium uses, staffing and car parking on match days and non-match days;
- Match day traffic management measures;

4.2 Everton facilities in the wider area

4.2.1 Figure 20 illustrates the location of Goodison Park in the context of other community led facilities run by Everton in the local area including:

- Blue Base: Salop Street community facility;
- Everton Free School & Football College: Spellow Lane educational facility for young people aged between 14 and 16 years.
- Everton in the Community People's Hub: Spellow Lane community facility;
- Everton One: Walton Lane club shop.
- Everton in the Community (EitC) Offices: Goodison Road offices within existing terraced housing units.

4.2.2 It should be noted that these nearby facilities do not form part of this planning application. It is intended that these facilities – with the exception of the club shop - will remain in place and continue to be operational following the redevelopment of Goodison Park. Everton's presence within the Walton community will continue. The club shop is not owned by the club and is leased. Following relocation, the club does not anticipate renewing this lease.

4.3 Stadium facilities

4.3.1 The capacity of Goodison Park currently sits at around 39,500 supporters. Goodison Park has been the home of Everton Football Club since 1892 and is referred to as the first major football stadium built in England. The four stands cover much of the application site, with the exception of the southern portion of the site, which comprises hardstanding (surface car parking). The pitch occupies a north-south orientation and is surrounded by four stands:

- Goodison Road stand or Main Stand (west)
- Gwladys Street stand (north)
- Bullens Road stand (east)
- Park End stand (south)

Figure 20: Existing Goodison Park Stadium Layout

Source: Mott MacDonald

4.4 Non-match day uses

Stadium

4.4.1 The stadium houses hospitality facilities in the Main Stand and Park End which operate throughout the week. These are currently used internally by the Club for training and EitC events and are also made available for hire by other parties for various purposes, typically banqueting, events (such as weddings), meetings and conferences.

4.4.2 Interactive stadium tours also take place on non-match days, at least five days a week. The stadium Box Office at the Park End is open through the week and on Saturdays. The club also operates offices and two receptions (one at the Park End and another on Goodison Road) through the working week.

Staff

4.4.3 The majority of the stadium's on-site non-match day employees comprise a mixture of maintenance, hospitality and security staff, alongside Everton and EitC operational staff. Table 3 provides an approximate typical breakdown of non-match day staff that work within the stadium. It should be noted that the staffing levels can increase with the hosting of a major event in the hospitality facilities.

Table 3: Non-Matchday Staff Breakdown

Staff Category	Number of Staff	Breakdown
Operational Staff	12	Office Based – 9 | IT On-Site – 2 | Reception – 1
Maintenance & Ground Staff	10	
Hospitality	10	
Security Staff	3	Patrol/Control Room – 3
Total	**35**	

Source: Everton Football Club

Car park

4.4.4 On non-matchdays, the stadium car park is accessible primarily via Goodison Road. The results of a manual survey undertaken by car park staff is provided in Table 4 which shows typical car park occupancy through the working weekday. The car park is sometimes also used by EitC staff and Free School staff.

4.4.5 It should be noted that all operations, maintenance and security staff will be relocated to Bramley-Moore Dock once the new stadium is open. The intention is for EitC to be relocated on-site as part of the proposed development in new offices which will include allocated off-street parking. Staff at the Free School who currently park at Goodison Park will park at the existing car park at the Blue Base facility once the stadium is redeveloped.

Table 4: EFC Car Park Staff Survey – Friday 10th May 2019 07:00-10:00

Staff Category	Number of Vehicles
Everton Staff	23
EitC Staff	11
Sodexo (catering)	2
Free School Staff	12
Blue Base	0
Hub	0
Cleaners	1
Lounge Workers & Builders	23
Security Staff	1
Minibuses	7
Pool Cars	5
Total	**85**

Source: Everton Football Club

4.4.6 The site has capacity for around 300 cars on non-match days, accordingly it is clear that on non-matchdays the car park is underutilised.

4.4.7 It should be noted that on non-match days the Park End car park is occasionally used for football parking associated with matches at Anfield Stadium. On these occasions vehicles may enter and exit the car park via the main access on Goodison Road and also the secondary access on Bullens Road.

4.5 Matchday uses

Typical frequency of fixtures

4.5.1 On average, over the past five complete seasons up to and including the 2018/2019 season there have been a total of 24 first team fixtures per season played at Goodison Park between August and May. The variations in this figure depend on the participation and stage of progression in cup competitions, which, across the past five seasons, have included the FA Cup, the EFL Cup and the Europa League.

4.5.2 On average, two thirds of all fixtures are played on a weekend while all weekday fixtures (excluding bank holidays) kick-off no earlier than 19:45. As is generally consistent with major English football stadia, the majority of fixtures occur on a Saturday with most of these matches kicking-off at 15:00. Sunday fixtures are more spread over the three-hour period between 13:30 and 16:30.

Staff

4.5.3 On match days around 1,200 staff work at the site. It should be noted that match day staff are classed as people who are working at the stadium on match day, accordingly this includes people not directly employed by the Club including media, police and ambulance. A breakdown of staff for a typical matchday is provided in Table 5 below.

Table 5: Matchday Staff Breakdown

Category	Number of Staff
Hospitability Staff	250
Media Staff	200
Information & Hosting Staff	170
Security & Safety Staff	500
Management Staff	60
Other	30
Total	**1,210**

Source: Everton Football Club

Car park

4.5.4 On matchdays the Park End car park is reduced in size to accommodate the Everton Fan Zone as well as broadcasting / media vehicles. Accordingly, the capacity of the car park is reduced to around 150 vehicles.

4.5.5 Additional off-site parking is accommodated in Stanley Park car park, approximately 1km from the stadium at the Priory Road / Utting Avenue junction. This car park is only used on matchdays and is also used by Liverpool Football Club for their match day requirements.

4.5.6 Supporter coaches currently park on Priory Road to the south east, approximately 0.5km from the stadium.

4.6 Match day traffic management

4.6.1 There are several traffic management elements in place to ensure safe and efficient access and egress for match day traffic. The key components are:

- Matchday pedestrian zone.
- Football Match Parking Zone (FMPZ).
- Matchday traffic management strategy.

Match day pedestrian zone

4.6.2 Figure 21 overleaf shows the boundary of the site and the Traffic Regulation Orders (TROs) that are in operation in the immediate area.

4.6.3 TROs are in place to regulate the speed, movement and parking of vehicles. On match days signing enforces a pedestrian zone and restrictions to loading and waiting around the stadium. In this way all of Gwladys Street, Muriel Street, Diana Street, Bullens Road, and part of Goodison Road and City Road become pedestrian zones with access for traffic limited and prohibited.

Figure 21: Traffic Regulation Orders and Extent of Highway Adoption

Source: Mott MacDonald

Football Match Residents Parking Zone (FMRPZ)

4.6.4 On-street parking around Goodison Park is restricted by a Football Match Residents Parking Zone (FMRPZ), the boundary of which is indicated in Figure 22. This area covers both Goodison Park and Anfield Stadium to restrict match day parking for fixtures at both stadia. The restrictions mean that public on-street parking is generally unavailable between 10:00 and 00:00 every day from August to June inclusive.

4.6.5 Only residents, authorised visitors and businesses can park on street within the zone. Residents and businesses are issued with parking permits and visitor permits which must be displayed within the car. Non authorized vehicles parked on street within the zone are subject to fines and parking enforcement by Liverpool City Council.

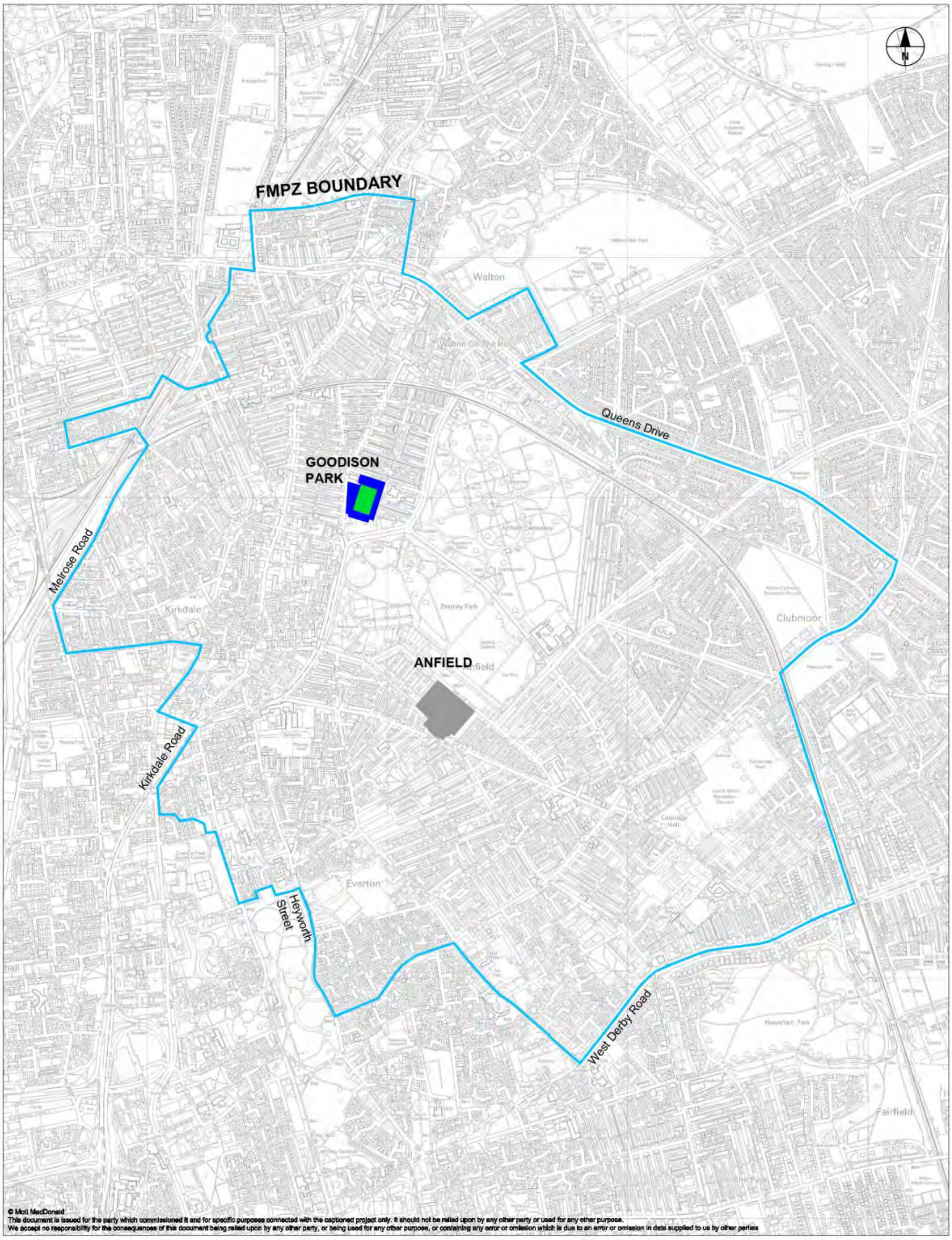
Matchday traffic management strategy

4.6.6 The current matchday strategy for Goodison Park is focused around a series of road closures in the vicinity of the stadium to ensure crowd safety and restrict vehicle access into the area. The road closures are shown in Figure 23 below.

4.6.7 For the pre-match period, all local roads around the stadium close around one hour prior to kick off as identified in Figure 23. Following kick off the roads are re-opened for the main part of the game. The roads are then closed again approximately 15 minutes prior to full time. In the post-match period the roads remain closed until crowds have dispersed sufficiently to re-open them.

4.6.8 Following the full-time whistle Walton Lane is closed in both directions at the junction with Spellow Lane for between approximately 15 and 30 minutes. This closure is enforced to support pedestrian egress from the stadium following the match and maintain crowd safety. The road is re-opened once crowds have dispersed.

Figure 22: FMPZ Boundary



Source: Mott MacDonald

Figure 23: Matchday Traffic Management

Source: Mott MacDonald

5 Highway network traffic data

Introduction

5.1.1 This section provides a review of existing traffic flows on the local highway network and provides an evidence base for the subsequent impact assessment in Section 8 of this TA.

5.1.2 The section firstly concentrates upon traffic on the local highway network in terms of the study area agreed with Liverpool City Council. Following this a review of the specific traffic generation of Goodison Park is provided. In summary:

- Traffic profile on County Road and Walton Lane;
- Local network junction analysis;
- Traffic generation of Goodison Park.

Traffic surveys

5.1.3 In order to assess the volume of traffic on nearby streets and of the Goodison Park car park itself, two-week traffic counts were commissioned between 14th March and 27th March 2019 at the following locations:

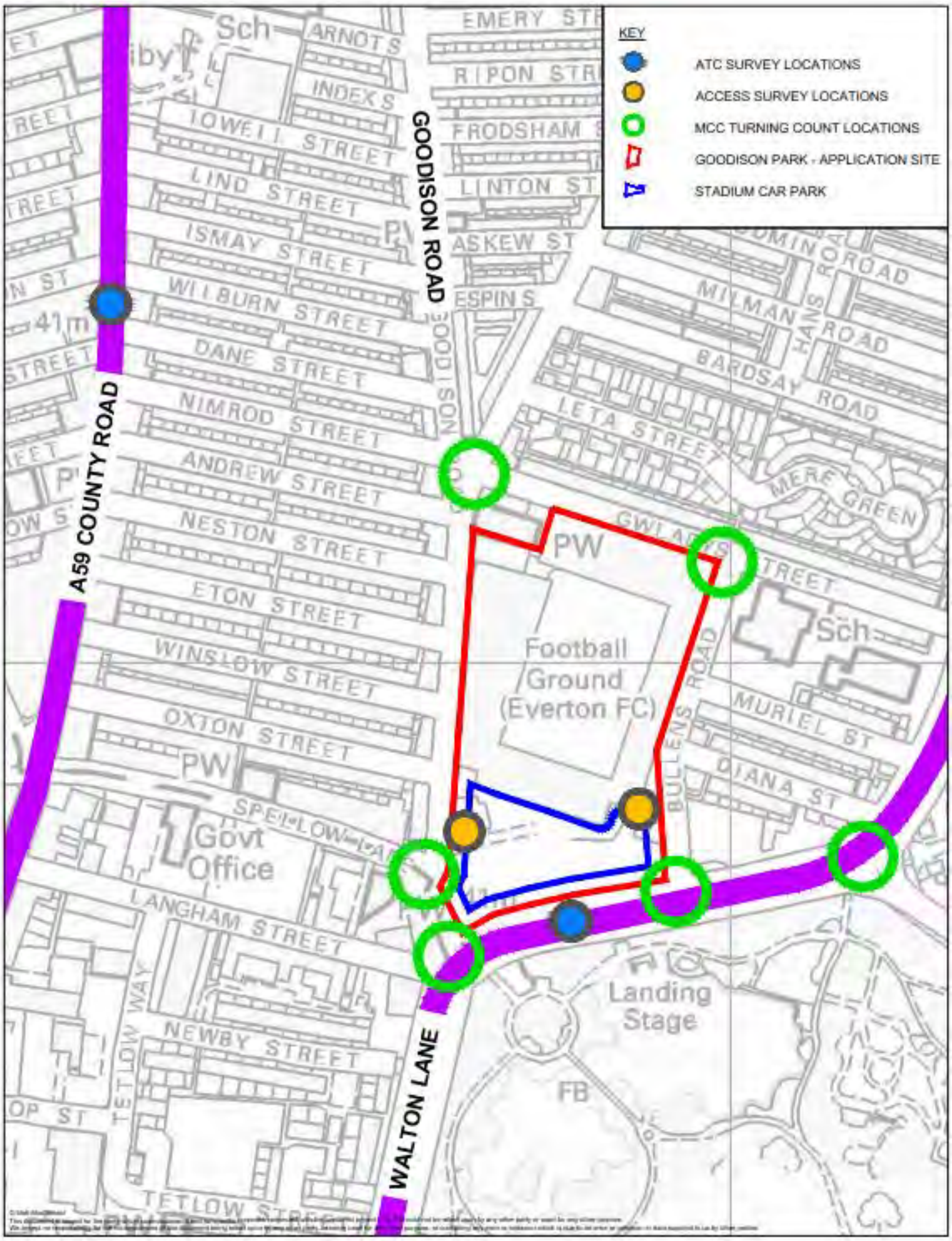
- County Road (A59);
- Walton Lane (A580);
- Goodison Road site access;
- Bullens Road site access.

5.1.4 Manually Classified Counts (MCC) turning count data was also undertaken for the following junctions between 07:00 - 10:00 and 16:00 – 18:00 on 14th March 2019 (non-matchday):

- Walton Lane / Bullens Road.
- Walton Lane / Spellow Lane/Langham Street.
- Walton Lane / Priory Road.
- Spellow Lane / Goodison Road.
- Goodison Road / City Road / Gwladys Street / Andrew Street / Nimrod Street.
- Bullens Road / Gwladys Street.

5.1.5 All survey locations are illustrated overleaf in Figure 24. The extent of the traffic survey area was agreed in scoping with Liverpool City Council.

Figure 24: Traffic Survey Locations Map



Source: Mott MacDonald

5.2 Traffic profile on key routes: Walton Lane and County Road

5.2.1 It should be noted that the first week of the two-week survey period for Walton Lane and County Road coincided with a weekend matchday at Goodison Park (versus Chelsea Sunday 17th March 16:30 kick off). The weekday traffic analysis considers the full 2-week dataset, while the weekend and 7-day average profiles incorporate data from the second week only (incorporating the non-matchday weekend). Following this a comparison of weekend traffic- match day and non-match day is provided.

5.2.2 Walton Lane is the busier of the two routes accommodating around 24,000 vehicles on a daily basis compared with County Road which accommodates around 18,000 traffic movements daily.

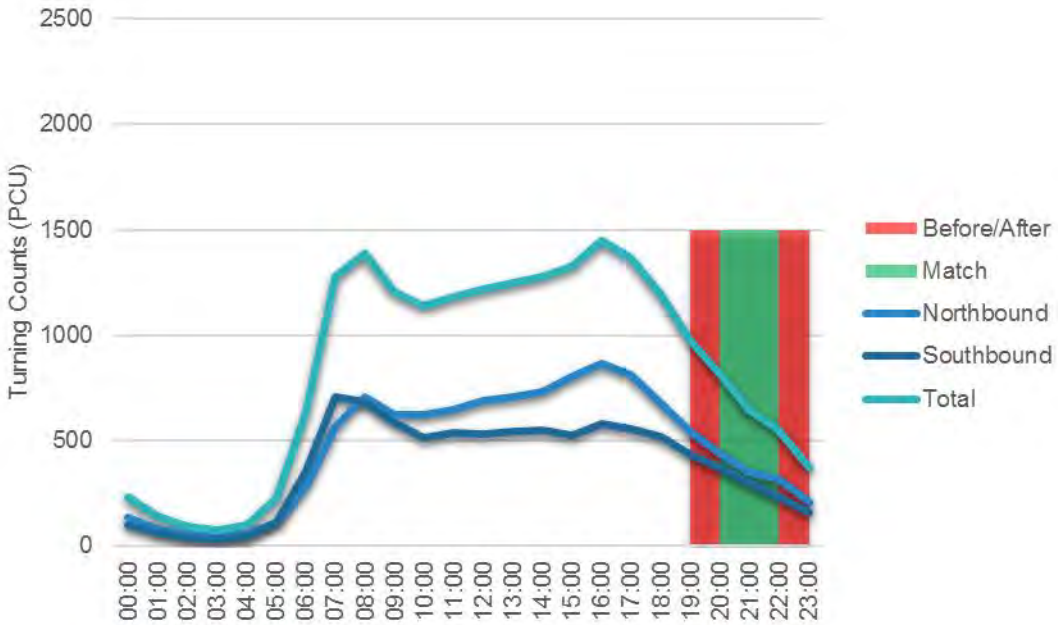
County Road

5.2.3 The weekday average profile provided in Figure 25 shows clear AM and PM peak hours, both these peaks see maximum hourly flows of around 1,400 vehicles per hour (veh/hr) while inter-peak flows throughout the day stay at around 1,200 Veh/hr.

5.2.4 The weekend average profile provided in Figure 26 shows a wider single peak which experiences its highest flows during the afternoon between midday to around 17:00, during which it shows a maximum flow of just under 1,300 veh/hr. The average afternoon traffic of around 1,200 veh/hr mirrors the weekday interpeak flows.

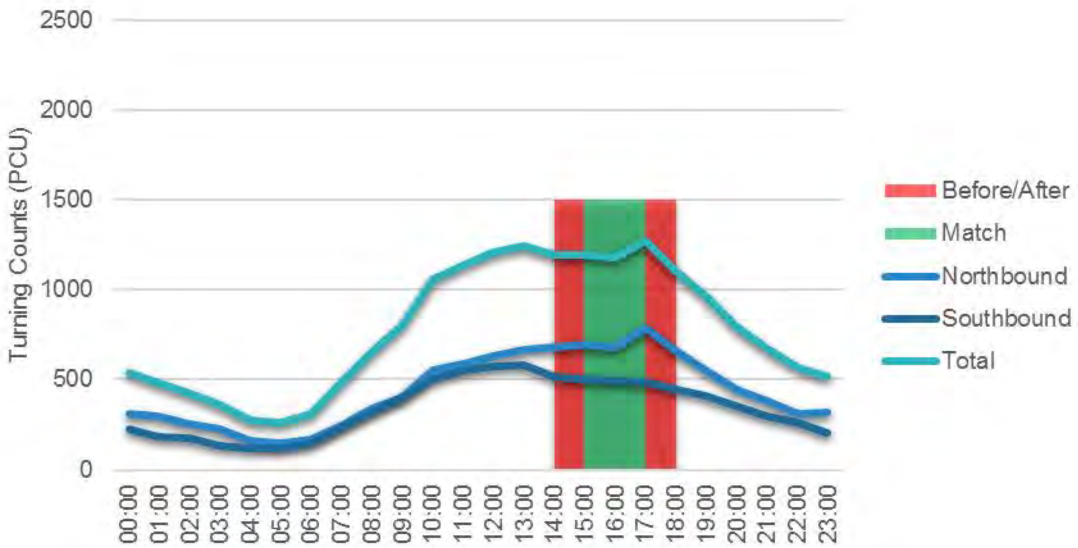
5.2.5 The 7-day average profile (Figure 27) rises to just under 1,200 Veh/hr at around 07:00 before gradually climbing up to around 1,400 Veh/hr at 4-5pm before decreasing into the evening.

Figure 25: County Road Traffic Profile – Weekday Average



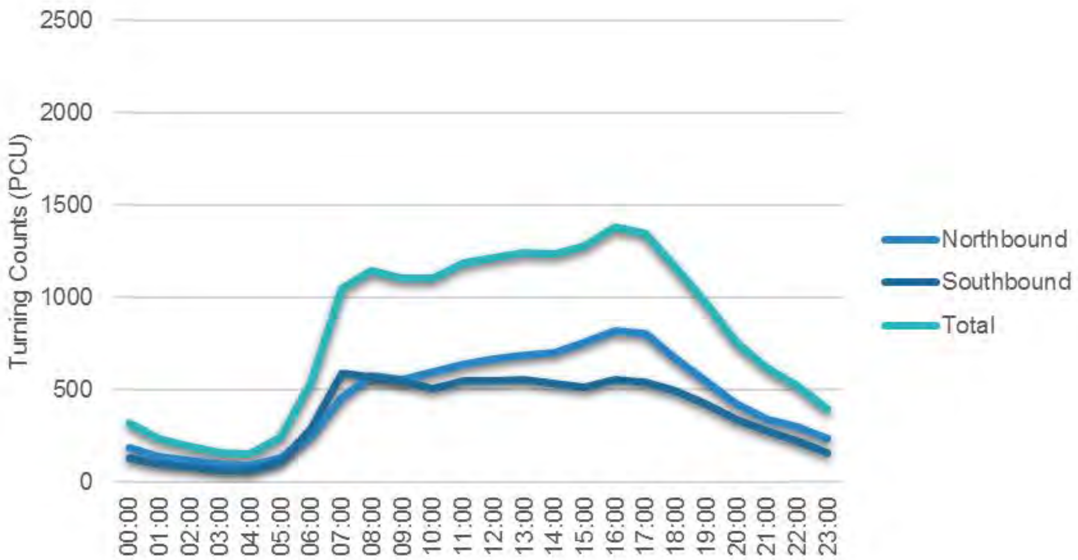
Source: Mott MacDonald

Figure 26: County Road Traffic Profile – Weekend Average (non-match)



Source: Mott MacDonald

Figure 27: County Road Traffic Profile – 7-Day Average (non-match)



Source: Mott MacDonald

Walton Lane

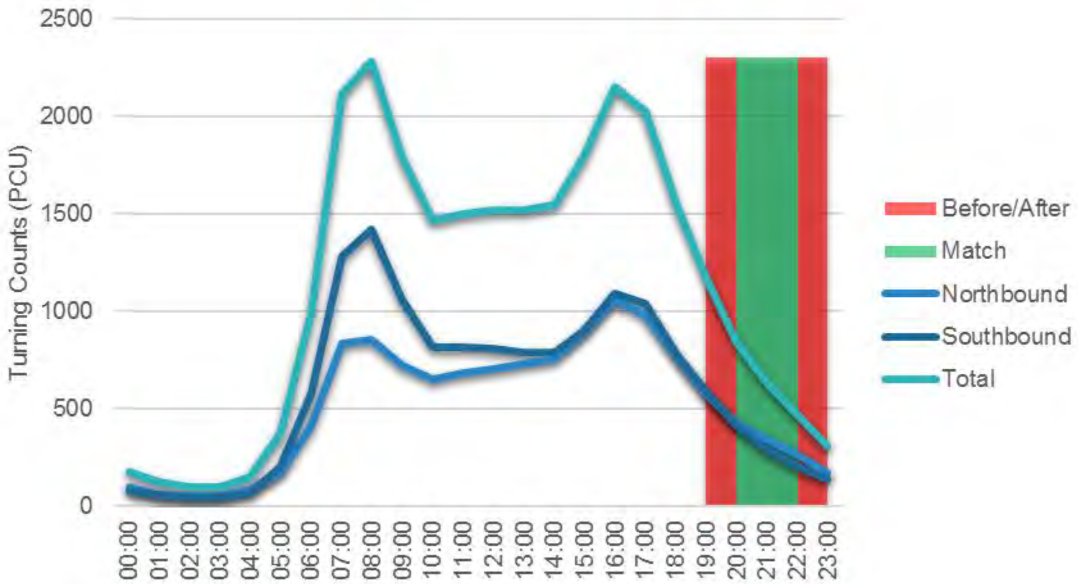
5.2.6 The weekday average profile provided in Figure 28 shows clear AM and PM peaks which both exceed 2,000 Veh/hr for at least one hour. Interpeak flows remain relatively constant at around 1,500 Veh/hr, while traffic begins to decrease around 18:00.

5.2.7 As with all scenarios, the PM northbound and southbound flows are very similar while the AM southbound flows into the city centre are significantly higher, particularly for the weekday average.

5.2.8 The weekend average profile provided in Figure 29 shows a single gradual peak which reaches around 1,700 Veh/hr at midday. Southbound flows are again higher during the morning hours, but not to the degree of the weekday average profile.

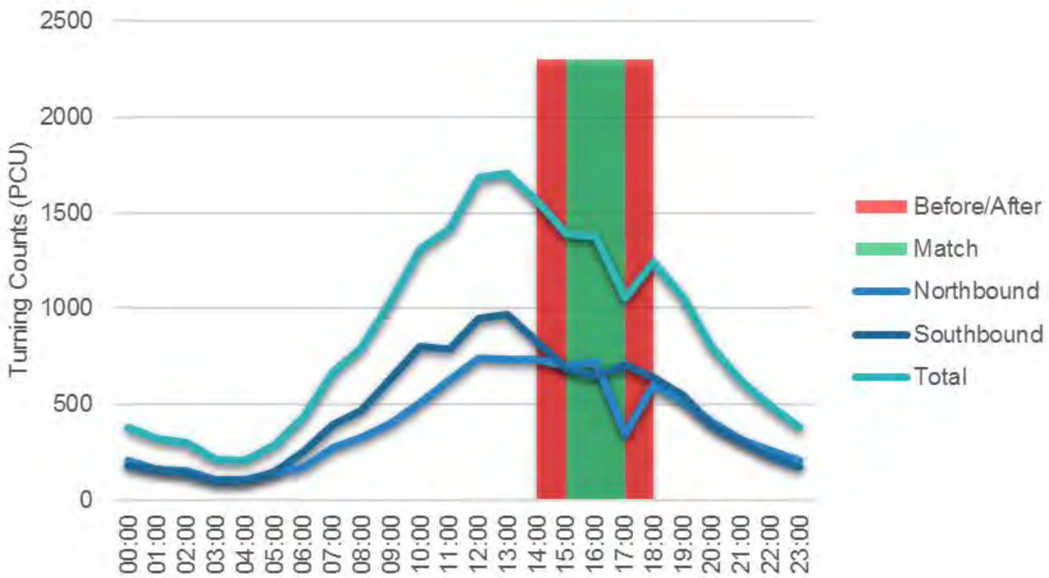
5.2.9 The 7-day average profile (Figure 30) shows the same interpeak flows of around 1,500 Veh/hr as the weekday average, although the AM and PM peaks are not as prominent, without exceeding 2,000 Veh/hr throughout the day.

Figure 28: Walton Lane Traffic Profile – Weekday Average (non-match)



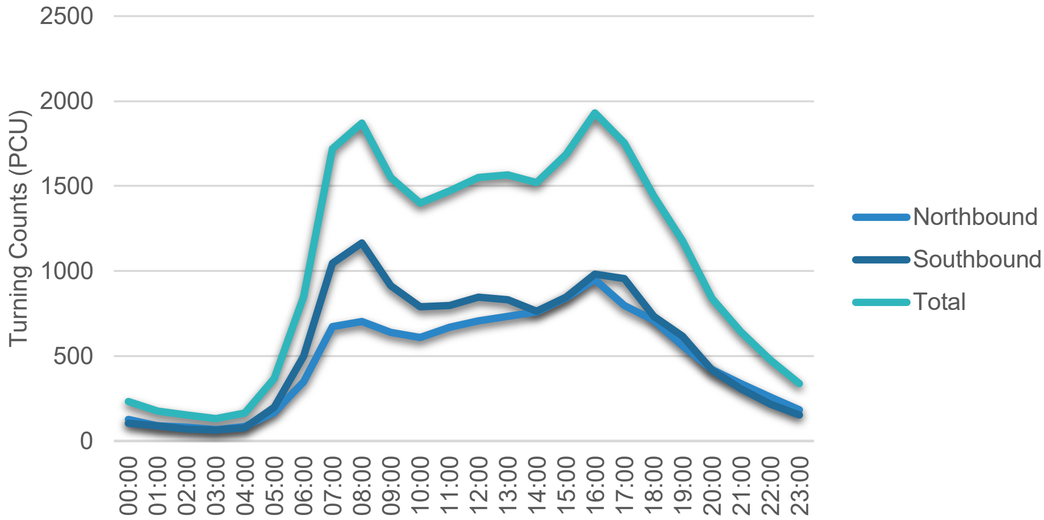
Source: Mott MacDonald

Figure 29: Walton Lane Traffic Profile – Weekend Average (non-match)



Source: Mott MacDonald

Figure 30: Walton Lane Traffic Profile – 7-Day Average (non-match)



Source: Mott MacDonald

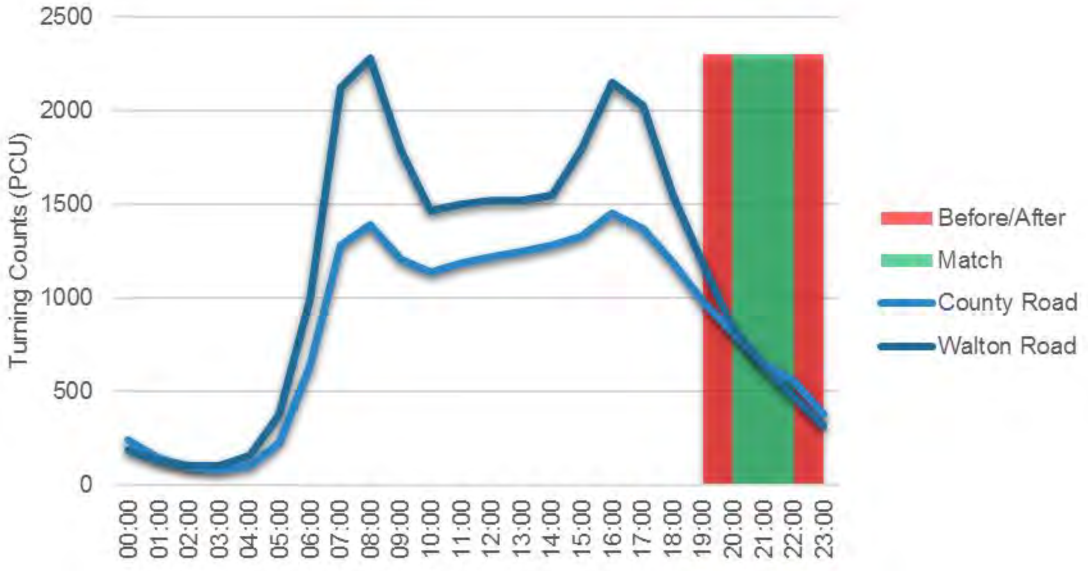
Combined summary

5.2.10 Figure 31, Figure 32 and Figure 33 provide a comparison between the two routes for the three respective scenarios. All figures show combined traffic profiles for two-way traffic only.

5.2.11 In terms of the weekday average profiles, Walton Lane experiences higher volumes of traffic and features more prominent AM and PM peaks. These peaks coincide with the shallower peaks experienced on the County Road. There are minimal differences in flows during weekends between the two routes.

5.2.12 The 7-day average profiles also show similar trends, with higher traffic flows and more defined AM and PM peaks experienced on Walton Lane when compared to County Road.

Figure 31: County Road/Walton Lane Combined Traffic Profile – Weekday Average (non-match)

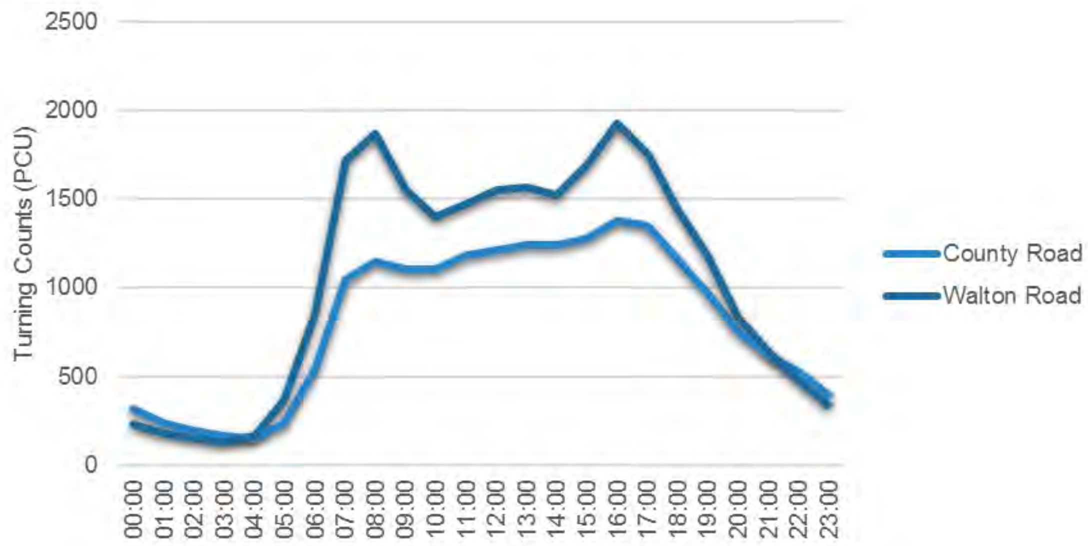


Source: Mott MacDonald

Figure 32: County Road/Walton Lane Combined Traffic Profile – Weekend Average (non-match)

Source: Mott MacDonald

Figure 33: County Road/Walton Lane Combined Traffic Profile – 7-Day Average (non-match)



Source: Mott MacDonald

Matchday vs non-matchday

5.2.13 To assess the impact of a fixture at Goodison Park, traffic profiles for a matchday and a non-matchday scenario were derived from the survey data for comparison. The matchday scenario used in this case is Sunday 17th March 2019, on which Everton hosted a Premier League match against Chelsea, with an attendance of 39,356 (99% capacity), representing a full sell out match.

5.2.14 The two scenarios for comparison are as follows:

- Sunday 17th March 2019 – Matchday (16:30 Kick-Off (KO)).
- Sunday 24th March 2019 – Non-Matchday.

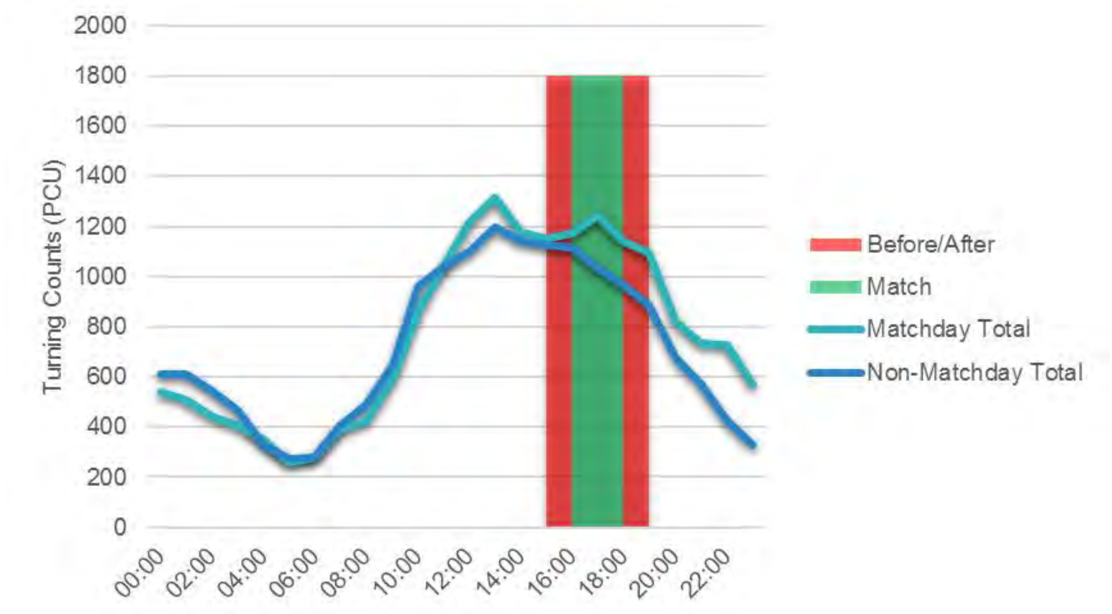
5.2.15 Figure 34 and Figure 35 show the traffic profiles for County Road and Walton Lane for the two scenarios respectively. It should be noted that Walton Lane was temporarily closed following the match as part of the post-match traffic management strategy. The closure took place at around 18:30.

5.2.16 County Road (Figure 34) experiences similar transport demand for both scenarios until 16:00, 30 minutes prior to kick off. Traffic flow to this point on matchday is similar to a non-matchday. Traffic flow in the post-match period are approximately 200 Veh/hr above that of the non-matchday scenario.

5.2.17 The difference in traffic flow on Walton Lane is more prominent, with the midday peak increasing from 1,400 to 1,600 Veh/hr and remaining at 300 Veh/hr above the non-matchday profile at 2pm. The temporary post-match closure of Walton Lane is also clear on the profile, shown by the sharp decline in traffic flow from 6pm. Following its reopening, traffic rises to near 1,400 Veh/hr at 19:00, approximately 400 Veh/hr higher than the non-matchday profile, before decreasing to mirror the non-matchday scenario by 21:00.

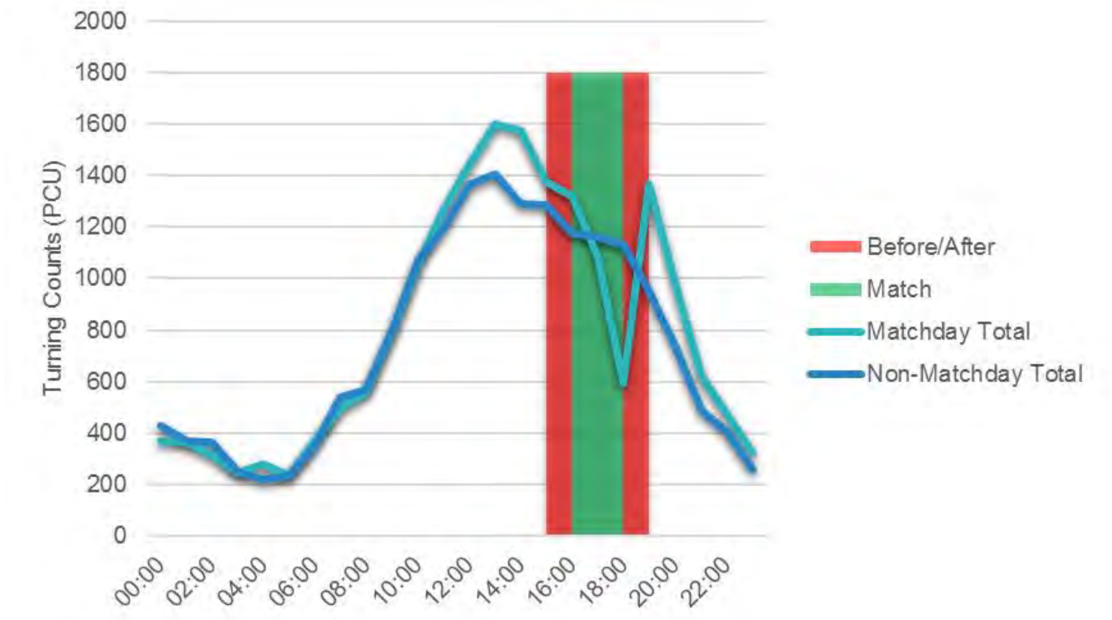
5.2.18 Comparing the two routes, Walton Lane experiences a greater increase in traffic flow in the matchday scenario, showing this route accommodates a higher proportion of traffic generated by football at Goodison Park.

Figure 34: County Road Traffic Profile (Sunday) – Matchday vs Non-Matchday



Source: Mott MacDonald

Figure 35: Walton Lane Traffic Profile (Sunday) – Matchday vs Non-Matchday



Source: Mott MacDonald

5.3 Local network junction analysis

5.3.1 Traffic demand around Goodison Park has been surveyed at key junctions surrounding the site (Figure 24). The surveys were undertaken between 07:00 - 10:00 and 16:00 – 18:00 on 14th March 2019 to capture the morning and evening weekday peak hours.

- Walton Lane / Bullens Road.
- Walton Lane / Spellow Lane/Langham Street.
- Walton Lane / Priory Road.
- Spellow Lane / Goodison Road.
- Goodison Road / City Road / Gwladys Street / Andrew Street / Nimrod Street.
- Bullens Road / Gwladys Street.

5.3.2 Traffic flows at these junctions for the weekday morning and evening peak hours are included In Appendix E to give an indication of the distribution of traffic on the surrounding road network.

5.3.3 Across all scenarios, the two signalised junctions on Walton Lane experience the highest volume of turning traffic compared to all the other junctions surveyed. At the junction of Walton Lane / Spellow Lane and Langham Street 2,784 vehicles passed through the junction in the weekday AM peak hour and 2,602 in the PM peak hour. At the Walton Lane junction with Priory Road further east 2,679 vehicles passed in the weekday AM peak hour and 2,370 in the PM peak.

Figure 36: Walton Lane/Spellow Lane/Langham Street Junction

Source: Google Maps

Figure 37: Walton Lane/Priory Road Junction

Source: Google Maps

5.3.4 The Spellow Lane/Goodison Road junction experienced a total of 852 vehicles in the weekday AM peak and 1,003 vehicles during the PM peak. At all other junctions surveyed in the predominantly residential area traffic flows through the junctions surveyed were below 500 vehicles per hour in any peak hour.

5.3.5 Overall the weekday AM and PM scenarios show similar turning count volumes across the junctions surveyed, with the AM scenario experiencing marginally higher levels of total turning counts.

5.3.6 The performance of the junctions surveyed is assessed further through detailed junction modelling using LinSig, contained in Section 8 of this TA.

5.4 Traffic Generation of Goodison Park

5.4.1 The traffic generation of the existing Goodison Park car park located directly to the south of the Park End has been assessed by traffic survey over the two-week period between the 14th March – 27th March 2019. The location of the stadium car park and its surveyed access points from Goodison Road and Bullens Road are shown previously in Figure 24. It should be noted that the secondary car park access point via Bullens Road is only usually used under two circumstances:

- To accommodate match day traffic ingress and egress;
- On non-EFC match days when the car park is being used as a paying public car park for Anfield Stadium traffic.

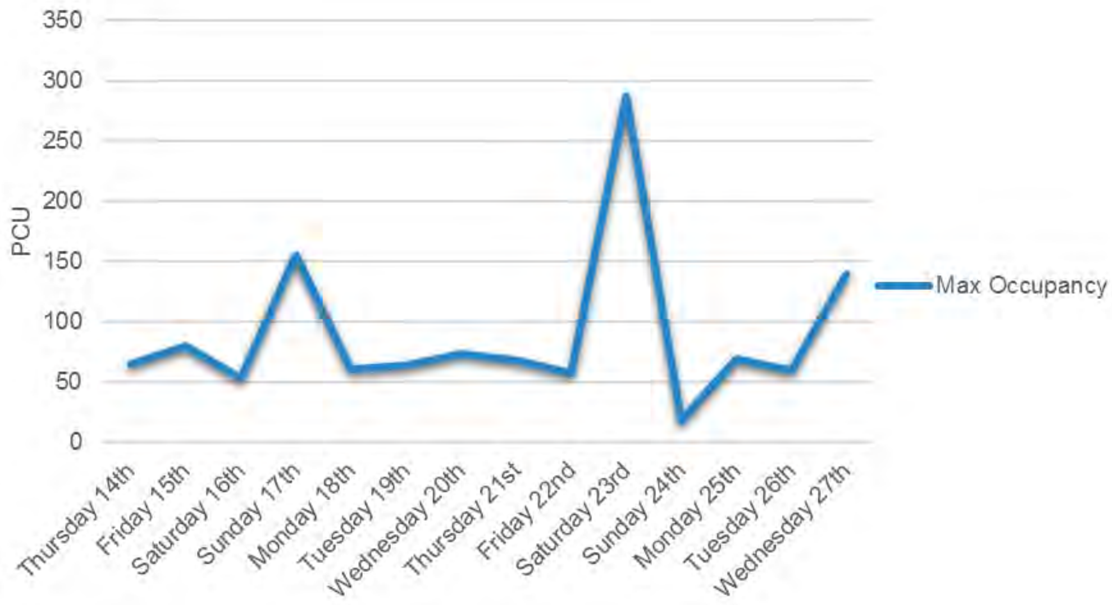
5.4.2 The following section contains a review of the traffic surveys for the following scenarios:

- Non matchday typical usage;
- Matchday vs non-matchday comparison;
- Matchday usage for Goodison Road and Bullens Road access points.

5.4.3 Based on the survey data, the maximum car park occupancy on each day throughout the two-week period is provided in Figure 38. From this analysis an average typical occupancy of 67 vehicles was identified. This value excludes the following days due to the respective non-typical circumstances:

- Sunday 17th March: Premier League fixture at Goodison Park.
- Saturday 23rd March: Friendly fixture at Anfield Stadium- Goodison Park car park hired out for use.

Figure 38: Goodison Park car park maximum occupancy distribution



Source: Mott MacDonald

Non matchday weekday traffic generation of Goodison Park

5.4.4 Table 6 shows the average weekday combined access and egress movements with respect to the wider network peak hours. On average the car park generates 39 daily traffic movements in the morning network peak hour and 25 in the evening network peak. On a daily basis the site generates a total of around 420 traffic movements.

Table 6: Combined Access Average Weekday Peak Hour Movements

Peak Hour	In	Out	Total
08:00-09:00	32	7	39
17:00-18:00	9	16	25

Source: Mott MacDonald

Matchday traffic generation of Goodison Park

5.4.5 On the match day of Sunday 17th March (16:30 KO), the car park generated a total of 545 traffic movements. It should be noted that on Sunday 24th March, a non-match day, the site generated significantly less traffic with 100 movements recorded for the day.

5.4.6 Peak match day traffic generation of the site is summarised in Table 7 below. These peak periods coincide with the busiest pre-match arrival period and the post-match departure period.

Table 7: Match Day Traffic Generation of Goodison Park

Peak Hour	In	Out	Total
14:00-15:00	53	6	59
19:00-20:00	27	118	145

Source: Mott MacDonald

Conclusions

5.4.7 This section has explored in some detail traffic volumes on the highway network surrounding the site and the traffic generation of Goodison Park on match days and non-match days. This information will be used in the impact assessment included as Section 8. This data will also be used in the Environmental Impact Assessment which will be submitted in the planning application.

6 Proposed development

6.1 Introduction

6.1.1 The development site is bound by Goodison Road to the west, Spellow Lane to the south-west, Walton Lane to the south, Bullens Road to the east, Gwladys Street to the north and Goodison Place and Church of St Luke the Evangelist to the north-west.

6.1.2 This section details the proposals for the Goodison Park Legacy Project, noting the assumed vehicular and pedestrian access arrangements and parking provisions.

6.2 Development description

6.2.1 The formal description of development is as follows:

Application for Outline Planning Permission for the demolition of existing buildings and redevelopment of the site for a mix of uses, comprising residential units (Use Class C3); residential institution (Use Class C2); shops (Use Class A1); financial & professional services (Use Class A2); food and drink use (Use Class A3); drinking establishments (Use Class A4); hot food takeaways (Use Class A5); business use (Use Class B1); non-residential institutions (Use Class D1); and open space, with associated access, servicing, parking and landscaping. All matters (Access, Appearance, Landscaping, Layout and Scale) are reserved for future determination.

6.2.2 The illustrative masterplan, which indicates how the development could come forward in the future, is provided in Figure 39 and the maximum development quanta schedule is shown in Table 8 below.

Table 8: Maximum Development Quanta

Location	Land Use	Maximum Total Floorspace (SQ.M. GEA) / Dwellings	Land Use type assessed
Block A	A1 Retail	532 sqm	Non-food retail & local shops
	A2/A3/A4/A5 Financial & professional services / Food & drink / Drinking establishments / Hot food takeaways	644 sqm	Food & Drink Uses
	C3 Dwellings	96 units	Apartments
Block 1B	D1 Non-residential institution	4,283 sqm	Community Education
Block 2B	A1 Retail	552 sqm	Non-food retail & local shops
	A3 Food & Drink	635 sqm	Food & Drink Uses
Block 1C	C3 Dwellings	15 units	Houses
Block 2C	C3 Dwellings	41 units	29 Apartments, 12 Houses
Block 1D	A2 Financial & Professional Services	188 sqm	B1 Office
	B1 Business	3,160 sqm	B1 Office
Block 2D	A2 Financial & Professional Services	205 sqm	B1 Office
	B1 Business	1,602 sqm	B1 Office
Block 1E	C3 Dwellings	11 units	Houses

Location	Land Use	Maximum Total Floorspace (SQ.M. GEA) / Dwellings	Land Use type assessed
Block 2E	C3 Dwellings	10 units	Houses
Block F	D1 Non-residential institution	2,596 sqm	Primary Education
Block G	C2 Residential Institution	78 bed care home and 24 beds extra care	Retirement & Care Community
Block H	D1 Non-residential institution	3,119 sqm	‘Walk in’ Health Centre

Source: Condy Lofthouse Architects .

Figure 39: Illustrative Masterplan

Source: Condy Lofthouse Architects

Potential Uses

6.2.3 As this planning application has been made in outline with all matters reserved, the detail of the specific development type and potential end users of each development block are not yet known. Accordingly, this assessment is based on robust assumptions on the potential land uses which could come forwards at each block. For instance, the D1 'non-residential institution' use encompasses a wide range of potential uses including places of worship, premises for education, museums, libraries, medical centres and exhibition halls. Furthermore, the C3 use includes houses and apartments. Discussion with the Club has been undertaken to ascertain the most likely potential type of development to come forwards at the site within each proposed use class and assumptions have been made to inform the most robust form of assessment for each.

6.2.4 The development type for each block assessed as part of this planning application is referenced in Table 8. Further detail on land use assumptions used in parking calculations is included in Section 6.5, and Section 7.2 for trip generation.

6.3 Site access

The outline planning application

6.3.1 It should be noted that within this outline planning application, access is a reserved matter and therefore details of vehicular / pedestrian access are shown indicatively at this stage, with further details to be provided through future planning submissions.

Pedestrian and cycle access

6.3.2 It is anticipated that the site will be accessible to pedestrians from all directions with a minimum of 2-metre wide footways provided around the entire site perimeter. Crossing points with dropped kerbs and tactile paving will be provide at all site access points where vehicles may enter and exit the site.

6.3.3 An internal road is shown in outline spanning the southern site area, connecting Goodison Road to the west with Bullens Road to the east. In addition, it is envisaged that the central park area will be accessible from all corners. An internal network of pedestrian routes will be created so that north – south and east - west routes are established, as shown indicatively in Figure 40.

6.3.4 The roads surrounding the site support pedestrian movement through an existing network of footways, complemented by dropped kerbs and tactile paving at key crossing points. All residential roads in the area are also controlled by vertical traffic calming measures to ensure a safe pedestrian environment.

6.3.5 It is envisaged that uncontrolled pedestrian crossings will be provided across Goodison Road, Gwladys Street and Bullens Road at appropriate locations, so the site is well connected to the existing pedestrian and cycle network.

Vehicular access

6.3.6 Several vehicle access points are shown indicatively around the perimeter of the site to facilitate vehicular access. For the purposes of this assessment, it is assumed that access to the car park serving =Block A, B1, B2 & H park would be facilitated via two junctions with Goodison Road and Bullens Road (at the same locations as existing junctions to the existing Goodison Park car park). This would create a southern spine road through the site.

6.3.7 Access to off-street parking areas will be provided by new junctions at the following indicative locations:

- Goodison Road near Winslow Street;
- Goodison Road near Neston Street;
- Gwladys Street between Bullens Road and Goodison Road;
- Bullens Road near Gwladys Street.

6.3.8 Please note that as the planning application is made in outline the number and location of these proposed access points could change.

6.3.9 On Gwladys Street and Bullens Road: on street parking bays are indicatively shown on the illustrative masterplan. At present on these routes parked cars, particularly on Gwladys Street and Bullens Road can inhibit two-way traffic movement. With these changes in place, cars parked on street will not inhibit traffic movement.

6.3.10 Access into the northern car park (shown indicatively on the illustrative masterplan) is provided via a new junction with Gwladys Street. The car park will Block D2 & F.

6.3.11 Bullens Road could also feature an additional site access to the south via a junction opposite Diana Street. This would act as the point of access connecting the car parks serving Block G (potential residential care uses) and Block H (assumed medical uses).

Figure 40: Outline pedestrian and vehicle routes

Source: Condy Lofthouse Architects

Highway adoption

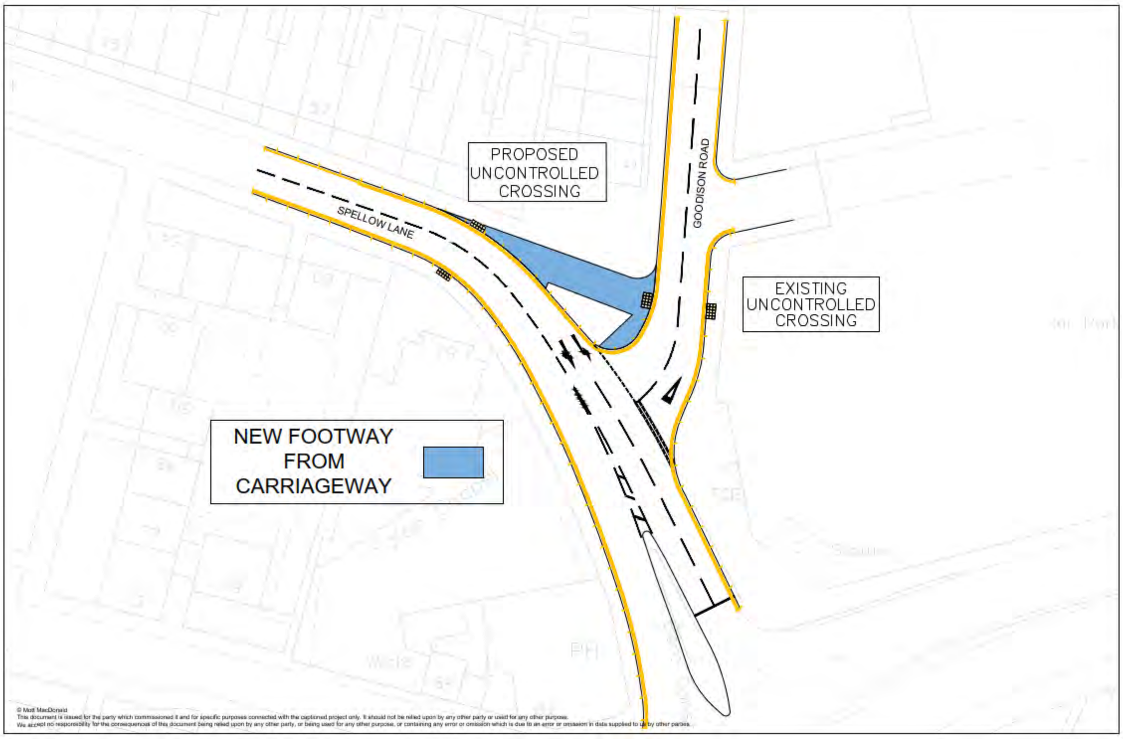
6.3.12 It is proposed that all internal vehicular and pedestrian routes will be privately maintained and will not form part of the adopted public highway. It is proposed that the on-street parking bays and the new footways behind them will form part of the adopted highway. A plan showing the area to be adopted are shown in Appendix K.

6.4 Highway improvements

6.4.1 As part of the proposed development there are highway works proposed to be carried out in the area by the Club to enhance the Spellow Lane/Goodison Road junction and improve pedestrian safety in the area on account of traffic generated by the development. The proposals are shown in Figure 41 below. It is envisaged that these works will be secured via a Section 278 agreement associated with any outline permission.

6.4.2 The proposed works will expand the footway on the north side of Spellow Lane and remove the existing left turn lane onto Goodison Road. The existing priority junction with Spellow Lane/Goodison Road will be realigned to form a traditional 'T' junction with improved accessibility for vehicles. In addition to this, an uncontrolled crossing featuring dropped kerbs and tactile paving will be provided on Spellow Lane west of the Goodison Road/Spellow Lane junction.

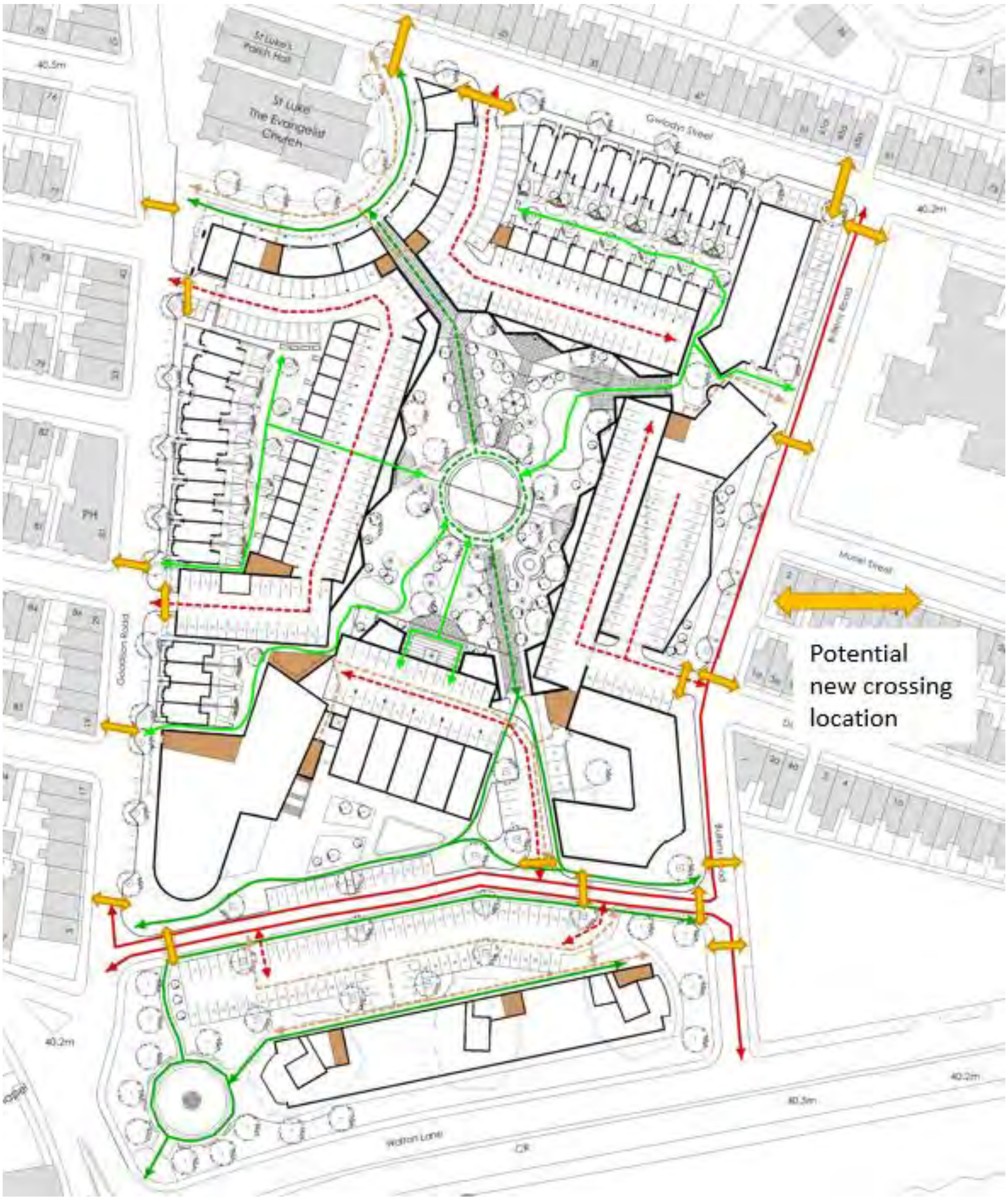
Figure 41: Proposed highway improvement Spellow Lane



Source: Mott MacDonald

6.4.3 As the Goodison Park Legacy Project is built out it will be important that the site connects well with existing pedestrian infrastructure around the site. As the planning application is made in outline it is not possible at the moment to identify where exactly the connection points will be located. As further reserved matters submissions are made the specific location and form of the crossings will be confirmed.

Figure 42: Illustrative pedestrian crossing locations



Source: Mott MacDonald / Condy Lofthouse

6.5 Car parking

6.5.1 Up to 393 ‘off street’ car parking spaces are proposed to serve the development. This section provides a breakdown of this figure and sets out a justification for this level of provision to align with LCC's parking standards as described in LCC's Ensuring a Choice of Travel SPD (April 2008).

6.5.2 As noted previously, this application is made in outline only with all matters reserved. The proposed parking quanta for the land uses is provided below in Table 9 alongside LCC's standard requirements for each use. A plan illustrating the outline parking allocations is shown as Figure 43.

Table 9: Proposed Parking and LCC Standards

Location	Use Class / Assumed Use	Floorspace / Dwellings	LCC Maximum Standard	Proposed Parking Quanta
Block A	A1 Non Food Retail	532 sqm	*1 space per 22 sqm*	24
	A2/A3/A4/A5	644 sqm	*1 space per 35 sqm A2 or 1 space per 8 sqm public space*	
	C3 Apartments	96 apartments	*1 space per apartment*	48
Block 1B	D1 Non – Residential Institution	4,264 sqm	*1 space per 40 sqm gallery, 1 space per 2 staff education*	15 plus 4 street spaces
Block 2B	A1 Non-FoodRetail	552 sqm	*1 space per 22 sqm*	38
	A3 Food & Drink	635 sqm	*1 space per 8 sqm public space*	
Block 1C	C3 Housing	15 houses	*1.5 spaces per house*	12 plus 9 street spaces
Block 2C	C3 Apartments	6 maisonettes, 29 apartments	*1 space per apartment*	31
	C3 Housing	6 houses	*1.5 space per house*	6
Block 1D	A2 Professional Services	188 sqm	*1 space per 35 sqm*	56
	B1 Business	3,160 sqm	*1 space per 45 sqm*	
Block 2D	A2 Professional Services	205 sqm	*1 space per 35 sqm*	37
	B1 Business	1,601 sqm	*1 space per 45 sqm*	
Block 1E	C3 Houses	11 terraced houses	*1.5 spaces per house*	11 plus 8 street spaces
Block 2E	C3 Townhouses	10 townhouses	*1.5 spaces per house*	10
Block F	D1 Non – Residential Institution	2596 sqm	*1 space per 2 staff*	30
Block G	C2 Residential Institution	78 bed care home and 24 beds extra care	*1 space per 3 staff* *1 space per 6 residents*	34 plus 6 street spaces
Block H	D1 Health Centre	3,119 sqm	*1 space per 3 staff* *2 spaces per consulting room*	41
TOTAL				**393 plus 27 street spaces**

Source: Mott MacDonald, LCC's Ensuring a Choice of Travel SPD (April 2008).

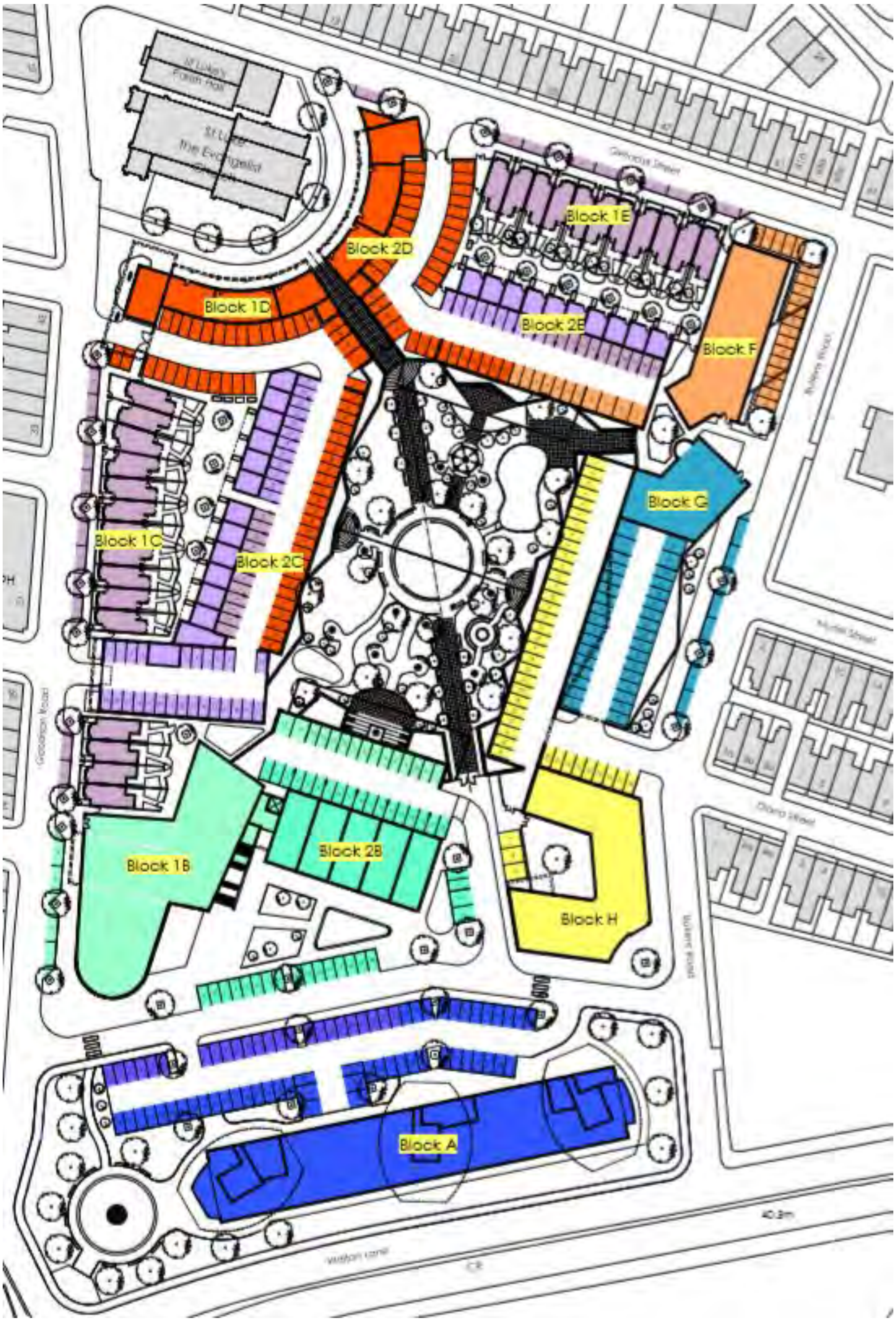
Disabled parking

6.5.3 Condy Lofthouse Architects has confirmed that there is sufficient space available so that 5% of the total number of parking spaces will be disabled accessible across the site. For the range of uses provided LCC's Ensuring a Choice of Travel SPD recommends a minimum of 2% to 4% disabled provision where over 200 parking bays are provided depending on the proposed use. The provision of 5% disabled parking is therefore in excess of this minimum LCC requirement.

On street parking bays

6.5.4 In should be noted that in addition to the parking above around 27 car parking spaces will be created on-street. The on-street spaces will be provided within the adopted highway and will be available for use by any end user. It is expected that they would predominantly be used by residents, visitors and staff to the new development. It should be noted that very few residential properties in the local area have off-street parking available to them. The majority of local residents on Gwladys Street, Bullens Road and Goodison Road who own vehicles already park their vehicles on the street.

Figure 43: Outline parking allocations (indicative only)



Source: Condy Lofthouse

Parking Strategy

6.5.5 In developing the parking strategy, it should be noted that this planning application is made in outline with all matters reserved. Accordingly, it is the purpose of this section to justify the level of parking provision across the site to demonstrate that there is sufficient space within the site to align with the principles set out in LCC's Ensuring a Choice of Travel SPD. Following the granting of planning permission, once more detail on the end users of the site is known and the specific use of each building, the exact number of spaces to be allocated to each building or use will be determined.

6.5.6 Given the mix of uses proposed and potential for linked trips some of the uses will share parking areas such as the retail and restaurant elements. Furthermore, it has been agreed in scoping with Liverpool City Council that residential parking does not need to be provided to the maximum standard possible. This is on account of the high accessibility of the site (as explained in Section 3) and the relatively low car ownership levels in the area. In the County ward of Liverpool, within which Goodison Park is located 57% of households do not own cars (2011 Census). This is somewhat higher than the wider Liverpool local authority area where on average 46% of households do not own a car (2011 Census) and the Northwest average where 27% of households do not own a car.

6.5.7 It should also be noted that the nearby consented residential development detailed in Section 3.9 of this report (18F/1316) was granted planning permission with 60% of units having no parking space. This was justified on account of the good public transport and active travel connections available. There is therefore precedent in this area for car parking being provided below the maximum standards in the local area.

6.5.8 The following commentary is based on the assumptions made about the specific end uses of blocks, in order to inform this Transport Assessment, as detailed in Section 6.2.

Residential Use in Blocks A, C and E

6.5.9 In terms of residential parking provision, the 96 apartments in Block A have a provision of 48 spaces, 50% of dwellings will have a parking space. This is in line with the accessibility of the site and similar developments nearby which have recently been granted planning permission.

6.5.10 The 21 houses and 35 apartments / maisonettes to be provided in Block C have been allocated 49 spaces, with a further 9 on-street. Apartments across the site are provided with a minimum of 1 space per two apartments therefore requiring 18 spaces at Block C. The 21 houses here would require 31 parking spaces according to LCC's standards. Therefore, there is sufficient parking within Block C to accommodate this allocation.

6.5.11 In Block E for the 11 terraced houses and 10 townhouses, 21 spaces will be provided. This is below the 1.5 space per dwelling in the LCC guidance however it should be noted that very few of the existing residential properties in the area (which are predominantly terraced) have off street parking available. It should also be noted that 8 spaces will be created on street which will accommodate parking demand from this block.

Block A retail & A2/3/4/5 uses, Block 2B retail and A3 food & drink.

6.5.12 Due to the variety of proposed public facilities, parking for the retail and food / restaurant uses will be shared. Demand for the restaurant and the retail facilities will peak at different times.

6.5.13 As an example, the restaurants in Block A will likely be used primarily during lunchtime and evening, whilst the retail units will be used throughout the day. As such, the overall parking demand can be shared partially between these proposed uses.

6.5.14 In total across Blocks A & B, 62 parking spaces are proposed for retail & A2/3/4/5 uses. Across Blocks A and B, 1,084m² of retail is proposed: based on the LCC standards this would require a maximum of 49 parking spaces. A total of 1,279m² of A2/3/4/5 use is proposed, based on the LCC maximum standards this would require a maximum of 80 car parking spaces.

6.5.15 We consider that the provision of 62 parking spaces is satisfactory taking into account the maximum parking standards and the fact that these spaces will be shared between uses. It should also be noted that many of the customers of the retail units will also use the food & drink facilities and vice versa. Similarly, the retail and A2/3/4/5 uses will draw much of their custom from local residents and also employees at the proposed development and as such would not need to provide maximum numbers of parking spaces for these customers.

Block 1B & F Non-Residential Institutions

6.5.16 Block 1B is to be allocated 15 spaces with an additional 4 spaces on street directly outside on Goodison Road. Considering LCC's standards for D1 education use this provision would be adequate for a maximum of 30 staff working at the centre at any one time. We therefore consider that this is an appropriate level of provision for the proposed use.

6.5.17 Similarly, provision of 30 spaces for the potential education use in Block F would be sufficient for 60 staff based on the LCC standards of 1 space per 2 staff. Depending on the final use of the two developments there could be some scope for the sharing of the 45 parking spaces across these two sites for education purposes.

Block G Residential Institution

6.5.18 The potential residential institution located in Block G has been allocated 34 parking spaces, with 6 additional spaces located on street directly outside the site on Bullens Road. LCCs parking standards permit a maximum of 1 space per 5 residents and 1 space per 3 staff for care homes. Therefore, the off-street provision complies with LCC standards and based on likely splits, this would accommodate 102 residents and 42 staff which is an acceptable initial provision relative to the size of the facility.

Block H Medical Drop in Centre

6.5.19 LCC's parking standards for this use are based on the number of consulting rooms in the development and number of staff. As the application is in outline this information is not known at this stage. Accordingly, parking has been calculated using other similar facilities in Liverpool as a precedent as follows:

- Edge Hill Health Centre 2,694m² - 55 spaces
- Townsend Lane Neighbourhood Health Centre 2,482m² - 52 spaces
- Breeze Hill Neighbourhood Health Centre 2,238m² - 38 spaces.

6.5.20 Based on these developments an average of one parking space per 51m² is calculated. A provision of 41 spaces is proposed at the development which is only 17 spaces below this average. It should be noted that visitors and staff at the drop-in centre will be able to use on street bays as well as public parking areas associated with the restaurants and retail areas if necessary.

Discouraging inappropriate on street parking

6.5.21 As set out in Section 4.6 the development site is located in the Goodison Park and Anfield Stadium FMRPZ. With the proposed development completed, these restrictions will stay in place in the local area and surrounding streets. In this way local residents and businesses will not be negatively impacted by congestion and car parking when football matches and major events take place at Anfield Stadium. These restrictions will prevent visitors and employees at the proposed development from parking on street outside the development site and encourage the use of public transport and active travel modes.

6.6 Bicycle Parking

6.6.1 As this is an outline application the scheme design is indicative. However, it is important to note that cycle parking will be provided throughout the site both in the form of communal cycle parking outside buildings for visitors but also sheltered / internal parking for staff and residents. This will be secured through the planning process as subsequent reserved matters planning submissions are made following the granting of any outline planning approval.

6.6.2 Cycle parking areas across the development site will be provided in general accordance with LCC's Ensuring a Choice of Travel SPD (April 2008). This will ensure people accessing the site will have a range of sustainable travel modes to choose as an alternative to private car travel. The cycle parking minimum standards are replicated below to provide a guide to reserved matters applications:

- A1 Retail- *1 space per 300sqm for staff & per 200sqm for customers*
- A2 Professional Services - *1 space per 300sqm for staff & per 200sqm for customers*
- A3/4/5 Food & Drink Uses- *1 space per 300sqm for staff & per 300sqm for customers*
- B1 Business- *1 space per 45 sqm*
- C2 Residential Institutions- *1 per 5 staff plus 1 per 20 residents*
- C3 Houses- *no minimum standards*
- C3 Apartments- *1 space per apartment & 10% unit spaces for visitors*
- D1 Health Centres- *1 per 5 staff plus 2 per consulting room*
- D1 Primary School - *1 space per 5 staff & 1 per 10 students*
- D1 Secondary School & Adult Education- *1 space per 5 staff & 1 per 4 students*

6.7 Football Match Parking Zone

6.7.1 In scoping, LCC has requested that Mott MacDonald analyse the extent of the FMRPZ which operates around Goodison Park and Anfield Stadium and whether the extent should be changed once Goodison Park is redeveloped. Following the relocation of Everton FC from the area, the FMPZ will remain in operation to serve Liverpool FC fixtures at Anfield Stadium. Therefore, this analysis assesses walking times from Anfield Stadium and the area this covers.

6.7.2 For the new stadium planning application at Bramley-Moore Dock, LCC has requested that Mott MacDonald adopt a 30-minute walk-time to determine the extent of the parking restrictions that will be required as part of that application. Using this walk time as a guide for this analysis Figure 44 illustrates walking time isochrones from Anfield Stadium to assess the extent of the area covered within a 30-minute walk.

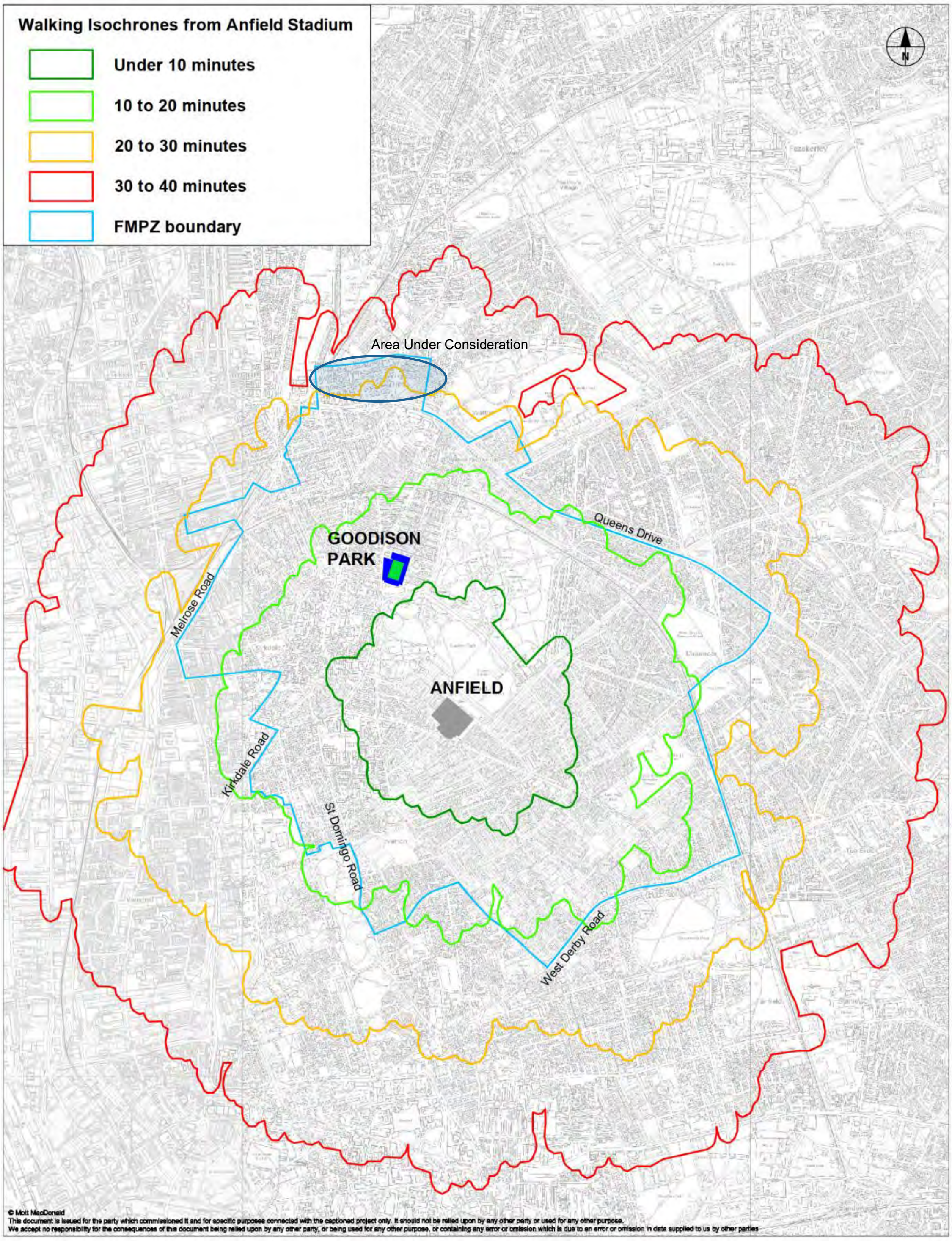
6.7.3 LCC noted the area to consider for removal from the FMPZ is the area north of Breeze Hill. The area in question is roughly bounded by Taylors Lane and Herbarth Close and Gladstone Road to the north, Breeze Hill/Queens Drive to the south, Manobier Crescent and Moor Lane to the east and Stuart Road to the west.

6.7.4 The analysis shows that the area highlighted by LCC is located partially within the 30-minute walk isochrone from Anfield Stadium, with the northern limit located marginally outside the 30-

minute walk isochrone. Therefore, if this area was to be removed from the FMRPZ, it is likely that on match or event days at Anfield Stadium, this area north of Breeze Hill may be occupied by parked vehicles associated with demand from Anfield Stadium.

6.7.5 Therefore, the conclusion of this analysis recommends that there are no changes required to the FMPZ in terms of the area it covers following the relocation of Everton FC from Goodison Park. This is because the existing FMPZ suitably covers the area around Anfield Stadium within a 30-minute walk and matches and events at Anfield Stadium require the FMPZ in the current form to enforce illegal parking within residential streets.

Figure 44: FMPZ Analysis: Walk times from Anfield Stadium (when Everton have moved from Goodison Park



Source: Mott MacDonald

6.8 Minimum Accessibility Standard Assessment

6.8.1 In line with LCC's Supplementary Planning Document 'Ensuring a Choice of Travel', a Minimum Accessibility Standard Assessment (MASA) has been undertaken. The MASA is a tool which assesses the accessibility of a proposed development.

6.8.2 Due to the layout and varying use classes associated with the proposed development, a number of MASAs have been produced to cover the main uses proposed. MASAs have been provided for the following:

- Block A and E – use class: C3 (dwelling houses).
- Block 1D and 2D – use class: B1 (office).
- Block H – use class: D1 (non-residential institutions).

6.8.3 A breakdown of the results is presented in the table below:

Table 10: Goodison Legacy: MASA Breakdown

Assessment Criteria	Block A		Block 1D		Block 2D		Block E		Block H	
	R	A	R	A	R	A	R	A	R	A
Access on Foot	4	4	4	4	4	4	4	4	4	4
Access by Cycle	5	5	5	5	5	5	5	5	5	5
Access by Public Transport	5	5	6	6	6	6	5	5	6	6
Vehicular Parking	1	1	1	1	1	1	1	1	1	1
Total	**15**	**15**	**16**	**16**	**16**	**16**	**15**	**15**	**16**	**16**

Source: Mott MacDonald (R = score required, A = score achieved)

6.8.4 It should be noted that MASAs have been provided for the 'worst-case' use classes – the blocks which required the highest score to pass. As demonstrated in Table 10, these use classes meet the required criteria to pass the MASA.

6.8.5 Full MASAs are found in Appendix A.

6.9 Construction

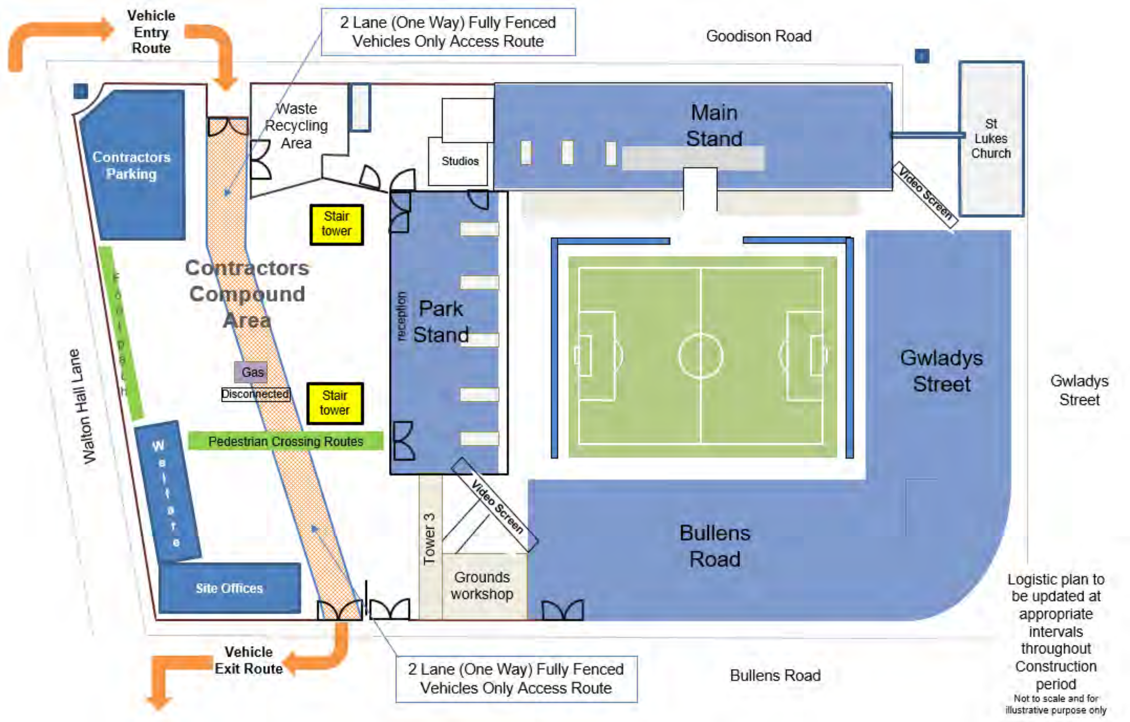
6.9.1 The access strategy for the demolition and construction phases of development is set out in Chapter 4 *Construction Strategy* in Volume II of the ES. The proposed site access and egress strategy for plant and other construction vehicles during these phases is set out as Figure 45 below. It is estimated by the Club that with a start date in 2024 (when Everton's new stadium at Bramley-Moore Dock is open) that the entire redevelopment of Goodison Park would be complete in 2028.

Plant and construction traffic

6.9.2 Construction traffic will enter the site from Walton Lane via its junction with Spellow Lane. All exit will be via Bullens Road back onto Walton Lane. A one-way system will be in operation within the site. The Club envisage that the vast majority of construction traffic will originate from the motorway network, the most appropriate route to the site being from M57 Junction 4 then using the A580 East Lancashire Road dual carriageway to Walton Lane. On departure to the site construction traffic would take the same route.

6.9.3 The Construction Management plan sets out that the traffic generation of the construction of the site would peak at around 57 two way movements per day (114 total movements).

Figure 45: Demolition & construction access strategy



Source: Everton

Construction workers

6.9.4 The vast majority of construction staff would not be permitted to park inside the Goodison Park site during construction works. Furthermore, they would be restricted from parking on the streets outside in the immediate vicinity of the stadium on account of the existing parking restrictions surrounding the site as discussed in Section 4.6.

6.9.5 Some parking will be set aside within the Blue Base on Salop Street for construction worker vehicles. Vehicles not able to park within this area will need to park within publicly available or private car parks in the local area. Accordingly, construction worker traffic will be spread wide across the road network. Prior to development commencing a Construction Travel Plan will be prepared as part of the Construction Environmental Management Plan which will be prepared following any approval of planning permission. This will assist in the management of construction worker traffic. Construction workers will be actively encouraged to utilise public transport, walking, cycling and car share wherever practical.

Construction Impact

6.9.6 The impact of the construction phases is assessed in the Transport Chapter of the EIA (Chapter 7, ES Volume II), which accompanies this planning application. The traffic generation of the demolition and construction phases is much lower than that of the operation stages, which is set out in Section 7 below.

7 Trip generation and distribution

7.1 Introduction

7.1.1 This section provides details on the vehicular traffic expected to be generated by the development and the different types of trips associated with the various land uses. This assessment will inform the impact assessment provided later in this report.

7.2 Trip generation

7.2.1 TRICS (Trip Rate Information Computer System) is a database of trip rates for developments used in the United Kingdom for transport planning purposes, specifically to quantify the trip generation of new development. It gives an indication of the number of journeys expected to arrive, and depart, through the day for different land use types. TRICS has been utilised to gain an understanding of the amount of vehicular traffic generated by the proposed development.

Proposed land uses and trip rates

7.2.2 As this planning application has been made in outline with all matters reserved, the detail of the specific uses and potential end users of each development block are not yet known. Accordingly, this assessment is based on robust assumptions on the potential land uses which could come forwards at each block. An overview of the trip generation parameters used for each development type is provided here.

Residential Use

7.2.3 The residential uses are generic in nature and for apartments the ‘flats-privately owned’ land use in TRICS has been used, for houses the ‘houses- privately owned’ category is used. It is likely that not all residential properties will be privately owned, some will be rented (either private rent or social rent). Notwithstanding this the ‘privately owned’ categories have been used to provide a robust assessment. These generally produce higher trip rates per unit than the rented categories.

Retail

7.2.4 For retail the ‘local shops’ category has been used. We consider this the most appropriate use given the size of the retail units proposed and the envisaged local catchment that the retail units will serve.

Food & Drink

7.2.5 For food & drink use (A3/4/5) the ‘restaurant’ category has been used in TRICS. The end user of each of the food & drink units is not known. Accordingly, the ‘restaurant’ use will provide a robust assessment. Within Block A, Use Class A2 (Financial & Professional Services use) is potentially proposed along with the A3/4/5 use. TRICS does not have TRICS trip rates for this use. Accordingly, for all A2/3/4/5 use within Block A 100% restaurant use has been assumed for the purpose of the assessment.

B1 Business & & A2 Professional Services

7.2.6 For the B1 business use the ‘office’ category is the most appropriate to the proposed use. For Block D where there are ground floor Use Class A2 Financial & Professional Services proposed the TRICS database does not provide trip rates for this use, accordingly the floorspace proposed for this use has been included in the B1 business use assessment the same as the floors above.

D1 Primary Education

7.2.7 For the proposed education facility at Block F it is not confirmed whether this could be a primary school, secondary school or for adult education. Accordingly, for the purpose of this assessment the facility is assumed to be a primary school to represent a worst-case scenario. This will ensure a robust assessment is carried out. Primary schools typically generate more traffic per square metre of floorspace than secondary schools or colleges / universities.

D1 Community Education / Gallery / Museum / Arts

7.2.8 For Block 1B, the end user or exact use of the block is not yet known. A range of potential uses are applied for including community education, gallery, museum or arts facility. Of these uses the community education use will generate the most traffic per square metre of development during the network peak hours. Accordingly, this use has been selected within TRICS for this assessment.

Residential Institution

7.2.9 For Block G the TRICS land use ‘retirement & care community’ land use best suits the proposed development.

Health Centre

7.2.10 For Block H a health centre has been assumed; however, the end user for the site and what type of health centre and the ailments it will treat are also not confirmed. For this reason, the ‘NHS Walk In centre’ use has been used so that a robust assessment is provided.

Trip Generation

7.2.11 Table 11 below provides the expected arrivals and departures for the AM (08:00 – 09:00) and PM (17:00 – 18:00) peaks based on the proposed quantum of development and assumed uses. The full TRICS output data is provided in Appendix B.

Table 11: Trip Generation

Block	TRICS Land Use	AM Peak			PM Peak		
		Arrivals	Departures	Total	Arrivals	Departures	Total
Block A	A3 Restaurant	-	-	-	10	6	16
Block A	C3 Flats	6	22	28	19	9	28
Block A	A1 Local Shops	17	15	31	24	26	51
Block 1B	D1 Community Education	39	5	44	30	44	74
Block 2B	A1 Local Shops	17	15	33	25	27	53
Block 2B	A3 Restaurant	-	-	-	10	6	16
Block C	C3 Flats	2	7	8	6	3	8
Block C	C3 Houses	3	9	12	8	4	13
Block 1D	B1 Office	40	4	43	5	29	34
Block 2D	B1 Office	21	2	23	3	16	18
Block E	C3 Houses	3	7	9	7	3	10

Block	TRICS Land Use	AM Peak			PM Peak		
		Arrivals	Departures	Total	Arrivals	Departures	Total
Block F	**D1 Primary Education**	81	65	146	7	10	17
Block G	**C2 Residential Institution**	12	7	18	7	12	19
Block H	**D1 Walk in Centre**	36	10	46	9	21	30
Total		**276**	**167**	**443**	**170**	**217**	**387**

Source: Mott MacDonald * Please note figures may not total exactly due to rounding

7.2.12 Based on the TRICS calculations the development will generate 443 traffic movements in the weekday morning peak hour and 387 in the weekday evening peak hour.

Committed development trip generation

7.2.13 The traffic to be generated by the proposed residential development adjacent to the application site (ref: 18F/1316) will also be considered in the assessment. This development comprises 106 flats together with associated car parking, landscaping and ancillary works. As no traffic assessment was included in this planning application Mott MacDonald has undertaken an assessment using the same trip rates for ‘C3 flats’ that were employed for the trip generation exercise for the redevelopment of Goodison Park. Based on these trip rates a total of 31 traffic movements is calculated for the weekday morning peak and 31 movements in the weekday evening peak.

7.3 Trip distribution

7.3.1 The development proposal consists of a number of different land uses which will generate differing types of trips in terms of their likely origins and destinations. Accordingly, different land uses will require different trip distribution methods. The methodology to distribute traffic on the network is set out below:

- **Census journey to work data** – 2011 Census ‘journey to work’ data has been gathered from the Datashine Commute website, which provides information on the origin/destination of employment related trips. This has been used to determine the trip distribution for the employment, adult education and residential land uses at the development.
- **Existing turning movements** – Trips for the restaurant use and primary education have been distributed using the surveyed turning movements on Walton Lane.
- **Pass-by trips and diverted trips** – this method has been applied to the retail generated traffic on the network. Retail trips are assumed to be travelling through the area already and, therefore, will not be new trips on the road network. Instead, these are viewed as existing trips which will be diverted to the site.
- **Existing turning movements and percentage split** – traffic approaching the development on Walton Lane from the north has several route choices to access the site. Before arriving at the Walton Lane / Spellow Lane junction, traffic has the option of accessing the site via Luxmore Road, Gwladys Street or Bullens Road. To take account of this route choice, for traffic with an origin or destination at Blocks A, H and G, 30% has been allocated via Bullens Road and 70% via the Walton Lane / Spellow lane junction. We consider this a robust approach given that traffic would also have the choice of using Luxmore road or Gwladys Street for these destinations.

7.3.2 Based on the assumptions above, the distribution of development trips is illustrated in the flow diagrams shown in Appendix C and traffic flow diagrams are presented in Appendix D.

8 Traffic modelling

8.1 Introduction

8.1.1 In this section an overview of the traffic modelling undertaken to assess the impact of the proposed development is provided. Firstly, an overview of the assessment scenarios and methodology is provided, followed by the junction analysis results.

8.2 Future year assessments

Traffic growth

8.2.1 The proposed opening year of the development with all aspects built out and occupied is 2028, a further future year assessment of 2032 is also provided, representing five years after opening. In order to take account of the traffic growth which will take place in Liverpool from present to these future years, TEMPro (Trip End Model Presentation Program) has been used. This program developed by the Department for Transport uses planning data to calculate changes in transport demand in the future. For the purposes of this assessment, TEMPRO uses a base year of 2019.The TEMPro factors used to assess traffic growth on the local transport network are summarised below.

- **Weekday 2028 AM:** 1.121
- **Weekday 2028 PM:** 1.116
- **Weekday 2032 AM:** 1.166
- **Weekday 2032 PM:** 1.159

Assessment scenarios

8.2.2 The 2019 surveyed traffic has been factored to 2028 and 2032 levels and is shown in Appendix E. Committed development traffic from the adjacent development has been added to this growthed traffic to calculate the 2028 and 2032 baseline. Development traffic has been added to this base traffic to calculate the 2028 and 2032 base plus development traffic scenarios. This process is summarised in Table 12 below.

Table 12: Scenario Breakdown

Scenario	Description
2019 Survey	Based on a traffic survey covering both the AM and PM peaks, carried out on a weekday in March 2019.
2028 Base	The '2019 Survey' scenario with traffic growthed to 2028 and added committed development flows, generated by planning application reference 18F/1316.
2028 Base + Development	The '2028 Base' flows with the additional traffic generated by the proposed development added.
2032 Base	The '2019 Survey' scenario with traffic growthed to 2032 and added committed development flows, generated by planning application reference 18F/1316.
2032 Base + Development	The '2032 Base' flows with the additional traffic generated by the proposed development added.

Source: Mott MacDonald

8.2.3 Traffic flow diagrams for each scenario are provided in Appendix E.

8.2.4 In scoping with LCC it was agreed that the following junctions would need to be assessed in terms of traffic impact using computer modelling.

- Walton Lane/Priory Road junction
- Spellow Lane/Walton Lane/Langham Street

8.2.5 In addition to these signal junctions the following priority junctions have been assessed as these will also accommodate significant development traffic flow:

- Walton Lane/Bullens Road
- Walton Lane/Gwladys Street

8.2.6 It should be noted that no allowance has been made in the traffic calculations to remove existing traffic from the network which travels to and from Goodison Park in the morning and evening peaks. This has been done to ensure a robust assessment is undertaken.

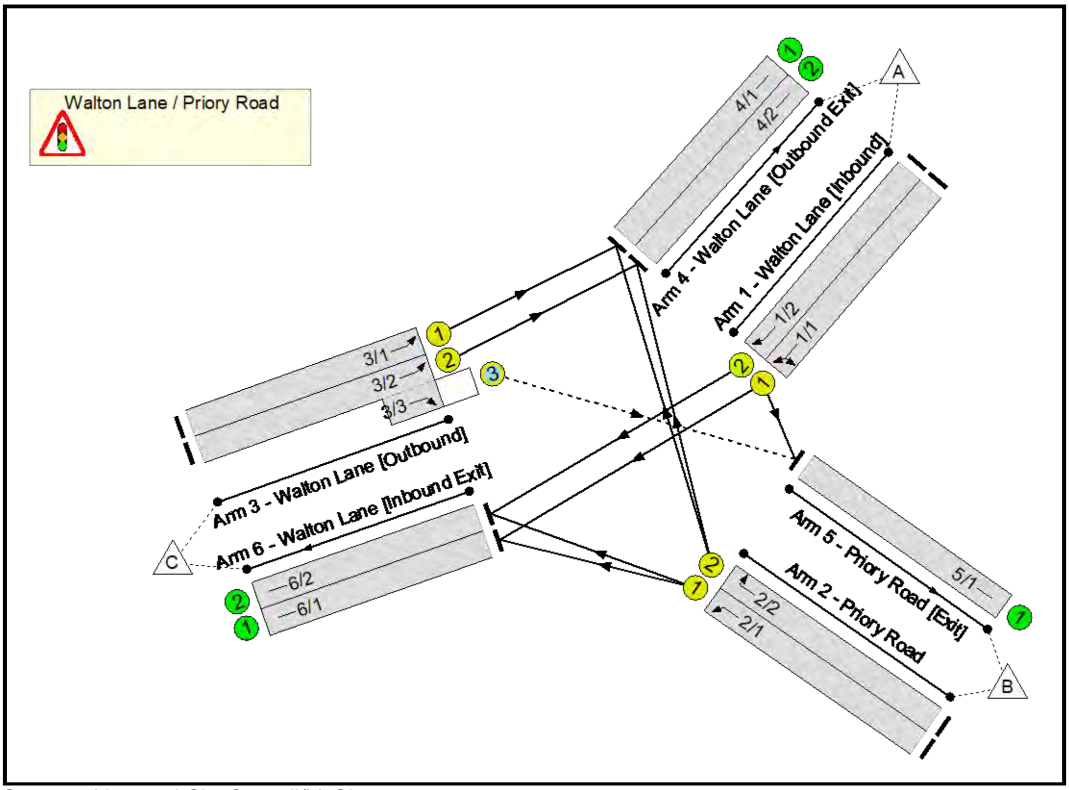
8.3 Signal junction assessments

8.3.1 To assess the signal junctions LinSig has been used, a traffic signal junction modelling tool, the most widely used traffic signal design package in the transport planning industry. In LinSig a Practical Reserve Capacity (PRC) value of 5% or more indicates that a junction is operating within its available capacity, and is able to accommodate future growth. The Degree of Saturation (DoS) gives an indication of how much demand an arm is experiencing compared to its total capacity, and a DoS less than 90% indicates that the arm is operating comfortably within its capacity. The Mean Maximum Queue (MMQ) indicator gives an estimate of the average maximum queue length in vehicles which could materialise at each arm of the junction.

