



LAND AT NEW FARM, MELKSHAM

Transport Assessment

November 2025

Bloor Homes South West



**RESIDENTIAL DEVELOPMENT
LAND AT NEW FARM
MELKSHAM**

TRANSPORT ASSESSMENT

CONTROLLED DOCUMENT

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RESIDENTIAL DEVELOPMENT LAND AT NEW FARM MELKSHAM

TRANSPORT ASSESSMENT

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1. INTRODUCTION

- 1.1 This Transport Assessment (TA) has been prepared by Paul Basham Associates on behalf of Bloor Homes South West to support an outline planning application for a residential development; public open space including formal play space and allotments; sustainable drainage systems and associated infrastructure; a 100 place nursery and access points for pedestrians and cyclists on Land at New Farm, Melksham. All matters are reserved except for access. Vehicle access would be provided via an improved Eastern Way/A3102 roundabout junction and an emergency access onto the A3102.
- 1.2 The site is located to the immediate north of Sandridge Common Road, A3102, and approximately 1.8km east of the approximate town centre of Melksham. The site location has been identified within **Figure 1**, whilst the site layout is provided at **Appendix A**.

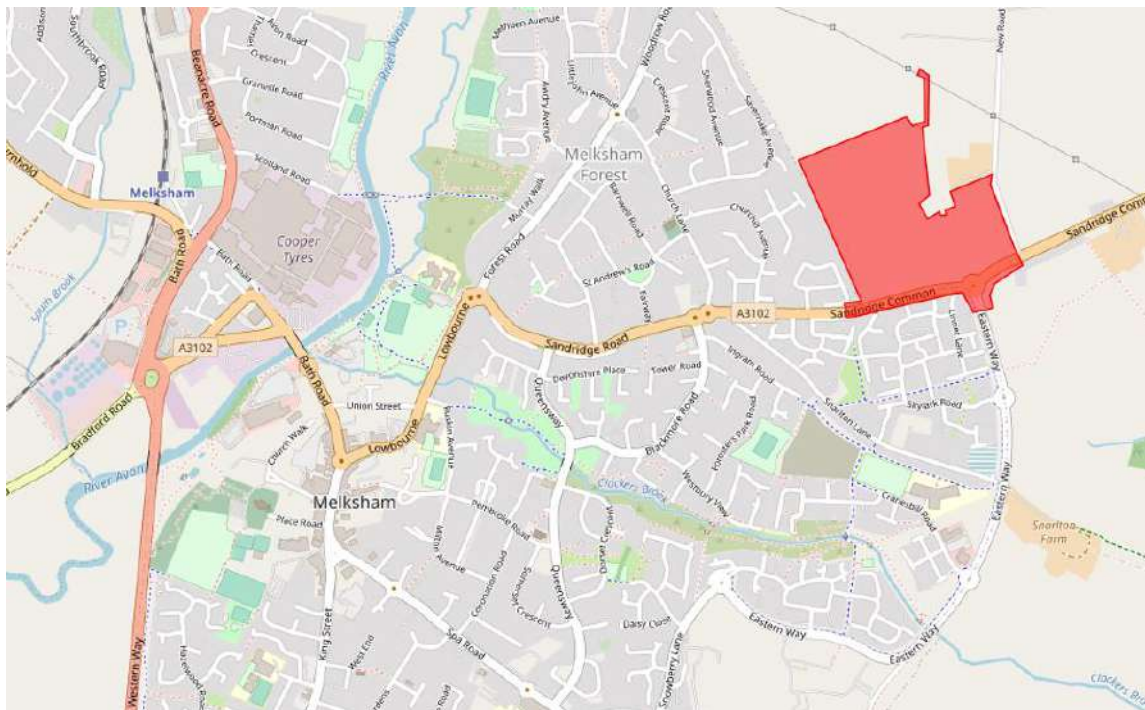


Figure 1: Site Location

- 1.3 The site is located in Melksham and therefore, the Highway Authority and Local Planning Authority is Wiltshire Council (WC) as it is a unitary authority.
- 1.4 Paul Basham Associates have prepared a Travel Plan (TP) which should be read in conjunction with this report which aims to reduce the impact of car travel by outlining various measures to promote sustainable travel options.

