

RIDGE

TRANSPORT ASSESSMENT

LAND EAST OF SHOWELL FARM,
CHIPPENHAM, WILSHIRE
HALLAM LAND
May 2026

TRANSPORT ASSESSMENT
LAND EAST OF SHOWELL FARM, CHIPPENHAM
HALLAM LAND

15 May 2026

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VERSION CONTROL

VERSION	DATE	DESCRIPTION	CREATED BY	REVIEWED BY
1.0	28.04.2026	First Draft	AW	MG
2.0	05.05.2026	Second Draft	AW	MG
3.0	12.05.2026	Issue	AW	MG
4.0	15.05.2026	Second Issue	BT	MG
5.0	27.05.2026	Third Issue	AW	MG

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1. INTRODUCTION

1.1. Background

1.1.1. Ridge and Partners LLP has been appointed by Hallam Land Management Ltd to provide transport highways advise in relation to a residential led mixed-use development on land know as 'Land Est of Showell Farm' ('The Site')/

1.1.2. The detailed description of the development proposals is set out below:

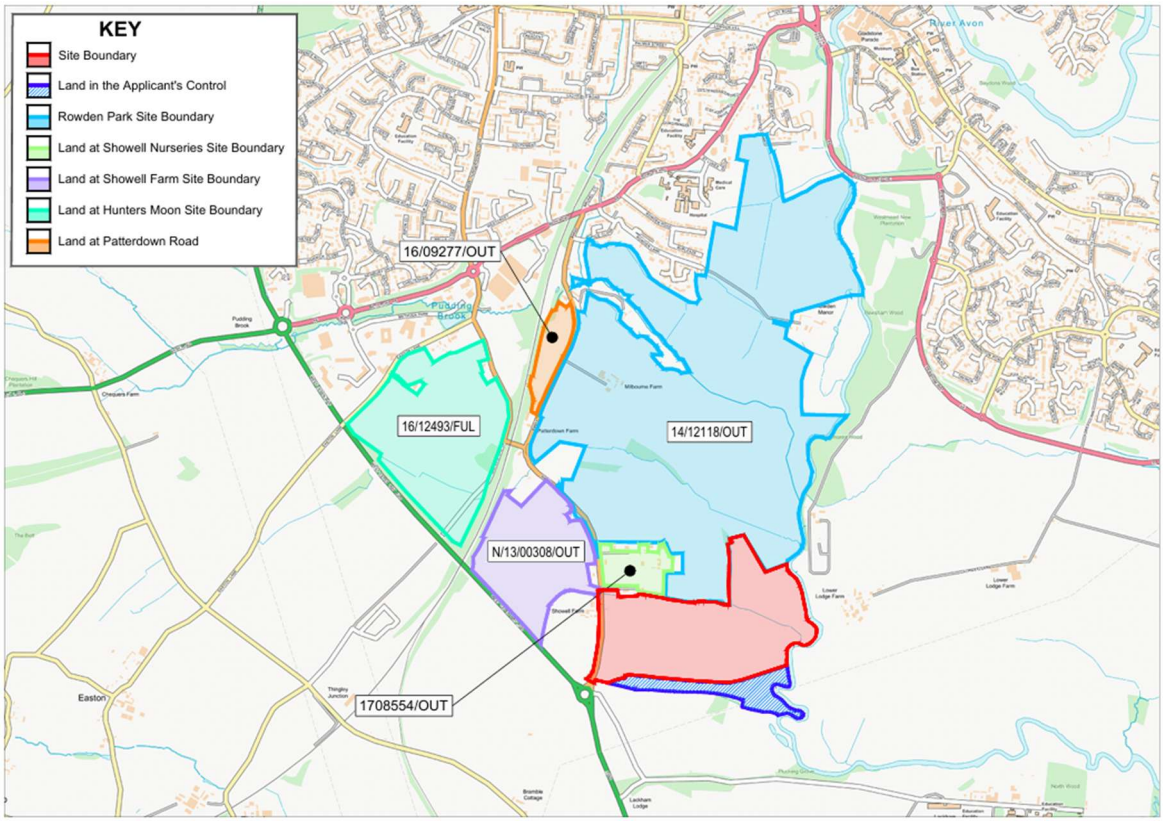
"Outline Planning Application for up to 400 dwellings (Class C3 use), land for a local centre accommodating commercial business and service uses (Class E use), drinking establishment and hot food takeaway (Sui Generis); and local community uses (Class F2); open space and landscaping to include natural green space, amenity green space, area of formal play, allotments and community orchard, sustainable drainage infrastructure including attenuation basins; cycle and pedestrian routes; parking; utilities infrastructure and ground remodelling. All maters reserved except for the formation of a new vehicular access and cycle and pedestrian access including emergency access, onto B4528."

1.1.3. The development site comprises approximately 30 hectares and lies on the southern edge of Chippenham adjacent to areas of land that have received planning permission for residential and employment uses (Rowden Park, Land at Hunters Moon, Land at Showell Farm, Land at Showell Nurseries and Land at Patterdown Road). The site is located east of the B4528 'Patterdown Road' and northeast of the Lackham Roundabout providing access to the A350.

1.2. Site Location

1.2.1. **Figure 1.1** shows the location of the site in context of the permitted developments.

Figure 1.1: Site Location Plan



1.2.2. A planning application for the Site (Ref: PL/2023/04417) was previously submitted by Hallam Land for up to 450 dwellings and a local centre. The application was later withdrawn. Responses from Active Travel England (ATE) and Chippenham Cycle Network Development Group (CCNDG) to the previous planning application have helped to inform the proposal now being brought forward.

1.3. Scope of the Report

1.3.1. This Transport Assessment (TA) examines the transport and highways matters pertinent to the site, and in doing so demonstrates the suitability of the site for development.

1.3.2. This TA is structured as follows:

- Section 3 reviews relevant national, regional and local policy and guidance as related to the proposed development;
- Section 4 undertakes a review of the planning history of the local area;
- Section 5 details pertinent highway schemes within the locality;
- Section 6 describes and assesses the exiting site, including access to local services and facilities and an audit of accessibility to and from the site by sustainable modes of travel (on foot, by cycle and public transport);
- Section 7 describes the local highway network including an assessment of highway safety;
- Section 8 details the development proposal and its associated parking and access arrangement;
- Section 9 forecasts the number of active travel movements and their distribution on the network;

- Section 10 - sets out the methodology for forecasting the trip generation and trip distribution for the development;
- Section 11 sets out the highway assessment methodology including the inclusion of committed developments;
- Section 12 reviews the impact of the development on the local highway network and sets out a strategy for any necessary mitigation;
- Section 13 undertakes an assessment of impact during construction;
- Section 14 sets out the transport mitigation that the development will provide; and
- Section 15 provides a summary of the TA and presents the conclusions of the assessment.

1.3.3. This TA demonstrates that the proposed development supported by suitable mitigation will not have a material impact on the surrounding highway network, and that the site is suitably and sustainably located to be accessed by sustainable modes of transport to include active travel.

1.3.4. The proposed development will not have a severe residual cumulative impact as defined within the National Planning Policy Framework (NPPF) on the highway network.

1.3.5. As such, it is considered that there are no highways or transport matters to prevent the proposals from being approved.

2. PLANNING POLICY

2.1. Introduction

2.1.1. This section outlines the national and local planning policies and guidance relevant to the proposed development. The following are set out:

- NPPF (2024);
- Planning Practice Guidance – Travel Plans, Transport Assessment and Statement in decision-taking (2014);
- Manual for Streets (MfS) (2007, 2010);
- Wiltshire Local Transport Plan (2011-2026);
- Wiltshire Core Strategy;
- Chippenham Site Allocations Plan;
- Wiltshire Local Plan Review; and
- Chippenham Neighbourhood Plan.

2.1.2. This review sets the planning context for the proposed development, and thereafter this TA demonstrates the suitability of the site in view of this context.

2.2. National Planning Policy Framework (updated July 2021)

2.2.1. The NPPF sets out the central government's planning policies for England and how these are expected to be applied at a local level. It provides a framework within which locally prepared plans for housing and other development are produced. Originally published in March 2012, the NPPF has had numerous revisions, with the most recent being (at the time of writing) in December 2024. The document sets out the Government's planning policies for England and how these should be applied.

2.2.2. The NPPF states that the "*purpose of the planning system is to contribute to the achievement of sustainable development*", which itself is defined as "*meeting the needs of the present without compromising the ability of future generations to meet their own needs.*" The NPPF is based on a "*presumption in favour of sustainable development*", as detailed in paragraph 11.

2.2.3. Considering transport, the NPPF guides that transport issues should be considered at the earliest stage of development proposals. It is noted that "the planning system should actively manage patterns of growth", with significant development sited "in locations which are or can be made sustainable, through limiting the need to travel and offering a genuine choice of transport modes. This can help to reduce congestion and emissions, and improve air quality and public health".

2.2.4. Paragraph 115 of the NPPF also states the following:

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

a. sustainable transport modes are prioritised taking account of the vision for the site, the type of development and its location;

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

c. the design of streets, parking areas, other transport elements and the content of associated standards reflects current national guidance, including the National Design Guide and the National Model Design Code; and

d. Any significant impacts from the development on the transport network (in terms of capacity and congestion), or on highway safety, can be cost effectively mitigated to an acceptable degree through a vision-led approach."

2.2.5. Crucially, paragraph 116 states that "*development should only be prevented or refused on highways grounds if there would be an unacceptable impact on highway safety, or the residual cumulative impacts on the road network, following mitigation, would be severe, taking into account all reasonable future scenarios.*"

2.2.6. Paragraph 117 states that 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 reduced mobility in relation to all modes of transport;

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

allow for the efficient delivery of goods, and access by service and emergency vehicles; and be designed to enable charging of plug-in and other ultra-low emission vehicles in safe, accessible and convenient locations."

2.2.7. Paragraph 118 states that all developments that are expected to generate significant amounts of movements should be required to provide a Travel Plan (TP) and the planning application should be supported by a vision-led Transport Assessment (TA) or Transport Statement (TS). This planning application is supported by a TA and TP, as per NPPF and OCC guidance.

2.3. Planning Practice Guidance

2.3.1. Published in 2014, the Government's Planning Practice Guidance 'Travel Plans, Transport Assessments and Statements in Decision-Taking' outlines the fundamental principles that form the basis of Travel Plans (TPs), TAs, and Transport Statements (TSs). The guidance states that producing these documents provides a means to assess, and mitigate, the negative transport impacts of development; in this way, sustainable development can be achieved.

2.3.2. The guidance sets out that whilst TPs promote the implementation of sustainable travel into the planning process, TAs and TSs assess the potential transport implications of developments and significantly whether the residual transport impacts of a proposed development are 'severe'.

2.4. Manual for Streets

2.4.1. MfS, launched in March 2007, superseded 'Design Bulletin 32', first published in 1977 and its accompanying guide 'Places, Streets and Movement', providing new advice for the design of residential streets in England and Wales. A second iteration 'Manual for Streets 2: Wider Application of Principles' was subsequently published in October 2010. The document builds on the original philosophies and demonstrates how they can be extended to encompass the design of busier streets and non-trunk roads. It provides a flexible and pragmatic guidance to assist Local Planning and Highway Authorities in managing their urban highway network.

2.4.2. The overarching theme of MfS is to increase the quality of life through good design which creates people-orientated streets. It highlights the importance of interactions between all road users and states that:

"Streets should not be designed just to accommodate the movement of motor vehicles. It is important that designers place a high priority on meeting the needs of pedestrians, cyclists and public transport users, so that growth in these modes of travel is encouraged".

2.4.3. MfS aims to assist in the creation of zones for movement that:

- Help to build and strengthen the communities they serve;
- Meet the needs of all users, by embodying the principles of inclusive design;
- Form part of a well-connected network;
- Are attractive and have their own distinct identity;
- Are cost-effective to construct and maintain; and
- Are safe.

2.5. Wiltshire Local Transport Plan (2011-2026)

2.5.1. The Third Wiltshire Local Transport Plan (LTP3) covers the period from 2011 to 2026, and sets out the Council's objectives, implementation plans and targets for transport in Wiltshire via a long term transport strategy, a shorter-term implementation plan and a number of supporting strategies.

2.5.2. A number of local strategic transport objectives have been developed in the LTP3; these include:

- SO2 – To provide, support and promote a choice of sustainable transport alternatives;
- SO5 – To improve sustainable access to a full range of opportunities particularly for those people without a car;
- SO11 – To reduce the level of air pollutant and climate change emissions from transport;
- SO12 – To support planned growth in Wiltshire and ensure that new developments adequately provide for their sustainable transport requirements and mitigate their traffic impacts;
- SO13 – To reduce the need to travel, particularly by private car;
- SO14 – To promote travel modes that are beneficial to health; and
- SO17 – To improve access to Wiltshire's countryside and provide a more useable public rights of way network.

2.5.3. Car and cycle parking standards for residential developments are set out in the 'Car Parking Strategy' and 'Cycling Strategy' respectively.

2.6. Wiltshire Core Strategy

2.6.1. The Wiltshire Core Strategy was formally adopted on 20 January 2015 and sets out the Council's spatial vision, key objectives and the overall principles for development within the County for the plan period up to 2026.

2.6.2. Core Policy 1 identifies the settlements where sustainable development will take place to improve the lives of all those who live and work in Wiltshire. Chippenham is identified as a Principal Settlement; these will provide:

"…significant levels of jobs and homes, together with supporting community facilities and infrastructure, meeting their economic potential in the most sustainable way to support better self containment."

2.6.3. The Chippenham Area Strategy is set out in Paragraphs 5.43 – 5.57 of the document and at Core Policy 10. The strategy for Chippenham is to support its role as an important service centre for surrounding towns and villages in Wiltshire; it has excellent transport links, though this also results in significant levels of out-commuting. Core Policy 13 states that over the plan period (2006-2026), approximately 5,090 new homes will be provided within the Chippenham Community Area, of which about 4,510 should occur at Chippenham.

2.6.4. Policies in relation to transport include Core Policy 61 'Transport and Development', and Core Policy 62 'Development Impacts on the Transport Networks'.

2.6.5. Core Policy 61 states:

"New development should be located and designed to help reduce the need to travel, particularly by private car, and to encourage the use of sustainable transport alternatives."

2.6.6. Core Policy 61 goes on to state that Transport Assessments must demonstrate that:

- consideration has been given to the needs of all transport users;
- the proposal is capable of being served by safe access to the highway network; and
- fit for purpose and safe loading/unloading facilities can be provided where these are required as part of the normal functioning of the development.

2.6.7. Core Policy 61 concludes by stating:

"Developments should provide appropriate mitigating measures to offset any adverse impacts on the transport network at both the construction and operational stages."

2.6.8. Core Policy 63 covers Transport Strategies for principal settlements including Chippenham. Core Policy 63 states:

"Packages of integrated transport measures will be identified in Chippenham, Trowbridge and Salisbury to help facilitate sustainable development growth. The packages will seek to achieve a major shift to sustainable transport by helping to reduce reliance on the private car and by improving sustainable transport alternatives."

2.6.9. Core Policy 64 sets out Demand Management, including referring to residential parking standards, and states:

"…the provision of car parking associated with well designed new residential development will be based on minimum parking standards. In determining the appropriate mix of parking types, the presumption will be that unallocated communal parking will be included in the majority of new residential development."

2.7. Chippenham Site Allocation Plan

2.7.1. The Chippenham Site Allocations Plan was adopted in May 2017 to identify strategic sites to deliver growth (4,510 homes by 2026) in the Chippenham area, this includes the consented development at North Chippenham, and allocations at Rawlings Green and South West Chippenham.

2.7.2. The Plan includes a Vision for Chippenham and associated objectives:

Chippenham Vision:
Chippenham will strive to be as attractive as possible in terms of shopping and leisure provision and will emphasise its role as a Riverside Market town surrounded by beautiful countryside and attractive villages.

Chippenham will recognise and build on its natural assets and its important heritage will be cherished. Its setting on the River Avon will be its defining and connecting feature combined with the historic centre, the market, pleasant parks and open spaces; creating a thriving artery and distinctive identity for the town.
Chippenham will be a place where young people choose to stay to live and work, because of the excellent education facilities, the choice and quality of work, which are complimented by its programme of events, festivals and activities.

Chippenham will be a retail destination of choice for the surrounding area due to its range of shops, excellent market, lively cafés and restaurants and leisure facilities which are complimented by its programme of events, festivals and activities.

Chippenham will take advantage of its excellent rail and road links and its position on the high tech corridor between London, Bristol and beyond. It will strengthen its offer and role as a business location ensuring people can live and work locally.

Chippenham will have an integrated approach to transport so that traffic flow will be more efficient, the town centre will be less congested and there will be improved access for sustainable modes of transport.

Objective 3: improving connectivity and reducing traffic impacts:
"The scale and rate of growth that Chippenham will accommodate over the plan period will increase pressures on the road network. The A350 plays an important role both in supporting the town's economy but also a much wider area. Improvements are planned to improve how the A350 works and development at Chippenham must not undo these benefits. Congested road corridors and junctions within the town impede and can deter travel to the town's businesses, services and facilities. In particular, congestion in and around the town centre, as recognised by the Chippenham Vision, needs to be addressed as a part of planning for the town's growth…"

Objective 4: improving access to sustainable transport:
"…Development should seek to promote easier access to key services by non motorised transport, improve access to public transport, offer efficient access to the primary road network, particularly by HGV traffic, and avoid unnecessary traffic in the town centre..."

2.7.3. The majority of the South West Chippenham allocation has been granted planning permission, extending the Chippenham development boundary south to the northern boundary of The Site and offering employment, primary education and everyday services and facilities within a distance that enables journeys to be undertaken using active modes of transport.

2.8. Wiltshire Local Plan Review

2.8.1. The Wiltshire Local Plan 2020 – 2038 was submitted for Examination in November 2024. The Inspector's latest correspondence has raised concerns over the timeline that WC have outlined in relation to the preparation of additional evidence required for a sound plan and have asked WC to either withdraw or for the Inspectors to consider the Plan as submitted which would inevitably lead to a recommendation that the Plan is not adopted. WC have responded that a report will be taken to Cabinet and Council meetings in May 2026; at the time of writing of this TA the recommendation to Council shown in the Cabinet Agenda is for the Local Plan to be withdrawn from examination.

2.9. Chippenham Neighbourhood Plan

2.9.1. The Chippenham Neighbourhood Plan was made in May 2024. The Site and Showell Farm Nurseries are outside of but immediately adjacent to the Chippenham Neighbourhood Area designation made in August 2021.

2.10. Summary

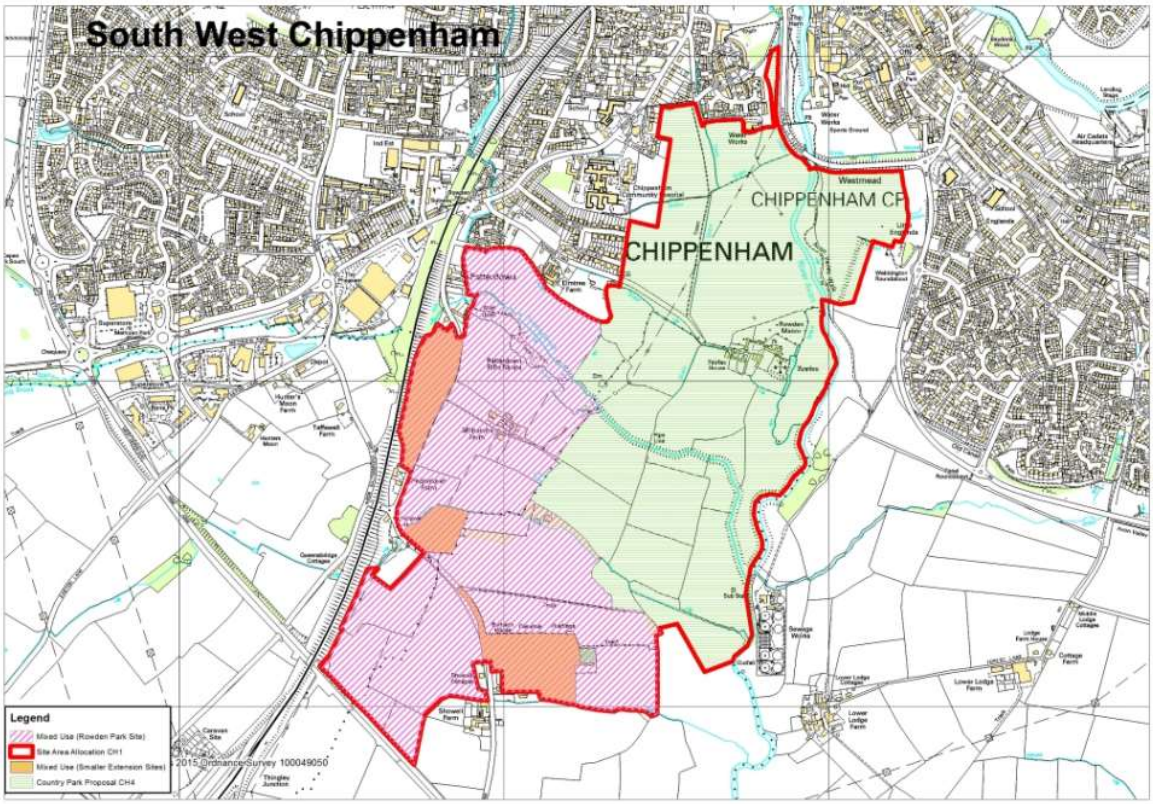
2.10.1. In light of the context set out above in the review of relevant national and local policies and guidance, this TA will demonstrate the suitability of the site for a residential led development with local centre uses.

2.10.2. The core theme of sustainability is a common thread throughout these policies, not least the potential of sustainable travel modes, comprising walking, cycling and public transport, to replace the use of the private car for many short, local journeys.

3. PLANNING CONTEXT

3.1.1. As stated in the previous section the Chippenham Site Allocations Plan allocated land at South West Chippenham under Policy CH1 to deliver 1,000 dwellings, 18ha of employment, a two form entry primary school and a riverside country park at the Rowden Park site with up to 400 dwellings on smaller extension sites in the locality. **Figure 3.1** is an extract of the indicative plan for the South West Chippenham strategic site allocation.

Figure 3.1: Indicative Plan for the South West Chippenham Strategic Site Allocation



3.1.2. Planning permission has been granted in line with the allocation for:

PLANNING REFERENCE	SITE	DEVELOPMENT
N/13/00308/OUT	Land at Showell Farm	5 ha employment
14/12118/OUT	Rowden Park	1,000 dwellings Local Centre – Classes A1-A5, D1 and D2 1 FE Primary School
16/09277/OUT	Land at Patterdown Road	72 dwellings
16/12493/FUL	Land at Hunters Moon	450 dwellings 2.3 ha employment (1.6ha has been given over to housing (Ref: PL/2022/06908))

PLANNING REFERENCE	SITE	DEVELOPMENT
17/08554/OUT	Land at Showell Nurseries	120 dwellings

3.1.3. Reserved matter and discharge of conditions applications have been submitted for all of these developments.

3.1.4. These permitted developments lie immediately north of the Site and form a natural extension of the existing built-out area of south Chippenham. These developments have undergone the scrutiny of the Local Highway Authority (LHA) and have been considered suitable sustainable development schemes subject to conditions and planning obligations.

3.1.5. The mix of land uses approved on the adjacent sites include local employment opportunities, complementing wider local employment opportunities available in the town, enabling residents to work in close proximity to home and undertake their journey to work by means other than the private car.

3.1.6. The proposed development includes land for a local centre that could accommodate local retail, commercial and service uses. Additional, local retail opportunities are proposed at Rowden Park and is expected to deliver some six small shops and to include an express food store, together these will provide the residents of the proposed development opportunity to undertake journeys for everyday services and facilities by sustainable modes of transport.

3.1.7. Development at Rowden Park, Patterdown Road and Hunters Moon has already commenced. Upon review of the multiple applications for the discharge of conditions and the approval of reserved matters over recent years, it is considered likely that the remaining approved developments will commence construction in the near future.

3.1.8. These approved sites as referred to above have been deemed acceptable in their provision of financial contributions to active travel routes within and outside of their site boundaries providing suitable routes to the town centre and to secondary schools (where relevant) to the north.

3.1.9. Additionally, the s106 agreements for Rowden Park and Showell Nurseries include contributions to public transport on the basis of a sum of £428 per dwelling (index linked). This sum of money was intended to extend the existing Stagecoach Service 55 which routes from Chippenham railway station to Swindon bus station via Calne, Lyneham and Royal Wootton Bassett, to the Rowden Park site where the bus would enter and exit the site via an internal circular bus route.

4. HIGHWAY IMPROVEMENT SCHEMES

4.1. Introduction

4.1.1. This section sets out two major proposed highway schemes that will provide benefit to vehicles routeing along the A350 and via the M4 Junction 17.

4.2. A350 Highway Improvements

4.2.1. Over recent years three major capital schemes (Phases 1, 2 and 3) have been brought forward to improve capacity and safety on the route, largely funded through successful Department for Transport (DfT) and/or Local Enterprise Partnerships (LEP) funding bids.

4.2.2. More recently, an Outline Business Case (OBC) was approved by DfT for funding to bring forward a scheme to complete the dualling of the A350 bypass at Chippenham (Phases 4 and 5).

4.2.3. Work commenced in Spring 2025 on Phases 4 and 5 of the scheme and is ongoing with completion expected by the end of 2026.

4.2.4. The key elements of the Phase 4 & 5 project are :-

- Phase 4 dualling: widening the A350 to dual 2-lane carriageways between Chequers Roundabout (A4) and Lackham roundabout. The dualling would take place within the existing wide highway verge to the west of the current carriageway;
- Phase 5 dualling: widening the A350 to dual 2-lane carriageways along the full stretch between Cepen Park South Roundabout and Bumpers Farm Roundabout (A420). The dualling would take place within the existing wide highway verge to the west of the current carriageway;
- a significant remodelling of the Bumpers Farm roundabout junction to provide capacity enhancements and full signalisation; and
- minor alterations to Lackham Roundabout capacity to accommodate the additional carriageway.

4.3. M4-Junction 17

4.3.1. Funding for enhancements at M4 Junction 17 has been sought through Major Road Network Funding, and a scheme at this junction was identified as a priority by the Western Gateway Sub-National Transport Body.

4.3.2. The scheme will build upon the previous improvement works undertaken in 2018, which introduced partial traffic signalisation at the motorway off-slips with an estimated cost of £27 million. The scheme will facilitate further improvements, to allow for envisaged future traffic growth.

4.3.3. The scheme is being developed as a single package of improvements to maximise and optimise capacity of the junction within the bounds of the existing highway. It is anticipated that this approach will help avoid the potential need for progressive and sequential improvement projects at the junction over many years as individual developments come forward.

4.3.4. The scheme proposals include:

- Introduction of traffic signals to all approaches to the roundabout i.e. completion of the full signalisation of the junction;
- Carriageway widening and additional traffic capacity on all approaches to the junction (M4 off slips, A350, A429 and B4122);
- Increase in the number of traffic lanes across the motorway bridges from two to three;
- Widening of the circulatory carriageway and introduction of additional traffic lanes and capacity around the junction;
- Repositioning of the layby along the A429 to allow for carriageway widening work.

4.3.5. The Outline Business Case was approved in May 2024, funding was made available to develop the detailed design. Subsequent stages of DfT funding will be required to deliver the scheme alongside local contributions. The current timeline for opening is spring 2028.

5. SITE LOCATION AND ACCESSIBILTY

5.1. Introduction

5.1.1. This section provides a description of the site location and examines the level of accessibility to and from the site for all modes. The accessibility audit is in keeping with current national and local planning policies which highlight the importance of integrating land-use, transport and planning decisions to address the needs of both present and future communities to create developments with good access to local infrastructure and that are supported by public transport services.

5.2. Site Location

5.2.1. The Site as proposed sits to the south of the existing market town of Chippenham, immediately to the east of Patterdown Road (B4528) and occupies an area of approximately 30 hectares. The site covers an area that predominantly consists of open fields.

5.2.2. The site lies, as the crow flies, approximately 2.6km south of Chippenham town centre, 8km west of Calne, 7km north of Melksham and 5km east of Corsham.

5.2.3. The development benefits from being in close proximity to, and forms a natural extension to Chippenham town, adjacent to land that is allocated in the Chippenham Site Allocations Plan for residential and employment uses and is currently being delivered and occupied.

5.2.4. The location of the site in the context of Chippenham and the permitted development is shown above in **Figure 1.1.**

5.2.5. The site is bounded by the following:

- The River Avon and open fields to the east;
- Patterdown Road (B4528) to the west;
- Showell Nurseries and land which will form part of the Rowden Park development (both with planning consent for development); and
- Lackham Roundabout, and fields to the south.

5.3. Local Facilities and Services

5.3.1. This section provides a comprehensive review of the sustainability credentials of the site, encompassing a review of accessibility to existing services and facilities as well as opportunities for journeys to and from the site to be made by sustainable means.

5.3.2. Due to the nature of the development and the opportunities that exist through the delivery of the permitted developments in close proximity to the site the assessment has been undertaken to understand the future accessibility of the site.

5.3.3. The expectation to locate residential developments within walking distance of day-to-day needs is set out in the NPPF, which states that "*Significant development should be focused on locations which are or can be made sustainable, through limiting the need to travel and offering a genuine choice of transport modes*".

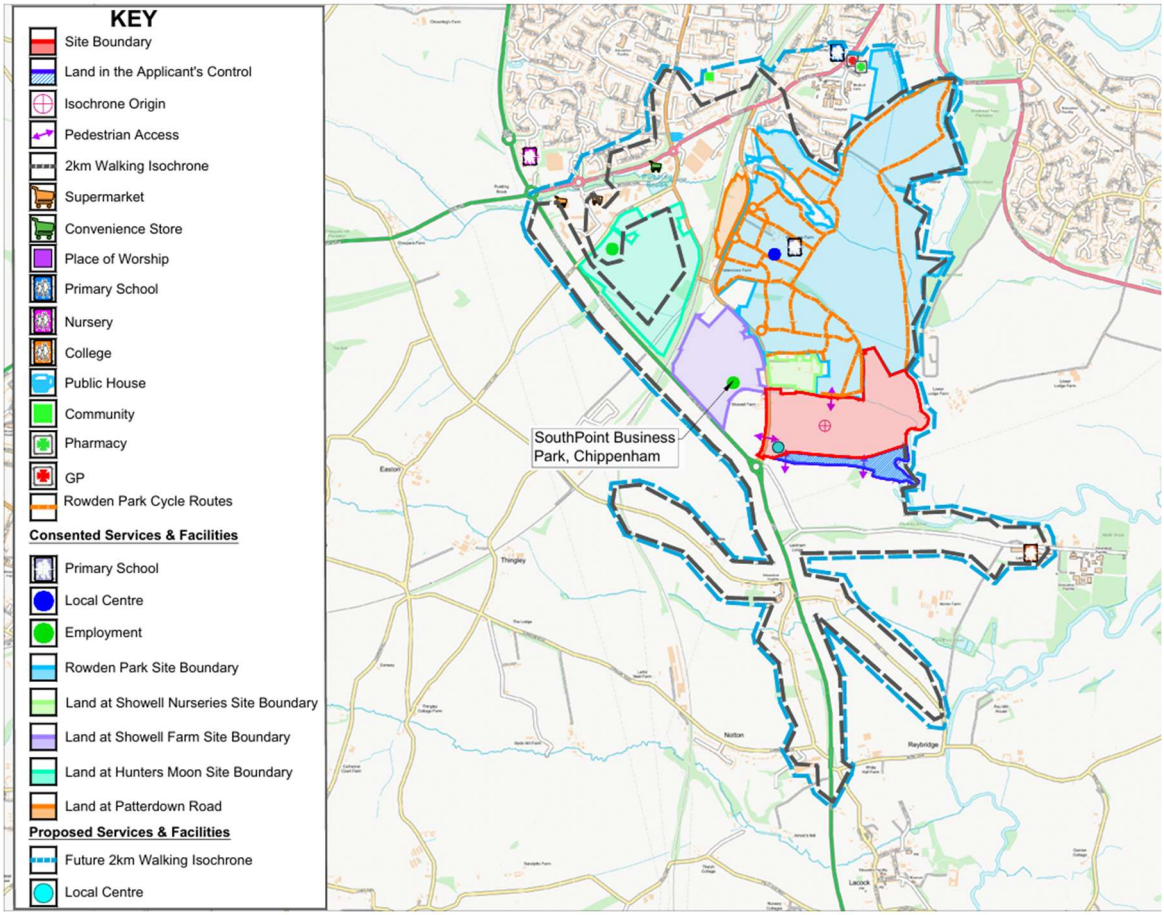
5.3.4. A range of facilities and services, which serve the daily needs of the existing population of south and west Chippenham, are accessible from the site by sustainable modes and as such there will not be a requirement to rely on the use of the private car for daily journeys.

5.3.5. When considering the sustainability credentials of a site, guidance from the Institution of Highways and Transportation (IHT, Guidelines for Providing for Journeys on Foot, 2000) is of importance; this guidance identifies 2km as the maximum suggested acceptable walking distance for pedestrians without a mobility impairment.

5.3.6. The former 'Planning Policy Guidance 13: Transport' (2011) also identified 2km as a distance within which walking offers the greatest potential to replace short car journeys. Whilst superseded in planning terms, this guidance is still widely considered as applicable in terms of accessibility. As such, the accessibility of the site has been assessed with weight given to this distance as 'reasonable'.

5.3.7. **Figure 5.1** shows a 2km walking isochrone from the site, which roughly equates to a 24-minute walk. This isochrone is measured from the centre of the site and is based on egress by way of the two key points of pedestrian access which are discussed further in **Section 7**.

Figure 5.1: 2km Isochrone and Surrounding Services and Facilities



5.3.8. As shown above, the Rowden Park development will deliver a primary school enabling accompanied children to easily undertake their journey to school by sustainable modes of transport The School Places Strategy 2023 – 2027 identifies a 2FE primary school to be delivered at Rowden Park. Construction of first phases and occupations are underway.

5.3.9. Both the proposed development and Rowden Park will provide local centres offering food retail and other retail / services enabling future residents to undertake their everyday food shopping and other opportunities without reliance on the private car.

5.3.10. The distance and estimated journey times (for walking and cycling) from the site to the identified facilities and services are summarised in **Table 5.1**. These distances have been measured from the centre of the site and follow suitable routes. The estimated journey times are calculated based on a walking speed of 1.4 metres per second (abstracted from IHT, 2000) and a cycling speed of 4 metres per second. The services and facilities are not an exhaustive list as there are many more amenities available within walking and cycling distance of the site.

Table 5.1: Distance and Journey Time to Services and Facilities

Service / Facility	Location		Distance (m)	Time (mins)	Time (mins)
Retail					
Local Centre	Development Site		310	4	2
Local Centre	Rowden Park		1200	14	5
M&S Foodhall	Bath Road Retail Park	SN14 0UL	2340	28	10
Aldi	Methuen Park	SN14 0GX	2540	30	11
Sainsburys	Bath Road	SN14 0BJ	2440	29	10
Bath Road Retail Park (TKMaxx/Next/Costa Coffee/ KFC)		SN14 0FJ	2340	28	10
Londis (Esso)	Bath Road	SN14 0RL	1940	23	8
Town Centre			2750	33	11
Education					
Primary School	Rowden Park		1610	19	7
Busy Bees Nursery	Bath Road	SN14 0BJ	2440	29	10
Queens Crescent School	Windsor Close	SN14 0QT	2740	33	11
St Mary's Catholic Primary School	Rowden Hill	SN15 2AH	2640	31	11
St Peters Academy	Lords Mead	SN14 0LL	3840	46	16
Wiltshire College & University Centre Lackham	Lacock	SN15 2NY	2130	25	9
Community					
Kingsley Road Community Hall	Kingsley Road	SN14 0AS	2440	29	10
Pubs					
The Pheasant	Bath Road	SN14 0AE	1840	22	8
Rowden Arms	Rowden Hill	SN15 2AW	2140	25	9
Health					
Rowden Surgery	Rowden Hill	SN15 2SB	2740	33	11
Chippenham Community Hospital		SN15 2AJ	2740	33	11
Lloyds Pharmacy	Bath Road	SN14 0BJ	2440	29	10
Lloyds Pharmacy	St Lukes Drive	SN15 2SD	2840	34	12
Employment					
Employment	Showell Farm	Southpoint Business Park	900-1200	11-14	4 - 5
Town Centre			2750	33	11
Langley Park Employment Area			4750		20
Bumpers Farm Employment Area			4150		17

5.3.11. The above table shows that a GP, pharmacy, convenience stores, supermarkets, primary schools and town centre are located within a 2km walk or 3km cycle. As such, the proposed site is well-situated in relation to a range of existing facilities and services.

5.3.12. The proposal will provide a local centre, with a mix of uses enabling residents to undertake a number of trips by active modes and keeping a number of trips internal to the site.

5.3.13. Additionally, the Rowden Park development to the immediate north of the site will provide a primary school and a number of units for retail and local services; the development will provide an active travel connection to the Rowden Park proposed active travel network via the upgrading of PRoW LACO9 enabling residents in both developments to travel sustainably to each other's amenities.

5.3.14. The development also proposes a 3m shared use cycleway along Patterdown Road which will link into the active travel infrastructure that is provided at the Rowden Park roundabout access.

5.3.15. The permitted development 'Land at Showell Farm' will provide employment opportunities (Southpoint Business Park) within a reasonable walking distance. David Lloyd has recently applied for a health, fitness and raquets club at Southpoint Business Park which if consented would provide access to sports facilities within a suitable walking and cycling distance.

5.3.16. Employment within the town centre, at Langley Road and at Bumpers Farm are all within a reasonable cycling distance.

5.3.17. Given the above assessment, it is reasonable to conclude that the site is located in a sustainable position, being within walking and cycling distance of a range of facilities and services. Some of these destinations lie within a 'reasonable' walking distance and the entirety of Chippenham is within cycling distance of the site (see **Figure 5.3**), and as such there is a genuine opportunity for everyday journeys to and from the site to be made sustainably and without a dependence on the private car.

5.4. Pedestrian Accessibility

5.4.1. Walking is the primary mode of travel for local journeys and is widely recognised as the most sustainable form of travel (IHT, 2000). As such, walking forms an important part of sustainable growth, with the NPPF guiding those opportunities to promote walking are identified and maximised.

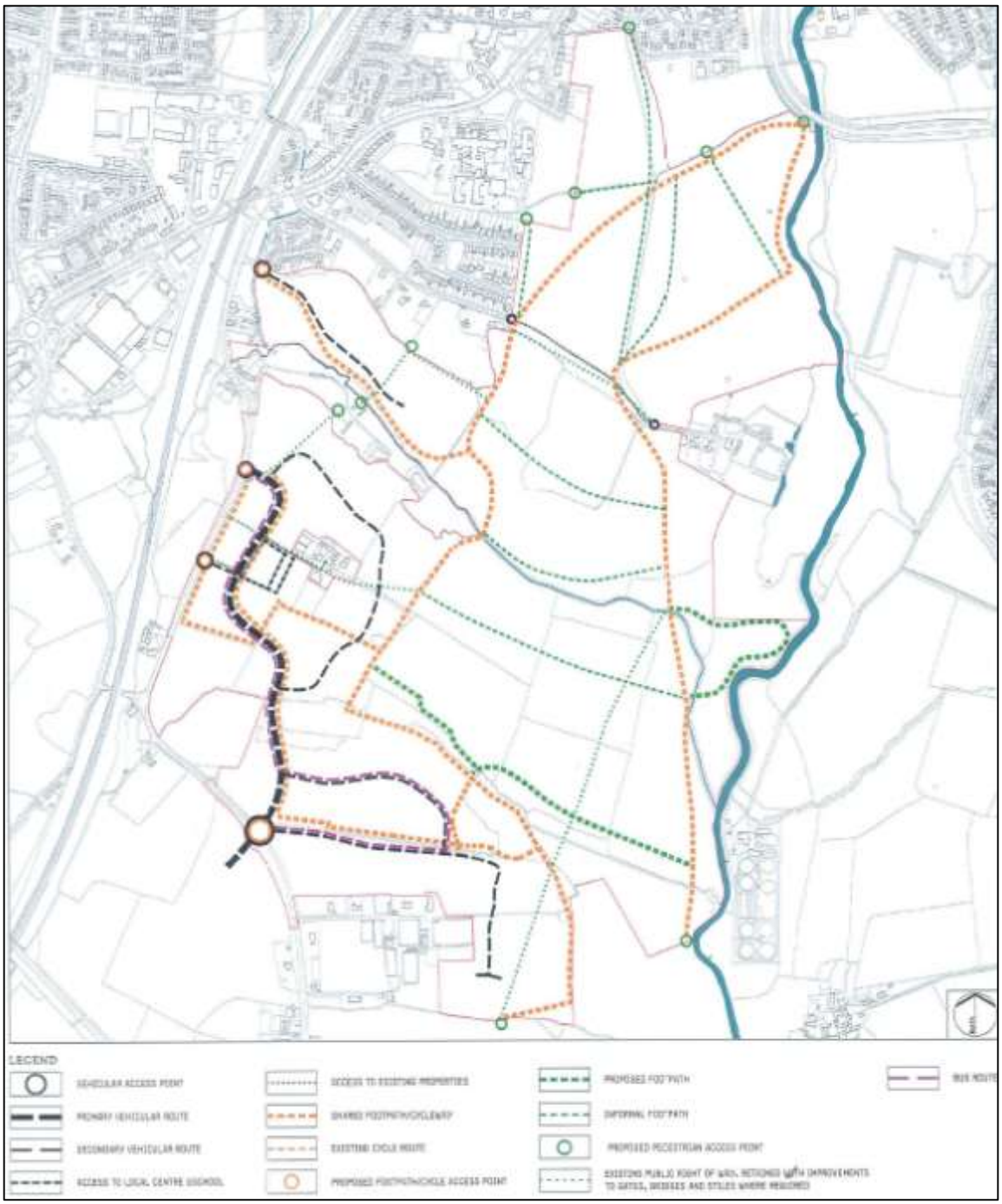
5.4.2. Therefore, by locating developments to minimise the need to travel, and to maximise the use of sustainable modes of transport, sustainable growth can be encouraged.

5.4.3. As set out above the location of the site is conducive to the creation of a sustainable development, with a range of everyday facilities and services lying within 'reasonable' walking distance.

5.4.4. The site will link to these facilities via the upgrading of PRoWs LAC09 and LAC39 through the Site to their boundary with Rowden Park and via the provision of a 3m shared use path along Patterdown Road connecting with the active travel infrastructure provided at the Rowden Park roundabout access.

5.4.5. These three points of active travel connection will link with the active travel provision as part of Rowden Park, secured via planning conditions and obligations / contributions within the completed S106 agreement. The internal active travel routes agreed as part of Rowden Park are shown on the corresponding Movement and Access Parameter Plan, an extract of which is provided as **Figure 5.2.**

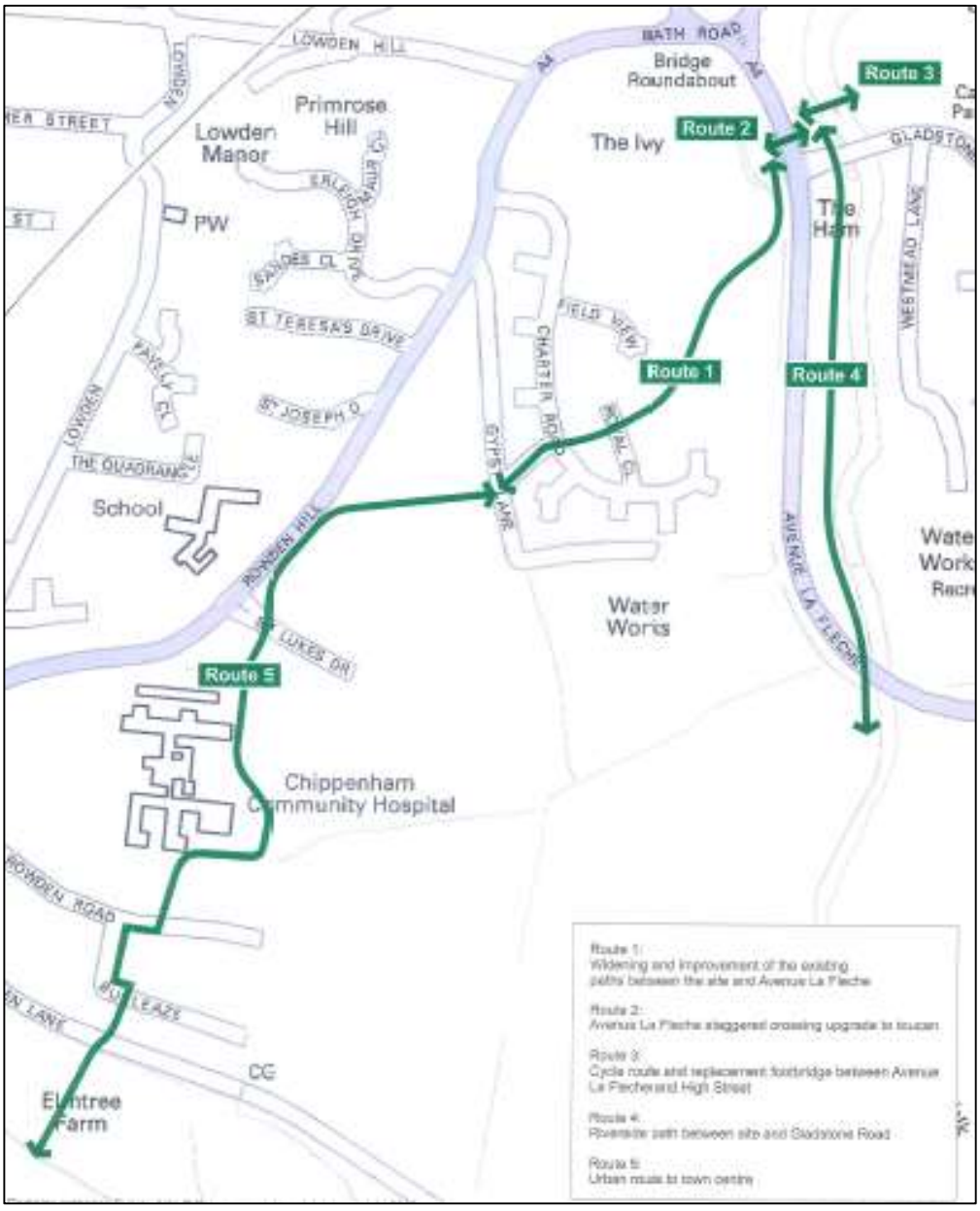
Figure 5.2: Extract of Movement and Access Parameter Plan for Rowden Park (from LDA Drawing No. 3787-804-Rev A)



5.4.6. In addition to the internal routes shown in Figure 6.2, Rowden Park will deliver enhancements to the existing PRoW network and external routes providing access to the town centre (The Rowden Mile) and the consented developments on 'Land at Showell Farm' and 'Land at Hunters Moon'. The decision notice and S106 agreement set out the delivery of the enhancements / contributions and the timescales for their delivery. Five schemes are identified in relation to the 'Cycle and Pedestrian Routes Contribution' (£385,000) and are depicted at Appendix 6 of the S106 agreement, an extract of which is provided as **Figure 5.3**; there is a covenant for WC to deliver routes 1, 5 and 4 (in that order) in advance of routes 2 and 3.

5.4.7. The works identified to be undertaken by WC include widening and improving of the existing paths between Rowden Park and Avenue La Fleche; upgrading of the existing staggered crossing on Avenue La Fleche to a Toucan; a cycle route and replacement footbridge between Avenue La Fleche and the High Street via the car park; cycle improvements along the existing riverside path between Rowden Park and Gladstone Road including improvements to the existing footbridge; and improvements to the route between Rowden Park and the town centre including surfacing and lighting where achievable.

Figure 6.3: Extract from Appendix 6 of S106 Agreement for Rowden Park



5.4.8. Condition 23 of the Rowden Park decision notice requires the development to provide a footway connection between the development and the eastern side of Queens Bridge plus footway markings through the bridge and a short footway connection at the western side of the bridge to enable access into Saltersford Lane prior to occupation of the 400th dwelling.

5.4.9. Condition 24 of the Rowden Park decision notice requires prior to the occupation of the 150th dwelling a link from the occupied dwellings to the town centre of the shared use pedestrian and cycle path known as the Rowden Mile (which includes both the spur to Avenue La Fleche and the spur to Gypsy Lane) to be constructed to a width of 3m and as further dwellings become occupied the relevant additional parts of the Rowden Mile to provide a link from those dwellings to the town centre shall be provided.

5.4.10. Rowden Park has delivered an active travel connection from its northern access (Wiltshire Drive) to the existing infrastructure on the eastern side of Patterdown Road (B4663) providing a connection to Bath Road.

5.4.11. Rowden Park's extensive active travel network and the off-site active travel improvements provide connections to the existing continuous network of footways and footpaths that route through Chippenham facilitating journeys to and from the site on foot. Generally, this network provides streetlights, footways/footpaths and pedestrian crossing facilities.

5.4.12. The upgrading of PRoW LAC09 within the Site provides a connection to the Rowden Park on and off-site active travel infrastructure providing access to the town centre and Bath Road from which services and facilities can be accessed.

5.5. Public Rights of Way

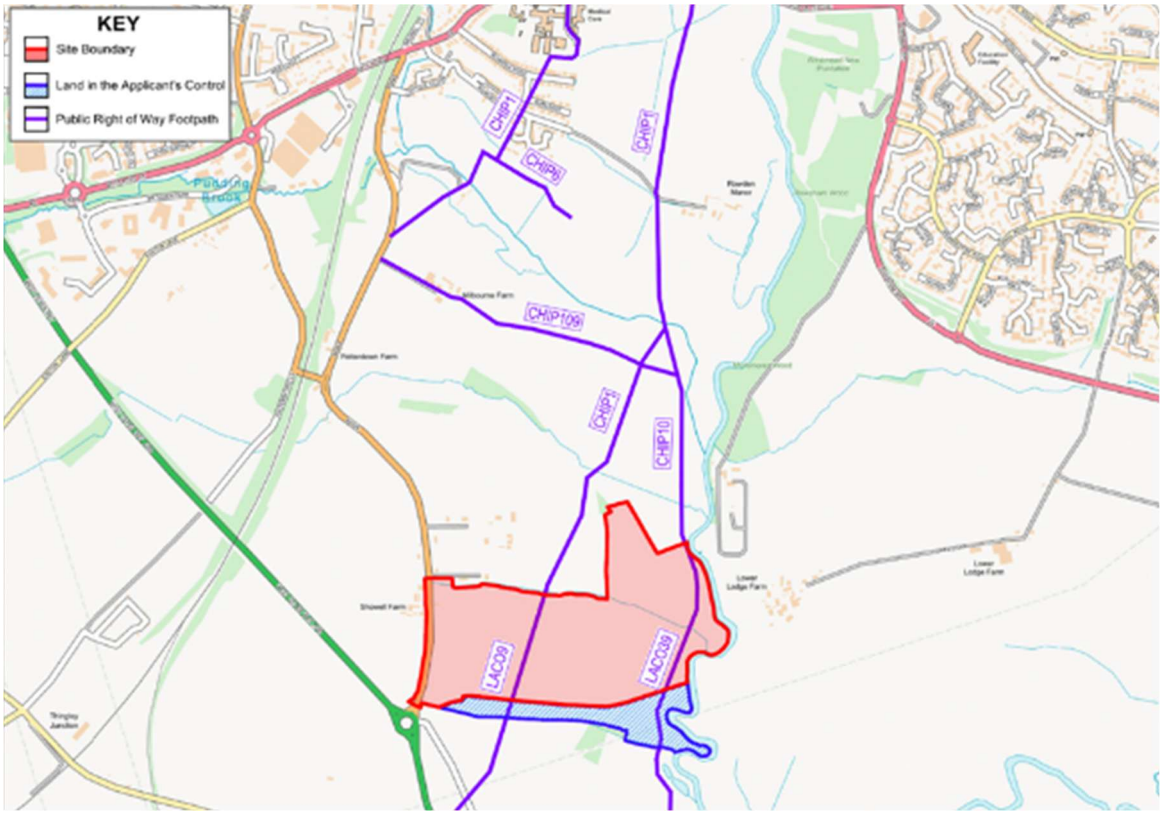
5.5.1. The Public Right of Way (PROW) network in the vicinity of the site is shown in **Figure 5.4.**

5.5.2. Two public footpaths route north to south through the Site. To the south of the Site, Footpath LACO9 terminates at the A350 whilst Footpath LACO39 connects to Lackham College and the wider PRoW network providing access to Lacock village and rural Wiltshire. To the north the footpaths connect with Footpath CHIP1 providing access to Chippenham town centre.

5.5.3. The two Public Rights of Way that route through the Site will be accommodated on their existing alignment. The western footpath (LAC09) will route within the proposed residential development and will be upgraded to a 3m consolidated surface suitable for use within its future environment. The eastern footpath (LAC039) will be routed through natural green space and its 3m construction will be undertaken using compacted hoggin; this route will provide access to the country park.

5.5.4. Both footpaths, as they continue north through Rowden Park, are to be upgraded to shared foot/cycleway (see Figure 6.2) and will provide access between to both site's services and facilities including the consented primary school within Rowden Gate. Through the wider Rowden Park's active travel infrastructure and offsite improvements onward travel to the town centre and Bath Road is provided.

Figure 5.4 – Public Rights of Way



5.6. Cyclist Accessibility

5.6.1. Cycling is recognised as one of the most sustainable forms of transport (CIHT's Planning for Cycling, 2015). In general, given the compact nature of Chippenham, it is considered that cycling offers a real alternative to the private car for day-to-day journeys to and from the site.

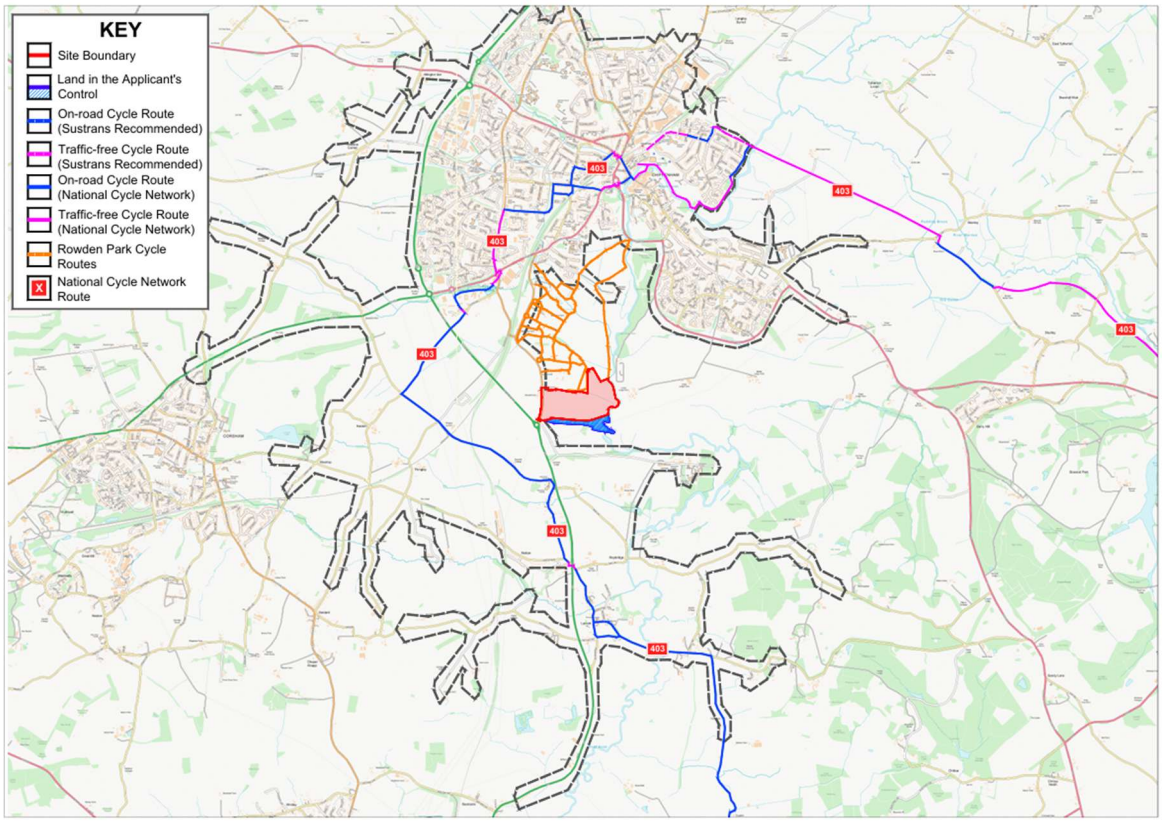
5.6.2. The former Planning Policy Guidance 13: Transport (2011) identified 5km as a distance within which cycling offers the greatest potential to replace car journeys, with this distance widely recognised as a reasonable cycling distance. Whilst this guidance has been superseded in planning terms it is still considered as applicable with respect to accessibility.

5.6.3. In addition to this, LTN1/20 states that 'two out of every three personal trips are less than five miles in length - an achievable distance to cycle for most people.' This distance is equivalent to approximately 8km.

5.6.4. **Figure 5.5** shows the existing National Cycle Network (NCN) routes and future Rowden Park cycle routes. The network of local cycle routes which are either on-road recommended routes or shared use footway/cycleway routes, are shown on the Chippenham Cycle Map attached at **Appendix A**.

5.6.5. **Figure 5.5** also demonstrates the area which lies within a 5km cycle.

Figure 5.5 – Cycling Network and 5km Isochrone



5.6.6. **Figure 5.5** indicates that the entirety of Chippenham lies within a 5km cycle of the site, with this distance widely recognised as a reasonable cycling distance. As such, the facilities, services and employment opportunities within the town lie within a reasonable cycling distance of the site.

5.6.7. It is also noted that Chippenham Railway Station is located approximately 3.5km to the northeast of the site and therefore can be reached within a 'reasonable' cycling distance of the site. As such, there is the opportunity for journeys to this destination to be undertaken by cyclists providing onward travel to multiple destinations by a sustainable mode of transport.

5.6.8. As shown, National Cycle Network (NCN) Route 403 can be accessed approximately 900m south and 1600m north of the site. NCN Route 403 links Melksham with Chippenham and continues eastward to Marlborough via Calne and provides access to the wider NCN. Locally, this route provides a connection to Chippenham town centre and railway station.

5.6.9. The local routes provide connections across Chippenham enabling access to the wide range of services and facilities.

5.6.10. Finally, the Rowden Park development provides a substantial network of traffic free active travel routes to the north of the site and contributions to off-site active travel improvements enabling two-thirds of the journey length to the railway station and town centre to be undertaken on traffic free routes.

5.7. Public Transport Accessibility – Bus

5.7.1. The site is not currently located in close proximity to a regular bus service. The X34, which provides a roughly half-hourly service between Chippenham and Frome via Trowbridge, can be accessed via the 'Wiltshire College' bus stops on the A350 and the 'B&Q' and the 'Rowden Arms' bus stops on Bath Road.

5.7.2. The bus stops on Bath Road also provide access to the 44D (Chippenham town centre), 636 (Corsham, Colerne, Marshfield), X31 (Corsham, Rudloe, Box, Bath) and X34 (Frome, Trowbridge, Melksham) services.

5.7.3. Finally, the 'Patterdown' bus stops on the B4528 'Patterdown Road' provide access to the X37 service which provides access to and from Wiltshire College via a single morning and evening service.

5.7.4. The Rowden Park and Showell Nurseries permitted developments are obligated to contribute a sum of £428 per dwelling (index linked) towards public transport service enhancements. This sum of money was intended to extend the existing Stagecoach Service 55 which routes from Chippenham railway station to Swindon bus station via Calne, Lyneham and Royal Wootton Bassett, to the Rowden Park site where the bus would enter and exit the site via an internal circular bus route.

5.7.5. It is noted that from 1st March 2026, Faresaver commenced the new 44H service on behalf of WC operating hourly Monday to Saturdays. Service 44H routes from Chippenham town centre to new stops (Gazelle Drive and Sunbeam Drive) serving the Patterdown development and Cepen Park. The service provides a connection to Sheldon secondary school and 6th Form for the start and end of the school day and enables access to Queens Crescent, Frogwell, Redland and St Peter's primary schools.

5.7.6. It is proposed that the development contributes the same sum of money per dwelling (index linked) as the Rowden Park and Showell Nurseries developments and the 44H bus service is extended along the B4528 'Patterdown Road' undertaking a U-turn at the Lackham roundabout.

5.8. Public Transport Accessibility – Rail

5.8.1. The site is well situated in relation to Chippenham Railway Station, which lies broadly 3.5km to the northeast and is approximately a 14½ minute cycle from the centre of the site utilising the proposed Rowden Park cycle routes or approximately 16 ½ minutes via the existing network (4km distance).

5.8.2. Chippenham Railway Station is on the Great Western Main Line and services are operated by Great Western Railway. The station offers 306 sheltered, secure bicycling parking facilities by way of cycle stands which are monitored by CCTV; as such, there is the opportunity for journeys to the station to be made by bicycle for onwards travel by rail.

5.8.3. **Table 5.2** sets out a summary of the rail services, including key destinations, approximate journey times and approximate frequencies on a typical weekday.

Table 5.2 – Summary of Train Services from Chippenham Railway Station

DESTINATION	APPROXIMATE JOURNEY TIME	APPROXIMATE FREQUENCY
Bath	12 Minutes	30 Minutes
Bristol Temple Meads	30 Minutes	30 Minutes
Cardiff Central	90 Minutes	30 Minutes
Swindon	12 Minutes	30 Minutes
Reading	45 Minutes	30 Minutes
London Paddington	70 Minutes	30 Minutes
Melksham, Trowbridge and Westbury – Trans Wilts Line	10 Minutes 20 Minutes 30 Minutes	120 Minutes

5.8.4. The Wessex Main Line can be accessed at Melksham providing access to Warminster, Salisbury and Southampton.

5.8.5. As such, it is considered that the services that call at Chippenham Railway Station provide the opportunity for travel by sustainable means to a number of destinations. This station is accessible from the site by sustainable modes, creating the opportunity for multi-modal travel and representing an alternative to the private car.

5.9. Summary

5.9.1. The links to the existing and proposed active travel routes, along with the proposed bus service routeing along the B4528 Patterdown Road, will enable the future residents to undertake journeys from home to destinations within Chippenham and via bus and rail to destinations further afield without the use of the private car.

6. EXISTING HIGHWAYS NETWORK

6.1. Description of Highway Network

6.1.1. The proposed site is situated to the south of Chippenham and has good road connections with urban distributor and arterial roads in the surrounding area providing access to Chippenham itself and further afield via the A350 and A4.

6.1.2. This chapter should be read in conjunction with Chapter 4 which sets out the ongoing and future improvement to the highway network in Chippenham and the Strategic Road network (SRN.

B4528 – Patterdown Road

6.1.3. Patterdown Road is a single carriageway which routes from A4 Bath Road to the north of the site and joins the A350 to the south via the four-arm Lackham Roundabout. Patterdown Road joins the A4 Bath Road via a four-arm mini-roundabout. The road is subject to a 40mph speed limit and is partially street lit.

6.1.4. Street lighting is present within the existing 40mph speed limit and at the Lackham College roundabout.

6.1.5. A footway is present on the eastern side of Patterdown Road between the A4 and the permitted Patterdown Road development. The Showell Nurseries development delivers a small length of footway to enable access to the 'Showell Farm' bus stops and Rowden Park proposes short footway lengths at its proposed roundabout to enable links to the Showell Farm development utilising the roundabout's splitter islands to aid pedestrian movements.

6.1.6. Approximately half-way along Patterdown Road there is a signalised junction formed with the B4528; the signals on the B4528 arm are setback approximately 80 metres from the junction enabling shuttle working to operate through a tunnel under the London – Bristol railway line.

6.1.7. Between the Showell Nurseries development and the B4528 signalised junction the Rowden Park development has introduced a 30m ICD 5-arm roundabout offering two accesses to Rowden Park and the fifth arm providing access to the A350 via the Showell Farm development.

B4528 – Saltersford Lane

6.1.8. Saltersford Lane routes north and joins the A4 Bath Road via The Pheasant roundabout. The road is predominantly unlit, rural in nature with no pedestrian infrastructure.

A4 Bath Road

6.1.9. The A4 forms a primary route from the A350 Chequers Roundabout into the centre of Chippenham. There are active travel routes along its length in the form of footways and shared use foot/cycleways that form a continuous route to the town centre; the routes are sometimes on both sides and sometimes on a single side of the A4. The road is street lit along its length and there are numerous pedestrian crossings both controlled and uncontrolled enabling pedestrians to safely cross the road and filter north.

6.1.10. Junctions take the form of roundabouts at the western end along with a signalised junction providing access to B&Q / Currys. Heading east the junctions mainly take the form of simple priority junctions with a mini-roundabout junction formed with Brunel Court and a ghost-island right turn lane provided at the junctions with St Lukes Drive and Charter Road.

A350

6.1.11. The A350 forms a primary route from the M4 travelling south through west Wiltshire and skirting around the western side of Chippenham.

6.1.12. Around Chippenham the A350 takes the form of a dual carriageway from Malmesbury Roundabout to approximately 200m southwest of the Bumpers Farm Roundabout and from approximately 175m north of the roundabout junction formed with Sandown Drive to just south of the Chequers Roundabout, with a wide single carriageway along the rest of the route. The speed limit varies between 40mph and 70mph.

6.1.13. In the vicinity of the Site the A350 is a single wide carriageway and provides access to the B4363 via the Lackham roundabout.

6.1.14. As well as providing access to the M4 and western Wiltshire market towns of Melksham, Westbury and Warminster the A350 continues south to Bournemouth and Poole via Shaftesbury and Blandford Forum and provides access via the Chequers Roundabout to the A4 which routes southwest to Bath.

6.1.15. Wiltshire Council has submitted a Full Business Case to the Department for Transport to gain funding to complete the dualling of the remaining single carriageway sections of the A350 round Chippenham with construction works anticipated to be undertaken during 2024 and 2025.

6.2. Highway Safety

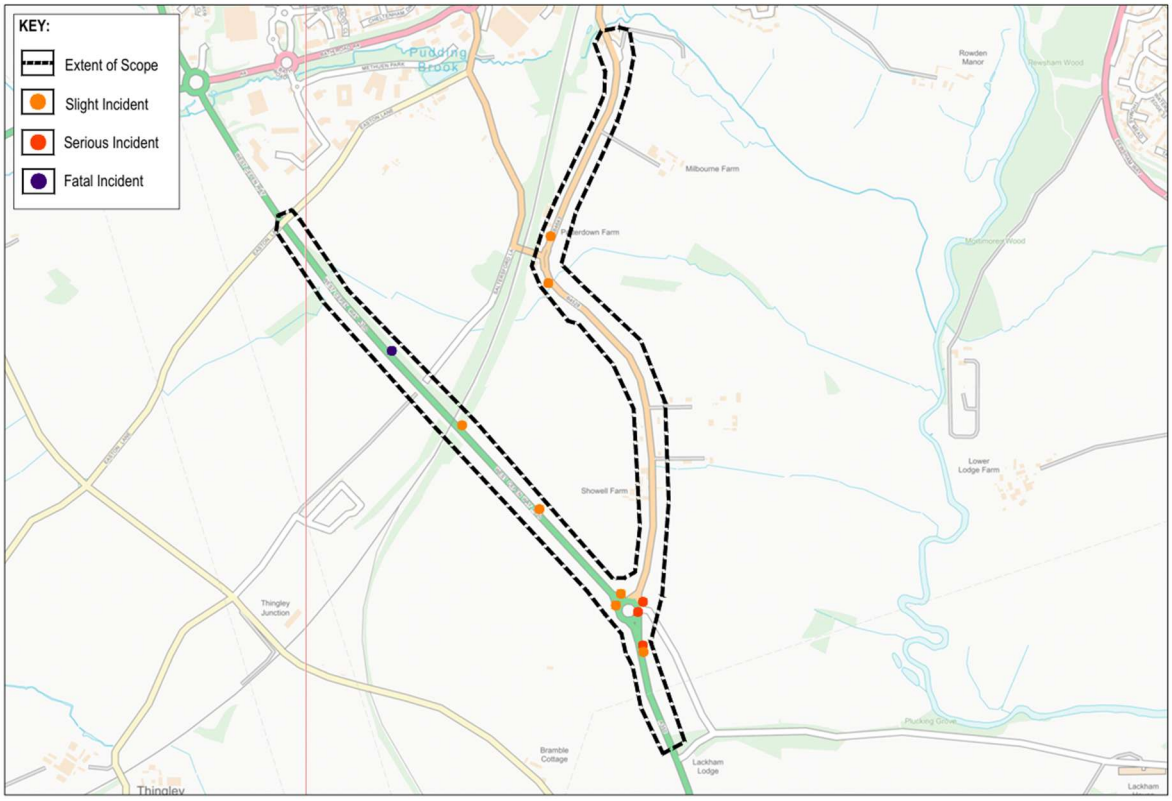
6.2.1. To assess the existing safety level of the nearby highway network and thus identify any potential collision patterns, a review of the latest available 5-year personal injury records between 01/01/2020 and 31/12/2024 was undertaken following advice from Wiltshire Council to utilise the Crashmap website. Detailed PIC data has been requested from WC but has not yet been delivered.

6.2.2. **Figure 6.1** shows the study area and the locations of the recorded personal injury collisions.

6.2.3. Over the 5-year period, there were eleven collisions including 7 slight injuries, 3 serious incidents and 1 fatality reported along the road network in the vicinity of the development site. Out of these, 3 slight and 3 serious incidents were reported at the A350/ West Cepen Way Roundabout which account for an average 1 incident per year.

6.2.4. Given the low number of collisions and their dispersed nature, it is reasonable to conclude that the highway network surrounding the proposed development site does not include any geometric features that can be specifically linked to recorded collisions. It is therefore considered reasonable to conclude that the proposed development will lead to a neutral impact on the existing road safety level.

Figure 6.1 – PIC Study Area and Locations of Collisions



7. DEVELOPMENT PROPOSALS

7.1. Introduction

7.1.1. This section of the TA presents the proposals for the development site, the strategy for providing access for vehicles, pedestrians and cyclists and parking standards that the development should meet.

7.2. Development Proposals

7.2.1. The development proposal is seeking outline planning permission for up to 400 dwellings, a local centre accommodating commercial business. and service floorspace and local community uses.

7.2.2. The Land Use Parameter Plan is attached at **Appendix B** and an extract is provided in **Figure 7.1.**

Figure 7.1 Land Use Parameter Plan



7.3. Access and Movement Strategy

7.3.1. The development proposal seeks to provide a movement strategy that fully integrates the proposed development and its services and facilities with the nearby committed developments enabling access further afield by active travel modes. The development will integrate with the existing Public Right of Way network and enable access to a bus service with a financial contribution towards its provision. The development will deliver a 3m shared use path between the A350/ B4528 roundabout and the Rowden Gate roundabout. **Figure 7.2** is an extract from the Illustrative Masterplan which is attached at **Appendix B.**

Figure 7.2: Illustrative Masterplan



7.4. Vehicular Access

7.4.1. The main access will take the form of a priority junction with a right-turn ghost island from the B4528 Patterdown Road. The access will be supported by an emergency access provided via a proposed shared use path to the north of the access. The preliminary design of the access is attached at **Appendix C** with an extract shown in **Figure 7.3**. Visibility splays of 2.4m x 120m, suitable for the 40mph speed limit, can be delivered within the existing highway boundary. The proposed carriageway width is 6.0 m with 12.5m radii. An assessment of vehicle swept paths has been undertaken and is attached in **Appendix C.**

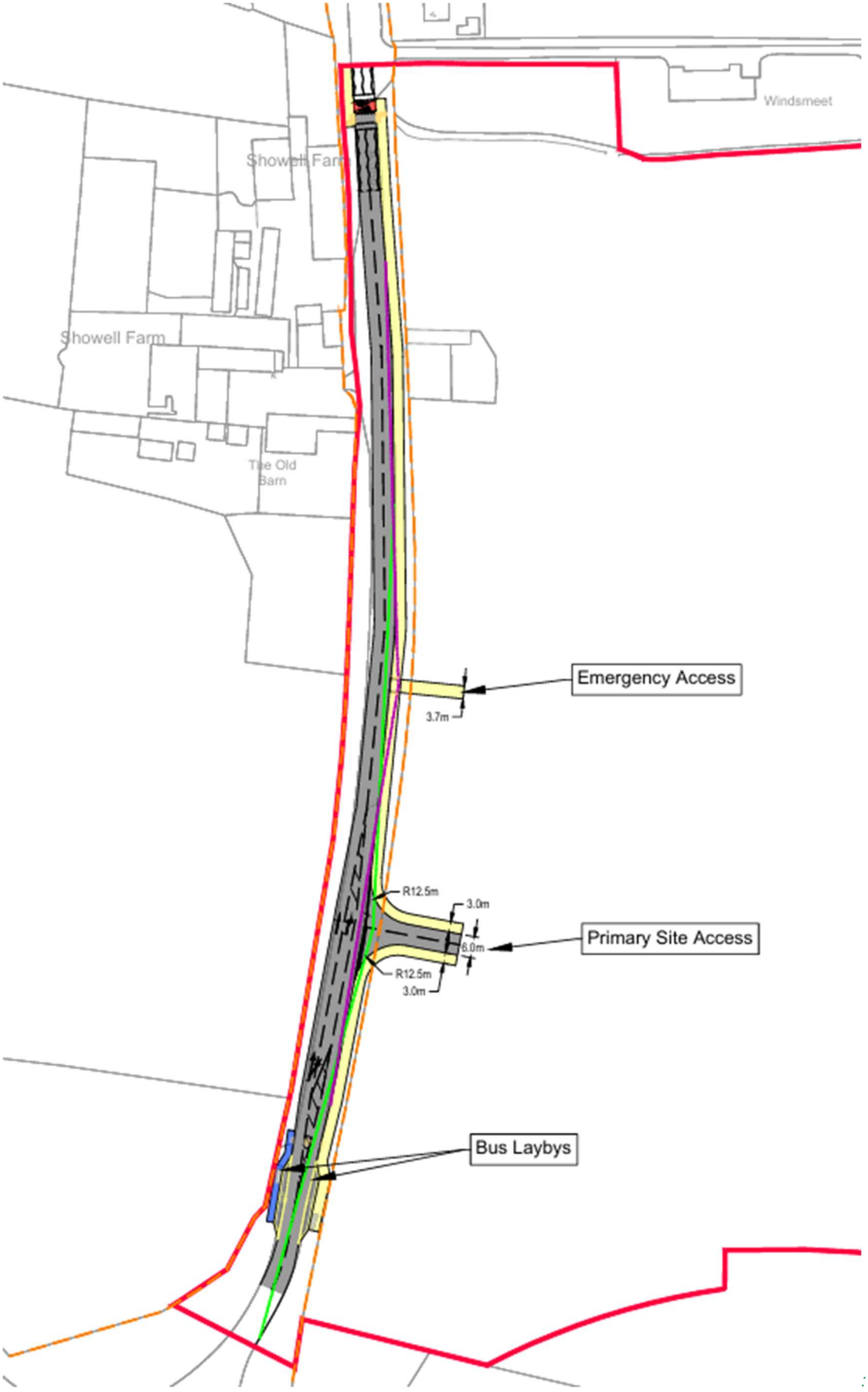


Figure 7:3 Site Access

7.4.2. To the south of the access, it is proposed to provide laybys to accommodate the future bus service(s) that will be contracted using the s106 monies. Dropped kerbs with tactile paving and a pedestrian refuge is proposed to enable safe access between the Site and the western bus stop.

7.5. Pedestrian and Cyclist Access

7.5.1. The vehicular access on Patterdown Road will provide access for pedestrians and cyclists via a 3m shared path on either side of the carriageway. In addition, to the north of the vehicular access, a shared use path (emergency access) will provide a segregated route for pedestrians and cyclists. The shared use path will extend south along the eastern side of Patterdown Road to provide access to the proposed bus laybys where a refuge will be provided for crossing to the western bus layby. The shared use path will be extended north along the eastern side of Patterdown Road where a parallel crossing facility (south of the existing bus layby) is proposed with the shared use path continuing on the western side of Patterdown Road to connect with the walking/cycling facilities at the Rowden Gate roundabout. A drawing showing the proposed shared use path is provided at **Appendix D**.

7.5.2. The two Public Rights of Way that route through the Site will be accommodated on their existing alignment. The western footpath (LAC09) will route within the proposed residential development and will be upgraded to a 3m consolidated surface suitable for use within its future environment; this route connects with the Rowden Park active travel infrastructure providing access to the services and facilities within the Rowden Gate development including the primary school. The eastern footpath (LAC039) will be routed through natural green space and its 3m construction will be undertaken using compacted hoggin; this route will provide access to the country park.

7.5.3. Local Transport Note 1/20 (LTN 1/20): Cycle Infrastructure Design (July 2020), provides guidance on the minimum width for shared-use and segregated routes; for shared-use, a width of 3m is considered appropriate for routes carrying up to 300 pedestrians per hour and 300 cyclists per hour with segregated facilities considered appropriate for routes carrying up to 1,000 cyclists per hour. **Table 8.2** shows that the maximum number of active travel trips in any hour will be 58 and therefore the provision of a 3m shared use path is considered suitable in this location.

7.6. Internal Layout

7.6.1. The design of the internal road network will be engineered to meet the standards specified in Manual for Streets guidance and WC guidance, with a particular focus on the creation of safe routes around the site encouraging accessibility for pedestrians and cyclists.

7.7. Public Transport

7.7.1. The development proposes to provide a contribution of £428 per dwelling (index linked) towards a bus service. This contribution is the same as the obligations for the Rowden Park and Showell Nurseries developments and can be pooled to deliver a regular bus service to serve all three sites. Previously, the intention was that the monies would deliver an extension to Stagecoach Service 55 which currently routes from Chippenham railway station to Swindon bus station via Calne, Lyneham and Royal Wootton Bassett and was envisaged to enter and exit the Rowden Park development via an internal circular bus route. However, it is noted the recent 44H service has been introduced providing a service between the town centre and Cepen Park which routes along Patterdown Road and also provides an extended service to Sheldon secondary school at the start

and end of the school day and enables access to Queens Crescent, St Peter's , Redland and Frogwell primary schools. The proposed development will construct bus laybys on either side of Patterdown Road in the vicinity of the local centre; the provision of the bus stops will enable any existing/future bus services to U-turn at the Lackham roundabout. The location and design of the bus laybys is shown in **Figure 7.3** and at **Appendix C**.

7.8. Parking Provision

7.8.1. Whilst the application is seeking outline planning permission with parking provision to be determined at reserved matters stage, the current policy as set out in the Wiltshire LTP3 for vehicle and cycling parking provision is set out below.

Car Parking – Wiltshire LTP3 Car Parking Strategy

7.8.2. **Table 7.1** sets out the minimum standard for allocated parking spaces for dwellings.

Table 8.1 WC's Minimum Allocated Curtilage Parking Standards for Residential Units

NUMBER OF BEDROOMS			VISITOR PARKING
1	2/3	4	
1 Space	2 Spaces	3 Spaces	0.2 spaces per dwelling

7.8.3. Any garages to be considered as part of the allocated parking provision will have minimum internal dimension of 6m x 3m.

7.8.4. It is proposed that the development will provide vehicle parking for residential dwellings in accordance with WC's minimum parking standards.

7.8.5. Parking for the local centre's mixed uses will be in accordance with the maximum car parking standards as set out in Appendix C of the Car Parking Strategy and discounted on the site's accessibility in accordance with the questionnaire presented at Appendix D of the same document.

Cycle Parking – Wiltshire LTP3 Cycle Strategy

7.8.6. **Table 7.2** sets out the minimum standard for cycle parking spaces for dwellings.

Table 8.2 WC's Minimum Cycle Parking Standards for Residential Units

NUMBER OF BEDROOMS			VISITOR PARKING
1 - 3	4	5	
1 covered space per bedroom	3 covered spaces	4 covered spaces	1 space per 20 dwelling

7.8.7. The proposed development will meet the minimum requirement for cycle parking for residential units. Suitable cycle parking storage will be provided for residential dwellings by means of secured

and sheltered cycle stores or bike racks in the garage or other space within the residential area designed to accommodate bicycles.

7.8.8. For non-residential uses, secured and sheltered cycle parking spaces will be provided at an appropriate level in accordance with the minimum standards sets out in Appendix 4 of the Cycling Strategy.

7.9. Electric Vehicle Infrastructure

7.9.1. The development will provide Electric Vehicle Charging Points in accordance with requirements set out in the Building Regulations (Approved Document S).

7.10. Suitable Transport Measures

7.10.1. The Site has the ability to offer potential sustainable measures such as electric bike/scooter hire facilities, car club vehicle(s), storage lockers for home deliveries, wayfinding infrastructure and sustainable travel information.

7.11. Travel Plan

7.11.1. Travel Plans are seen by the Government as a strategic management tool in achieving traffic reduction and accelerating the development of more sustainable travel trends on both the strategic and local highway networks. Furthermore, they are being increasingly used as part of a toolkit to secure reductions in carbon emissions and contribute to the UK's target to bring all greenhouse gas to net zero by 2050.

7.11.2. To echo both national and local aspirations to deliver sustainable development, and contribute towards priorities of reducing emissions and congestion, a Framework Travel Plan has been prepared in conjunction with the TA and is included with the planning submission. This document has been prepared in compliance with the LHA's guidance outlining key targets, responsibilities, and a range of initiatives and measures that are designed to:

- Reduce the need to travel by car, thus reducing pollution and congestion in the area;
- Facilitate good access to key day-to-day destinations such as education, employment, retail, health and leisure / recreation;
- Cooperate with neighbouring communities, the LHA and other relevant organisations in achieving the greatest mode shift away from single-occupancy car journeys;
- Provide on-site facilities to encourage the usage of walking, cycling and public transport as appropriate; and
- Promote a healthier lifestyle for residents, visitors and the wider community.

7.11.3. Strategies to deliver reduced vehicle use and active lifestyles are presented in the Framework Travel Plan submitted to support the planning application.

8. ACTIVE TRAVEL

8.1. Introduction

8.1.1. This section sets out the active travel trip generation (i.e. trips by pedestrians and cyclists) of the proposed development and the assignment onto the surrounding network based to the origin / destination of trips. Full forecasts are set out at **Appendix E**, with summary tables provided in the sub-sections below, as appropriate. Additionally, responses to ATE, CCNDG and WC Education comments on the previous planning application are provided.

8.2. Active Travel Forecast

Active Travel Trip Generation

8.2.1. The active travel trip generation (i.e. trips by pedestrians and cyclists) of the proposed development has been forecast using trip rates derived from an interrogation of TRICS, the industry standard database. **Table 8.1** summarises the selection criteria for the derivation of trip rates.

Table 8.1: TRICS Selection Criteria

Parameter	Residential	
Dataset	Houses Privately Owned	Business Park
Geography	United Kingdom (excluding Greater London and Northern Ireland)	
Quanta	Up to 1,000 dwellings	Up to 6,000sqm
Main Location	Edge of Town or Suburban Area	
Survey Dates	Weekdays, outside COVID-19 pandemic	
Travel Plan	No	

8.2.2. The resulting trip rates (for active travel, i.e. pedestrians and cyclists combined) by hour over the weekday 12-hour period (07:00-19:00) are summarised in **Table 8.2** and applied to the development quanta in **Table 8.3**. The full TRICS output reports are reproduced at **Appendix F**.