Walton Lane/Priory Road

8.3.2 This is a three-arm signalised junction, located to the south-east of the proposed development. The network layout is presented in Figure 46 below. The development scenarios described in Table 12 have each been modelled, and the full LinSig output is included in Appendix F.

Figure 46: Walton Lane North/Priory Road/Walton Lane South Network Layout



Source: Liverpool City Council/LinSig

8.3.3 It should be noted that this LinSig model was provided by LCC, as the junction is to be upgraded in late 2019 / early 2020. All traffic flow data input into the model however has been calculated by Mott MacDonald.

8.3.4 Results for the AM peak period are summarised in Table 13 below.

Table 13: Walton Lane North/Priory Road/Walton Lane South Model Results – AM Peak

Arm	2028 Base		2028 Base + Dev		2032 Base		2032 Base + Dev	
	Deg. Sat.	MMQ	Deg. Sat.	MMQ	Deg. Sat.	MMQ	Deg. Sat.	MMQ
Walton Lane [Inbound] Left Ahead	79.9	18.1	83.0	19.4	83.0	19.4	86.3	21.3
Walton Lane [Inbound] Ahead	80.7	19.4	83.8	20.9	83.9	21.0	86.8	22.7
Priory Road Left	79.8	11.8	81.8	12.4	83.0	12.8	84.9	13.5
Priory Road Right	21.3	2.7	21.3	2.7	22.2	2.9	22.2	2.9
Walton Lane [Outbound] Ahead	65.1	14.1	68.4	15.3	67.7	15.2	71.0	16.5
Walton Lane [Outbound] Ahead Right	81.9	8.8	83.2	9.0	85.1	9.3	86.3	9.6

Arm	2028 Base		2028 Base + Dev		2032 Base		2032 Base + Dev	
	Deg. Sat.	MMQ	Deg. Sat.	MMQ	Deg. Sat.	MMQ	Deg. Sat.	MMQ
PRC	**9.9%**		**7.4%**		**5.8%**		**3.6%**	

Source: LinSig. *MNQ = Mean Max Queue, the average maximum length of queue expected in the hour.*

8.3.5 In the '2028 Base' scenario, the junction has a PRC of 9.9%. This falls to 7.4% in the '2028 Base + Development' scenario. In the '2032 Base' scenario, the junction has a PRC of 5.8%. This falls to 3.6% in the '2032 Base + Development' scenario. These results indicate that the junction is operating above the 5% PRC threshold in all scenarios apart from the '2032 Base + Development'. Nevertheless, the decrease when compared with the '2032 Base' scenario is small (-2.2%).

8.3.6 The degree of saturation (DoS) gives an indication of how much demand an arm is experiencing compared to its total capacity, and a DoS less than 90% indicates that the arm is operating comfortably within its capacity. In all scenarios, the arm with the highest DoS is Walton Lane [Outbound] Ahead Right. However, in the worst-case scenario ('2028 Base + Development'), the value is 86.3%, and is lower than the 90% DoS threshold. This indicates that the arm is capable of accommodating more vehicular traffic.

8.3.7 Results for the PM peak period are summarised in Table 14 below.

Table 14: Walton Lane North/Priory Road/Walton Lane South Model Results - PM

Arm	2028 Base		2028 Base + Dev		2032 Base		2032 Base + Dev	
	Deg. Sat.	MMQ	Deg. Sat.	MMQ	Deg. Sat.	MMQ	Deg. Sat.	MMQ
Walton Lane [Inbound] Left Ahead	63.2	12.3	67.0	13.4	65.7	13.0	69.5	14.2
Walton Lane [Inbound] Ahead	64.2	13.2	68.2	14.4	66.7	13.9	70.6	15.2
Priory Road Left	62.8	5.5	64.8	5.8	65.2	5.8	67.1	6.1
Priory Road Right	19.2	1.9	19.2	1.9	19.9	1.9	19.9	1.9
Walton Lane [Outbound] Ahead	61.6	12.4	67.0	14.7	63.9	13.4	69.4	15.8
Walton Lane [Outbound] Ahead Right	62.5	9.7	66.1	10.2	66.1	10.3	69.8	10.8
PRC	**40.1%**		**32%**		**35%**		**27.5%**	

Source: LinSig

8.3.8 In the '2028 Base' scenario, the junction has a PRC of 40.1%. This falls to 32% in the '2028 Base + Development' scenario. In the '2032 Base' scenario, the junction has a PRC of 35%. This falls to 27.5% in the '2032 Base + Development' scenario. Nevertheless, these results are above the 5% PRC threshold. This indicates that the junction is comfortably within its operational capacity, and can accommodate more growth if necessary.

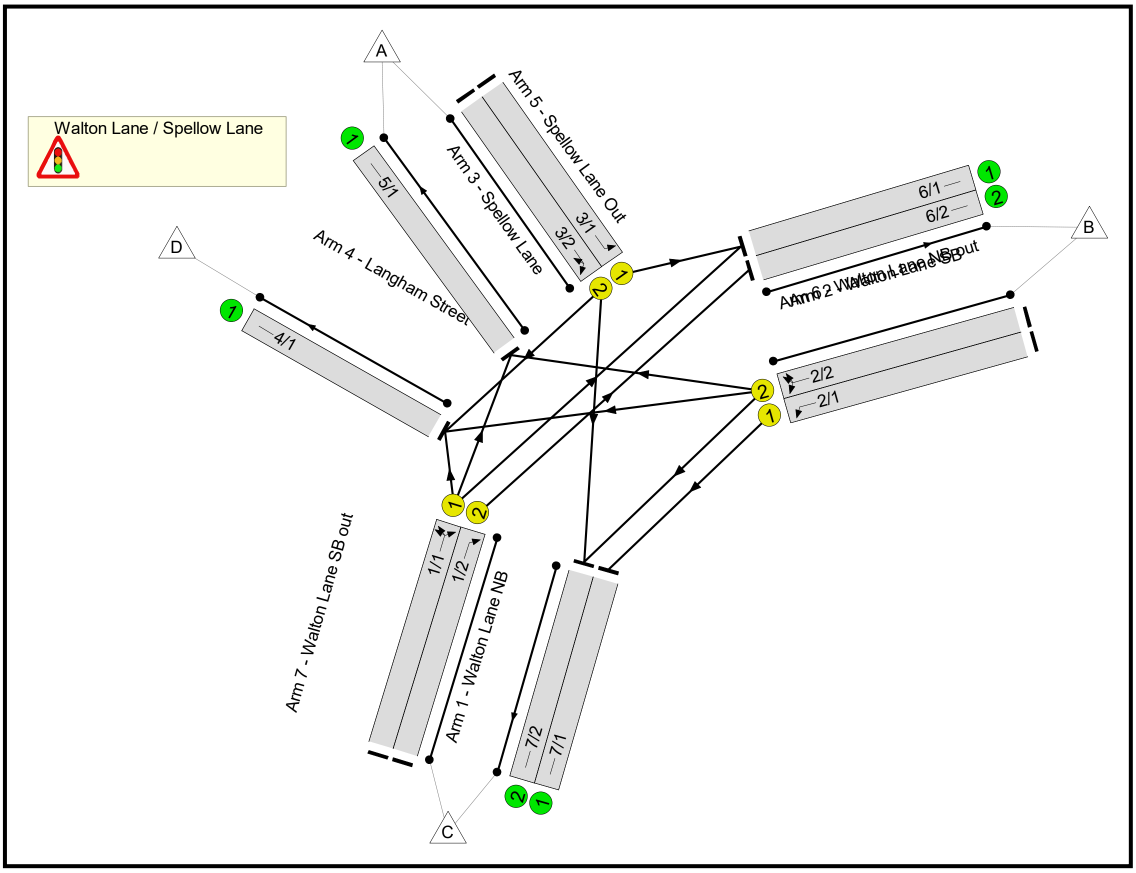
8.3.9 In all scenarios, each arm has a similar DoS, barring the Priory Road Right Turn Arm. Nevertheless, no arm reaches a DoS of over 70% in any scenario, which indicates that all arms are capable of accommodating much more vehicular traffic.

8.3.10 In each scenario, the arm with the highest MMQ fluctuates between Walton Lane [Inbound] Ahead and Walton Lane [Outbound] Ahead, although they are very similar. When comparing the ‘2028 Base’ and ‘2032 Base + Development’ scenarios, the MMQ along Walton Lane [Inbound] Ahead increases from 12 to 14. In addition to this, the MMQ along Walton Lane [Outbound] Ahead increases from 12 to 16. The difference between the MMQ increase on both of these arms is negligible.

Spellow Lane/Walton Lane east/Walton Lane south/Langham Street

8.3.11 This is a four-arm signalised junction, located to the south-west of the proposed development, and has been modelled using LinSig. The network layout is presented in Figure 47 below. The development scenarios described in Table 12 have each been modelled, and the full LinSig output is included in Appendix G.

Figure 47: Spellow Lane/Walton Lane East/Walton Lane South/Langham Street Network Layout



Source: Liverpool City Council/LinSig

8.3.12 It should be noted that this LinSig model was also provided by LCC, as the junction is to be upgraded early 2020. All traffic flow data input into the model however has been calculated by Mott MacDonald. Results for the AM peak period are summarised in Table 15 below.

Table 15: Spellow Lane/Walton Lane East/Walton Lane South/Langham Street Model Results - AM

Arm	2028 Base		2028 Base + Dev		2032 Base		2032 Base + Dev	
	Deg. Sat.	MMQ	Deg. Sat.	MMQ	Deg. Sat.	MMQ	Deg. Sat.	MMQ
Walton Lane SB [Ahead Right]	75.4	23.0	79.9	25.2	78.4	24.9	82.9	27.2
Walton Lane SB [Ahead]	74.2	22.3	78.8	24.5	77.3	24.2	82.0	26.6
Walton Lane NB [Ahead Left]	46.6	10.3	53.3	12.0	48.4	10.8	55.2	12.7
Walton Lane NB [Ahead]	46.8	10.3	53.3	12.0	48.7	10.9	55.3	12.7
Spellow Lane [Left]	37.0	6.9	36.8	7.1	38.4	7.2	38.2	7.4
Spellow Lane [Right]	76.4	8.7	80.4	10.7	79.1	9.2	82.7	11.3
PRC	**17.8%**		**12.0%**		**13.8%**		**8.6%**	

Source: LinSig

8.3.13 In the ‘2028 Base’ scenario, the junction has a PRC of 17.8%. This falls to 12% in the ‘2028 Base + Development’ scenario. In the ‘2032 Base’ scenario, the junction has a PRC of 13.8%. This falls to 8.6% in the ‘2032 Base + Development’ scenario. Nevertheless, these results are above the 5% PRC threshold. This indicates that the junction is comfortably within its operational capacity, and can accommodate more growth if necessary. The DoS is under the 90% threshold on every arm in all scenarios.

8.3.14 Results for the PM peak period are summarised in Table 16 below.

Table 16: Spellow Lane/Walton Lane East/Walton Lane South/Langham Street Model Results - PM

Arm	2028 Base		2028 Base + Dev		2032 Base		2032 Base + Dev	
	Deg. Sat.	MMQ	Deg. Sat.	MMQ	Deg. Sat.	MMQ	Deg. Sat.	MMQ
Walton Lane SB [Ahead Right]	59.2	14.8	64.4	16.5	61.4	15.8	66.8	17.6
Walton Lane SB [Ahead]	58.8	14.7	64.1	16.5	61.0	15.7	66.5	17.5
Walton Lane NB [Ahead Left]	53.1	11.7	60.7	13.7	55.1	12.3	62.9	14.4
Walton Lane NB [Ahead]	54.0	12.1	61.6	13.9	56.1	12.7	63.6	14.6
Spellow Lane [Left]	57.3	12.7	57.1	13.2	59.5	13.4	59.1	13.8
Spellow Lane [Right]	59.5	7.5	62.7	9.1	61.6	7.8	64.8	9.5
PRC	**51.2%**		**39.7%**		**46%**		**34.7%**	

Source: LinSig

8.3.15 In the ‘2028 Base’ scenario, the junction has a PRC of 51.1%. This falls to 39.7% in the ‘2028 Base + Development’ scenario. In the ‘2032 Base’ scenario, the junction has a PRC of 46%. This falls to 34.7% in the ‘2032 Base + Development’ scenario.

8.3.16 The DoS on all arms in all scenarios is well below the 90% threshold, with the highest value found along Walton Lane SB [Ahead Right] in the ‘2032 Base + Development’ scenario, representing an MMQ of 17.6. When compared with the ‘2028 Base’ scenario, this represents an increase in DoS of 7.6%, and an MMQ of 2.8, both of which would be difficult to notice by drivers passing through the junction.

8.3.17 It should be noted that the traffic data used in the assessment include existing traffic to and from Goodison Park. This traffic has not been removed from the background traffic. This has been done so that a robust assessment is undertaken.

8.4 Priority junction assessments

8.4.1 The priority junctions have been modelled using Junctions 9. In Junctions 9, an RFC (ratio of flow to capacity) value of 0.85 or above indicates that the junction could begin to experience queuing and congestion as traffic flow is close to design capacity. An RFC value of 1 or above indicates a junction is operating over its design capacity and will experience congestion and delay.

Walton Lane / Bullens Road

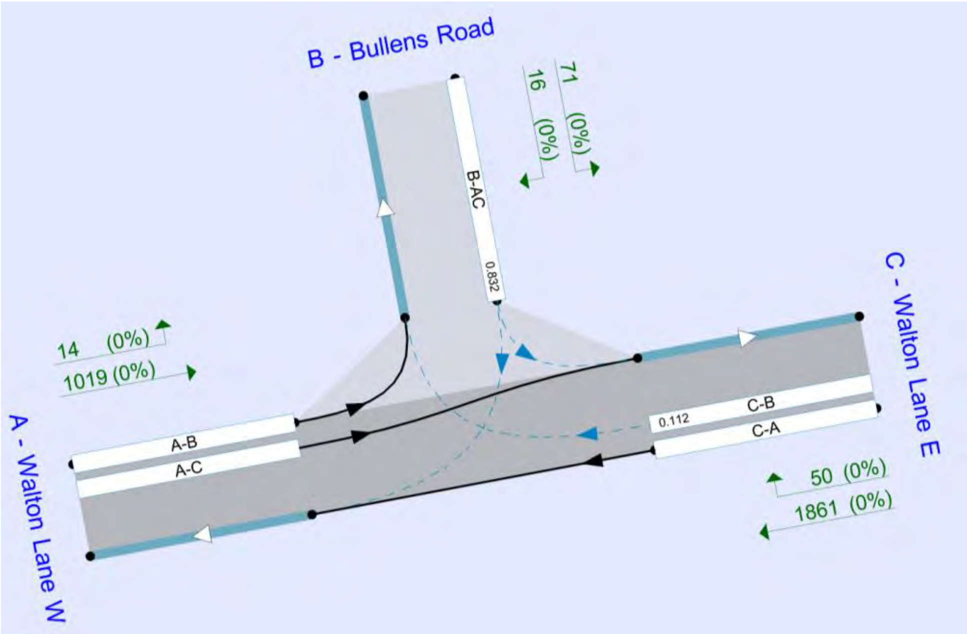
8.4.2 Initial model runs of this junction showed that vehicles turning right out of Bullens Road could be delayed on account of the volume of opposing traffic on Walton Lane. This occurred only in the morning peak in the ‘2032 Base + Development’ scenario when there would be an additional 37 vehicles turning out of the junction onto Walton Lane, on account of development. We consider that is reasonable to assume that a proportion of traffic would instead re-route to the Walton Lane / Spellow Lane signal junction to avoid any delay.

8.4.3 The majority of this development traffic is generated by the residential block A, care home Block G, as well as the educational block F. Therefore, vehicles with an origin or destination in this area will be familiar with the network, and know that alternative routes are available. We have re-routed 16 vehicles through the Walton Lane / Spellow Lane signal junction to the Walton Lane / Bullens Road junction in the ‘2032 Base + Development AM’ scenario only.

8.4.4 The network layout is presented in Figure 48 below. Traffic flows through the junction input to the model for all other scenarios are as shown in Appendix E. The full Junctions 9 output is provided in Appendix H. Junction modelling results are shown in

8.4.5 **Table 17** below.

Figure 48: Walton Lane / Bullens Road Junction Layout



Source: Mott MacDonald

Table 17: Walton Lane / Bullens Road Junction Model Results

Stream	AM		PM	
	RFC	Queue	RFC	Queue
2028 Base				
Stream B-AC	0.55	1.2	0.14	0.2
Stream C-B	0.02	0.0	0.02	0.0
2028 Base + Dev				
Stream B-AC	0.84	4.4	0.31	0.5
Stream C-B	0.11	0.1	0.09	0.1
2032 Base				
Stream B-AC	0.77	3.1	0.15	0.2
Stream C-B	0.02	0.0	0.02	0.0
2032 Base + Dev				
Stream B-AC	0.84	4.3	0.39	0.6
Stream C-B	0.11	0.1	0.10	0.1

Source: Junctions 9

8.4.6 As can be seen, the RFC values at this junction are below the 0.85 threshold in all scenarios, for both the AM and PM peak periods for the years 2028 and 2032 base and base plus development. From this information we conclude that the development would not have a severe impact on the operation of the junction.

Spellow Lane/Walton Lane Sensitivity Test

8.4.7 The 16 re-routed vehicles from the Bullens Road / Walton Lane junction would instead utilise the Walton Lane / Spellow Lane junction. These additional vehicles have been added to the worst-case scenario in the LinSig model ('2032 Base + Dev AM') and a sensitivity test has been undertaken. The results of the test are provided in Table 18 below.

Table 18: Spellow / Walton Lane Sensitivity Test

Arm	2032 Base + Dev AM	
	Deg. Sat.	MMQ
Walton Lane SB [Ahead Right]	84.0	27.9
Walton Lane SB [Ahead]	83.4	27.4
Walton Lane NB [Ahead Left]	56.2	12.8
Walton Lane NB [Ahead]	56.3	12.8
Spellow Lane [Left]	37.4	7.2
Spellow Lane [Right]	83.4	11.9
PRC	**7.2%**	

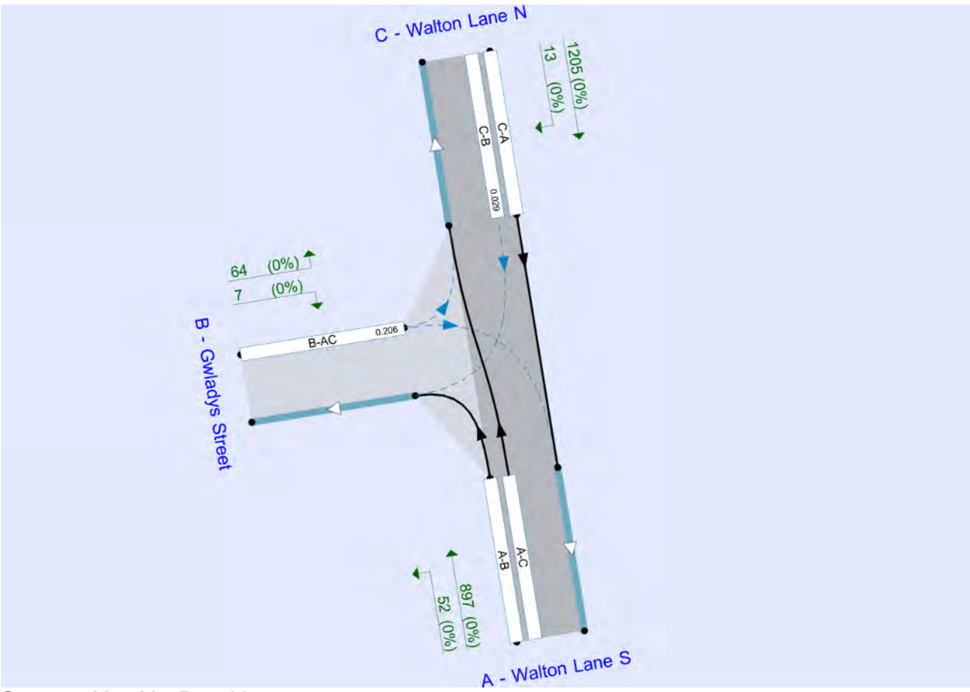
Source: LinSig

8.4.8 When compared with Table 15, the DoS along Spellow Lane [Right] (which is the lane right-turning traffic would utilise) rises from 82.7% by 0.7% to 83.4%. The MMQ rises from 11.3 by 0.6 to 11.9. These increases are marginal, and would not be noticeable in reality. Additionally, the junction will operate with a PRC of 7.2% - which is above the 5% threshold. This means that the junction would be capable of accommodating additional future growth.

Walton Lane / Gwladys Street

8.4.9 Baseline traffic flows at this junction have been calculated using the traffic survey results from the Walton Lane/Priory Road survey, Gwladys Street / Bullens Road and Walton Lane / Bullens Road Survey. The network layout is presented in Figure 49 below. The full Junctions 9 output is provided in Appendix I.

Figure 49: Walton Lane / Gwladys Street Junction Layout



Source: Mott MacDonald

8.4.10 The results of the assessment are shown below in Table 19.

Table 19: Walton Lane / Gwladys Street Junction Model Results

Stream	AM		PM	
	RFC	Queue	RFC	Queue
		2028 Base		
Stream B-AC	0.15	0.2	0.11	0.1
Stream C-B	0.07	0.1	0.00	0.0
		2028 Base + Dev		
Stream B-AC	0.33	0.5	0.19	0.2
Stream C-B	0.26	0.4	0.11	0.1
		2032 Base		
Stream B-AC	0.17	0.2	0.12	0.1
Stream C-B	0.07	0.1	0.00	0.0
		2032 Base + Dev		
Stream B-AC	0.38	0.6	0.21	0.3
Stream C-B	0.27	0.1	0.03	0.0

Source: Junctions 9

The results indicate that the junction is operating well under the 0.85 RFC threshold in all scenarios in the AM and PM peaks. When comparing the ‘2032 Base AM’ with the ‘2032 Base + Dev AM’ scenario, the RFC increases from 0.17 by 0.21 to 0.38. Additionally, the queue length increases from 0.2 by 0.4 to 0.6. Both increases indicate that the impact of the proposed development on the junction is to be negligible, and the junction is capable of accommodating additional vehicular traffic in the future.

9 Summary & Conclusions

9.1 Introduction

9.1.1 Everton Stadium Development Limited (hereafter 'Everton') has appointed Mott MacDonald to prepare this Transport Assessment (TA) to support an outline planning application for the proposed redevelopment of Goodison Park following Everton's relocation to Bramley-Moore Dock as part of 'The People's Project'. The outline planning application is submitted with all matters reserved.

9.1.2 The People's Project encompasses the development of Everton's new stadium at Bramley-Moore Dock and the Goodison Park Legacy Project - the redevelopment of Goodison Park stadium to form a mixed-use development which includes a range of community-led facilities as well as residential dwellings and commercial space.

9.1.3 Goodison Park is located in L4, Walton: approximately 4km north of Liverpool city centre. The site is well connected to the local road network and is well placed to take advantage of established public transport, pedestrian and cycle connectivity

9.1.4 The scope of this TA has been agreed with LCC. A review of accessibility has been undertaken and the site benefits from excellent walking, cycling and public transport connections; all of which are well-utilised for the site's current use of hosting football matches. It is therefore considered that the future residents, employees and visitors of the site will have a good choice of travel modes to and from the site.

9.1.5 The proposed uses at the development have passed the MASA (Minimum Accessibility Standard Assessment) which has been undertaken in accordance with Liverpool City Council's 'Ensuring a Choice of Travel Supplementary Planning Document. The Transport Assessment demonstrates that the proposed development has sufficient parking provided for all uses proposed in general accordance with LCC's parking standards as set out in the aforementioned document.

9.1.6 Traffic generation has been calculated using the TRICS database. Additionally, 2011 Census data has been used to distribute traffic to and from the development site. Junction modelling was undertaken for the following junctions:

- Walton Lane/Priory Road;
- Spellow Lane/Walton Lane/Langham Street;
- Walton Lane/Bullens Road;
- Walton Lane/Gwladys Street.

9.1.7 The junction modelling shows that the development will not have a severe impact on the surrounding road network. As noted, prior, the assessment represents a worst-case scenario which uses robust parameters and the existing traffic generated by Goodison Park has not been removed from the capacity assessment calculations.

9.2 Scheme alignment with policy

9.2.1 Following the policy context presented in Section 2, it is clear that that the proposed development supports and fulfils the policy guidelines and regulations relevant to it. An overview of alignment with policy is now provided.

National Planning Policy Framework (2019)

9.2.2 The Goodison Park Legacy Project complies with the policy guidance set out in the NPPF (2019) paragraphs 108-111, which requires all developments that will generate significant amounts of movements to be supported by a Transport Assessment.

9.2.3 The work undertaken to develop the Transport Assessment has been developed in line with the NPPF to take into account whether "appropriate opportunities to promote sustainable transport modes have been taken up", that "safe and suitable access… can be achieved" and that "any significant impacts from the development on the transport network… can be cost effectively mitigated..." (para. 108). This has been demonstrated within the development proposals description in Section 6 and in the traffic impact analysis included as Section 8.

9.2.4 The development proposals and the measures set out within the Framework Travel Plan, which accompanies this planning application, will encourage sustainable travel where practical. The transport demand generated by the development has been assessed with the conclusion that it will not have a material impact on the operation of the transport network (Section 8). We consider that the impact on the operation of the transport network would not be severe (the threshold identified in NPPF paragraph 109).

Unitary Development Plan (UDP) (2002)

9.2.5 The Goodison Park Legacy Project also aligns with the requirements of the City of Liverpool's Unitary Development Plan (2002). This document highlights the need to manage private car usage, promote public transport usage and encourage active travel uptake (Policies GEN6, T4, T6, T7, T8, T11, T12, T13 & T15). As described in some detail, the proposed development is well placed to take advantage of existing public transport, walking and cycling measures as outlined in Section 3 and the proposed development will be well connected to the surrounding sustainable transport networks as described in Section 6. The impact of the proposed development on the operation of the surrounding road network is set out in detail in Section 8.

Liverpool Local Plan (2018)

9.2.6 Liverpool's Local Plan (submission draft, 2018) states that development proposals should make the best use of existing transport infrastructure. Where this cannot be achieved, development should be phased to coincide with new transport infrastructure provision (Policy TP1). Policy TP2 requires that the impact of developments is considered in Transport Assessments. Policies TP5, TP6, TP7, & TP8 require that all developments are accessible by walking, cycling, and public transport and can be adequately serviced. The work undertaken within this TA assesses the available carrying capacity of the existing highway network and demonstrates that the development can be accommodated without capacity enhancements in Section 8. It is clearly demonstrated that the site is accessible by walking, cycling and public transport in Sections 3 & 6 of this Transport Assessment. The impact of the development on the road network is set out in Section 8.

Ensuring a Choice of Travel SPD (2008)

9.2.7 The Ensuring a Choice of Travel SPD (2008) provides guidance on access and transport requirements for new development. The document identifies that for the proposed range of land uses a series of prescribed standards should apply.

9.2.8 The proposed development, as described in Section 6, adheres to these standards. In addition, the SPD outlines details of the Minimum Accessibility Standard Assessment which must be completed for developments. This is also included in Section 6. The proposed development meets the requirements of the MASA.

Design for Access for All SPD (2011)

9.2.9 The Design for Access for All SPD highlights the most important principles in designing inclusive developments, which meet the needs for all users including disabled people. Part 3 of the SPD sets out design guidance to provide accessible footways and crossings, as well as appropriate provision of disabled parking. These principles will be taken into account at the detailed design stage, when future reserved matters submissions are made.

9.3 Conclusions

9.3.1 In conclusion, this Transport Assessment has demonstrated that the proposed Goodison Park Legacy Project can be accommodated by the existing transport network and the measures proposed. It is considered that the application proposal is acceptable in transport planning terms (having regard to the statutory development plan and other material considerations).

Appendices

A. Minimum Accessibility Standard Assessments (MASAs)

Proposal	**Goodison Legacy (D1) - Other Urban - Major & Large**			
Address: **Completed By:**	Former Goodison Park Site, Walton Lane Block H - Use Class: D1 JMc			

Has a diagram been submitted which shows how people move to and through the development and how this links to the surrounding roads, footpaths and sight lines? (This can be included within the Design and Access Statement, see Section 2.25.) If a diagram has not been submitted your application may not be processed.	**Yes / No**

Access on Foot			**Points**	**Score**
Safety	Is there safe pedestrian access to and within the site, and for pedestrians passing the site (2m minimum width footpath on both sides of the road)? If no your application must address safe pedestrian access.			**Yes**
Location	**<u>Housing Development:</u>** Is the development within 800m of a district or local centre (see Accessibility Maps) **<u>Other development</u>:** Is the density of existing local housing (i.e. within 800m) more than 30 houses per hectare (see Accessibility Maps)	Yes	2	**2**
		No	0	
Internal Layout	Does 'circulation' and access inside the sites reflect direct, safe and easy to use pedestrian routes for all; with priority given to pedestrians when they have to cross roads or cycle routes?	Yes	1	**1**
		No	0	
External Layout	Are there barriers between site and local facilities or housing which restrict pedestrian access? Examples include no dropped kerbs at crossings or on desire lines; steep gradients; a lack of a formall crossing where there is heavy traffic; security concerns, e.g. lack of lighting.	There are barriers	-2	**1**
		There are no barriers	1	
Other	The development links to identified recreational walking network (see Accessibility Map 1). If no, please provide reasons why not.			**Yes**
			Total (B)	4

Summary	Box A: Minimum Standard (from Table 3.1)	4	**Comments to correct shortfall: N/A**
	Box B: Actual Score	4	

Access by Cycle			**Points**	**Score**
Safety	Are there safety issues for cyclists either turning into or out of the site or a road junctions within 400m of the site (e.g. dangerous right turns for cyclists due to the level of traffic)? If yes, you must address safety issues in your application.			**No**
Cycle Parking	Does the development meet cycle parking standards, in a secure location with natural surveillance, or where appropriate contribute to communal cycle parking facilities? If no, you must address cycle parking standards and cycle parking facilities.			**Yes**
Location	<u>Residential Development</u> Is the development within 1500m of a district or local centre (see Accessibility Maps) <u>Other development:</u> Is the density of existing local housing (i.e. within 1500m) more than 30 houses per hectare (see Accessibility Maps)	Yes	2	**2**
		No	0	
Internal layout	Does 'circulation' and access inside the site reflect direct and safe cycle routes; with priority given to cyclists where they meet motor vehicles?	Yes	1	**1**
		No	0	

External Access	The development is within 400m of an existing or proposed cycle route and / or proposes to create a link to a cycle route, or develop a route.		1	**1**
	The development is not within 400m of an existing or proposed cycle route.		-1	
Other	Development includes cycle parking, shower facilities and lockers for cyclists	Yes	1	**1**
		No	0	
			Total (B)	5
Summary	Box A: **Minimum Standard** (From Table 3.1)	5	**Comments to correct shortfall:**	
	Box B: **Actual Score**	5		
Access by Public Transport			**Points**	**Score**
Location and access to public transport	Is the site within a 200m safe and convenient walking distance of a bus stop, and/or within 400m of a rail station?	Yes	2	**2**
		No	0	
	Are there barriers on direct and safe pedestrian routes to bus stops or rail stations? i.e. A lack of dropped kerbs; Pavements less than 2m wide; A lack of formal crossings where there is heavy traffic; or bus stop infrastructure.	There are barriers	0	**1**
		There are no barriers	1	
Frequency	High (four or more bus services or trains an hour)		2	**2**
	Medium (two or three bus services or trains an hour)		0	
	Low (less than two bus services or trains an hour)		0	
Other	The proposal contributes to bus priority measures serving the site		1	**0**
	The proposal contributes to bus stops, bus interchange or bus or rail stations in the vicinity and/or provides bus stops or bus interchange in the site		1	**1**
	The proposal contributes to an existing or new bus service		1	**0**
			Total (B):	6
Summary	Box A: **Minimum Standard** (from Table 3.1)	6	**Comments to correct shortfall:**	
	Box B: **Total Score**	6		
Vehicle Access and Parking			**Points**	**Score**
Vehicle access and circulation	Is there safe access to and from the road? If no, you must address safety issues.			**Yes**
	Can the site be adequately serviced? If no, you must address service issues.			**Yes**
	Is the safety and convenience of other users (pedestrians, cyclists and public transport) affected by the proposal? If yes, you must address safety issues.			**No**
	Has access for the emergency services been provided? If no, you must provide emergency service provision.			**Yes**
	For development which generates significant freight movements, is the site easily accessed from the road or rail freight route networks (i.e. minimising the impact of traffic on local roads and neighbourhoods) (see Accessibility Map 3 in Appendix F)? If no, please provide an explanation.			**N/A**
	The off-street parking provided is as advised in Section 4 for that development type.	Yes	1	**0**
		No	0	

Parking	The off-street parking provided is less than 75% of the amount advised in Section 4 for that development type (or shares parking provision with another development)	Yes	2	**0**
		No	0	
	For development in controlled parking zones:			
	Is the proposal for a car free development?	Yes	1	**0**
		No	0	
	Supports the control or removal of on-street parking spaces (inc provision of disabled spaces), or contributes to other identified measures in the local parking strategy (including car clubs)	Yes	1	**1**
		No	0	
			Total (B):	1

Summary	Box A: **Minimum Standard** (From Table 3.1)	1	**Comments to correct shortfall:**
	Box B: **Total Score**	1	

Proposal	**Goodison Legacy (C3) - Other Urban - Major & Large**			
Address: **Completed By:**	Former Goodison Park Site, Walton Lane Block A - Use Class: C3 JMc			
Has a diagram been submitted which shows how people move to and through the development and how this links to the surrounding roads, footpaths and sight lines? (This can be included within the Design and Access Statement, see Section 2.25.) If a diagram has not been submitted your application may not be processed.				**Yes**
Access on Foot			**Points**	**Score**
Safety	Is there safe pedestrian access to and within the site, and for pedestrians passing the site (2m minimum width footpath on both sides of the road)? If no your application must address safe pedestrian access.			**Yes**
Location	**<u>Housing Development:</u>** Is the development within 800m of a district or local centre (see Accessibility Maps) **<u>Other development</u>:** Is the density of existing local housing (i.e. within 800m) more than 30 houses per hectare (see Accessibility Maps)	Yes	2	**2**
		No	0	
Internal Layout	Does 'circulation' and access inside the sites reflect direct, safe and easy to use pedestrian routes for all; with priority given to pedestrians when they have to cross roads or cycle routes?	Yes	1	**1**
		No	0	
External Layout	Are there barriers between site and local facilities or housing which restrict pedestrian access? Examples include no dropped kerbs at crossings or on desire lines; steep gradients; a lack of a formall crossing where there is heavy traffic; security concerns, e.g. lack of lighting.	There are barriers	-2	**1**
		There are no barriers	1	
Other	The development links to identified recreational walking network (see Accessibility Map 1). If no, please provide reasons why not.			**Yes**
			Total (B)	4
Summary	Box A: Minimum Standard (from Table 3.1)	4	**Comments to correct shortfall: N/A**	
	Box B: Actual Score	4		
Access by Cycle			**Points**	**Score**
Safety	Are there safety issues for cyclists either turning into or out of the site or a road junctions within 400m of the site (e.g. dangerous right turns for cyclists due to the level of traffic)? If yes, you must address safety issues in your application.			**No**
Cycle Parking	Does the development meet cycle parking standards, in a secure location with natural surveillance, or where appropriate contribute to communal cycle parking facilities? If no, you must address cycle parking standards and cycle parking facilities.			**Yes**
Location	<u>Residential Development</u> Is the development within 1500m of a district or local centre (see Accessibility Maps) <u>Other development:</u> Is the density of existing local housing (i.e. within 1500m) more than 30 houses per hectare (see Accessibility Maps)	Yes	2	**2**
		No	0	
Internal layout	Does 'circulation' and access inside the site reflect direct and safe cycle routes; with priority given to cyclists where they meet motor vehicles?	Yes	1	**1**
		No	0	

External Access	The development is within 400m of an existing or proposed cycle route and / or proposes to create a link to a cycle route, or develop a route.		1	**1**
	The development is not within 400m of an existing or proposed cycle route.		-1	
Other	Development includes cycle parking, shower facilities and lockers for cyclists	Yes	1	**1**
		No	0	
			Total (B)	5
Summary	Box A: **Minimum Standard** (From Table 3.1)	5	**Comments to correct shortfall:**	
	Box B: **Actual Score**	5		
Access by Public Transport			**Points**	**Score**
Location and access to public transport	Is the site within a 200m safe and convenient walking distance of a bus stop, and/or within 400m of a rail station?	Yes	2	**2**
		No	0	
	Are there barriers on direct and safe pedestrian routes to bus stops or rail stations? i.e. A lack of dropped kerbs; Pavements less than 2m wide; A lack of formal crossings where there is heavy traffic; or bus stop infrastructure.	There are barriers	0	**1**
		There are no barriers	1	
Frequency	High (four or more bus services or trains an hour)		2	**2**
	Medium (two or three bus services or trains an hour)		0	
	Low (less than two bus services or trains an hour)		0	
Other	The proposal contributes to bus priority measures serving the site		1	**N/A**
	The proposal contributes to bus stops, bus interchange or bus or rail stations in the vicinity and/or provides bus stops or bus interchange in the site		1	**N/A**
	The proposal contributes to an existing or new bus service		1	**N/A**
			Total (B):	5
Summary	Box A: **Minimum Standard** (from Table 3.1)	5	**Comments to correct shortfall:**	
	Box B: **Total Score**	5		
Vehicle Access and Parking			**Points**	**Score**
Vehicle access and circulation	Is there safe access to and from the road? If no, you must address safety issues.			**Yes**
	Can the site be adequately serviced? If no, you must address service issues.			**Yes**
	Is the safety and convenience of other users (pedestrians, cyclists and public transport) affected by the proposal? If yes, you must address safety issues.			**No**
	Has access for the emergency services been provided? If no, you must provide emergency service provision.			**Yes**
	For development which generates significant freight movements, is the site easily accessed from the road or rail freight route networks (i.e. minimising the impact of traffic on local roads and neighbourhoods) (see Accessibility Map 3 in Appendix F)? If no, please provide an explanation.			**N/A**
	The off-street parking provided is as advised in Section 4 for that development type.	Yes	1	**0**
		No	0	

<table>
<tr><td rowspan="8">Parking</td><td rowspan="2">The off-street parking provided is less than 75% of the amount advised in Section 4 for that development type (or shares parking provision with another development)</td><td>Yes</td><td>2</td><td rowspan="2">0</td></tr>
<tr><td>No</td><td>0</td></tr>
<tr><td colspan="4">For development in controlled parking zones:</td></tr>
<tr><td rowspan="2">Is the proposal for a car free development?</td><td>Yes</td><td>1</td><td rowspan="2">0</td></tr>
<tr><td>No</td><td>0</td></tr>
<tr><td rowspan="2">Supports the control or removal of on-street parking spaces (inc provision of disabled spaces), or contributes to other identified measures in the local parking strategy (including car clubs)</td><td>Yes</td><td>1</td><td rowspan="2">1</td></tr>
<tr><td>No</td><td>0</td></tr>
<tr><td colspan="3">Total (B):</td><td>1</td></tr>
<tr><td rowspan="2">Summary</td><td>Box A:
Minimum Standard (From Table 3.1)</td><td>1</td><td colspan="2" rowspan="2">Comments to correct shortfall:</td></tr>
<tr><td>Box B: Total Score</td><td>1</td></tr>
</table>

Proposal	**BMD (B1) - Other Urban - Major & Large**			
Address: **Completed By:**	Former Goodison Park Site, Walton Lane Block D1 - Use Class: B1 JMc			
Has a diagram been submitted which shows how people move to and through the development and how this links to the surrounding roads, footpaths and sight lines? (This can be included within the Design and Access Statement, see Section 2.25.) If a diagram has not been submitted your application may not be processed.				**Yes**
Access on Foot			**Points**	**Score**
Safety	Is there safe pedestrian access to and within the site, and for pedestrians passing the site (2m minimum width footpath on both sides of the road)? If no your application must address safe pedestrian access.			**Yes**
Location	**<u>Housing Development:</u>** Is the development within 800m of a district or local centre (see Accessibility Maps) **<u>Other development</u>:** Is the density of existing local housing (i.e. within 800m) more than 30 houses per hectare (see Accessibility Maps)	Yes	2	**2**
		No	0	
Internal Layout	Does 'circulation' and access inside the sites reflect direct, safe and easy to use pedestrian routes for all; with priority given to pedestrians when they have to cross roads or cycle routes?	Yes	1	**1**
		No	0	
External Layout	Are there barriers between site and local facilities or housing which restrict pedestrian access? Examples include no dropped kerbs at crossings or on desire lines; steep gradients; a lack of a formall crossing where there is heavy traffic; security concerns, e.g. lack of lighting.	There are barriers	-2	**1**
		There are no barriers	1	
Other	The development links to identified recreational walking network (see Accessibility Map 1). If no, please provide reasons why not.			**Yes**
			Total (B)	4
Summary	Box A: Minimum Standard (from Table 3.1)	4	**Comments to correct shortfall: N/A**	
	Box B: Actual Score	4		
Access by Cycle			**Points**	**Score**
Safety	Are there safety issues for cyclists either turning into or out of the site or a road junctions within 400m of the site (e.g. dangerous right turns for cyclists due to the level of traffic)? If yes, you must address safety issues in your application.			**No**
Cycle Parking	Does the development meet cycle parking standards, in a secure location with natural surveillance, or where appropriate contribute to communal cycle parking facilities? If no, you must address cycle parking standards and cycle parking facilities.			**Yes**
Location	<u>Residential Development</u> Is the development within 1500m of a district or local centre (see Accessibility Maps) <u>Other development:</u> Is the density of existing local housing (i.e. within 1500m) more than 30 houses per hectare (see Accessibility Maps)	Yes	2	**2**
		No	0	
Internal layout	Does 'circulation' and access inside the site reflect direct and safe cycle routes; with priority given to cyclists where they meet motor vehicles?	Yes	1	**1**
		No	0	

External Access	The development is within 400m of an existing or proposed cycle route and / or proposes to create a link to a cycle route, or develop a route.		1	**1**
	The development is not within 400m of an existing or proposed cycle route.		-1	
Other	Development includes cycle parking, shower facilities and lockers for cyclists	Yes	1	**1**
		No	0	
			Total (B)	5
Summary	Box A: **Minimum Standard** (From Table 3.1)	5	**Comments to correct shortfall:**	
	Box B: **Actual Score**	5		
Access by Public Transport			**Points**	**Score**
Location and access to public transport	Is the site within a 200m safe and convenient walking distance of a bus stop, and/or within 400m of a rail station?	Yes	2	**2**
		No	0	
	Are there barriers on direct and safe pedestrian routes to bus stops or rail stations? i.e. A lack of dropped kerbs; Pavements less than 2m wide; A lack of formal crossings where there is heavy traffic; or bus stop infrastructure.	There are barriers	0	**1**
		There are no barriers	1	
Frequency	High (four or more bus services or trains an hour)		2	**2**
	Medium (two or three bus services or trains an hour)		0	
	Low (less than two bus services or trains an hour)		0	
Other	The proposal contributes to bus priority measures serving the site		1	**0**
	The proposal contributes to bus stops, bus interchange or bus or rail stations in the vicinity and/or provides bus stops or bus interchange in the site		1	**1**
	The proposal contributes to an existing or new bus service		1	**0**
			Total (B):	6
Summary	Box A: **Minimum Standard** (from Table 3.1)	6	**Comments to correct shortfall:**	
	Box B: **Total Score**	6		
Vehicle Access and Parking			**Points**	**Score**
Vehicle access and circulation	Is there safe access to and from the road? If no, you must address safety issues.			**Yes**
	Can the site be adequately serviced? If no, you must address service issues.			**Yes**
	Is the safety and convenience of other users (pedestrians, cyclists and public transport) affected by the proposal? If yes, you must address safety issues.			**No**
	Has access for the emergency services been provided? If no, you must provide emergency service provision.			**Yes**
	For development which generates significant freight movements, is the site easily accessed from the road or rail freight route networks (i.e. minimising the impact of traffic on local roads and neighbourhoods) (see Accessibility Map 3 in Appendix F)? If no, please provide an explanation.			**N/A**
	The off-street parking provided is as advised in Section 4 for that development type.	Yes	1	**0**
		No	0	

Parking	The off-street parking provided is less than 75% of the amount advised in Section 4 for that development type (or shares parking provision with another development)	Yes	2	**0**
		No	0	
	For development in controlled parking zones:			
	Is the proposal for a car free development?	Yes	1	**0**
		No	0	
	Supports the control or removal of on-street parking spaces (inc provision of disabled spaces), or contributes to other identified measures in the local parking strategy (including car clubs)	Yes	1	**1**
		No	0	
			Total (B):	1

Summary	Box A: **Minimum Standard** (From Table 3.1)	1	**Comments to correct shortfall:**
	Box B: **Total Score**	1	

Proposal	**BMD (B1) - Other Urban - Major & Large**			
Address: **Completed By:**	Former Goodison Park Site, Walton Lane Block D2 - Use Class: B1 JMc			
Has a diagram been submitted which shows how people move to and through the development and how this links to the surrounding roads, footpaths and sight lines? (This can be included within the Design and Access Statement, see Section 2.25.) If a diagram has not been submitted your application may not be processed.				**Yes**
Access on Foot			**Points**	**Score**
Safety	Is there safe pedestrian access to and within the site, and for pedestrians passing the site (2m minimum width footpath on both sides of the road)? If no your application must address safe pedestrian access.			**Yes**
Location	**<u>Housing Development:</u>** Is the development within 800m of a district or local centre (see Accessibility Maps) **<u>Other development</u>:** Is the density of existing local housing (i.e. within 800m) more than 30 houses per hectare (see Accessibility Maps)	Yes	2	**2**
		No	0	
Internal Layout	Does 'circulation' and access inside the sites reflect direct, safe and easy to use pedestrian routes for all; with priority given to pedestrians when they have to cross roads or cycle routes?	Yes	1	**1**
		No	0	
External Layout	Are there barriers between site and local facilities or housing which restrict pedestrian access? Examples include no dropped kerbs at crossings or on desire lines; steep gradients; a lack of a formall crossing where there is heavy traffic; security concerns, e.g. lack of lighting.	There are barriers	-2	**1**
		There are no barriers	1	
Other	The development links to identified recreational walking network (see Accessibility Map 1). If no, please provide reasons why not.			**Yes**
			Total (B)	4
Summary	Box A: Minimum Standard (from Table 3.1)	4	**Comments to correct shortfall: N/A**	
	Box B: Actual Score	4		
Access by Cycle			**Points**	**Score**
Safety	Are there safety issues for cyclists either turning into or out of the site or a road junctions within 400m of the site (e.g. dangerous right turns for cyclists due to the level of traffic)? If yes, you must address safety issues in your application.			**No**
Cycle Parking	Does the development meet cycle parking standards, in a secure location with natural surveillance, or where appropriate contribute to communal cycle parking facilities? If no, you must address cycle parking standards and cycle parking facilities.			**Yes**
Location	<u>Residential Development</u> Is the development within 1500m of a district or local centre (see Accessibility Maps) <u>Other development:</u> Is the density of existing local housing (i.e. within 1500m) more than 30 houses per hectare (see Accessibility Maps)	Yes	2	**2**
		No	0	
Internal layout	Does 'circulation' and access inside the site reflect direct and safe cycle routes; with priority given to cyclists where they meet motor vehicles?	Yes	1	**1**
		No	0	

External Access	The development is within 400m of an existing or proposed cycle route and / or proposes to create a link to a cycle route, or develop a route.		1	**1**
	The development is not within 400m of an existing or proposed cycle route.		-1	
Other	Development includes cycle parking, shower facilities and lockers for cyclists	Yes	1	**1**
		No	0	
			Total (B)	5
Summary	Box A: **Minimum Standard** (From Table 3.1)	5	**Comments to correct shortfall:**	
	Box B: **Actual Score**	5		
Access by Public Transport			**Points**	**Score**
Location and access to public transport	Is the site within a 200m safe and convenient walking distance of a bus stop, and/or within 400m of a rail station?	Yes	2	**2**
		No	0	
	Are there barriers on direct and safe pedestrian routes to bus stops or rail stations? i.e. A lack of dropped kerbs; Pavements less than 2m wide; A lack of formal crossings where there is heavy traffic; or bus stop infrastructure.	There are barriers	0	**1**
		There are no barriers	1	
Frequency	High (four or more bus services or trains an hour)		2	**2**
	Medium (two or three bus services or trains an hour)		0	
	Low (less than two bus services or trains an hour)		0	
Other	The proposal contributes to bus priority measures serving the site		1	**0**
	The proposal contributes to bus stops, bus interchange or bus or rail stations in the vicinity and/or provides bus stops or bus interchange in the site		1	**1**
	The proposal contributes to an existing or new bus service		1	**0**
			Total (B):	6
Summary	Box A: **Minimum Standard** (from Table 3.1)	6	**Comments to correct shortfall:**	
	Box B: **Total Score**	6		
Vehicle Access and Parking			**Points**	**Score**
Vehicle access and circulation	Is there safe access to and from the road? If no, you must address safety issues.			**Yes**
	Can the site be adequately serviced? If no, you must address service issues.			**Yes**
	Is the safety and convenience of other users (pedestrians, cyclists and public transport) affected by the proposal? If yes, you must address safety issues.			**No**
	Has access for the emergency services been provided? If no, you must provide emergency service provision.			**Yes**
	For development which generates significant freight movements, is the site easily accessed from the road or rail freight route networks (i.e. minimising the impact of traffic on local roads and neighbourhoods) (see Accessibility Map 3 in Appendix F)? If no, please provide an explanation.			**N/A**
	The off-street parking provided is as advised in Section 4 for that development type.	Yes	1	**0**
		No	0	

Parking	The off-street parking provided is less than 75% of the amount advised in Section 4 for that development type (or shares parking provision with another development)	Yes	2	**0**
		No	0	
	For development in controlled parking zones:			
	Is the proposal for a car free development?	Yes	1	**0**
		No	0	
	Supports the control or removal of on-street parking spaces (inc provision of disabled spaces), or contributes to other identified measures in the local parking strategy (including car clubs)	Yes	1	**1**
		No	0	
			Total (B):	1

Summary	Box A: **Minimum Standard** (From Table 3.1)	1	**Comments to correct shortfall:**
	Box B: **Total Score**	1	

Proposal	**Goodison Legacy (C3) - Other Urban - Major & Large**			
Address: **Completed By:**	Former Goodison Park Site, Walton Lane Block E - Use Class: C3 JMc			
Has a diagram been submitted which shows how people move to and through the development and how this links to the surrounding roads, footpaths and sight lines? (This can be included within the Design and Access Statement, see Section 2.25.) If a diagram has not been submitted your application may not be processed.				**Yes**
Access on Foot			**Points**	**Score**
Safety	Is there safe pedestrian access to and within the site, and for pedestrians passing the site (2m minimum width footpath on both sides of the road)? If no your application must address safe pedestrian access.			**Yes**
Location	**<u>Housing Development:</u>** Is the development within 800m of a district or local centre (see Accessibility Maps) **<u>Other development</u>:** Is the density of existing local housing (i.e. within 800m) more than 30 houses per hectare (see Accessibility Maps)	Yes	2	**2**
		No	0	
Internal Layout	Does 'circulation' and access inside the sites reflect direct, safe and easy to use pedestrian routes for all; with priority given to pedestrians when they have to cross roads or cycle routes?	Yes	1	**1**
		No	0	
External Layout	Are there barriers between site and local facilities or housing which restrict pedestrian access? Examples include no dropped kerbs at crossings or on desire lines; steep gradients; a lack of a formall crossing where there is heavy traffic; security concerns, e.g. lack of lighting.	There are barriers	-2	**1**
		There are no barriers	1	
Other	The development links to identified recreational walking network (see Accessibility Map 1). If no, please provide reasons why not.			**Yes**
			Total (B)	4
Summary	Box A: Minimum Standard (from Table 3.1) — 4	**Comments to correct shortfall: N/A**		
	Box B: Actual Score — 4			
Access by Cycle			**Points**	**Score**
Safety	Are there safety issues for cyclists either turning into or out of the site or a road junctions within 400m of the site (e.g. dangerous right turns for cyclists due to the level of traffic)? If yes, you must address safety issues in your application.			**No**
Cycle Parking	Does the development meet cycle parking standards, in a secure location with natural surveillance, or where appropriate contribute to communal cycle parking facilities? If no, you must address cycle parking standards and cycle parking facilities.			**Yes**
Location	<u>Residential Development</u> Is the development within 1500m of a district or local centre (see Accessibility Maps) <u>Other development:</u> Is the density of existing local housing (i.e. within 1500m) more than 30 houses per hectare (see Accessibility Maps)	Yes	2	**2**
		No	0	
Internal layout	Does 'circulation' and access inside the site reflect direct and safe cycle routes; with priority given to cyclists where they meet motor vehicles?	Yes	1	**1**
		No	0	

External Access	The development is within 400m of an existing or proposed cycle route and / or proposes to create a link to a cycle route, or develop a route.		1	**1**
	The development is not within 400m of an existing or proposed cycle route.		-1	
Other	Development includes cycle parking, shower facilities and lockers for cyclists	Yes	1	**1**
		No	0	
			Total (B)	5
Summary	Box A: **Minimum Standard** (From Table 3.1)	5	**Comments to correct shortfall:**	
	Box B: **Actual Score**	5		
Access by Public Transport			**Points**	**Score**
Location and access to public transport	Is the site within a 200m safe and convenient walking distance of a bus stop, and/or within 400m of a rail station?	Yes	2	**2**
		No	0	
	Are there barriers on direct and safe pedestrian routes to bus stops or rail stations? i.e. A lack of dropped kerbs; Pavements less than 2m wide; A lack of formal crossings where there is heavy traffic; or bus stop infrastructure.	There are barriers	0	**1**
		There are no barriers	1	
Frequency	High (four or more bus services or trains an hour)		2	**2**
	Medium (two or three bus services or trains an hour)		0	
	Low (less than two bus services or trains an hour)		0	
Other	The proposal contributes to bus priority measures serving the site		1	**0**
	The proposal contributes to bus stops, bus interchange or bus or rail stations in the vicinity and/or provides bus stops or bus interchange in the site		1	**0**
	The proposal contributes to an existing or new bus service		1	**0**
			Total (B):	5
Summary	Box A: **Minimum Standard** (from Table 3.1)	5	**Comments to correct shortfall:**	
	Box B: **Total Score**	5		
Vehicle Access and Parking			**Points**	**Score**
Vehicle access and circulation	Is there safe access to and from the road? If no, you must address safety issues.			**Yes**
	Can the site be adequately serviced? If no, you must address service issues.			**Yes**
	Is the safety and convenience of other users (pedestrians, cyclists and public transport) affected by the proposal? If yes, you must address safety issues.			**No**
	Has access for the emergency services been provided? If no, you must provide emergency service provision.			**Yes**
	For development which generates significant freight movements, is the site easily accessed from the road or rail freight route networks (i.e. minimising the impact of traffic on local roads and neighbourhoods) (see Accessibility Map 3 in Appendix F)? If no, please provide an explanation.			**N/A**
	The off-street parking provided is as advised in Section 4 for that development type.	Yes	1	**0**
		No	0	

Parking	The off-street parking provided is less than 75% of the amount advised in Section 4 for that development type (or shares parking provision with another development)	Yes	2	**0**
		No	0	
	For development in controlled parking zones:			
	Is the proposal for a car free development?	Yes	1	**0**
		No	0	
	Supports the control or removal of on-street parking spaces (inc provision of disabled spaces), or contributes to other identified measures in the local parking strategy (including car clubs)	Yes	1	**1**
		No	0	
			Total (B):	1

Summary	Box A: **Minimum Standard** (From Table 3.1)	1	**Comments to correct shortfall:**
	Box B: **Total Score**	1	

B. TRICS Output Data

Calculation Reference: AUDIT-704103-190513-0559

TRIP RATE CALCULATION SELECTION PARAMETERS:

Land Use : 03 - RESIDENTIAL
Category : C - FLATS PRIVATELY OWNED
VEHICLES

Selected regions and areas:

02	SOUTH EAST		
	ES	EAST SUSSEX	1 days
03	SOUTH WEST		
	DC	DORSET	1 days
04	EAST ANGLIA		
	CA	CAMBRIDGESHIRE	2 days
	SF	SUFFOLK	1 days
05	EAST MIDLANDS		
	NT	NOTTINGHAMSHIRE	2 days
09	NORTH		
	CB	CUMBRIA	1 days
	TV	TEES VALLEY	1 days
10	WALES		
	DB	DENBIGHSHIRE	1 days
11	SCOTLAND		
	EB	CITY OF EDINBURGH	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: 14 to 135 (units:)
Range Selected by User: 6 to 215 (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 05/06/18

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	4 days
Wednesday	3 days
Friday	2 days

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

Selected survey types:

Manual count	11 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)	10
Neighbourhood Centre (PPS6 Local Centre)	1

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	7
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:

C3	11 days

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

Population within 1 mile:

1,001 to 5,000	3 days
10,001 to 15,000	2 days
20,001 to 25,000	2 days
25,001 to 50,000	3 days
50,001 to 100,000	1 days

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

Population within 5 miles:

25,001 to 50,000	1 days
50,001 to 75,000	3 days
125,001 to 250,000	2 days
250,001 to 500,000	5 days

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

Car ownership within 5 miles:

0.6 to 1.0	3 days
1.1 to 1.5	8 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:

No	11 days

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

PTAL Rating:

No PTAL Present	11 days

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

TRIP RATE for Land Use 03 - RESIDENTIAL/C - FLATS PRIVATELY OWNED
VEHICLES
Calculation factor: 1 DWELLS
BOLD print indicates peak (busiest) period

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	11	54	0.062	11	54	0.134	11	54	0.196
08:00 - 09:00	11	54	0.064	**11**	**54**	**0.229**	**11**	**54**	**0.293**
09:00 - 10:00	11	54	0.084	11	54	0.130	11	54	0.214
10:00 - 11:00	11	54	0.075	11	54	0.090	11	54	0.165
11:00 - 12:00	11	54	0.082	11	54	0.080	11	54	0.162
12:00 - 13:00	11	54	0.080	11	54	0.072	11	54	0.152
13:00 - 14:00	11	54	0.079	11	54	0.085	11	54	0.164
14:00 - 15:00	11	54	0.105	11	54	0.109	11	54	0.214
15:00 - 16:00	11	54	0.110	11	54	0.077	11	54	0.187
16:00 - 17:00	11	54	0.110	11	54	0.092	11	54	0.202
17:00 - 18:00	**11**	**54**	**0.196**	11	54	0.094	11	54	0.290
18:00 - 19:00	11	54	0.134	11	54	0.080	11	54	0.214
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			1.181			1.272			2.453

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

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

Parameter summary

Trip rate parameter range selected:	14 - 135 (units:)
Survey date date range:	01/01/11 - 05/06/18
Number of weekdays (Monday-Friday):	11
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.

Calculation Reference: AUDIT-704107-191112-1132

TRIP RATE CALCULATION SELECTION PARAMETERS:

Land Use : 02 - EMPLOYMENT
Category : A - OFFICE
VEHICLES

Selected regions and areas:

02	SOUTH EAST		
	HC	HAMPSHIRE	1 days
	SC	SURREY	1 days
06	WEST MIDLANDS		
	WM	WEST MIDLANDS	1 days
08	NORTH WEST		
	LC	LANCASHIRE	1 days
09	NORTH		
	TW	TYNE & WEAR	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: Gross floor area
Actual Range: 1800 to 10293 (units: sqm)
Range Selected by User: 1000 to 20000 (units: sqm)

Parking Spaces Range: All Surveys Included

Public Transport Provision:
Selection by: Include all surveys

Date Range: 01/01/11 to 14/03/19

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
Tuesday	3 days
Friday	1 days

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

Selected survey types:

Manual count	5 days
Directional ATC Count	0 days

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

Selected Locations:
Suburban Area (PPS6 Out of Centre) 5

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	3
Built-Up Zone	1
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:	
B1	5 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	1 days
10,001 to 15,000	1 days
25,001 to 50,000	3 days

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

Population within 5 miles:	
125,001 to 250,000	1 days
250,001 to 500,000	2 days
500,001 or More	2 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	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.

Travel Plan:	
Yes	1 days
No	4 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	5 days

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

LIST OF SITES relevant to selection parameters

1 HC-02-A-12 HMRC HAMPSHIRE
NORTHERN ROAD
PORTSMOUTH
COSHAM
Suburban Area (PPS6 Out of Centre)
No Sub Category
Total Gross floor area: 10100 sqm
Survey date: MONDAY 23/11/15 Survey Type: MANUAL

2 LC-02-A-09 OFFICES LANCASHIRE
FURTHERGATE
BLACKBURN

Suburban Area (PPS6 Out of Centre)
Built-Up Zone
Total Gross floor area: 2600 sqm
Survey date: TUESDAY 04/06/13 Survey Type: MANUAL

3 SC-02-A-17 PHARMACEUTICALS SURREY
ST GEORGE'S AVENUE
WEYBRIDGE
THE HEATH
Suburban Area (PPS6 Out of Centre)
Residential Zone
Total Gross floor area: 10293 sqm
Survey date: TUESDAY 18/10/11 Survey Type: MANUAL

4 TW-02-A-08 HOUSING ASSOCIATION OFFICE TYNE & WEAR
BENTON PARK ROAD
NEWCASTLE UPON TYNE
LONGBENTON
Suburban Area (PPS6 Out of Centre)
Residential Zone
Total Gross floor area: 4800 sqm
Survey date: FRIDAY 19/10/18 Survey Type: MANUAL

5 WM-02-A-04 OFFICE WEST MIDLANDS
BOURNVILLE LANE
BIRMINGHAM

Suburban Area (PPS6 Out of Centre)
Residential Zone
Total Gross floor area: 1800 sqm
Survey date: TUESDAY 10/11/15 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 02 - EMPLOYMENT/A - OFFICE
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	1	10100	1.109	1	10100	0.168	1	10100	1.277
07:00 - 08:00	5	5919	0.774	5	5919	0.081	5	5919	0.855
08:00 - 09:00	5	**5919**	**1.183**	5	5919	0.112	5	**5919**	**1.295**
09:00 - 10:00	5	5919	0.720	5	5919	0.223	5	5919	0.943
10:00 - 11:00	5	5919	0.253	5	5919	0.176	5	5919	0.429
11:00 - 12:00	5	5919	0.189	5	5919	0.206	5	5919	0.395
12:00 - 13:00	5	5919	0.277	5	5919	0.399	5	5919	0.676
13:00 - 14:00	5	5919	0.311	5	5919	0.341	5	5919	0.652
14:00 - 15:00	5	5919	0.193	5	5919	0.402	5	5919	0.595
15:00 - 16:00	5	5919	0.149	5	5919	0.672	5	5919	0.821
16:00 - 17:00	5	5919	0.196	5	**5919**	**0.865**	5	5919	1.061
17:00 - 18:00	5	5919	0.145	5	5919	0.858	5	5919	1.003
18:00 - 19:00	5	5919	0.027	5	5919	0.348	5	5919	0.375
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			5.526			4.851			10.377

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

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

Parameter summary

Trip rate parameter range selected:	1800 - 10293 (units: sqm)
Survey date date range:	01/01/11 - 14/03/19
Number of weekdays (Monday-Friday):	5
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.

Calculation Reference: AUDIT-704107-191112-1124

TRIP RATE CALCULATION SELECTION PARAMETERS:

Land Use : 03 - RESIDENTIAL
Category : O - RETIREMENT AND CARE COMMUNITY
VEHICLES

Selected regions and areas:

02	SOUTH EAST		
	KC	KENT	1 days
	OX	OXFORDSHIRE	1 days
	SC	SURREY	1 days
03	SOUTH WEST		
	BR	BRISTOL CITY	2 days
	DV	DEVON	1 days
	NS	NORTH SOMERSET	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: 39 to 137 (units:)
Range Selected by User: 36 to 149 (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 27/11/15

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:

Tuesday	2 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	7 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)	3
Edge of Town	3
Neighbourhood Centre (PPS6 Local Centre)	1

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	7

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:

Not Known	1 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	1 days
15,001 to 20,000	1 days
20,001 to 25,000	2 days
25,001 to 50,000	3 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	1 days
100,001 to 125,000	2 days
125,001 to 250,000	2 days
250,001 to 500,000	1 days
500,001 or More	1 days

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

Car ownership within 5 miles:

0.6 to 1.0	1 days
1.1 to 1.5	6 days

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

Travel Plan:

Yes	1 days
No	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	7 days

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

LIST OF SITES relevant to selection parameters

1	BR-03-O-01	RETIREMENT VILLAGE		BRISTOL CITY
	HOLLWAY ROAD BRISTOL STOCKWOOD Neighbourhood Centre (PPS6 Local Centre) Residential Zone			
	Total Number of dwellings:		58	
	Survey date: TUESDAY		*22/09/15*	*Survey Type: MANUAL*
2	BR-03-O-02	RETIREMENT VILLAGE		BRISTOL CITY
	MEG THATCHERS GARDENS BRISTOL Suburban Area (PPS6 Out of Centre) Residential Zone			
	Total Number of dwellings:		49	
	Survey date: FRIDAY		*18/09/15*	*Survey Type: MANUAL*
3	DV-03-O-01	RETIREMENT VILLAGE		DEVON
	ST MARYCHURCH ROAD TORQUAY ST MARYCHURCH Suburban Area (PPS6 Out of Centre) Residential Zone			
	Total Number of dwellings:		45	
	Survey date: TUESDAY		*29/09/15*	*Survey Type: MANUAL*
4	KC-03-O-01	RETIREMENT VILLAGE		KENT
	RUMFIELDS ROAD BROADSTAIRS Suburban Area (PPS6 Out of Centre) Residential Zone			
	Total Number of dwellings:		40	
	Survey date: THURSDAY		*19/11/15*	*Survey Type: MANUAL*
5	NS-03-O-01	RETIREMENT VILLAGE		NORTH SOMERSET
	DIAMOND BATCH WESTON SUPER MARE WORLE Edge of Town Residential Zone			
	Total Number of dwellings:		137	
	Survey date: THURSDAY		*24/09/15*	*Survey Type: MANUAL*
6	OX-03-O-01	RETIREMENT VILLAGE		OXFORDSHIRE
	RUSKIN ROAD BANBURY EASINGTON Edge of Town Residential Zone			
	Total Number of dwellings:		70	
	Survey date: WEDNESDAY		*11/11/15*	*Survey Type: MANUAL*
7	SC-03-O-01	RETIREMENT VILLAGE		SURREY
	WESTFIELD ROAD WOKING Edge of Town Residential Zone			
	Total Number of dwellings:		39	
	Survey date: WEDNESDAY		*18/11/15*	*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/O - RETIREMENT AND CARE COMMUNITY
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	7	63	0.059	7	63	0.030	7	63	0.089
08:00 - 09:00	7	63	0.114	7	63	0.064	7	63	0.178
09:00 - 10:00	7	63	**0.212**	7	63	0.135	7	63	0.347
10:00 - 11:00	7	63	0.146	7	63	0.158	7	63	0.304
11:00 - 12:00	7	63	0.153	7	63	0.151	7	63	0.304
12:00 - 13:00	7	63	0.123	7	63	0.146	7	63	0.269
13:00 - 14:00	7	63	0.176	7	63	**0.192**	7	63	**0.368**
14:00 - 15:00	7	63	0.158	7	63	0.185	7	63	0.343
15:00 - 16:00	7	63	0.148	7	63	0.183	7	63	0.331
16:00 - 17:00	7	63	0.132	7	63	0.132	7	63	0.264
17:00 - 18:00	7	63	0.071	7	63	0.116	7	63	0.187
18:00 - 19:00	7	63	0.066	7	63	0.066	7	63	0.132
19:00 - 20:00	7	63	0.039	7	63	0.046	7	63	0.085
20:00 - 21:00	7	63	0.030	7	63	0.057	7	63	0.087
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			1.627			1.661			3.288

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

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

Parameter summary

Trip rate parameter range selected:	39 - 137 (units:)
Survey date date range:	01/01/11 - 27/11/15
Number of weekdays (Monday-Friday):	7
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.

Calculation Reference: AUDIT-704107-191111-1119

TRIP RATE CALCULATION SELECTION PARAMETERS:

Land Use : 04 - EDUCATION
Category : A - PRIMARY
VEHICLES

Selected regions and areas:

04	EAST ANGLIA		
	SF	SUFFOLK	1 days
05	EAST MIDLANDS		
	LN	LINCOLNSHIRE	1 days
	NR	NORTHAMPTONSHIRE	1 days
07	YORKSHIRE & NORTH LINCOLNSHIRE		
	WY	WEST YORKSHIRE	2 days
08	NORTH WEST		
	MS	MERSEYSIDE	1 days
09	NORTH		
	TW	TYNE & WEAR	1 days
10	WALES		
	MT	MERTHYR TYDFIL	1 days
11	SCOTLAND		
	DU	DUNDEE CITY	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: Gross floor area
Actual Range: 1000 to 3756 (units: sqm)
Range Selected by User: 1000 to 4800 (units: sqm)

Parking Spaces Range: All Surveys Included

Public Transport Provision:
Selection by: Include all surveys

Date Range: 01/01/11 to 15/03/19

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

Selected survey days:

Monday	3 days
Wednesday	2 days
Thursday	3 days
Friday	1 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)	7
Neighbourhood Centre (PPS6 Local Centre)	2

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	9

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:

D1	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	3 days
15,001 to 20,000	1 days
20,001 to 25,000	1 days
25,001 to 50,000	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	2 days
75,001 to 100,000	1 days
125,001 to 250,000	1 days
250,001 to 500,000	3 days
500,001 or More	2 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	5 days
1.1 to 1.5	4 days

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

Travel Plan:

Yes	1 days
No	8 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.

<u>*LIST OF SITES relevant to selection parameters*</u>

1 DU-04-A-01 PRIMARY SCHOOL DUNDEE CITY
FALKLAND CRESCENT
DUNDEE
BROUGHTY FERRY
Suburban Area (PPS6 Out of Centre)
Residential Zone
Total Gross floor area: 3288 sqm
Survey date: MONDAY 21/05/12 Survey Type: MANUAL

2 LN-04-A-01 PRIMARY SCHOOL LINCOLNSHIRE
GONERBY HILL FOOT
GRANTHAM

Neighbourhood Centre (PPS6 Local Centre)
Residential Zone
Total Gross floor area: 1990 sqm
Survey date: WEDNESDAY 12/06/13 Survey Type: MANUAL

3 MS-04-A-02 PRIMARY SCHOOL MERSEYSIDE
BOOKER AVENUE
LIVERPOOL
ALVERTON
Suburban Area (PPS6 Out of Centre)
Residential Zone
Total Gross floor area: 2500 sqm
Survey date: THURSDAY 13/06/13 Survey Type: MANUAL

4 MT-04-A-01 PRIMARY SCHOOL MERTHYR TYDFIL
BRECON ROAD
MERTHYR TYDFIL

Suburban Area (PPS6 Out of Centre)
Residential Zone
Total Gross floor area: 1000 sqm
Survey date: FRIDAY 18/10/13 Survey Type: MANUAL

5 NR-04-A-03 PRIMARY SCHOOL NORTHAMPTONSHIRE
BOOTH LANE NORTH
NORTHAMPTON

Suburban Area (PPS6 Out of Centre)
Residential Zone
Total Gross floor area: 2635 sqm
Survey date: THURSDAY 24/03/16 Survey Type: MANUAL

6 SF-04-A-03 PRIMARY SCHOOL SUFFOLK
ENSTONE ROAD
LOWESTOFT
KIRKLEY
Neighbourhood Centre (PPS6 Local Centre)
Residential Zone
Total Gross floor area: 2550 sqm
Survey date: WEDNESDAY 10/12/14 Survey Type: MANUAL

7 TW-04-A-01 PRIMARY SCHOOL TYNE & WEAR
GLYNWOOD GARDENS
GATESHEAD

Suburban Area (PPS6 Out of Centre)
Residential Zone
Total Gross floor area: 2900 sqm
Survey date: MONDAY 07/10/13 Survey Type: MANUAL

8 WY-04-A-01 PRIMARY SCHOOL WEST YORKSHIRE
SHAKESPEARE AVENUE
LEEDS

Suburban Area (PPS6 Out of Centre)
Residential Zone
Total Gross floor area: 3756 sqm
Survey date: THURSDAY 19/09/13 Survey Type: MANUAL

9 WY-04-A-02 PRIMARY SCHOOL WEST YORKSHIRE
TOWN STREET
LEEDS

Suburban Area (PPS6 Out of Centre)
Residential Zone
Total Gross floor area: 3150 sqm
Survey date: MONDAY 19/10/15 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.

MANUALLY DESELECTED SITES

Site Ref	Reason for Deselection
CF-04-A-01	size
LC-04-A-06	size

TRIP RATE for Land Use 04 - EDUCATION/A - PRIMARY

VEHICLES

Calculation factor: 100 sqm

BOLD print indicates peak (busiest) period

Time Range	ARRIVALS No. Days	ARRIVALS Ave. GFA	ARRIVALS Trip Rate	DEPARTURES No. Days	DEPARTURES Ave. GFA	DEPARTURES Trip Rate	TOTALS No. Days	TOTALS Ave. GFA	TOTALS 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	1	1990	0.000	1	1990	0.000	1	1990	0.000
06:00 - 07:00	1	1990	0.201	1	1990	0.050	1	1990	0.251
07:00 - 08:00	9	2641	0.783	9	2641	0.366	9	2641	1.149
08:00 - 09:00	9	**2641**	**3.118**	9	2641	2.512	9	**2641**	**5.630**
09:00 - 10:00	9	2641	0.459	9	2641	0.673	9	2641	1.132
10:00 - 11:00	9	2641	0.172	9	2641	0.156	9	2641	0.328
11:00 - 12:00	9	2641	0.194	9	2641	0.147	9	2641	0.341
12:00 - 13:00	9	2641	0.210	9	2641	0.257	9	2641	0.467
13:00 - 14:00	9	2641	0.147	9	2641	0.210	9	2641	0.357
14:00 - 15:00	9	2641	0.496	9	2641	0.257	9	2641	0.753
15:00 - 16:00	9	2641	2.457	9	**2641**	**2.604**	9	2641	5.061
16:00 - 17:00	9	2641	0.353	9	2641	0.921	9	2641	1.274
17:00 - 18:00	9	2641	0.261	9	2641	0.400	9	2641	0.661
18:00 - 19:00	8	2846	0.004	8	2846	0.132	8	2846	0.136
19:00 - 20:00	1	1990	0.000	1	1990	0.000	1	1990	0.000
20:00 - 21:00	1	1990	0.000	1	1990	0.503	1	1990	0.503
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			8.855			9.188			18.043

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

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

Parameter summary

Trip rate parameter range selected:	1000 - 3756 (units: sqm)
Survey date date range:	01/01/11 - 15/03/19
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:	2

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.

Calculation Reference: AUDIT-704107-191111-1145

TRIP RATE CALCULATION SELECTION PARAMETERS:

Land Use : 01 - RETAIL
Category : I - SHOPPING CENTRE - LOCAL SHOPS
VEHICLES

Selected regions and areas:

02	SOUTH EAST		
	EX	ESSEX	1 days
03	SOUTH WEST		
	BR	BRISTOL CITY	1 days
	DV	DEVON	1 days
04	EAST ANGLIA		
	CA	CAMBRIDGESHIRE	1 days
06	WEST MIDLANDS		
	WO	WORCESTERSHIRE	1 days
08	NORTH WEST		
	CH	CHESHIRE	2 days
	LC	LANCASHIRE	1 days
09	NORTH		
	TV	TEES VALLEY	2 days
	TW	TYNE & WEAR	2 days
13	MUNSTER		
	CR	CORK	1 days
15	GREATER DUBLIN		
	DL	DUBLIN	2 days
17	ULSTER (NORTHERN IRELAND)		
	DE	DERRY	2 days
	DO	DOWN	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: Gross floor area
Actual Range: 260 to 4052 (units: sqm)
Range Selected by User: 210 to 84009 (units: sqm)

Parking Spaces Range: All Surveys Included

Public Transport Provision:
Selection by: Include all surveys

Date Range: 01/01/11 to 24/05/19

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

Selected survey days:

Monday	3 days
Tuesday	3 days
Wednesday	4 days
Thursday	3 days
Friday	5 days

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

Selected survey types:

Manual count	18 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)	7
Neighbourhood Centre (PPS6 Local Centre)	11

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

Selected Location Sub Categories:

Residential Zone	14
Retail Zone	1
High Street	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:

n/a	1 days
A1	2 days

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

Population within 1 mile:

1,001 to 5,000	1 days
5,001 to 10,000	3 days
10,001 to 15,000	3 days
20,001 to 25,000	4 days
25,001 to 50,000	7 days

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

Population within 5 miles:

25,001 to 50,000	1 days
75,001 to 100,000	3 days
100,001 to 125,000	2 days
125,001 to 250,000	5 days
250,001 to 500,000	6 days
500,001 or More	1 days

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

Car ownership within 5 miles:

0.6 to 1.0	6 days
1.1 to 1.5	12 days

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

Petrol filling station:

Included in the survey count	0 days
Excluded from count or no filling station	18 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:

No	18 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	18 days

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

LIST OF SITES relevant to selection parameters

1	BR-01-I-01	LOCAL SHOPS		BRISTOL CITY
	BELLAND DRIVE BRISTOL WHITCHURCH Neighbourhood Centre (PPS6 Local Centre) Residential Zone			
	Total Gross floor area:		770 sqm	
	Survey date: TUESDAY		*22/09/15*	*Survey Type: MANUAL*
2	CA-01-I-01	LOCAL SHOPS		CAMBRIDGESHIRE
	WARWICK ROAD PETERBOROUGH Suburban Area (PPS6 Out of Centre) Residential Zone			
	Total Gross floor area:		478 sqm	
	Survey date: MONDAY		*17/10/11*	*Survey Type: MANUAL*
3	CH-01-I-02	LOCAL SHOPS		CHESHIRE
	CHRISTLETON ROAD CHESTER BOUGHTON HEATH Neighbourhood Centre (PPS6 Local Centre) Residential Zone			
	Total Gross floor area:		260 sqm	
	Survey date: TUESDAY		*15/05/12*	*Survey Type: MANUAL*
4	CH-01-I-03	LOCAL SHOPS		CHESHIRE
	MILL LANE CHESTER BACHE Neighbourhood Centre (PPS6 Local Centre) Residential Zone			
	Total Gross floor area:		365 sqm	
	Survey date: THURSDAY		*17/05/12*	*Survey Type: MANUAL*
5	CR-01-I-01	LOCAL SHOPS		CORK
	BISHOPSTOWN ROAD CORK WILTON Neighbourhood Centre (PPS6 Local Centre) Retail Zone			
	Total Gross floor area:		1575 sqm	
	Survey date: FRIDAY		*23/03/18*	*Survey Type: MANUAL*
6	DE-01-I-01	LOCAL SHOPS		DERRY
	ROSSDOWNEY PARK LONDONDERRY CLOONEY Suburban Area (PPS6 Out of Centre) Residential Zone			
	Total Gross floor area:		820 sqm	
	Survey date: WEDNESDAY		*20/06/12*	*Survey Type: MANUAL*
7	DE-01-I-02	LOCAL SHOPS		DERRY
	BEECHWOOD AVENUE LONDONDERRY Suburban Area (PPS6 Out of Centre) Residential Zone			
	Total Gross floor area:		1425 sqm	
	Survey date: THURSDAY		*21/06/12*	*Survey Type: MANUAL*
8	DL-01-I-03	LOCAL SHOPS		DUBLIN
	RAVENSDALE PARK DUBLIN TERENURE Suburban Area (PPS6 Out of Centre) Residential Zone			
	Total Gross floor area:		2442 sqm	
	Survey date: WEDNESDAY		*28/09/11*	*Survey Type: MANUAL*

LIST OF SITES relevant to selection parameters (Cont.)

9 DL-01-I-07 LOCAL SHOPS DUBLIN
DUNDRUM ROAD
DUBLIN
WINDY ARBOUR
Suburban Area (PPS6 Out of Centre)
No Sub Category
Total Gross floor area: 1034 sqm
Survey date: WEDNESDAY 01/10/14 Survey Type: MANUAL

10 DO-01-I-01 LOCAL SHOPS DOWN
COMBER ROAD
BELFAST
DUNDONALD
Neighbourhood Centre (PPS6 Local Centre)
No Sub Category
Total Gross floor area: 1305 sqm
Survey date: FRIDAY 25/11/11 Survey Type: MANUAL

11 DV-01-I-01 LOCAL SHOPS DEVON
TORRIDGE WAY
PLYMOUTH
EFFORD
Suburban Area (PPS6 Out of Centre)
Residential Zone
Total Gross floor area: 470 sqm
Survey date: TUESDAY 17/07/12 Survey Type: MANUAL

12 EX-01-I-02 LOCAL SHOPS ESSEX
QUEENS ROAD
BRAINTREE

Suburban Area (PPS6 Out of Centre)
Residential Zone
Total Gross floor area: 375 sqm
Survey date: FRIDAY 08/07/16 Survey Type: MANUAL

13 LC-01-I-01 LOCAL SHOPS LANCASHIRE
TALBOT ROW
NEAR CHORLEY
EUXTON
Neighbourhood Centre (PPS6 Local Centre)
Residential Zone
Total Gross floor area: 720 sqm
Survey date: MONDAY 17/10/11 Survey Type: MANUAL

14 TV-01-I-03 LOCAL SHOPS TEES VALLEY
ACKLAM ROAD
MIDDLESBROUGH
ACKLAM
Neighbourhood Centre (PPS6 Local Centre)
Residential Zone
Total Gross floor area: 1840 sqm
Survey date: FRIDAY 04/10/13 Survey Type: MANUAL

15 TV-01-I-04 LOCAL SHOPS TEES VALLEY
CARGO FLEET LANE
MIDDLESBROUGH
ORMESBY
Neighbourhood Centre (PPS6 Local Centre)
Residential Zone
Total Gross floor area: 585 sqm
Survey date: MONDAY 07/10/13 Survey Type: MANUAL

16 TW-01-I-02 LOCAL SHOPS TYNE & WEAR
DURHAM ROAD
SUNDERLAND
BARNES PARK
Neighbourhood Centre (PPS6 Local Centre)
Residential Zone
Total Gross floor area: 540 sqm
Survey date: WEDNESDAY 21/11/12 Survey Type: MANUAL

17 TW-01-I-03 LOCAL SHOPS TYNE & WEAR
VICTORIA ROAD
WASHINGTON
CONCORD
Neighbourhood Centre (PPS6 Local Centre)
High Street
Total Gross floor area: 2700 sqm
Survey date: FRIDAY 24/05/19 Survey Type: MANUAL

LIST OF SITES relevant to selection parameters (Cont.)

18 WO-01-I-02 LOCAL SHOPS WORCESTERSHIRE
CRANHAM DRIVE
WORCESTER

Neighbourhood Centre (PPS6 Local Centre)
Residential Zone
Total Gross floor area: 4052 sqm
Survey date: THURSDAY 22/05/14 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/I - SHOPPING CENTRE - LOCAL SHOPS
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	1	540	1.296	1	540	1.296	1	540	2.592
07:00 - 08:00	18	1209	2.459	18	1209	2.215	18	1209	4.674
08:00 - 09:00	18	1209	3.126	18	1209	2.785	18	1209	5.911
09:00 - 10:00	18	1209	3.994	18	1209	3.420	18	1209	7.414
10:00 - 11:00	18	1209	4.022	18	1209	3.700	18	1209	7.722
11:00 - 12:00	18	1209	4.026	18	1209	4.220	18	1209	8.246
12:00 - 13:00	**18**	**1209**	**4.895**	18	1209	4.734	**18**	**1209**	**9.629**
13:00 - 14:00	18	1209	4.436	18	1209	4.491	18	1209	8.927
14:00 - 15:00	18	1209	4.155	18	1209	4.298	18	1209	8.453
15:00 - 16:00	18	1209	4.160	18	1209	4.275	18	1209	8.435
16:00 - 17:00	18	1209	4.555	18	1209	4.298	18	1209	8.853
17:00 - 18:00	18	1209	4.596	**18**	**1209**	**4.932**	18	1209	9.528
18:00 - 19:00	18	1209	4.560	18	1209	4.744	18	1209	9.304
19:00 - 20:00	16	1321	4.037	16	1321	4.207	16	1321	8.244
20:00 - 21:00	16	1321	3.237	16	1321	3.393	16	1321	6.630
21:00 - 22:00	12	1120	3.401	12	1120	3.691	12	1120	7.092
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			60.955			60.699			121.654

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

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

Parameter summary

Trip rate parameter range selected:	260 - 4052 (units: sqm)
Survey date date range:	01/01/11 - 24/05/19
Number of weekdays (Monday-Friday):	18
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.

LIST OF SITES relevant to selection parameters

1 CA-04-D-02 NURSERY CAMBRIDGESHIRE
EASTFIELD ROAD
PETERBOROUGH

Suburban Area (PPS6 Out of Centre)
Residential Zone
Total Gross floor area: 400 sqm
Survey date: TUESDAY 18/10/16 Survey Type: MANUAL

2 DL-04-D-01 NURSERY DUBLIN
78 THE PARK
DUBLIN
BEAUMONT WOODS
Suburban Area (PPS6 Out of Centre)
Residential Zone
Total Gross floor area: 256 sqm
Survey date: WEDNESDAY 26/09/12 Survey Type: MANUAL

3 DU-04-D-01 NURSERY DUNDEE CITY
LONGTOWN TERRACE
DUNDEE

Suburban Area (PPS6 Out of Centre)
Residential Zone
Total Gross floor area: 325 sqm
Survey date: MONDAY 24/04/17 Survey Type: MANUAL

4 LN-04-D-01 NURSERY LINCOLNSHIRE
NEWARK ROAD
LINCOLN
SWALLOW BECK
Suburban Area (PPS6 Out of Centre)
Residential Zone
Total Gross floor area: 600 sqm
Survey date: TUESDAY 31/10/17 Survey Type: MANUAL

5 TW-04-D-02 NURSERY TYNE & WEAR
ETTRICK GROVE
SUNDERLAND
HIGH BARNES
Suburban Area (PPS6 Out of Centre)
Residential Zone
Total Gross floor area: 500 sqm
Survey date: WEDNESDAY 28/11/12 Survey Type: MANUAL

6 WL-04-D-01 NURSERY WILTSHIRE
SHREWSBURY ROAD
SWINDON
WALCOT
Suburban Area (PPS6 Out of Centre)
Residential Zone
Total Gross floor area: 500 sqm
Survey date: THURSDAY 22/09/16 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 04 - EDUCATION/D - NURSERY
VEHICLES
Calculation factor: 100 sqm
BOLD print indicates peak (busiest) period

Time Range	ARRIVALS			DEPARTURES			TOTALS		
	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	2	328	0.152	2	328	0.000	2	328	0.152
07:00 - 08:00	6	430	1.898	6	430	1.317	6	430	3.215
08:00 - 09:00	6	**430**	**3.719**	6	**430**	**2.983**	6	**430**	**6.702**
09:00 - 10:00	6	430	1.434	6	430	1.240	6	430	2.674
10:00 - 11:00	6	430	0.310	6	430	0.232	6	430	0.542
11:00 - 12:00	6	430	0.581	6	430	0.620	6	430	1.201
12:00 - 13:00	6	430	0.891	6	430	1.085	6	430	1.976
13:00 - 14:00	6	430	1.046	6	430	1.317	6	430	2.363
14:00 - 15:00	6	430	0.659	6	430	0.736	6	430	1.395
15:00 - 16:00	6	430	1.356	6	430	1.162	6	430	2.518
16:00 - 17:00	6	430	2.015	6	430	2.208	6	430	4.223
17:00 - 18:00	6	430	2.712	6	430	2.906	6	430	5.618
18:00 - 19:00	6	430	0.465	6	430	0.969	6	430	1.434
19:00 - 20:00	1	400	0.000	1	400	0.000	1	400	0.000
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			17.238			16.775			34.013

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

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

Parameter summary

Trip rate parameter range selected:	256 - 600 (units: sqm)
Survey date date range:	01/01/11 - 12/07/18
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.

Calculation Reference: AUDIT-704103-190513-0542

TRIP RATE CALCULATION SELECTION PARAMETERS:

Land Use : 04 - EDUCATION
Category : C - COLLEGE/UNIVERSITY
VEHICLES

Selected regions and areas:

02	SOUTH EAST		
	ES	EAST SUSSEX	2 days
	EX	ESSEX	1 days
	KC	KENT	1 days
03	SOUTH WEST		
	GS	GLOUCESTERSHIRE	1 days
	WL	WILTSHIRE	1 days
10	WALES		
	SW	SWANSEA	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: Gross floor area
Actual Range: 3900 to 16600 (units: sqm)
Range Selected by User: 750 to 20000 (units: sqm)

Parking Spaces Range: All Surveys Included

Public Transport Provision:
Selection by: Include all surveys

Date Range: 01/01/11 to 25/04/18

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	1 days
Tuesday	2 days
Wednesday	1 days
Thursday	3 days

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

Selected survey types:

Manual count	7 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)	7

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	6
Built-Up Zone	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:

D1	7 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	1 days
20,001 to 25,000	1 days
25,001 to 50,000	3 days

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

Population within 5 miles:

25,001 to 50,000	1 days
50,001 to 75,000	1 days
75,001 to 100,000	1 days
100,001 to 125,000	1 days
125,001 to 250,000	3 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	5 days

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

Travel Plan:

Yes	1 days
No	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	7 days

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

TRIP RATE for Land Use 04 - EDUCATION/C - COLLEGE/UNIVERSITY
VEHICLES
Calculation factor: 100 sqm
BOLD print indicates peak (busiest) period

Time Range	ARRIVALS			DEPARTURES			TOTALS		
	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	7	10852	0.201	7	10852	0.038	7	10852	0.239
08:00 - 09:00	7	**10852**	**1.478**	7	10852	0.566	7	**10852**	**2.044**
09:00 - 10:00	7	10852	0.583	7	10852	0.263	7	10852	0.846
10:00 - 11:00	7	10852	0.325	7	10852	0.220	7	10852	0.545
11:00 - 12:00	7	10852	0.337	7	10852	0.338	7	10852	0.675
12:00 - 13:00	7	10852	0.317	7	10852	0.366	7	10852	0.683
13:00 - 14:00	7	10852	0.330	7	10852	0.317	7	10852	0.647
14:00 - 15:00	7	10852	0.284	7	10852	0.427	7	10852	0.711
15:00 - 16:00	7	10852	0.340	7	10852	0.650	7	10852	0.990
16:00 - 17:00	7	10852	0.303	7	**10852**	**0.770**	7	10852	1.073
17:00 - 18:00	7	10852	0.349	7	10852	0.455	7	10852	0.804
18:00 - 19:00	6	11261	0.332	6	11261	0.234	6	11261	0.566
19:00 - 20:00	5	11488	0.207	5	11488	0.334	5	11488	0.541
20:00 - 21:00	4	11059	0.161	4	11059	0.601	4	11059	0.762
21:00 - 22:00	4	11059	0.020	4	11059	0.274	4	11059	0.294
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			5.567			5.853			11.420

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

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

Parameter summary

Trip rate parameter range selected:	3900 - 16600 (units: sqm)
Survey date date range:	01/01/11 - 25/04/18
Number of weekdays (Monday-Friday):	7
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.

Calculation Reference: AUDIT-704103-190513-0552

TRIP RATE CALCULATION SELECTION PARAMETERS:

Land Use : 04 - EDUCATION
Category : F - COMMUNITY EDUCATION
VEHICLES

Selected regions and areas:

02	SOUTH EAST		
	OX	OXFORDSHIRE	1 days
06	WEST MIDLANDS		
	WM	WEST MIDLANDS	2 days
10	WALES		
	NW	NEWPORT	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: Gross floor area
Actual Range: 228 to 1054 (units: sqm)
Range Selected by User: 228 to 8928 (units: sqm)

Parking Spaces Range: All Surveys Included

Public Transport Provision:
Selection by: Include all surveys

Date Range: 01/01/08 to 01/08/20

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
Thursday	1 days
Friday	1 days

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

Selected survey types:

Manual count	4 days
Directional ATC Count	0 days

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

Selected Locations:

Edge of Town Centre	1
Edge of Town	2
Neighbourhood Centre (PPS6 Local Centre)	1

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	2
High Street	1
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:

D1	4 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®.

Secondary Filtering selection (Cont.):

Population within 1 mile:

5,001 to 10,000	1 days
20,001 to 25,000	2 days
25,001 to 50,000	1 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	1 days
125,001 to 250,000	1 days
500,001 or More	2 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	4 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:

No	4 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	4 days

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

TRIP RATE for Land Use 04 - EDUCATION/F - COMMUNITY EDUCATION
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	1	228	0.000	1	228	0.000	1	228	0.000
07:00 - 08:00	3	712	0.234	3	712	0.047	3	712	0.281
08:00 - 09:00	4	607	0.906	4	607	0.124	4	607	1.030
09:00 - 10:00	4	607	1.153	4	607	0.659	4	607	1.812
10:00 - 11:00	4	607	0.906	4	607	0.823	4	607	1.729
11:00 - 12:00	4	607	1.112	4	607	1.523	4	607	2.635
12:00 - 13:00	4	607	0.535	4	607	0.865	4	607	1.400
13:00 - 14:00	4	607	0.659	4	607	0.659	4	607	1.318
14:00 - 15:00	4	607	1.194	4	607	1.070	4	607	2.264
15:00 - 16:00	4	**607**	**1.441**	4	607	1.647	4	**607**	**3.088**
16:00 - 17:00	4	607	1.029	4	607	1.359	4	607	2.388
17:00 - 18:00	4	607	0.700	4	607	1.029	4	607	1.729
18:00 - 19:00	3	712	1.218	3	712	0.468	3	712	1.686
19:00 - 20:00	3	712	0.328	3	712	0.281	3	712	0.609
20:00 - 21:00	3	712	0.000	3	712	0.047	3	712	0.047
21:00 - 22:00	2	641	0.156	2	**641**	**2.184**	2	641	2.340
22:00 - 23:00	1	228	0.000	1	228	0.000	1	228	0.000
23:00 - 24:00									
Total Rates:			11.571			12.785			24.356

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

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

Parameter summary

Trip rate parameter range selected:	228 - 1054 (units: sqm)
Survey date date range:	01/01/08 - 01/08/20
Number of weekdays (Monday-Friday):	4
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.

Calculation Reference: AUDIT-704103-190513-0548

TRIP RATE CALCULATION SELECTION PARAMETERS:

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

Selected regions and areas:

02	SOUTH EAST	
HC	HAMPSHIRE	1 days
KC	KENT	4 days
WS	WEST SUSSEX	2 days
03	SOUTH WEST	
DV	DEVON	3 days
WL	WILTSHIRE	1 days
04	EAST ANGLIA	
CA	CAMBRIDGESHIRE	3 days
NF	NORFOLK	2 days
SF	SUFFOLK	2 days
05	EAST MIDLANDS	
LE	LEICESTERSHIRE	1 days
LN	LINCOLNSHIRE	1 days
06	WEST MIDLANDS	
WK	WARWICKSHIRE	1 days
WM	WEST MIDLANDS	1 days
WO	WORCESTERSHIRE	1 days
07	YORKSHIRE & NORTH LINCOLNSHIRE	
NY	NORTH YORKSHIRE	4 days
SY	SOUTH YORKSHIRE	1 days
WY	WEST YORKSHIRE	1 days
08	NORTH WEST	
CH	CHESHIRE	1 days
GM	GREATER MANCHESTER	1 days
MS	MERSEYSIDE	1 days
09	NORTH	
DH	DURHAM	2 days
TW	TYNE & WEAR	2 days
10	WALES	
PS	POWYS	1 days
11	SCOTLAND	
AG	ANGUS	1 days
FA	FALKIRK	2 days
HI	HIGHLAND	1 days
PK	PERTH & KINROSS	1 days
17	ULSTER (NORTHERN IRELAND)	
AN	ANTRIM	2 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:	6 to 363 (units:)
Range Selected by User:	5 to 4334 (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 20/11/18

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	10 days
Tuesday	12 days
Wednesday	9 days
Thursday	5 days
Friday	8 days

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

Selected survey types:

Manual count	44 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)	33
Neighbourhood Centre (PPS6 Local Centre)	11

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	37
Village	7

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	44 days

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

Population within 1 mile:

1,000 or Less	1 days
1,001 to 5,000	10 days
5,001 to 10,000	8 days
10,001 to 15,000	4 days
15,001 to 20,000	8 days
20,001 to 25,000	6 days
25,001 to 50,000	6 days
50,001 to 100,000	1 days

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

Secondary Filtering selection (Cont.):

Population within 5 miles:

5,001 to 25,000	5 days
25,001 to 50,000	7 days
50,001 to 75,000	6 days
75,001 to 100,000	7 days
100,001 to 125,000	2 days
125,001 to 250,000	11 days
250,001 to 500,000	5 days
500,001 or More	1 days

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

Car ownership within 5 miles:

0.6 to 1.0	15 days
1.1 to 1.5	27 days
1.6 to 2.0	2 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	2 days
No	42 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	44 days

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

TRIP RATE for Land Use 03 - RESIDENTIAL/A - HOUSES PRIVATELY OWNED
VEHICLES
Calculation factor: 1 DWELLS
BOLD print indicates peak (busiest) period

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	44	65	0.056	44	65	0.236	44	65	0.292
08:00 - 09:00	44	65	0.123	**44**	**65**	**0.321**	44	65	0.444
09:00 - 10:00	44	65	0.137	44	65	0.168	44	65	0.305
10:00 - 11:00	44	65	0.119	44	65	0.154	44	65	0.273
11:00 - 12:00	44	65	0.131	44	65	0.141	44	65	0.272
12:00 - 13:00	44	65	0.158	44	65	0.147	44	65	0.305
13:00 - 14:00	44	65	0.156	44	65	0.166	44	65	0.322
14:00 - 15:00	44	65	0.149	44	65	0.170	44	65	0.319
15:00 - 16:00	44	65	0.220	44	65	0.148	44	65	0.368
16:00 - 17:00	44	65	0.258	44	65	0.159	44	65	0.417
17:00 - 18:00	**44**	**65**	**0.311**	44	65	0.162	**44**	**65**	**0.473**
18:00 - 19:00	44	65	0.226	44	65	0.150	44	65	0.376
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			2.044			2.122			4.166

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

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

Parameter summary

Trip rate parameter range selected:	6 - 363 (units:)
Survey date date range:	01/01/11 - 20/11/18
Number of weekdays (Monday-Friday):	44
Number of Saturdays:	0
Number of Sundays:	0
Surveys automatically removed from selection:	3
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.