Site History and Relevant Planning Applications

- 1.5 The site has been subject to a full planning application (submitted under reference: PL/2024/13045) for 295 homes and an area safeguarded for a 100 space Children's Nursery. At the time of writing, this is a live application. WC's latest highways comments relate to internal layout matters, and therefore it is understood that the other highway principles are agreed, i.e. those that would fall to be considered as part of an outline application with detail of access – including means of access, highway impact and sustainable travel improvements.
- 1.6 There have been additional applications within the vicinity of the site including to the north (Land South of Woodrow Road) which was withdrawn, an application to the south (Land at Blackmore Farm) which has received consent and an application to the west (Land North of Sandridge Common) which secured planning and is now fully constructed. These applications are detailed below.

PL/2023/01949 – Land at Blackmore Farm, Sandridge Common

- 1.7 In 2023, an application on Blackmore Farm for 'Outline permission with some matters reserved for demolition of agricultural outbuildings and development of up to 650 dwellings; land for primary school; land for mixed-use hub (class E / class F); open space; provision of access infrastructure from Sandridge Common (A3102); and provision of all associated infrastructure necessary to facilitate development of the site (access only)' was submitted to Wiltshire Council and was refused in March 2024, albeit Wiltshire Council Highways were happy with the assessment undertaken and offered no objection to the proposals.
- 1.8 As part of this application, a Transport Assessment was submitted which contains information including 2022 traffic surveys of the A3102/Eastern Way junction and the scope of assessment which has been considered in preparing this TA.
- 1.9 In December 2023, a revised application was submitted on the site for 500 dwellings (under reference: PL/2023/11188) and therefore associated committed development traffic flows have been applied at 500 dwellings given this is the current position. This application received consent in May 2025 and is referenced throughout this report where necessary.
- 1.10 This Transport Assessment will therefore review national and local policy, the existing conditions, Personal Injury Accident (PIA) data, development proposals including car and cycle parking provision, trip generation and distribution outputs and the subsequent junction capacity modelling before drawing conclusions.

2. PLANNING POLICY

2.1 The proposed development and supplementary reports have been prepared in accordance with national, regional and local policy, including:

- National Planning Policy Framework (NPPF)
- Wiltshire Core Strategy (2015);
- Wiltshire Local Transport Plan (2011);
- Wiltshire Local Plan Review (2023);
- Melksham Neighbourhood Plan (2020); and
- Active Travel England Toolkit.

National Planning Policy Framework (NPPF)

2.2 The NPPF (December 2024) acts as the central guidance for development planning. Designed to make the planning system less complex and more accessible, the NPPF gives greater responsibility to Local Authorities, a ‘presumption in favour of sustainable development’ and encourages local planning authorities to positively seek opportunities to meet the development needs of their area. As defined in NPPF Annex 2: Glossary, a Transport Assessment is ‘*A comprehensive and systematic process that considers and sets out transport issues relating to a proposed development, in the context of the vision for the scheme. It identifies measures required to support alternatives to the car such as walking, cycling and public transport, and to promote accessibility and safety, together with measures that will be needed to deal with the anticipated transport impacts of the development*’. The following NPPF paragraphs are relevant to the proposed development:

Transport issues should be considered from the earliest stages of plan-making and development proposals, using a vision-led approach to identify transport solutions that deliver well-designed, sustainable and popular places. This should involve:

- a) making transport considerations an important part of early engagement with local communities;
- b) ensuring patterns of movement, streets, parking and other transport considerations are integral to the design of schemes, and contribute to making high quality places;
- c) understanding and addressing the potential impacts of development on transport networks;
- d) realising opportunities from existing or proposed transport infrastructure, and changing transport technology and usage – for example in relation to the scale, location or density of development that can be accommodated;
- e) identifying and pursuing opportunities to promote walking, cycling and public transport use; and
- f) identifying, assessing and taking into account the environmental impacts of traffic and transport infrastructure – including appropriate opportunities for avoiding and mitigating any adverse effects, and for net environmental gains.