Table 8.2: Active Travel Trip Rates – Weekday

Hour Commencing	Residential (per dwelling)		
	In	Out	Total
07:00	0.017	0.037	0.054
08:00	0.035	0.110	0.145
09:00	0.031	0.045	0.076
10:00	0.030	0.031	0.061
11:00	0.033	0.029	0.062
12:00	0.041	0.019	0.060
13:00	0.031	0.032	0.063
14:00	0.041	0.033	0.074
15:00	0.094	0.045	0.139
16:00	0.060	0.035	0.095
17:00	0.052	0.020	0.072
18:00	0.029	0.051	0.080
Total	**0.494**	**0.487**	**0.981**

Table 8.3: Active Travel Trip Generation – Weekday

Hour Commencing	Residential (410)		
	In	Out	Total
07:00	7	15	22
08:00	14	44	58
09:00	12	18	30
10:00	12	12	24
11:00	13	12	25
12:00	16	8	24
13:00	12	13	25
14:00	16	13	30
15:00	38	18	56
16:00	24	14	38
17:00	21	8	29
18:00	12	20	32
Total	**198**	**195**	**392**

8.2.3. Overall, the proposed development is forecast to generate 392 trips by active travel modes over the weekday 12-hour period. The weekday AM and PM peak hours of generation (08:00-09:00 and 15:00-16:00 respectively) are forecast to result in 58 and 56 active travel trips respectively.

Active Travel Trip Distribution

8.2.4. The distribution of active travel trips generated by the proposed residential development has been based on trip purposes, derived from the National Travel Survey (NTS) 2021 (Table NTS0502: Trip Start Time by Trip Purpose); this identifies the proportion of trips within each hourly period associated with different trip purposes. **Table 8.4** provides a summary of the proportion and number of active travel trips associated with different trip purposes over the weekday 12-hour period, with a full breakdown provided at **Appendix E**.

Table 9.4: Active Travel Trip Generation by Purpose – Weekday 12-Hour Period

Trip Purpose	Proportion	No. of Trips
Commuting	14%	56
Business	2%	8
Education	10%	40
Escort Education	10%	37
Shopping	16%	64
Other Work, Other Escort and Personal Business	18%	72
Visiting Friends / Entertainment / Sport	13%	49
Holiday / Day Trip / Other	17%	67
Total	**100%**	**392**
Note: Summation errors due to rounding.		

8.2.5. For each of the trip purposes, a destination / destinations have been identified. For all purposes, it is assumed that active travel trips would be contained within the Chippenham urban area. The full analysis is included at **Appendix E**, with the methodology / assumptions summarised in **Table 8.5**.

Table 8.5: Trip Distribution by Purpose (Proposed Residential Development) – Methodology and Assumptions

Trip Purpose	Methodology / Assumptions
Commuting / Business	100% of trips have been distributed to destinations based on analysis of the 2011 Census (the 'WF01BEW – Location of usual residence and place of work (OA level)' dataset). Trips between residential areas (the 'place of residence') and employment destinations (the 'place of work') within the Chippenham urban area have been identified. For employment destinations, the analysis has been undertaken at the Lower Super Output Area (LSOA) level, with a destination assigned to each LSOA.
Education	100% of trips to / from Hardenhuish School and Sheldon School (Hardenhuish Lane), being the nearest secondary education provision to the site.
Escort Education	100% of trips to / from the primary school to be provided as part of Rowden Park and therefore contained within the area of the proposed development / Rowden Park. Trips for this purpose include both the escorting adult and the pupil being escorted. It is therefore considered reasonable to assume that these trips would be for primary education and to the nearest primary education provision.
Shopping	25% of trips to / from Chippenham town centre, 50% of trips to / from the local centres within the proposed development / Rowden Park and 25% of trips to / from Sainsbury's / Metheun Retail Parks adjacent to the A4. The highest proportion has been assigned to the local centres within the proposed development / Rowden Park (and therefore contained within this area) as these will cater for day-to-day needs.
Other Work, Other Escort and Personal Business	20% of trips to /from the local centres within the proposed development / Rowden Park and therefore contained within this area, with the remaining 80% of trips to / from Chippenham town centre.
Visiting Friends / Entertainment / Sport	100% of trips to / from Chippenham town centre (where facilities associated with such activities are available), though, in reality, a proportion of these trips would likely be retained within the proposed development / Rowden Park due to complementary land uses being provided.
Holiday / Day Trip / Other	Given the trip purpose, it is likely that the destination would be external to the Chippenham urban area, with the active travel trip assumed to facilitate onward travel via Chippenham railway station.

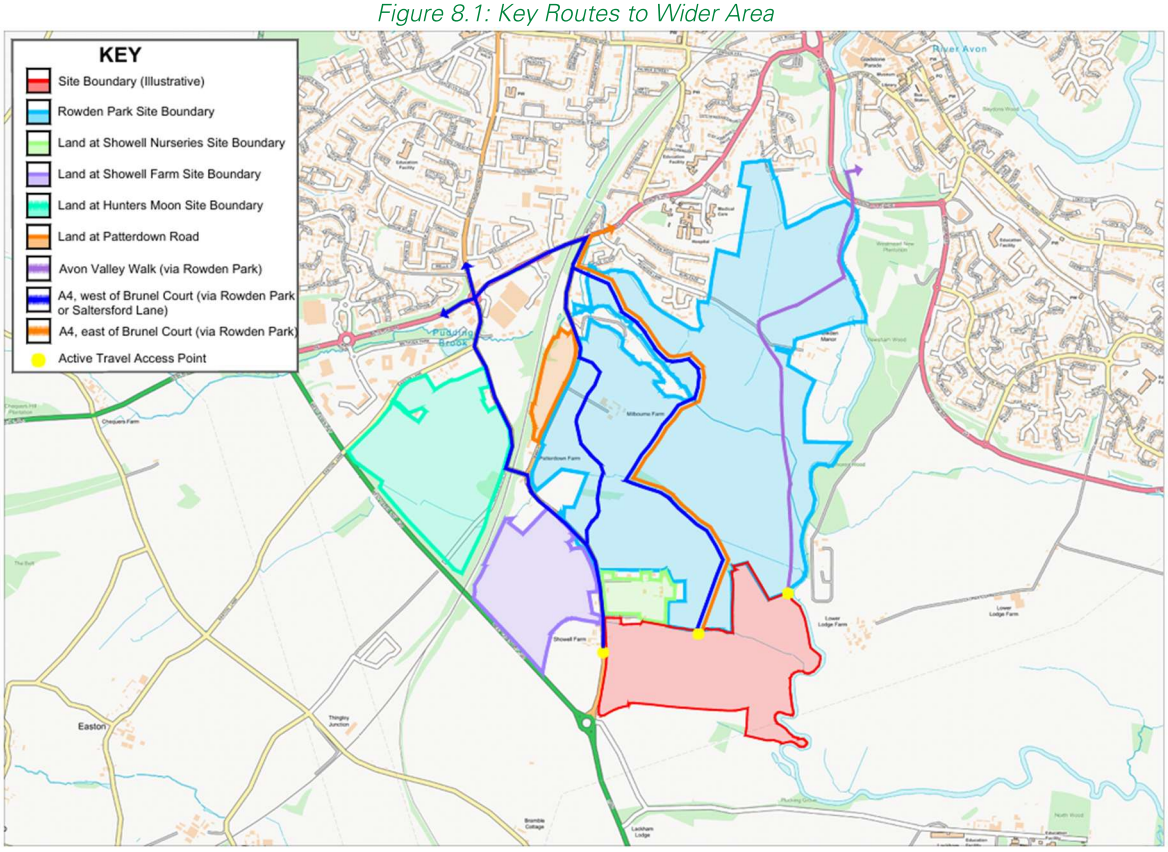
Active Travel Trip Assignment

8.2.6. Active travel trips have been assigned to routes to the identified origins / destinations, with consideration to existing routes / committed routes as part of the wider consented development and those that form part of the proposed development. **Table 8.6** summarises the total number of active travel trips to each route by hour over the weekday 12-hour period (a full breakdown for each development component is included at **Appendix E**), with the routes external to the proposed development / Rowden Park shown in Figure 9.1. The extent of the routes shown includes the immediate vicinity of the site, which is considered commensurate with the scale of the proposed development / level of active travel trip generation.

Table 8.6: Active Travel Trips by Route

Hour Commencing	Number of Trips by Route				
	A4, east of Brunel Court (via Rowden Park)	A4, west of Brunel Court (via Rowden Park or Saltersford Lane)	Avon Valley Walk (via Rowden Park)	Within Proposed Development / Rowden Park	Total
07:00	0	7	11	2	20
08:00	0	21	17	18	57
09:00	0	4	19	7	30
10:00	0	3	16	5	24
11:00	0	3	16	6	25
12:00	0	3	16	5	24
13:00	0	3	17	5	25
14:00	0	4	17	8	29
15:00	0	18	21	17	55
16:00	0	6	25	5	37
17:00	0	5	19	3	28
18:00	0	4	22	4	31
Total	**3**	**82**	**216**	**84**	**385**
Maximum	**0**	**21**	**25**	**18**	**57**
Note: Summation errors due to rounding.					

Figure 8.1: Key Routes to Wider Area



8.2.7. It can be seen that the majority of active travel trips are forecast to route to / from the Avon Valley Walk (via Rowden Park) to the northeast, equating to 56% of all active travel trips over the weekday

12-hour period. This is due to the number of attractors within Chippenham town centre and employment opportunities at Langley Park, trips to which would utilise this route.

8.2.8. 21% of active travel trips are forecast to route to / from the A4 to the west of Brunel Court, either via Rowden Park or Saltersford Lane. This route serves the main residential areas of Cepen Park and those adjacent to Hungerdown Lane, as well as attractors such as Metheun Park, Bumpers Farm and adjacent to Hungerdown Lane. Potential improvements to cycling provision along the A4 and Saltersford Lane have been identified by Wiltshire Council (WC) in its draft Local Cycling and Walking Infrastructure Plan (LCWIP).

8.2.9. 22% of active travel trips are forecast to be contained within the proposed development / Rowden Park. The remaining 1% of trips are forecast to route to / from the A4 to the east of Brunel Court; whilst this could be utilised as a route for some key attractors such as Chippenham town centre, it is considered less direct and attractive than routeing via the Avon Valley Walk.

8.3. Responses to ATE & CCNDG Comments on Previous Planning Application

Allocation / Accessibility

8.3.1. WC 's assessment of the site 'Site Selection Report for Chippenham' (2021) states that the site (Reference: SHEELA 473) "*Does not appear to have any overriding significant impacts that justify excluding the site at this stage*" and "*Accessibility to local facilities is average and the site has good access to the A350 and B4528*". This informed WC's decision to include the site as part of an allocation within its emerging Draft Local Plan covering the period to 2038.

8.3.2. Other previous appraisals of the site have included the 'Chippenham Site Allocations Plan – Transport and Accessibility Evidence Paper 3' (prepared by Atkins in 2014), which provided a comparison of five identified key strategic sites against three key themes, with the site forming part of Strategic Site E. The report demonstrated that Site E (together with Site A[1]) offered the greatest potential to deliver developments that provided strong or moderate access to the public transport network and to / from Chippenham town centre and key services.

8.3.3. The planning application has been submitted on the basis of a standalone development that is not reliant on the delivery of the wider site allocation that is proposed within the emerging Local Plan. It has been demonstrated that the proposed development can come forward without the proposed A350 to A4 Strategic Link Road (**Section 10**).

Reliance on Rowden Park Infrastructure

8.3.4. ATE refers to the site's proximity to, and reliance upon, the consented development at Rowden Park to the north, namely the associated active travel infrastructure and enhancements to public transport provision, expressing concern that Rowden Park is not sufficiently advanced to the extent that further development cannot be considered viable to proceed in the short or medium term.

[1] Land at North Chippeham

8.3.5. Since the earlier planning application there has been significant planning and construction activity at Rowden Park and the neighbouring committed developments with the future housing being marketed.

8.3.6. Given the time lag from planning permission to occupation of the proposed development it is expected that Rowden's Park active travel infrastructure obligations (to provide suitable active travel infrastructure and contributions to enable access to the town centre and employment areas, as well as public transport infrastructure and contributions), will have been substantially completed..

8.3.7. In the interim if these works were not to be completed, the development's proposal for a 3m shared use cycleway alongside Patterdown Road will connect with the constructed Rowden Gate roundabout access which has associated active travel provision. Users can then connect via Wiltshire Drive (constructed within Rowden Park) to the historical existing provision on Patterdown Road which provides connection to Bath Road.

Active Travel Route to the Proposed Rowden Park Primary School

8.3.8. In relation to the active travel route to the primary school located within Rowden Park, the footways / cycleways within that consented development site and considered suitable for active travel by WC when the planning application was determined will be utilised. This infrastructure will be accessed via a connection between the northern site boundary and Rowden Park Phase 5. The active travel route within the development and which will be used to make the connection to Rowden Park will comprise of the existing PRoW being upgraded to a 3m shared use cycleway with a bound surface material.

Distance to Proposed Local Centre

8.3.9. The northern finger of the development has now been removed and all proposed dwellings are sited within a 400 m walking distance of the proposed local centre which is half the 800m distance referenced for 'walkable neighbourhoods' in Manual for Streets (MfS).

Active Travel Connections

8.3.10. The proposed development provides the following active travel connections:

- To the north via its connections to Rowden Park via Public Footpath References: LAC09 and LAC39;
- To the south via Public Footpath References: LAC09 and LAC 39; and
- To the west via Patterdown Road via the primary and emergency accesses.

8.3.11. It should be highlighted that connections can only be made to public highway / Public Rights of Way (PRoW) network where the development abuts the route; provision of further connections via third party land cannot deliver guaranteed routes. It is on this basis that the active travel connections have been identified and proposed.

8.3.12. To the north, connections will be provided to Rowden Park via Public Footpath References: LAC09 and LAC39. The former is considered to provide the main connection to Rowden Park and will consist of a bound surface 3m shared use cycleway. The proposed development includes up to

400 dwellings, with an estimated population of 888 people. Local Transport Note 1/20 (LTN 1/20): Cycle Infrastructure Design (July 2020), provides guidance on the minimum width for shared-use and segregated routes; for shared-use, a width of 3m is considered appropriate for routes carrying up to 300 pedestrians per hour and 300 cyclists per hour (i.e. 67% of the future population), with segregated facilities (3m wide cycleway and 2m wide footway) considered appropriate for routes carrying up to 1,000 cyclists per hour (i.e. more than the future population). Taking account of trips being undertaken at different times of the day and by different modes, it can be seen from these estimates that a single active travel connection to the north is suitable to provide onward access to services and facilities within Rowden Park and beyond. Notwithstanding this, a second connection is proposed via Public Footpath Reference LAC39; which is proposed to be a shared cycleway and footpath and will provide a connection to the network of active travel routes proposed within the 'Riverside Park'; this route is proposed to be 3m wide and constructed using compacted hoggin.

8.3.13. These two points of active travel connection will link with the active travel provision as part of Rowden Park, secured via planning conditions and obligations / contributions within the completed S106 agreement.

8.3.14. The Patterdown Road active travel infrastructure has been amended to provide a 3m shared use path between the A350/ Patterdown Road roundabout and the Patterdown Road / Rowden Park access roundabout. Access from the development to this proposed active travel corridor will be provided from both sides of the primary access and from the proposed emergency / active travel access. To the south of the primary access, the proposed shared use cycleway will route along the east side of Patterdown Road, providing a connection to proposed bus stop infrastructure, with a pedestrian refuge facilitating pedestrian crossing movements between the bus stops. To the north of the primary access, the proposed shared use cycleway will route along the east side of Patterdown Road, passing the proposed emergency access (incorporating active travel connection) and connecting to the constructed active travel infrastructure provided at the Rowden Gate / Patterdown Road access roundabout via a parallel crossing enabling onward travel to Bath Road via Wiltshire Drive / Patterdown Road.

Access to and Provision of Public Transport

8.3.15. It is proposed to provide a contribution of £428 per dwelling (index linked) towards a bus service. This contribution is the same as the obligations for Rowden Park and 'Land at Showell Nurseries' and can be pooled to deliver a regular bus service to serve all three sites. Previously, the intention was that the monies would deliver an extension to Stagecoach Service 55 which currently routes from Chippenham railway station to Swindon bus station via Calne, Lyneham and Royal Wootton Bassett and was envisaged to enter and exit Rowden Park via an internal circular bus route. More recently service 44H has been introduced providing access to the town centre and an extended service and beginning and end of the school day to Sheldon school. The proposed development will construct bus laybys on either side of Patterdown Road in the vicinity of the local centre; the provision of the bus stops will enable any future bus services to U-turn at the Lackham roundabout.

Travel Plan

8.3.16. In response to the Travel Plan comment: the submitted TP is a framework document. Planning conditions will be applied to any decision notice requiring preparation of a full TP. Mode share targets would be agreed with WC following a baseline travel survey. The monitoring strategy

proposed is consistent with those agreed with WC as part of TPs prepared for other development sites of a similar scale. Any requirement to secure potential remedial measures will be subject to further discussion with WC.

Requirement for Segregated Pedestrian / Cyclist Routes within the Development

8.3.17. In response to AADT flows on the site access road: in terms of the uplift of combined weekday AM and PM traffic flows to AADT, a factor derived from TRICS (the industry-standard database for trip rates) has been applied. **Table 8.1** provides a breakdown of the calculations.

Table 8.1 Breakdown of AADT Calculations for Site Access Road

CALCULATION COMPONENT	VALUE
Residual External Traffic Generation (Combined AM + PM)	305
AM + PM to AADT Factor (Rounded)	4.52
AADT	1,379

8.3.18. The development's internal highway network will be subject to a 20mph speed limit. Table 4.1 of For this speed limit LTN 1/20 indicates that mixed traffic is appropriate for most people in highways with less than 2,000 vehicles per day. Therefore, cycling can be undertaken within the carriageway. The use of shared cycleways is set out in paragraph 8.3.12 above.

8.4. Response to Wiltshire Council Education Comments on Previous Planning Application

8.4.1. In the Education response, the issue of a safe route to primary and secondary schools was raised.

8.4.2. The future primary school provision will be at the proposed Rowden Park development which will be delivered by WC via land obligated under the Rowden Park planning permission and s106 contributions from several consented residential developments and to which this development could contribute to. The active travel route from the development to the school will be via the upgraded PRoW (3m shared use cycleway with a bound surface) which will link into the Rowden Park active travel infrastructure.

8.4.3. In the event that Rowden Park has not completed the active travel link to its southern boundary, active travel to the school can be undertaken via the development's proposed 3m shared use cycleway on Patterdown Road, linking to the constructed active travel infrastructure at the Patterdown Road / Rowden Gate roundabout access with onward travel afforded by the active travel infrastructure provided alongside the new roads within Rowden Gate.

8.4.4. If the Rowden Gate primary school is not open when dwellings are occupied and children are provided places in other primary schools within Chippenham, the proposed route alongside Patterdown Road with onward travel via the constructed Wiltshire Drive within Rowden gate which links into the existing footway alongside the northern section of Patterdown Road. Patterdown Down Road connects with Bath Road from which a pedestrian route to Southmead via a controlled pedestrian crossing provides access to Queens Crescent, Frogwell, St Peter's and Redland primary schools. Alternatively, a contribution is to be provided towards public transport and the existing 44H service could be extended to serve the development and would provide access to these schools. To the east Bath Road provides active travel access to St Mary's primary school.

8.4.5. The same route set out above would provide active travel access to Sheldon and Hardenhuish secondary schools and sixth forms with the 44H bus service providing a public transport option.

9. VEHICLE TRIP GENERATION AND DISTRIBUTION

9.1. Introduction

9.1.1. This section of the TA sets out the forecast trip generation of the proposed development for all modes of transport, and the methodology for distribution and assignment of traffic onto the highway network. This is based on a residential development of 400 dwellings, a Local Centre comprising up to 675 sq m of mixed use (local retail, commercial business and service uses, (Use Class E.) The local centre has not been included for the purposes of trip generation as its main purpose is to serve the needs of the future residents and the nearby committed developments who will either undertake their journey by active modes or if by car it will be part of a linked journey i.e. on the way to or from work.

9.2. Trip Rates and Trip Generation

Initial Trip Rates and Trip Generation

9.2.1. The vehicle trip generation of the proposed development has been forecast using trip rates derived from an interrogation of TRICS (Version 8.25.12), the industry-standard database.

Residential

9.2.2. Sites meeting the following criteria have been selected for the residential element:

- Within the 'Residential – Houses Privately Owned' dataset;
- Located in England and Wales (excluding Greater London) and in a 'Suburban Area' or on the 'Edge of Town';
- Up to 1,000 dwellings;
- Weekdays only
- Population within 5 miles up to 75,000;
- Surveyed outside of the COVID-19 pandemic; and
- Without a TP.

9.2.3. It should be noted that the site will include a proportion of affordable housing, and as such the use of the 'Houses Privately Owned' category to calculate the trip generation of the entire quantum provides a robust assessment. In addition, the selection of, exclusively, sites that do not have a TP provides a robust assessment, as the planning application will be accompanied by a TP.

9.2.4. The resulting trip rates and trip generation for the traditional weekday AM (08:00-09:00) and PM (17:00-18:00) peak hours are summarised in **Table 9.1**. The full TRICS output reports are reproduced at **Appendix G**. These have been applied to the development quanta of 400 units, with the resulting vehicle trip generation also shown in **Table 9.1**.

Table 9.1: Initial Residential Vehicle Trip Rates and Generation

Time Period	Trip Rates (per dwelling)			Trip Generation (400 dwellings)		
	In	Out	Total	In	Out	Total
AM Peak Hour	0.116	0.358	0.474	46	143	190
PM Peak Hour	0.310	0.153	0.463	124	61	185
Note: Summation errors due to rounding.						

Journey Composition

9.2.5. It should be noted that the derived trip rates for residential development contain journeys with various purposes associated with not only employment but also leisure, shopping and education

activities. The development proposes employment and a local centre to support the core residential element which will reduce the number of external vehicle trips.

9.2.6. In light of this, an exercise has been undertaken to calculate the trips that would be associated with different journey purposes associated with the proposed mix of supporting land uses on the site. In order to disaggregate the forecast trips by journey purposes, information on journey purposes by trip starting time for England was obtained from the National Travel Survey.

9.2.7. The 2015/2019 NTS is the latest available series of household data that has been released to provide a data source pre-the Covid 19 pandemic at a national level that sets out personal travel in England. NTS Table 502 provides details of 'Trip start time by trip purpose (Monday to Friday only)' and a peak hour summary is provided as **Table 9.2** below.

Table 9.2 – Summary of Peak Periods Journey Purpose – As Extracted from NTS Table 0502

Journey Purpose	AM Peak (08:00-09:00)	PM Peak (17:00-18:00)
Commuting/Business	37%	43%
Education	1%	0%
Escort Education	28%	3%
Shopping	5%	13%
Personal business	23%	23%
Social Activities/Holiday/Day Trip	7%	18%
Total	100%	100%

9.2.8. The forecast residential 2-way trip generation by different journey purposes are summarised in **Table 9.3** as follows:

Table 9.3 – Forecast 2 – Way Residential Person Trip Rates by Journey Purpose

Journey Purpose	2-Way Trips	
	08:00-09:00	17:00-18:00
Commuting/Business	70	80
Education	2	0
Escort Education	53	6
Shopping	9	24
Personal Business	44	43
Social/ Holiday Trips	13	33
Total	190	185

Calculation of External Trip Generation

9.2.9. Whilst a primary school within a reasonable walking distance is proposed at the Rowden Park development no reduction in external trip generation has been undertaken. As educational trips make up a large percentage of the AM peak hour journey composition the external trip generation is expected to be less than the calculation below.

9.2.10. It can be seen from **Table 9.3** that Personal Business provides a high proportion of the main journey purpose during the reviewed peak hours, equating to 23%in the AM and PM peak periods. Personal Business is defined within the 'Notes and Definition' July 2018 release note relating to the NTS as:

"*Visits to services, e.g. hairdressers, launderettes, dry cleaners, betting shops, solicitors, banks, estate agents, libraries, churches or for medical consultation or treatment; or for eating and drinking, unless the main purpose was entertainment or social.*"

9.2.11. It is evident that the local centre would provide a number of these types of services and whilst not all personal business uses may be covered by this centre it is considered reasonable to apply a 20% reduction in the forecast Personal Business-related journeys as shown in **Table 9.3** to account for potential internalisation in relation to this proposed use. The forecast reduction for personal business-related journeys associated with the residential element is summarised in **Table 9.4** below.

9.2.12. The onsite local centre would include a convenience shopping element catering to the day-to-day local requirements of the proposed new community. On this basis further adjustments have also been undertaken to take account of this specific use.

9.2.13. It can be seen from **Table 9.3** that shopping comprises a proportion of the main journey purpose during the reviewed peak hours. Retail trips in the morning peak are likely to consist of more convenience-based journeys (e.g. to pick up day to day food products) and therefore, it is likely that the proposed local centre onsite would account for the most part of the shopping journeys. However, evening journeys would most likely encompass a broader range of shopping journeys which means that a lower proportion of all shopping journeys would be convenience based in this peak periods. The forecast reduction for shopping related journeys associated with the residential element is summarised in **Table 9.4** below.

Table 9.4 – Trip reductions to take into account internal personal business and shopping

Journey Type	AM peak period (08:00-09:00)		PM peak period (17:00-18:00)	
	In	Out	In	Out
Personal Business	-2	-6	-6	-3
Shopping	-2	-7	-6	-3

9.2.14. Applying the reductions in trips shown in **Table 9.4** provides an interim external vehicle trip generation as shown in **Table 9.5**.

Table 9.5 – Total Interim External Trip Generation with reductions for Employment, Personal Business and Shopping

Use	Trip Generation (400 dwellings)					
	AM Peak Period			PM Peak Period		
	In	Out	Total	In	Out	Total
Residential	42	130	172	112	55	167
Note: Summation errors due to rounding.						

Trip Reduction due to Travel Trends and Travel Behaviour Changes

9.2.15. Finally, a further reduction is considered in respect of behaviour change brought about by the Covid-19 pandemic, the provision of sustainable travel measures/infrastructure within the development and a robust Travel Plan.

9.2.16. It is noted that recent control measures introduced nationally as a result of the Covid 19 pandemic appear to have resulted in behavioural change that has resulted in more home working even after the measures were lifted. These changes in travel pattern are discussed in the Royal Town Planning Institute document titled 'Plan the World We Need', which was released in June 2020. Section 3.1 states the following:

"…In the UK during April, 39% of those in employment reported working only from home, while 6% both worked from home and travelled to work. This contrasts with 5% of the workforce who reported working mainly from home during 2019…"

9.2.17. The Department for Transport (DfT), in conjunction with Ipsos MORI, published 'All change? Travel tracker - Wave 1 summary for the Department for Transport' in June 2020. This summary document presents analysis and headline figures from a UK-wide survey commissioned by the DfT and undertaken during May-June 2020. The survey explored whether participants would use more sustainable travel or return to pre-lockdown travel and made the following statement in this regard:

"Thinking about the future more generally, the survey suggests that there could be some positive behavioural impacts from a sustainability perspective. There is a high degree of self-reported willingness to change behaviour in response to the long-term threat. Many say they are willing to do a range of things to reduce their contribution to climate change, reflecting a recognition that the long-term posed by climate change is as serious as coronavirus in the long-term (63% agree, 15% disagree)".

9.2.18. In addition, research undertaken by the Chartered Institute of Personnel and Development (CIPD) suggest that "*the proportion of people working from home on a regular basis once the crisis is over will increase to 37% compared to 18% before the pandemic*"

9.2.19. Properties within the community would be designed to capitalise on these changes so that home working is possible through the use of enhanced telecommunications and the establishment of appropriate work areas within each property and areas to support recreation.

9.2.20. It is also noted that according to 2011 Census Data, 4.6% of Chippenham residents were working from home rising to 35.6% in the 2021 Census which was undertaken when Covid-19 restrictions were in place.

9.2.21. A robust site overarching Travel Plan will also be introduced at the development to reduce the reliance on solo-car journeys and thus to accomplish a positive mode shift from car travel to other sustainable modes.

9.2.22. Various tangible measures will be used to enable a significant behavioural change. This is emphasised within the 'Essential Guide to Travel Planning' document published by the Department for Transport in March 2008, which states that:

"Good travel plans have typically succeeded in cutting the number of people driving to work by 15%"

9.2.23. In addition, these measures are also likely to have a similar impact on other journey purposes not only commuting trips.

9.2.24. The development has the opportunity to introduce potential sustainable travel measures (e-bike hub, car club) which will increase the opportunity for modal shift and reduce the need to own an additional private car or even to own a single private car.

9.2.25. In light of changing behaviours brought about by the Covid-19 pandemic, enhanced telecommunications, the provision of sustainable transport measures/infrastructure and a robust Travel Plan it is reasonable to assume a mode shift of 10% away from car usage can be achieved.

9.2.26. The forecast reduction due to travel trends and travel behaviour changes is summarised in **Table 9.6** below.

Table 9.6 – Trip Reduction due to Travel Trends and Travel Behaviour Changes

Use	Trip Reduction (400 dwellings)					
	AM Peak Period			PM Peak Period		
	In	Out	Total	In	Out	Total
Residential	-4	-13	-17	-11	-6	-17
Note: Summation errors due to rounding.						

Residential External Development Trips

9.2.27. The total external trips as set out in **Table 9.5** have been adjusted to take account of travel trends and changes in travel behaviour as discussed above. The subsequent residual external trip generation is provided in **Table 9.7**. This traffic generation is used for the subsequent traffic assessment to assess the proposed development's impact on the external highway network.

Table 9.7 – Residual External Trip Generation

Use	Residual Trip Generation (400 dwellings)					
	AM Peak Period			PM Peak Period		
	In	Out	Total	In	Out	Total
Residential	38	117	154	101	50	151
Note: Summation errors due to rounding.						

Trip Distribution

9.2.28. The distribution of development traffic has been based on analysis of the 2011 Census data, specifically the 'WU03EW – Location of usual residence and place of work by method of travel to work (MSOA level)' dataset. As per other analysis, the 'Wiltshire 010' MSOA has been used as a proxy for the origins / destinations of trips generated by the proposed development.

9.2.29. The analysis has been undertaken for the 'Driving a car or van' mode based on origins / destinations at the MSOA level. The likely routeing of development traffic between the site and the various output areas (i.e. origins / destinations) has been established using an online route planning application for journeys arriving during the weekday AM peak hour (08:00-09:00). Where multiple route options

were identified, trips have been apportioned equally between the competing routes. The resulting distribution is summarised in **Table 9.8**.

9.2.30. The distribution and resulting development traffic on the study area network is shown at **Appendix H**.

Table 9.8: Residential Vehicle Trip Distribution

Distribution	Proportion of Traffic	Vehicle Trips (Total)	
		AM Peak Hour	PM Peak Hour
A350 North - M4 J17 - A429 North	4.5%	7	7
A350 North - M4 J17 - M4 East	10.2%	16	15
B4643 North - A4 Bath Rd East - A420 Marshfield Rd	7.8%	12	12
A350 North - A420 Bristol Road West	8.3%	13	13
A350 North - Bumpers Way	6.0%	9	9
B4643 North - A4 Bath Rd East	2.7%	4	4
B4643 North - A4 Bath Rd East - Ave La Fleche - London Road	6.2%	10	9
A350 North - A4 Bath Road West	21.9%	34	33
A350 South	12.8%	20	19
A350 South - The Wharf	0.2%	0	0
A350 North - M4 J17 - M4 West	4.4%	7	7
A350 North - B4158 South	1.5%	2	2
B4643 North - B4528 Saltersford Ln - B4528 Hungerdown Ln	1.5%	2	2
B4643 North - A4 Bath Rd East - Bath Rd - The Bridge	6.9%	11	10
B4643 North - A4 Bath Rd East - Ave La Fleche - A4 Pewsham Way	1.0%	2	2
B4643 North - A4 Bath Rd East - Ave La Fleche	4.1%	6	6
Total	**100%**	**154**	**151**

Note:
1. *Summation errors due to rounding.*
2. *Distribution locations reflects the extents of the study area network.*

10. HIGHWAY ASSESSMENT METHODOLOGY

10.1. Introduction

10.1.1. This section sets out the methodology for preparing forecasts for the assessment of the impact of the proposed development on the study area network. This includes details relating to background traffic growth, committed development, and potential other future development within the locality. The traffic impact assessment itself includes junction capacity assessments for existing off-site junctions and proposed access junctions.

10.1.2. The Wiltshire Transport Model (WTM) '2024 Core' has been obtained to provide a reference base flow which will be uplifted to project a prevailing traffic condition for Year 2026 for assessment purposes.

10.1.3. 'Base' and 'Base + Development' scenarios have been assessed for the future year (2031 – 5 year post submission of the planning application).

10.1.4. The assessment scenarios are summarised in **Table 10.1.**

Table 10.1: Assessment Scenarios

Scenario	Description
2024 Core	WTM – obtained as a reference base for base and future year forecast
2026 Baseline	Current baseline - Application of 2024 – 2026 TEMPRO traffic growth to '2024 Base' traffic flows
2031 Baseline	Future year baseline - Application of 2024-2031 TEMPro traffic growth to '2024 Base' traffic flows plus traffic associated with committed developments at Showell Nurseries (120 units) and Barrow Farm (230 units)
2031 Base + Development	'2031 Base' traffic flows plus proposed development (400 dwellings).

10.1.5. The construction of the scenarios is discussed in the following sub-sections. All traffic flows for the assessment scenarios and their component parts are included at **Appendix H.**

10.2. Wiltshire Transport Model (2024 Base)

10.2.1. The WTM provides the '2024 Base' scenario. The committed developments that are programmed for completion by 2024 and therefore included in the WTM are:

- Langley Park Aldi Store;
- Langley Park - 70% of 400 dwellings + hotel;
- Land southeast of M4 J17 - 9.3ha B8;
- Land at Hungerdown Lane - 35 dwellings;
- Land at Showell Farm - 5ha B1, B2, B8;
- Land at Patterdown Road - 72 dwellings;
- Rowden Park - 70% of 1,000 dwellings;
- Hunters Moon - 70% of 2.3ha B1, B2, B8 + 450 dwellings;
- Rawlings Green - 70% of 250 dwellings;
- Birds Marsh - 70% of 2.7ha A1, B1, B2, B8 + 750 dwellings; and
- East of Farrells Field - 70% of 30 dwellings.

10.3. Background Growth

10.3.1. Traffic growth factors have been derived from TEMPro. TEMPro forecasts traffic growth based on factors such as changes in housing, employment and car ownership over a growth period for a selected study area using the National Trip End Model (NTEM) and therefore, takes into account the remaining development in the list above that was not included in the '2024 Base' scenario.

10.3.2. Growth factors have been extracted from TEMPro for the period 2024 – 2026 and 2024-2031 using the average of a number of Wiltshire Middle Super Output Areas (MSOAs) and are set out in **Table 10.2**.

Table 10.2: TEMPro Growth Factor

	Year 2024 - 2026	
MSOA	**AM**	**PM**
Wiltshire 008	1.013032	1.012882
Wiltshire 009	1.016229	1.015829
Wiltshire 010	1.01478	1.014381
Wiltshire 011	1.021374	1.020375
Wiltshire 013	1.013182	1.013232
Wiltshire 014	1.015879	1.013931
Wiltshire 018	1.016478	1.016578
Average	**1.015851**	**1.015315**
	Year 2024 - 2031	
MSOA	**AM**	**PM**
Wiltshire 008	1.058485	1.059815
Wiltshire 009	1.066364	1.06621
Wiltshire 010	1.06575	1.065699
Wiltshire 011	1.080025	1.07936
Wiltshire 013	1.058996	1.060633
Wiltshire 014	1.061094	1.057717
Wiltshire 018	1.070662	1.071634
Average	**1.065911**	**1.065867**

10.3.3. The growth factors have been applied to the '2024 Model Data' traffic flows to derive the '2026 Base' and forecast the background traffic growth for form part of the '2031 Base' scenario.

10.4. Committed Developments

10.4.1. Best practice on Transport Assessment indicates that concurrent planning applications in the surrounding area which will have an impact on the proposed study network should be considered as part of the transport appraisal.

10.4.2. It is acknowledged that the TEMPro National Trip End Model (NTEM) datasets take into account the underlying planning information in the local area, as well as the strategic housing and employment allocations. Thus, committed development traffic is already accounted for in these growth figures.

10.4.3. In addition to the committed developments included as part of the WTM model, the following neighbouring committed developments were also identified and are to be considered as part of the cumulative impact assessment.

- Land at Showell Nurseries for 120 dwellings Ref 17/08554/OUT
- Land off the B4069 East of Barrow Farm, Langley Burrell Ref: PL/2022/04681

10.4.4. The forecast traffic generation, and distribution associated with the identified two committed developments have been extracted from the supporting Transport Assessments (TAs) and manually applied in addition to the background traffic growth. Where the traffic assignment does not extend onto the study network of this TA, the associated vehicle movements have been proportionally distributed consistently with the existing travel pattern along the study network.

10.4.5. For the committed residential development at Showell Nurseries, forecasts have been prepared based on the trip generation contained in the TA that supported the planning application and the trip distribution for residential development as detailed in **Section 9** of this TA.

10.4.6. The resulting traffic flows have then been combined with the '2031 Background traffic flows to derive the '2031 Baseline' condition.

10.5. Development Traffic (2031 Base + Development)

10.5.1. The development traffic flows as detailed in **Section 9** have been combined with the '2031 Base' traffic flows to derive the '2031 Base + Development' traffic flows.

11. HIGHWAY NETWORK PERFORMANCE

11.1. Introduction

11.1.1. Due to the large study area, the assessment of the performance of the highway network has been undertaken in two stages. Firstly, a percentage impact of each arm of the 17 junctions assessed has been undertaken. Where the percentage impact is above 5% a junction capacity assessment has been undertaken using industry-standard modelling software 'Junction 10' and 'LINSIG' for all scenarios set out in **Section 10**.

11.2. Percentage Impact Assessment

11.2.1. A percentage impact assessment impact of the development traffic impact against the '2031 Base' scenario has been undertaken with the results shown in **Table 11.1.**

Table 11.1: Junction Percentage Impact

No.	Name	Arm	2031 Base		Dev Traffic		% Impact	
			AM	PM	AM	PM	AM	PM
1	Malmesbury Roundabout	A350 W Cepen Way (W)	1405	1376	24	10	1.7%	0.7%
		A350 Malmesbury Rd (N)	1796	1890	7	19	0.4%	1.0%
		Unnamed Rd (E)	252	218	0	0	0.0%	0.0%
		B4158 Malmesbury Rd (S)	690	549	1	1	0.1%	0.3%
2	Bumpers Farm Roundabout	A350 W Cepen Way (S)	1364	1250	41	17	3.0%	1.4%
		A420 Bristol Rd (W)	700	572	3	8	0.4%	1.5%
		A350 W Cepen Way (N)	1383	1289	8	21	0.6%	1.6%
		A420 Bristol Rd (E)	586	470	0	0	0.0%	0.0%
		Bumpers Way	216	427	2	6	1.0%	1.4%
3	A350 / Sandown Drive Roundabout	A350 W Cepen Way (S)	1358	1331	41	17	3.0%	1.3%
		A350 W Cepen Way (N)	1123	1140	13	35	1.2%	3.1%
		Sandown Dr	60	62	0	0	0.0%	0.0%
4	Chequers Roundabout	A350 W Cepen Way (S)	942	821	66	28	7.0%	3.4%
		A4 Bath Rd (W)	967	871	8	22	0.9%	2.6%
		A350 W Cepen Way (N)	1062	1044	13	35	1.2%	3.4%
		Sainsbury's Road	183	275	0	0	0.0%	0.0%
		A4 Bath Rd (E)	750	824	0	0	0.0%	0.0%
5	Saltersford Lane / Patterdown Road Signals	Unnamed Rd (N)	291	243	11	29	3.7%	11.9%
		Unnamed Rd (S)	429	518	35	15	8.2%	2.9%
		B4528 Saltersford Ln	186	132	1	2	0.3%	1.1%
6	The Pheasant Roundabout	A4 Bath Road (E)	547	552	0	0	0.0%	0.0%
		B4528 Saltersford Ln	213	356	2	1	0.8%	0.2%
		A4 Bath Road (W)	616	854	0	0	0.0%	0.0%
		B4528 Hungerdown Ln	743	472	1	2	0.1%	0.3%
7	Bath Road / Patterdown Road Mini-Roundabout	A4 Bath Road (E)	848	837	11	29	1.3%	3.5%
		Unnamed Rd	408	337	33	14	8.2%	4.2%
		A4 Bath Road (W)	504	588	0	0	0.0%	0.0%
8	Bridge Centre Gyratory	Ave. La Fleche	1279	1368	4	11	0.3%	0.8%
		A4 Bath Road	1042	1033	30	13	2.9%	1.3%
		A420	963	960	3	8	0.3%	0.8%

No.	Name	Arm	2031 Base		Dev Traffic		% Impact	
			AM	PM	AM	PM	AM	PM
9	Ivy Lane / New Road Signals	A420 Ivy Ln	823	813	9	4	1.1%	0.5%
		A420 New Rd	1144	1162	3	8	0.3%	0.7%
		New Rd	236	267	0	0	0.0%	0.0%
10	London Road / Ave. La Fleche Roundabout	Ave. La Fleche	283	152	7	3	2.5%	2.0%
		London Road / The Causeway (N)	180	399	0	0	0.0%	0.0%
		London Road (S)	587	439	2	6	0.4%	1.4%
11	Ave. La Fleche / Pewsham Way Roundabout	A4 Pewsham Way	634	530	0	1	0.1%	0.2%
		A4 Ave. La Fleche (W)	723	900	8	4	1.2%	0.4%
		Ave. La Fleche (E)	399	475	2	6	0.6%	1.3%
12	Webbington Roundabout	A4 Pewsham Way (S)	634	530	0	1	0.1%	0.2%
		A4 Pewsham Way (N)	427	737	1	0	0.3%	0.1%
		Webbington Road	0	0	0	0	-	-
13	Canal Roundabout	A4 Pewsham Way (E)	493	403	0	0	0.0%	0.0%
		A4 Pewsham Way (W)	427	737	1	0	0.3%	0.1%
		Canal Road	276	272	0	1	0.1%	0.4%
14	King's Roundabout	A4 Pewsham Way (N)	452	386	0	0	0.0%	0.0%
		A4 Pewsham Way (S)	403	539	0	0	0.0%	0.0%
		King Henry Dr	72	46	0	0	0.0%	0.0%
15	Pewsham Way / Lodge Road Priority	A4 Pewsham Way (N)	429	363	0	0	0.0%	0.0%
		A4 Pewsham Way (S)	407	497	0	0	0.0%	0.0%
		Lodge Road	171	130	0	0	0.0%	0.0%
16	London Road / Pewsham Way Roundabout	A4 London Road (S)	942	764	2	6	0.2%	0.8%
		A4 Pewsham Way	417	439	0	0	0.0%	0.0%
		London Road (N)	429	547	7	3	1.7%	0.6%
17	M4 Junction 17	A350 (S)	1783	1552	22	10	1.3%	0.6%
		M4 (W)	4380	3920	2	4	0.0%	0.1%
		A429 (N)	1002	914	2	5	0.2%	0.5%
		M4 (E)	3620	4287	4	10	0.1%	0.2%
		B4122	323	450	0	0	0.0%	0.0%
18	Lackham Roundabout	A350 West Cepen Way (N)	693	710	21	57	3.1%	8.1%
		Unnamed Rd (E)	433	402	81	35	18.8%	8.7%
		A350 (S)	1282	1161	5	13	0.4%	1.1%

11.2.2. **Table 11.1**. indicates that the development traffic has a 5% or more impact on one or more arms of the following junctions:

- Junction 4 – Chequers Roundabout;
- Junction 5 - Patterdown Road / Saltersford Lane Signals;
- Junction 7 – A4 Bath Road / Patterdown Road Mini-Roundabout; and
- Junction 18 – Lackham Roundabout.

11.2.3. A detailed assessment of the capacity of these junctions has been carried out with the results shown below.

11.3. Junction Assessments

11.3.1. Junction capacity assessments to identify the performance of four off-site junctions have been undertaken to understand the operation of the junctions for each of the four scenarios.

11.3.2. Full output reports for the junction models are provided at **Appendix I**, which includes the input parameters and results. The results are summarised in the following sub-sections.

Junction 4 – Chequers Roundabout

11.3.3. The results of the capacity assessment for all scenarios are summarised in **Table 11.2**.

Table 11.2: Chequers Roundabout – Capacity Performance

Movement	AM Peak Hour				PM Peak Hour			
	Q PCUs	Dly (secs)	RFC	Junc Dly (secs)	Q PCUs	Dly (secs)	RFC	Junc Dly (secs)
2026 Base								
A350 North	2	6.33	0.46	23.57	1.6	5.52	0.45	15.24
Sainsbury	0.5	11.6	0.34		1	12.68	0.49	
A4 East	1.7	8.82	0.38		1.9	8.73	0.43	
A350 South	4	14.68	0.75		3	13.39	0.68	
A4 West	17.8	64.34	1.03		8.5	35.22	0.89	
2031 Base								
A350 North	2.2	6.77	0.5	49.87	1.9	5.94	0.48	24.5
Sainsbury	0.7	13.22	0.38		1.3	15.46	0.52	
A4 East	2.2	10.32	0.41		2.5	10.01	0.47	
A350 South	6.1	21.14	0.85		4.9	19.75	0.8	
A4 West	50	162.95	1.03		17.4	67.69	0.94	
2031 Base + Development								
A350 North	2.3	6.73	0.51	59.64	2	6.15	0.51	32.96
Sainsbury	0.7	13.16	0.4		1.5	17.16	0.56	
A4 East	2.3	10.35	0.41		2.6	10.9	0.48	
A350 South	11.7	36.29	0.91		6.2	24.88	0.82	
A4 West	61.2	189.39	1.05		27	98.14	0.97	

11.3.4. The modelling indicates that the A4 West arm is currently operating over capacity in the AM and worsens as the committed development and the development traffic are introduced; in the PM peak hour this arm is currently operating within capacity but worsens as the committed development and the development traffic are introduced until it is operating over capacity.

11.3.5. To resolve this capacity issue the flare length has been increased to 24.5m i.e. the approach to the roundabout is widened over a longer distance. The proposed mitigation scheme is shown at **Appendix J** with an extract provided in **Figure 11.1**. The results of the capacity assessment for the two future scenarios are shown in **Table 11.3**.

Figure 11.1: Chequers Roundabout – Mitigation scheme

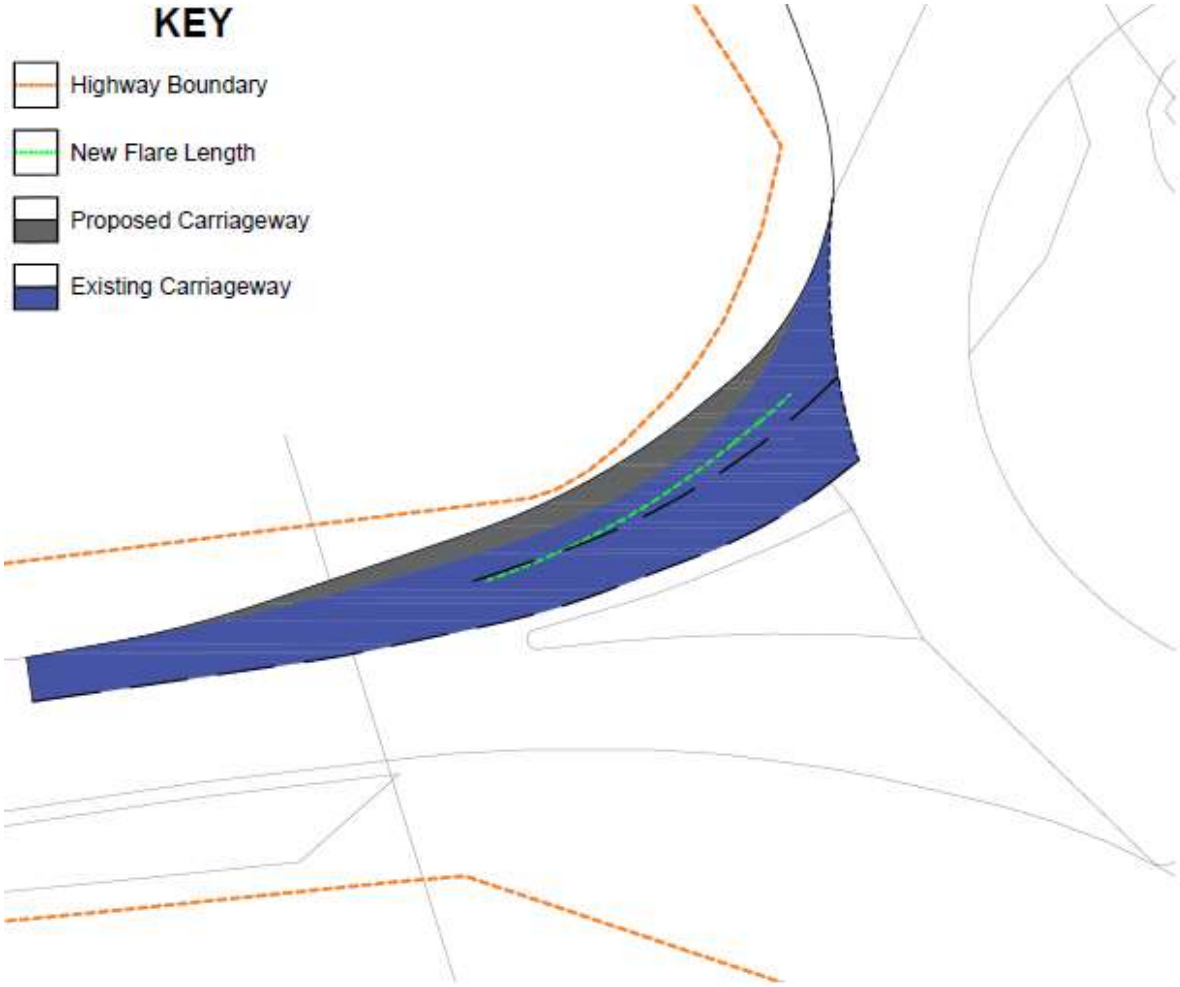


Table 11.3: Chequers Roundabout – Capacity Performance

Movement	AM Peak Hour				PM Peak Hour			
	Q PCUs	Dly (secs)	LOS	Junc Dly (secs)	Q PCUs	Dly (secs)	LOS	Junc Dly (secs)
2028 Base + Development								
A350 North	2.3	6.95	0.51		2	6.13	0.51	
Sainsbury	0.8	13.47	0.4		1.8	17.47	0.56	
A4 East	2.4	10.52	0.41	21.8	2.9	11.06	0.49	16.06
A350 South	10.4	34.82	0.89		5.2	22.53	0.82	
A4 West	11.1	35.12	0.87		6.6	26.18	0.85	

11.3.6. The results indicate that with the proposed mitigation the junction will operate within capacity in both future scenarios. The performance of the junction, with the increased flare length and the traffic associated with the proposed development and the identified committed developments, offers an improvement to the current operation of the junction.

Junction 5 – Patterdown Road/Saltersford Lane

11.3.7. The results of the capacity assessment for all scenarios are summarised in **Table 11.4.**

Table 11.4 – Patterdown Road / Saltersford Lane Signals – Capacity Performance

Arm	AM			PM		
	DoS (%)	Queue (PCUs)	Delay s/PCU	DoS (%)	Queue (PCUs)	Delay s/PCU
2026 Base						
Patterdown Road South	41.8	6.5	17.5	43.9	7.0	13.1
Saltersford Lane	41.1	4.0	34.9	44.5	3.2	45.2
Patterdown Road North	28.3	4.1	15.7	19.3	2.6	10.6
PRC (%)	115.5			102.4		
Cycle Time	90 secs					
2031 Base						
Patterdown Road South	45.2	7.3	18.0	46.7	7.8	13.5
Saltersford Lane	43.1	4.3	35.4	46.9	3.4	15.9
Patterdown Road North	30.3	4.5	15.9	21.5	3.0	10.7
PRC (%)	99.0			91.7		
Cycle Time	90 secs					
2031 Base + Development						
Patterdown Road South	47.8	7.9	17.8	48.1	8.0	13.7
Saltersford Lane	45.3	4.4	36.9	47.3	3.4	46.0
Patterdown Road North	30.6	4.6	15.4	24.0	3.4	11.0
PRC (%)	88.3			87.2		
Cycle Time	90 secs					

11.3.8. The junction is forecast to operate well within capacity in all scenarios during the AM and PM peak hours. There is no material deterioration in performance with the additional traffic associated with the proposed development and the identified committed developments.

Junction 7 – A4 Bath Road / Patterdown Road Mini Roundabout

11.3.9. The results of the capacity assessment for all scenarios are summarised in **Table 11.5.**

Table 11.5: A4 Bath Road / Patterdown Road Mini-Roundabout – Capacity Performance

Movement	AM Peak Hour				PM Peak Hour			
	Q PCUs	Dly (secs)	RFC	Junc Dly (secs)	Q PCUs	Dly (secs)	RFC	Junc Dly (secs)
2026 Base								
Brunel Court	0	0	0	7.42	0	0	0	6.79
A4 Bath Road East	1.2	5.45	0.53		1.1	5.21	0.52	
Patterdown Road	1.3	12.31	0.54		0.8	9.68	0.44	
A4 Bath Road West	0.9	6.89	0.46		1.1	7.39	0.53	
2031 Base								
Brunel Court	0	0	0	8.22	0	0	0	7.38
A4 Bath Road East	1.4	5.81	0.56		1.3	5.62	0.55	
Patterdown Road	1.6	14.23	0.59		1	10.63	0.48	
A4 Bath Road West	1	7.42	0.49		1.3	8.03	0.56	
2031 Base + Development								
Brunel Court	0	0	0	8.92	0	0	0	7.63
A4 Bath Road East	1.4	5.91	0.56		1.4	5.87	0.57	
Patterdown Road	2	16.19	0.64		1.1	11.06	0.5	
A4 Bath Road West	1.1	7.7	0.5		1.3	8.16	0.56	

11.3.10. The junction is forecast to operate well within capacity in all scenarios during the AM and PM peak hours. There is no material deterioration in performance with the proposed development and with the additional traffic associated with the proposed development and the identified committed developments.

Junction 18 – Lackham Roundabout

11.3.11. The results of the capacity assessment for all scenarios are summarised in **Table 11.6.**

Table 11.6: Lackham Roundabout – Capacity Performance

Movement	AM Peak Hour				PM Peak Hour			
	Q PCUs	Dly (secs)	LOS	Junc Dly (secs)	Q PCUs	Dly (secs)	LOS	Junc Dly (secs)
2026 Base								
A350 South	7.1	18.34	0.82	16.81	3.1	9.37	0.65	11.73
A350 West	2.9	16.07	0.71		3.4	15.89	0.71	
Patterdown Road	1.7	13.1	0.55		1.3	11.44	0.52	
Wiltshire College	0	0	0		0	0	0	
2031 Base								
A350 South	9.5	23.51	0.86	21.56	3.9	11.52	0.71	14.11
A350 West	4.8	22.31	0.76		3.9	19.16	0.8	
Patterdown Road	1.9	14.56	0.59		1.4	12.63	0.54	
Wiltshire College	0	0	0		0	0	0	
2031 Base + Development								
A350 South	9.4	25.83	0.89	21.56	4.5	11.89	0.7	14.72
A350 West	4.5	19.69	0.78		5	20.17	0.79	
Patterdown Road	2.2	13.97	0.58		1.8	12.69	0.56	
Wiltshire College	0	0	0		0	0	0	

11.3.12. The junction is forecast to operate well within capacity in all scenarios during the AM and PM peak hours. There is no material deterioration in performance with the additional traffic associated with the proposed development and the identified committed developments.

Site Access

11.3.13. The results of the capacity assessment for the '2028 Base + Development' and the '2028 Sensitivity Test' are summarised in **Table 11.7**.

Table 11.7 Site Access – Capacity Performance

Movement	AM Peak Hour				PM Peak Hour			
	Q PCUs	Dly (secs)	RFC	Junc Dly (secs)	Q PCUs	Dly (secs)	RFC	Junc Dly (secs)
2031 + Dev								
Stream B-AC	0.3	9.75	0.24	1.3	0.1	8.41	0.1	0.92
Stream C-B	0	6.8	0.05		0.1	7.39	0.13	
Note: A - Patterdown Road (N), B - Site Access, C – Patterdown Road (S)								

11.3.14. The junction is forecast to operate well within capacity in both future scenarios during the AM and PM peak hours.

12. CONSTRUCTION IMPACT

12.1. Introduction

12.1.1. The anticipated impact of the construction traffic associated with the proposed development has been assessed based on experience on other comparable schemes.

12.1.2. Throughout the construction of the proposed development, various plant, equipment and materials will need to be transported to/from the site.

12.1.3. The related construction traffic will comprise two principal forms. Firstly, workforce-related traffic will comprise the arrival/departure of the workforce associated with the development of the site. Secondly, delivery-related traffic will comprise traffic associated with deliveries, plant movements, and material movements for export/import of materials.

12.2. Workforce Related

12.2.1. Typically, site hours demand the workforce to arrive/depart outside of peak hours, and as such this element of construction traffic will have minimal impact during peak hour.

12.2.2. The site will deliver approximately 100 dwellings per year. Typically for a buildout of 100 dwellings per annum there would be an average daily workforce of 50 staff. This number of construction workers is not expected to generate the same number of vehicle trips as many workers travel together in vans or cars.

12.2.3. In addition, the total movements associated with the full residential development will be greater than the number of workforce-related movements, and therefore these movements will present less onerous traffic conditions.

12.3. Delivery Related

12.3.1. Regarding delivery-related traffic, deliveries and earth-moving operations can be managed. Planning conditions may be secured to restrict deliveries to outside of peak hours, and to designated routes.

12.3.2. An earthworks strategy will aim to retain as much material as possible on site.

12.3.3. A Construction Traffic Management Plan (CTMP), which will set out the hours of operation and maximum vehicle movements, will be prepared and agreed with relevant consultees before the commencement of construction work. This strategy will aim to reduce conflicts with nearby sensitive receptors.

12.3.4. Similar to above an estimate for HGV movements for 100 houses per annum is seven HGV deliveries equating to 14 daily HGV movements.

12.4. Construction Traffic Management Plan

12.4.1. The LHA is expected to request a Construction Traffic Management Plan (CTMP) to control the construction stage of the development. As well as managing routes and delivery times the CTMP will set out compound details, vehicle washing, road cleaning and other items.

13. TRANSPORT MITIGATION

13.1.1. The Land East of Showell Farm development proposes extensive integrated mitigation measures that will lower external vehicle trips and increase use of sustainable modes of transport leading to the development producing a lower level of emissions and aiding climate control. These integrated measures include:

- Framework Travel Plan;
- Potential electric bike hire and electric vehicle hire;
- Bus laybys on Patterdown Road and a contribution towards the implementation / extension of a bus service;
- Active travel link alongside Patterdown Road and a parallel crossing linking into the existing Patterdown Road / Rowden Gate active travel infrastructure; and
- Active travel links to the adjacent neighbourhood communities enabling integration between the existing and future communities and enabling access to Chippenham railway station and Chippenham town centre.

13.1.2. **Section 10** sets out that the proposed development, when considered with committed development, will not impact on the operation of existing junctions with the exception of the western arm of the Chequers Roundabout. An increase to the flare length on the western arm is proposed to mitigate this impact with the proposal offering improvements to the existing operation of the junction.

14. SUMMARY AND CONCLUSIONS

14.1. Summary

14.1.1. This TA has been prepared in regard to a residential-led development for up to 400 dwellings, a Local Centre comprising up to 675sq m of local retail, Commercial business and service uses (Use Class E) on Land East of Showell Farm, Chippenham. The site is located, as the crow flies, approximately 2.6km south of Chippenham town centre. The development benefits from being in close proximity to and forms a natural extension to the committed southern expansion of Chippenham.

14.1.2. A comprehensive review of the sustainability credentials of the site, encompassing a review of accessibility to existing facilities and services in Chippenham and proposed facilities within the development and the surrounding permitted developments, as well as opportunities for journeys to and from the site to be made by sustainable means, has been undertaken. This has identified that a range of day-to-day facilities are within walking and cycling distance of the site, accessible via the proposed and existing pedestrian / cyclist network.

14.1.3. The Site proposes, a mixed-use development in proximity to an area of committed growth and investment, where new employment and local retail, education and community facilities are being delivered. This supports a sustainable development where the majority of everyday journeys can be undertaken within the immediate vicinity by sustainable modes.

14.1.4. The site will deliver active travel routes within the site providing links to the existing and proposed upgrades external to the site. The site will deliver an active travel route alongside Patterdown Road.

14.1.5. Additionally, the site has the potential to deliver sustainable travel measures (e.g. electric bike hire, electric vehicle hire, delivery lockers) to increase access to sustainable modes thereby encouraging a reduction of trips to/from the site by private car.

14.1.6. Currently there is no regular bus service on Patterdown Road. The development proposes to undertake a contribution of £428 per dwelling (index linked) towards a bus service. This contribution is the same as the obligations for the Rowden Park and Showell Nurseries developments and can be pooled to deliver a regular bus service to serve all three sites or to extend / improve the frequency of the 44H bus service.The proposed development will construct bus laybys on either side of Patterdown Road in the vicinity of the local centre; the provision of the bus stops will enable any future bus services to U-turn at the Lackham roundabout.

14.1.7. A robust Travel Plan is proposed to inform residents of the sustainable transport options available to reduce single occupancy car journeys and the benefits to individuals and the environment of undertaking journeys by active modes or public transport.

14.1.8. The access strategy proposes a priority junction with a right-turn ghost island formed with the B4528 Patterdown Road. Visibility splays of 2.4m x 120m, suitable for the 40mph speed limit, can be delivered within the existing highway boundary. The site access will be supported by an emergency access provided via a proposed shared use path to the north of the access.

14.1.9. The vehicular access on Patterdown Road will provide access for pedestrians and cyclists via shared use cycleways on either side of the carriageway. In addition, to the north of the vehicular access, a shared use path will provide a segregated route for pedestrians and cyclists.

14.1.10. The two Public Rights of Way that route through the Site will be accommodated on their existing alignment. The western footpath (LAC09) will route within the proposed residential development and will be upgraded to a 3m shared use cycleway with a consolidated surface suitable for use within its future environment. The eastern footpath (LAC039) will be routed through natural green space and will provide a 3m shared use cyclepath formed from hoggin.

14.1.11. The vehicle trip generation of the proposed development has been forecast based on trip rates derived from TRICS and distributed / assigned onto the study area network based on analysis of 2011 Census data. Junction capacity assessments have been undertaken using industry-standard modelling software, examining a 2031 assessment year, 'Base' (includes traffic growth and committed developments), 'Base + Development' (as per the 'Base' plus proposed development) scenarios.

14.1.12. The modelling has demonstrated that all existing off-site junctions will operate well within capacity in all future assessment scenarios during the AM and PM peak hours with the exception of the western arm of the Chequers Roundabout. An increase to the flare length on the western arm is proposed to mitigate this impact with the proposal offering improvements to the existing operation of the junction.

14.1.13. Construction impacts will be managed through a CTMP or similar document. An FTP has been prepared and sets an overarching strategy for sustainable transport to be adopted across the development. The core aim of the FTP is to have a positive influence on the travel behaviours of all users of the development by maximising opportunities for trips to be made using sustainable modes.

14.2. Conclusions

14.2.1. This TA has demonstrated that:

- The site is accessible for non-car modes, with links to existing / proposed facilities available via walking and cycling modes and the ability to deliver a suitable public transport service via combined s106 contributions and the provision of new bus stops;
- Safe and suitable access can be provided to / from the site for all users; and
- The impact of the proposed development will not be 'severe', meeting the requirements of local policy and the NPPF. The application is accompanied by an FTP that will promote the uptake of sustainable travel opportunities.

14.2.2. It can therefore be concluded that there are no transport reasons why the proposed development should not be granted planning permission.

APPENDICES

APPENDIX A – CHIPPENHAM CYCLE MAP

Base map data © OpenStreetMap contributors. Additional data by Wiltshire Council
© Crown copyright and database rights 2013 Ordnance Survey 100049050
Cartography by Steer Davies Gleave August 2013

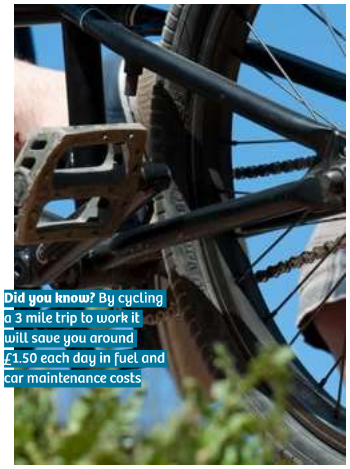
Scale 1:10,000

0	400	800	1,200 Metres
0	5	10	15 minutes walk
0	1.5	3	4.5 minutes cycle



Why cycle?

Connecting Wiltshire is trying to encourage more people to cycle, whether it be to work, school, shopping or just for leisure. Not only can it improve your health and fitness, help the environment and beat congestion, but it can also save you money.



Cycling is a great way to introduce some exercise into your daily routine. It can also help reduce stress and is a great way to clear your head at the end of the day.

Code of conduct for shared use paths

When you are cycling, please:

- Give way to walkers and wheelchair users and leave them plenty of room.
- Take care around horse riders especially when approaching from behind.
- Be prepared to slow down or stop.
- Don't cycle at excessive speed.
- Be careful at junctions, bends, entrances or any other places where people could appear without warning.
- Don't assume that everyone can see or hear you.
- Use your bell or call out. Don't surprise people. Acknowledge those who give way to you.
- Keep to your side of any dividing line.
- Use lights when it gets dark or in dull weather. Carry a spare set of lights or batteries with you.

When you are walking, please:

- Listen for bells. Bells are not an order for you to get out of the way. They are to make you aware that cyclists are looking for a safe opportunity to pass.
- Allow cyclists to pass when it's safe. Remember cyclists need time to brake and stop.
- Keep your dog under control.
- Keep to your side of any dividing line. Please be tolerant where space is limited.

Keep your bike safe

- Buy a good lock and make sure you always lock the frame of the bike to the parking stand.
- Take removable lights with you.
- A good rule of thumb is that your lock should cost around 10% of the value of your bike, or to look out for 'Sold Secure' ratings.
- You can insure your bike on your home insurance policy or buy specialist cycle cover.
- Make sure you record your cycle frame number which will help you recover it if it's stolen.

Bike Maintenance

There are many friendly bike shops in Wiltshire who can help you keep your bike running smoothly.

Learning some basic bike maintenance is useful for keeping your bike in good condition:

Every time you use your bike
- Check the air pressure in your tyres and pump up if needed.
- Make sure your brakes are working

Weekly (for frequent cyclists)
- Oil your chain

Less frequently
- Oil any moving parts of the bike. Take care not to get oil on your brake pads or wheel rims.
- Check your brake pads for wear. They should contact squarely with the wheel rim not the tyre.
- Check the frame for damage and make sure any bolts are securely tightened.

It is worth making sure you carry some basic equipment with you on any rides such as repair patches, tyre levers and a pump and valve.

Leisure routes

Several of Sustrans' National Cycle Network (NCN) routes pass through Wiltshire:

NCN 4 is a long distance route between London and Fishguard via Reading, Bath, Bristol, Newport, Swansea, Carmarthen, Tenby, Haverfordwest and St. Davids.

NCN 24 will run from Bath through Radstock and Frome in Somerset, then Warminster and Salisbury to join with NCN 23 at Eastleigh in Hampshire

NCN 45 will connect Salisbury in Wiltshire with Chester in Cheshire, via Swindon, Cirencester, Gloucester, Worcester and Whitchurch

There are also many local routes. The Wiltshire Cycleway is a circular route passing through many of Wiltshire's towns.

Look for the blue route signs or visit **www.connectingwiltshire.co.uk**



Time/Distance/Calorie Counter

The times and distances to the right are based on following the recommended cycle routes where possible and with a cycling speed of 10mph (this is an unhurried speed on the flat). If you cycle quicker, your journey time can be even shorter and you can burn more calories.

For time, distance, calorie information and gradient profiles for other cycle journeys, use our journey planner at **www.connectingwiltshire.co.uk**

	Town centre / Tourist Information	Rail station / Wiltshire College	Wiltshire Council Office (Monkton Park) / Olympiad Leisure Centre	Bus station / Library	Swindon & Wiltshire History Centre	Methuen Park	Bumpers Farm	Langley Park	Hardenhuish School / Sheldon School	Abbeyfield School
Town centre / Tourist Information										
Rail station / Wiltshire College	3 mins 0.50 miles 14 Cals									
Wiltshire Council Office (Monkton Park) / Olympiad Leisure Centre	3 mins 0.50 miles 14 Cals	<1.5 mins <0.25 miles <7 Cals								
Bus station / Library	1.5 mins 0.25 miles 7 Cals	4.5 mins 0.75 miles 21 Cals	3 mins 0.50 miles 14 Cals							
Swindon & Wiltshire History Centre	4.5 mins 0.75 miles 21 Cals	1.5 mins 0.25 miles 7 Cals	1.5 mins 0.25 miles 7 Cals	6 mins 1.0 miles 28 Cals						
Methuen Park	13.5 mins 2.25 miles 63 Cals	13.5 mins 2.25 miles 63 Cals	15 mins 2.5 miles 70 Cals	15 mins 2.5 miles 70 Cals	18 mins 3.0 miles 84 Cals					
Bumpers Farm	10.5 mins 1.75 miles 49 Cals	10.5 mins 1.75 miles 49 Cals	12 mins 2.0 miles 56 Cals	12 mins 2.0 miles 56 Cals	15 mins 2.5 miles 70 Cals	10.5 mins 1.75 miles 49 Cals				
Langley Park	7.5 mins 1.25 miles 35 Cals	7.5 mins 1.25 miles 35 Cals	9 mins 1.50 miles 42 Cals	10.5 mins 1.75 miles 49 Cals	10.5 mins 1.75 miles 49 Cals	16.5 mins 2.75 miles 77 Cals	12 mins 2.0 miles 56 Cals			
Hardenhuish School / Sheldon School	7.5 mins 1.25 miles 35 Cals	9 mins 1.50 miles 42 Cals	9 mins 1.50 miles 42 Cals	9 mins 1.50 miles 42 Cals	7.5 mins 1.25 miles 35 Cals	10.5 mins 1.75 miles 49 Cals	6 mins 1.0 miles 28 Cals	10.5 mins 1.75 miles 49 Cals		
Abbeyfield School	9 mins 1.50 miles 42 Cals	10.5 mins 1.75 miles 49 Cals	9 mins 1.50 miles 42 Cals	9 mins 1.50 miles 42 Cals	10.5 mins 1.75 miles 49 Cals	19.5 mins 3.25 miles 91 Cals	19.5 mins 3.25 miles 91 Cals	15 mins 2.5 miles 70 Cals	18 mins 3.0 miles 84 Cals	





Travel made simple

Connecting Wiltshire

Cycle map

Chippenham

Why not try walking?

Walking is a great alternative to many forms of motorised transport. It is a terrific way to explore Wiltshire's many urban centres and take in the sights and sounds on foot. It can leave you feeling refreshed and energised before starting work and it also offers you valuable time to relax and unwind after a hard day in the office.

There are other benefits associated with walking; some of these might encourage you to start walking:

- Guaranteed arrival time
- No parking problems
- Time for you to relax and unwind
- Reduces congestion, good for the environment and your local area
- It is free

How can I make walking more fun?

- Find someone to walk with so you can chat as you walk
- Use an MP3 player so you can listen to your favourite music or podcasts as you go
- Use a pedometer to measure your average daily steps then steadily try to increase the amount

How can I fit walking into my day?

Walking is a great way of taking more exercise each day without having to greatly alter your daily routine. Have you considered….

- Walking to the shops
- Taking a regular walk with a friend
- Leaving the car behind for short journeys
- Walking the kids to school
- Getting off the bus a stop early and walking the rest of the journey
- Using the stairs instead of the lift
- Going for a stroll with family or friends after dinner

Do you only live a couple of miles from work?

Not sure how far it really is? Why not visit **www.connectingwiltshire.co.uk** to help plan your route, provide a journey time and distance and tell you how many calories you can burn on the way.



Plan your journey and find information for all travel into and around Wiltshire at **www.connectingwiltshire.co.uk.** You can look up leisure cycling routes, find local cycling groups and cycle training, report problems on the roads, or find out about taking your bike on trains.

www.connectingwiltshire.co.uk
connectingwiltshire@wiltshire.gov.uk

www.connectingwiltshire.co.uk

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www.facebook.com/connectingwiltshire

Connecting Wiltshire
Travel made simple

Wiltshire Council

This leaflet has been produced by Steer Davies Gleave on behalf of Wiltshire Council.