Calculation Reference: AUDIT-704103-190513-0523

TRIP RATE CALCULATION SELECTION PARAMETERS:

Land Use : 05 - HEALTH
Category : K - NHS WALK-IN CENTRE
VEHICLES

Selected regions and areas:

02	SOUTH EAST		
	ES	EAST SUSSEX	1 days
09	NORTH		
	TW	TYNE & WEAR	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: Gross floor area
Actual Range: 2230 to 2350 (units: sqm)
Range Selected by User: 98 to 2350 (units: sqm)

Parking Spaces Range: All Surveys Included

Public Transport Provision:
Selection by: Include all surveys

Date Range: 01/01/11 to 22/09/17

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
Friday 1 days

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

Selected survey types:
Manual count 2 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:
Town Centre 1
Suburban Area (PPS6 Out of Centre) 1

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
High Street 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:
D1 2 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®.

Secondary Filtering selection (Cont.):

Population within 1 mile:

25,001 to 50,000	1 days
50,001 to 100,000	1 days

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

Population within 5 miles:

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	1 days
1.1 to 1.5	1 days

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

Travel Plan:

No	2 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	2 days

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

TRIP RATE for Land Use 05 - HEALTH/K - NHS WALK-IN CENTRE
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	2290	0.153	2	2290	0.087	2	2290	0.240
08:00 - 09:00	2	2290	1.157	2	2290	0.328	2	2290	1.485
09:00 - 10:00	2	2290	1.026	2	2290	0.655	2	2290	1.681
10:00 - 11:00	2	2290	0.568	2	2290	0.939	2	2290	1.507
11:00 - 12:00	2	2290	0.611	2	2290	0.786	2	2290	1.397
12:00 - 13:00	2	2290	0.786	2	2290	0.677	2	2290	1.463
13:00 - 14:00	2	2290	0.721	2	2290	0.546	2	2290	1.267
14:00 - 15:00	2	2290	0.633	2	2290	0.764	2	2290	1.397
15:00 - 16:00	2	2290	0.459	2	2290	0.590	2	2290	1.049
16:00 - 17:00	2	2290	0.502	2	2290	0.830	2	2290	1.332
17:00 - 18:00	2	2290	0.284	2	2290	0.677	2	2290	0.961
18:00 - 19:00	2	2290	0.262	2	2290	0.328	2	2290	0.590
19:00 - 20:00	2	2290	0.240	2	2290	0.349	2	2290	0.589
20:00 - 21:00	1	2350	0.340	1	2350	0.213	1	2350	0.553
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			7.742			7.769			15.511

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

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

Parameter summary

Trip rate parameter range selected:	2230 - 2350 (units: sqm)
Survey date date range:	01/01/11 - 22/09/17
Number of weekdays (Monday-Friday):	2
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.

Calculation Reference: AUDIT-704103-190513-0513

TRIP RATE CALCULATION SELECTION PARAMETERS:

Land Use : 06 - HOTEL, FOOD & DRINK
Category : B - RESTAURANTS
VEHICLES

Selected regions and areas:

01	GREATER LONDON		
	BT	BRENT	1 days
	EN	ENFIELD	1 days
02	SOUTH EAST		
	HC	HAMPSHIRE	1 days
05	EAST MIDLANDS		
	DS	DERBYSHIRE	1 days
06	WEST MIDLANDS		
	WM	WEST MIDLANDS	2 days
11	SCOTLAND		
	RF	RENFREWSHIRE	1 days
12	CONNAUGHT		
	RO	ROSCOMMON	1 days
17	ULSTER (NORTHERN IRELAND)		
	AN	ANTRIM	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: Gross floor area
Actual Range: 150 to 736 (units: sqm)
Range Selected by User: 75 to 2400 (units: sqm)

Parking Spaces Range: All Surveys Included

Public Transport Provision:
Selection by: Include all surveys

Date Range: 01/01/11 to 12/07/18

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	2 days
Thursday	2 days
Friday	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)	3
Neighbourhood Centre (PPS6 Local Centre)	6

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:

Development Zone	2
Residential Zone	2
Village	1
High Street	3
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:

A3	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:

1,000 or Less	1 days
5,001 to 10,000	1 days
10,001 to 15,000	1 days
15,001 to 20,000	1 days
25,001 to 50,000	3 days
50,001 to 100,000	2 days

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

Population within 5 miles:

5,000 or Less	1 days
25,001 to 50,000	1 days
125,001 to 250,000	1 days
250,001 to 500,000	5 days
500,001 or More	1 days

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

Car ownership within 5 miles:

0.6 to 1.0	5 days
1.1 to 1.5	3 days
2.1 to 2.5	1 days

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

Travel Plan:

Yes	1 days
No	8 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	7 days
3 Moderate	1 days
5 Very Good	1 days

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

TRIP RATE for Land Use 06 - HOTEL, FOOD & DRINK/B - RESTAURANTS
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	1	370	0.000	1	370	0.270	1	370	0.270
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									
08:00 - 09:00									
09:00 - 10:00	1	175	0.571	1	175	0.571	1	175	1.142
10:00 - 11:00	5	235	1.362	5	235	0.596	5	235	1.958
11:00 - 12:00	8	325	1.192	8	325	0.769	8	325	1.961
12:00 - 13:00	8	325	2.499	8	325	1.269	8	325	3.768
13:00 - 14:00	8	325	1.730	8	325	2.345	8	325	4.075
14:00 - 15:00	8	325	0.961	8	325	1.423	8	325	2.384
15:00 - 16:00	9	330	0.808	9	330	1.043	9	330	1.851
16:00 - 17:00	9	330	0.942	9	330	0.673	9	330	1.615
17:00 - 18:00	9	330	1.582	9	330	0.976	9	330	2.558
18:00 - 19:00	9	330	2.154	9	330	1.481	9	330	3.635
19:00 - 20:00	9	330	1.986	9	330	1.683	9	330	3.669
20:00 - 21:00	9	330	1.515	9	330	2.120	9	330	3.635
21:00 - 22:00	9	330	1.178	9	330	1.616	9	330	2.794
22:00 - 23:00	9	330	0.471	9	330	1.077	9	330	1.548
23:00 - 24:00	9	330	0.067	9	330	0.841	9	330	0.908
Total Rates:			19.018			18.753			37.771

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

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

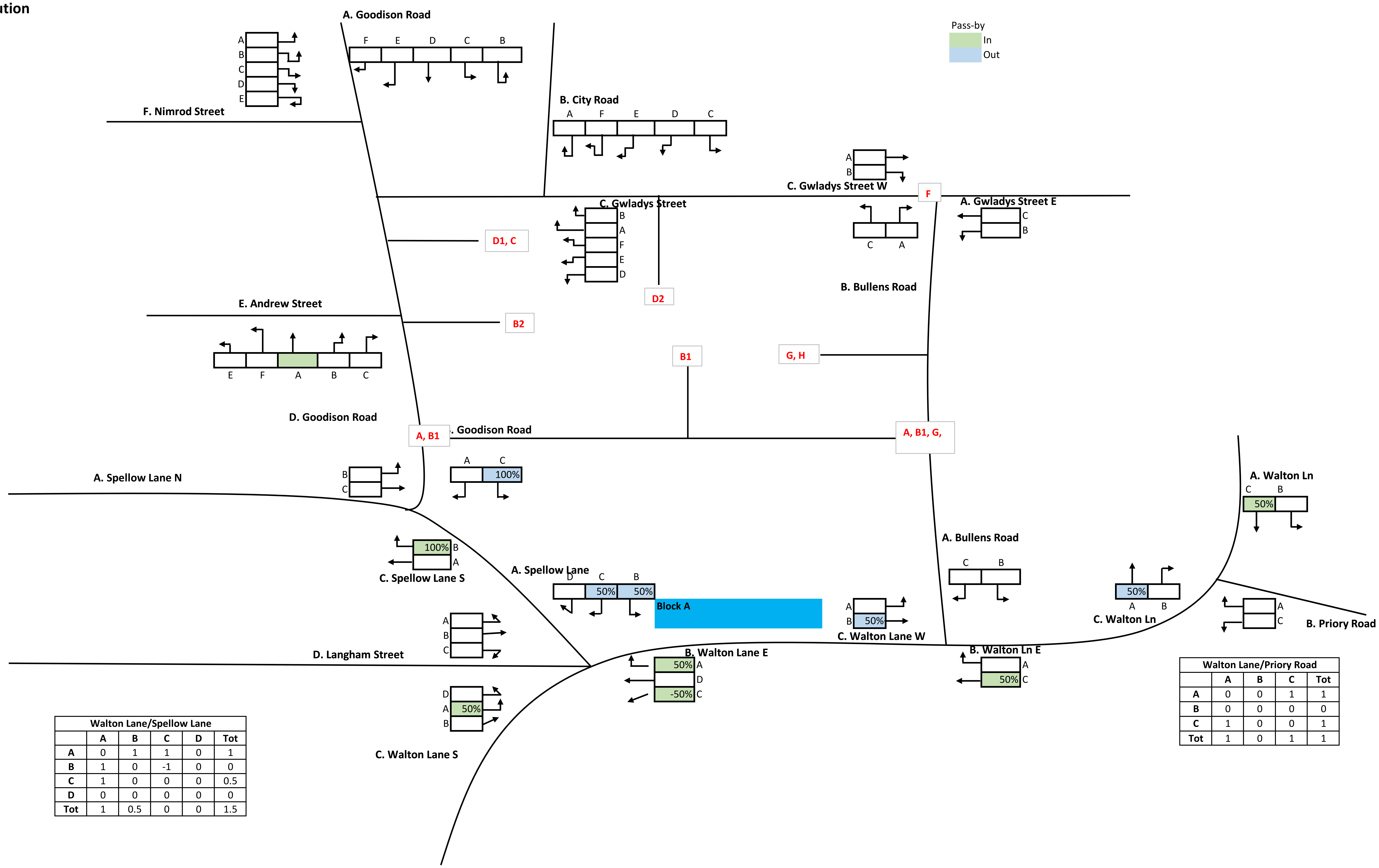
Parameter summary

Trip rate parameter range selected:	150 - 736 (units: sqm)
Survey date date range:	01/01/11 - 12/07/18
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.

C. Flow Distribution Diagrams

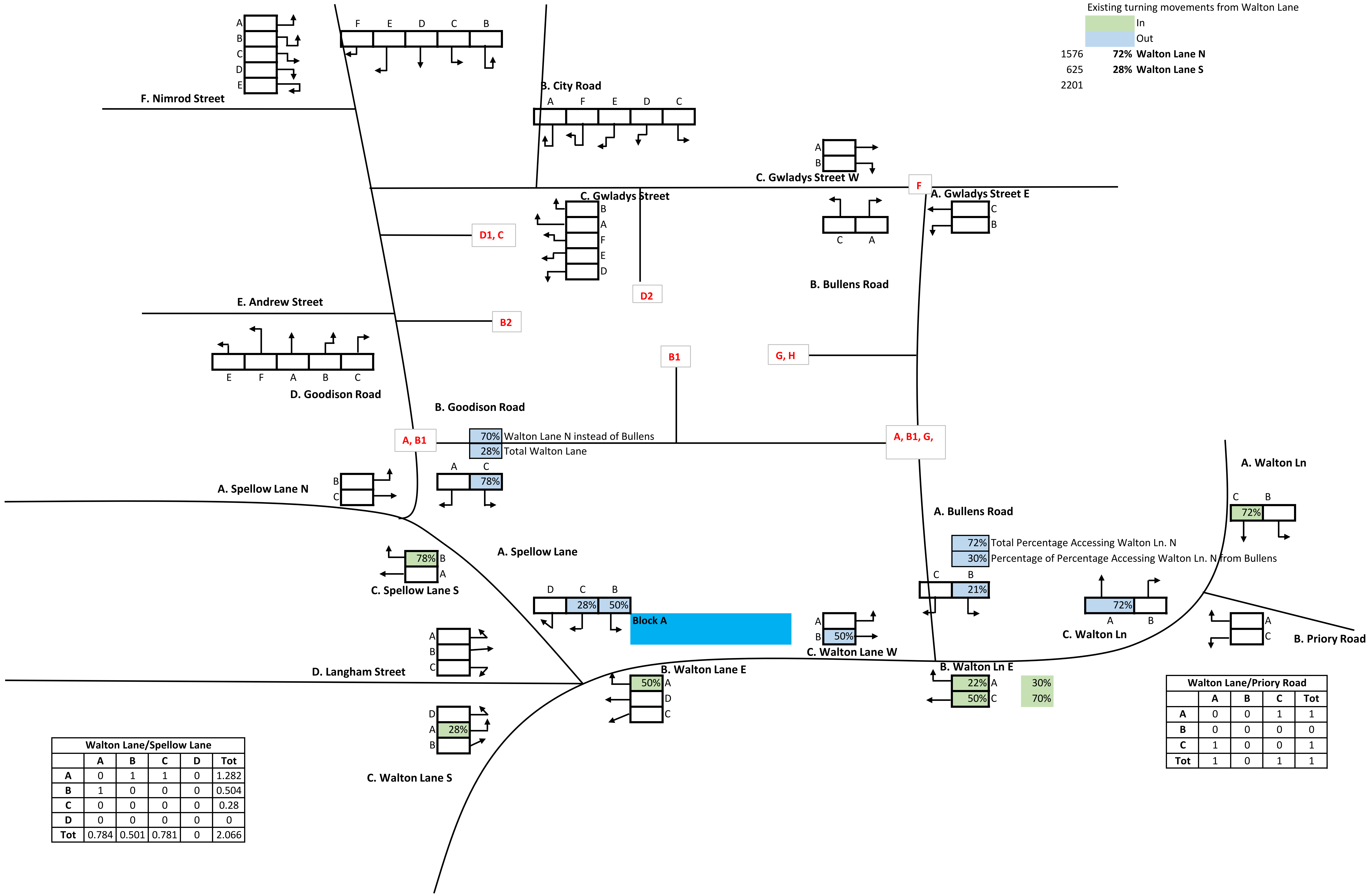
Block B2: A3 Distribution



Walton Lane/Spellow Lane					
	A	B	C	D	Tot
A	0	1	1	0	1
B	1	0	-1	0	0
C	1	0	0	0	0.5
D	0	0	0	0	0
Tot	1	0.5	0	0	1.5

Walton Lane/Priory Road				
	A	B	C	Tot
A	0	0	1	1
B	0	0	0	0
C	1	0	0	1
Tot	1	0	1	1

Block A: A3 Distribution



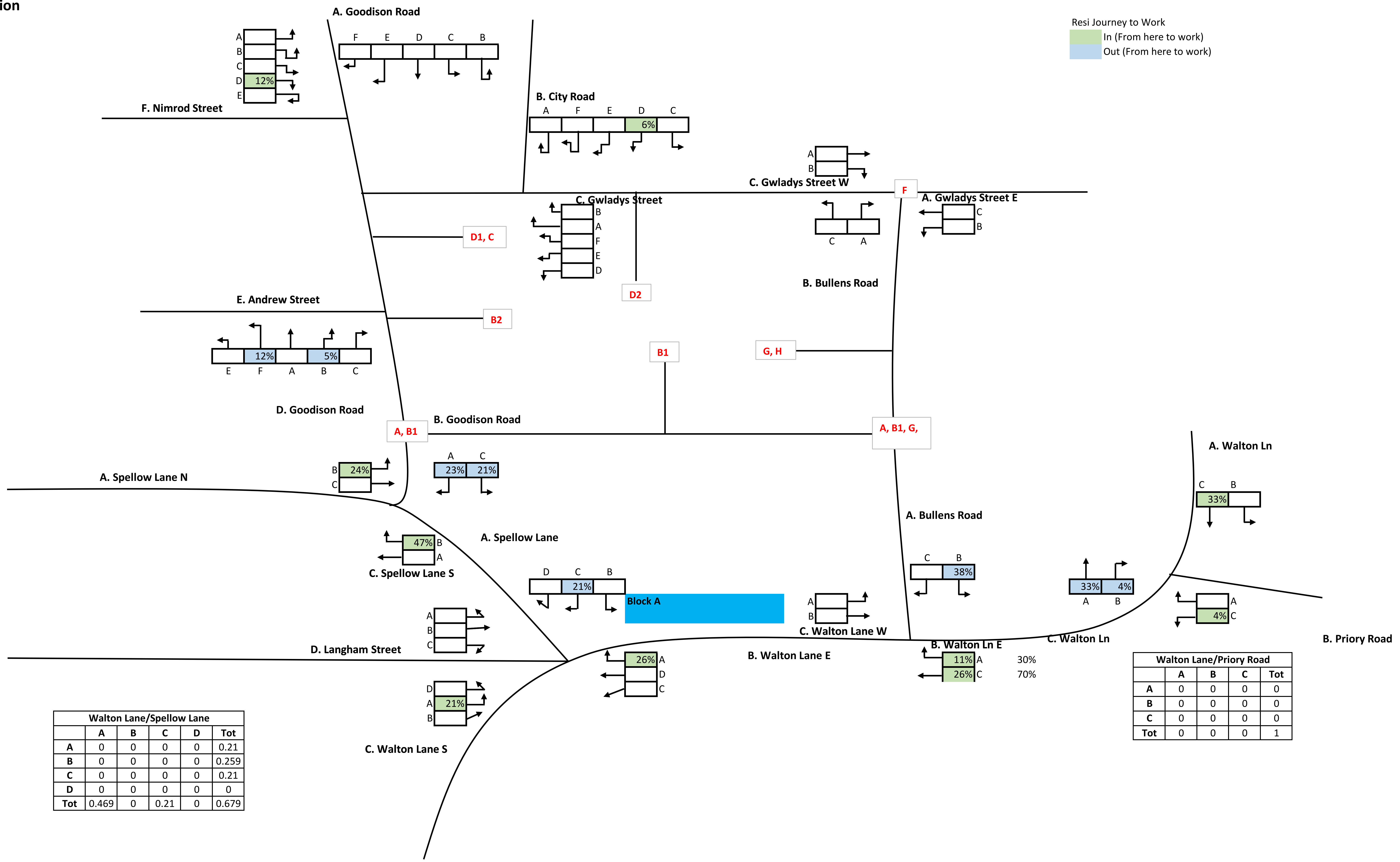
Walton Lane/Spellow Lane

	A	B	C	D	Tot
A	0	1	1	0	1.282
B	1	0	0	0	0.504
C	0	0	0	0	0.28
D	0	0	0	0	0
Tot	0.784	0.501	0.781	0	2.066

Walton Lane/Priory Road

	A	B	C	Tot
A	0	0	1	1
B	0	0	0	0
C	1	0	0	1
Tot	1	0	1	1

Block A: C3 Distribution



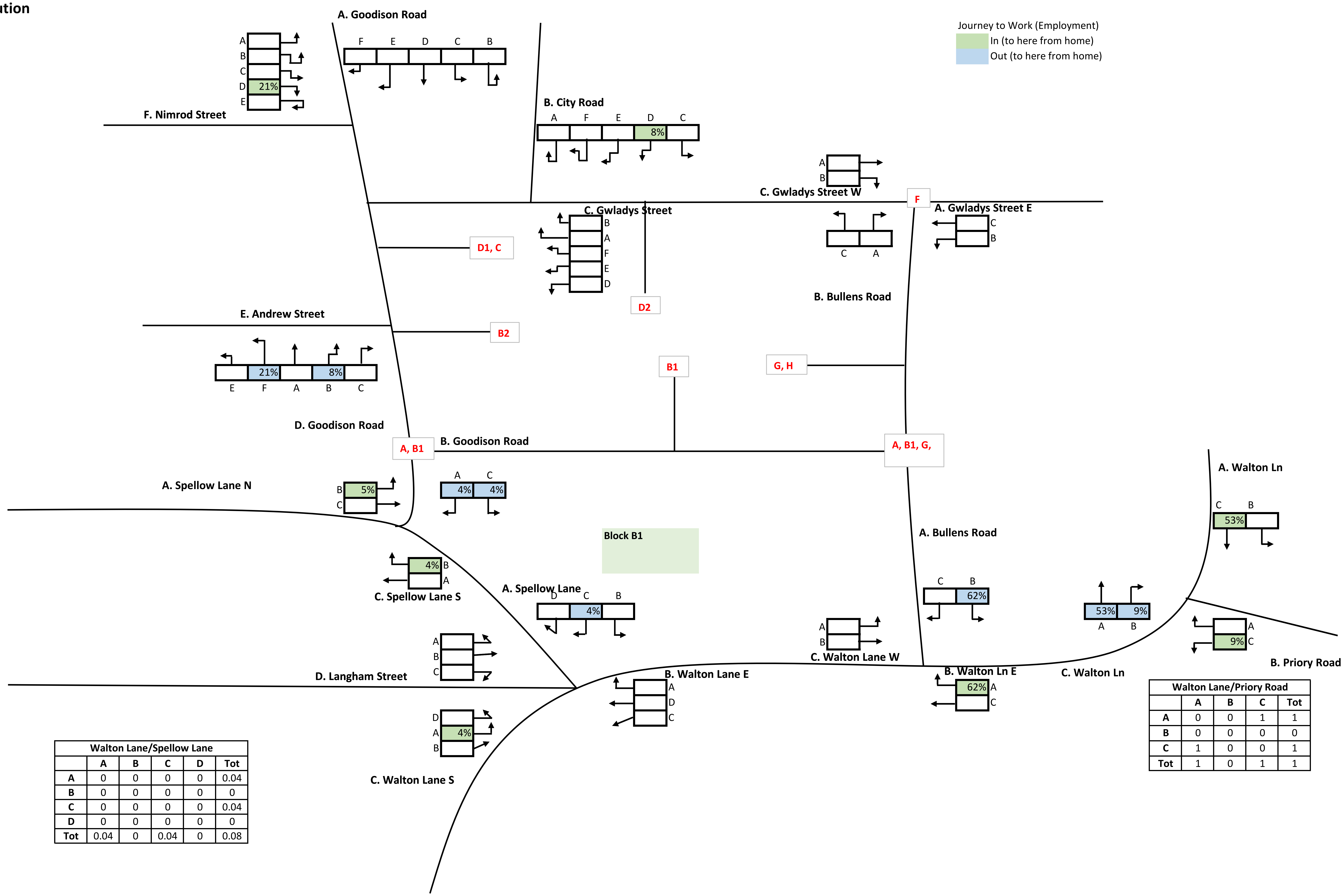
Walton Lane/Spellow Lane

	A	B	C	D	Tot
A	0	0	0	0	0.21
B	0	0	0	0	0.259
C	0	0	0	0	0.21
D	0	0	0	0	0
Tot	0.469	0	0.21	0	0.679

Walton Lane/Priory Road

	A	B	C	Tot
A	0	0	0	0
B	0	0	0	0
C	0	0	0	0
Tot	0	0	0	1

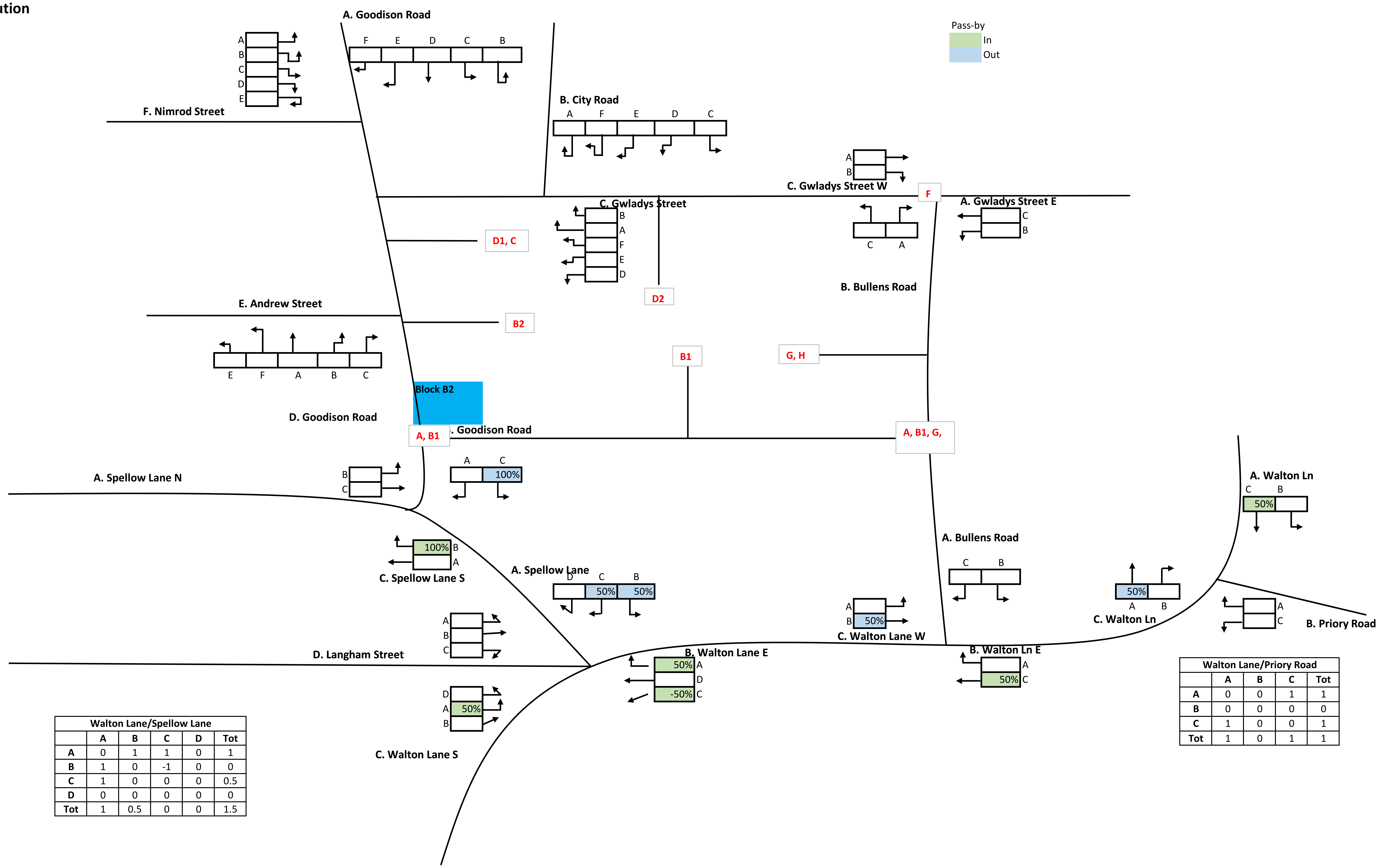
Block B1: D1 Distribution



Walton Lane/Spellow Lane	A	B	C	D	Tot
A	0	0	0	0	0.04
B	0	0	0	0	0
C	0	0	0	0	0.04
D	0	0	0	0	0
Tot	0.04	0	0.04	0	0.08

Walton Lane/Priory Road	A	B	C	Tot
A	0	0	1	1
B	0	0	0	0
C	1	0	0	1
Tot	1	0	1	1

Block B2: A1 Distribution



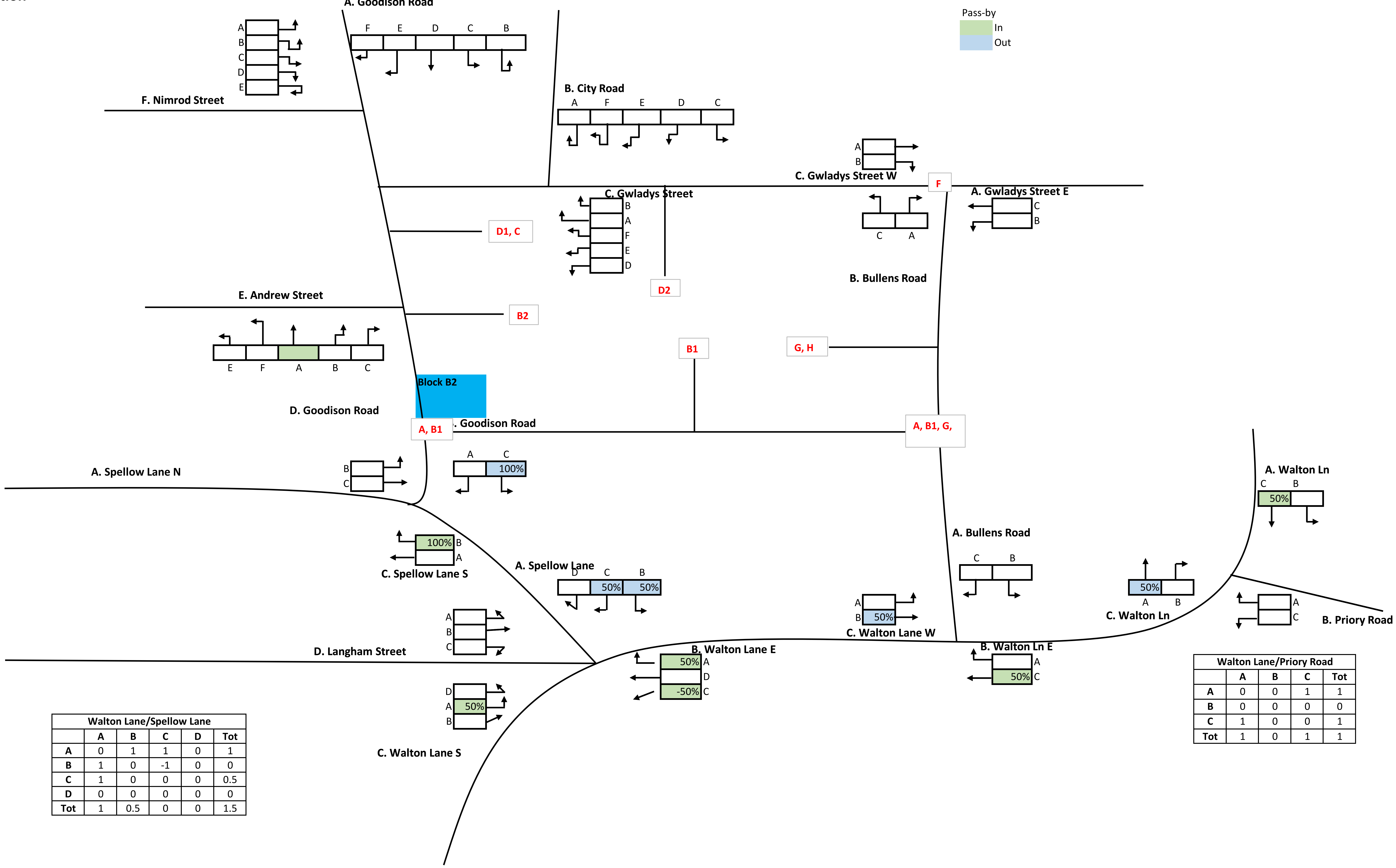
Walton Lane/Spellow Lane

	A	B	C	D	Tot
A	0	1	1	0	1
B	1	0	-1	0	0
C	1	0	0	0	0.5
D	0	0	0	0	0
Tot	1	0.5	0	0	1.5

Walton Lane/Priory Road

	A	B	C	Tot
A	0	0	1	1
B	0	0	0	0
C	1	0	0	1
Tot	1	0	1	1

Block B2: A3 Distribution



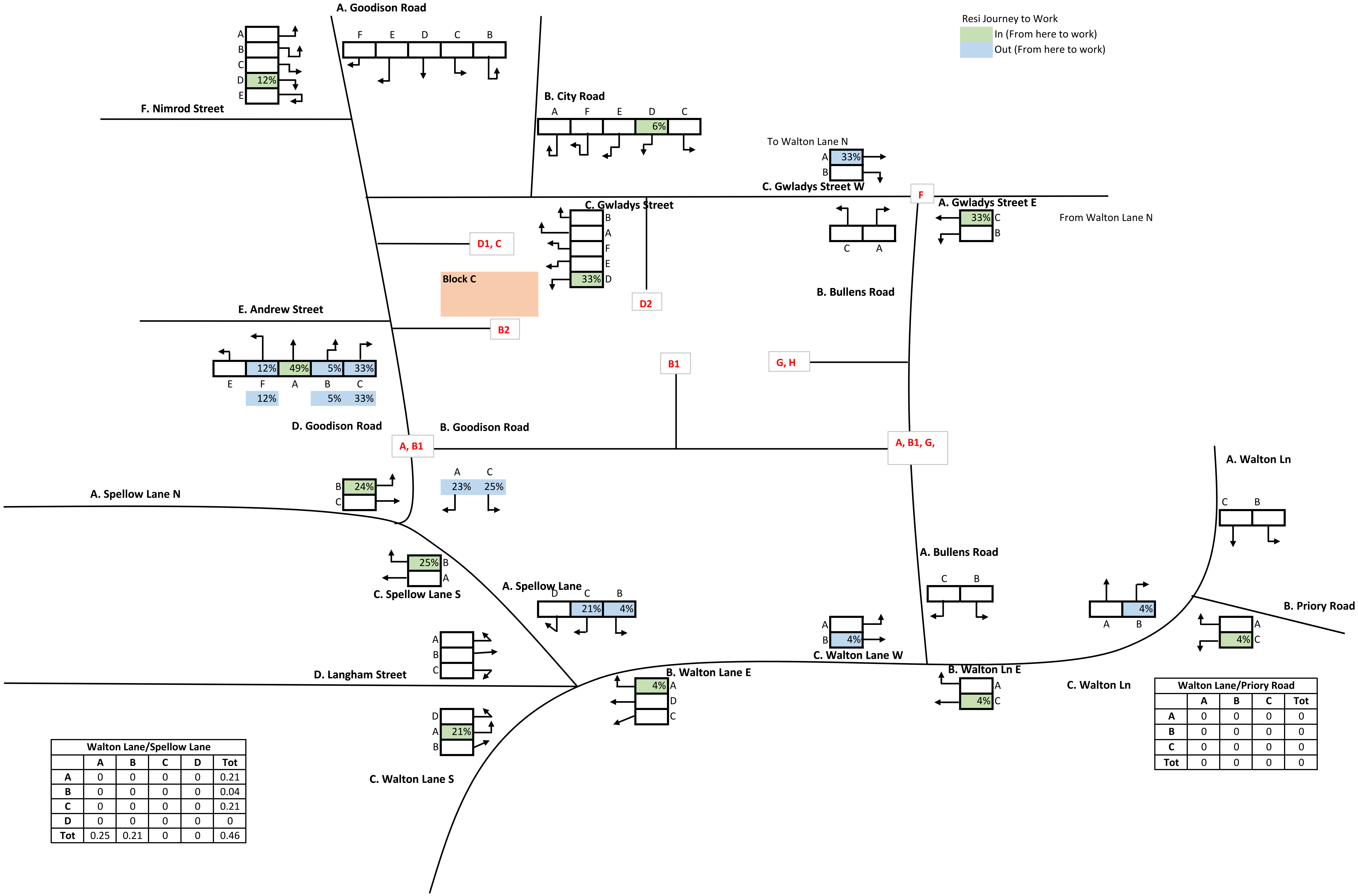
Walton Lane/Spellow Lane

	A	B	C	D	Tot
A	0	1	1	0	1
B	1	0	-1	0	0
C	1	0	0	0	0.5
D	0	0	0	0	0
Tot	1	0.5	0	0	1.5

Walton Lane/Priory Road

	A	B	C	Tot
A	0	0	1	1
B	0	0	0	0
C	1	0	0	1
Tot	1	0	1	1

Block C: Distribution



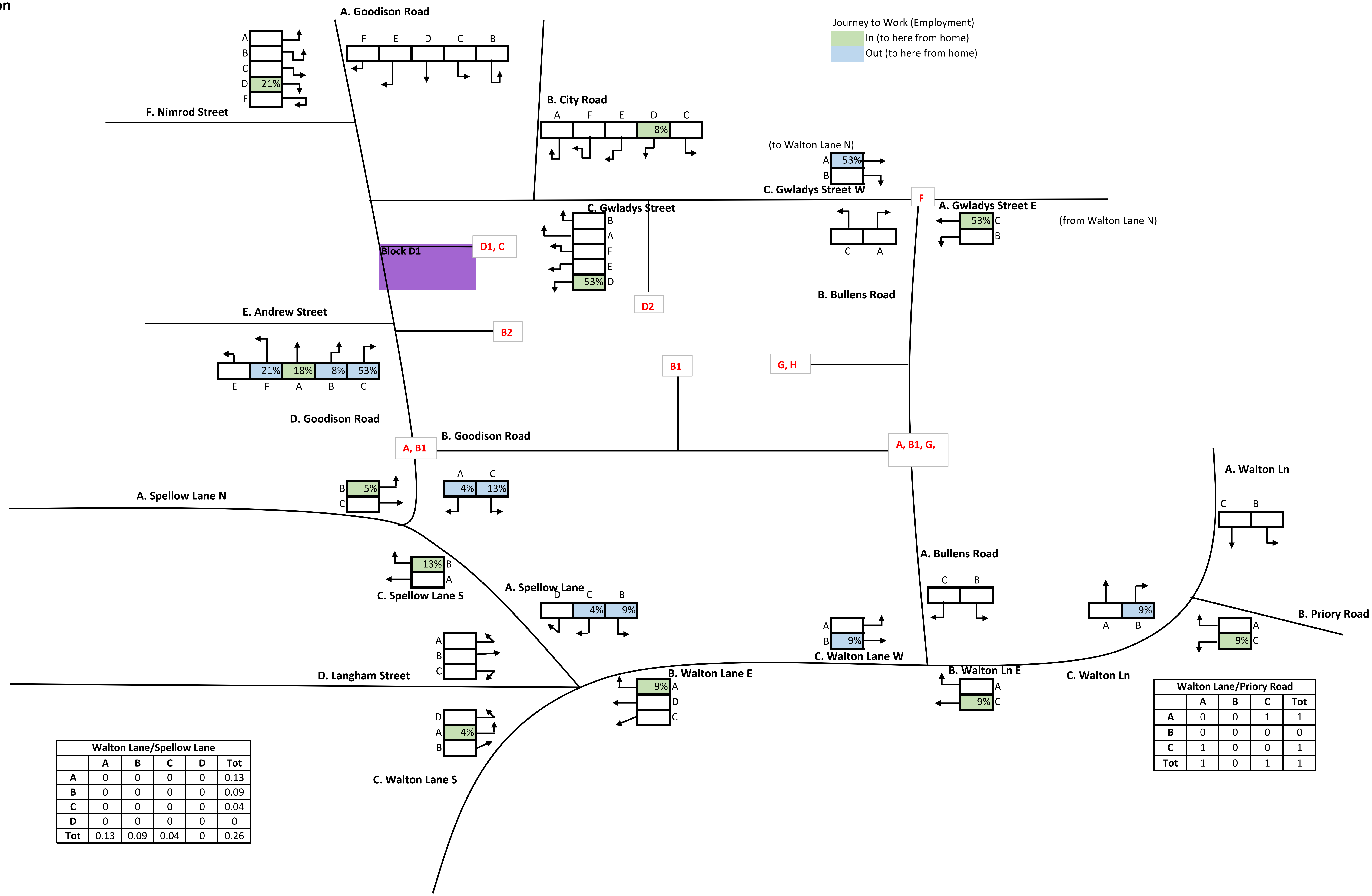
Walton Lane/Spellow Lane

	A	B	C	D	Tot
A	0	0	0	0	0.21
B	0	0	0	0	0.04
C	0	0	0	0	0.21
D	0	0	0	0	0
Tot	0.25	0.21	0	0	0.46

Walton Lane/Priory Road

	A	B	C	Tot
A	0	0	0	0
B	0	0	0	0
C	0	0	0	0
Tot	0	0	0	0

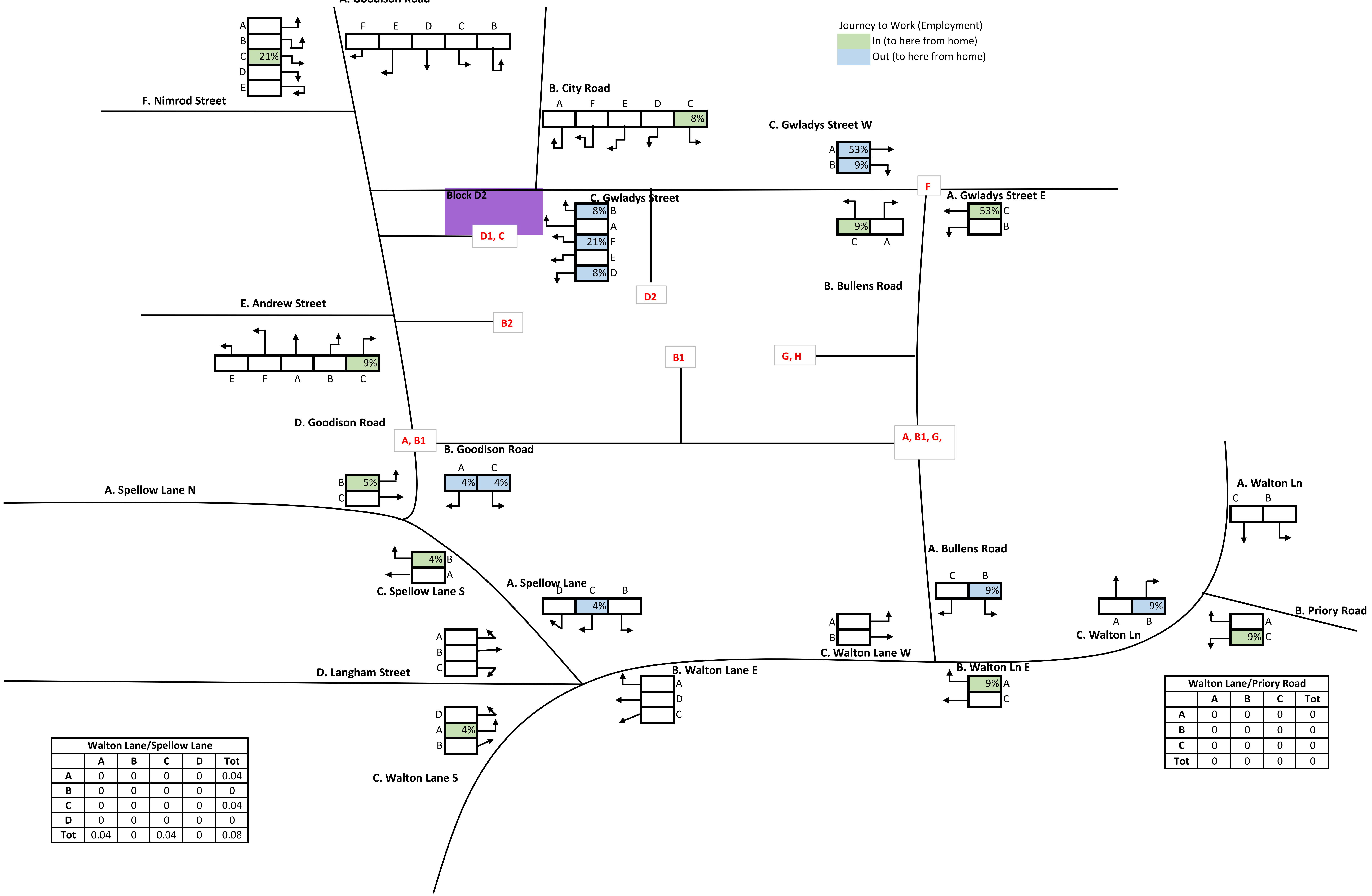
Block D1: Distribution



Walton Lane/Spellow Lane					
	A	B	C	D	Tot
A	0	0	0	0	0.13
B	0	0	0	0	0.09
C	0	0	0	0	0.04
D	0	0	0	0	0
Tot	0.13	0.09	0.04	0	0.26

Walton Lane/Priory Road				
	A	B	C	Tot
A	0	0	1	1
B	0	0	0	0
C	1	0	0	1
Tot	1	0	1	1

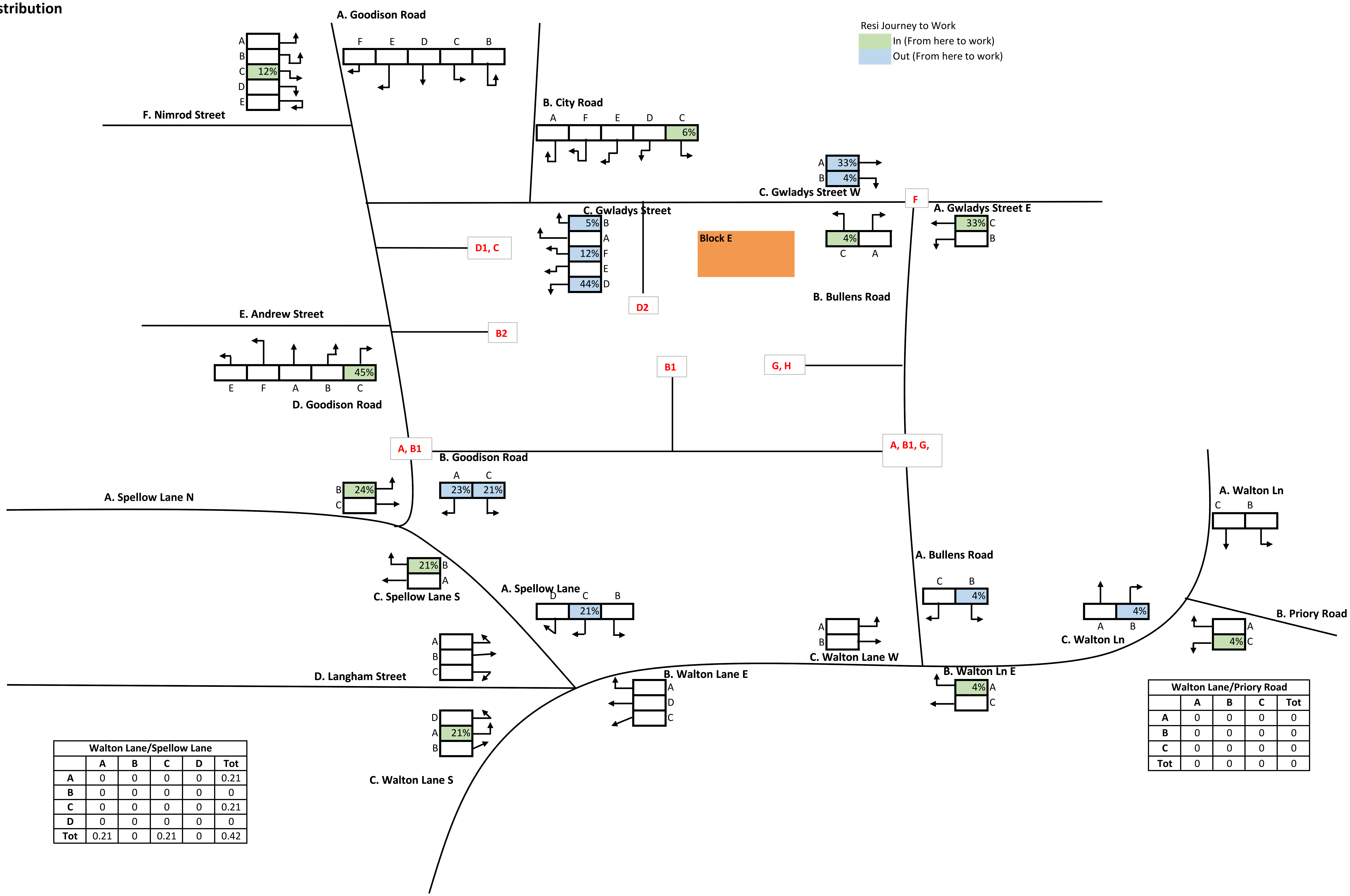
Block D2: Distribution



Walton Lane/Spellow Lane	A	B	C	D	Tot
A	0	0	0	0	0.04
B	0	0	0	0	0
C	0	0	0	0	0.04
D	0	0	0	0	0
Tot	0.04	0	0.04	0	0.08

Walton Lane/Priory Road	A	B	C	Tot
A	0	0	0	0
B	0	0	0	0
C	0	0	0	0
Tot	0	0	0	0

Block E: Distribution



Walton Lane/Spellow Lane					
	A	B	C	D	Tot
A	0	0	0	0	0.21
B	0	0	0	0	0
C	0	0	0	0	0.21
D	0	0	0	0	0
Tot	0.21	0	0.21	0	0.42

Walton Lane/Priory Road				
	A	B	C	Tot
A	0	0	0	0
B	0	0	0	0
C	0	0	0	0
Tot	0	0	0	0

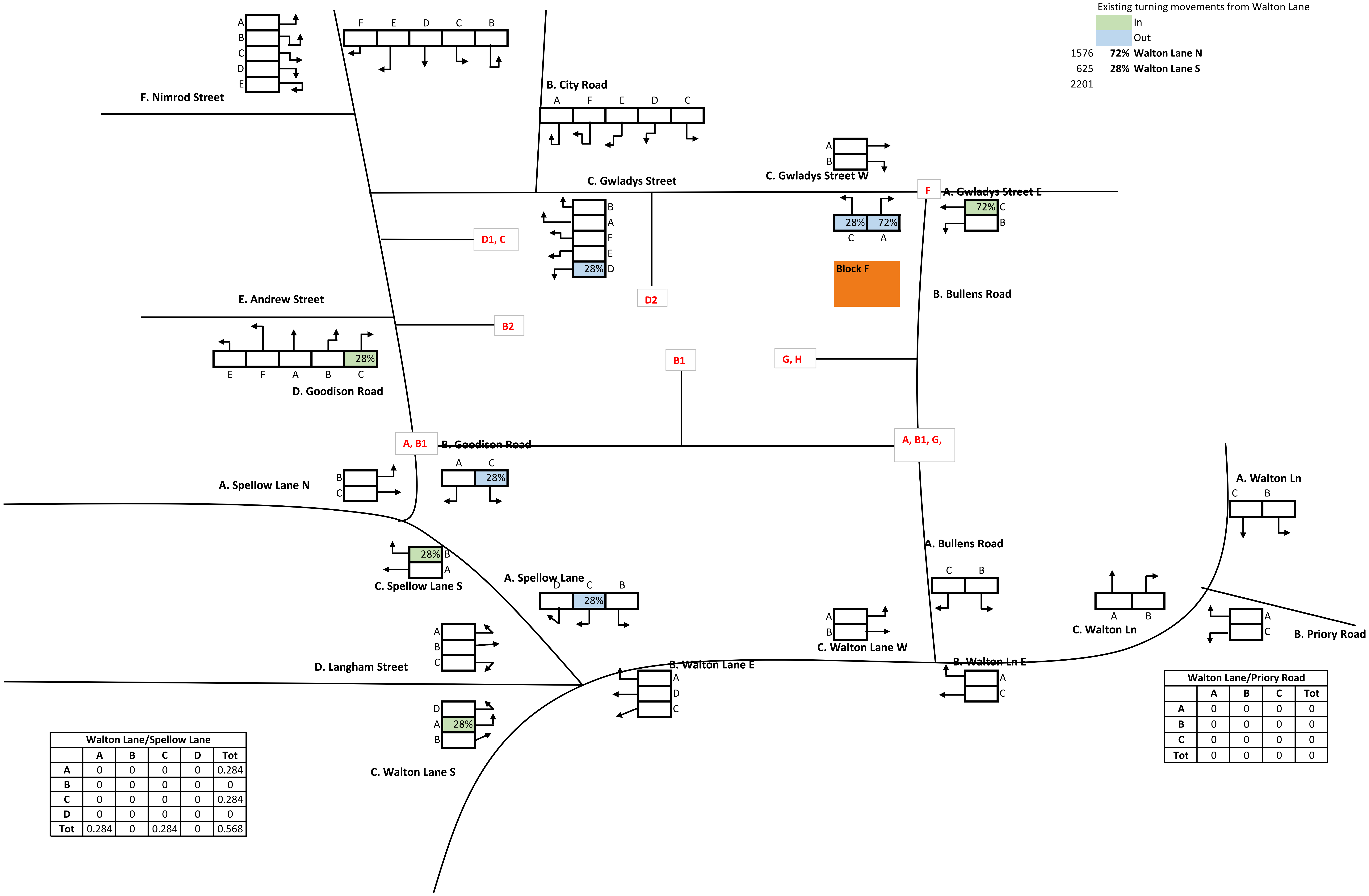
Block F: Distribution

Existing turning movements from Walton Lane

In

Out

1576	72%	Walton Lane N
625	28%	Walton Lane S
2201		



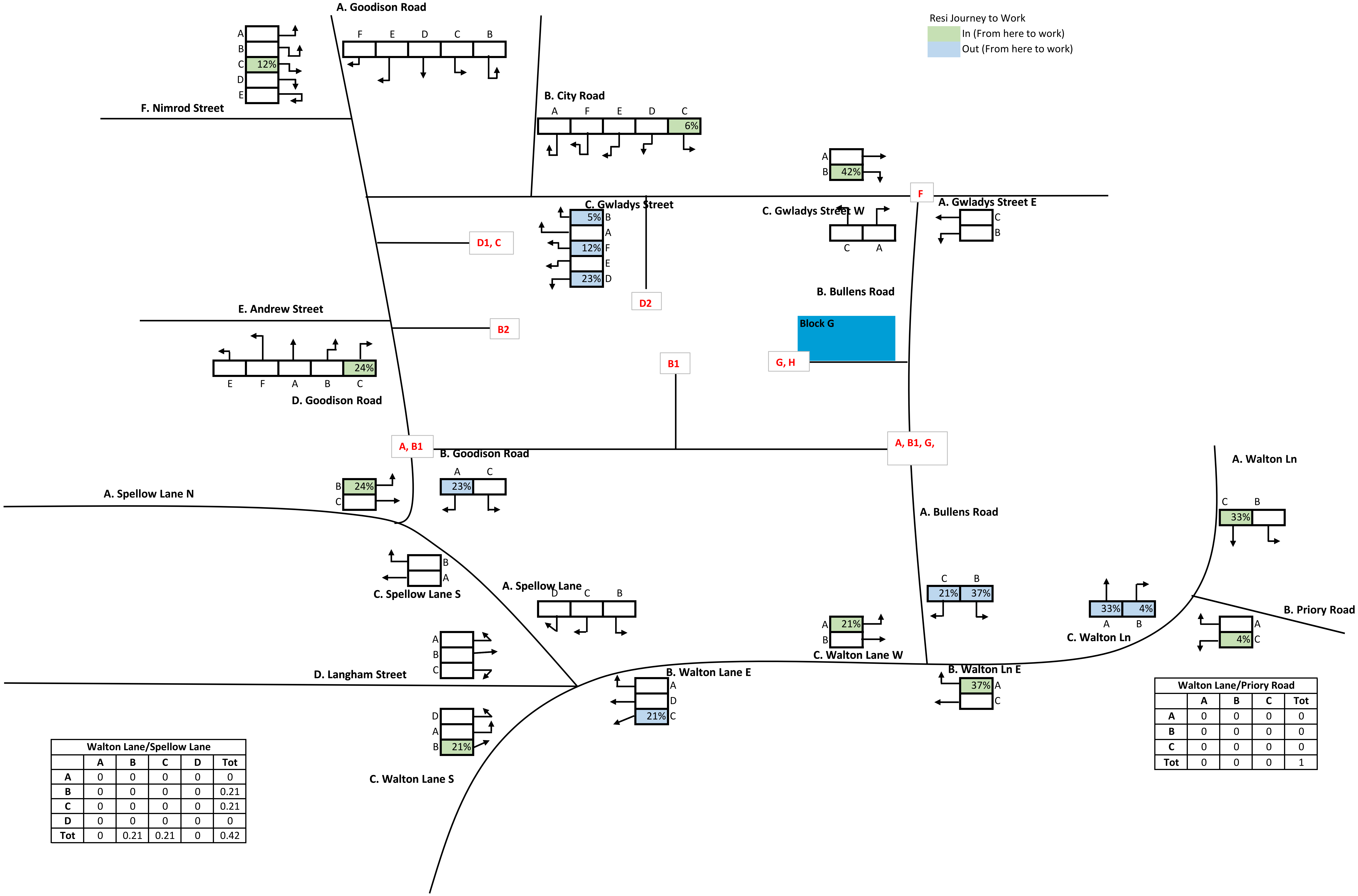
Walton Lane/Spellow Lane

	A	B	C	D	Tot
A	0	0	0	0	0.284
B	0	0	0	0	0
C	0	0	0	0	0.284
D	0	0	0	0	0
Tot	0.284	0	0.284	0	0.568

Walton Lane/Priory Road

	A	B	C	Tot
A	0	0	0	0
B	0	0	0	0
C	0	0	0	0
Tot	0	0	0	0

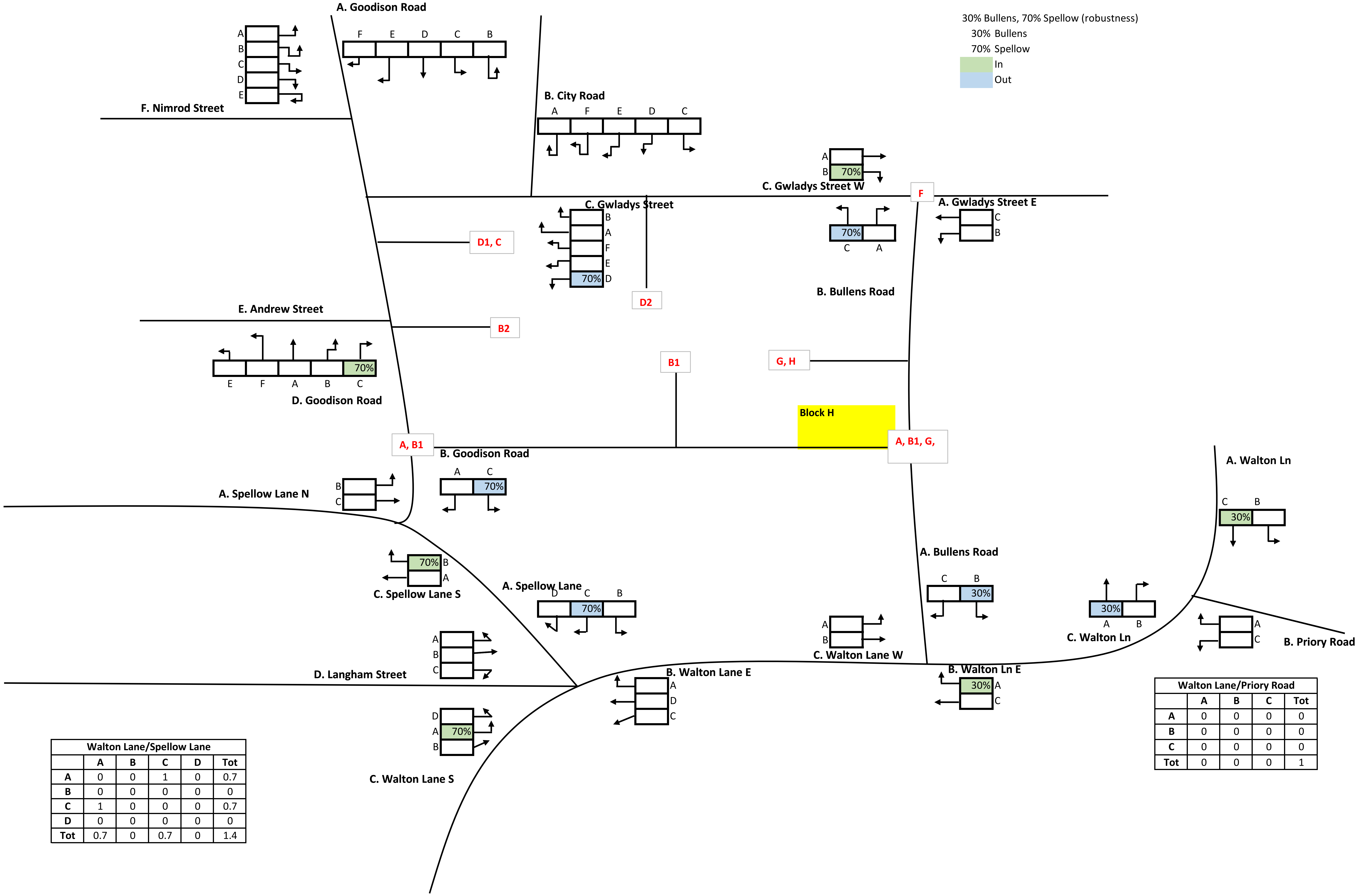
Block G: Distribution



Walton Lane/Spellow Lane					
	A	B	C	D	Tot
A	0	0	0	0	0
B	0	0	0	0	0.21
C	0	0	0	0	0.21
D	0	0	0	0	0
Tot	0	0.21	0.21	0	0.42

Walton Lane/Priory Road				
	A	B	C	Tot
A	0	0	0	0
B	0	0	0	0
C	0	0	0	0
Tot	0	0	0	1

Block H: Distribution



Walton Lane/Spellow Lane

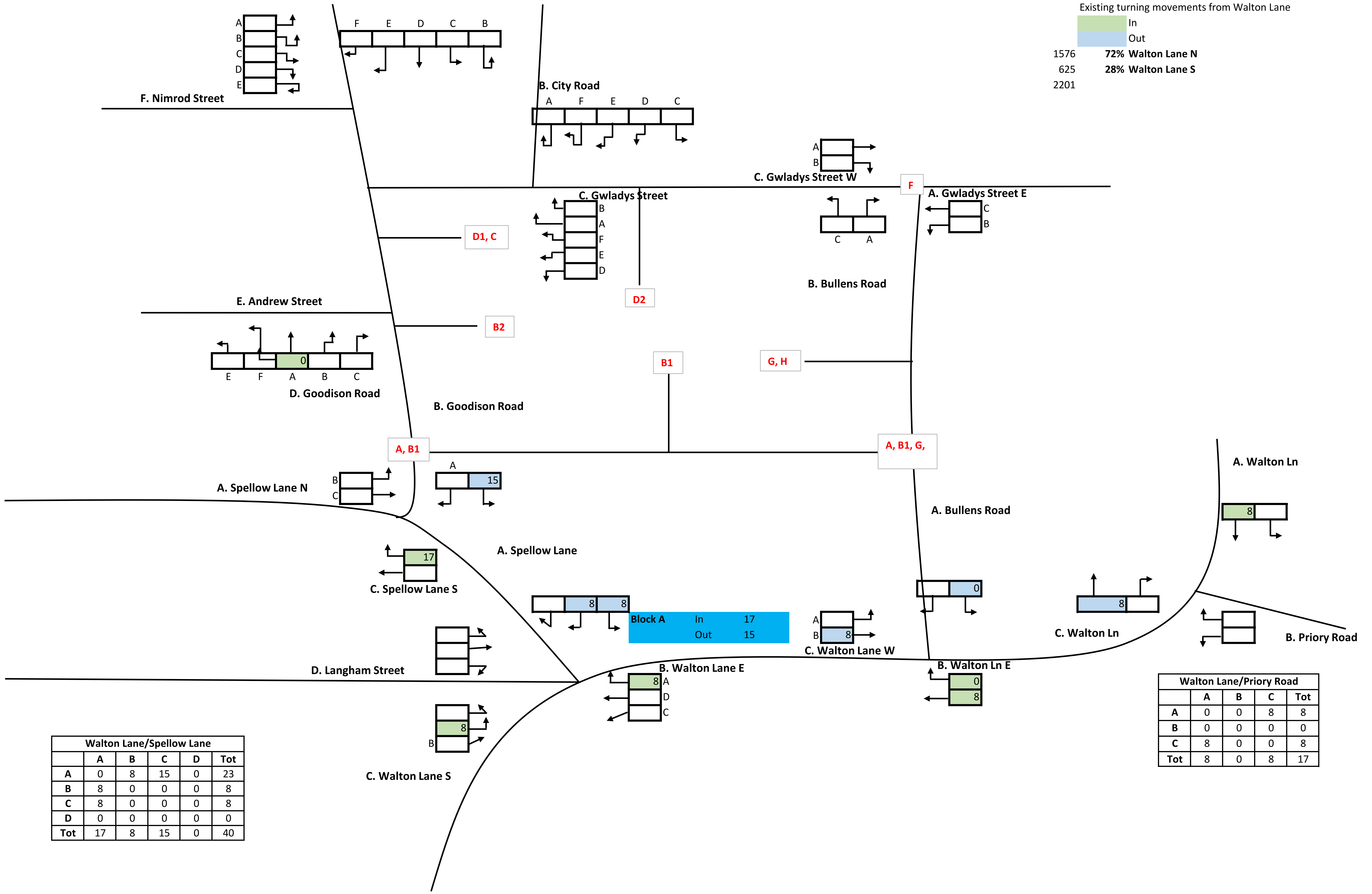
	A	B	C	D	Tot
A	0	0	1	0	0.7
B	0	0	0	0	0
C	1	0	0	0	0.7
D	0	0	0	0	0
Tot	0.7	0	0.7	0	1.4

Walton Lane/Priory Road

	A	B	C	Tot
A	0	0	0	0
B	0	0	0	0
C	0	0	0	0
Tot	0	0	0	1

D. Trip Generation Flow Diagrams

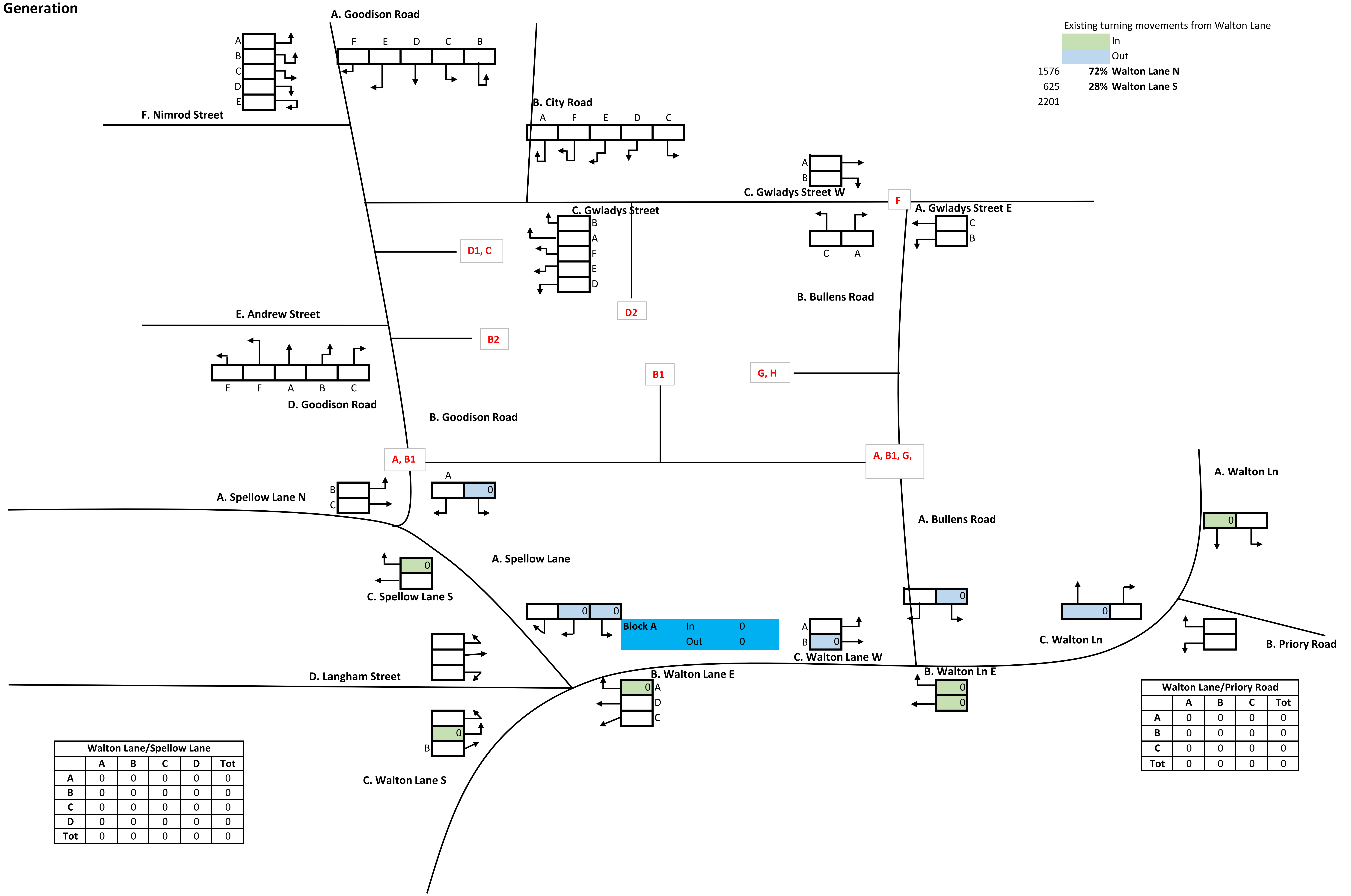
Block A: A3 AM Trip Generation



Walton Lane/Spellow Lane	A	B	C	D	Tot
A	0	8	15	0	23
B	8	0	0	0	8
C	8	0	0	0	8
D	0	0	0	0	0
Tot	17	8	15	0	40

Walton Lane/Priory Road	A	B	C	Tot
A	0	0	8	8
B	0	0	0	0
C	8	0	0	8
Tot	8	0	8	17

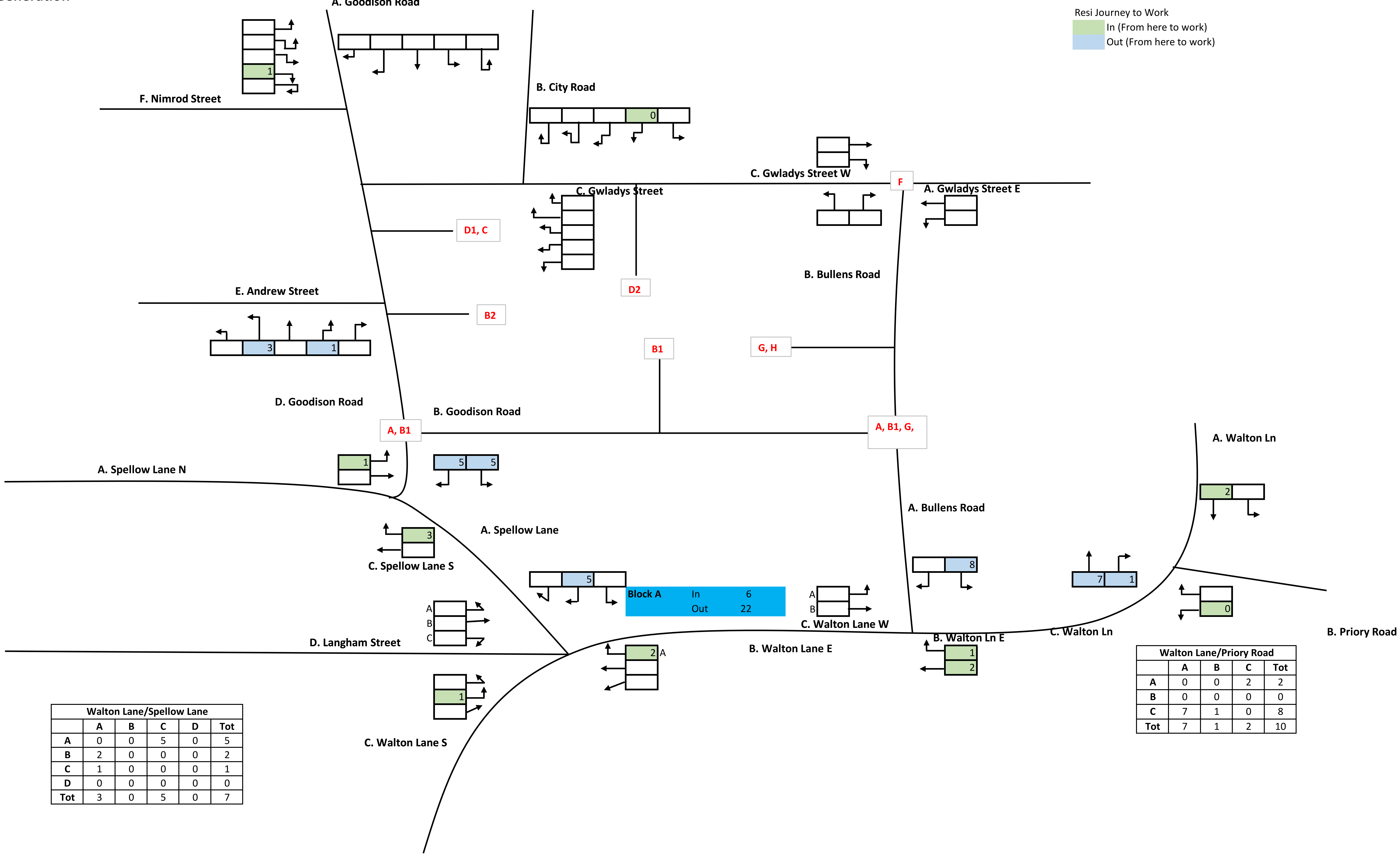
Block A: A3 AM Trip Generation



Walton Lane/Spellow Lane					
	A	B	C	D	Tot
A	0	0	0	0	0
B	0	0	0	0	0
C	0	0	0	0	0
D	0	0	0	0	0
Tot	0	0	0	0	0

Walton Lane/Priory Road				
	A	B	C	Tot
A	0	0	0	0
B	0	0	0	0
C	0	0	0	0
Tot	0	0	0	0

Block A: C3 AM Trip Generation



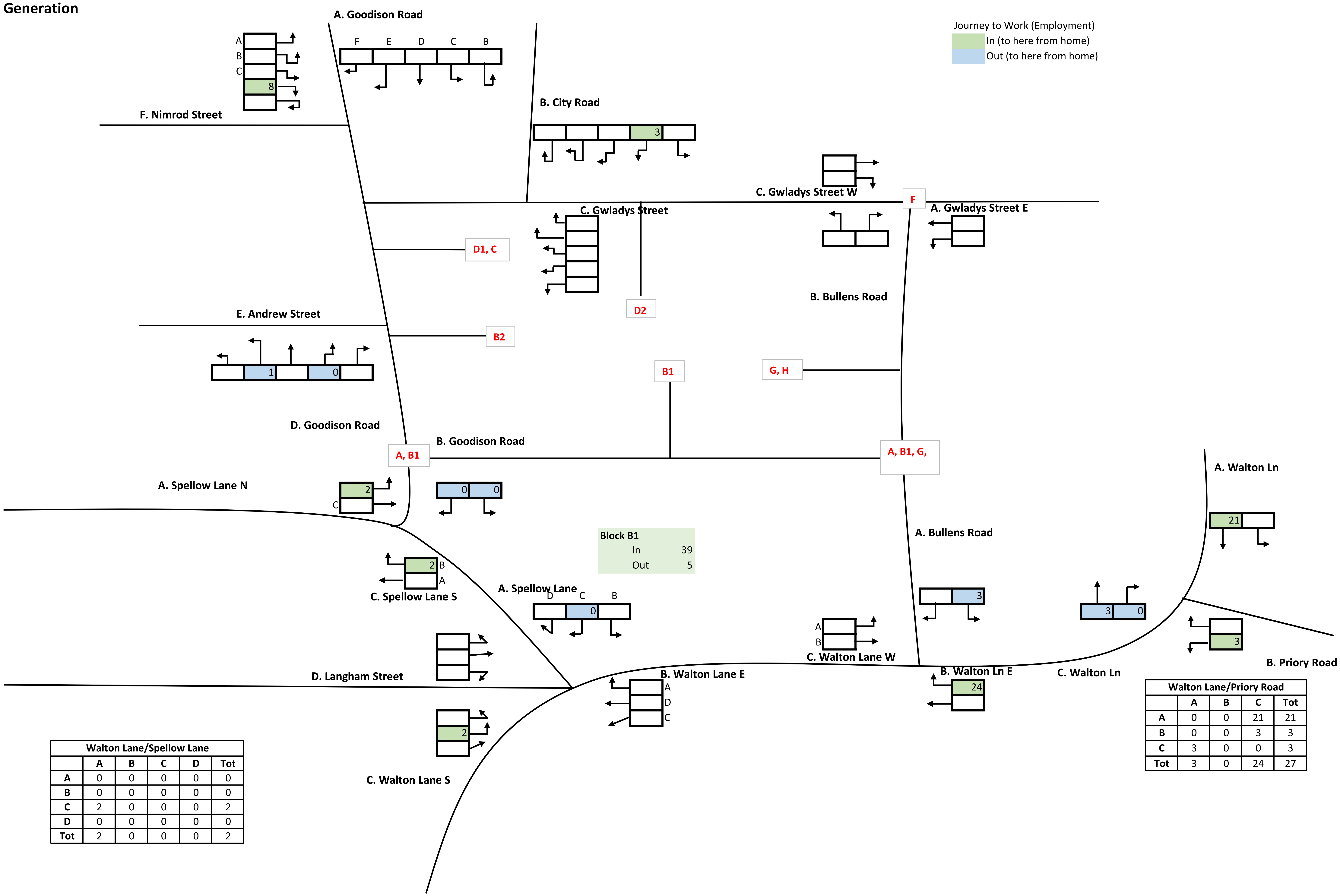
Walton Lane/Spellow Lane

	A	B	C	D	Tot
A	0	0	5	0	5
B	2	0	0	0	2
C	1	0	0	0	1
D	0	0	0	0	0
Tot	3	0	5	0	7

Walton Lane/Priory Road

	A	B	C	Tot
A	0	0	2	2
B	0	0	0	0
C	7	1	0	8
Tot	7	1	2	10

Block B1: D1 AM Trip Generation



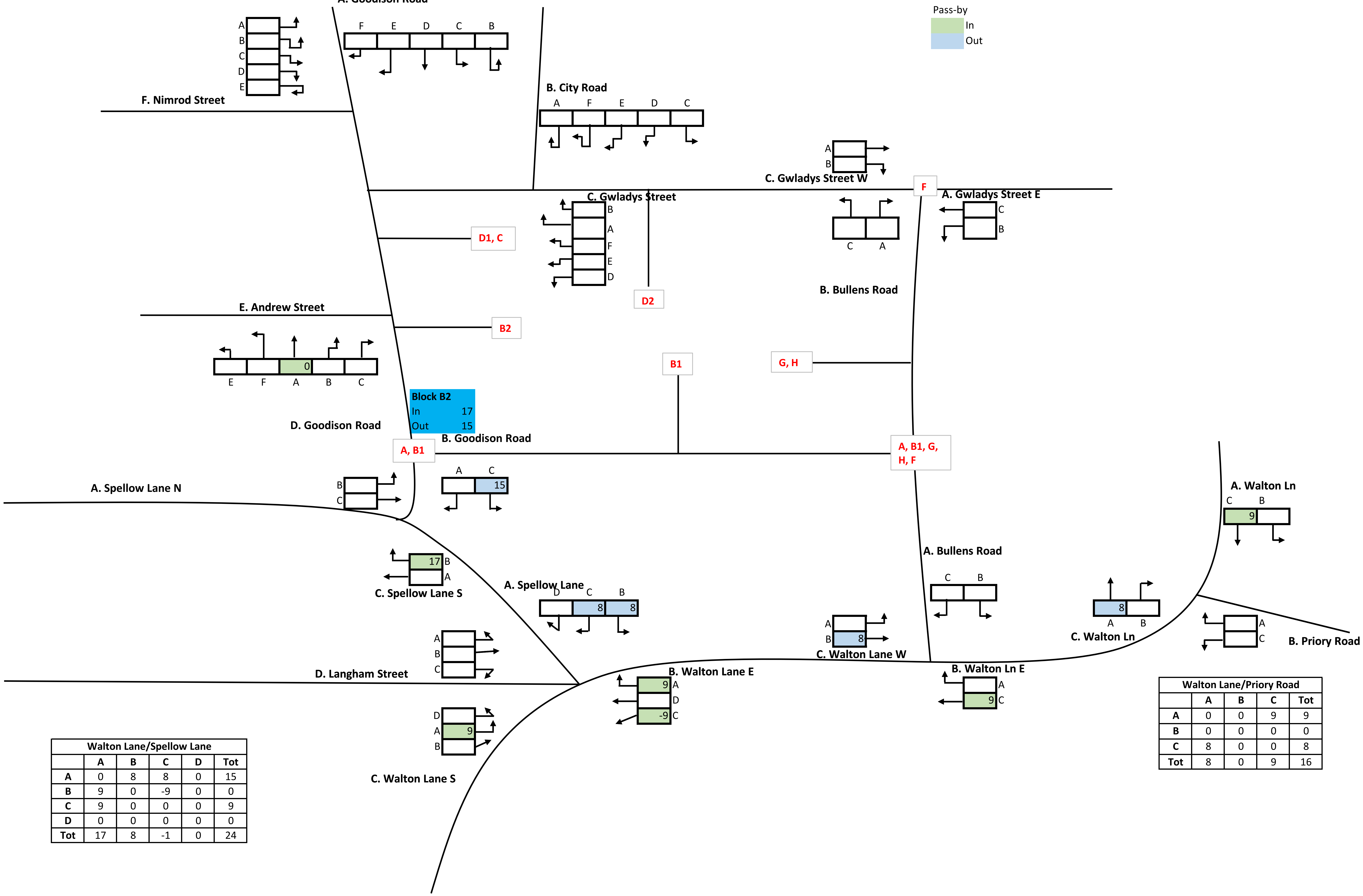
Walton Lane/Spellow Lane

	A	B	C	D	Tot
A	0	0	0	0	0
B	0	0	0	0	0
C	2	0	0	0	2
D	0	0	0	0	0
Tot	2	0	0	0	2

Walton Lane/Priory Road

	A	B	C	Tot
A	0	0	21	21
B	0	0	3	3
C	3	0	0	3
Tot	3	0	24	27

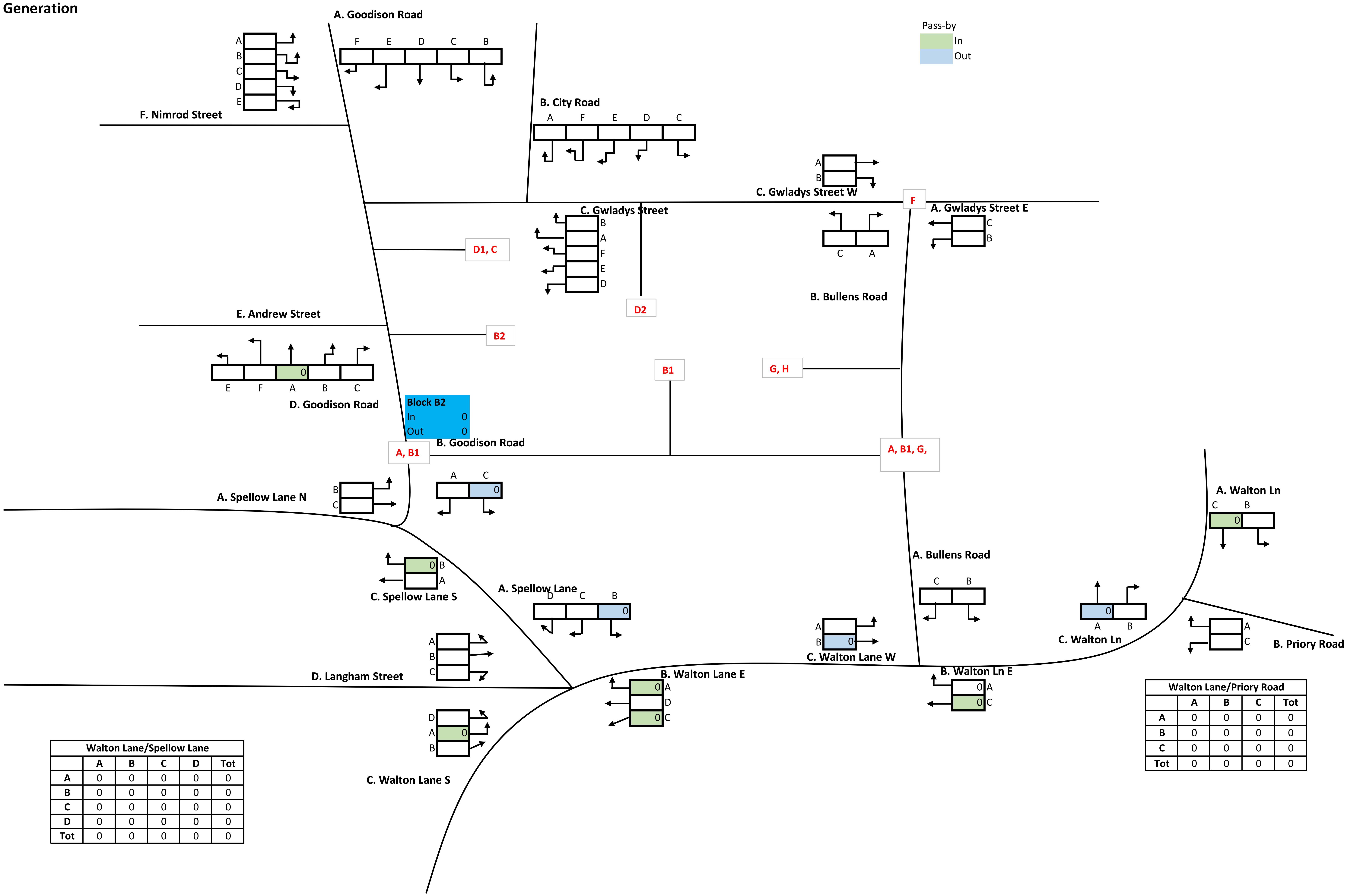
Block B2: A1 AM Trip Generation



Walton Lane/Spellow Lane					
	A	B	C	D	Tot
A	0	8	8	0	15
B	9	0	-9	0	0
C	9	0	0	0	9
D	0	0	0	0	0
Tot	17	8	-1	0	24

Walton Lane/Priory Road				
	A	B	C	Tot
A	0	0	9	9
B	0	0	0	0
C	8	0	0	8
Tot	8	0	9	16

Block B2: A3 AM Trip Generation



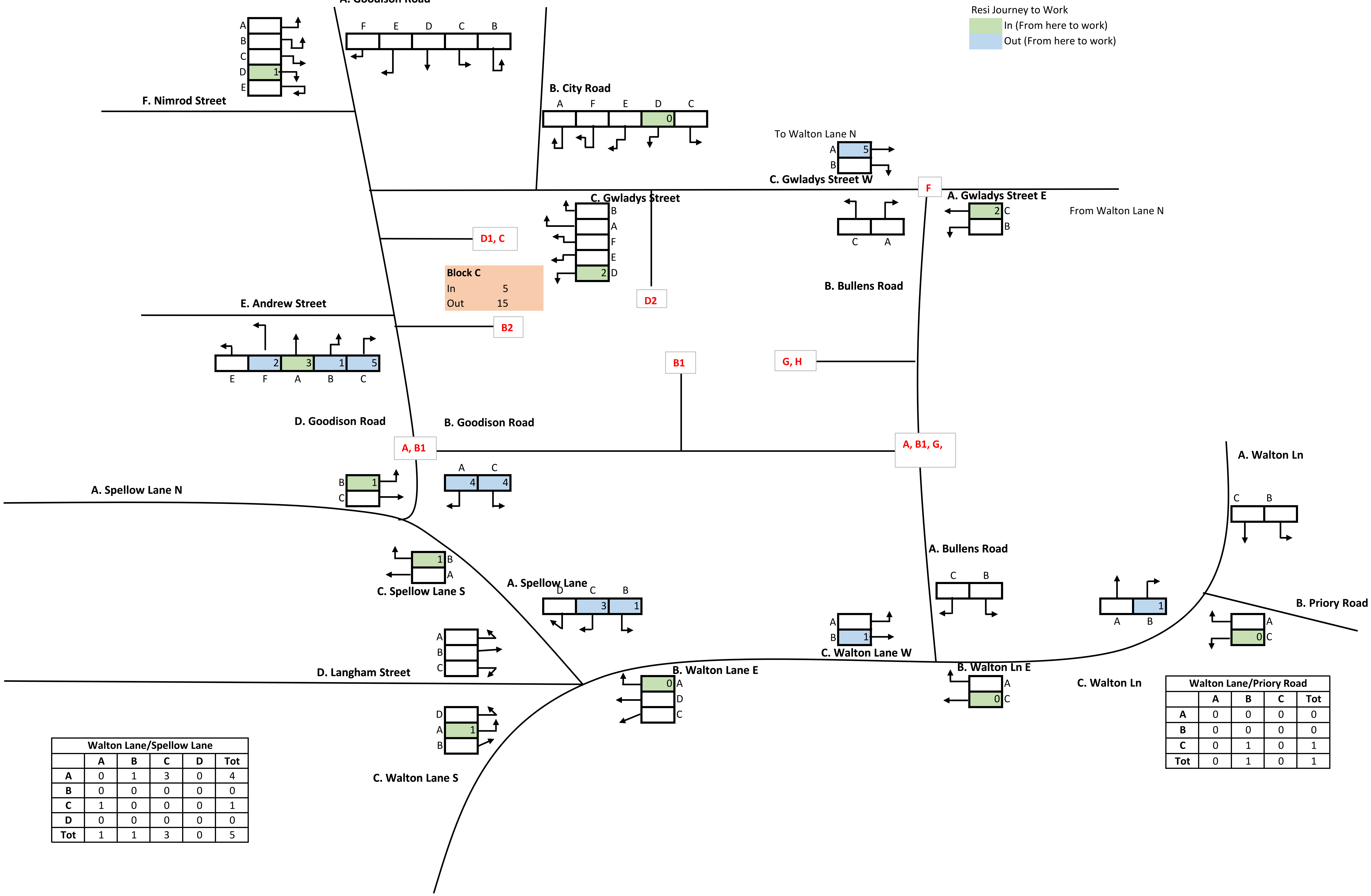
Walton Lane/Spellow Lane

	A	B	C	D	Tot
A	0	0	0	0	0
B	0	0	0	0	0
C	0	0	0	0	0
D	0	0	0	0	0
Tot	0	0	0	0	0

Walton Lane/Priory Road

	A	B	C	Tot
A	0	0	0	0
B	0	0	0	0
C	0	0	0	0
Tot	0	0	0	0

Block C: AM Trip Generation



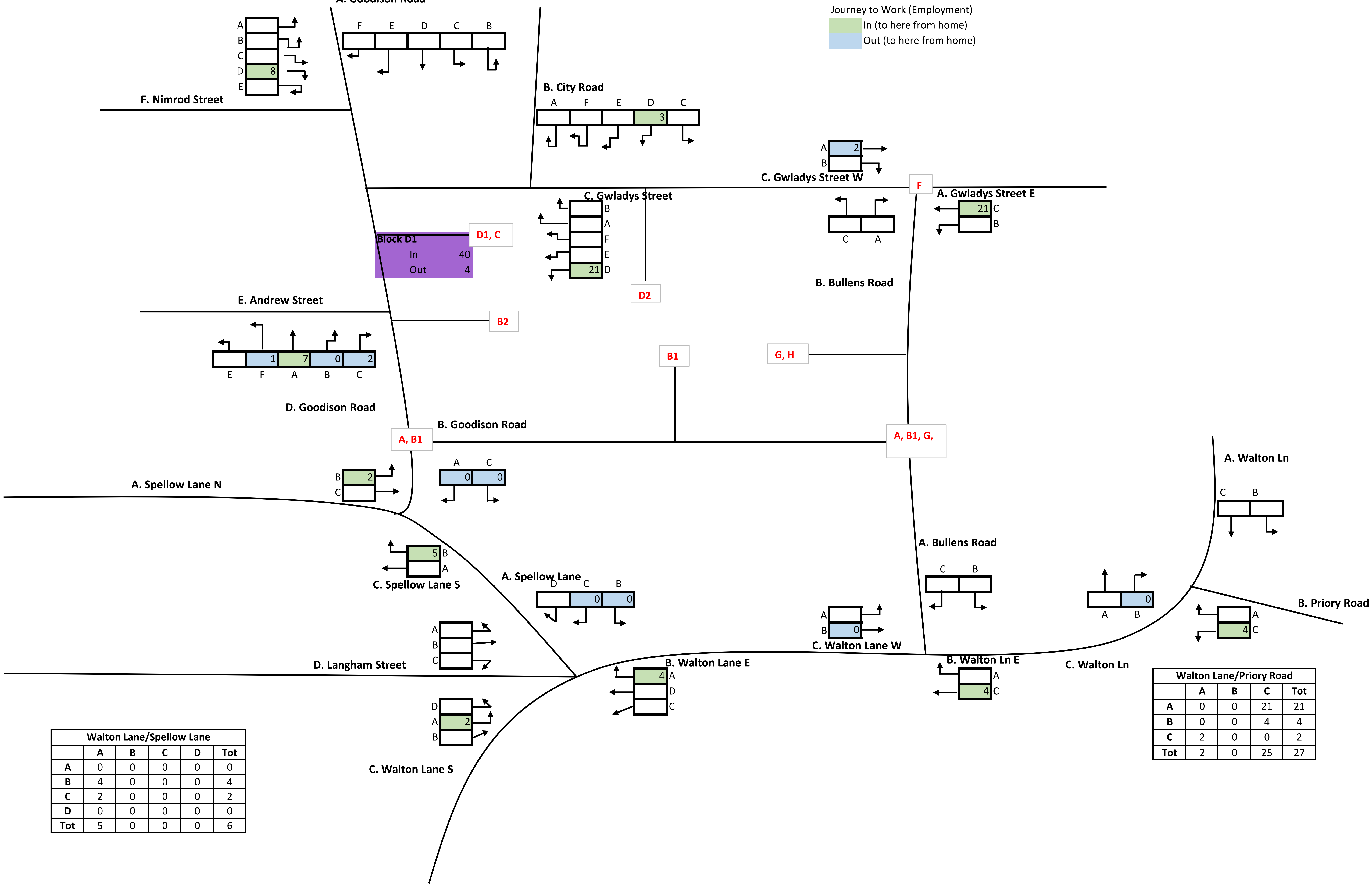
Walton Lane/Spellow Lane

	A	B	C	D	Tot
A	0	1	3	0	4
B	0	0	0	0	0
C	1	0	0	0	1
D	0	0	0	0	0
Tot	1	1	3	0	5

Walton Lane/Priory Road

	A	B	C	Tot
A	0	0	0	0
B	0	0	0	0
C	0	1	0	1
Tot	0	1	0	1

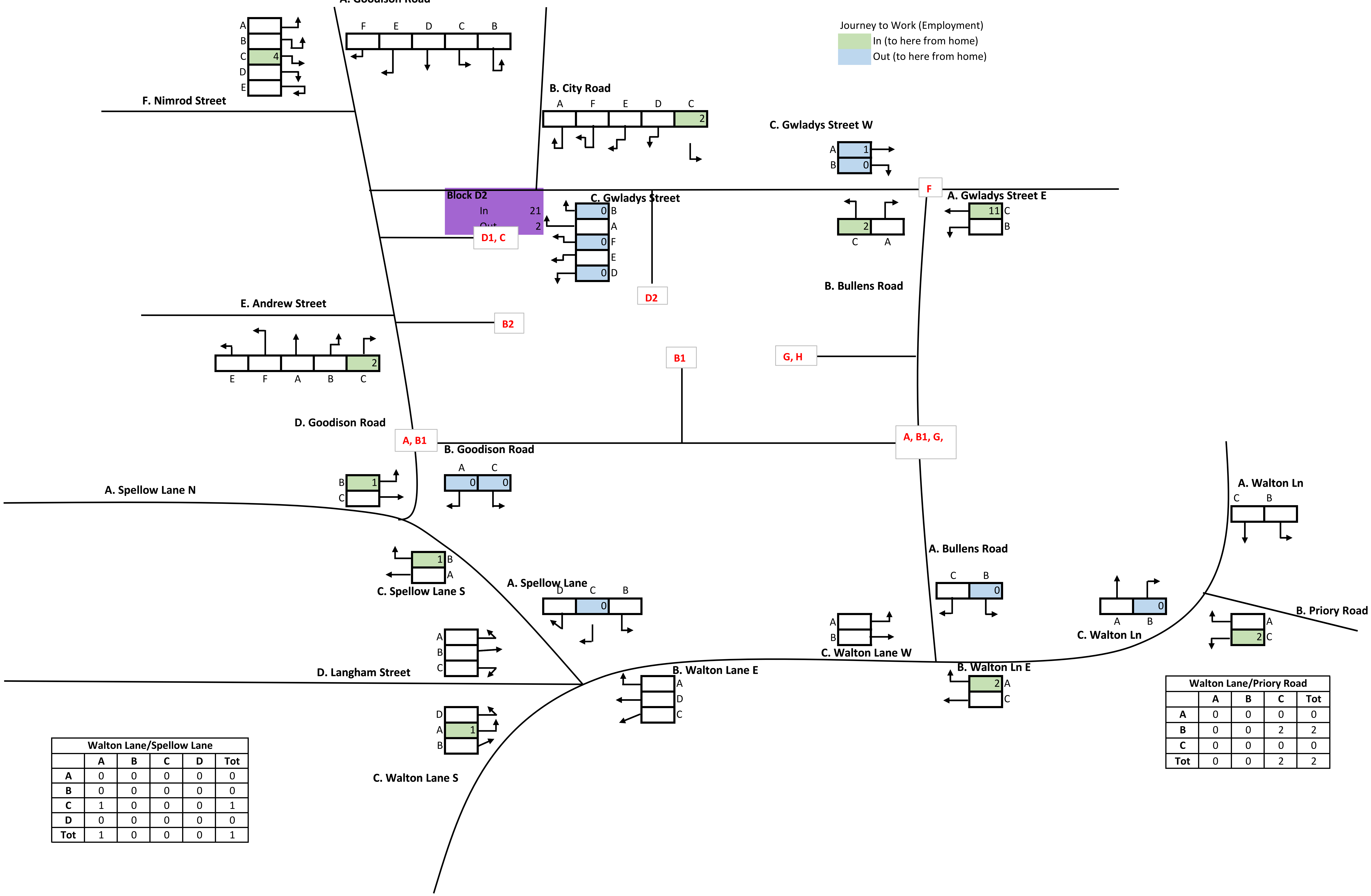
Block D1: AM Trip Generation



Walton Lane/Spellow Lane	A	B	C	D	Tot
A	0	0	0	0	0
B	4	0	0	0	4
C	2	0	0	0	2
D	0	0	0	0	0
Tot	5	0	0	0	6