(NPPF Para.109)

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

(NPPF Para.110)

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 Code⁴⁸; 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.	(NPPF, Para. 115)
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.	(NPPF, Para. 116)
Within this context, applications for development should: a) give priority first to pedestrian and cycle movements, both within the scheme and with neighbouring areas; and second – so far as possible – to facilitating access to high quality public transport, with layouts that maximise the catchment area for bus or other public transport services, and appropriate facilities that encourage public transport use; b) address the needs of people with disabilities and reduced mobility in relation to all modes of transport; c) create places that are safe, secure and attractive – which minimise the scope for conflicts between pedestrians, cyclists and vehicles, avoid unnecessary street clutter, and respond to local character and design standards; d) allow for the efficient delivery of goods, and access by service and emergency vehicles; and e) be designed to enable charging of plug-in and other ultra-low emission vehicles in safe, accessible and convenient locations.	(NPPF, Para. 117)
All developments that will generate significant amounts of movement should be required to provide a travel plan, and the application should be supported by a vision-led transport statement or transport assessment so that the likely impacts of the proposal can be assessed and monitored.	(NPPF, Para. 118)

- 2.3 It should be noted that the NPPF had a minor update in February 2025 to resolve a cross-referencing point. This did not constitute a change to the policy and the NPPF continues to be dated December 2024.

Wiltshire Core Strategy (2015)

- 2.4 The Wiltshire Core Strategy sets out to create stronger, more resilient communities, and to contribute to the achievement of sustainable development. In order to do so, the document presents a vision for Wiltshire, this vision has been summarised below.

‘By 2026, Wiltshire will have stronger, more resilient communities based on a sustainable pattern of development...

Employment, housing and other development will have been provided in sustainable locations in response to local needs as well as the changing climate and incorporating exceptional standards of design...

Partnership working with communities will have helped plan effectively for local areas and allow communities to receive the benefit of managed growth, where appropriate’.

- 2.5 In order to achieve this vision, the document produces strategies develop to address the challenges for this region. The Strategies include the following:

- Delivering a thriving economy;

Addressing climate change;

- Providing everyone with access to a decent, affordable home;

Helping to build resilient communities;

Protecting and enhancing the natural, historic and built environment; and

Ensuring that adequate infrastructure is in place to support our communities.

- 2.6 The site-specific and highways related strategies mentioned above have been summarised within this report:

Strategic Objective 2: Addressing Climate Change

- 2.7 Climate change is possibly the greatest long-term challenge facing the world today. Tackling climate change is therefore a key Government priority for the planning system. Local authorities are uniquely placed to act on climate change and the planning system can help by contributing to delivering the most sustainable development and shaping communities that are resilient to the unavoidable consequences of a changing climate:

- A sustainable pattern of development, including improvement to the self-containment levels of the main settlements and a reduction in the need to travel, will have contributed towards meeting climate change obligations.
- The supply of energy and heat from renewable sources will have contributed towards meeting national targets and helped to address fuel poverty.
- New development will have incorporated sustainable building practices and where possible will have contributed to improving the existing building stock.
- High energy efficiency will have been incorporated into new buildings and development. New developments will have incorporated appropriate adaptation and mitigation for climate change.
- New developments will be supported by sustainable waste management.

Strategic Objective 3: Providing everyone with access to a decent, affordable home

- 2.8 This strategy makes provision for at least 42,000 new homes in Wiltshire in the plan period from 2006-2026. It sets out a plan for an appropriate mix of types, sizes and tenures, particularly to address affordable housing needs, and will ensure a continuous supply of housing over the plan period that is aligned to job growth and the delivery of infrastructure:

- New homes will have been delivered in the most sustainable locations and will have been designed to respect the local character.