Updated by Wiltshire Council - March 2015

APPENDIX B – LAND USE PARAMETER PLAN AND ILLUSTRATIVE MASTERPLAN

N

B4528

A350

0 125m

Site Boundary (29.97ha)

Other Land in the Applicants Control

Proposed Land Uses

Total Residential Development - 10.70ha

Residential Development
Ridge heights up to 12.5m (3 Storeys) from proposed ground level (excluding point features)

Residential Development
Heights up to 10m (2 Storeys) from proposed ground level (excluding point features)

Local Centre - 0.2ha
Ridge height up to 12.5m (excluding point features)

Retained Shelter Shed and Enclosure Wall

Green Infrastructure

Open Space, which includes:
Amenity Green Space, Parks, Sport and Recreation, Play Space, and Allotments

Natural Green Space

Existing Vegetation to be Retained
Subject to Arboricultural Impact Assessment

Indicative Location of Swale

Indicative Location of Attenuation Feature

Indicative Location for Community Gardens/Allotment

Indicative Location for Formal Area of Play

Indicative Location for Informal Area of Play

Indicative Location for Orchard Planting

Access and Movement

Proposed Vehicular, Cycle and Pedestrian Access

Proposed Emergency Vehicle, Pedestrian and Cycle Access

Potential Pedestrian/Cycle Access

Indicative Locations for Vehicular Access Between Development Parcels

Corridor of Retained Land to Facilitate Field Access

Existing Public Right of Way Retained

client
Hallam Land

project title
Land East of Showell Farm, Chippenham

drawing title
Parameter Plan

date	**15 APRIL 2026**	drawn by	**NBo**
drawing number	**edp2272_d024ab**	checked	**PWi**
scale	**1:2,500 @ A2**	QA	**OSh**

the environmental dimension partnership

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- Site Boundary (29.97ha)
- Other Land in the Applicants Control
- Proposed Vehicular, Cycle and Pedestrian Access
- Proposed Emergency Vehicle, Pedestrian and Cycle Access
- Pedestrian/Cycle Access
- Existing Vegetation
- Proposed Tree Planting
- Proposed Scrub Planting
- Meadow Planting
- Amenity Green Space
- Mown Path/Nature Trail
- Footpath
- Sustainable Drainage Feature
- Play Provision
- Primary Street
- Secondary Street
- Shared Surface/Private Drive
- Public Square
- Allotment
- Orchard

client
Hallam Land Management

project title
Land East of Showell Farm, Chippenham

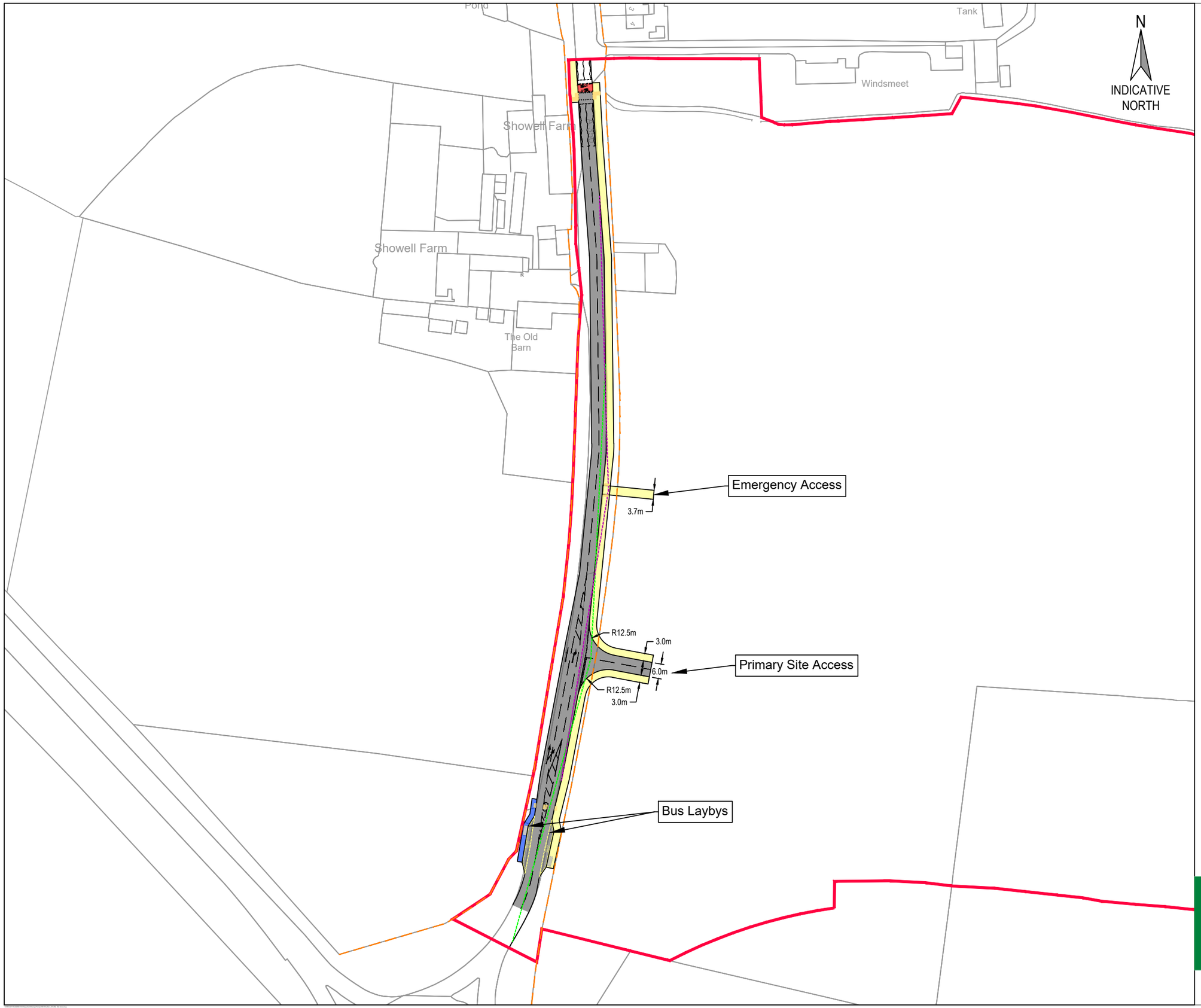
drawing title
Illustrative Site Layout

date	**17 APRIL 2026**	drawn by	**NBo**
drawing number	**edp2272_d066**	checked	**PWi**
scale	**1:2,500 @ A2**	QA	**OSh**

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APPENDIX C – SITE ACCESS PRELIMINARY DESIGN



LEGEND

- Site Boundary
- 2.4m x 120m Visibility Splays (Emergency Access)
- 2.4m x 120m Visibility Splays (Primary Access)
- Highway Boundary
- Carriageway
- Proposed Shared Pedestrian and Cyclist Path
- Proposed Pedestrian Path

Rev	Date	Description	By	Apvd
P5	14.05.26	Amendments	BT	AW
P4	14.05.26	Amendments	BT	AW
P3	12.05.26	Amendments	BT	AW
P2	21.04.26	Amendments	BT	AW
P1	08.04.25	Preliminary issue	DL	AW

PROJECT:
CHIPPENHAM

TITLE:
SITE ACCESS

CLIENT:
HALLAM LAND MANAGEMENT

SCALE@A3:
1:1500

PROJECT REF:
B14133

STATUS:
N/A

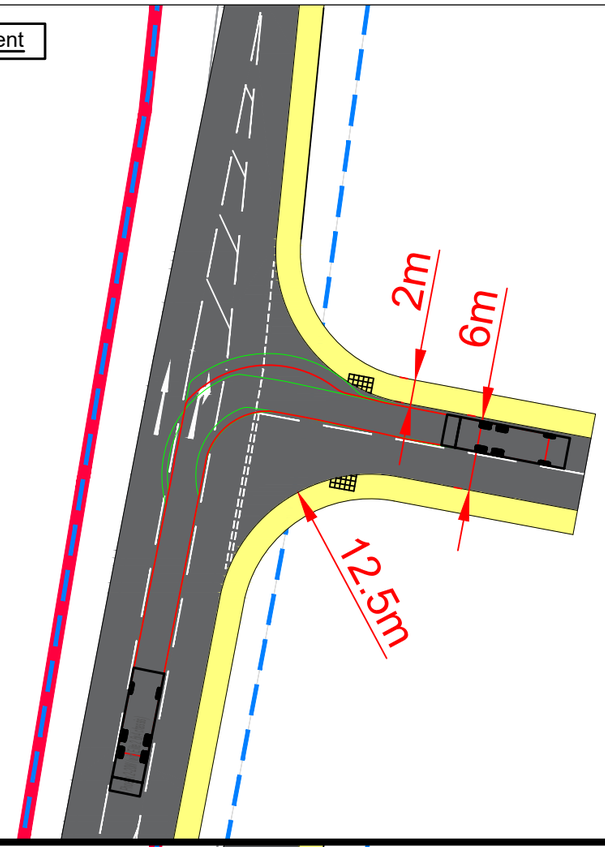
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REV:
P5

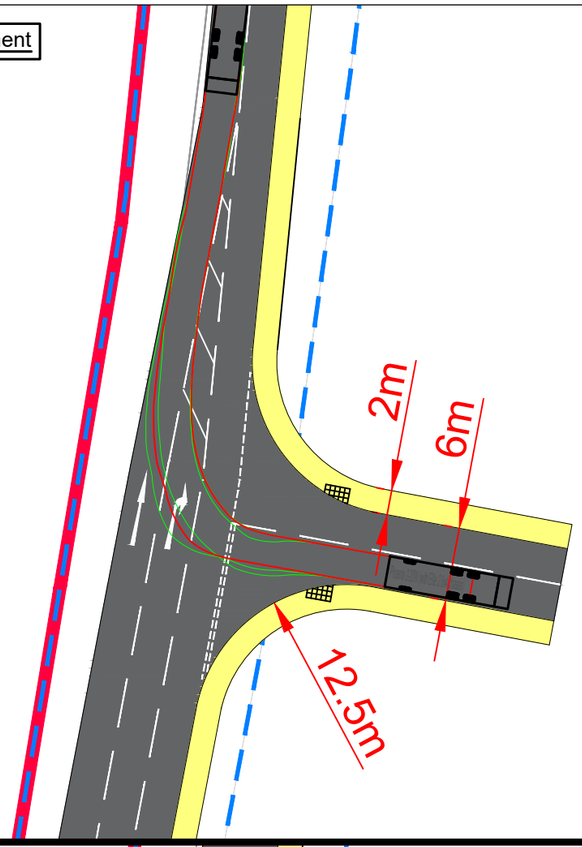
Revision Referencing
P = Preliminary A = Approval T = Tender C = Construction

RIDGE

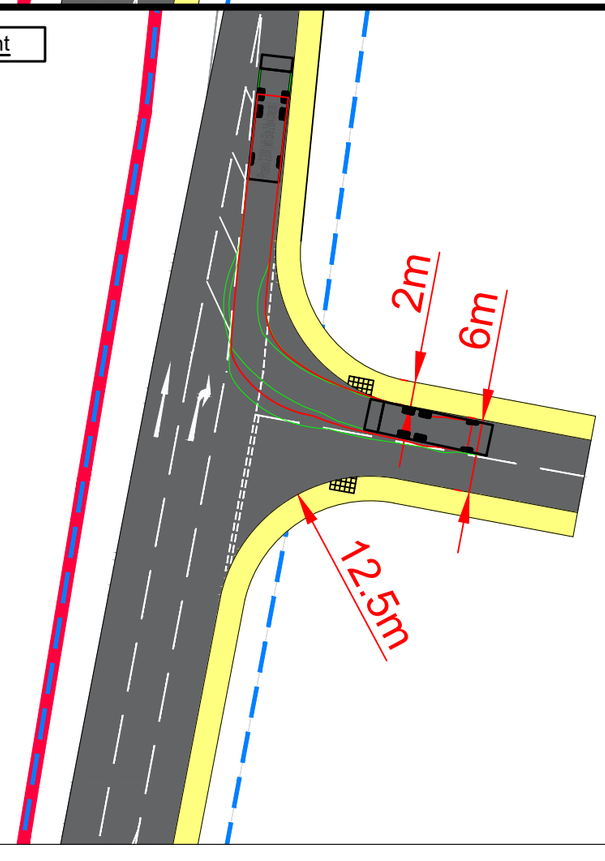
Right-In Movement



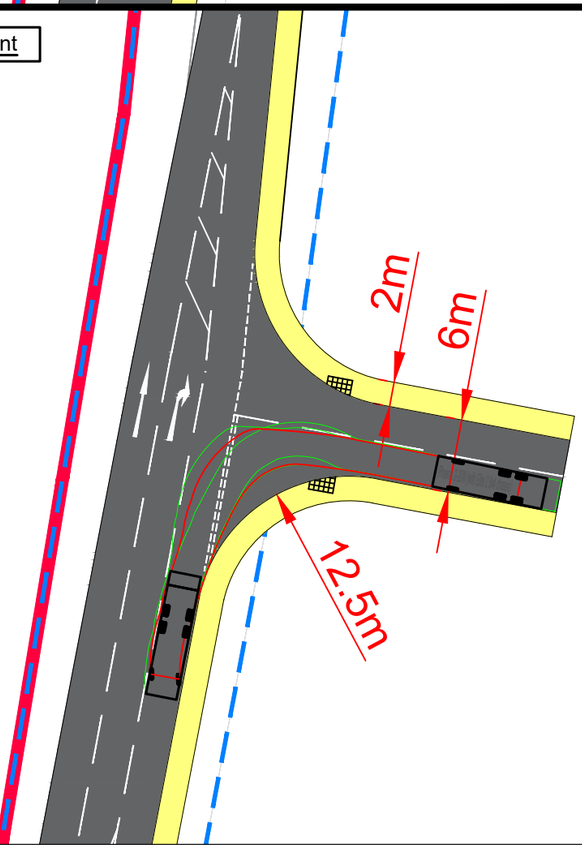
Right-Out Movement

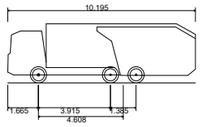


Left-In Movement



Left-Out Movement





Phoenix 2-20W (with Elite 2 6x4 chassis)	
Overall Length	10.195m
Overall Width	2.530m
Overall Body Height	3.205m
Min Body Ground Clearance	0.410m
Track Width	2.500m
Lock to lock time	4.00s
Kerb to Kerb Turning Radius	9.000m

N

INDICATIVE NORTH

Rev	Date	Description	By	Apvd
P2	17.03.23	Red Line Amended	AB	AW
P1	16.12.22	Preliminary Issue	AB	AW

PROJECT:
CHIPPENHAM

TITLE:
REFUSE VEHICLE SWEPT PATH ANALYSIS

CLIENT:
HALLAM LAND MANAGEMENT

SCALE@A3:
NTS

PROJECT REF:
B14133

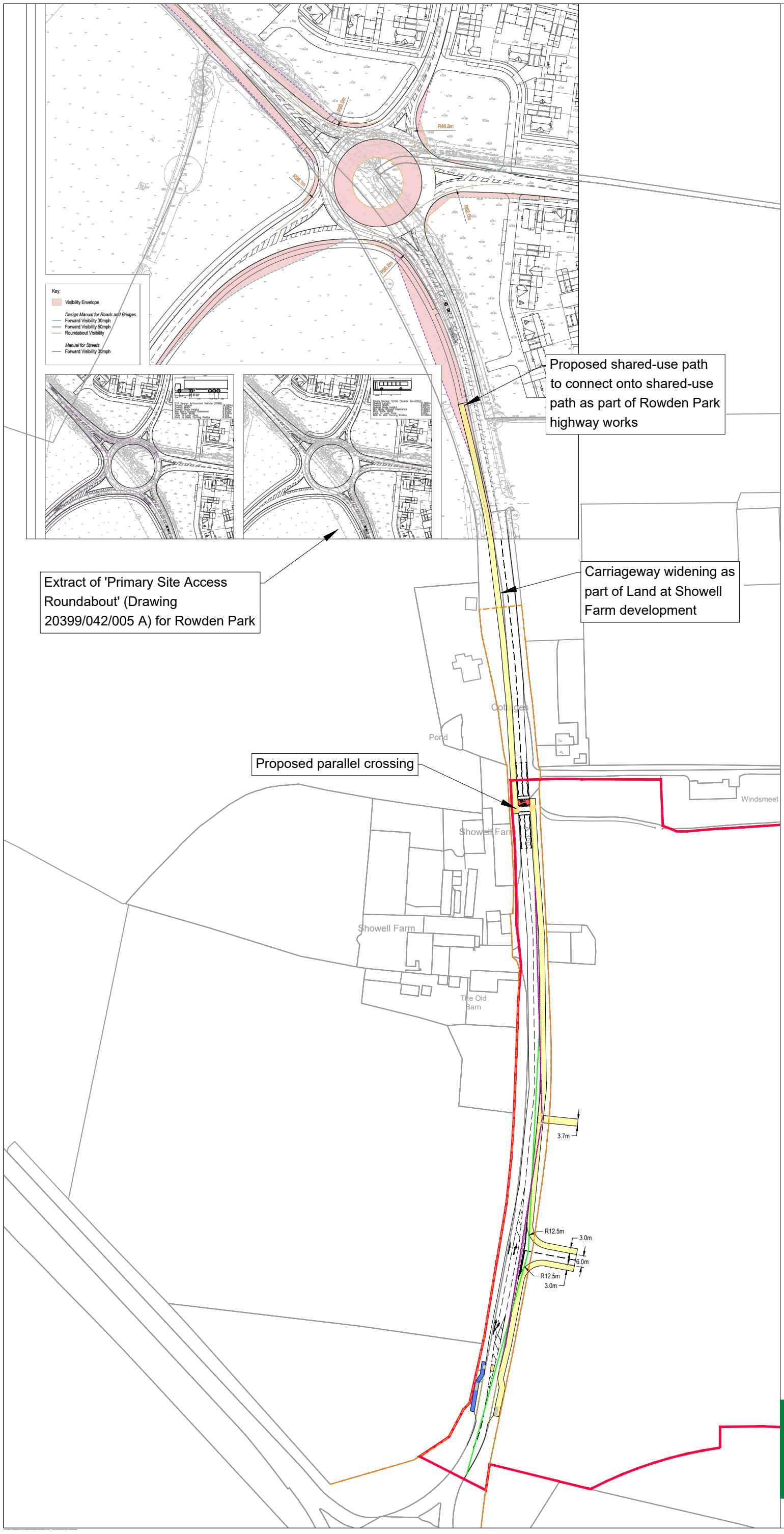
DRAWING No:
013

REV:
P2

Revision Referencing
P = Preliminary A = Approval T = Tender C = Construction

Bristol, Cardiff, Plymouth, Winchester
St James Court, St James Parade, Bristol BS1 3LH
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+44(0)117 922 6266

APPENDIX D – OFF SITE ACTIVE TRAVEL PRELIMINARY DESIGN



LEGEND

- Site Boundary
- 2.4m x 120m Visibility Splays
- 2.4m x 120m Visibility Splays (Emergency Access)
- Highway Boundary
- Proposed Shared Pedestrian and Cyclist Path

N

INDICATIVE NORTH

Rev	Date	Description	By	Apvd
P4	15.05.26	Amendments	BT	AW
P3	12.05.26	Amendments	BT	AW
P2	26.03.26	Amendments	BT	AW
P1	30.01.24	Preliminary issue	BT	AW

PROJECT:
CHIPPENHAM

TITLE:
EXTENT OF PROPOSED SHARED-USE PATH

CLIENT:
HALLAM LAND MANAGEMENT

SCALE@A3:
1:2000

PROJECT REF:
B14133

STATUS:
N/A

DRAWING No:
016

REV:
P4

Revision Referencing
P = Preliminary A = Approval T = Tender C = Construction

RIDGE

APPENDIX E – ACTIVE TRAVEL FORECAST

Summary

Active Travel Trip Generation

Hour Commencing	Residential (400 dwellings)			Employment (2,500sqm)			Total		
	In	Out	Total	In	Out	Total	In	Out	Total
07:00	7	15	22	0	0	0	7	15	22
08:00	14	44	58	1	0	1	15	44	59
09:00	12	18	30	1	0	1	13	18	31
10:00	12	12	24	0	0	1	12	13	25
11:00	13	12	25	0	0	1	13	12	25
12:00	16	8	24	0	1	1	17	8	25
13:00	12	13	25	1	1	2	13	14	27
14:00	16	13	30	0	1	1	17	14	31
15:00	38	18	56	0	0	1	38	18	56
16:00	24	14	38	0	1	1	24	15	39
17:00	21	8	29	0	1	1	21	9	30
18:00	12	20	32	0	0	0	12	21	32
Total	**198**	**195**	**392**	**5**	**6**	**11**	**203**	**201**	**404**

Active Travel Trips by Route

Hour Commencing	Number of Trips by Route				
	400	A4, west of Brunel Court (via Rowden Park or Saltersford Lane)	Avon Valley Walk (via Rowden Park)	Within Proposed Development / Rowden Park	Total
07:00	1	7	11	2	21
08:00	1	21	18	18	58
09:00	0	5	19	7	31
10:00	0	3	17	5	25
11:00	0	3	16	6	25
12:00	0	3	17	5	25
13:00	0	4	18	5	27
14:00	0	5	18	8	30
15:00	0	18	21	17	56
16:00	1	7	25	5	38
17:00	0	5	20	4	29
18:00	0	5	23	4	32
Total	**4**	**86**	**221**	**85**	**396**
Max	**1**	**21**	**25**	**18**	**58**

0%

0%

Residential Land Use: Active Travel Forecasts

Trip Rates (per dwelling)

Hour Commencing	Walking			Cycling			Active Travel Combined		
	In	Out	Total	In	Out	Total	In	Out	Total
07:00	0.016	0.034	0.050	0.001	0.003	0.004	0.017	0.037	0.054
08:00	0.034	0.107	0.141	0.001	0.003	0.004	0.035	0.110	0.145
09:00	0.030	0.044	0.074	0.001	0.001	0.002	0.031	0.045	0.076
10:00	0.030	0.030	0.060	0.000	0.001	0.001	0.030	0.031	0.061
11:00	0.033	0.026	0.059	0.000	0.003	0.003	0.033	0.029	0.062
12:00	0.035	0.016	0.051	0.006	0.003	0.009	0.041	0.019	0.060
13:00	0.028	0.031	0.059	0.003	0.001	0.004	0.031	0.032	0.063
14:00	0.038	0.032	0.070	0.003	0.001	0.004	0.041	0.033	0.074
15:00	0.093	0.044	0.137	0.001	0.001	0.002	0.094	0.045	0.139
16:00	0.059	0.034	0.093	0.001	0.001	0.002	0.060	0.035	0.095
17:00	0.046	0.017	0.063	0.006	0.003	0.009	0.052	0.020	0.072
18:00	0.026	0.049	0.075	0.003	0.002	0.005	0.029	0.051	0.080
Total	**0.468**	**0.464**	**0.932**	**0.026**	**0.023**	**0.049**	**0.494**	**0.487**	**0.981**

Note: Based on multi-modal trip rates derived from TRICS.

Trip Generation

No. of Dwellings: 400

Hour Commencing	Active Travel Combined		
	In	Out	Total
07:00	7	15	22
08:00	14	44	58
09:00	12	18	30
10:00	12	12	24
11:00	13	12	25
12:00	16	8	24
13:00	12	13	25
14:00	16	13	30
15:00	38	18	56
16:00	24	14	38
17:00	21	8	29
18:00	12	20	32
Total	**198**	**195**	**392**

Trips by Purpose

Trip Start Time By Purpose

Hour Commencing	Trip Purpose								
	Commuting	Business	Education	Escort Education	Shopping	Other Work, Other Escort and Personal Business	Visiting Friends / Entertainment / Sport	Holiday / Day trip / Other	Total
07:00	46%	3%	12%	4%	2%	15%	3%	13%	100%
08:00	16%	2%	28%	26%	4%	15%	3%	6%	100%
09:00	11%	3%	3%	7%	23%	22%	13%	19%	100%
10:00	5%	3%	1%	0%	31%	23%	14%	23%	100%
11:00	5%	2%	1%	1%	34%	22%	14%	20%	100%
12:00	5%	3%	1%	1%	29%	21%	17%	22%	100%
13:00	9%	3%	1%	1%	26%	22%	15%	22%	100%
14:00	9%	2%	5%	14%	17%	17%	14%	21%	100%
15:00	6%	1%	26%	22%	10%	13%	10%	12%	100%
16:00	21%	2%	4%	4%	13%	20%	16%	20%	100%
17:00	26%	2%	3%	3%	10%	21%	15%	21%	100%
18:00	19%	1%	1%	0%	19%	16%	24%	20%	100%

Note: Based on Table NTS0502 of the National Travel Survey (2021).

No. of Active Travel Trips by Purpose

Hour Commencing	Active Travel Combined								
	Commuting	Business	Education	Escort Education	Shopping	Other Work, Other Escort and Personal Business	Visiting Friends / Entertainment / Sport	Holiday / Day Trip / Other	Total
07:00	10	1	3	1	0	3	1	3	22
08:00	9	1	16	15	2	9	2	4	58
09:00	3	1	1	2	7	7	4	6	30
10:00	1	1	0	0	7	6	3	6	24
11:00	1	0	0	0	8	6	4	5	25
12:00	1	1	0	0	7	5	4	5	24
13:00	2	1	0	0	7	5	4	6	25
14:00	3	1	2	4	5	5	4	6	30
15:00	4	1	14	12	6	7	5	6	56
16:00	8	1	2	1	5	8	6	8	38
17:00	7	0	1	1	3	6	4	6	29
18:00	6	0	0	0	6	5	8	6	32
Total	**56**	**8**	**40**	**37**	**64**	**72**	**49**	**67**	**392**
Proportion	**14%**	**2%**	**10%**	**10%**	**16%**	**18%**	**13%**	**17%**	**100%**

Trip Distribution and Assignment

Distribution / Assignment Assumptions

Purpose	Destination	Proportion	Route
Commuting / Business	Land uses within Proposed Development / Rowden Park	0%	Within Proposed Development / Rowden Park
	Based on 2011 Census 'Method of travel to work' data	88%	See 'Residential Land Use: Census Analysis' tab
Education	Hardenhuish / Sheldon School	100%	A4, west of Brunel Court (via Rowden Park or Saltersford Lane)
Escort Education	Proposed Primary School within Rowden Park	100%	Within Proposed Development / Rowden Park
Shopping	Chippenham Town Centre	25%	Avon Valley Walk (via Rowden Park)
	Proposed Local Centre within Proposed Development / Rowden Park	50%	Within Proposed Development / Rowden Park
	Sainsbury's Retail Park / Metheun Park	25%	A4, west of Brunel Court (via Rowden Park or Saltersford Lane)
Other Work, Other Escort and Personal Business	Chippenham Town Centre	80%	Avon Valley Walk (via Rowden Park)
	Proposed Local Centre within Proposed Development / Rowden Park	20%	Within Proposed Development / Rowden Park
Visiting Friends / Entertainment / Sport	Chippenham Town Centre	100%	Avon Valley Walk (via Rowden Park)
Holiday / Day Trip / Other	Travel via Railway Station	100%	Avon Valley Walk (via Rowden Park)

Assignment Proportions by Purpose

Trip Purpose	Proportion of Trips by Route			
	A4, east of Brunel Court (via Rowden Park)	A4, west of Brunel Court (via Rowden Park or Saltersford Lane)	Avon Valley Walk (via Rowden Park)	Within Proposed Development / Rowden Park
Commuting / Business	5%	41%	42%	0%
Education		100%		
Escort Education				100%
Shopping		25%	25%	50%
Other Work, Other Escort and Personal Business			80%	20%
Visiting Friends / Entertainment / Sport			100%	
Holiday / Day Trip / Other			100%	

Note: See 'Residential Development: Census Analysis' tab for analysis for 'Commuting and Business' trips.

Number of Trips by Route

Hour Commencing	Number of Trips by Route				
	A4, east of Brunel Court (via Rowden Park)	A4, west of Brunel Court (via Rowden Park or Saltersford Lane)	Avon Valley Walk (via Rowden Park)	Within Proposed Development / Rowden Park	Total
07:00	0	7	11	2	20
08:00	0	21	17	18	57
09:00	0	4	19	7	30
10:00	0	3	16	5	24
11:00	0	3	16	6	25
12:00	0	3	16	5	24
13:00	0	3	17	5	25
14:00	0	4	17	8	29
15:00	0	18	21	17	55
16:00	0	6	25	5	37
17:00	0	5	19	3	28
18:00	0	4	22	4	31
Total	**3**	**82**	**216**	**84**	**385**
Max	**0**	**21**	**25**	**18**	**57**

Residential Land Use: Census Analysis

Export Details

Dataset	WF01BEW - Location of usual residence and place of work (OA level)
Population	All usual residents ages 16 and over in employment the week before the census
Units	Persons
Date	2011

Data

Place of Work (LSOA)	Place of Residence (MSOA)					Proportion	Destination
	Wiltshire 009	Wiltshire 010	Wiltshire 011	Wiltshire 014	Total		
Wiltshire 009A	19	20	15	3	57	1%	Cepen Park North
Wiltshire 009B	32	13	25	6	76	1%	Chippenham Town Centre
Wiltshire 009C	85	47	63	40	235	4%	Greenways Business Park
Wiltshire 009D	161	148	154	143	606	9%	Langley Park
Wiltshire 009E	96	99	44	35	274	4%	Hardenhuish / Sheldon School
Wiltshire 009F	50	20	14	15	99	1%	Chippenham Town Centre
Wiltshire 010A	75	103	53	59	290	4%	Bumpers Farm Industrial Estate
Wiltshire 010B	43	61	45	36	185	3%	Sainsbury's / Metheun Retail Parks
Wiltshire 010C	136	241	149	129	655	10%	Bumpers Farm Industrial Estate
Wiltshire 010D	9	19	8	2	38	1%	Frogwell Primary School
Wiltshire 010E	400	30	5	6	441	7%	Redland Primary School
Wiltshire 010F	9	20	8	4	41	1%	Sheldon Road
Wiltshire 010G	4	13	0	2	19	0%	Queen's Crescent School
Wiltshire 011A	14	10	23	5	52	1%	Lowden Hill Local Centre
Wiltshire 011B	428	410	427	383	1,648	25%	Chippenham Town Centre
Wiltshire 011C	77	87	81	50	295	4%	Chippenham Community Hospital
Wiltshire 011D	37	44	70	65	216	3%	Chippenham Town Centre
Wiltshire 011E	56	52	79	44	231	3%	Monkton Park
Wiltshire 011F	44	107	60	37	248	4%	Bath Road Industrial Estate / Retail Park
Wiltshire 014A	17	16	22	47	102	2%	Pewsham
Wiltshire 014B	13	17	18	94	142	2%	Pewsham
Wiltshire 014C	1	1	4	7	13	0%	Pewsham
Wiltshire 014D	3	0	1	10	14	0%	Pewsham
Wiltshire 014E	2	7	3	16	28	0%	Pewsham
Wiltshire 018A	123	225	140	157	645	10%	Metheun Park
Total	**1,934**	**1,810**	**1,511**	**1,395**	**6,650**	**100%**	

Notes:

1. LSOAs / MSOAs in the Chippenham urban area have been selected. Whilst most of 'Chippenham 018A' lies outside of the Chippenham urban area, it includes a key employment destination on the edge of town, so has been included in the analysis.

2. Within each of the LSOAs, the most likely destination in terms of employment opportunities has been selected.

Destination and Routeing

Destination	Proportion	Route
Bath Road Industrial Estate / Retail Park	4%	A4, west of Brunel Court (via Rowden Park or Saltersford Lane)
Bumpers Farm Industrial Estate	14%	A4, west of Brunel Court (via Rowden Park or Saltersford Lane)
Cepen Park North	1%	A4, west of Brunel Court (via Rowden Park or Saltersford Lane)
Chippenham Community Hospital	4%	A4, east of Brunel Court (via Rowden Park)
Chippenham Town Centre	31%	Avon Valley Walk (via Rowden Park)
Frogwell Primary School	1%	A4, west of Brunel Court (via Rowden Park or Saltersford Lane)
Greenways Business Park	4%	A4, west of Brunel Court (via Rowden Park or Saltersford Lane)
Hardenhuish / Sheldon School	4%	A4, west of Brunel Court (via Rowden Park or Saltersford Lane)
Langley Park	9%	Avon Valley Walk (via Rowden Park)
Lowden Hill Local Centre	1%	A4, east of Brunel Court (via Rowden Park)
Metheun Park	10%	A4, west of Brunel Court (via Rowden Park or Saltersford Lane)
Monkton Park	3%	Avon Valley Walk (via Rowden Park)
Pewsham	4%	Avon Valley Walk (via Rowden Park)
Queen's Crescent School	0%	A4, west of Brunel Court (via Rowden Park or Saltersford Lane)
Redland Primary School	7%	A4, west of Brunel Court (via Rowden Park or Saltersford Lane)
Sainsbury's / Metheun Retail Parks	3%	A4, west of Brunel Court (via Rowden Park or Saltersford Lane)
Sheldon Road	1%	A4, west of Brunel Court (via Rowden Park or Saltersford Lane)
Total	**100%**	

Route Summary (Pre-Internalisation)

Route	Proportion
A4, east of Brunel Court (via Rowden Park)	5%
A4, west of Brunel Court (via Rowden Park or Saltersford Lane)	47%
Avon Valley Walk (via Rowden Park)	48%
Total	**100%**

Route Summary (Post-Internalisation)

Route	Proportion
A4, east of Brunel Court (via Rowden Park)	5%
A4, west of Brunel Court (via Rowden Park or Saltersford Lane)	41%
Avon Valley Walk (via Rowden Park)	42%
Within Proposed Development / Rowden Park	12%
Total	**100%**

Note: Proportion to 'Within Proposed Development / Rowden Park' is as per the internalisation assumption within the Transport Assessment.

Employment Land Use: Active Travel Forecasts

Trip Rates (per 100sqm)

Hour Commencing	Walking			Cycling			Active Travel Combined		
	In	Out	Total	In	Out	Total	In	Out	Total
07:00	0.037	0.037	0.074	0.028	0.000	0.028	0.065	0.037	0.102
08:00	0.116	0.074	0.190	0.088	0.000	0.088	0.204	0.074	0.278
09:00	0.097	0.074	0.171	0.042	0.005	0.047	0.139	0.079	0.218
10:00	0.083	0.097	0.180	0.009	0.000	0.009	0.092	0.097	0.189
11:00	0.056	0.088	0.144	0.009	0.019	0.028	0.065	0.107	0.172
12:00	0.083	0.176	0.259	0.014	0.019	0.033	0.097	0.195	0.292
13:00	0.232	0.208	0.440	0.005	0.009	0.014	0.237	0.217	0.454
14:00	0.111	0.120	0.231	0.009	0.032	0.041	0.120	0.152	0.272
15:00	0.065	0.074	0.139	0.009	0.042	0.051	0.074	0.116	0.190
16:00	0.088	0.116	0.204	0.009	0.032	0.041	0.097	0.148	0.245
17:00	0.107	0.088	0.195	0.000	0.074	0.074	0.107	0.162	0.269
18:00	0.028	0.069	0.097	0.005	0.005	0.010	0.033	0.074	0.107
Total	**1.103**	**1.221**	**2.324**	**0.227**	**0.237**	**0.464**	**1.330**	**1.458**	**2.788**

Note: Based on multi-modal trip rates derived from TRICS.

Trip Generation

Floor Area (sqm) 400

Hour Commencing	Active Travel Combined		
	In	Out	Total
07:00	0	0	0
08:00	1	0	1
09:00	1	0	1
10:00	0	0	1
11:00	0	0	1
12:00	0	1	1
13:00	1	1	2
14:00	0	1	1
15:00	0	0	1
16:00	0	1	1
17:00	0	1	1
18:00	0	0	0
Total	**5**	**6**	**11**

Trip Distribution

Census Export Details

Dataset	WF01BEW - Location of usual residence and place of work (OA level)
Population	All usual residents ages 16 and over in employment the week before the census
Units	Persons
Date	2011

Census Data

Place of Residence (LSOA)	Place of Work (MSOA)					Proportion	Destination
	Wiltshire 009	Wiltshire 010	Wiltshire 011	Wiltshire 014	Total		
Wiltshire 009A	109	86	141	12	348	6%	Cepen Park North
Wiltshire 009B	67	61	121	4	253	4%	Audley Road
Wiltshire 009C	68	52	69	7	196	3%	Greenway Lane
Wiltshire 009D	56	34	120	3	213	4%	Pewhill Park
Wiltshire 009E	63	39	104	4	210	4%	Long Ridings / Ridings Mead
Wiltshire 009F	80	37	101	6	224	4%	John Cole's Park
Wiltshire 010A	37	57	101	12	207	4%	Cepen Park South
Wiltshire 010B	51	86	101	4	242	4%	Cepen Park South
Wiltshire 010C	59	84	114	3	260	5%	Frogwell
Wiltshire 010D	44	66	89	3	202	4%	Frogwell
Wiltshire 010E	45	61	92	7	205	4%	Redland
Wiltshire 010F	60	70	131	5	266	5%	Sheldon Road
Wiltshire 010G	51	63	82	7	203	4%	Queen's Crescent
Wiltshire 011A	45	42	95	7	189	3%	Audley Road
Wiltshire 011B	54	35	116	6	211	4%	Chippenham Town Centre
Wiltshire 011C	55	48	124	3	230	4%	Lowden Hill
Wiltshire 011D	46	37	134	10	227	4%	Chippenham Town Centre
Wiltshire 011E	61	56	171	16	304	5%	Monkton Park
Wiltshire 011F	54	50	100	6	210	4%	Ladyfield Road
Wiltshire 014A	46	42	93	34	215	4%	Pewsham
Wiltshire 014B	44	39	130	27	240	4%	Pewsham
Wiltshire 014C	49	49	122	33	253	4%	Pewsham
Wiltshire 014D	46	44	109	41	240	4%	Pewsham
Wiltshire 014E	57	64	130	39	290	5%	Pewsham
Total	**1,347**	**1,302**	**2,690**	**299**	**5,638**	**100%**	

Notes:

1. LSOAs / MSOAs in the Chippenham urban area have been selected. Whilst most of 'Chippenham 018A' lies outside of the Chippenham urban area, it includes a key employment destination on the edge of town, so has been included in the analysis.

2. Within each of the LSOAs, the most likely origin in terms of residential area has been selected, with description relating either to the name of the area or a key highway within it.

Trip Assignment

0%

Full Breakdown

Destination	Proportion	Route
Audley Road	8%	A4, east of Brunel Court (via Rowden Park)
Cepen Park North	6%	A4, west of Brunel Court (via Rowden Park or Saltersford Lane)
Cepen Park South	8%	A4, west of Brunel Court (via Rowden Park or Saltersford Lane)
Chippenham Town Centre	8%	Avon Valley Walk (via Rowden Park)
Frogwell	8%	A4, west of Brunel Court (via Rowden Park or Saltersford Lane)
Greenway Lane	3%	Avon Valley Walk (via Rowden Park)
John Cole's Park	4%	Avon Valley Walk (via Rowden Park)
Ladyfield Road	4%	A4, west of Brunel Court (via Rowden Park or Saltersford Lane)
Long Ridings / Ridings Mead	4%	Avon Valley Walk (via Rowden Park)
Lowden Hill	4%	A4, east of Brunel Court (via Rowden Park)
Monkton Park	5%	Avon Valley Walk (via Rowden Park)
Pewhill Park	4%	Avon Valley Walk (via Rowden Park)
Pewsham	22%	Avon Valley Walk (via Rowden Park)
Queen's Crescent	4%	A4, west of Brunel Court (via Rowden Park or Saltersford Lane)
Redland	4%	A4, west of Brunel Court (via Rowden Park or Saltersford Lane)
Sheldon Road	5%	A4, west of Brunel Court (via Rowden Park or Saltersford Lane)
Total	**100%**	

Assignment Proportions (Pre-Internalisation)

Route	Proportion
A4, east of Brunel Court (via Rowden Park)	12%
A4, west of Brunel Court (via Rowden Park or Saltersford Lane)	38%
Avon Valley Walk (via Rowden Park)	50%
Total	**100%**

Assignment Proportions (Post-Internalisation)

Route	Proportion
A4, east of Brunel Court (via Rowden Park)	10%
A4, west of Brunel Court (via Rowden Park or Saltersford Lane)	33%
Avon Valley Walk (via Rowden Park)	44%
Within Proposed Development / Rowden Park	12%
Total	**100%**

Note: Proportion to 'Within Proposed Development / Rowden Park' is as per the internalisation assumption within the Transport Assessment.

Number of Trips by Route

Hour Commencing	Number of Trips by Route				
	A4, east of Brunel Court (via Rowden Park)	A4, west of Brunel Court (via Rowden Park or Saltersford Lane)	Avon Valley Walk (via Rowden Park)	Within Proposed Development / Rowden Park	Total
07:00	0	0	0	0	0
08:00	0	0	0	0	1
09:00	0	0	0	0	1
10:00	0	0	0	0	1
11:00	0	0	0	0	1
12:00	0	0	1	0	1
13:00	0	1	1	0	2
14:00	0	0	0	0	1
15:00	0	0	0	0	1
16:00	0	0	0	0	1
17:00	0	0	0	0	1
18:00	0	0	0	0	0
Total	**1**	**4**	**5**	**1**	**11**
Max	**0**	**1**	**1**	**0**	**2**

APPENDIX F – ACTIVE TRAVEL TRICS OUTPUT REPORTS

Calculation Reference: AUDIT-829401-230717-0716

TRIP RATE CALCULATION SELECTION PARAMETERS:

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

Selected regions and areas:

02	SOUTH EAST		
	KC	KENT	2 days
03	SOUTH WEST		
	DV	DEVON	2 days
	SM	SOMERSET	1 days
04	EAST ANGLIA		
	NF	NORFOLK	1 days
	SF	SUFFOLK	1 days
07	YORKSHIRE & NORTH LINCOLNSHIRE		
	NY	NORTH YORKSHIRE	2 days
10	WALES		
	PS	POWYS	1 days
11	SCOTLAND		
	AS	ABERDEENSHIRE	1 days
	HI	HIGHLAND	1 days

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

Primary Filtering selection:

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

Parameter: No of Dwellings
Actual Range: 10 to 363 (units:)
Range Selected by User: 6 to 1000 (units:)

Parking Spaces Range: All Surveys Included

Parking Spaces per Dwelling Range: All Surveys Included

Bedrooms per Dwelling Range: All Surveys Included

Percentage of dwellings privately owned: All Surveys Included

Public Transport Provision:
Selection by: Include all surveys

Date Range: 01/01/15 to 01/03/23

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
Wednesday	8 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	12 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)	6
Edge of Town	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:

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.

Inclusion of Servicing Vehicles Counts:

Servicing vehicles Included	26 days - Selected
Servicing vehicles Excluded	49 days - Selected

Secondary Filtering selection:

Use Class:

C3	12 days

This data displays the number of surveys per Use Class classification within the selected set. The Use Classes Order (England) 2020 has been used for this purpose, which can be found within the Library module of TRICS®.

Population within 500m Range:

All Surveys Included

Population within 1 mile:

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

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

Population within 5 miles:

5,001 to 25,000	5 days
25,001 to 50,000	1 days
50,001 to 75,000	6 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
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	12 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	12 days

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

LIST OF SITES relevant to selection parameters

1 AS-03-A-02 MIXED HOUSES ABERDEENSHIRE
FARROCHIE ROAD
STONEHAVEN

Edge of Town
Residential Zone
Total No of Dwellings: 131
Survey date: WEDNESDAY 20/04/22 Survey Type: MANUAL

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

Suburban Area (PPS6 Out of Centre)
Residential Zone
Total No of Dwellings: 116
Survey date: FRIDAY 25/09/15 Survey Type: MANUAL

3 DV-03-A-03 TERRACED & SEMI DETACHED DEVON
LOWER BRAND LANE
HONITON

Suburban Area (PPS6 Out of Centre)
Residential Zone
Total No of Dwellings: 70
Survey date: MONDAY 28/09/15 Survey Type: MANUAL

4 HI-03-A-14 SEMI-DETACHED & TERRACED HIGHLAND
KING BRUDE ROAD
INVERNESS
SCORGUIE
Suburban Area (PPS6 Out of Centre)
Residential Zone
Total No of Dwellings: 40
Survey date: WEDNESDAY 23/03/16 Survey Type: MANUAL

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

Suburban Area (PPS6 Out of Centre)
Residential Zone
Total No of Dwellings: 363
Survey date: WEDNESDAY 27/09/17 Survey Type: MANUAL

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

Edge of Town
Residential Zone
Total No of Dwellings: 288
Survey date: WEDNESDAY 27/09/17 Survey Type: MANUAL

7 NF-03-A-03 DETACHED HOUSES NORFOLK
HALING WAY
THETFORD

Edge of Town
Residential Zone
Total No of Dwellings: 10
Survey date: WEDNESDAY 16/09/15 Survey Type: MANUAL

8 NY-03-A-13 TERRACED HOUSES NORTH YORKSHIRE
CATTERICK ROAD
CATTERICK GARRISON
OLD HOSPITAL COMPOUND
Suburban Area (PPS6 Out of Centre)
Residential Zone
Total No of Dwellings: 10
Survey date: WEDNESDAY 10/05/17 Survey Type: MANUAL

LIST OF SITES relevant to selection parameters (Cont.)

9	NY-03-A-14 PALACE ROAD RIPON	DETACHED & BUNGALOWS	NORTH YORKSHIRE
	Edge of Town Residential Zone Total No of Dwellings: 45 *Survey date: WEDNESDAY 18/05/22*		*Survey Type: MANUAL*
10	PS-03-A-02 GUNROG ROAD WELSHPOOL	DETACHED/SEMI-DETACHED	POWYS
	Suburban Area (PPS6 Out of Centre) Residential Zone Total No of Dwellings: 28 *Survey date: MONDAY 11/05/15*		*Survey Type: MANUAL*
11	SF-03-A-05 VALE LANE BURY ST EDMUNDS	DETACHED HOUSES	SUFFOLK
	Edge of Town Residential Zone Total No of Dwellings: 18 *Survey date: WEDNESDAY 09/09/15*		*Survey Type: MANUAL*
12	SM-03-A-01 WEMBDON ROAD BRIDGWATER NORTHFIELD	DETACHED & SEMI	SOMERSET
	Edge of Town Residential Zone Total No of Dwellings: 33 *Survey date: THURSDAY 24/09/15*		*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/A - HOUSES PRIVATELY OWNED
MULTI-MODAL TOTAL VEHICLES
Calculation factor: 1 DWELLS
BOLD print indicates peak (busiest) period
Total People to Total Vehicles ratio (all time periods and directions): 1.85

	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	12	96	0.069	12	96	0.273	12	96	0.342
08:00 - 09:00	12	96	0.142	12	96	0.363	12	96	0.505
09:00 - 10:00	12	96	0.153	12	96	0.170	12	96	0.323
10:00 - 11:00	12	96	0.142	12	96	0.178	12	96	0.320
11:00 - 12:00	12	96	0.135	12	96	0.156	12	96	0.291
12:00 - 13:00	12	96	0.202	12	96	0.155	12	96	0.357
13:00 - 14:00	12	96	0.174	12	96	0.161	12	96	0.335
14:00 - 15:00	12	96	0.190	12	96	0.169	12	96	0.359
15:00 - 16:00	12	96	0.273	12	96	0.178	12	96	0.451
16:00 - 17:00	12	96	0.301	12	96	0.174	12	96	0.475
17:00 - 18:00	12	96	0.367	12	96	0.168	12	96	0.535
18:00 - 19:00	12	96	0.279	12	96	0.214	12	96	0.493
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			2.427			2.359			4.786

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

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

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Parameter summary

Trip rate parameter range selected:	10 - 363 (units:)
Survey date date range:	01/01/15 - 01/03/23
Number of weekdays (Monday-Friday):	12
Number of Saturdays:	0
Number of Sundays:	0
Surveys automatically removed from selection:	0
Surveys manually removed from selection:	0

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

TRIP RATE for Land Use 03 - RESIDENTIAL/A - HOUSES PRIVATELY OWNED
MULTI-MODAL TAXIS
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	12	96	0.001	12	96	0.001	12	96	0.002
08:00 - 09:00	12	96	0.006	12	96	0.005	12	96	0.011
09:00 - 10:00	12	96	0.003	12	96	0.001	12	96	0.004
10:00 - 11:00	12	96	0.002	12	96	0.003	12	96	0.005
11:00 - 12:00	12	96	0.002	12	96	0.002	12	96	0.004
12:00 - 13:00	12	96	0.003	12	96	0.003	12	96	0.006
13:00 - 14:00	12	96	0.003	12	96	0.001	12	96	0.004
14:00 - 15:00	12	96	0.000	12	96	0.002	12	96	0.002
15:00 - 16:00	12	96	0.003	12	96	0.000	12	96	0.003
16:00 - 17:00	12	96	0.001	12	96	0.001	12	96	0.002
17:00 - 18:00	12	96	0.001	12	96	0.001	12	96	0.002
18:00 - 19:00	12	96	0.001	12	96	0.002	12	96	0.003
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.026			0.022			0.048

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

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

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

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	12	96	0.002	12	96	0.003	12	96	0.005
08:00 - 09:00	12	96	0.002	12	96	0.002	12	96	0.004
09:00 - 10:00	12	96	0.004	12	96	0.002	12	96	0.006
10:00 - 11:00	12	96	0.004	12	96	0.004	12	96	0.008
11:00 - 12:00	12	96	0.002	12	96	0.003	12	96	0.005
12:00 - 13:00	12	96	0.002	12	96	0.005	12	96	0.007
13:00 - 14:00	12	96	0.002	12	96	0.001	12	96	0.003
14:00 - 15:00	12	96	0.001	12	96	0.000	12	96	0.001
15:00 - 16:00	12	96	0.002	12	96	0.003	12	96	0.005
16:00 - 17:00	12	96	0.003	12	96	0.003	12	96	0.006
17:00 - 18:00	12	96	0.003	12	96	0.003	12	96	0.006
18:00 - 19:00	12	96	0.002	12	96	0.000	12	96	0.002
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.029			0.029			0.058

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

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

TRIP RATE for Land Use 03 - RESIDENTIAL/A - HOUSES PRIVATELY OWNED
MULTI-MODAL PSVS
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	12	96	0.000	12	96	0.000	12	96	0.000
08:00 - 09:00	12	96	0.001	12	96	0.001	12	96	0.002
09:00 - 10:00	12	96	0.000	12	96	0.000	12	96	0.000
10:00 - 11:00	12	96	0.000	12	96	0.000	12	96	0.000
11:00 - 12:00	12	96	0.000	12	96	0.000	12	96	0.000
12:00 - 13:00	12	96	0.000	12	96	0.000	12	96	0.000
13:00 - 14:00	12	96	0.000	12	96	0.000	12	96	0.000
14:00 - 15:00	12	96	0.001	12	96	0.001	12	96	0.002
15:00 - 16:00	12	96	0.000	12	96	0.000	12	96	0.000
16:00 - 17:00	12	96	0.000	12	96	0.000	12	96	0.000
17:00 - 18:00	12	96	0.000	12	96	0.000	12	96	0.000
18:00 - 19:00	12	96	0.000	12	96	0.000	12	96	0.000
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.002			0.002			0.004

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

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

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

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	12	96	0.001	12	96	0.003	12	96	0.004
08:00 - 09:00	12	96	0.001	12	96	0.003	12	96	0.004
09:00 - 10:00	12	96	0.001	12	96	0.001	12	96	0.002
10:00 - 11:00	12	96	0.000	12	96	0.001	12	96	0.001
11:00 - 12:00	12	96	0.000	12	96	0.003	12	96	0.003
12:00 - 13:00	12	96	0.006	12	96	0.003	12	96	0.009
13:00 - 14:00	12	96	0.003	12	96	0.001	12	96	0.004
14:00 - 15:00	12	96	0.003	12	96	0.001	12	96	0.004
15:00 - 16:00	12	96	0.001	12	96	0.001	12	96	0.002
16:00 - 17:00	12	96	0.001	12	96	0.001	12	96	0.002
17:00 - 18:00	12	96	0.006	12	96	0.003	12	96	0.009
18:00 - 19:00	12	96	0.003	12	96	0.002	12	96	0.005
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.026			0.023			0.049

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

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

TRIP RATE for Land Use 03 - RESIDENTIAL/A - HOUSES PRIVATELY OWNED
MULTI-MODAL VEHICLE OCCUPANTS
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	12	96	0.104	12	96	0.438	12	96	0.542
08:00 - 09:00	12	96	0.201	12	96	0.675	12	96	0.876
09:00 - 10:00	12	96	0.220	12	96	0.274	12	96	0.494
10:00 - 11:00	12	96	0.199	12	96	0.260	12	96	0.459
11:00 - 12:00	12	96	0.189	12	96	0.250	12	96	0.439
12:00 - 13:00	12	96	0.283	12	96	0.232	12	96	0.515
13:00 - 14:00	12	96	0.263	12	96	0.242	12	96	0.505
14:00 - 15:00	12	96	0.276	12	96	0.247	12	96	0.523
15:00 - 16:00	12	96	0.478	12	96	0.273	12	96	0.751
16:00 - 17:00	12	96	0.529	12	96	0.266	12	96	0.795
17:00 - 18:00	12	96	0.639	12	96	0.266	12	96	0.905
18:00 - 19:00	12	96	0.478	12	96	0.378	12	96	0.856
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			3.859			3.801			7.660

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

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

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

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	12	96	0.016	12	96	0.034	12	96	0.050
08:00 - 09:00	12	96	0.034	12	96	0.107	12	96	0.141
09:00 - 10:00	12	96	0.030	12	96	0.044	12	96	0.074
10:00 - 11:00	12	96	0.030	12	96	0.030	12	96	0.060
11:00 - 12:00	12	96	0.033	12	96	0.026	12	96	0.059
12:00 - 13:00	12	96	0.035	12	96	0.016	12	96	0.051
13:00 - 14:00	12	96	0.028	12	96	0.031	12	96	0.059
14:00 - 15:00	12	96	0.038	12	96	0.032	12	96	0.070
15:00 - 16:00	12	96	0.093	12	96	0.044	12	96	0.137
16:00 - 17:00	12	96	0.059	12	96	0.034	12	96	0.093
17:00 - 18:00	12	96	0.046	12	96	0.017	12	96	0.063
18:00 - 19:00	12	96	0.026	12	96	0.049	12	96	0.075
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.468			0.464			0.932

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

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

TRIP RATE for Land Use 03 - RESIDENTIAL/A - HOUSES PRIVATELY OWNED
MULTI-MODAL BUS/TRAM PASSENGERS
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	12	96	0.003	12	96	0.006	12	96	0.009
08:00 - 09:00	12	96	0.000	12	96	0.016	12	96	0.016
09:00 - 10:00	12	96	0.000	12	96	0.008	12	96	0.008
10:00 - 11:00	12	96	0.002	12	96	0.002	12	96	0.004
11:00 - 12:00	12	96	0.000	12	96	0.003	12	96	0.003
12:00 - 13:00	12	96	0.004	12	96	0.002	12	96	0.006
13:00 - 14:00	12	96	0.003	12	96	0.003	12	96	0.006
14:00 - 15:00	12	96	0.005	12	96	0.005	12	96	0.010
15:00 - 16:00	12	96	0.008	12	96	0.006	12	96	0.014
16:00 - 17:00	12	96	0.011	12	96	0.009	12	96	0.020
17:00 - 18:00	12	96	0.005	12	96	0.006	12	96	0.011
18:00 - 19:00	12	96	0.024	12	96	0.010	12	96	0.034
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.065			0.076			0.141

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

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

TRIP RATE for Land Use 03 - RESIDENTIAL/A - HOUSES PRIVATELY OWNED
MULTI-MODAL TOTAL RAIL PASSENGERS
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	12	96	0.000	12	96	0.013	12	96	0.013
08:00 - 09:00	12	96	0.000	12	96	0.012	12	96	0.012
09:00 - 10:00	12	96	0.000	12	96	0.003	12	96	0.003
10:00 - 11:00	12	96	0.000	12	96	0.002	12	96	0.002
11:00 - 12:00	12	96	0.000	12	96	0.002	12	96	0.002
12:00 - 13:00	12	96	0.000	12	96	0.002	12	96	0.002
13:00 - 14:00	12	96	0.002	12	96	0.000	12	96	0.002
14:00 - 15:00	12	96	0.001	12	96	0.001	12	96	0.002
15:00 - 16:00	12	96	0.003	12	96	0.002	12	96	0.005
16:00 - 17:00	12	96	0.003	12	96	0.001	12	96	0.004
17:00 - 18:00	12	96	0.016	12	96	0.000	12	96	0.016
18:00 - 19:00	12	96	0.009	12	96	0.002	12	96	0.011
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.034			0.040			0.074

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

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

TRIP RATE for Land Use 03 - RESIDENTIAL/A - HOUSES PRIVATELY OWNED
MULTI-MODAL COACH PASSENGERS
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	12	96	0.000	12	96	0.000	12	96	0.000
08:00 - 09:00	12	96	0.000	12	96	0.001	12	96	0.001
09:00 - 10:00	12	96	0.000	12	96	0.000	12	96	0.000
10:00 - 11:00	12	96	0.000	12	96	0.000	12	96	0.000
11:00 - 12:00	12	96	0.000	12	96	0.000	12	96	0.000
12:00 - 13:00	12	96	0.000	12	96	0.000	12	96	0.000
13:00 - 14:00	12	96	0.000	12	96	0.000	12	96	0.000
14:00 - 15:00	12	96	0.001	12	96	0.000	12	96	0.001
15:00 - 16:00	12	96	0.000	12	96	0.000	12	96	0.000
16:00 - 17:00	12	96	0.000	12	96	0.000	12	96	0.000
17:00 - 18:00	12	96	0.000	12	96	0.000	12	96	0.000
18:00 - 19:00	12	96	0.000	12	96	0.000	12	96	0.000
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.001			0.001			0.002

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

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

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

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	12	96	0.003	12	96	0.019	12	96	0.022
08:00 - 09:00	12	96	0.000	12	96	0.029	12	96	0.029
09:00 - 10:00	12	96	0.000	12	96	0.011	12	96	0.011
10:00 - 11:00	12	96	0.002	12	96	0.003	12	96	0.005
11:00 - 12:00	12	96	0.000	12	96	0.004	12	96	0.004
12:00 - 13:00	12	96	0.004	12	96	0.003	12	96	0.007
13:00 - 14:00	12	96	0.005	12	96	0.003	12	96	0.008
14:00 - 15:00	12	96	0.007	12	96	0.006	12	96	0.013
15:00 - 16:00	12	96	0.010	12	96	0.008	12	96	0.018
16:00 - 17:00	12	96	0.015	12	96	0.010	12	96	0.025
17:00 - 18:00	12	96	0.021	12	96	0.006	12	96	0.027
18:00 - 19:00	12	96	0.033	12	96	0.012	12	96	0.045
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.100			0.114			0.214

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

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

TRIP RATE for Land Use 03 - RESIDENTIAL/A - HOUSES PRIVATELY OWNED
MULTI-MODAL TOTAL PEOPLE
Calculation factor: 1 DWELLS
BOLD print indicates peak (busiest) period
Total People to Total Vehicles ratio (all time periods and directions): 1.85

	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	12	96	0.124	12	96	0.495	12	96	0.619
08:00 - 09:00	12	96	0.235	12	96	0.813	12	96	1.048
09:00 - 10:00	12	96	0.251	12	96	0.331	12	96	0.582
10:00 - 11:00	12	96	0.230	12	96	0.294	12	96	0.524
11:00 - 12:00	12	96	0.222	12	96	0.283	12	96	0.505
12:00 - 13:00	12	96	0.328	12	96	0.254	12	96	0.582
13:00 - 14:00	12	96	0.299	12	96	0.277	12	96	0.576
14:00 - 15:00	12	96	0.324	12	96	0.286	12	96	0.610
15:00 - 16:00	12	96	0.582	12	96	0.326	12	96	0.908
16:00 - 17:00	12	96	0.603	12	96	0.311	12	96	0.914
17:00 - 18:00	12	96	0.712	12	96	0.293	12	96	1.005
18:00 - 19:00	12	96	0.540	12	96	0.441	12	96	0.981
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			4.450			4.404			8.854

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

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

TRIP RATE for Land Use 03 - RESIDENTIAL/A - HOUSES PRIVATELY OWNED
MULTI-MODAL CARS
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	12	96	0.056	12	96	0.223	12	96	0.279
08:00 - 09:00	12	96	0.122	12	96	0.326	12	96	0.448
09:00 - 10:00	12	96	0.123	12	96	0.149	12	96	0.272
10:00 - 11:00	12	96	0.116	12	96	0.151	12	96	0.267
11:00 - 12:00	12	96	0.114	12	96	0.128	12	96	0.242
12:00 - 13:00	12	96	0.181	12	96	0.129	12	96	0.310
13:00 - 14:00	12	96	0.137	12	96	0.133	12	96	0.270
14:00 - 15:00	12	96	0.169	12	96	0.147	12	96	0.316
15:00 - 16:00	12	96	0.252	12	96	0.159	12	96	0.411
16:00 - 17:00	12	96	0.273	12	96	0.152	12	96	0.425
17:00 - 18:00	12	96	0.326	12	96	0.148	12	96	0.474
18:00 - 19:00	12	96	0.253	12	96	0.199	12	96	0.452
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			2.122			2.044			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.*

TRIP RATE for Land Use 03 - RESIDENTIAL/A - HOUSES PRIVATELY OWNED
MULTI-MODAL LGVS
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	12	96	0.011	12	96	0.046	12	96	0.057
08:00 - 09:00	12	96	0.012	12	96	0.027	12	96	0.039
09:00 - 10:00	12	96	0.022	12	96	0.017	12	96	0.039
10:00 - 11:00	12	96	0.019	12	96	0.018	12	96	0.037
11:00 - 12:00	12	96	0.016	12	96	0.023	12	96	0.039
12:00 - 13:00	12	96	0.017	12	96	0.017	12	96	0.034
13:00 - 14:00	12	96	0.031	12	96	0.026	12	96	0.057
14:00 - 15:00	12	96	0.018	12	96	0.019	12	96	0.037
15:00 - 16:00	12	96	0.016	12	96	0.016	12	96	0.032
16:00 - 17:00	12	96	0.024	12	96	0.017	12	96	0.041
17:00 - 18:00	12	96	0.037	12	96	0.017	12	96	0.054
18:00 - 19:00	12	96	0.023	12	96	0.013	12	96	0.036
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.246			0.256			0.502

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

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

TRIP RATE for Land Use 03 - RESIDENTIAL/A - HOUSES PRIVATELY OWNED
MULTI-MODAL MOTOR CYCLES
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	12	96	0.000	12	96	0.000	12	96	0.000
08:00 - 09:00	12	96	0.000	12	96	0.002	12	96	0.002
09:00 - 10:00	12	96	0.000	12	96	0.001	12	96	0.001
10:00 - 11:00	12	96	0.001	12	96	0.001	12	96	0.002
11:00 - 12:00	12	96	0.001	12	96	0.002	12	96	0.003
12:00 - 13:00	12	96	0.000	12	96	0.000	12	96	0.000
13:00 - 14:00	12	96	0.001	12	96	0.000	12	96	0.001
14:00 - 15:00	12	96	0.001	12	96	0.001	12	96	0.002
15:00 - 16:00	12	96	0.000	12	96	0.000	12	96	0.000
16:00 - 17:00	12	96	0.001	12	96	0.001	12	96	0.002
17:00 - 18:00	12	96	0.001	12	96	0.000	12	96	0.001
18:00 - 19:00	12	96	0.000	12	96	0.000	12	96	0.000
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.006			0.008			0.014

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.*

Calculation Reference: AUDIT-829401-230718-0726

TRIP RATE CALCULATION SELECTION PARAMETERS:

Land Use : 02 - EMPLOYMENT
Category : B - BUSINESS PARK
MULTI-MODAL TOTAL VEHICLES

Selected regions and areas:

02	SOUTH EAST		
	EX	ESSEX	2 days
03	SOUTH WEST		
	DV	DEVON	1 days
04	EAST ANGLIA		
	NF	NORFOLK	1 days
05	EAST MIDLANDS		
	LN	LINCOLNSHIRE	1 days
10	WALES		
	CF	CARDIFF	2 days

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

Primary Filtering selection:

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

Parameter: Gross floor area
Actual Range: 1500 to 5000 (units: sqm)
Range Selected by User: 975 to 6000 (units: sqm)

Parking Spaces Range: All Surveys Included

Public Transport Provision:
Selection by: Include all surveys

Date Range: 01/01/15 to 15/09/22

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

Selected survey days:

Monday	1 days
Wednesday	1 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	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:

Edge of Town	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:

Industrial Zone	3
Commercial Zone	1
Development Zone	1
Residential 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.

Inclusion of Servicing Vehicles Counts:

Servicing vehicles Included	4 days - Selected

Secondary Filtering selection:

Use Class:

Not Known	7 days

This data displays the number of surveys per Use Class classification within the selected set. The Use Classes Order (England) 2020 has been used for this purpose, which can be found within the Library module of TRICS®.

Filter by Site Operations Breakdown:
All Surveys Included

Population within 500m Range:
All Surveys Included

Population within 1 mile:

5,001 to 10,000	1 days
10,001 to 15,000	4 days
15,001 to 20,000	2 days

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

Population within 5 miles:

125,001 to 250,000	5 days
250,001 to 500,000	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	3 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:

No	7 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	CF-02-B-04 BUSINESS PARK RHYMNEY RIVER BRIDGE RD CARDIFF Edge of Town Development Zone Total Gross floor area: *Survey date: FRIDAY*		5300 sqm *05/05/17*	CARDIFF *Survey Type: MANUAL*
2	CF-02-B-06 BUSINESS PARK MALTHOUSE AVENUE CARDIFF PONTPRENNAU Edge of Town No Sub Category Total Gross floor area: *Survey date: MONDAY*		1642 sqm *12/03/18*	CARDIFF *Survey Type: MANUAL*
3	DV-02-B-01 BUSINESS PARK MANATON CLOSE EXETER MATFORD BUSINESS PARK Edge of Town Commercial Zone Total Gross floor area: *Survey date: WEDNESDAY*		1500 sqm *05/07/17*	DEVON *Survey Type: MANUAL*
4	EX-02-B-01 BUSINESS PARK BRUNEL COURT COLCHESTER SEVERALLS INDUSTRIAL PK Edge of Town Industrial Zone Total Gross floor area: *Survey date: FRIDAY*		2900 sqm *18/05/18*	ESSEX *Survey Type: MANUAL*
5	EX-02-B-02 BUSINESS PARK WYNCOLLS ROAD COLCHESTER SEVERALLS INDUSTRIAL PK Edge of Town Industrial Zone Total Gross floor area: *Survey date: FRIDAY*		4083 sqm *18/05/18*	ESSEX *Survey Type: MANUAL*
6	LN-02-B-02 BUSINESS PARK CARDINAL CLOSE LINCOLN Edge of Town Industrial Zone Total Gross floor area: *Survey date: THURSDAY*		5000 sqm *25/06/15*	LINCOLNSHIRE *Survey Type: MANUAL*
7	NF-02-B-03 BUSINESS PARK BARTON WAY NORWICH Edge of Town Residential Zone Total Gross floor area: *Survey date: THURSDAY*		2634 sqm *15/09/22*	NORFOLK *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/B - BUSINESS PARK
MULTI-MODAL TOTAL VEHICLES
Calculation factor: 100 sqm
BOLD print indicates peak (busiest) period
Total People to Total Vehicles ratio (all time periods and directions): 1.68

	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	7	3085	0.440	7	3085	0.111	7	3085	0.551
08:00 - 09:00	7	3085	1.241	7	3085	0.306	7	3085	1.547
09:00 - 10:00	7	3085	0.968	7	3085	0.579	7	3085	1.547
10:00 - 11:00	7	3085	0.658	7	3085	0.574	7	3085	1.232
11:00 - 12:00	7	3085	0.690	7	3085	0.616	7	3085	1.306
12:00 - 13:00	7	3085	0.500	7	3085	0.667	7	3085	1.167
13:00 - 14:00	7	3085	0.671	7	3085	0.639	7	3085	1.310
14:00 - 15:00	7	3085	0.514	7	3085	0.732	7	3085	1.246
15:00 - 16:00	7	3085	0.445	7	3085	0.537	7	3085	0.982
16:00 - 17:00	7	3085	0.435	7	3085	1.028	7	3085	1.463
17:00 - 18:00	7	3085	0.310	7	3085	0.945	7	3085	1.255
18:00 - 19:00	7	3085	0.269	7	3085	0.435	7	3085	0.704
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			7.141			7.169			14.310

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

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

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Parameter summary

Trip rate parameter range selected:	1500 - 5000 (units: sqm)
Survey date date range:	01/01/15 - 15/09/22
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.

TRIP RATE for Land Use 02 - EMPLOYMENT/B - BUSINESS PARK
MULTI-MODAL TAXIS
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	7	3085	0.005	7	3085	0.005	7	3085	0.010
08:00 - 09:00	7	3085	0.009	7	3085	0.009	7	3085	0.018
09:00 - 10:00	7	3085	0.005	7	3085	0.005	7	3085	0.010
10:00 - 11:00	7	3085	0.014	7	3085	0.014	7	3085	0.028
11:00 - 12:00	7	3085	0.005	7	3085	0.005	7	3085	0.010
12:00 - 13:00	7	3085	0.000	7	3085	0.005	7	3085	0.005
13:00 - 14:00	7	3085	0.000	7	3085	0.000	7	3085	0.000
14:00 - 15:00	7	3085	0.000	7	3085	0.000	7	3085	0.000
15:00 - 16:00	7	3085	0.000	7	3085	0.000	7	3085	0.000
16:00 - 17:00	7	3085	0.000	7	3085	0.000	7	3085	0.000
17:00 - 18:00	7	3085	0.009	7	3085	0.009	7	3085	0.018
18:00 - 19:00	7	3085	0.005	7	3085	0.005	7	3085	0.010
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.052			0.057			0.109

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

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

TRIP RATE for Land Use 02 - EMPLOYMENT/B - BUSINESS PARK
MULTI-MODAL OGVS
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	7	3085	0.014	7	3085	0.014	7	3085	0.028
08:00 - 09:00	7	3085	0.028	7	3085	0.028	7	3085	0.056
09:00 - 10:00	7	3085	0.046	7	3085	0.051	7	3085	0.097
10:00 - 11:00	7	3085	0.014	7	3085	0.023	7	3085	0.037
11:00 - 12:00	7	3085	0.037	7	3085	0.028	7	3085	0.065
12:00 - 13:00	7	3085	0.028	7	3085	0.037	7	3085	0.065
13:00 - 14:00	7	3085	0.019	7	3085	0.019	7	3085	0.038
14:00 - 15:00	7	3085	0.000	7	3085	0.005	7	3085	0.005
15:00 - 16:00	7	3085	0.051	7	3085	0.042	7	3085	0.093
16:00 - 17:00	7	3085	0.019	7	3085	0.019	7	3085	0.038
17:00 - 18:00	7	3085	0.000	7	3085	0.014	7	3085	0.014
18:00 - 19:00	7	3085	0.005	7	3085	0.009	7	3085	0.014
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.261			0.289			0.550

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

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

TRIP RATE for Land Use 02 - EMPLOYMENT/B - BUSINESS PARK
MULTI-MODAL CYCLISTS
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	7	3085	0.028	7	3085	0.000	7	3085	0.028
08:00 - 09:00	7	3085	0.088	7	3085	0.000	7	3085	0.088
09:00 - 10:00	7	3085	0.042	7	3085	0.005	7	3085	0.047
10:00 - 11:00	7	3085	0.009	7	3085	0.000	7	3085	0.009
11:00 - 12:00	7	3085	0.009	7	3085	0.019	7	3085	0.028
12:00 - 13:00	7	3085	0.014	7	3085	0.019	7	3085	0.033
13:00 - 14:00	7	3085	0.005	7	3085	0.009	7	3085	0.014
14:00 - 15:00	7	3085	0.009	7	3085	0.032	7	3085	0.041
15:00 - 16:00	7	3085	0.009	7	3085	0.042	7	3085	0.051
16:00 - 17:00	7	3085	0.009	7	3085	0.032	7	3085	0.041
17:00 - 18:00	7	3085	0.000	7	3085	0.074	7	3085	0.074
18:00 - 19:00	7	3085	0.005	7	3085	0.005	7	3085	0.010
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.227			0.237			0.464

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

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

TRIP RATE for Land Use 02 - EMPLOYMENT/B - BUSINESS PARK
MULTI-MODAL VEHICLE OCCUPANTS
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	7	3085	0.523	7	3085	0.120	7	3085	0.643
08:00 - 09:00	7	3085	1.361	7	3085	0.380	7	3085	1.741
09:00 - 10:00	7	3085	1.324	7	3085	0.746	7	3085	2.070
10:00 - 11:00	7	3085	0.977	7	3085	0.769	7	3085	1.746
11:00 - 12:00	7	3085	1.051	7	3085	0.820	7	3085	1.871
12:00 - 13:00	7	3085	0.704	7	3085	0.991	7	3085	1.695
13:00 - 14:00	7	3085	0.972	7	3085	0.931	7	3085	1.903
14:00 - 15:00	7	3085	0.690	7	3085	1.042	7	3085	1.732
15:00 - 16:00	7	3085	0.662	7	3085	0.713	7	3085	1.375
16:00 - 17:00	7	3085	0.565	7	3085	1.408	7	3085	1.973
17:00 - 18:00	7	3085	0.403	7	3085	1.241	7	3085	1.644
18:00 - 19:00	7	3085	0.380	7	3085	0.593	7	3085	0.973
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			9.612			9.754			19.366

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

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

TRIP RATE for Land Use 02 - EMPLOYMENT/B - BUSINESS PARK
MULTI-MODAL PEDESTRIANS
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	7	3085	0.037	7	3085	0.037	7	3085	0.074
08:00 - 09:00	7	3085	0.116	7	3085	0.074	7	3085	0.190
09:00 - 10:00	7	3085	0.097	7	3085	0.074	7	3085	0.171
10:00 - 11:00	7	3085	0.083	7	3085	0.097	7	3085	0.180
11:00 - 12:00	7	3085	0.056	7	3085	0.088	7	3085	0.144
12:00 - 13:00	7	3085	0.083	7	3085	0.176	7	3085	0.259
13:00 - 14:00	7	3085	0.232	7	3085	0.208	7	3085	0.440
14:00 - 15:00	7	3085	0.111	7	3085	0.120	7	3085	0.231
15:00 - 16:00	7	3085	0.065	7	3085	0.074	7	3085	0.139
16:00 - 17:00	7	3085	0.088	7	3085	0.116	7	3085	0.204
17:00 - 18:00	7	3085	0.107	7	3085	0.088	7	3085	0.195
18:00 - 19:00	7	3085	0.028	7	3085	0.069	7	3085	0.097
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			1.103			1.221			2.324

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

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

TRIP RATE for Land Use 02 - EMPLOYMENT/B - BUSINESS PARK
MULTI-MODAL BUS/TRAM PASSENGERS
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	7	3085	0.028	7	3085	0.000	7	3085	0.028
08:00 - 09:00	7	3085	0.176	7	3085	0.000	7	3085	0.176
09:00 - 10:00	7	3085	0.116	7	3085	0.019	7	3085	0.135
10:00 - 11:00	7	3085	0.074	7	3085	0.032	7	3085	0.106
11:00 - 12:00	7	3085	0.032	7	3085	0.051	7	3085	0.083
12:00 - 13:00	7	3085	0.060	7	3085	0.014	7	3085	0.074
13:00 - 14:00	7	3085	0.060	7	3085	0.056	7	3085	0.116
14:00 - 15:00	7	3085	0.042	7	3085	0.056	7	3085	0.098
15:00 - 16:00	7	3085	0.009	7	3085	0.074	7	3085	0.083
16:00 - 17:00	7	3085	0.009	7	3085	0.107	7	3085	0.116
17:00 - 18:00	7	3085	0.023	7	3085	0.181	7	3085	0.204
18:00 - 19:00	7	3085	0.005	7	3085	0.037	7	3085	0.042
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.634			0.627			1.261

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

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

TRIP RATE for Land Use 02 - EMPLOYMENT/B - BUSINESS PARK
MULTI-MODAL TOTAL RAIL PASSENGERS
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	7	3085	0.028	7	3085	0.000	7	3085	0.028
08:00 - 09:00	7	3085	0.102	7	3085	0.000	7	3085	0.102
09:00 - 10:00	7	3085	0.079	7	3085	0.000	7	3085	0.079
10:00 - 11:00	7	3085	0.028	7	3085	0.000	7	3085	0.028
11:00 - 12:00	7	3085	0.009	7	3085	0.000	7	3085	0.009
12:00 - 13:00	7	3085	0.014	7	3085	0.009	7	3085	0.023
13:00 - 14:00	7	3085	0.000	7	3085	0.014	7	3085	0.014
14:00 - 15:00	7	3085	0.009	7	3085	0.028	7	3085	0.037
15:00 - 16:00	7	3085	0.000	7	3085	0.037	7	3085	0.037
16:00 - 17:00	7	3085	0.000	7	3085	0.083	7	3085	0.083
17:00 - 18:00	7	3085	0.000	7	3085	0.107	7	3085	0.107
18:00 - 19:00	7	3085	0.000	7	3085	0.037	7	3085	0.037
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.269			0.315			0.584

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

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

TRIP RATE for Land Use 02 - EMPLOYMENT/B - BUSINESS PARK
MULTI-MODAL PUBLIC TRANSPORT USERS
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	7	3085	0.056	7	3085	0.000	7	3085	0.056
08:00 - 09:00	7	3085	0.278	7	3085	0.000	7	3085	0.278
09:00 - 10:00	7	3085	0.194	7	3085	0.019	7	3085	0.213
10:00 - 11:00	7	3085	0.102	7	3085	0.032	7	3085	0.134
11:00 - 12:00	7	3085	0.042	7	3085	0.051	7	3085	0.093
12:00 - 13:00	7	3085	0.074	7	3085	0.023	7	3085	0.097
13:00 - 14:00	7	3085	0.060	7	3085	0.069	7	3085	0.129
14:00 - 15:00	7	3085	0.051	7	3085	0.083	7	3085	0.134
15:00 - 16:00	7	3085	0.009	7	3085	0.111	7	3085	0.120
16:00 - 17:00	7	3085	0.009	7	3085	0.190	7	3085	0.199
17:00 - 18:00	7	3085	0.023	7	3085	0.287	7	3085	0.310
18:00 - 19:00	7	3085	0.005	7	3085	0.074	7	3085	0.079
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.903			0.939			1.842

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

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

TRIP RATE for Land Use 02 - EMPLOYMENT/B - BUSINESS PARK
MULTI-MODAL TOTAL PEOPLE
Calculation factor: 100 sqm
BOLD print indicates peak (busiest) period
Total People to Total Vehicles ratio (all time periods and directions): 1.68

	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	7	3085	0.644	7	3085	0.157	7	3085	0.801
08:00 - 09:00	7	3085	1.843	7	3085	0.454	7	3085	2.297
09:00 - 10:00	7	3085	1.658	7	3085	0.843	7	3085	2.501
10:00 - 11:00	7	3085	1.172	7	3085	0.898	7	3085	2.070
11:00 - 12:00	7	3085	1.158	7	3085	0.977	7	3085	2.135
12:00 - 13:00	7	3085	0.875	7	3085	1.209	7	3085	2.084
13:00 - 14:00	7	3085	1.269	7	3085	1.218	7	3085	2.487
14:00 - 15:00	7	3085	0.861	7	3085	1.278	7	3085	2.139
15:00 - 16:00	7	3085	0.746	7	3085	0.940	7	3085	1.686
16:00 - 17:00	7	3085	0.671	7	3085	1.746	7	3085	2.417
17:00 - 18:00	7	3085	0.533	7	3085	1.690	7	3085	2.223
18:00 - 19:00	7	3085	0.417	7	3085	0.741	7	3085	1.158
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			11.847			12.151			23.998

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

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

TRIP RATE for Land Use 02 - EMPLOYMENT/B - BUSINESS PARK
MULTI-MODAL CARS
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	7	3085	0.370	7	3085	0.065	7	3085	0.435
08:00 - 09:00	7	3085	1.014	7	3085	0.120	7	3085	1.134
09:00 - 10:00	7	3085	0.713	7	3085	0.333	7	3085	1.046
10:00 - 11:00	7	3085	0.384	7	3085	0.273	7	3085	0.657
11:00 - 12:00	7	3085	0.380	7	3085	0.347	7	3085	0.727
12:00 - 13:00	7	3085	0.292	7	3085	0.454	7	3085	0.746
13:00 - 14:00	7	3085	0.454	7	3085	0.412	7	3085	0.866
14:00 - 15:00	7	3085	0.343	7	3085	0.560	7	3085	0.903
15:00 - 16:00	7	3085	0.273	7	3085	0.357	7	3085	0.630
16:00 - 17:00	7	3085	0.320	7	3085	0.871	7	3085	1.191
17:00 - 18:00	7	3085	0.269	7	3085	0.824	7	3085	1.093
18:00 - 19:00	7	3085	0.236	7	3085	0.398	7	3085	0.634
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			5.048			5.014			10.062

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

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

TRIP RATE for Land Use 02 - EMPLOYMENT/B - BUSINESS PARK
MULTI-MODAL LGVS
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	7	3085	0.046	7	3085	0.028	7	3085	0.074
08:00 - 09:00	7	3085	0.181	7	3085	0.139	7	3085	0.320
09:00 - 10:00	7	3085	0.190	7	3085	0.190	7	3085	0.380
10:00 - 11:00	7	3085	0.241	7	3085	0.259	7	3085	0.500
11:00 - 12:00	7	3085	0.259	7	3085	0.232	7	3085	0.491
12:00 - 13:00	7	3085	0.176	7	3085	0.167	7	3085	0.343
13:00 - 14:00	7	3085	0.194	7	3085	0.199	7	3085	0.393
14:00 - 15:00	7	3085	0.171	7	3085	0.167	7	3085	0.338
15:00 - 16:00	7	3085	0.120	7	3085	0.134	7	3085	0.254
16:00 - 17:00	7	3085	0.097	7	3085	0.130	7	3085	0.227
17:00 - 18:00	7	3085	0.032	7	3085	0.093	7	3085	0.125
18:00 - 19:00	7	3085	0.023	7	3085	0.023	7	3085	0.046
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			1.730			1.761			3.491

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

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

TRIP RATE for Land Use 02 - EMPLOYMENT/B - BUSINESS PARK
MULTI-MODAL MOTOR CYCLES
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	7	3085	0.005	7	3085	0.000	7	3085	0.005
08:00 - 09:00	7	3085	0.005	7	3085	0.005	7	3085	0.010
09:00 - 10:00	7	3085	0.009	7	3085	0.000	7	3085	0.009
10:00 - 11:00	7	3085	0.005	7	3085	0.000	7	3085	0.005
11:00 - 12:00	7	3085	0.005	7	3085	0.005	7	3085	0.010
12:00 - 13:00	7	3085	0.005	7	3085	0.005	7	3085	0.010
13:00 - 14:00	7	3085	0.005	7	3085	0.005	7	3085	0.010
14:00 - 15:00	7	3085	0.000	7	3085	0.000	7	3085	0.000
15:00 - 16:00	7	3085	0.000	7	3085	0.005	7	3085	0.005
16:00 - 17:00	7	3085	0.000	7	3085	0.009	7	3085	0.009
17:00 - 18:00	7	3085	0.000	7	3085	0.005	7	3085	0.005
18:00 - 19:00	7	3085	0.000	7	3085	0.000	7	3085	0.000
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.039			0.039			0.078

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.*

APPENDIX G – VEHICLE TRICS OUTPUT REPORTS

Audit Code: 9ed1d564-bd89-4129-80dc-8de2dc71f760

Filtering Summary:

Land Use: 03/A RESIDENTIAL/HOUSES PRIVATELY OWNED

Selected Trip Rate Calculation Parameter Range: 4 - 1000 DWELLS

Actual Trip Rate Calculation Parameter Range: 6 - 432 DWELLS

Date Range: Minimum: 01/01/2014 Maximum: 30/06/2025

Parking Spaces Range: All Surveys Selected

Parking Spaces Per Dwelling Range: All Surveys Selected

Bedrooms Per Dwelling Range: All Surveys Selected

Percentage of Dwellings Privately Owned: All Surveys Selected

Population Within 500m Range: 750 4900

Days of the week selected:

Friday	1
Monday	4
Thursday	1
Tuesday	1
Wednesday	6

Main Location Types selected:

Edge of Town	8
Suburban Area	5

Inclusion of Servicing Vehicles Counts:

Servicing Vehicle Excluded	11
Servicing Vehicles Included	2

Population <1 Mile ranges selected:

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

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Population <5 Mile ranges selected:

25,001 to 50,000	3
5,001 to 25,000	4
50,001 to 75,000	6

Car Ownership <5 Mile ranges selected:

0.6 to 1.0	6
1.1 to 1.5	7

PTAL Rating:

No PTAL Present	13

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TRIP RATE CALCULATION SELECTION PARAMETERS:

Land Use: 03 - RESIDENTIAL

Category: A - HOUSES PRIVATELY OWNED

Selected Vehicle Type: Total Vehicles

Selected regions and areas:

02	**SOUTH EAST**		
	ES	EAST SUSSEX	1 day
	HF	HERTFORDSHIRE	1 day
	KC	KENT	2 days
03	**SOUTH WEST**		
	DV	DEVON	2 days
	SM	SOMERSET	1 day
04	**EAST ANGLIA**		
	NF	NORFOLK	2 days
	SF	SUFFOLK	1 day
07	**YORKSHIRE & NORTH LINCOLNSHIRE**		
	NE	NORTH EAST LINCOLNSHIRE	1 day
	NY	NORTH YORKSHIRE	1 day
10	**WALES**		
	PS	POWYS	1 day

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

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Primary Filtering Selection:

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

Parameter:	DWELLS
Actual Range:	6 to 432 (units:DWELLS)
Range Selected by User:	4 to 1000 (units:DWELLS)
Parking Spaces Range:	6 - 2824

Public Transport Provision:

Selection by:	All Surveys Included
Date Range:	01/01/14 to 30/06/25

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:

Friday	1 days
Monday	4 days
Thursday	1 days
Tuesday	1 days
Wednesday	6 days

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

Selected survey types:

Manual count	12
Direction ATC Count	1

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	8 days
Suburban Area	5 days

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:

No Sub Category	1 days
Residential Zone	12 days

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.

Inclusion of Servicing Vehicle Counts:

Servicing vehicles Included	2 days
Servicing vehicles Unknown	11 days

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Secondary Filtering Selection:

Use Class:

C3	13 surveys

This data displays the number of surveys per Use Class classification within the selected set. The Use Classes Order (England) 2020 has been used for this purpose, which can be found within the Library module of TRICS®.

Population within 500m Range:

220 - 4900

Population within 1 mile:

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

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

Population within 5 miles:

25,001 to 50,000	3 surveys
5,001 to 25,000	4 surveys
50,001 to 75,000	6 surveys

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 surveys
1.1 to 1.5	7 surveys

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.

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Petrol filling station:

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	13 surveys

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	13 surveys

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.