Walton Lane/Priory Road	A	B	C	Tot
A	0	0	21	21
B	0	0	4	4
C	2	0	0	2
Tot	2	0	25	27

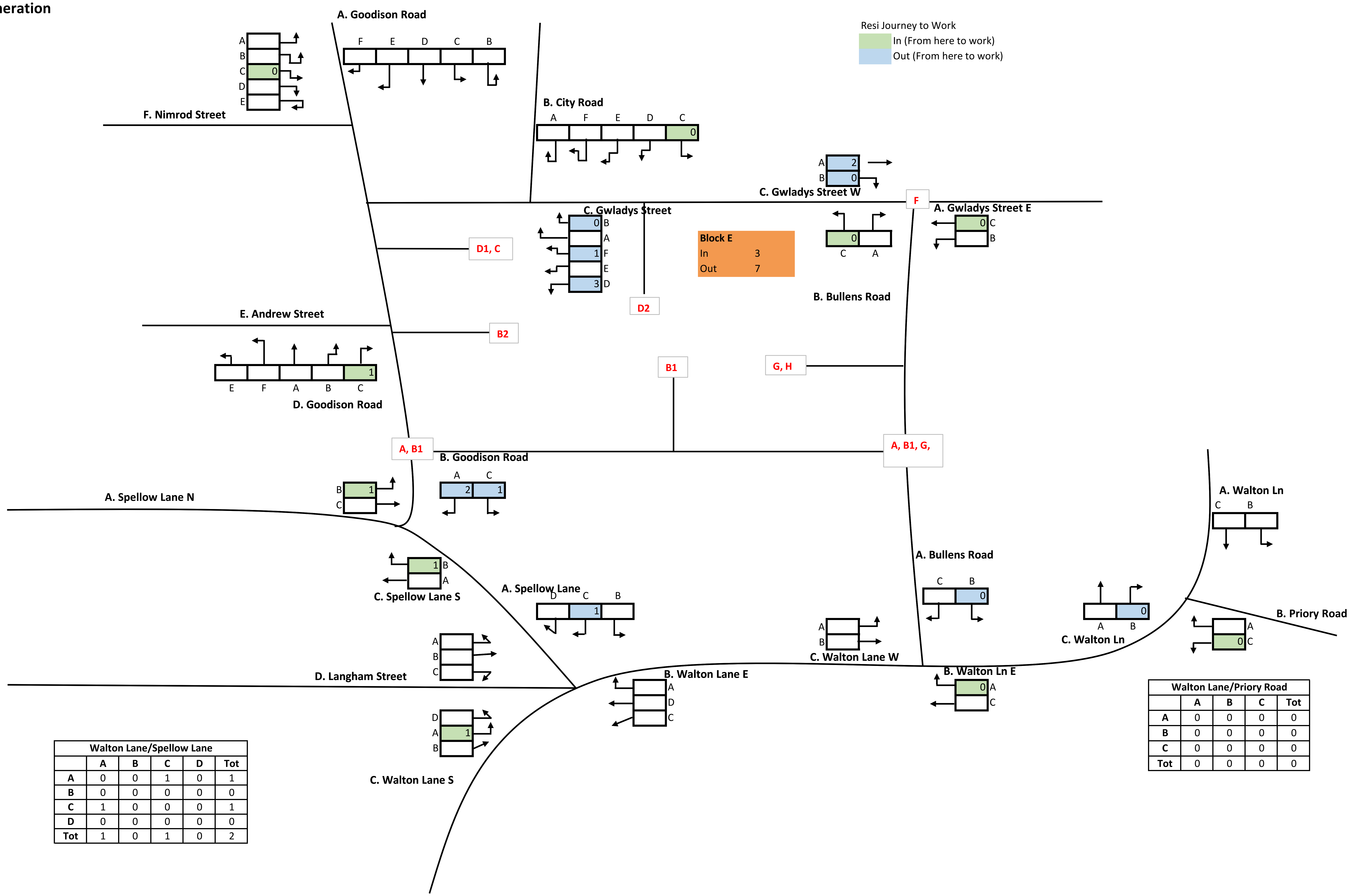
Block D2: AM Trip Generation



Walton Lane/Spellow Lane					
	A	B	C	D	Tot
A	0	0	0	0	0
B	0	0	0	0	0
C	1	0	0	0	1
D	0	0	0	0	0
Tot	1	0	0	0	1

Walton Lane/Priory Road				
	A	B	C	Tot
A	0	0	0	0
B	0	0	2	2
C	0	0	0	0
Tot	0	0	2	2

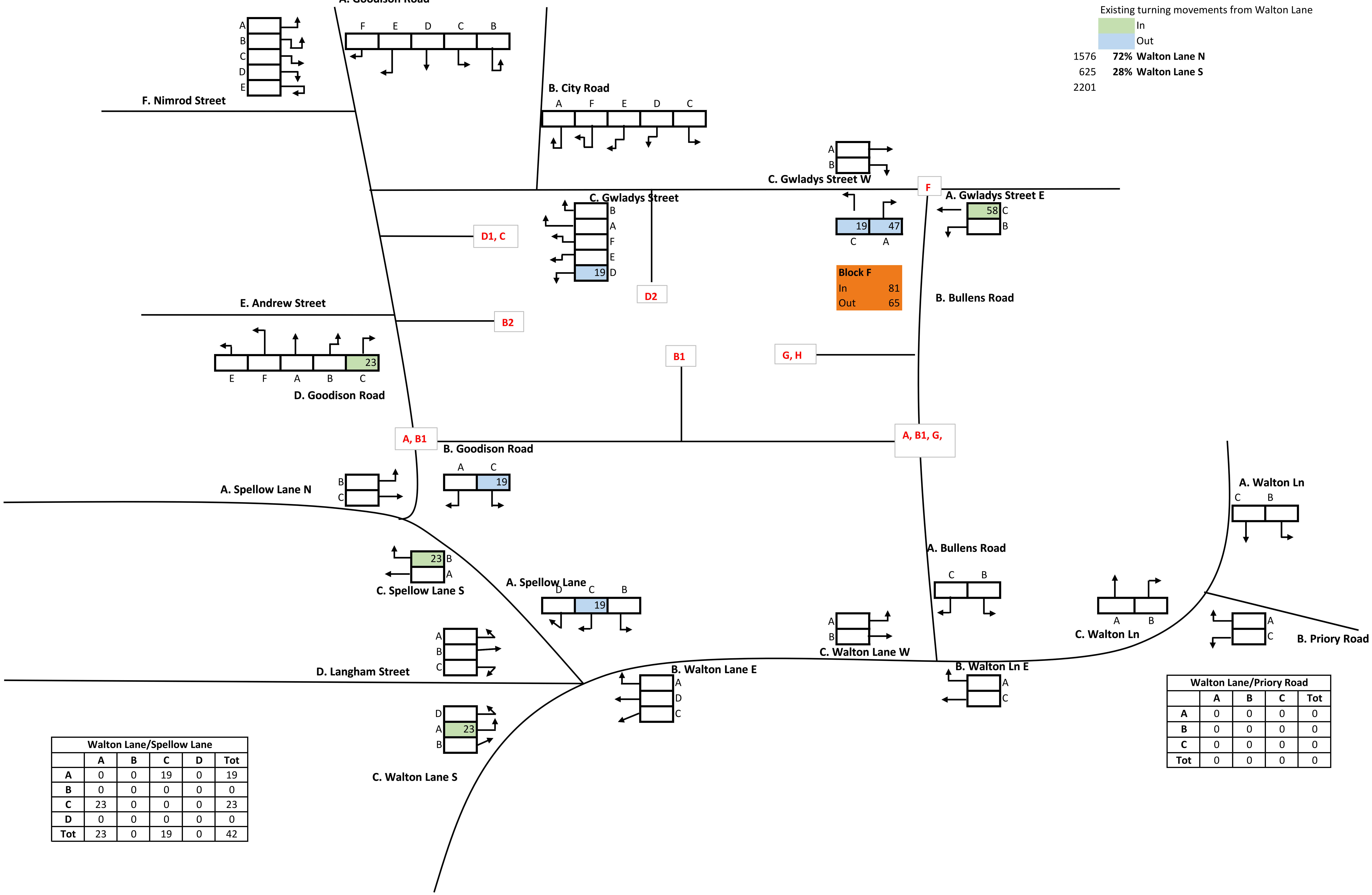
Block E: AM Trip Generation



Walton Lane/Spellow Lane					
	A	B	C	D	Tot
A	0	0	1	0	1
B	0	0	0	0	0
C	1	0	0	0	1
D	0	0	0	0	0
Tot	1	0	1	0	2

Walton Lane/Priory Road				
	A	B	C	Tot
A	0	0	0	0
B	0	0	0	0
C	0	0	0	0
Tot	0	0	0	0

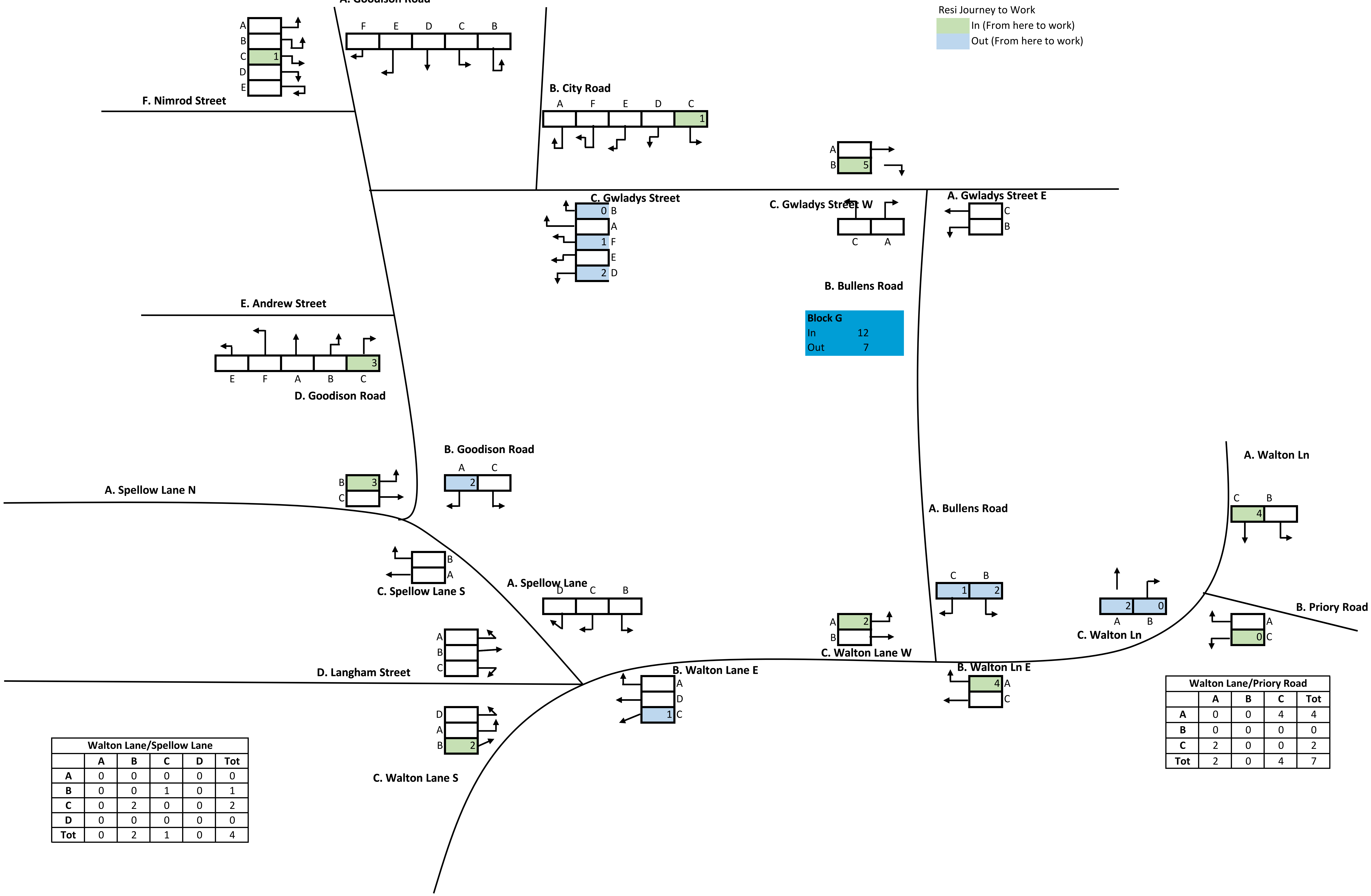
Block F: AM Trip Generation



Walton Lane/Spellow Lane					
	A	B	C	D	Tot
A	0	0	19	0	19
B	0	0	0	0	0
C	23	0	0	0	23
D	0	0	0	0	0
Tot	23	0	19	0	42

Walton Lane/Priory Road				
	A	B	C	Tot
A	0	0	0	0
B	0	0	0	0
C	0	0	0	0
Tot	0	0	0	0

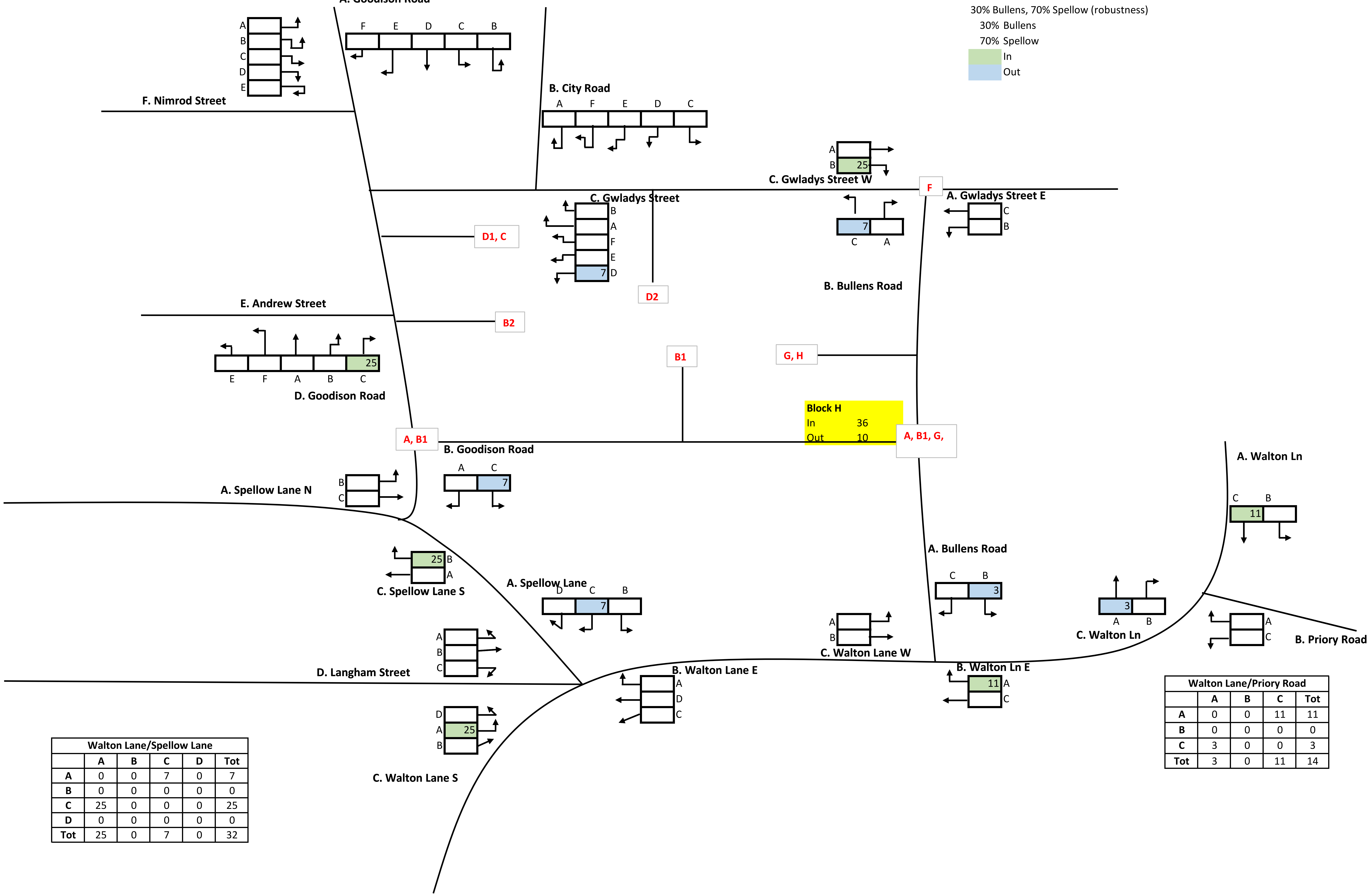
Block G: AM Trip Generation



Walton Lane/Spellow Lane					
	A	B	C	D	Tot
A	0	0	0	0	0
B	0	0	1	0	1
C	0	2	0	0	2
D	0	0	0	0	0
Tot	0	2	1	0	4

Walton Lane/Priory Road				
	A	B	C	Tot
A	0	0	4	4
B	0	0	0	0
C	2	0	0	2
Tot	2	0	4	7

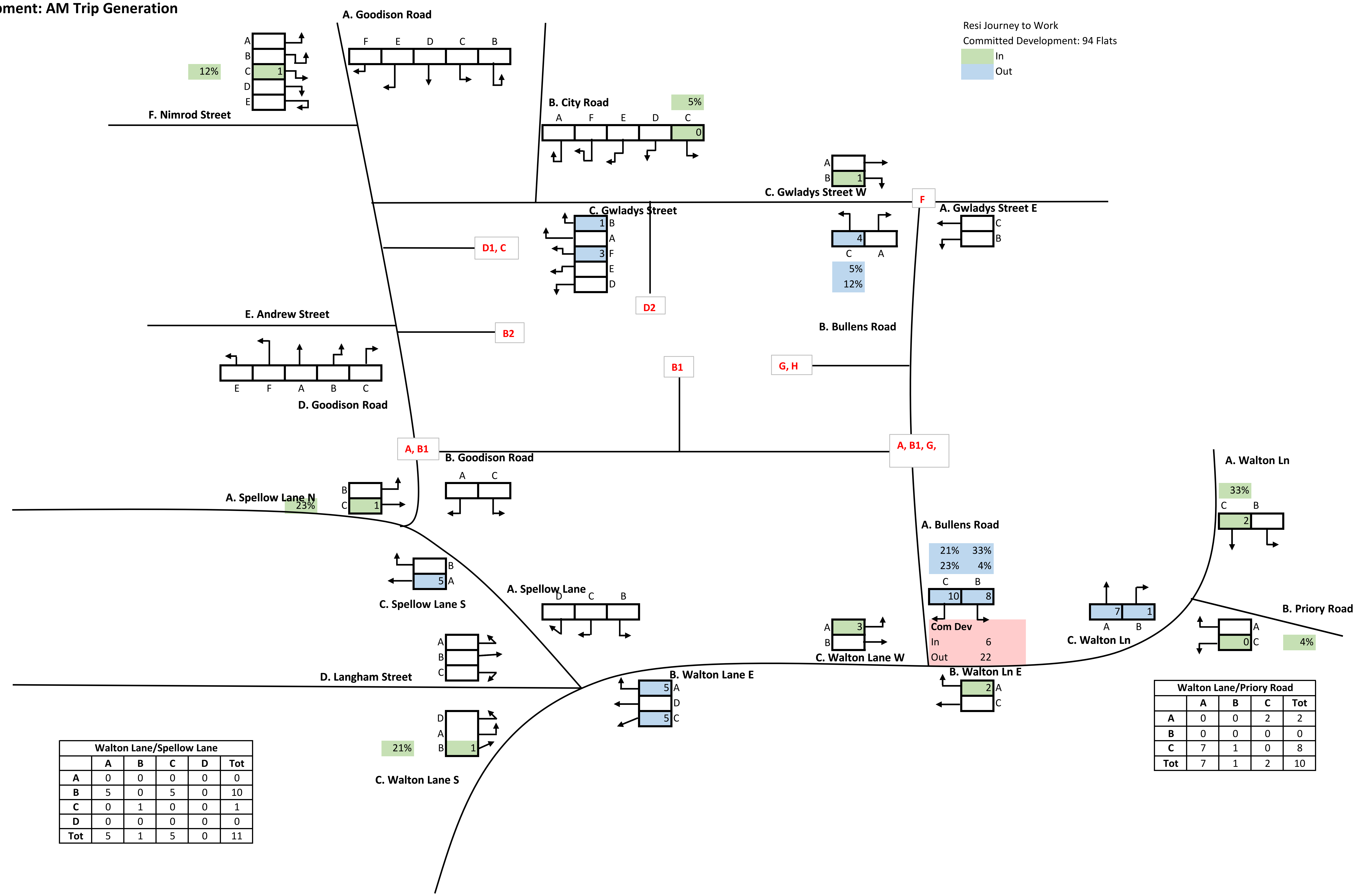
Block H: AM Trip Generation



Walton Lane/Spellow Lane					
	A	B	C	D	Tot
A	0	0	7	0	7
B	0	0	0	0	0
C	25	0	0	0	25
D	0	0	0	0	0
Tot	25	0	7	0	32

Walton Lane/Priory Road				
	A	B	C	Tot
A	0	0	11	11
B	0	0	0	0
C	3	0	0	3
Tot	3	0	11	14

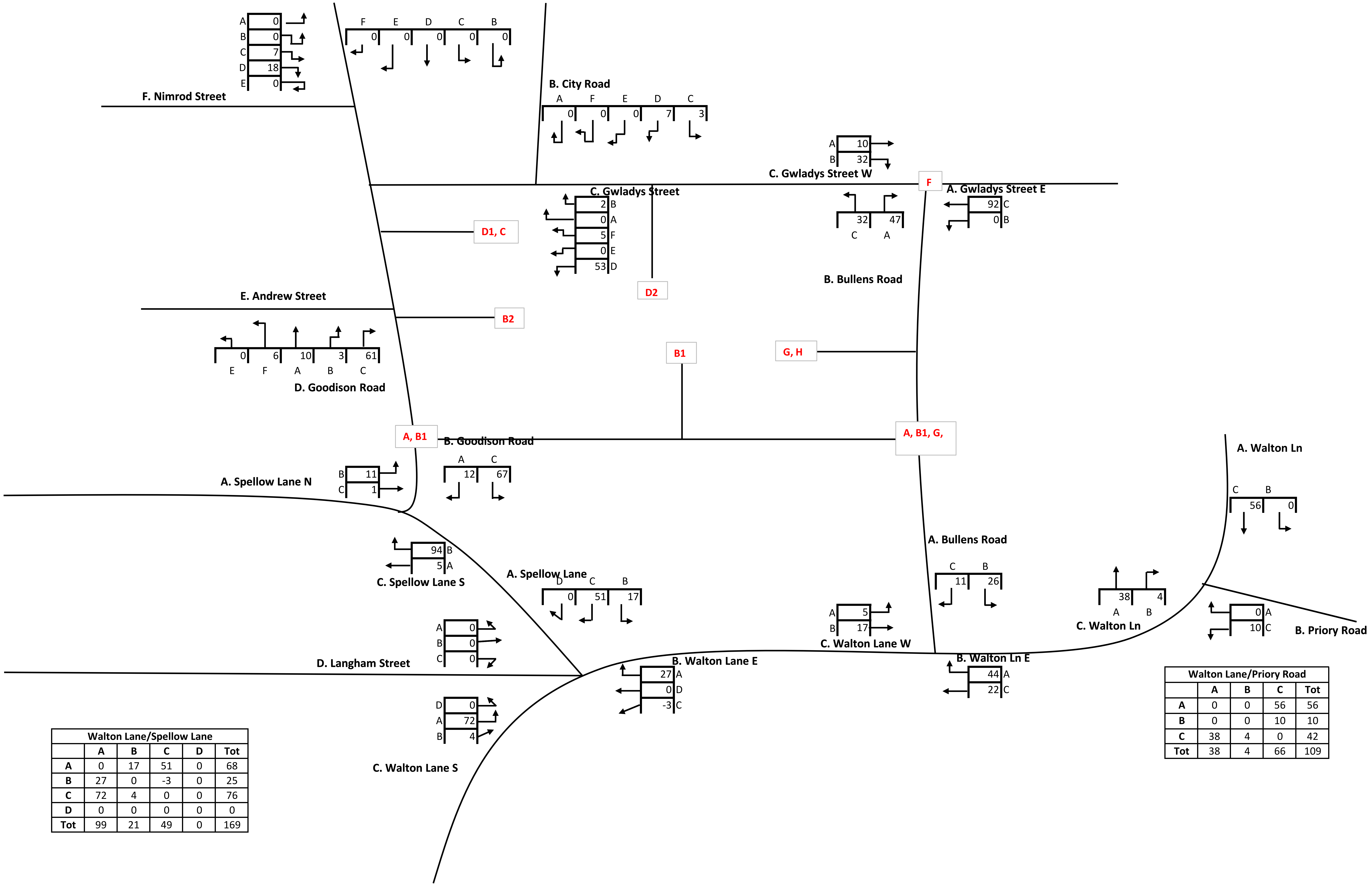
Committed Development: AM Trip Generation



Walton Lane/Spellow Lane	A	B	C	D	Tot
A	0	0	0	0	0
B	5	0	5	0	10
C	0	1	0	0	1
D	0	0	0	0	0
Tot	5	1	5	0	11

Walton Lane/Priory Road	A	B	C	Tot
A	0	0	2	2
B	0	0	0	0
C	7	1	0	8
Tot	7	1	2	10

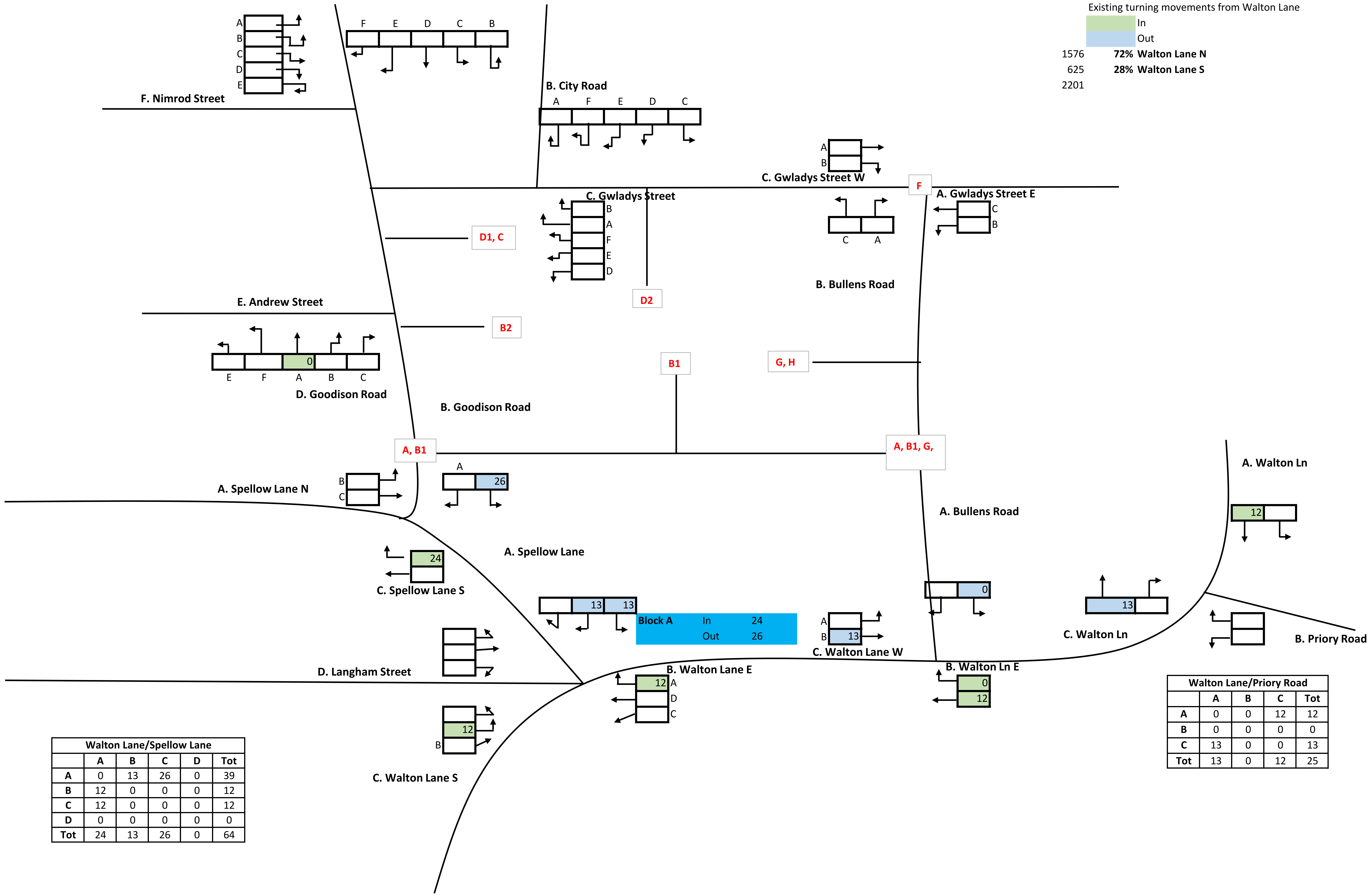
Total Development: AM Trip Generation



Walton Lane/Spellow Lane					
	A	B	C	D	Tot
A	0	17	51	0	68
B	27	0	-3	0	25
C	72	4	0	0	76
D	0	0	0	0	0
Tot	99	21	49	0	169

Walton Lane/Priory Road				
	A	B	C	Tot
A	0	0	56	56
B	0	0	10	10
C	38	4	0	42
Tot	38	4	66	109

Block A: A3 PM Trip Generation



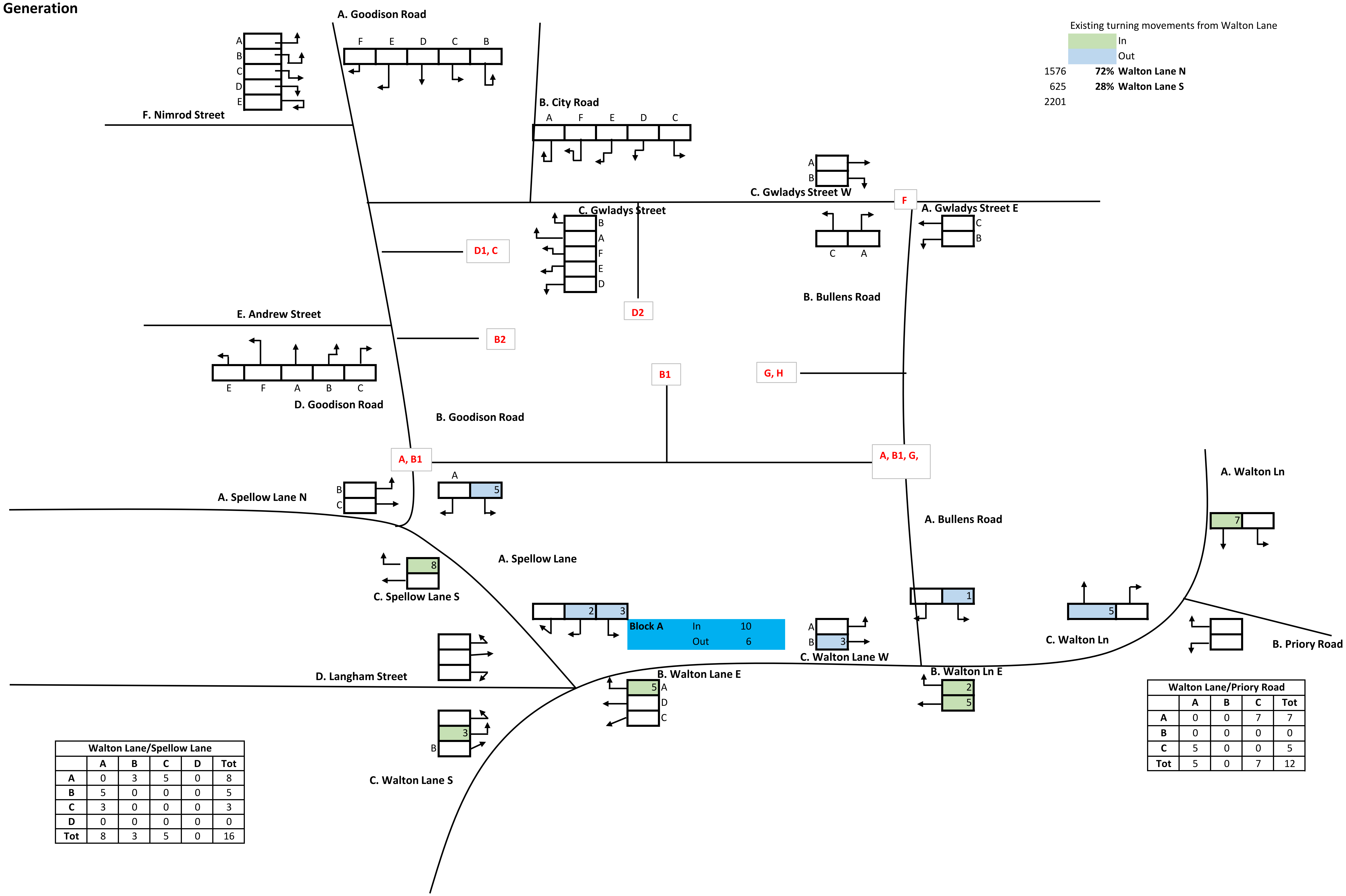
Walton Lane/Spellow Lane					
	A	B	C	D	Tot
A	0	13	26	0	39
B	12	0	0	0	12
C	12	0	0	0	12
D	0	0	0	0	0
Tot	24	13	26	0	64

Walton Lane/Priory Road				
	A	B	C	Tot
A	0	0	12	12
B	0	0	0	0
C	13	0	0	13
Tot	13	0	12	25

Block A: A3 PM Trip Generation

Existing turning movements from Walton Lane

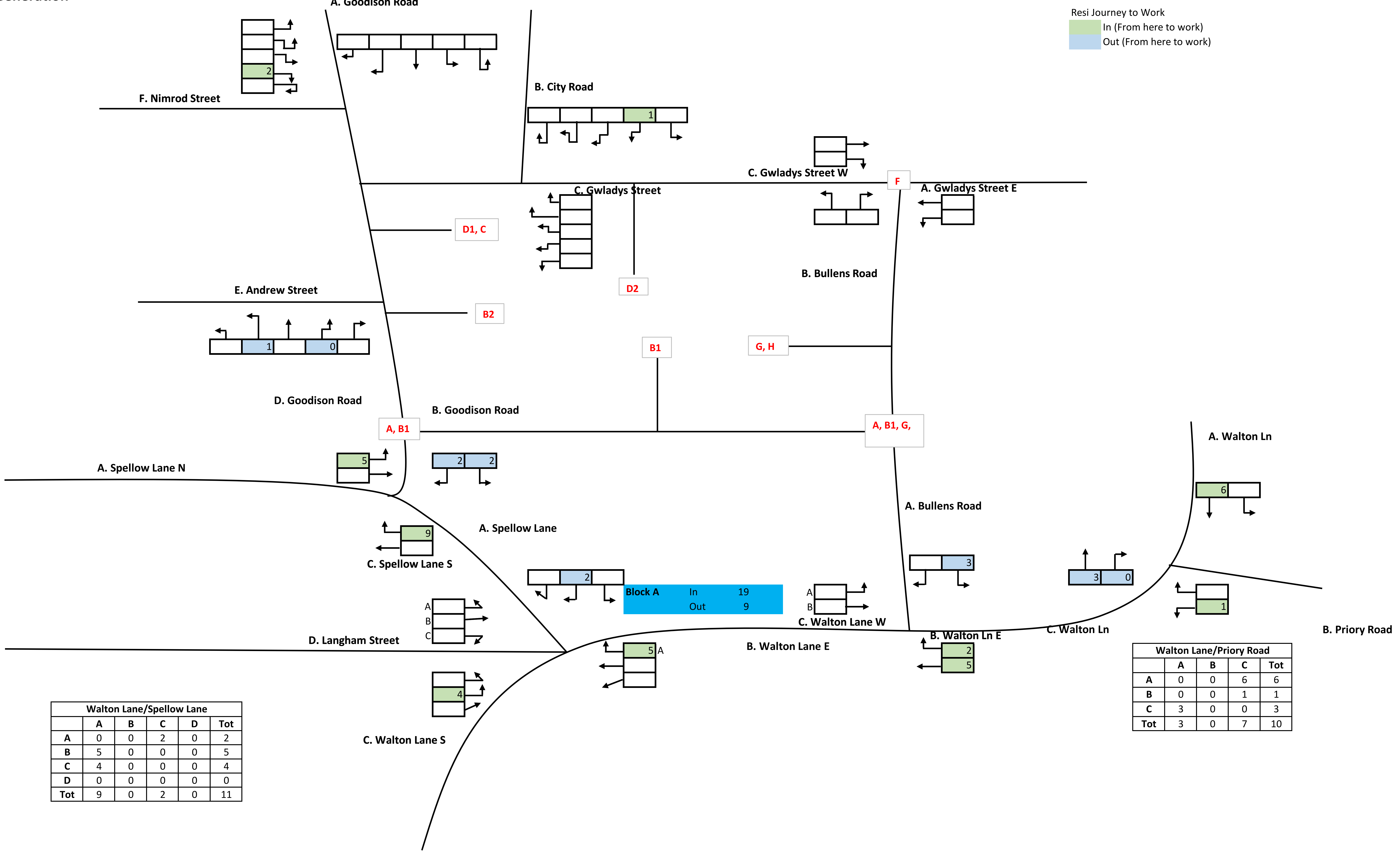
		In
		Out
1576	**72%**	**Walton Lane N**
625	**28%**	**Walton Lane S**
2201		



Walton Lane/Spellow Lane					
	A	**B**	**C**	**D**	**Tot**
A	0	3	5	0	8
B	5	0	0	0	5
C	3	0	0	0	3
D	0	0	0	0	0
Tot	8	3	5	0	16

Walton Lane/Priory Road				
	A	**B**	**C**	**Tot**
A	0	0	7	7
B	0	0	0	0
C	5	0	0	5
Tot	5	0	7	12

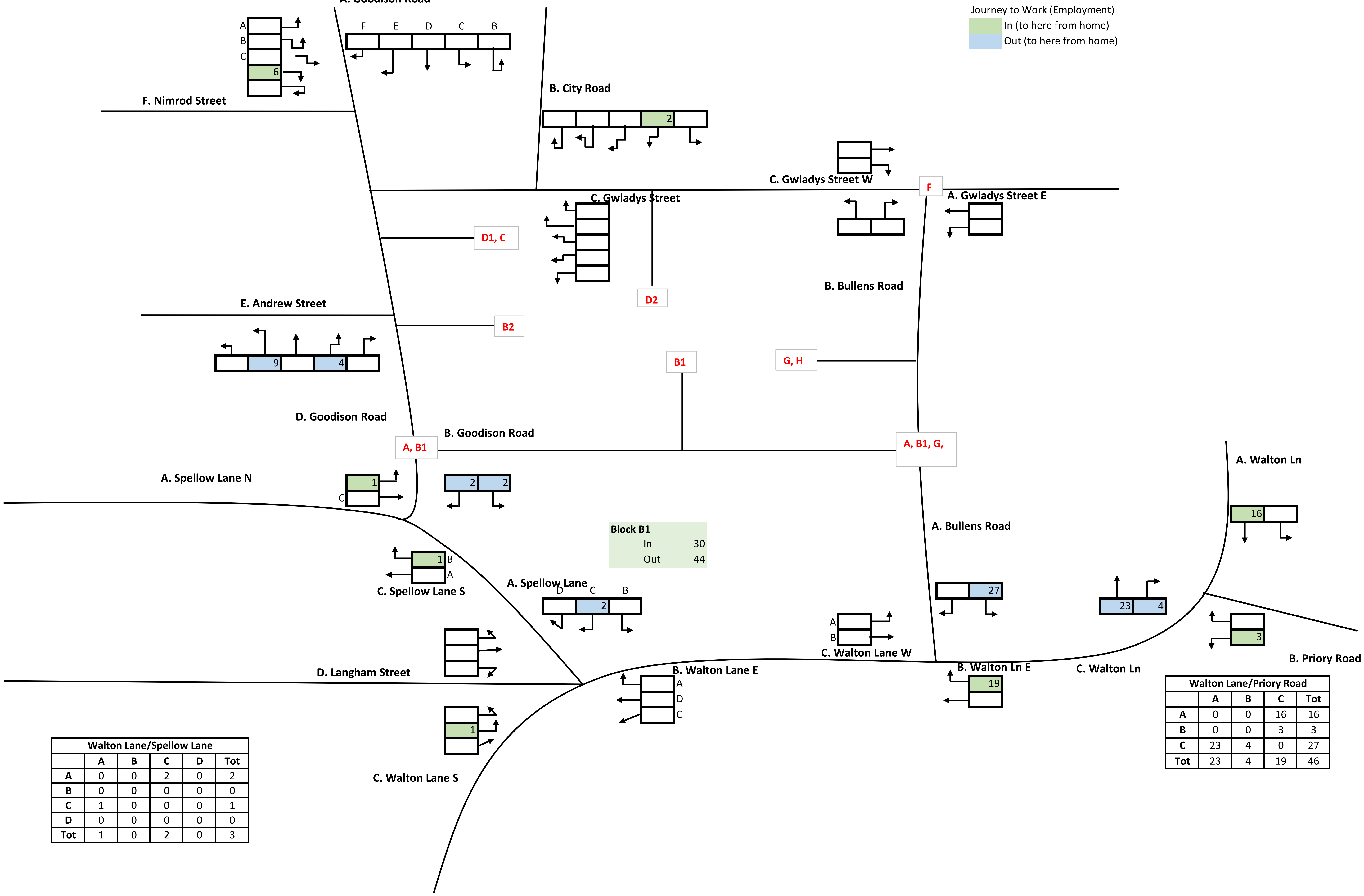
Block A: C3 PM Trip Generation



Walton Lane/Spellow Lane					
	A	B	C	D	Tot
A	0	0	2	0	2
B	5	0	0	0	5
C	4	0	0	0	4
D	0	0	0	0	0
Tot	9	0	2	0	11

Walton Lane/Priory Road				
	A	B	C	Tot
A	0	0	6	6
B	0	0	1	1
C	3	0	0	3
Tot	3	0	7	10

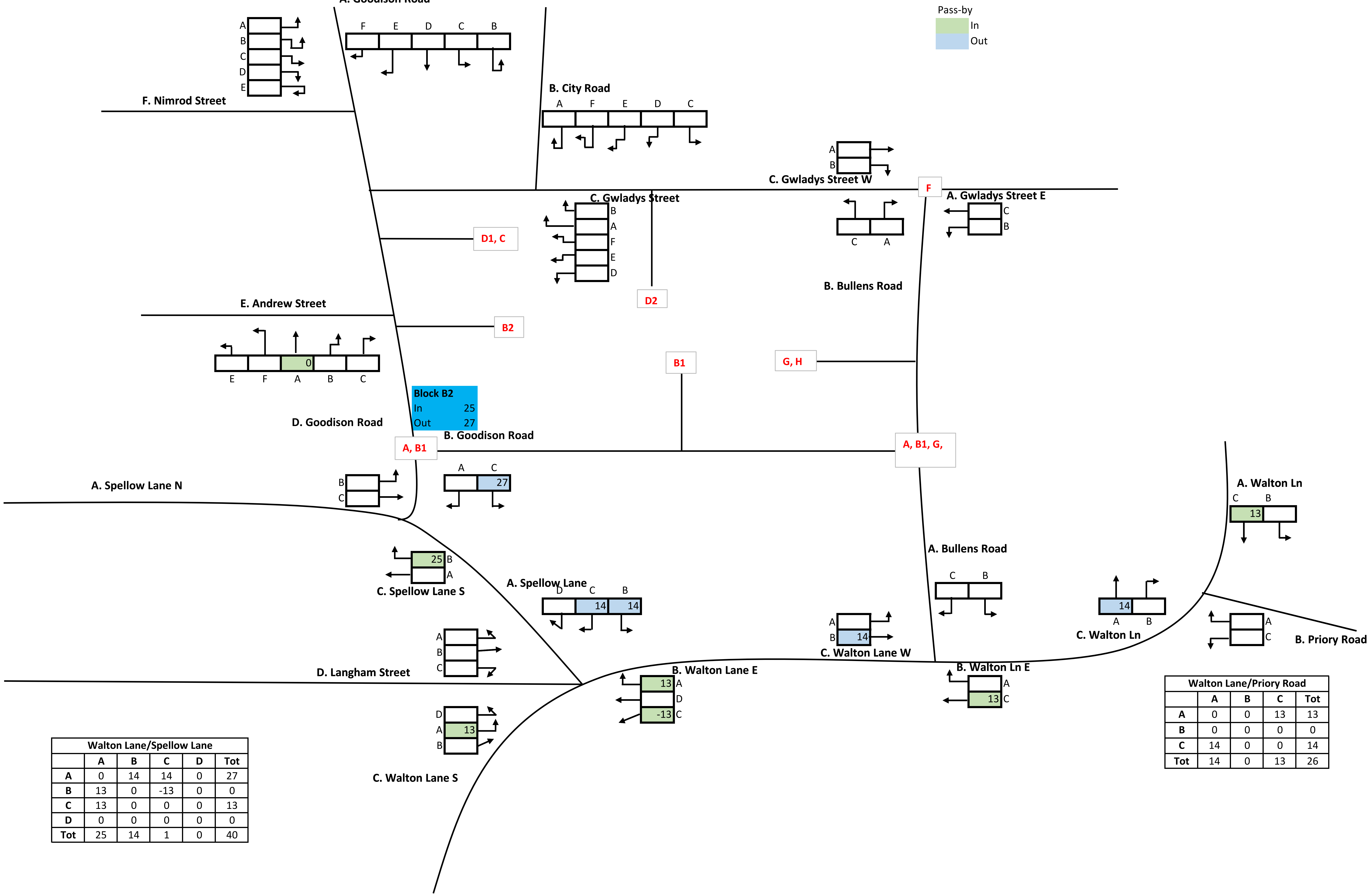
Block B1: D1 PM Trip Generation



Walton Lane/Spellow Lane					
	A	B	C	D	Tot
A	0	0	2	0	2
B	0	0	0	0	0
C	1	0	0	0	1
D	0	0	0	0	0
Tot	1	0	2	0	3

Walton Lane/Priory Road				
	A	B	C	Tot
A	0	0	16	16
B	0	0	3	3
C	23	4	0	27
Tot	23	4	19	46

Block B2: A1 PM Trip Generation



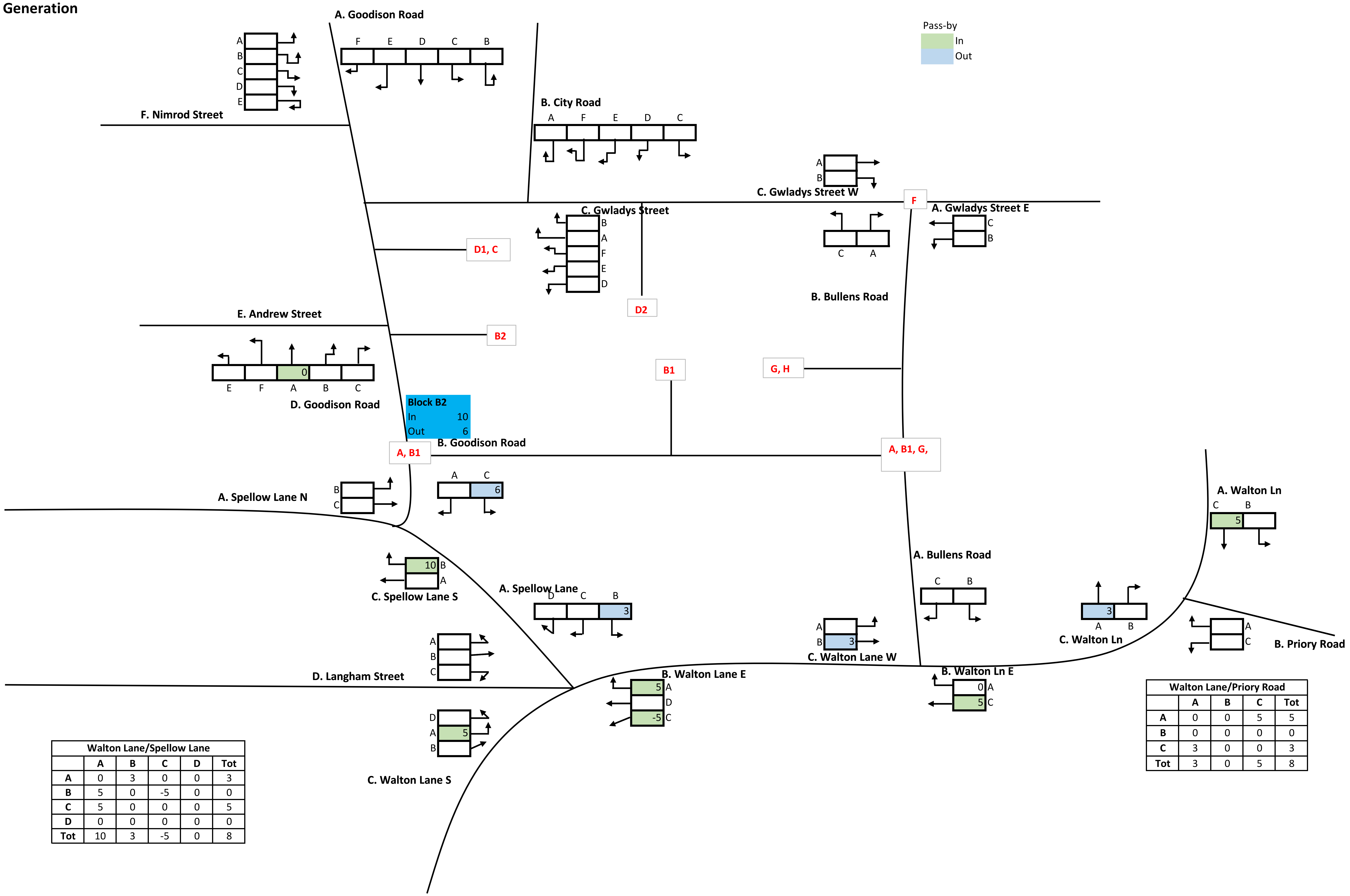
Walton Lane/Spellow Lane

	A	B	C	D	Tot
A	0	14	14	0	27
B	13	0	-13	0	0
C	13	0	0	0	13
D	0	0	0	0	0
Tot	25	14	1	0	40

Walton Lane/Priory Road

	A	B	C	Tot
A	0	0	13	13
B	0	0	0	0
C	14	0	0	14
Tot	14	0	13	26

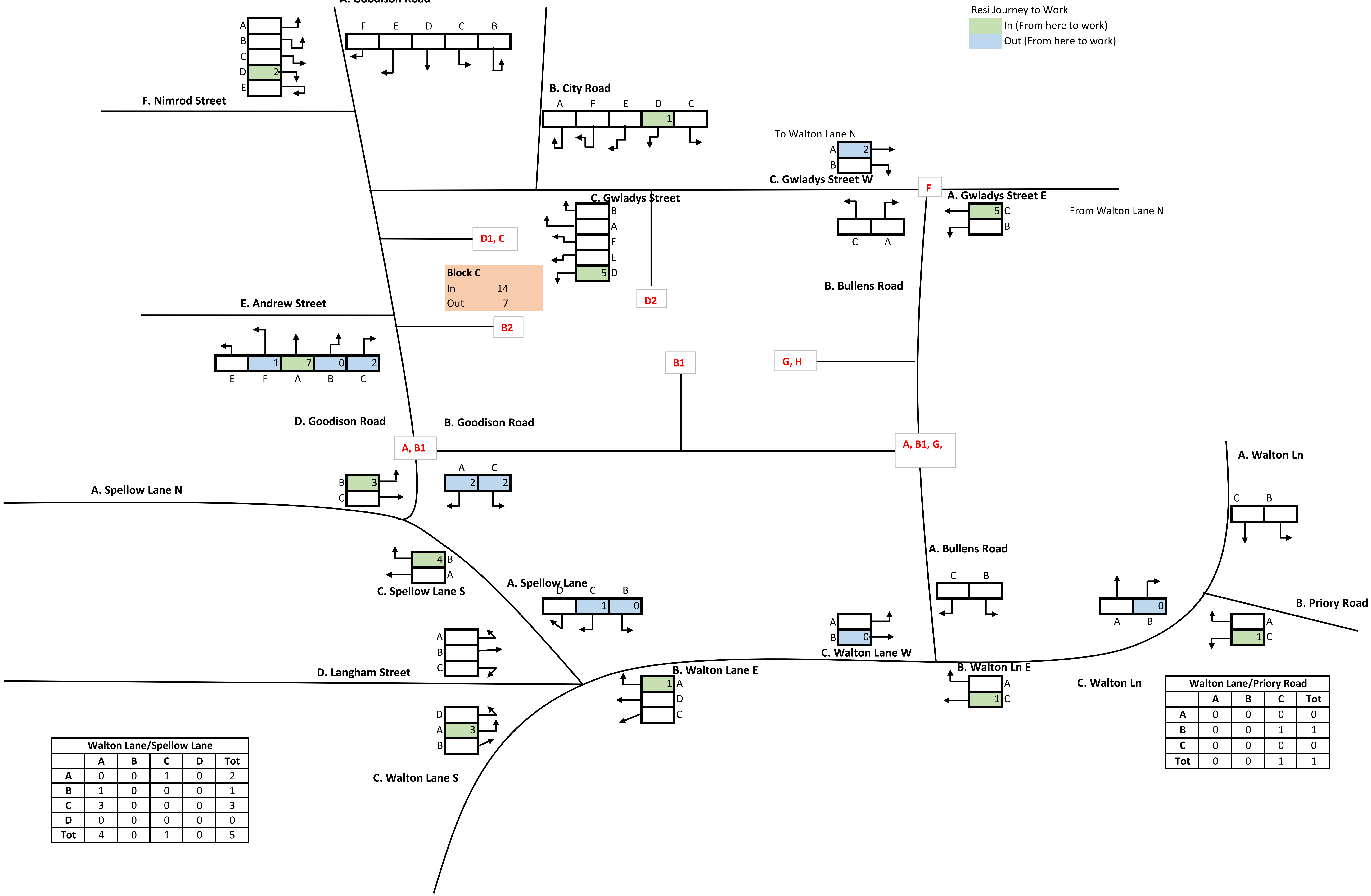
Block B2: A3 PM Trip Generation



Walton Lane/Spellow Lane					
	A	B	C	D	Tot
A	0	3	0	0	3
B	5	0	-5	0	0
C	5	0	0	0	5
D	0	0	0	0	0
Tot	10	3	-5	0	8

Walton Lane/Priory Road				
	A	B	C	Tot
A	0	0	5	5
B	0	0	0	0
C	3	0	0	3
Tot	3	0	5	8

Block C: PM Trip Generation



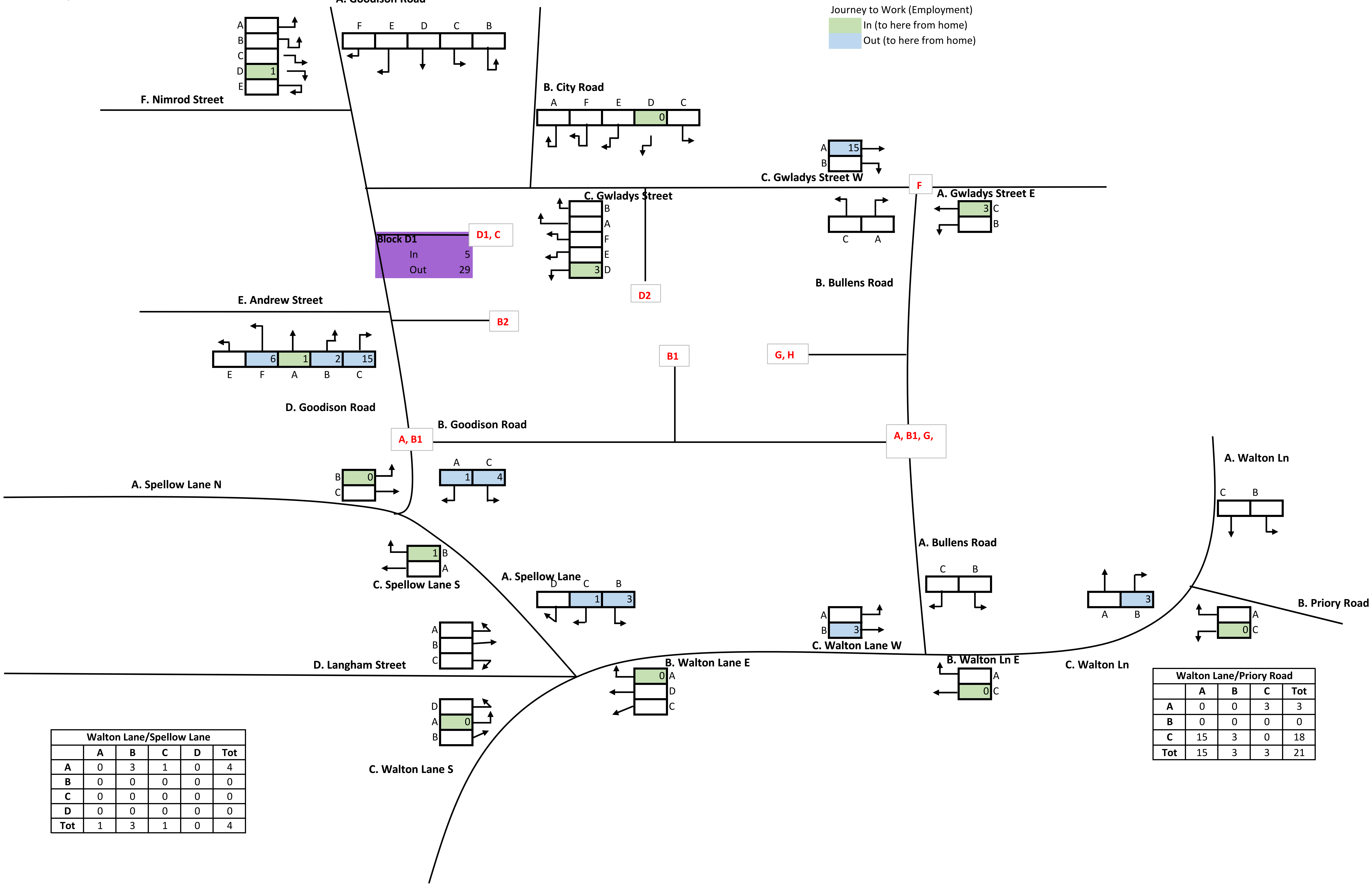
Walton Lane/Spellow Lane

	A	B	C	D	Tot
A	0	0	1	0	2
B	1	0	0	0	1
C	3	0	0	0	3
D	0	0	0	0	0
Tot	4	0	1	0	5

Walton Lane/Priory Road

	A	B	C	Tot
A	0	0	0	0
B	0	0	1	1
C	0	0	0	0
Tot	0	0	1	1

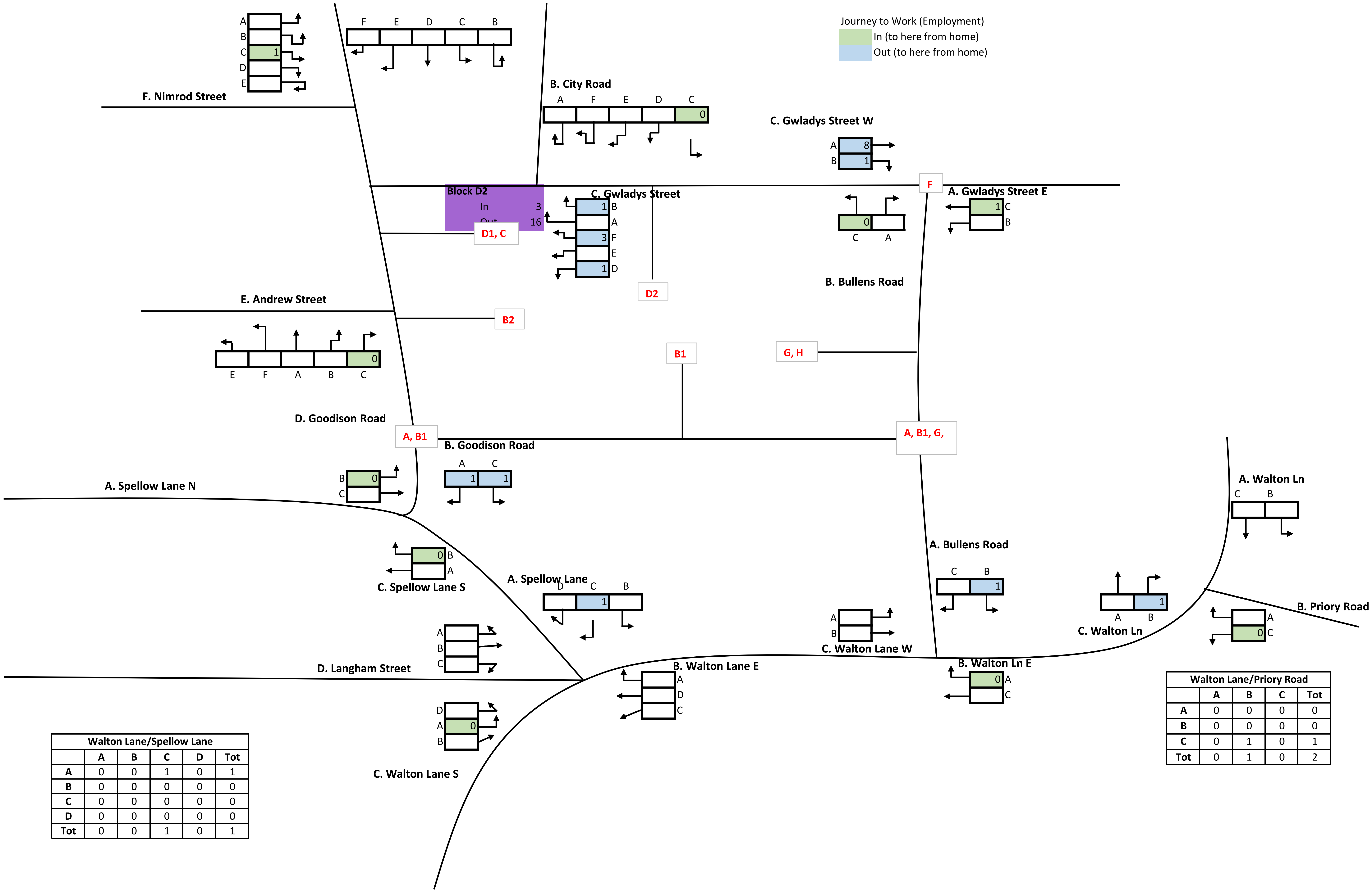
Block D1: PM Trip Generation



Walton Lane/Spellow Lane					
	A	B	C	D	Tot
A	0	3	1	0	4
B	0	0	0	0	0
C	0	0	0	0	0
D	0	0	0	0	0
Tot	1	3	1	0	4

Walton Lane/Priory Road				
	A	B	C	Tot
A	0	0	3	3
B	0	0	0	0
C	15	3	0	18
Tot	15	3	3	21

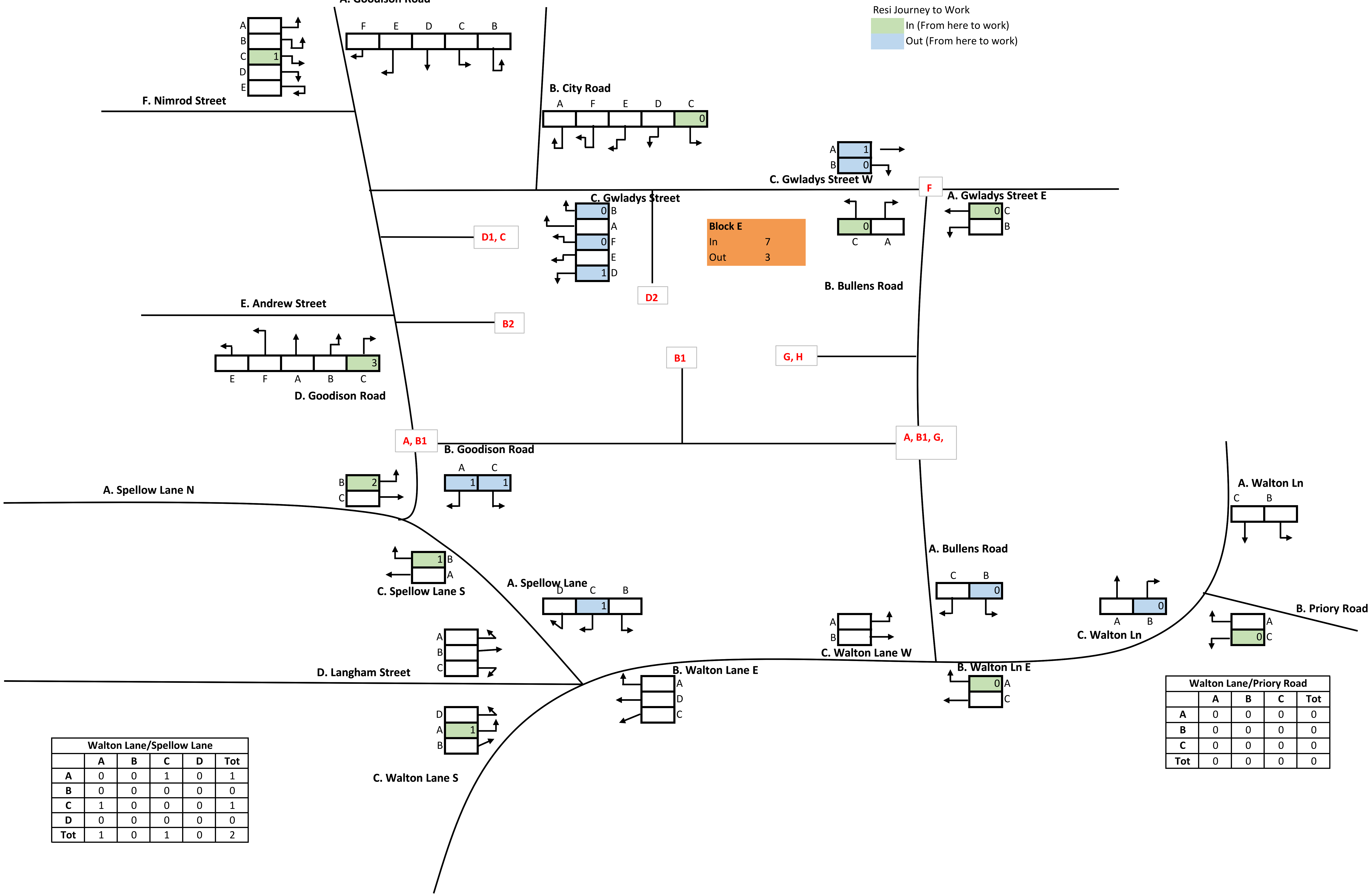
Block D2: PM Trip Generation



Walton Lane/Spellow Lane					
	A	B	C	D	Tot
A	0	0	1	0	1
B	0	0	0	0	0
C	0	0	0	0	0
D	0	0	0	0	0
Tot	0	0	1	0	1

Walton Lane/Priory Road				
	A	B	C	Tot
A	0	0	0	0
B	0	0	0	0
C	0	1	0	1
Tot	0	1	0	2

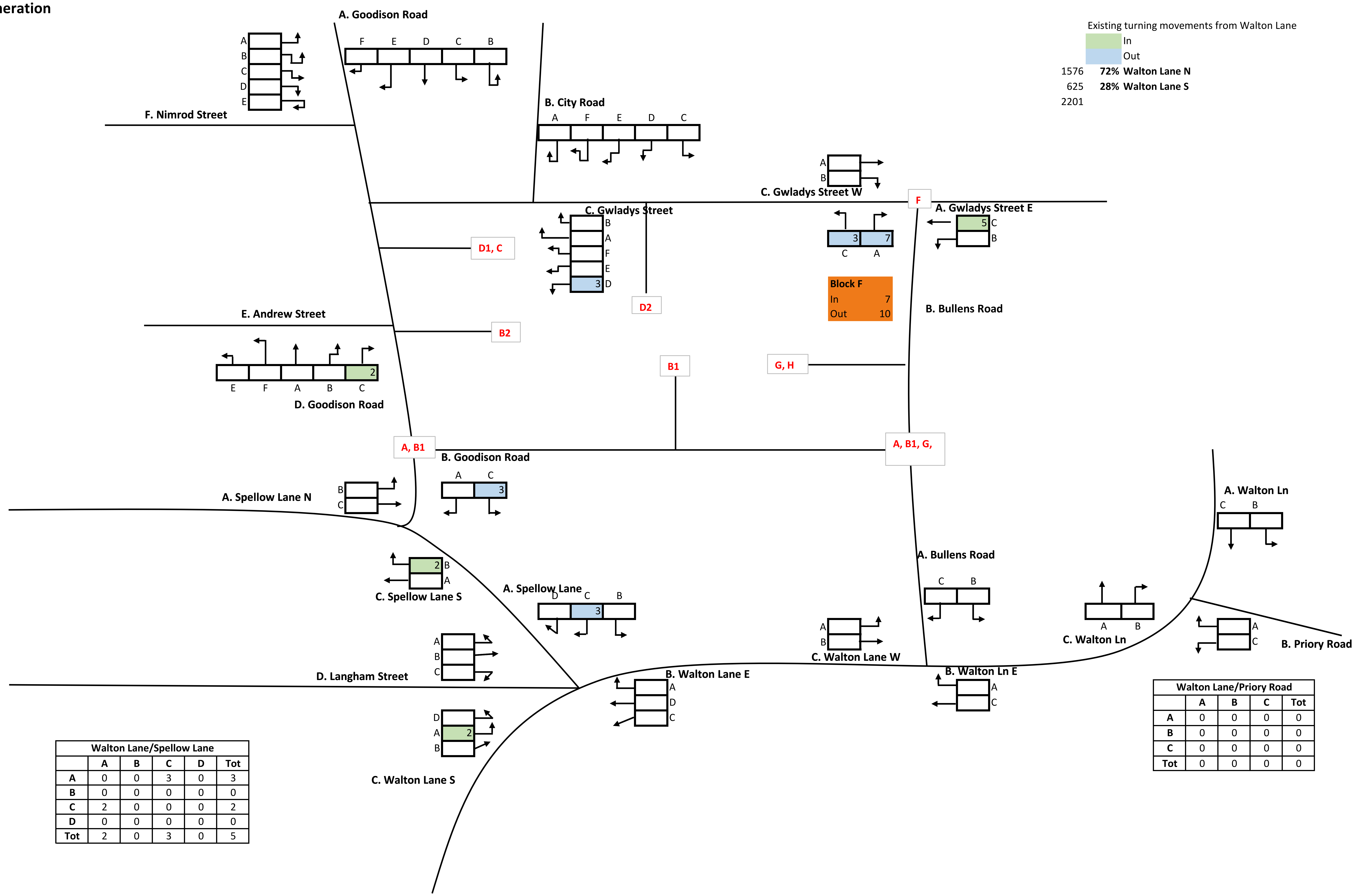
Block E: PM Trip Generation



Walton Lane/Spellow Lane					
	A	B	C	D	Tot
A	0	0	1	0	1
B	0	0	0	0	0
C	1	0	0	0	1
D	0	0	0	0	0
Tot	1	0	1	0	2

Walton Lane/Priory Road				
	A	B	C	Tot
A	0	0	0	0
B	0	0	0	0
C	0	0	0	0
Tot	0	0	0	0

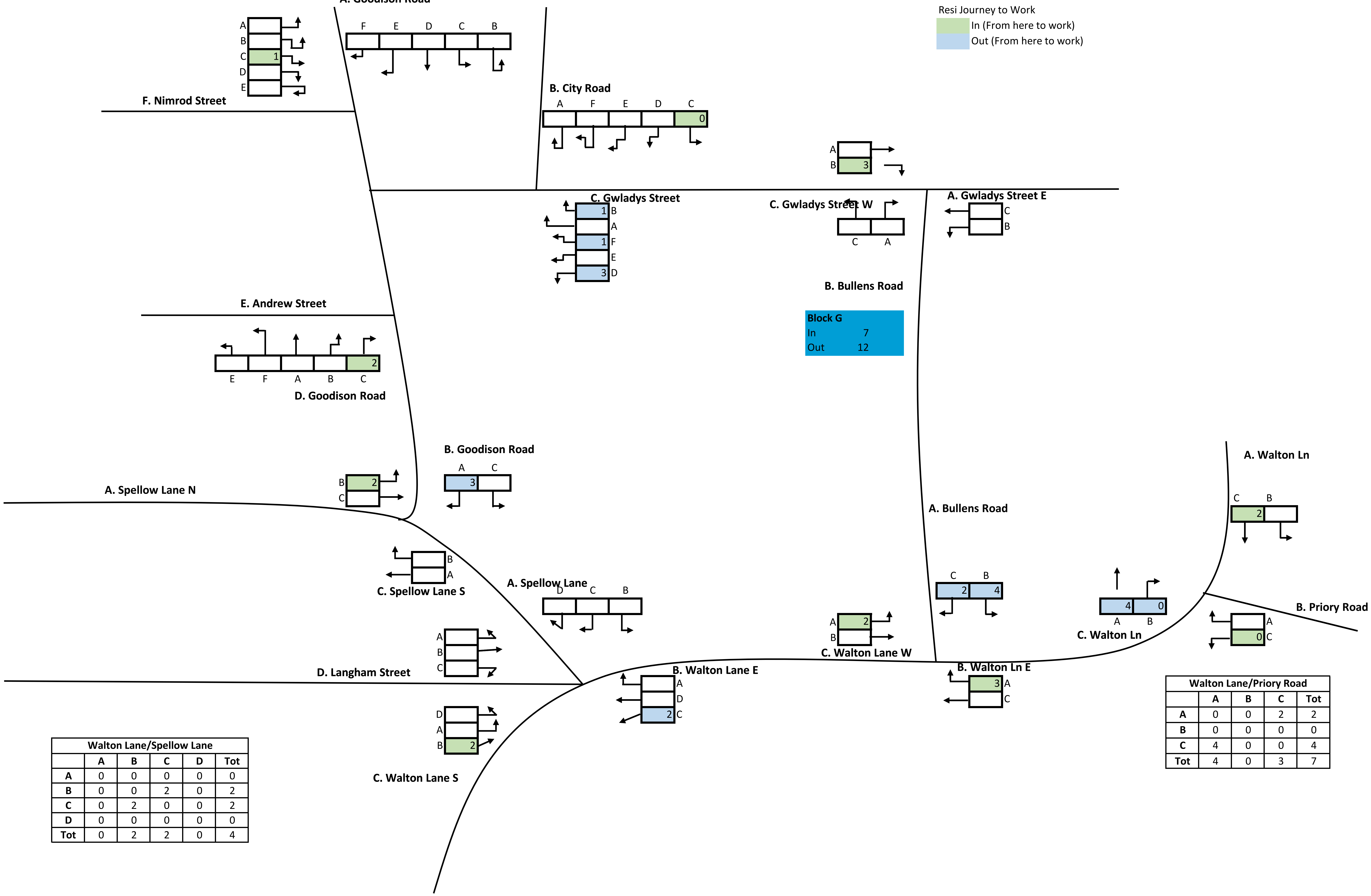
Block F: PM Trip Generation



Walton Lane/Spellow Lane					
	A	B	C	D	Tot
A	0	0	3	0	3
B	0	0	0	0	0
C	2	0	0	0	2
D	0	0	0	0	0
Tot	2	0	3	0	5

Walton Lane/Priory Road				
	A	B	C	Tot
A	0	0	0	0
B	0	0	0	0
C	0	0	0	0
Tot	0	0	0	0

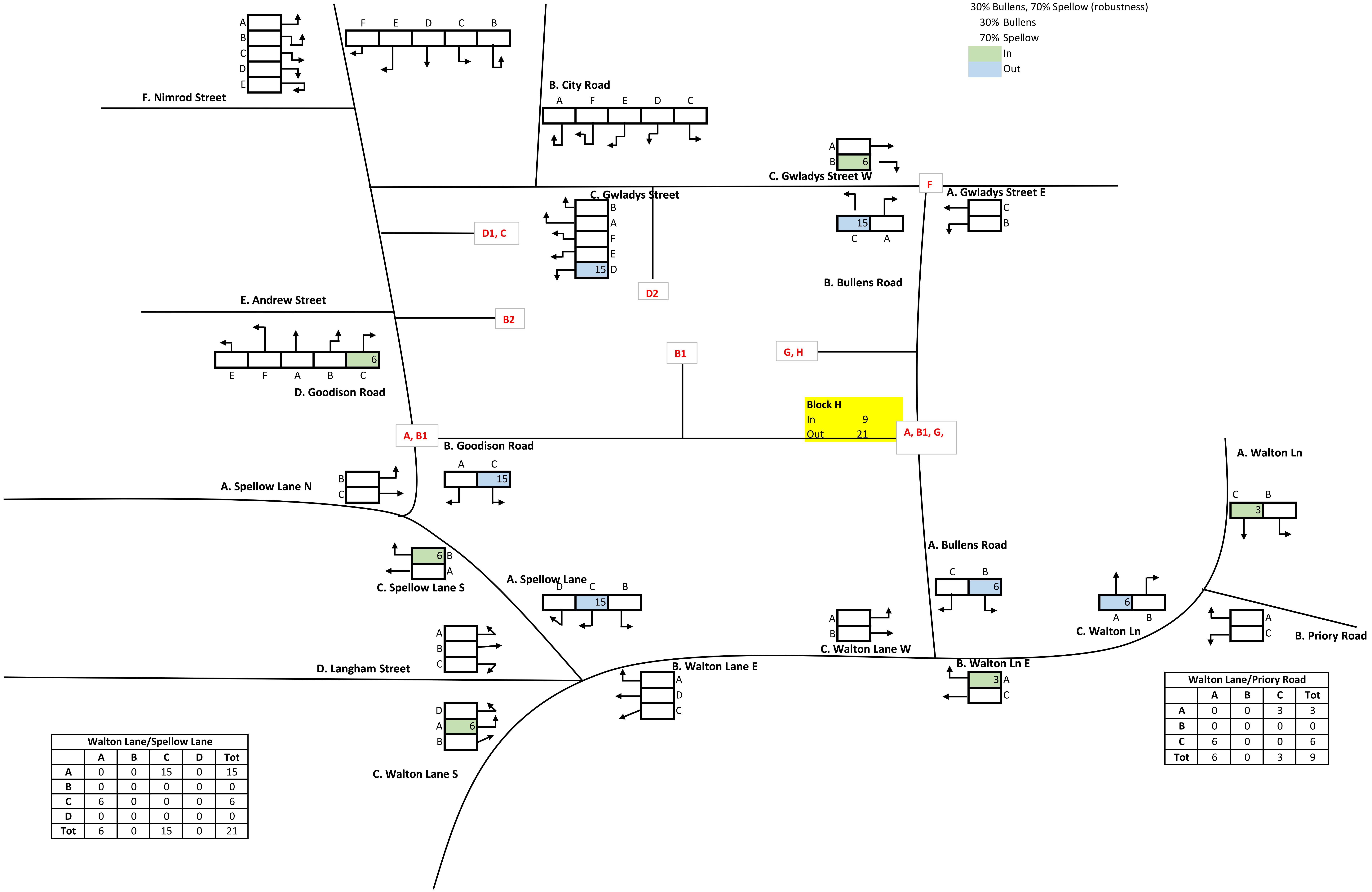
Block G: PM Trip Generation



Walton Lane/Spellow Lane					
	A	B	C	D	Tot
A	0	0	0	0	0
B	0	0	2	0	2
C	0	2	0	0	2
D	0	0	0	0	0
Tot	0	2	2	0	4

Walton Lane/Priory Road				
	A	B	C	Tot
A	0	0	2	2
B	0	0	0	0
C	4	0	0	4
Tot	4	0	3	7

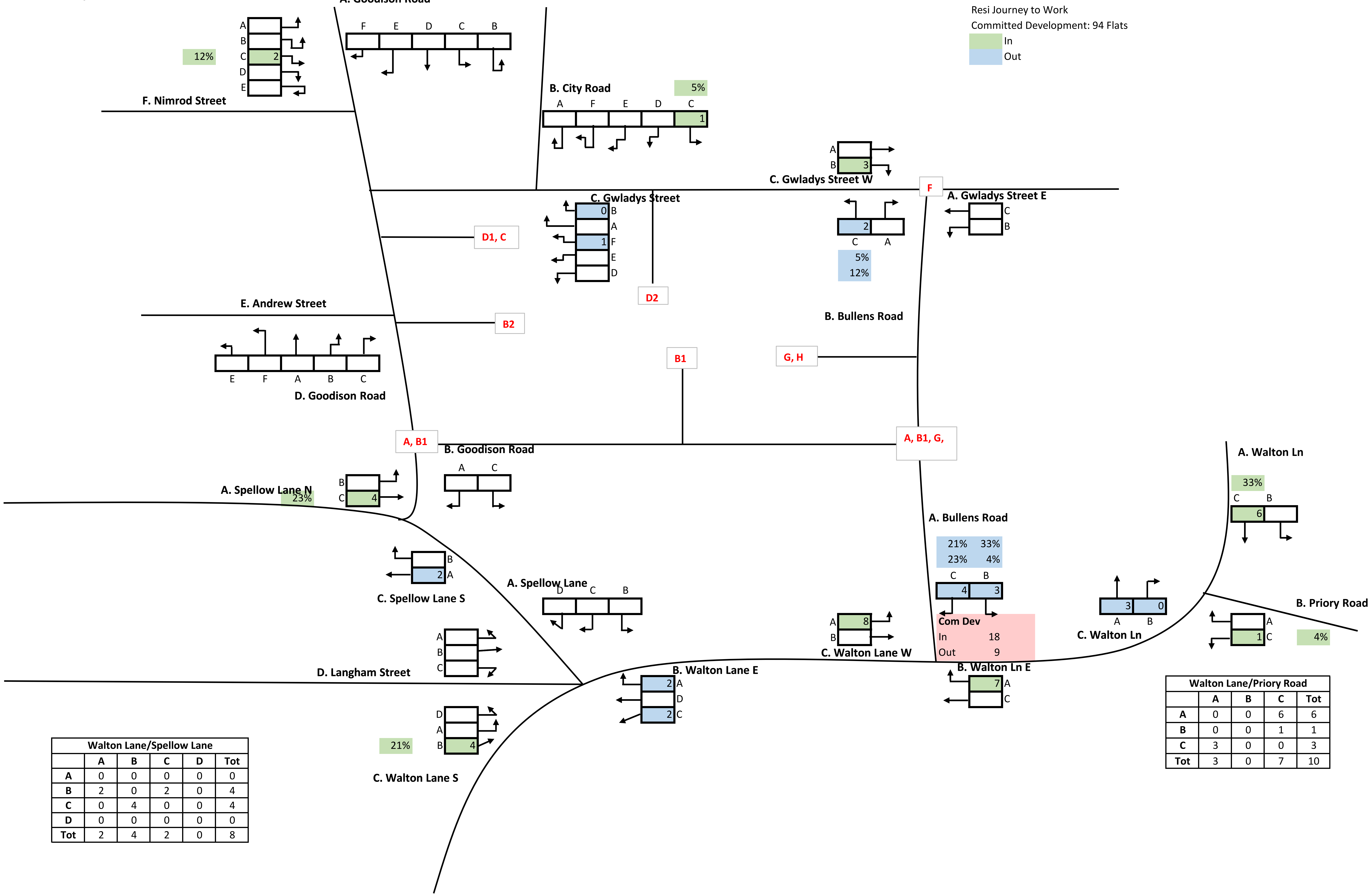
Block H: PM Trip Generation



Walton Lane/Spellow Lane					
	A	B	C	D	Tot
A	0	0	15	0	15
B	0	0	0	0	0
C	6	0	0	0	6
D	0	0	0	0	0
Tot	6	0	15	0	21

Walton Lane/Priory Road				
	A	B	C	Tot
A	0	0	3	3
B	0	0	0	0
C	6	0	0	6
Tot	6	0	3	9

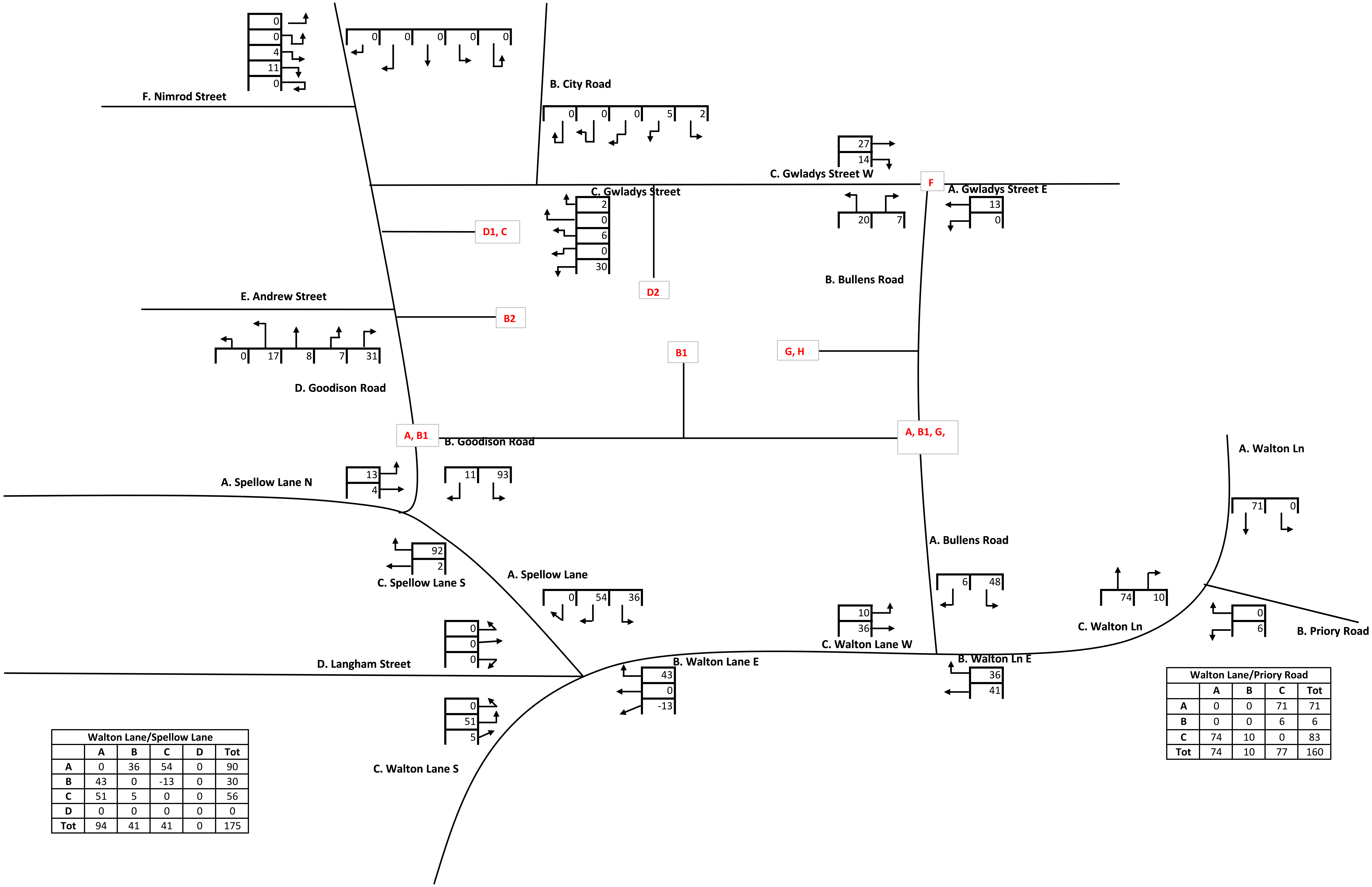
Committed Devleopment: PM Trip Generation



Walton Lane/Spellow Lane					
	A	B	C	D	Tot
A	0	0	0	0	0
B	2	0	2	0	4
C	0	4	0	0	4
D	0	0	0	0	0
Tot	2	4	2	0	8

Walton Lane/Priory Road				
	A	B	C	Tot
A	0	0	6	6
B	0	0	1	1
C	3	0	0	3
Tot	3	0	7	10

Total Development: PM Trip Generation

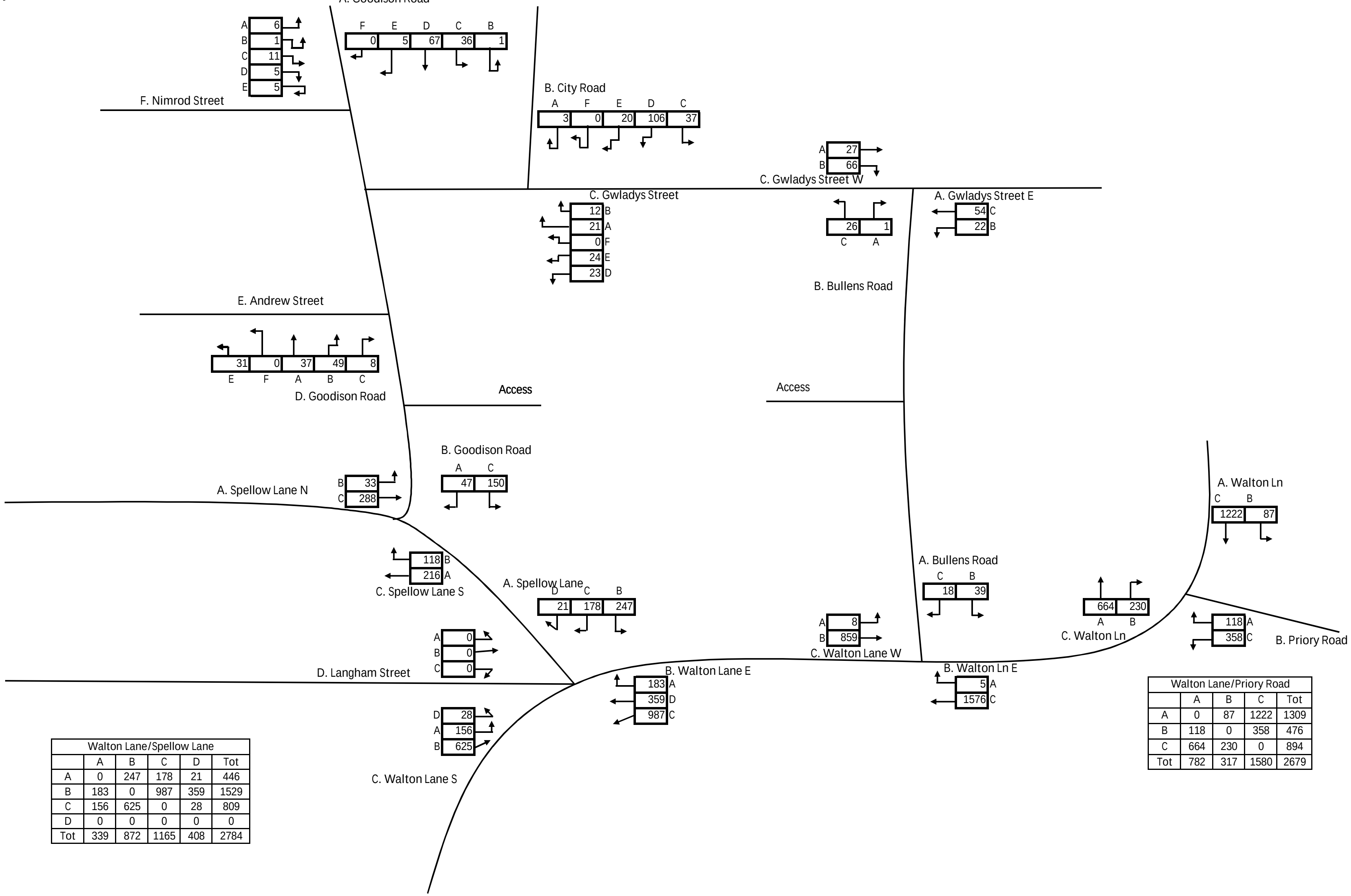


Walton Lane/Spellow Lane					
	A	B	C	D	Tot
A	0	36	54	0	90
B	43	0	-13	0	30
C	51	5	0	0	56
D	0	0	0	0	0
Tot	94	41	41	0	175

Walton Lane/Priory Road				
	A	B	C	Tot
A	0	0	71	71
B	0	0	6	6
C	74	10	0	83
Tot	74	10	77	160

E. Assessment Scenarios Flow Diagrams

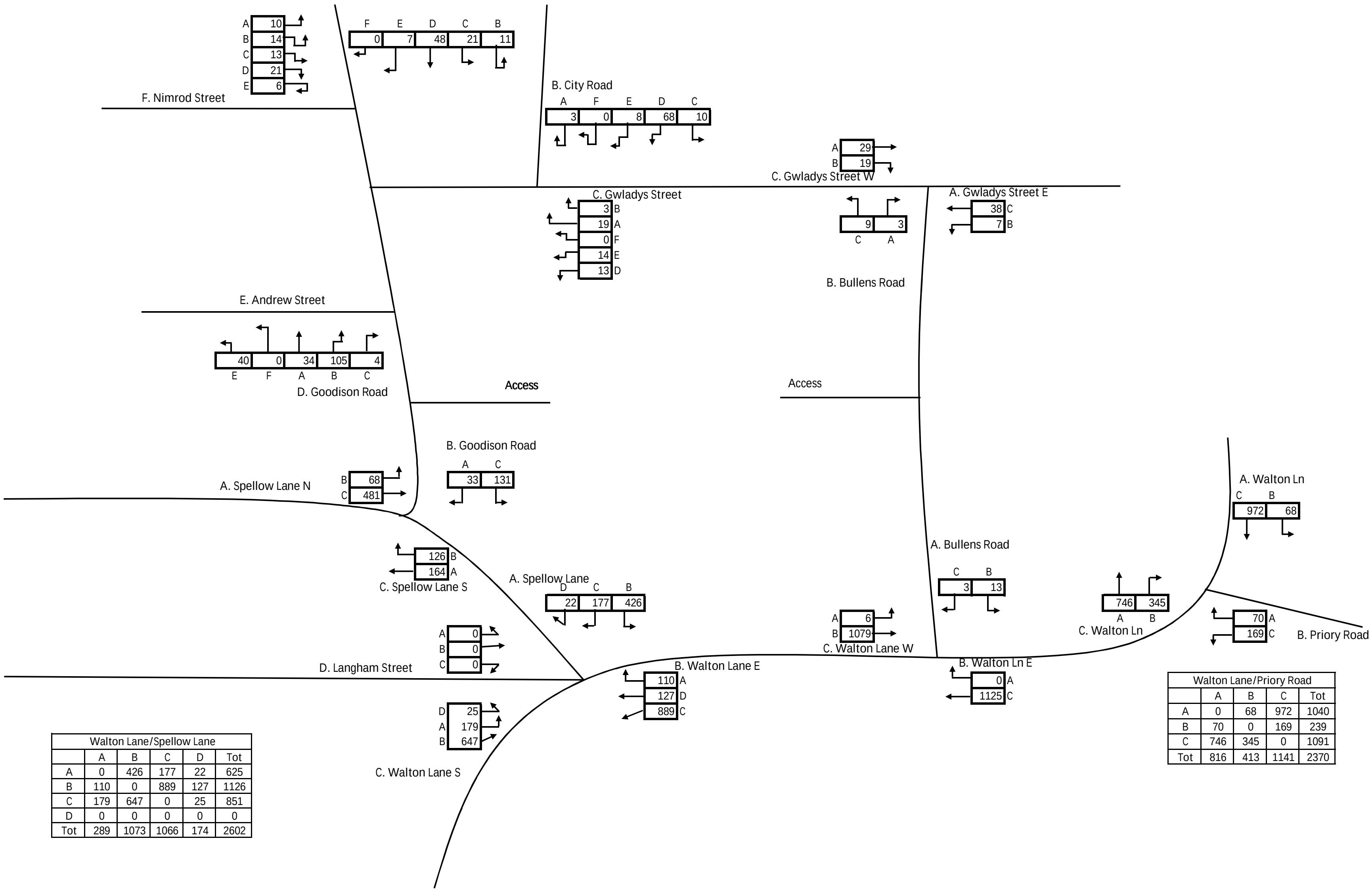
2019 Weekday Survey AM



Walton Lane/Spellow Lane					
	A	B	C	D	Tot
A	0	247	178	21	446
B	183	0	987	359	1529
C	156	625	0	28	809
D	0	0	0	0	0
Tot	339	872	1165	408	2784

Walton Lane/Priory Road				
	A	B	C	Tot
A	0	87	1222	1309
B	118	0	358	476
C	664	230	0	894
Tot	782	317	1580	2679

2019 Weekday Survey PM

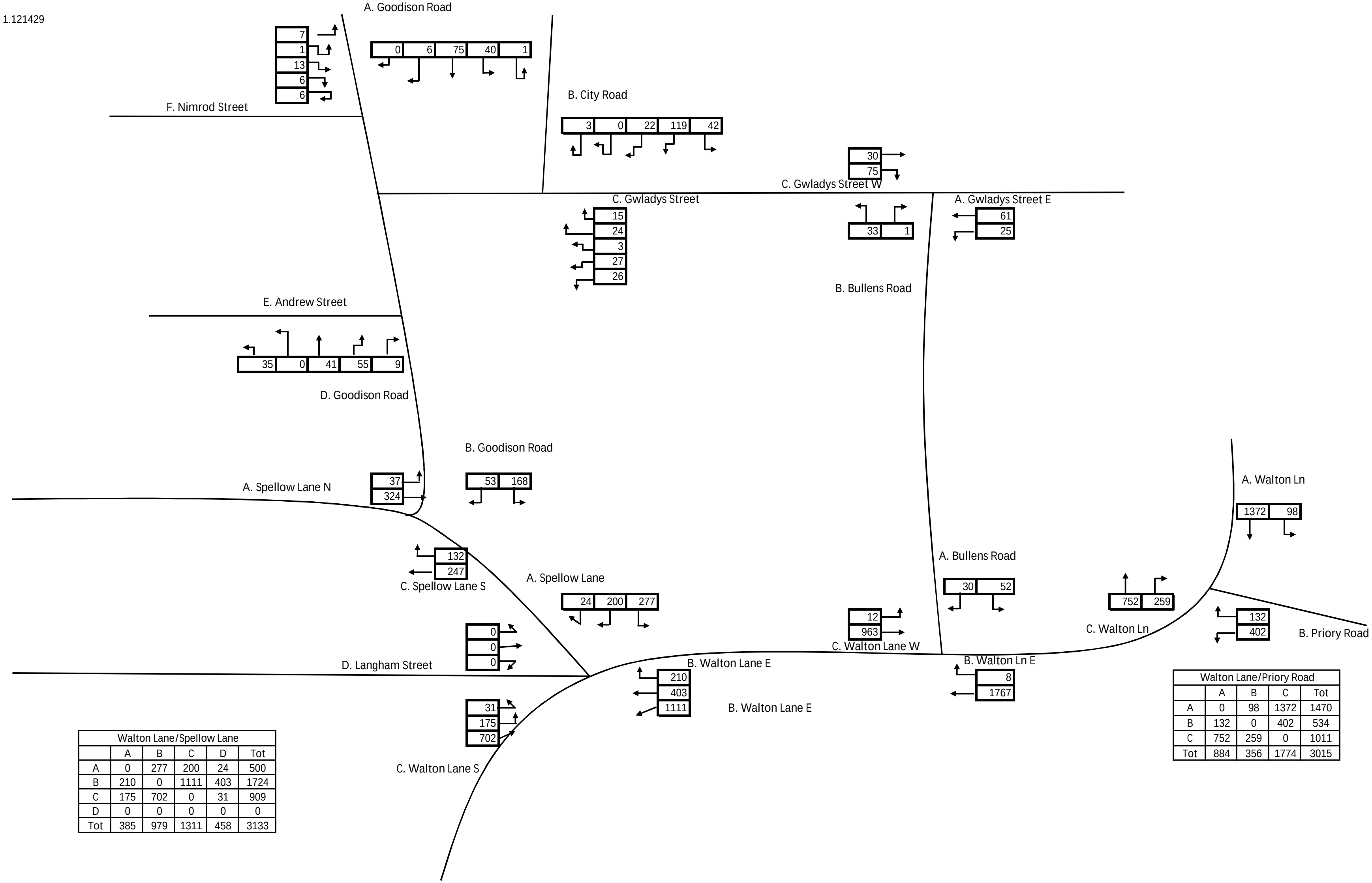


Walton Lane/Spellow Lane					
	A	B	C	D	Tot
A	0	426	177	22	625
B	110	0	889	127	1126
C	179	647	0	25	851
D	0	0	0	0	0
Tot	289	1073	1066	174	2602

Walton Lane/Priory Road				
	A	B	C	Tot
A	0	68	972	1040
B	70	0	169	239
C	746	345	0	1091
Tot	816	413	1141	2370