- More modest growth, proportionate to the size of the settlement, will have been delivered in smaller settlements through site allocation development plan documents, community-led planning policy documents. The benefits from the development of new homes will have been successfully captured for local communities.
- Development will have avoided encroachment on the Western Wiltshire Green Belt and the separate identity of the outlying villages to the west of Swindon protected.
- The flexible approach will have allowed the council, for example, through the preparation of the Site Allocations DPD and local communities preparing neighbourhood plans, to respond positively to opportunities without being inhibited by an overly prescriptive rigid approach which might otherwise prevent sustainable development proposals that can contribute to delivering the strategic objectives of the plan.
- The strategy will have made significant progress towards addressing the shortfall in affordable homes across Wiltshire through ensuring all new schemes of five or more houses deliver appropriate on-site affordable housing provision.
- Land will have been used efficiently and opportunities for all development to below-carbon or zero carbon will have been optimised.
- A range of housing types and sizes will have been provided in order to help meet local needs for different groups of the population in a sustainable manner, including many new homes meeting the needs of an ageing population thereby allowing people to live for longer within their own communities.
- New sites will have been provided for gypsies and travellers.
- Changes in the accommodation of military personnel will have enabled better integration with the wider community.

Strategic Objective 6: To ensure that infrastructure is in place to support communities.

- 2.9 The anticipated level of growth within Wiltshire will increase demand on local infrastructure services and facilities. The strategy will need to ensure that infrastructure requirements are appropriately planned, secured and implemented to ensure the timely delivery of development proposals. Social and physical infrastructure (e.g. transport improvements) can positively affect the environment, the economy and social well-being. The strategy will need to ensure that strategic and local transport needs are managed in a sustainable manner. The anticipated effects of climate change could potentially increase the frequency of flood events within Wiltshire. Development will need to appropriately address the risk of flooding and, where necessary, provide attenuation measures designed to adapt to the challenge of climate change.

Wiltshire Local Transport Plan (2011 – 2026)

- 2.10 The Wiltshire Local Transport Plan (LTP) sets out an accessibility vision to help ensure contribution to the national transport goals. The vision has been detailed below.

‘To help reduce social exclusion and provide good sustainable access to employment, health care, education, leisure and social activities as well as other vital goods and services so that wherever possible people can satisfy their needs locally and without the need to travel by car.’

- 2.11 In order to meet this vision, goals and objectives have been produced. The goals of the LTP have been summarised below:

- Supporting economic growth;
- Reducing carbon emissions;
- Better safety, security and health;
- Promote equality of opportunity; and
- Improve quality of life and a healthy, natural environment.

- 2.12 The objectives of the LTP have been summarised below:

- To provide, support and/or promote a choice of sustainable transport alternatives including walking, cycling, buses and rail;
- To reduce the impact of traffic on people’s quality of life and Wiltshire’s built and natural environment;
- To minimise traffic delays and disruption and improve journey time reliability on key routes;
- To improve sustainable access to a full range of opportunities particularly for those people without access to a car;
- To reduce the level of air pollutant and climate change emissions from transport;
- To support planned growth in Wiltshire and ensure that new developments adequately provide for their sustainable transport requirements and mitigate their traffic impacts;
- To reduce the need to travel, particularly by private car;
- To promote travel modes that are beneficial to health;
- To improve the resilience of the transport system to impacts such as adverse weather, climate change and peak oil; and
- To enhance the journey experience of transport users.

2.13 The Wiltshire Local Transport Plan covers the period between March 2022 to March 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.

- support economic growth;
- reduce carbon emissions;
- contribute to better safety, security and health;
- promote equality of opportunity; and
- improve quality of life and a healthy natural environment;

Wiltshire's Local Plan

2.14 Wiltshire's Local Plan is currently under review. The Wiltshire Council Local Plan Pre-Submission Draft 2020 – 2038 was submitted in September 2023 and provides an emerging vision for Melksham that was subject to public consultation from September to November 2023, with the Stage 2 hearings set to commence on the 11th November 2025. Within the emerging Wiltshire Local Plan, the site is referenced under Policy 20: Land north of A3102 is included. The document outlines the development being capable of delivering approximately 285 dwellings and a 100-space nursery and states that access is possible via a fourth arm off the existing roundabout on A3102.

2.15 Furthermore, within the Policy, infrastructure and mitigation requirements are set out including:

- vehicular access from the existing roundabout on the A3102 adjacent to the southern boundary;
- offsite infrastructure improvements to water supply and foul water network;
- introduce green and blue infrastructure through the development that incorporates new woodland and/or tree planting;
- provision of a suitable buffer either side of the watercourse that runs south to north through the site;
- funding contributions towards early years, primary and secondary education and on, or off-site healthcare capacity to meet the needs created by the development; and
- measures to positively support walking, cycling and public transport use between the site, Melksham town centre and Melksham railway station and linking into existing networks.