COVID-19 Restrictions:

No

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1	**DV-03-A-02**	**HOUSES & BUNGALOWS**	**DEVON**

MILLHEAD ROAD
HONITON
Suburban Area
Residential Zone
Number of dwellings: 116.00 DWELLS
Survey date: Friday 25/09/2015
Survey Type: Manual

2	**DV-03-A-03**	**TERRACED & SEMI DETACHED**	**DEVON**

LOWER BRAND LANE
HONITON
Suburban Area
Residential Zone
Number of dwellings: 70.00 DWELLS
Survey date:
Survey Type: Manual

3	**ES-03-A-13**	**DETACHED HOUSES**	**EAST SUSSEX**

A265
HEATHFIELD
Edge of Town
Residential Zone
Number of dwellings: 36.00 DWELLS
Survey date:
Survey Type: Manual

4	**HF-03-A-06**	**MIXED HOUSES & FLATS**	**HERTFORDSHIRE**

A505
ROYSTON
Edge of Town
Residential Zone
Number of dwellings: 180.00 DWELLS
Survey date: Tuesday 28/11/2023
Survey Type: Manual

5	**KC-03-A-06**	**MIXED HOUSES & FLATS**	**KENT**

MARGATE ROAD
HERNE BAY
Suburban Area
Residential Zone
Number of dwellings: 363.00 DWELLS
Survey date: Wednesday 27/09/2017
Survey Type: Manual

6	**KC-03-A-07**	**MIXED HOUSES**	**KENT**

RECULVER ROAD
HERNE BAY
Edge of Town
Residential Zone
Number of dwellings: 288.00 DWELLS
Survey date: Wednesday 27/09/2017
Survey Type: Manual

7	**NE-03-A-02**	**SEMI DETACHED & DETACHED**	**NORTH EAST LINCOLNSHIRE**

HANOVER WALK
SCUNTHORPE
Edge of Town
No Sub Category
Number of dwellings: 432.00 DWELLS
Survey date:
Survey Type: Manual

8	**NF-03-A-03**	**DETACHED HOUSES**	**NORFOLK**

HALING WAY
THETFORD
Edge of Town
Residential Zone
Number of dwellings: 10.00 DWELLS
Survey date: Wednesday 16/09/2015
Survey Type: Manual

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9 **NF-03-A-10** **MIXED HOUSES & FLATS** **NORFOLK**
HUNSTANTON ROAD
HUNSTANTON
Edge of Town
Residential Zone
Number of dwellings: 17.00 DWELLS
Survey date: Wednesday 12/09/2018 Survey Type: Manual

10 **NY-03-A-13** **TERRACED HOUSES** **NORTH YORKSHIRE**
CATTERICK ROAD
CATTERICK GARRISON
OLD HOSPITAL COMPOUND
Suburban Area
Residential Zone
Number of dwellings: 10.00 DWELLS
Survey date: Wednesday 10/05/2017 Survey Type: Manual

11 **PS-03-A-02** **DETACHED/SEMI-DETACHED** **POWYS**
GUNROG ROAD
WELSHPOOL
Suburban Area
Residential Zone
Number of dwellings: 28.00 DWELLS
Survey date: Survey Type: Manual

12 **SF-03-A-05** **DETACHED HOUSES** **SUFFOLK**
VALE LANE
BURY ST EDMUNDS
Edge of Town
Residential Zone
Number of dwellings: 18.00 DWELLS
Survey date: Wednesday 09/09/2015 Survey Type: Manual

13 **SM-03-A-01** **DETACHED & SEMI** **SOMERSET**
WEMBDON ROAD
BRIDGWATER
NORTHFIELD
Edge of Town
Residential Zone
Number of dwellings: 33.00 DWELLS
Survey date: Thursday 24/09/2015 Survey Type: Manual

DESELECTED SURVEYS

Site Ref	Survey Date	Reason for Deselection
AS-03-A-02|20-04-2022	20-04-2022	Location
CC-03-A-01|25-05-2016	25-05-2016	Location
CV-03-A-02|22-05-2017	22-05-2017	Location
CV-03-A-03|22-05-2017	22-05-2017	Location
DE-03-A-04|19-05-2022	19-05-2022	Location
DE-03-A-05|20-05-2022	20-05-2022	Location
DL-03-A-10|20-06-2018	20-06-2018	Location
DN-03-A-03|01-09-2014	01-09-2014	Location
DN-03-A-04|26-09-2014	26-09-2014	Location
DN-03-A-05|03-09-2014	03-09-2014	Location
DN-03-A-06|10-10-2018	10-10-2018	Location
HI-03-A-14|23-03-2016	23-03-2016	Location

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Site Ref	Survey Date	Reason for Deselection
IM-03-A-04|20-05-2024	20-05-2024	Location
IM-03-A-05|21-05-2024	21-05-2024	Location
IM-03-A-06|23-05-2024	23-05-2024	Location
LT-03-A-01|24-04-2015	24-04-2015	Location
MG-03-A-01|12-10-2021	12-10-2021	Location
NY-03-A-14|18-05-2022	18-05-2022	Covid
RO-03-A-03|25-09-2014	25-09-2014	Location
RO-03-A-04|26-09-2014	26-09-2014	Location
WA-03-A-04|24-06-2014	24-06-2014	Location
WC-03-A-01|28-05-2018	28-05-2018	Location
WX-03-A-01|25-09-2014	25-09-2014	Location

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

Total Vehicles

Calculation factor: 1 DWELLS

**BOLD print indicates peak (busiest) period*

Time Range	No. Days	Ave. DWELLS	Arrivals	Departures	Totals
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	**13**	**123**	**0.061**	**0.243**	**0.304**
08:00-09:00	**13**	**123**	**0.116**	**0.358**	**0.474**
09:00-10:00	**13**	**123**	**0.142**	**0.145**	**0.287**
10:00-11:00	**13**	**123**	**0.121**	**0.156**	**0.277**
11:00-12:00	**13**	**123**	**0.113**	**0.136**	**0.249**
12:00-13:00	**13**	**123**	**0.174**	**0.138**	**0.312**
13:00-14:00	**13**	**123**	**0.142**	**0.134**	**0.276**
14:00-15:00	**13**	**123**	**0.172**	**0.164**	**0.336**
15:00-16:00	**13**	**123**	**0.272**	**0.176**	**0.448**
16:00-17:00	**13**	**123**	**0.284**	**0.169**	**0.453**
17:00-18:00	**13**	**123**	**0.310**	**0.153**	**0.463**
18:00-19:00	**13**	**123**	**0.255**	**0.196**	**0.451**
19:00-20:00					
20:00-21:00					
21:00-22:00					
22:00-23:00					
23:00-00:00					
Total Rates:			**2.162**	**2.168**	**4.330**

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

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

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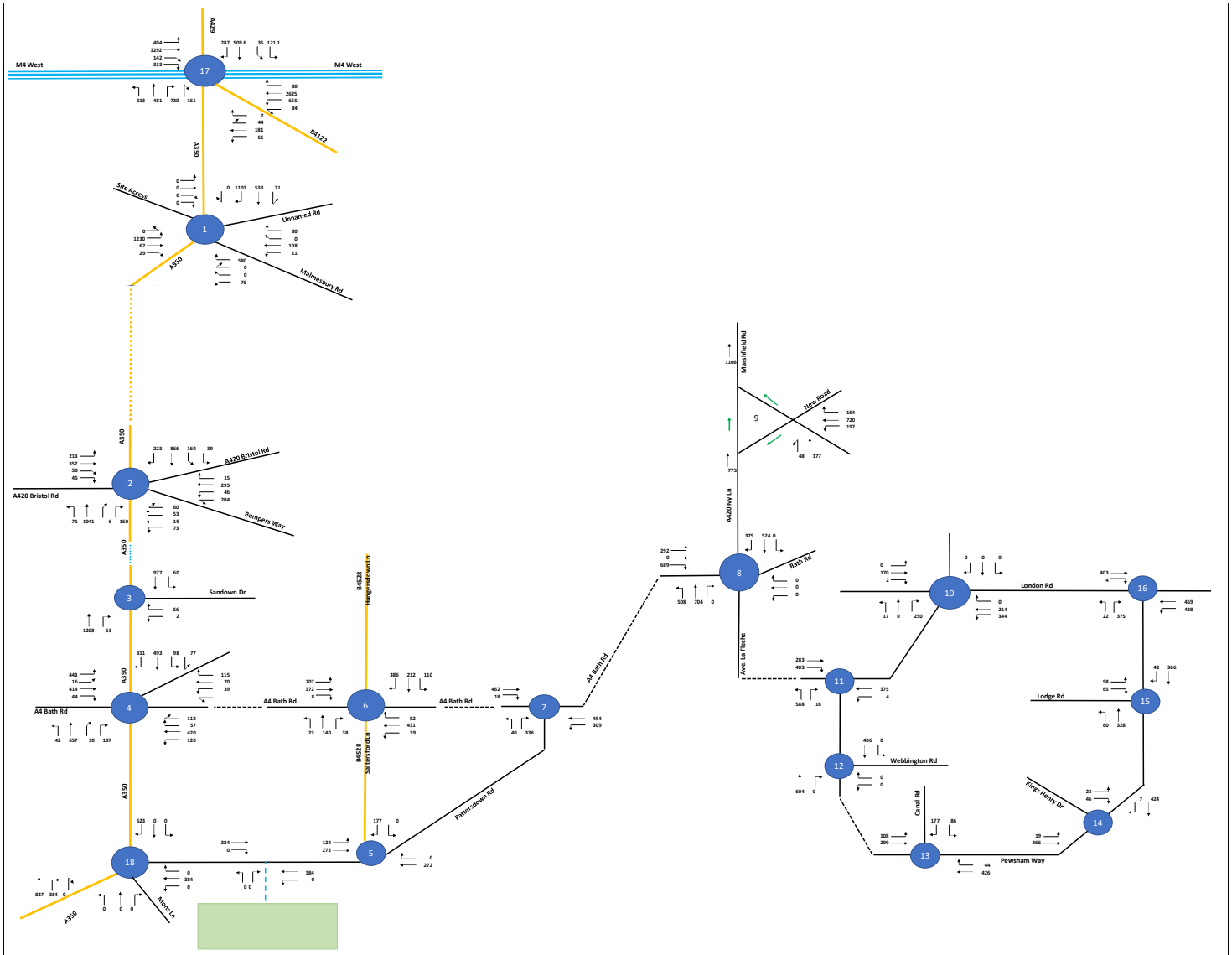
Parameter Summary:

Trip rate parameter range selected:	4 - 1000 (units: DWELLS)
Survey date date range:	12/05/2014 - 18/03/2024
Number of weekdays (Monday-Friday):	13
Number of Saturdays:	0
Number of Sundays:	0
Surveys automatically removed from selection:	23
Surveys manually removed from selection:	0

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

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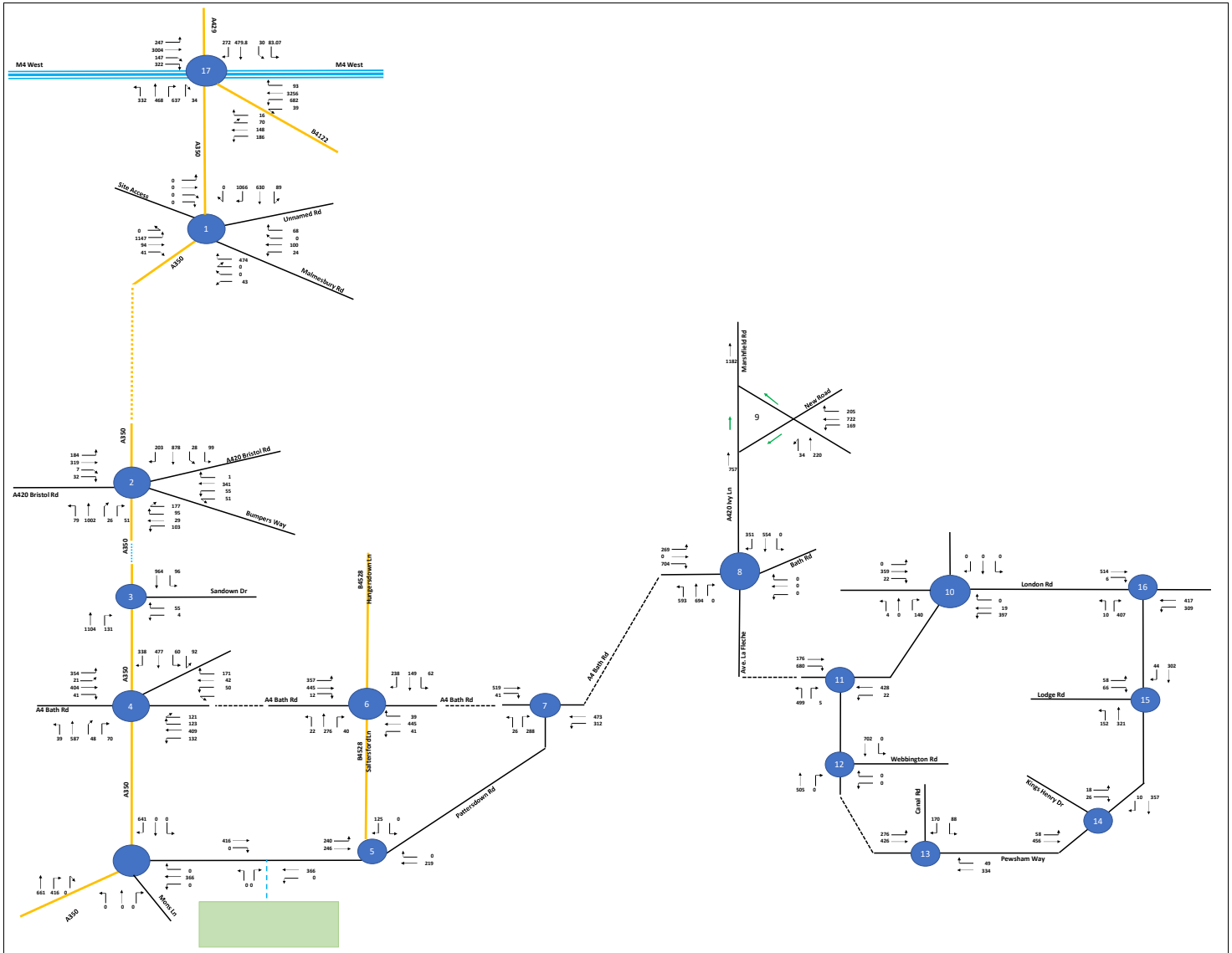
APPENDIX H – TRAFFIC FLOW DIAGRAMS



Notes: 1.016 Year 2024 - Year 2026				Client	Hallam Land Management Ltd
Project No. 14133	File name Chippenham Traffic Diagram_B 17.03.2026 Updated Showell.xls			Project	Chippenham Wiltshire
Date 13.03.2026	Drawn SR	Checked AW	Approved MG	Title	Year 2026 Baseline AM Peak

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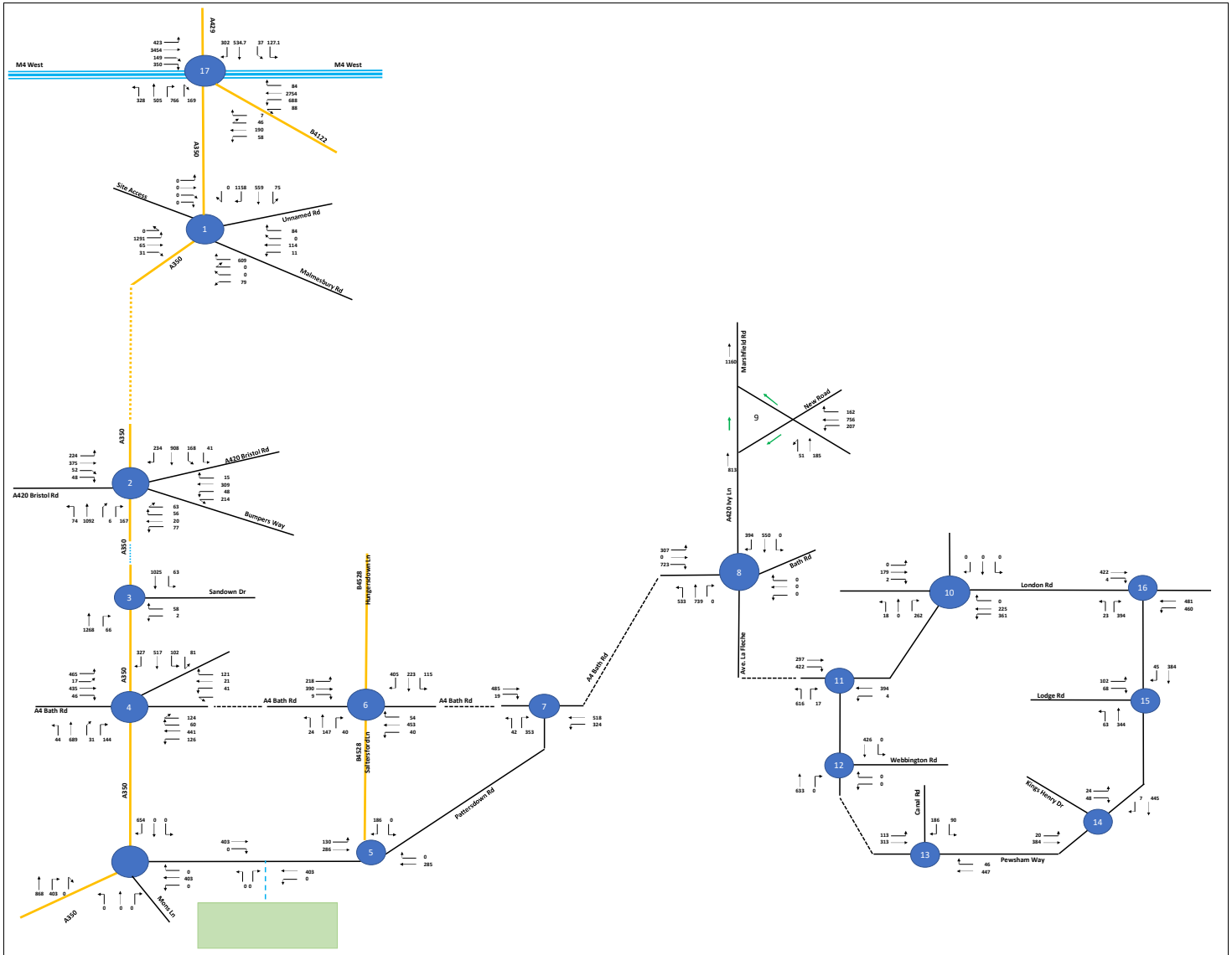
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Notes: 1.01S Year 2024 - Year 2026				Client	Hallam Land Management Ltd
Project No. 14133	File name Chippenham Traffic Diagram_B 17.03.2026 Updated Showell.xlsx			Project	Chippenham Wiltshire
Date 13.03.2026	Drawn SR	Checked AW	Approved MG	Title	Year 2026 Baseline PM Peak

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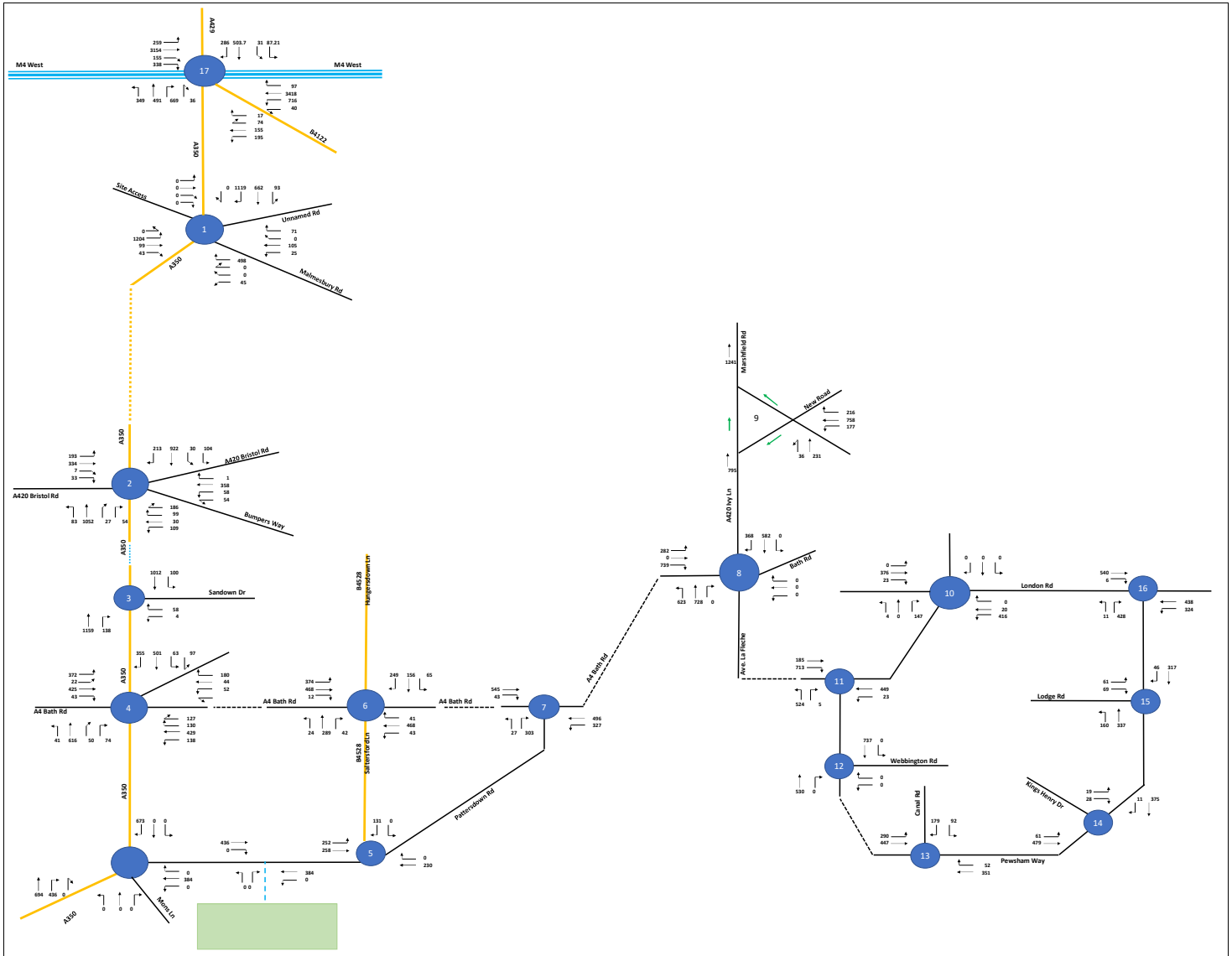
RIDGE



Notes: 1.066 Year 2024 - Year 2031				Client	Hallam Land Management Ltd
Project No. 14133	File name Chippenham Traffic Diagram_B 17.03.2026 Updated Showell.xls			Project	Chippenham Wiltshire
Date 13.03.2026	Drawn SR	Checked AW	Approved MG	Title	Year 2031 Background Growth AM Peak

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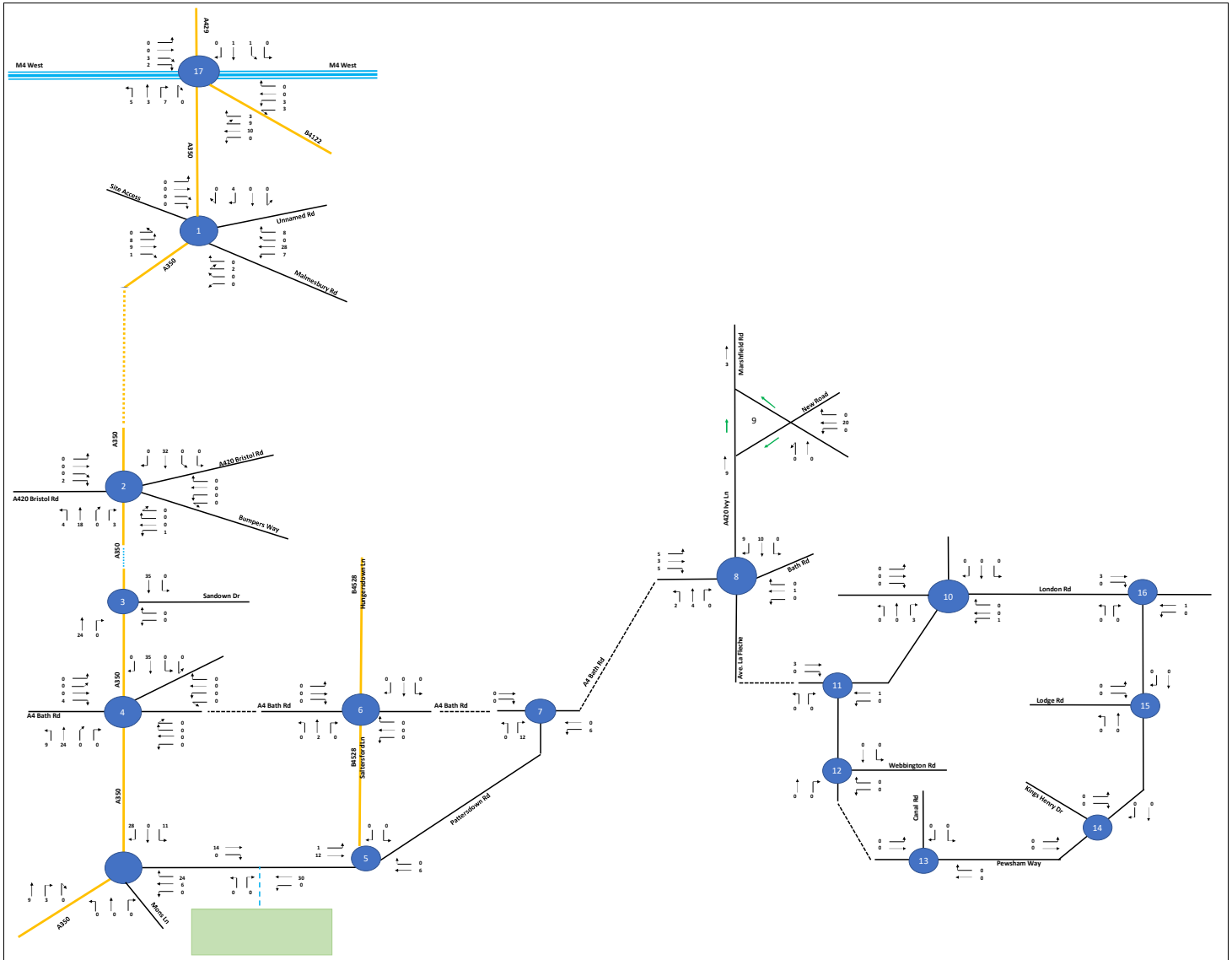
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Notes: 1.066 Year 2024 - Year 2031				Client	Hallam Land Management Ltd
Project No. 14133	File name Chippenham Traffic Diagram_B 17.03.2026 Updated Showell.xls			Project	Chippenham Wiltshire
Date 13.03.2026	Drawn SR	Checked AW	Approved MD	Title	Year 2031 Background Growth PM Peak

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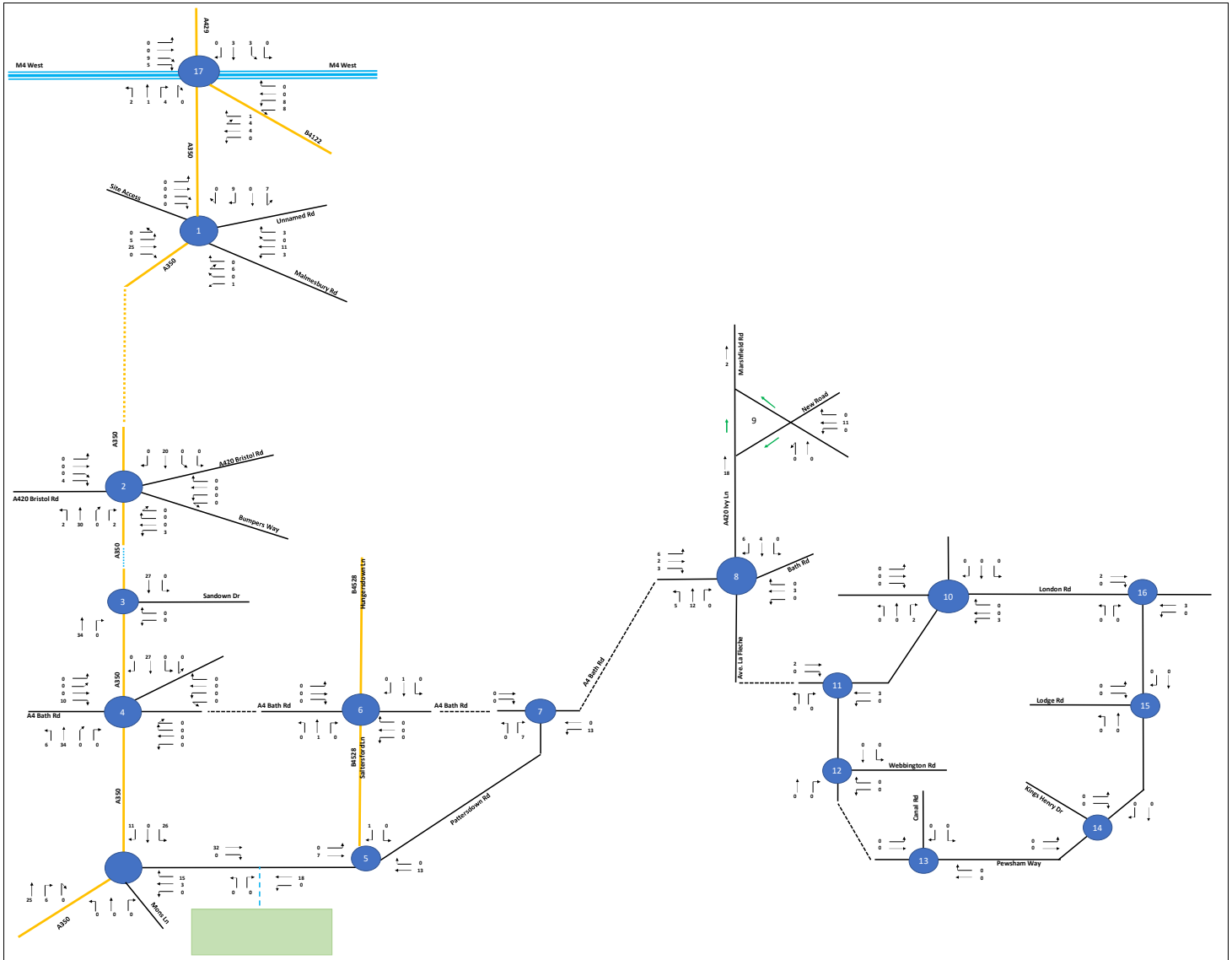


Notes:
1. Combination of CD1 Showell Nurseries (120 units) and Barrow Farm (230 units) developments

Project No. 14133	File name: Chippenham Traffic Diagram_B 17.03.2026 Updated Showell.xls			Client: Hallam Land Management Ltd
Date: 13.03.2026	Drawn: SR	Checked: AW	Approved: MG	Project: Chippenham Wiltshire
				Title: Committed Development Traffic AM Peak

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Notes:
1. Combination of CD1 Showell Nurseries (120 units) and Barrow Farm (230 units) developments

Project No.	File name			
14133	Chippenham Traffic Diagram_B 17.03.2026 Updated Showell.xls			
Date	Drawn	Checked	Approved	
13.03.2026	SR	AW	MG	

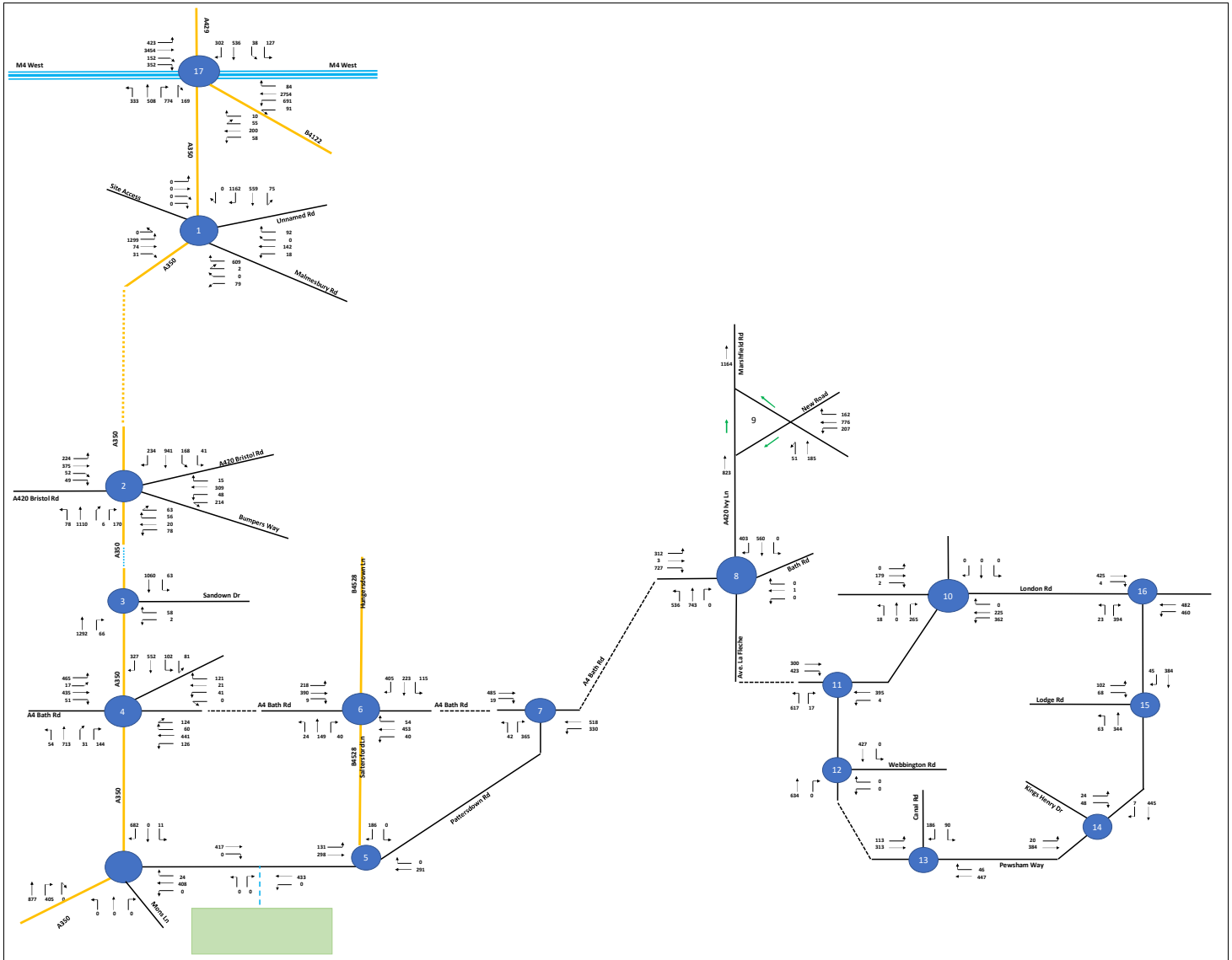
Client: Hallam Land Management Ltd

Project: Chippenham Wiltshire

Title: Committed Development Traffic PM Peak

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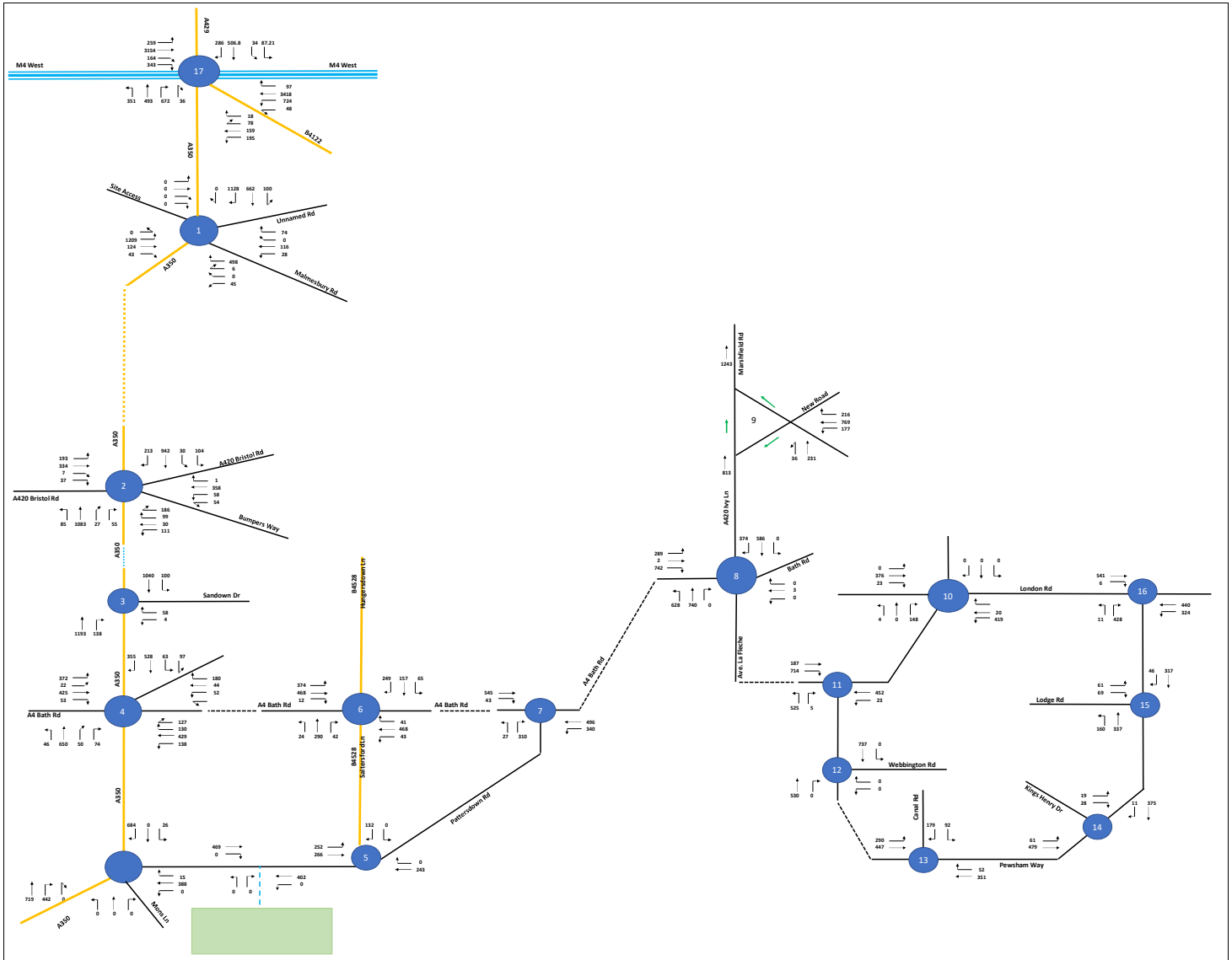


Notes:
1. Year 2031 Background Traffic Growth + Committee Developments of Showell Nurseries and Barrow Farm

Project No.	File name			Client
14133	Chippenham Traffic Diagram_B 17.03.2026 Updated Showell.xls			Hallam Land Management Ltd
Date	Drawn	Checked	Approved	Project
13.03.2026	SR	AW	MG	Chippenham Wiltshire
				Title
				Year 2031 Baseline AM Peak

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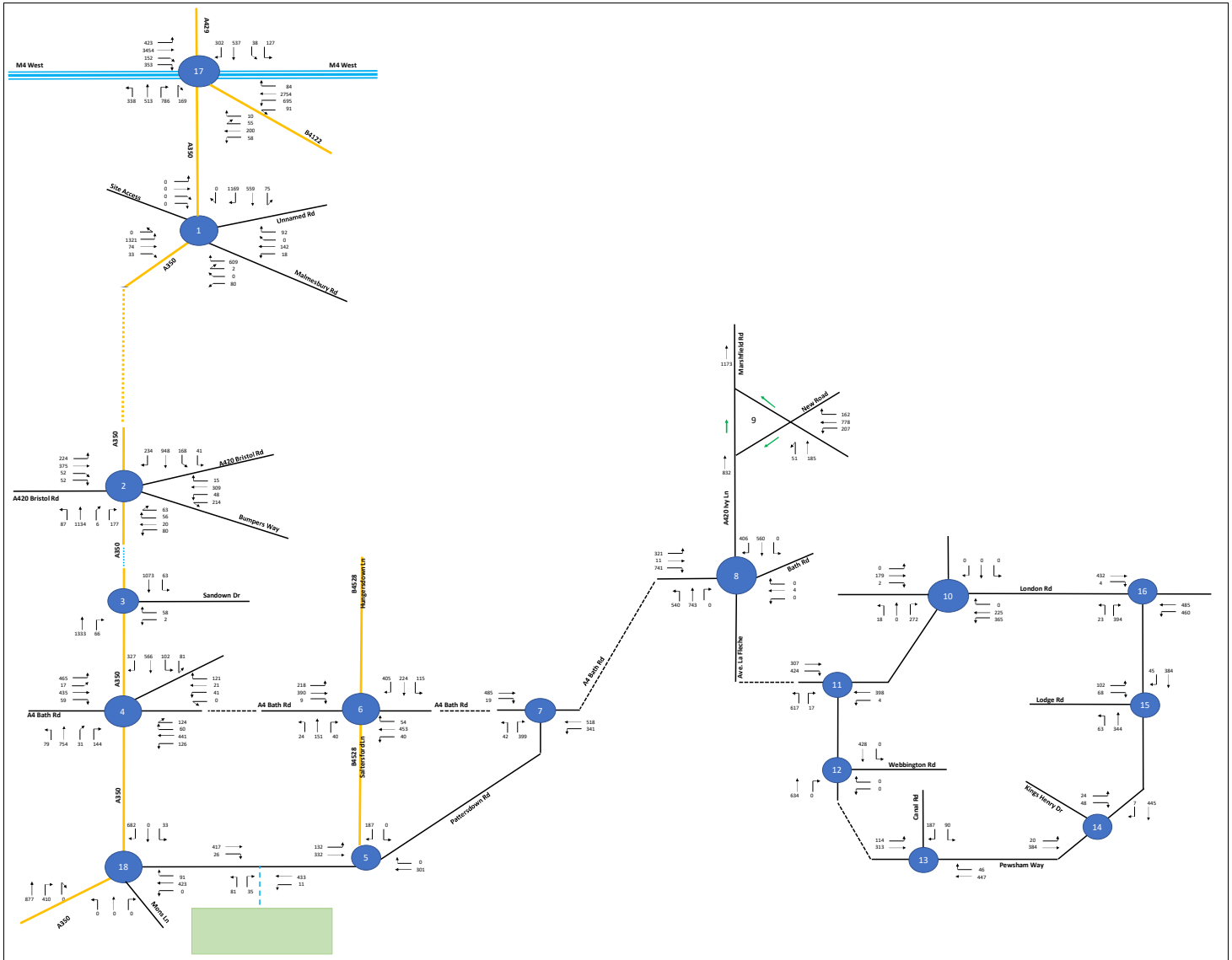


Notes:
1. Year 2031 Background Traffic Growth + Committee Developments of Showell Nurseries and Barrow Farm

Project No. 14133	File name: Chippenham Traffic Diagram_B 17.03.2026 Updated Showell.xlsx			Client: Hallam Land Management Ltd
Date: 13.03.2026	Drawn: SR	Checked: AW	Approved: MG	Project: Chippenham Wiltshire
				Title: Year 2031 Baseline PM Peak

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Notes:
1. Year 2031 Background Traffic Growth + Committee Developments of Showell Nurseries and Barrow Farm + Proposed Development

Project No. 14133	File name Chippenham Traffic Diagram_B 17.03.2026 Updated Showell.xlsx			
Date 13.03.2026	Drawn SR	Checked AW	Approved MD	

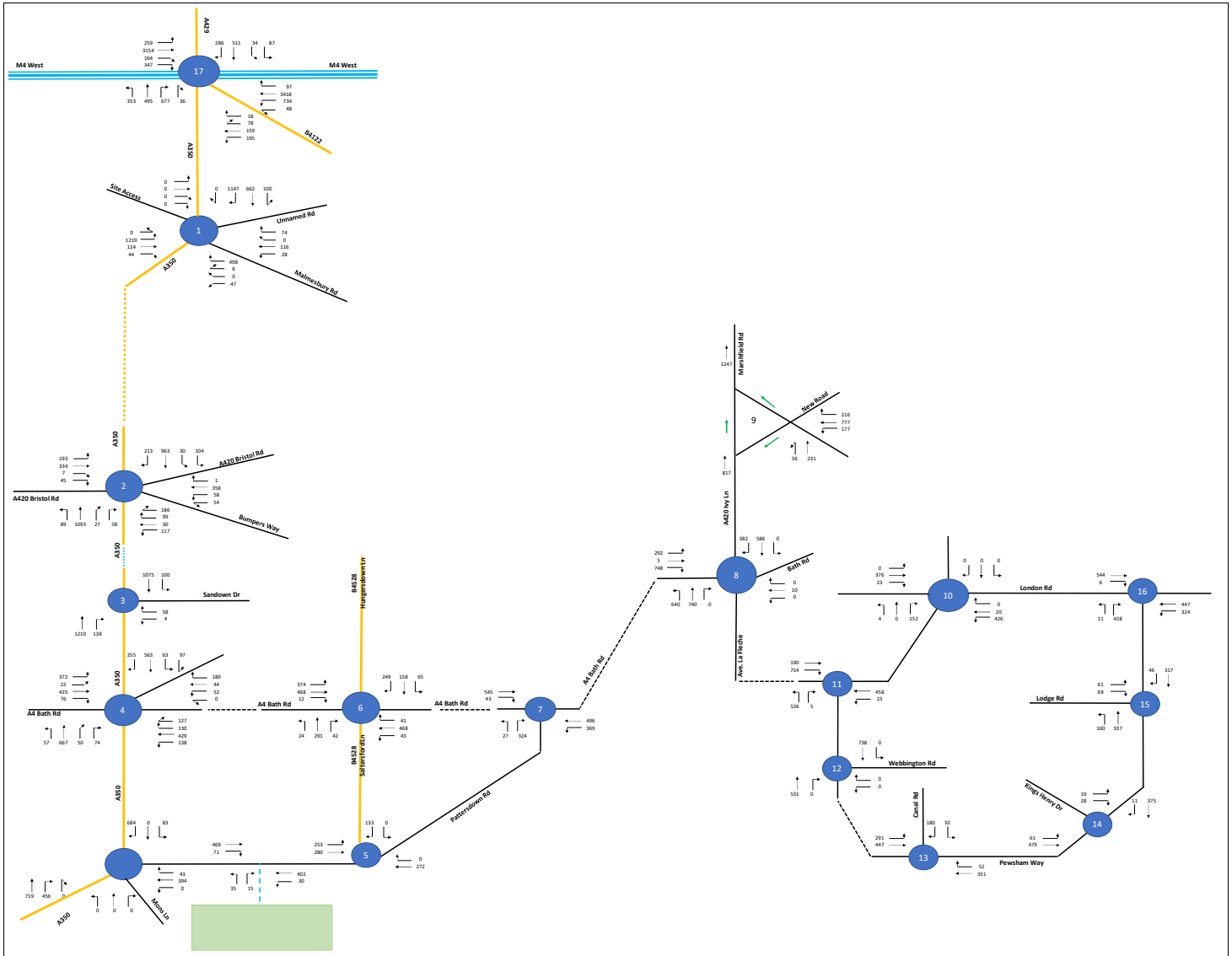
Client: Hallam Land Management Ltd

Project: Chippenham Wiltshire

Title: Year 2031 Baseline + Development Traffic (400 Units) AM Peak

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Notes:
1. Year 2031 Background Traffic Growth + Committee Developments of Showerll Nurseries and Barrow Farm + Proposed Development

Project No. 14133	File name Chippenham Traffic Diagram_B 17.03.2026 Undated Showell.xlsx			
Date 13.03.2026	Drawn SR	Checked AW	Approved MG	

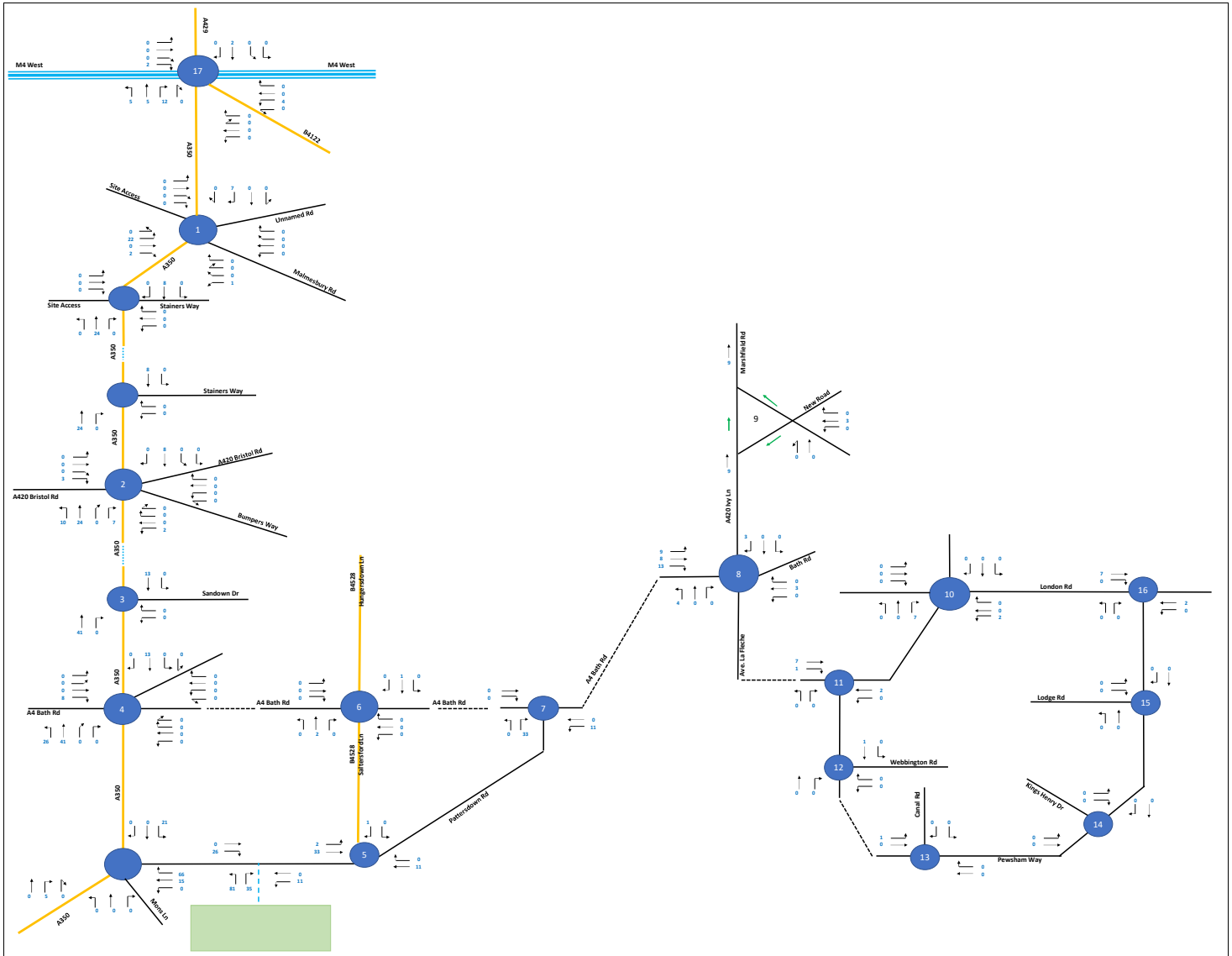
Client: Hallam Land Management Ltd

Project: Chippenham Wiltshire

Title: Year 2031 Baseline + Development Traffic (400 Units) PM Peak

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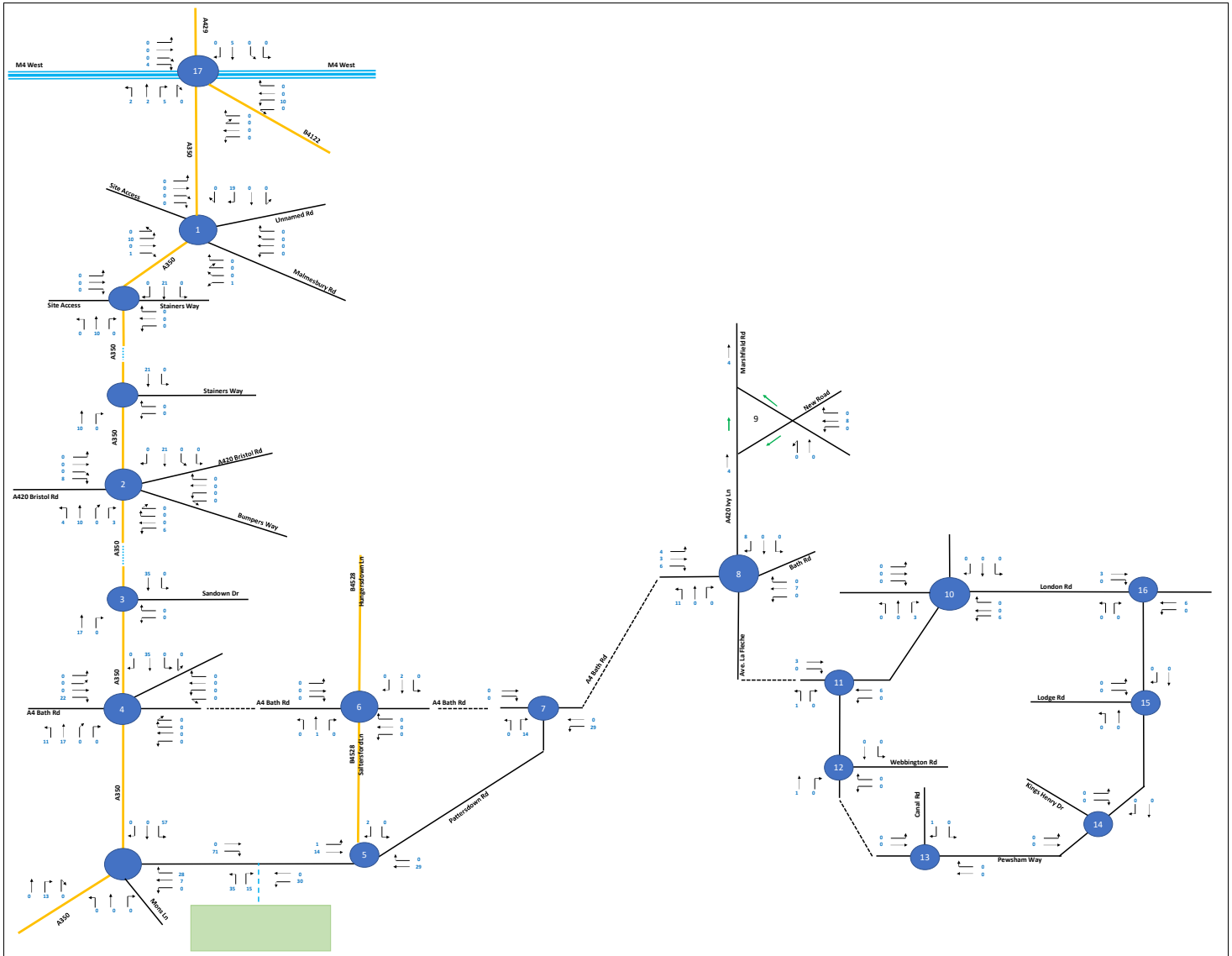


Notes: Development Traffic 400 Dwellings
IN 38
OUT 117

Project No. 14133	File name Chippenham Traffic Diagram_B 17.03.2026 Updated Showell.xlsx			Client: Hallam Land Management Ltd
Date 13.03.2026	Drawn SR	Checked AW	Approved MD	Project: Chippenham Wiltshire
				Title: Development Traffic AM Peak

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Notes: Development Traffic 400 Dwellings
IN 101
OUT 50

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Date 13.03.2026	Drawn SR	Checked AW	Approved MD	

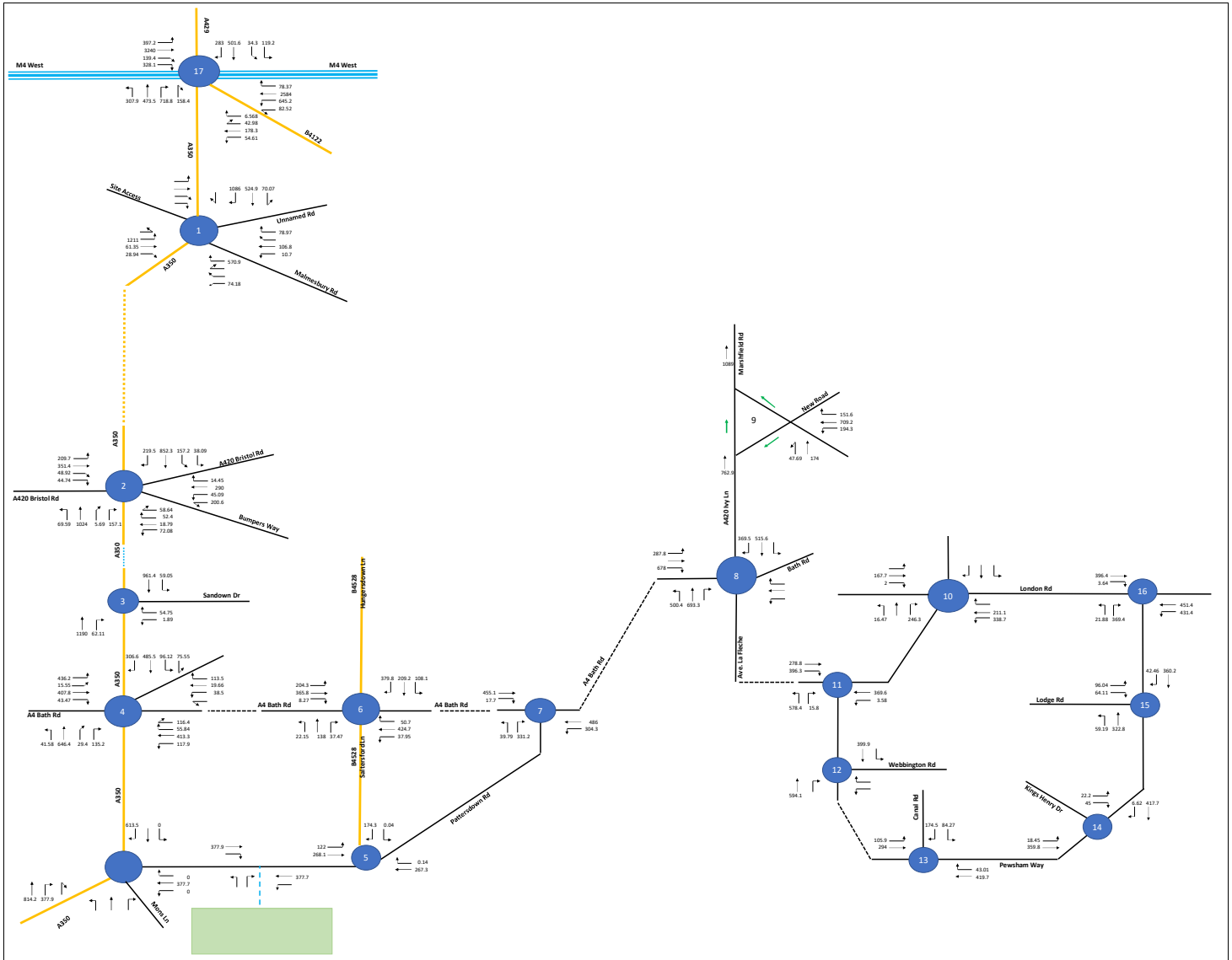
Client: Hallam Land Management Ltd

Project: Chippenham Wiltshire

Title: Development Traffic PM Peak

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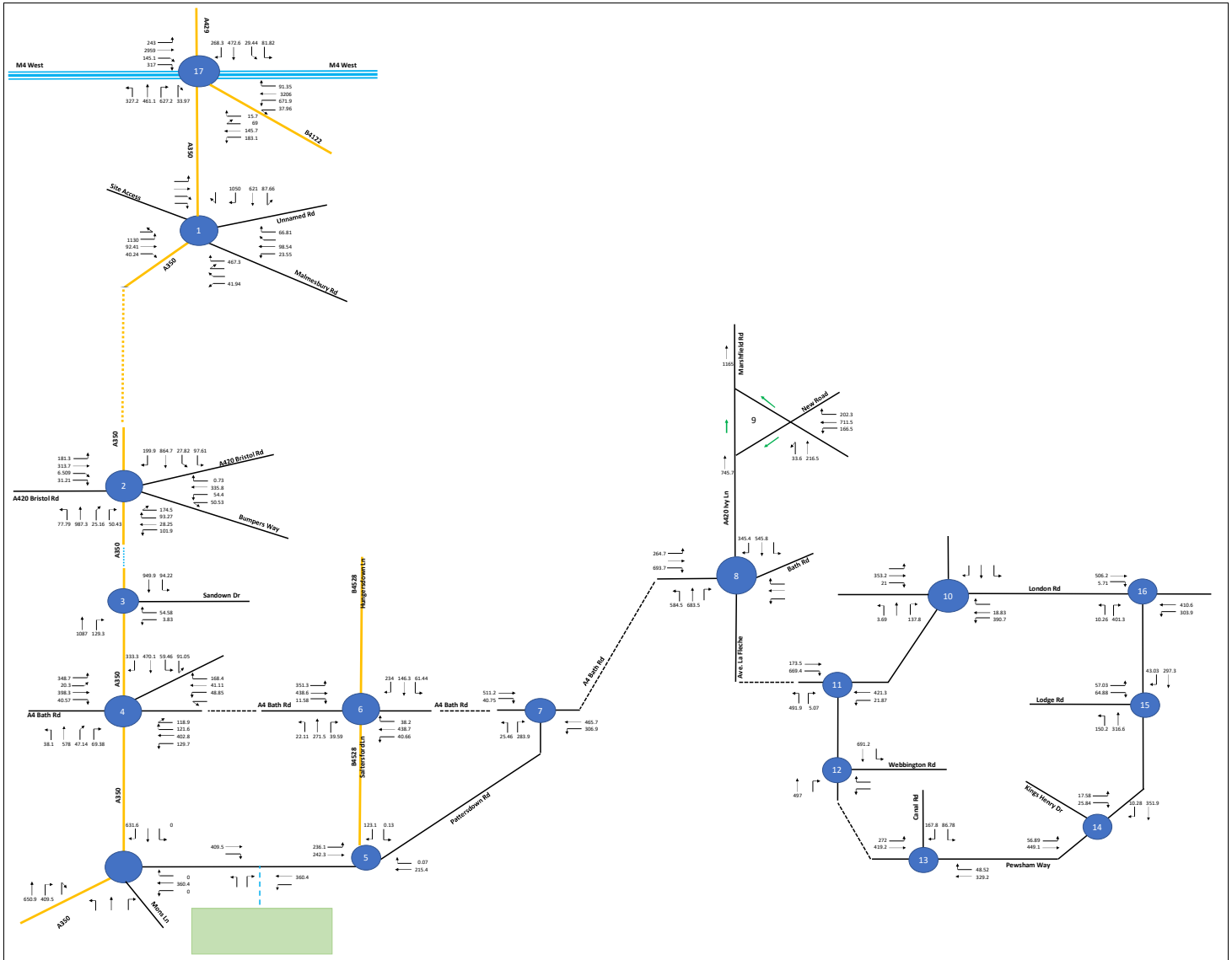
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Notes:				Client	Hallam Land Management Ltd
Project No. 14133	File name Chippenham Traffic Diagram_B 17.03.2026 Updated Showell.xls			Project	Chippenham Wiltshire
Date 13.03.2026	Drawn SR	Checked AW	Approved MD	Title	Year 2024 Baseline AM Peak

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Notes:				Client	Hallam Land Management Ltd
Project No. 14133	File name Chippenham Traffic Diagram_B 17.03.2026 Updated Showell.xls			Project	Chippenham Wiltshire
Date 13.03.2026	Drawn SR	Checked AW	Approved MD	Title	Year 2024 Baseline AM Peak

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APPENDIX I – JUNCTION MODEL OUTPUT REPORTS

Junctions 10

ARCADY 10 - Roundabout Module

Version: 10.1.1.1905
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Filename: Chequers RA - AB.j10
Path: Y:\PROJECT FOLDER\B14133 Chippenham\Calculations\Transport\ARCADY\2026 March TA
Report generation date: 24/03/2026 09:26:28

»Year 2031 Baseline, AM
»Year 2031 Baseline, PM
»Year 2031 + Dev, AM
»Year 2031 + Dev, PM
»Year 2026 Baseline, AM
»Year 2026 Baseline, PM

Summary of junction performance

	AM						PM					
	Set ID	Queue (PCU)	Delay (s)	RFC	LOS	Junction Delay (s)	Set ID	Queue (PCU)	Delay (s)	RFC	LOS	Junction Delay (s)
	[Lane Simulation] -Year 2031 Baseline											
1 - A350 North	D1	2.2	6.77	0.50	A	49.87	D2	1.9	5.94	0.48	A	24.50
2 - Sainsbury		0.7	13.22	0.38	B			1.3	15.46	0.52	C	
3 - A4 East		2.2	10.32	0.41	B			2.5	10.01	0.47	B	
4 - A350 South		6.1	21.14	0.85	C			4.9	19.75	0.80	C	
5 - A4 West		50.0	162.95	1.03	F			17.4	67.69	0.94	F	
	[Lane Simulation] - Year 2031 + Dev											
1 - A350 North	D3	2.3	6.73	0.51	A	59.64	D4	2.0	6.15	0.51	A	32.96
2 - Sainsbury		0.7	13.16	0.40	B			1.5	17.16	0.56	C	
3 - A4 East		2.3	10.35	0.41	B			2.6	10.90	0.48	B	
4 - A350 South		11.7	36.29	0.91	E			6.2	24.88	0.82	C	
5 - A4 West		61.2	189.39	1.05	F			27.0	98.14	0.97	F	
	[Lane Simulation] - Year 2026 Baseline											
1 - A350 North	D5	2.0	6.33	0.46	A	23.57	D6	1.6	5.52	0.45	A	15.24
2 - Sainsbury		0.5	11.60	0.34	B			1.0	12.68	0.49	B	
3 - A4 East		1.7	8.82	0.38	A			1.9	8.73	0.43	A	
4 - A350 South		4.0	14.68	0.75	B			3.0	13.39	0.68	B	
5 - A4 West		17.8	64.34	1.03	F			8.5	35.22	0.89	E	

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

Values shown are the highest values encountered over all time segments. Delay is the maximum value of average delay per arriving vehicle. Arm and junction delays are averages for all movements, including movements with zero delay.

File summary

File Description

Title	
Location	
Site number	
Date	07/12/2022
Version	
Status	(new file)
Identifier	
Client	
Jobnumber	
Enumerator	JUBB\SRadford
Description	

Units

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

Analysis Options

Vehicle length (m)	Calculate Queue Percentiles	Calculate detailed queueing delay	Show lane queues in feet / metres	Show all PICADY stream intercepts	Calculate residual capacity	RFC Threshold	Average Delay threshold (s)	Queue threshold (PCU)	Use simulation for HCM roundabouts	Use iterations for HCM roundabouts
5.75						0.85	36.00	20.00		

Lane Simulation options

Criteria type	Stop criteria (%)	Stop criteria time (s)	Stop criteria number of trials	Calculate RFCs	Relaxation factor for capacity/RFC runs	Random seed	Results refresh speed (s)	Individual vehicle animation number of trials	Average animation capture interval (s)	Use quick response	Do flow sampling	Suppress automatic lane creation	Last run random seed	Last run number of trials
Delay	1.00	100000	100000	Calculate for all arms	3.00	-1	3	1	60	✓			1236834255	257

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)	Run automatically
D1	Year 2031 Baseline	AM	FLAT	08:00	09:00	60	15	✓
D2	Year 2031 Baseline	PM	FLAT	17:00	18:00	60	15	✓
D3	Year 2031 + Dev	AM	FLAT	08:00	09:00	60	15	✓
D4	Year 2031 + Dev	PM	FLAT	17:00	18:00	60	15	✓
D5	Year 2026 Baseline	AM	FLAT	08:00	09:00	60	15	✓
D6	Year 2026 Baseline	PM	FLAT	17:00	18:00	60	15	✓

Analysis Set Details

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

Year 2031 Baseline, AM

Data Errors and Warnings

Severity	Area	Item	Description
Last Run	Simulation	5 - A4 West	Arm 5: Queue at end of modelled period is greater than 10 PCU. Delay is likely to have been underestimated.
Info	Simulation	A1 - [Lane Simulation]	This run uses Simulation mode. For detailed information on this mode, please see the User Guide.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	Chequers Roundabout	Standard Roundabout		1, 2, 3, 4, 5	49.87	E

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	49.87	E

Arms

Arms

Arm	Name	Description	No give-way line
1	A350 North		
2	Sainsbury		
3	A4 East		
4	A350 South		
5	A4 West		

Roundabout Geometry

Arm	V - Approach road half-width (m)	E - Entry width (m)	I' - Effective flare length (m)	R - Entry radius (m)	D - Inscribed circle diameter (m)	PHI - Conflict (entry) angle (deg)	Entry only	Exit only
1 - A350 North	7.32	10.71	7.9	20.3	70.0	29.0		
2 - Sainsbury	3.47	5.95	3.0	9.3	70.0	50.0		
3 - A4 East	6.62	9.92	16.6	25.6	70.0	39.0		
4 - A350 South	7.39	9.84	5.7	35.3	70.0	27.0		
5 - A4 West	3.55	8.68	17.0	20.7	70.0	45.0		

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Arm	Final slope	Final intercept (PCU/hr)
1 - A350 North	0.658	2662
2 - Sainsbury	0.381	1100
3 - A4 East	0.636	2563
4 - A350 South	0.660	2632
5 - A4 West	0.505	1772

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

Lane Simulation: Arm options

Arm	Lane capacity source	Traffic considering secondary lanes (%)
1 - A350 North	Evenly split	10.00
2 - Sainsbury	Evenly split	10.00
3 - A4 East	Evenly split	10.00
4 - A350 South	Evenly split	10.00
5 - A4 West	Evenly split	10.00

Lanes

Arm	Side	Lane level	Lane	Destination arms	Has limited storage	Storage (PCU)	Has bottleneck	Has obstruction	Minimum capacity (PCU/hr)	Maximum capacity (PCU/hr)	Signalised
1 - A350 North	Entry	1	1	2, 3, 4		Infinity			0	99999	
			2	1, 4, 5		Infinity			0	99999	
	Exit	1	1			Infinity					
2 - Sainsbury	Entry	1	1	1, 2, 3, 4, 5		Infinity			0	99999	
	Exit	1	1			Infinity					
3 - A4 East	Entry	1	1	4, 5		Infinity			0	99999	
			2	1, 2, 3		Infinity			0	99999	
	Exit	1	1			Infinity					
4 - A350 South	Entry	1	1	1, 5	✓	24.00			0	99999	
			2	2, 3, 4	✓	24.00			0	99999	
		2	1	(1, 2, 3, 4, 5)		Infinity					
	Exit	1	1			Infinity					
5 - A4 West	Entry	1	1	1	✓	5.00			0	99999	
			2	2, 3, 4, 5	✓	5.00			0	99999	
		2	1	(1, 2, 3, 4, 5)		Infinity					
	Exit	1	1			Infinity					

Entry Lane slope and intercept

Arm	Side	Lane level	Lane	Final slope	Final intercept (PCU/hr)
1 - A350 North	Entry	1	1	0.329	1331
			2	0.329	1331
2 - Sainsbury	Entry	1	1	0.381	1100
3 - A4 East	Entry	1	1	0.318	1282
			2	0.318	1282
4 - A350 South	Entry	1	1	0.330	1316
			2	0.330	1316
5 - A4 West	Entry	1	1	0.252	886
			2	0.252	886

Summary of Entry Lane allowed movements

Arm	Lane Level	Lane	Destination arm				
			A350 North	Sainsbury	A4 East	A350 South	A4 West
1 - A350 North	1	1		✓	✓	✓	
		2	✓			✓	✓
2 - Sainsbury	1	1	✓	✓	✓	✓	✓
3 - A4 East	1	1				✓	✓
		2	✓	✓	✓		
4 - A350 South	1	1	✓				✓
		2		✓	✓	✓	
	2	1	✓	✓	✓	✓	✓
5 - A4 West	1	1	✓				
		2		✓	✓	✓	✓
	2	1	✓	✓	✓	✓	✓

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)	Run automatically
D1	Year 2031 Baseline	AM	FLAT	08:00	09:00	60	15	✓

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1 - A350 North		FLAT	✓	1062	100.000
2 - Sainsbury		FLAT	✓	183	100.000
3 - A4 East		FLAT	✓	751	100.000
4 - A350 South		FLAT	✓	942	100.000
5 - A4 West		FLAT	✓	968	100.000

Origin-Destination Data

Demand (PCU/hr)

		To				
		1 - A350 North	2 - Sainsbury	3 - A4 East	4 - A350 South	5 - A4 West
From	1 - A350 North	0	81	102	552	327
	2 - Sainsbury	121	0	0	41	21
	3 - A4 East	60	124	0	126	441
	4 - A350 South	713	31	144	0	54
	5 - A4 West	465	17	435	51	0

Vehicle Mix

HV data entry mode	PCU Factor for a HV (PCU)
HV Percentages	2.00

Junction	PCU factor for a cyclist	PCU factor for a cyclist in controlling flow
1	0.20	0.80

Heavy Vehicle %

		To				
		1 - A350 North	2 - Sainsbury	3 - A4 East	4 - A350 South	5 - A4 West
From	1 - A350 North	0	10	7	23	20
	2 - Sainsbury	4	0	0	5	2
	3 - A4 East	11	0	2	8	11
	4 - A350 South	19	7	2	0	10
	5 - A4 West	20	10	8	14	0

Cyclist %

		To				
		1 - A350 North	2 - Sainsbury	3 - A4 East	4 - A350 South	5 - A4 West
From	1 - A350 North	0	0	0	0	0
	2 - Sainsbury	0	0	0	0	0
	3 - A4 East	0	0	0	0	0
	4 - A350 South	0	0	0	0	0
	5 - A4 West	0	0	0	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
1 - A350 North	0.50	6.77	2.2	A	1065	1065
2 - Sainsbury	0.38	13.22	0.7	B	184	184
3 - A4 East	0.41	10.32	2.2	B	754	754
4 - A350 South	0.85	21.14	6.1	C	946	946
5 - A4 West	1.03	162.95	50.0	F	970	970

Main Results for each time segment

08:00 - 08:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A350 North	1061	265	775	2133	0.497	1063	1053	1335	0.0	1.9	6.480	A
2 - Sainsbury	183	46	1588	502	0.365	184	184	251	0.0	0.6	11.628	B
3 - A4 East	753	188	1114	1864	0.404	753	745	658	0.0	2.1	9.744	A
4 - A350 South	949	237	1098	1118	0.849	945	927	769	0.0	5.7	17.808	C
5 - A4 West	967	242	1191	986	0.982	919	889	852	0.0	21.2	55.017	F

08:15 - 08:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A350 North	1060	265	779	2134	0.497	1060	1055	1356	1.9	2.0	6.480	A
2 - Sainsbury	184	46	1585	506	0.363	183	183	254	0.6	0.7	12.406	B
3 - A4 East	749	187	1109	1849	0.405	750	748	659	2.1	2.0	9.736	A
4 - A350 South	944	236	1098	1200	0.787	953	948	762	5.7	5.3	21.140	C
5 - A4 West	975	244	1205	961	1.014	930	926	846	21.2	33.6	109.395	F

08:30 - 08:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A350 North	1066	266	790	2140	0.498	1067	1068	1346	2.0	2.1	6.655	A
2 - Sainsbury	188	47	1600	518	0.364	188	186	258	0.7	0.7	13.221	B
3 - A4 East	761	190	1118	1865	0.408	759	755	670	2.0	2.2	10.320	B
4 - A350 South	951	238	1103	1182	0.805	946	945	774	5.3	6.1	20.362	C
5 - A4 West	965	241	1202	936	1.031	934	937	847	33.6	42.8	150.460	F

08:45 - 09:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A350 North	1073	268	783	2145	0.500	1072	1063	1330	2.1	2.2	6.774	A
2 - Sainsbury	180	45	1602	480	0.376	181	184	253	0.7	0.5	12.347	B
3 - A4 East	752	188	1119	1898	0.396	751	755	664	2.2	2.1	9.813	A
4 - A350 South	942	235	1098	1113	0.846	931	933	772	6.1	5.5	19.263	C
5 - A4 West	971	243	1176	957	1.015	938	936	853	42.8	50.0	162.953	F

Lane Results

Lane Level notation: Lane Level 1 is always closest to the junction.

Lanes: Main Results for each time segment

08:00 - 08:15

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A350 North	Entry	1	1	2, 3, 4	488	1076	0.454	490	489	0.0	0.7	5.919	A
			2	1, 4, 5	573	1076	0.533	574	563	0.0	1.1	6.981	A
	Exit	1	1		1335			1335	1299	0.0	0.0	0.000	A
2 - Sainsbury	Entry	1	1	1, 2, 3, 4, 5	183	494	0.371	184	184	0.0	0.6	11.628	B
	Exit	1	1		251			251	250	0.0	0.0	0.000	A
3 - A4 East	Entry	1	1	4, 5	570	927	0.615	572	564	0.0	1.8	11.360	B
			2	1, 2, 3	183	927	0.198	181	181	0.0	0.3	5.040	A
	Exit	1	1		658			658	647	0.0	0.0	0.000	A
4 - A350 South	Entry	1	1	1, 5	772	954	0.809	769	748	0.0	5.5	21.225	C
			2	2, 3, 4	177	954	0.185	176	179	0.0	0.2	4.790	A
		2	1	(1, 2, 3, 4, 5)	949			949	949	0.0	0.0	0.055	A
	Exit	1	1		769			769	760	0.0	0.0	0.000	A
5 - A4 West	Entry	1	1	1	443	585	0.757	444	427	0.0	2.6	20.424	C
			2	2, 3, 4, 5	475	585	0.811	475	462	0.0	3.2	20.905	C
		2	1	(1, 2, 3, 4, 5)	967			918	912	0.0	15.4	34.137	D
	Exit	1	1		852			852	841	0.0	0.0	0.000	A

08:15 - 08:30

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A350 North	Entry	1	1	2, 3, 4	490	1075	0.456	490	489	0.7	0.8	5.955	A
			2	1, 4, 5	570	1075	0.530	570	566	1.1	1.2	6.949	A
	Exit	1	1		1356			1356	1343	0.0	0.0	0.000	A
2 - Sainsbury	Entry	1	1	1, 2, 3, 4, 5	184	495	0.371	183	183	0.6	0.7	12.406	B
	Exit	1	1		254			254	254	0.0	0.0	0.000	A
3 - A4 East	Entry	1	1	4, 5	564	929	0.607	565	564	1.8	1.7	11.402	B
			2	1, 2, 3	185	929	0.199	185	184	0.3	0.3	4.940	A
	Exit	1	1		659			659	660	0.0	0.0	0.000	A
4 - A350 South	Entry	1	1	1, 5	769	954	0.806	776	771	5.5	5.0	24.995	C
			2	2, 3, 4	176	954	0.185	177	178	0.2	0.2	4.887	A
		2	1	(1, 2, 3, 4, 5)	944			945	946	0.0	0.1	0.358	A
	Exit	1	1		762			762	766	0.0	0.0	0.000	A
5 - A4 West	Entry	1	1	1	451	582	0.775	450	446	2.6	2.9	22.333	C
			2	2, 3, 4, 5	479	582	0.822	479	480	3.2	3.5	23.797	C
		2	1	(1, 2, 3, 4, 5)	975			930	928	15.4	27.2	86.069	F
	Exit	1	1		846			846	836	0.0	0.0	0.000	A

08:30 - 08:45

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A350 North	Entry	1	1	2, 3, 4	494	1071	0.461	493	492	0.8	1.0	6.231	A
			2	1, 4, 5	572	1071	0.534	574	576	1.2	1.1	7.030	A
	Exit	1	1		1346			1346	1351	0.0	0.0	0.000	A
2 - Sainsbury	Entry	1	1	1, 2, 3, 4, 5	188	490	0.384	188	186	0.7	0.7	13.221	B
	Exit	1	1		258			258	255	0.0	0.0	0.000	A
3 - A4 East	Entry	1	1	4, 5	579	926	0.625	576	571	1.7	2.0	12.096	B
			2	1, 2, 3	182	926	0.196	183	184	0.3	0.2	5.152	A
	Exit	1	1		670			670	667	0.0	0.0	0.000	A
4 - A350 South	Entry	1	1	1, 5	775	952	0.814	770	770	5.0	5.6	24.042	C
			2	2, 3, 4	176	952	0.185	176	175	0.2	0.3	4.716	A
		2	1	(1, 2, 3, 4, 5)	951			951	948	0.1	0.1	0.317	A
	Exit	1	1		774			774	775	0.0	0.0	0.000	A
5 - A4 West	Entry	1	1	1	443	583	0.761	446	453	2.9	2.9	23.025	C
			2	2, 3, 4, 5	488	583	0.837	489	485	3.5	3.3	24.410	C
		2	1	(1, 2, 3, 4, 5)	965			931	937	27.2	36.5	126.721	F
	Exit	1	1		847			847	843	0.0	0.0	0.000	A

08:45 - 09:00

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A350 North	Entry	1	1	2, 3, 4	496	1073	0.462	494	490	1.0	1.0	6.145	A
			2	1, 4, 5	577	1073	0.538	579	572	1.1	1.2	7.336	A
	Exit	1	1		1330			1330	1335	0.0	0.0	0.000	A
2 - Sainsbury	Entry	1	1	1, 2, 3, 4, 5	180	489	0.369	181	184	0.7	0.5	12.347	B
	Exit	1	1		253			253	252	0.0	0.0	0.000	A
3 - A4 East	Entry	1	1	4, 5	573	926	0.619	572	572	2.0	1.9	11.475	B
			2	1, 2, 3	179	926	0.194	180	184	0.2	0.2	4.984	A
	Exit	1	1		664			664	666	0.0	0.0	0.000	A
4 - A350 South	Entry	1	1	1, 5	761	954	0.797	752	757	5.6	5.2	22.782	C
			2	2, 3, 4	179	954	0.188	179	176	0.3	0.2	4.603	A
		2	1	(1, 2, 3, 4, 5)	942			940	931	0.1	0.2	0.384	A
	Exit	1	1		772			772	770	0.0	0.0	0.000	A
5 - A4 West	Entry	1	1	1	458	589	0.778	455	450	2.9	3.3	23.287	C
			2	2, 3, 4, 5	482	589	0.817	482	486	3.3	3.3	24.213	C
		2	1	(1, 2, 3, 4, 5)	971			940	937	36.5	43.4	139.993	F
	Exit	1	1		853			853	849	0.0	0.0	0.000	A

Lane movements: Main Results for each time segment

08:00 - 08:15

Arm	Side	Lane level	Lane	To Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Simulation max flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A350 North	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	78	20	1331	1077	0.073	78	80	0.0	0.1	6.445	A
				3	104	26	1331	1075	0.097	104	102	0.0	0.2	6.353	A
				4	306	77	1331	1076	0.285	308	308	0.0	0.5	5.598	A
				5	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	244	61	1331	1076	0.227	245	239	0.0	0.4	5.630	A
				5	329	82	1331	1075	0.306	329	324	0.0	0.8	7.956	A
2 - Sainsbury	Entry	1	1	1	121	30	1100	494	0.245	121	120	0.0	0.4	11.439	B
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	41	10	1100	495	0.083	41	42	0.0	0.1	12.110	B
				5	22	5	1100	492	0.044	22	22	0.0	0.1	11.774	B
3 - A4 East	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	127	32	1282	926	0.137	128	124	0.0	0.4	11.347	B
				5	443	111	1282	928	0.477	444	440	0.0	1.4	11.364	B
			2	1	58	15	1282	927	0.063	58	58	0.0	0.1	5.265	A
				2	125	31	1282	927	0.135	124	123	0.0	0.2	4.944	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				5	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
4 - A350 South	Entry	1	1	1	715	179	1316	955	0.749	712	692	0.0	5.1	21.227	C
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				5	57	14	1316	956	0.060	57	55	0.0	0.4	21.211	C
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	31	8	1316	956	0.032	31	31	0.0	0.0	5.007	A
				3	146	36	1316	954	0.153	145	147	0.0	0.2	4.746	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				5	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	715	179	-	-	-	715	713	0.0	0.0	0.052	A
				2	31	8	-	-	-	31	32	0.0	0.0	0.025	A
				3	146	36	-	-	-	146	148	0.0	0.0	0.058	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				5	57	14	-	-	-	57	57	0.0	0.0	0.097	A
5 - A4 West	Entry	1	1	1	443	111	886	585	0.757	444	427	0.0	2.6	20.424	C
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				5	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	18	4	872	579	0.031	18	16	0.0	0.1	21.023	C
				3	409	102	886	585	0.699	409	398	0.0	2.8	20.840	C
				4	48	12	886	586	0.082	48	48	0.0	0.3	21.441	C
				5	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	468	117	-	-	-	443	438	0.0	7.6	34.720	D
				2	18	4	-	-	-	18	16	0.0	0.2	33.361	D
				3	431	108	-	-	-	409	409	0.0	6.9	33.743	D
				4	51	13	-	-	-	48	49	0.0	0.8	32.928	D
				5	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A

08:15 - 08:30

Arm	Side	Lane level	Lane	To Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Simulation max flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A350 North	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	81	20	1331	1075	0.076	81	81	0.1	0.2	6.439	A
				3	104	26	1331	1075	0.097	104	102	0.2	0.2	6.260	A
				4	304	76	1331	1074	0.283	305	306	0.5	0.5	5.694	A
				5	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	241	60	1331	1074	0.224	240	244	0.4	0.5	5.681	A
				5	329	82	1331	1074	0.307	330	322	0.8	0.7	7.888	A
2 - Sainsbury	Entry	1	1	1	124	31	1100	497	0.250	123	121	0.4	0.5	12.375	B
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	40	10	1100	498	0.080	40	42	0.1	0.1	12.607	B
				5	20	5	1091	493	0.040	20	20	0.1	0.1	12.181	B
3 - A4 East	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	126	32	1282	928	0.136	126	126	0.4	0.3	11.395	B
				5	438	109	1282	928	0.472	439	438	1.4	1.4	11.404	B
			2	1	62	15	1282	929	0.067	62	61	0.1	0.1	5.166	A
				2	123	31	1282	927	0.133	123	123	0.2	0.2	4.839	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				5	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
4 - A350 South	Entry	1	1	1	712	178	1316	954	0.747	720	715	5.1	4.6	25.023	D
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				5	56	14	1316	957	0.059	56	56	0.4	0.4	24.665	C
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	33	8	1316	958	0.035	33	33	0.0	0.0	4.865	A
				3	143	36	1316	956	0.150	143	144	0.2	0.2	4.893	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				5	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	712	178	-	-	-	712	713	0.0	0.0	0.370	A
				2	33	8	-	-	-	33	33	0.0	0.0	0.329	A
				3	143	36	-	-	-	143	144	0.0	0.0	0.311	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				5	56	14	-	-	-	56	55	0.0	0.0	0.369	A
5 - A4 West	Entry	1	1	1	451	113	886	582	0.776	450	446	2.6	2.9	22.333	C
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				5	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	16	4	879	579	0.027	16	17	0.1	0.1	24.328	C
				3	413	103	886	582	0.709	412	414	2.8	3.0	23.697	C
				4	50	13	886	583	0.086	51	49	0.3	0.4	24.496	C
				5	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	471	118	-	-	-	451	447	7.6	13.3	86.865	F
				2	16	4	-	-	-	16	17	0.2	0.4	80.970	F
				3	437	109	-	-	-	413	415	6.9	12.2	85.833	F
				4	51	13	-	-	-	50	49	0.8	1.4	83.097	F
				5	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A

08:30 - 08:45

Arm	Side	Lane level	Lane	To Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Simulation max flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A350 North	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	82	21	1331	1069	0.077	81	83	0.2	0.2	6.680	A
				3	104	26	1331	1071	0.097	104	103	0.2	0.2	6.652	A
				4	308	77	1331	1071	0.288	307	306	0.5	0.6	5.931	A
				5	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	246	62	1331	1071	0.230	247	250	0.5	0.4	5.717	A
				5	325	81	1331	1071	0.304	326	326	0.7	0.7	8.007	A
2 - Sainsbury	Entry	1	1	1	126	32	1100	488	0.259	126	123	0.5	0.5	13.238	B
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	40	10	1095	488	0.082	40	41	0.1	0.2	13.314	B
				5	22	5	1091	483	0.045	22	21	0.1	0.1	12.950	B
3 - A4 East	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	131	33	1282	925	0.141	130	129	0.3	0.5	11.841	B
				5	448	112	1282	926	0.484	446	442	1.4	1.6	12.173	B
			2	1	56	14	1282	925	0.061	57	60	0.1	0.1	5.660	A
				2	126	31	1282	925	0.136	126	124	0.2	0.1	4.931	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				5	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
4 - A350 South	Entry	1	1	1	723	181	1316	952	0.759	717	716	4.6	5.3	24.113	C
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				5	52	13	1316	955	0.055	53	54	0.4	0.3	23.164	C
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	33	8	1316	952	0.035	33	32	0.0	0.1	4.877	A
				3	143	36	1316	952	0.150	143	143	0.2	0.2	4.682	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				5	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	723	181	-	-	-	723	718	0.0	0.1	0.328	A
				2	33	8	-	-	-	33	32	0.0	0.0	0.238	A
				3	143	36	-	-	-	143	144	0.0	0.0	0.271	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				5	52	13	-	-	-	52	54	0.0	0.0	0.361	A
5 - A4 West	Entry	1	1	1	443	111	886	583	0.760	446	453	2.9	2.9	23.025	C
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				5	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	17	4	872	577	0.030	17	17	0.1	0.1	25.152	D
				3	421	105	886	583	0.723	422	420	3.0	2.8	24.373	C
				4	49	12	886	583	0.085	49	48	0.4	0.4	24.484	C
				5	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	463	116	-	-	-	443	453	13.3	17.5	127.019	F
				2	16	4	-	-	-	17	17	0.4	0.6	123.309	F
				3	433	108	-	-	-	421	419	12.2	16.3	126.107	F
				4	53	13	-	-	-	49	48	1.4	2.2	130.825	F
				5	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A

08:45 - 09:00

Arm	Side	Lane level	Lane	To Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Simulation max flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A350 North	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	83	21	1331	1073	0.077	82	81	0.2	0.2	6.745	A
				3	102	26	1331	1073	0.095	102	102	0.2	0.2	6.561	A
				4	311	78	1331	1073	0.289	310	308	0.6	0.6	5.812	A
				5	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	243	61	1331	1072	0.226	243	243	0.4	0.4	5.789	A
				5	335	84	1331	1073	0.312	336	329	0.7	0.8	8.443	A
2 - Sainsbury	Entry	1	1	1	118	30	1100	488	0.243	119	121	0.5	0.4	12.301	B
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	40	10	1100	488	0.083	41	41	0.2	0.1	12.622	B
				5	22	5	1087	481	0.045	22	22	0.1	0.0	12.106	B
3 - A4 East	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	129	32	1282	925	0.139	129	128	0.5	0.4	11.334	B
				5	444	111	1282	926	0.480	442	444	1.6	1.5	11.517	B
			2	1	58	14	1282	926	0.062	58	59	0.1	0.1	5.140	A
				2	122	30	1282	924	0.132	122	124	0.1	0.2	4.917	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				5	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
4 - A350 South	Entry	1	1	1	707	177	1316	954	0.741	699	704	5.3	4.8	22.860	C
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				5	54	13	1316	955	0.056	53	53	0.3	0.3	21.838	C
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	33	8	1311	951	0.035	33	31	0.1	0.1	4.770	A
				3	146	37	1316	954	0.153	146	145	0.2	0.2	4.569	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				5	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	708	177	-	-	-	707	702	0.1	0.1	0.411	A
				2	33	8	-	-	-	33	31	0.0	0.0	0.486	A
				3	147	37	-	-	-	146	144	0.0	0.0	0.274	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				5	54	13	-	-	-	54	53	0.0	0.0	0.312	A
5 - A4 West	Entry	1	1	1	458	115	886	589	0.778	455	450	2.9	3.3	23.287	C
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				5	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	17	4	865	574	0.029	16	16	0.1	0.1	24.347	C
				3	416	104	886	589	0.706	416	419	2.8	2.8	24.138	C
				4	49	12	886	589	0.084	49	51	0.4	0.3	24.828	C
				5	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	473	118	-	-	-	458	452	17.5	21.1	139.369	F
				2	17	4	-	-	-	17	16	0.6	0.7	134.318	F
				3	430	107	-	-	-	416	419	16.3	19.3	141.046	F
				4	52	13	-	-	-	49	50	2.2	2.4	138.013	F
				5	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A

Year 2031 Baseline, PM

Data Errors and Warnings

Severity	Area	Item	Description
Last Run	Simulation	5 - A4 West	Arm 5: Queue at end of modelled period is greater than 10 PCU. Delay is likely to have been underestimated.
Info	Simulation	A1 - [Lane Simulation]	This run uses Simulation mode. For detailed information on this mode, please see the User Guide.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	Chequers Roundabout	Standard Roundabout		1, 2, 3, 4, 5	24.50	C

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	24.50	C

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)	Run automatically
D2	Year 2031 Baseline	PM	FLAT	17:00	18:00	60	15	✓

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1 - A350 North		FLAT	✓	1043	100.000
2 - Sainsbury		FLAT	✓	276	100.000
3 - A4 East		FLAT	✓	824	100.000
4 - A350 South		FLAT	✓	820	100.000
5 - A4 West		FLAT	✓	872	100.000

Origin-Destination Data

Demand (PCU/hr)

		To				
		1 - A350 North	2 - Sainsbury	3 - A4 East	4 - A350 South	5 - A4 West
From	1 - A350 North	0	97	63	528	355
	2 - Sainsbury	180	0	0	52	44
	3 - A4 East	130	127	0	138	429
	4 - A350 South	650	50	74	0	46
	5 - A4 West	372	22	425	53	0

Vehicle Mix

HV data entry mode	PCU Factor for a HV (PCU)
HV Percentages	2.00

Junction	PCU factor for a cyclist	PCU factor for a cyclist in controlling flow
1	0.20	0.80

Heavy Vehicle %

		To				
		1 - A350 North	2 - Sainsbury	3 - A4 East	4 - A350 South	5 - A4 West
From	1 - A350 North	0	3	5	12	11
	2 - Sainsbury	3	0	0	2	1
	3 - A4 East	7	1	0	3	4
	4 - A350 South	17	3	1	0	4
	5 - A4 West	10	2	6	3	0

Cyclist %

		To				
		1 - A350 North	2 - Sainsbury	3 - A4 East	4 - A350 South	5 - A4 West
From	1 - A350 North	0	0	0	0	0
	2 - Sainsbury	0	0	0	0	0
	3 - A4 East	0	0	0	0	0
	4 - A350 South	0	0	0	0	0
	5 - A4 West	0	0	0	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
1 - A350 North	0.48	5.94	1.9	A	1043	1043
2 - Sainsbury	0.52	15.46	1.3	C	276	276
3 - A4 East	0.47	10.01	2.5	B	825	825
4 - A350 South	0.80	19.75	4.9	C	819	819
5 - A4 West	0.94	67.69	17.4	F	873	873

Main Results for each time segment

17:00 - 17:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A350 North	1047	262	740	2206	0.474	1046	1039	1326	0.0	1.7	5.780	A
2 - Sainsbury	275	69	1489	526	0.522	273	275	297	0.0	1.2	14.115	B
3 - A4 East	827	207	1209	1778	0.465	829	819	553	0.0	2.3	9.782	A
4 - A350 South	823	206	1269	1078	0.764	822	804	769	0.0	4.8	17.643	C
5 - A4 West	880	220	1214	932	0.944	851	824	877	0.0	12.9	38.903	E

17:15 - 17:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A350 North	1047	262	751	2192	0.478	1047	1043	1328	1.7	1.8	5.879	A
2 - Sainsbury	275	69	1502	530	0.518	276	276	296	1.2	1.2	15.365	C
3 - A4 East	832	208	1214	1769	0.470	829	826	563	2.3	2.5	9.980	A
4 - A350 South	816	204	1270	1077	0.758	819	819	774	4.8	4.3	19.493	C
5 - A4 West	868	217	1209	938	0.926	870	860	879	12.9	15.2	60.873	F

17:30 - 17:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A350 North	1037	259	750	2187	0.474	1035	1041	1330	1.8	1.9	5.921	A
2 - Sainsbury	277	69	1483	532	0.520	277	278	302	1.2	1.3	15.464	C
3 - A4 East	826	207	1203	1813	0.456	827	829	557	2.5	2.2	10.013	B
4 - A350 South	815	204	1264	1025	0.795	820	819	766	4.3	4.3	19.747	C
5 - A4 West	870	218	1216	949	0.917	864	865	867	15.2	17.4	67.686	F

17:45 - 18:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A350 North	1042	260	744	2222	0.469	1043	1044	1332	1.9	1.8	5.937	A
2 - Sainsbury	278	69	1494	534	0.520	277	276	293	1.3	1.2	15.233	C
3 - A4 East	814	204	1215	1828	0.445	816	820	556	2.2	2.2	9.784	A
4 - A350 South	821	205	1260	1078	0.762	815	813	771	4.3	4.9	19.013	C
5 - A4 West	873	218	1207	1024	0.852	869	873	868	17.4	17.0	66.663	F

Lane Results

Lane Level notation: Lane Level 1 is always closest to the junction.