2028 Base AM

TEMPro Growth Factor: 1.121429



Walton Lane/Spellow Lane

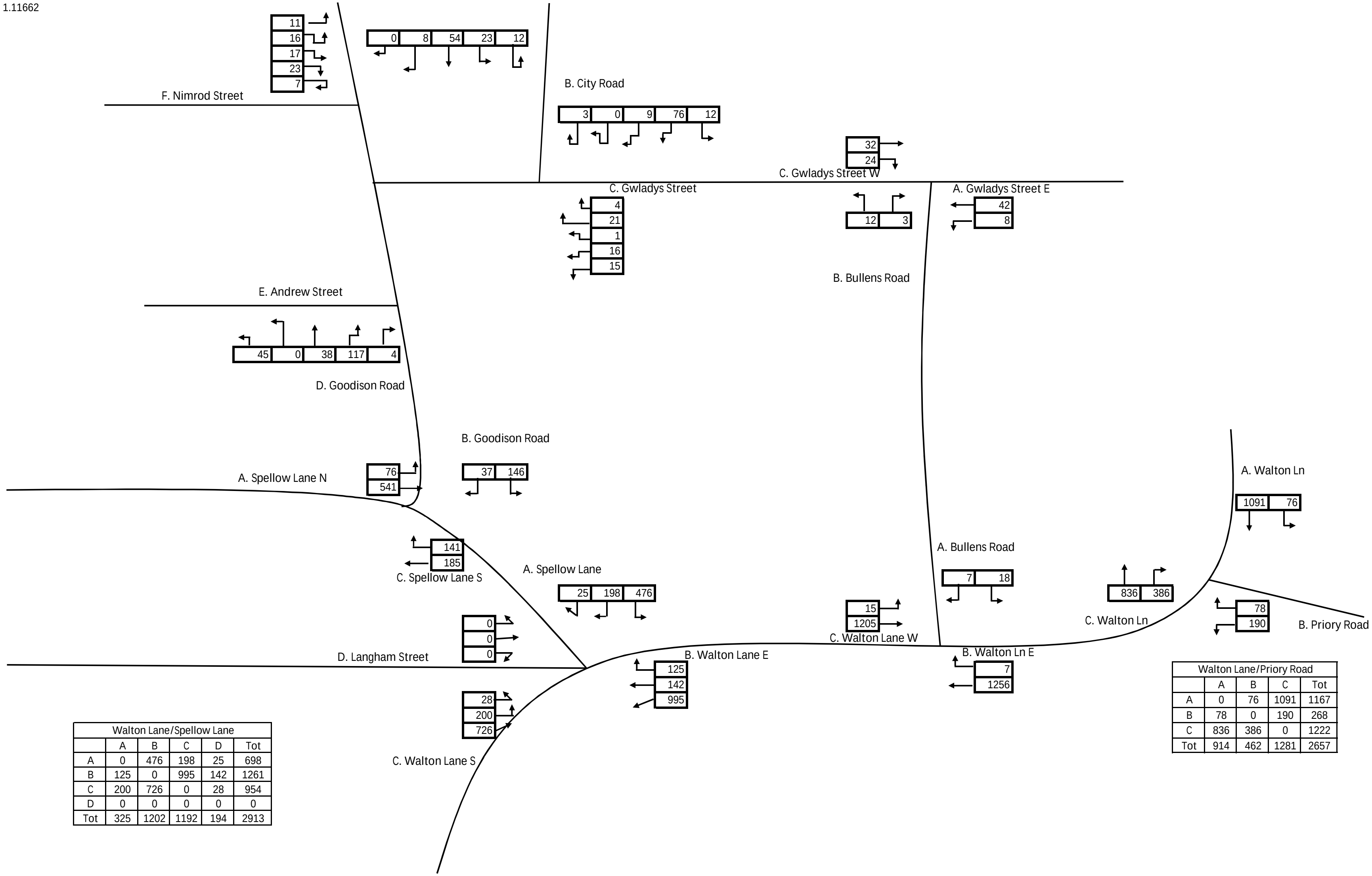
	A	B	C	D	Tot
A	0	277	200	24	500
B	210	0	1111	403	1724
C	175	702	0	31	909
D	0	0	0	0	0
Tot	385	979	1311	458	3133

Walton Lane/Priory Road

	A	B	C	Tot
A	0	98	1372	1470
B	132	0	402	534
C	752	259	0	1011
Tot	884	356	1774	3015

2028 Base PM

TEMPro Growth Factor: 1.11662



Walton Lane/Spellow Lane

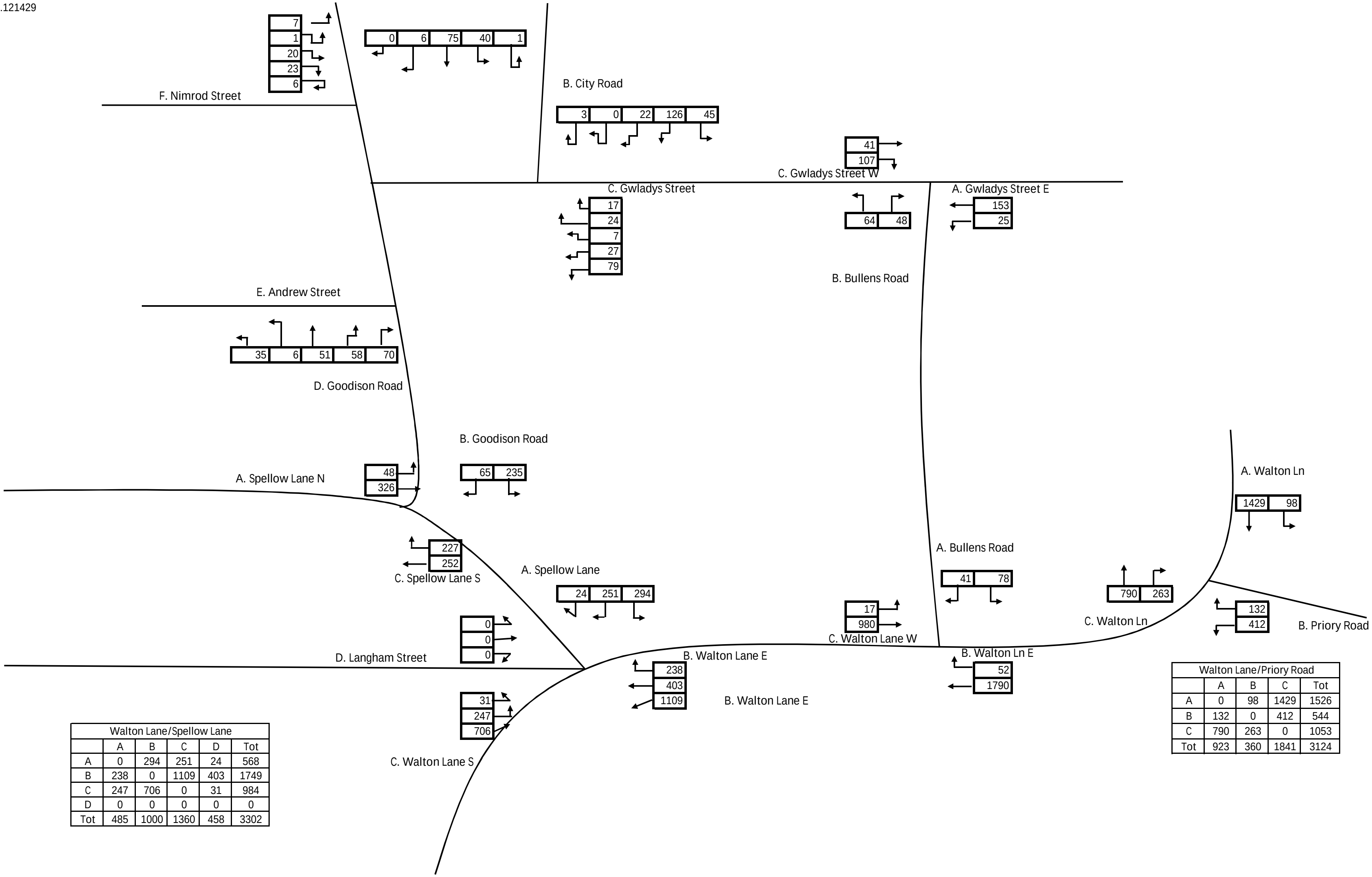
	A	B	C	D	Tot
A	0	476	198	25	698
B	125	0	995	142	1261
C	200	726	0	28	954
D	0	0	0	0	0
Tot	325	1202	1192	194	2913

Walton Lane/Priory Road

	A	B	C	Tot
A	0	76	1091	1167
B	78	0	190	268
C	836	386	0	1222
Tot	914	462	1281	2657

2028 Base + Development AM

TEMPro Growth Factor: 1.121429



Walton Lane/Spellow Lane

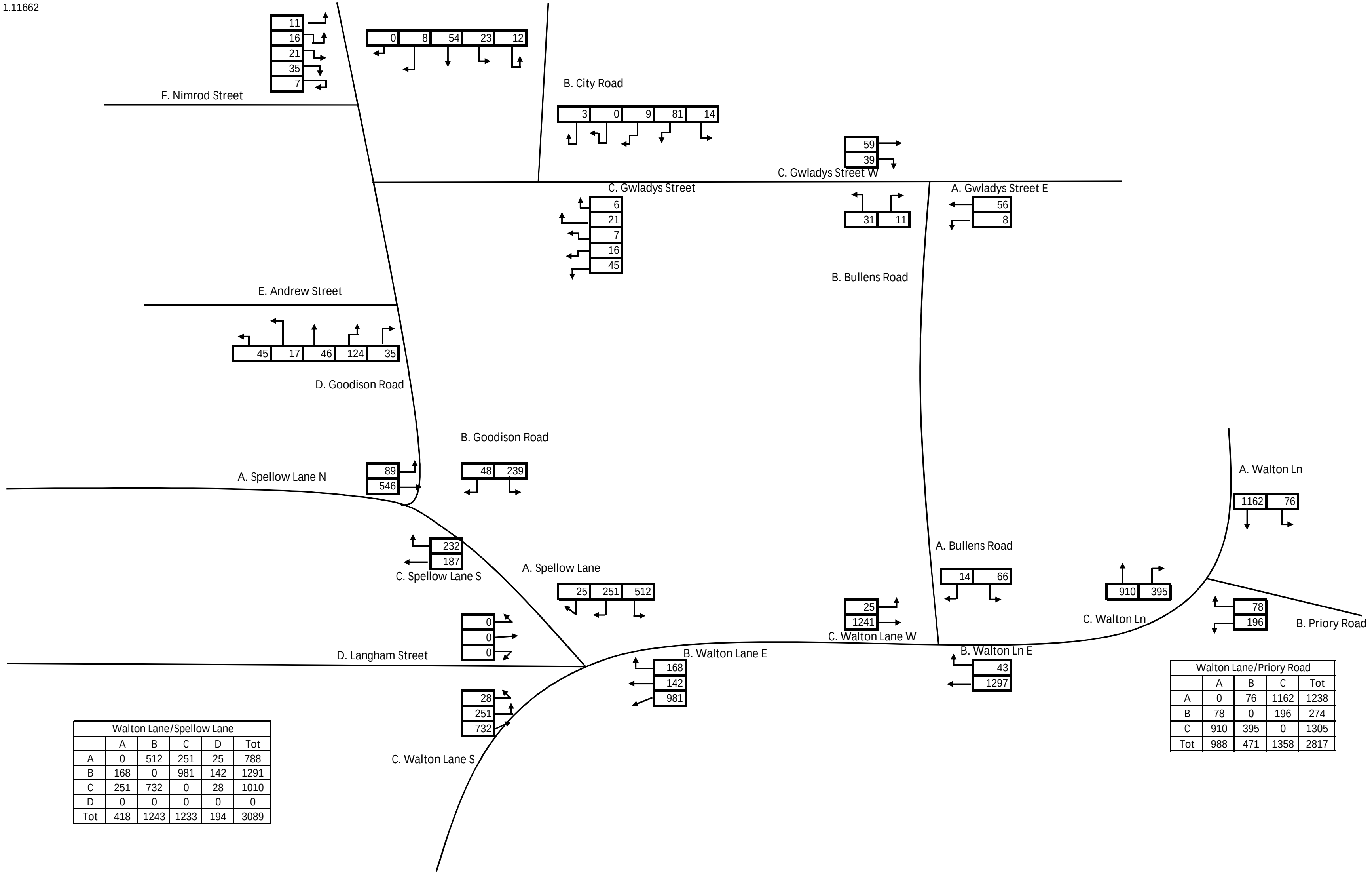
	A	B	C	D	Tot
A	0	294	251	24	568
B	238	0	1109	403	1749
C	247	706	0	31	984
D	0	0	0	0	0
Tot	485	1000	1360	458	3302

Walton Lane/Priory Road

	A	B	C	Tot
A	0	98	1429	1526
B	132	0	412	544
C	790	263	0	1053
Tot	923	360	1841	3124

2028 Base + Development PM

TEMPro Growth Factor: 1.11662



Walton Lane/Spellow Lane

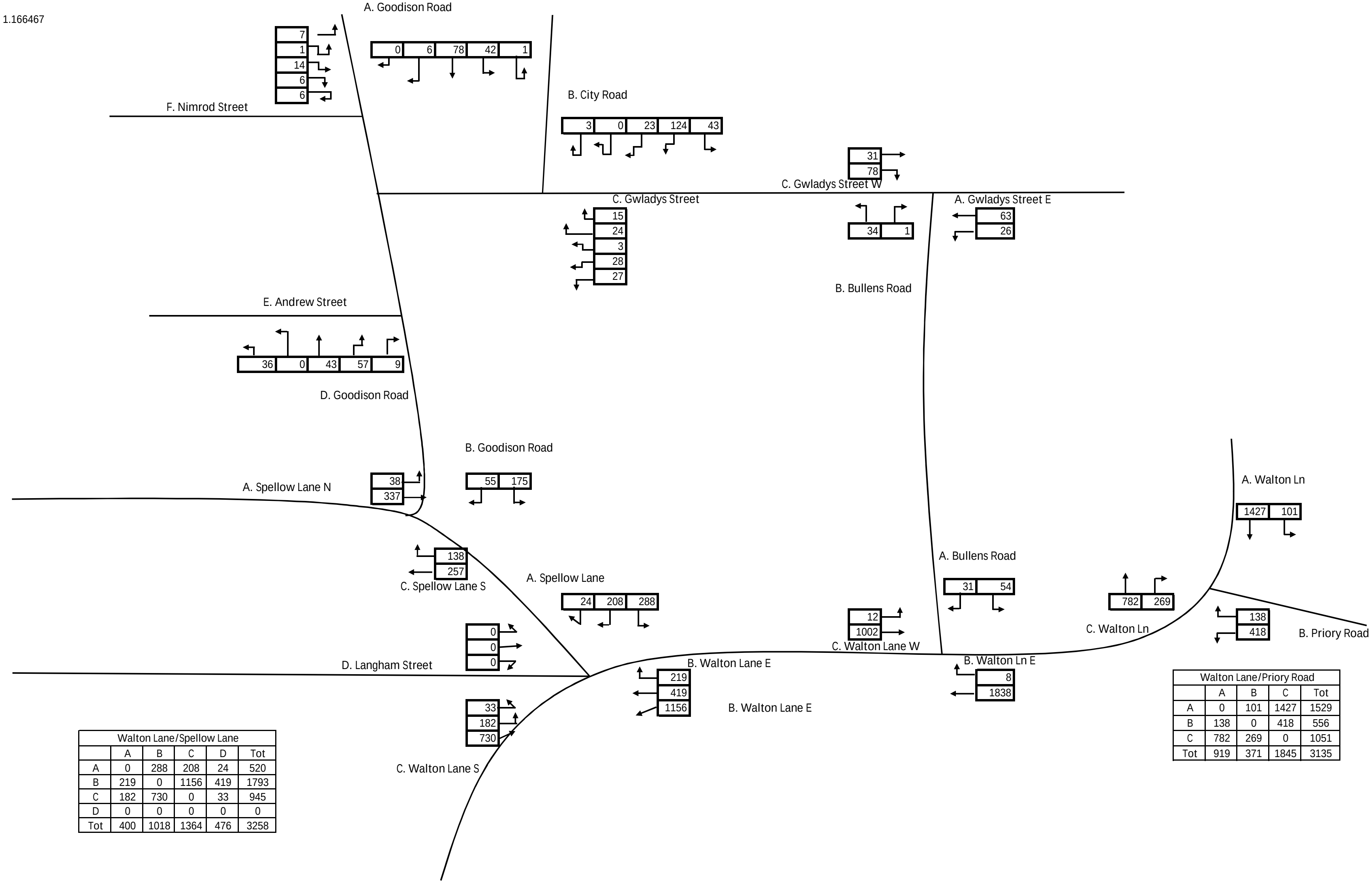
	A	B	C	D	Tot
A	0	512	251	25	788
B	168	0	981	142	1291
C	251	732	0	28	1010
D	0	0	0	0	0
Tot	418	1243	1233	194	3089

Walton Lane/Priory Road

	A	B	C	Tot
A	0	76	1162	1238
B	78	0	196	274
C	910	395	0	1305
Tot	988	471	1358	2817

2032 Base AM

TEMPro Growth Factor: 1.166467

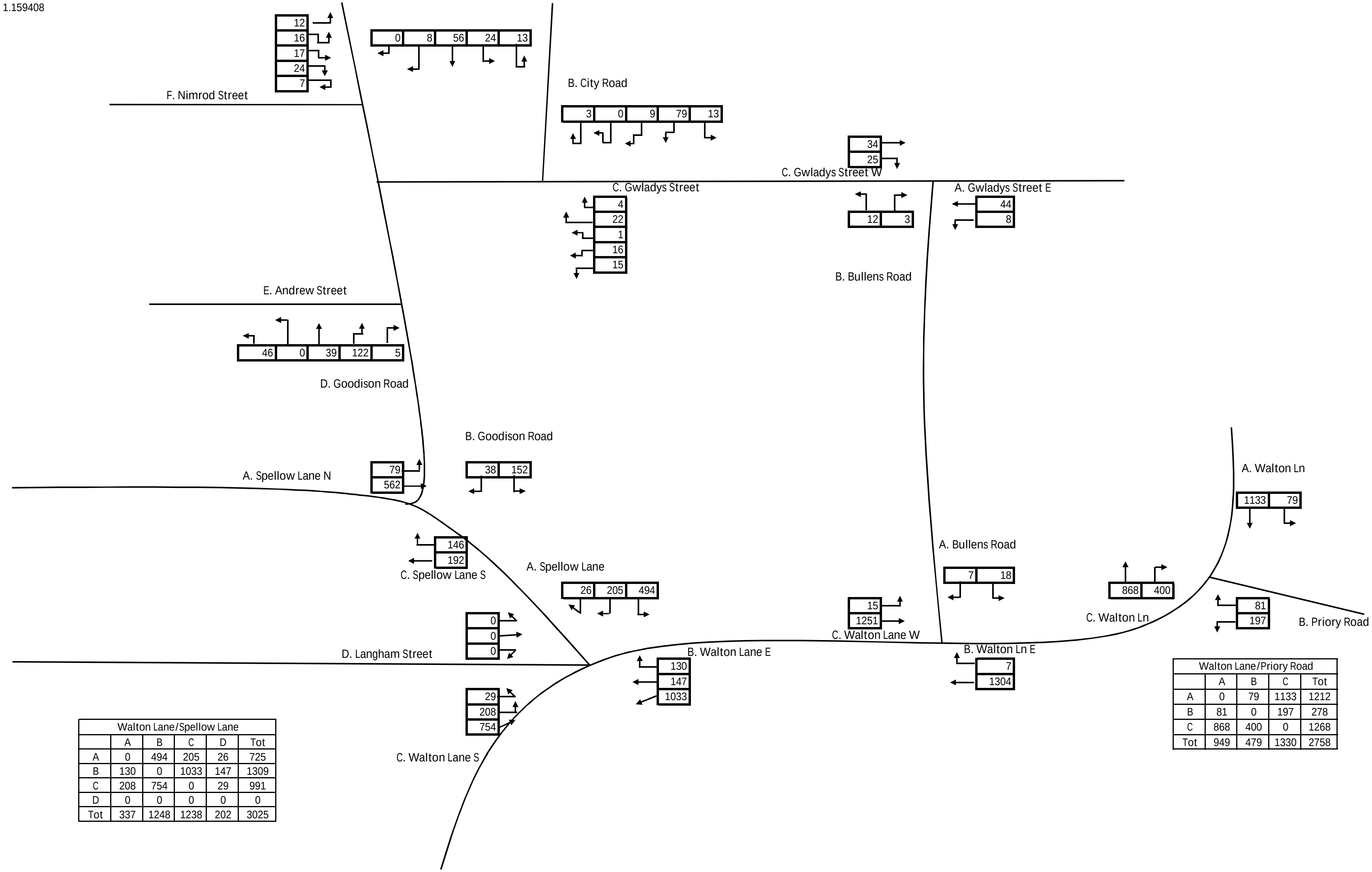


Walton Lane/Spellow Lane					
	A	B	C	D	Tot
A	0	288	208	24	520
B	219	0	1156	419	1793
C	182	730	0	33	945
D	0	0	0	0	0
Tot	400	1018	1364	476	3258

Walton Lane/Priory Road				
	A	B	C	Tot
A	0	101	1427	1529
B	138	0	418	556
C	782	269	0	1051
Tot	919	371	1845	3135

2032 Base PM

TEMPro Growth Factor: 1.159408

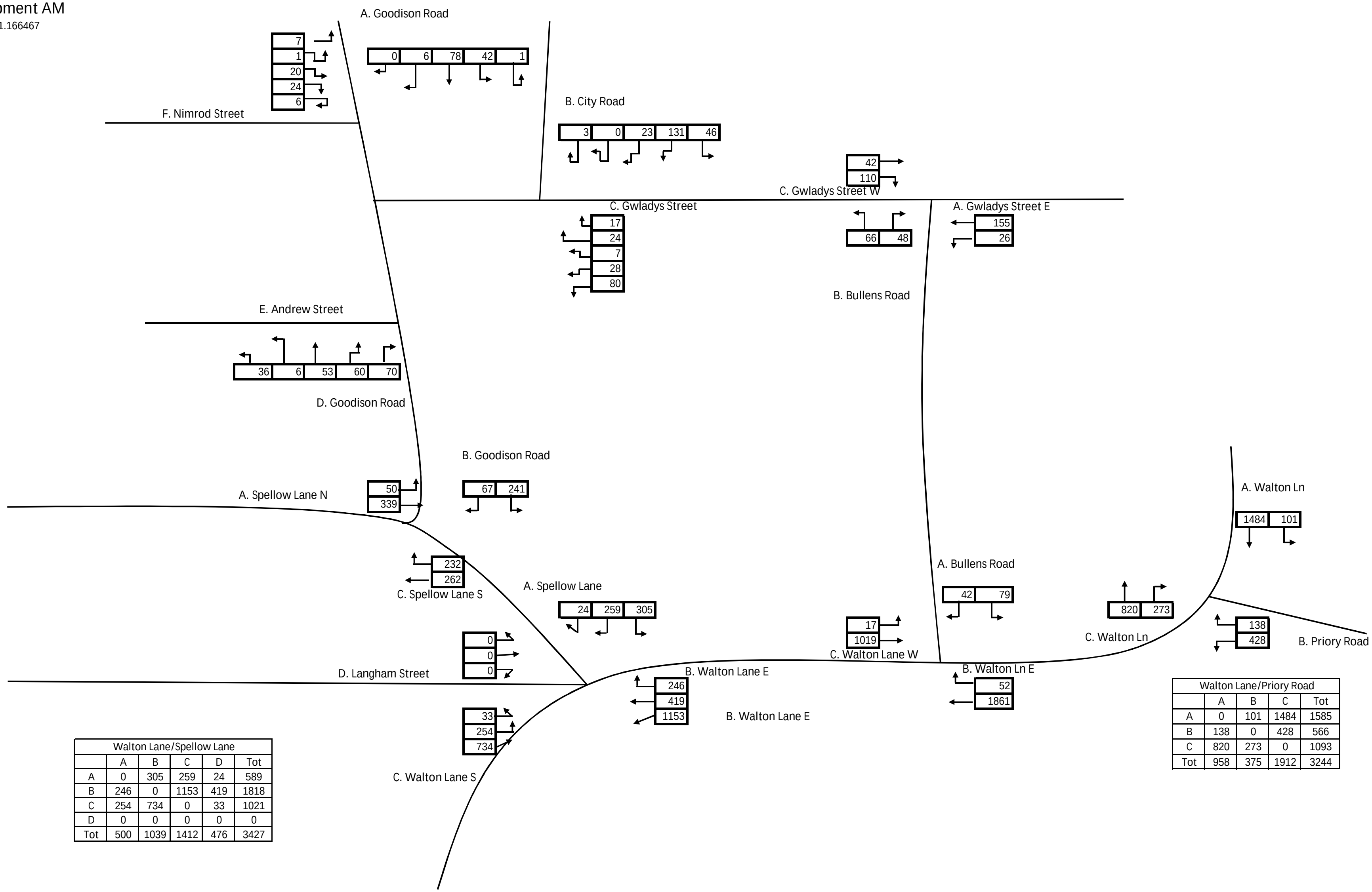


Walton Lane/Spellow Lane					
	A	B	C	D	Tot
A	0	494	205	26	725
B	130	0	1033	147	1309
C	208	754	0	29	991
D	0	0	0	0	0
Tot	337	1248	1238	202	3025

Walton Lane/Priory Road				
	A	B	C	Tot
A	0	79	1133	1212
B	81	0	197	278
C	868	400	0	1268
Tot	949	479	1330	2758

2032 Base + Development AM

TEMPro Growth Factor: 1.166467



Walton Lane/Spellow Lane

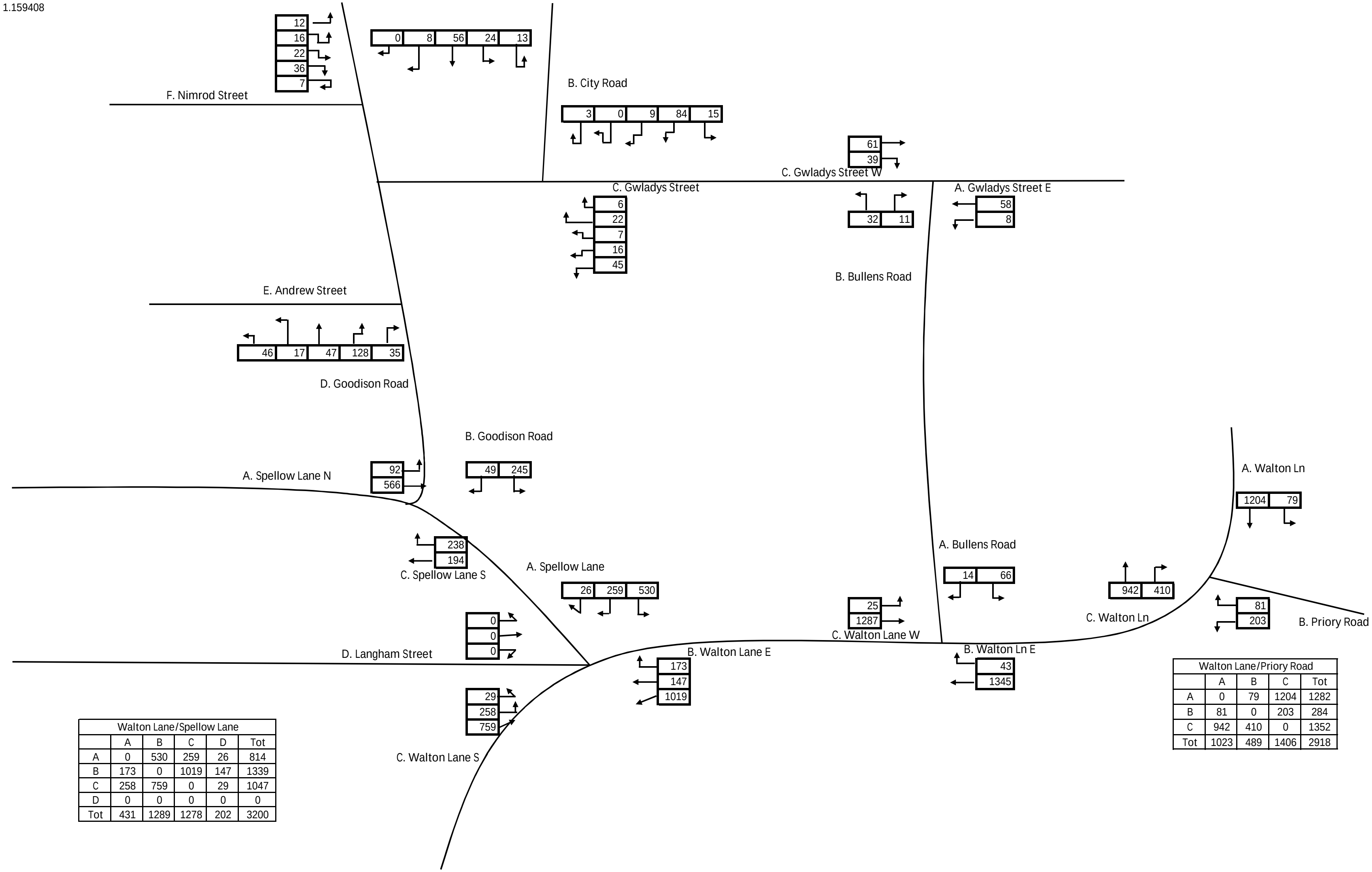
	A	B	C	D	Tot
A	0	305	259	24	589
B	246	0	1153	419	1818
C	254	734	0	33	1021
D	0	0	0	0	0
Tot	500	1039	1412	476	3427

Walton Lane/Priory Road

	A	B	C	Tot
A	0	101	1484	1585
B	138	0	428	566
C	820	273	0	1093
Tot	958	375	1912	3244

2032 Base + Development PM

TEMPro Growth Factor: 1.159408



Walton Lane/Spellow Lane					
	A	B	C	D	Tot
A	0	530	259	26	814
B	173	0	1019	147	1339
C	258	759	0	29	1047
D	0	0	0	0	0
Tot	431	1289	1278	202	3200

Walton Lane/Priory Road				
	A	B	C	Tot
A	0	79	1204	1282
B	81	0	203	284
C	942	410	0	1352
Tot	1023	489	1406	2918

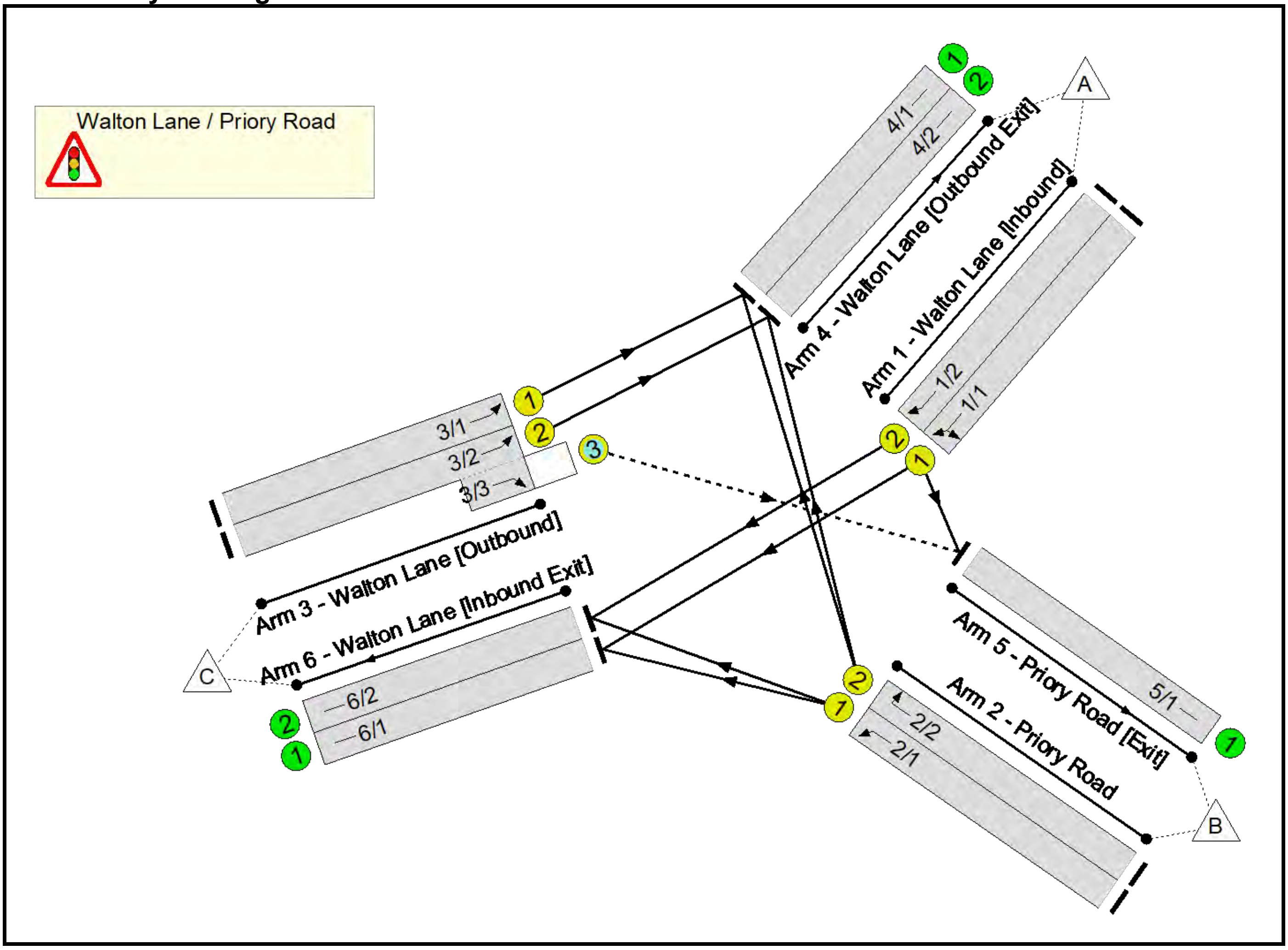
F. Walton Lane/Priory Road Full LinSig Outputs

Full Input Data And Results

User and Project Details

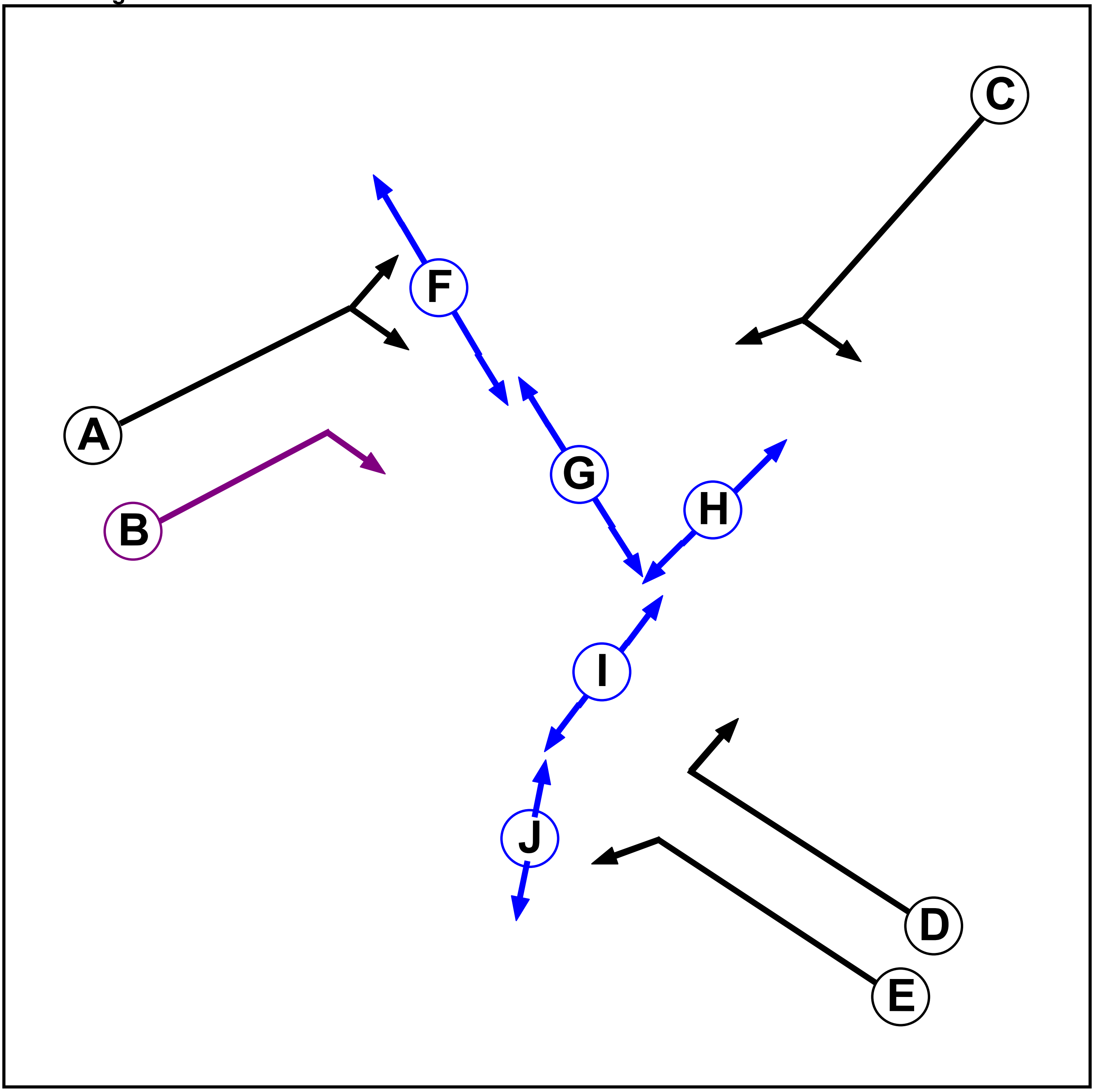
Project:	**21 Traffic Signal Junction Upgrades**
Title:	**Walton Lane / Priory Road**
Location:	
Client:	Liverpool City Council
Site Ref(s):	2267
Date Completed:	March 2018
Model Purpose:	Proposed Linsig Model
Additional detail:	
File name:	2267 Proposed Model_JMc_v3.lsg3x
Author:	David Thomas
Company:	Amey Consulting
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	Ind. Arrow	A	4	4
C	Traffic		7	7
D	Traffic		7	7
E	Traffic		7	7
F	Pedestrian		7	7
G	Pedestrian		7	7
H	Pedestrian		7	7
I	Pedestrian		7	7
J	Pedestrian		7	7

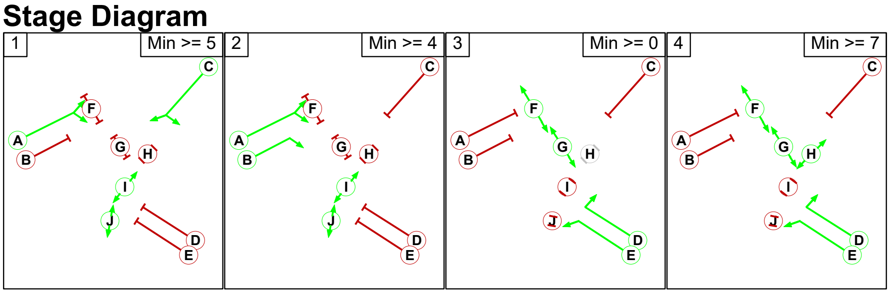
Phase Intergreens Matrix

	Starting Phase										
		A	B	C	D	E	F	G	H	I	J
Terminating Phase	A		-	-	5	9	5	10	10	-	-
	B	-		9	5	9	5	10	10	-	-
	C	-	5		5	6	-	7	6	-	-
	D	7	7	5		-	-	-	-	5	-
	E	5	5	5	-		-	-	-	-	5
	F	5	5	-	-	-		-	-	-	-
	G	5	5	5	-	-	-		-	-	-
	H	5	5	5	-	-	-	-		-	-
	I	-	-	-	5	-	-	-	-		-
	J	-	-	-	-	5	-	-	-	-	

Phases in Stage

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

Stage Diagram



Phase Delays

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

Prohibited Stage Change

		To Stage			
		1	2	3	4
From Stage	1		5	10	10
	2	9		10	10
	3	7	7		0
	4	7	7	0	

Full Input Data And Results

Give-Way Lane Input Data

Junction: Walton Lane / Priory Road											
Lane	Movement	Max Flow when Giving Way (PCU/Hr)	Min Flow when Giving Way (PCU/Hr)	Opposing Lane	Opp. Lane Coeff.	Opp. Mvmnts.	Right Turn Storage (PCU)	Non-Blocking Storage (PCU)	RTF	Right Turn Move up (s)	Max Turns in Intergreen (PCU)
3/3 (Walton Lane [Outbound])	5/1 (Right)	1439	0	1/1	1.09	All	2.00	-	0.50	2	2.00
				1/2	1.09	All					

Full Input Data And Results

Lane Input Data

Junction: Walton Lane / Priory Road												
Lane	**Lane Type**	**Phases**	**Start Disp.**	**End Disp.**	**Physical Length (PCU)**	**Sat Flow Type**	**Def User Saturation Flow (PCU/Hr)**	**Lane Width (m)**	**Gradient**	**Nearside Lane**	**Turns**	**Turning Radius (m)**
1/1 (Walton Lane [Inbound])	U	C	2	3	60.0	Geom	-	3.25	0.00	Y	Arm 5 Left	Inf
											Arm 6 Ahead	Inf
1/2 (Walton Lane [Inbound])	U	C	2	3	60.0	Geom	-	3.00	0.00	N	Arm 6 Ahead	Inf
2/1 (Priory Road)	U	E	2	3	60.0	Geom	-	3.20	0.00	Y	Arm 6 Left	Inf
2/2 (Priory Road)	U	D	2	3	60.0	Geom	-	3.00	0.00	N	Arm 4 Right	Inf
3/1 (Walton Lane [Outbound])	U	A	2	3	60.0	Geom	-	3.30	0.00	Y	Arm 4 Ahead	Inf
3/2 (Walton Lane [Outbound])	U	A	2	3	60.0	Geom	-	3.40	0.00	N	Arm 4 Ahead	Inf
3/3 (Walton Lane [Outbound])	O	A B	2	3	3.0	Geom	-	3.50	0.00	N	Arm 5 Right	Inf
4/1 (Walton Lane [Outbound Exit])	U		2	3	60.0	Inf	-	-	-	-	-	-
4/2 (Walton Lane [Outbound Exit])	U		2	3	60.0	Inf	-	-	-	-	-	-
5/1 (Priory Road [Exit])	U		2	3	60.0	Inf	-	-	-	-	-	-
6/1 (Walton Lane [Inbound Exit])	U		2	3	60.0	Inf	-	-	-	-	-	-
6/2 (Walton Lane [Inbound Exit])	U		2	3	60.0	Inf	-	-	-	-	-	-

Full Input Data And Results

Traffic Flow Groups

Flow Group	Start Time	End Time	Duration	Formula
1: '2019 Survey AM'	08:00	09:00	01:00	
2: '2019 Survey PM'	17:00	18:00	01:00	
3: '2028 Survey AM'	08:00	09:00	01:00	
4: '2028 Survey PM'	17:00	18:00	01:00	
5: '2028 Base AM'	08:00	09:00	01:00	
6: '2028 Base PM'	17:00	18:00	01:00	
7: '2028 Base + Dev AM'	08:00	09:00	01:00	
8: '2028 Base + Dev PM'	17:00	18:00	01:00	
9: '2032 Survey AM'	08:00	09:00	01:00	
10: '2032 Survey PM'	17:00	18:00	01:00	
11: '2032 Base AM'	08:00	09:00	01:00	
12: '2032 Base PM'	17:00	18:00	01:00	
13: '2032 Base + Dev AM'	08:00	09:00	01:00	
14: '2032 Base + Dev PM'	17:00	18:00	01:00	

Scenario 1: '2019 Survey AM' (FG1: '2019 Survey AM', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired

Desired Flow :

		Destination			
		A	B	C	Tot.
Origin	A	0	87	1222	1309
	B	118	0	358	476
	C	664	230	0	894
	Tot.	782	317	1580	2679

Full Input Data And Results

Traffic Lane Flows

Lane	Scenario 1: 2019 Survey AM
Junction: Walton Lane / Priory Road	
1/1	631
1/2	678
2/1	358
2/2	118
3/1	664
3/2 (with short)	230(In) 0(Out)
3/3 (short)	230
4/1	723
4/2	59
5/1	317
6/1	723
6/2	857

Lane Saturation Flows

Junction: Walton Lane / Priory Road								
Lane	**Lane Width (m)**	**Gradient**	**Nearside Lane**	**Allowed Turns**	**Turning Radius (m)**	**Turning Prop.**	**Sat Flow (PCU/Hr)**	**Flared Sat Flow (PCU/Hr)**
1/1 (Walton Lane [Inbound])	3.25	0.00	Y	Arm 5 Left	Inf	13.8 %	1940	1940
				Arm 6 Ahead	Inf	86.2 %		
1/2 (Walton Lane [Inbound])	3.00	0.00	N	Arm 6 Ahead	Inf	100.0 %	2055	2055
2/1 (Priory Road)	3.20	0.00	Y	Arm 6 Left	Inf	100.0 %	1935	1935
2/2 (Priory Road)	3.00	0.00	N	Arm 4 Right	Inf	100.0 %	2055	2055
3/1 (Walton Lane [Outbound])	3.30	0.00	Y	Arm 4 Ahead	Inf	100.0 %	1945	1945
3/2 (Walton Lane [Outbound])	3.40	0.00	N	Arm 4 Ahead	Inf	0.0 %	2095	2095
3/3 (Walton Lane [Outbound])	3.50	0.00	N	Arm 5 Right	Inf	100.0 %	2105	2105
4/1 (Walton Lane [Outbound Exit] Lane 1)	Infinite Saturation Flow						Inf	Inf
4/2 (Walton Lane [Outbound Exit] Lane 2)	Infinite Saturation Flow						Inf	Inf
5/1 (Priory Road [Exit] Lane 1)	Infinite Saturation Flow						Inf	Inf
6/1 (Walton Lane [Inbound Exit] Lane 1)	Infinite Saturation Flow						Inf	Inf
6/2 (Walton Lane [Inbound Exit] Lane 2)	Infinite Saturation Flow						Inf	Inf

Scenario 2: '2019 Survey PM' (FG2: '2019 Survey PM', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired

Desired Flow :

	Destination				
Origin		A	B	C	Tot.
	A	0	68	972	1040
	B	70	0	169	239
	C	746	345	0	1091
	Tot.	816	413	1141	2370

Traffic Lane Flows

Lane	Scenario 2: 2019 Survey PM
Junction: Walton Lane / Priory Road	
1/1	499
1/2	541
2/1	169
2/2	70
3/1	745
3/2 (with short)	346(In) 1(Out)
3/3 (short)	345
4/1	780
4/2	36
5/1	413
6/1	516
6/2	625

Full Input Data And Results

Lane Saturation Flows

Junction: Walton Lane / Priory Road								
Lane	**Lane Width (m)**	**Gradient**	**Nearside Lane**	**Allowed Turns**	**Turning Radius (m)**	**Turning Prop.**	**Sat Flow (PCU/Hr)**	**Flared Sat Flow (PCU/Hr)**
1/1 (Walton Lane [Inbound])	3.25	0.00	Y	Arm 5 Left	Inf	13.6 %	1940	1940
				Arm 6 Ahead	Inf	86.4 %		
1/2 (Walton Lane [Inbound])	3.00	0.00	N	Arm 6 Ahead	Inf	100.0 %	2055	2055
2/1 (Priory Road)	3.20	0.00	Y	Arm 6 Left	Inf	100.0 %	1935	1935
2/2 (Priory Road)	3.00	0.00	N	Arm 4 Right	Inf	100.0 %	2055	2055
3/1 (Walton Lane [Outbound])	3.30	0.00	Y	Arm 4 Ahead	Inf	100.0 %	1945	1945
3/2 (Walton Lane [Outbound])	3.40	0.00	N	Arm 4 Ahead	Inf	100.0 %	2095	2095
3/3 (Walton Lane [Outbound])	3.50	0.00	N	Arm 5 Right	Inf	100.0 %	2105	2105
4/1 (Walton Lane [Outbound Exit] Lane 1)	Infinite Saturation Flow						Inf	Inf
4/2 (Walton Lane [Outbound Exit] Lane 2)	Infinite Saturation Flow						Inf	Inf
5/1 (Priory Road [Exit] Lane 1)	Infinite Saturation Flow						Inf	Inf
6/1 (Walton Lane [Inbound Exit] Lane 1)	Infinite Saturation Flow						Inf	Inf
6/2 (Walton Lane [Inbound Exit] Lane 2)	Infinite Saturation Flow						Inf	Inf

Scenario 3: '2028 Base AM' (FG5: '2028 Base AM', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired

Desired Flow :

	Destination				
		A	B	C	Tot.
Origin	A	0	98	1372	1470
	B	132	0	402	534
	C	752	259	0	1011
	Tot.	884	357	1774	3015

Traffic Lane Flows

Lane	Scenario 3: 2028 Base AM
Junction: Walton Lane / Priory Road	
1/1	710
1/2	760
2/1	402
2/2	132
3/1	752
3/2 (with short)	259(In) 0(Out)
3/3 (short)	259
4/1	818
4/2	66
5/1	357
6/1	813
6/2	961

Lane Saturation Flows

Junction: Walton Lane / Priory Road								
Lane	**Lane Width (m)**	**Gradient**	**Nearside Lane**	**Allowed Turns**	**Turning Radius (m)**	**Turning Prop.**	**Sat Flow (PCU/Hr)**	**Flared Sat Flow (PCU/Hr)**
1/1 (Walton Lane [Inbound])	3.25	0.00	Y	Arm 5 Left	Inf	13.8 %	1940	1940
				Arm 6 Ahead	Inf	86.2 %		
1/2 (Walton Lane [Inbound])	3.00	0.00	N	Arm 6 Ahead	Inf	100.0 %	2055	2055
2/1 (Priory Road)	3.20	0.00	Y	Arm 6 Left	Inf	100.0 %	1935	1935
2/2 (Priory Road)	3.00	0.00	N	Arm 4 Right	Inf	100.0 %	2055	2055
3/1 (Walton Lane [Outbound])	3.30	0.00	Y	Arm 4 Ahead	Inf	100.0 %	1945	1945
3/2 (Walton Lane [Outbound])	3.40	0.00	N	Arm 4 Ahead	Inf	0.0 %	2095	2095
3/3 (Walton Lane [Outbound])	3.50	0.00	N	Arm 5 Right	Inf	100.0 %	2105	2105
4/1 (Walton Lane [Outbound Exit] Lane 1)	Infinite Saturation Flow						Inf	Inf
4/2 (Walton Lane [Outbound Exit] Lane 2)	Infinite Saturation Flow						Inf	Inf
5/1 (Priory Road [Exit] Lane 1)	Infinite Saturation Flow						Inf	Inf
6/1 (Walton Lane [Inbound Exit] Lane 1)	Infinite Saturation Flow						Inf	Inf
6/2 (Walton Lane [Inbound Exit] Lane 2)	Infinite Saturation Flow						Inf	Inf

Scenario 4: '2028 Base PM' (FG6: '2028 Base PM', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired

Desired Flow :

	Destination				
Origin		A	B	C	Tot.
	A	0	76	1091	1167
	B	78	0	190	268
	C	836	386	0	1222
	Tot.	914	462	1281	2657

Traffic Lane Flows

Lane	Scenario 4: 2028 Base PM
Junction: Walton Lane / Priory Road	
1/1	562
1/2	605
2/1	190
2/2	78
3/1	836
3/2 (with short)	386(In) 0(Out)
3/3 (short)	386
4/1	875
4/2	39
5/1	462
6/1	581
6/2	700

Full Input Data And Results

Lane Saturation Flows

Junction: Walton Lane / Priory Road								
Lane	**Lane Width (m)**	**Gradient**	**Nearside Lane**	**Allowed Turns**	**Turning Radius (m)**	**Turning Prop.**	**Sat Flow (PCU/Hr)**	**Flared Sat Flow (PCU/Hr)**
1/1 (Walton Lane [Inbound])	3.25	0.00	Y	Arm 5 Left	Inf	13.5 %	1940	1940
				Arm 6 Ahead	Inf	86.5 %		
1/2 (Walton Lane [Inbound])	3.00	0.00	N	Arm 6 Ahead	Inf	100.0 %	2055	2055
2/1 (Priory Road)	3.20	0.00	Y	Arm 6 Left	Inf	100.0 %	1935	1935
2/2 (Priory Road)	3.00	0.00	N	Arm 4 Right	Inf	100.0 %	2055	2055
3/1 (Walton Lane [Outbound])	3.30	0.00	Y	Arm 4 Ahead	Inf	100.0 %	1945	1945
3/2 (Walton Lane [Outbound])	3.40	0.00	N	Arm 4 Ahead	Inf	0.0 %	2095	2095
3/3 (Walton Lane [Outbound])	3.50	0.00	N	Arm 5 Right	Inf	100.0 %	2105	2105
4/1 (Walton Lane [Outbound Exit] Lane 1)	Infinite Saturation Flow						Inf	Inf
4/2 (Walton Lane [Outbound Exit] Lane 2)	Infinite Saturation Flow						Inf	Inf
5/1 (Priory Road [Exit] Lane 1)	Infinite Saturation Flow						Inf	Inf
6/1 (Walton Lane [Inbound Exit] Lane 1)	Infinite Saturation Flow						Inf	Inf
6/2 (Walton Lane [Inbound Exit] Lane 2)	Infinite Saturation Flow						Inf	Inf

Scenario 5: '2028 Base + Dev AM' (FG7: '2028 Base + Dev AM', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired

Desired Flow :

		Destination			
		A	B	C	Tot.
Origin	A	0	98	1429	1527
	B	132	0	412	544
	C	790	263	0	1053
	Tot.	922	361	1841	3124

Traffic Lane Flows

Lane	Scenario 5: 2028 Base + Dev AM
Junction: Walton Lane / Priory Road	
1/1	738
1/2	789
2/1	412
2/2	132
3/1	790
3/2 (with short)	263(In) 0(Out)
3/3 (short)	263
4/1	856
4/2	66
5/1	361
6/1	846
6/2	995

Lane Saturation Flows

Junction: Walton Lane / Priory Road								
Lane	**Lane Width (m)**	**Gradient**	**Nearside Lane**	**Allowed Turns**	**Turning Radius (m)**	**Turning Prop.**	**Sat Flow (PCU/Hr)**	**Flared Sat Flow (PCU/Hr)**
1/1 (Walton Lane [Inbound])	3.25	0.00	Y	Arm 5 Left	Inf	13.3 %	1940	1940
				Arm 6 Ahead	Inf	86.7 %		
1/2 (Walton Lane [Inbound])	3.00	0.00	N	Arm 6 Ahead	Inf	100.0 %	2055	2055
2/1 (Priory Road)	3.20	0.00	Y	Arm 6 Left	Inf	100.0 %	1935	1935
2/2 (Priory Road)	3.00	0.00	N	Arm 4 Right	Inf	100.0 %	2055	2055
3/1 (Walton Lane [Outbound])	3.30	0.00	Y	Arm 4 Ahead	Inf	100.0 %	1945	1945
3/2 (Walton Lane [Outbound])	3.40	0.00	N	Arm 4 Ahead	Inf	0.0 %	2095	2095
3/3 (Walton Lane [Outbound])	3.50	0.00	N	Arm 5 Right	Inf	100.0 %	2105	2105
4/1 (Walton Lane [Outbound Exit] Lane 1)	Infinite Saturation Flow						Inf	Inf
4/2 (Walton Lane [Outbound Exit] Lane 2)	Infinite Saturation Flow						Inf	Inf
5/1 (Priory Road [Exit] Lane 1)	Infinite Saturation Flow						Inf	Inf
6/1 (Walton Lane [Inbound Exit] Lane 1)	Infinite Saturation Flow						Inf	Inf
6/2 (Walton Lane [Inbound Exit] Lane 2)	Infinite Saturation Flow						Inf	Inf

Scenario 6: '2028 Base + Dev PM' (FG8: '2028 Base + Dev PM', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired

Desired Flow :

	Destination				
Origin		A	B	C	Tot.
	A	0	76	1162	1238
	B	78	0	196	274
	C	910	395	0	1305
	Tot.	988	471	1358	2817

Traffic Lane Flows

Lane	Scenario 6: 2028 Base + Dev PM
Junction: Walton Lane / Priory Road	
1/1	596
1/2	642
2/1	196
2/2	78
3/1	910
3/2 (with short)	395(In) 0(Out)
3/3 (short)	395
4/1	949
4/2	39
5/1	471
6/1	618
6/2	740

Lane Saturation Flows

Junction: Walton Lane / Priory Road								
Lane	**Lane Width (m)**	**Gradient**	**Nearside Lane**	**Allowed Turns**	**Turning Radius (m)**	**Turning Prop.**	**Sat Flow (PCU/Hr)**	**Flared Sat Flow (PCU/Hr)**
1/1 (Walton Lane [Inbound])	3.25	0.00	Y	Arm 5 Left	Inf	12.8 %	1940	1940
				Arm 6 Ahead	Inf	87.2 %		
1/2 (Walton Lane [Inbound])	3.00	0.00	N	Arm 6 Ahead	Inf	100.0 %	2055	2055
2/1 (Priory Road)	3.20	0.00	Y	Arm 6 Left	Inf	100.0 %	1935	1935
2/2 (Priory Road)	3.00	0.00	N	Arm 4 Right	Inf	100.0 %	2055	2055
3/1 (Walton Lane [Outbound])	3.30	0.00	Y	Arm 4 Ahead	Inf	100.0 %	1945	1945
3/2 (Walton Lane [Outbound])	3.40	0.00	N	Arm 4 Ahead	Inf	0.0 %	2095	2095
3/3 (Walton Lane [Outbound])	3.50	0.00	N	Arm 5 Right	Inf	100.0 %	2105	2105
4/1 (Walton Lane [Outbound Exit] Lane 1)	Infinite Saturation Flow						Inf	Inf
4/2 (Walton Lane [Outbound Exit] Lane 2)	Infinite Saturation Flow						Inf	Inf
5/1 (Priory Road [Exit] Lane 1)	Infinite Saturation Flow						Inf	Inf
6/1 (Walton Lane [Inbound Exit] Lane 1)	Infinite Saturation Flow						Inf	Inf
6/2 (Walton Lane [Inbound Exit] Lane 2)	Infinite Saturation Flow						Inf	Inf

Scenario 7: '2032 Base AM' (FG11: '2032 Base AM', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired

Desired Flow :

	Destination				
Origin		A	B	C	Tot.
	A	0	101	1427	1528
	B	138	0	418	556
	C	782	269	0	1051
	Tot.	920	370	1845	3135

Traffic Lane Flows

Lane	Scenario 7: 2032 Base AM
Junction: Walton Lane / Priory Road	
1/1	738
1/2	790
2/1	418
2/2	138
3/1	782
3/2 (with short)	269(In) 0(Out)
3/3 (short)	269
4/1	851
4/2	69
5/1	370
6/1	846
6/2	999

Lane Saturation Flows

Junction: Walton Lane / Priory Road								
Lane	**Lane Width (m)**	**Gradient**	**Nearside Lane**	**Allowed Turns**	**Turning Radius (m)**	**Turning Prop.**	**Sat Flow (PCU/Hr)**	**Flared Sat Flow (PCU/Hr)**
1/1 (Walton Lane [Inbound])	3.25	0.00	Y	Arm 5 Left	Inf	13.7 %	1940	1940
				Arm 6 Ahead	Inf	86.3 %		
1/2 (Walton Lane [Inbound])	3.00	0.00	N	Arm 6 Ahead	Inf	100.0 %	2055	2055
2/1 (Priory Road)	3.20	0.00	Y	Arm 6 Left	Inf	100.0 %	1935	1935
2/2 (Priory Road)	3.00	0.00	N	Arm 4 Right	Inf	100.0 %	2055	2055
3/1 (Walton Lane [Outbound])	3.30	0.00	Y	Arm 4 Ahead	Inf	100.0 %	1945	1945
3/2 (Walton Lane [Outbound])	3.40	0.00	N	Arm 4 Ahead	Inf	0.0 %	2095	2095
3/3 (Walton Lane [Outbound])	3.50	0.00	N	Arm 5 Right	Inf	100.0 %	2105	2105
4/1 (Walton Lane [Outbound Exit] Lane 1)	Infinite Saturation Flow						Inf	Inf
4/2 (Walton Lane [Outbound Exit] Lane 2)	Infinite Saturation Flow						Inf	Inf
5/1 (Priory Road [Exit] Lane 1)	Infinite Saturation Flow						Inf	Inf
6/1 (Walton Lane [Inbound Exit] Lane 1)	Infinite Saturation Flow						Inf	Inf
6/2 (Walton Lane [Inbound Exit] Lane 2)	Infinite Saturation Flow						Inf	Inf

Scenario 8: '2032 Base PM' (FG12: '2032 Base PM', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired

Desired Flow :

	Destination				
Origin		A	B	C	Tot.
	A	0	79	1133	1212
	B	81	0	197	278
	C	868	400	0	1268
	Tot.	949	479	1330	2758

Traffic Lane Flows

Lane	Scenario 8: 2032 Base PM
Junction: Walton Lane / Priory Road	
1/1	584
1/2	628
2/1	197
2/2	81
3/1	868
3/2 (with short)	400(In) 0(Out)
3/3 (short)	400
4/1	909
4/2	40
5/1	479
6/1	604
6/2	726

Lane Saturation Flows

Junction: Walton Lane / Priory Road								
Lane	**Lane Width (m)**	**Gradient**	**Nearside Lane**	**Allowed Turns**	**Turning Radius (m)**	**Turning Prop.**	**Sat Flow (PCU/Hr)**	**Flared Sat Flow (PCU/Hr)**
1/1 (Walton Lane [Inbound])	3.25	0.00	Y	Arm 5 Left	Inf	13.5 %	1940	1940
				Arm 6 Ahead	Inf	86.5 %		
1/2 (Walton Lane [Inbound])	3.00	0.00	N	Arm 6 Ahead	Inf	100.0 %	2055	2055
2/1 (Priory Road)	3.20	0.00	Y	Arm 6 Left	Inf	100.0 %	1935	1935
2/2 (Priory Road)	3.00	0.00	N	Arm 4 Right	Inf	100.0 %	2055	2055
3/1 (Walton Lane [Outbound])	3.30	0.00	Y	Arm 4 Ahead	Inf	100.0 %	1945	1945
3/2 (Walton Lane [Outbound])	3.40	0.00	N	Arm 4 Ahead	Inf	0.0 %	2095	2095
3/3 (Walton Lane [Outbound])	3.50	0.00	N	Arm 5 Right	Inf	100.0 %	2105	2105
4/1 (Walton Lane [Outbound Exit] Lane 1)	Infinite Saturation Flow						Inf	Inf
4/2 (Walton Lane [Outbound Exit] Lane 2)	Infinite Saturation Flow						Inf	Inf
5/1 (Priory Road [Exit] Lane 1)	Infinite Saturation Flow						Inf	Inf
6/1 (Walton Lane [Inbound Exit] Lane 1)	Infinite Saturation Flow						Inf	Inf
6/2 (Walton Lane [Inbound Exit] Lane 2)	Infinite Saturation Flow						Inf	Inf

Scenario 9: '2032 Base + Dev AM' (FG13: '2032 Base + Dev AM', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired

Desired Flow :

	Destination				
Origin		A	B	C	Tot.
	A	0	101	1484	1585
	B	138	0	428	566
	C	820	273	0	1093
	Tot.	958	374	1912	3244

Traffic Lane Flows

Lane	Scenario 9: 2032 Base + Dev AM
Junction: Walton Lane / Priory Road	
1/1	767
1/2	818
2/1	428
2/2	138
3/1	820
3/2 (with short)	273(In) 0(Out)
3/3 (short)	273
4/1	889
4/2	69
5/1	374
6/1	880
6/2	1032

Lane Saturation Flows

Junction: Walton Lane / Priory Road								
Lane	**Lane Width (m)**	**Gradient**	**Nearside Lane**	**Allowed Turns**	**Turning Radius (m)**	**Turning Prop.**	**Sat Flow (PCU/Hr)**	**Flared Sat Flow (PCU/Hr)**
1/1 (Walton Lane [Inbound])	3.25	0.00	Y	Arm 5 Left	Inf	13.2 %	1940	1940
				Arm 6 Ahead	Inf	86.8 %		
1/2 (Walton Lane [Inbound])	3.00	0.00	N	Arm 6 Ahead	Inf	100.0 %	2055	2055
2/1 (Priory Road)	3.20	0.00	Y	Arm 6 Left	Inf	100.0 %	1935	1935
2/2 (Priory Road)	3.00	0.00	N	Arm 4 Right	Inf	100.0 %	2055	2055
3/1 (Walton Lane [Outbound])	3.30	0.00	Y	Arm 4 Ahead	Inf	100.0 %	1945	1945
3/2 (Walton Lane [Outbound])	3.40	0.00	N	Arm 4 Ahead	Inf	0.0 %	2095	2095
3/3 (Walton Lane [Outbound])	3.50	0.00	N	Arm 5 Right	Inf	100.0 %	2105	2105
4/1 (Walton Lane [Outbound Exit] Lane 1)	Infinite Saturation Flow						Inf	Inf
4/2 (Walton Lane [Outbound Exit] Lane 2)	Infinite Saturation Flow						Inf	Inf
5/1 (Priory Road [Exit] Lane 1)	Infinite Saturation Flow						Inf	Inf
6/1 (Walton Lane [Inbound Exit] Lane 1)	Infinite Saturation Flow						Inf	Inf
6/2 (Walton Lane [Inbound Exit] Lane 2)	Infinite Saturation Flow						Inf	Inf

Scenario 10: '2032 Base + Dev PM' (FG14: '2032 Base + Dev PM', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired

Desired Flow :

	Destination				
Origin		A	B	C	Tot.
	A	0	79	1204	1283
	B	81	0	203	284
	C	942	410	0	1352
	Tot.	1023	489	1407	2919

Traffic Lane Flows

Lane	Scenario 10: 2032 Base + Dev PM
Junction: Walton Lane / Priory Road	
1/1	618
1/2	665
2/1	203
2/2	81
3/1	942
3/2 (with short)	410(In) 0(Out)
3/3 (short)	410
4/1	983
4/2	40
5/1	489
6/1	641
6/2	766

Full Input Data And Results

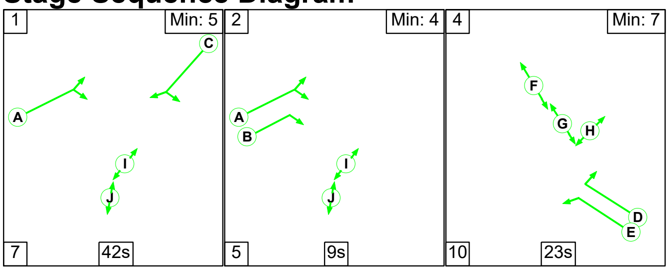
Lane Saturation Flows

Junction: Walton Lane / Priory Road

Lane	Lane Width (m)	Gradient	Nearside Lane	Allowed Turns	Turning Radius (m)	Turning Prop.	Sat Flow (PCU/Hr)	Flared Sat Flow (PCU/Hr)
1/1 (Walton Lane [Inbound])	3.25	0.00	Y	Arm 5 Left	Inf	12.8 %	1940	1940
				Arm 6 Ahead	Inf	87.2 %		
1/2 (Walton Lane [Inbound])	3.00	0.00	N	Arm 6 Ahead	Inf	100.0 %	2055	2055
2/1 (Priory Road)	3.20	0.00	Y	Arm 6 Left	Inf	100.0 %	1935	1935
2/2 (Priory Road)	3.00	0.00	N	Arm 4 Right	Inf	100.0 %	2055	2055
3/1 (Walton Lane [Outbound])	3.30	0.00	Y	Arm 4 Ahead	Inf	100.0 %	1945	1945
3/2 (Walton Lane [Outbound])	3.40	0.00	N	Arm 4 Ahead	Inf	0.0 %	2095	2095
3/3 (Walton Lane [Outbound])	3.50	0.00	N	Arm 5 Right	Inf	100.0 %	2105	2105
4/1 (Walton Lane [Outbound Exit] Lane 1)	Infinite Saturation Flow						Inf	Inf
4/2 (Walton Lane [Outbound Exit] Lane 2)	Infinite Saturation Flow						Inf	Inf
5/1 (Priory Road [Exit] Lane 1)	Infinite Saturation Flow						Inf	Inf
6/1 (Walton Lane [Inbound Exit] Lane 1)	Infinite Saturation Flow						Inf	Inf
6/2 (Walton Lane [Inbound Exit] Lane 2)	Infinite Saturation Flow						Inf	Inf

Scenario 1: '2019 Survey AM' (FG1: '2019 Survey AM', Plan 1: 'Network Control Plan 1')

Stage Sequence Diagram

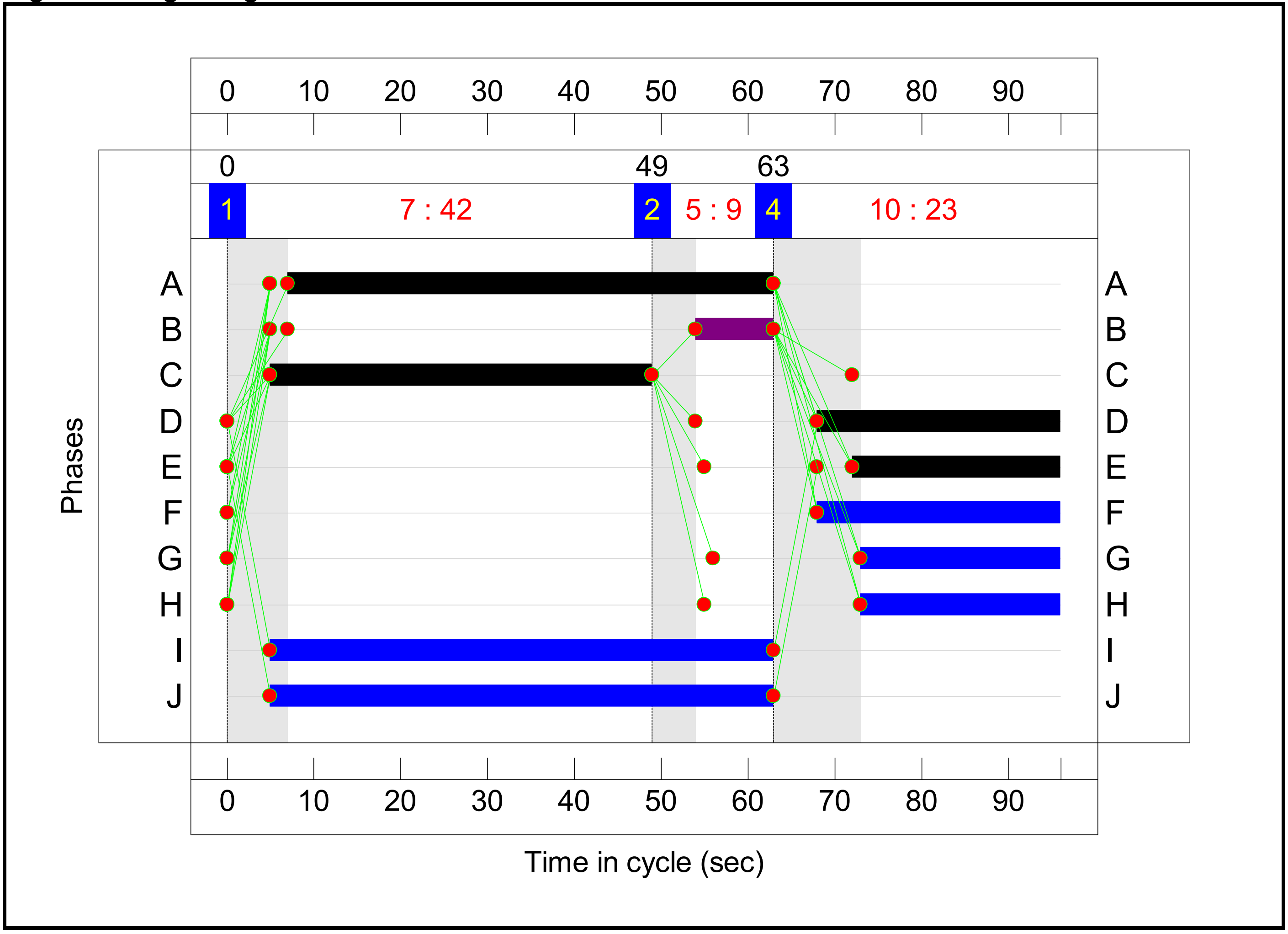


Stage Timings

Stage	1	2	4
Duration	42	9	23
Change Point	0	49	63

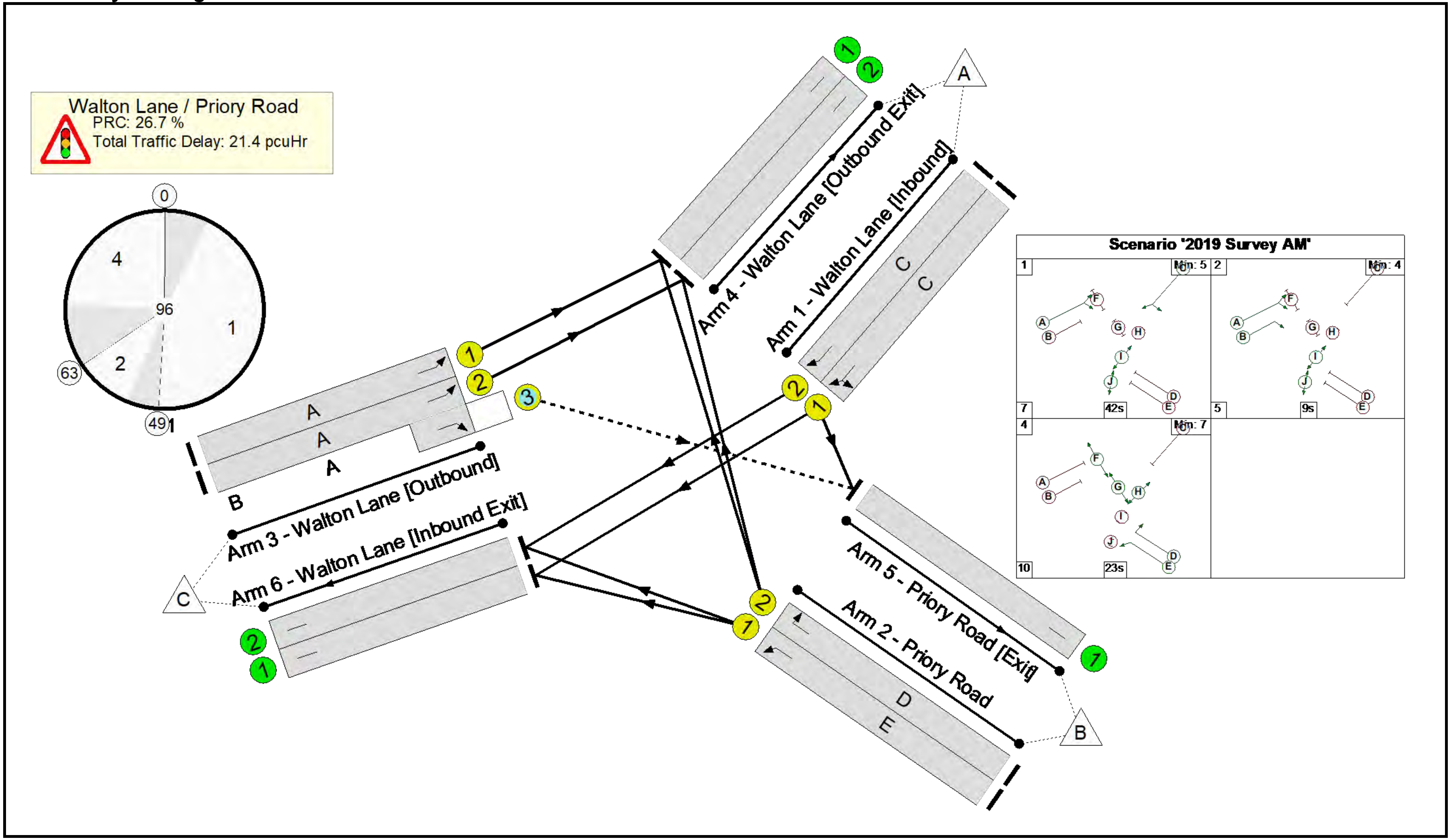
Full Input Data And Results

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: Walton Lane / Priory Road	**-**	**-**	**N/A**	**-**	**-**		**-**	**-**	**-**	**-**	**-**	**-**	**71.0%**
Walton Lane / Priory Road	**-**	**-**	**N/A**	**-**	**-**		**-**	**-**	**-**	**-**	**-**	**-**	**71.0%**
1/1	Walton Lane [Inbound] Left Ahead	U	N/A	N/A	C		1	44	-	631	1940	909	69.4%
1/2	Walton Lane [Inbound] Ahead	U	N/A	N/A	C		1	44	-	678	2055	963	70.4%
2/1	Priory Road Left	U	N/A	N/A	E		1	24	-	358	1935	504	71.0%
2/2	Priory Road Right	U	N/A	N/A	D		1	28	-	118	2055	621	19.0%
3/1	Walton Lane [Outbound] Ahead	U	N/A	N/A	A		1	56	-	664	1945	1155	57.5%
3/2+3/3	Walton Lane [Outbound] Ahead Right	U+O	N/A	N/A	A	B	1	56	9	230	2095:2105	0+341	0.0 : 67.5%
4/1	Walton Lane [Outbound Exit]	U	N/A	N/A	-		-	-	-	723	Inf	Inf	0.0%
4/2	Walton Lane [Outbound Exit]	U	N/A	N/A	-		-	-	-	59	Inf	Inf	0.0%
5/1	Priory Road [Exit]	U	N/A	N/A	-		-	-	-	317	Inf	Inf	0.0%
6/1	Walton Lane [Inbound Exit]	U	N/A	N/A	-		-	-	-	723	Inf	Inf	0.0%
6/2	Walton Lane [Inbound Exit]	U	N/A	N/A	-		-	-	-	857	Inf	Inf	0.0%

Full Input Data And Results

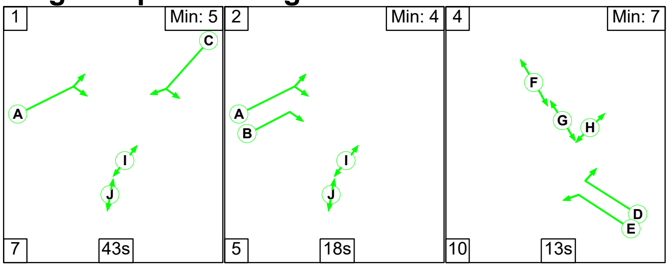
Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network: Walton Lane / Priory Road	**-**	**-**	**2**	**223**	**5**	**15.1**	**5.3**	**0.9**	**21.4**	**-**	**-**	**-**	**-**
Walton Lane / Priory Road	**-**	**-**	**2**	**223**	**5**	**15.1**	**5.3**	**0.9**	**21.4**	**-**	**-**	**-**	**-**
1/1	631	631	-	-	-	3.5	1.1	-	4.6	26.5	13.1	1.1	14.3
1/2	678	678	-	-	-	3.8	1.2	-	5.0	26.5	14.3	1.2	15.5
2/1	358	358	-	-	-	3.2	1.2	-	4.4	44.4	8.7	1.2	9.9
2/2	118	118	-	-	-	0.8	0.1	-	0.9	28.4	2.3	0.1	2.4
3/1	664	664	-	-	-	2.2	0.7	-	2.9	15.7	10.9	0.7	11.6
3/2+3/3	230	230	2	223	5	1.6	1.0	0.9	3.5	55.1	5.8	1.0	6.8
4/1	723	723	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
4/2	59	59	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/1	317	317	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/1	723	723	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/2	857	857	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0

C1 PRC for Signalled Lanes (%): 26.7 Total Delay for Signalled Lanes (pcuHr): 21.39 Cycle Time (s): 96
PRC Over All Lanes (%): 26.7 Total Delay Over All Lanes(pcuHr): 21.39

Full Input Data And Results

Scenario 2: '2019 Survey PM' (FG2: '2019 Survey PM', Plan 1: 'Network Control Plan 1')

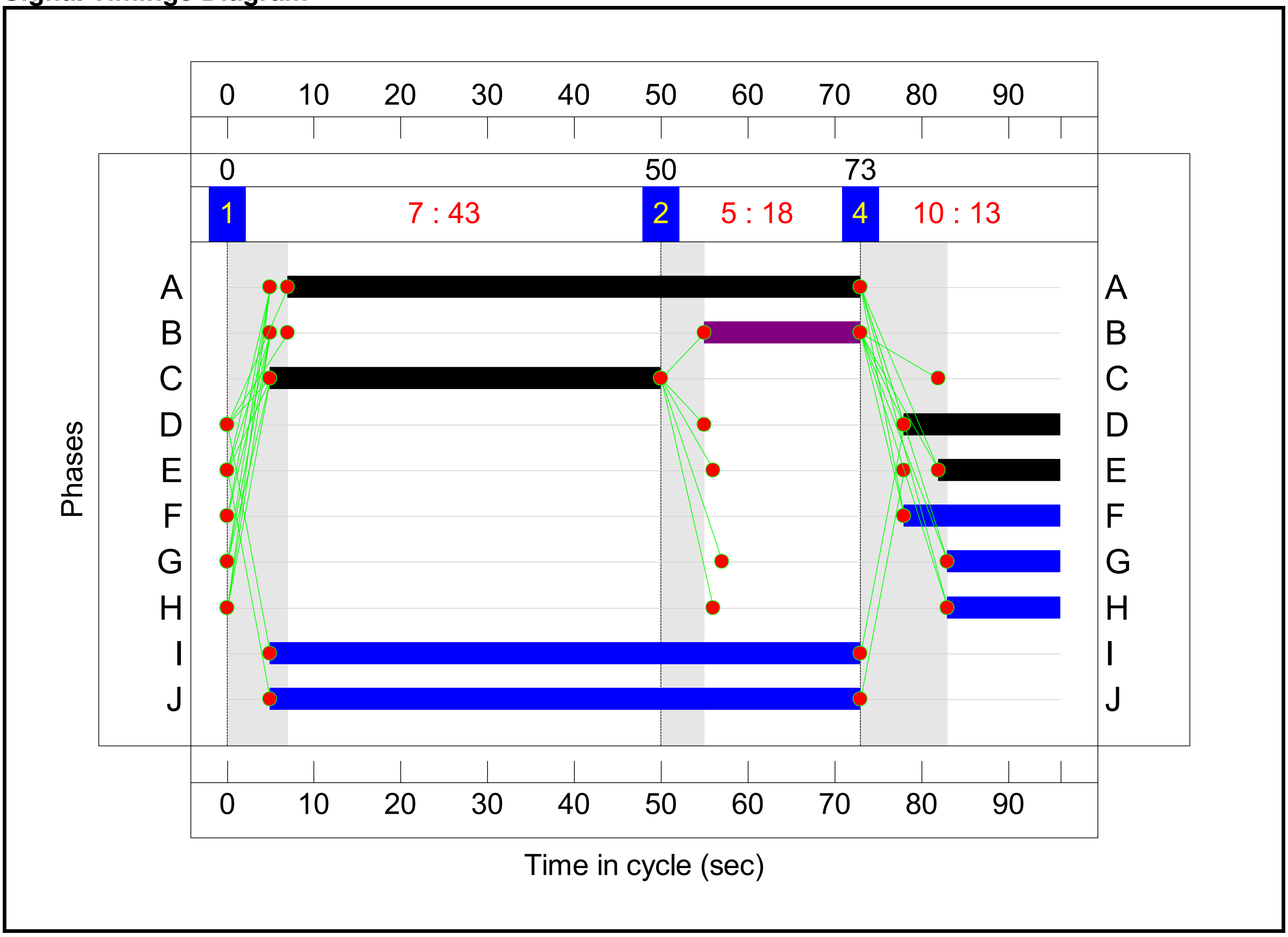
Stage Sequence Diagram



Stage Timings

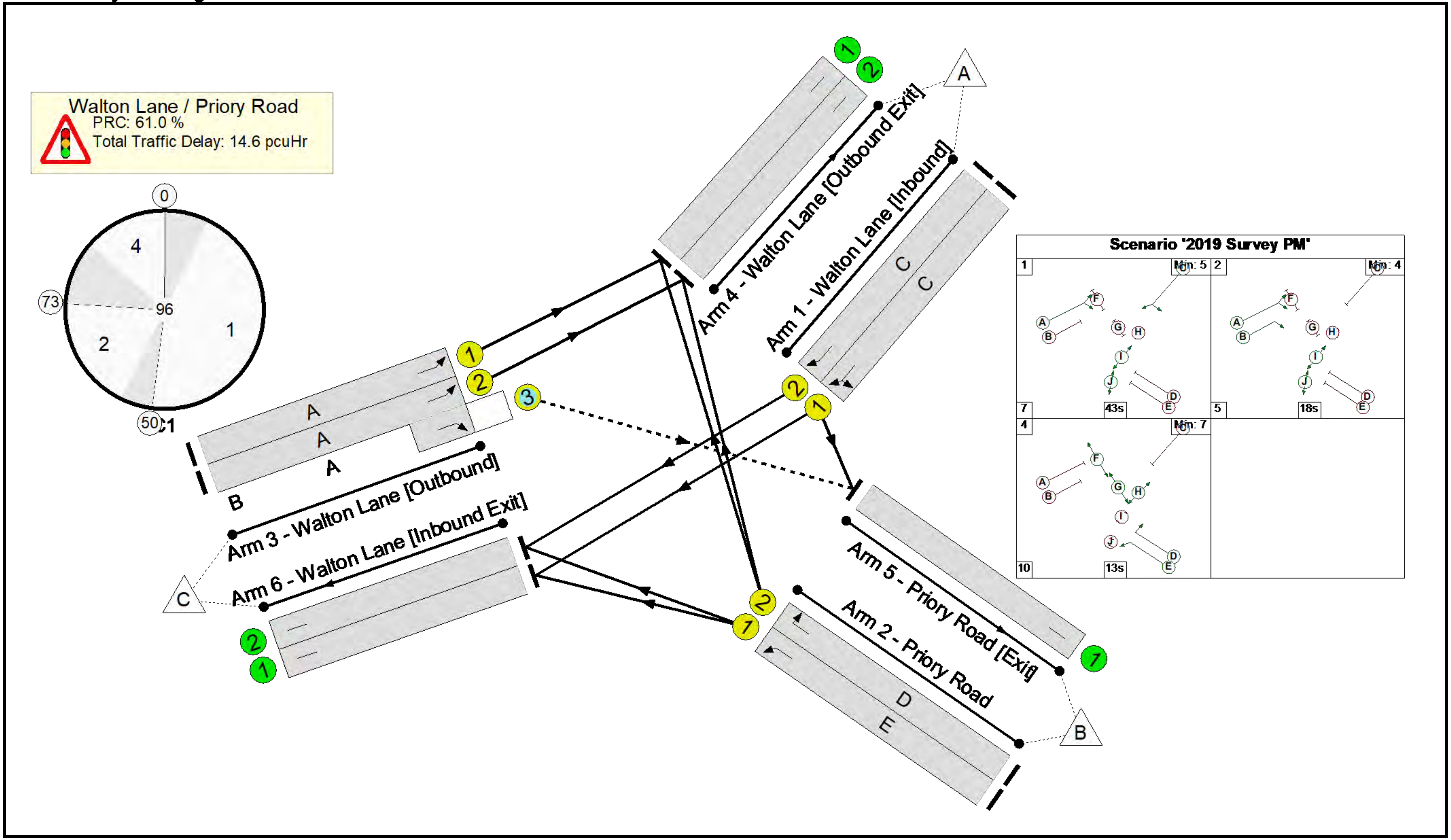
Stage	1	2	4
Duration	43	18	13
Change Point	0	50	73

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: Walton Lane / Priory Road	**-**	**-**	**N/A**	**-**	**-**		**-**	**-**	**-**	**-**	**-**	**-**	**55.9%**
Walton Lane / Priory Road	**-**	**-**	**N/A**	**-**	**-**		**-**	**-**	**-**	**-**	**-**	**-**	**55.9%**
1/1	Walton Lane [Inbound] Left Ahead	U	N/A	N/A	C		1	45	-	499	1940	930	53.7%
1/2	Walton Lane [Inbound] Ahead	U	N/A	N/A	C		1	45	-	541	2055	985	54.9%
2/1	Priory Road Left	U	N/A	N/A	E		1	14	-	169	1935	302	55.9%
2/2	Priory Road Right	U	N/A	N/A	D		1	18	-	70	2055	407	17.2%
3/1	Walton Lane [Outbound] Ahead	U	N/A	N/A	A		1	66	-	745	1945	1357	54.9%
3/2+3/3	Walton Lane [Outbound] Ahead Right	U+O	N/A	N/A	A	B	1	66	18	346	2095:2105	2+625	55.2 : 55.2%
4/1	Walton Lane [Outbound Exit]	U	N/A	N/A	-		-	-	-	780	Inf	Inf	0.0%
4/2	Walton Lane [Outbound Exit]	U	N/A	N/A	-		-	-	-	36	Inf	Inf	0.0%
5/1	Priory Road [Exit]	U	N/A	N/A	-		-	-	-	413	Inf	Inf	0.0%
6/1	Walton Lane [Inbound Exit]	U	N/A	N/A	-		-	-	-	516	Inf	Inf	0.0%
6/2	Walton Lane [Inbound Exit]	U	N/A	N/A	-		-	-	-	625	Inf	Inf	0.0%

Full Input Data And Results

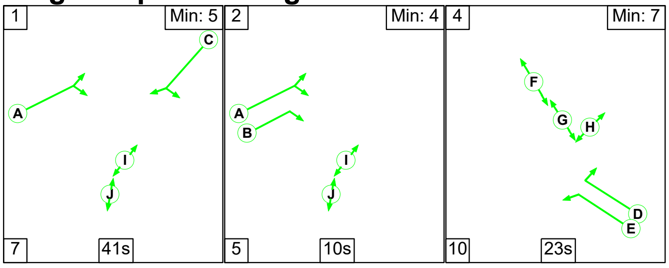
Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network: Walton Lane / Priory Road	**-**	**-**	**89**	**249**	**7**	**10.6**	**3.1**	**0.9**	**14.6**	**-**	**-**	**-**	**-**
Walton Lane / Priory Road	**-**	**-**	**89**	**249**	**7**	**10.6**	**3.1**	**0.9**	**14.6**	**-**	**-**	**-**	**-**
1/1	499	499	-	-	-	2.4	0.6	-	3.0	21.7	9.3	0.6	9.9
1/2	541	541	-	-	-	2.7	0.6	-	3.3	21.7	10.1	0.6	10.7
2/1	169	169	-	-	-	1.8	0.6	-	2.4	50.8	4.1	0.6	4.8
2/2	70	70	-	-	-	0.6	0.1	-	0.7	37.3	1.5	0.1	1.6
3/1	745	745	-	-	-	1.5	0.6	-	2.1	10.0	9.7	0.6	10.3
3/2+3/3	346	346	89	249	7	1.6	0.6	0.9	3.2	32.9	7.7	0.6	8.3
4/1	780	780	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
4/2	36	36	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/1	413	413	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/1	516	516	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/2	625	625	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0

C1 PRC for Signalled Lanes (%): 61.0 Total Delay for Signalled Lanes (pcuHr): 14.62 Cycle Time (s): 96
PRC Over All Lanes (%): 61.0 Total Delay Over All Lanes(pcuHr): 14.62

Full Input Data And Results

Scenario 3: '2028 Base AM' (FG5: '2028 Base AM', Plan 1: 'Network Control Plan 1')

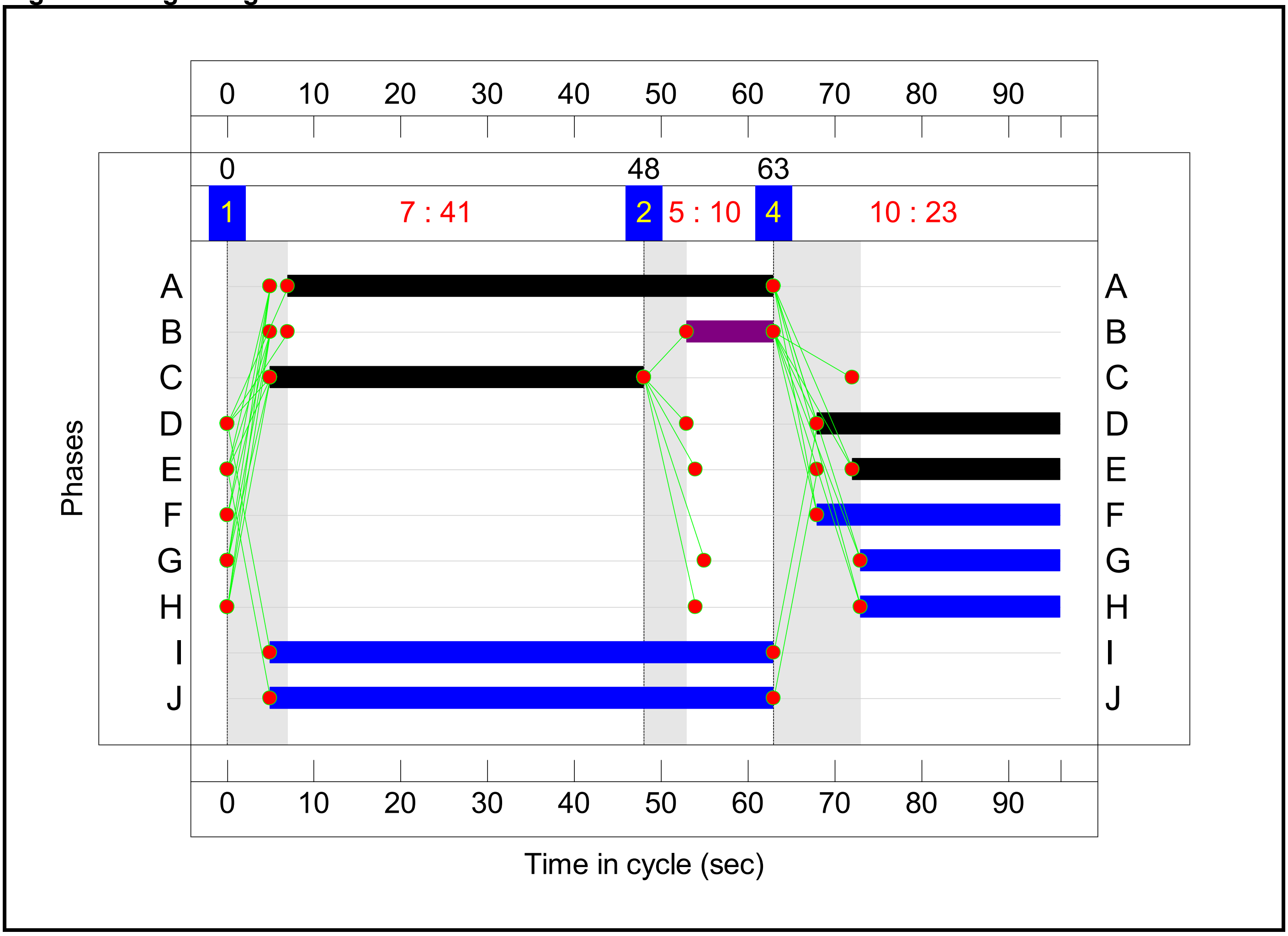
Stage Sequence Diagram



Stage Timings

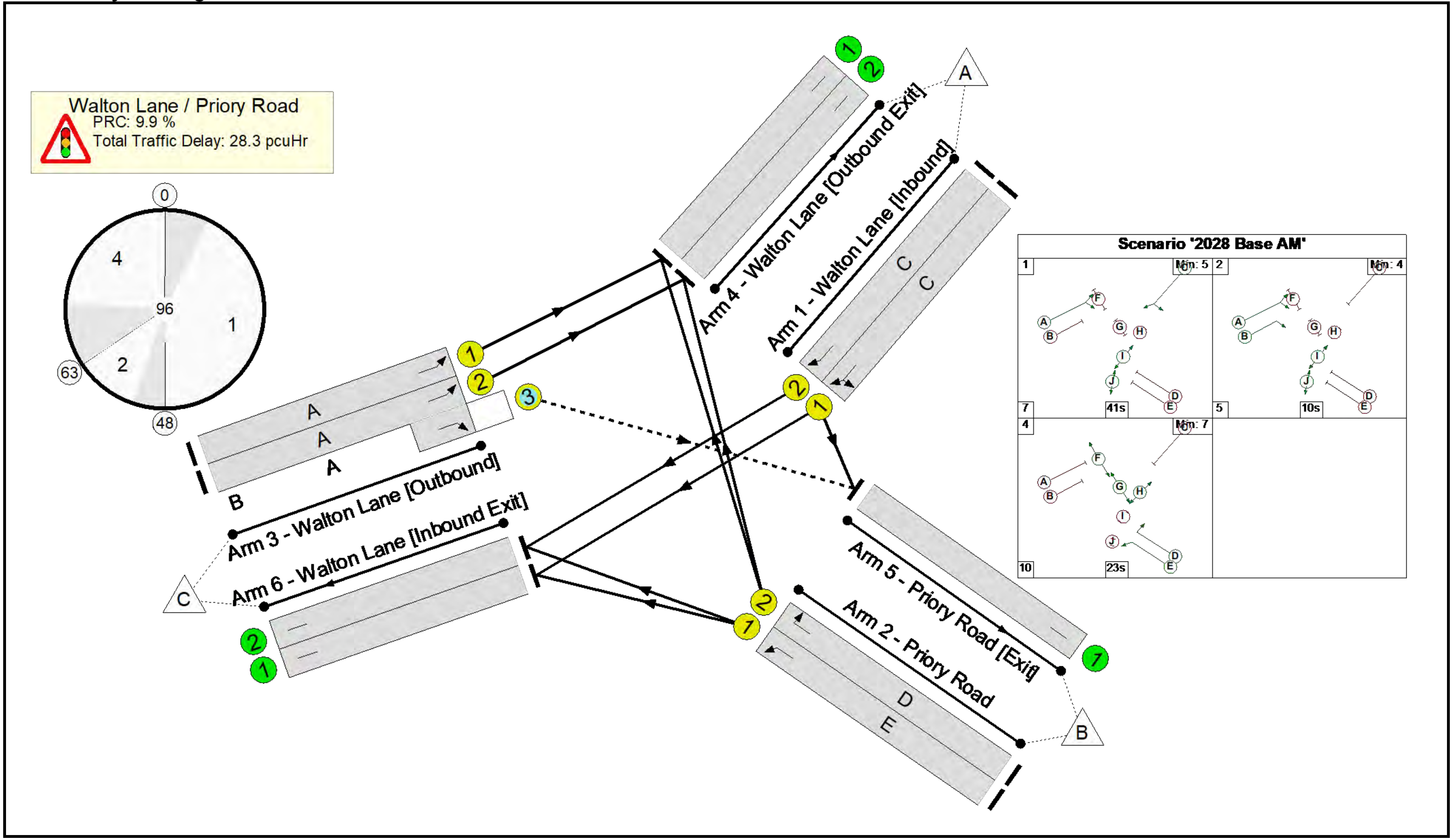
Stage	1	2	4
Duration	41	10	23
Change Point	0	48	63

Signal Timings Diagram



Full Input Data And Results

Network Layout Diagram



Full Input Data And Results

Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network: Walton Lane / Priory Road	**-**	**-**	**N/A**	**-**	**-**		**-**	**-**	**-**	**-**	**-**	**-**	**81.9%**
Walton Lane / Priory Road	**-**	**-**	**N/A**	**-**	**-**		**-**	**-**	**-**	**-**	**-**	**-**	**81.9%**
1/1	Walton Lane [Inbound] Left Ahead	U	N/A	N/A	C		1	43	-	710	1940	889	79.9%
1/2	Walton Lane [Inbound] Ahead	U	N/A	N/A	C		1	43	-	760	2055	942	80.7%
2/1	Priory Road Left	U	N/A	N/A	E		1	24	-	402	1935	504	79.8%
2/2	Priory Road Right	U	N/A	N/A	D		1	28	-	132	2055	621	21.3%
3/1	Walton Lane [Outbound] Ahead	U	N/A	N/A	A		1	56	-	752	1945	1155	65.1%
3/2+3/3	Walton Lane [Outbound] Ahead Right	U+O	N/A	N/A	A	B	1	56	10	259	2095:2105	0+316	0.0 : 81.9%
4/1	Walton Lane [Outbound Exit]	U	N/A	N/A	-		-	-	-	818	Inf	Inf	0.0%
4/2	Walton Lane [Outbound Exit]	U	N/A	N/A	-		-	-	-	66	Inf	Inf	0.0%
5/1	Priory Road [Exit]	U	N/A	N/A	-		-	-	-	357	Inf	Inf	0.0%
6/1	Walton Lane [Inbound Exit]	U	N/A	N/A	-		-	-	-	813	Inf	Inf	0.0%
6/2	Walton Lane [Inbound Exit]	U	N/A	N/A	-		-	-	-	961	Inf	Inf	0.0%