Joint Melksham Neighbourhood Plan (2020 – 2026)

2.16 The Melksham Neighbourhood Plan was adopted in July 2021 and gives the communities of Melksham Town and Melksham Without real local planning power in guiding the conservation and development of the area until 2026.

2.17 The Melksham Neighbourhood Plan is shaped by the following Vision:

‘The vision of the Neighbourhood Plan is to make the town of Melksham and the parish of Melksham Without great places to live, to work, to play and to visit; attractive, healthy, convenient and environmentally sustainable, with access to employment, education, shops and services via walking, cycling and public transport’.

2.18 The aforementioned vision is underpinned by the following objectives:

- **A 21st century community... meeting the challenges of sustainable development and climate change through:**
 - Reducing carbon emissions to contribute to carbon neutrality in Wiltshire by 2030
 - Planning for new development that addresses the impact of climate change
 - Encouraging and promoting new development that addresses the impact of climate change
- **Great places to live... where our housing and infrastructure needs are balanced with global and regional issues;**
 - Enabling and promoting the importance of early community engagement in change and development
 - Supporting sustainable development of new housing and associated facilities within settlements, and exceptionally, adjacent to settlements
 - Promoting the delivery of infrastructure to address the needs of the population
- **Great places for shopping, working and getting around through;**
 - Protecting and enhancing the vitality of Melksham town centre
 - The retention, regeneration and intensified use of previously developed employment land
 - Supporting improved transport infrastructure for the increasing Melksham population
 - Encouraging journeys by rail and bus together with improving cycle and walking routes to reduce the need to travel by car.
- **Places where community well-being and open spaces are protected and enhanced by;**
 - Preserving and increasing our network of green spaces
 - Promoting opportunities for people to lead healthier lifestyles with a greater sense of well-being
 - Protecting, improving and expanding existing services and community facilities to promote health, education and social needs
- **A locally distinctive and high quality built and natural environment;**
 - Conserving and enhancing the quality of the natural landscape
 - Ensuring that new development is sympathetic to our built heritage and the character of the area, with high standards of design.

Active Travel England Toolkit

2.19 Active Travel England have produced a toolkit to assess merits for active travel in the development proposal for any development over 150 units in size. The guidance indicates the importance of moving away from ‘predict and provide’ and towards ‘vision and validate’/‘decide and provide’ which is also supported by the DfT Circular 01/2022.

2.20 Active Travel England (ATE) states that Transport Assessments should:

- Forecast the multi-modal movements generated by a development, quantifying the additional trip generation and the distribution and assignment;
- Provide a qualitative analysis of the current infrastructure in the surrounding area (which may include using the Cycling Level of Service Tool in LTN 1/20), taking into account how additional movements across all modes of transport will impact upon the capacity of public transport, walking, wheeling and cycling networks; and
- Provide detail (and justification) of any proposed improvements to infrastructure and the proposed delivery mechanism, as well as any other supporting strategies that seek to enable an increase in walking, wheeling and cycling rates.

2.21 High quality walking infrastructure from the site to public transport should be provided, which allows people to carry out daily duties. ATE expect walking routes to:

- be 2m wide (with limited pinch points of 1.5m due to street furniture) and localised widening to accommodate peak usage;
- be step-free;
- have a smooth, even surface;
- be uncluttered;
- have street lighting; and
- include appropriate crossings in compliance with LTN 1/20 Table 10-2 and Inclusive Mobility.

2.22 The development proposals and site design will take this into consideration when tying into the surrounding pedestrian infrastructure. The existing pedestrian infrastructure along Sandridge Common Road and Eastern Way (which provides access to schools and local facilities) is all step free and of suitable width as aforementioned.

2.23 The Active Travel Toolkit (attached as **Appendix B**) has been utilised to determine the sustainability of the proposed development site. The site passes 8 out of the 10 of the criteria within the checklist and the criteria that the site does not meet can be met through condition mainly related to the provision of a bus service being implemented.