Lanes: Main Results for each time segment

17:00 - 17:15

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A350 North	Entry	1	1	2, 3, 4	467	1088	0.429	468	464	0.0	0.6	5.187	A
			2	1, 4, 5	580	1088	0.533	579	575	0.0	1.1	6.269	A
	Exit	1	1		1326			1326	1298	0.0	0.0	0.000	A
2 - Sainsbury	Entry	1	1	1, 2, 3, 4, 5	275	532	0.516	273	275	0.0	1.2	14.115	B
	Exit	1	1		297			297	294	0.0	0.0	0.000	A
3 - A4 East	Entry	1	1	4, 5	568	897	0.633	570	563	0.0	1.8	11.588	B
			2	1, 2, 3	259	897	0.288	259	256	0.0	0.5	5.784	A
	Exit	1	1		553			553	536	0.0	0.0	0.000	A
4 - A350 South	Entry	1	1	1, 5	699	897	0.779	698	681	0.0	4.6	20.034	C
			2	2, 3, 4	124	897	0.138	124	123	0.0	0.2	4.673	A
		2	1	(1, 2, 3, 4, 5)	823			823	823	0.0	0.1	0.155	A
	Exit	1	1		769			769	766	0.0	0.0	0.000	A
5 - A4 West	Entry	1	1	1	365	580	0.630	363	353	0.0	1.9	16.160	C
			2	2, 3, 4, 5	488	580	0.842	488	471	0.0	3.2	21.373	C
		2	1	(1, 2, 3, 4, 5)	880			853	844	0.0	7.8	19.498	C
	Exit	1	1		877			877	866	0.0	0.0	0.000	A

17:15 - 17:30

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A350 North	Entry	1	1	2, 3, 4	465	1084	0.429	464	463	0.6	0.7	5.280	A
			2	1, 4, 5	582	1084	0.537	582	580	1.1	1.1	6.367	A
	Exit	1	1		1328			1328	1327	0.0	0.0	0.000	A
2 - Sainsbury	Entry	1	1	1, 2, 3, 4, 5	275	527	0.521	276	276	1.2	1.2	15.365	C
	Exit	1	1		296			296	296	0.0	0.0	0.000	A
3 - A4 East	Entry	1	1	4, 5	575	895	0.642	573	568	1.8	2.1	11.799	B
			2	1, 2, 3	257	895	0.287	256	258	0.5	0.5	5.961	A
	Exit	1	1		563			563	556	0.0	0.0	0.000	A
4 - A350 South	Entry	1	1	1, 5	693	897	0.772	696	695	4.6	4.1	22.335	C
			2	2, 3, 4	123	897	0.137	123	124	0.2	0.1	4.708	A
		2	1	(1, 2, 3, 4, 5)	816			816	817	0.1	0.0	0.155	A
	Exit	1	1		774			774	771	0.0	0.0	0.000	A
5 - A4 West	Entry	1	1	1	371	581	0.639	369	366	1.9	2.0	18.246	C
			2	2, 3, 4, 5	497	581	0.856	501	494	3.2	3.1	23.706	C
		2	1	(1, 2, 3, 4, 5)	868			869	860	7.8	10.1	39.407	E
	Exit	1	1		879			879	876	0.0	0.0	0.000	A

17:30 - 17:45

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A350 North	Entry	1	1	2, 3, 4	460	1084	0.424	459	463	0.7	0.8	5.355	A
			2	1, 4, 5	577	1084	0.533	576	578	1.1	1.1	6.384	A
	Exit	1	1		1330			1330	1331	0.0	0.0	0.000	A
2 - Sainsbury	Entry	1	1	1, 2, 3, 4, 5	277	534	0.518	277	278	1.2	1.3	15.464	C
	Exit	1	1		302			302	299	0.0	0.0	0.000	A
3 - A4 East	Entry	1	1	4, 5	563	899	0.626	564	570	2.1	1.8	11.891	B
			2	1, 2, 3	263	899	0.293	263	259	0.5	0.4	5.880	A
	Exit	1	1		557			557	557	0.0	0.0	0.000	A
4 - A350 South	Entry	1	1	1, 5	692	899	0.770	696	695	4.1	4.1	22.577	C
			2	2, 3, 4	123	899	0.137	123	124	0.1	0.1	4.808	A
		2	1	(1, 2, 3, 4, 5)	815			815	819	0.0	0.0	0.188	A
	Exit	1	1		766			766	769	0.0	0.0	0.000	A
5 - A4 West	Entry	1	1	1	372	579	0.642	369	371	2.0	2.1	18.511	C
			2	2, 3, 4, 5	492	579	0.849	495	494	3.1	3.4	24.045	C
		2	1	(1, 2, 3, 4, 5)	870			863	866	10.1	12.0	45.950	E
	Exit	1	1		867			867	875	0.0	0.0	0.000	A

17:45 - 18:00

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A350 North	Entry	1	1	2, 3, 4	462	1086	0.426	462	463	0.8	0.8	5.399	A
			2	1, 4, 5	580	1086	0.534	581	581	1.1	1.1	6.374	A
	Exit	1	1		1332			1332	1327	0.0	0.0	0.000	A
2 - Sainsbury	Entry	1	1	1, 2, 3, 4, 5	278	530	0.524	277	276	1.3	1.2	15.233	C
	Exit	1	1		293			293	294	0.0	0.0	0.000	A
3 - A4 East	Entry	1	1	4, 5	557	895	0.622	558	564	1.8	1.8	11.506	B
			2	1, 2, 3	257	895	0.287	258	256	0.4	0.4	5.989	A
	Exit	1	1		556			556	561	0.0	0.0	0.000	A
4 - A350 South	Entry	1	1	1, 5	699	901	0.777	694	690	4.1	4.6	21.572	C
			2	2, 3, 4	122	901	0.135	121	122	0.1	0.2	4.763	A
		2	1	(1, 2, 3, 4, 5)	821			821	815	0.0	0.1	0.291	A
	Exit	1	1		771			771	774	0.0	0.0	0.000	A
5 - A4 West	Entry	1	1	1	369	581	0.635	372	374	2.1	1.9	18.354	C
			2	2, 3, 4, 5	498	581	0.856	497	499	3.4	3.3	23.655	C
		2	1	(1, 2, 3, 4, 5)	873			867	872	12.0	11.8	45.599	E
	Exit	1	1		868			868	871	0.0	0.0	0.000	A

Lane movements: Main Results for each time segment

17:00 - 17:15

Arm	Side	Lane level	Lane	To Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Simulation max flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A350 North	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	98	24	1331	1088	0.090	98	97	0.0	0.2	5.570	A
				3	63	16	1331	1088	0.058	64	63	0.0	0.1	5.705	A
				4	306	76	1331	1088	0.281	306	304	0.0	0.4	4.939	A
				5	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	222	56	1331	1087	0.204	222	224	0.0	0.3	4.923	A
				5	358	89	1331	1088	0.329	357	352	0.0	0.8	7.116	A
2 - Sainsbury	Entry	1	1	1	180	45	1100	531	0.339	179	180	0.0	0.8	14.137	B
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	52	13	1100	531	0.097	52	52	0.0	0.2	14.339	B
				5	43	11	1100	532	0.080	42	44	0.0	0.2	13.767	B
3 - A4 East	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	137	34	1282	897	0.153	138	137	0.0	0.4	11.452	B
				5	431	108	1282	896	0.481	433	426	0.0	1.4	11.632	B
			2	1	130	33	1282	896	0.145	131	130	0.0	0.2	5.898	A
				2	128	32	1282	896	0.143	128	127	0.0	0.2	5.674	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				5	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
4 - A350 South	Entry	1	1	1	653	163	1316	897	0.728	653	636	0.0	4.2	20.025	C
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				5	46	12	1316	898	0.052	46	45	0.0	0.3	20.145	C
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	49	12	1316	897	0.055	49	50	0.0	0.1	4.771	A
				3	75	19	1316	896	0.083	75	74	0.0	0.1	4.608	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				5	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	653	163	-	-	-	653	653	0.0	0.1	0.154	A
				2	49	12	-	-	-	49	50	0.0	0.0	0.157	A
				3	75	19	-	-	-	75	74	0.0	0.0	0.123	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				5	46	12	-	-	-	46	46	0.0	0.0	0.215	A
5 - A4 West	Entry	1	1	1	365	91	886	580	0.630	363	353	0.0	1.9	16.160	C
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				5	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	22	5	879	577	0.038	22	21	0.0	0.1	21.141	C
				3	414	103	886	580	0.714	414	400	0.0	2.7	21.364	C
				4	53	13	886	580	0.091	52	50	0.0	0.4	21.539	C
				5	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	375	94	-	-	-	365	360	0.0	3.2	18.917	C
				2	23	6	-	-	-	22	21	0.0	0.2	20.968	C
				3	429	107	-	-	-	414	411	0.0	3.9	19.876	C
				4	54	13	-	-	-	53	51	0.0	0.4	19.754	C
				5	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A

17:15 - 17:30

Arm	Side	Lane level	Lane	To Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Simulation max flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A350 North	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	98	25	1331	1084	0.091	98	97	0.2	0.2	5.745	A
				3	63	16	1331	1085	0.058	63	62	0.1	0.1	5.803	A
				4	304	76	1331	1084	0.280	303	303	0.4	0.4	5.003	A
				5	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	228	57	1331	1084	0.211	228	224	0.3	0.4	4.971	A
				5	354	89	1331	1084	0.327	355	357	0.8	0.7	7.232	A
2 - Sainsbury	Entry	1	1	1	180	45	1100	527	0.341	180	181	0.8	0.8	15.454	C
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	51	13	1100	528	0.097	51	52	0.2	0.2	15.100	C
				5	44	11	1100	529	0.083	44	43	0.2	0.2	15.320	C
3 - A4 East	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	139	35	1282	895	0.155	138	138	0.4	0.5	11.894	B
				5	436	109	1282	895	0.487	435	430	1.4	1.6	11.768	B
			2	1	130	33	1282	895	0.146	129	131	0.2	0.3	6.084	A
				2	127	32	1282	895	0.141	127	127	0.2	0.2	5.842	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				5	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
4 - A350 South	Entry	1	1	1	647	162	1316	897	0.721	650	650	4.2	3.9	22.365	C
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				5	46	12	1316	897	0.051	46	46	0.3	0.2	21.955	C
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	48	12	1316	897	0.054	49	50	0.1	0.0	4.771	A
				3	74	19	1316	899	0.083	75	74	0.1	0.1	4.667	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				5	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	647	162	-	-	-	647	648	0.1	0.0	0.155	A
				2	48	12	-	-	-	48	50	0.0	0.0	0.151	A
				3	75	19	-	-	-	74	74	0.0	0.0	0.144	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				5	46	12	-	-	-	46	45	0.0	0.0	0.179	A
5 - A4 West	Entry	1	1	1	371	93	886	581	0.639	369	366	1.9	2.0	18.246	C
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				5	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	22	6	883	580	0.038	22	22	0.1	0.1	23.634	C
				3	423	106	886	581	0.729	425	419	2.7	2.7	23.722	C
				4	52	13	886	582	0.089	53	53	0.4	0.3	23.616	C
				5	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	372	93	-	-	-	371	366	3.2	4.3	39.036	E
				2	22	6	-	-	-	22	22	0.2	0.3	39.467	E
				3	422	105	-	-	-	423	419	3.9	4.9	39.751	E
				4	52	13	-	-	-	52	53	0.4	0.6	39.145	E
				5	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A

17:30 - 17:45

Arm	Side	Lane level	Lane	To Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Simulation max flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A350 North	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	97	24	1331	1085	0.090	97	98	0.2	0.2	5.841	A
				3	64	16	1331	1085	0.059	64	64	0.1	0.1	5.924	A
				4	298	75	1331	1084	0.275	298	301	0.4	0.5	5.053	A
				5	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	227	57	1331	1085	0.209	227	226	0.4	0.4	5.036	A
				5	350	88	1331	1084	0.323	349	352	0.7	0.8	7.239	A
2 - Sainsbury	Entry	1	1	1	181	45	1100	534	0.338	181	181	0.8	0.8	15.500	C
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	53	13	1100	534	0.100	54	53	0.2	0.2	15.229	C
				5	43	11	1100	535	0.080	43	44	0.2	0.2	15.601	C
3 - A4 East	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	135	34	1282	899	0.151	136	137	0.5	0.4	11.737	B
				5	427	107	1282	899	0.475	428	433	1.6	1.3	11.940	B
			2	1	131	33	1282	900	0.146	131	131	0.3	0.2	6.049	A
				2	132	33	1282	899	0.147	132	129	0.2	0.2	5.719	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				5	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
4 - A350 South	Entry	1	1	1	645	161	1316	899	0.718	649	649	3.9	3.9	22.628	C
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				5	47	12	1314	899	0.052	47	46	0.2	0.2	21.949	C
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	51	13	1316	899	0.056	51	51	0.0	0.1	4.856	A
				3	72	18	1316	900	0.080	72	73	0.1	0.1	4.774	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				5	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	645	161	-	-	-	645	649	0.0	0.0	0.189	A
				2	51	13	-	-	-	51	51	0.0	0.0	0.155	A
				3	72	18	-	-	-	72	73	0.0	0.0	0.196	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				5	47	12	-	-	-	47	46	0.0	0.0	0.209	A
5 - A4 West	Entry	1	1	1	372	93	886	579	0.642	369	371	2.0	2.1	18.511	C
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				5	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	21	5	885	580	0.037	22	22	0.1	0.1	23.819	C
				3	419	105	886	579	0.722	421	420	2.7	2.9	24.095	C
				4	52	13	886	579	0.089	52	52	0.3	0.3	23.752	C
				5	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	374	94	-	-	-	372	371	4.3	5.1	44.977	E
				2	21	5	-	-	-	21	22	0.3	0.3	46.686	E
				3	422	106	-	-	-	419	421	4.9	5.9	46.636	E
				4	52	13	-	-	-	52	52	0.6	0.7	46.723	E
				5	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A

17:45 - 18:00

Arm	Side	Lane level	Lane	To Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Simulation max flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A350 North	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	98	24	1331	1085	0.090	97	96	0.2	0.2	5.817	A
				3	61	15	1331	1085	0.056	61	63	0.1	0.1	5.943	A
				4	304	76	1331	1086	0.280	304	303	0.5	0.5	5.134	A
				5	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	226	56	1331	1085	0.208	225	227	0.4	0.4	5.024	A
				5	354	88	1331	1086	0.326	355	354	0.8	0.7	7.233	A
2 - Sainsbury	Entry	1	1	1	181	45	1100	530	0.341	181	179	0.8	0.8	15.299	C
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	52	13	1100	529	0.098	52	52	0.2	0.2	14.989	B
				5	45	11	1100	530	0.085	45	45	0.2	0.2	15.258	C
3 - A4 East	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	136	34	1282	895	0.152	136	139	0.4	0.4	11.529	B
				5	421	105	1282	895	0.471	422	426	1.3	1.3	11.498	B
			2	1	132	33	1282	895	0.147	132	129	0.2	0.2	6.054	A
				2	125	31	1282	895	0.140	126	127	0.2	0.2	5.927	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				5	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
4 - A350 South	Entry	1	1	1	653	163	1316	901	0.725	647	644	3.9	4.3	21.627	C
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				5	47	12	1316	900	0.052	47	46	0.2	0.3	20.886	C
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	49	12	1316	902	0.055	49	49	0.1	0.1	4.815	A
				3	72	18	1316	901	0.080	72	73	0.1	0.1	4.729	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				5	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	653	163	-	-	-	653	646	0.0	0.1	0.291	A
				2	49	12	-	-	-	49	49	0.0	0.0	0.332	A
				3	73	18	-	-	-	72	73	0.0	0.0	0.293	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				5	46	12	-	-	-	47	46	0.0	0.0	0.242	A
5 - A4 West	Entry	1	1	1	369	92	886	581	0.636	372	374	2.1	1.9	18.354	C
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				5	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	21	5	883	580	0.036	21	21	0.1	0.2	23.873	C
				3	423	106	886	581	0.728	423	424	2.9	2.8	23.690	C
				4	54	13	886	581	0.092	53	53	0.3	0.3	23.297	C
				5	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	372	93	-	-	-	369	373	5.1	5.0	45.157	E
				2	21	5	-	-	-	21	21	0.3	0.3	46.282	E
				3	426	106	-	-	-	423	424	5.9	5.8	45.897	E
				4	54	14	-	-	-	54	53	0.7	0.7	45.890	E
				5	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A

Year 2031 + Dev, AM

Data Errors and Warnings

Severity	Area	Item	Description
Last Run	Simulation	4 - A350 South	Arm 4: Queue at end of modelled period is greater than 10 PCU. Delay is likely to have been underestimated.
Last Run	Simulation	5 - A4 West	Arm 5: Queue at end of modelled period is greater than 10 PCU. Delay is likely to have been underestimated.
Info	Simulation	A1 - [Lane Simulation]	This run uses Simulation mode. For detailed information on this mode, please see the User Guide.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	Chequers Roundabout	Standard Roundabout		1, 2, 3, 4, 5	59.64	F

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	59.64	F

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)	Run automatically
D3	Year 2031 + Dev	AM	FLAT	08:00	09:00	60	15	✓

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1 - A350 North		FLAT	✓	1076	100.000
2 - Sainsbury		FLAT	✓	183	100.000
3 - A4 East		FLAT	✓	751	100.000
4 - A350 South		FLAT	✓	1008	100.000
5 - A4 West		FLAT	✓	976	100.000

Origin-Destination Data

Demand (PCU/hr)

		To				
		1 - A350 North	2 - Sainsbury	3 - A4 East	4 - A350 South	5 - A4 West
From	1 - A350 North	0	81	102	566	327
	2 - Sainsbury	121	0	0	41	21
	3 - A4 East	60	124	0	126	441
	4 - A350 South	754	31	144	0	79
	5 - A4 West	465	17	435	59	0

Vehicle Mix

HV data entry mode	PCU Factor for a HV (PCU)
HV Percentages	2.00

Junction	PCU factor for a cyclist	PCU factor for a cyclist in controlling flow
1	0.20	0.80

Heavy Vehicle %

		To				
		1 - A350 North	2 - Sainsbury	3 - A4 East	4 - A350 South	5 - A4 West
From	1 - A350 North	0	10	7	23	20
	2 - Sainsbury	4	0	0	5	2
	3 - A4 East	11	0	2	8	11
	4 - A350 South	19	7	2	0	10
	5 - A4 West	20	10	8	14	0

Cyclist %

		To				
		1 - A350 North	2 - Sainsbury	3 - A4 East	4 - A350 South	5 - A4 West
From	1 - A350 North	0	0	0	0	0
	2 - Sainsbury	0	0	0	0	0
	3 - A4 East	0	0	0	0	0
	4 - A350 South	0	0	0	0	0
	5 - A4 West	0	0	0	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
1 - A350 North	0.51	6.73	2.3	A	1076	1076
2 - Sainsbury	0.40	13.16	0.7	B	185	185
3 - A4 East	0.41	10.35	2.3	B	749	749
4 - A350 South	0.91	36.29	11.7	E	1021	1021
5 - A4 West	1.05	189.39	61.2	F	973	973

Main Results for each time segment

08:00 - 08:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A350 North	1083	271	774	2125	0.510	1088	1068	1363	0.0	1.9	6.510	A
2 - Sainsbury	187	47	1609	472	0.397	188	183	252	0.0	0.6	12.354	B
3 - A4 East	748	187	1144	1879	0.398	746	738	654	0.0	2.3	9.455	A
4 - A350 South	1001	250	1090	1149	0.871	995	982	800	0.0	8.2	23.872	C
5 - A4 West	963	241	1231	955	1.009	905	875	854	0.0	24.0	64.924	F

08:15 - 08:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A350 North	1084	271	791	2122	0.511	1084	1077	1372	1.9	2.2	6.638	A
2 - Sainsbury	188	47	1622	497	0.379	187	185	253	0.6	0.7	12.875	B
3 - A4 East	754	188	1142	1879	0.401	755	756	666	2.3	2.1	10.037	B
4 - A350 South	1014	253	1102	1181	0.858	1004	996	795	8.2	10.1	31.873	D
5 - A4 West	976	244	1230	926	1.054	933	923	876	24.0	36.7	121.546	F

08:30 - 08:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A350 North	1073	268	799	2131	0.503	1072	1072	1382	2.2	2.3	6.623	A
2 - Sainsbury	184	46	1617	507	0.363	183	182	254	0.7	0.7	12.377	B
3 - A4 East	746	187	1127	1834	0.407	747	753	673	2.1	2.2	10.349	B
4 - A350 South	1047	262	1091	1169	0.895	1028	1016	783	10.1	10.8	34.674	D
5 - A4 West	963	241	1257	920	1.047	924	921	863	36.7	48.0	170.519	F

08:45 - 09:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A350 North	1065	266	798	2136	0.499	1066	1080	1383	2.3	2.2	6.734	A
2 - Sainsbury	180	45	1611	487	0.370	182	182	253	0.7	0.4	13.162	B
3 - A4 East	749	187	1124	1848	0.406	749	753	670	2.2	2.3	10.161	B
4 - A350 South	1022	255	1095	1125	0.908	1009	1011	777	10.8	11.7	36.289	E
5 - A4 West	991	248	1237	945	1.050	944	928	867	48.0	61.2	189.387	F

Lane Results

Lane Level notation: Lane Level 1 is always closest to the junction.

Lanes: Main Results for each time segment

08:00 - 08:15

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A350 North	Entry	1	1	2, 3, 4	501	1076	0.466	503	494	0.0	0.8	6.008	A
			2	1, 4, 5	582	1076	0.541	585	574	0.0	1.1	6.955	A
	Exit	1	1		1363			1363	1332	0.0	0.0	0.000	A
2 - Sainsbury	Entry	1	1	1, 2, 3, 4, 5	187	486	0.386	188	183	0.0	0.6	12.354	B
	Exit	1	1		252			252	249	0.0	0.0	0.000	A
3 - A4 East	Entry	1	1	4, 5	562	918	0.613	560	556	0.0	2.1	11.013	B
			2	1, 2, 3	186	918	0.202	186	181	0.0	0.2	4.929	A
	Exit	1	1		654			654	632	0.0	0.0	0.000	A
4 - A350 South	Entry	1	1	1, 5	827	957	0.864	823	807	0.0	7.6	27.676	D
			2	2, 3, 4	172	957	0.180	172	175	0.0	0.2	4.604	A
		2	1	(1, 2, 3, 4, 5)	1001			999	1013	0.0	0.4	0.594	A
	Exit	1	1		800			800	786	0.0	0.0	0.000	A
5 - A4 West	Entry	1	1	1	435	575	0.756	431	419	0.0	2.9	20.997	C
			2	2, 3, 4, 5	475	575	0.826	474	455	0.0	3.3	22.526	C
		2	1	(1, 2, 3, 4, 5)	963			910	900	0.0	17.9	42.869	E
	Exit	1	1		854			854	847	0.0	0.0	0.000	A

08:15 - 08:30

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A350 North	Entry	1	1	2, 3, 4	503	1071	0.470	502	497	0.8	1.0	6.075	A
			2	1, 4, 5	581	1071	0.543	581	581	1.1	1.2	7.137	A
	Exit	1	1		1372			1372	1363	0.0	0.0	0.000	A
2 - Sainsbury	Entry	1	1	1, 2, 3, 4, 5	188	481	0.391	187	185	0.6	0.7	12.875	B
	Exit	1	1		253			253	253	0.0	0.0	0.000	A
3 - A4 East	Entry	1	1	4, 5	570	918	0.620	570	570	2.1	1.9	11.746	B
			2	1, 2, 3	184	918	0.201	185	186	0.2	0.3	5.133	A
	Exit	1	1		666			666	657	0.0	0.0	0.000	A
4 - A350 South	Entry	1	1	1, 5	839	953	0.881	832	823	7.6	8.6	33.904	D
			2	2, 3, 4	172	953	0.180	172	173	0.2	0.2	4.782	A
		2	1	(1, 2, 3, 4, 5)	1014			1011	1000	0.4	1.3	3.451	A
	Exit	1	1		795			795	789	0.0	0.0	0.000	A
5 - A4 West	Entry	1	1	1	441	576	0.766	438	437	2.9	3.1	22.829	C
			2	2, 3, 4, 5	495	576	0.861	494	486	3.3	3.5	24.721	C
		2	1	(1, 2, 3, 4, 5)	976			936	925	17.9	30.2	97.582	F
	Exit	1	1		876			876	875	0.0	0.0	0.000	A

08:30 - 08:45

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A350 North	Entry	1	1	2, 3, 4	492	1068	0.460	492	496	1.0	1.0	6.258	A
			2	1, 4, 5	581	1068	0.544	580	576	1.2	1.3	6.948	A
	Exit	1	1		1382			1382	1373	0.0	0.0	0.000	A
2 - Sainsbury	Entry	1	1	1, 2, 3, 4, 5	184	483	0.381	183	182	0.7	0.7	12.377	B
	Exit	1	1		254			254	254	0.0	0.0	0.000	A
3 - A4 East	Entry	1	1	4, 5	559	923	0.606	560	570	1.9	1.9	12.140	B
			2	1, 2, 3	187	923	0.202	187	183	0.3	0.3	5.129	A
	Exit	1	1		673			673	660	0.0	0.0	0.000	A
4 - A350 South	Entry	1	1	1, 5	861	956	0.900	845	838	8.6	9.4	36.764	E
			2	2, 3, 4	183	956	0.191	183	178	0.2	0.2	4.959	A
		2	1	(1, 2, 3, 4, 5)	1047			1044	1019	1.3	1.3	4.168	A
	Exit	1	1		783			783	787	0.0	0.0	0.000	A
5 - A4 West	Entry	1	1	1	436	569	0.767	434	436	3.1	3.1	23.178	C
			2	2, 3, 4, 5	490	569	0.861	490	485	3.5	3.5	25.527	D
		2	1	(1, 2, 3, 4, 5)	963			926	921	30.2	41.4	145.990	F
	Exit	1	1		863			863	869	0.0	0.0	0.000	A

08:45 - 09:00

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A350 North	Entry	1	1	2, 3, 4	489	1068	0.458	489	499	1.0	0.9	6.234	A
			2	1, 4, 5	577	1068	0.540	576	581	1.3	1.3	7.178	A
	Exit	1	1		1383			1383	1380	0.0	0.0	0.000	A
2 - Sainsbury	Entry	1	1	1, 2, 3, 4, 5	180	485	0.371	182	182	0.7	0.4	13.162	B
	Exit	1	1		253			253	255	0.0	0.0	0.000	A
3 - A4 East	Entry	1	1	4, 5	563	924	0.609	562	565	1.9	2.1	11.944	B
			2	1, 2, 3	187	924	0.202	187	187	0.3	0.2	5.141	A
	Exit	1	1		670			670	658	0.0	0.0	0.000	A
4 - A350 South	Entry	1	1	1, 5	841	955	0.881	832	835	9.4	9.5	37.426	E
			2	2, 3, 4	177	955	0.186	177	176	0.2	0.2	4.988	A
		2	1	(1, 2, 3, 4, 5)	1022			1019	1011	1.3	2.0	5.616	A
	Exit	1	1		777			777	791	0.0	0.0	0.000	A
5 - A4 West	Entry	1	1	1	446	574	0.777	447	443	3.1	2.9	23.554	C
			2	2, 3, 4, 5	499	574	0.869	497	485	3.5	3.7	25.564	D
		2	1	(1, 2, 3, 4, 5)	991			945	928	41.4	54.7	166.087	F
	Exit	1	1		867			867	870	0.0	0.0	0.000	A

Lane movements: Main Results for each time segment

08:00 - 08:15

Arm	Side	Lane level	Lane	To Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Simulation max flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A350 North	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	80	20	1331	1076	0.074	81	80	0.0	0.2	6.492	A
				3	105	26	1331	1077	0.097	104	99	0.0	0.2	6.306	A
				4	317	79	1331	1077	0.294	318	314	0.0	0.5	5.760	A
				5	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	259	65	1331	1078	0.240	260	253	0.0	0.3	5.731	A
				5	323	81	1331	1076	0.300	324	322	0.0	0.8	7.885	A
2 - Sainsbury	Entry	1	1	1	125	31	1100	489	0.255	125	122	0.0	0.4	12.301	B
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	42	11	1100	497	0.085	43	40	0.0	0.2	12.570	B
				5	20	5	1094	491	0.042	20	20	0.0	0.0	12.240	B
3 - A4 East	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	127	32	1282	919	0.138	126	127	0.0	0.4	11.216	B
				5	435	109	1282	918	0.474	434	430	0.0	1.7	10.952	B
			2	1	59	15	1282	919	0.064	59	58	0.0	0.1	5.172	A
				2	127	32	1282	918	0.138	127	123	0.0	0.2	4.826	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				5	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
4 - A350 South	Entry	1	1	1	751	188	1316	956	0.785	748	732	0.0	6.8	27.681	D
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				5	76	19	1316	959	0.079	75	76	0.0	0.7	27.632	D
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	28	7	1316	960	0.030	28	31	0.0	0.1	5.016	A
				3	144	36	1316	956	0.150	144	144	0.0	0.1	4.521	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				5	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	752	188	-	-	-	751	759	0.0	0.3	0.613	A
				2	29	7	-	-	-	28	31	0.0	0.0	0.553	A
				3	144	36	-	-	-	144	145	0.0	0.1	0.472	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				5	75	19	-	-	-	76	78	0.0	0.0	0.688	A
5 - A4 West	Entry	1	1	1	435	109	886	576	0.755	431	419	0.0	2.9	20.997	C
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				5	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	16	4	841	552	0.028	16	15	0.0	0.1	22.458	C
				3	406	101	886	575	0.706	405	388	0.0	2.8	22.543	C
				4	54	13	886	578	0.093	54	52	0.0	0.4	22.416	C
				5	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	460	115	-	-	-	435	431	0.0	8.5	42.715	E
				2	15	4	-	-	-	16	16	0.0	0.2	42.099	E
				3	430	107	-	-	-	406	399	0.0	8.0	42.937	E
				4	58	14	-	-	-	54	54	0.0	1.2	43.730	E
				5	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A

08:15 - 08:30

Arm	Side	Lane level	Lane	To Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Simulation max flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A350 North	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	82	20	1331	1072	0.076	82	83	0.2	0.2	6.592	A
				3	104	26	1331	1072	0.097	102	101	0.2	0.3	6.635	A
				4	317	79	1331	1071	0.296	318	313	0.5	0.6	5.715	A
				5	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	255	64	1331	1070	0.238	254	251	0.3	0.5	5.716	A
				5	326	82	1331	1071	0.305	328	329	0.8	0.7	8.193	A
2 - Sainsbury	Entry	1	1	1	125	31	1100	484	0.258	123	122	0.4	0.5	12.872	B
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	42	10	1100	482	0.086	42	42	0.2	0.2	12.657	B
				5	22	5	1100	487	0.044	22	20	0.0	0.1	13.330	B
3 - A4 East	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	125	31	1282	918	0.136	125	126	0.4	0.4	11.516	B
				5	445	111	1282	918	0.484	445	444	1.7	1.5	11.813	B
			2	1	60	15	1282	919	0.065	61	61	0.1	0.1	5.595	A
				2	124	31	1282	920	0.135	125	125	0.2	0.2	4.930	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				5	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
4 - A350 South	Entry	1	1	1	756	189	1316	952	0.794	750	742	6.8	7.8	33.872	D
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				5	83	21	1316	952	0.087	82	81	0.7	0.8	34.172	D
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	28	7	1310	948	0.030	28	30	0.1	0.0	4.881	A
				3	144	36	1316	952	0.151	144	143	0.1	0.2	4.763	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				5	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	758	190	-	-	-	756	746	0.3	0.9	3.489	A
				2	28	7	-	-	-	28	29	0.0	0.0	3.615	A
				3	144	36	-	-	-	144	143	0.1	0.2	3.196	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				5	83	21	-	-	-	83	81	0.0	0.1	3.546	A
5 - A4 West	Entry	1	1	1	441	110	886	575	0.766	438	437	2.9	3.1	22.829	C
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				5	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	17	4	866	561	0.031	18	16	0.1	0.1	24.578	C
				3	420	105	886	576	0.729	420	413	2.8	2.9	24.720	C
				4	58	14	886	575	0.101	56	57	0.4	0.5	24.774	C
				5	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	460	115	-	-	-	441	438	8.5	14.1	97.395	F
				2	19	5	-	-	-	17	16	0.2	0.6	95.025	F
				3	434	108	-	-	-	420	414	8.0	13.5	97.452	F
				4	63	16	-	-	-	58	57	1.2	2.0	100.691	F
				5	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A

08:30 - 08:45

Arm	Side	Lane level	Lane	To Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Simulation max flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A350 North	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	80	20	1331	1069	0.075	80	82	0.2	0.2	6.840	A
				3	106	26	1331	1068	0.099	105	103	0.3	0.2	6.842	A
				4	306	76	1331	1069	0.286	307	310	0.6	0.6	5.864	A
				5	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	257	64	1331	1069	0.241	256	251	0.5	0.5	5.797	A
				5	324	81	1331	1068	0.303	324	324	0.7	0.7	7.817	A
2 - Sainsbury	Entry	1	1	1	122	30	1100	486	0.251	121	120	0.5	0.4	12.506	B
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	41	10	1100	489	0.084	41	41	0.2	0.1	12.016	B
				5	21	5	1089	486	0.043	21	21	0.1	0.1	12.338	B
3 - A4 East	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	122	30	1282	923	0.132	121	126	0.4	0.5	11.874	B
				5	437	109	1282	923	0.474	440	444	1.5	1.4	12.217	B
			2	1	61	15	1282	922	0.066	60	59	0.1	0.1	5.511	A
				2	126	31	1282	921	0.137	126	124	0.2	0.2	4.966	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				5	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
4 - A350 South	Entry	1	1	1	781	195	1316	956	0.816	766	758	7.8	8.5	36.807	E
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				5	80	20	1316	954	0.084	79	79	0.8	0.9	36.386	E
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	33	8	1316	953	0.034	32	32	0.0	0.1	5.320	A
				3	151	38	1316	956	0.157	151	146	0.2	0.2	4.883	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				5	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	783	196	-	-	-	781	761	0.9	0.9	4.259	A
				2	33	8	-	-	-	33	32	0.0	0.0	3.870	A
				3	151	38	-	-	-	151	146	0.2	0.2	3.460	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				5	80	20	-	-	-	80	80	0.1	0.1	4.886	A
5 - A4 West	Entry	1	1	1	436	109	886	569	0.767	434	436	3.1	3.1	23.178	C
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				5	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	16	4	845	548	0.029	15	16	0.1	0.2	25.266	D
				3	417	104	886	569	0.732	416	411	2.9	3.0	25.511	D
				4	57	14	886	572	0.100	58	59	0.5	0.4	25.724	D
				5	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	459	115	-	-	-	436	436	14.1	19.7	145.686	F
				2	18	4	-	-	-	16	16	0.6	0.8	152.342	F
				3	430	107	-	-	-	417	411	13.5	18.4	146.009	F
				4	57	14	-	-	-	57	58	2.0	2.4	146.198	F
				5	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A

08:45 - 09:00

Arm	Side	Lane level	Lane	To Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Simulation max flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A350 North	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	81	20	1331	1070	0.076	82	82	0.2	0.1	6.876	A
				3	100	25	1331	1070	0.093	100	101	0.2	0.2	6.746	A
				4	308	77	1331	1070	0.287	307	317	0.6	0.6	5.861	A
				5	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	244	61	1331	1070	0.228	244	250	0.5	0.5	5.755	A
				5	333	83	1331	1069	0.311	332	330	0.7	0.8	8.233	A
2 - Sainsbury	Entry	1	1	1	118	30	1100	488	0.242	119	120	0.4	0.3	13.193	B
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	42	10	1100	491	0.085	42	41	0.1	0.1	13.325	B
				5	20	5	1094	485	0.042	21	21	0.1	0.1	12.675	B
3 - A4 East	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	126	32	1282	925	0.137	126	126	0.5	0.5	11.868	B
				5	437	109	1282	924	0.473	435	439	1.4	1.6	11.966	B
			2	1	63	16	1282	925	0.068	63	62	0.1	0.1	5.362	A
				2	124	31	1282	923	0.134	125	126	0.2	0.1	5.044	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				5	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
4 - A350 South	Entry	1	1	1	764	191	1316	955	0.800	754	755	8.5	8.6	37.442	E
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				5	78	19	1316	956	0.081	78	80	0.9	0.8	37.286	E
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	29	7	1316	958	0.031	30	31	0.1	0.0	5.105	A
				3	148	37	1316	956	0.155	147	145	0.2	0.2	4.965	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				5	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	765	191	-	-	-	764	756	0.9	1.5	5.761	A
				2	29	7	-	-	-	29	31	0.0	0.0	5.231	A
				3	148	37	-	-	-	148	145	0.2	0.2	5.074	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				5	79	20	-	-	-	78	80	0.1	0.2	5.575	A
5 - A4 West	Entry	1	1	1	446	111	886	574	0.777	447	443	3.1	2.9	23.554	C
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				5	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	17	4	857	560	0.031	17	16	0.2	0.1	25.272	D
				3	423	106	886	574	0.737	422	412	3.0	3.1	25.569	D
				4	59	15	886	575	0.102	57	57	0.4	0.4	25.611	D
				5	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	467	117	-	-	-	446	442	19.7	25.8	165.821	F
				2	18	5	-	-	-	17	16	0.8	1.0	169.131	F
				3	445	111	-	-	-	423	412	18.4	24.6	166.267	F
				4	60	15	-	-	-	59	57	2.4	3.3	165.725	F
				5	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A

Year 2031 + Dev, PM

Data Errors and Warnings

Severity	Area	Item	Description
Last Run	Simulation	5 - A4 West	Arm 5: Queue at end of modelled period is greater than 10 PCU. Delay is likely to have been underestimated.
Info	Simulation	A1 - [Lane Simulation]	This run uses Simulation mode. For detailed information on this mode, please see the User Guide.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	Chequers Roundabout	Standard Roundabout		1, 2, 3, 4, 5	32.96	D

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	32.96	D

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)	Run automatically
D4	Year 2031 + Dev	PM	FLAT	17:00	18:00	60	15	✓

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1 - A350 North		FLAT	✓	1078	100.000
2 - Sainsbury		FLAT	✓	276	100.000
3 - A4 East		FLAT	✓	824	100.000
4 - A350 South		FLAT	✓	848	100.000
5 - A4 West		FLAT	✓	895	100.000

Origin-Destination Data

Demand (PCU/hr)

		To				
		1 - A350 North	2 - Sainsbury	3 - A4 East	4 - A350 South	5 - A4 West
From	1 - A350 North	0	97	63	563	355
	2 - Sainsbury	180	0	0	52	44
	3 - A4 East	127	130	0	138	429
	4 - A350 South	667	50	74	0	57
	5 - A4 West	372	22	425	76	0

Vehicle Mix

HV data entry mode	PCU Factor for a HV (PCU)
HV Percentages	2.00

Junction	PCU factor for a cyclist	PCU factor for a cyclist in controlling flow
1	0.20	0.80

Heavy Vehicle %

		To				
		1 - A350 North	2 - Sainsbury	3 - A4 East	4 - A350 South	5 - A4 West
From	1 - A350 North	0	3	5	12	11
	2 - Sainsbury	3	0	0	2	1
	3 - A4 East	7	1	0	3	4
	4 - A350 South	17	3	1	0	4
	5 - A4 West	10	2	6	3	0

Cyclist %

		To				
		1 - A350 North	2 - Sainsbury	3 - A4 East	4 - A350 South	5 - A4 West
From	1 - A350 North	0	0	0	0	0
	2 - Sainsbury	0	0	0	0	0
	3 - A4 East	0	0	0	0	0
	4 - A350 South	0	0	0	0	0
	5 - A4 West	0	0	0	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
1 - A350 North	0.51	6.15	2.0	A	1076	1076
2 - Sainsbury	0.56	17.16	1.5	C	279	279
3 - A4 East	0.48	10.90	2.6	B	824	824
4 - A350 South	0.82	24.88	6.2	C	849	849
5 - A4 West	0.97	98.14	27.0	F	894	894

Main Results for each time segment

17:00 - 17:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A350 North	1079	270	748	2197	0.491	1079	1072	1324	0.0	1.9	5.922	A
2 - Sainsbury	276	69	1529	495	0.557	277	274	298	0.0	1.2	15.405	C
3 - A4 East	825	206	1266	1753	0.470	828	815	541	0.0	2.3	9.851	A
4 - A350 South	838	210	1260	1069	0.784	838	827	834	0.0	5.5	20.352	C
5 - A4 West	891	223	1215	935	0.953	857	835	883	0.0	15.2	43.721	E

17:15 - 17:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A350 North	1077	269	768	2217	0.486	1076	1076	1335	1.9	2.0	6.149	A
2 - Sainsbury	281	70	1549	506	0.556	278	276	296	1.2	1.5	16.657	C
3 - A4 East	821	205	1273	1767	0.465	823	821	553	2.3	2.3	10.229	B
4 - A350 South	860	215	1270	1043	0.824	849	854	826	5.5	6.2	23.087	C
5 - A4 West	905	226	1228	936	0.967	876	869	891	15.2	22.8	80.501	F

17:30 - 17:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A350 North	1076	269	779	2155	0.499	1075	1079	1352	2.0	2.0	6.104	A
2 - Sainsbury	278	70	1548	501	0.555	279	278	306	1.5	1.2	17.163	C
3 - A4 East	841	210	1268	1765	0.477	839	826	559	2.3	2.6	10.896	B
4 - A350 South	851	213	1275	1078	0.789	853	848	832	6.2	6.1	24.683	C
5 - A4 West	892	223	1242	934	0.956	889	891	887	22.8	24.2	96.312	F

17:45 - 18:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A350 North	1070	268	767	2119	0.505	1074	1074	1357	2.0	1.8	6.148	A
2 - Sainsbury	281	70	1547	509	0.552	280	277	294	1.2	1.3	16.326	C
3 - A4 East	809	202	1273	1751	0.462	809	820	554	2.6	2.4	10.335	B
4 - A350 South	849	212	1262	1071	0.793	855	851	820	6.1	5.7	24.876	C
5 - A4 West	889	222	1238	916	0.970	886	883	879	24.2	27.0	98.139	F

Lane Results

Lane Level notation: Lane Level 1 is always closest to the junction.

Lanes: Main Results for each time segment

17:00 - 17:15

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A350 North	Entry	1	1	2, 3, 4	487	1085	0.449	487	482	0.0	0.8	5.288	A
			2	1, 4, 5	592	1085	0.546	592	590	0.0	1.2	6.450	A
	Exit	1	1		1324			1324	1302	0.0	0.0	0.000	A
2 - Sainsbury	Entry	1	1	1, 2, 3, 4, 5	276	516	0.534	277	274	0.0	1.2	15.405	C
	Exit	1	1		298			298	296	0.0	0.0	0.000	A
3 - A4 East	Entry	1	1	4, 5	569	879	0.648	572	562	0.0	1.9	11.628	B
			2	1, 2, 3	256	879	0.291	256	253	0.0	0.4	5.874	A
	Exit	1	1		541			541	530	0.0	0.0	0.000	A
4 - A350 South	Entry	1	1	1, 5	719	900	0.798	718	705	0.0	5.2	22.910	C
			2	2, 3, 4	120	900	0.133	120	122	0.0	0.2	4.745	A
		2	1	(1, 2, 3, 4, 5)	838			838	848	0.0	0.1	0.331	A
	Exit	1	1		834			834	817	0.0	0.0	0.000	A
5 - A4 West	Entry	1	1	1	358	579	0.618	360	350	0.0	1.7	16.612	C
			2	2, 3, 4, 5	500	579	0.862	497	485	0.0	3.5	22.048	C
		2	1	(1, 2, 3, 4, 5)	891			858	856	0.0	10.0	23.683	C
	Exit	1	1		883			883	878	0.0	0.0	0.000	A

17:15 - 17:30

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A350 North	Entry	1	1	2, 3, 4	484	1078	0.449	484	485	0.8	0.8	5.559	A
			2	1, 4, 5	593	1078	0.550	592	592	1.2	1.2	6.641	A
	Exit	1	1		1335			1335	1336	0.0	0.0	0.000	A
2 - Sainsbury	Entry	1	1	1, 2, 3, 4, 5	281	509	0.553	278	276	1.2	1.5	16.657	C
	Exit	1	1		296			296	300	0.0	0.0	0.000	A
3 - A4 East	Entry	1	1	4, 5	567	877	0.647	568	563	1.9	1.9	12.125	B
			2	1, 2, 3	254	877	0.290	255	258	0.4	0.4	6.072	A
	Exit	1	1		553			553	551	0.0	0.0	0.000	A
4 - A350 South	Entry	1	1	1, 5	734	897	0.818	727	730	5.2	5.7	25.906	D
			2	2, 3, 4	122	897	0.136	121	124	0.2	0.2	4.747	A
		2	1	(1, 2, 3, 4, 5)	860			856	856	0.1	0.3	0.537	A
	Exit	1	1		826			826	824	0.0	0.0	0.000	A
5 - A4 West	Entry	1	1	1	363	576	0.630	360	359	1.7	2.0	18.148	C
			2	2, 3, 4, 5	513	576	0.891	515	510	3.5	3.7	25.445	D
		2	1	(1, 2, 3, 4, 5)	905			876	872	10.0	17.0	57.918	F
	Exit	1	1		891			891	885	0.0	0.0	0.000	A

17:30 - 17:45

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A350 North	Entry	1	1	2, 3, 4	486	1075	0.453	485	486	0.8	0.8	5.519	A
			2	1, 4, 5	590	1075	0.549	590	593	1.2	1.2	6.593	A
	Exit	1	1		1352			1352	1344	0.0	0.0	0.000	A
2 - Sainsbury	Entry	1	1	1, 2, 3, 4, 5	278	509	0.547	279	278	1.5	1.2	17.163	C
	Exit	1	1		306			306	299	0.0	0.0	0.000	A
3 - A4 East	Entry	1	1	4, 5	576	878	0.655	573	568	1.9	2.2	13.091	B
			2	1, 2, 3	266	878	0.302	267	258	0.4	0.4	6.051	A
	Exit	1	1		559			559	560	0.0	0.0	0.000	A
4 - A350 South	Entry	1	1	1, 5	726	895	0.811	728	724	5.7	5.7	27.201	D
			2	2, 3, 4	125	895	0.140	125	124	0.2	0.2	4.707	A
		2	1	(1, 2, 3, 4, 5)	851			851	847	0.3	0.3	1.160	A
	Exit	1	1		832			832	831	0.0	0.0	0.000	A
5 - A4 West	Entry	1	1	1	369	573	0.645	369	372	2.0	1.8	18.508	C
			2	2, 3, 4, 5	518	573	0.904	520	519	3.7	3.8	25.796	D
		2	1	(1, 2, 3, 4, 5)	892			887	891	17.0	18.6	73.426	F
	Exit	1	1		887			887	888	0.0	0.0	0.000	A

17:45 - 18:00

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A350 North	Entry	1	1	2, 3, 4	481	1079	0.446	483	481	0.8	0.7	5.525	A
			2	1, 4, 5	590	1079	0.547	591	594	1.2	1.1	6.664	A
	Exit	1	1		1357			1357	1344	0.0	0.0	0.000	A
2 - Sainsbury	Entry	1	1	1, 2, 3, 4, 5	281	510	0.552	280	277	1.2	1.3	16.326	C
	Exit	1	1		294			294	297	0.0	0.0	0.000	A
3 - A4 East	Entry	1	1	4, 5	558	876	0.637	556	564	2.2	2.1	12.330	B
			2	1, 2, 3	251	876	0.287	253	256	0.4	0.3	5.949	A
	Exit	1	1		554			554	555	0.0	0.0	0.000	A
4 - A350 South	Entry	1	1	1, 5	721	900	0.802	729	726	5.7	5.4	27.716	D
			2	2, 3, 4	127	900	0.141	127	125	0.2	0.2	4.751	A
		2	1	(1, 2, 3, 4, 5)	849			848	850	0.3	0.2	1.063	A
	Exit	1	1		820			820	824	0.0	0.0	0.000	A
5 - A4 West	Entry	1	1	1	366	574	0.639	370	368	1.8	1.9	18.646	C
			2	2, 3, 4, 5	518	574	0.903	516	516	3.8	3.9	25.506	D
		2	1	(1, 2, 3, 4, 5)	889			885	884	18.6	21.3	76.031	F
	Exit	1	1		879			879	885	0.0	0.0	0.000	A

Lane movements: Main Results for each time segment

17:00 - 17:15

Arm	Side	Lane level	Lane	To Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Simulation max flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A350 North	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	97	24	1331	1085	0.090	97	97	0.0	0.2	5.762	A
				3	63	16	1331	1085	0.058	63	63	0.0	0.1	5.742	A
				4	327	82	1331	1085	0.301	327	322	0.0	0.5	5.040	A
				5	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	240	60	1331	1084	0.222	241	237	0.0	0.3	5.027	A
				5	352	88	1331	1086	0.324	351	353	0.0	0.8	7.394	A
2 - Sainsbury	Entry	1	1	1	178	45	1100	517	0.345	179	179	0.0	0.8	15.483	C
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	53	13	1100	516	0.102	53	51	0.0	0.3	15.048	C
				5	45	11	1100	518	0.086	45	44	0.0	0.2	15.502	C
3 - A4 East	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	143	36	1282	879	0.163	144	137	0.0	0.5	11.636	B
				5	426	106	1282	879	0.485	428	425	0.0	1.4	11.625	B
			2	1	125	31	1282	880	0.142	125	125	0.0	0.2	5.949	A
				2	131	33	1282	879	0.149	131	128	0.0	0.2	5.806	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				5	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
4 - A350 South	Entry	1	1	1	660	165	1316	901	0.733	659	649	0.0	4.8	22.947	C
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				5	58	15	1316	900	0.065	58	56	0.0	0.4	22.527	C
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	48	12	1316	901	0.053	48	49	0.0	0.1	4.826	A
				3	72	18	1316	901	0.080	72	73	0.0	0.1	4.691	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				5	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	660	165	-	-	-	660	668	0.0	0.1	0.340	A
				2	48	12	-	-	-	48	50	0.0	0.0	0.309	A
				3	72	18	-	-	-	72	73	0.0	0.0	0.258	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				5	58	15	-	-	-	58	58	0.0	0.0	0.351	A
5 - A4 West	Entry	1	1	1	358	89	886	580	0.617	360	350	0.0	1.7	16.612	C
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				5	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	22	5	886	581	0.038	22	21	0.0	0.1	21.545	C
				3	407	102	886	579	0.703	405	394	0.0	2.8	22.068	C
				4	71	18	886	579	0.122	70	70	0.0	0.5	22.089	C
				5	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	372	93	-	-	-	358	357	0.0	4.2	23.003	C
				2	23	6	-	-	-	22	22	0.0	0.3	24.769	C
				3	421	105	-	-	-	407	405	0.0	4.7	24.078	C
				4	75	19	-	-	-	71	72	0.0	0.9	24.340	C
				5	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A

17:15 - 17:30

Arm	Side	Lane level	Lane	To Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Simulation max flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A350 North	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	95	24	1331	1077	0.088	94	97	0.2	0.2	5.979	A
				3	61	15	1331	1079	0.057	61	63	0.1	0.1	6.009	A
				4	328	82	1331	1078	0.304	328	325	0.5	0.5	5.330	A
				5	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	235	59	1331	1078	0.218	235	236	0.3	0.4	5.229	A
				5	358	89	1331	1078	0.332	358	356	0.8	0.8	7.575	A
2 - Sainsbury	Entry	1	1	1	184	46	1100	508	0.362	182	180	0.8	1.0	16.792	C
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	52	13	1100	509	0.103	52	53	0.3	0.3	16.541	C
				5	45	11	1100	508	0.088	44	44	0.2	0.3	16.254	C
3 - A4 East	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	137	34	1282	876	0.156	137	136	0.5	0.5	12.138	B
				5	431	108	1282	877	0.491	431	427	1.4	1.5	12.121	B
			2	1	123	31	1282	877	0.140	123	126	0.2	0.2	6.185	A
				2	132	33	1282	877	0.150	132	132	0.2	0.2	5.969	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				5	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
4 - A350 South	Entry	1	1	1	676	169	1316	898	0.753	669	672	4.8	5.3	25.930	D
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				5	58	15	1316	898	0.065	58	59	0.4	0.4	25.662	D
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	49	12	1316	899	0.055	49	50	0.1	0.1	4.794	A
				3	73	18	1316	897	0.081	73	74	0.1	0.1	4.715	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				5	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	679	170	-	-	-	676	673	0.1	0.2	0.544	A
				2	49	12	-	-	-	49	50	0.0	0.0	0.575	A
				3	73	18	-	-	-	73	74	0.0	0.0	0.469	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				5	59	15	-	-	-	58	59	0.0	0.0	0.522	A
5 - A4 West	Entry	1	1	1	363	91	886	576	0.630	360	359	1.7	2.0	18.148	C
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				5	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	21	5	886	577	0.036	21	22	0.1	0.1	24.761	C
				3	417	104	886	576	0.724	420	414	2.8	3.0	25.468	D
				4	76	19	886	577	0.131	75	75	0.5	0.6	25.517	D
				5	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	377	94	-	-	-	363	360	4.2	7.0	56.983	F
				2	21	5	-	-	-	21	21	0.3	0.4	56.051	F
				3	429	107	-	-	-	417	415	4.7	8.2	58.337	F
				4	77	19	-	-	-	76	75	0.9	1.5	60.395	F
				5	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A

17:30 - 17:45

Arm	Side	Lane level	Lane	To Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Simulation max flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A350 North	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	97	24	1331	1075	0.091	97	97	0.2	0.2	5.990	A
				3	62	16	1331	1076	0.058	62	64	0.1	0.1	6.137	A
				4	327	82	1331	1075	0.304	326	325	0.5	0.5	5.236	A
				5	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	236	59	1331	1075	0.220	235	238	0.4	0.5	5.196	A
				5	354	88	1331	1074	0.329	355	356	0.8	0.8	7.523	A
2 - Sainsbury	Entry	1	1	1	181	45	1100	510	0.355	181	180	1.0	0.8	17.293	C
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	55	14	1100	509	0.108	55	53	0.3	0.3	16.978	C
				5	42	11	1100	511	0.083	43	45	0.3	0.2	16.869	C
3 - A4 East	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	143	36	1282	879	0.163	143	139	0.5	0.6	13.035	B
				5	433	108	1282	878	0.493	430	429	1.5	1.6	13.109	B
			2	1	132	33	1282	879	0.150	132	127	0.2	0.2	6.178	A
				2	134	33	1282	879	0.152	134	131	0.2	0.2	5.934	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				5	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
4 - A350 South	Entry	1	1	2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				5	59	15	1316	896	0.066	59	58	0.4	0.4	26.603	D
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	52	13	1316	899	0.058	51	50	0.1	0.1	4.779	A
				3	74	18	1316	897	0.082	74	74	0.1	0.1	4.660	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				5	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	667	167	-	-	-	667	665	0.2	0.2	1.183	A
				2	52	13	-	-	-	52	50	0.0	0.0	0.917	A
				3	73	18	-	-	-	74	74	0.0	0.0	0.993	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				5	59	15	-	-	-	59	58	0.0	0.0	1.352	A
5 - A4 West	Entry	1	1	1	369	92	886	573	0.645	369	372	2.0	1.8	18.508	C
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				5	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	23	6	884	576	0.040	23	22	0.1	0.2	25.361	D
				3	421	105	886	573	0.736	424	422	3.0	3.0	25.856	D
				4	74	18	886	574	0.128	73	75	0.6	0.6	25.595	D
				5	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	371	93	-	-	-	369	371	7.0	7.6	72.338	F
				2	22	6	-	-	-	23	22	0.4	0.5	73.863	F
				3	423	106	-	-	-	421	422	8.2	8.9	74.154	F
				4	76	19	-	-	-	74	75	1.5	1.6	74.335	F
				5	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A

17:45 - 18:00

Arm	Side	Lane level	Lane	To Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Simulation max flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A350 North	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	95	24	1331	1078	0.088	95	96	0.2	0.1	6.023	A
				3	62	16	1331	1079	0.058	63	63	0.1	0.1	6.114	A
				4	324	81	1331	1078	0.300	325	322	0.5	0.4	5.240	A
				5	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	235	59	1331	1079	0.218	235	239	0.5	0.4	5.248	A
				5	355	89	1331	1079	0.329	356	355	0.8	0.7	7.609	A
2 - Sainsbury	Entry	1	1	1	184	46	1100	510	0.362	184	181	0.8	0.9	16.406	C
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	52	13	1100	511	0.101	52	51	0.3	0.2	15.919	C
				5	45	11	1100	512	0.088	45	45	0.2	0.2	16.468	C
3 - A4 East	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	132	33	1282	878	0.151	131	136	0.6	0.6	12.342	B
				5	426	106	1282	877	0.485	425	428	1.6	1.5	12.326	B
			2	1	127	32	1282	877	0.145	128	127	0.2	0.2	6.112	A
				2	124	31	1282	876	0.142	125	129	0.2	0.2	5.796	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				5	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
4 - A350 South	Entry	1	1	1	668	167	1316	900	0.742	675	669	5.2	5.0	27.755	D
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				5	53	13	1316	899	0.059	54	57	0.4	0.4	27.312	D
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	52	13	1316	898	0.058	52	51	0.1	0.1	4.874	A
				3	74	19	1316	898	0.083	74	74	0.1	0.1	4.668	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				5	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	668	167	-	-	-	668	668	0.2	0.1	1.036	A
				2	53	13	-	-	-	52	51	0.0	0.0	1.192	A
				3	74	19	-	-	-	74	74	0.0	0.0	1.157	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				5	54	13	-	-	-	53	57	0.0	0.0	1.105	A
5 - A4 West	Entry	1	1	1	366	92	886	573	0.639	370	368	1.8	1.9	18.646	C
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				5	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	21	5	886	577	0.037	22	22	0.2	0.2	25.375	D
				3	420	105	886	574	0.732	417	418	3.0	3.2	25.542	D
				4	77	19	886	575	0.133	77	76	0.6	0.5	25.349	D
				5	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	368	92	-	-	-	366	368	7.6	8.7	75.406	F
				2	21	5	-	-	-	21	22	0.5	0.5	76.885	F
				3	423	106	-	-	-	420	419	8.9	10.2	76.681	F
				4	77	19	-	-	-	77	76	1.6	1.8	75.138	F
				5	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A

Year 2026 Baseline, AM

Data Errors and Warnings

Severity	Area	Item	Description
Last Run	Simulation	5 - A4 West	Arm 5: Queue at end of modelled period is greater than 10 PCU. Delay is likely to have been underestimated.
Info	Simulation	A1 - [Lane Simulation]	This run uses Simulation mode. For detailed information on this mode, please see the User Guide.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	Chequers Roundabout	Standard Roundabout		1, 2, 3, 4, 5	23.57	C

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	23.57	C

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)	Run automatically
D5	Year 2026 Baseline	AM	FLAT	08:00	09:00	60	15	✓

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1 - A350 North		FLAT	✓	979	100.000
2 - Sainsbury		FLAT	✓	174	100.000
3 - A4 East		FLAT	✓	715	100.000
4 - A350 South		FLAT	✓	866	100.000
5 - A4 West		FLAT	✓	917	100.000

Origin-Destination Data

Demand (PCU/hr)

		To				
		1 - A350 North	2 - Sainsbury	3 - A4 East	4 - A350 South	5 - A4 West
From	1 - A350 North	0	77	98	493	311
	2 - Sainsbury	115	0	0	39	20
	3 - A4 East	57	118	0	120	420
	4 - A350 South	657	30	137	0	42
	5 - A4 West	443	16	414	44	0

Vehicle Mix

HV data entry mode	PCU Factor for a HV (PCU)
HV Percentages	2.00

Junction	PCU factor for a cyclist	PCU factor for a cyclist in controlling flow
1	0.20	0.80

Heavy Vehicle %

		To				
		1 - A350 North	2 - Sainsbury	3 - A4 East	4 - A350 South	5 - A4 West
From	1 - A350 North	0	10	7	23	20
	2 - Sainsbury	4	0	0	5	2
	3 - A4 East	11	0	2	8	11
	4 - A350 South	19	7	2	0	10
	5 - A4 West	20	10	8	14	0

Cyclist %

		To				
		1 - A350 North	2 - Sainsbury	3 - A4 East	4 - A350 South	5 - A4 West
From	1 - A350 North	0	0	0	0	0
	2 - Sainsbury	0	0	0	0	0
	3 - A4 East	0	0	0	0	0
	4 - A350 South	0	0	0	0	0
	5 - A4 West	0	0	0	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
1 - A350 North	0.46	6.33	2.0	A	987	987
2 - Sainsbury	0.34	11.60	0.5	B	172	172
3 - A4 East	0.38	8.82	1.7	A	711	711
4 - A350 South	0.75	14.68	4.0	B	869	869
5 - A4 West	1.03	64.34	17.8	F	915	915

Main Results for each time segment

08:00 - 08:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A350 North	981	245	745	2149	0.457	978	968	1285	0.0	1.8	5.895	A
2 - Sainsbury	171	43	1482	540	0.317	174	174	241	0.0	0.4	10.206	B
3 - A4 East	703	176	1014	1880	0.374	702	707	642	0.0	1.7	8.292	A
4 - A350 South	882	221	1034	1183	0.746	885	858	682	0.0	3.8	14.243	B
5 - A4 West	917	229	1135	961	0.954	895	862	784	0.0	13.6	39.900	E

08:15 - 08:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A350 North	985	246	760	2128	0.463	987	980	1258	1.8	1.6	6.041	A
2 - Sainsbury	168	42	1506	531	0.317	169	172	241	0.4	0.5	11.605	B
3 - A4 East	718	180	1031	1943	0.370	725	719	645	1.7	1.7	8.559	A
4 - A350 South	866	216	1041	1188	0.729	870	867	715	3.8	3.4	14.297	B
5 - A4 West	897	224	1112	970	0.924	906	909	799	13.6	15.6	61.153	F

08:30 - 08:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A350 North	992	248	759	2141	0.463	988	981	1264	1.6	2.0	6.078	A
2 - Sainsbury	173	43	1509	556	0.311	173	173	238	0.5	0.5	10.846	B
3 - A4 East	702	175	1024	1920	0.365	702	716	658	1.7	1.5	8.482	A
4 - A350 South	851	213	1037	1197	0.711	860	865	689	3.4	3.4	14.217	B
5 - A4 West	925	231	1107	899	1.029	916	907	790	15.6	17.8	64.343	F

08:45 - 09:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A350 North	988	247	763	2181	0.453	984	990	1273	2.0	2.0	6.331	A
2 - Sainsbury	176	44	1498	523	0.337	177	175	250	0.5	0.5	11.060	B
3 - A4 East	720	180	1031	1894	0.380	723	724	645	1.5	1.6	8.820	A
4 - A350 South	878	220	1059	1215	0.723	872	874	695	3.4	4.0	14.684	B
5 - A4 West	920	230	1129	1003	0.917	907	920	802	17.8	17.0	61.934	F

Lane Results

Lane Level notation: Lane Level 1 is always closest to the junction.

Lanes: Main Results for each time segment

08:00 - 08:15

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A350 North	Entry	1	1	2, 3, 4	456	1086	0.420	455	442	0.0	0.7	5.494	A
			2	1, 4, 5	525	1086	0.483	523	526	0.0	1.1	6.244	A
	Exit	1	1		1285			1285	1242	0.0	0.0	0.000	A
2 - Sainsbury	Entry	1	1	1, 2, 3, 4, 5	171	534	0.320	174	174	0.0	0.4	10.206	B
	Exit	1	1		241			241	239	0.0	0.0	0.000	A
3 - A4 East	Entry	1	1	4, 5	527	959	0.550	527	532	0.0	1.5	9.512	A
			2	1, 2, 3	176	959	0.183	176	175	0.0	0.3	4.791	A
	Exit	1	1		642			642	623	0.0	0.0	0.000	A
4 - A350 South	Entry	1	1	1, 5	717	975	0.735	720	692	0.0	3.6	16.827	C
			2	2, 3, 4	164	975	0.169	164	166	0.0	0.2	4.718	A
		2	1	(1, 2, 3, 4, 5)	882			882	873	0.0	0.0	0.015	A
	Exit	1	1		682			682	688	0.0	0.0	0.000	A
5 - A4 West	Entry	1	1	1	435	600	0.725	432	417	0.0	2.5	18.568	C
			2	2, 3, 4, 5	464	600	0.774	463	445	0.0	2.9	18.557	C
		2	1	(1, 2, 3, 4, 5)	917			899	883	0.0	8.3	21.112	C
	Exit	1	1		784			784	778	0.0	0.0	0.000	A

08:15 - 08:30

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A350 North	Entry	1	1	2, 3, 4	452	1081	0.418	452	449	0.7	0.7	5.607	A
			2	1, 4, 5	533	1081	0.493	535	531	1.1	0.9	6.422	A
	Exit	1	1		1258			1258	1272	0.0	0.0	0.000	A
2 - Sainsbury	Entry	1	1	1, 2, 3, 4, 5	168	525	0.320	169	172	0.4	0.5	11.605	B
	Exit	1	1		241			241	243	0.0	0.0	0.000	A
3 - A4 East	Entry	1	1	4, 5	543	954	0.570	551	541	1.5	1.4	9.888	A
			2	1, 2, 3	175	954	0.183	174	177	0.3	0.3	4.756	A
	Exit	1	1		645			645	644	0.0	0.0	0.000	A
4 - A350 South	Entry	1	1	1, 5	697	973	0.717	702	702	3.6	3.2	16.846	C
			2	2, 3, 4	168	973	0.173	169	165	0.2	0.2	4.728	A
		2	1	(1, 2, 3, 4, 5)	866			866	866	0.0	0.0	0.040	A
	Exit	1	1		715			715	696	0.0	0.0	0.000	A
5 - A4 West	Entry	1	1	1	434	605	0.717	431	440	2.5	2.7	20.208	C
			2	2, 3, 4, 5	470	605	0.776	475	469	2.9	2.6	21.305	C
		2	1	(1, 2, 3, 4, 5)	897			904	908	8.3	10.3	40.379	E
	Exit	1	1		799			799	793	0.0	0.0	0.000	A

08:30 - 08:45

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A350 North	Entry	1	1	2, 3, 4	453	1081	0.419	451	448	0.7	0.9	5.611	A
			2	1, 4, 5	539	1081	0.499	537	534	0.9	1.1	6.483	A
	Exit	1	1		1264			1264	1265	0.0	0.0	0.000	A
2 - Sainsbury	Entry	1	1	1, 2, 3, 4, 5	173	524	0.330	173	173	0.5	0.5	10.846	B
	Exit	1	1		238			238	240	0.0	0.0	0.000	A
3 - A4 East	Entry	1	1	4, 5	527	956	0.552	528	540	1.4	1.3	9.759	A
			2	1, 2, 3	174	956	0.183	175	176	0.3	0.2	4.804	A
	Exit	1	1		658			658	648	0.0	0.0	0.000	A
4 - A350 South	Entry	1	1	1, 5	687	974	0.705	695	698	3.2	3.2	16.848	C
			2	2, 3, 4	165	974	0.169	164	167	0.2	0.2	4.629	A
		2	1	(1, 2, 3, 4, 5)	851			851	865	0.0	0.0	0.008	A
	Exit	1	1		689			689	688	0.0	0.0	0.000	A
5 - A4 West	Entry	1	1	1	438	607	0.721	439	436	2.7	2.6	20.186	C
			2	2, 3, 4, 5	477	607	0.786	478	471	2.6	3.1	22.140	C
		2	1	(1, 2, 3, 4, 5)	925			915	909	10.3	12.2	43.092	E
	Exit	1	1		790			790	801	0.0	0.0	0.000	A

08:45 - 09:00

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A350 North	Entry	1	1	2, 3, 4	452	1080	0.418	451	455	0.9	0.8	5.818	A
			2	1, 4, 5	537	1080	0.497	533	535	1.1	1.2	6.782	A
	Exit	1	1		1273			1273	1284	0.0	0.0	0.000	A
2 - Sainsbury	Entry	1	1	1, 2, 3, 4, 5	176	528	0.334	177	175	0.5	0.5	11.060	B
	Exit	1	1		250			250	238	0.0	0.0	0.000	A
3 - A4 East	Entry	1	1	4, 5	539	954	0.565	540	548	1.3	1.4	10.179	B
			2	1, 2, 3	182	954	0.191	183	176	0.2	0.2	4.852	A
	Exit	1	1		645			645	650	0.0	0.0	0.000	A
4 - A350 South	Entry	1	1	1, 5	706	967	0.730	700	707	3.2	3.7	17.390	C
			2	2, 3, 4	172	967	0.178	172	167	0.2	0.2	4.774	A
		2	1	(1, 2, 3, 4, 5)	878			877	876	0.0	0.1	0.020	A
	Exit	1	1		695			695	703	0.0	0.0	0.000	A
5 - A4 West	Entry	1	1	1	438	601	0.729	440	446	2.6	2.6	21.092	C
			2	2, 3, 4, 5	468	601	0.779	468	474	3.1	3.0	20.545	C
		2	1	(1, 2, 3, 4, 5)	920			907	920	12.2	11.4	41.380	E
	Exit	1	1		802			802	808	0.0	0.0	0.000	A

Lane movements: Main Results for each time segment

08:00 - 08:15

Arm	Side	Lane level	Lane	To Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Simulation max flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A350 North	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	78	20	1331	1088	0.072	79	76	0.0	0.1	5.987	A
				3	101	25	1331	1089	0.093	101	99	0.0	0.2	5.911	A
				4	277	69	1331	1087	0.254	275	267	0.0	0.5	5.162	A
				5	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	211	53	1331	1086	0.194	210	220	0.0	0.4	5.171	A
				5	314	78	1331	1088	0.289	313	306	0.0	0.6	6.992	A
2 - Sainsbury	Entry	1	1	1	114	29	1100	535	0.213	116	115	0.0	0.3	10.056	B
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	38	10	1100	536	0.071	39	40	0.0	0.1	10.783	B
				5	19	5	1100	540	0.035	19	19	0.0	0.1	9.918	A
3 - A4 East	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	116	29	1282	960	0.120	115	119	0.0	0.3	9.612	A
				5	412	103	1282	960	0.429	411	413	0.0	1.2	9.483	A
			2	1	57	14	1282	955	0.060	58	58	0.0	0.1	5.220	A
				2	118	30	1282	960	0.123	118	118	0.0	0.2	4.604	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				5	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
4 - A350 South	Entry	1	1	1	677	169	1316	975	0.694	679	652	0.0	3.3	16.848	C
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				5	41	10	1316	977	0.042	41	40	0.0	0.2	16.518	C
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	29	7	1316	976	0.029	29	30	0.0	0.0	4.941	A
				3	136	34	1316	974	0.139	135	136	0.0	0.2	4.671	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				5	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	677	169	-	-	-	677	665	0.0	0.0	0.014	A
				2	29	7	-	-	-	29	30	0.0	0.0	0.000	A
				3	136	34	-	-	-	136	137	0.0	0.0	0.024	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				5	41	10	-	-	-	41	41	0.0	0.0	0.020	A
5 - A4 West	Entry	1	1	1	435	109	886	600	0.725	432	417	0.0	2.5	18.568	C
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				5	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	15	4	867	594	0.026	15	15	0.0	0.1	17.700	C
				3	406	102	886	600	0.677	405	388	0.0	2.6	18.576	C
				4	43	11	886	602	0.071	42	42	0.0	0.2	18.689	C
				5	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	447	112	-	-	-	435	427	0.0	4.1	21.292	C
				2	16	4	-	-	-	15	15	0.0	0.1	19.821	C
				3	411	103	-	-	-	406	398	0.0	3.5	21.013	C
				4	44	11	-	-	-	43	43	0.0	0.5	20.847	C
				5	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A

08:15 - 08:30

Arm	Side	Lane level	Lane	To Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Simulation max flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A350 North	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	78	20	1331	1083	0.072	78	77	0.1	0.1	6.085	A
				3	94	23	1331	1081	0.087	94	100	0.2	0.2	5.912	A
				4	280	70	1331	1081	0.259	281	272	0.5	0.4	5.326	A
				5	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	225	56	1331	1081	0.208	225	221	0.4	0.3	5.143	A
				5	308	77	1331	1081	0.285	309	310	0.6	0.5	7.308	A
2 - Sainsbury	Entry	1	1	1	109	27	1100	525	0.207	109	114	0.3	0.4	11.749	B
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	39	10	1100	522	0.075	38	38	0.1	0.1	11.633	B
				5	20	5	1092	527	0.038	21	20	0.1	0.0	10.763	B
3 - A4 East	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	122	30	1282	956	0.127	125	120	0.3	0.3	9.839	A
				5	422	105	1282	954	0.442	426	422	1.2	1.1	9.903	A
			2	1	58	14	1282	958	0.060	58	58	0.1	0.1	5.074	A
				2	117	29	1282	957	0.122	116	119	0.2	0.2	4.617	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				5	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
4 - A350 South	Entry	1	1	1	656	164	1316	973	0.674	660	660	3.3	3.0	16.889	C
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				5	42	10	1316	969	0.043	42	42	0.2	0.2	16.208	C
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	31	8	1316	973	0.032	31	30	0.0	0.1	5.159	A
				3	137	34	1316	973	0.141	137	135	0.2	0.2	4.636	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				5	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	656	164	-	-	-	656	659	0.0	0.0	0.036	A
				2	31	8	-	-	-	31	30	0.0	0.0	0.036	A
				3	137	34	-	-	-	137	135	0.0	0.0	0.046	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				5	42	10	-	-	-	42	41	0.0	0.0	0.075	A
5 - A4 West	Entry	1	1	1	434	109	886	607	0.716	431	440	2.5	2.7	20.208	C
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				5	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	15	4	854	585	0.026	15	16	0.1	0.1	21.078	C
				3	409	102	886	606	0.675	413	408	2.6	2.2	21.234	C
				4	46	11	886	608	0.075	46	45	0.2	0.3	22.070	C
				5	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	424	106	-	-	-	434	440	4.1	4.7	40.222	E
				2	17	4	-	-	-	15	16	0.1	0.3	44.027	E
				3	409	102	-	-	-	409	407	3.5	4.8	40.310	E
				4	47	12	-	-	-	46	45	0.5	0.6	41.097	E
				5	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A

08:30 - 08:45

Arm	Side	Lane level	Lane	To Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Simulation max flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A350 North	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	79	20	1331	1080	0.073	79	77	0.1	0.2	6.132	A
				3	99	25	1331	1078	0.092	99	99	0.2	0.2	5.966	A
				4	275	69	1331	1082	0.254	272	271	0.4	0.6	5.298	A
				5	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	221	55	1331	1081	0.205	221	218	0.3	0.4	5.247	A
				5	318	79	1331	1081	0.294	316	316	0.5	0.7	7.314	A
2 - Sainsbury	Entry	1	1	1	114	29	1100	526	0.217	114	115	0.4	0.3	10.721	B
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	39	10	1100	529	0.074	39	38	0.1	0.1	11.207	B
				5	20	5	1100	530	0.037	20	20	0.0	0.0	10.875	B
3 - A4 East	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	115	29	1282	958	0.120	115	117	0.3	0.3	9.463	A
				5	412	103	1282	955	0.431	412	424	1.1	1.1	9.843	A
			2	1	58	14	1282	958	0.060	58	57	0.1	0.1	5.322	A
				2	117	29	1282	956	0.122	117	118	0.2	0.1	4.577	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				5	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
4 - A350 South	Entry	1	1	1	645	161	1316	974	0.662	654	656	3.0	2.9	16.882	C
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				5	42	11	1316	972	0.044	42	42	0.2	0.3	16.361	C
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	28	7	1316	973	0.028	28	30	0.1	0.0	4.945	A
				3	137	34	1316	973	0.141	137	137	0.2	0.2	4.564	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				5	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	645	161	-	-	-	645	656	0.0	0.0	0.008	A
				2	28	7	-	-	-	28	29	0.0	0.0	0.011	A
				3	137	34	-	-	-	137	137	0.0	0.0	0.009	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				5	42	11	-	-	-	42	42	0.0	0.0	0.014	A
5 - A4 West	Entry	1	1	1	438	109	886	607	0.721	439	436	2.7	2.6	20.186	C
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				5	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	14	4	861	586	0.024	14	15	0.1	0.1	22.626	C
				3	421	105	886	606	0.695	422	412	2.2	2.7	22.109	C
				4	42	10	886	605	0.069	41	44	0.3	0.3	22.273	C
				5	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	447	112	-	-	-	438	436	4.7	6.2	43.756	E
				2	14	4	-	-	-	14	15	0.3	0.2	44.041	E
				3	422	106	-	-	-	421	414	4.8	5.3	42.433	E
				4	41	10	-	-	-	42	44	0.6	0.5	43.037	E
				5	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A

08:45 - 09:00

Arm	Side	Lane level	Lane	To Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Simulation max flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A350 North	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	79	20	1331	1079	0.073	79	75	0.2	0.1	6.307	A
				3	95	24	1331	1079	0.088	95	97	0.2	0.2	6.261	A
				4	278	70	1331	1081	0.257	277	282	0.6	0.4	5.493	A
				5	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	216	54	1331	1078	0.200	215	219	0.4	0.4	5.432	A
				5	321	80	1331	1079	0.297	318	316	0.7	0.8	7.689	A
2 - Sainsbury	Entry	1	1	1	119	30	1100	528	0.225	119	117	0.3	0.3	11.097	B
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	38	10	1100	523	0.073	39	37	0.1	0.1	11.394	B
				5	20	5	1092	522	0.038	20	20	0.0	0.0	10.263	B
3 - A4 East	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	121	30	1282	954	0.127	122	121	0.3	0.3	10.037	B
				5	417	104	1282	954	0.438	419	427	1.1	1.1	10.221	B
			2	1	59	15	1282	953	0.061	60	58	0.1	0.1	5.153	A
				2	123	31	1282	952	0.130	123	117	0.1	0.2	4.718	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				5	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
4 - A350 South	Entry	1	1	1	660	165	1316	967	0.682	654	662	2.9	3.5	17.385	C
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				5	45	11	1316	969	0.046	45	44	0.3	0.2	17.463	C
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	31	8	1316	968	0.032	31	30	0.0	0.0	4.862	A
				3	141	35	1316	967	0.146	141	137	0.2	0.2	4.756	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				5	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	661	165	-	-	-	660	665	0.0	0.0	0.018	A
				2	31	8	-	-	-	31	30	0.0	0.0	0.007	A
				3	141	35	-	-	-	141	137	0.0	0.0	0.009	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				5	45	11	-	-	-	45	44	0.0	0.0	0.101	A
5 - A4 West	Entry	1	1	1	438	110	886	601	0.729	440	446	2.6	2.6	21.092	C
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				5	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	17	4	861	588	0.028	16	16	0.1	0.1	19.293	C
				3	407	102	886	601	0.676	408	415	2.7	2.4	20.533	C
				4	45	11	886	600	0.075	43	43	0.3	0.4	21.152	C
				5	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	442	110	-	-	-	438	447	6.2	5.5	41.608	E
				2	18	4	-	-	-	17	16	0.2	0.2	41.870	E
				3	415	104	-	-	-	407	414	5.3	5.2	41.140	E
				4	45	11	-	-	-	45	44	0.5	0.5	41.371	E
				5	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A

Year 2026 Baseline, PM

Data Errors and Warnings

Severity	Area	Item	Description
Info	Simulation	A1 - [Lane Simulation]	This run uses Simulation mode. For detailed information on this mode, please see the User Guide.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	Chequers Roundabout	Standard Roundabout		1, 2, 3, 4, 5	15.24	C

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	15.24	C

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)	Run automatically
D6	Year 2026 Baseline	PM	FLAT	17:00	18:00	60	15	✓

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1 - A350 North		FLAT	✓	967	100.000
2 - Sainsbury		FLAT	✓	263	100.000
3 - A4 East		FLAT	✓	785	100.000
4 - A350 South		FLAT	✓	744	100.000
5 - A4 West		FLAT	✓	820	100.000

Origin-Destination Data

Demand (PCU/hr)

		To				
		1 - A350 North	2 - Sainsbury	3 - A4 East	4 - A350 South	5 - A4 West
From	1 - A350 North	0	92	60	477	338
	2 - Sainsbury	171	0	0	50	42
	3 - A4 East	123	121	0	132	409
	4 - A350 South	587	48	70	0	39
	5 - A4 West	354	21	404	41	0

Vehicle Mix

HV data entry mode	PCU Factor for a HV (PCU)
HV Percentages	2.00

Junction	PCU factor for a cyclist	PCU factor for a cyclist in controlling flow
1	0.20	0.80

Heavy Vehicle %

		To				
		1 - A350 North	2 - Sainsbury	3 - A4 East	4 - A350 South	5 - A4 West
From	1 - A350 North	0	3	5	12	11
	2 - Sainsbury	3	0	0	2	1
	3 - A4 East	7	1	0	3	4
	4 - A350 South	17	3	1	0	4
	5 - A4 West	10	2	6	3	0

Cyclist %

		To				
		1 - A350 North	2 - Sainsbury	3 - A4 East	4 - A350 South	5 - A4 West
From	1 - A350 North	0	0	0	0	0
	2 - Sainsbury	0	0	0	0	0
	3 - A4 East	0	0	0	0	0
	4 - A350 South	0	0	0	0	0
	5 - A4 West	0	0	0	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
1 - A350 North	0.45	5.52	1.6	A	962	962
2 - Sainsbury	0.49	12.68	1.0	B	266	266
3 - A4 East	0.43	8.73	1.9	A	789	789
4 - A350 South	0.68	13.39	3.0	B	737	737
5 - A4 West	0.89	35.22	8.5	E	827	827

Main Results for each time segment

17:00 - 17:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A350 North	955	239	699	2205	0.433	955	956	1237	0.0	1.6	5.373	A
2 - Sainsbury	264	66	1370	596	0.442	264	265	284	0.0	1.0	12.680	B
3 - A4 East	786	197	1107	1850	0.425	786	783	527	0.0	1.9	8.407	A
4 - A350 South	739	185	1205	1093	0.676	741	733	687	0.0	2.6	11.944	B
5 - A4 West	826	207	1120	930	0.889	816	793	826	0.0	7.4	26.682	D

17:15 - 17:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A350 North	953	238	712	2197	0.434	954	959	1227	1.6	1.5	5.499	A
2 - Sainsbury	268	67	1382	594	0.452	268	263	284	1.0	0.9	12.386	B
3 - A4 East	799	200	1115	1887	0.424	800	793	534	1.9	1.7	8.734	A
4 - A350 South	731	183	1216	1101	0.664	737	747	700	2.6	2.5	13.395	B
5 - A4 West	829	207	1117	974	0.851	822	821	836	7.4	8.5	35.222	E

17:30 - 17:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A350 North	972	243	706	2218	0.438	970	966	1233	1.5	1.5	5.521	A
2 - Sainsbury	267	67	1397	555	0.481	265	264	280	0.9	1.0	12.101	B
3 - A4 East	782	196	1123	1837	0.426	782	779	539	1.7	1.9	8.357	A
4 - A350 South	738	184	1206	1113	0.663	740	736	699	2.5	3.0	13.245	B
5 - A4 West	829	207	1117	978	0.847	822	819	828	8.5	7.5	33.044	D

17:45 - 18:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A350 North	966	241	698	2155	0.448	964	968	1237	1.5	1.4	5.508	A
2 - Sainsbury	263	66	1383	540	0.487	263	263	279	1.0	0.9	12.274	B
3 - A4 East	787	197	1116	1864	0.422	788	788	530	1.9	1.8	8.655	A
4 - A350 South	742	185	1204	1090	0.681	743	742	700	3.0	2.7	13.320	B
5 - A4 West	824	206	1117	968	0.852	818	817	830	7.5	7.7	30.813	D

Lane Results

Lane Level notation: Lane Level 1 is always closest to the junction.