Full Input Data And Results

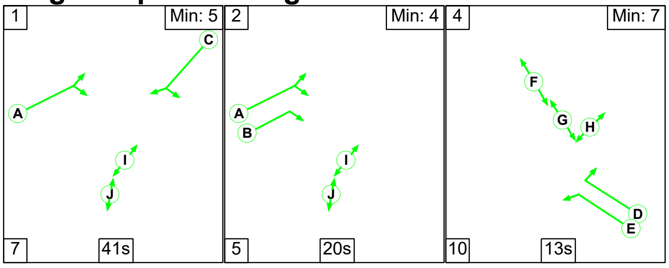
Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network: Walton Lane / Priory Road	**-**	**-**	**0**	**254**	**5**	**18.4**	**9.1**	**0.9**	**28.3**	**-**	**-**	**-**	**-**
Walton Lane / Priory Road	**-**	**-**	**0**	**254**	**5**	**18.4**	**9.1**	**0.9**	**28.3**	**-**	**-**	**-**	**-**
1/1	710	710	-	-	-	4.4	1.9	-	6.3	32.0	16.2	1.9	18.1
1/2	760	760	-	-	-	4.7	2.0	-	6.8	32.0	17.3	2.0	19.4
2/1	402	402	-	-	-	3.7	1.9	-	5.6	50.2	9.9	1.9	11.8
2/2	132	132	-	-	-	0.9	0.1	-	1.1	28.7	2.6	0.1	2.7
3/1	752	752	-	-	-	2.7	0.9	-	3.6	17.4	13.2	0.9	14.1
3/2+3/3	259	259	0	254	5	2.0	2.1	0.9	4.9	68.7	6.7	2.1	8.8
4/1	818	818	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
4/2	66	66	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/1	357	357	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/1	813	813	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/2	961	961	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0

C1 PRC for Signalled Lanes (%): 9.9 Total Delay for Signalled Lanes (pcuHr): 28.30 Cycle Time (s): 96
PRC Over All Lanes (%): 9.9 Total Delay Over All Lanes(pcuHr): 28.30

Full Input Data And Results

Scenario 4: '2028 Base PM' (FG6: '2028 Base PM', Plan 1: 'Network Control Plan 1')

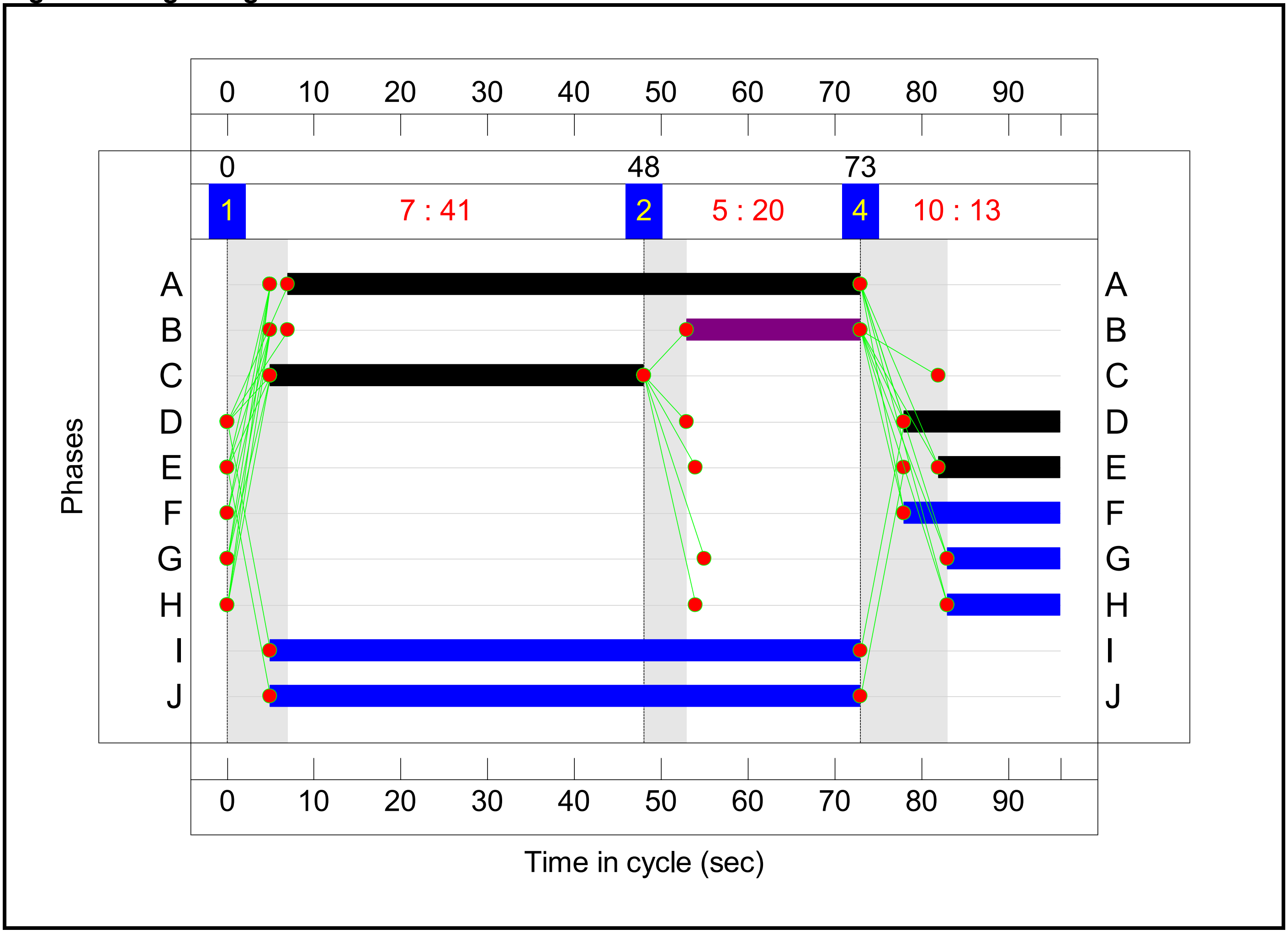
Stage Sequence Diagram



Stage Timings

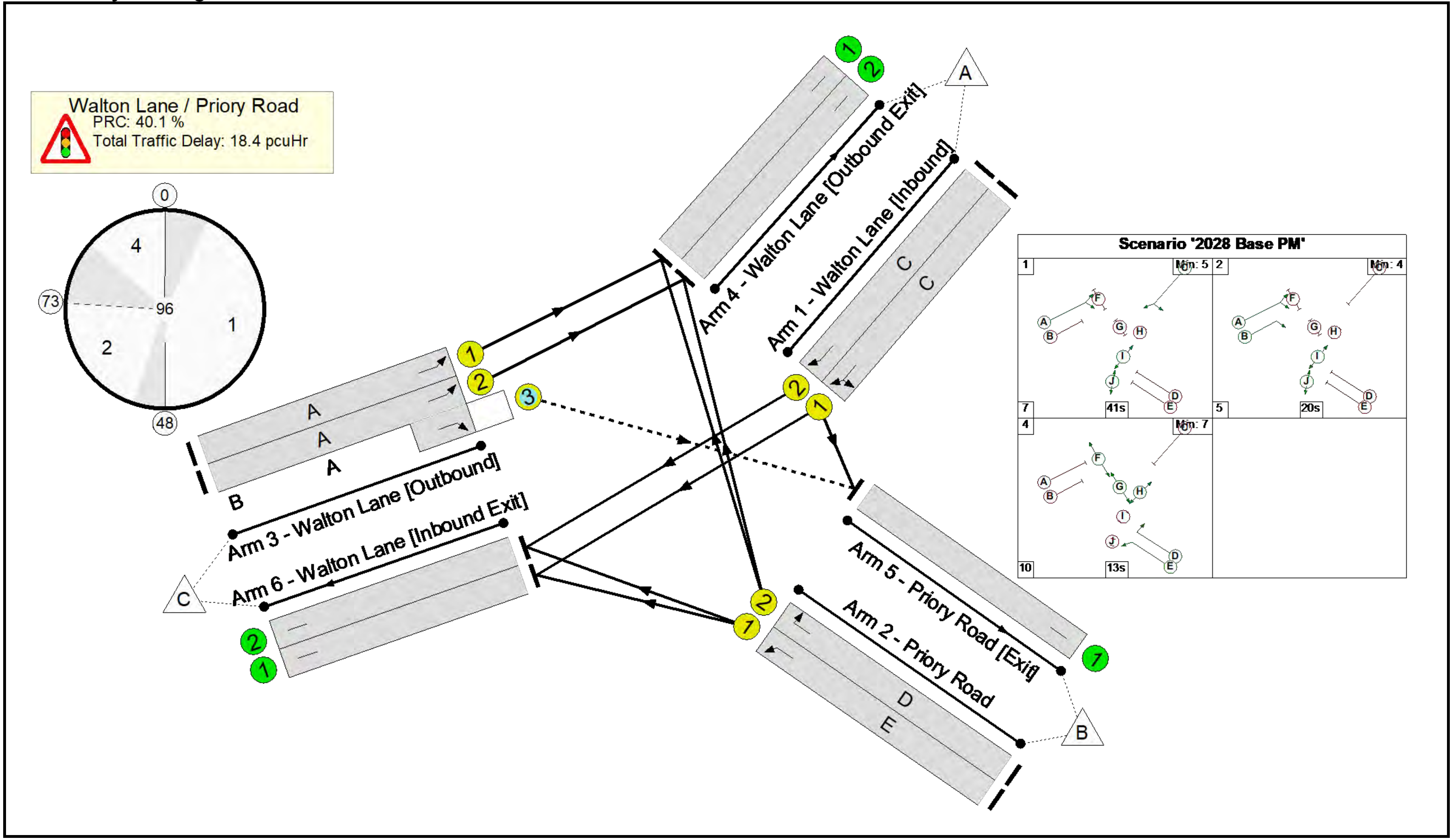
Stage	1	2	4
Duration	41	20	13
Change Point	0	48	73

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: Walton Lane / Priory Road	-	-	**N/A**	-	-		-	-	-	-	-	-	**64.2%**
Walton Lane / Priory Road	-	-	**N/A**	-	-		-	-	-	-	-	-	**64.2%**
1/1	Walton Lane [Inbound] Left Ahead	U	N/A	N/A	C		1	43	-	562	1940	889	63.2%
1/2	Walton Lane [Inbound] Ahead	U	N/A	N/A	C		1	43	-	605	2055	942	64.2%
2/1	Priory Road Left	U	N/A	N/A	E		1	14	-	190	1935	302	62.8%
2/2	Priory Road Right	U	N/A	N/A	D		1	18	-	78	2055	407	19.2%
3/1	Walton Lane [Outbound] Ahead	U	N/A	N/A	A		1	66	-	836	1945	1357	61.6%
3/2+3/3	Walton Lane [Outbound] Ahead Right	U+O	N/A	N/A	A	B	1	66	20	386	2095:2105	0+618	0.0 : 62.5%
4/1	Walton Lane [Outbound Exit]	U	N/A	N/A	-		-	-	-	875	Inf	Inf	0.0%
4/2	Walton Lane [Outbound Exit]	U	N/A	N/A	-		-	-	-	39	Inf	Inf	0.0%
5/1	Priory Road [Exit]	U	N/A	N/A	-		-	-	-	462	Inf	Inf	0.0%
6/1	Walton Lane [Inbound Exit]	U	N/A	N/A	-		-	-	-	581	Inf	Inf	0.0%
6/2	Walton Lane [Inbound Exit]	U	N/A	N/A	-		-	-	-	700	Inf	Inf	0.0%

Full Input Data And Results

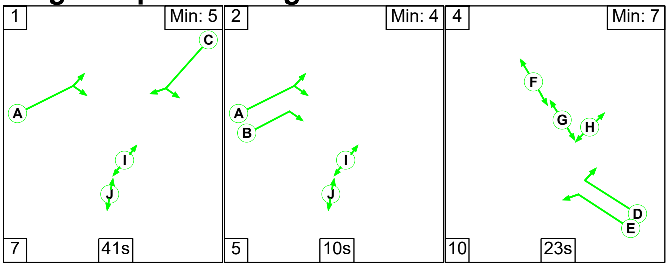
Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network: Walton Lane / Priory Road	**-**	**-**	**38**	**340**	**8**	**13.2**	**4.3**	**0.9**	**18.4**	**-**	**-**	**-**	**-**
Walton Lane / Priory Road	**-**	**-**	**38**	**340**	**8**	**13.2**	**4.3**	**0.9**	**18.4**	**-**	**-**	**-**	**-**
1/1	562	562	-	-	-	3.1	0.9	-	3.9	25.3	11.4	0.9	12.3
1/2	605	605	-	-	-	3.4	0.9	-	4.2	25.3	12.3	0.9	13.2
2/1	190	190	-	-	-	2.0	0.8	-	2.8	53.7	4.7	0.8	5.5
2/2	78	78	-	-	-	0.7	0.1	-	0.8	37.6	1.7	0.1	1.9
3/1	836	836	-	-	-	1.8	0.8	-	2.6	11.1	11.6	0.8	12.4
3/2+3/3	386	386	38	340	8	2.2	0.8	0.9	4.0	37.3	8.9	0.8	9.7
4/1	875	875	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
4/2	39	39	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/1	462	462	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/1	581	581	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/2	700	700	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0

C1 PRC for Signalled Lanes (%): 40.1 Total Delay for Signalled Lanes (pcuHr): 18.43 Cycle Time (s): 96
PRC Over All Lanes (%): 40.1 Total Delay Over All Lanes(pcuHr): 18.43

Full Input Data And Results

Scenario 5: '2028 Base + Dev AM' (FG7: '2028 Base + Dev AM', Plan 1: 'Network Control Plan 1')

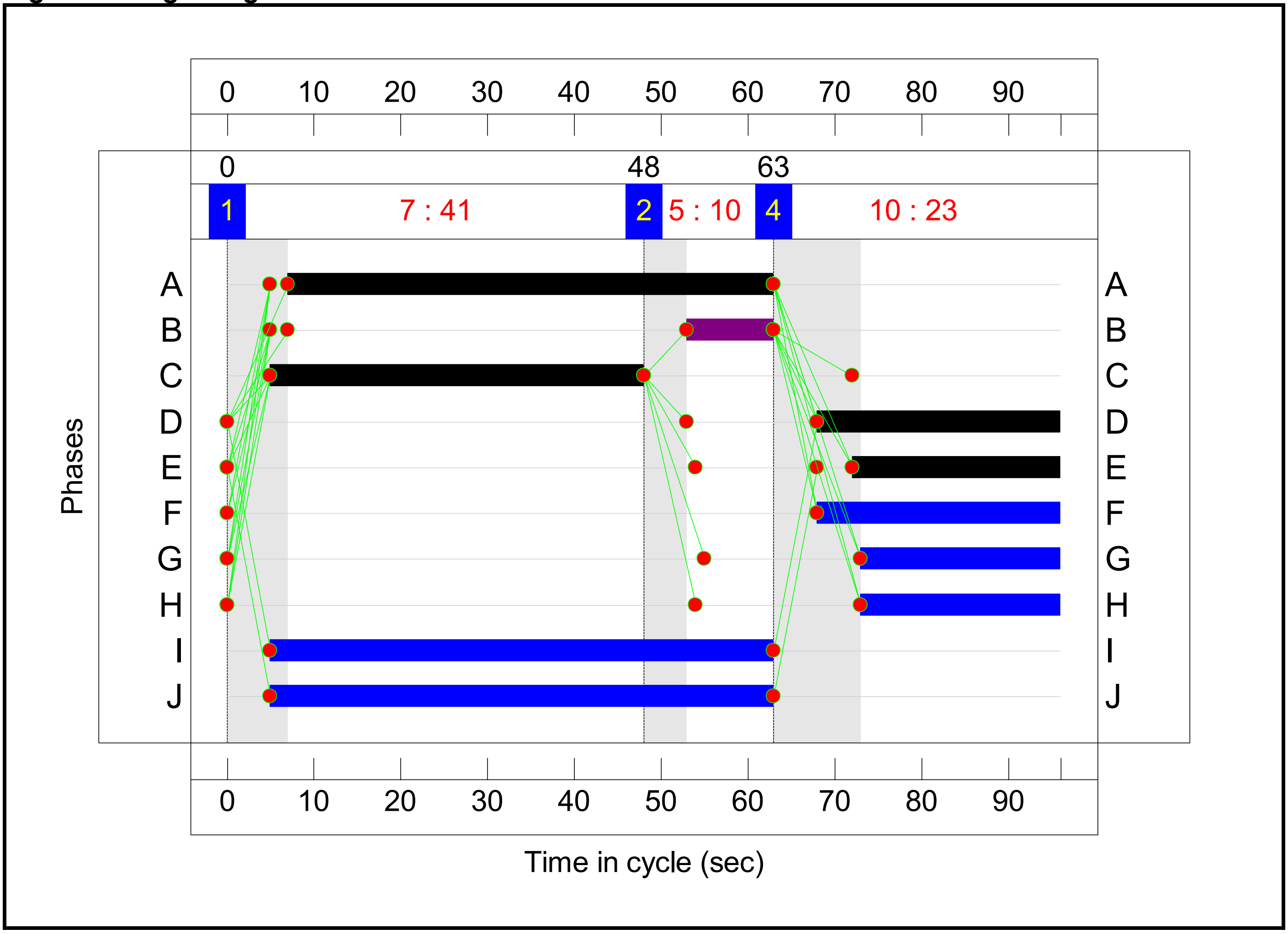
Stage Sequence Diagram



Stage Timings

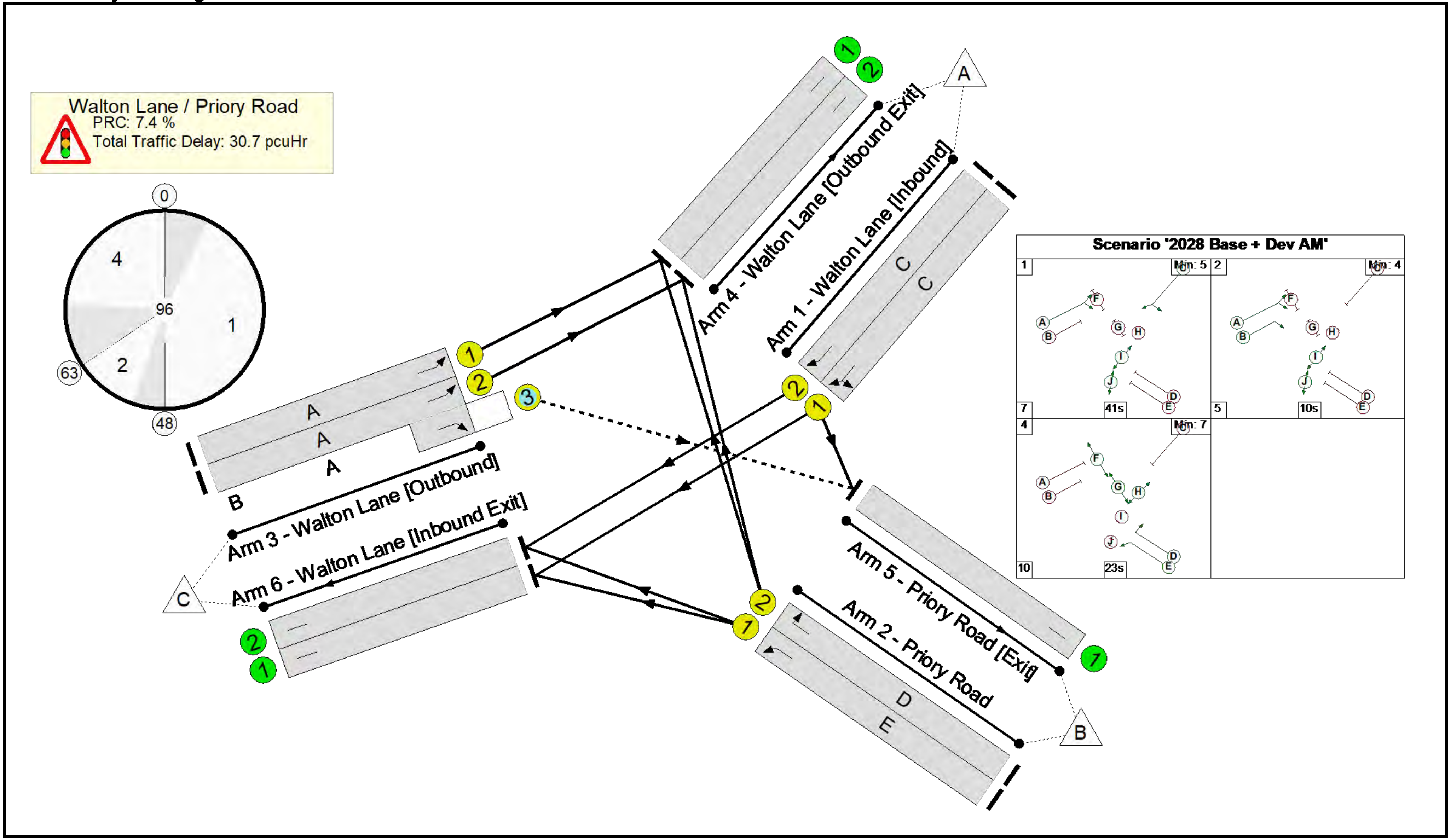
Stage	1	2	4
Duration	41	10	23
Change Point	0	48	63

Signal Timings Diagram



Full Input Data And Results

Network Layout Diagram



Full Input Data And Results

Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network: Walton Lane / Priory Road	**-**	**-**	**N/A**	**-**	**-**		**-**	**-**	**-**	**-**	**-**	**-**	**83.8%**
Walton Lane / Priory Road	**-**	**-**	**N/A**	**-**	**-**		**-**	**-**	**-**	**-**	**-**	**-**	**83.8%**
1/1	Walton Lane [Inbound] Left Ahead	U	N/A	N/A	C		1	43	-	738	1940	889	83.0%
1/2	Walton Lane [Inbound] Ahead	U	N/A	N/A	C		1	43	-	789	2055	942	83.8%
2/1	Priory Road Left	U	N/A	N/A	E		1	24	-	412	1935	504	81.8%
2/2	Priory Road Right	U	N/A	N/A	D		1	28	-	132	2055	621	21.3%
3/1	Walton Lane [Outbound] Ahead	U	N/A	N/A	A		1	56	-	790	1945	1155	68.4%
3/2+3/3	Walton Lane [Outbound] Ahead Right	U+O	N/A	N/A	A	B	1	56	10	263	2095:2105	0+316	0.0 : 83.2%
4/1	Walton Lane [Outbound Exit]	U	N/A	N/A	-		-	-	-	856	Inf	Inf	0.0%
4/2	Walton Lane [Outbound Exit]	U	N/A	N/A	-		-	-	-	66	Inf	Inf	0.0%
5/1	Priory Road [Exit]	U	N/A	N/A	-		-	-	-	361	Inf	Inf	0.0%
6/1	Walton Lane [Inbound Exit]	U	N/A	N/A	-		-	-	-	846	Inf	Inf	0.0%
6/2	Walton Lane [Inbound Exit]	U	N/A	N/A	-		-	-	-	995	Inf	Inf	0.0%

Full Input Data And Results

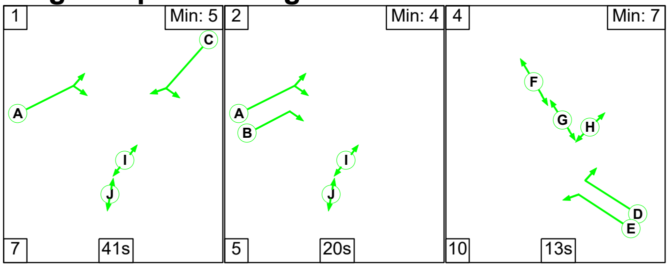
Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network: Walton Lane / Priory Road	**-**	**-**	**0**	**258**	**5**	**19.3**	**10.5**	**0.9**	**30.7**	**-**	**-**	**-**	**-**
Walton Lane / Priory Road	**-**	**-**	**0**	**258**	**5**	**19.3**	**10.5**	**0.9**	**30.7**	**-**	**-**	**-**	**-**
1/1	738	738	-	-	-	4.7	2.4	-	7.0	34.3	17.0	2.4	19.4
1/2	789	789	-	-	-	5.0	2.5	-	7.5	34.3	18.4	2.5	20.9
2/1	412	412	-	-	-	3.8	2.1	-	6.0	52.1	10.3	2.1	12.4
2/2	132	132	-	-	-	0.9	0.1	-	1.1	28.7	2.6	0.1	2.7
3/1	790	790	-	-	-	2.9	1.1	-	4.0	18.2	14.3	1.1	15.3
3/2+3/3	263	263	0	258	5	2.0	2.3	0.9	5.2	70.6	6.8	2.3	9.0
4/1	856	856	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
4/2	66	66	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/1	361	361	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/1	846	846	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/2	995	995	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0

C1 PRC for Signalled Lanes (%): 7.4 Total Delay for Signalled Lanes (pcuHr): 30.71 Cycle Time (s): 96
PRC Over All Lanes (%): 7.4 Total Delay Over All Lanes(pcuHr): 30.71

Full Input Data And Results

Scenario 6: '2028 Base + Dev PM' (FG8: '2028 Base + Dev PM', Plan 1: 'Network Control Plan 1')

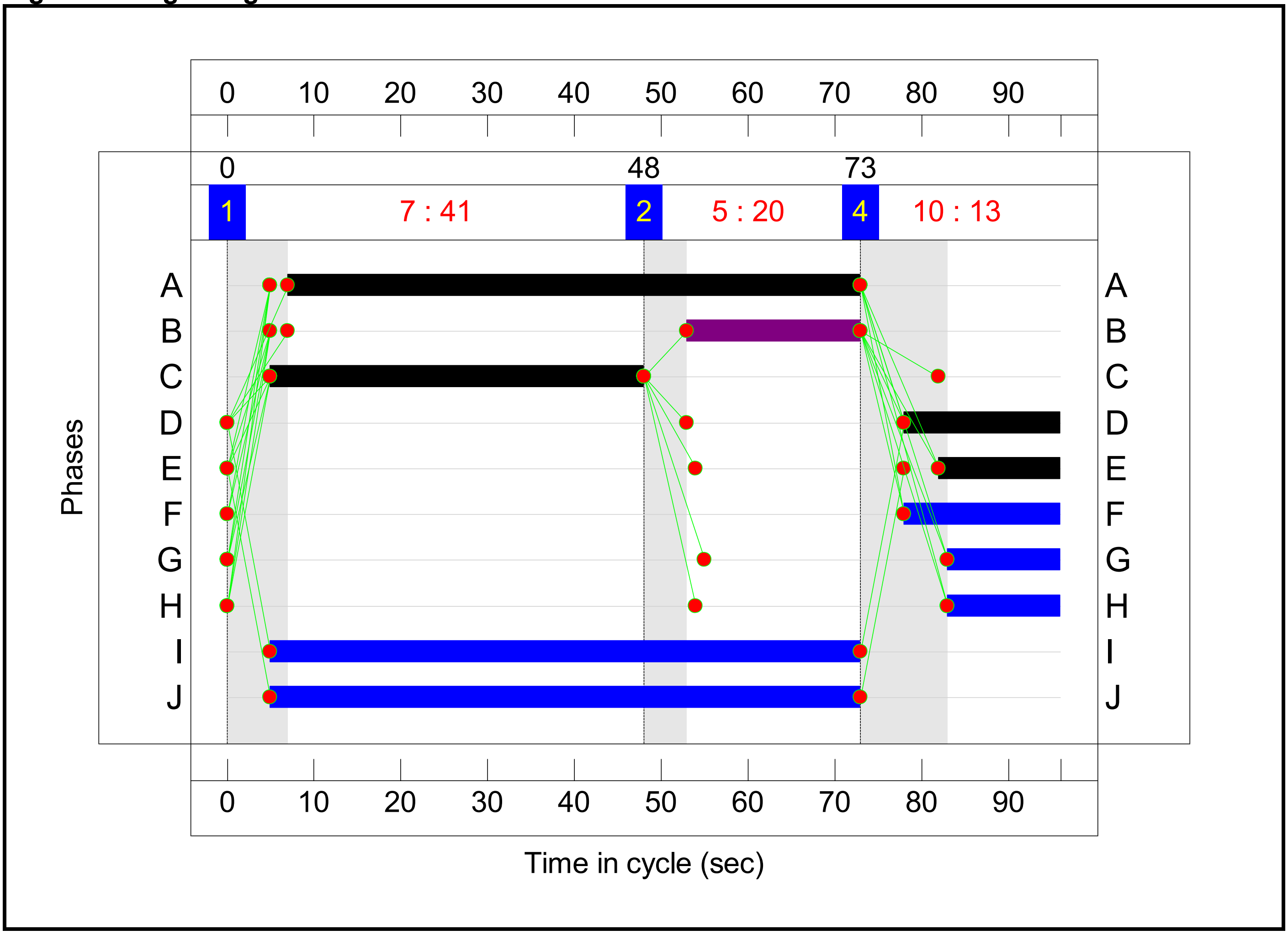
Stage Sequence Diagram



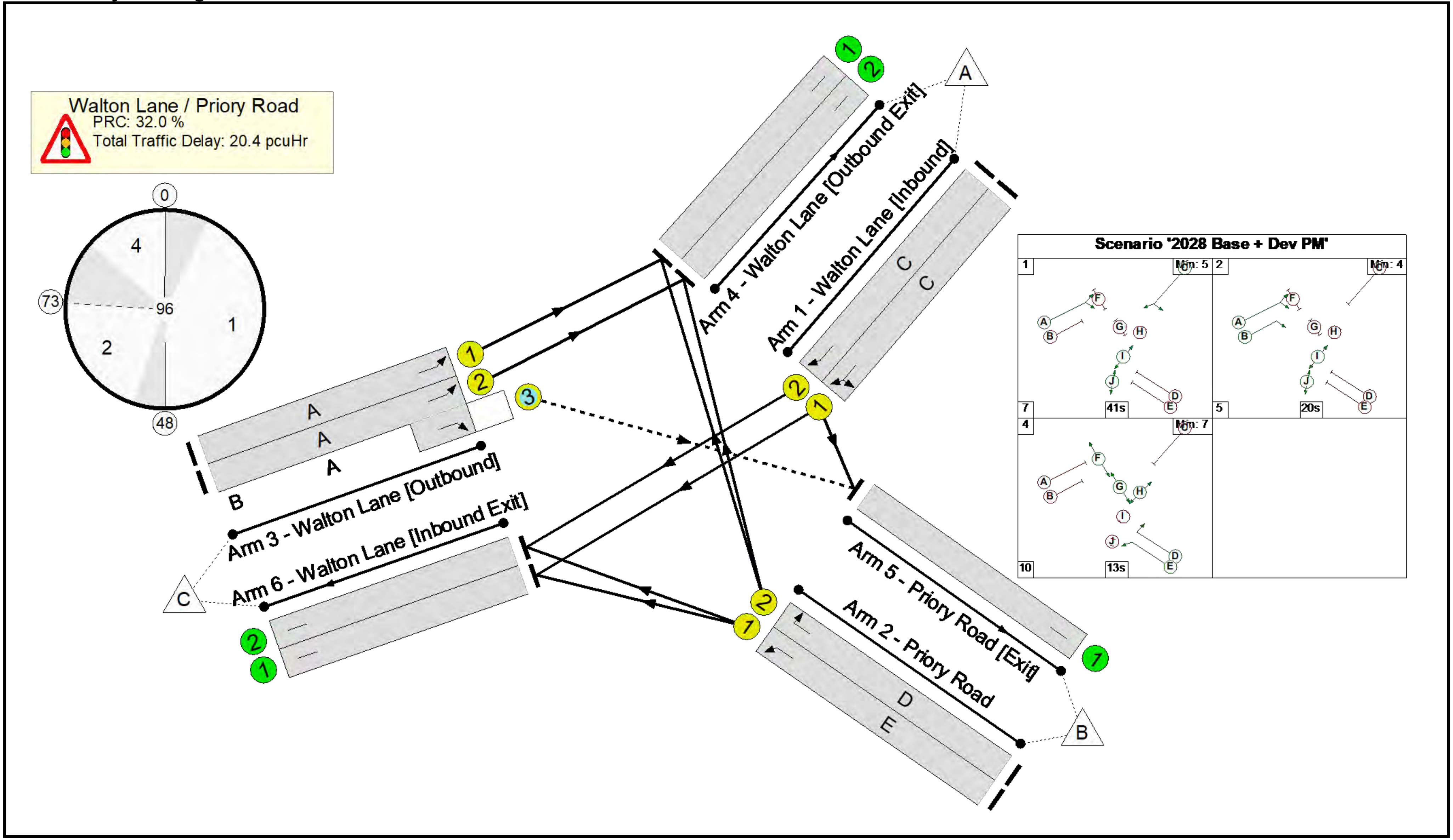
Stage Timings

Stage	1	2	4
Duration	41	20	13
Change Point	0	48	73

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: Walton Lane / Priory Road	**-**	**-**	**N/A**	**-**	**-**		**-**	**-**	**-**	**-**	**-**	**-**	**68.2%**
Walton Lane / Priory Road	**-**	**-**	**N/A**	**-**	**-**		**-**	**-**	**-**	**-**	**-**	**-**	**68.2%**
1/1	Walton Lane [Inbound] Left Ahead	U	N/A	N/A	C		1	43	-	596	1940	889	67.0%
1/2	Walton Lane [Inbound] Ahead	U	N/A	N/A	C		1	43	-	642	2055	942	68.2%
2/1	Priory Road Left	U	N/A	N/A	E		1	14	-	196	1935	302	64.8%
2/2	Priory Road Right	U	N/A	N/A	D		1	18	-	78	2055	407	19.2%
3/1	Walton Lane [Outbound] Ahead	U	N/A	N/A	A		1	66	-	910	1945	1357	67.0%
3/2+3/3	Walton Lane [Outbound] Ahead Right	U+O	N/A	N/A	A	B	1	66	20	395	2095:2105	0+598	0.0 : 66.1%
4/1	Walton Lane [Outbound Exit]	U	N/A	N/A	-		-	-	-	949	Inf	Inf	0.0%
4/2	Walton Lane [Outbound Exit]	U	N/A	N/A	-		-	-	-	39	Inf	Inf	0.0%
5/1	Priory Road [Exit]	U	N/A	N/A	-		-	-	-	471	Inf	Inf	0.0%
6/1	Walton Lane [Inbound Exit]	U	N/A	N/A	-		-	-	-	618	Inf	Inf	0.0%
6/2	Walton Lane [Inbound Exit]	U	N/A	N/A	-		-	-	-	740	Inf	Inf	0.0%

Full Input Data And Results

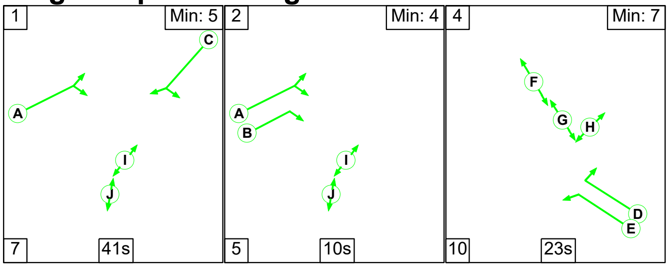
Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network: Walton Lane / Priory Road	**-**	**-**	**19**	**368**	**8**	**14.3**	**5.1**	**1.0**	**20.4**	**-**	**-**	**-**	**-**
Walton Lane / Priory Road	**-**	**-**	**19**	**368**	**8**	**14.3**	**5.1**	**1.0**	**20.4**	**-**	**-**	**-**	**-**
1/1	596	596	-	-	-	3.4	1.0	-	4.4	26.4	12.4	1.0	13.4
1/2	642	642	-	-	-	3.7	1.1	-	4.7	26.4	13.4	1.1	14.4
2/1	196	196	-	-	-	2.1	0.9	-	3.0	54.7	4.9	0.9	5.8
2/2	78	78	-	-	-	0.7	0.1	-	0.8	37.6	1.7	0.1	1.9
3/1	910	910	-	-	-	2.1	1.0	-	3.1	12.2	13.7	1.0	14.7
3/2+3/3	395	395	19	368	8	2.4	1.0	1.0	4.4	39.9	9.2	1.0	10.2
4/1	949	949	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
4/2	39	39	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/1	471	471	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/1	618	618	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/2	740	740	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0

C1 PRC for Signalled Lanes (%): 32.0 Total Delay for Signalled Lanes (pcuHr): 20.35 Cycle Time (s): 96
PRC Over All Lanes (%): 32.0 Total Delay Over All Lanes(pcuHr): 20.35

Full Input Data And Results

Scenario 7: '2032 Base AM' (FG11: '2032 Base AM', Plan 1: 'Network Control Plan 1')

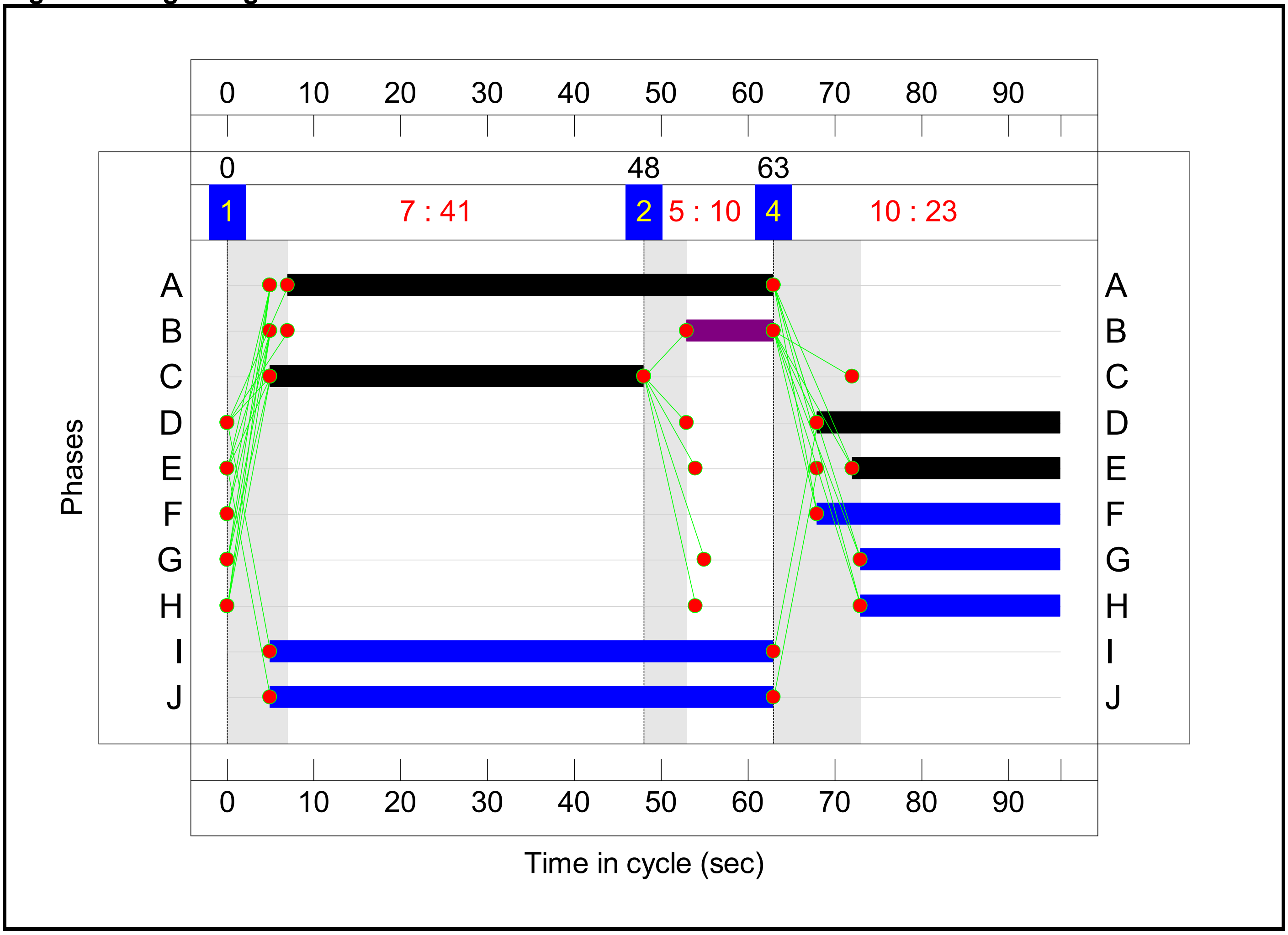
Stage Sequence Diagram



Stage Timings

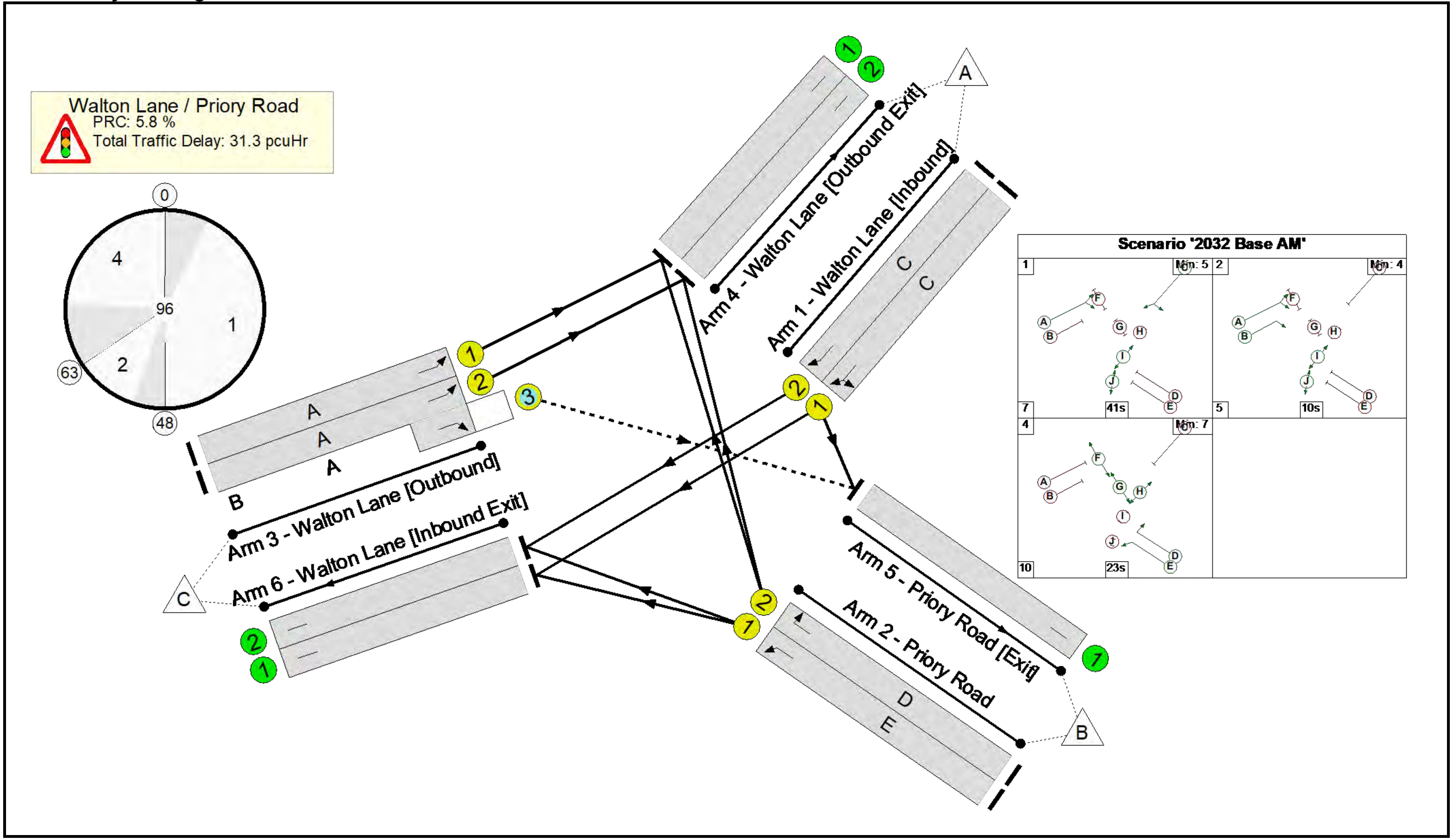
Stage	1	2	4
Duration	41	10	23
Change Point	0	48	63

Signal Timings Diagram



Full Input Data And Results

Network Layout Diagram



Full Input Data And Results

Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network: Walton Lane / Priory Road	**-**	**-**	**N/A**	**-**	**-**		**-**	**-**	**-**	**-**	**-**	**-**	**85.1%**
Walton Lane / Priory Road	**-**	**-**	**N/A**	**-**	**-**		**-**	**-**	**-**	**-**	**-**	**-**	**85.1%**
1/1	Walton Lane [Inbound] Left Ahead	U	N/A	N/A	C		1	43	-	738	1940	889	83.0%
1/2	Walton Lane [Inbound] Ahead	U	N/A	N/A	C		1	43	-	790	2055	942	83.9%
2/1	Priory Road Left	U	N/A	N/A	E		1	24	-	418	1935	504	83.0%
2/2	Priory Road Right	U	N/A	N/A	D		1	28	-	138	2055	621	22.2%
3/1	Walton Lane [Outbound] Ahead	U	N/A	N/A	A		1	56	-	782	1945	1155	67.7%
3/2+3/3	Walton Lane [Outbound] Ahead Right	U+O	N/A	N/A	A	B	1	56	10	269	2095:2105	0+316	0.0 : 85.1%
4/1	Walton Lane [Outbound Exit]	U	N/A	N/A	-		-	-	-	851	Inf	Inf	0.0%
4/2	Walton Lane [Outbound Exit]	U	N/A	N/A	-		-	-	-	69	Inf	Inf	0.0%
5/1	Priory Road [Exit]	U	N/A	N/A	-		-	-	-	370	Inf	Inf	0.0%
6/1	Walton Lane [Inbound Exit]	U	N/A	N/A	-		-	-	-	846	Inf	Inf	0.0%
6/2	Walton Lane [Inbound Exit]	U	N/A	N/A	-		-	-	-	999	Inf	Inf	0.0%

Full Input Data And Results

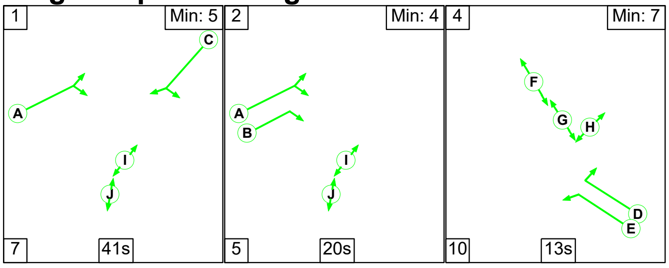
Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network: Walton Lane / Priory Road	**-**	**-**	**0**	**263**	**6**	**19.5**	**10.9**	**0.9**	**31.3**	**-**	**-**	**-**	**-**
Walton Lane / Priory Road	**-**	**-**	**0**	**263**	**6**	**19.5**	**10.9**	**0.9**	**31.3**	**-**	**-**	**-**	**-**
1/1	738	738	-	-	-	4.7	2.4	-	7.0	34.3	17.0	2.4	19.4
1/2	790	790	-	-	-	5.0	2.5	-	7.5	34.4	18.4	2.5	21.0
2/1	418	418	-	-	-	3.9	2.3	-	6.2	53.4	10.4	2.3	12.8
2/2	138	138	-	-	-	1.0	0.1	-	1.1	28.8	2.7	0.1	2.9
3/1	782	782	-	-	-	2.9	1.0	-	3.9	18.1	14.1	1.0	15.2
3/2+3/3	269	269	0	263	6	2.1	2.6	0.9	5.5	74.0	6.8	2.6	9.3
4/1	851	851	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
4/2	69	69	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/1	370	370	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/1	846	846	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/2	999	999	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0

C1 PRC for Signalled Lanes (%): 5.8 Total Delay for Signalled Lanes (pcuHr): 31.32 Cycle Time (s): 96
PRC Over All Lanes (%): 5.8 Total Delay Over All Lanes(pcuHr): 31.32

Full Input Data And Results

Scenario 8: '2032 Base PM' (FG12: '2032 Base PM', Plan 1: 'Network Control Plan 1')

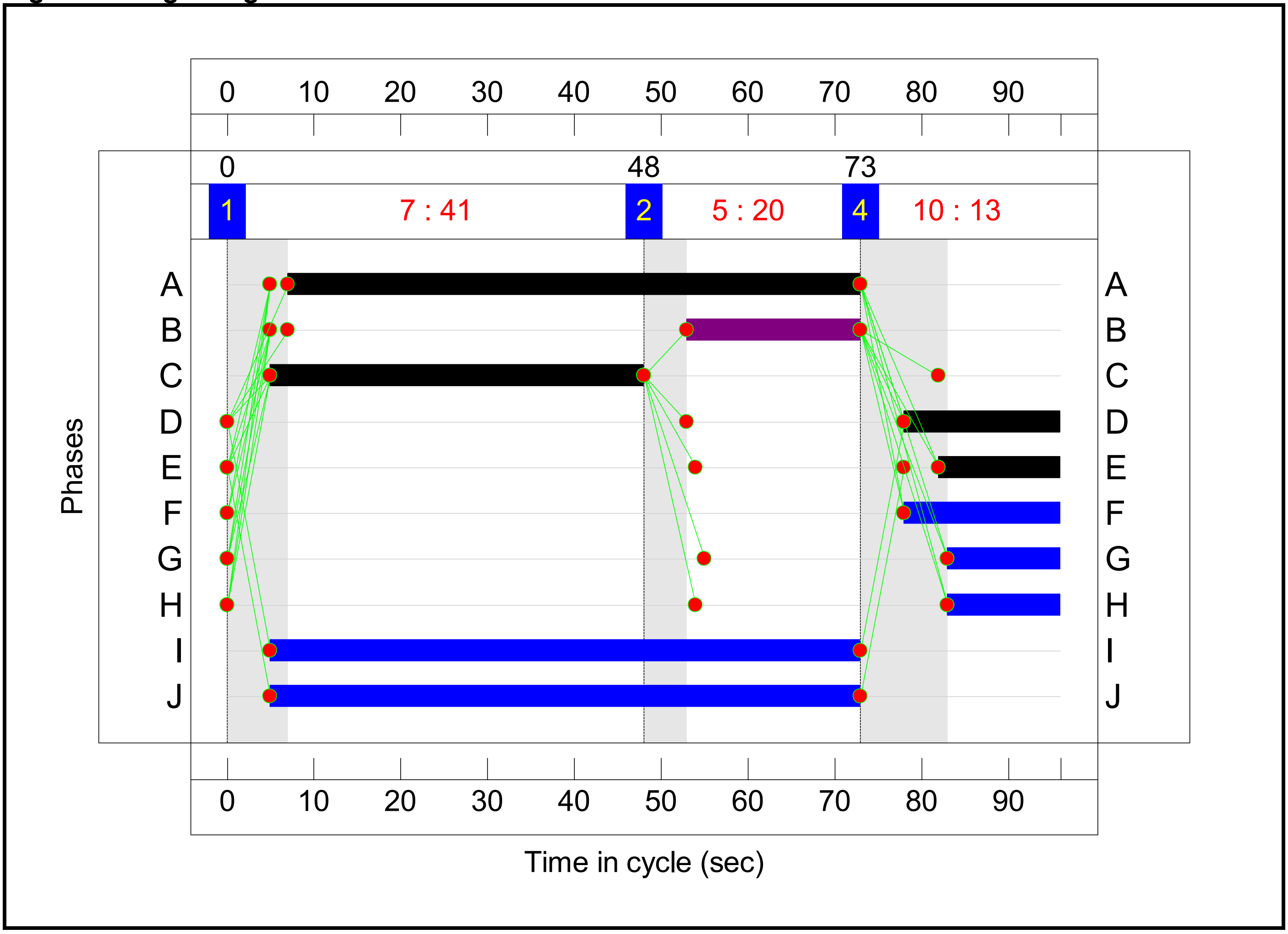
Stage Sequence Diagram



Stage Timings

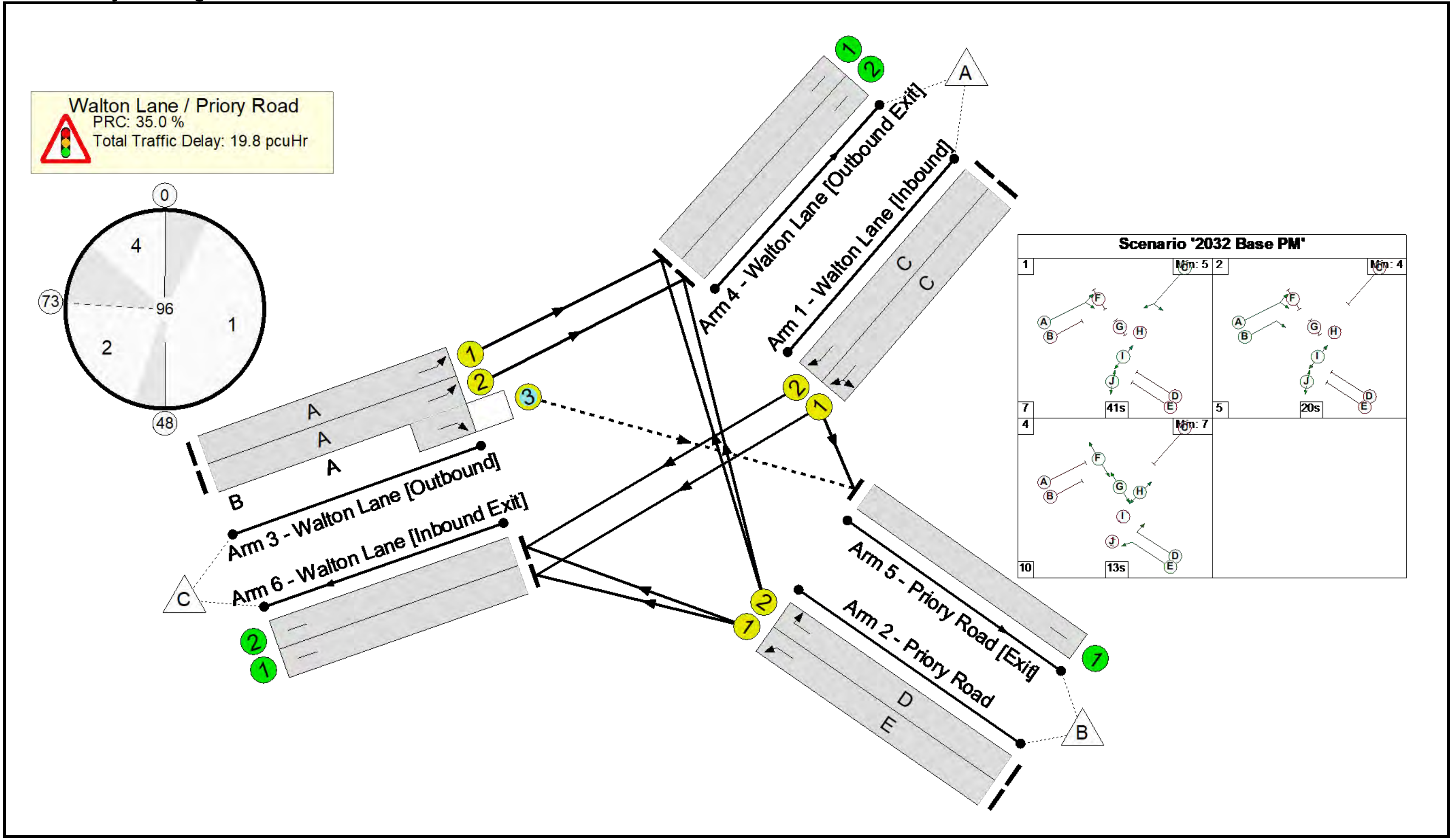
Stage	1	2	4
Duration	41	20	13
Change Point	0	48	73

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: Walton Lane / Priory Road	**-**	**-**	**N/A**	**-**	**-**		**-**	**-**	**-**	**-**	**-**	**-**	**66.7%**
Walton Lane / Priory Road	**-**	**-**	**N/A**	**-**	**-**		**-**	**-**	**-**	**-**	**-**	**-**	**66.7%**
1/1	Walton Lane [Inbound] Left Ahead	U	N/A	N/A	C		1	43	-	584	1940	889	65.7%
1/2	Walton Lane [Inbound] Ahead	U	N/A	N/A	C		1	43	-	628	2055	942	66.7%
2/1	Priory Road Left	U	N/A	N/A	E		1	14	-	197	1935	302	65.2%
2/2	Priory Road Right	U	N/A	N/A	D		1	18	-	81	2055	407	19.9%
3/1	Walton Lane [Outbound] Ahead	U	N/A	N/A	A		1	66	-	868	1945	1357	63.9%
3/2+3/3	Walton Lane [Outbound] Ahead Right	U+O	N/A	N/A	A	B	1	66	20	400	2095:2105	0+605	0.0 : 66.1%
4/1	Walton Lane [Outbound Exit]	U	N/A	N/A	-		-	-	-	909	Inf	Inf	0.0%
4/2	Walton Lane [Outbound Exit]	U	N/A	N/A	-		-	-	-	40	Inf	Inf	0.0%
5/1	Priory Road [Exit]	U	N/A	N/A	-		-	-	-	479	Inf	Inf	0.0%
6/1	Walton Lane [Inbound Exit]	U	N/A	N/A	-		-	-	-	604	Inf	Inf	0.0%
6/2	Walton Lane [Inbound Exit]	U	N/A	N/A	-		-	-	-	726	Inf	Inf	0.0%

Full Input Data And Results

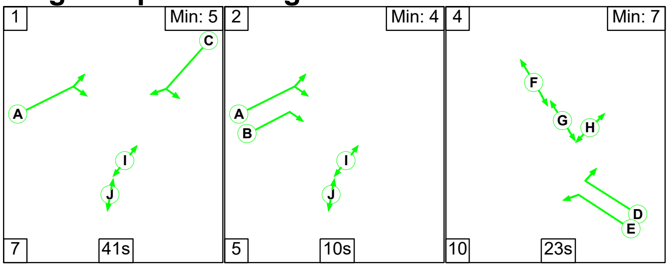
Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network: Walton Lane / Priory Road	**-**	**-**	**26**	**366**	**8**	**14.0**	**4.8**	**1.0**	**19.8**	**-**	**-**	**-**	**-**
Walton Lane / Priory Road	**-**	**-**	**26**	**366**	**8**	**14.0**	**4.8**	**1.0**	**19.8**	**-**	**-**	**-**	**-**
1/1	584	584	-	-	-	3.3	1.0	-	4.2	26.0	12.0	1.0	13.0
1/2	628	628	-	-	-	3.5	1.0	-	4.5	26.0	12.9	1.0	13.9
2/1	197	197	-	-	-	2.1	0.9	-	3.0	54.8	4.9	0.9	5.8
2/2	81	81	-	-	-	0.7	0.1	-	0.8	37.7	1.8	0.1	1.9
3/1	868	868	-	-	-	1.9	0.9	-	2.8	11.6	12.5	0.9	13.4
3/2+3/3	400	400	26	366	8	2.5	1.0	1.0	4.4	39.4	9.3	1.0	10.3
4/1	909	909	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
4/2	40	40	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/1	479	479	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/1	604	604	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/2	726	726	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0

C1 PRC for Signalled Lanes (%): 35.0 Total Delay for Signalled Lanes (pcuHr): 19.77 Cycle Time (s): 96
PRC Over All Lanes (%): 35.0 Total Delay Over All Lanes(pcuHr): 19.77

Full Input Data And Results

Scenario 9: '2032 Base + Dev AM' (FG13: '2032 Base + Dev AM', Plan 1: 'Network Control Plan 1')

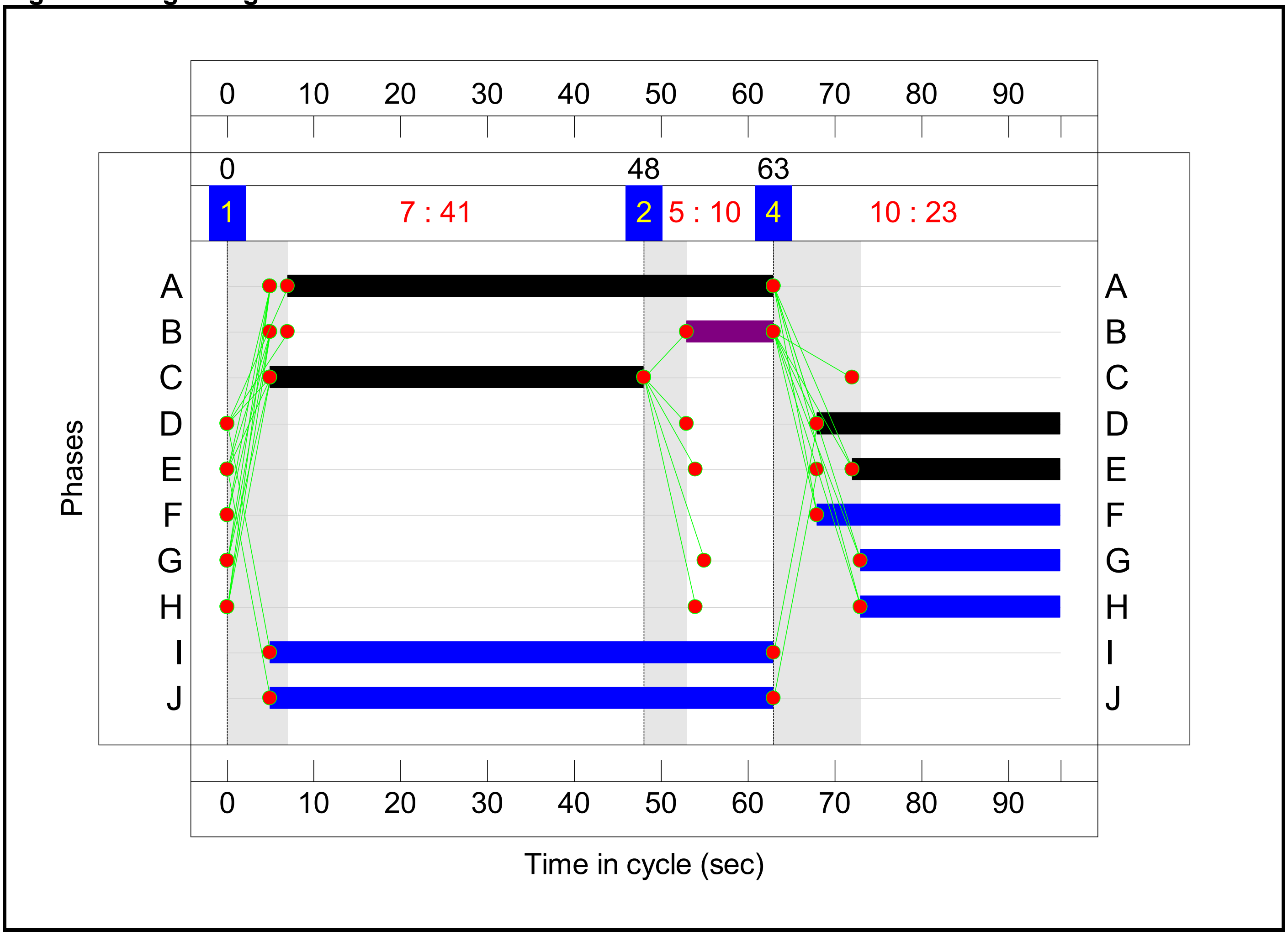
Stage Sequence Diagram



Stage Timings

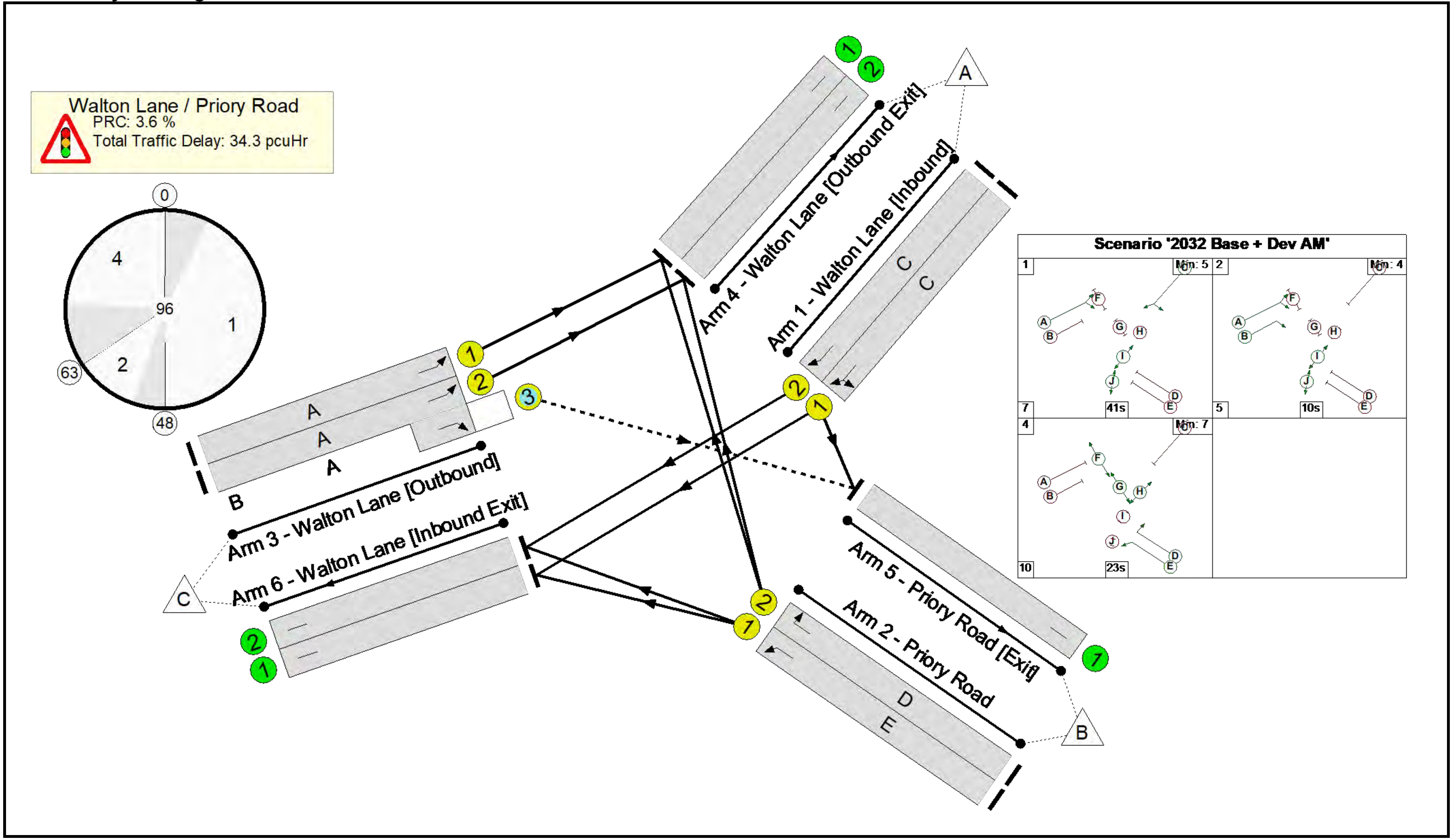
Stage	1	2	4
Duration	41	10	23
Change Point	0	48	63

Signal Timings Diagram



Full Input Data And Results

Network Layout Diagram



Full Input Data And Results

Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network: Walton Lane / Priory Road	-	-	**N/A**	-	-		-	-	-	-	-	-	**86.8%**
Walton Lane / Priory Road	-	-	**N/A**	-	-		-	-	-	-	-	-	**86.8%**
1/1	Walton Lane [Inbound] Left Ahead	U	N/A	N/A	C		1	43	-	767	1940	889	86.3%
1/2	Walton Lane [Inbound] Ahead	U	N/A	N/A	C		1	43	-	818	2055	942	86.8%
2/1	Priory Road Left	U	N/A	N/A	E		1	24	-	428	1935	504	84.9%
2/2	Priory Road Right	U	N/A	N/A	D		1	28	-	138	2055	621	22.2%
3/1	Walton Lane [Outbound] Ahead	U	N/A	N/A	A		1	56	-	820	1945	1155	71.0%
3/2+3/3	Walton Lane [Outbound] Ahead Right	U+O	N/A	N/A	A	B	1	56	10	273	2095:2105	0+316	0.0 : 86.3%
4/1	Walton Lane [Outbound Exit]	U	N/A	N/A	-		-	-	-	889	Inf	Inf	0.0%
4/2	Walton Lane [Outbound Exit]	U	N/A	N/A	-		-	-	-	69	Inf	Inf	0.0%
5/1	Priory Road [Exit]	U	N/A	N/A	-		-	-	-	374	Inf	Inf	0.0%
6/1	Walton Lane [Inbound Exit]	U	N/A	N/A	-		-	-	-	880	Inf	Inf	0.0%
6/2	Walton Lane [Inbound Exit]	U	N/A	N/A	-		-	-	-	1032	Inf	Inf	0.0%

Full Input Data And Results

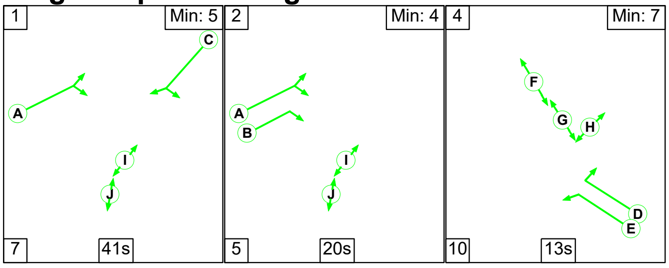
Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network: Walton Lane / Priory Road	**-**	**-**	**0**	**267**	**6**	**20.5**	**12.9**	**0.9**	**34.3**	**-**	**-**	**-**	**-**
Walton Lane / Priory Road	**-**	**-**	**0**	**267**	**6**	**20.5**	**12.9**	**0.9**	**34.3**	**-**	**-**	**-**	**-**
1/1	767	767	-	-	-	5.0	3.0	-	8.0	37.3	18.3	3.0	21.3
1/2	818	818	-	-	-	5.3	3.1	-	8.5	37.2	19.5	3.1	22.7
2/1	428	428	-	-	-	4.0	2.6	-	6.6	55.9	10.8	2.6	13.5
2/2	138	138	-	-	-	1.0	0.1	-	1.1	28.8	2.7	0.1	2.9
3/1	820	820	-	-	-	3.1	1.2	-	4.3	19.0	15.3	1.2	16.5
3/2+3/3	273	273	0	267	6	2.1	2.8	0.9	5.8	76.6	6.8	2.8	9.6
4/1	889	889	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
4/2	69	69	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/1	374	374	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/1	880	880	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/2	1032	1032	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0

C1 PRC for Signalled Lanes (%): 3.6 Total Delay for Signalled Lanes (pcuHr): 34.31 Cycle Time (s): 96
PRC Over All Lanes (%): 3.6 Total Delay Over All Lanes(pcuHr): 34.31

Full Input Data And Results

Scenario 10: '2032 Base + Dev PM' (FG14: '2032 Base + Dev PM', Plan 1: 'Network Control Plan 1')

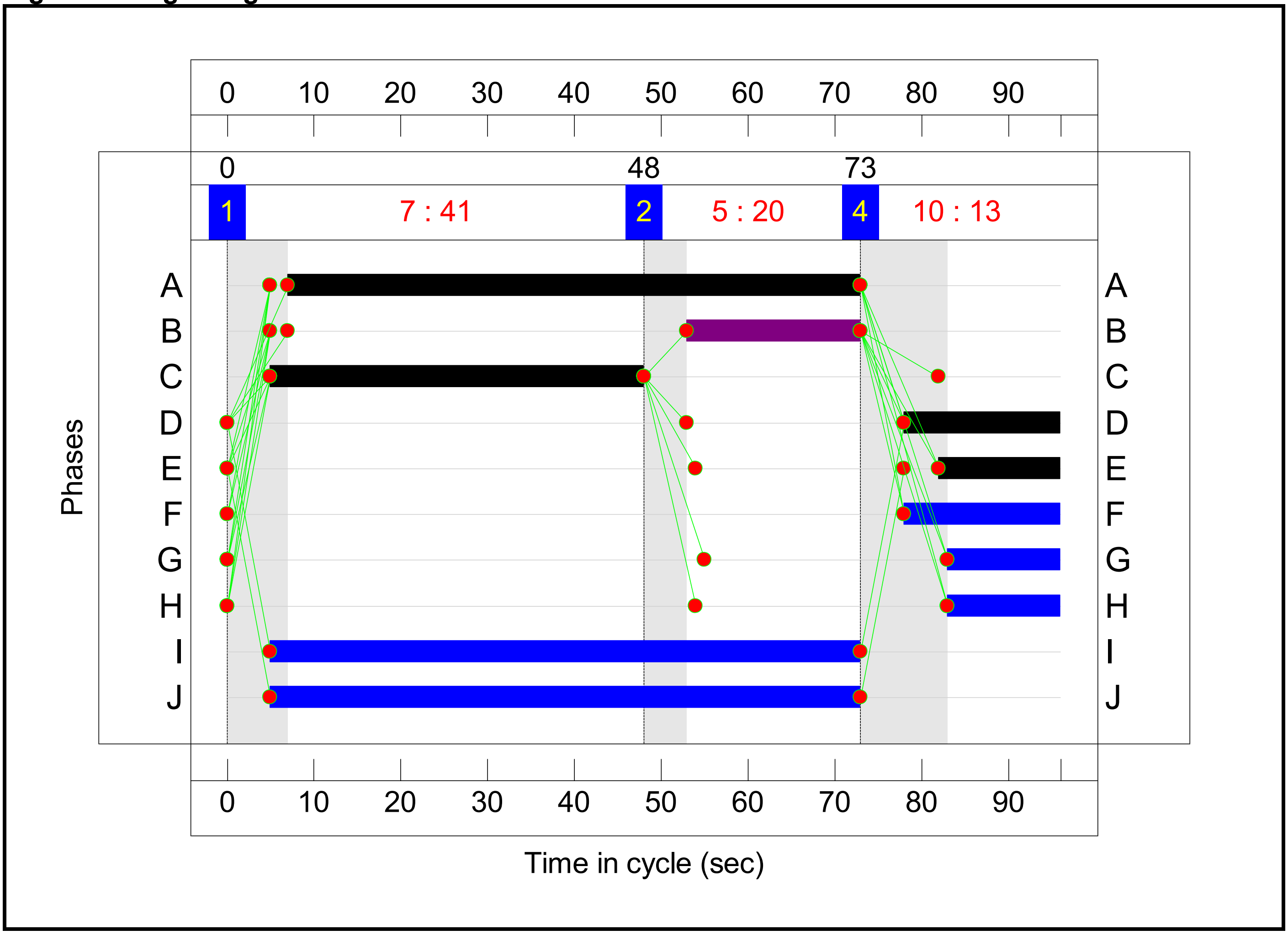
Stage Sequence Diagram



Stage Timings

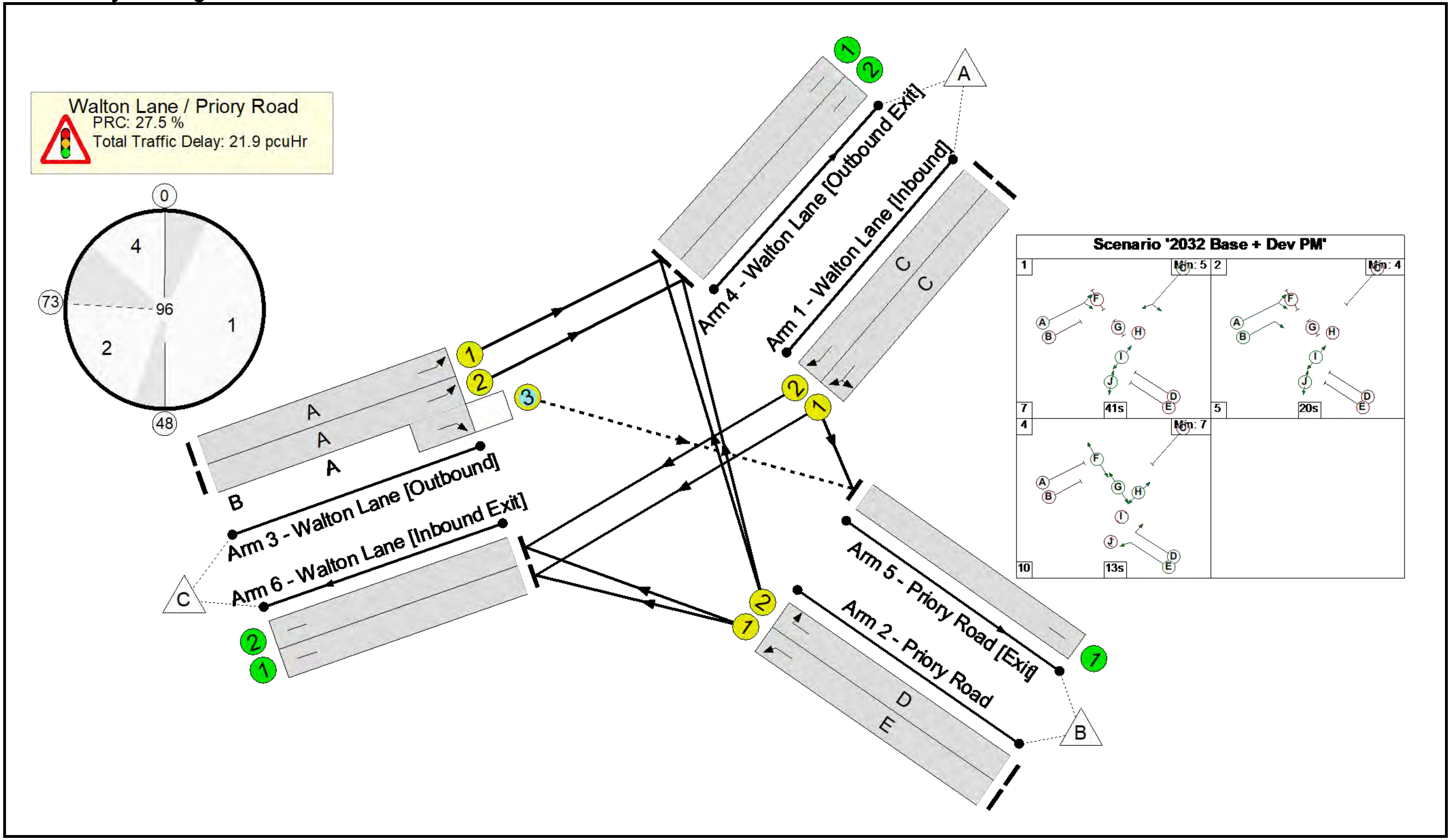
Stage	1	2	4
Duration	41	20	13
Change Point	0	48	73

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: Walton Lane / Priory Road	-	-	**N/A**	-	-		-	-	-	-	-	-	**70.6%**
Walton Lane / Priory Road	-	-	**N/A**	-	-		-	-	-	-	-	-	**70.6%**
1/1	Walton Lane [Inbound] Left Ahead	U	N/A	N/A	C		1	43	-	618	1940	889	69.5%
1/2	Walton Lane [Inbound] Ahead	U	N/A	N/A	C		1	43	-	665	2055	942	70.6%
2/1	Priory Road Left	U	N/A	N/A	E		1	14	-	203	1935	302	67.1%
2/2	Priory Road Right	U	N/A	N/A	D		1	18	-	81	2055	407	19.9%
3/1	Walton Lane [Outbound] Ahead	U	N/A	N/A	A		1	66	-	942	1945	1357	69.4%
3/2+3/3	Walton Lane [Outbound] Ahead Right	U+O	N/A	N/A	A	B	1	66	20	410	2095:2105	0+587	0.0 : 69.8%
4/1	Walton Lane [Outbound Exit]	U	N/A	N/A	-		-	-	-	983	Inf	Inf	0.0%
4/2	Walton Lane [Outbound Exit]	U	N/A	N/A	-		-	-	-	40	Inf	Inf	0.0%
5/1	Priory Road [Exit]	U	N/A	N/A	-		-	-	-	489	Inf	Inf	0.0%
6/1	Walton Lane [Inbound Exit]	U	N/A	N/A	-		-	-	-	641	Inf	Inf	0.0%
6/2	Walton Lane [Inbound Exit]	U	N/A	N/A	-		-	-	-	766	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: Walton Lane / Priory Road	**-**	**-**	**8**	**393**	**9**	**15.2**	**5.7**	**1.0**	**21.9**	**-**	**-**	**-**	**-**
Walton Lane / Priory Road	**-**	**-**	**8**	**393**	**9**	**15.2**	**5.7**	**1.0**	**21.9**	**-**	**-**	**-**	**-**
1/1	618	618	-	-	-	3.5	1.1	-	4.7	27.3	13.0	1.1	14.2
1/2	665	665	-	-	-	3.8	1.2	-	5.0	27.3	14.0	1.2	15.2
2/1	203	203	-	-	-	2.2	1.0	-	3.2	55.9	5.1	1.0	6.1
2/2	81	81	-	-	-	0.7	0.1	-	0.8	37.7	1.8	0.1	1.9
3/1	942	942	-	-	-	2.2	1.1	-	3.4	12.8	14.7	1.1	15.8
3/2+3/3	410	410	8	393	9	2.7	1.1	1.0	4.8	42.1	9.7	1.1	10.8
4/1	983	983	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
4/2	40	40	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/1	489	489	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/1	641	641	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/2	766	766	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0

C1 PRC for Signalled Lanes (%): 27.5 Total Delay for Signalled Lanes (pcuHr): 21.87 Cycle Time (s): 96
PRC Over All Lanes (%): 27.5 Total Delay Over All Lanes(pcuHr): 21.87

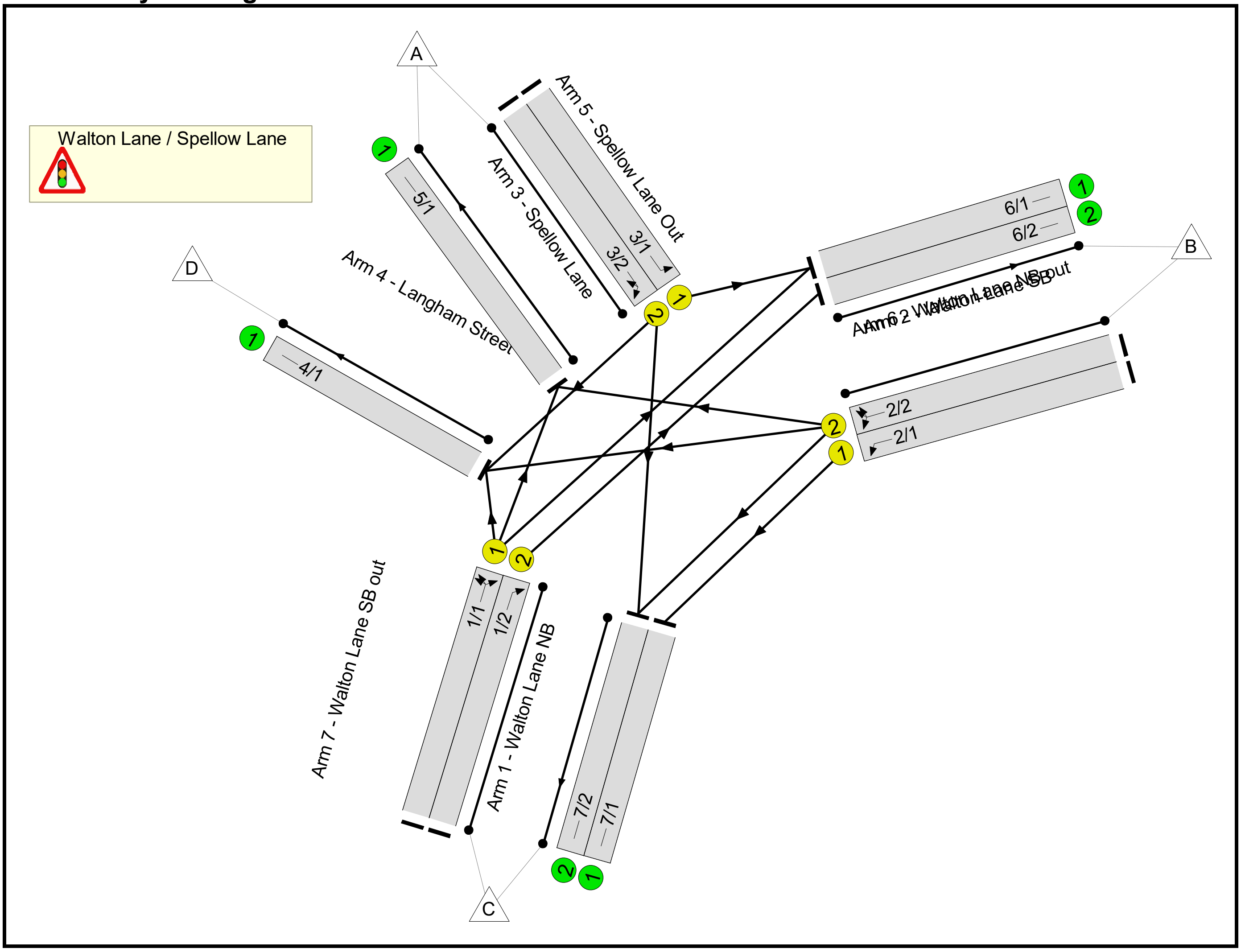
G. Spellow Lane/Walton Lane East/Walton Lane South/Langham Street Full LinSig Outputs

Full Input Data And Results

User and Project Details

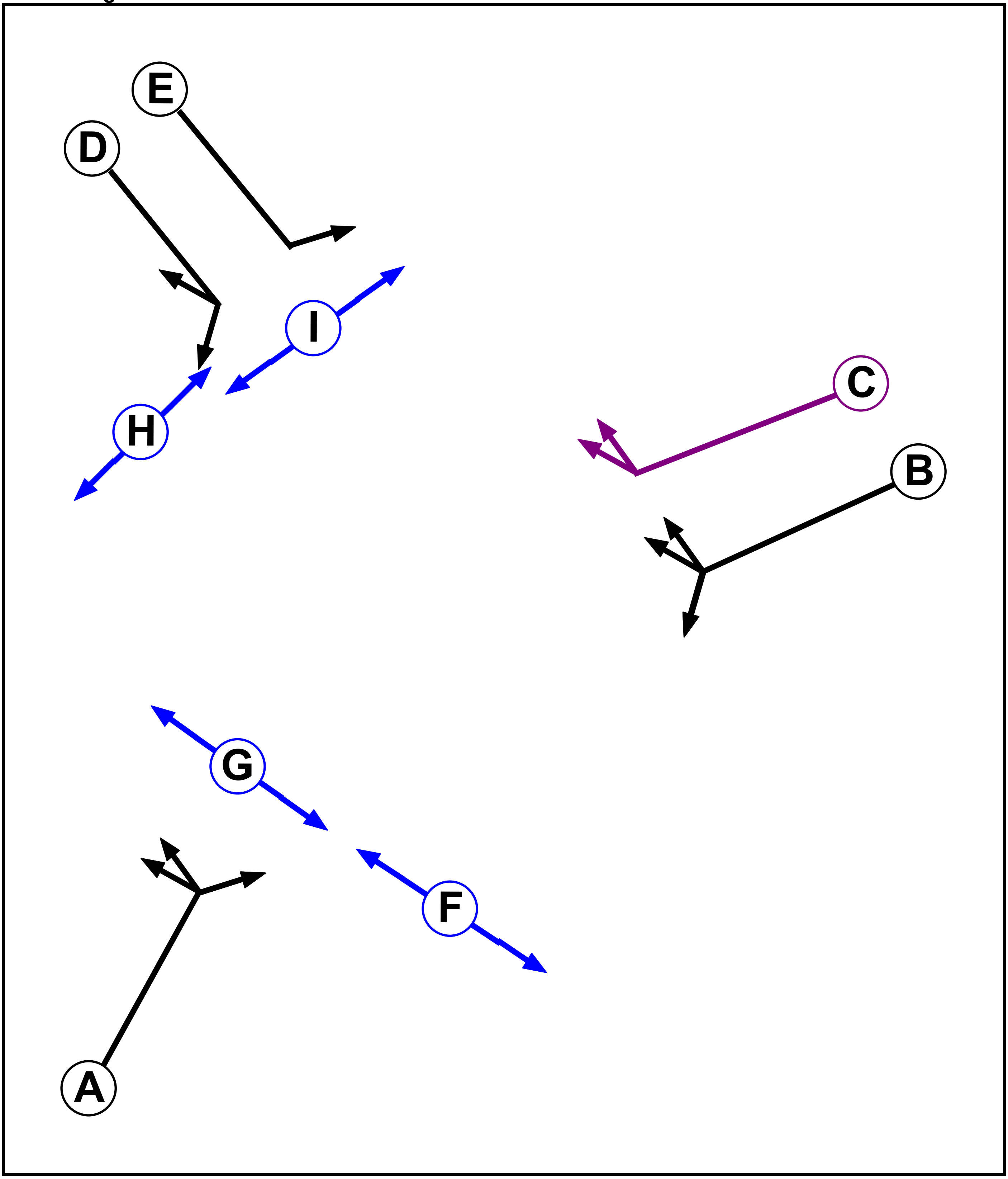
Project:	
Title:	
Location:	
Additional detail:	
File name:	Walton Spellow option 2 v2.lsg3x
Author:	
Company:	
Address:	

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	Ind. Arrow	B	4	4
D	Traffic		7	7
E	Traffic		7	7
F	Pedestrian		7	7
G	Pedestrian		7	7
H	Pedestrian		7	7
I	Pedestrian		7	7

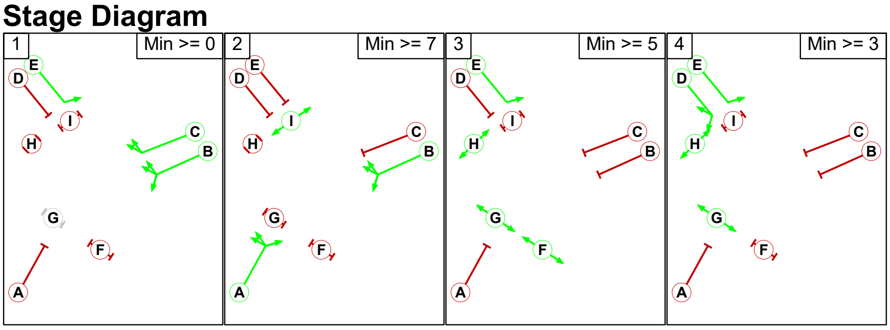
Phase Intergreens Matrix

		Starting Phase								
		A	B	C	D	E	F	G	H	I
Terminating Phase	A		-	6	7	8	-	6	10	-
	B	-		-	5	-	8	-	9	-
	C	6	-		5	-	8	-	9	0
	D	5	7	6		-	10	-	-	6
	E	5	-	-	-		-	-	-	6
	F	-	9	9	9	-		-	-	-
	G	9	-	-	-	-	-		-	-
	H	10	10	10	-	-	-	-		-
	I	-	-	0	10	10	-	-	-	

Phases in Stage

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

Stage Diagram



Phase Delays

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

Prohibited Stage Change

		To Stage			
		1	2	3	4
From Stage	1		6	9	9
	2	10		10	10
	3	10	10		9
	4	10	10	10	

Full Input Data And Results

Give-Way Lane Input Data

Junction: Walton Lane / Spellow Lane
There are no Opposed Lanes in this Junction

Full Input Data And Results

Lane Input Data

Junction: Walton Lane / Spellow Lane

Lane	Lane Type	Phases	Start Disp.	End Disp.	Physical Length (PCU)	Sat Flow Type	Def User Saturation Flow (PCU/Hr)	Lane Width (m)	Gradient	Nearside Lane	Turns	Turning Radius (m)
1/1 (Walton Lane NB)	U	A	2	3	60.0	Geom	-	3.30	0.00	Y	Arm 4 Left	Inf
											Arm 5 Left	Inf
											Arm 6 Right	Inf
1/2 (Walton Lane NB)	U	A	2	3	60.0	Geom	-	3.30	0.00	Y	Arm 6 Right	Inf
2/1 (Walton Lane SB)	U	B	2	3	60.0	Geom	-	3.60	0.00	Y	Arm 7 Left	Inf
2/2 (Walton Lane SB)	U	B C	2	3	60.0	Geom	-	3.60	0.00	Y	Arm 4 Right	Inf
											Arm 5 Right	Inf
											Arm 7 Left	Inf
3/1 (Spellow Lane)	U	E	2	3	60.0	Geom	-	3.40	0.00	Y	Arm 6 Left	Inf
3/2 (Spellow Lane)	U	D	2	3	7.8	Geom	-	3.40	0.00	Y	Arm 4 U-Turn	Inf
											Arm 7 Right	Inf
4/1 (Langham Street)	U		2	3	60.0	Geom	-	3.25	0.00	Y		
5/1 (Spellow Lane Out)	U		2	3	60.0	Geom	-	3.80	0.00	Y		
6/1 (Walton Lane NB out)	U		2	3	60.0	Geom	-	3.60	0.00	Y		
6/2 (Walton Lane NB out)	U		2	3	60.0	Geom	-	3.60	0.00	Y		
7/1 (Walton Lane SB out)	U		2	3	60.0	Geom	-	3.40	0.00	Y		
7/2 (Walton Lane SB out)	U		2	3	60.0	Geom	-	3.40	0.00	Y		

Full Input Data And Results

Traffic Flow Groups

Flow Group	Start Time	End Time	Duration	Formula
1: '2019 Survey AM'	08:00	09:00	01:00	
2: '2019 Survey PM'	17:00	18:00	01:00	
3: '2028 Survey AM'	08:00	09:00	01:00	
4: '2028 Survey PM'	16:00	17:00	01:00	
5: '2028 Base AM'	08:00	09:00	01:00	
6: '2028 Base PM'	16:00	17:00	01:00	
7: '2028 Base + Dev AM'	08:00	09:00	01:00	
8: '2028 Base + Dev PM'	16:00	17:00	01:00	
9: '2032 Base AM'	08:00	09:00	01:00	
10: '2032 Base PM'	16:00	17:00	01:00	
11: '2032 Base + Dev AM'	08:00	09:00	01:00	
12: '2032 Base + Dev PM'	16:00	17:00	01:00	
13: '2032 Base + Dev AM Sensitivity'	08:00	09:00	01:00	

Scenario 1: '2019 Survey AM' (FG1: '2019 Survey AM', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired

Desired Flow :

	Destination					
		A	B	C	D	Tot.
Origin	A	0	247	178	21	446
	B	183	0	987	359	1529
	C	156	625	0	28	809
	D	0	0	0	0	0
	Tot.	339	872	1165	408	2784

Full Input Data And Results

Traffic Lane Flows

Lane	Scenario 1: 2019 Survey AM
Junction: Walton Lane / Spellow Lane	
1/1	403
1/2	406
2/1	757
2/2	772
3/1	247
3/2	199
4/1	408
5/1	339
6/1	466
6/2	406
7/1	757
7/2	408

Lane Saturation Flows

Junction: Walton Lane / Spellow Lane								
Lane	**Lane Width (m)**	**Gradient**	**Nearside Lane**	**Allowed Turns**	**Turning Radius (m)**	**Turning Prop.**	**Sat Flow (PCU/Hr)**	**Flared Sat Flow (PCU/Hr)**
1/1 (Walton Lane NB)	3.30	0.00	Y	Arm 4 Left	Inf	6.9 %	1945	1945
				Arm 5 Left	Inf	38.7 %		
				Arm 6 Right	Inf	54.3 %		
1/2 (Walton Lane NB)	3.30	0.00	Y	Arm 6 Right	Inf	100.0 %	1945	1945
2/1 (Walton Lane SB)	3.60	0.00	Y	Arm 7 Left	Inf	100.0 %	1975	1975
2/2 (Walton Lane SB)	3.60	0.00	Y	Arm 4 Right	Inf	46.5 %	1975	1975
				Arm 5 Right	Inf	23.7 %		
				Arm 7 Left	Inf	29.8 %		
3/1 (Spellow Lane)	3.40	0.00	Y	Arm 6 Left	Inf	100.0 %	1955	1955
3/2 (Spellow Lane)	3.40	0.00	Y	Arm 4 U-Turn	Inf	10.6 %	1955	1955
				Arm 7 Right	Inf	89.4 %		
4/1 (Langham Street)	3.25	0.00	Y				1940	1940
5/1 (Spellow Lane Out)	3.80	0.00	Y				1995	1995
6/1 (Walton Lane NB out)	3.60	0.00	Y				1975	1975
6/2 (Walton Lane NB out)	3.60	0.00	Y				1975	1975
7/1 (Walton Lane SB out)	3.40	0.00	Y				1955	1955
7/2 (Walton Lane SB out)	3.40	0.00	Y				1955	1955

Scenario 2: '2019 Survey PM' (FG2: '2019 Survey PM', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired

Desired Flow :

		Destination				
		A	B	C	D	Tot.
Origin	A	0	426	177	22	625
	B	110	0	889	127	1126
	C	179	647	0	25	851
	D	0	0	0	0	0
	Tot.	289	1073	1066	174	2602

Traffic Lane Flows

Lane	Scenario 2: 2019 Survey PM
Junction: Walton Lane / Spellow Lane	
1/1	422
1/2	429
2/1	561
2/2	565
3/1	426
3/2	199
4/1	174
5/1	289
6/1	644
6/2	429
7/1	561
7/2	505

Full Input Data And Results

Lane Saturation Flows

Junction: Walton Lane / Spellow Lane								
Lane	**Lane Width (m)**	**Gradient**	**Nearside Lane**	**Allowed Turns**	**Turning Radius (m)**	**Turning Prop.**	**Sat Flow (PCU/Hr)**	**Flared Sat Flow (PCU/Hr)**
1/1 (Walton Lane NB)	3.30	0.00	Y	Arm 4 Left	Inf	5.9 %	1945	1945
				Arm 5 Left	Inf	42.4 %		
				Arm 6 Right	Inf	51.7 %		
1/2 (Walton Lane NB)	3.30	0.00	Y	Arm 6 Right	Inf	100.0 %	1945	1945
2/1 (Walton Lane SB)	3.60	0.00	Y	Arm 7 Left	Inf	100.0 %	1975	1975
2/2 (Walton Lane SB)	3.60	0.00	Y	Arm 4 Right	Inf	22.5 %	1975	1975
				Arm 5 Right	Inf	19.5 %		
				Arm 7 Left	Inf	58.1 %		
3/1 (Spellow Lane)	3.40	0.00	Y	Arm 6 Left	Inf	100.0 %	1955	1955
3/2 (Spellow Lane)	3.40	0.00	Y	Arm 4 U-Turn	Inf	11.1 %	1955	1955
				Arm 7 Right	Inf	88.9 %		
4/1 (Langham Street)	3.25	0.00	Y				1940	1940
5/1 (Spellow Lane Out)	3.80	0.00	Y				1995	1995
6/1 (Walton Lane NB out)	3.60	0.00	Y				1975	1975
6/2 (Walton Lane NB out)	3.60	0.00	Y				1975	1975
7/1 (Walton Lane SB out)	3.40	0.00	Y				1955	1955
7/2 (Walton Lane SB out)	3.40	0.00	Y				1955	1955

Scenario 3: '2028 Base AM' (FG5: '2028 Base AM', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired

Desired Flow :

	Destination					
Origin		A	B	C	D	Tot.
	A	0	277	200	24	501
	B	210	0	1111	403	1724
	C	175	702	0	31	908
	D	0	0	0	0	0
	Tot.	385	979	1311	458	3133