3. SITE LOCATION

- 3.1 The site is located in Melksham, approximately 9km northeast of Trowbridge and 9km south of Chippenham. The development site is bound to the north by undeveloped land, to the east by New Road, to the South by the Sandridge Common (A3102) and the west by residential development. The local highway network is shown in **Figure 2** below.

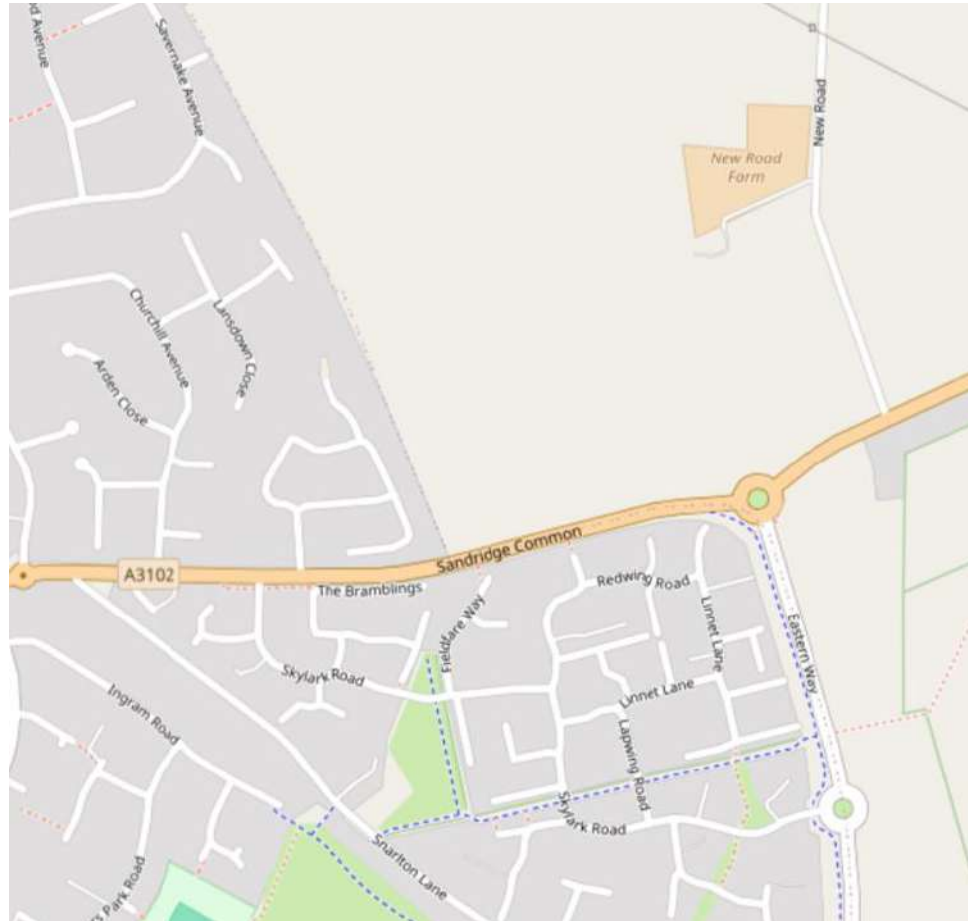


Figure 2: Site Context Plan

- 3.2 The site currently comprises agricultural land and as aforementioned has been subject to a full planning application (ref: PL/2024/10345) for 295 homes and an area safeguarded for a 100 space Nursery. The existing site conditions are outlined in **Photograph 1**.



Photograph 1: Existing Site Frontage along Sandridge Common

Local Road Network

- 3.3 Sandridge Common (A3102) routes along the southern boundary of the site and measures approximately 7m in width with a shared footway/cycleway measuring 3m along the southern side of the carriageway which continues into Melksham town centre. Within the vicinity of the site, a 40mph speed limit is in place along Sandridge Common with a 30mph limit introduced approximately 90m west of the site's western boundary. The conditions on Sandridge Common are demonstrated in **Photographs 2 and 3**.



Photograph 2: Conditions along Sandridge Common



Photograph 3: Existing roundabout to the east

- 3.4 Approximately 215m east of the proposed secondary access point, Sandridge Common (A3102), meets a 3-arm roundabout with Eastern Way and Sandridge Common. Eastern Way is a single carriageway Road that measures approximately 7.3m wide and is subject to a 40mph speed limit.