Lanes: Main Results for each time segment

17:00 - 17:15

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A350 North	Entry	1	1	2, 3, 4	419	1101	0.380	419	420	0.0	0.7	4.916	A
			2	1, 4, 5	536	1101	0.487	536	536	0.0	1.0	5.738	A
	Exit	1	1		1237			1237	1216	0.0	0.0	0.000	A
2 - Sainsbury	Entry	1	1	1, 2, 3, 4, 5	264	577	0.457	264	265	0.0	1.0	12.680	B
	Exit	1	1		284			284	281	0.0	0.0	0.000	A
3 - A4 East	Entry	1	1	4, 5	540	929	0.581	540	539	0.0	1.4	9.684	A
			2	1, 2, 3	246	929	0.265	245	244	0.0	0.4	5.583	A
	Exit	1	1		527			527	518	0.0	0.0	0.000	A
4 - A350 South	Entry	1	1	1, 5	622	919	0.677	623	615	0.0	2.5	13.537	B
			2	2, 3, 4	117	919	0.128	119	118	0.0	0.1	4.535	A
		2	1	(1, 2, 3, 4, 5)	739			739	743	0.0	0.0	0.001	A
	Exit	1	1		687			687	691	0.0	0.0	0.000	A
5 - A4 West	Entry	1	1	1	358	603	0.593	358	344	0.0	1.6	14.732	B
			2	2, 3, 4, 5	460	603	0.763	458	448	0.0	2.6	18.504	C
		2	1	(1, 2, 3, 4, 5)	826			818	809	0.0	3.2	9.692	A
	Exit	1	1		826			826	823	0.0	0.0	0.000	A

17:15 - 17:30

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A350 North	Entry	1	1	2, 3, 4	418	1097	0.381	418	422	0.7	0.6	4.988	A
			2	1, 4, 5	536	1097	0.489	536	538	1.0	0.9	5.909	A
	Exit	1	1		1227			1227	1238	0.0	0.0	0.000	A
2 - Sainsbury	Entry	1	1	1, 2, 3, 4, 5	268	573	0.468	268	263	1.0	0.9	12.386	B
	Exit	1	1		284			284	284	0.0	0.0	0.000	A
3 - A4 East	Entry	1	1	4, 5	551	927	0.594	553	548	1.4	1.3	10.177	B
			2	1, 2, 3	249	927	0.268	247	245	0.4	0.5	5.511	A
	Exit	1	1		534			534	533	0.0	0.0	0.000	A
4 - A350 South	Entry	1	1	1, 5	614	915	0.671	621	629	2.5	2.3	15.247	C
			2	2, 3, 4	117	915	0.127	116	118	0.1	0.2	4.611	A
		2	1	(1, 2, 3, 4, 5)	731			731	747	0.0	0.0	0.022	A
	Exit	1	1		700			700	700	0.0	0.0	0.000	A
5 - A4 West	Entry	1	1	1	354	604	0.585	351	353	1.6	1.7	15.614	C
			2	2, 3, 4, 5	475	604	0.786	472	468	2.6	2.8	20.275	C
		2	1	(1, 2, 3, 4, 5)	829			829	823	3.2	3.9	16.837	C
	Exit	1	1		836			836	829	0.0	0.0	0.000	A

17:30 - 17:45

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A350 North	Entry	1	1	2, 3, 4	427	1099	0.389	426	425	0.6	0.6	4.951	A
			2	1, 4, 5	545	1099	0.496	544	541	0.9	1.0	5.978	A
	Exit	1	1		1233			1233	1227	0.0	0.0	0.000	A
2 - Sainsbury	Entry	1	1	1, 2, 3, 4, 5	267	567	0.471	265	264	0.9	1.0	12.101	B
	Exit	1	1		280			280	280	0.0	0.0	0.000	A
3 - A4 East	Entry	1	1	4, 5	538	924	0.582	538	535	1.3	1.5	9.639	A
			2	1, 2, 3	244	924	0.264	244	244	0.5	0.4	5.534	A
	Exit	1	1		539			539	535	0.0	0.0	0.000	A
4 - A350 South	Entry	1	1	1, 5	620	918	0.676	623	618	2.3	2.8	15.118	C
			2	2, 3, 4	117	918	0.128	117	118	0.2	0.2	4.566	A
		2	1	(1, 2, 3, 4, 5)	738			738	738	0.0	0.0	0.011	A
	Exit	1	1		699			699	699	0.0	0.0	0.000	A
5 - A4 West	Entry	1	1	1	350	604	0.580	353	354	1.7	1.3	15.319	C
			2	2, 3, 4, 5	471	604	0.779	469	465	2.8	2.7	20.095	C
		2	1	(1, 2, 3, 4, 5)	829			821	817	3.9	3.5	14.998	B
	Exit	1	1		828			828	823	0.0	0.0	0.000	A

17:45 - 18:00

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A350 North	Entry	1	1	2, 3, 4	424	1101	0.385	423	427	0.6	0.6	4.991	A
			2	1, 4, 5	542	1101	0.492	541	541	1.0	0.9	5.924	A
	Exit	1	1		1237			1237	1231	0.0	0.0	0.000	A
2 - Sainsbury	Entry	1	1	1, 2, 3, 4, 5	263	572	0.460	263	263	1.0	0.9	12.274	B
	Exit	1	1		279			279	282	0.0	0.0	0.000	A
3 - A4 East	Entry	1	1	4, 5	546	927	0.589	546	544	1.5	1.5	10.022	B
			2	1, 2, 3	242	927	0.261	242	243	0.4	0.3	5.588	A
	Exit	1	1		530			530	534	0.0	0.0	0.000	A
4 - A350 South	Entry	1	1	1, 5	627	919	0.682	628	627	2.8	2.6	15.155	C
			2	2, 3, 4	115	919	0.125	115	115	0.2	0.2	4.507	A
		2	1	(1, 2, 3, 4, 5)	742			742	741	0.0	0.0	0.013	A
	Exit	1	1		700			700	701	0.0	0.0	0.000	A
5 - A4 West	Entry	1	1	1	357	604	0.591	354	352	1.3	1.8	15.270	C
			2	2, 3, 4, 5	463	604	0.767	464	465	2.7	2.6	19.675	C
		2	1	(1, 2, 3, 4, 5)	824			821	819	3.5	3.3	13.159	B
	Exit	1	1		830			830	829	0.0	0.0	0.000	A

Lane movements: Main Results for each time segment

17:00 - 17:15

Arm	Side	Lane level	Lane	To Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Simulation max flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A350 North	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	92	23	1331	1101	0.083	92	91	0.0	0.2	5.325	A
				3	60	15	1331	1101	0.055	60	59	0.0	0.1	5.247	A
				4	267	67	1331	1101	0.243	267	270	0.0	0.4	4.689	A
				5	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	201	50	1331	1102	0.183	201	202	0.0	0.3	4.608	A
				5	335	84	1331	1101	0.304	335	334	0.0	0.6	6.418	A
2 - Sainsbury	Entry	1	1	1	171	43	1100	576	0.297	171	172	0.0	0.7	12.843	B
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	51	13	1100	576	0.088	52	50	0.0	0.2	12.529	B
				5	42	10	1100	576	0.073	42	42	0.0	0.2	12.203	B
3 - A4 East	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	129	32	1282	928	0.139	129	130	0.0	0.4	9.680	A
				5	411	103	1282	929	0.442	412	409	0.0	1.0	9.686	A
			2	1	123	31	1282	929	0.133	123	123	0.0	0.2	5.683	A
				2	123	31	1282	929	0.133	123	121	0.0	0.2	5.487	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				5	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
4 - A350 South	Entry	1	1	1	585	146	1316	919	0.637	586	577	0.0	2.3	13.552	B
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				5	37	9	1316	920	0.040	37	38	0.0	0.2	13.332	B
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	50	12	1316	918	0.054	50	48	0.0	0.0	4.480	A
				3	67	17	1316	919	0.073	68	69	0.0	0.0	4.572	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				5	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	585	146	-	-	-	585	586	0.0	0.0	0.001	A
				2	50	12	-	-	-	50	48	0.0	0.0	0.002	A
				3	67	17	-	-	-	67	70	0.0	0.0	0.000	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				5	37	9	-	-	-	37	39	0.0	0.0	0.000	A
5 - A4 West	Entry	1	1	1	358	89	886	603	0.593	358	344	0.0	1.6	14.732	B
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				5	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	20	5	883	603	0.033	19	20	0.0	0.1	18.704	C
				3	401	100	886	603	0.665	399	389	0.0	2.2	18.508	C
				4	40	10	886	602	0.066	39	39	0.0	0.2	18.365	C
				5	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	361	90	-	-	-	358	351	0.0	1.4	9.397	A
				2	20	5	-	-	-	20	20	0.0	0.1	10.983	B
				3	405	101	-	-	-	401	398	0.0	1.6	9.884	A
				4	40	10	-	-	-	40	40	0.0	0.2	9.603	A
				5	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A

17:15 - 17:30

Arm	Side	Lane level	Lane	To Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Simulation max flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A350 North	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	91	23	1331	1097	0.083	91	92	0.2	0.1	5.315	A
				3	57	14	1331	1097	0.052	57	59	0.1	0.1	5.470	A
				4	270	67	1331	1098	0.246	270	270	0.4	0.4	4.755	A
				5	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	201	50	1331	1098	0.183	201	203	0.3	0.3	4.617	A
				5	335	84	1331	1096	0.306	336	335	0.6	0.6	6.684	A
2 - Sainsbury	Entry	1	1	1	174	43	1100	573	0.303	174	171	0.7	0.6	12.387	B
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	51	13	1100	575	0.089	51	50	0.2	0.2	12.338	B
				5	43	11	1100	574	0.075	43	42	0.2	0.1	12.440	B
3 - A4 East	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	136	34	1282	927	0.147	136	135	0.4	0.3	9.879	A
				5	415	104	1282	927	0.447	417	413	1.0	0.9	10.275	B
			2	1	124	31	1282	927	0.134	123	124	0.2	0.3	5.618	A
				2	124	31	1282	928	0.134	124	122	0.2	0.2	5.408	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				5	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
4 - A350 South	Entry	1	1	1	574	144	1316	915	0.627	580	590	2.3	2.2	15.288	C
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				5	40	10	1316	917	0.044	41	39	0.2	0.1	14.684	B
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	48	12	1316	916	0.052	48	49	0.0	0.1	4.672	A
				3	69	17	1316	916	0.075	68	69	0.0	0.1	4.569	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				5	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	574	144	-	-	-	574	590	0.0	0.0	0.022	A
				2	48	12	-	-	-	48	49	0.0	0.0	0.024	A
				3	69	17	-	-	-	69	70	0.0	0.0	0.020	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				5	40	10	-	-	-	40	39	0.0	0.0	0.019	A
5 - A4 West	Entry	1	1	1	354	88	886	604	0.585	351	353	1.6	1.7	15.614	C
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				5	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	22	6	883	602	0.037	22	22	0.1	0.2	20.161	C
				3	411	103	886	604	0.680	409	404	2.2	2.4	20.333	C
				4	42	11	886	603	0.070	41	42	0.2	0.2	19.785	C
				5	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	354	88	-	-	-	354	354	1.4	1.7	16.629	C
				2	22	6	-	-	-	22	22	0.1	0.1	18.263	C
				3	412	103	-	-	-	411	405	1.6	1.9	16.925	C
				4	42	10	-	-	-	42	42	0.2	0.2	16.903	C
				5	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A

17:30 - 17:45

Arm	Side	Lane level	Lane	To Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Simulation max flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A350 North	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	93	23	1331	1099	0.084	92	90	0.1	0.1	5.376	A
				3	61	15	1331	1098	0.056	61	62	0.1	0.1	5.195	A
				4	273	68	1331	1098	0.249	273	273	0.4	0.4	4.740	A
				5	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	201	50	1331	1098	0.183	201	201	0.3	0.3	4.698	A
				5	344	86	1331	1098	0.313	344	340	0.6	0.6	6.732	A
2 - Sainsbury	Entry	1	1	1	172	43	1100	568	0.303	170	171	0.6	0.7	12.023	B
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	51	13	1100	566	0.090	50	51	0.2	0.2	12.250	B
				5	44	11	1100	571	0.077	44	43	0.1	0.1	12.230	B
3 - A4 East	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	134	34	1282	924	0.145	134	133	0.3	0.4	9.550	A
				5	404	101	1282	924	0.437	404	402	0.9	1.1	9.669	A
			2	1	124	31	1282	925	0.134	123	123	0.3	0.2	5.721	A
				2	120	30	1282	927	0.130	121	121	0.2	0.2	5.355	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				5	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
4 - A350 South	Entry	1	1	1	584	146	1316	918	0.636	586	580	2.2	2.6	15.142	C
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				5	37	9	1316	918	0.040	37	38	0.1	0.2	14.786	B
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	48	12	1316	917	0.052	47	48	0.1	0.1	4.626	A
				3	69	17	1316	916	0.076	70	70	0.1	0.1	4.526	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				5	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	584	146	-	-	-	584	582	0.0	0.0	0.013	A
				2	48	12	-	-	-	48	48	0.0	0.0	0.003	A
				3	69	17	-	-	-	69	70	0.0	0.0	0.004	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				5	37	9	-	-	-	37	38	0.0	0.0	0.005	A
5 - A4 West	Entry	1	1	1	350	88	886	604	0.580	353	354	1.7	1.3	15.319	C
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				5	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	20	5	883	602	0.033	20	20	0.2	0.1	19.753	C
				3	409	102	886	604	0.678	408	403	2.4	2.3	20.133	C
				4	41	10	886	603	0.069	41	42	0.2	0.3	19.898	C
				5	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	354	88	-	-	-	350	352	1.7	1.5	14.871	B
				2	20	5	-	-	-	20	20	0.1	0.1	14.445	B
				3	413	103	-	-	-	409	402	1.9	1.7	15.036	C
				4	42	11	-	-	-	41	42	0.2	0.2	15.919	C
				5	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A

17:45 - 18:00

Arm	Side	Lane level	Lane	To Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Simulation max flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A350 North	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	93	23	1331	1101	0.084	93	93	0.1	0.1	5.362	A
				3	59	15	1331	1102	0.054	59	62	0.1	0.1	5.445	A
				4	272	68	1331	1101	0.247	271	272	0.4	0.3	4.742	A
				5	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	207	52	1331	1102	0.188	206	205	0.3	0.3	4.743	A
				5	335	84	1331	1102	0.304	335	336	0.6	0.6	6.635	A
2 - Sainsbury	Entry	1	1	1	172	43	1100	573	0.299	172	171	0.7	0.6	12.319	B
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	50	13	1100	573	0.088	50	50	0.2	0.2	12.315	B
				5	41	10	1100	569	0.072	41	42	0.1	0.1	12.044	B
3 - A4 East	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	131	33	1282	927	0.141	131	134	0.4	0.3	9.914	A
				5	415	104	1282	926	0.448	414	411	1.1	1.2	10.057	B
			2	1	123	31	1282	927	0.132	123	122	0.2	0.2	5.639	A
				2	119	30	1282	927	0.128	119	121	0.2	0.1	5.539	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				5	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
4 - A350 South	Entry	1	1	1	587	147	1316	919	0.639	588	587	2.6	2.4	15.218	C
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				5	40	10	1316	920	0.044	40	40	0.2	0.2	14.338	B
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	47	12	1316	919	0.051	47	47	0.1	0.1	4.578	A
				3	67	17	1316	920	0.073	68	68	0.1	0.1	4.459	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				5	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	587	147	-	-	-	587	586	0.0	0.0	0.015	A
				2	47	12	-	-	-	47	47	0.0	0.0	0.004	A
				3	67	17	-	-	-	67	68	0.0	0.0	0.013	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				5	40	10	-	-	-	40	40	0.0	0.0	0.004	A
5 - A4 West	Entry	1	1	1	357	89	886	604	0.592	354	352	1.3	1.8	15.270	C
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				5	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	19	5	886	607	0.032	19	21	0.1	0.1	20.253	C
				3	404	101	886	604	0.669	404	404	2.3	2.2	19.656	C
				4	40	10	886	604	0.066	40	40	0.3	0.2	19.555	C
				5	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	359	90	-	-	-	357	354	1.5	1.4	12.910	B
				2	19	5	-	-	-	19	21	0.1	0.1	13.719	B
				3	406	101	-	-	-	404	404	1.7	1.7	13.304	B
				4	40	10	-	-	-	40	40	0.2	0.2	13.492	B
				5	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A



Junctions 10

ARCADY 10 - Roundabout Module

Version: 10.1.1.1905
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Filename: Chequers RA - Mitigation 03.2026.j10
Path: Y:\PROJECT FOLDER\B14133 Chippenham\Calculations\Transport\ARCADY\2026 March TA
Report generation date: 24/03/2026 09:33:11

»Year 2031 + Dev, AM
»Year 2031 + Dev, PM

Summary of junction performance

	AM						PM					
	Set ID	Queue (PCU)	Delay (s)	RFC	LOS	Junction Delay (s)	Set ID	Queue (PCU)	Delay (s)	RFC	LOS	Junction Delay (s)
	[Lane Simulation] -Year 2031 + Dev											
1 - A350 North	D1	2.3	6.95	0.51	A	21.80	D2	2.0	6.13	0.51	A	16.06
2 - Sainsbury		0.8	13.47	0.40	B			1.8	17.47	0.56	C	
3 - A4 East		2.4	10.52	0.41	B			2.9	11.06	0.49	B	
4 - A350 South		10.4	34.82	0.89	D			5.2	22.53	0.82	C	
5 - A4 West		11.1	35.12	0.87	E			6.6	26.18	0.85	D	

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. Arm and junction delays are averages for all movements, including movements with zero delay.

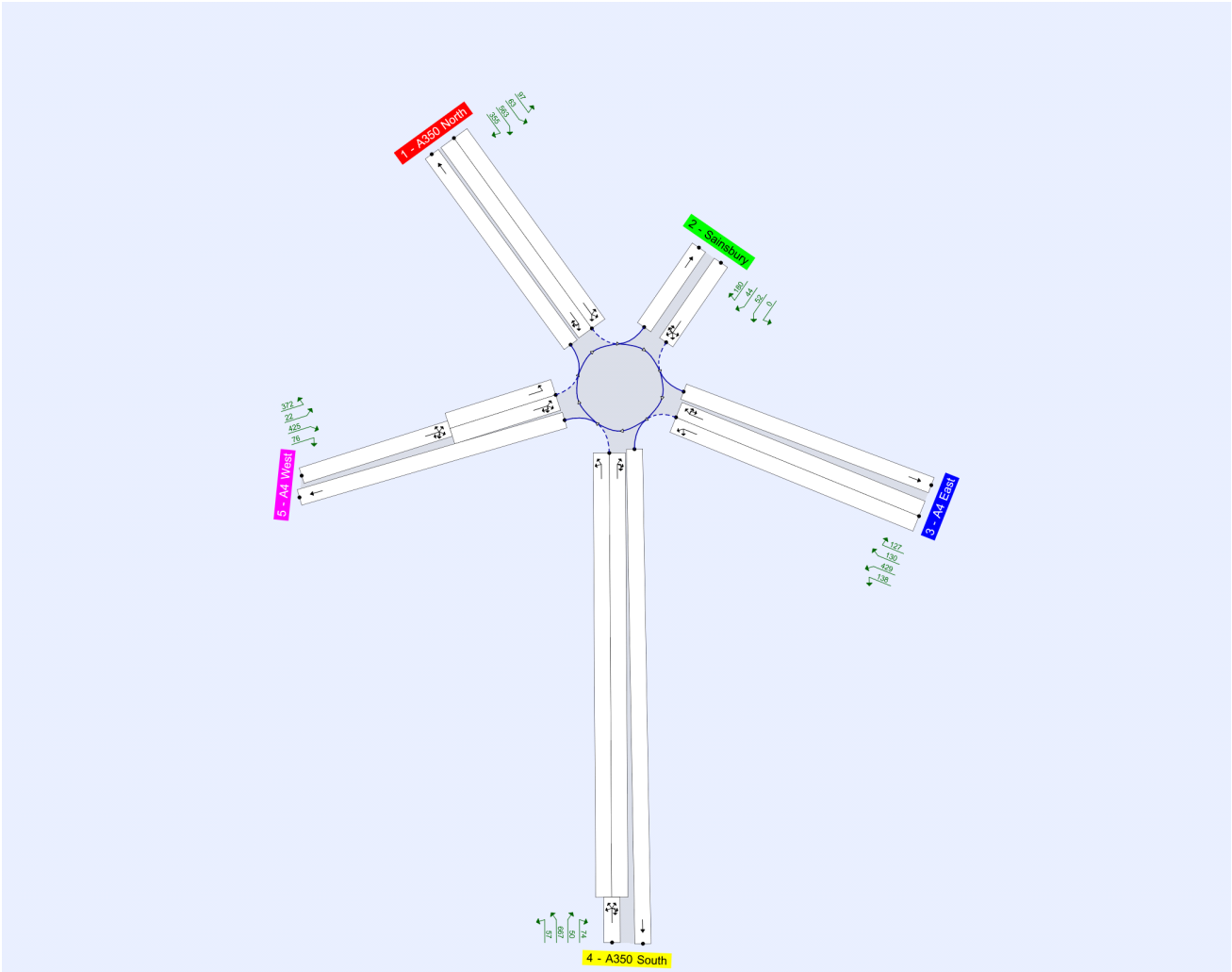
File summary

File Description

Title	
Location	
Site number	
Date	07/12/2022
Version	
Status	(new file)
Identifier	
Client	
Jobnumber	
Enumerator	JUBB\SRadford
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



Flows show original traffic demand (PCU/hr).

Lane simulation visualisation time: 17:00:00

The junction diagram reflects the last run of Junctions.

Analysis Options

Vehicle length (m)	Calculate Queue Percentiles	Calculate detailed queueing delay	Show lane queues in feet / metres	Show all PICADY stream intercepts	Calculate residual capacity	RFC Threshold	Average Delay threshold (s)	Queue threshold (PCU)	Use simulation for HCM roundabouts	Use iterations for HCM roundabouts
5.75						0.85	36.00	20.00		

Lane Simulation options

Criteria type	Stop criteria (%)	Stop criteria time (s)	Stop criteria number of trials	Calculate RFCs	Relaxation factor for capacity/RFC runs	Random seed	Results refresh speed (s)	Individual vehicle animation number of trials	Average animation capture interval (s)	Use quick response	Do flow sampling	Suppress automatic lane creation	Last run random seed	Last run number of trials
Delay	1.00	100000	100000	Calculate for all arms	3.00	-1	3	1	60	✓			705552583	151

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)	Run automatically
D1	Year 2031 + Dev	AM	FLAT	08:00	09:00	60	15	✓
D2	Year 2031 + Dev	PM	FLAT	17:00	18:00	60	15	✓

Analysis Set Details

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

Year 2031 + Dev, AM

Data Errors and Warnings

Severity	Area	Item	Description
Last Run	Simulation	4 - A350 South	Arm 4: Queue at end of modelled period is greater than 10 PCU. Delay is likely to have been underestimated.
Last Run	Simulation	5 - A4 West	Arm 5: Queue at end of modelled period is greater than 10 PCU. Delay is likely to have been underestimated.
Info	Simulation	A1 - [Lane Simulation]	This run uses Simulation mode. For detailed information on this mode, please see the User Guide.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	Chequers Roundabout	Standard Roundabout		1, 2, 3, 4, 5	21.80	C

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	21.80	C

Arms

Arms

Arm	Name	Description	No give-way line
1	A350 North		
2	Sainsbury		
3	A4 East		
4	A350 South		
5	A4 West		

Roundabout Geometry

Arm	V - Approach road half-width (m)	E - Entry width (m)	I' - Effective flare length (m)	R - Entry radius (m)	D - Inscribed circle diameter (m)	PHI - Conflict (entry) angle (deg)	Entry only	Exit only
1 - A350 North	7.32	10.71	7.9	20.3	70.0	29.0		
2 - Sainsbury	3.47	5.95	3.0	9.3	70.0	50.0		
3 - A4 East	6.62	9.92	16.6	25.6	70.0	39.0		
4 - A350 South	7.39	9.84	5.7	35.3	70.0	27.0		
5 - A4 West	3.55	9.90	24.5	20.7	70.0	44.0		

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Arm	Final slope	Final intercept (PCU/hr)
1 - A350 North	0.658	2662
2 - Sainsbury	0.381	1100
3 - A4 East	0.636	2563
4 - A350 South	0.660	2632
5 - A4 West	0.546	2027

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

Lane Simulation: Arm options

Arm	Lane capacity source	Traffic considering secondary lanes (%)
1 - A350 North	Evenly split	10.00
2 - Sainsbury	Evenly split	10.00
3 - A4 East	Evenly split	10.00
4 - A350 South	Evenly split	10.00
5 - A4 West	Evenly split	10.00

Lanes

Arm	Side	Lane level	Lane	Destination arms	Has limited storage	Storage (PCU)	Has bottleneck	Has obstruction	Minimum capacity (PCU/hr)	Maximum capacity (PCU/hr)	Signalised
1 - A350 North	Entry	1	1	2, 3, 4		Infinity			0	99999	
			2	1, 4, 5		Infinity			0	99999	
	Exit	1	1			Infinity					
2 - Sainsbury	Entry	1	1	1, 2, 3, 4, 5		Infinity			0	99999	
	Exit	1	1			Infinity					
3 - A4 East	Entry	1	1	4, 5		Infinity			0	99999	
			2	1, 2, 3		Infinity			0	99999	
	Exit	1	1			Infinity					
4 - A350 South	Entry	1	1	1, 5	✓	24.00			0	99999	
			2	2, 3, 4	✓	24.00			0	99999	
		2	1	(1, 2, 3, 4, 5)		Infinity					
	Exit	1	1			Infinity					
5 - A4 West	Entry	1	1	1	✓	6.00			0	99999	
			2	2, 3, 4, 5	✓	6.00			0	99999	
		2	1	(1, 2, 3, 4, 5)		Infinity					
	Exit	1	1			Infinity					

Entry Lane slope and intercept

Arm	Side	Lane level	Lane	Final slope	Final intercept (PCU/hr)
1 - A350 North	Entry	1	1	0.329	1331
			2	0.329	1331
2 - Sainsbury	Entry	1	1	0.381	1100
3 - A4 East	Entry	1	1	0.318	1282
			2	0.318	1282
4 - A350 South	Entry	1	1	0.330	1316
			2	0.330	1316
5 - A4 West	Entry	1	1	0.273	1014
			2	0.273	1014

Summary of Entry Lane allowed movements

Arm	Lane Level	Lane	Destination arm				
			A350 North	Sainsbury	A4 East	A350 South	A4 West
1 - A350 North	1	1		✓	✓	✓	
		2	✓			✓	✓
2 - Sainsbury	1	1	✓	✓	✓	✓	✓
3 - A4 East	1	1				✓	✓
		2	✓	✓	✓		
4 - A350 South	1	1	✓				✓
		2		✓	✓	✓	
	2	1	✓	✓	✓	✓	✓
5 - A4 West	1	1	✓				
		2		✓	✓	✓	✓
	2	1	✓	✓	✓	✓	✓

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)	Run automatically
D1	Year 2031 + Dev	AM	FLAT	08:00	09:00	60	15	✓

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1 - A350 North		FLAT	✓	1076	100.000
2 - Sainsbury		FLAT	✓	183	100.000
3 - A4 East		FLAT	✓	751	100.000
4 - A350 South		FLAT	✓	1007	100.000
5 - A4 West		FLAT	✓	976	100.000

Origin-Destination Data

Demand (PCU/hr)

		To				
		1 - A350 North	2 - Sainsbury	3 - A4 East	4 - A350 South	5 - A4 West
From	1 - A350 North	0	81	102	566	327
	2 - Sainsbury	121	0	0	41	21
	3 - A4 East	60	124	0	126	441
	4 - A350 South	754	30	144	0	79
	5 - A4 West	465	17	435	59	0

Vehicle Mix

HV data entry mode	PCU Factor for a HV (PCU)
HV Percentages	2.00

Junction	PCU factor for a cyclist	PCU factor for a cyclist in controlling flow
1	0.20	0.80

Heavy Vehicle %

		To				
		1 - A350 North	2 - Sainsbury	3 - A4 East	4 - A350 South	5 - A4 West
From	1 - A350 North	0	10	7	23	20
	2 - Sainsbury	4	0	0	5	2
	3 - A4 East	11	0	2	8	11
	4 - A350 South	19	7	2	0	10
	5 - A4 West	20	10	8	14	0

Cyclist %

		To				
		1 - A350 North	2 - Sainsbury	3 - A4 East	4 - A350 South	5 - A4 West
From	1 - A350 North	0	0	0	0	0
	2 - Sainsbury	0	0	0	0	0
	3 - A4 East	0	0	0	0	0
	4 - A350 South	0	0	0	0	0
	5 - A4 West	0	0	0	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
1 - A350 North	0.51	6.95	2.3	A	1086	1086
2 - Sainsbury	0.40	13.47	0.8	B	183	183
3 - A4 East	0.41	10.52	2.4	B	743	743
4 - A350 South	0.89	34.82	10.4	D	1004	1004
5 - A4 West	0.87	35.12	11.1	E	972	972

Year 2031 + Dev, PM

Data Errors and Warnings

Severity	Area	Item	Description
Info	Simulation	A1 - [Lane Simulation]	This run uses Simulation mode. For detailed information on this mode, please see the User Guide.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	Chequers Roundabout	Standard Roundabout		1, 2, 3, 4, 5	16.06	C

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	16.06	C

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)	Run automatically
D2	Year 2031 + Dev	PM	FLAT	17:00	18:00	60	15	✓

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1 - A350 North		FLAT	✓	1078	100.000
2 - Sainsbury		FLAT	✓	276	100.000
3 - A4 East		FLAT	✓	824	100.000
4 - A350 South		FLAT	✓	848	100.000
5 - A4 West		FLAT	✓	895	100.000

Origin-Destination Data

Demand (PCU/hr)

		To				
		1 - A350 North	2 - Sainsbury	3 - A4 East	4 - A350 South	5 - A4 West
From	1 - A350 North	0	97	63	563	355
	2 - Sainsbury	180	0	0	52	44
	3 - A4 East	130	127	0	138	429
	4 - A350 South	667	50	74	0	57
	5 - A4 West	372	22	425	76	0

Vehicle Mix

HV data entry mode	PCU Factor for a HV (PCU)
HV Percentages	2.00

Junction	PCU factor for a cyclist	PCU factor for a cyclist in controlling flow
1	0.20	0.80

Heavy Vehicle %

		To				
		1 - A350 North	2 - Sainsbury	3 - A4 East	4 - A350 South	5 - A4 West
From	1 - A350 North	0	3	5	12	11
	2 - Sainsbury	3	0	0	2	1
	3 - A4 East	7	1	0	3	4
	4 - A350 South	17	3	1	0	4
	5 - A4 West	10	2	6	3	0

Cyclist %

		To				
		1 - A350 North	2 - Sainsbury	3 - A4 East	4 - A350 South	5 - A4 West
From	1 - A350 North	0	0	0	0	0
	2 - Sainsbury	0	0	0	0	0
	3 - A4 East	0	0	0	0	0
	4 - A350 South	0	0	0	0	0
	5 - A4 West	0	0	0	0	0

Results

Results Summary for whole modelled period

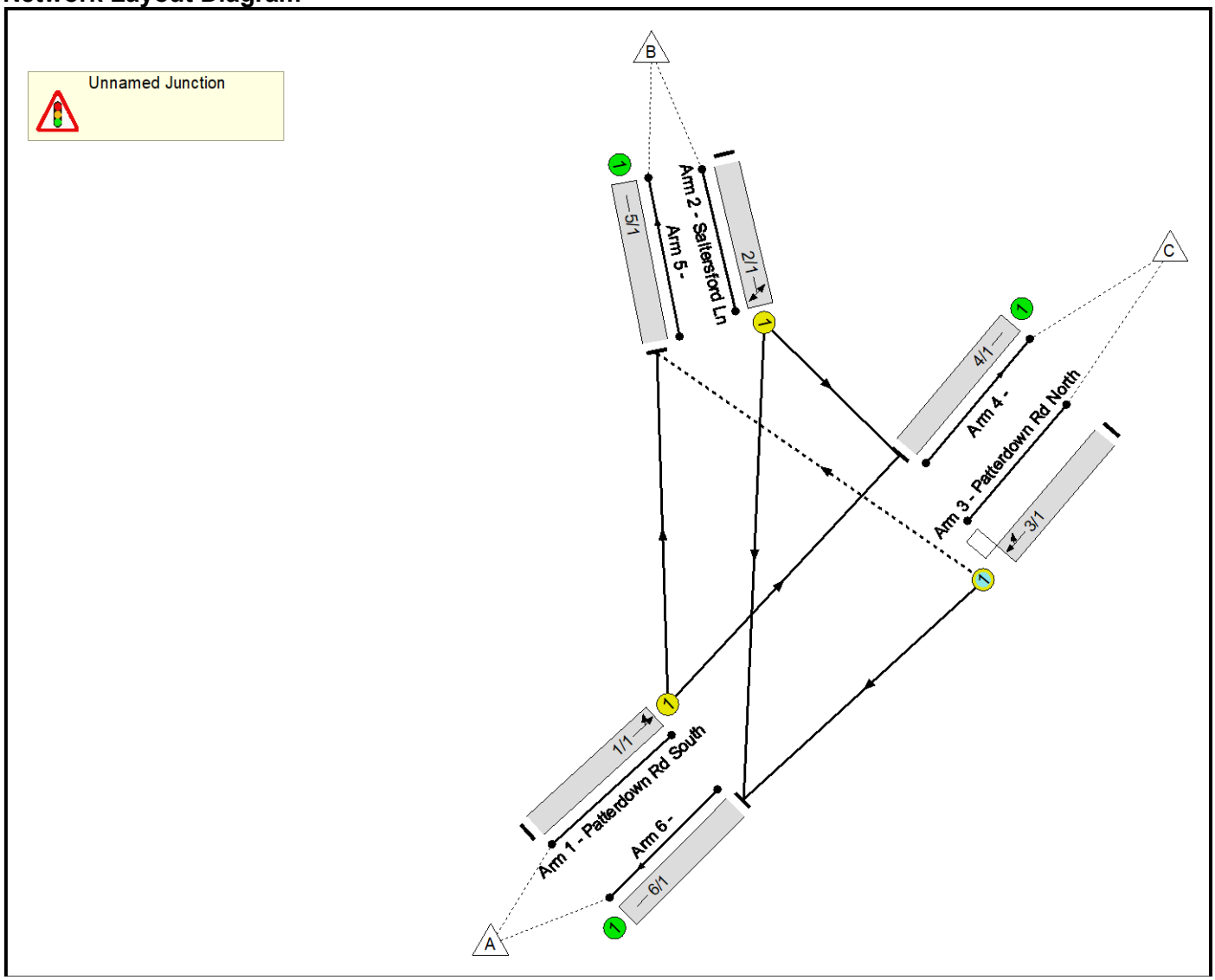
Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
1 - A350 North	0.51	6.13	2.0	A	1083	1083
2 - Sainsbury	0.56	17.47	1.8	C	279	279
3 - A4 East	0.49	11.06	2.9	B	831	831
4 - A350 South	0.82	22.53	5.2	C	841	841
5 - A4 West	0.85	26.18	6.6	D	897	897

Full Input Data And Results

User and Project Details

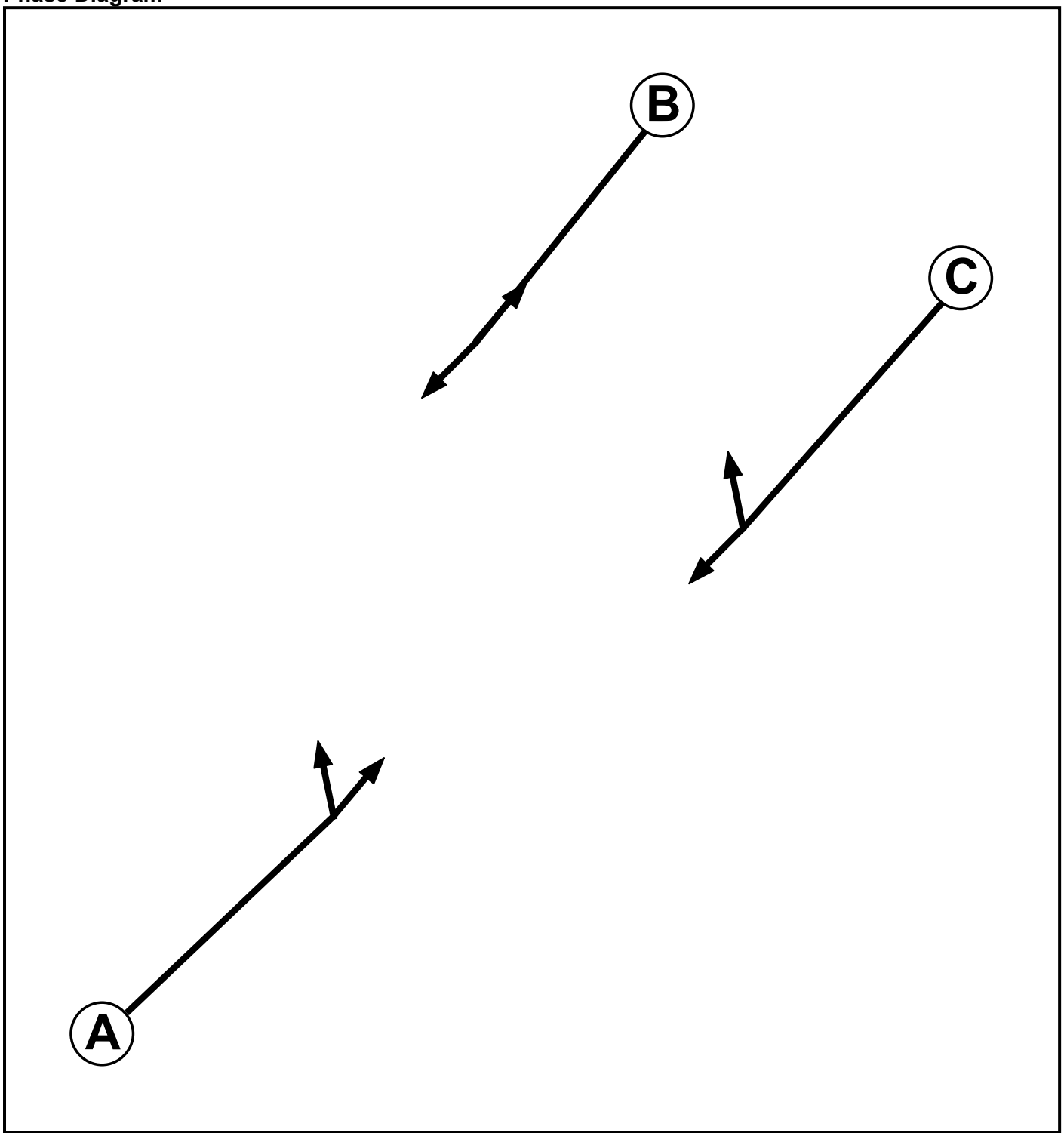
Project:	**14133**
Title:	**Pattersdown Rd / Saltersford Ln Signalised Junction**
Location:	Chippenham
Additional detail:	
File name:	Patterdown Rd - Saltersford Ln 03.2026.lsg3x
Author:	
Company:	Ridge
Address:	Bristol

Network Layout Diagram



Full Input Data And Results

Phase Diagram



Phase Input Data

Phase Name	Phase Type	Assoc. Phase	Street Min	Cont Min
A	Traffic		7	7
B	Traffic		7	7
C	Traffic		7	7

Full Input Data And Results

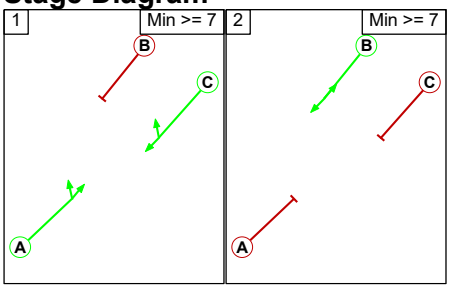
Phase Intergreens Matrix

Terminating Phase	Starting Phase			
		A	B	C
	A		12	-
	B	12		12
	C	-	12	

Phases in Stage

Stage No.	Phases in Stage
1	A C
2	B

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
From Stage	1		12
	2	12	

Full Input Data And Results

Give-Way Lane Input Data

Junction: Unnamed Junction											
Lane	**Movement**	**Max Flow when Giving Way (PCU/Hr)**	**Min Flow when Giving Way (PCU/Hr)**	**Opposing Lane**	**Opp. Lane Coeff.**	**Opp. Mvmnts.**	**Right Turn Storage (PCU)**	**Non-Blocking Storage (PCU)**	**RTF**	**Right Turn Move up (s)**	**Max Turns in Intergreen (PCU)**
3/1 (Patterdown Rd North)	5/1 (Right)	1439	0	1/1	1.09	All	1.00	1.00	0.50	1	1.00

Full Input Data And Results

Lane Input Data

Junction: Unnamed Junction												
Lane	**Lane Type**	**Phases**	**Start Disp.**	**End Disp.**	**Physical Length (PCU)**	**Sat Flow Type**	**Def User Saturation Flow (PCU/Hr)**	**Lane Width (m)**	**Gradient**	**Nearside Lane**	**Turns**	**Turning Radius (m)**
1/1 (Patterdown Rd South)	U	A	2	3	60.0	Geom	-	3.65	0.00	Y	Arm 4 Ahead	50.00
											Arm 5 Left	20.00
2/1 (Saltersford Ln)	U	B	2	3	60.0	Geom	-	3.25	0.00	Y	Arm 4 Left	10.00
											Arm 6 Right	10.00
3/1 (Patterdown Rd North)	O	C	2	3	60.0	Geom	-	3.65	0.00	Y	Arm 5 Right	10.00
											Arm 6 Ahead	50.00
4/1	U		2	3	60.0	Inf	-	-	-	-	-	-
5/1	U		2	3	60.0	Inf	-	-	-	-	-	-
6/1	U		2	3	60.0	Inf	-	-	-	-	-	-

Traffic Flow Groups

Flow Group	Start Time	End Time	Duration	Formula
1: 'Year 2031 Baseline AM'	08:00	09:00	01:00	
2: 'Year 2031 Baseline PM'	17:00	18:00	01:00	
3: 'Year 2031 + Dev AM'	08:00	09:00	01:00	
4: 'Year 2031 + Dev PM'	17:00	18:00	01:00	
5: 'Year 2026 Baseline AM'	08:00	09:00	01:00	
6: 'Year 2026 Baseline PM'	17:00	18:00	01:00	

Scenario 1: 'Scenario 1' (FG1: 'Year 2031 Baseline AM', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired

Desired Flow :

		Destination			
		A	B	C	Tot.
Origin	A	0	131	298	429
	B	186	0	0	186
	C	291	0	0	291
	Tot.	477	131	298	906

Full Input Data And Results

Traffic Lane Flows

Lane	Scenario 1: Scenario 1
Junction: Unnamed Junction	
1/1	429
2/1	186
3/1	291
4/1	298
5/1	131
6/1	477

Lane Saturation Flows

Junction: Unnamed Junction								
Lane	**Lane Width (m)**	**Gradient**	**Nearside Lane**	**Allowed Turns**	**Turning Radius (m)**	**Turning Prop.**	**Sat Flow (PCU/Hr)**	**Flared Sat Flow (PCU/Hr)**
1/1 (Patterdown Rd South)	3.65	0.00	Y	Arm 4 Ahead	50.00	69.5 %	1897	1897
				Arm 5 Left	20.00	30.5 %		
2/1 (Saltersford Ln)	3.25	0.00	Y	Arm 4 Left	10.00	0.0 %	1687	1687
				Arm 6 Right	10.00	100.0 %		
3/1 (Patterdown Rd North)	3.65	0.00	Y	Arm 5 Right	10.00	0.0 %	1922	1922
				Arm 6 Ahead	50.00	100.0 %		
4/1	Infinite Saturation Flow						Inf	Inf
5/1	Infinite Saturation Flow						Inf	Inf
6/1	Infinite Saturation Flow						Inf	Inf

Scenario 2: 'New Scenario' (FG2: 'Year 2031 Baseline PM', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired

Desired Flow :

		Destination			
		A	B	C	Tot.
Origin	A	0	252	266	518
	B	132	0	0	132
	C	243	0	0	243
	Tot.	375	252	266	893

Full Input Data And Results

Traffic Lane Flows

Lane	Scenario 2: New Scenario
Junction: Unnamed Junction	
1/1	518
2/1	132
3/1	243
4/1	266
5/1	252
6/1	375

Lane Saturation Flows

Junction: Unnamed Junction								
Lane	**Lane Width (m)**	**Gradient**	**Nearside Lane**	**Allowed Turns**	**Turning Radius (m)**	**Turning Prop.**	**Sat Flow (PCU/Hr)**	**Flared Sat Flow (PCU/Hr)**
1/1 (Patterdown Rd South)	3.65	0.00	Y	Arm 4 Ahead	50.00	51.4 %	1882	1882
				Arm 5 Left	20.00	48.6 %		
2/1 (Saltersford Ln)	3.25	0.00	Y	Arm 4 Left	10.00	0.0 %	1687	1687
				Arm 6 Right	10.00	100.0 %		
3/1 (Patterdown Rd North)	3.65	0.00	Y	Arm 5 Right	10.00	0.0 %	1922	1922
				Arm 6 Ahead	50.00	100.0 %		
4/1	Infinite Saturation Flow						Inf	Inf
5/1	Infinite Saturation Flow						Inf	Inf
6/1	Infinite Saturation Flow						Inf	Inf

Scenario 3: 'New Scenario' (FG3: 'Year 2031 + Dev AM', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired

Desired Flow :

		Destination			
		A	B	C	Tot.
Origin	A	0	132	332	464
	B	187	0	0	187
	C	301	0	0	301
	Tot.	488	132	332	952

Full Input Data And Results

Traffic Lane Flows

Lane	Scenario 3: New Scenario
Junction: Unnamed Junction	
1/1	464
2/1	187
3/1	301
4/1	332
5/1	132
6/1	488

Lane Saturation Flows

Junction: Unnamed Junction								
Lane	**Lane Width (m)**	**Gradient**	**Nearside Lane**	**Allowed Turns**	**Turning Radius (m)**	**Turning Prop.**	**Sat Flow (PCU/Hr)**	**Flared Sat Flow (PCU/Hr)**
1/1 (Patterdown Rd South)	3.65	0.00	Y	Arm 4 Ahead	50.00	71.6 %	1899	1899
				Arm 5 Left	20.00	28.4 %		
2/1 (Saltersford Ln)	3.25	0.00	Y	Arm 4 Left	10.00	0.0 %	1687	1687
				Arm 6 Right	10.00	100.0 %		
3/1 (Patterdown Rd North)	3.65	0.00	Y	Arm 5 Right	10.00	0.0 %	1922	1922
				Arm 6 Ahead	50.00	100.0 %		
4/1	Infinite Saturation Flow						Inf	Inf
5/1	Infinite Saturation Flow						Inf	Inf
6/1	Infinite Saturation Flow						Inf	Inf

Scenario 4: 'New Scenario' (FG4: 'Year 2031 + Dev PM', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired

Desired Flow :

		Destination			
		A	B	C	Tot.
Origin	A	0	253	280	533
	B	133	0	0	133
	C	272	0	0	272
	Tot.	405	253	280	938

Full Input Data And Results

Traffic Lane Flows

Lane	Scenario 4: New Scenario
Junction: Unnamed Junction	
1/1	533
2/1	133
3/1	272
4/1	280
5/1	253
6/1	405

Lane Saturation Flows

Junction: Unnamed Junction								
Lane	**Lane Width (m)**	**Gradient**	**Nearside Lane**	**Allowed Turns**	**Turning Radius (m)**	**Turning Prop.**	**Sat Flow (PCU/Hr)**	**Flared Sat Flow (PCU/Hr)**
1/1 (Patterdown Rd South)	3.65	0.00	Y	Arm 4 Ahead	50.00	52.5 %	1883	1883
				Arm 5 Left	20.00	47.5 %		
2/1 (Saltersford Ln)	3.25	0.00	Y	Arm 4 Left	10.00	0.0 %	1687	1687
				Arm 6 Right	10.00	100.0 %		
3/1 (Patterdown Rd North)	3.65	0.00	Y	Arm 5 Right	10.00	0.0 %	1922	1922
				Arm 6 Ahead	50.00	100.0 %		
4/1	Infinite Saturation Flow						Inf	Inf
5/1	Infinite Saturation Flow						Inf	Inf
6/1	Infinite Saturation Flow						Inf	Inf

Scenario 5: 'New Scenario' (FG5: 'Year 2026 Baseline AM', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired

Desired Flow :

		Destination			
		A	B	C	Tot.
Origin	A	0	124	272	396
	B	177	0	0	177
	C	272	0	0	272
	Tot.	449	124	272	845

Full Input Data And Results

Traffic Lane Flows

Lane	Scenario 5: New Scenario
Junction: Unnamed Junction	
1/1	396
2/1	177
3/1	272
4/1	272
5/1	124
6/1	449

Lane Saturation Flows

Junction: Unnamed Junction								
Lane	**Lane Width (m)**	**Gradient**	**Nearside Lane**	**Allowed Turns**	**Turning Radius (m)**	**Turning Prop.**	**Sat Flow (PCU/Hr)**	**Flared Sat Flow (PCU/Hr)**
1/1 (Patterdown Rd South)	3.65	0.00	Y	Arm 4 Ahead	50.00	68.7 %	1896	1896
				Arm 5 Left	20.00	31.3 %		
2/1 (Saltersford Ln)	3.25	0.00	Y	Arm 4 Left	10.00	0.0 %	1687	1687
				Arm 6 Right	10.00	100.0 %		
3/1 (Patterdown Rd North)	3.65	0.00	Y	Arm 5 Right	10.00	0.0 %	1922	1922
				Arm 6 Ahead	50.00	100.0 %		
4/1	Infinite Saturation Flow						Inf	Inf
5/1	Infinite Saturation Flow						Inf	Inf
6/1	Infinite Saturation Flow						Inf	Inf

Scenario 6: 'New Scenario' (FG6: 'Year 2026 Baseline PM', Plan 1: 'Network Control Plan 1')

Traffic Flows, Desired

Desired Flow :

		Destination			
		A	B	C	Tot.
Origin	A	0	240	246	486
	B	125	0	0	125
	C	219	0	0	219
	Tot.	344	240	246	830

Full Input Data And Results

Traffic Lane Flows

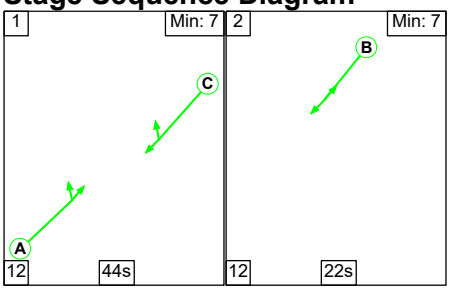
Lane	Scenario 6: New Scenario
Junction: Unnamed Junction	
1/1	486
2/1	125
3/1	219
4/1	246
5/1	240
6/1	344

Lane Saturation Flows

Junction: Unnamed Junction								
Lane	**Lane Width (m)**	**Gradient**	**Nearside Lane**	**Allowed Turns**	**Turning Radius (m)**	**Turning Prop.**	**Sat Flow (PCU/Hr)**	**Flared Sat Flow (PCU/Hr)**
1/1 (Patterdown Rd South)	3.65	0.00	Y	Arm 4 Ahead	50.00	50.6 %	1882	1882
				Arm 5 Left	20.00	49.4 %		
2/1 (Saltersford Ln)	3.25	0.00	Y	Arm 4 Left	10.00	0.0 %	1687	1687
				Arm 6 Right	10.00	100.0 %		
3/1 (Patterdown Rd North)	3.65	0.00	Y	Arm 5 Right	10.00	0.0 %	1922	1922
				Arm 6 Ahead	50.00	100.0 %		
4/1	Infinite Saturation Flow						Inf	Inf
5/1	Infinite Saturation Flow						Inf	Inf
6/1	Infinite Saturation Flow						Inf	Inf

Scenario 1: 'Scenario 1' (FG1: 'Year 2031 Baseline AM', Plan 1: 'Network Control Plan 1')

Stage Sequence Diagram

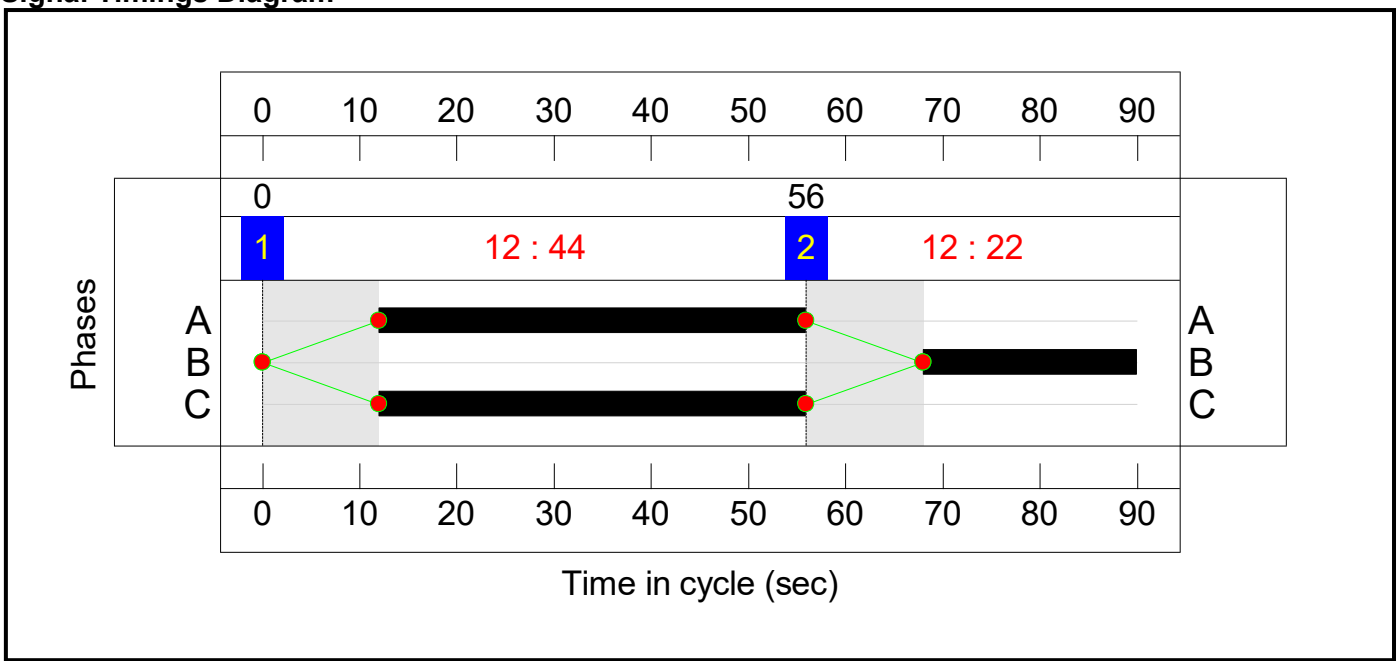


Stage Timings

Stage	1	2
Duration	44	22
Change Point	0	56

Full Input Data And Results

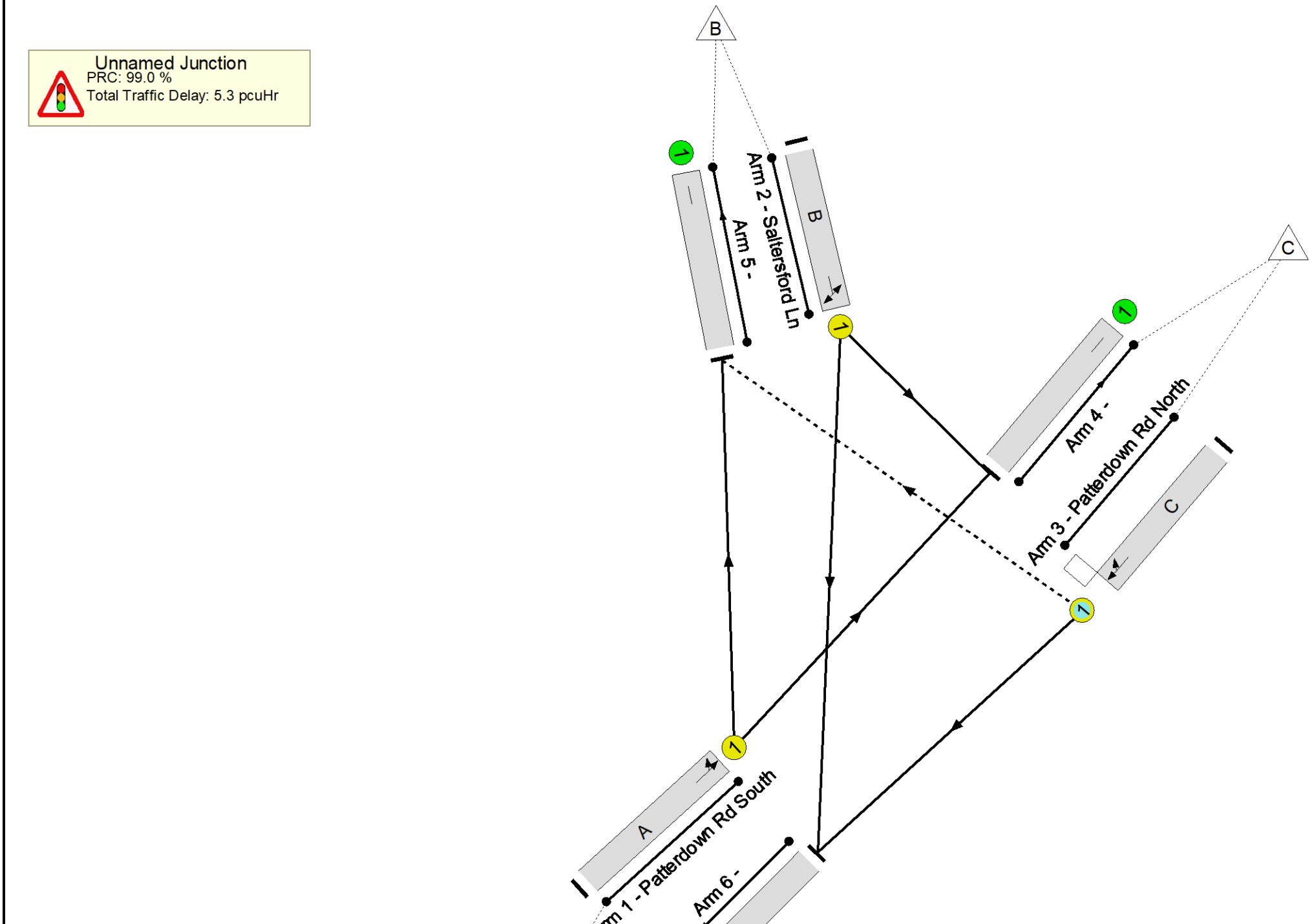
Signal Timings Diagram



Full Input Data And Results

Network Layout Diagram

Unnamed Junction
PRC: 99.0 %
Total Traffic Delay: 5.3 pcuHr



Full Input Data And Results

Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network	**-**	**-**	**N/A**	**-**	**-**		**-**	**-**	**-**	**-**	**-**	**-**	**45.2%**
Unnamed Junction	**-**	**-**	**N/A**	**-**	**-**		**-**	**-**	**-**	**-**	**-**	**-**	**45.2%**
1/1	Patterdown Rd South Ahead Left	U	N/A	N/A	A		1	44	-	429	1897	948	45.2%
2/1	Saltersford Ln Left Right	U	N/A	N/A	B		1	22	-	186	1687	431	43.1%
3/1	Patterdown Rd North Right Ahead	O	N/A	N/A	C		1	44	-	291	1922	961	30.3%
4/1		U	N/A	N/A	-		-	-	-	298	Inf	Inf	0.0%
5/1		U	N/A	N/A	-		-	-	-	131	Inf	Inf	0.0%
6/1		U	N/A	N/A	-		-	-	-	477	Inf	Inf	0.0%

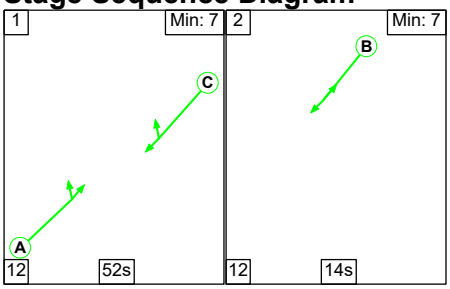
Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network	**-**	**-**	**0**	**0**	**0**	**4.3**	**1.0**	**0.0**	**5.3**	**-**	**-**	**-**	**-**
Unnamed Junction	**-**	**-**	**0**	**0**	**0**	**4.3**	**1.0**	**0.0**	**5.3**	**-**	**-**	**-**	**-**
1/1	429	429	-	-	-	1.7	0.4	-	2.1	18.0	6.9	0.4	7.3
2/1	186	186	-	-	-	1.4	0.4	-	1.8	35.4	3.9	0.4	4.3
3/1	291	291	0	0	0	1.1	0.2	0.0	1.3	15.9	4.3	0.2	4.5
4/1	298	298	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/1	131	131	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/1	477	477	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0

C1 PRC for Signalled Lanes (%): 99.0 PRC Over All Lanes (%): 99.0 Total Delay for Signalled Lanes (pcuHr): 5.26 Total Delay Over All Lanes(pcuHr): 5.26 Cycle Time (s): 90

Full Input Data And Results

Scenario 2: 'New Scenario' (FG2: 'Year 2031 Baseline PM', Plan 1: 'Network Control Plan 1')

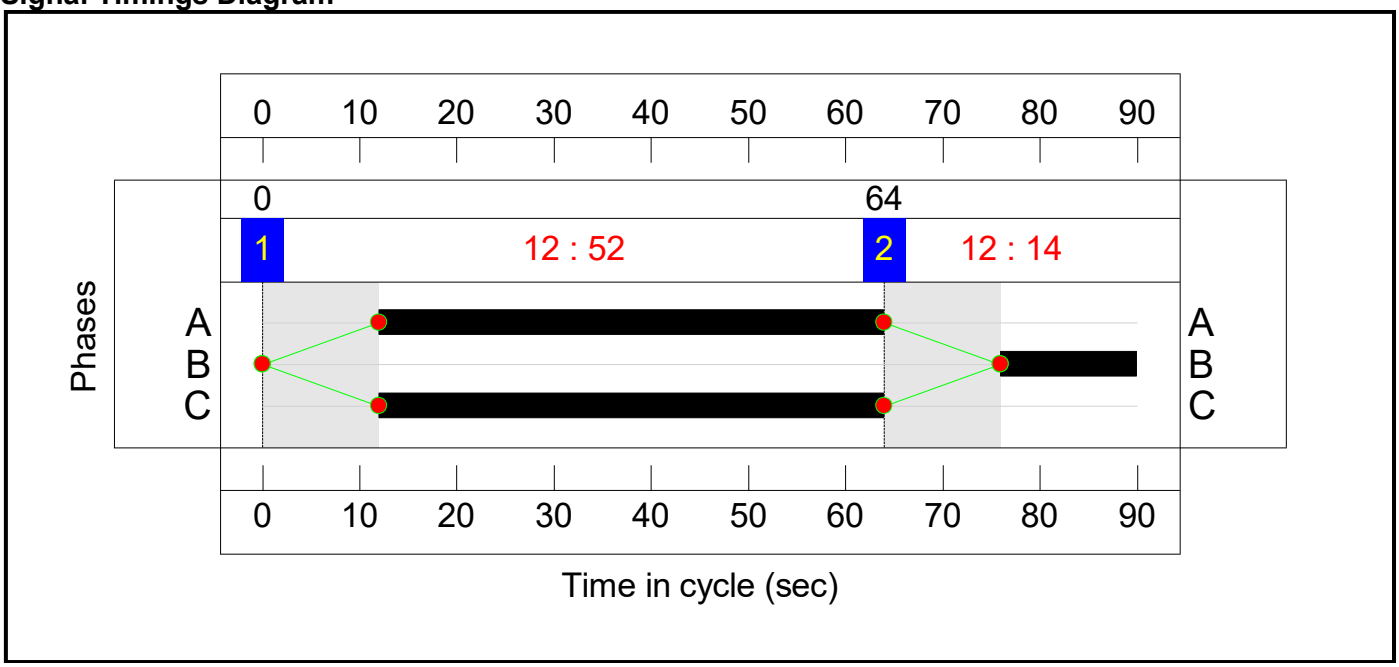
Stage Sequence Diagram



Stage Timings

Stage	1	2
Duration	52	14
Change Point	0	64

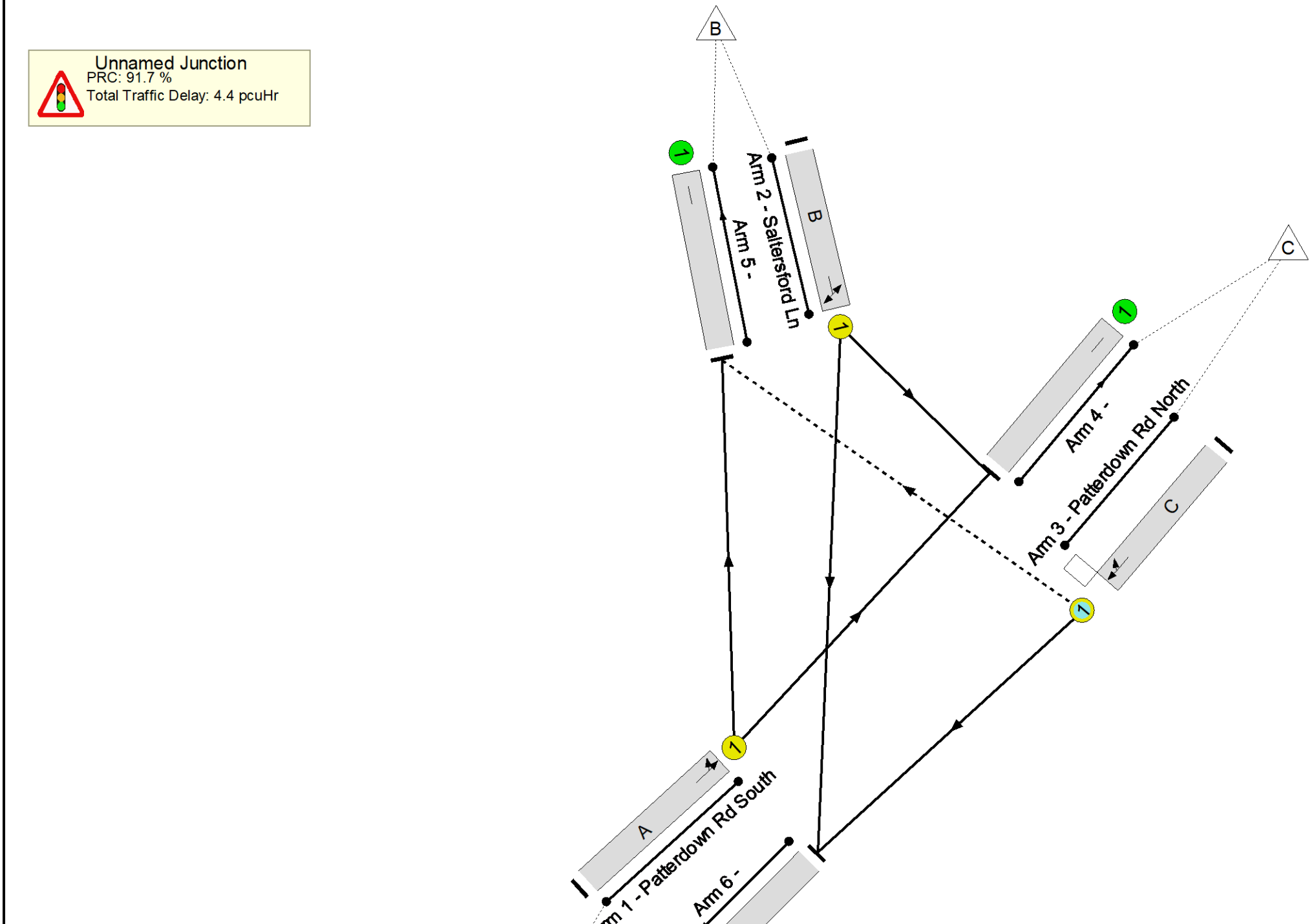
Signal Timings Diagram



Full Input Data And Results

Network Layout Diagram

Unnamed Junction
PRC: 91.7 %
Total Traffic Delay: 4.4 pcuHr



Full Input Data And Results

Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network	**-**	**-**	**N/A**	**-**	**-**		**-**	**-**	**-**	**-**	**-**	**-**	**46.9%**
Unnamed Junction	**-**	**-**	**N/A**	**-**	**-**		**-**	**-**	**-**	**-**	**-**	**-**	**46.9%**
1/1	Patterdown Rd South Ahead Left	U	N/A	N/A	A		1	52	-	518	1882	1108	46.7%
2/1	Saltersford Ln Left Right	U	N/A	N/A	B		1	14	-	132	1687	281	46.9%
3/1	Patterdown Rd North Right Ahead	O	N/A	N/A	C		1	52	-	243	1922	1132	21.5%
4/1		U	N/A	N/A	-		-	-	-	266	Inf	Inf	0.0%
5/1		U	N/A	N/A	-		-	-	-	252	Inf	Inf	0.0%
6/1		U	N/A	N/A	-		-	-	-	375	Inf	Inf	0.0%

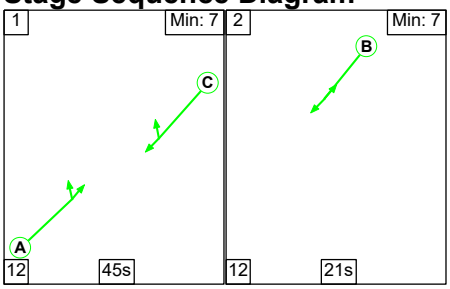
Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network	**-**	**-**	**0**	**0**	**0**	**3.3**	**1.0**	**0.0**	**4.4**	**-**	**-**	**-**	**-**
Unnamed Junction	**-**	**-**	**0**	**0**	**0**	**3.3**	**1.0**	**0.0**	**4.4**	**-**	**-**	**-**	**-**
1/1	518	518	-	-	-	1.5	0.4	-	1.9	13.5	7.3	0.4	7.8
2/1	132	132	-	-	-	1.2	0.4	-	1.7	45.9	3.0	0.4	3.4
3/1	243	243	0	0	0	0.6	0.1	0.0	0.7	10.7	2.8	0.1	3.0
4/1	266	266	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/1	252	252	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/1	375	375	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0

C1 PRC for Signalled Lanes (%): 91.7 PRC Over All Lanes (%): 91.7 Total Delay for Signalled Lanes (pcuHr): 4.36 Total Delay Over All Lanes(pcuHr): 4.36 Cycle Time (s): 90

Full Input Data And Results

Scenario 3: 'New Scenario' (FG3: 'Year 2031 + Dev AM', Plan 1: 'Network Control Plan 1')

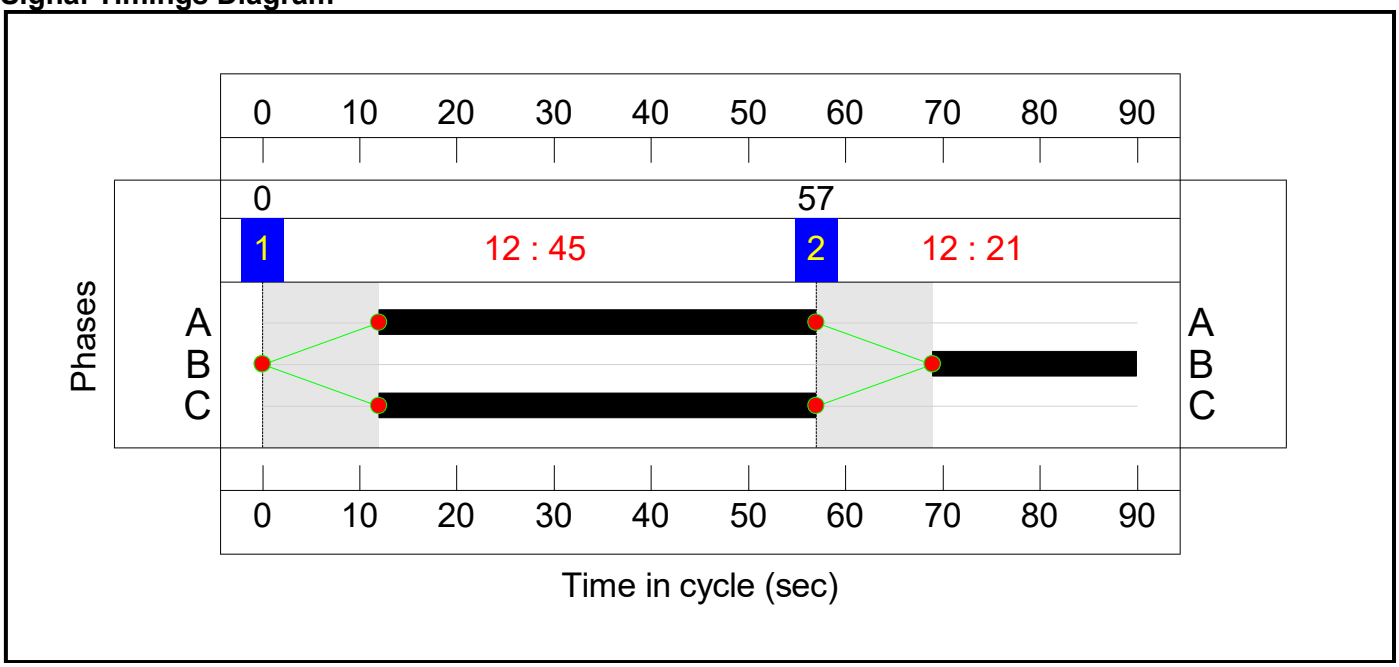
Stage Sequence Diagram



Stage Timings

Stage	1	2
Duration	45	21
Change Point	0	57

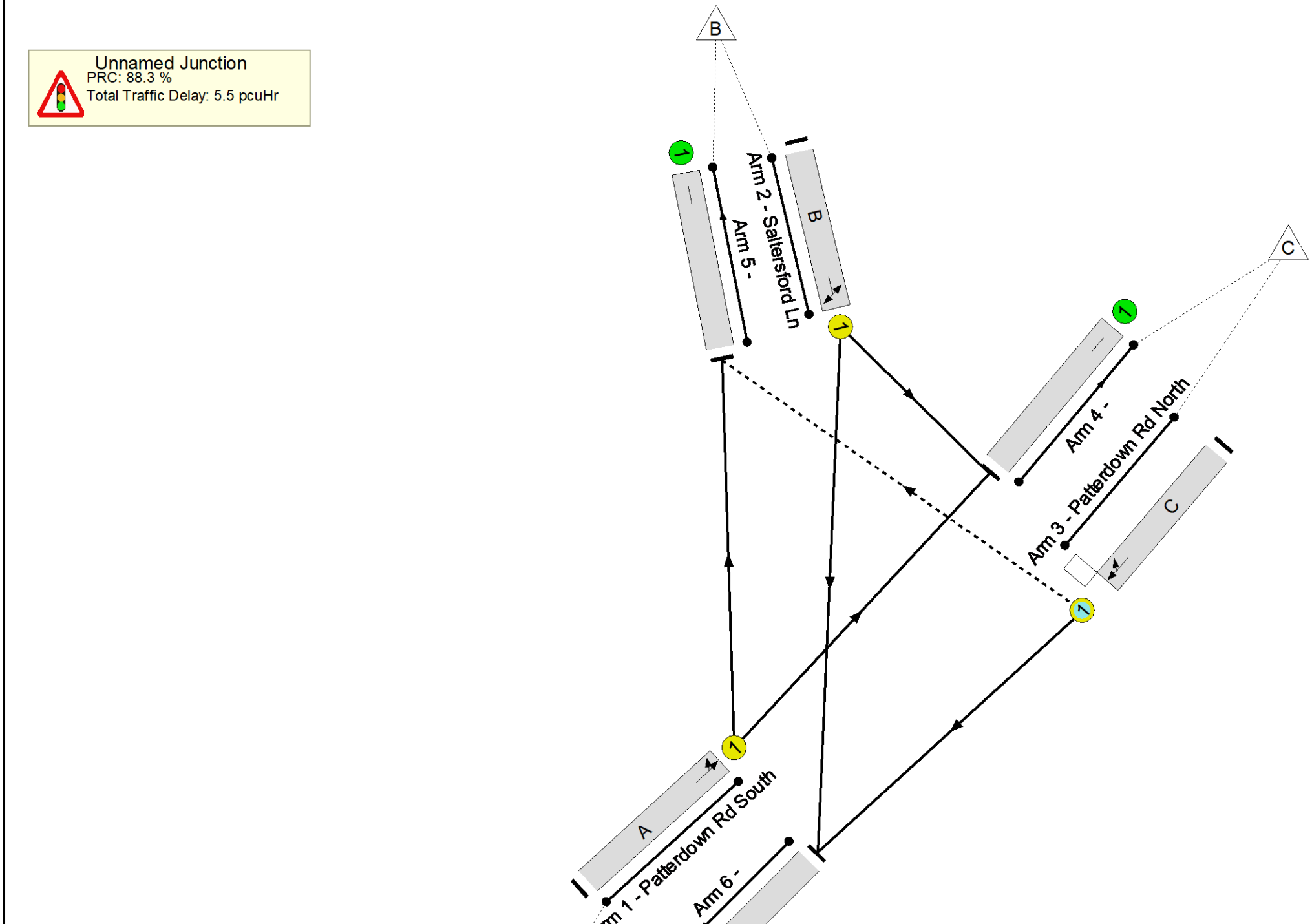
Signal Timings Diagram



Full Input Data And Results

Network Layout Diagram

Unnamed Junction
PRC: 88.3 %
Total Traffic Delay: 5.5 pcuHr



Full Input Data And Results

Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network	**-**	**-**	**N/A**	**-**	**-**		**-**	**-**	**-**	**-**	**-**	**-**	**47.8%**
Unnamed Junction	**-**	**-**	**N/A**	**-**	**-**		**-**	**-**	**-**	**-**	**-**	**-**	**47.8%**
1/1	Patterdown Rd South Ahead Left	U	N/A	N/A	A		1	45	-	464	1899	971	47.8%
2/1	Saltersford Ln Left Right	U	N/A	N/A	B		1	21	-	187	1687	412	45.3%
3/1	Patterdown Rd North Right Ahead	O	N/A	N/A	C		1	45	-	301	1922	982	30.6%
4/1		U	N/A	N/A	-		-	-	-	332	Inf	Inf	0.0%
5/1		U	N/A	N/A	-		-	-	-	132	Inf	Inf	0.0%
6/1		U	N/A	N/A	-		-	-	-	488	Inf	Inf	0.0%