Full Input Data And Results

Traffic Lane Flows

Lane	Scenario 3: 2028 Base AM
Junction: Walton Lane / Spellow Lane	
1/1	453
1/2	455
2/1	855
2/2	869
3/1	277
3/2	224
4/1	458
5/1	385
6/1	524
6/2	455
7/1	855
7/2	456

Lane Saturation Flows

Lane	Lane Width (m)	Gradient	Nearside Lane	Allowed Turns	Turning Radius (m)	Turning Prop.	Sat Flow (PCU/Hr)	Flared Sat Flow (PCU/Hr)
Junction: Walton Lane / Spellow Lane								
1/1 (Walton Lane NB)	3.30	0.00	Y	Arm 4 Left	Inf	6.8 %	1945	1945
				Arm 5 Left	Inf	38.6 %		
				Arm 6 Right	Inf	54.5 %		
1/2 (Walton Lane NB)	3.30	0.00	Y	Arm 6 Right	Inf	100.0 %	1945	1945
2/1 (Walton Lane SB)	3.60	0.00	Y	Arm 7 Left	Inf	100.0 %	1975	1975
2/2 (Walton Lane SB)	3.60	0.00	Y	Arm 4 Right	Inf	46.4 %	1975	1975
				Arm 5 Right	Inf	24.2 %		
				Arm 7 Left	Inf	29.5 %		
3/1 (Spellow Lane)	3.40	0.00	Y	Arm 6 Left	Inf	100.0 %	1955	1955
3/2 (Spellow Lane)	3.40	0.00	Y	Arm 4 U-Turn	Inf	10.7 %	1955	1955
				Arm 7 Right	Inf	89.3 %		
4/1 (Langham Street)	3.25	0.00	Y				1940	1940
5/1 (Spellow Lane Out)	3.80	0.00	Y				1995	1995
6/1 (Walton Lane NB out)	3.60	0.00	Y				1975	1975
6/2 (Walton Lane NB out)	3.60	0.00	Y				1975	1975
7/1 (Walton Lane SB out)	3.40	0.00	Y				1955	1955
7/2 (Walton Lane SB out)	3.40	0.00	Y				1955	1955

Scenario 4: '2028 Base PM' (FG6: '2028 Base PM', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired

Desired Flow :

		Destination				
		A	B	C	D	Tot.
Origin	A	0	476	198	25	699
	B	125	0	995	142	1262
	C	200	726	0	28	954
	D	0	0	0	0	0
	Tot.	325	1202	1193	195	2915

Traffic Lane Flows

Lane	Scenario 4: 2028 Base PM
Junction: Walton Lane / Spellow Lane	
1/1	473
1/2	481
2/1	629
2/2	633
3/1	476
3/2	223
4/1	195
5/1	325
6/1	721
6/2	481
7/1	629
7/2	564

Full Input Data And Results

Lane Saturation Flows

Junction: Walton Lane / Spellow Lane								
Lane	**Lane Width (m)**	**Gradient**	**Nearside Lane**	**Allowed Turns**	**Turning Radius (m)**	**Turning Prop.**	**Sat Flow (PCU/Hr)**	**Flared Sat Flow (PCU/Hr)**
1/1 (Walton Lane NB)	3.30	0.00	Y	Arm 4 Left	Inf	5.9 %	1945	1945
				Arm 5 Left	Inf	42.3 %		
				Arm 6 Right	Inf	51.8 %		
1/2 (Walton Lane NB)	3.30	0.00	Y	Arm 6 Right	Inf	100.0 %	1945	1945
2/1 (Walton Lane SB)	3.60	0.00	Y	Arm 7 Left	Inf	100.0 %	1975	1975
2/2 (Walton Lane SB)	3.60	0.00	Y	Arm 4 Right	Inf	22.4 %	1975	1975
				Arm 5 Right	Inf	19.7 %		
				Arm 7 Left	Inf	57.8 %		
3/1 (Spellow Lane)	3.40	0.00	Y	Arm 6 Left	Inf	100.0 %	1955	1955
3/2 (Spellow Lane)	3.40	0.00	Y	Arm 4 U-Turn	Inf	11.2 %	1955	1955
				Arm 7 Right	Inf	88.8 %		
4/1 (Langham Street)	3.25	0.00	Y				1940	1940
5/1 (Spellow Lane Out)	3.80	0.00	Y				1995	1995
6/1 (Walton Lane NB out)	3.60	0.00	Y				1975	1975
6/2 (Walton Lane NB out)	3.60	0.00	Y				1975	1975
7/1 (Walton Lane SB out)	3.40	0.00	Y				1955	1955
7/2 (Walton Lane SB out)	3.40	0.00	Y				1955	1955

Scenario 5: '2028 Base + Dev AM' (FG7: '2028 Base + Dev AM', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired

Desired Flow :

	Destination					
Origin		A	B	C	D	Tot.
	A	0	294	251	24	569
	B	238	0	1109	403	1750
	C	247	706	0	31	984
	D	0	0	0	0	0
	Tot.	485	1000	1360	458	3303

Full Input Data And Results

Traffic Lane Flows

Lane	Scenario 5: 2028 Base + Dev AM
Junction: Walton Lane / Spellow Lane	
1/1	492
1/2	492
2/1	869
2/2	881
3/1	294
3/2	275
4/1	458
5/1	485
6/1	508
6/2	492
7/1	869
7/2	491

Lane Saturation Flows

Lane	Lane Width (m)	Gradient	Nearside Lane	Allowed Turns	Turning Radius (m)	Turning Prop.	Sat Flow (PCU/Hr)	Flared Sat Flow (PCU/Hr)
Junction: Walton Lane / Spellow Lane								
1/1 (Walton Lane NB)	3.30	0.00	Y	Arm 4 Left	Inf	6.3 %	1945	1945
				Arm 5 Left	Inf	50.2 %		
				Arm 6 Right	Inf	43.5 %		
1/2 (Walton Lane NB)	3.30	0.00	Y	Arm 6 Right	Inf	100.0 %	1945	1945
2/1 (Walton Lane SB)	3.60	0.00	Y	Arm 7 Left	Inf	100.0 %	1975	1975
2/2 (Walton Lane SB)	3.60	0.00	Y	Arm 4 Right	Inf	45.7 %	1975	1975
				Arm 5 Right	Inf	27.0 %		
				Arm 7 Left	Inf	27.2 %		
3/1 (Spellow Lane)	3.40	0.00	Y	Arm 6 Left	Inf	100.0 %	1955	1955
3/2 (Spellow Lane)	3.40	0.00	Y	Arm 4 U-Turn	Inf	8.7 %	1955	1955
				Arm 7 Right	Inf	91.3 %		
4/1 (Langham Street)	3.25	0.00	Y				1940	1940
5/1 (Spellow Lane Out)	3.80	0.00	Y				1995	1995
6/1 (Walton Lane NB out)	3.60	0.00	Y				1975	1975
6/2 (Walton Lane NB out)	3.60	0.00	Y				1975	1975
7/1 (Walton Lane SB out)	3.40	0.00	Y				1955	1955
7/2 (Walton Lane SB out)	3.40	0.00	Y				1955	1955

Scenario 6: '2028 Base + Dev PM' (FG8: '2028 Base + Dev PM', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired

Desired Flow :

	Destination					
Origin		A	B	C	D	Tot.
	A	0	512	251	25	788
	B	168	0	981	142	1291
	C	251	732	0	28	1011
	D	0	0	0	0	0
	Tot.	419	1244	1232	195	3090

Traffic Lane Flows

Lane	Scenario 6: 2028 Base + Dev PM
Junction: Walton Lane / Spellow Lane	
1/1	502
1/2	509
2/1	644
2/2	647
3/1	512
3/2	276
4/1	195
5/1	419
6/1	735
6/2	509
7/1	644
7/2	588

Full Input Data And Results

Lane Saturation Flows

Junction: Walton Lane / Spellow Lane								
Lane	**Lane Width (m)**	**Gradient**	**Nearside Lane**	**Allowed Turns**	**Turning Radius (m)**	**Turning Prop.**	**Sat Flow (PCU/Hr)**	**Flared Sat Flow (PCU/Hr)**
1/1 (Walton Lane NB)	3.30	0.00	Y	Arm 4 Left	Inf	5.6 %	1945	1945
				Arm 5 Left	Inf	50.0 %		
				Arm 6 Right	Inf	44.4 %		
1/2 (Walton Lane NB)	3.30	0.00	Y	Arm 6 Right	Inf	100.0 %	1945	1945
2/1 (Walton Lane SB)	3.60	0.00	Y	Arm 7 Left	Inf	100.0 %	1975	1975
2/2 (Walton Lane SB)	3.60	0.00	Y	Arm 4 Right	Inf	21.9 %	1975	1975
				Arm 5 Right	Inf	26.0 %		
				Arm 7 Left	Inf	52.1 %		
3/1 (Spellow Lane)	3.40	0.00	Y	Arm 6 Left	Inf	100.0 %	1955	1955
3/2 (Spellow Lane)	3.40	0.00	Y	Arm 4 U-Turn	Inf	9.1 %	1955	1955
				Arm 7 Right	Inf	90.9 %		
4/1 (Langham Street)	3.25	0.00	Y				1940	1940
5/1 (Spellow Lane Out)	3.80	0.00	Y				1995	1995
6/1 (Walton Lane NB out)	3.60	0.00	Y				1975	1975
6/2 (Walton Lane NB out)	3.60	0.00	Y				1975	1975
7/1 (Walton Lane SB out)	3.40	0.00	Y				1955	1955
7/2 (Walton Lane SB out)	3.40	0.00	Y				1955	1955

Scenario 7: '2032 Base AM' (FG9: '2032 Base AM', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired

Desired Flow :

	Destination					
Origin		A	B	C	D	Tot.
	A	0	288	208	24	520
	B	219	0	1156	419	1794
	C	182	730	0	33	945
	D	0	0	0	0	0
	Tot.	401	1018	1364	476	3259

Full Input Data And Results

Traffic Lane Flows

Lane	Scenario 7: 2032 Base AM
Junction: Walton Lane / Spellow Lane	
1/1	471
1/2	474
2/1	891
2/2	903
3/1	288
3/2	232
4/1	476
5/1	401
6/1	544
6/2	474
7/1	891
7/2	473

Lane Saturation Flows

Lane	Lane Width (m)	Gradient	Nearside Lane	Allowed Turns	Turning Radius (m)	Turning Prop.	Sat Flow (PCU/Hr)	Flared Sat Flow (PCU/Hr)
Junction: Walton Lane / Spellow Lane								
1/1 (Walton Lane NB)	3.30	0.00	Y	Arm 4 Left	Inf	7.0 %	1945	1945
				Arm 5 Left	Inf	38.6 %		
				Arm 6 Right	Inf	54.4 %		
1/2 (Walton Lane NB)	3.30	0.00	Y	Arm 6 Right	Inf	100.0 %	1945	1945
2/1 (Walton Lane SB)	3.60	0.00	Y	Arm 7 Left	Inf	100.0 %	1975	1975
2/2 (Walton Lane SB)	3.60	0.00	Y	Arm 4 Right	Inf	46.4 %	1975	1975
				Arm 5 Right	Inf	24.3 %		
				Arm 7 Left	Inf	29.3 %		
3/1 (Spellow Lane)	3.40	0.00	Y	Arm 6 Left	Inf	100.0 %	1955	1955
3/2 (Spellow Lane)	3.40	0.00	Y	Arm 4 U-Turn	Inf	10.3 %	1955	1955
				Arm 7 Right	Inf	89.7 %		
4/1 (Langham Street)	3.25	0.00	Y				1940	1940
5/1 (Spellow Lane Out)	3.80	0.00	Y				1995	1995
6/1 (Walton Lane NB out)	3.60	0.00	Y				1975	1975
6/2 (Walton Lane NB out)	3.60	0.00	Y				1975	1975
7/1 (Walton Lane SB out)	3.40	0.00	Y				1955	1955
7/2 (Walton Lane SB out)	3.40	0.00	Y				1955	1955

Scenario 8: '2032 Base PM' (FG10: '2032 Base PM', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired

Desired Flow :

		Destination				
		A	B	C	D	Tot.
Origin	A	0	494	205	26	725
	B	130	0	1033	147	1310
	C	208	754	0	29	991
	D	0	0	0	0	0
	Tot.	338	1248	1238	202	3026

Traffic Lane Flows

Lane	Scenario 8: 2032 Base PM
Junction: Walton Lane / Spellow Lane	
1/1	491
1/2	500
2/1	653
2/2	657
3/1	494
3/2	231
4/1	202
5/1	338
6/1	748
6/2	500
7/1	653
7/2	585

Lane Saturation Flows

Junction: Walton Lane / Spellow Lane								
Lane	Lane Width (m)	Gradient	Nearside Lane	Allowed Turns	Turning Radius (m)	Turning Prop.	Sat Flow (PCU/Hr)	Flared Sat Flow (PCU/Hr)
1/1 (Walton Lane NB)	3.30	0.00	Y	Arm 4 Left	Inf	5.9 %	1945	1945
				Arm 5 Left	Inf	42.4 %		
				Arm 6 Right	Inf	51.7 %		
1/2 (Walton Lane NB)	3.30	0.00	Y	Arm 6 Right	Inf	100.0 %	1945	1945
2/1 (Walton Lane SB)	3.60	0.00	Y	Arm 7 Left	Inf	100.0 %	1975	1975
2/2 (Walton Lane SB)	3.60	0.00	Y	Arm 4 Right	Inf	22.4 %	1975	1975
				Arm 5 Right	Inf	19.8 %		
				Arm 7 Left	Inf	57.8 %		
3/1 (Spellow Lane)	3.40	0.00	Y	Arm 6 Left	Inf	100.0 %	1955	1955
3/2 (Spellow Lane)	3.40	0.00	Y	Arm 4 U-Turn	Inf	11.3 %	1955	1955
				Arm 7 Right	Inf	88.7 %		
4/1 (Langham Street)	3.25	0.00	Y				1940	1940
5/1 (Spellow Lane Out)	3.80	0.00	Y				1995	1995
6/1 (Walton Lane NB out)	3.60	0.00	Y				1975	1975
6/2 (Walton Lane NB out)	3.60	0.00	Y				1975	1975
7/1 (Walton Lane SB out)	3.40	0.00	Y				1955	1955
7/2 (Walton Lane SB out)	3.40	0.00	Y				1955	1955

Scenario 9: '2032 Base + Dev AM' (FG11: '2032 Base + Dev AM', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired

Desired Flow :

		Destination				
		A	B	C	D	Tot.
Origin	A	0	305	259	24	588
	B	246	0	1153	419	1818
	C	254	734	0	33	1021
	D	0	0	0	0	0
	Tot.	500	1039	1412	476	3427

Full Input Data And Results

Traffic Lane Flows

Lane	Scenario 9: 2032 Base + Dev AM
Junction: Walton Lane / Spellow Lane	
1/1	510
1/2	511
2/1	904
2/2	914
3/1	305
3/2	283
4/1	476
5/1	500
6/1	528
6/2	511
7/1	904
7/2	508

Lane Saturation Flows

Junction: Walton Lane / Spellow Lane								
Lane	**Lane Width (m)**	**Gradient**	**Nearside Lane**	**Allowed Turns**	**Turning Radius (m)**	**Turning Prop.**	**Sat Flow (PCU/Hr)**	**Flared Sat Flow (PCU/Hr)**
1/1 (Walton Lane NB)	3.30	0.00	Y	Arm 4 Left	Inf	6.5 %	1945	1945
				Arm 5 Left	Inf	49.8 %		
				Arm 6 Right	Inf	43.7 %		
1/2 (Walton Lane NB)	3.30	0.00	Y	Arm 6 Right	Inf	100.0 %	1945	1945
2/1 (Walton Lane SB)	3.60	0.00	Y	Arm 7 Left	Inf	100.0 %	1975	1975
2/2 (Walton Lane SB)	3.60	0.00	Y	Arm 4 Right	Inf	45.8 %	1975	1975
				Arm 5 Right	Inf	26.9 %		
				Arm 7 Left	Inf	27.2 %		
3/1 (Spellow Lane)	3.40	0.00	Y	Arm 6 Left	Inf	100.0 %	1955	1955
3/2 (Spellow Lane)	3.40	0.00	Y	Arm 4 U-Turn	Inf	8.5 %	1955	1955
				Arm 7 Right	Inf	91.5 %		
4/1 (Langham Street)	3.25	0.00	Y				1940	1940
5/1 (Spellow Lane Out)	3.80	0.00	Y				1995	1995
6/1 (Walton Lane NB out)	3.60	0.00	Y				1975	1975
6/2 (Walton Lane NB out)	3.60	0.00	Y				1975	1975
7/1 (Walton Lane SB out)	3.40	0.00	Y				1955	1955
7/2 (Walton Lane SB out)	3.40	0.00	Y				1955	1955

Scenario 10: '2032 Base + Dev PM' (FG12: '2032 Base + Dev PM', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired

Desired Flow :

		Destination				
		A	B	C	D	Tot.
Origin	A	0	530	259	26	815
	B	173	0	1019	147	1339
	C	258	759	0	29	1046
	D	0	0	0	0	0
	Tot.	431	1289	1278	202	3200

Traffic Lane Flows

Lane	Scenario 10: 2032 Base + Dev PM
Junction: Walton Lane / Spellow Lane	
1/1	520
1/2	526
2/1	668
2/2	671
3/1	530
3/2	285
4/1	202
5/1	431
6/1	763
6/2	526
7/1	668
7/2	610

Full Input Data And Results

Lane Saturation Flows

Junction: Walton Lane / Spellow Lane								
Lane	**Lane Width (m)**	**Gradient**	**Nearside Lane**	**Allowed Turns**	**Turning Radius (m)**	**Turning Prop.**	**Sat Flow (PCU/Hr)**	**Flared Sat Flow (PCU/Hr)**
1/1 (Walton Lane NB)	3.30	0.00	Y	Arm 4 Left	Inf	5.6 %	1945	1945
				Arm 5 Left	Inf	49.6 %		
				Arm 6 Right	Inf	44.8 %		
1/2 (Walton Lane NB)	3.30	0.00	Y	Arm 6 Right	Inf	100.0 %	1945	1945
2/1 (Walton Lane SB)	3.60	0.00	Y	Arm 7 Left	Inf	100.0 %	1975	1975
2/2 (Walton Lane SB)	3.60	0.00	Y	Arm 4 Right	Inf	21.9 %	1975	1975
				Arm 5 Right	Inf	25.8 %		
				Arm 7 Left	Inf	52.3 %		
3/1 (Spellow Lane)	3.40	0.00	Y	Arm 6 Left	Inf	100.0 %	1955	1955
3/2 (Spellow Lane)	3.40	0.00	Y	Arm 4 U-Turn	Inf	9.1 %	1955	1955
				Arm 7 Right	Inf	90.9 %		
4/1 (Langham Street)	3.25	0.00	Y				1940	1940
5/1 (Spellow Lane Out)	3.80	0.00	Y				1995	1995
6/1 (Walton Lane NB out)	3.60	0.00	Y				1975	1975
6/2 (Walton Lane NB out)	3.60	0.00	Y				1975	1975
7/1 (Walton Lane SB out)	3.40	0.00	Y				1955	1955
7/2 (Walton Lane SB out)	3.40	0.00	Y				1955	1955

Scenario 11: '2032 Base + Dev AM Sensitivity' (FG13: '2032 Base + Dev AM Sensitivity', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired

Desired Flow :

		Destination				
		A	B	C	D	Tot.
Origin	A	0	305	275	24	604
	B	246	0	1153	419	1818
	C	254	734	0	33	1021
	D	0	0	0	0	0
	Tot.	500	1039	1428	476	3443

Traffic Lane Flows

Lane	Scenario 11: 2032 Base + Dev AM Sensitivity
Junction: Walton Lane / Spellow Lane	
1/1	510
1/2	511
2/1	906
2/2	912
3/1	305
3/2	299
4/1	476
5/1	500
6/1	528
6/2	511
7/1	906
7/2	522

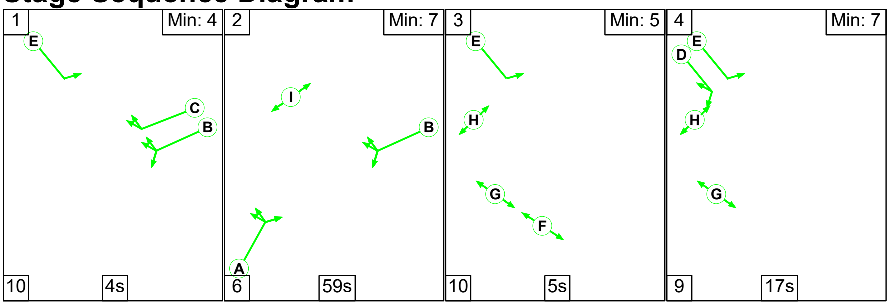
Full Input Data And Results

Lane Saturation Flows

Junction: Walton Lane / Spellow Lane								
Lane	**Lane Width (m)**	**Gradient**	**Nearside Lane**	**Allowed Turns**	**Turning Radius (m)**	**Turning Prop.**	**Sat Flow (PCU/Hr)**	**Flared Sat Flow (PCU/Hr)**
1/1 (Walton Lane NB)	3.30	0.00	Y	Arm 4 Left	Inf	6.5 %	1945	1945
				Arm 5 Left	Inf	49.8 %		
				Arm 6 Right	Inf	43.7 %		
1/2 (Walton Lane NB)	3.30	0.00	Y	Arm 6 Right	Inf	100.0 %	1945	1945
2/1 (Walton Lane SB)	3.60	0.00	Y	Arm 7 Left	Inf	100.0 %	1975	1975
2/2 (Walton Lane SB)	3.60	0.00	Y	Arm 4 Right	Inf	45.9 %	1975	1975
				Arm 5 Right	Inf	27.0 %		
				Arm 7 Left	Inf	27.1 %		
3/1 (Spellow Lane)	3.40	0.00	Y	Arm 6 Left	Inf	100.0 %	1955	1955
3/2 (Spellow Lane)	3.40	0.00	Y	Arm 4 U-Turn	Inf	8.0 %	1955	1955
				Arm 7 Right	Inf	92.0 %		
4/1 (Langham Street)	3.25	0.00	Y				1940	1940
5/1 (Spellow Lane Out)	3.80	0.00	Y				1995	1995
6/1 (Walton Lane NB out)	3.60	0.00	Y				1975	1975
6/2 (Walton Lane NB out)	3.60	0.00	Y				1975	1975
7/1 (Walton Lane SB out)	3.40	0.00	Y				1955	1955
7/2 (Walton Lane SB out)	3.40	0.00	Y				1955	1955

Scenario 1: '2019 Survey AM' (FG1: '2019 Survey AM', Plan 1: 'Network Control Plan 1')

Stage Sequence Diagram

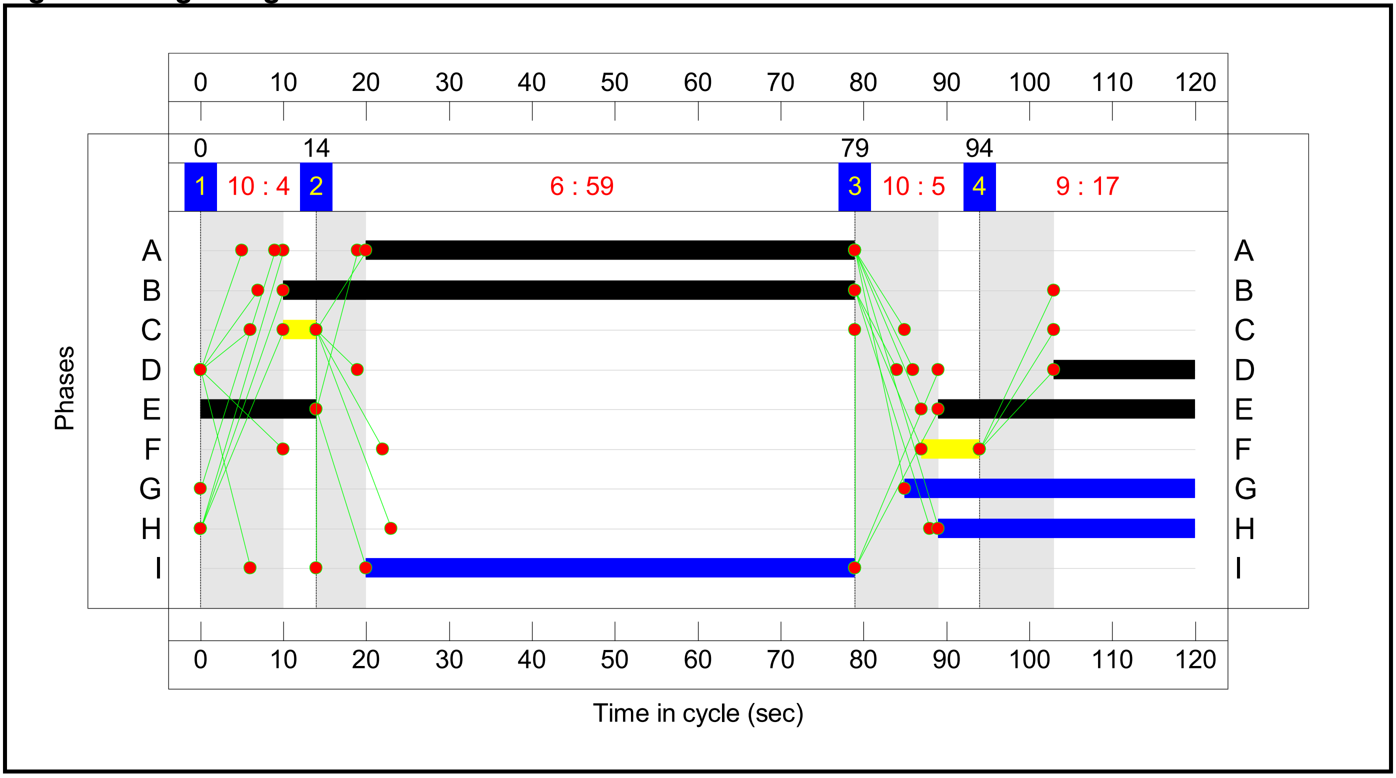


Stage Timings

Stage	1	2	3	4
Duration	4	59	5	17
Change Point	0	14	79	94

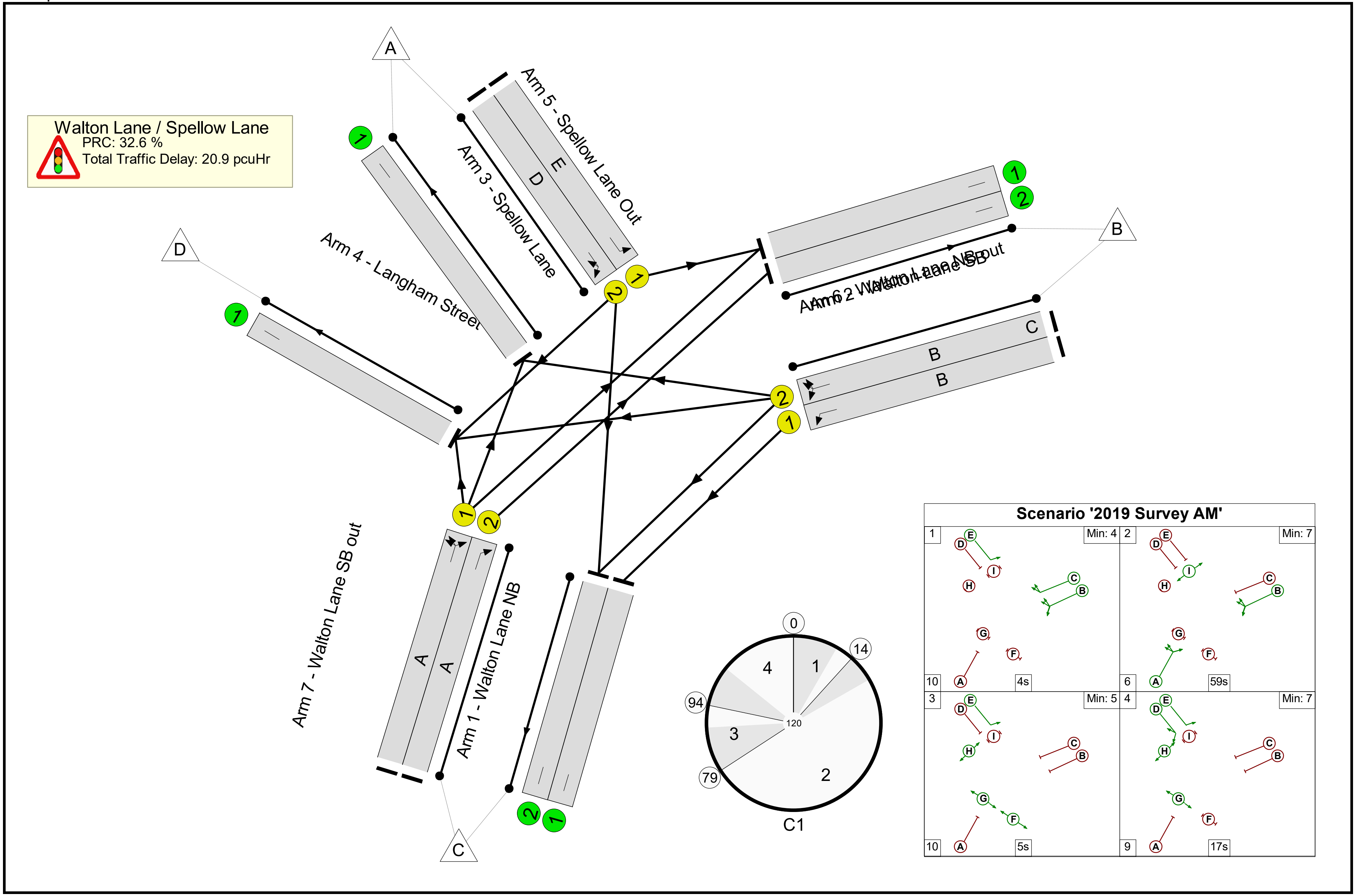
Full Input Data And Results

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**	**-**	**-**		**-**	**-**	**-**	**-**	**-**	**-**	**67.9%**
Walton Lane / Spellow Lane	**-**	**-**	**N/A**	**-**	**-**		**-**	**-**	**-**	**-**	**-**	**-**	**67.9%**
1/1	Walton Lane NB Left Left2 Right	U	N/A	N/A	A		1	59	-	403	1945	973	41.4%
1/2	Walton Lane NB Right	U	N/A	N/A	A		1	59	-	406	1945	973	41.7%
2/1	Walton Lane SB Left	U	N/A	N/A	B		1	69	-	757	1975	1152	65.7%
2/2	Walton Lane SB Right Right2 Left	U	N/A	N/A	B	C	1	69	4	772	1975	1152	67.0%
3/1	Spellow Lane Left	U	N/A	N/A	E		1	45	-	247	1955	749	33.0%
3/2	Spellow Lane U-Turn Right	U	N/A	N/A	D		1	17	-	199	1955	293	67.9%
4/1	Langham Street	U	N/A	N/A	-		-	-	-	408	1940	1940	21.0%
5/1	Spellow Lane Out	U	N/A	N/A	-		-	-	-	339	1995	1995	17.0%
6/1	Walton Lane NB out	U	N/A	N/A	-		-	-	-	466	1975	1975	23.6%
6/2	Walton Lane NB out	U	N/A	N/A	-		-	-	-	406	1975	1975	20.6%
7/1	Walton Lane SB out	U	N/A	N/A	-		-	-	-	757	1955	1955	38.7%
7/2	Walton Lane SB out	U	N/A	N/A	-		-	-	-	408	1955	1955	20.9%

Full Input Data And Results

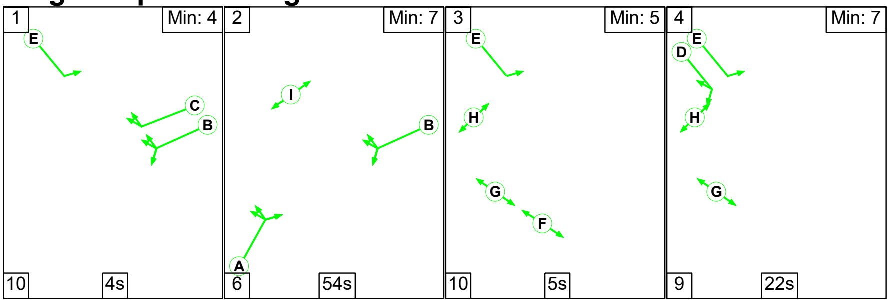
Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network	**-**	**-**	**0**	**0**	**0**	**15.9**	**4.9**	**0.0**	**20.9**	**-**	**-**	**-**	**-**
Walton Lane / Spellow Lane	**-**	**-**	**0**	**0**	**0**	**15.9**	**4.9**	**0.0**	**20.9**	**-**	**-**	**-**	**-**
1/1	403	403	-	-	-	2.1	0.4	-	2.5	22.1	8.4	0.4	8.7
1/2	406	406	-	-	-	2.1	0.4	-	2.5	22.1	8.5	0.4	8.8
2/1	757	757	-	-	-	3.6	1.0	-	4.5	21.4	17.0	1.0	18.0
2/2	772	772	-	-	-	3.7	1.0	-	4.7	21.8	17.6	1.0	18.6
3/1	247	247	-	-	-	1.8	0.2	-	2.0	29.7	5.8	0.2	6.0
3/2	199	199	-	-	-	2.7	1.0	-	3.7	67.0	6.2	1.0	7.3
4/1	408	408	-	-	-	0.0	0.1	-	0.1	1.2	0.0	0.1	0.1
5/1	339	339	-	-	-	0.0	0.1	-	0.1	1.1	0.0	0.1	0.1
6/1	466	466	-	-	-	0.0	0.2	-	0.2	1.2	0.0	0.2	0.2
6/2	406	406	-	-	-	0.0	0.1	-	0.1	1.1	0.0	0.1	0.1
7/1	757	757	-	-	-	0.0	0.3	-	0.3	1.6	12.6	0.3	12.9
7/2	408	408	-	-	-	0.0	0.1	-	0.1	1.2	0.0	0.1	0.1

C1 PRC for Signalled Lanes (%): 32.6 Total Delay for Signalled Lanes (pcuHr): 19.89 Cycle Time (s): 120
PRC Over All Lanes (%): 32.6 Total Delay Over All Lanes(pcuHr): 20.87

Full Input Data And Results

Scenario 2: '2019 Survey PM' (FG2: '2019 Survey PM', Plan 1: 'Network Control Plan 1')

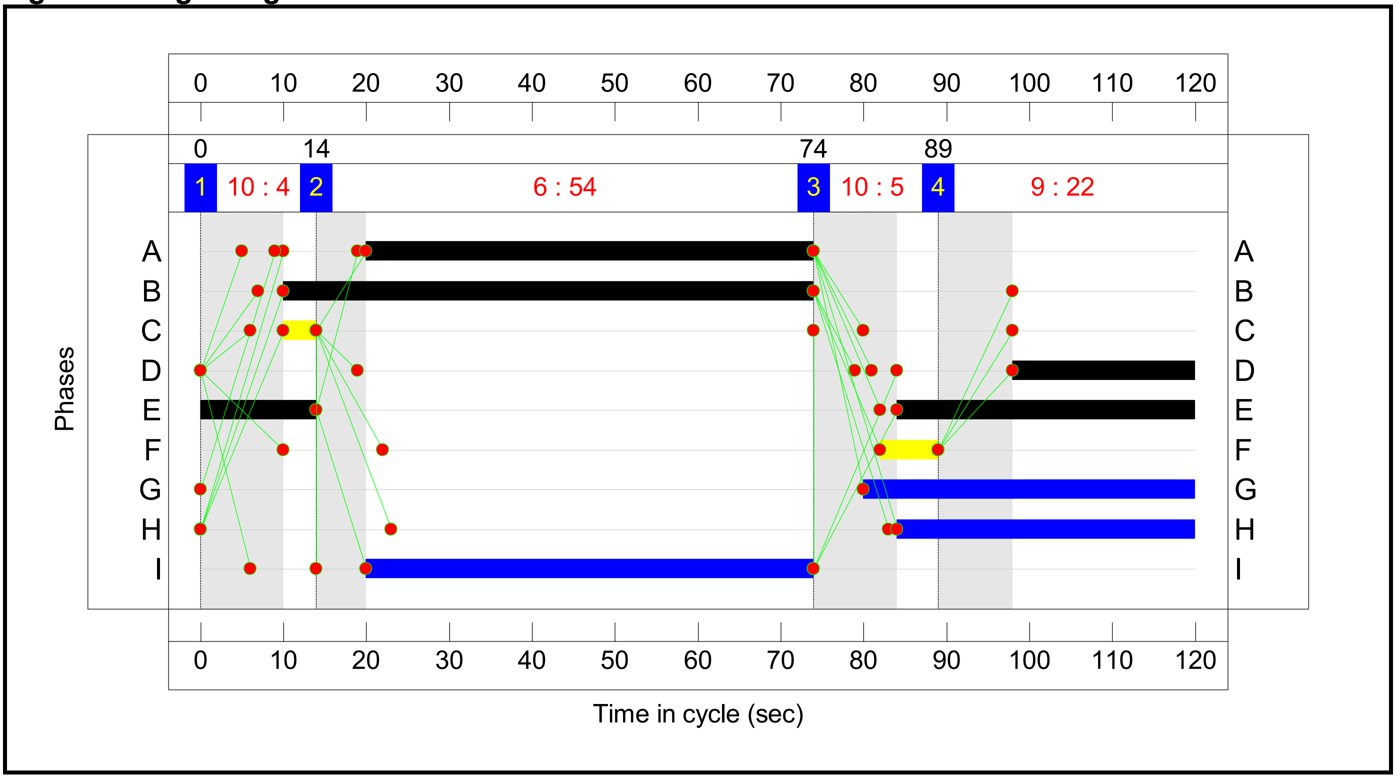
Stage Sequence Diagram



Stage Timings

Stage	1	2	3	4
Duration	4	54	5	22
Change Point	0	14	74	89

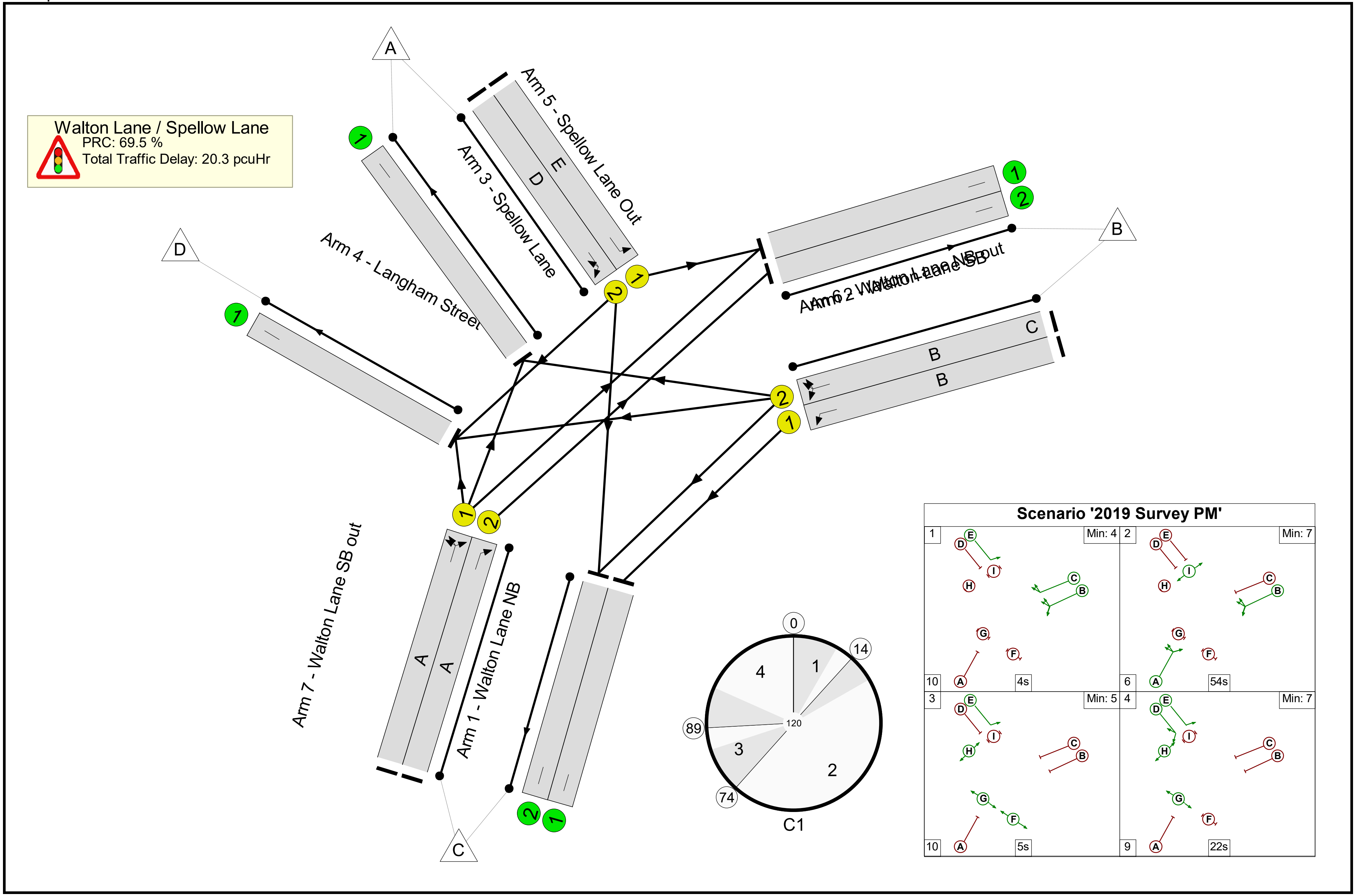
Signal Timings Diagram



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**	**-**	**-**		**-**	**-**	**-**	**-**	**-**	**-**	**53.1%**
Walton Lane / Spellow Lane	**-**	**-**	**N/A**	**-**	**-**		**-**	**-**	**-**	**-**	**-**	**-**	**53.1%**
1/1	Walton Lane NB Left Left2 Right	U	N/A	N/A	A		1	54	-	422	1945	891	47.3%
1/2	Walton Lane NB Right	U	N/A	N/A	A		1	54	-	429	1945	891	48.1%
2/1	Walton Lane SB Left	U	N/A	N/A	B		1	64	-	561	1975	1070	52.4%
2/2	Walton Lane SB Right Right2 Left	U	N/A	N/A	B	C	1	64	4	565	1975	1070	52.8%
3/1	Spellow Lane Left	U	N/A	N/A	E		1	50	-	426	1955	831	51.3%
3/2	Spellow Lane U-Turn Right	U	N/A	N/A	D		1	22	-	199	1955	375	53.1%
4/1	Langham Street	U	N/A	N/A	-		-	-	-	174	1940	1940	9.0%
5/1	Spellow Lane Out	U	N/A	N/A	-		-	-	-	289	1995	1995	14.5%
6/1	Walton Lane NB out	U	N/A	N/A	-		-	-	-	644	1975	1975	32.6%
6/2	Walton Lane NB out	U	N/A	N/A	-		-	-	-	429	1975	1975	21.7%
7/1	Walton Lane SB out	U	N/A	N/A	-		-	-	-	561	1955	1955	28.7%
7/2	Walton Lane SB out	U	N/A	N/A	-		-	-	-	505	1955	1955	25.8%

Full Input Data And Results

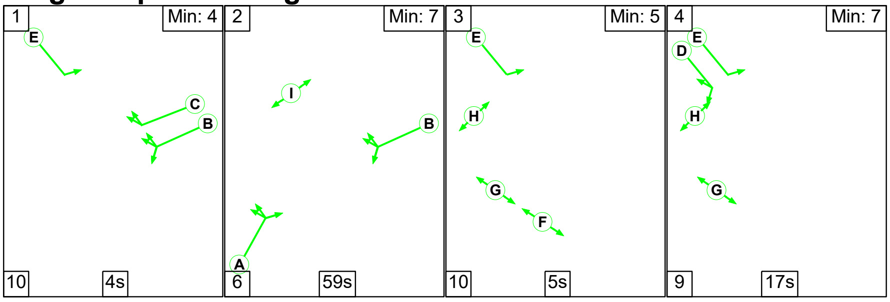
Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network	**-**	**-**	**0**	**0**	**0**	**16.3**	**4.0**	**0.0**	**20.3**	**-**	**-**	**-**	**-**
Walton Lane / Spellow Lane	**-**	**-**	**0**	**0**	**0**	**16.3**	**4.0**	**0.0**	**20.3**	**-**	**-**	**-**	**-**
1/1	422	422	-	-	-	2.6	0.4	-	3.1	26.3	9.7	0.4	10.2
1/2	429	429	-	-	-	2.7	0.5	-	3.2	26.5	9.9	0.5	10.4
2/1	561	561	-	-	-	2.7	0.6	-	3.3	21.1	11.8	0.6	12.4
2/2	565	565	-	-	-	2.8	0.6	-	3.3	21.2	12.1	0.6	12.6
3/1	426	426	-	-	-	3.0	0.5	-	3.5	29.8	10.4	0.5	10.9
3/2	199	199	-	-	-	2.4	0.6	-	3.0	53.8	5.9	0.6	6.5
4/1	174	174	-	-	-	0.0	0.0	-	0.0	1.0	0.0	0.0	0.0
5/1	289	289	-	-	-	0.0	0.1	-	0.1	1.1	0.0	0.1	0.1
6/1	644	644	-	-	-	0.0	0.2	-	0.2	1.4	0.0	0.2	0.2
6/2	429	429	-	-	-	0.0	0.1	-	0.1	1.2	0.0	0.1	0.1
7/1	561	561	-	-	-	0.0	0.2	-	0.2	1.3	7.6	0.2	7.8
7/2	505	505	-	-	-	0.0	0.2	-	0.2	1.2	0.0	0.2	0.2

C1 PRC for Signalled Lanes (%): 69.5 Total Delay for Signalled Lanes (pcuHr): 19.36 Cycle Time (s): 120
PRC Over All Lanes (%): 69.5 Total Delay Over All Lanes(pcuHr): 20.26

Full Input Data And Results

Scenario 3: '2028 Base AM' (FG5: '2028 Base AM', Plan 1: 'Network Control Plan 1')

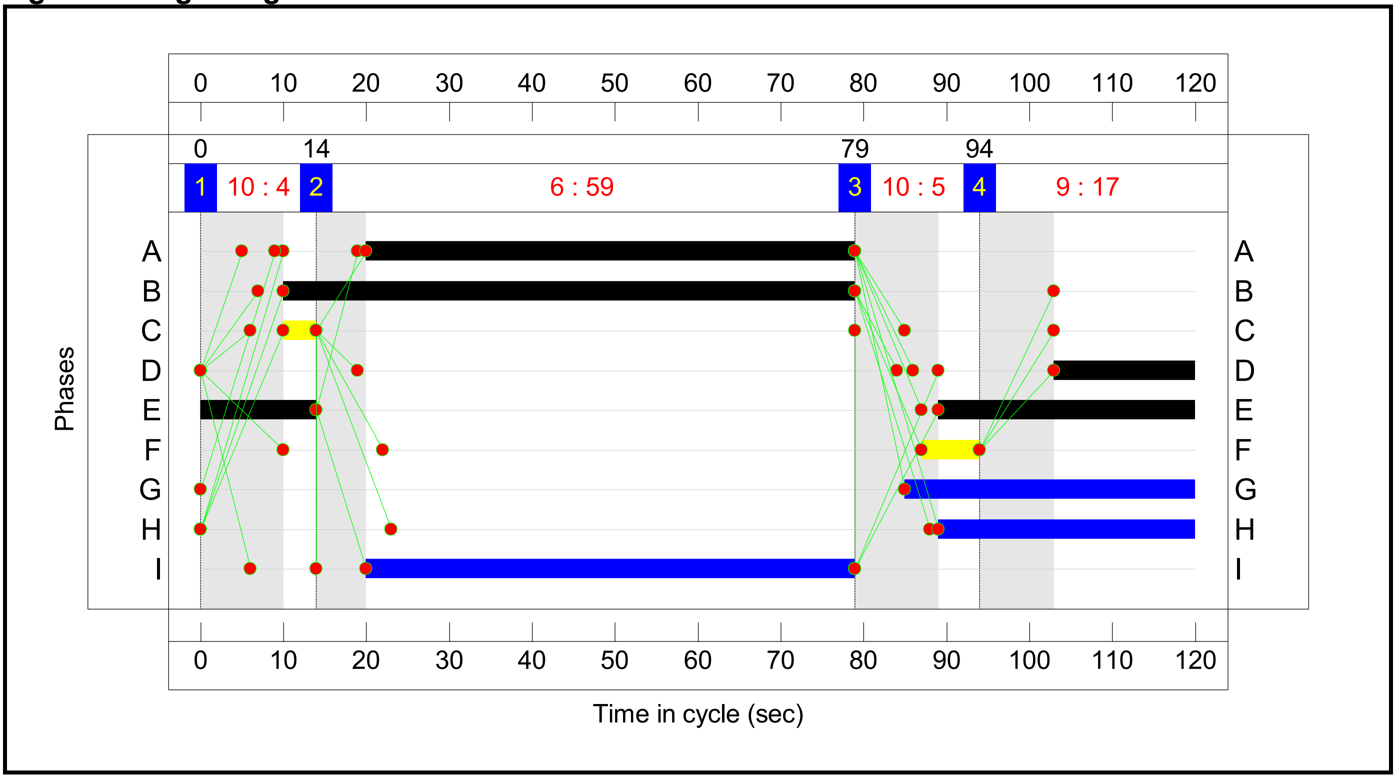
Stage Sequence Diagram



Stage Timings

Stage	1	2	3	4
Duration	4	59	5	17
Change Point	0	14	79	94

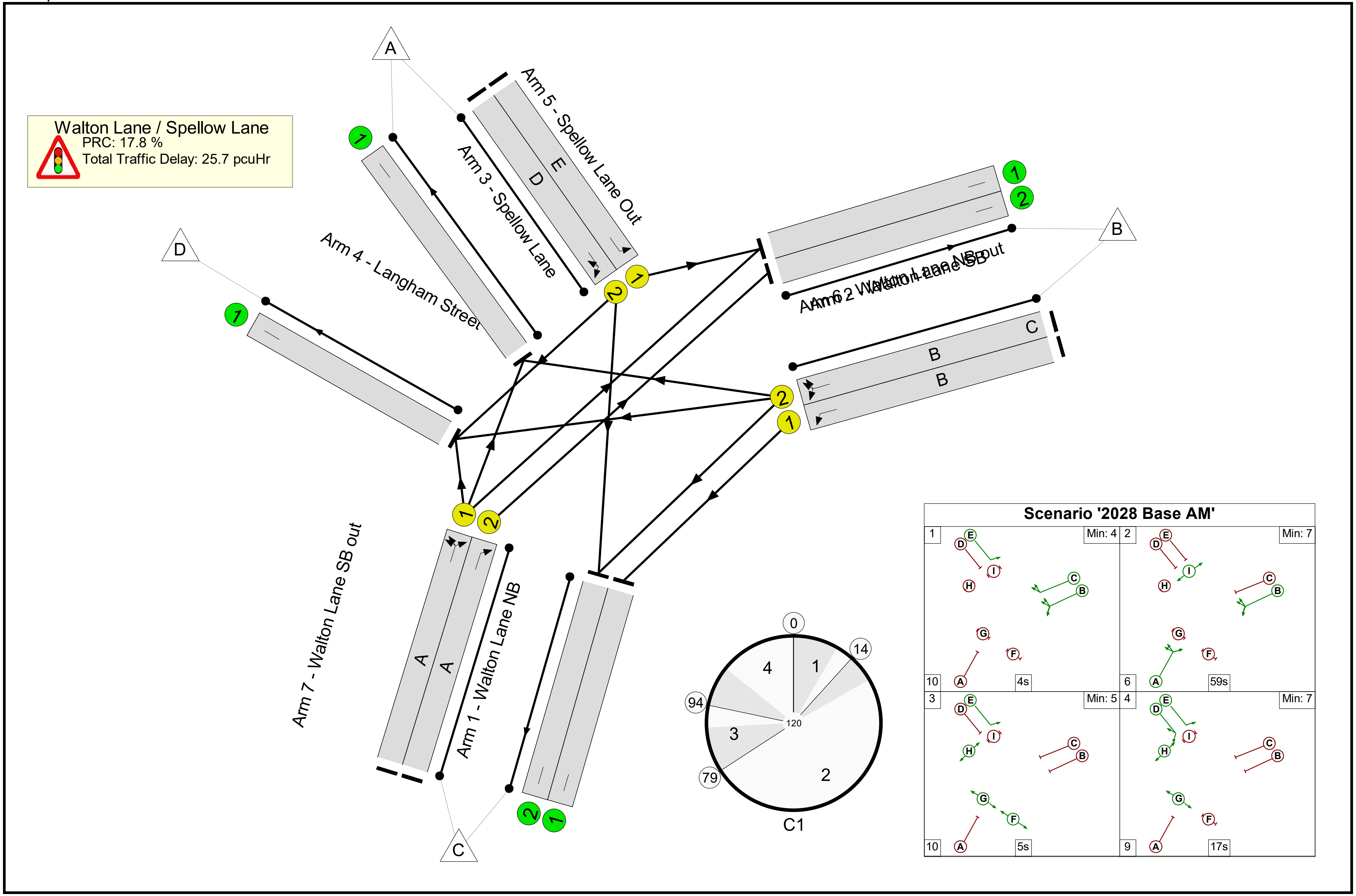
Signal Timings Diagram



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**	**-**	**-**		**-**	**-**	**-**	**-**	**-**	**-**	**76.4%**
Walton Lane / Spellow Lane	**-**	**-**	**N/A**	**-**	**-**		**-**	**-**	**-**	**-**	**-**	**-**	**76.4%**
1/1	Walton Lane NB Left Left2 Right	U	N/A	N/A	A		1	59	-	453	1945	973	46.6%
1/2	Walton Lane NB Right	U	N/A	N/A	A		1	59	-	455	1945	973	46.8%
2/1	Walton Lane SB Left	U	N/A	N/A	B		1	69	-	855	1975	1152	74.2%
2/2	Walton Lane SB Right Right2 Left	U	N/A	N/A	B	C	1	69	4	869	1975	1152	75.4%
3/1	Spellow Lane Left	U	N/A	N/A	E		1	45	-	277	1955	749	37.0%
3/2	Spellow Lane U-Turn Right	U	N/A	N/A	D		1	17	-	224	1955	293	76.4%
4/1	Langham Street	U	N/A	N/A	-		-	-	-	458	1940	1940	23.6%
5/1	Spellow Lane Out	U	N/A	N/A	-		-	-	-	385	1995	1995	19.3%
6/1	Walton Lane NB out	U	N/A	N/A	-		-	-	-	524	1975	1975	26.5%
6/2	Walton Lane NB out	U	N/A	N/A	-		-	-	-	455	1975	1975	23.0%
7/1	Walton Lane SB out	U	N/A	N/A	-		-	-	-	855	1955	1955	43.7%
7/2	Walton Lane SB out	U	N/A	N/A	-		-	-	-	456	1955	1955	23.3%

Full Input Data And Results

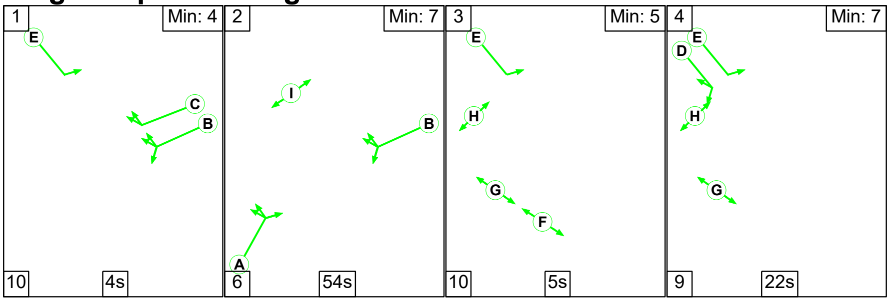
Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network	**-**	**-**	**0**	**0**	**0**	**18.9**	**6.8**	**0.0**	**25.7**	**-**	**-**	**-**	**-**
Walton Lane / Spellow Lane	**-**	**-**	**0**	**0**	**0**	**18.9**	**6.8**	**0.0**	**25.7**	**-**	**-**	**-**	**-**
1/1	453	453	-	-	-	2.5	0.4	-	2.9	23.0	9.8	0.4	10.3
1/2	455	455	-	-	-	2.5	0.4	-	2.9	23.1	9.9	0.4	10.3
2/1	855	855	-	-	-	4.4	1.4	-	5.8	24.4	20.9	1.4	22.3
2/2	869	869	-	-	-	4.5	1.5	-	6.0	24.9	21.5	1.5	23.0
3/1	277	277	-	-	-	2.0	0.3	-	2.3	30.4	6.6	0.3	6.9
3/2	224	224	-	-	-	3.0	1.5	-	4.6	73.8	7.2	1.5	8.7
4/1	458	458	-	-	-	0.0	0.2	-	0.2	1.2	0.0	0.2	0.2
5/1	385	385	-	-	-	0.0	0.1	-	0.1	1.1	0.0	0.1	0.1
6/1	524	524	-	-	-	0.0	0.2	-	0.2	1.2	0.0	0.2	0.2
6/2	455	455	-	-	-	0.0	0.1	-	0.1	1.2	0.0	0.1	0.1
7/1	855	855	-	-	-	0.0	0.4	-	0.4	1.7	16.9	0.4	17.3
7/2	456	456	-	-	-	0.0	0.2	-	0.2	1.2	0.0	0.2	0.2

C1 PRC for Signalled Lanes (%): 17.8 Total Delay for Signalled Lanes (pcuHr): 24.54 Cycle Time (s): 120
PRC Over All Lanes (%): 17.8 Total Delay Over All Lanes(pcuHr): 25.70

Full Input Data And Results

Scenario 4: '2028 Base PM' (FG6: '2028 Base PM', Plan 1: 'Network Control Plan 1')

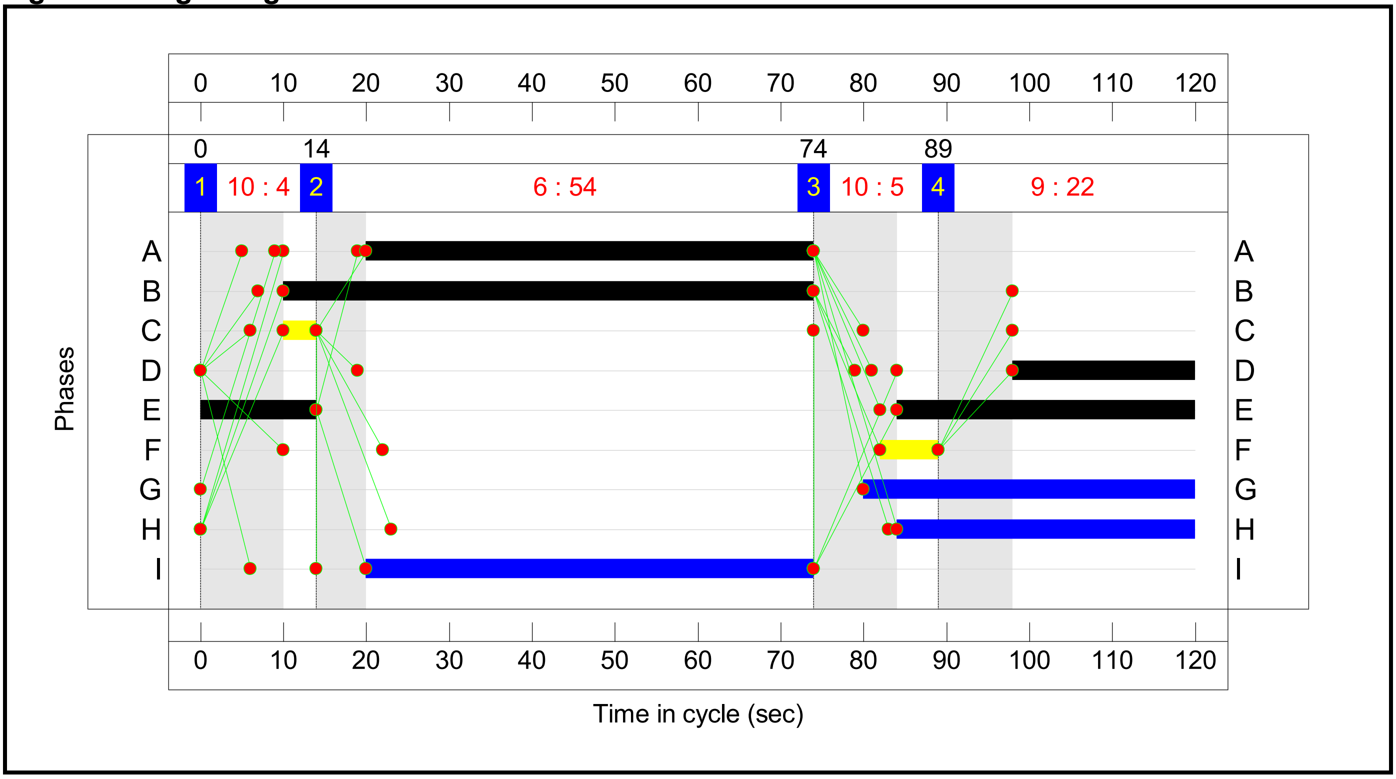
Stage Sequence Diagram



Stage Timings

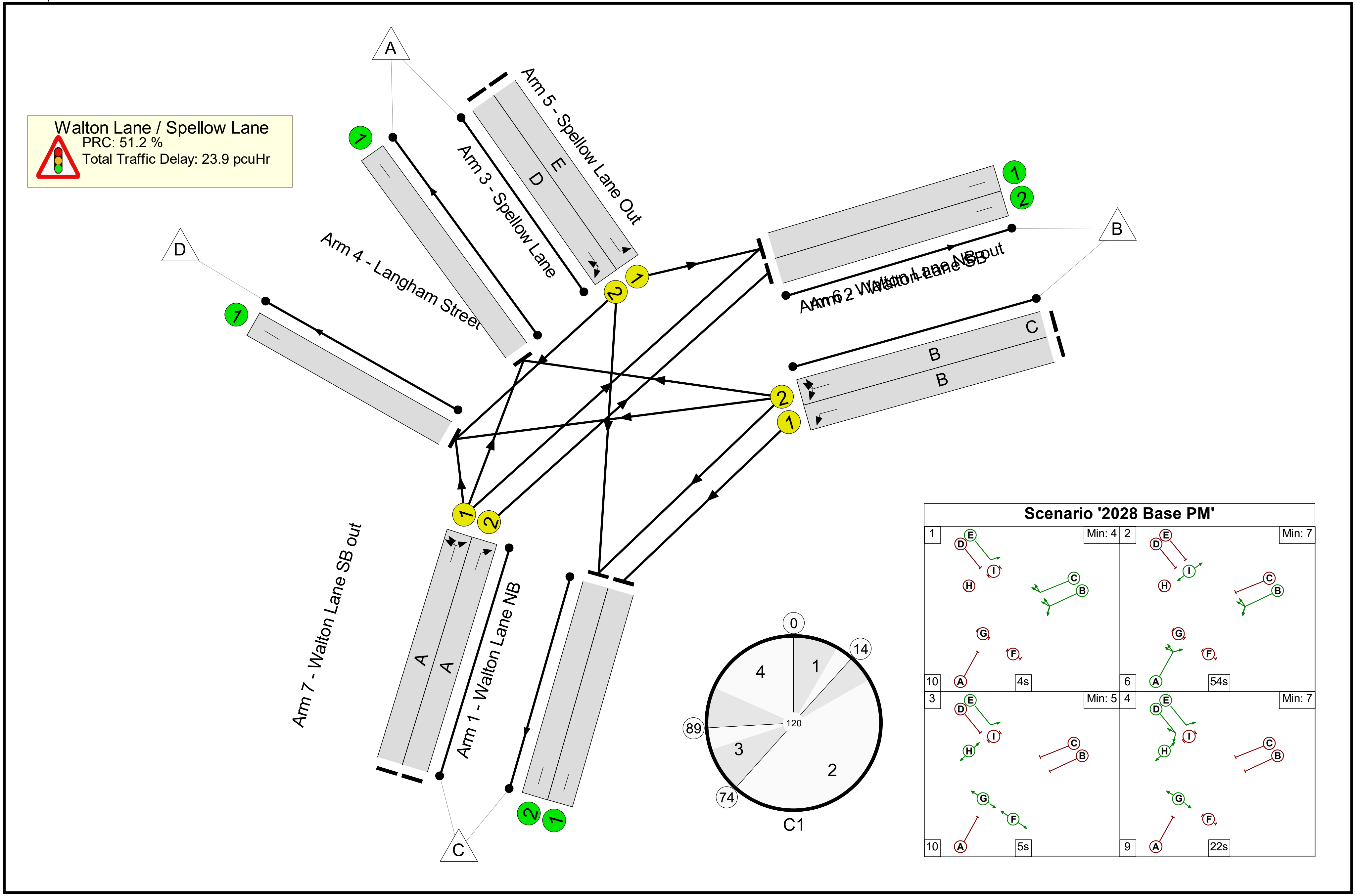
Stage	1	2	3	4
Duration	4	54	5	22
Change Point	0	14	74	89

Signal Timings Diagram



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**	**-**	**-**		**-**	**-**	**-**	**-**	**-**	**-**	**59.5%**
Walton Lane / Spellow Lane	**-**	**-**	**N/A**	**-**	**-**		**-**	**-**	**-**	**-**	**-**	**-**	**59.5%**
1/1	Walton Lane NB Left Left2 Right	U	N/A	N/A	A		1	54	-	473	1945	891	53.1%
1/2	Walton Lane NB Right	U	N/A	N/A	A		1	54	-	481	1945	891	54.0%
2/1	Walton Lane SB Left	U	N/A	N/A	B		1	64	-	629	1975	1070	58.8%
2/2	Walton Lane SB Right Right2 Left	U	N/A	N/A	B	C	1	64	4	633	1975	1070	59.2%
3/1	Spellow Lane Left	U	N/A	N/A	E		1	50	-	476	1955	831	57.3%
3/2	Spellow Lane U-Turn Right	U	N/A	N/A	D		1	22	-	223	1955	375	59.5%
4/1	Langham Street	U	N/A	N/A	-		-	-	-	195	1940	1940	10.1%
5/1	Spellow Lane Out	U	N/A	N/A	-		-	-	-	325	1995	1995	16.3%
6/1	Walton Lane NB out	U	N/A	N/A	-		-	-	-	721	1975	1975	36.5%
6/2	Walton Lane NB out	U	N/A	N/A	-		-	-	-	481	1975	1975	24.4%
7/1	Walton Lane SB out	U	N/A	N/A	-		-	-	-	629	1955	1955	32.2%
7/2	Walton Lane SB out	U	N/A	N/A	-		-	-	-	564	1955	1955	28.8%

Full Input Data And Results

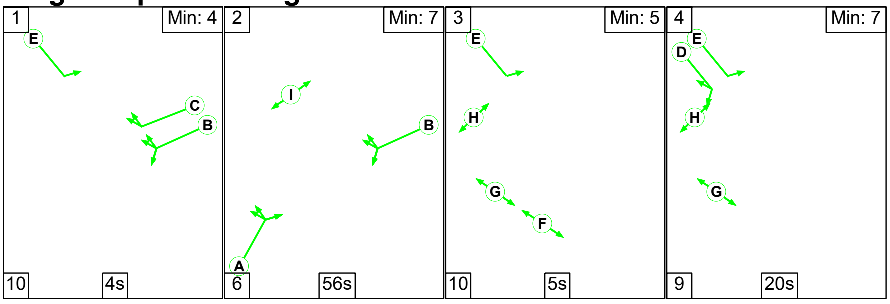
Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network	**-**	**-**	**0**	**0**	**0**	**18.9**	**5.0**	**0.0**	**23.9**	**-**	**-**	**-**	**-**
Walton Lane / Spellow Lane	**-**	**-**	**0**	**0**	**0**	**18.9**	**5.0**	**0.0**	**23.9**	**-**	**-**	**-**	**-**
1/1	473	473	-	-	-	3.1	0.6	-	3.6	27.6	11.2	0.6	11.7
1/2	481	481	-	-	-	3.1	0.6	-	3.7	27.8	11.5	0.6	12.1
2/1	629	629	-	-	-	3.2	0.7	-	3.9	22.6	14.0	0.7	14.7
2/2	633	633	-	-	-	3.3	0.7	-	4.0	22.7	14.1	0.7	14.8
3/1	476	476	-	-	-	3.5	0.7	-	4.1	31.3	12.0	0.7	12.7
3/2	223	223	-	-	-	2.7	0.7	-	3.5	56.0	6.8	0.7	7.5
4/1	195	195	-	-	-	0.0	0.1	-	0.1	1.0	0.0	0.1	0.1
5/1	325	325	-	-	-	0.0	0.1	-	0.1	1.1	0.0	0.1	0.1
6/1	721	721	-	-	-	0.0	0.3	-	0.3	1.4	0.0	0.3	0.3
6/2	481	481	-	-	-	0.0	0.2	-	0.2	1.2	0.0	0.2	0.2
7/1	629	629	-	-	-	0.0	0.2	-	0.2	1.4	9.8	0.2	10.1
7/2	564	564	-	-	-	0.0	0.2	-	0.2	1.3	0.0	0.2	0.2

C1 PRC for Signalled Lanes (%): 51.2 Total Delay for Signalled Lanes (pcuHr): 22.86 Cycle Time (s): 120
PRC Over All Lanes (%): 51.2 Total Delay Over All Lanes(pcuHr): 23.91

Full Input Data And Results

Scenario 5: '2028 Base + Dev AM' (FG7: '2028 Base + Dev AM', Plan 1: 'Network Control Plan 1')

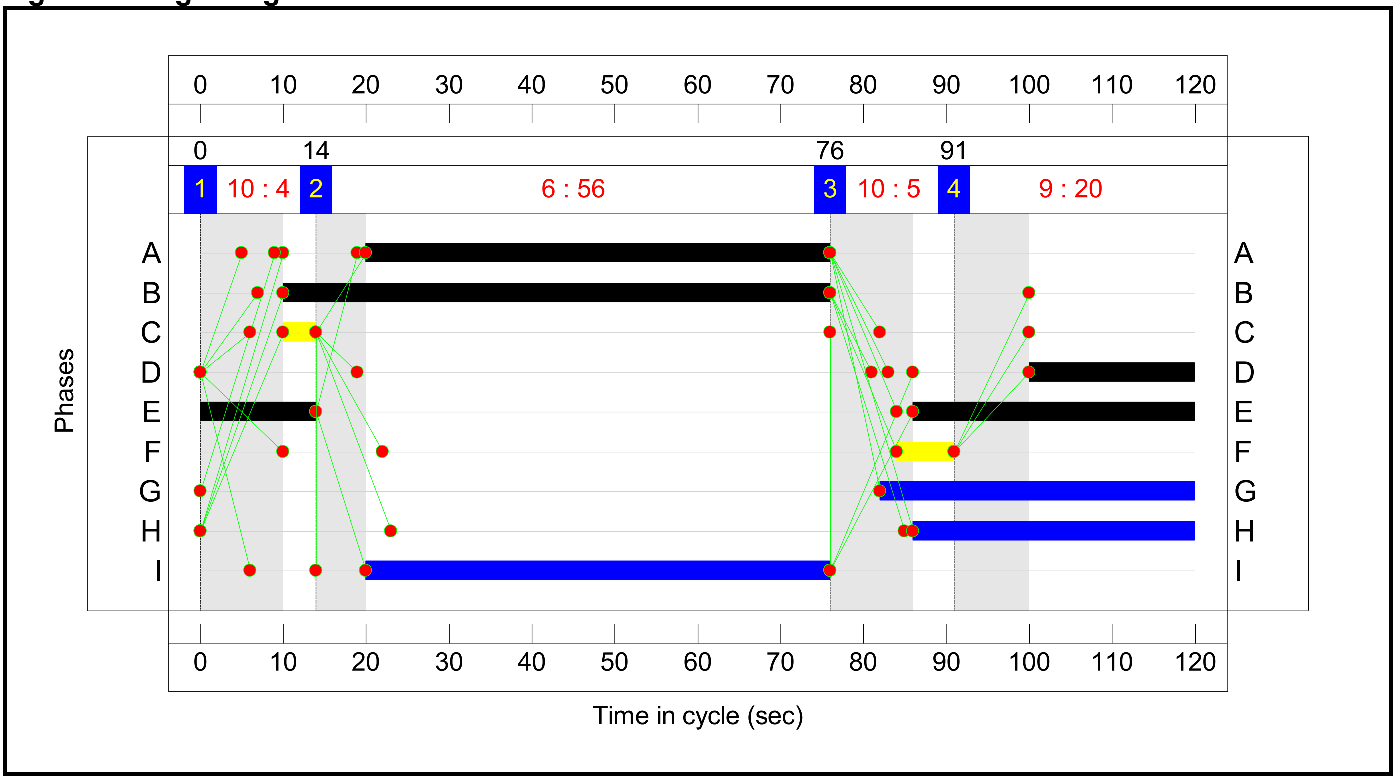
Stage Sequence Diagram



Stage Timings

Stage	1	2	3	4
Duration	4	56	5	20
Change Point	0	14	76	91

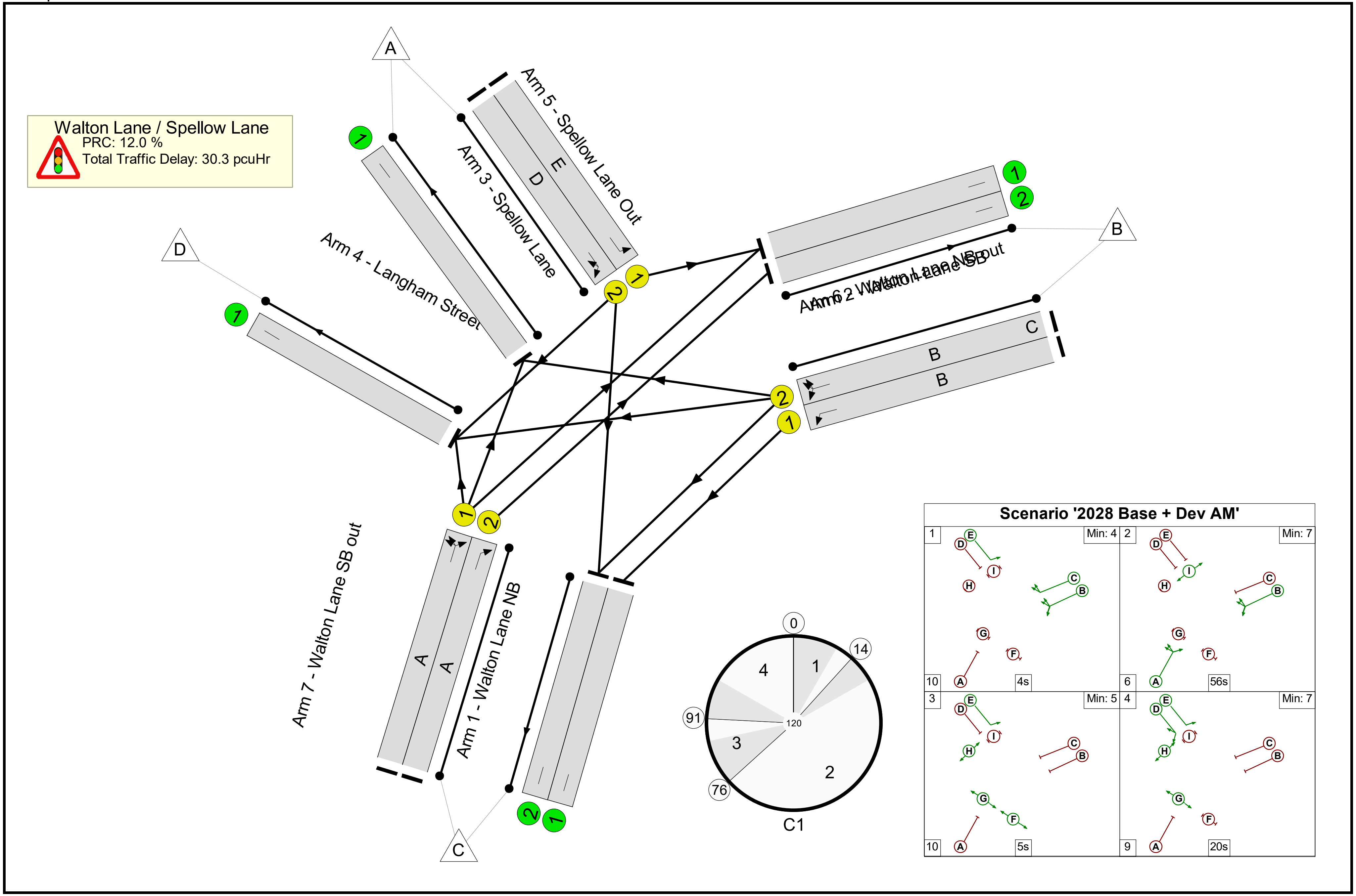
Signal Timings Diagram



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**	**-**	**-**		**-**	**-**	**-**	**-**	**-**	**-**	**80.4%**
Walton Lane / Spellow Lane	**-**	**-**	**N/A**	**-**	**-**		**-**	**-**	**-**	**-**	**-**	**-**	**80.4%**
1/1	Walton Lane NB Left Left2 Right	U	N/A	N/A	A		1	56	-	492	1945	924	53.3%
1/2	Walton Lane NB Right	U	N/A	N/A	A		1	56	-	492	1945	924	53.3%
2/1	Walton Lane SB Left	U	N/A	N/A	B		1	66	-	869	1975	1103	78.8%
2/2	Walton Lane SB Right Right2 Left	U	N/A	N/A	B	C	1	66	4	881	1975	1103	79.9%
3/1	Spellow Lane Left	U	N/A	N/A	E		1	48	-	294	1955	798	36.8%
3/2	Spellow Lane U-Turn Right	U	N/A	N/A	D		1	20	-	275	1955	342	80.4%
4/1	Langham Street	U	N/A	N/A	-		-	-	-	458	1940	1940	23.6%
5/1	Spellow Lane Out	U	N/A	N/A	-		-	-	-	485	1995	1995	24.3%
6/1	Walton Lane NB out	U	N/A	N/A	-		-	-	-	508	1975	1975	25.7%
6/2	Walton Lane NB out	U	N/A	N/A	-		-	-	-	492	1975	1975	24.9%
7/1	Walton Lane SB out	U	N/A	N/A	-		-	-	-	869	1955	1955	44.5%
7/2	Walton Lane SB out	U	N/A	N/A	-		-	-	-	491	1955	1955	25.1%

Full Input Data And Results

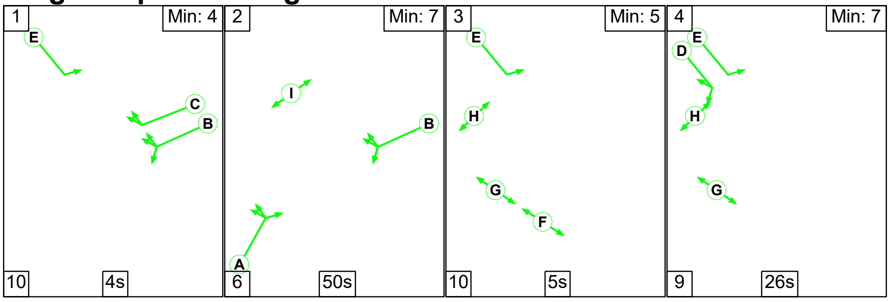
Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network	**-**	**-**	**0**	**0**	**0**	**21.9**	**8.4**	**0.0**	**30.3**	**-**	**-**	**-**	**-**
Walton Lane / Spellow Lane	**-**	**-**	**0**	**0**	**0**	**21.9**	**8.4**	**0.0**	**30.3**	**-**	**-**	**-**	**-**
1/1	492	492	-	-	-	3.0	0.6	-	3.6	26.3	11.5	0.6	12.0
1/2	492	492	-	-	-	3.0	0.6	-	3.6	26.3	11.5	0.6	12.0
2/1	869	869	-	-	-	5.0	1.8	-	6.9	28.5	22.7	1.8	24.5
2/2	881	881	-	-	-	5.2	2.0	-	7.1	29.1	23.2	2.0	25.2
3/1	294	294	-	-	-	2.0	0.3	-	2.3	28.3	6.8	0.3	7.1
3/2	275	275	-	-	-	3.6	1.9	-	5.6	72.9	8.8	1.9	10.7
4/1	458	458	-	-	-	0.0	0.2	-	0.2	1.2	0.0	0.2	0.2
5/1	485	485	-	-	-	0.0	0.2	-	0.2	1.2	0.0	0.2	0.2
6/1	508	508	-	-	-	0.0	0.2	-	0.2	1.2	0.0	0.2	0.2
6/2	492	492	-	-	-	0.0	0.2	-	0.2	1.2	0.0	0.2	0.2
7/1	869	869	-	-	-	0.0	0.4	-	0.4	1.8	18.6	0.4	19.0
7/2	491	491	-	-	-	0.0	0.2	-	0.2	1.2	0.0	0.2	0.2

C1 PRC for Signalled Lanes (%): 12.0 Total Delay for Signalled Lanes (pcuHr): 29.07 Cycle Time (s): 120
PRC Over All Lanes (%): 12.0 Total Delay Over All Lanes(pcuHr): 30.31

Full Input Data And Results

Scenario 6: '2028 Base + Dev PM' (FG8: '2028 Base + Dev PM', Plan 1: 'Network Control Plan 1')

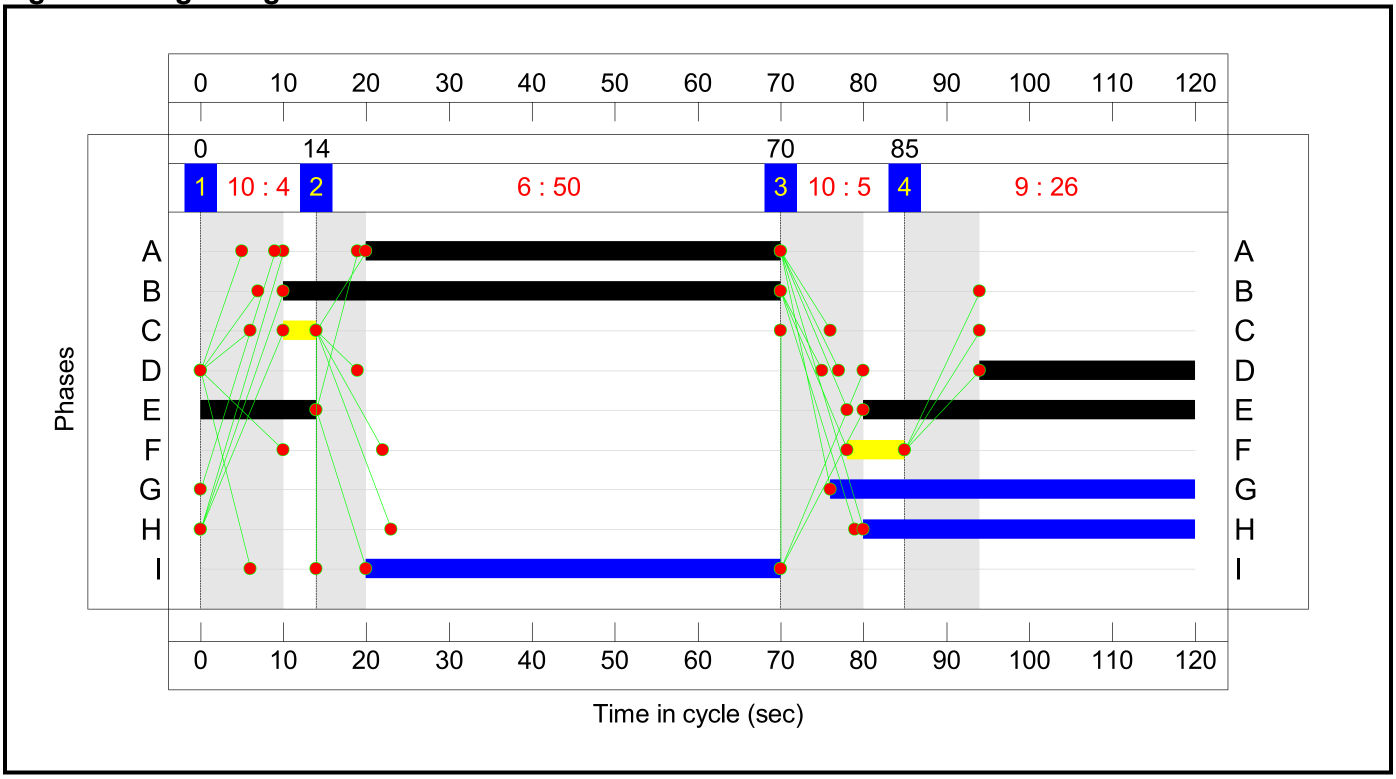
Stage Sequence Diagram



Stage Timings

Stage	1	2	3	4
Duration	4	50	5	26
Change Point	0	14	70	85

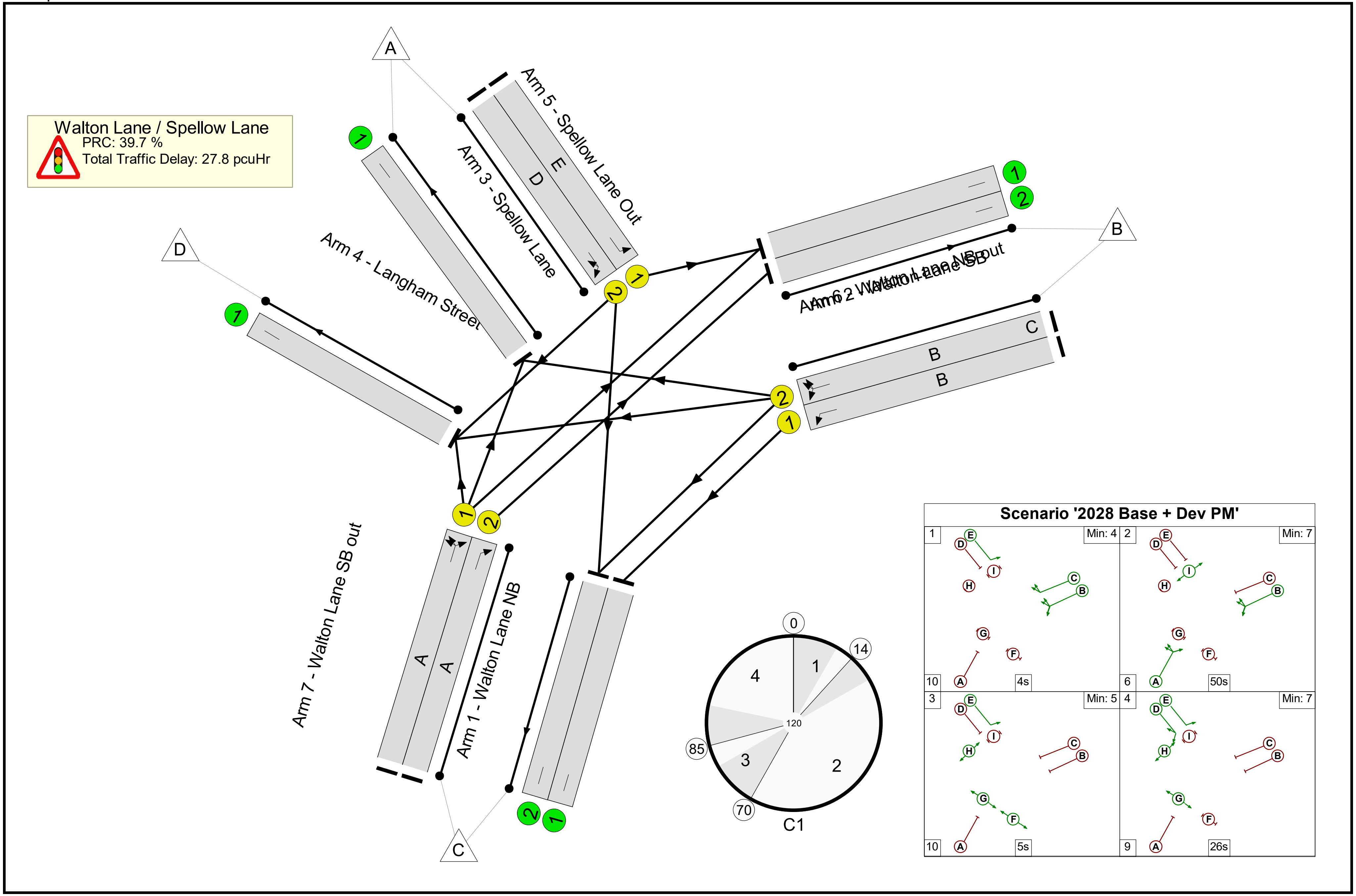
Signal Timings Diagram



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**	**-**	**-**		**-**	**-**	**-**	**-**	**-**	**-**	**64.4%**
Walton Lane / Spellow Lane	**-**	**-**	**N/A**	**-**	**-**		**-**	**-**	**-**	**-**	**-**	**-**	**64.4%**
1/1	Walton Lane NB Left Left2 Right	U	N/A	N/A	A		1	50	-	502	1945	827	60.7%
1/2	Walton Lane NB Right	U	N/A	N/A	A		1	50	-	509	1945	827	61.6%
2/1	Walton Lane SB Left	U	N/A	N/A	B		1	60	-	644	1975	1004	64.1%
2/2	Walton Lane SB Right Right2 Left	U	N/A	N/A	B	C	1	60	4	647	1975	1004	64.4%
3/1	Spellow Lane Left	U	N/A	N/A	E		1	54	-	512	1955	896	57.1%
3/2	Spellow Lane U-Turn Right	U	N/A	N/A	D		1	26	-	276	1955	440	62.7%
4/1	Langham Street	U	N/A	N/A	-		-	-	-	195	1940	1940	10.1%
5/1	Spellow Lane Out	U	N/A	N/A	-		-	-	-	419	1995	1995	21.0%
6/1	Walton Lane NB out	U	N/A	N/A	-		-	-	-	735	1975	1975	37.2%
6/2	Walton Lane NB out	U	N/A	N/A	-		-	-	-	509	1975	1975	25.8%
7/1	Walton Lane SB out	U	N/A	N/A	-		-	-	-	644	1955	1955	32.9%
7/2	Walton Lane SB out	U	N/A	N/A	-		-	-	-	588	1955	1955	30.1%

Full Input Data And Results

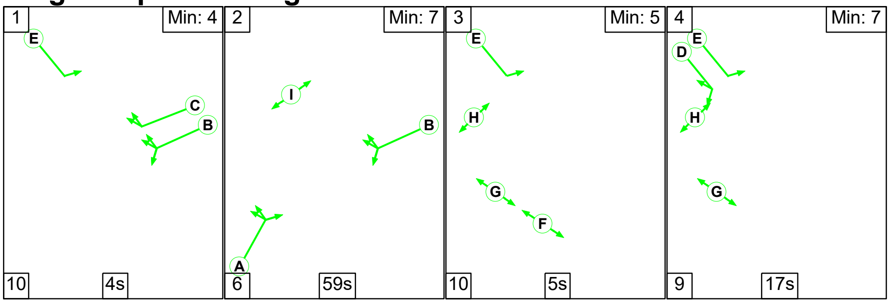
Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network	**-**	**-**	**0**	**0**	**0**	**21.9**	**6.0**	**0.0**	**27.8**	**-**	**-**	**-**	**-**
Walton Lane / Spellow Lane	**-**	**-**	**0**	**0**	**0**	**21.9**	**6.0**	**0.0**	**27.8**	**-**	**-**	**-**	**-**
1/1	502	502	-	-	-	3.7	0.8	-	4.5	32.3	13.0	0.8	13.7
1/2	509	509	-	-	-	3.8	0.8	-	4.6	32.5	13.1	0.8	13.9
2/1	644	644	-	-	-	3.9	0.9	-	4.7	26.5	15.6	0.9	16.5
2/2	647	647	-	-	-	3.9	0.9	-	4.8	26.6	15.6	0.9	16.5
3/1	512	512	-	-	-	3.4	0.7	-	4.1	28.5	12.5	0.7	13.2
3/2	276	276	-	-	-	3.2	0.8	-	4.1	52.8	8.3	0.8	9.1
4/1	195	195	-	-	-	0.0	0.1	-	0.1	1.0	0.0	0.1	0.1
5/1	419	419	-	-	-	0.0	0.1	-	0.1	1.1	0.0	0.1	0.1
6/1	735	735	-	-	-	0.0	0.3	-	0.3	1.5	0.0	0.3	0.3
6/2	509	509	-	-	-	0.0	0.2	-	0.2	1.2	0.0	0.2	0.2
7/1	644	644	-	-	-	0.0	0.2	-	0.3	1.4	11.4	0.2	11.7
7/2	588	588	-	-	-	0.0	0.2	-	0.2	1.3	0.0	0.2	0.2

C1 PRC for Signalled Lanes (%): 39.7 Total Delay for Signalled Lanes (pcuHr): 26.72 Cycle Time (s): 120
PRC Over All Lanes (%): 39.7 Total Delay Over All Lanes(pcuHr): 27.85

Full Input Data And Results

Scenario 7: '2032 Base AM' (FG9: '2032 Base AM', Plan 1: 'Network Control Plan 1')

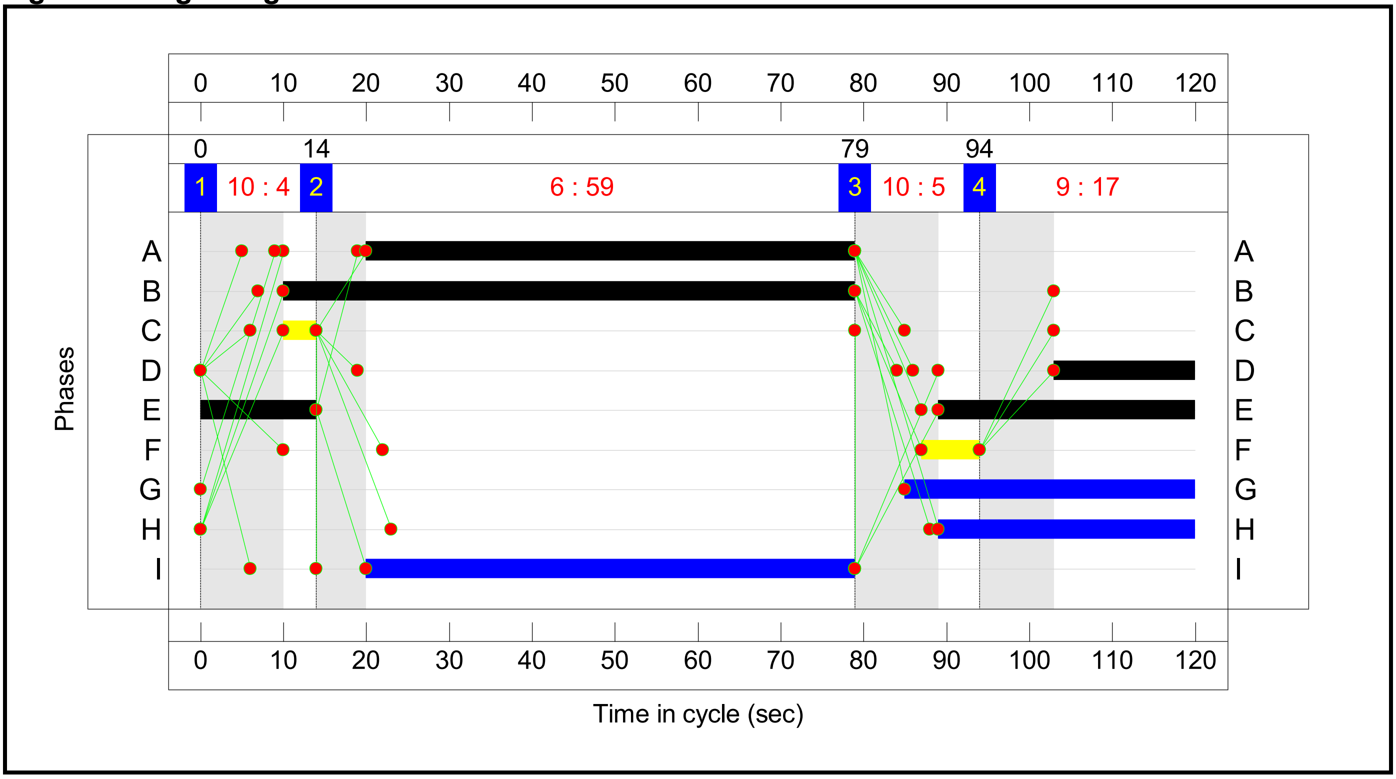
Stage Sequence Diagram



Stage Timings

Stage	1	2	3	4
Duration	4	59	5	17
Change Point	0	14	79	94

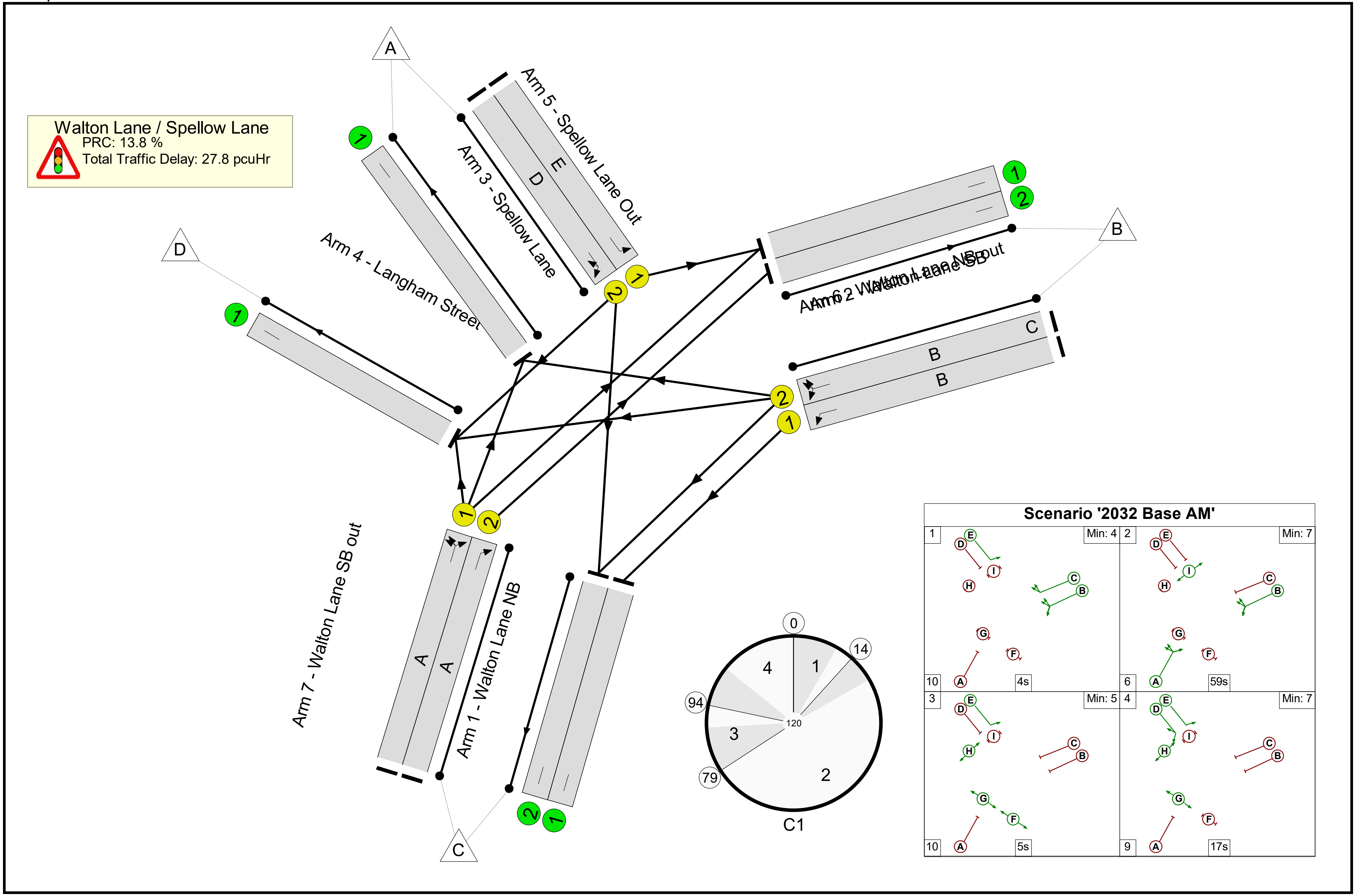
Signal Timings Diagram



Full Input Data And Results

Network Layout Diagram

Full Input Data And Results



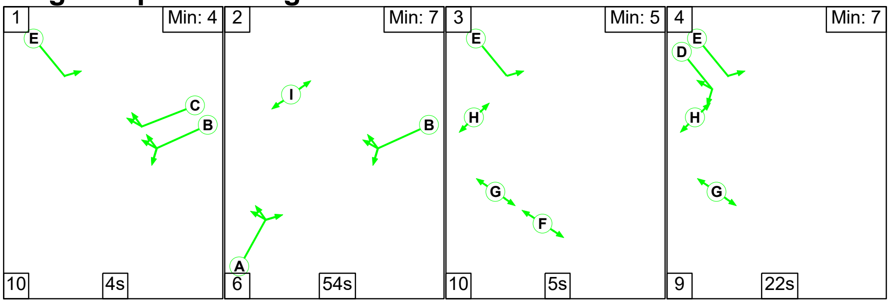
Network Results

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**	**-**	**-**		**-**	**-**	**-**	**-**	**-**	**-**	**79.1%**
Walton Lane / Spellow Lane	**-**	**-**	**N/A**	**-**	**-**		**-**	**-**	**-**	**-**	**-**	**-**	**79.1%**
1/1	Walton Lane NB Left Left2 Right	U	N/A	N/A	A		1	59	-	471	1945	973	48.4%
1/2	Walton Lane NB Right	U	N/A	N/A	A		1	59	-	474	1945	973	48.7%
2/1	Walton Lane SB Left	U	N/A	N/A	B		1	69	-	891	1975	1152	77.3%
2/2	Walton Lane SB Right Right2 Left	U	N/A	N/A	B	C	1	69	4	903	1975	1152	78.4%
3/1	Spellow Lane Left	U	N/A	N/A	E		1	45	-	288	1955	749	38.4%
3/2	Spellow Lane U-Turn Right	U	N/A	N/A	D		1	17	-	232	1955	293	79.1%
4/1	Langham Street	U	N/A	N/A	-		-	-	-	476	1940	1940	24.5%
5/1	Spellow Lane Out	U	N/A	N/A	-		-	-	-	401	1995	1995	20.1%
6/1	Walton Lane NB out	U	N/A	N/A	-		-	-	-	544	1975	1975	27.5%
6/2	Walton Lane NB out	U	N/A	N/A	-		-	-	-	474	1975	1975	24.0%
7/1	Walton Lane SB out	U	N/A	N/A	-		-	-	-	891	1955	1955	45.6%
7/2	Walton Lane SB out	U	N/A	N/A	-		-	-	-	473	1955	1955	24.2%