- 3.5 Approximately 150m east of the Sandridge Common roundabout, there is a priority junction with New Road (**Photograph 4**), a single carriageway road that measures approximately 4.2m wide and is subject to national speed limit (which would be 60mph). New Road continues for 1.2km north before reaching a further priority junction with Woodrow Road/Lower Woodrow. Lower Woodrow continues north to reach Bewley Common and Lacock.



Photograph 4: New Road

- 3.6 From the site, the A3102 routes west approximately 1.1km to reach a double mini roundabout with Forest Road and Lowbourne. From Lowbourne, Melksham town centre can be accessed. To the north of Lowbourne and via Bank Street (A3102) the A350 can be accessed via the Farmers Roundabout. The A350 is located west of Melksham and is a primary route that runs from Junction 17 of the M4 to Poole in Dorset.

Existing Traffic Conditions

- 3.7 In February 2024 as part of the full planning application on the site, 2 x 7-day ATC surveys were undertaken, with one installed on A3102 Sandridge Common Road to the west of the existing A3102/Eastern Way roundabout and one installed along New Road to the east of the site. The results of the two ATC surveys are summarised in **Table 1** and **Table 2**, with the full outputs attached as **Appendix C**.

A3102 Sandridge Common Road	Daily Flow (7-day Average)	85 th percentile Speeds (mph)
Eastbound	3624	41.9
Westbound	3498	39.6

Table 1: ATC Traffic Speed Survey Results (A3102 Sandridge Common Road)

New Road	Daily Flow (7-day Average)	85 th percentile Speeds (mph)
Northbound	727	36.0
Southbound	794	39.6

Table 2: ATC Traffic Speed Survey Results (New Road)

- 3.8 As summarised within **Table 1**, 85th percentile speeds along the A3102 Sandridge Common Road are 41.9mph eastbound and 39.6mph westbound. In terms of daily 7-day average traffic flows, the A3102 Sandridge Common typically accommodates 3624 vehicles eastbound and 3498 vehicles westbound.
- 3.9 As summarised within **Table 2**, 85th percentile speeds along New Road are 36.0mph northbound and 39.6mph southbound. In terms of daily 7-day average traffic flows, New Road accommodates 727 vehicles northbound and 794 vehicles southbound on a typical day, which equates to 61 vehicles per hour northbound and 66 vehicles per hour southbound across a 12 hour period.

Pedestrian and Cycle Network

- 3.10 Along Sandridge Common within the vicinity of the roundabout junction with Eastern Way a shared footway/cycleway, that measures 3m wide, runs along the southern side of the carriageway (**Photograph 5**) towards Melksham Town Centre. The shared arrangement ends approximately 200m west of the A3102/ Eastern Way Roundabout, at the pedestrian/cycle connection to Redwing Road. Beyond this to the west the pedestrian footway reduces to 2m in width and continues to route into Melksham. Along the northern side of the A3102 (across the site boundary), no footways or cycleways are present.



Photograph 5: Shared Footway/Cycleway along southern side of Sandridge Common Road

- 3.11 To the west of the site, Sandridge Common Road is equipped with 2m wide lit footways. Approximately 10m west of the speed limit change a 2m footway begins along the northern side of Sandridge Common Road.
- 3.12 In addition, along the pedestrian route into Melksham town centre, there are appropriately placed dropped kerbs and tactile paving to facilitate the safe movement of pedestrians. The existing pedestrian conditions are demonstrated within **Photographs 6 and 7**.