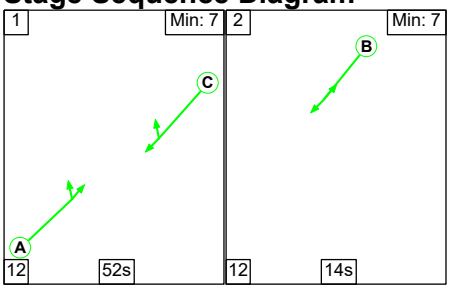
Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network	**-**	**-**	**0**	**0**	**0**	**4.4**	**1.1**	**0.0**	**5.5**	**-**	**-**	**-**	**-**
Unnamed Junction	**-**	**-**	**0**	**0**	**0**	**4.4**	**1.1**	**0.0**	**5.5**	**-**	**-**	**-**	**-**
1/1	464	464	-	-	-	1.8	0.5	-	2.3	17.8	7.5	0.5	7.9
2/1	187	187	-	-	-	1.5	0.4	-	1.9	36.9	3.9	0.4	4.4
3/1	301	301	0	0	0	1.1	0.2	0.0	1.3	15.4	4.3	0.2	4.6
4/1	332	332	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/1	132	132	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/1	488	488	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0

C1 PRC for Signalled Lanes (%): 88.3 Total Delay for Signalled Lanes (pcuHr): 5.49 Cycle Time (s): 90
PRC Over All Lanes (%): 88.3 Total Delay Over All Lanes(pcuHr): 5.49

Full Input Data And Results

Scenario 4: 'New Scenario' (FG4: 'Year 2031 + Dev PM', Plan 1: 'Network Control Plan 1')

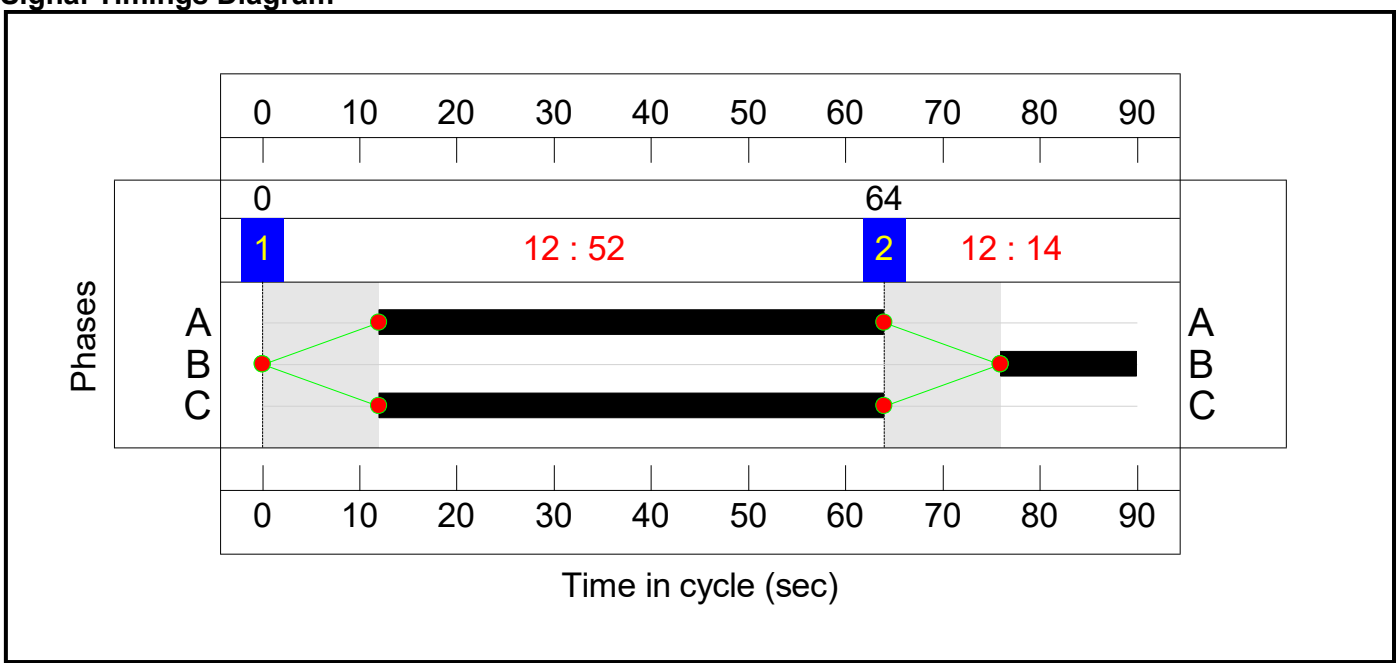
Stage Sequence Diagram



Stage Timings

Stage	1	2
Duration	52	14
Change Point	0	64

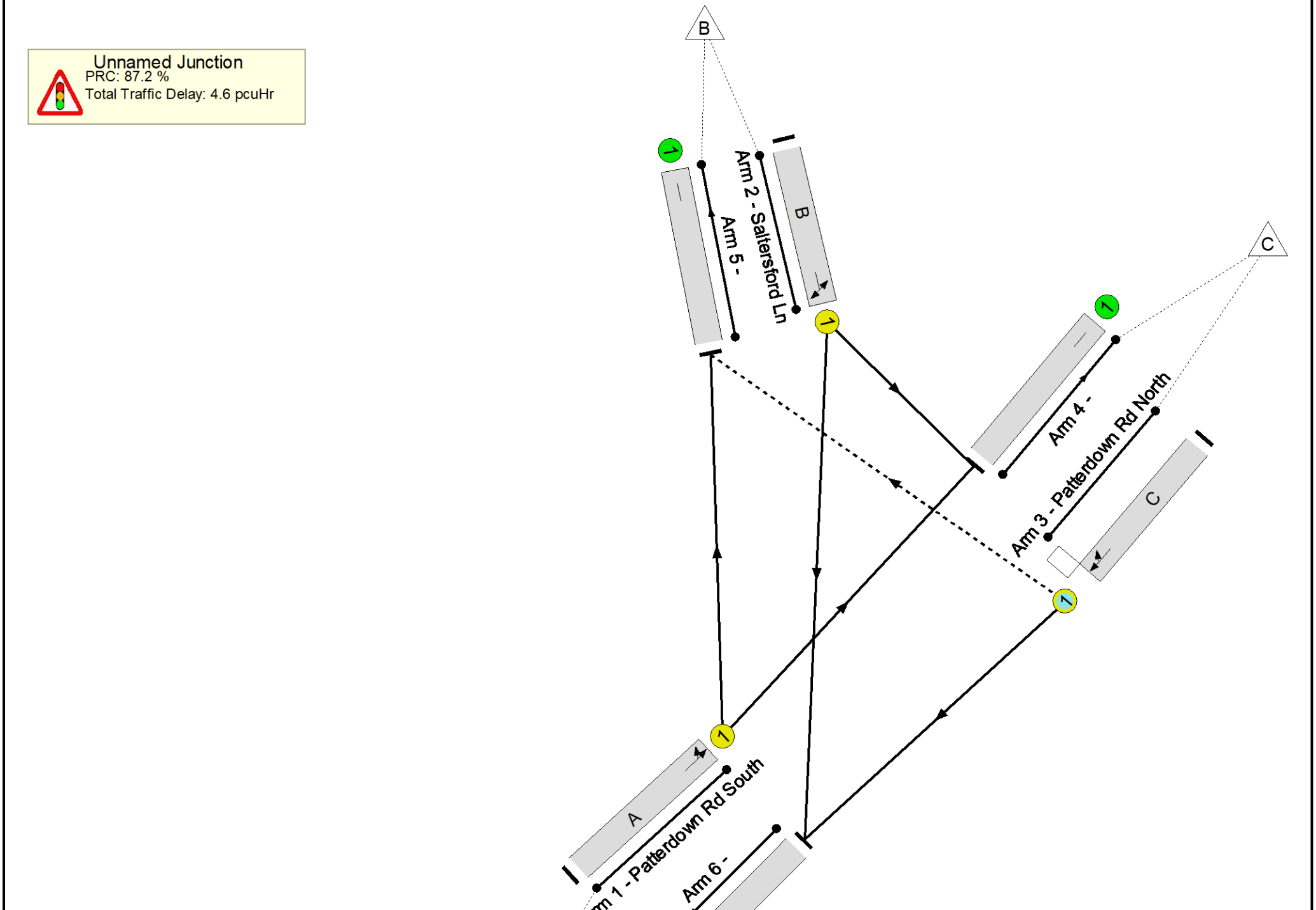
Signal Timings Diagram



Full Input Data And Results

Network Layout Diagram

Unnamed Junction
PRC: 87.2 %
Total Traffic Delay: 4.6 pcuHr



Full Input Data And Results

Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network	**-**	**-**	**N/A**	**-**	**-**		**-**	**-**	**-**	**-**	**-**	**-**	**48.1%**
Unnamed Junction	**-**	**-**	**N/A**	**-**	**-**		**-**	**-**	**-**	**-**	**-**	**-**	**48.1%**
1/1	Patterdown Rd South Ahead Left	U	N/A	N/A	A		1	52	-	533	1883	1109	48.1%
2/1	Saltersford Ln Left Right	U	N/A	N/A	B		1	14	-	133	1687	281	47.3%
3/1	Patterdown Rd North Right Ahead	O	N/A	N/A	C		1	52	-	272	1922	1132	24.0%
4/1		U	N/A	N/A	-		-	-	-	280	Inf	Inf	0.0%
5/1		U	N/A	N/A	-		-	-	-	253	Inf	Inf	0.0%
6/1		U	N/A	N/A	-		-	-	-	405	Inf	Inf	0.0%

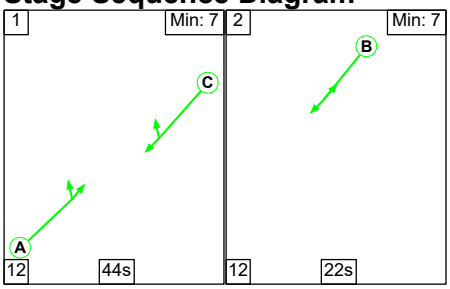
Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network	**-**	**-**	**0**	**0**	**0**	**3.5**	**1.1**	**0.0**	**4.6**	**-**	**-**	**-**	**-**
Unnamed Junction	**-**	**-**	**0**	**0**	**0**	**3.5**	**1.1**	**0.0**	**4.6**	**-**	**-**	**-**	**-**
1/1	533	533	-	-	-	1.6	0.5	-	2.0	13.7	7.6	0.5	8.0
2/1	133	133	-	-	-	1.3	0.4	-	1.7	46.0	3.0	0.4	3.4
3/1	272	272	0	0	0	0.7	0.2	0.0	0.8	11.0	3.2	0.2	3.4
4/1	280	280	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/1	253	253	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/1	405	405	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0

C1 PRC for Signalled Lanes (%): 87.2 PRC Over All Lanes (%): 87.2 Total Delay for Signalled Lanes (pcuHr): 4.56 Total Delay Over All Lanes(pcuHr): 4.56 Cycle Time (s): 90

Full Input Data And Results

Scenario 5: 'New Scenario' (FG5: 'Year 2026 Baseline AM', Plan 1: 'Network Control Plan 1')

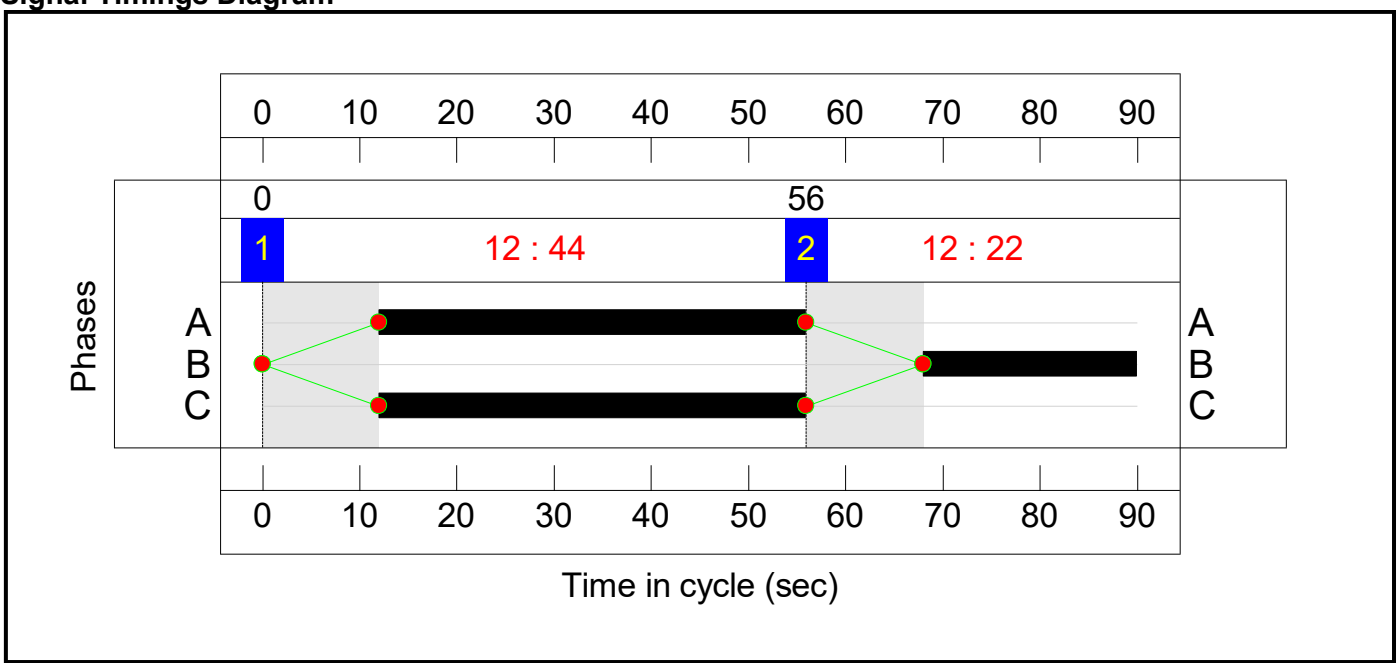
Stage Sequence Diagram



Stage Timings

Stage	1	2
Duration	44	22
Change Point	0	56

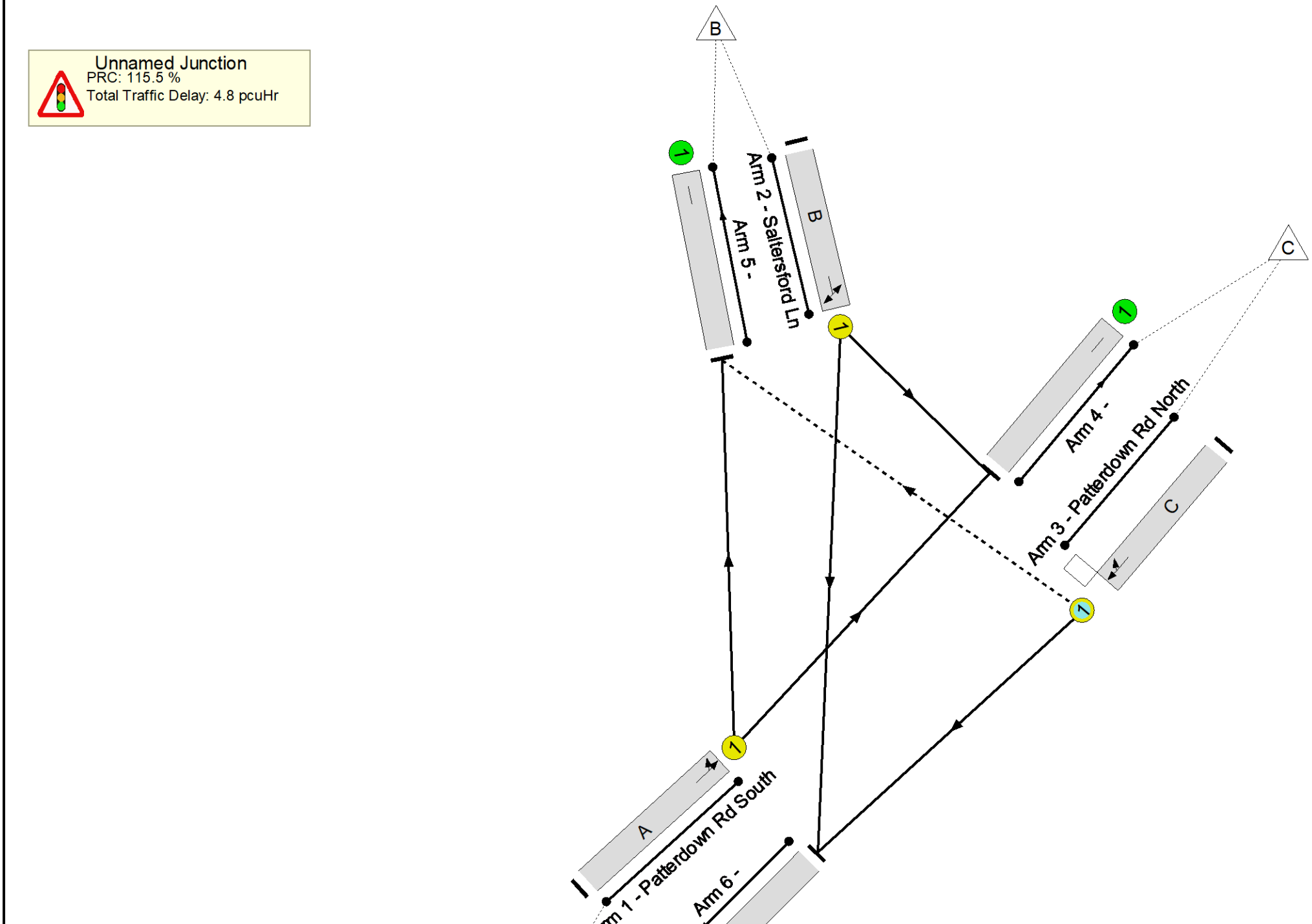
Signal Timings Diagram



Full Input Data And Results

Network Layout Diagram

Unnamed Junction
PRC: 115.5 %
Total Traffic Delay: 4.8 pcuHr



Full Input Data And Results

Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network	**-**	**-**	**N/A**	**-**	**-**		**-**	**-**	**-**	**-**	**-**	**-**	**41.8%**
Unnamed Junction	**-**	**-**	**N/A**	**-**	**-**		**-**	**-**	**-**	**-**	**-**	**-**	**41.8%**
1/1	Patterdown Rd South Ahead Left	U	N/A	N/A	A		1	44	-	396	1896	948	41.8%
2/1	Saltersford Ln Left Right	U	N/A	N/A	B		1	22	-	177	1687	431	41.1%
3/1	Patterdown Rd North Right Ahead	O	N/A	N/A	C		1	44	-	272	1922	961	28.3%
4/1		U	N/A	N/A	-		-	-	-	272	Inf	Inf	0.0%
5/1		U	N/A	N/A	-		-	-	-	124	Inf	Inf	0.0%
6/1		U	N/A	N/A	-		-	-	-	449	Inf	Inf	0.0%

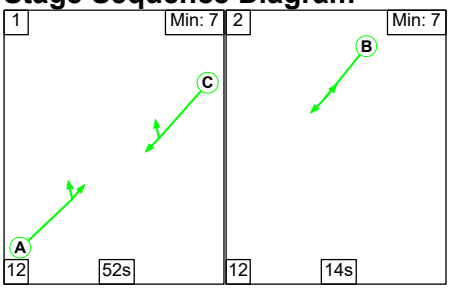
Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network	**-**	**-**	**0**	**0**	**0**	**3.9**	**0.9**	**0.0**	**4.8**	**-**	**-**	**-**	**-**
Unnamed Junction	**-**	**-**	**0**	**0**	**0**	**3.9**	**0.9**	**0.0**	**4.8**	**-**	**-**	**-**	**-**
1/1	396	396	-	-	-	1.6	0.4	-	1.9	17.5	6.2	0.4	6.5
2/1	177	177	-	-	-	1.4	0.3	-	1.7	34.9	3.6	0.3	4.0
3/1	272	272	0	0	0	1.0	0.2	0.0	1.2	15.7	3.9	0.2	4.1
4/1	272	272	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/1	124	124	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/1	449	449	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0

C1 PRC for Signalled Lanes (%): 115.5 PRC Over All Lanes (%): 115.5 Total Delay for Signalled Lanes (pcuHr): 4.83 Total Delay Over All Lanes(pcuHr): 4.83 Cycle Time (s): 90

Full Input Data And Results

Scenario 6: 'New Scenario' (FG6: 'Year 2026 Baseline PM', Plan 1: 'Network Control Plan 1')

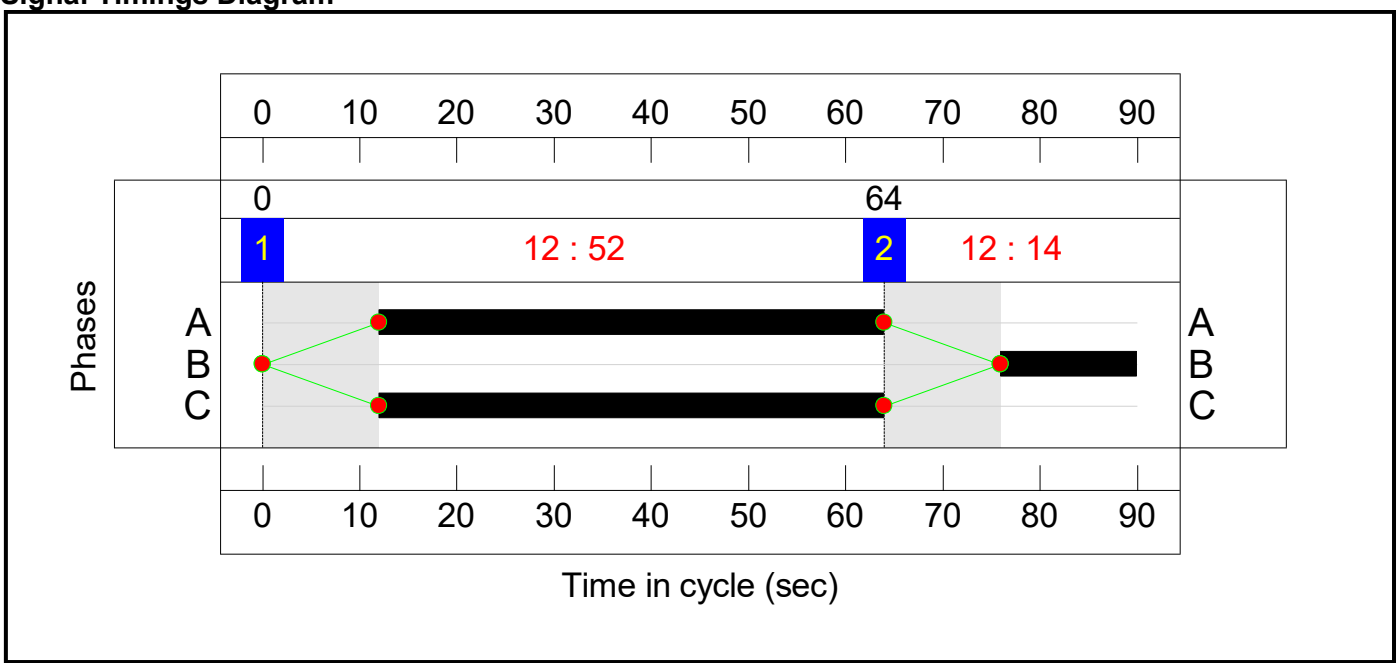
Stage Sequence Diagram



Stage Timings

Stage	1	2
Duration	52	14
Change Point	0	64

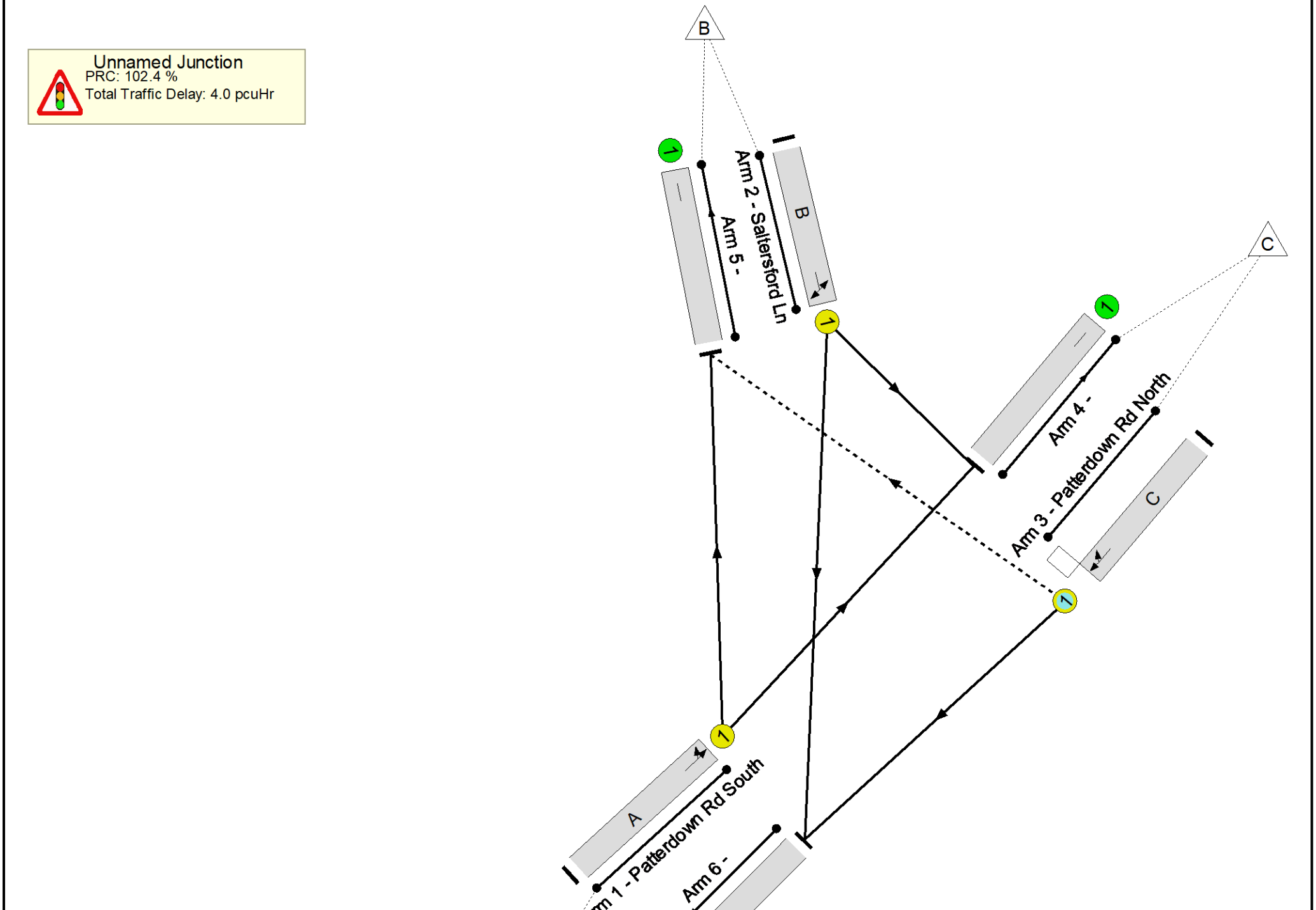
Signal Timings Diagram



Full Input Data And Results

Network Layout Diagram

Unnamed Junction
PRC: 102.4 %
Total Traffic Delay: 4.0 pcuHr



Full Input Data And Results

Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network	**-**	**-**	**N/A**	**-**	**-**		**-**	**-**	**-**	**-**	**-**	**-**	**44.5%**
Unnamed Junction	**-**	**-**	**N/A**	**-**	**-**		**-**	**-**	**-**	**-**	**-**	**-**	**44.5%**
1/1	Patterdown Rd South Ahead Left	U	N/A	N/A	A		1	52	-	486	1882	1108	43.9%
2/1	Saltersford Ln Left Right	U	N/A	N/A	B		1	14	-	125	1687	281	44.5%
3/1	Patterdown Rd North Right Ahead	O	N/A	N/A	C		1	52	-	219	1922	1132	19.3%
4/1		U	N/A	N/A	-		-	-	-	246	Inf	Inf	0.0%
5/1		U	N/A	N/A	-		-	-	-	240	Inf	Inf	0.0%
6/1		U	N/A	N/A	-		-	-	-	344	Inf	Inf	0.0%

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**	**3.1**	**0.9**	**0.0**	**4.0**	**-**	**-**	**-**	**-**
Unnamed Junction	**-**	**-**	**0**	**0**	**0**	**3.1**	**0.9**	**0.0**	**4.0**	**-**	**-**	**-**	**-**
1/1	486	486	-	-	-	1.4	0.4	-	1.8	13.1	6.6	0.4	7.0
2/1	125	125	-	-	-	1.2	0.4	-	1.6	45.2	2.8	0.4	3.2
3/1	219	219	0	0	0	0.5	0.1	0.0	0.6	10.6	2.5	0.1	2.6
4/1	246	246	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/1	240	240	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/1	344	344	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0

C1 PRC for Signalled Lanes (%): 102.4 Total Delay for Signalled Lanes (pcuHr): 3.99 Cycle Time (s): 90
PRC Over All Lanes (%): 102.4 Total Delay Over All Lanes(pcuHr): 3.99

Junctions 10

ARCADY 10 - Roundabout Module

Version: 10.1.1.1905
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Filename: A4- Pattersdown Rd.j10
Path: Y:\PROJECT FOLDER\B14133 Chippenham\Calculations\Transport\ARCADY\2026 March TA
Report generation date: 23/03/2026 17:26:41

»Year 2031 Baseline, AM
»Year 2031 Baseline, PM
»Year 2031 + Dev, AM
»Year 2031 + Dev, PM
»Year 2026 Baseline, AM
»Year 2026 Baseline, PM

Summary of junction performance

	AM				PM			
	Queue (PCU)	Delay (s)	RFC	Junction Delay (s)	Queue (PCU)	Delay (s)	RFC	Junction Delay (s)
	Year 2031 Baseline							
1 - Brunel Court	0.0	0.00	0.00	8.22	0.0	0.00	0.00	7.38
2 - A4 Bath Road East	1.4	5.81	0.56		1.3	5.62	0.55	
3 - Patterdown Road	1.6	14.23	0.59		1.0	10.63	0.48	
4 - A4 Bath Road West	1.0	7.42	0.49		1.3	8.03	0.56	
	Year 2031 + Dev							
1 - Brunel Court	0.0	0.00	0.00	8.92	0.0	0.00	0.00	7.63
2 - A4 Bath Road East	1.4	5.91	0.56		1.4	5.87	0.57	
3 - Patterdown Road	2.0	16.19	0.64		1.1	11.06	0.50	
4 - A4 Bath Road West	1.1	7.70	0.50		1.3	8.16	0.56	
	Year 2026 Baseline							
1 - Brunel Court	0.0	0.00	0.00	7.42	0.0	0.00	0.00	6.79
2 - A4 Bath Road East	1.2	5.45	0.53		1.1	5.21	0.52	
3 - Patterdown Road	1.3	12.31	0.54		0.8	9.68	0.44	
4 - A4 Bath Road West	0.9	6.89	0.46		1.1	7.39	0.53	

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.

File summary

File Description

Title	A4 Bath Road / Patterdown Road Mini RA
Location	Chippenham
Site number	
Date	01/03/2026
Version	A
Status	Draft
Identifier	
Client	Hallam
Jobnumber	B14133
Enumerator	Ridge
Description	

Units

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

Analysis Options

Mini-roundabout model	Vehicle length (m)	Calculate Queue Percentiles	Calculate detailed queueing delay	Show lane queues in feet / metres	Show all PICADY stream intercepts	Calculate residual capacity	RFC Threshold	Average Delay threshold (s)	Queue threshold (PCU)	Use simulation for HCM roundabouts	Use iterations for HCM roundabouts
JUNCTIONS 9	5.75						0.85	36.00	20.00		

Demand Set Summary

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time period length (min)	Time segment length (min)	Run automatically
D1	Year 2031 Baseline	AM	FLAT	08:00	09:00	60	15	✓
D2	Year 2031 Baseline	PM	FLAT	17:00	18:00	60	15	✓
D3	Year 2031 + Dev	AM	FLAT	08:00	09:00	60	15	✓
D4	Year 2031 + Dev	PM	FLAT	17:00	18:00	60	15	✓
D5	Year 2026 Baseline	AM	FLAT	08:00	09:00	60	15	✓
D6	Year 2026 Baseline	PM	FLAT	17:00	18:00	60	15	✓

Analysis Set Details

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

Year 2031 Baseline, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Mini-roundabout		Mini-roundabout appears to have unbalanced flows and may behave like a priority junction; treat results with caution. See User Guide for details.[Arms 2 and 3 have 71% of the total flow for the roundabout for one or more time segments][Arms 2 and 4 have 76% of the total flow for the roundabout for one or more time segments]

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	A4 / Pattersdown Rd Junction	Mini-roundabout		1, 2, 3, 4	8.22	A

Junction Network

Driving side	Lighting	Road surface	In London	Network delay (s)	Network LOS
Left	Normal/unknown	Normal/unknown		8.22	A

Arms

Arms

Arm	Name	Description
1	Brunel Court	
2	A4 Bath Road East	
3	Patterdown Road	
4	A4 Bath Road West	

Mini Roundabout Geometry

Arm	Approach road half-width (m)	Minimum approach road half-width (m)	Entry width (m)	Effective flare length (m)	Distance to next arm (m)	Entry corner kerb line distance (m)	Gradient over 50m (%)	Kerbed central island
1 - Brunel Court	3.00	2.25	3.00	17.5	7.00	12.50	0.0	✓
2 - A4 Bath Road East	3.50	3.50	4.00	14.0	15.00	20.00	0.0	✓
3 - Patterdown Road	4.00	4.00	4.50	4.5	10.00	10.00	0.0	✓
4 - A4 Bath Road West	3.00	3.00	5.00	11.0	15.00	15.00	0.0	✓

Bypass

Arm	Arm has bypass	Bypass utilisation (%)
1 - Brunel Court	✓	100
2 - A4 Bath Road East		
3 - Patterdown Road		
4 - A4 Bath Road West		

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Arm	Final slope	Final intercept (PCU/hr)
1 - Brunel Court	0.483	753
2 - A4 Bath Road East	0.819	1543
3 - Patterdown Road	0.533	963
4 - A4 Bath Road West	0.552	1225

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

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time period length (min)	Time segment length (min)	Run automatically
D1	Year 2031 Baseline	AM	FLAT	08:00	09:00	60	15	✓

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1 - Brunel Court		FLAT	✓	0	100.000
2 - A4 Bath Road East		FLAT	✓	848	100.000
3 - Patterdown Road		FLAT	✓	407	100.000
4 - A4 Bath Road West		FLAT	✓	504	100.000

Origin-Destination Data

Demand (PCU/hr)

		To			
		1 - Brunel Court	2 - A4 Bath Road East	3 - Patterdown Road	4 - A4 Bath Road West
From	1 - Brunel Court	0	0	0	0
	2 - A4 Bath Road East	0	0	330	518
	3 - Patterdown Road	0	365	0	42
	4 - A4 Bath Road West	0	485	19	0

Vehicle Mix

HV data entry mode	PCU Factor for a HV (PCU)
HV Percentages	2.00

Heavy Vehicle %

		To			
		1 - Brunel Court	2 - A4 Bath Road East	3 - Patterdown Road	4 - A4 Bath Road West
From	1 - Brunel Court	0	0	0	0
	2 - A4 Bath Road East	0	0	11	9
	3 - Patterdown Road	0	11	0	9
	4 - A4 Bath Road West	0	7	9	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
1 - Brunel Court	0.00	0.00	0.0	A	0	0
2 - A4 Bath Road East	0.56	5.81	1.4	A	848	848
3 - Patterdown Road	0.59	14.23	1.6	B	407	407
4 - A4 Bath Road West	0.49	7.42	1.0	A	504	504

Main Results for each time segment

08:00 - 08:15

Arm	Total Demand (PCU/hr)	Junction demand (PCU/hr)	Junction Arrivals (PCU)	Bypass demand (PCU/hr)	Bypass exit flow (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Un
1 - Brunel Court	0	0	0	0	0	859	338	0.000	0	0	0.0	0.0	0.000	
2 - A4 Bath Road East	848	848	212	0	0	19	1528	0.555	843	841	0.0	1.4	5.725	
3 - Patterdown Road	407	407	102	0	0	515	689	0.591	401	347	0.0	1.5	13.577	
4 - A4 Bath Road West	504	504	126	0	0	359	1026	0.491	500	556	0.0	1.0	7.268	

08:15 - 08:30

Arm	Total Demand (PCU/hr)	Junction demand (PCU/hr)	Junction Arrivals (PCU)	Bypass demand (PCU/hr)	Bypass exit flow (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Un
1 - Brunel Court	0	0	0	0	0	869	333	0.000	0	0	0.0	0.0	0.000	
2 - A4 Bath Road East	848	848	212	0	0	19	1527	0.555	848	850	1.4	1.4	5.815	
3 - Patterdown Road	407	407	102	0	0	518	687	0.592	407	349	1.5	1.6	14.212	
4 - A4 Bath Road West	504	504	126	0	0	365	1023	0.492	504	560	1.0	1.0	7.419	

08:30 - 08:45

Arm	Total Demand (PCU/hr)	Junction demand (PCU/hr)	Junction Arrivals (PCU)	Bypass demand (PCU/hr)	Bypass exit flow (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Un
1 - Brunel Court	0	0	0	0	0	869	333	0.000	0	0	0.0	0.0	0.000	
2 - A4 Bath Road East	848	848	212	0	0	19	1527	0.555	848	850	1.4	1.4	5.815	
3 - Patterdown Road	407	407	102	0	0	518	687	0.592	407	349	1.6	1.6	14.227	
4 - A4 Bath Road West	504	504	126	0	0	365	1023	0.492	504	560	1.0	1.0	7.420	

08:45 - 09:00

Arm	Total Demand (PCU/hr)	Junction demand (PCU/hr)	Junction Arrivals (PCU)	Bypass demand (PCU/hr)	Bypass exit flow (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Un
1 - Brunel Court	0	0	0	0	0	869	333	0.000	0	0	0.0	0.0	0.000	
2 - A4 Bath Road East	848	848	212	0	0	19	1527	0.555	848	850	1.4	1.4	5.815	
3 - Patterdown Road	407	407	102	0	0	518	687	0.592	407	349	1.6	1.6	14.232	
4 - A4 Bath Road West	504	504	126	0	0	365	1023	0.492	504	560	1.0	1.0	7.420	

Year 2031 Baseline, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Mini-roundabout		Mini-roundabout appears to have unbalanced flows and may behave like a priority junction; treat results with caution. See User Guide for details.[Arms 2 and 4 have 80% of the total flow for the roundabout for one or more time segments]

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	A4 / Pattersdown Rd Junction	Mini-roundabout		1, 2, 3, 4	7.38	A

Junction Network

Driving side	Lighting	Road surface	In London	Network delay (s)	Network LOS
Left	Normal/unknown	Normal/unknown		7.38	A

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)	Run automatically
D2	Year 2031 Baseline	PM	FLAT	17:00	18:00	60	15	✓

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1 - Brunel Court		FLAT	✓	0	100.000
2 - A4 Bath Road East		FLAT	✓	836	100.000
3 - Patterdown Road		FLAT	✓	337	100.000
4 - A4 Bath Road West		FLAT	✓	588	100.000

Origin-Destination Data

Demand (PCU/hr)

		To			
		1 - Brunel Court	2 - A4 Bath Road East	3 - Patterdown Road	4 - A4 Bath Road West
From	1 - Brunel Court	0	0	0	0
	2 - A4 Bath Road East	0	0	340	496
	3 - Patterdown Road	0	310	0	27
	4 - A4 Bath Road West	0	545	43	0

Vehicle Mix

HV data entry mode	PCU Factor for a HV (PCU)
HV Percentages	2.00

Heavy Vehicle %

		To			
		1 - Brunel Court	2 - A4 Bath Road East	3 - Patterdown Road	4 - A4 Bath Road West
From	1 - Brunel Court	0	0	0	0
	2 - A4 Bath Road East	0	0	6	4
	3 - Patterdown Road	0	7	0	5
	4 - A4 Bath Road West	0	4	2	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
1 - Brunel Court	0.00	0.00	0.0	A	0	0
2 - A4 Bath Road East	0.55	5.62	1.3	A	836	836
3 - Patterdown Road	0.48	10.63	1.0	B	337	337
4 - A4 Bath Road West	0.56	8.03	1.3	A	588	588

Main Results for each time segment

17:00 - 17:15

Arm	Total Demand (PCU/hr)	Junction demand (PCU/hr)	Junction Arrivals (PCU)	Bypass demand (PCU/hr)	Bypass exit flow (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Un
1 - Brunel Court	0	0	0	0	0	889	323	0.000	0	0	0.0	0.0	0.000	
2 - A4 Bath Road East	836	836	209	0	0	43	1508	0.554	831	847	0.0	1.3	5.529	
3 - Patterdown Road	337	337	84	0	0	493	700	0.481	333	381	0.0	1.0	10.366	
4 - A4 Bath Road West	588	588	147	0	0	306	1056	0.557	583	520	0.0	1.3	7.826	

17:15 - 17:30

Arm	Total Demand (PCU/hr)	Junction demand (PCU/hr)	Junction Arrivals (PCU)	Bypass demand (PCU/hr)	Bypass exit flow (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Un
1 - Brunel Court	0	0	0	0	0	898	319	0.000	0	0	0.0	0.0	0.000	
2 - A4 Bath Road East	836	836	209	0	0	43	1508	0.554	836	855	1.3	1.3	5.615	
3 - Patterdown Road	337	337	84	0	0	496	699	0.482	337	383	1.0	1.0	10.624	
4 - A4 Bath Road West	588	588	147	0	0	310	1054	0.558	588	523	1.3	1.3	8.023	

17:30 - 17:45

Arm	Total Demand (PCU/hr)	Junction demand (PCU/hr)	Junction Arrivals (PCU)	Bypass demand (PCU/hr)	Bypass exit flow (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Un
1 - Brunel Court	0	0	0	0	0	898	319	0.000	0	0	0.0	0.0	0.000	
2 - A4 Bath Road East	836	836	209	0	0	43	1508	0.554	836	855	1.3	1.3	5.615	
3 - Patterdown Road	337	337	84	0	0	496	699	0.482	337	383	1.0	1.0	10.627	
4 - A4 Bath Road West	588	588	147	0	0	310	1054	0.558	588	523	1.3	1.3	8.025	

17:45 - 18:00

Arm	Total Demand (PCU/hr)	Junction demand (PCU/hr)	Junction Arrivals (PCU)	Bypass demand (PCU/hr)	Bypass exit flow (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Un
1 - Brunel Court	0	0	0	0	0	898	319	0.000	0	0	0.0	0.0	0.000	
2 - A4 Bath Road East	836	836	209	0	0	43	1508	0.554	836	855	1.3	1.3	5.615	
3 - Patterdown Road	337	337	84	0	0	496	699	0.482	337	383	1.0	1.0	10.629	
4 - A4 Bath Road West	588	588	147	0	0	310	1054	0.558	588	523	1.3	1.3	8.027	

Year 2031 + Dev, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Mini-roundabout		Mini-roundabout appears to have unbalanced flows and may behave like a priority junction; treat results with caution. See User Guide for details.[Arms 2 and 3 have 72% of the total flow for the roundabout for one or more time segments][Arms 2 and 4 have 75% of the total flow for the roundabout for one or more time segments]

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	A4 / Pattersdown Rd Junction	Mini-roundabout		1, 2, 3, 4	8.92	A

Junction Network

Driving side	Lighting	Road surface	In London	Network delay (s)	Network LOS
Left	Normal/unknown	Normal/unknown		8.92	A

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)	Run automatically
D3	Year 2031 + Dev	AM	FLAT	08:00	09:00	60	15	✓

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1 - Brunel Court		FLAT	✓	0	100.000
2 - A4 Bath Road East		FLAT	✓	859	100.000
3 - Patterdown Road		FLAT	✓	441	100.000
4 - A4 Bath Road West		FLAT	✓	504	100.000

Origin-Destination Data

Demand (PCU/hr)

		To			
		1 - Brunel Court	2 - A4 Bath Road East	3 - Patterdown Road	4 - A4 Bath Road West
From	1 - Brunel Court	0	0	0	0
	2 - A4 Bath Road East	0	0	341	518
	3 - Patterdown Road	0	399	0	42
	4 - A4 Bath Road West	0	485	19	0

Vehicle Mix

HV data entry mode	PCU Factor for a HV (PCU)
HV Percentages	2.00

Heavy Vehicle %

		To			
		1 - Brunel Court	2 - A4 Bath Road East	3 - Patterdown Road	4 - A4 Bath Road West
From	1 - Brunel Court	0	0	0	0
	2 - A4 Bath Road East	0	0	11	9
	3 - Patterdown Road	0	11	0	9
	4 - A4 Bath Road West	0	7	9	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
1 - Brunel Court	0.00	0.00	0.0	A	0	0
2 - A4 Bath Road East	0.56	5.91	1.4	A	859	859
3 - Patterdown Road	0.64	16.19	2.0	C	441	441
4 - A4 Bath Road West	0.50	7.70	1.1	A	504	504

Main Results for each time segment

08:00 - 08:15

Arm	Total Demand (PCU/hr)	Junction demand (PCU/hr)	Junction Arrivals (PCU)	Bypass demand (PCU/hr)	Bypass exit flow (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Un
1 - Brunel Court	0	0	0	0	0	892	322	0.000	0	0	0.0	0.0	0.000	
2 - A4 Bath Road East	859	859	215	0	0	19	1528	0.562	853	873	0.0	1.4	5.816	
3 - Patterdown Road	441	441	110	0	0	515	689	0.640	433	358	0.0	1.9	15.208	
4 - A4 Bath Road West	504	504	126	0	0	392	1008	0.500	500	556	0.0	1.1	7.519	

08:15 - 08:30

Arm	Total Demand (PCU/hr)	Junction demand (PCU/hr)	Junction Arrivals (PCU)	Bypass demand (PCU/hr)	Bypass exit flow (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Un
1 - Brunel Court	0	0	0	0	0	903	317	0.000	0	0	0.0	0.0	0.000	
2 - A4 Bath Road East	859	859	215	0	0	19	1527	0.562	859	884	1.4	1.4	5.911	
3 - Patterdown Road	441	441	110	0	0	518	687	0.642	441	360	1.9	1.9	16.158	
4 - A4 Bath Road West	504	504	126	0	0	399	1005	0.502	504	560	1.1	1.1	7.694	

08:30 - 08:45

Arm	Total Demand (PCU/hr)	Junction demand (PCU/hr)	Junction Arrivals (PCU)	Bypass demand (PCU/hr)	Bypass exit flow (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Un
1 - Brunel Court	0	0	0	0	0	903	317	0.000	0	0	0.0	0.0	0.000	
2 - A4 Bath Road East	859	859	215	0	0	19	1527	0.562	859	884	1.4	1.4	5.912	
3 - Patterdown Road	441	441	110	0	0	518	687	0.642	441	360	1.9	2.0	16.184	
4 - A4 Bath Road West	504	504	126	0	0	399	1005	0.502	504	560	1.1	1.1	7.699	

08:45 - 09:00

Arm	Total Demand (PCU/hr)	Junction demand (PCU/hr)	Junction Arrivals (PCU)	Bypass demand (PCU/hr)	Bypass exit flow (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Un
1 - Brunel Court	0	0	0	0	0	903	317	0.000	0	0	0.0	0.0	0.000	
2 - A4 Bath Road East	859	859	215	0	0	19	1527	0.562	859	884	1.4	1.4	5.912	
3 - Patterdown Road	441	441	110	0	0	518	687	0.642	441	360	2.0	2.0	16.192	
4 - A4 Bath Road West	504	504	126	0	0	399	1005	0.502	504	560	1.1	1.1	7.699	

Year 2031 + Dev, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Mini-roundabout		Mini-roundabout appears to have unbalanced flows and may behave like a priority junction; treat results with caution. See User Guide for details.[Arms 2 and 4 have 80% of the total flow for the roundabout for one or more time segments]

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	A4 / Pattersdown Rd Junction	Mini-roundabout		1, 2, 3, 4	7.63	A

Junction Network

Driving side	Lighting	Road surface	In London	Network delay (s)	Network LOS
Left	Normal/unknown	Normal/unknown		7.63	A

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)	Run automatically
D4	Year 2031 + Dev	PM	FLAT	17:00	18:00	60	15	✓

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1 - Brunel Court		FLAT	✓	0	100.000
2 - A4 Bath Road East		FLAT	✓	865	100.000
3 - Patterdown Road		FLAT	✓	351	100.000
4 - A4 Bath Road West		FLAT	✓	588	100.000

Origin-Destination Data

Demand (PCU/hr)

		To			
		1 - Brunel Court	2 - A4 Bath Road East	3 - Patterdown Road	4 - A4 Bath Road West
From	1 - Brunel Court	0	0	0	0
	2 - A4 Bath Road East	0	0	369	496
	3 - Patterdown Road	0	324	0	27
	4 - A4 Bath Road West	0	545	43	0

Vehicle Mix

HV data entry mode	PCU Factor for a HV (PCU)
HV Percentages	2.00

Heavy Vehicle %

		To			
		1 - Brunel Court	2 - A4 Bath Road East	3 - Patterdown Road	4 - A4 Bath Road West
From	1 - Brunel Court	0	0	0	0
	2 - A4 Bath Road East	0	0	6	4
	3 - Patterdown Road	0	7	0	5
	4 - A4 Bath Road West	0	4	2	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
1 - Brunel Court	0.00	0.00	0.0	A	0	0
2 - A4 Bath Road East	0.57	5.87	1.4	A	865	865
3 - Patterdown Road	0.50	11.06	1.1	B	351	351
4 - A4 Bath Road West	0.56	8.16	1.3	A	588	588

Main Results for each time segment

17:00 - 17:15

Arm	Total Demand (PCU/hr)	Junction demand (PCU/hr)	Junction Arrivals (PCU)	Bypass demand (PCU/hr)	Bypass exit flow (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Un
1 - Brunel Court	0	0	0	0	0	903	317	0.000	0	0	0.0	0.0	0.000	
2 - A4 Bath Road East	865	865	216	0	0	43	1508	0.574	859	860	0.0	1.4	5.772	
3 - Patterdown Road	351	351	88	0	0	493	701	0.501	347	409	0.0	1.0	10.752	
4 - A4 Bath Road West	588	588	147	0	0	320	1048	0.561	583	519	0.0	1.3	7.948	

17:15 - 17:30

Arm	Total Demand (PCU/hr)	Junction demand (PCU/hr)	Junction Arrivals (PCU)	Bypass demand (PCU/hr)	Bypass exit flow (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Un
1 - Brunel Court	0	0	0	0	0	912	312	0.000	0	0	0.0	0.0	0.000	
2 - A4 Bath Road East	865	865	216	0	0	43	1508	0.574	865	869	1.4	1.4	5.871	
3 - Patterdown Road	351	351	88	0	0	496	699	0.502	351	412	1.0	1.1	11.050	
4 - A4 Bath Road West	588	588	147	0	0	324	1046	0.562	588	523	1.3	1.3	8.158	

17:30 - 17:45

Arm	Total Demand (PCU/hr)	Junction demand (PCU/hr)	Junction Arrivals (PCU)	Bypass demand (PCU/hr)	Bypass exit flow (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Un
1 - Brunel Court	0	0	0	0	0	912	312	0.000	0	0	0.0	0.0	0.000	
2 - A4 Bath Road East	865	865	216	0	0	43	1508	0.574	865	869	1.4	1.4	5.871	
3 - Patterdown Road	351	351	88	0	0	496	699	0.502	351	412	1.1	1.1	11.055	
4 - A4 Bath Road West	588	588	147	0	0	324	1046	0.562	588	523	1.3	1.3	8.160	

17:45 - 18:00

Arm	Total Demand (PCU/hr)	Junction demand (PCU/hr)	Junction Arrivals (PCU)	Bypass demand (PCU/hr)	Bypass exit flow (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Un
1 - Brunel Court	0	0	0	0	0	912	312	0.000	0	0	0.0	0.0	0.000	
2 - A4 Bath Road East	865	865	216	0	0	43	1508	0.574	865	869	1.4	1.4	5.871	
3 - Patterdown Road	351	351	88	0	0	496	699	0.502	351	412	1.1	1.1	11.055	
4 - A4 Bath Road West	588	588	147	0	0	324	1046	0.562	588	523	1.3	1.3	8.162	

Year 2026 Baseline, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Mini-roundabout		Mini-roundabout appears to have unbalanced flows and may behave like a priority junction; treat results with caution. See User Guide for details.[Arms 2 and 3 have 71% of the total flow for the roundabout for one or more time segments][Arms 2 and 4 have 77% of the total flow for the roundabout for one or more time segments]

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	A4 / Pattersdown Rd Junction	Mini-roundabout		1, 2, 3, 4	7.42	A

Junction Network

Driving side	Lighting	Road surface	In London	Network delay (s)	Network LOS
Left	Normal/unknown	Normal/unknown		7.42	A

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)	Run automatically
D5	Year 2026 Baseline	AM	FLAT	08:00	09:00	60	15	✓

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1 - Brunel Court		FLAT	✓	0	100.000
2 - A4 Bath Road East		FLAT	✓	803	100.000
3 - Patterdown Road		FLAT	✓	376	100.000
4 - A4 Bath Road West		FLAT	✓	480	100.000

Origin-Destination Data

Demand (PCU/hr)

		To			
		1 - Brunel Court	2 - A4 Bath Road East	3 - Patterdown Road	4 - A4 Bath Road West
From	1 - Brunel Court	0	0	0	0
	2 - A4 Bath Road East	0	0	309	494
	3 - Patterdown Road	0	336	0	40
	4 - A4 Bath Road West	0	462	18	0

Vehicle Mix

HV data entry mode	PCU Factor for a HV (PCU)
HV Percentages	2.00

Heavy Vehicle %

		To			
		1 - Brunel Court	2 - A4 Bath Road East	3 - Patterdown Road	4 - A4 Bath Road West
From	1 - Brunel Court	0	0	0	0
	2 - A4 Bath Road East	0	0	11	9
	3 - Patterdown Road	0	11	0	9
	4 - A4 Bath Road West	0	7	9	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
1 - Brunel Court	0.00	0.00	0.0	A	0	0
2 - A4 Bath Road East	0.53	5.45	1.2	A	803	803
3 - Patterdown Road	0.54	12.31	1.3	B	376	376
4 - A4 Bath Road West	0.46	6.89	0.9	A	480	480

Main Results for each time segment

08:00 - 08:15

Arm	Total Demand (PCU/hr)	Junction demand (PCU/hr)	Junction Arrivals (PCU)	Bypass demand (PCU/hr)	Bypass exit flow (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Un
1 - Brunel Court	0	0	0	0	0	808	363	0.000	0	0	0.0	0.0	0.000	
2 - A4 Bath Road East	803	803	201	0	0	18	1528	0.525	798	790	0.0	1.2	5.376	
3 - Patterdown Road	376	376	94	0	0	491	701	0.536	371	325	0.0	1.2	11.904	
4 - A4 Bath Road West	480	480	120	0	0	332	1042	0.461	476	531	0.0	0.9	6.774	

08:15 - 08:30

Arm	Total Demand (PCU/hr)	Junction demand (PCU/hr)	Junction Arrivals (PCU)	Bypass demand (PCU/hr)	Bypass exit flow (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Un
1 - Brunel Court	0	0	0	0	0	816	359	0.000	0	0	0.0	0.0	0.000	
2 - A4 Bath Road East	803	803	201	0	0	18	1528	0.525	803	798	1.2	1.2	5.447	
3 - Patterdown Road	376	376	94	0	0	494	700	0.537	376	327	1.2	1.3	12.300	
4 - A4 Bath Road West	480	480	120	0	0	336	1039	0.462	480	534	0.9	0.9	6.889	

08:30 - 08:45

Arm	Total Demand (PCU/hr)	Junction demand (PCU/hr)	Junction Arrivals (PCU)	Bypass demand (PCU/hr)	Bypass exit flow (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Un
1 - Brunel Court	0	0	0	0	0	816	359	0.000	0	0	0.0	0.0	0.000	
2 - A4 Bath Road East	803	803	201	0	0	18	1528	0.525	803	798	1.2	1.2	5.447	
3 - Patterdown Road	376	376	94	0	0	494	700	0.537	376	327	1.3	1.3	12.307	
4 - A4 Bath Road West	480	480	120	0	0	336	1039	0.462	480	534	0.9	0.9	6.890	

08:45 - 09:00

Arm	Total Demand (PCU/hr)	Junction demand (PCU/hr)	Junction Arrivals (PCU)	Bypass demand (PCU/hr)	Bypass exit flow (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Un
1 - Brunel Court	0	0	0	0	0	816	359	0.000	0	0	0.0	0.0	0.000	
2 - A4 Bath Road East	803	803	201	0	0	18	1528	0.525	803	798	1.2	1.2	5.447	
3 - Patterdown Road	376	376	94	0	0	494	700	0.537	376	327	1.3	1.3	12.310	
4 - A4 Bath Road West	480	480	120	0	0	336	1039	0.462	480	534	0.9	0.9	6.890	

Year 2026 Baseline, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Mini-roundabout		Mini-roundabout appears to have unbalanced flows and may behave like a priority junction; treat results with caution. See User Guide for details.[Arms 2 and 4 have 81% of the total flow for the roundabout for one or more time segments]

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	A4 / Pattersdown Rd Junction	Mini-roundabout		1, 2, 3, 4	6.79	A

Junction Network

Driving side	Lighting	Road surface	In London	Network delay (s)	Network LOS
Left	Normal/unknown	Normal/unknown		6.79	A

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)	Run automatically
D6	Year 2026 Baseline	PM	FLAT	17:00	18:00	60	15	✓

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1 - Brunel Court		FLAT	✓	0	100.000
2 - A4 Bath Road East		FLAT	✓	785	100.000
3 - Patterdown Road		FLAT	✓	314	100.000
4 - A4 Bath Road West		FLAT	✓	560	100.000

Origin-Destination Data

Demand (PCU/hr)

		To			
		1 - Brunel Court	2 - A4 Bath Road East	3 - Patterdown Road	4 - A4 Bath Road West
From	1 - Brunel Court	0	0	0	0
	2 - A4 Bath Road East	0	0	312	473
	3 - Patterdown Road	0	288	0	26
	4 - A4 Bath Road West	0	519	41	0

Vehicle Mix

HV data entry mode	PCU Factor for a HV (PCU)
HV Percentages	2.00

Heavy Vehicle %

		To			
		1 - Brunel Court	2 - A4 Bath Road East	3 - Patterdown Road	4 - A4 Bath Road West
From	1 - Brunel Court	0	0	0	0
	2 - A4 Bath Road East	0	0	6	4
	3 - Patterdown Road	0	7	0	5
	4 - A4 Bath Road West	0	4	2	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
1 - Brunel Court	0.00	0.00	0.0	A	0	0
2 - A4 Bath Road East	0.52	5.21	1.1	A	785	785
3 - Patterdown Road	0.44	9.68	0.8	A	314	314
4 - A4 Bath Road West	0.53	7.39	1.1	A	560	560

Main Results for each time segment

17:00 - 17:15

Arm	Total Demand (PCU/hr)	Junction demand (PCU/hr)	Junction Arrivals (PCU)	Bypass demand (PCU/hr)	Bypass exit flow (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Un
1 - Brunel Court	0	0	0	0	0	840	347	0.000	0	0	0.0	0.0	0.000	
2 - A4 Bath Road East	785	785	196	0	0	41	1510	0.520	781	800	0.0	1.1	5.143	
3 - Patterdown Road	314	314	79	0	0	470	713	0.441	311	351	0.0	0.8	9.494	
4 - A4 Bath Road West	560	560	140	0	0	285	1068	0.525	555	496	0.0	1.1	7.241	

17:15 - 17:30

Arm	Total Demand (PCU/hr)	Junction demand (PCU/hr)	Junction Arrivals (PCU)	Bypass demand (PCU/hr)	Bypass exit flow (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Un
1 - Brunel Court	0	0	0	0	0	848	343	0.000	0	0	0.0	0.0	0.000	
2 - A4 Bath Road East	785	785	196	0	0	41	1509	0.520	785	807	1.1	1.1	5.206	
3 - Patterdown Road	314	314	79	0	0	473	711	0.442	314	353	0.8	0.8	9.682	
4 - A4 Bath Road West	560	560	140	0	0	288	1066	0.525	560	499	1.1	1.1	7.389	

17:30 - 17:45

Arm	Total Demand (PCU/hr)	Junction demand (PCU/hr)	Junction Arrivals (PCU)	Bypass demand (PCU/hr)	Bypass exit flow (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Un
1 - Brunel Court	0	0	0	0	0	848	343	0.000	0	0	0.0	0.0	0.000	
2 - A4 Bath Road East	785	785	196	0	0	41	1509	0.520	785	807	1.1	1.1	5.206	
3 - Patterdown Road	314	314	79	0	0	473	711	0.442	314	353	0.8	0.8	9.684	
4 - A4 Bath Road West	560	560	140	0	0	288	1066	0.525	560	499	1.1	1.1	7.389	

17:45 - 18:00

Arm	Total Demand (PCU/hr)	Junction demand (PCU/hr)	Junction Arrivals (PCU)	Bypass demand (PCU/hr)	Bypass exit flow (PCU/hr)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Un
1 - Brunel Court	0	0	0	0	0	848	343	0.000	0	0	0.0	0.0	0.000	
2 - A4 Bath Road East	785	785	196	0	0	41	1509	0.520	785	807	1.1	1.1	5.206	
3 - Patterdown Road	314	314	79	0	0	473	711	0.442	314	353	0.8	0.8	9.684	
4 - A4 Bath Road West	560	560	140	0	0	288	1066	0.525	560	499	1.1	1.1	7.389	



Junctions 10

ARCADY 10 - Roundabout Module

Version: 10.1.1.1905
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Filename: Lackham Rbt - AB.j10
Path: Y:\PROJECT FOLDER\B14133 Chippenham\Calculations\Transport\ARCADY\2026 March TA
Report generation date: 23/03/2026 17:34:01

»Year 2031 + Dev, AM
»Year 2031 + Dev, PM
»Year 2031 Baseline, AM
»Year 2031 Baseline, PM
»Year 2026 Baseline, AM
»Year 2026 Baseline, PM

Summary of junction performance

	AM					PM				
	Queue (PCU)	Delay (s)	RFC	LOS	Junction Delay (s)	Queue (PCU)	Delay (s)	RFC	LOS	Junction Delay (s)
	[Lane Simulation] -Year 2031 + Dev									
1 - A350 South	9.4	25.83	0.89	D	21.65	4.5	11.89	0.70	B	14.72
2 - A350 W Cepen Way	4.5	19.69	0.78	C		5.0	20.17	0.79	C	
3 - Unnamed Rd	2.2	13.97	0.58	B		1.8	12.69	0.56	B	
4 - Access Rd	0.0	0.00	0.00	A		0.0	0.00	0.00	A	
	[Lane Simulation] - Year 2031 Baseline									
1 - A350 South	9.5	23.51	0.86	C	21.56	3.9	11.52	0.71	B	14.11
2 - A350 W Cepen Way	4.8	22.31	0.76	C		3.9	19.16	0.80	C	
3 - Unnamed Rd	1.9	14.56	0.59	B		1.4	12.63	0.54	B	
4 - Access Rd	0.0	0.00	0.00	A		0.0	0.00	0.00	A	
	[Lane Simulation] - Year 2026 Baseline									
1 - A350 South	7.1	18.34	0.82	C	16.81	3.1	9.37	0.65	A	11.73
2 - A350 W Cepen Way	2.9	16.07	0.71	C		3.4	15.89	0.71	C	
3 - Unnamed Rd	1.7	13.10	0.55	B		1.3	11.44	0.52	B	
4 - Access Rd	0.0	0.00	0.00	A		0.0	0.00	0.00	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. Arm and junction delays are averages for all movements, including movements with zero delay.

File summary

File Description

Title	
Location	
Site number	
Date	07/12/2022
Version	
Status	(new file)
Identifier	
Client	
Jobnumber	
Enumerator	JUBB\SRadford
Description	

Units

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

Analysis Options

Vehicle length (m)	Calculate Queue Percentiles	Calculate detailed queueing delay	Show lane queues in feet / metres	Show all PICADY stream intercepts	Calculate residual capacity	RFC Threshold	Average Delay threshold (s)	Queue threshold (PCU)	Use simulation for HCM roundabouts	Use iterations for HCM roundabouts
5.75						0.85	36.00	20.00		

Lane Simulation options

Criteria type	Stop criteria (%)	Stop criteria time (s)	Stop criteria number of trials	Calculate RFCs	Relaxation factor for capacity/RFC runs	Random seed	Results refresh speed (s)	Individual vehicle animation number of trials	Average animation capture interval (s)	Use quick response	Do flow sampling	Suppress automatic lane creation	Last run random seed	Last run number of trials
Delay	1.00	100000	100000	Calculate for all arms	3.00	-1	3	1	60	✓			274344362	176

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)	Run automatically
D1	Year 2031 + Dev	AM	FLAT	08:00	09:00	60	15	✓
D2	Year 2031 + Dev	PM	FLAT	17:00	18:00	60	15	✓
D3	Year 2031 Baseline	AM	FLAT	08:00	09:00	60	15	✓
D4	Year 2031 Baseline	PM	FLAT	17:00	18:00	60	15	✓
D5	Year 2026 Baseline	AM	FLAT	08:00	09:00	60	15	✓
D6	Year 2026 Baseline	PM	FLAT	17:00	18:00	60	15	✓

Analysis Set Details

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

Year 2031 + Dev, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	1 - A350 South - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Geometry	2 - A350 W Cepen Way - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Info	Simulation	A1 - [Lane Simulation]	This run uses Simulation mode. For detailed information on this mode, please see the User Guide.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	Lackham Rd	Standard Roundabout		1, 2, 3, 4	21.65	C

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	21.65	C

Arms

Arms

Arm	Name	Description	No give-way line
1	A350 South		
2	A350 W Cepen Way		
3	Unnamed Rd		
4	Access Rd		

Roundabout Geometry

Arm	V - Approach road half-width (m)	E - Entry width (m)	I' - Effective flare length (m)	R - Entry radius (m)	D - Inscribed circle diameter (m)	PHI - Conflict (entry) angle (deg)	Entry only	Exit only
1 - A350 South	3.50	7.93	60.0	24.0	67.1	40.0		
2 - A350 W Cepen Way	3.71	7.47	41.2	23.0	67.1	24.0		
3 - Unnamed Rd	3.60	7.50	17.3	28.3	67.1	26.0		
4 - Access Rd	2.20	5.70	3.8	12.7	67.1	28.0		

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Arm	Final slope	Final intercept (PCU/hr)
1 - A350 South	0.575	2089
2 - A350 W Cepen Way	0.584	2060
3 - Unnamed Rd	0.547	1827
4 - Access Rd	0.387	915

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

Lane Simulation: Arm options

Arm	Lane capacity source	Traffic considering secondary lanes (%)
1 - A350 South	Evenly split	10.00
2 - A350 W Cepen Way	Evenly split	10.00
3 - Unnamed Rd	Evenly split	10.00
4 - Access Rd	Evenly split	10.00

Lanes

Arm	Side	Lane level	Lane	Destination arms	Has limited storage	Storage (PCU)	Has bottleneck	Has obstruction	Minimum capacity (PCU/hr)	Maximum capacity (PCU/hr)	Signalised
1 - A350 South	Entry	1	1	2	✓	10.00			0	99999	
			2	1, 3, 4	✓	10.00			0	99999	
		2	1	(1, 2, 3, 4)		Infinity					
	Exit	1	1			Infinity					
2 - A350 W Cepen Way	Entry	1	1	3, 4	✓	4.00			0	99999	
			2	1, 2	✓	4.00			0	99999	
		2	1	(1, 2, 3, 4)		Infinity					
	Exit	1	1			Infinity					
3 - Unnamed Rd	Entry	1	1	1, 4	✓	3.00			0	99999	
			2	2, 3	✓	3.00			0	99999	
		2	1	(1, 2, 3, 4)		Infinity					
	Exit	1	1			Infinity					
4 - Access Rd	Entry	1	1	1, 2, 3, 4		Infinity			0	99999	
	Exit	1	1			Infinity					

Entry Lane slope and intercept

Arm	Side	Lane level	Lane	Final slope	Final intercept (PCU/hr)
1 - A350 South	Entry	1	1	0.288	1045
			2	0.288	1045
2 - A350 W Cepen Way	Entry	1	1	0.292	1030
			2	0.292	1030
3 - Unnamed Rd	Entry	1	1	0.273	914
			2	0.273	914
4 - Access Rd	Entry	1	1	0.387	915

Summary of Entry Lane allowed movements

Arm	Lane Level	Lane	Destination arm			
			A350 South	A350 W Cepen Way	Unnamed Rd	Access Rd
1 - A350 South	1	1		✓		
		2	✓		✓	✓
	2	1	✓	✓	✓	✓
2 - A350 W Cepen Way	1	1			✓	✓
		2	✓	✓		
	2	1	✓	✓	✓	✓
3 - Unnamed Rd	1	1	✓			✓
		2		✓	✓	
	2	1	✓	✓	✓	✓
4 - Access Rd	1	1	✓	✓	✓	✓

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)	Run automatically
D1	Year 2031 + Dev	AM	FLAT	08:00	09:00	60	15	✓

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1 - A350 South		FLAT	✓	1287	100.000
2 - A350 W Cepen Way		FLAT	✓	715	100.000
3 - Unnamed Rd		FLAT	✓	514	100.000
4 - Access Rd		FLAT	✓	0	100.000

Origin-Destination Data

Demand (PCU/hr)

		To			
		1 - A350 South	2 - A350 W Cepen Way	3 - Unnamed Rd	4 - Access Rd
From	1 - A350 South	0	877	410	0
	2 - A350 W Cepen Way	682	0	33	0
	3 - Unnamed Rd	423	91	0	0
	4 - Access Rd	0	0	0	0

Vehicle Mix

HV data entry mode	PCU Factor for a HV (PCU)
HV Percentages	2.00

Junction	PCU factor for a cyclist	PCU factor for a cyclist in controlling flow
1	0.20	0.80

Heavy Vehicle %

		To			
		1 - A350 South	2 - A350 W Cepen Way	3 - Unnamed Rd	4 - Access Rd
From	1 - A350 South	0	16	13	0
	2 - A350 W Cepen Way	20	0	0	0
	3 - Unnamed Rd	20	0	0	0
	4 - Access Rd	0	0	0	0

Cyclist %

		To			
		1 - A350 South	2 - A350 W Cepen Way	3 - Unnamed Rd	4 - Access Rd
From	1 - A350 South	0	0	0	0
	2 - A350 W Cepen Way	0	0	0	0
	3 - Unnamed Rd	0	0	0	0
	4 - Access Rd	0	0	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
1 - A350 South	0.89	25.83	9.4	D	1278	1278
2 - A350 W Cepen Way	0.78	19.69	4.5	C	712	712
3 - Unnamed Rd	0.58	13.97	2.2	B	514	514
4 - Access Rd	0.00	0.00	0.0	A	0	0

Main Results for each time segment

08:00 - 08:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A350 South	1272	318	93	1481	0.859	1273	1255	1095	0.0	9.4	22.392	C
2 - A350 W Cepen Way	704	176	407	948	0.743	708	696	959	0.0	3.7	17.972	C
3 - Unnamed Rd	512	128	675	875	0.585	513	512	440	0.0	2.1	13.113	B
4 - Access Rd	0	0	1189	458	0.000	0	0	0	0.0	0.0	0.000	A

08:15 - 08:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A350 South	1284	321	89	1440	0.892	1282	1286	1105	9.4	9.3	25.020	D
2 - A350 W Cepen Way	712	178	406	915	0.778	708	713	966	3.7	4.2	19.131	C
3 - Unnamed Rd	519	130	674	895	0.580	521	515	440	2.1	2.2	13.777	B
4 - Access Rd	0	0	1194	465	0.000	0	0	0	0.0	0.0	0.000	A

08:30 - 08:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A350 South	1276	319	87	1506	0.847	1287	1281	1099	9.3	8.7	25.828	D
2 - A350 W Cepen Way	715	179	417	983	0.727	700	706	958	4.2	4.5	19.690	C
3 - Unnamed Rd	513	128	669	893	0.575	518	517	449	2.2	2.1	13.970	B
4 - Access Rd	0	0	1187	439	0.000	0	0	0	0.0	0.0	0.000	A

08:45 - 09:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A350 South	1282	321	90	1460	0.878	1287	1280	1107	8.7	9.3	25.111	D
2 - A350 W Cepen Way	716	179	409	932	0.768	714	719	968	4.5	3.9	19.086	C
3 - Unnamed Rd	512	128	685	888	0.576	511	519	438	2.1	1.9	13.706	B
4 - Access Rd	0	0	1196	464	0.000	0	0	0	0.0	0.0	0.000	A

Lane Results

Lane Level notation: Lane Level 1 is always closest to the junction.

Lanes: Main Results for each time segment

08:00 - 08:15

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A350 South	Entry	1	1	2	861	1018	0.846	866	851	0.0	5.2	19.531	C
			2	1, 3, 4	407	1018	0.400	407	404	0.0	1.0	7.145	A
		2	1	(1, 2, 3, 4)	1272			1268	1280	0.0	3.2	6.770	A
	Exit	1	1		1095			1095	1084	0.0	0.0	0.000	A
2 - A350 W Cepen Way	Entry	1	1	3, 4	33	911	0.036	33	32	0.0	0.0	4.017	A
			2	1, 2	675	911	0.741	675	664	0.0	2.3	11.359	B
		2	1	(1, 2, 3, 4)	704			708	706	0.0	1.4	6.978	A
	Exit	1	1		959			959	944	0.0	0.0	0.000	A
3 - Unnamed Rd	Entry	1	1	1, 4	420	729	0.576	420	419	0.0	1.4	10.290	B
			2	2, 3	92	729	0.126	93	93	0.0	0.1	5.834	A
		2	1	(1, 2, 3, 4)	512			512	518	0.0	0.6	3.733	A
	Exit	1	1		440			440	436	0.0	0.0	0.000	A
4 - Access Rd	Entry	1	1	1, 2, 3, 4	0	455	0.000	0	0	0.0	0.0	0.000	A
	Exit	1	1		0			0	0	0.0	0.0	0.000	A

08:15 - 08:30

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A350 South	Entry	1	1	2	877	1019	0.861	877	880	5.2	5.4	21.299	C
			2	1, 3, 4	410	1019	0.402	406	406	1.0	1.1	7.438	A
		2	1	(1, 2, 3, 4)	1284			1287	1287	3.2	2.8	8.182	A
	Exit	1	1		1105			1105	1104	0.0	0.0	0.000	A
2 - A350 W Cepen Way	Entry	1	1	3, 4	34	912	0.037	34	33	0.0	0.0	4.285	A
			2	1, 2	674	912	0.739	674	680	2.3	2.3	11.508	B
		2	1	(1, 2, 3, 4)	712			707	713	1.4	1.9	8.025	A
	Exit	1	1		966			966	971	0.0	0.0	0.000	A
3 - Unnamed Rd	Entry	1	1	1, 4	431	730	0.591	432	424	1.4	1.3	10.239	B
			2	2, 3	89	730	0.122	89	91	0.1	0.2	5.952	A
		2	1	(1, 2, 3, 4)	519			520	515	0.6	0.7	4.417	A
	Exit	1	1		440			440	439	0.0	0.0	0.000	A
4 - Access Rd	Entry	1	1	1, 2, 3, 4	0	453	0.000	0	0	0.0	0.0	0.000	A
	Exit	1	1		0			0	0	0.0	0.0	0.000	A

08:30 - 08:45

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A350 South	Entry	1	1	2	866	1020	0.849	870	872	5.4	5.0	21.025	C
			2	1, 3, 4	415	1020	0.407	417	409	1.1	0.8	7.289	A
		2	1	(1, 2, 3, 4)	1276			1281	1279	2.8	2.9	9.281	A
	Exit	1	1		1099			1099	1099	0.0	0.0	0.000	A
2 - A350 W Cepen Way	Entry	1	1	3, 4	31	909	0.035	32	32	0.0	0.0	4.317	A
			2	1, 2	672	909	0.740	669	673	2.3	2.6	11.610	B
		2	1	(1, 2, 3, 4)	715			704	707	1.9	1.9	8.458	A
	Exit	1	1		958			958	963	0.0	0.0	0.000	A
3 - Unnamed Rd	Entry	1	1	1, 4	428	731	0.585	431	426	1.3	1.3	10.515	B
			2	2, 3	88	731	0.120	87	91	0.2	0.1	5.929	A
		2	1	(1, 2, 3, 4)	513			516	516	0.7	0.6	4.381	A
	Exit	1	1		449			449	442	0.0	0.0	0.000	A
4 - Access Rd	Entry	1	1	1, 2, 3, 4	0	456	0.000	0	0	0.0	0.0	0.000	A
	Exit	1	1		0			0	0	0.0	0.0	0.000	A

08:45 - 09:00

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A350 South	Entry	1	1	2	874	1019	0.858	878	871	5.0	5.1	21.138	C
			2	1, 3, 4	408	1019	0.400	409	409	0.8	0.9	7.570	A
		2	1	(1, 2, 3, 4)	1282			1282	1280	2.9	3.3	8.539	A
	Exit	1	1		1107			1107	1113	0.0	0.0	0.000	A
2 - A350 W Cepen Way	Entry	1	1	3, 4	29	911	0.032	29	32	0.0	0.0	4.121	A
			2	1, 2	686	911	0.753	685	687	2.6	2.4	11.582	B
		2	1	(1, 2, 3, 4)	716			714	718	1.9	1.5	7.968	A
	Exit	1	1		968			968	964	0.0	0.0	0.000	A
3 - Unnamed Rd	Entry	1	1	1, 4	420	727	0.578	421	426	1.3	1.2	10.447	B
			2	2, 3	89	727	0.122	90	93	0.1	0.1	5.781	A
		2	1	(1, 2, 3, 4)	512			509	518	0.6	0.6	4.263	A
	Exit	1	1		438			438	441	0.0	0.0	0.000	A
4 - Access Rd	Entry	1	1	1, 2, 3, 4	0	452	0.000	0	0	0.0	0.0	0.000	A
	Exit	1	1		0			0	0	0.0	0.0	0.000	A

Lane movements: Main Results for each time segment

08:00 - 08:15

Arm	Side	Lane level	Lane	To Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Simulation max flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignal level servic
1 - A350 South	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	861	215	1045	1018	0.846	866	851	0.0	5.2	19.531	C
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	407	102	1045	1018	0.400	407	404	0.0	1.0	7.145	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	863	216	-	-	-	861	872	0.0	2.2	6.881	A
				3	408	102	-	-	-	407	408	0.0	1.0	6.539	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
2 - A350 W Cepen Way	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	33	8	1030	910	0.036	33	32	0.0	0.0	4.017	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	675	169	1030	911	0.741	675	664	0.0	2.3	11.359	B
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	671	168	-	-	-	675	673	0.0	1.3	7.042	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	33	8	-	-	-	33	32	0.0	0.1	5.858	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
3 - Unnamed Rd	Entry	1	1	1	420	105	914	729	0.576	420	419	0.0	1.4	10.290	B
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	92	23	914	730	0.126	93	93	0.0	0.1	5.834	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	420	105	-	-	-	420	425	0.0	0.6	3.975	A
				2	92	23	-	-	-	92	93	0.0	0.1	2.810	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
4 - Access Rd	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A

08:15 - 08:30

Arm	Side	Lane level	Lane	To Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Simulation max flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignal level servic
1 - A350 South	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	877	219	1045	1019	0.861	877	880	5.2	5.4	21.299	C
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	410	102	1045	1019	0.402	406	406	1.0	1.1	7.438	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	876	219	-	-	-	877	881	2.2	2.0	8.291	A
				3	408	102	-	-	-	410	406	1.0	0.8	7.954	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
2 - A350 W Cepen Way	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	34	8	1030	914	0.037	34	33	0.0	0.0	4.285	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	674	168	1030	912	0.739	674	680	2.3	2.3	11.508	B
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	678	169	-	-	-	674	680	1.3	1.8	8.114	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	34	9	-	-	-	34	33	0.1	0.1	6.511	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
3 - Unnamed Rd	Entry	1	1	1	431	108	914	730	0.590	432	424	1.4	1.3	10.239	B
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	89	22	914	728	0.123	89	91	0.1	0.2	5.952	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	430	107	-	-	-	431	424	0.6	0.6	4.716	A
				2	89	22	-	-	-	89	91	0.1	0.1	3.258	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
4 - Access Rd	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A

08:30 - 08:45

Arm	Side	Lane level	Lane	To Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Simulation max flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignal level servic
1 - A350 South	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	866	217	1045	1020	0.849	870	872	5.4	5.0	21.025	C
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	415	104	1045	1020	0.407	417	409	1.1	0.8	7.289	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	862	216	-	-	-	866	870	2.0	2.0	9.428	A
				3	414	103	-	-	-	415	408	0.8	0.9	8.977	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
2 - A350 W Cepen Way	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	31	8	1030	909	0.035	32	32	0.0	0.0	4.317	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	672	168	1030	909	0.740	669	673	2.3	2.6	11.610	B
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	682	171	-	-	-	672	675	1.8	1.8	8.534	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	32	8	-	-	-	31	32	0.1	0.1	7.129	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
3 - Unnamed Rd	Entry	1	1	1	428	107	914	731	0.585	431	426	1.3	1.3	10.515	B
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	88	22	914	731	0.120	87	91	0.2	0.1	5.929	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	426	106	-	-	-	428	426	0.6	0.5	4.669	A
				2	88	22	-	-	-	88	90	0.1	0.1	3.255	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
4 - Access Rd	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A

08:45 - 09:00

Arm	Side	Lane level	Lane	To Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Simulation max flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignal level servic
1 - A350 South	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	874	219	1045	1019	0.858	878	871	5.0	5.1	21.138	C
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	408	102	1045	1019	0.400	409	409	0.8	0.9	7.570	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	874	218	-	-	-	874	872	2.0	2.3	8.601	A
				3	408	102	-	-	-	408	409	0.9	1.0	8.411	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
2 - A350 W Cepen Way	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	29	7	1030	909	0.032	29	32	0.0	0.0	4.121	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	686	171	1030	911	0.753	685	687	2.6	2.4	11.582	B
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	687	172	-	-	-	686	686	1.8	1.4	7.982	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	29	7	-	-	-	29	32	0.1	0.1	7.730	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
3 - Unnamed Rd	Entry	1	1	1	420	105	914	727	0.578	421	426	1.3	1.2	10.447	B
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	89	22	914	727	0.122	90	93	0.1	0.1	5.781	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	422	106	-	-	-	420	426	0.5	0.6	4.580	A
				2	89	22	-	-	-	89	92	0.1	0.1	3.041	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
4 - Access Rd	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A

Year 2031 + Dev, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	1 - A350 South - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Geometry	2 - A350 W Cepen Way - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Info	Simulation	A1 - [Lane Simulation]	This run uses Simulation mode. For detailed information on this mode, please see the User Guide.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	Lackham Rd	Standard Roundabout		1, 2, 3, 4	14.72	B

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	14.72	B

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)	Run automatically
D2	Year 2031 + Dev	PM	FLAT	17:00	18:00	60	15	✓

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1 - A350 South		FLAT	✓	1175	100.000
2 - A350 W Cepen Way		FLAT	✓	767	100.000
3 - Unnamed Rd		FLAT	✓	437	100.000
4 - Access Rd		FLAT	✓	0	100.000

Origin-Destination Data

Demand (PCU/hr)

		To			
		1 - A350 South	2 - A350 W Cepen Way	3 - Unnamed Rd	4 - Access Rd
From	1 - A350 South	0	719	456	0
	2 - A350 W Cepen Way	684	0	83	0
	3 - Unnamed Rd	394	43	0	0
	4 - Access Rd	0	0	0	0

Vehicle Mix

HV data entry mode	PCU Factor for a HV (PCU)
HV Percentages	2.00

Junction	PCU factor for a cyclist	PCU factor for a cyclist in controlling flow
1	0.20	0.80

Heavy Vehicle %

		To			
		1 - A350 South	2 - A350 W Cepen Way	3 - Unnamed Rd	4 - Access Rd
From	1 - A350 South	0	15	8	0
	2 - A350 W Cepen Way	10	0	0	0
	3 - Unnamed Rd	11	0	0	0
	4 - Access Rd	0	0	0	0

Cyclist %

		To			
		1 - A350 South	2 - A350 W Cepen Way	3 - Unnamed Rd	4 - Access Rd
From	1 - A350 South	0	0	0	0
	2 - A350 W Cepen Way	0	0	0	0
	3 - Unnamed Rd	0	0	0	0
	4 - Access Rd	0	0	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
1 - A350 South	0.70	11.89	4.5	B	1172	1172
2 - A350 W Cepen Way	0.79	20.17	5.0	C	770	770
3 - Unnamed Rd	0.56	12.69	1.8	B	436	436
4 - Access Rd	0.00	0.00	0.0	A	0	0

Main Results for each time segment

17:00 - 17:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A350 South	1188	297	43	1698	0.700	1190	1161	1083	0.0	4.0	11.151	B
2 - A350 W Cepen Way	768	192	467	990	0.775	771	753	766	0.0	3.8	17.267	C
3 - Unnamed Rd	435	109	690	782	0.556	436	433	548	0.0	1.5	11.931	B
4 - Access Rd	0	0	1127	490	0.000	0	0	0	0.0	0.0	0.000	A

17:15 - 17:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A350 South	1177	294	43	1698	0.693	1169	1179	1092	4.0	4.5	11.099	B
2 - A350 W Cepen Way	789	197	454	1003	0.787	786	776	758	3.8	4.7	18.232	C
3 - Unnamed Rd	438	109	699	846	0.517	436	431	541	1.5	1.8	12.060	B
4 - Access Rd	0	0	1134	484	0.000	0	0	0	0.0	0.0	0.000	A

17:30 - 17:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A350 South	1179	295	42	1732	0.680	1181	1182	1059	4.5	3.9	11.889	B
2 - A350 W Cepen Way	756	189	444	1005	0.753	747	763	779	4.7	4.1	18.874	C
3 - Unnamed Rd	435	109	666	808	0.538	435	436	526	1.8	1.5	12.686	B
4 - Access Rd	0	0	1101	458	0.000	0	0	0	0.0	0.0	0.000	A

17:45 - 18:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A350 South	1143	286	45	1638	0.698	1148	1171	1069	3.9	3.6	10.905	B
2 - A350 W Cepen Way	767	192	452	988	0.776	761	766	741	4.1	5.0	20.166	C
3 - Unnamed Rd	437	109	678	817	0.535	437	442	535	1.5	1.4	12.024	B
4 - Access Rd	0	0	1114	502	0.000	0	0	0	0.0	0.0	0.000	A

Lane Results

Lane Level notation: Lane Level 1 is always closest to the junction.