Full Input Data And Results

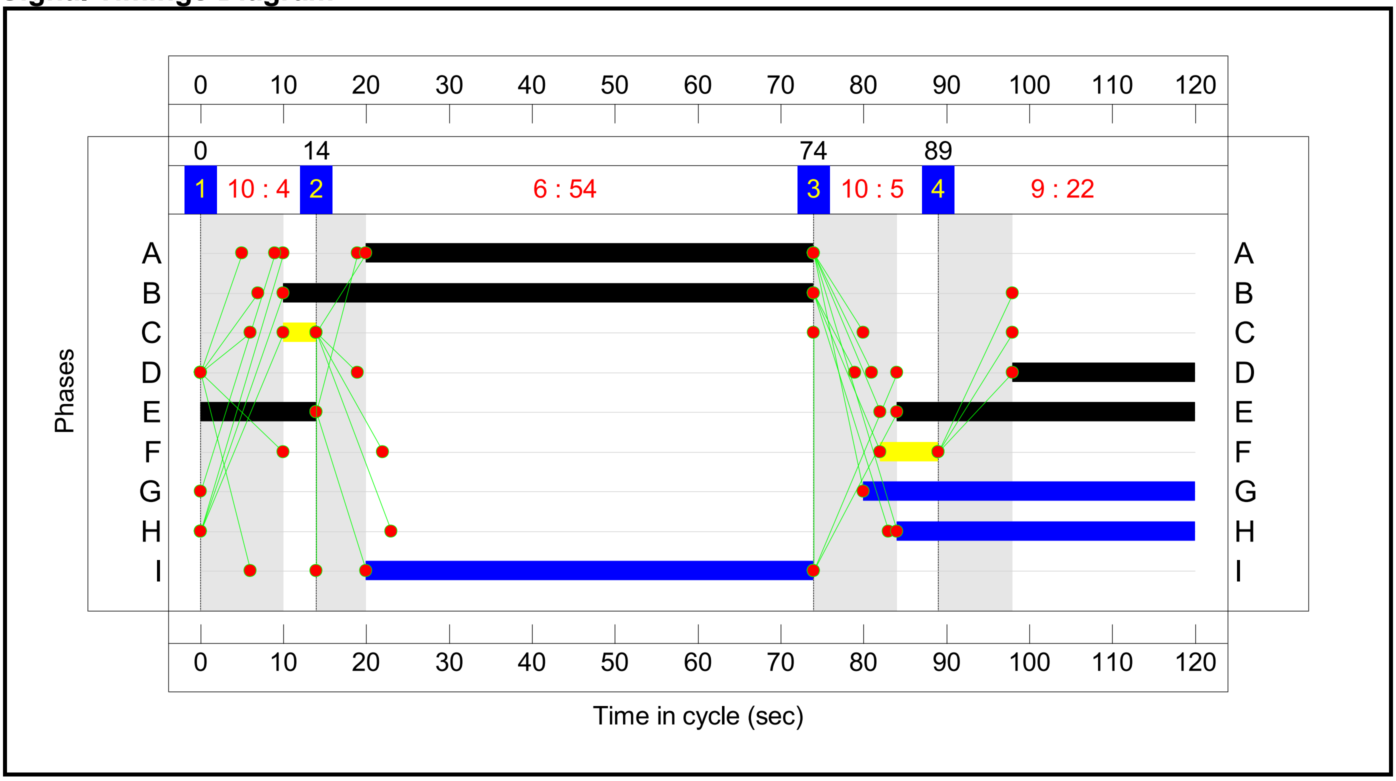
Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network	**-**	**-**	**0**	**0**	**0**	**20.0**	**7.7**	**0.0**	**27.8**	**-**	**-**	**-**	**-**
Walton Lane / Spellow Lane	**-**	**-**	**0**	**0**	**0**	**20.0**	**7.7**	**0.0**	**27.8**	**-**	**-**	**-**	**-**
1/1	471	471	-	-	-	2.6	0.5	-	3.1	23.4	10.3	0.5	10.8
1/2	474	474	-	-	-	2.6	0.5	-	3.1	23.4	10.4	0.5	10.9
2/1	891	891	-	-	-	4.7	1.7	-	6.4	25.8	22.5	1.7	24.2
2/2	903	903	-	-	-	4.8	1.8	-	6.6	26.3	23.1	1.8	24.9
3/1	288	288	-	-	-	2.1	0.3	-	2.5	30.7	6.9	0.3	7.2
3/2	232	232	-	-	-	3.2	1.8	-	5.0	77.0	7.4	1.8	9.2
4/1	476	476	-	-	-	0.0	0.2	-	0.2	1.2	0.0	0.2	0.2
5/1	401	401	-	-	-	0.0	0.1	-	0.1	1.1	0.0	0.1	0.1
6/1	544	544	-	-	-	0.0	0.2	-	0.2	1.3	0.0	0.2	0.2
6/2	474	474	-	-	-	0.0	0.2	-	0.2	1.2	0.0	0.2	0.2
7/1	891	891	-	-	-	0.0	0.4	-	0.4	1.8	18.5	0.4	18.9
7/2	473	473	-	-	-	0.0	0.2	-	0.2	1.2	0.0	0.2	0.2

C1 PRC for Signalled Lanes (%): 13.8 Total Delay for Signalled Lanes (pcuHr): 26.54 Cycle Time (s): 120
PRC Over All Lanes (%): 13.8 Total Delay Over All Lanes(pcuHr): 27.78

Full Input Data And Results
Scenario 8: '2032 Base PM' (FG10: '2032 Base PM', Plan 1: 'Network Control Plan 1')
Stage Sequence Diagram


Stage Timings

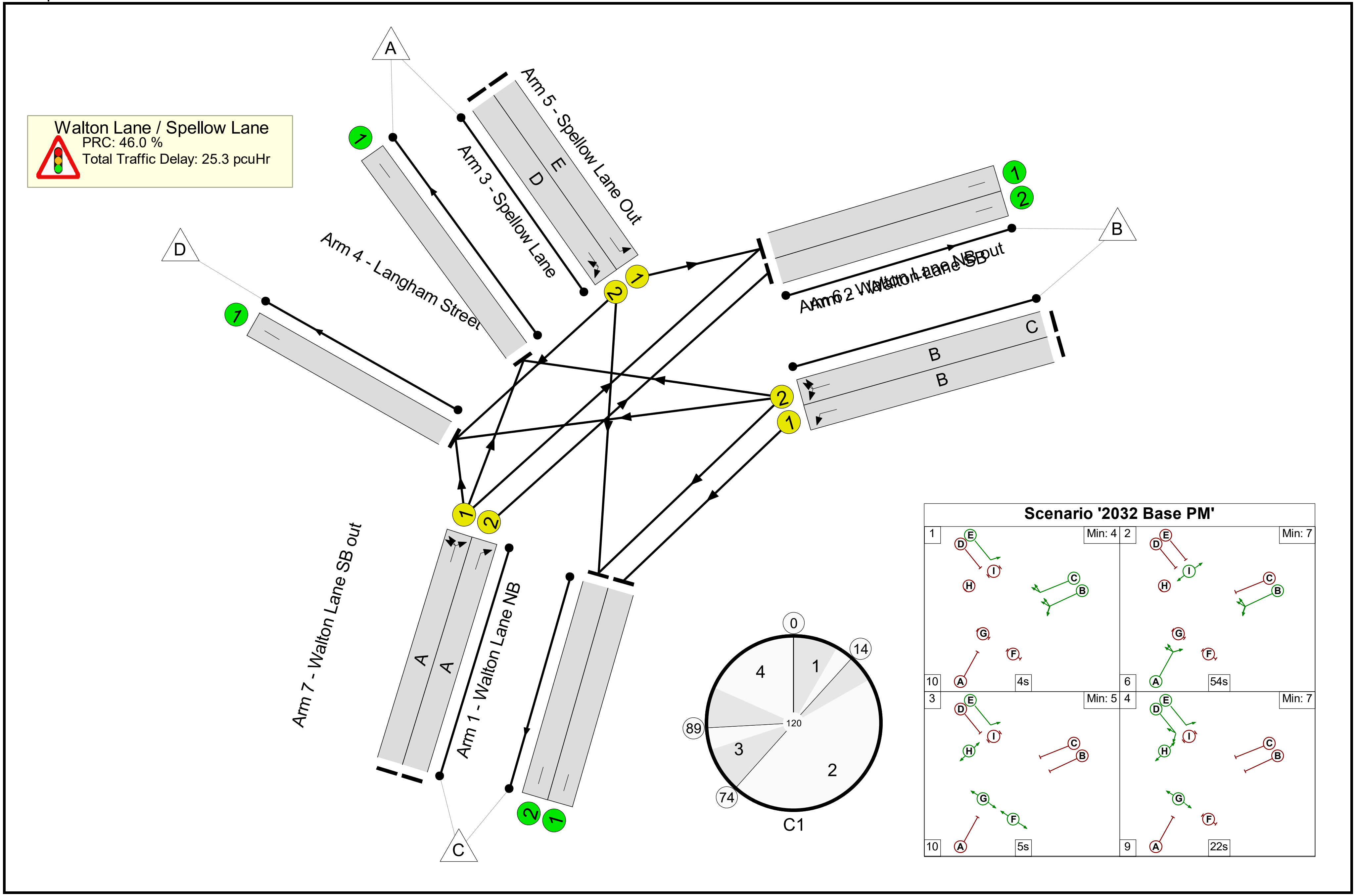
Stage	1	2	3	4
Duration	4	54	5	22
Change Point	0	14	74	89

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**	**-**	**-**		**-**	**-**	**-**	**-**	**-**	**-**	**61.6%**
Walton Lane / Spellow Lane	**-**	**-**	**N/A**	**-**	**-**		**-**	**-**	**-**	**-**	**-**	**-**	**61.6%**
1/1	Walton Lane NB Left Left2 Right	U	N/A	N/A	A		1	54	-	491	1945	891	55.1%
1/2	Walton Lane NB Right	U	N/A	N/A	A		1	54	-	500	1945	891	56.1%
2/1	Walton Lane SB Left	U	N/A	N/A	B		1	64	-	653	1975	1070	61.0%
2/2	Walton Lane SB Right Right2 Left	U	N/A	N/A	B	C	1	64	4	657	1975	1070	61.4%
3/1	Spellow Lane Left	U	N/A	N/A	E		1	50	-	494	1955	831	59.5%
3/2	Spellow Lane U-Turn Right	U	N/A	N/A	D		1	22	-	231	1955	375	61.6%
4/1	Langham Street	U	N/A	N/A	-		-	-	-	202	1940	1940	10.4%
5/1	Spellow Lane Out	U	N/A	N/A	-		-	-	-	338	1995	1995	16.9%
6/1	Walton Lane NB out	U	N/A	N/A	-		-	-	-	748	1975	1975	37.9%
6/2	Walton Lane NB out	U	N/A	N/A	-		-	-	-	500	1975	1975	25.3%
7/1	Walton Lane SB out	U	N/A	N/A	-		-	-	-	653	1955	1955	33.4%
7/2	Walton Lane SB out	U	N/A	N/A	-		-	-	-	585	1955	1955	29.9%

Full Input Data And Results

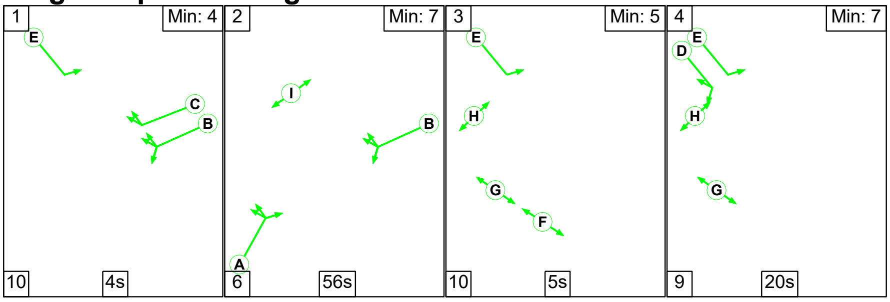
Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network	**-**	**-**	**0**	**0**	**0**	**19.9**	**5.4**	**0.0**	**25.3**	**-**	**-**	**-**	**-**
Walton Lane / Spellow Lane	**-**	**-**	**0**	**0**	**0**	**19.9**	**5.4**	**0.0**	**25.3**	**-**	**-**	**-**	**-**
1/1	491	491	-	-	-	3.2	0.6	-	3.8	28.0	11.7	0.6	12.3
1/2	500	500	-	-	-	3.3	0.6	-	3.9	28.3	12.1	0.6	12.7
2/1	653	653	-	-	-	3.4	0.8	-	4.2	23.1	14.9	0.8	15.7
2/2	657	657	-	-	-	3.4	0.8	-	4.2	23.2	15.0	0.8	15.8
3/1	494	494	-	-	-	3.6	0.7	-	4.4	31.9	12.6	0.7	13.4
3/2	231	231	-	-	-	2.9	0.8	-	3.6	56.8	7.0	0.8	7.8
4/1	202	202	-	-	-	0.0	0.1	-	0.1	1.0	0.0	0.1	0.1
5/1	338	338	-	-	-	0.0	0.1	-	0.1	1.1	0.0	0.1	0.1
6/1	748	748	-	-	-	0.0	0.3	-	0.3	1.5	0.0	0.3	0.3
6/2	500	500	-	-	-	0.0	0.2	-	0.2	1.2	0.0	0.2	0.2
7/1	653	653	-	-	-	0.0	0.3	-	0.3	1.4	10.4	0.3	10.7
7/2	585	585	-	-	-	0.0	0.2	-	0.2	1.3	0.0	0.2	0.2

C1 PRC for Signalled Lanes (%): 46.0 Total Delay for Signalled Lanes (pcuHr): 24.21 Cycle Time (s): 120
PRC Over All Lanes (%): 46.0 Total Delay Over All Lanes(pcuHr): 25.31

Full Input Data And Results

Scenario 9: '2032 Base + Dev AM' (FG11: '2032 Base + Dev AM', Plan 1: 'Network Control Plan 1')

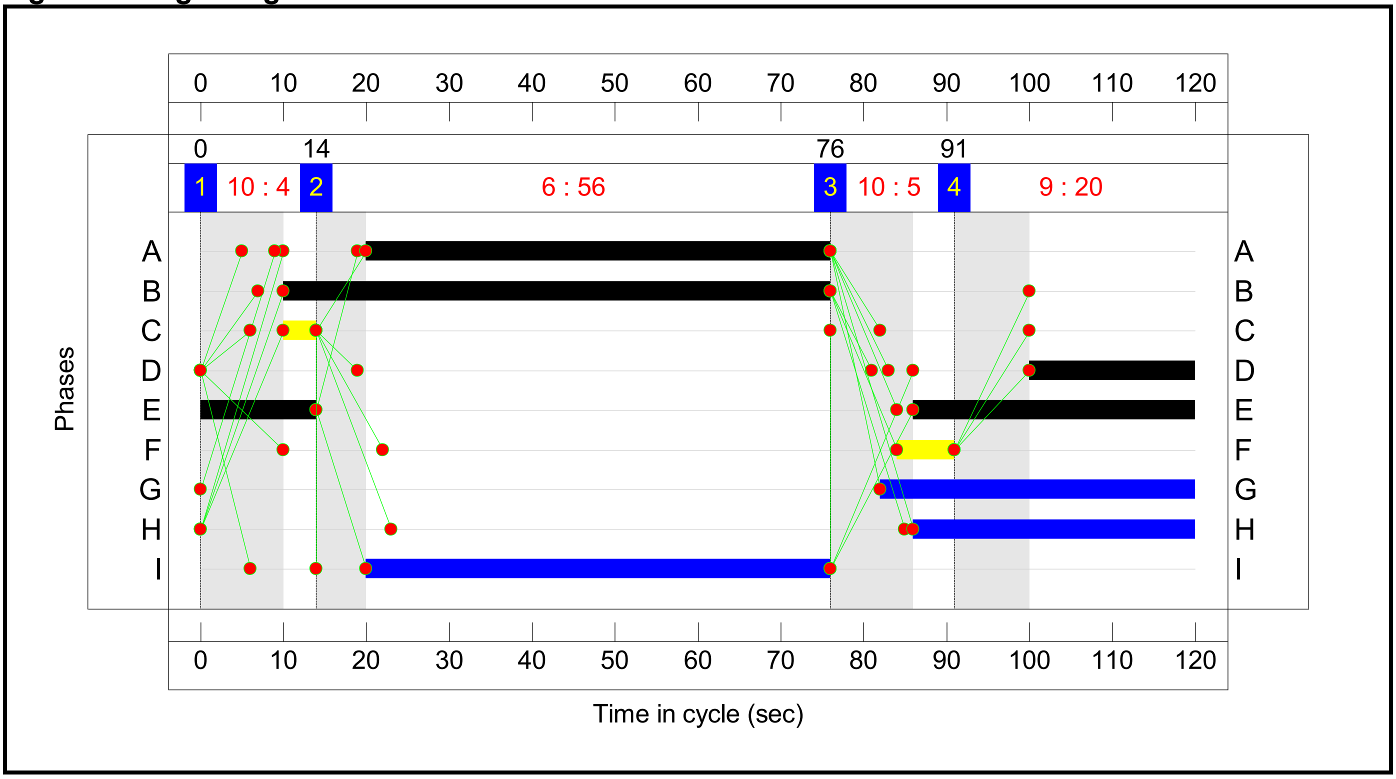
Stage Sequence Diagram



Stage Timings

Stage	1	2	3	4
Duration	4	56	5	20
Change Point	0	14	76	91

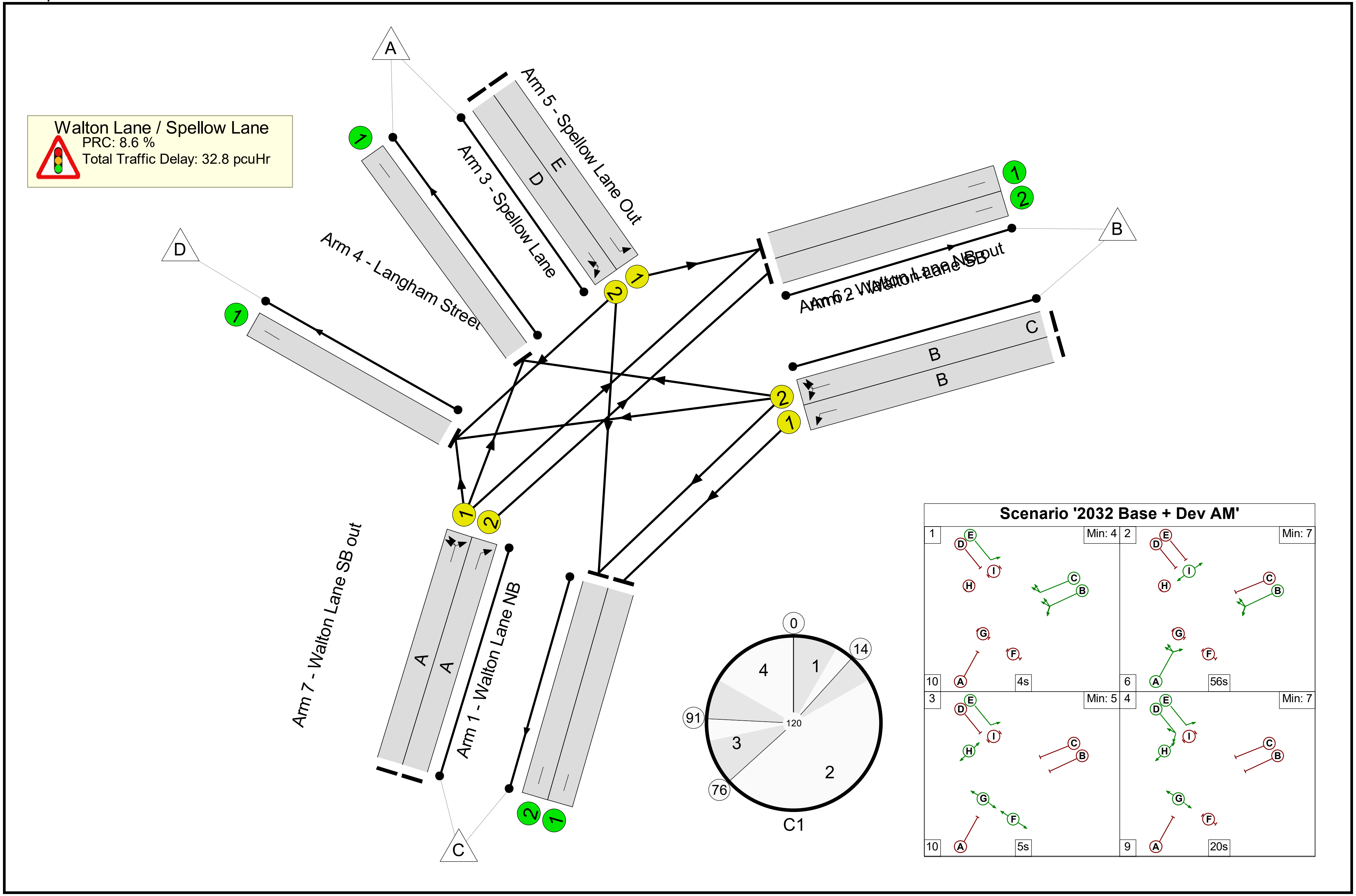
Signal Timings Diagram



Full Input Data And Results

Network Layout Diagram

Full Input Data And Results



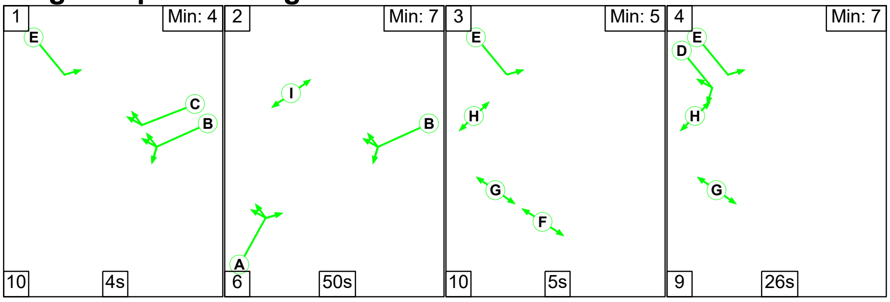
Network Results

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**	**-**	**-**		**-**	**-**	**-**	**-**	**-**	**-**	**82.9%**
Walton Lane / Spellow Lane	**-**	**-**	**N/A**	**-**	**-**		**-**	**-**	**-**	**-**	**-**	**-**	**82.9%**
1/1	Walton Lane NB Left Left2 Right	U	N/A	N/A	A		1	56	-	510	1945	924	55.2%
1/2	Walton Lane NB Right	U	N/A	N/A	A		1	56	-	511	1945	924	55.3%
2/1	Walton Lane SB Left	U	N/A	N/A	B		1	66	-	904	1975	1103	82.0%
2/2	Walton Lane SB Right Right2 Left	U	N/A	N/A	B	C	1	66	4	914	1975	1103	82.9%
3/1	Spellow Lane Left	U	N/A	N/A	E		1	48	-	305	1955	798	38.2%
3/2	Spellow Lane U-Turn Right	U	N/A	N/A	D		1	20	-	283	1955	342	82.7%
4/1	Langham Street	U	N/A	N/A	-		-	-	-	476	1940	1940	24.5%
5/1	Spellow Lane Out	U	N/A	N/A	-		-	-	-	500	1995	1995	25.1%
6/1	Walton Lane NB out	U	N/A	N/A	-		-	-	-	528	1975	1975	26.7%
6/2	Walton Lane NB out	U	N/A	N/A	-		-	-	-	511	1975	1975	25.9%
7/1	Walton Lane SB out	U	N/A	N/A	-		-	-	-	904	1955	1955	46.2%
7/2	Walton Lane SB out	U	N/A	N/A	-		-	-	-	508	1955	1955	26.0%

Full Input Data And Results

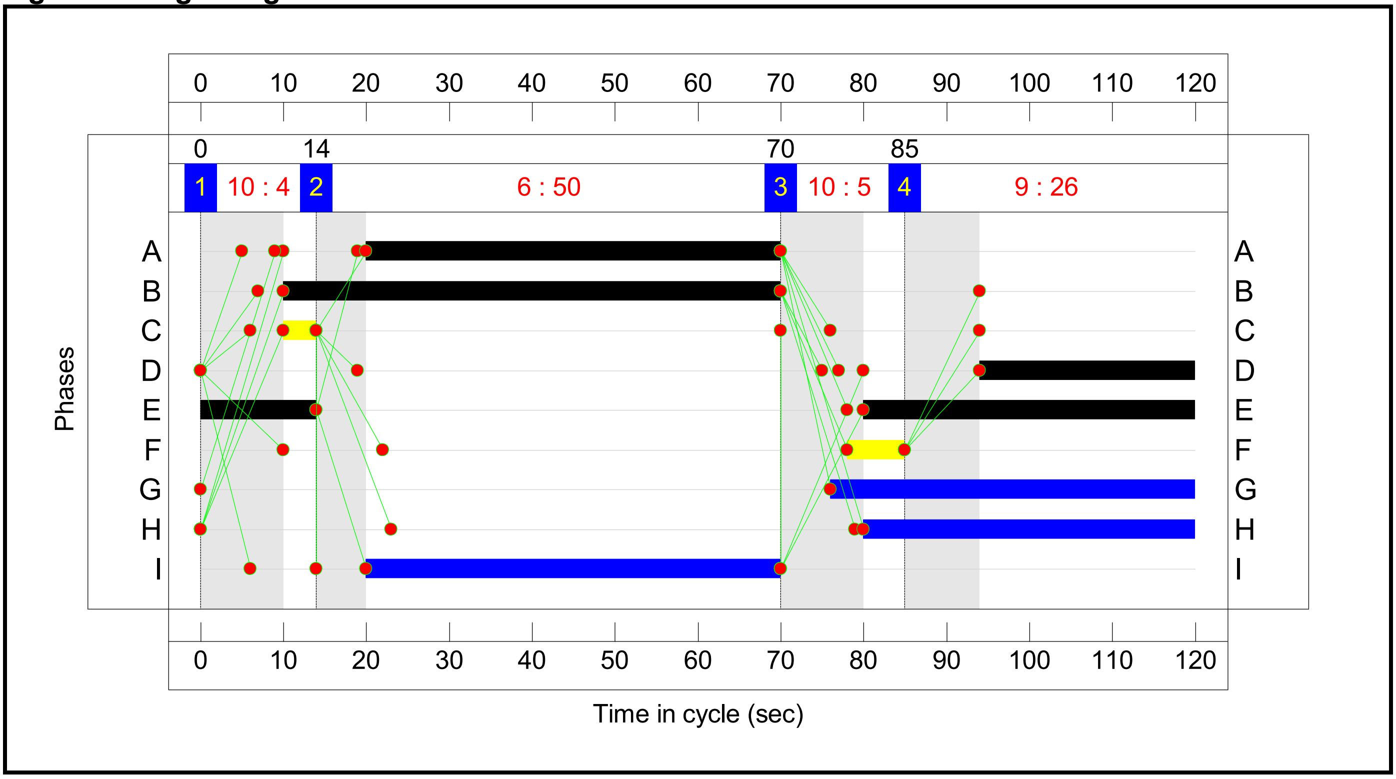
Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network	**-**	**-**	**0**	**0**	**0**	**23.2**	**9.6**	**0.0**	**32.8**	**-**	**-**	**-**	**-**
Walton Lane / Spellow Lane	**-**	**-**	**0**	**0**	**0**	**23.2**	**9.6**	**0.0**	**32.8**	**-**	**-**	**-**	**-**
1/1	510	510	-	-	-	3.2	0.6	-	3.8	26.8	12.0	0.6	12.7
1/2	511	511	-	-	-	3.2	0.6	-	3.8	26.8	12.1	0.6	12.7
2/1	904	904	-	-	-	5.4	2.2	-	7.6	30.4	24.4	2.2	26.6
2/2	914	914	-	-	-	5.5	2.4	-	7.9	31.1	24.9	2.4	27.2
3/1	305	305	-	-	-	2.1	0.3	-	2.4	28.5	7.1	0.3	7.4
3/2	283	283	-	-	-	3.8	2.2	-	6.0	76.1	9.0	2.2	11.3
4/1	476	476	-	-	-	0.0	0.2	-	0.2	1.2	0.0	0.2	0.2
5/1	500	500	-	-	-	0.0	0.2	-	0.2	1.2	0.0	0.2	0.2
6/1	528	528	-	-	-	0.0	0.2	-	0.2	1.2	0.0	0.2	0.2
6/2	511	511	-	-	-	0.0	0.2	-	0.2	1.2	0.0	0.2	0.2
7/1	904	904	-	-	-	0.0	0.4	-	0.5	1.8	20.7	0.4	21.1
7/2	508	508	-	-	-	0.0	0.2	-	0.2	1.2	0.0	0.2	0.2

C1 PRC for Signalled Lanes (%): 8.6 Total Delay for Signalled Lanes (pcuHr): 31.53 Cycle Time (s): 120
PRC Over All Lanes (%): 8.6 Total Delay Over All Lanes(pcuHr): 32.85

Full Input Data And Results
Scenario 10: '2032 Base + Dev PM' (FG12: '2032 Base + Dev PM', Plan 1: 'Network Control Plan 1')
Stage Sequence Diagram


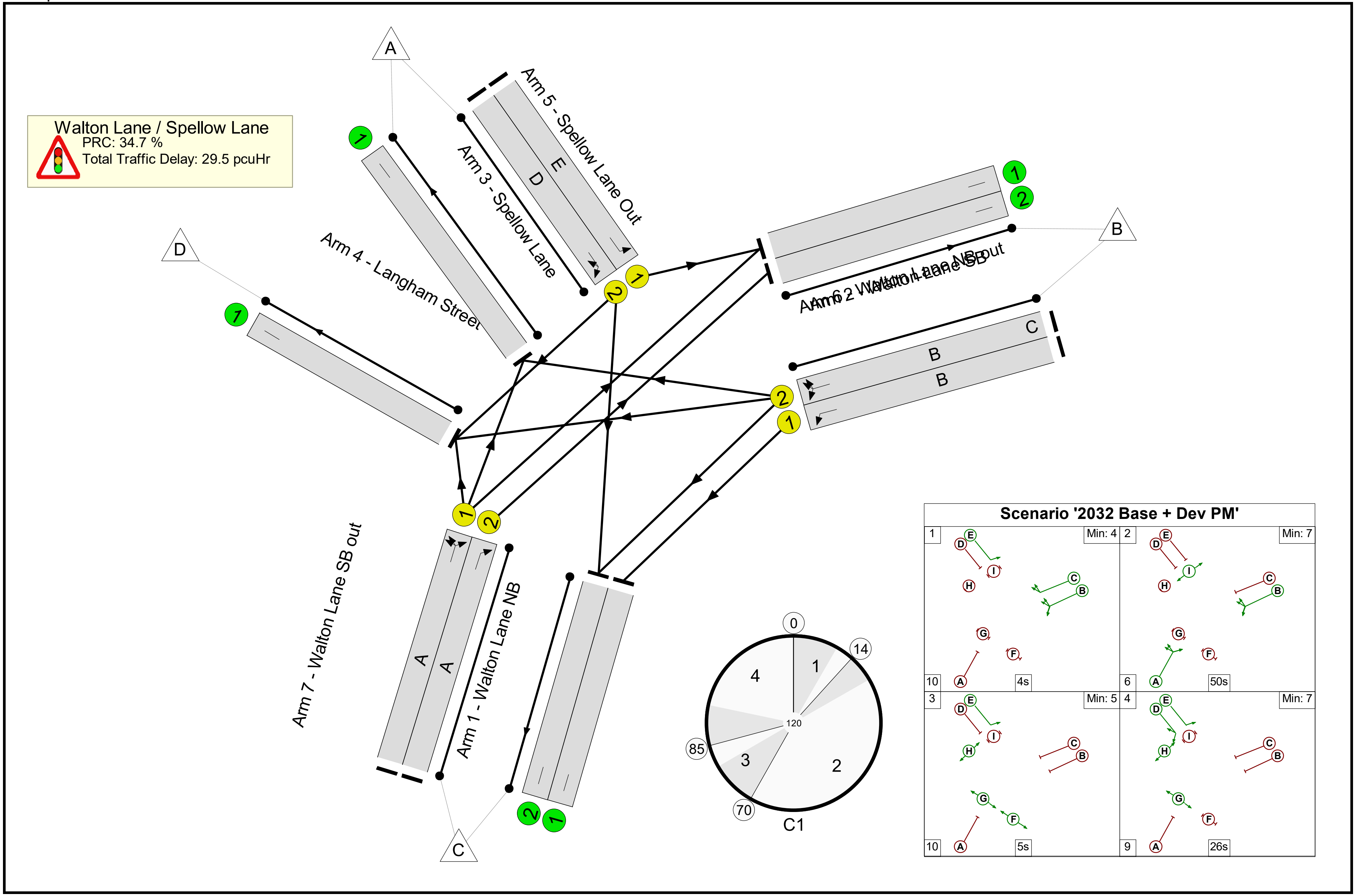
Stage Timings

Stage	1	2	3	4
Duration	4	50	5	26
Change Point	0	14	70	85

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**	**-**	**-**		**-**	**-**	**-**	**-**	**-**	**-**	**66.8%**
Walton Lane / Spellow Lane	**-**	**-**	**N/A**	**-**	**-**		**-**	**-**	**-**	**-**	**-**	**-**	**66.8%**
1/1	Walton Lane NB Left Left2 Right	U	N/A	N/A	A		1	50	-	520	1945	827	62.9%
1/2	Walton Lane NB Right	U	N/A	N/A	A		1	50	-	526	1945	827	63.6%
2/1	Walton Lane SB Left	U	N/A	N/A	B		1	60	-	668	1975	1004	66.5%
2/2	Walton Lane SB Right Right2 Left	U	N/A	N/A	B	C	1	60	4	671	1975	1004	66.8%
3/1	Spellow Lane Left	U	N/A	N/A	E		1	54	-	530	1955	896	59.1%
3/2	Spellow Lane U-Turn Right	U	N/A	N/A	D		1	26	-	285	1955	440	64.8%
4/1	Langham Street	U	N/A	N/A	-		-	-	-	202	1940	1940	10.4%
5/1	Spellow Lane Out	U	N/A	N/A	-		-	-	-	431	1995	1995	21.6%
6/1	Walton Lane NB out	U	N/A	N/A	-		-	-	-	763	1975	1975	38.6%
6/2	Walton Lane NB out	U	N/A	N/A	-		-	-	-	526	1975	1975	26.6%
7/1	Walton Lane SB out	U	N/A	N/A	-		-	-	-	668	1955	1955	34.2%
7/2	Walton Lane SB out	U	N/A	N/A	-		-	-	-	610	1955	1955	31.2%

Full Input Data And Results

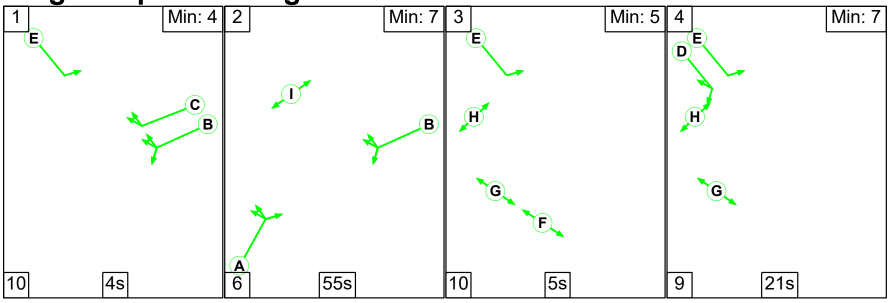
Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network	**-**	**-**	**0**	**0**	**0**	**23.0**	**6.5**	**0.0**	**29.5**	**-**	**-**	**-**	**-**
Walton Lane / Spellow Lane	**-**	**-**	**0**	**0**	**0**	**23.0**	**6.5**	**0.0**	**29.5**	**-**	**-**	**-**	**-**
1/1	520	520	-	-	-	3.9	0.8	-	4.8	32.9	13.6	0.8	14.4
1/2	526	526	-	-	-	4.0	0.9	-	4.8	33.1	13.7	0.9	14.6
2/1	668	668	-	-	-	4.1	1.0	-	5.1	27.2	16.5	1.0	17.5
2/2	671	671	-	-	-	4.1	1.0	-	5.1	27.3	16.6	1.0	17.6
3/1	530	530	-	-	-	3.6	0.7	-	4.3	29.1	13.1	0.7	13.8
3/2	285	285	-	-	-	3.3	0.9	-	4.2	53.7	8.6	0.9	9.5
4/1	202	202	-	-	-	0.0	0.1	-	0.1	1.0	0.0	0.1	0.1
5/1	431	431	-	-	-	0.0	0.1	-	0.1	1.2	0.0	0.1	0.1
6/1	763	763	-	-	-	0.0	0.3	-	0.3	1.5	0.0	0.3	0.3
6/2	526	526	-	-	-	0.0	0.2	-	0.2	1.2	0.0	0.2	0.2
7/1	668	668	-	-	-	0.0	0.3	-	0.3	1.5	12.1	0.3	12.3
7/2	610	610	-	-	-	0.0	0.2	-	0.2	1.3	0.0	0.2	0.2

C1 PRC for Signalled Lanes (%): 34.7 Total Delay for Signalled Lanes (pcuHr): 28.28 Cycle Time (s): 120
PRC Over All Lanes (%): 34.7 Total Delay Over All Lanes(pcuHr): 29.46

Full Input Data And Results

Scenario 11: '2032 Base + Dev AM Sensitivity' (FG13: '2032 Base + Dev AM Sensitivity', Plan 1: 'Network Control Plan 1')

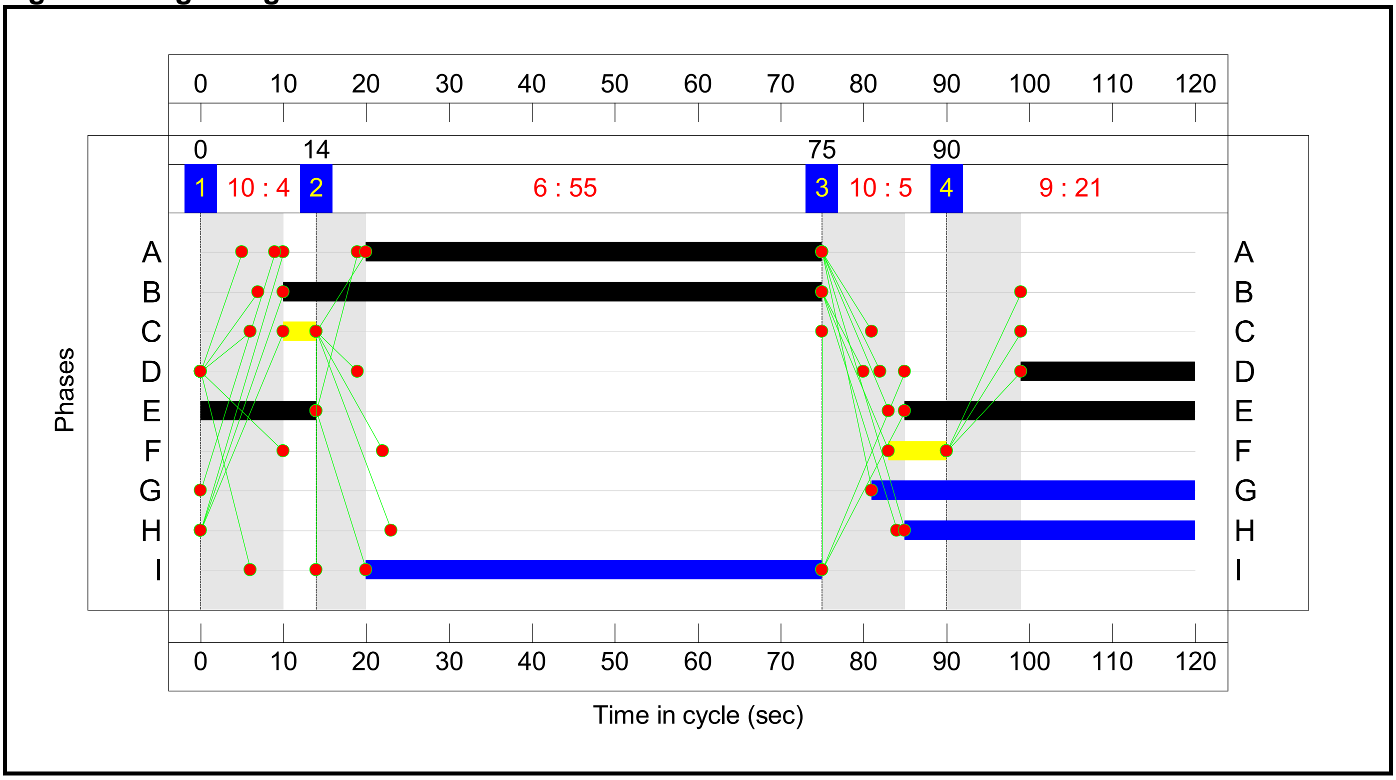
Stage Sequence Diagram



Stage Timings

Stage	1	2	3	4
Duration	4	55	5	21
Change Point	0	14	75	90

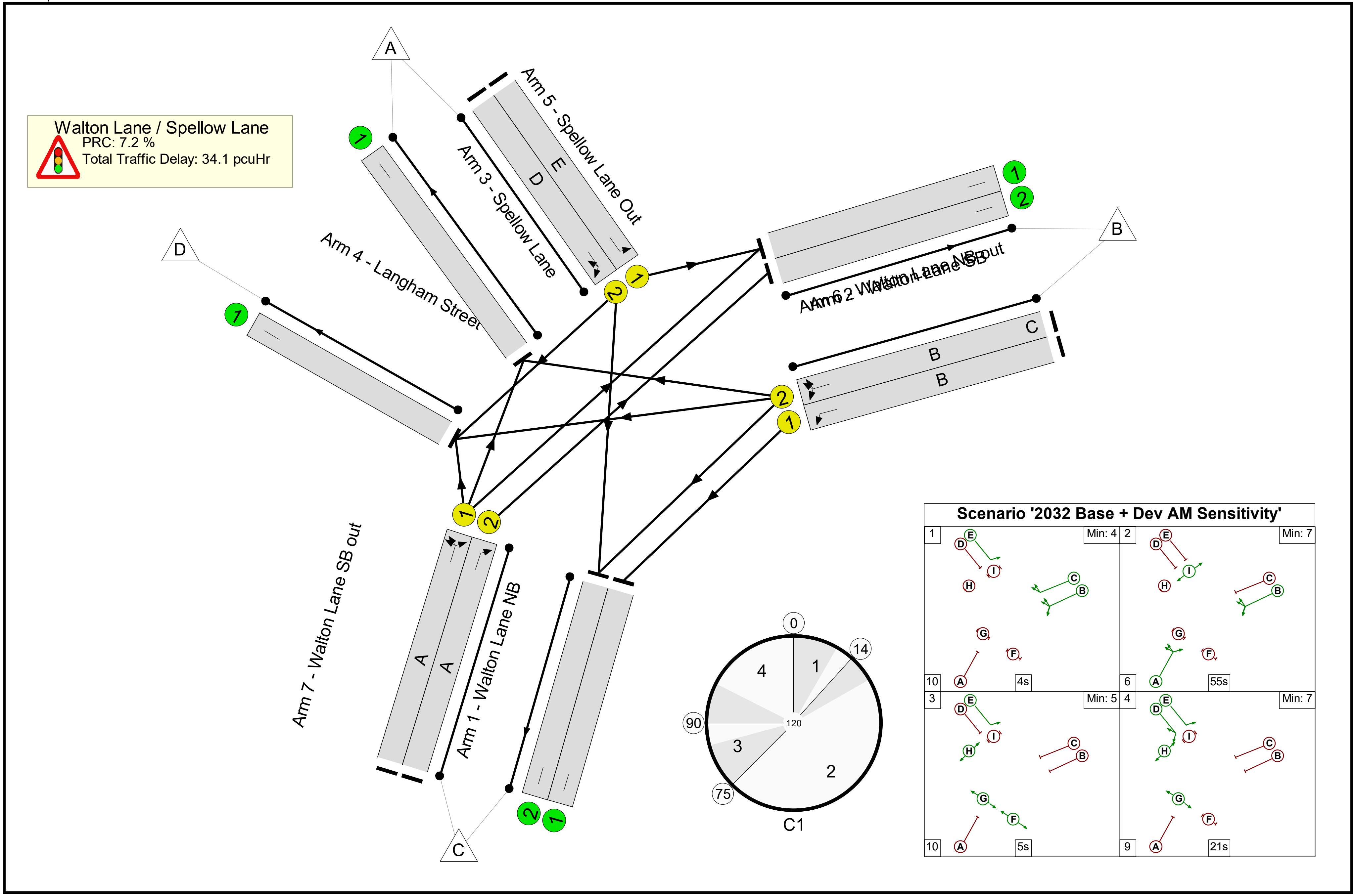
Signal Timings Diagram



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**	**-**	**-**		**-**	**-**	**-**	**-**	**-**	**-**	**84.0%**
Walton Lane / Spellow Lane	**-**	**-**	**N/A**	**-**	**-**		**-**	**-**	**-**	**-**	**-**	**-**	**84.0%**
1/1	Walton Lane NB Left Left2 Right	U	N/A	N/A	A		1	55	-	510	1945	908	56.2%
1/2	Walton Lane NB Right	U	N/A	N/A	A		1	55	-	511	1945	908	56.3%
2/1	Walton Lane SB Left	U	N/A	N/A	B		1	65	-	906	1975	1086	83.4%
2/2	Walton Lane SB Right Right2 Left	U	N/A	N/A	B	C	1	65	4	912	1975	1086	84.0%
3/1	Spellow Lane Left	U	N/A	N/A	E		1	49	-	305	1955	815	37.4%
3/2	Spellow Lane U-Turn Right	U	N/A	N/A	D		1	21	-	299	1955	358	83.4%
4/1	Langham Street	U	N/A	N/A	-		-	-	-	476	1940	1940	24.5%
5/1	Spellow Lane Out	U	N/A	N/A	-		-	-	-	500	1995	1995	25.1%
6/1	Walton Lane NB out	U	N/A	N/A	-		-	-	-	528	1975	1975	26.7%
6/2	Walton Lane NB out	U	N/A	N/A	-		-	-	-	511	1975	1975	25.9%
7/1	Walton Lane SB out	U	N/A	N/A	-		-	-	-	906	1955	1955	46.3%
7/2	Walton Lane SB out	U	N/A	N/A	-		-	-	-	522	1955	1955	26.7%

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	**-**	**-**	**0**	**0**	**0**	**23.9**	**10.2**	**0.0**	**34.1**	**-**	**-**	**-**	**-**
Walton Lane / Spellow Lane	**-**	**-**	**0**	**0**	**0**	**23.9**	**10.2**	**0.0**	**34.1**	**-**	**-**	**-**	**-**
1/1	510	510	-	-	-	3.3	0.6	-	3.9	27.6	12.2	0.6	12.8
1/2	511	511	-	-	-	3.3	0.6	-	3.9	27.7	12.2	0.6	12.8
2/1	906	906	-	-	-	5.6	2.4	-	8.1	32.2	24.9	2.4	27.4
2/2	912	912	-	-	-	5.7	2.5	-	8.3	32.6	25.3	2.5	27.9
3/1	305	305	-	-	-	2.0	0.3	-	2.3	27.7	6.9	0.3	7.2
3/2	299	299	-	-	-	3.9	2.3	-	6.3	75.3	9.6	2.3	11.9
4/1	476	476	-	-	-	0.0	0.2	-	0.2	1.2	0.0	0.2	0.2
5/1	500	500	-	-	-	0.0	0.2	-	0.2	1.2	0.0	0.2	0.2
6/1	528	528	-	-	-	0.0	0.2	-	0.2	1.2	0.0	0.2	0.2
6/2	511	511	-	-	-	0.0	0.2	-	0.2	1.2	0.0	0.2	0.2
7/1	906	906	-	-	-	0.0	0.4	-	0.5	1.8	21.2	0.4	21.6
7/2	522	522	-	-	-	0.0	0.2	-	0.2	1.3	0.0	0.2	0.2

C1 PRC for Signalled Lanes (%): 7.2 Total Delay for Signalled Lanes (pcuHr): 32.81 Cycle Time (s): 120
PRC Over All Lanes (%): 7.2 Total Delay Over All Lanes(pcuHr): 34.14

H. Walton Lane - Bullens Road Junctions 9 Output

Junctions 9

PICADY 9 - Priority Intersection Module

Filename: Bullens Road - Walton Lane.j9
Path: P:\Liverpool\ITD\Projects\385175 BMD\Goodison Legacy\Modelling\PICADY
Report generation date: 10/12/2019 11:05:23

Summary of junction performance

	AM								PM							
	Set ID	Queue (PCU)	Delay (s)	RFC	LOS	Junction Delay (s)	Junction LOS	Network Residual Capacity	Set ID	Queue (PCU)	Delay (s)	RFC	LOS	Junction Delay (s)	Junction LOS	Network Residual Capacity
	2028 Base															
Stream B-AC	D1	1.2	52.89	0.55	F	1.55	A	-4 % [Stream B-AC]	D3	0.2	22.50	0.14	C	0.25	A	5 % [Stream B-AC]
Stream C-B		0.0	7.91	0.02	A					0.0	9.47	0.02	A			
	2028 Base + Dev															
Stream B-AC	D2	4.4	167.66	0.84	F	5.86	A	-7 % [Stream B-AC]	D4	0.5	22.76	0.31	C	0.75	A	4 % [Stream B-AC]
Stream C-B		0.1	8.82	0.11	A					0.1	10.19	0.09	B			
	2032 Base															
Stream B-AC	D5	3.1	137.97	0.77	F	4.00	A	-7 % [Stream B-AC]	D7	0.2	24.54	0.15	C	0.26	A	4 % [Stream B-AC]
Stream C-B		0.0	8.09	0.02	A					0.0	9.48	0.02	A			
	2032 Base + Dev															
Stream B-AC	D6	4.3	187.72	0.84	F	5.54	A	-5 % [Stream B-AC]	D8	0.6	32.07	0.39	D	0.99	A	0 % [Stream B-AC]
Stream C-B		0.1	9.05	0.11	A					0.1	10.56	0.10	B			

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. Junction LOS and Junction Delay are demand-weighted averages. Network Residual Capacity indicates the amount by which network flow could be increased before a user-definable threshold (see Analysis Options) is met.

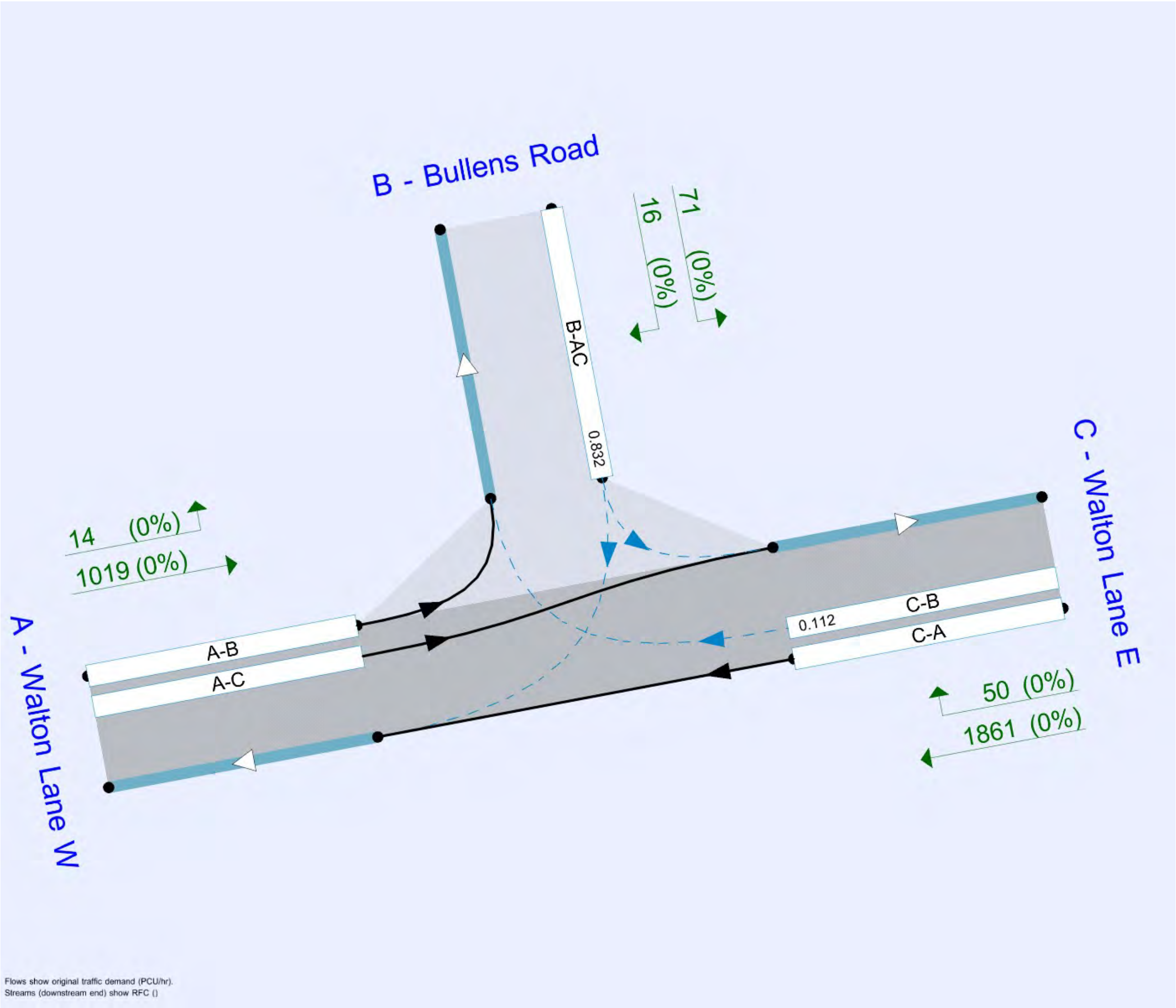
File summary

File Description

Title	Goodison Legacy
Location	Bullens Road / Walton Lane
Site number	
Date	09/12/2019
Version	1
Status	(new file)
Identifier	
Client	
Jobnumber	
Enumerator	MOTTMAC\MCM80211
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	Residual capacity criteria type	RFC Threshold	Average Delay threshold (s)	Queue threshold (PCU)
	✓	Delay	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 period length (min)	Time segment length (min)
D1	2028 Base	AM	FLAT	08:00	09:30	90	15
D2	2028 Base + Dev	AM	FLAT	08:00	09:30	90	15
D3	2028 Base	PM	FLAT	17:00	18:30	90	15
D4	2028 Base + Dev	PM	FLAT	17:00	18:30	90	15
D5	2032 Base	AM	FLAT	08:00	09:30	90	15
D6	2032 Base + Dev	AM	FLAT	08:00	09:30	90	15
D7	2032 Base	PM	FLAT	17:00	18:30	90	15
D8	2032 Base + Dev	PM	FLAT	17:00	18:30	90	15

Analysis Set Details

ID	Network flow scaling factor (%)
A1	100.000

2028 Base, 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	Walton Lane / Bullens Lane	T-Junction	Two-way		1.55	A

Junction Network Options

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold
Left	Normal/unknown	-4	Stream B-AC

Arms

Arms

Arm	Name	Description	Arm type
A	Walton Lane W		Major
B	Bullens Road		Minor
C	Walton Lane E		Major

Major Arm Geometry

Arm	Width of carriageway (m)	Has kerbed central reserve	Width of kerbed central reserve (m)	Has right turn bay	Visibility for right turn (m)	Blocks?	Blocking queue (PCU)
C - Walton Lane E	7.35	✓	1.00		250.0		-

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

Minor Arm Geometry

Arm	Minor arm type	Lane width (m)	Visibility to left (m)	Visibility to right (m)
B - Bullens Road	One lane	3.45	30	150

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	599	0.101	0.254	0.160	0.363
B-C	751	0.108	0.274	-	-
C-B	719	0.262	0.262	-	-

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

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

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

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time period length (min)	Time segment length (min)
D1	2028 Base	AM	FLAT	08:00	09:30	90	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 - Walton Lane W		✓	975	100.000
B - Bullens Road		✓	82	100.000
C - Walton Lane E		✓	1775	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		A - Walton Lane W	B - Bullens Road	C - Walton Lane E
From	A - Walton Lane W	0	12	963
	B - Bullens Road	30	0	52
	C - Walton Lane E	1767	8	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - Walton Lane W	B - Bullens Road	C - Walton Lane E
From	A - Walton Lane W	0	0	0
	B - Bullens Road	0	0	0
	C - Walton Lane E	0	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
B-AC	0.55	52.89	1.2	F
C-A				
C-B	0.02	7.91	0.0	A
A-B				
A-C				

Main Results for each time segment

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	82	150	0.547	78	1.1	47.526	E
C-A	1767			1767			
C-B	8	463	0.017	8	0.0	7.907	A
A-B	12			12			
A-C	963			963			

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	82	150	0.547	82	1.1	52.392	F
C-A	1767			1767			
C-B	8	463	0.017	8	0.0	7.908	A
A-B	12			12			
A-C	963			963			

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	82	150	0.547	82	1.2	52.688	F
C-A	1767			1767			
C-B	8	463	0.017	8	0.0	7.908	A
A-B	12			12			
A-C	963			963			

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	82	150	0.547	82	1.2	52.800	F
C-A	1767			1767			
C-B	8	463	0.017	8	0.0	7.908	A
A-B	12			12			
A-C	963			963			

09:00 - 09:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	82	150	0.547	82	1.2	52.856	F
C-A	1767			1767			
C-B	8	463	0.017	8	0.0	7.908	A
A-B	12			12			
A-C	963			963			

09:15 - 09:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	82	150	0.547	82	1.2	52.894	F
C-A	1767			1767			
C-B	8	463	0.017	8	0.0	7.908	A
A-B	12			12			
A-C	963			963			

2028 Base + 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	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	Walton Lane / Bullens Lane	T-Junction	Two-way		5.86	A

Junction Network Options

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold
Left	Normal/unknown	-7	Stream B-AC

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time period length (min)	Time segment length (min)
D2	2028 Base + Dev	AM	FLAT	08:00	09:30	90	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 - Walton Lane W		✓	994	100.000
B - Bullens Road		✓	100	100.000
C - Walton Lane E		✓	1840	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		A - Walton Lane W	B - Bullens Road	C - Walton Lane E
From	A - Walton Lane W	0	14	980
	B - Bullens Road	31	0	69
	C - Walton Lane E	1790	50	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - Walton Lane W	B - Bullens Road	C - Walton Lane E
From	A - Walton Lane W	0	0	0
	B - Bullens Road	0	0	0
	C - Walton Lane E	0	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
B-AC	0.84	167.66	4.4	F
C-A				
C-B	0.11	8.82	0.1	A
A-B				
A-C				

Main Results for each time segment

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	100	120	0.836	89	2.9	96.605	F
C-A	1790			1790			
C-B	50	458	0.109	50	0.1	8.802	A
A-B	14			14			
A-C	980			980			

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	100	119	0.839	97	3.5	140.615	F
C-A	1790			1790			
C-B	50	458	0.109	50	0.1	8.819	A
A-B	14			14			
A-C	980			980			

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	100	119	0.839	99	3.9	153.014	F
C-A	1790			1790			
C-B	50	458	0.109	50	0.1	8.819	A
A-B	14			14			
A-C	980			980			

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	100	119	0.839	99	4.1	159.931	F
C-A	1790			1790			
C-B	50	458	0.109	50	0.1	8.819	A
A-B	14			14			
A-C	980			980			

09:00 - 09:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	100	119	0.839	99	4.3	164.451	F
C-A	1790			1790			
C-B	50	458	0.109	50	0.1	8.819	A
A-B	14			14			
A-C	980			980			

09:15 - 09:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	100	119	0.839	100	4.4	167.664	F
C-A	1790			1790			
C-B	50	458	0.109	50	0.1	8.819	A
A-B	14			14			
A-C	980			980			

2028 Base, 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	Walton Lane / Bullens Lane	T-Junction	Two-way		0.25	A

Junction Network Options

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold
Left	Normal/unknown	5	Stream B-AC

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time period length (min)	Time segment length (min)
D3	2028 Base	PM	FLAT	17:00	18:30	90	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 - Walton Lane W		✓	1265	100.000
B - Bullens Road		✓	25	100.000
C - Walton Lane E		✓	1263	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		A - Walton Lane W	B - Bullens Road	C - Walton Lane E
From	A - Walton Lane W	0	15	1250
	B - Bullens Road	7	0	18
	C - Walton Lane E	1256	7	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - Walton Lane W	B - Bullens Road	C - Walton Lane E
From	A - Walton Lane W	0	0	0
	B - Bullens Road	0	0	0
	C - Walton Lane E	0	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
B-AC	0.14	22.50	0.2	C
C-A				
C-B	0.02	9.47	0.0	A
A-B				
A-C				

Main Results for each time segment

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	25	185	0.135	24	0.2	22.333	C
C-A	1256			1256			
C-B	7	387	0.018	7	0.0	9.468	A
A-B	15			15			
A-C	1250			1250			

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	25	185	0.135	25	0.2	22.499	C
C-A	1256			1256			
C-B	7	387	0.018	7	0.0	9.469	A
A-B	15			15			
A-C	1250			1250			

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	25	185	0.135	25	0.2	22.502	C
C-A	1256			1256			
C-B	7	387	0.018	7	0.0	9.469	A
A-B	15			15			
A-C	1250			1250			

17:45 - 18:00

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	25	185	0.135	25	0.2	22.504	C
C-A	1256			1256			
C-B	7	387	0.018	7	0.0	9.469	A
A-B	15			15			
A-C	1250			1250			

18:00 - 18:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	25	185	0.135	25	0.2	22.504	C
C-A	1256			1256			
C-B	7	387	0.018	7	0.0	9.469	A
A-B	15			15			
A-C	1250			1250			

18:15 - 18:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	25	185	0.135	25	0.2	22.504	C
C-A	1256			1256			
C-B	7	387	0.018	7	0.0	9.469	A
A-B	15			15			
A-C	1250			1250			

2028 Base + 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	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	Walton Lane / Bullens Lane	T-Junction	Two-way		0.75	A

Junction Network Options

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold
Left	Normal/unknown	4	Stream B-AC

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time period length (min)	Time segment length (min)
D4	2028 Base + Dev	PM	FLAT	17:00	18:30	90	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 - Walton Lane W		✓	1257	100.000
B - Bullens Road		✓	72	100.000
C - Walton Lane E		✓	1333	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		A - Walton Lane W	B - Bullens Road	C - Walton Lane E
From	A - Walton Lane W	0	16	1241
	B - Bullens Road	10	0	62
	C - Walton Lane E	1297	36	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - Walton Lane W	B - Bullens Road	C - Walton Lane E
From	A - Walton Lane W	0	0	0
	B - Bullens Road	0	0	0
	C - Walton Lane E	0	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
B-AC	0.31	22.76	0.5	C
C-A				
C-B	0.09	10.19	0.1	B
A-B				
A-C				

Main Results for each time segment

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	72	230	0.312	70	0.4	22.249	C
C-A	1297			1297			
C-B	36	389	0.092	36	0.1	10.168	B
A-B	16			16			
A-C	1241			1241			

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	72	230	0.313	72	0.4	22.738	C
C-A	1297			1297			
C-B	36	389	0.092	36	0.1	10.190	B
A-B	16			16			
A-C	1241			1241			

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	72	230	0.313	72	0.4	22.752	C
C-A	1297			1297			
C-B	36	389	0.092	36	0.1	10.190	B
A-B	16			16			
A-C	1241			1241			

17:45 - 18:00

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	72	230	0.313	72	0.5	22.760	C
C-A	1297			1297			
C-B	36	389	0.092	36	0.1	10.190	B
A-B	16			16			
A-C	1241			1241			

18:00 - 18:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	72	230	0.313	72	0.5	22.759	C
C-A	1297			1297			
C-B	36	389	0.092	36	0.1	10.190	B
A-B	16			16			
A-C	1241			1241			

18:15 - 18:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	72	230	0.313	72	0.5	22.762	C
C-A	1297			1297			
C-B	36	389	0.092	36	0.1	10.190	B
A-B	16			16			
A-C	1241			1241			

2032 Base, 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	Walton Lane / Bullens Lane	T-Junction	Two-way		4.00	A

Junction Network Options

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold
Left	Normal/unknown	-7	Stream B-AC

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time period length (min)	Time segment length (min)
D5	2032 Base	AM	FLAT	08:00	09:30	90	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 - Walton Lane W		✓	1014	100.000
B - Bullens Road		✓	85	100.000
C - Walton Lane E		✓	1846	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		A - Walton Lane W	B - Bullens Road	C - Walton Lane E
From	A - Walton Lane W	0	12	1002
	B - Bullens Road	31	0	54
	C - Walton Lane E	1838	8	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - Walton Lane W	B - Bullens Road	C - Walton Lane E
From	A - Walton Lane W	0	0	0
	B - Bullens Road	0	0	0
	C - Walton Lane E	0	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
B-AC	0.77	137.97	3.1	F
C-A				
C-B	0.02	8.09	0.0	A
A-B				
A-C				

Main Results for each time segment

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	85	110	0.774	76	2.2	91.826	F
C-A	1838			1838			
C-B	8	453	0.018	8	0.0	8.088	A
A-B	12			12			
A-C	1002			1002			

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	85	110	0.775	83	2.7	124.059	F
C-A	1838			1838			
C-B	8	453	0.018	8	0.0	8.090	A
A-B	12			12			
A-C	1002			1002			

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	85	110	0.775	84	2.8	130.983	F
C-A	1838			1838			
C-B	8	453	0.018	8	0.0	8.090	A
A-B	12			12			
A-C	1002			1002			

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	85	110	0.775	85	3.0	134.441	F
C-A	1838			1838			
C-B	8	453	0.018	8	0.0	8.090	A
A-B	12			12			
A-C	1002			1002			

09:00 - 09:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	85	110	0.775	85	3.0	136.545	F
C-A	1838			1838			
C-B	8	453	0.018	8	0.0	8.090	A
A-B	12			12			
A-C	1002			1002			

09:15 - 09:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	85	110	0.775	85	3.1	137.969	F
C-A	1838			1838			
C-B	8	453	0.018	8	0.0	8.090	A
A-B	12			12			
A-C	1002			1002			

2032 Base + 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	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	Walton Lane / Bullens Lane	T-Junction	Two-way		5.54	A

Junction Network Options

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold
Left	Normal/unknown	-5	Stream B-AC

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time period length (min)	Time segment length (min)
D6	2032 Base + Dev	AM	FLAT	08:00	09:30	90	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 - Walton Lane W		✓	1033	100.000
B - Bullens Road		✓	87	100.000
C - Walton Lane E		✓	1911	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		A - Walton Lane W	B - Bullens Road	C - Walton Lane E
From	A - Walton Lane W	0	14	1019
	B - Bullens Road	16	0	71
	C - Walton Lane E	1861	50	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - Walton Lane W	B - Bullens Road	C - Walton Lane E
From	A - Walton Lane W	0	0	0
	B - Bullens Road	0	0	0
	C - Walton Lane E	0	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
B-AC	0.84	187.72	4.3	F
C-A				
C-B	0.11	9.05	0.1	A
A-B				
A-C				

Main Results for each time segment

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	87	105	0.832	76	2.7	105.575	F
C-A	1861			1861			
C-B	50	448	0.112	50	0.1	9.024	A
A-B	14			14			
A-C	1019			1019			

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	87	104	0.837	84	3.4	155.142	F
C-A	1861			1861			
C-B	50	448	0.112	50	0.1	9.045	A
A-B	14			14			
A-C	1019			1019			

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	87	104	0.837	86	3.7	169.885	F
C-A	1861			1861			
C-B	50	448	0.112	50	0.1	9.045	A
A-B	14			14			
A-C	1019			1019			

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	87	104	0.837	86	4.0	178.239	F
C-A	1861			1861			
C-B	50	448	0.112	50	0.1	9.045	A
A-B	14			14			
A-C	1019			1019			

09:00 - 09:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	87	104	0.837	86	4.1	183.762	F
C-A	1861			1861			
C-B	50	448	0.112	50	0.1	9.045	A
A-B	14			14			
A-C	1019			1019			

09:15 - 09:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	87	104	0.837	87	4.3	187.721	F
C-A	1861			1861			
C-B	50	448	0.112	50	0.1	9.045	A
A-B	14			14			
A-C	1019			1019			

2032 Base, 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	Walton Lane / Bullens Lane	T-Junction	Two-way		0.26	A

Junction Network Options

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold
Left	Normal/unknown	4	Stream B-AC

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time period length (min)	Time segment length (min)
D7	2032 Base	PM	FLAT	17:00	18:30	90	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 - Walton Lane W		✓	1266	100.000
B - Bullens Road		✓	25	100.000
C - Walton Lane E		✓	1311	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		A - Walton Lane W	B - Bullens Road	C - Walton Lane E
From	A - Walton Lane W	0	15	1251
	B - Bullens Road	7	0	18
	C - Walton Lane E	1304	7	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - Walton Lane W	B - Bullens Road	C - Walton Lane E
From	A - Walton Lane W	0	0	0
	B - Bullens Road	0	0	0
	C - Walton Lane E	0	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
B-AC	0.15	24.54	0.2	C
C-A				
C-B	0.02	9.48	0.0	A
A-B				
A-C				

Main Results for each time segment

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	25	172	0.146	24	0.2	24.325	C
C-A	1304			1304			
C-B	7	387	0.018	7	0.0	9.474	A
A-B	15			15			
A-C	1251			1251			

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	25	172	0.146	25	0.2	24.539	C
C-A	1304			1304			
C-B	7	387	0.018	7	0.0	9.475	A
A-B	15			15			
A-C	1251			1251			

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	25	172	0.146	25	0.2	24.541	C
C-A	1304			1304			
C-B	7	387	0.018	7	0.0	9.475	A
A-B	15			15			
A-C	1251			1251			

17:45 - 18:00

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	25	172	0.146	25	0.2	24.544	C
C-A	1304			1304			
C-B	7	387	0.018	7	0.0	9.475	A
A-B	15			15			
A-C	1251			1251			

18:00 - 18:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	25	172	0.146	25	0.2	24.544	C
C-A	1304			1304			
C-B	7	387	0.018	7	0.0	9.475	A
A-B	15			15			
A-C	1251			1251			

18:15 - 18:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	25	172	0.146	25	0.2	24.544	C
C-A	1304			1304			
C-B	7	387	0.018	7	0.0	9.475	A
A-B	15			15			
A-C	1251			1251			

2032 Base + 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	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	Walton Lane / Bullens Lane	T-Junction	Two-way		0.99	A

Junction Network Options

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold
Left	Normal/unknown	0	Stream B-AC

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time period length (min)	Time segment length (min)
D8	2032 Base + Dev	PM	FLAT	17:00	18:30	90	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 - Walton Lane W		✓	1304	100.000
B - Bullens Road		✓	73	100.000
C - Walton Lane E		✓	1381	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		A - Walton Lane W	B - Bullens Road	C - Walton Lane E
From	A - Walton Lane W	0	17	1287
	B - Bullens Road	10	0	63
	C - Walton Lane E	1345	36	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - Walton Lane W	B - Bullens Road	C - Walton Lane E
From	A - Walton Lane W	0	0	0
	B - Bullens Road	0	0	0
	C - Walton Lane E	0	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
B-AC	0.39	32.07	0.6	D
C-A				
C-B	0.10	10.56	0.1	B
A-B				
A-C				

Main Results for each time segment

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	73	186	0.393	71	0.6	30.695	D
C-A	1345			1345			
C-B	36	377	0.096	36	0.1	10.533	B
A-B	17			17			
A-C	1287			1287			

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	73	185	0.394	73	0.6	32.003	D
C-A	1345			1345			
C-B	36	377	0.096	36	0.1	10.558	B
A-B	17			17			
A-C	1287			1287			

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	73	185	0.394	73	0.6	32.041	D
C-A	1345			1345			
C-B	36	377	0.096	36	0.1	10.558	B
A-B	17			17			
A-C	1287			1287			

17:45 - 18:00

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	73	185	0.394	73	0.6	32.054	D
C-A	1345			1345			
C-B	36	377	0.096	36	0.1	10.558	B
A-B	17			17			
A-C	1287			1287			

18:00 - 18:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	73	185	0.394	73	0.6	32.060	D
C-A	1345			1345			
C-B	36	377	0.096	36	0.1	10.558	B
A-B	17			17			
A-C	1287			1287			

18:15 - 18:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	73	185	0.394	73	0.6	32.066	D
C-A	1345			1345			
C-B	36	377	0.096	36	0.1	10.558	B
A-B	17			17			
A-C	1287			1287			

I. Walton Lane - Gwladys Street Junctions 9 Output

Junctions 9

PICADY 9 - Priority Intersection Module

Version: 9.5.1.7462

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

Filename: Gwladys Street - Walton Lane.j9
Path: P:\Liverpool\ITD\Projects\385175 BMD\Goodison Legacy\Modelling\PICADY
Report generation date: 10/12/2019 11:06:16

Summary of junction performance

	AM								PM							
	Set ID	Queue (PCU)	Delay (s)	RFC	LOS	Junction Delay (s)	Junction LOS	Network Residual Capacity	Set ID	Queue (PCU)	Delay (s)	RFC	LOS	Junction Delay (s)	Junction LOS	Network Residual Capacity
	2028 Base															
Stream B-AC	D1	0.2	20.21	0.15	C	0.37	A	10 % [Stream B-AC]	D3	0.1	12.99	0.11	B	0.22	A	28 % [Stream B-AC]
Stream C-B		0.1	8.19	0.07	A					0.0	0.00	0.00	A			
	2028 Base + Dev															
Stream B-AC	D2	0.5	19.59	0.33	C	1.19	A	6 % [Stream B-AC]	D4	0.2	11.81	0.19	B	0.66	A	38 % [Stream B-AC]
Stream C-B		0.4	10.36	0.26	B					0.1	8.69	0.11	A			
	2032 Base															
Stream B-AC	D5	0.2	23.40	0.17	C	0.41	A	6 % [Stream B-AC]	D7	0.1	13.75	0.12	B	0.23	A	23 % [Stream B-AC]
Stream C-B		0.1	8.40	0.07	A					0.0	0.00	0.00	A			
	2032 Base + Dev															
Stream B-AC	D6	0.6	24.59	0.38	C	1.33	A	3 % [Stream B-AC]	D8	0.3	13.19	0.21	B	0.47	A	23 % [Stream B-AC]
Stream C-B		0.4	10.70	0.27	B					0.0	8.16	0.03	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. Junction LOS and Junction Delay are demand-weighted averages. Network Residual Capacity indicates the amount by which network flow could be increased before a user-definable threshold (see Analysis Options) is met.

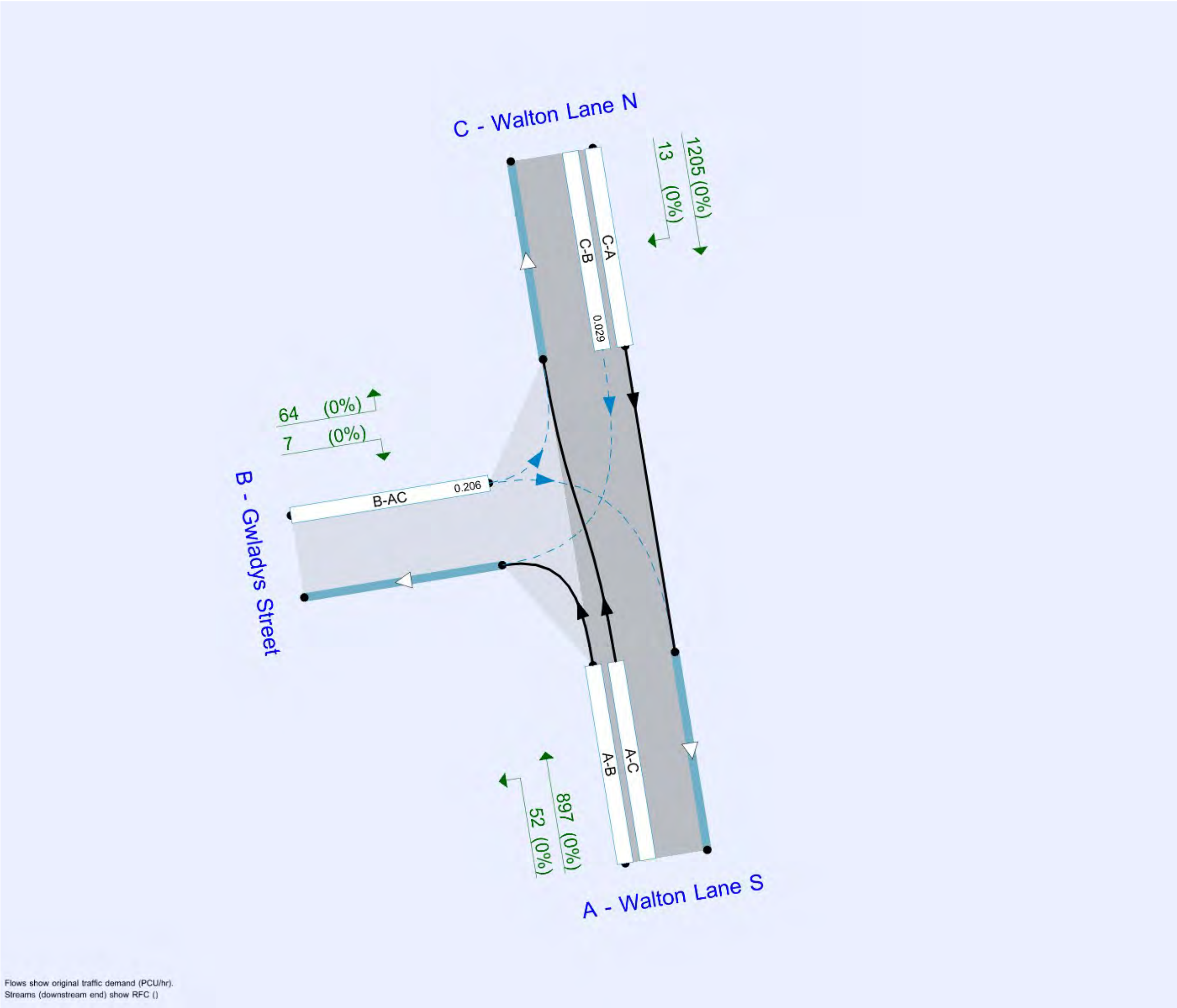
File summary

File Description

Title	Goodison Legacy
Location	Gwladys Street / Walton Lane
Site number	
Date	09/12/2019
Version	1
Status	(new file)
Identifier	
Client	
Jobnumber	
Enumerator	MOTTMAC\MCM80211
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	Residual capacity criteria type	RFC Threshold	Average Delay threshold (s)	Queue threshold (PCU)
	✓	Delay	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 period length (min)	Time segment length (min)
D1	2028 Base	AM	FLAT	08:00	09:30	90	15
D2	2028 Base + Dev	AM	FLAT	08:00	09:30	90	15
D3	2028 Base	PM	FLAT	17:00	18:30	90	15
D4	2028 Base + Dev	PM	FLAT	17:00	18:30	90	15
D5	2032 Base	AM	FLAT	08:00	09:30	90	15
D6	2032 Base + Dev	AM	FLAT	08:00	09:30	90	15
D7	2032 Base	PM	FLAT	17:00	18:30	90	15
D8	2032 Base + Dev	PM	FLAT	17:00	18:30	90	15

Analysis Set Details

ID	Network flow scaling factor (%)
A1	100.000

2028 Base, 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	Walton Lane / Gwladys Street	T-Junction	Two-way		0.37	A

Junction Network Options

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold
Left	Normal/unknown	10	Stream B-AC

Arms

Arms

Arm	Name	Description	Arm type
A	Walton Lane S		Major
B	Gwladys Street		Minor
C	Walton Lane N		Major

Major Arm Geometry

Arm	Width of carriageway (m)	Has kerbed central reserve	Width of kerbed central reserve (m)	Has right turn bay	Visibility for right turn (m)	Blocks?	Blocking queue (PCU)
C - Walton Lane N	6.00	✓	1.50		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 - Gwladys Street	One lane	3.30	25	16

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	525	0.093	0.234	0.147	0.334
B-C	653	0.100	0.253	-	-
C-B	719	0.278	0.278	-	-

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 period length (min)	Time segment length (min)
D1	2028 Base	AM	FLAT	08:00	09:30	90	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 - Walton Lane S		✓	884	100.000
B - Gwladys Street		✓	31	100.000
C - Walton Lane N		✓	1493	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		A - Walton Lane S	B - Gwladys Street	C - Walton Lane N
From	A - Walton Lane S	0	52	832
	B - Gwladys Street	10	0	21
	C - Walton Lane N	1460	33	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - Walton Lane S	B - Gwladys Street	C - Walton Lane N
From	A - Walton Lane S	0	0	0
	B - Gwladys Street	0	0	0
	C - Walton Lane N	0	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
B-AC	0.15	20.21	0.2	C
C-A				
C-B	0.07	8.19	0.1	A
A-B				
A-C				

Main Results for each time segment

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	31	209	0.148	30	0.2	20.048	C
C-A	1460			1460			
C-B	33	473	0.070	33	0.1	8.179	A
A-B	52			52			
A-C	832			832			

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	31	209	0.148	31	0.2	20.207	C
C-A	1460			1460			
C-B	33	473	0.070	33	0.1	8.189	A
A-B	52			52			
A-C	832			832			

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	31	209	0.148	31	0.2	20.210	C
C-A	1460			1460			
C-B	33	473	0.070	33	0.1	8.189	A
A-B	52			52			
A-C	832			832			

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	31	209	0.148	31	0.2	20.212	C
C-A	1460			1460			
C-B	33	473	0.070	33	0.1	8.189	A
A-B	52			52			
A-C	832			832			

09:00 - 09:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	31	209	0.148	31	0.2	20.212	C
C-A	1460			1460			
C-B	33	473	0.070	33	0.1	8.189	A
A-B	52			52			
A-C	832			832			

09:15 - 09:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	31	209	0.148	31	0.2	20.212	C
C-A	1460			1460			
C-B	33	473	0.070	33	0.1	8.189	A
A-B	52			52			
A-C	832			832			

2028 Base + 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	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	Walton Lane / Gwladys Street	T-Junction	Two-way		1.19	A

Junction Network Options

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold
Left	Normal/unknown	6	Stream B-AC

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time period length (min)	Time segment length (min)
D2	2028 Base + Dev	AM	FLAT	08:00	09:30	90	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 - Walton Lane S		✓	884	100.000
B - Gwladys Street		✓	89	100.000
C - Walton Lane N		✓	1585	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		A - Walton Lane S	B - Gwladys Street	C - Walton Lane N
From	A - Walton Lane S	0	52	832
	B - Gwladys Street	10	0	79
	C - Walton Lane N	1460	125	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - Walton Lane S	B - Gwladys Street	C - Walton Lane N
From	A - Walton Lane S	0	0	0
	B - Gwladys Street	0	0	0
	C - Walton Lane N	0	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
B-AC	0.33	19.59	0.5	C
C-A				
C-B	0.26	10.36	0.4	B
A-B				
A-C				

Main Results for each time segment

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	89	274	0.325	87	0.5	19.130	C
C-A	1460			1460			
C-B	125	473	0.265	124	0.4	10.276	B
A-B	52			52			
A-C	832			832			

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	89	273	0.326	89	0.5	19.581	C
C-A	1460			1460			
C-B	125	473	0.265	125	0.4	10.357	B
A-B	52			52			
A-C	832			832			

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	89	273	0.326	89	0.5	19.590	C
C-A	1460			1460			
C-B	125	473	0.265	125	0.4	10.357	B
A-B	52			52			
A-C	832			832			

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	89	273	0.326	89	0.5	19.592	C
C-A	1460			1460			
C-B	125	473	0.265	125	0.4	10.357	B
A-B	52			52			
A-C	832			832			

09:00 - 09:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	89	273	0.326	89	0.5	19.594	C
C-A	1460			1460			
C-B	125	473	0.265	125	0.4	10.357	B
A-B	52			52			
A-C	832			832			

09:15 - 09:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	89	273	0.326	89	0.5	19.594	C
C-A	1460			1460			
C-B	125	473	0.265	125	0.4	10.357	B
A-B	52			52			
A-C	832			832			

2028 Base, 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	Walton Lane / Gwladys Street	T-Junction	Two-way		0.22	A

Junction Network Options

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold
Left	Normal/unknown	28	Stream B-AC

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time period length (min)	Time segment length (min)
D3	2028 Base	PM	FLAT	17:00	18:30	90	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 - Walton Lane S		✓	914	100.000
B - Gwladys Street		✓	36	100.000
C - Walton Lane N		✓	1161	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		A - Walton Lane S	B - Gwladys Street	C - Walton Lane N
From	A - Walton Lane S	0	50	864
	B - Gwladys Street	7	0	29
	C - Walton Lane N	1161	0	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - Walton Lane S	B - Gwladys Street	C - Walton Lane N
From	A - Walton Lane S	0	0	0
	B - Gwladys Street	0	0	0
	C - Walton Lane N	0	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
B-AC	0.11	12.99	0.1	B
C-A				
C-B	0.00	0.00	0.0	A
A-B				
A-C				

Main Results for each time segment

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	36	313	0.115	35	0.1	12.941	B
C-A	1161			1161			
C-B	0	464	0.000	0	0.0	0.000	A
A-B	50			50			
A-C	864			864			

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	36	313	0.115	36	0.1	12.987	B
C-A	1161			1161			
C-B	0	464	0.000	0	0.0	0.000	A
A-B	50			50			
A-C	864			864			

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	36	313	0.115	36	0.1	12.987	B
C-A	1161			1161			
C-B	0	464	0.000	0	0.0	0.000	A
A-B	50			50			
A-C	864			864			

17:45 - 18:00

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	36	313	0.115	36	0.1	12.987	B
C-A	1161			1161			
C-B	0	464	0.000	0	0.0	0.000	A
A-B	50			50			
A-C	864			864			

18:00 - 18:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	36	313	0.115	36	0.1	12.987	B
C-A	1161			1161			
C-B	0	464	0.000	0	0.0	0.000	A
A-B	50			50			
A-C	864			864			

18:15 - 18:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	36	313	0.115	36	0.1	12.987	B
C-A	1161			1161			
C-B	0	464	0.000	0	0.0	0.000	A
A-B	50			50			
A-C	864			864			

2028 Base + 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	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	Walton Lane / Gwladys Street	T-Junction	Two-way		0.66	A

Junction Network Options

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold
Left	Normal/unknown	38	Stream B-AC

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time period length (min)	Time segment length (min)
D4	2028 Base + Dev	PM	FLAT	17:00	18:30	90	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 - Walton Lane S		✓	914	100.000
B - Gwladys Street		✓	70	100.000
C - Walton Lane N		✓	914	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		A - Walton Lane S	B - Gwladys Street	C - Walton Lane N
From	A - Walton Lane S	0	50	864
	B - Gwladys Street	7	0	63
	C - Walton Lane N	864	50	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - Walton Lane S	B - Gwladys Street	C - Walton Lane N
From	A - Walton Lane S	0	0	0
	B - Gwladys Street	0	0	0
	C - Walton Lane N	0	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
B-AC	0.19	11.81	0.2	B
C-A				
C-B	0.11	8.69	0.1	A
A-B				
A-C				

Main Results for each time segment

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	70	375	0.187	69	0.2	11.745	B
C-A	864			864			
C-B	50	464	0.108	50	0.1	8.672	A
A-B	50			50			
A-C	864			864			

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	70	375	0.187	70	0.2	11.814	B
C-A	864			864			
C-B	50	464	0.108	50	0.1	8.690	A
A-B	50			50			
A-C	864			864			

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	70	375	0.187	70	0.2	11.815	B
C-A	864			864			
C-B	50	464	0.108	50	0.1	8.690	A
A-B	50			50			
A-C	864			864			

17:45 - 18:00

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	70	375	0.187	70	0.2	11.815	B
C-A	864			864			
C-B	50	464	0.108	50	0.1	8.690	A
A-B	50			50			
A-C	864			864			

18:00 - 18:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	70	375	0.187	70	0.2	11.815	B
C-A	864			864			
C-B	50	464	0.108	50	0.1	8.690	A
A-B	50			50			
A-C	864			864			

18:15 - 18:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	70	375	0.187	70	0.2	11.815	B
C-A	864			864			
C-B	50	464	0.108	50	0.1	8.690	A
A-B	50			50			
A-C	864			864			

2032 Base, 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	Walton Lane / Gwladys Street	T-Junction	Two-way		0.41	A

Junction Network Options

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold
Left	Normal/unknown	6	Stream B-AC

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time period length (min)	Time segment length (min)
D5	2032 Base	AM	FLAT	08:00	09:30	90	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 - Walton Lane S		✓	920	100.000
B - Gwladys Street		✓	32	100.000
C - Walton Lane N		✓	1553	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		A - Walton Lane S	B - Gwladys Street	C - Walton Lane N
From	A - Walton Lane S	0	55	865
	B - Gwladys Street	10	0	22
	C - Walton Lane N	1519	34	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - Walton Lane S	B - Gwladys Street	C - Walton Lane N
From	A - Walton Lane S	0	0	0
	B - Gwladys Street	0	0	0
	C - Walton Lane N	0	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
B-AC	0.17	23.40	0.2	C
C-A				
C-B	0.07	8.40	0.1	A
A-B				
A-C				

Main Results for each time segment

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	32	186	0.172	31	0.2	23.138	C
C-A	1519			1519			
C-B	34	463	0.074	34	0.1	8.388	A
A-B	55			55			
A-C	865			865			

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	32	186	0.172	32	0.2	23.392	C
C-A	1519			1519			
C-B	34	463	0.074	34	0.1	8.400	A
A-B	55			55			
A-C	865			865			

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	32	186	0.172	32	0.2	23.397	C
C-A	1519			1519			
C-B	34	463	0.074	34	0.1	8.400	A
A-B	55			55			
A-C	865			865			

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	32	186	0.172	32	0.2	23.397	C
C-A	1519			1519			
C-B	34	463	0.074	34	0.1	8.400	A
A-B	55			55			
A-C	865			865			

09:00 - 09:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	32	186	0.172	32	0.2	23.399	C
C-A	1519			1519			
C-B	34	463	0.074	34	0.1	8.400	A
A-B	55			55			
A-C	865			865			

09:15 - 09:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	32	186	0.172	32	0.2	23.399	C
C-A	1519			1519			
C-B	34	463	0.074	34	0.1	8.400	A
A-B	55			55			
A-C	865			865			

2032 Base + 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	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	Walton Lane / Gwladys Street	T-Junction	Two-way		1.33	A

Junction Network Options

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold
Left	Normal/unknown	3	Stream B-AC

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time period length (min)	Time segment length (min)
D6	2032 Base + Dev	AM	FLAT	08:00	09:30	90	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 - Walton Lane S		✓	920	100.000
B - Gwladys Street		✓	89	100.000
C - Walton Lane N		✓	1645	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		A - Walton Lane S	B - Gwladys Street	C - Walton Lane N
From	A - Walton Lane S	0	55	865
	B - Gwladys Street	10	0	79
	C - Walton Lane N	1519	126	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - Walton Lane S	B - Gwladys Street	C - Walton Lane N
From	A - Walton Lane S	0	0	0
	B - Gwladys Street	0	0	0
	C - Walton Lane N	0	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
B-AC	0.38	24.59	0.6	C
C-A				
C-B	0.27	10.70	0.4	B
A-B				
A-C				

Main Results for each time segment

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	89	237	0.376	87	0.6	23.694	C
C-A	1519			1519			
C-B	126	463	0.272	125	0.4	10.606	B
A-B	55			55			
A-C	865			865			

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	89	235	0.378	89	0.6	24.558	C
C-A	1519			1519			
C-B	126	463	0.272	126	0.4	10.696	B
A-B	55			55			
A-C	865			865			

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	89	235	0.378	89	0.6	24.579	C
C-A	1519			1519			
C-B	126	463	0.272	126	0.4	10.696	B
A-B	55			55			
A-C	865			865			

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	89	235	0.378	89	0.6	24.586	C
C-A	1519			1519			
C-B	126	463	0.272	126	0.4	10.696	B
A-B	55			55			
A-C	865			865			

09:00 - 09:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	89	235	0.378	89	0.6	24.589	C
C-A	1519			1519			
C-B	126	463	0.272	126	0.4	10.696	B
A-B	55			55			
A-C	865			865			

09:15 - 09:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	89	235	0.378	89	0.6	24.592	C
C-A	1519			1519			
C-B	126	463	0.272	126	0.4	10.696	B
A-B	55			55			
A-C	865			865			

2032 Base, 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	Walton Lane / Gwladys Street	T-Junction	Two-way		0.23	A

Junction Network Options

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold
Left	Normal/unknown	23	Stream B-AC

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time period length (min)	Time segment length (min)
D7	2032 Base	PM	FLAT	17:00	18:30	90	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 - Walton Lane S		✓	949	100.000
B - Gwladys Street		✓	37	100.000
C - Walton Lane N		✓	1205	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		A - Walton Lane S	B - Gwladys Street	C - Walton Lane N
From	A - Walton Lane S	0	52	897
	B - Gwladys Street	7	0	30
	C - Walton Lane N	1205	0	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - Walton Lane S	B - Gwladys Street	C - Walton Lane N
From	A - Walton Lane S	0	0	0
	B - Gwladys Street	0	0	0
	C - Walton Lane N	0	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
B-AC	0.12	13.75	0.1	B
C-A				
C-B	0.00	0.00	0.0	A
A-B				
A-C				

Main Results for each time segment

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	37	299	0.124	36	0.1	13.692	B
C-A	1205			1205			
C-B	0	454	0.000	0	0.0	0.000	A
A-B	52			52			
A-C	897			897			

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	37	299	0.124	37	0.1	13.748	B
C-A	1205			1205			
C-B	0	454	0.000	0	0.0	0.000	A
A-B	52			52			
A-C	897			897			

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	37	299	0.124	37	0.1	13.748	B
C-A	1205			1205			
C-B	0	454	0.000	0	0.0	0.000	A
A-B	52			52			
A-C	897			897			

17:45 - 18:00

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	37	299	0.124	37	0.1	13.748	B
C-A	1205			1205			
C-B	0	454	0.000	0	0.0	0.000	A
A-B	52			52			
A-C	897			897			

18:00 - 18:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	37	299	0.124	37	0.1	13.748	B
C-A	1205			1205			
C-B	0	454	0.000	0	0.0	0.000	A
A-B	52			52			
A-C	897			897			

18:15 - 18:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	37	299	0.124	37	0.1	13.748	B
C-A	1205			1205			
C-B	0	454	0.000	0	0.0	0.000	A
A-B	52			52			
A-C	897			897			

2032 Base + 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	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	Walton Lane / Gwladys Street	T-Junction	Two-way		0.47	A

Junction Network Options

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold
Left	Normal/unknown	23	Stream B-AC

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time period length (min)	Time segment length (min)
D8	2032 Base + Dev	PM	FLAT	17:00	18:30	90	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 - Walton Lane S		✓	949	100.000
B - Gwladys Street		✓	71	100.000
C - Walton Lane N		✓	1218	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		A - Walton Lane S	B - Gwladys Street	C - Walton Lane N
From	A - Walton Lane S	0	52	897
	B - Gwladys Street	7	0	64
	C - Walton Lane N	1205	13	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A - Walton Lane S	B - Gwladys Street	C - Walton Lane N
From	A - Walton Lane S	0	0	0
	B - Gwladys Street	0	0	0
	C - Walton Lane N	0	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
B-AC	0.21	13.19	0.3	B
C-A				
C-B	0.03	8.16	0.0	A
A-B				
A-C				

Main Results for each time segment

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	71	344	0.206	70	0.3	13.088	B
C-A	1205			1205			
C-B	13	454	0.029	13	0.0	8.151	A
A-B	52			52			
A-C	897			897			

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	71	344	0.206	71	0.3	13.185	B
C-A	1205			1205			
C-B	13	454	0.029	13	0.0	8.154	A
A-B	52			52			
A-C	897			897			

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	71	344	0.206	71	0.3	13.185	B
C-A	1205			1205			
C-B	13	454	0.029	13	0.0	8.154	A
A-B	52			52			
A-C	897			897			

17:45 - 18:00

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	71	344	0.206	71	0.3	13.185	B
C-A	1205			1205			
C-B	13	454	0.029	13	0.0	8.154	A
A-B	52			52			
A-C	897			897			

18:00 - 18:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	71	344	0.206	71	0.3	13.185	B
C-A	1205			1205			
C-B	13	454	0.029	13	0.0	8.155	A
A-B	52			52			
A-C	897			897			

18:15 - 18:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	71	344	0.206	71	0.3	13.185	B
C-A	1205			1205			
C-B	13	454	0.029	13	0.0	8.155	A
A-B	52			52			
A-C	897			897			

I. Walton Lane - Gwladys Street Junctions 9 Output

J. Scoping Correspondence

K. Proposed Highway Adoption Plan

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