Lanes: Main Results for each time segment

17:00 - 17:15

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A350 South	Entry	1	1	2	722	1032	0.700	723	708	0.0	2.8	12.841	B
			2	1, 3, 4	467	1032	0.453	467	453	0.0	1.0	7.200	A
		2	1	(1, 2, 3, 4)	1188			1190	1176	0.0	0.2	0.576	A
	Exit	1	1		1083			1083	1065	0.0	0.0	0.000	A
2 - A350 W Cepen Way	Entry	1	1	3, 4	81	894	0.091	81	78	0.0	0.1	4.522	A
			2	1, 2	687	894	0.769	690	674	0.0	2.1	11.183	B
		2	1	(1, 2, 3, 4)	768			768	762	0.0	1.6	6.800	A
	Exit	1	1		766			766	750	0.0	0.0	0.000	A
3 - Unnamed Rd	Entry	1	1	1, 4	391	725	0.539	393	391	0.0	1.0	9.687	A
			2	2, 3	43	725	0.059	43	42	0.0	0.0	5.417	A
		2	1	(1, 2, 3, 4)	435			434	437	0.0	0.5	2.685	A
	Exit	1	1		548			548	531	0.0	0.0	0.000	A
4 - Access Rd	Entry	1	1	1, 2, 3, 4	0	479	0.000	0	0	0.0	0.0	0.000	A
	Exit	1	1		0			0	0	0.0	0.0	0.000	A

17:15 - 17:30

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A350 South	Entry	1	1	2	717	1032	0.695	715	723	2.8	3.1	12.608	B
			2	1, 3, 4	456	1032	0.441	454	456	1.0	0.9	7.081	A
		2	1	(1, 2, 3, 4)	1177			1173	1180	0.2	0.5	0.698	A
	Exit	1	1		1092			1092	1077	0.0	0.0	0.000	A
2 - A350 W Cepen Way	Entry	1	1	3, 4	88	898	0.098	87	86	0.1	0.2	4.412	A
			2	1, 2	697	898	0.776	699	690	2.1	2.4	11.485	B
		2	1	(1, 2, 3, 4)	789			785	778	1.6	2.2	7.597	A
	Exit	1	1		758			758	767	0.0	0.0	0.000	A
3 - Unnamed Rd	Entry	1	1	1, 4	394	723	0.545	393	387	1.0	1.2	9.720	A
			2	2, 3	42	723	0.059	43	44	0.0	0.1	5.008	A
		2	1	(1, 2, 3, 4)	438			436	432	0.5	0.5	2.867	A
	Exit	1	1		541			541	542	0.0	0.0	0.000	A
4 - Access Rd	Entry	1	1	1, 2, 3, 4	0	476	0.000	0	0	0.0	0.0	0.000	A
	Exit	1	1		0			0	0	0.0	0.0	0.000	A

17:30 - 17:45

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A350 South	Entry	1	1	2	735	1033	0.712	737	726	3.1	2.7	13.607	B
			2	1, 3, 4	444	1033	0.430	444	457	0.9	0.9	6.904	A
		2	1	(1, 2, 3, 4)	1179			1179	1181	0.5	0.3	0.988	A
	Exit	1	1		1059			1059	1072	0.0	0.0	0.000	A
2 - A350 W Cepen Way	Entry	1	1	3, 4	82	901	0.091	82	84	0.2	0.0	4.367	A
			2	1, 2	667	901	0.740	666	679	2.4	2.4	11.654	B
		2	1	(1, 2, 3, 4)	756			749	763	2.2	1.7	8.086	A
	Exit	1	1		779			779	769	0.0	0.0	0.000	A
3 - Unnamed Rd	Entry	1	1	1, 4	392	732	0.535	393	393	1.2	1.1	9.886	A
			2	2, 3	42	732	0.057	42	43	0.1	0.1	5.480	A
		2	1	(1, 2, 3, 4)	435			434	435	0.5	0.4	3.280	A
	Exit	1	1		526			526	540	0.0	0.0	0.000	A
4 - Access Rd	Entry	1	1	1, 2, 3, 4	0	489	0.000	0	0	0.0	0.0	0.000	A
	Exit	1	1		0			0	0	0.0	0.0	0.000	A

17:45 - 18:00

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A350 South	Entry	1	1	2	690	1032	0.669	697	709	2.7	2.5	12.588	B
			2	1, 3, 4	452	1032	0.438	452	462	0.9	0.9	7.195	A
		2	1	(1, 2, 3, 4)	1143			1142	1170	0.3	0.2	0.547	A
	Exit	1	1		1069			1069	1079	0.0	0.0	0.000	A
2 - A350 W Cepen Way	Entry	1	1	3, 4	84	898	0.093	84	83	0.0	0.1	4.567	A
			2	1, 2	682	898	0.759	678	683	2.4	2.6	11.773	B
		2	1	(1, 2, 3, 4)	767			765	767	1.7	2.4	9.306	A
	Exit	1	1		741			741	755	0.0	0.0	0.000	A
3 - Unnamed Rd	Entry	1	1	1, 4	394	729	0.541	392	396	1.1	1.1	9.611	A
			2	2, 3	44	729	0.061	45	46	0.1	0.1	5.406	A
		2	1	(1, 2, 3, 4)	437			438	442	0.4	0.2	2.915	A
	Exit	1	1		535			535	544	0.0	0.0	0.000	A
4 - Access Rd	Entry	1	1	1, 2, 3, 4	0	484	0.000	0	0	0.0	0.0	0.000	A
	Exit	1	1		0			0	0	0.0	0.0	0.000	A

Lane movements: Main Results for each time segment

17:00 - 17:15

Arm	Side	Lane level	Lane	To Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Simulation max flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignal level servic
1 - A350 South	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	722	181	1045	1032	0.700	723	708	0.0	2.8	12.841	B
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	467	117	1045	1032	0.453	467	453	0.0	1.0	7.200	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	721	180	-	-	-	722	719	0.0	0.2	0.594	A
				3	467	117	-	-	-	467	457	0.0	0.1	0.551	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
2 - A350 W Cepen Way	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	81	20	1030	896	0.091	81	78	0.0	0.1	4.522	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	687	172	1030	894	0.768	690	674	0.0	2.1	11.183	B
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	687	172	-	-	-	687	683	0.0	1.5	6.994	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	81	20	-	-	-	81	79	0.0	0.1	5.268	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
3 - Unnamed Rd	Entry	1	1	1	391	98	914	725	0.539	393	391	0.0	1.0	9.687	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	43	11	914	724	0.059	43	42	0.0	0.0	5.417	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	392	98	-	-	-	391	395	0.0	0.4	2.770	A
				2	43	11	-	-	-	43	43	0.0	0.0	1.982	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
4 - Access Rd	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A

17:15 - 17:30

Arm	Side	Lane level	Lane	To Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Simulation max flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignal level servic
1 - A350 South	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	717	179	1045	1032	0.695	715	723	2.8	3.1	12.608	B
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	456	114	1045	1032	0.441	454	456	1.0	0.9	7.081	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	720	180	-	-	-	717	724	0.2	0.3	0.707	A
				3	457	114	-	-	-	456	456	0.1	0.2	0.683	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
2 - A350 W Cepen Way	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	88	22	1030	897	0.098	87	86	0.1	0.2	4.412	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	697	174	1030	898	0.776	699	690	2.1	2.4	11.485	B
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	701	175	-	-	-	697	691	1.5	2.0	7.652	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	88	22	-	-	-	88	86	0.1	0.2	7.196	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
3 - Unnamed Rd	Entry	1	1	1	394	98	914	723	0.545	393	387	1.0	1.2	9.720	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	42	11	914	722	0.059	43	44	0.0	0.1	5.008	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	394	99	-	-	-	394	388	0.4	0.4	2.970	A
				2	43	11	-	-	-	42	44	0.0	0.1	2.057	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
4 - Access Rd	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A

17:30 - 17:45

Arm	Side	Lane level	Lane	To Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Simulation max flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignal level servic
1 - A350 South	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	735	184	1045	1033	0.712	737	726	3.1	2.7	13.607	B
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	444	111	1045	1032	0.430	444	457	0.9	0.9	6.904	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	735	184	-	-	-	735	724	0.3	0.2	1.065	A
				3	444	111	-	-	-	444	456	0.2	0.1	0.872	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
2 - A350 W Cepen Way	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	82	21	1030	901	0.091	82	84	0.2	0.0	4.367	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	667	167	1030	901	0.740	666	679	2.4	2.4	11.654	B
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	673	168	-	-	-	667	679	2.0	1.6	8.247	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	83	21	-	-	-	82	83	0.2	0.2	6.893	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
3 - Unnamed Rd	Entry	1	1	1	392	98	914	731	0.536	393	393	1.2	1.1	9.886	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	42	10	914	728	0.058	42	43	0.1	0.1	5.480	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	393	98	-	-	-	392	392	0.4	0.3	3.363	A
				2	42	10	-	-	-	42	43	0.1	0.0	2.598	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
4 - Access Rd	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A

17:45 - 18:00

Arm	Side	Lane level	Lane	To Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Simulation max flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignal level servic
1 - A350 South	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	690	173	1045	1032	0.669	697	709	2.7	2.5	12.588	B
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	452	113	1045	1032	0.438	452	462	0.9	0.9	7.195	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	691	173	-	-	-	690	709	0.2	0.1	0.568	A
				3	452	113	-	-	-	452	462	0.1	0.1	0.517	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
2 - A350 W Cepen Way	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	84	21	1030	895	0.093	84	83	0.0	0.1	4.567	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	682	170	1030	898	0.759	678	683	2.4	2.6	11.773	B
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	681	170	-	-	-	682	684	1.6	2.1	9.452	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	86	21	-	-	-	84	83	0.2	0.3	8.219	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
3 - Unnamed Rd	Entry	1	1	1	394	99	914	728	0.541	392	396	1.1	1.1	9.611	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	44	11	914	728	0.061	45	46	0.1	0.1	5.406	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	393	98	-	-	-	394	396	0.3	0.2	2.994	A
				2	44	11	-	-	-	44	46	0.0	0.0	2.297	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
4 - Access Rd	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A

Year 2031 Baseline, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	1 - A350 South - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Geometry	2 - A350 W Cepen Way - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Info	Simulation	A1 - [Lane Simulation]	This run uses Simulation mode. For detailed information on this mode, please see the User Guide.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	Lackham Rd	Standard Roundabout		1, 2, 3, 4	21.56	C

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	21.56	C

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)	Run automatically
D3	Year 2031 Baseline	AM	FLAT	08:00	09:00	60	15	✓

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1 - A350 South		FLAT	✓	1282	100.000
2 - A350 W Cepen Way		FLAT	✓	693	100.000
3 - Unnamed Rd		FLAT	✓	432	100.000
4 - Access Rd		FLAT	✓	0	100.000

Origin-Destination Data

Demand (PCU/hr)

		To			
		1 - A350 South	2 - A350 W Cepen Way	3 - Unnamed Rd	4 - Access Rd
From	1 - A350 South	0	877	405	0
	2 - A350 W Cepen Way	682	0	11	0
	3 - Unnamed Rd	408	24	0	0
	4 - Access Rd	0	0	0	0

Vehicle Mix

HV data entry mode	PCU Factor for a HV (PCU)
HV Percentages	2.00

Junction	PCU factor for a cyclist	PCU factor for a cyclist in controlling flow
1	0.20	0.80

Heavy Vehicle %

	To				
From		1 - A350 South	2 - A350 W Cepen Way	3 - Unnamed Rd	4 - Access Rd
	1 - A350 South	0	16	13	0
	2 - A350 W Cepen Way	20	0	0	0
	3 - Unnamed Rd	20	0	0	0
	4 - Access Rd	0	0	0	0

Cyclist %

	To				
From		1 - A350 South	2 - A350 W Cepen Way	3 - Unnamed Rd	4 - Access Rd
	1 - A350 South	0	0	0	0
	2 - A350 W Cepen Way	0	0	0	0
	3 - Unnamed Rd	0	0	0	0
	4 - Access Rd	0	0	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
1 - A350 South	0.86	23.51	9.5	C	1285	1285
2 - A350 W Cepen Way	0.76	22.31	4.8	C	693	693
3 - Unnamed Rd	0.59	14.56	1.9	B	430	430
4 - Access Rd	0.00	0.00	0.0	A	0	0

Main Results for each time segment

08:00 - 08:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A350 South	1283	321	22	1587	0.809	1285	1261	1086	0.0	7.1	18.478	C
2 - A350 W Cepen Way	695	174	407	926	0.751	696	680	900	0.0	4.3	20.181	C
3 - Unnamed Rd	428	107	684	783	0.547	425	428	419	0.0	1.8	13.426	B
4 - Access Rd	0	0	1109	512	0.000	0	0	0	0.0	0.0	0.000	A

08:15 - 08:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A350 South	1270	317	22	1493	0.851	1284	1275	1077	7.1	7.9	23.412	C
2 - A350 W Cepen Way	693	173	402	932	0.743	687	693	905	4.3	4.8	22.168	C
3 - Unnamed Rd	425	106	676	747	0.569	423	429	413	1.8	1.9	14.558	B
4 - Access Rd	0	0	1099	493	0.000	0	0	0	0.0	0.0	0.000	A

08:30 - 08:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A350 South	1303	326	27	1574	0.828	1287	1283	1083	7.9	8.6	21.338	C
2 - A350 W Cepen Way	682	170	407	943	0.723	683	693	907	4.8	4.0	20.258	C
3 - Unnamed Rd	437	109	673	743	0.589	437	432	417	1.9	1.9	14.499	B
4 - Access Rd	0	0	1110	485	0.000	0	0	0	0.0	0.0	0.000	A

08:45 - 09:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A350 South	1284	321	25	1488	0.863	1278	1273	1098	8.6	9.5	23.507	C
2 - A350 W Cepen Way	702	175	400	918	0.764	701	699	902	4.0	4.7	22.307	C
3 - Unnamed Rd	429	107	692	779	0.551	431	424	410	1.9	1.6	13.350	B
4 - Access Rd	0	0	1123	486	0.000	0	0	0	0.0	0.0	0.000	A

Lane Results

Lane Level notation: Lane Level 1 is always closest to the junction.

Lanes: Main Results for each time segment

08:00 - 08:15

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A350 South	Entry	1	1	2	878	1038	0.846	878	854	0.0	4.6	18.100	C
			2	1, 3, 4	407	1038	0.392	407	407	0.0	0.7	6.832	A
		2	1	(1, 2, 3, 4)	1283			1284	1282	0.0	1.8	3.975	A
	Exit	1	1		1086			1086	1073	0.0	0.0	0.000	A
2 - A350 W Cepen Way	Entry	1	1	3, 4	12	911	0.013	12	11	0.0	0.0	4.278	A
			2	1, 2	681	911	0.748	684	669	0.0	2.3	11.360	B
		2	1	(1, 2, 3, 4)	695			694	690	0.0	1.9	8.904	A
	Exit	1	1		900			900	878	0.0	0.0	0.000	A
3 - Unnamed Rd	Entry	1	1	1, 4	405	727	0.557	403	404	0.0	1.4	10.098	B
			2	2, 3	22	727	0.030	22	24	0.0	0.0	5.064	A
		2	1	(1, 2, 3, 4)	428			427	433	0.0	0.4	3.629	A
	Exit	1	1		419			419	418	0.0	0.0	0.000	A
4 - Access Rd	Entry	1	1	1, 2, 3, 4	0	486	0.000	0	0	0.0	0.0	0.000	A
	Exit	1	1		0			0	0	0.0	0.0	0.000	A

08:15 - 08:30

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A350 South	Entry	1	1	2	874	1038	0.842	882	877	4.6	4.8	20.554	C
			2	1, 3, 4	402	1038	0.388	402	398	0.7	0.8	6.800	A
		2	1	(1, 2, 3, 4)	1270			1277	1277	1.8	2.3	7.212	A
	Exit	1	1		1077			1077	1088	0.0	0.0	0.000	A
2 - A350 W Cepen Way	Entry	1	1	3, 4	11	913	0.013	11	11	0.0	0.0	4.247	A
			2	1, 2	678	913	0.743	676	681	2.3	2.5	12.054	B
		2	1	(1, 2, 3, 4)	693			689	694	1.9	2.3	10.279	B
	Exit	1	1		905			905	900	0.0	0.0	0.000	A
3 - Unnamed Rd	Entry	1	1	1, 4	403	729	0.553	401	407	1.4	1.3	10.396	B
			2	2, 3	22	729	0.031	22	23	0.0	0.0	5.184	A
		2	1	(1, 2, 3, 4)	425			425	429	0.4	0.5	4.486	A
	Exit	1	1		413			413	410	0.0	0.0	0.000	A
4 - Access Rd	Entry	1	1	1, 2, 3, 4	0	490	0.000	0	0	0.0	0.0	0.000	A
	Exit	1	1		0			0	0	0.0	0.0	0.000	A

08:30 - 08:45

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A350 South	Entry	1	1	2	885	1037	0.854	880	877	4.8	5.1	19.162	C
			2	1, 3, 4	410	1037	0.395	407	407	0.8	0.9	6.863	A
		2	1	(1, 2, 3, 4)	1303			1295	1285	2.3	2.6	6.148	A
	Exit	1	1		1083			1083	1090	0.0	0.0	0.000	A
2 - A350 W Cepen Way	Entry	1	1	3, 4	10	911	0.011	10	11	0.0	0.0	3.987	A
			2	1, 2	673	911	0.739	673	682	2.5	2.3	11.530	B
		2	1	(1, 2, 3, 4)	682			683	692	2.3	1.7	8.852	A
	Exit	1	1		907			907	901	0.0	0.0	0.000	A
3 - Unnamed Rd	Entry	1	1	1, 4	412	730	0.565	410	408	1.3	1.4	10.499	B
			2	2, 3	27	730	0.037	27	25	0.0	0.0	5.045	A
		2	1	(1, 2, 3, 4)	437			439	433	0.5	0.5	4.382	A
	Exit	1	1		417			417	417	0.0	0.0	0.000	A
4 - Access Rd	Entry	1	1	1, 2, 3, 4	0	486	0.000	0	0	0.0	0.0	0.000	A
	Exit	1	1		0			0	0	0.0	0.0	0.000	A

08:45 - 09:00

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A350 South	Entry	1	1	2	880	1038	0.849	877	870	5.1	5.1	19.990	C
			2	1, 3, 4	402	1038	0.388	400	404	0.9	1.0	6.949	A
		2	1	(1, 2, 3, 4)	1284			1283	1273	2.6	3.4	7.917	A
	Exit	1	1		1098			1098	1088	0.0	0.0	0.000	A
2 - A350 W Cepen Way	Entry	1	1	3, 4	9	913	0.010	9	10	0.0	0.0	4.171	A
			2	1, 2	692	913	0.758	692	689	2.3	2.4	11.828	B
		2	1	(1, 2, 3, 4)	702			701	699	1.7	2.3	10.704	B
	Exit	1	1		902			902	894	0.0	0.0	0.000	A
3 - Unnamed Rd	Entry	1	1	1, 4	404	725	0.558	406	399	1.4	1.2	10.110	B
			2	2, 3	25	725	0.034	25	25	0.0	0.0	5.382	A
		2	1	(1, 2, 3, 4)	429			429	423	0.5	0.4	3.607	A
	Exit	1	1		410			410	414	0.0	0.0	0.000	A
4 - Access Rd	Entry	1	1	1, 2, 3, 4	0	481	0.000	0	0	0.0	0.0	0.000	A
	Exit	1	1		0			0	0	0.0	0.0	0.000	A

Lane movements: Main Results for each time segment

08:00 - 08:15

Arm	Side	Lane level	Lane	To Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Simulation max flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignal level servic
1 - A350 South	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	878	219	1045	1038	0.846	878	854	0.0	4.6	18.100	C
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	407	102	1045	1038	0.392	407	407	0.0	0.7	6.832	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	878	219	-	-	-	878	872	0.0	1.3	4.029	A
				3	406	102	-	-	-	407	410	0.0	0.5	3.862	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
2 - A350 W Cepen Way	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	12	3	991	873	0.014	12	11	0.0	0.0	4.278	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	681	170	1030	911	0.748	684	669	0.0	2.3	11.360	B
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	683	171	-	-	-	681	678	0.0	1.9	8.918	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	12	3	-	-	-	12	11	0.0	0.1	8.197	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
3 - Unnamed Rd	Entry	1	1	1	405	101	914	726	0.558	403	404	0.0	1.4	10.098	B
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	22	5	914	726	0.030	22	24	0.0	0.0	5.064	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	406	102	-	-	-	405	409	0.0	0.4	3.707	A
				2	22	5	-	-	-	22	24	0.0	0.0	2.534	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
4 - Access Rd	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A

08:15 - 08:30

Arm	Side	Lane level	Lane	To Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Simulation max flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignal level servic
1 - A350 South	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	874	219	1045	1038	0.842	882	877	4.6	4.8	20.554	C
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	402	101	1045	1038	0.388	402	398	0.7	0.8	6.800	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	869	217	-	-	-	874	878	1.3	1.6	7.363	A
				3	401	100	-	-	-	402	399	0.5	0.7	6.890	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
2 - A350 W Cepen Way	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	11	3	946	840	0.014	11	11	0.0	0.0	4.247	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	678	169	1030	913	0.742	676	681	2.3	2.5	12.054	B
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	681	170	-	-	-	678	682	1.9	2.3	10.303	B
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	11	3	-	-	-	11	11	0.1	0.0	9.043	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
3 - Unnamed Rd	Entry	1	1	1	403	101	914	728	0.553	401	407	1.4	1.3	10.396	B
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	22	6	904	721	0.031	22	23	0.0	0.0	5.184	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	403	101	-	-	-	403	406	0.4	0.5	4.555	A
				2	22	6	-	-	-	22	23	0.0	0.0	3.456	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
4 - Access Rd	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A

08:30 - 08:45

Arm	Side	Lane level	Lane	To Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Simulation max flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignal level servic
1 - A350 South	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	885	221	1045	1037	0.854	880	877	4.8	5.1	19.162	C
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	410	102	1045	1037	0.395	407	407	0.8	0.9	6.863	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	892	223	-	-	-	885	878	1.6	1.8	6.268	A
				3	411	103	-	-	-	410	407	0.7	0.8	5.896	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
2 - A350 W Cepen Way	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	10	2	918	810	0.012	10	11	0.0	0.0	3.987	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	673	168	1030	911	0.739	673	682	2.5	2.3	11.530	B
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	672	168	-	-	-	673	681	2.3	1.7	8.872	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	10	2	-	-	-	10	11	0.0	0.0	7.758	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
3 - Unnamed Rd	Entry	1	1	1	412	103	914	730	0.565	410	408	1.3	1.4	10.499	B
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	27	7	914	728	0.037	27	25	0.0	0.0	5.045	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	410	103	-	-	-	412	408	0.5	0.5	4.492	A
				2	27	7	-	-	-	27	25	0.0	0.0	2.875	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
4 - Access Rd	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A

08:45 - 09:00

Arm	Side	Lane level	Lane	To Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Simulation max flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignal level servic
1 - A350 South	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	880	220	1045	1037	0.849	877	870	5.1	5.1	19.990	C
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	402	101	1045	1038	0.388	400	404	0.9	1.0	6.949	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	882	220	-	-	-	880	869	1.8	2.3	8.008	A
				3	403	101	-	-	-	402	404	0.8	1.1	7.728	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
2 - A350 W Cepen Way	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	9	2	952	845	0.011	9	10	0.0	0.0	4.171	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	692	173	1030	914	0.758	692	689	2.3	2.4	11.828	B
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	693	173	-	-	-	692	689	1.7	2.2	10.721	B
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	9	2	-	-	-	9	10	0.0	0.0	9.733	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
3 - Unnamed Rd	Entry	1	1	1	404	101	914	725	0.558	406	399	1.4	1.2	10.110	B
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	25	6	914	726	0.034	25	25	0.0	0.0	5.382	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	404	101	-	-	-	404	398	0.5	0.4	3.712	A
				2	25	6	-	-	-	25	25	0.0	0.0	2.194	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
4 - Access Rd	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A

Year 2031 Baseline, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	1 - A350 South - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Geometry	2 - A350 W Cepen Way - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Info	Simulation	A1 - [Lane Simulation]	This run uses Simulation mode. For detailed information on this mode, please see the User Guide.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	Lackham Rd	Standard Roundabout		1, 2, 3, 4	14.11	B

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	14.11	B

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)	Run automatically
D4	Year 2031 Baseline	PM	FLAT	17:00	18:00	60	15	✓

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1 - A350 South		FLAT	✓	1161	100.000
2 - A350 W Cepen Way		FLAT	✓	710	100.000
3 - Unnamed Rd		FLAT	✓	403	100.000
4 - Access Rd		FLAT	✓	0	100.000

Origin-Destination Data

Demand (PCU/hr)

		To			
		1 - A350 South	2 - A350 W Cepen Way	3 - Unnamed Rd	4 - Access Rd
From	1 - A350 South	0	719	442	0
	2 - A350 W Cepen Way	684	0	26	0
	3 - Unnamed Rd	388	15	0	0
	4 - Access Rd	0	0	0	0

Vehicle Mix

HV data entry mode	PCU Factor for a HV (PCU)
HV Percentages	2.00

Junction	PCU factor for a cyclist	PCU factor for a cyclist in controlling flow
1	0.20	0.80

Heavy Vehicle %

		To			
		1 - A350 South	2 - A350 W Cepen Way	3 - Unnamed Rd	4 - Access Rd
From	1 - A350 South	0	15	8	0
	2 - A350 W Cepen Way	10	0	0	0
	3 - Unnamed Rd	11	0	0	0
	4 - Access Rd	0	0	0	0

Cyclist %

		To			
		1 - A350 South	2 - A350 W Cepen Way	3 - Unnamed Rd	4 - Access Rd
From	1 - A350 South	0	0	0	0
	2 - A350 W Cepen Way	0	0	0	0
	3 - Unnamed Rd	0	0	0	0
	4 - Access Rd	0	0	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
1 - A350 South	0.71	11.52	3.9	B	1158	1158
2 - A350 W Cepen Way	0.80	19.16	3.9	C	713	713
3 - Unnamed Rd	0.54	12.63	1.4	B	401	401
4 - Access Rd	0.00	0.00	0.0	A	0	0

Main Results for each time segment

17:00 - 17:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A350 South	1159	290	15	1664	0.696	1159	1144	1076	0.0	3.9	11.154	B
2 - A350 W Cepen Way	717	179	437	971	0.738	717	699	737	0.0	3.9	17.318	C
3 - Unnamed Rd	400	100	690	762	0.524	401	399	463	0.0	1.4	11.820	B
4 - Access Rd	0	0	1091	530	0.000	0	0	0	0.0	0.0	0.000	A

17:15 - 17:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A350 South	1154	289	14	1695	0.681	1157	1155	1084	3.9	3.6	11.186	B
2 - A350 W Cepen Way	718	179	442	943	0.761	717	710	730	3.9	3.8	18.389	C
3 - Unnamed Rd	403	101	691	745	0.542	407	402	468	1.4	1.2	12.193	B
4 - Access Rd	0	0	1098	502	0.000	0	0	0	0.0	0.0	0.000	A

17:30 - 17:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A350 South	1167	292	15	1633	0.715	1169	1164	1066	3.6	3.7	11.522	B
2 - A350 W Cepen Way	706	177	445	948	0.745	706	712	739	3.8	3.9	19.158	C
3 - Unnamed Rd	401	100	679	749	0.535	402	402	472	1.2	1.4	12.629	B
4 - Access Rd	0	0	1081	504	0.000	0	0	0	0.0	0.0	0.000	A

17:45 - 18:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A350 South	1152	288	16	1623	0.710	1153	1160	1071	3.7	3.9	11.024	B
2 - A350 W Cepen Way	709	177	437	889	0.798	710	709	733	3.9	3.7	18.470	C
3 - Unnamed Rd	402	100	684	766	0.525	403	403	463	1.4	1.4	11.889	B
4 - Access Rd	0	0	1087	501	0.000	0	0	0	0.0	0.0	0.000	A

Lane Results

Lane Level notation: Lane Level 1 is always closest to the junction.

Lanes: Main Results for each time segment

17:00 - 17:15

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A350 South	Entry	1	1	2	722	1040	0.694	722	709	0.0	2.7	12.500	B
			2	1, 3, 4	438	1040	0.421	437	435	0.0	0.9	6.646	A
		2	1	(1, 2, 3, 4)	1159			1160	1158	0.0	0.3	0.941	A
	Exit	1	1		1076			1076	1057	0.0	0.0	0.000	A
2 - A350 W Cepen Way	Entry	1	1	3, 4	26	903	0.029	26	26	0.0	0.0	4.229	A
			2	1, 2	691	903	0.765	690	673	0.0	2.4	11.310	B
		2	1	(1, 2, 3, 4)	717			717	709	0.0	1.5	6.262	A
	Exit	1	1		737			737	724	0.0	0.0	0.000	A
3 - Unnamed Rd	Entry	1	1	1, 4	385	725	0.531	386	384	0.0	1.1	9.410	A
			2	2, 3	15	725	0.021	15	15	0.0	0.0	4.962	A
		2	1	(1, 2, 3, 4)	400			400	403	0.0	0.3	2.579	A
	Exit	1	1		463			463	461	0.0	0.0	0.000	A
4 - Access Rd	Entry	1	1	1, 2, 3, 4	0	493	0.000	0	0	0.0	0.0	0.000	A
	Exit	1	1		0			0	0	0.0	0.0	0.000	A

17:15 - 17:30

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A350 South	Entry	1	1	2	713	1041	0.685	715	716	2.7	2.5	12.818	B
			2	1, 3, 4	442	1041	0.424	442	439	0.9	0.9	6.784	A
		2	1	(1, 2, 3, 4)	1154			1155	1155	0.3	0.2	0.758	A
	Exit	1	1		1084			1084	1072	0.0	0.0	0.000	A
2 - A350 W Cepen Way	Entry	1	1	3, 4	26	901	0.029	26	26	0.0	0.0	4.172	A
			2	1, 2	692	901	0.768	691	685	2.4	2.3	11.462	B
		2	1	(1, 2, 3, 4)	718			718	710	1.5	1.5	7.209	A
	Exit	1	1		730			730	731	0.0	0.0	0.000	A
3 - Unnamed Rd	Entry	1	1	1, 4	391	725	0.539	393	388	1.1	1.0	9.629	A
			2	2, 3	14	725	0.020	14	15	0.0	0.0	5.075	A
		2	1	(1, 2, 3, 4)	403			405	402	0.3	0.2	2.747	A
	Exit	1	1		468			468	465	0.0	0.0	0.000	A
4 - Access Rd	Entry	1	1	1, 2, 3, 4	0	490	0.000	0	0	0.0	0.0	0.000	A
	Exit	1	1		0			0	0	0.0	0.0	0.000	A

17:30 - 17:45

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A350 South	Entry	1	1	2	722	1040	0.694	724	720	2.5	2.6	13.063	B
			2	1, 3, 4	445	1040	0.428	445	444	0.9	0.8	6.674	A
		2	1	(1, 2, 3, 4)	1167			1167	1164	0.2	0.3	0.990	A
	Exit	1	1		1066			1066	1071	0.0	0.0	0.000	A
2 - A350 W Cepen Way	Entry	1	1	3, 4	27	900	0.030	27	28	0.0	0.0	4.197	A
			2	1, 2	679	900	0.755	679	684	2.3	2.3	11.690	B
		2	1	(1, 2, 3, 4)	706			706	712	1.5	1.6	7.789	A
	Exit	1	1		739			739	735	0.0	0.0	0.000	A
3 - Unnamed Rd	Entry	1	1	1, 4	386	728	0.530	387	387	1.0	1.1	9.764	A
			2	2, 3	15	728	0.020	15	15	0.0	0.0	4.990	A
		2	1	(1, 2, 3, 4)	401			401	402	0.2	0.4	3.054	A
	Exit	1	1		472			472	472	0.0	0.0	0.000	A
4 - Access Rd	Entry	1	1	1, 2, 3, 4	0	497	0.000	0	0	0.0	0.0	0.000	A
	Exit	1	1		0			0	0	0.0	0.0	0.000	A

17:45 - 18:00

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A350 South	Entry	1	1	2	716	1040	0.688	716	721	2.6	2.8	12.642	B
			2	1, 3, 4	438	1040	0.421	437	439	0.8	0.9	6.687	A
		2	1	(1, 2, 3, 4)	1152			1153	1161	0.3	0.2	0.737	A
	Exit	1	1		1071			1071	1070	0.0	0.0	0.000	A
2 - A350 W Cepen Way	Entry	1	1	3, 4	26	903	0.028	26	26	0.0	0.0	4.006	A
			2	1, 2	684	903	0.758	684	683	2.3	2.2	11.467	B
		2	1	(1, 2, 3, 4)	709			709	708	1.6	1.5	7.373	A
	Exit	1	1		733			733	737	0.0	0.0	0.000	A
3 - Unnamed Rd	Entry	1	1	1, 4	385	727	0.530	387	387	1.1	1.0	9.485	A
			2	2, 3	16	727	0.022	16	16	0.0	0.0	5.018	A
		2	1	(1, 2, 3, 4)	402			402	403	0.4	0.3	2.629	A
	Exit	1	1		463			463	465	0.0	0.0	0.000	A
4 - Access Rd	Entry	1	1	1, 2, 3, 4	0	494	0.000	0	0	0.0	0.0	0.000	A
	Exit	1	1		0			0	0	0.0	0.0	0.000	A

Lane movements: Main Results for each time segment

17:00 - 17:15

Arm	Side	Lane level	Lane	To Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Simulation max flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignal level servic
1 - A350 South	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	722	180	1045	1040	0.694	722	709	0.0	2.7	12.500	B
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	438	109	1045	1040	0.421	437	435	0.0	0.9	6.646	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	721	180	-	-	-	722	720	0.0	0.2	0.971	A
				3	437	109	-	-	-	438	438	0.0	0.1	0.895	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
2 - A350 W Cepen Way	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	26	7	1028	900	0.029	26	26	0.0	0.0	4.229	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	691	173	1030	903	0.765	690	673	0.0	2.4	11.310	B
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	691	173	-	-	-	691	683	0.0	1.4	6.313	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	26	7	-	-	-	26	26	0.0	0.1	5.055	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
3 - Unnamed Rd	Entry	1	1	1	385	96	914	725	0.531	386	384	0.0	1.1	9.410	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	15	4	895	713	0.021	15	15	0.0	0.0	4.962	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	384	96	-	-	-	385	388	0.0	0.3	2.605	A
				2	15	4	-	-	-	15	15	0.0	0.0	1.988	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
4 - Access Rd	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A

17:15 - 17:30

Arm	Side	Lane level	Lane	To Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Simulation max flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignal level servic
1 - A350 South	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	713	178	1045	1041	0.685	715	716	2.7	2.5	12.818	B
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	442	110	1045	1041	0.424	442	439	0.9	0.9	6.784	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	712	178	-	-	-	713	716	0.2	0.1	0.793	A
				3	442	110	-	-	-	442	439	0.1	0.1	0.705	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
2 - A350 W Cepen Way	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	26	6	1020	891	0.029	26	26	0.0	0.0	4.172	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	692	173	1030	901	0.768	691	685	2.4	2.3	11.462	B
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	692	173	-	-	-	692	684	1.4	1.4	7.244	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	26	6	-	-	-	26	26	0.1	0.0	6.362	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
3 - Unnamed Rd	Entry	1	1	1	391	98	914	724	0.539	393	388	1.1	1.0	9.629	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	14	4	893	710	0.020	14	15	0.0	0.0	5.075	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	389	97	-	-	-	391	387	0.3	0.2	2.774	A
				2	14	4	-	-	-	14	15	0.0	0.0	2.089	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
4 - Access Rd	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A

17:30 - 17:45

Arm	Side	Lane level	Lane	To Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Simulation max flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignal level servic
1 - A350 South	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	722	180	1045	1040	0.694	724	720	2.5	2.6	13.063	B
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	445	111	1045	1040	0.428	445	444	0.9	0.8	6.674	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	722	180	-	-	-	722	720	0.1	0.2	1.023	A
				3	445	111	-	-	-	445	444	0.1	0.1	0.939	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
2 - A350 W Cepen Way	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	27	7	1025	897	0.030	27	28	0.0	0.0	4.197	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	679	170	1030	900	0.755	679	684	2.3	2.3	11.690	B
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	679	170	-	-	-	679	684	1.4	1.5	7.840	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	27	7	-	-	-	27	28	0.0	0.0	6.648	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
3 - Unnamed Rd	Entry	1	1	1	386	97	914	728	0.530	387	387	1.0	1.1	9.764	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	15	4	893	711	0.021	15	15	0.0	0.0	4.990	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	386	96	-	-	-	386	387	0.2	0.3	3.093	A
				2	15	4	-	-	-	15	15	0.0	0.0	2.134	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
4 - Access Rd	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A

17:45 - 18:00

Arm	Side	Lane level	Lane	To Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Simulation max flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignal level servic
1 - A350 South	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	716	179	1045	1040	0.688	716	721	2.6	2.8	12.642	B
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	438	109	1045	1040	0.421	437	439	0.8	0.9	6.687	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	714	179	-	-	-	716	722	0.2	0.1	0.764	A
				3	437	109	-	-	-	438	439	0.1	0.1	0.696	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
2 - A350 W Cepen Way	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	26	6	1030	903	0.028	26	26	0.0	0.0	4.006	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	684	171	1030	903	0.758	684	683	2.3	2.2	11.467	B
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	684	171	-	-	-	684	682	1.5	1.5	7.410	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	26	6	-	-	-	26	26	0.0	0.0	6.477	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
3 - Unnamed Rd	Entry	1	1	1	385	96	914	727	0.530	387	387	1.1	1.0	9.485	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	16	4	893	709	0.023	16	16	0.0	0.0	5.018	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	385	96	-	-	-	385	387	0.3	0.3	2.668	A
				2	16	4	-	-	-	16	16	0.0	0.0	1.786	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
4 - Access Rd	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A

Year 2026 Baseline, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	1 - A350 South - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Geometry	2 - A350 W Cepen Way - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Info	Simulation	A1 - [Lane Simulation]	This run uses Simulation mode. For detailed information on this mode, please see the User Guide.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	Lackham Rd	Standard Roundabout		1, 2, 3, 4	16.81	C

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	16.81	C

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)	Run automatically
D5	Year 2026 Baseline	AM	FLAT	08:00	09:00	60	15	✓

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1 - A350 South		FLAT	✓	1211	100.000
2 - A350 W Cepen Way		FLAT	✓	623	100.000
3 - Unnamed Rd		FLAT	✓	384	100.000
4 - Access Rd		FLAT	✓	0	100.000

Origin-Destination Data

Demand (PCU/hr)

		To			
		1 - A350 South	2 - A350 W Cepen Way	3 - Unnamed Rd	4 - Access Rd
From	1 - A350 South	0	827	384	0
	2 - A350 W Cepen Way	623	0	0	0
	3 - Unnamed Rd	384	0	0	0
	4 - Access Rd	0	0	0	0

Vehicle Mix

HV data entry mode	PCU Factor for a HV (PCU)
HV Percentages	2.00

Junction	PCU factor for a cyclist	PCU factor for a cyclist in controlling flow
1	0.20	0.80

Heavy Vehicle %

	To				
From		1 - A350 South	2 - A350 W Cepen Way	3 - Unnamed Rd	4 - Access Rd
	1 - A350 South	0	16	13	0
	2 - A350 W Cepen Way	20	0	0	0
	3 - Unnamed Rd	20	0	0	0
	4 - Access Rd	0	0	0	0

Cyclist %

	To				
From		1 - A350 South	2 - A350 W Cepen Way	3 - Unnamed Rd	4 - Access Rd
	1 - A350 South	0	0	0	0
	2 - A350 W Cepen Way	0	0	0	0
	3 - Unnamed Rd	0	0	0	0
	4 - Access Rd	0	0	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
1 - A350 South	0.82	18.34	7.1	C	1220	1220
2 - A350 W Cepen Way	0.71	16.07	2.9	C	621	621
3 - Unnamed Rd	0.55	13.10	1.7	B	380	380
4 - Access Rd	0.00	0.00	0.0	A	0	0

Main Results for each time segment

08:00 - 08:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A350 South	1226	306	0	1517	0.808	1228	1193	993	0.0	7.1	18.147	C
2 - A350 W Cepen Way	615	154	396	910	0.676	619	610	832	0.0	2.9	14.400	B
3 - Unnamed Rd	377	94	619	740	0.510	373	375	396	0.0	1.7	11.950	B
4 - Access Rd	0	0	993	540	0.000	0	0	0	0.0	0.0	0.000	A

08:15 - 08:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A350 South	1193	298	0	1582	0.754	1178	1211	1007	7.1	5.7	16.368	C
2 - A350 W Cepen Way	621	155	377	914	0.680	626	623	802	2.9	2.7	16.070	C
3 - Unnamed Rd	380	95	626	710	0.535	380	381	377	1.7	1.3	12.628	B
4 - Access Rd	0	0	1007	526	0.000	0	0	0	0.0	0.0	0.000	A

08:30 - 08:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A350 South	1240	310	0	1508	0.822	1232	1219	983	5.7	6.9	18.335	C
2 - A350 W Cepen Way	611	153	386	893	0.684	605	614	846	2.7	2.9	15.366	C
3 - Unnamed Rd	377	94	605	731	0.516	378	374	386	1.3	1.6	12.302	B
4 - Access Rd	0	0	983	508	0.000	0	0	0	0.0	0.0	0.000	A

08:45 - 09:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A350 South	1222	306	0	1510	0.809	1222	1219	1026	6.9	5.9	16.734	C
2 - A350 W Cepen Way	636	159	384	898	0.709	639	627	838	2.9	2.5	15.075	C
3 - Unnamed Rd	387	97	639	703	0.550	387	390	384	1.6	1.4	13.096	B
4 - Access Rd	0	0	1026	533	0.000	0	0	0	0.0	0.0	0.000	A

Lane Results

Lane Level notation: Lane Level 1 is always closest to the junction.

Lanes: Main Results for each time segment

08:00 - 08:15

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A350 South	Entry	1	1	2	825	1045	0.790	832	817	0.0	4.4	17.098	C
			2	1, 3, 4	395	1045	0.378	396	376	0.0	0.7	6.484	A
		2	1	(1, 2, 3, 4)	1226			1220	1213	0.0	2.0	4.375	A
	Exit	1	1		993			993	985	0.0	0.0	0.000	A
2 - A350 W Cepen Way	Entry	1	1	3, 4	0	915	0.000	0	0	0.0	0.0	0.000	A
			2	1, 2	619	915	0.676	619	610	0.0	2.1	10.205	B
		2	1	(1, 2, 3, 4)	615			619	618	0.0	0.8	4.162	A
	Exit	1	1		832			832	817	0.0	0.0	0.000	A
3 - Unnamed Rd	Entry	1	1	1, 4	375	745	0.503	373	375	0.0	1.3	9.498	A
			2	2, 3	0	745	0.000	0	0	0.0	0.0	0.000	A
		2	1	(1, 2, 3, 4)	377			375	380	0.0	0.4	2.441	A
	Exit	1	1		396			396	376	0.0	0.0	0.000	A
4 - Access Rd	Entry	1	1	1, 2, 3, 4	0	531	0.000	0	0	0.0	0.0	0.000	A
	Exit	1	1		0			0	0	0.0	0.0	0.000	A

08:15 - 08:30

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A350 South	Entry	1	1	2	808	1045	0.774	802	822	4.4	3.9	17.006	C
			2	1, 3, 4	376	1045	0.359	377	389	0.7	0.5	6.744	A
		2	1	(1, 2, 3, 4)	1193			1183	1209	2.0	1.3	2.722	A
	Exit	1	1		1007			1007	1004	0.0	0.0	0.000	A
2 - A350 W Cepen Way	Entry	1	1	3, 4	0	920	0.000	0	0	0.0	0.0	0.000	A
			2	1, 2	625	920	0.679	626	623	2.1	1.8	10.673	B
		2	1	(1, 2, 3, 4)	621			625	622	0.8	0.9	5.402	A
	Exit	1	1		802			802	822	0.0	0.0	0.000	A
3 - Unnamed Rd	Entry	1	1	1, 4	379	743	0.511	380	381	1.3	1.0	9.661	A
			2	2, 3	0	743	0.000	0	0	0.0	0.0	0.000	A
		2	1	(1, 2, 3, 4)	380			379	380	0.4	0.3	2.959	A
	Exit	1	1		377			377	389	0.0	0.0	0.000	A
4 - Access Rd	Entry	1	1	1, 2, 3, 4	0	526	0.000	0	0	0.0	0.0	0.000	A
	Exit	1	1		0			0	0	0.0	0.0	0.000	A

08:30 - 08:45

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A350 South	Entry	1	1	2	848	1045	0.811	846	831	3.9	4.3	17.660	C
			2	1, 3, 4	385	1045	0.369	386	388	0.5	0.7	6.669	A
		2	1	(1, 2, 3, 4)	1240			1233	1222	1.3	1.9	4.235	A
	Exit	1	1		983			983	989	0.0	0.0	0.000	A
2 - A350 W Cepen Way	Entry	1	1	3, 4	0	917	0.000	0	0	0.0	0.0	0.000	A
			2	1, 2	605	917	0.659	605	614	1.8	1.9	10.346	B
		2	1	(1, 2, 3, 4)	611			605	614	0.9	1.0	5.001	A
	Exit	1	1		846			846	831	0.0	0.0	0.000	A
3 - Unnamed Rd	Entry	1	1	1, 4	378	748	0.505	378	374	1.0	1.1	9.528	A
			2	2, 3	0	748	0.000	0	0	0.0	0.0	0.000	A
		2	1	(1, 2, 3, 4)	377			378	375	0.3	0.4	2.764	A
	Exit	1	1		386			386	388	0.0	0.0	0.000	A
4 - Access Rd	Entry	1	1	1, 2, 3, 4	0	535	0.000	0	0	0.0	0.0	0.000	A
	Exit	1	1		0			0	0	0.0	0.0	0.000	A

08:45 - 09:00

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A350 South	Entry	1	1	2	840	1045	0.804	838	837	4.3	4.1	16.748	C
			2	1, 3, 4	384	1045	0.368	384	382	0.7	0.7	6.230	A
		2	1	(1, 2, 3, 4)	1222			1223	1218	1.9	1.0	3.446	A
	Exit	1	1		1026			1026	1017	0.0	0.0	0.000	A
2 - A350 W Cepen Way	Entry	1	1	3, 4	0	918	0.000	0	0	0.0	0.0	0.000	A
			2	1, 2	636	918	0.692	639	627	1.9	1.7	10.377	B
		2	1	(1, 2, 3, 4)	636			636	627	1.0	0.8	4.757	A
	Exit	1	1		838			838	837	0.0	0.0	0.000	A
3 - Unnamed Rd	Entry	1	1	1, 4	385	739	0.521	387	390	1.1	1.1	9.731	A
			2	2, 3	0	739	0.000	0	0	0.0	0.0	0.000	A
		2	1	(1, 2, 3, 4)	387			385	389	0.4	0.4	3.394	A
	Exit	1	1		384			384	382	0.0	0.0	0.000	A
4 - Access Rd	Entry	1	1	1, 2, 3, 4	0	518	0.000	0	0	0.0	0.0	0.000	A
	Exit	1	1		0			0	0	0.0	0.0	0.000	A

Lane movements: Main Results for each time segment

08:00 - 08:15

Arm	Side	Lane level	Lane	To Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Simulation max flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignal level servic
				1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	825	206	1045	1045	0.790	832	817	0.0	4.4	17.098	C
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
1 - A350 South	Entry	1	2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	395	99	1045	1045	0.378	396	376	0.0	0.7	6.484	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	829	207	-	-	-	825	834	0.0	1.4	4.349	A
				3	397	99	-	-	-	395	379	0.0	0.6	4.431	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
2 - A350 W Cepen Way	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	619	155	1030	914	0.677	619	610	0.0	2.1	10.205	B
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	615	154	-	-	-	619	618	0.0	0.8	4.162	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
3 - Unnamed Rd	Entry	1	1	1	375	94	914	744	0.504	373	375	0.0	1.3	9.498	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	377	94	-	-	-	375	380	0.0	0.4	2.441	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
4 - Access Rd	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A

08:15 - 08:30

Arm	Side	Lane level	Lane	To Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Simulation max flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignal level servic
1 - A350 South	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	808	202	1045	1045	0.774	802	822	4.4	3.9	17.006	C
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	376	94	1045	1045	0.359	377	389	0.7	0.5	6.744	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	818	204	-	-	-	808	821	1.4	1.1	2.801	A
				3	376	94	-	-	-	376	388	0.6	0.2	2.557	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
2 - A350 W Cepen Way	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	625	156	1030	920	0.679	626	623	2.1	1.8	10.673	B
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	621	155	-	-	-	625	622	0.8	0.9	5.402	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
3 - Unnamed Rd	Entry	1	1	1	379	95	914	744	0.510	380	381	1.3	1.0	9.661	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	380	95	-	-	-	379	380	0.4	0.3	2.959	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
4 - Access Rd	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A

08:30 - 08:45

Arm	Side	Lane level	Lane	To Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Simulation max flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignal level servic
1 - A350 South	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	848	212	1045	1045	0.811	846	831	3.9	4.3	17.660	C
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	385	96	1045	1045	0.369	386	388	0.5	0.7	6.669	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	853	213	-	-	-	848	833	1.1	1.4	4.315	A
				3	387	97	-	-	-	385	389	0.2	0.5	4.069	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
2 - A350 W Cepen Way	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	605	151	1030	918	0.659	605	614	1.8	1.9	10.346	B
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	611	153	-	-	-	605	614	0.9	1.0	5.001	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
3 - Unnamed Rd	Entry	1	1	1	378	94	914	748	0.505	378	374	1.0	1.1	9.528	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	377	94	-	-	-	378	375	0.3	0.4	2.764	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
4 - Access Rd	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A

08:45 - 09:00

Arm	Side	Lane level	Lane	To Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Simulation max flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignal level servic
1 - A350 South	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	840	210	1045	1045	0.804	838	837	4.3	4.1	16.748	C
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	384	96	1045	1045	0.368	384	382	0.7	0.7	6.230	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	840	210	-	-	-	840	836	1.4	0.7	3.567	A
				3	383	96	-	-	-	384	382	0.5	0.3	3.189	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
2 - A350 W Cepen Way	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	636	159	1030	918	0.692	639	627	1.9	1.7	10.377	B
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	636	159	-	-	-	636	627	1.0	0.8	4.757	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
3 - Unnamed Rd	Entry	1	1	1	385	96	914	740	0.521	387	390	1.1	1.1	9.731	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	387	97	-	-	-	385	389	0.4	0.4	3.394	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
4 - Access Rd	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A

Year 2026 Baseline, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	1 - A350 South - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Geometry	2 - A350 W Cepen Way - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Info	Simulation	A1 - [Lane Simulation]	This run uses Simulation mode. For detailed information on this mode, please see the User Guide.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	Lackham Rd	Standard Roundabout		1, 2, 3, 4	11.73	B

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	11.73	B

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)	Run automatically
D6	Year 2026 Baseline	PM	FLAT	17:00	18:00	60	15	✓

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1 - A350 South		FLAT	✓	1077	100.000
2 - A350 W Cepen Way		FLAT	✓	641	100.000
3 - Unnamed Rd		FLAT	✓	366	100.000
4 - Access Rd		FLAT	✓	0	100.000

Origin-Destination Data

Demand (PCU/hr)

		To			
		1 - A350 South	2 - A350 W Cepen Way	3 - Unnamed Rd	4 - Access Rd
From	1 - A350 South	0	661	416	0
	2 - A350 W Cepen Way	641	0	0	0
	3 - Unnamed Rd	366	0	0	0
	4 - Access Rd	0	0	0	0

Vehicle Mix

HV data entry mode	PCU Factor for a HV (PCU)
HV Percentages	2.00

Junction	PCU factor for a cyclist	PCU factor for a cyclist in controlling flow
1	0.20	0.80

Heavy Vehicle %

		To			
		1 - A350 South	2 - A350 W Cepen Way	3 - Unnamed Rd	4 - Access Rd
From	1 - A350 South	0	15	8	0
	2 - A350 W Cepen Way	10	0	0	0
	3 - Unnamed Rd	11	0	0	0
	4 - Access Rd	0	0	0	0

Cyclist %

		To			
		1 - A350 South	2 - A350 W Cepen Way	3 - Unnamed Rd	4 - Access Rd
From	1 - A350 South	0	0	0	0
	2 - A350 W Cepen Way	0	0	0	0
	3 - Unnamed Rd	0	0	0	0
	4 - Access Rd	0	0	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
1 - A350 South	0.65	9.37	3.1	A	1075	1075
2 - A350 W Cepen Way	0.71	15.89	3.4	C	637	637
3 - Unnamed Rd	0.52	11.44	1.3	B	374	374
4 - Access Rd	0.00	0.00	0.0	A	0	0

Main Results for each time segment

17:00 - 17:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A350 South	1084	271	0	1675	0.647	1081	1056	1029	0.0	3.0	9.335	A
2 - A350 W Cepen Way	638	160	414	894	0.714	637	625	667	0.0	2.6	13.671	B
3 - Unnamed Rd	386	96	637	737	0.524	392	370	414	0.0	0.8	10.637	B
4 - Access Rd	0	0	1029	538	0.000	0	0	0	0.0	0.0	0.000	A

17:15 - 17:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A350 South	1079	270	0	1675	0.644	1082	1080	1007	3.0	2.6	9.371	A
2 - A350 W Cepen Way	632	158	425	911	0.695	629	639	657	2.6	2.6	14.405	B
3 - Unnamed Rd	372	93	629	756	0.493	378	369	425	0.8	0.9	10.949	B
4 - Access Rd	0	0	1007	540	0.000	0	0	0	0.0	0.0	0.000	A

17:30 - 17:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A350 South	1059	265	0	1682	0.630	1060	1068	1006	2.6	2.5	9.069	A
2 - A350 W Cepen Way	641	160	414	914	0.701	632	632	646	2.6	3.4	15.885	C
3 - Unnamed Rd	376	94	632	734	0.512	374	370	414	0.9	1.0	11.444	B
4 - Access Rd	0	0	1006	531	0.000	0	0	0	0.0	0.0	0.000	A

17:45 - 18:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A350 South	1077	269	0	1680	0.641	1075	1077	990	2.5	3.1	9.032	A
2 - A350 W Cepen Way	637	159	405	935	0.681	633	647	670	3.4	3.0	15.216	C
3 - Unnamed Rd	361	90	633	742	0.486	357	360	405	1.0	1.3	11.081	B
4 - Access Rd	0	0	990	524	0.000	0	0	0	0.0	0.0	0.000	A

Lane Results

Lane Level notation: Lane Level 1 is always closest to the junction.

Lanes: Main Results for each time segment

17:00 - 17:15

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A350 South	Entry	1	1	2	668	1045	0.639	667	648	0.0	2.2	10.820	B
			2	1, 3, 4	416	1045	0.398	414	407	0.0	0.7	6.299	A
		2	1	(1, 2, 3, 4)	1084			1083	1067	0.0	0.1	0.310	A
	Exit	1	1		1029			1029	995	0.0	0.0	0.000	A
2 - A350 W Cepen Way	Entry	1	1	3, 4	0	909	0.000	0	0	0.0	0.0	0.000	A
			2	1, 2	639	909	0.703	637	625	0.0	1.9	10.092	B
		2	1	(1, 2, 3, 4)	638			639	633	0.0	0.7	3.551	A
	Exit	1	1		667			667	648	0.0	0.0	0.000	A
3 - Unnamed Rd	Entry	1	1	1, 4	388	740	0.524	392	370	0.0	0.7	8.752	A
			2	2, 3	0	740	0.000	0	0	0.0	0.0	0.000	A
		2	1	(1, 2, 3, 4)	386			388	373	0.0	0.1	1.883	A
	Exit	1	1		414			414	407	0.0	0.0	0.000	A
4 - Access Rd	Entry	1	1	1, 2, 3, 4	0	517	0.000	0	0	0.0	0.0	0.000	A
	Exit	1	1		0			0	0	0.0	0.0	0.000	A

17:15 - 17:30

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A350 South	Entry	1	1	2	656	1045	0.628	657	656	2.2	2.0	10.816	B
			2	1, 3, 4	424	1045	0.405	425	425	0.7	0.6	6.478	A
		2	1	(1, 2, 3, 4)	1079			1080	1079	0.1	0.0	0.326	A
	Exit	1	1		1007			1007	1008	0.0	0.0	0.000	A
2 - A350 W Cepen Way	Entry	1	1	3, 4	0	906	0.000	0	0	0.0	0.0	0.000	A
			2	1, 2	632	906	0.698	629	639	1.9	2.0	10.548	B
		2	1	(1, 2, 3, 4)	632			632	639	0.7	0.6	3.870	A
	Exit	1	1		657			657	656	0.0	0.0	0.000	A
3 - Unnamed Rd	Entry	1	1	1, 4	373	742	0.502	378	369	0.7	0.7	8.792	A
			2	2, 3	0	742	0.000	0	0	0.0	0.0	0.000	A
		2	1	(1, 2, 3, 4)	372			373	369	0.1	0.2	2.152	A
	Exit	1	1		425			425	425	0.0	0.0	0.000	A
4 - Access Rd	Entry	1	1	1, 2, 3, 4	0	526	0.000	0	0	0.0	0.0	0.000	A
	Exit	1	1		0			0	0	0.0	0.0	0.000	A

17:30 - 17:45

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A350 South	Entry	1	1	2	646	1045	0.618	646	655	2.0	1.8	10.397	B
			2	1, 3, 4	413	1045	0.396	414	413	0.6	0.7	6.447	A
		2	1	(1, 2, 3, 4)	1059			1059	1067	0.0	0.0	0.258	A
	Exit	1	1		1006			1006	1002	0.0	0.0	0.000	A
2 - A350 W Cepen Way	Entry	1	1	3, 4	0	909	0.000	0	0	0.0	0.0	0.000	A
			2	1, 2	636	909	0.700	632	632	2.0	2.1	10.853	B
		2	1	(1, 2, 3, 4)	641			636	633	0.6	1.4	5.002	A
	Exit	1	1		646			646	655	0.0	0.0	0.000	A
3 - Unnamed Rd	Entry	1	1	1, 4	376	741	0.507	374	370	0.7	0.9	9.209	A
			2	2, 3	0	741	0.000	0	0	0.0	0.0	0.000	A
		2	1	(1, 2, 3, 4)	376			376	370	0.2	0.1	2.233	A
	Exit	1	1		414			414	413	0.0	0.0	0.000	A
4 - Access Rd	Entry	1	1	1, 2, 3, 4	0	526	0.000	0	0	0.0	0.0	0.000	A
	Exit	1	1		0			0	0	0.0	0.0	0.000	A

17:45 - 18:00

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - A350 South	Entry	1	1	2	670	1045	0.642	670	662	1.8	2.2	10.574	B
			2	1, 3, 4	405	1045	0.387	405	415	0.7	0.8	6.233	A
		2	1	(1, 2, 3, 4)	1077			1075	1079	0.0	0.2	0.203	A
	Exit	1	1		990			990	1006	0.0	0.0	0.000	A
2 - A350 W Cepen Way	Entry	1	1	3, 4	0	912	0.000	0	0	0.0	0.0	0.000	A
			2	1, 2	635	912	0.696	633	647	2.1	2.0	10.577	B
		2	1	(1, 2, 3, 4)	637			635	646	1.4	1.0	4.709	A
	Exit	1	1		670			670	662	0.0	0.0	0.000	A
3 - Unnamed Rd	Entry	1	1	1, 4	359	741	0.485	357	360	0.9	1.0	8.937	A
			2	2, 3	0	741	0.000	0	0	0.0	0.0	0.000	A
		2	1	(1, 2, 3, 4)	361			359	360	0.1	0.3	2.170	A
	Exit	1	1		405			405	415	0.0	0.0	0.000	A
4 - Access Rd	Entry	1	1	1, 2, 3, 4	0	532	0.000	0	0	0.0	0.0	0.000	A
	Exit	1	1		0			0	0	0.0	0.0	0.000	A

Lane movements: Main Results for each time segment

17:00 - 17:15

Arm	Side	Lane level	Lane	To Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Simulation max flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignal level servic
1 - A350 South	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	668	167	1045	1045	0.639	667	648	0.0	2.2	10.820	B
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	416	104	1045	1045	0.398	414	407	0.0	0.7	6.299	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	668	167	-	-	-	668	657	0.0	0.1	0.331	A
				3	415	104	-	-	-	416	410	0.0	0.0	0.280	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
2 - A350 W Cepen Way	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	639	160	1030	909	0.703	637	625	0.0	1.9	10.092	B
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	638	160	-	-	-	639	633	0.0	0.7	3.551	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
3 - Unnamed Rd	Entry	1	1	1	388	97	914	740	0.525	392	370	0.0	0.7	8.752	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	386	96	-	-	-	388	373	0.0	0.1	1.883	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
4 - Access Rd	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A

17:15 - 17:30

Arm	Side	Lane level	Lane	To Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Simulation max flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignal level servic
1 - A350 South	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	656	164	1045	1045	0.628	657	656	2.2	2.0	10.816	B
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	424	106	1045	1045	0.405	425	425	0.7	0.6	6.478	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	656	164	-	-	-	656	655	0.1	0.0	0.352	A
				3	423	106	-	-	-	424	424	0.0	0.0	0.288	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
2 - A350 W Cepen Way	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	632	158	1030	906	0.698	629	639	1.9	2.0	10.548	B
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	632	158	-	-	-	632	639	0.7	0.6	3.870	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
3 - Unnamed Rd	Entry	1	1	1	373	93	914	741	0.503	378	369	0.7	0.7	8.792	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	372	93	-	-	-	373	369	0.1	0.2	2.152	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
4 - Access Rd	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A

17:30 - 17:45

Arm	Side	Lane level	Lane	To Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Simulation max flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignal level servic
1 - A350 South	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	646	161	1045	1045	0.618	646	655	2.0	1.8	10.397	B
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	413	103	1045	1045	0.396	414	413	0.6	0.7	6.447	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	646	162	-	-	-	646	654	0.0	0.0	0.284	A
				3	414	103	-	-	-	413	413	0.0	0.0	0.219	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
2 - A350 W Cepen Way	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	636	159	1030	909	0.700	632	632	2.0	2.1	10.853	B
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	641	160	-	-	-	636	633	0.6	1.4	5.002	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
3 - Unnamed Rd	Entry	1	1	1	376	94	914	741	0.507	374	370	0.7	0.9	9.209	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	376	94	-	-	-	376	370	0.2	0.1	2.233	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
4 - Access Rd	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A

17:45 - 18:00

Arm	Side	Lane level	Lane	To Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Simulation max flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignal level servic
1 - A350 South	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	670	168	1045	1045	0.642	670	662	1.8	2.2	10.574	B
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	405	101	1045	1045	0.387	405	415	0.7	0.8	6.233	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	671	168	-	-	-	670	664	0.0	0.1	0.220	A
				3	405	101	-	-	-	405	415	0.0	0.1	0.177	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
2 - A350 W Cepen Way	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	635	159	1030	912	0.696	633	647	2.1	2.0	10.577	B
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	637	159	-	-	-	635	646	1.4	1.0	4.709	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
3 - Unnamed Rd	Entry	1	1	1	359	90	914	741	0.485	357	360	0.9	1.0	8.937	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
		2	1	1	361	90	-	-	-	359	360	0.1	0.3	2.170	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
4 - Access Rd	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A

Junctions 10

PICADY 10 - Priority Intersection Module

Version: 10.1.1.1905
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Filename: Site Access.j10
Path: Y:\PROJECT FOLDER\B14133 Chippenham\Calculations\Transport\PICADY\March 2026
Report generation date: 23/03/2026 17:22:12

»2031 + Dev, AM
»2031 + Dev, PM

Summary of junction performance

	AM					PM				
	Set ID	Queue (PCU)	Delay (s)	RFC	Junction Delay (s)	Set ID	Queue (PCU)	Delay (s)	RFC	Junction Delay (s)
	2031 + Dev									
Stream B-AC	D1	0.3	9.75	0.24	1.30	D2	0.1	8.41	0.10	0.92
Stream C-B		0.0	6.80	0.05			0.1	7.39	0.13	

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.

File summary

File Description

Title	Proposed Site Access
Location	Chippenham
Site number	
Date	01/03/2026
Version	A
Status	Draft
Identifier	
Client	Hallam
Jobnumber	B14133
Enumerator	Ridge
Description	

Units

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

Analysis Options

Vehicle length (m)	Calculate Queue Percentiles	Calculate detailed queueing delay	Show lane queues in feet / metres	Show all PICADY stream intercepts	Calculate residual capacity	RFC Threshold	Average Delay threshold (s)	Queue threshold (PCU)	Use simulation for HCM roundabouts	Use iterations for HCM roundabouts
5.75						0.85	36.00	20.00		

Demand Set Summary

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time period length (min)	Time segment length (min)	Run automatically
D1	2031 + Dev	AM	FLAT	07:45	09:15	90	15	✓
D2	2031 + Dev	PM	FLAT	16:45	18:15	90	15	✓

Analysis Set Details

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

2031 + Dev, AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Arm A Direction	Arm B Direction	Arm C Direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way	Two-way	Two-way		1.30	A

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	1.30	A

Arms

Arms

Arm	Name	Description	Arm type
A	A350 (N)		Major
B	Site Access		Minor
C	A350 (S)		Major

Major Arm Geometry

Arm	Width of carriageway (m)	Has kerbed central reserve	Has right-turn storage	Width for right-turn storage (m)	Visibility for right turn (m)	Blocks?	Blocking queue (PCU)
C	6.30		✓	2.36	144.0		-

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

Minor Arm Geometry

Arm	Minor arm type	Lane width (m)	Visibility to left (m)	Visibility to right (m)
B	One lane	3.80	23	25

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	537	0.098	0.247	0.156	0.353
B-C	691	0.103	0.261	-	-
C-B	669	0.256	0.256	-	-

The slopes and intercepts shown above include custom intercept adjustments only.

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)	Run automatically
D1	2031 + Dev	AM	FLAT	07:45	09:15	90	15	✓

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		FLAT	✓	444	100.000
B		FLAT	✓	116	100.000
C		FLAT	✓	443	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		A	B	C
From	A	0	11	433
	B	35	0	81
	C	417	26	0

Vehicle Mix

HV data entry mode	PCU Factor for a HV (PCU)
HV Percentages	2.00

Heavy Vehicle %

		To		
		A	B	C
From	A	0	0	17
	B	0	0	0
	C	12	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
B-AC	0.24	9.75	0.3	A	116	174
C-A					417	626
C-B	0.05	6.80	0.0	A	26	39
A-B					11	17
A-C					433	650

Main Results for each time segment

07:45 - 08:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	116	29	485	0.239	115	0.0	0.3	9.690	A
C-A	417	104			417				
C-B	26	7	555	0.047	26	0.0	0.0	6.798	A
A-B	11	3			11				
A-C	433	108			433				

08:00 - 08:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	116	29	485	0.239	116	0.3	0.3	9.754	A
C-A	417	104			417				
C-B	26	7	555	0.047	26	0.0	0.0	6.801	A
A-B	11	3			11				
A-C	433	108			433				

08:15 - 08:30

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	116	29	485	0.239	116	0.3	0.3	9.754	A
C-A	417	104			417				
C-B	26	7	555	0.047	26	0.0	0.0	6.801	A
A-B	11	3			11				
A-C	433	108			433				

08:30 - 08:45

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	116	29	485	0.239	116	0.3	0.3	9.754	A
C-A	417	104			417				
C-B	26	7	555	0.047	26	0.0	0.0	6.801	A
A-B	11	3			11				
A-C	433	108			433				

08:45 - 09:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	116	29	485	0.239	116	0.3	0.3	9.754	A
C-A	417	104			417				
C-B	26	7	555	0.047	26	0.0	0.0	6.801	A
A-B	11	3			11				
A-C	433	108			433				

09:00 - 09:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	116	29	485	0.239	116	0.3	0.3	9.754	A
C-A	417	104			417				
C-B	26	7	555	0.047	26	0.0	0.0	6.801	A
A-B	11	3			11				
A-C	433	108			433				

2031 + Dev, PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Arm A Direction	Arm B Direction	Arm C Direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way	Two-way	Two-way		0.92	A

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	0.92	A

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)	Run automatically
D2	2031 + Dev	PM	FLAT	16:45	18:15	90	15	✓

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		FLAT	✓	432	100.000
B		FLAT	✓	50	100.000
C		FLAT	✓	540	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		A	B	C
From	A	0	30	402
	B	15	0	35
	C	469	71	0

Vehicle Mix

HV data entry mode	PCU Factor for a HV (PCU)
HV Percentages	2.00

Heavy Vehicle %

		To		
		A	B	C
From	A	0	0	12
	B	0	0	0
	C	7	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
B-AC	0.10	8.41	0.1	A	50	75
C-A					469	704
C-B	0.13	7.39	0.1	A	71	107
A-B					30	45
A-C					402	603

Main Results for each time segment

16:45 - 17:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	50	13	478	0.105	50	0.0	0.1	8.396	A
C-A	469	117			469				
C-B	71	18	558	0.127	70	0.0	0.1	7.373	A
A-B	30	8			30				
A-C	402	101			402				

17:00 - 17:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	50	13	478	0.105	50	0.1	0.1	8.415	A
C-A	469	117			469				
C-B	71	18	558	0.127	71	0.1	0.1	7.386	A
A-B	30	8			30				
A-C	402	101			402				

17:15 - 17:30

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	50	13	478	0.105	50	0.1	0.1	8.415	A
C-A	469	117			469				
C-B	71	18	558	0.127	71	0.1	0.1	7.386	A
A-B	30	8			30				
A-C	402	101			402				

17:30 - 17:45

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	50	13	478	0.105	50	0.1	0.1	8.415	A
C-A	469	117			469				
C-B	71	18	558	0.127	71	0.1	0.1	7.386	A
A-B	30	8			30				
A-C	402	101			402				

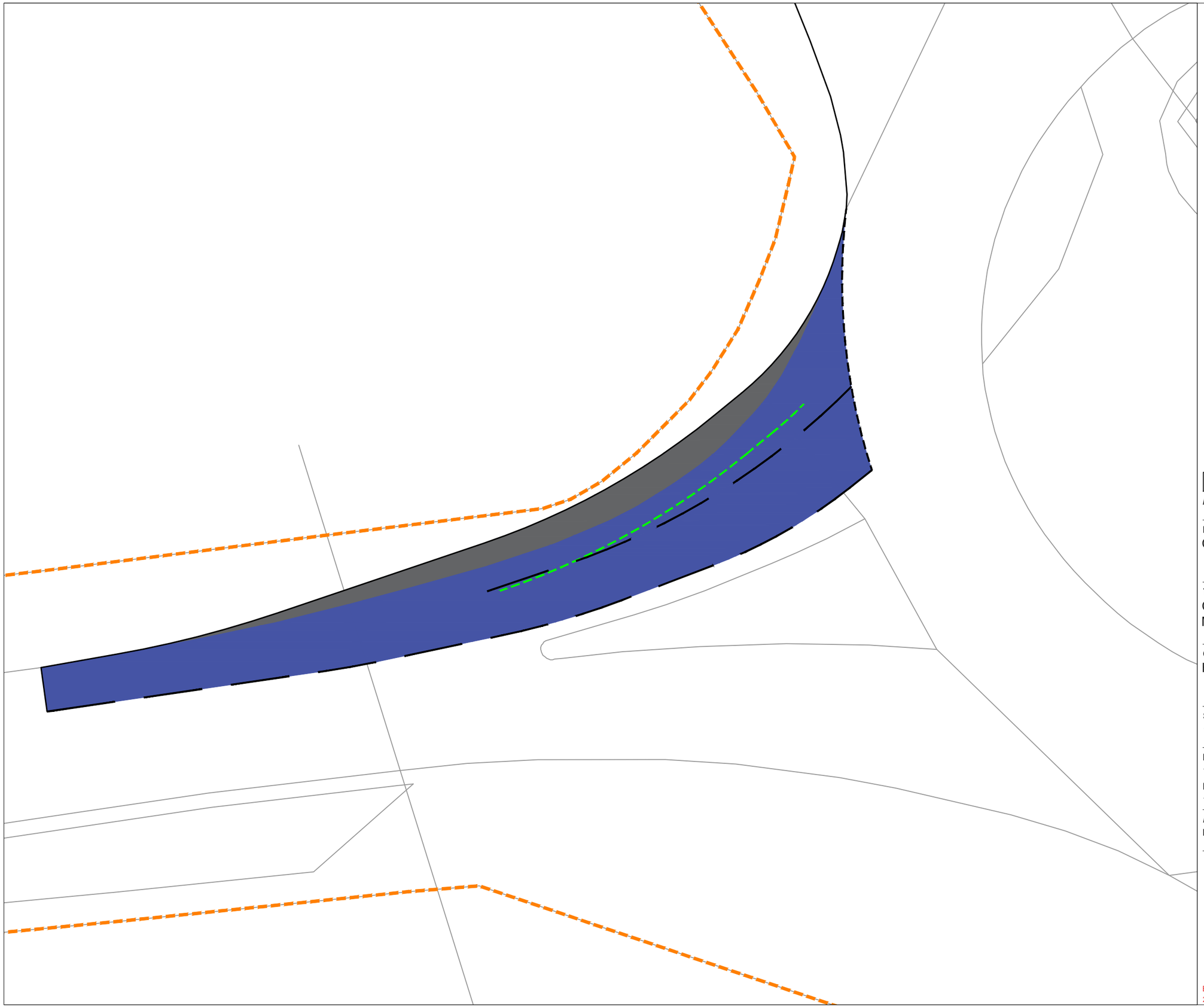
17:45 - 18:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	50	13	478	0.105	50	0.1	0.1	8.415	A
C-A	469	117			469				
C-B	71	18	558	0.127	71	0.1	0.1	7.386	A
A-B	30	8			30				
A-C	402	101			402				

18:00 - 18:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	50	13	478	0.105	50	0.1	0.1	8.415	A
C-A	469	117			469				
C-B	71	18	558	0.127	71	0.1	0.1	7.386	A
A-B	30	8			30				
A-C	402	101			402				

APPENDIX J – CHEQUERS ROUNDABOUT MITIGATION SCHEME PRELIMINARY DESIGN



KEY

- Highway Boundary
- New Flare Length
- Proposed Carriageway
- Existing Carriageway

Rev	Date	Description	By	Apvd
P1	19.12.22	Preliminary issue	MK	MD

PROJECT:
CHIPPENHAM

TITLE:
CHEQUERS ROUNDABOUT
MITIGATION SCHEME

CLIENT:
HALLAM LAND MANAGEMENT

SCALE@A3:
1:250

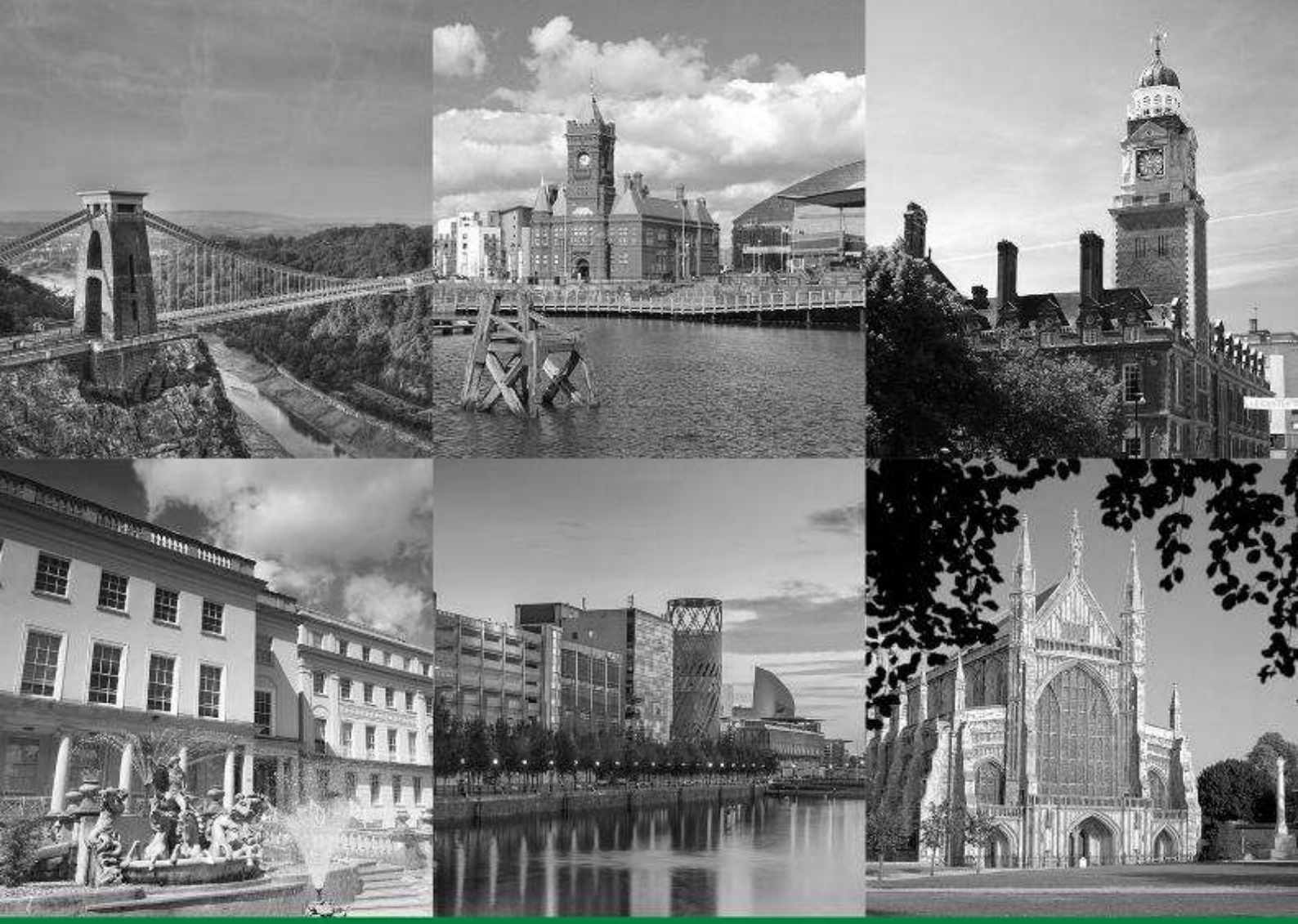
PROJECT REF:
14133

DRAWING No:
14

REV:
P1

Revision Referencing
P = Preliminary A = Approval T = Tender C = Construction

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