Photograph 6: Pedestrian infrastructure along Skylark Road junction



Photograph 7: Existing pedestrian crossing infrastructure along Sandridge Common Road

- 3.13 As detailed above, a shared footway and cycleway is provided along the footway which flanks the south of Sandridge Common. As mentioned, this shared arrangement ends approximately 240m west of the A3102/ Eastern Way Roundabout at Fieldfare Way but, continuous to flank Eastern Way along its entirety to Spa Road, southeast of Melksham.
- 3.14 The National Cycle Route 403 (NCR403) is located approximately 1.3km west of the proposed site at King George V Park and can be accessed via a 5-minute cycle long the A3102. From the King George V Park, NCR401 routes north towards Lacock (21-minute cycle) and towards Chippenham (21-minute cycle) and also provides a link to the National Cycle Route 4 (NCR4), located approximately 3.3km south (11-minute cycle). The NCR4 provides direct, off-road links to Trowbridge, a 11.7km southwest of the proposed site (37-minute cycle), and Devizes, 13.3km southeast of the proposed site (56-minute cycle).
- 3.15 Wiltshire's draft Local Cycling and Walking Infrastructure Plan (LCWIP) 2022 states that a full Melksham LCWIP will be published in 2024. It also contains a map which shows existing primary and secondary cycle routes and is shown in **Figure 3**.

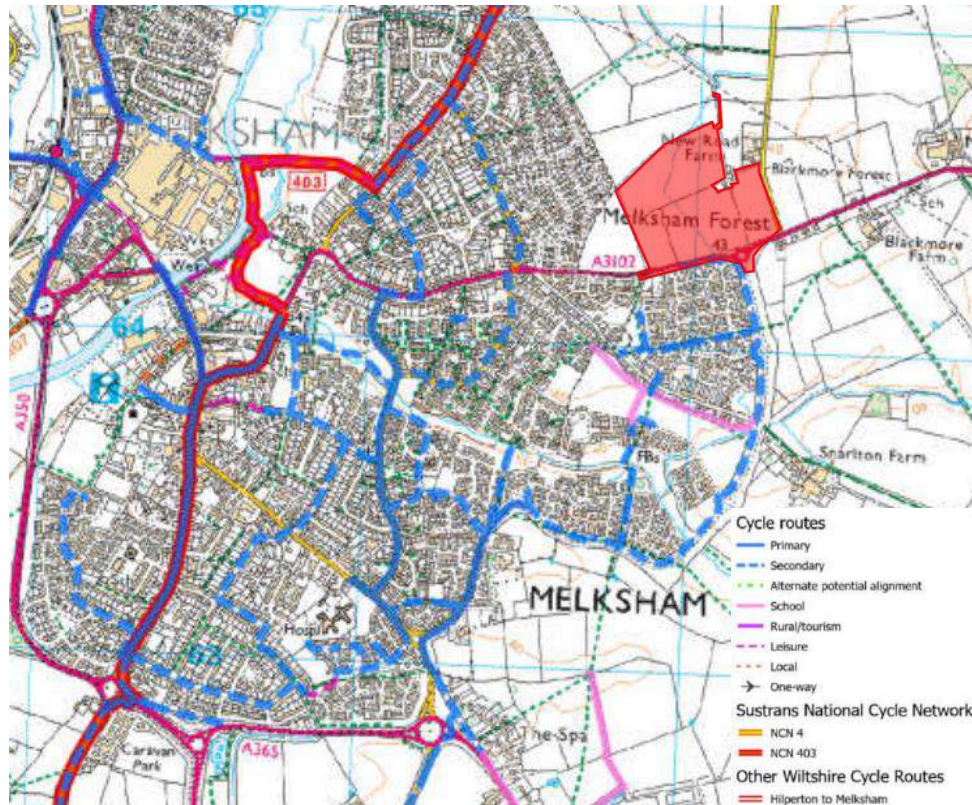


Figure 3: Wiltshire LCWIP

- 3.16 It can be seen in **Figure 3** that the site is north of an existing secondary route, which provides a route from the site into Melksham Town Centre and onto the National Cycle Network 403 route, which routes from Bowerhill in the south and Marlborough in the east. The southern section of the 403 route connects into the long distance NCN route 4, which connects London to Fishguard in Wales.

Public Rights of Way

- 3.17 There is an extensive Public Rights of Way (PRoW) network within immediate proximity of the site. The nearest ProW is located to the south of the site (route MELK103) and provides footpath access to Snarlton Lane and onward connectivity to Melksham town centre, via a series of other short footpaths on the PRoW network. There are multiple bridleways to the east of the site which would provide leisure opportunities for pedestrian and cyclists. The network, with respect to the proposed development, is shown in more detail in **Figure 4**.

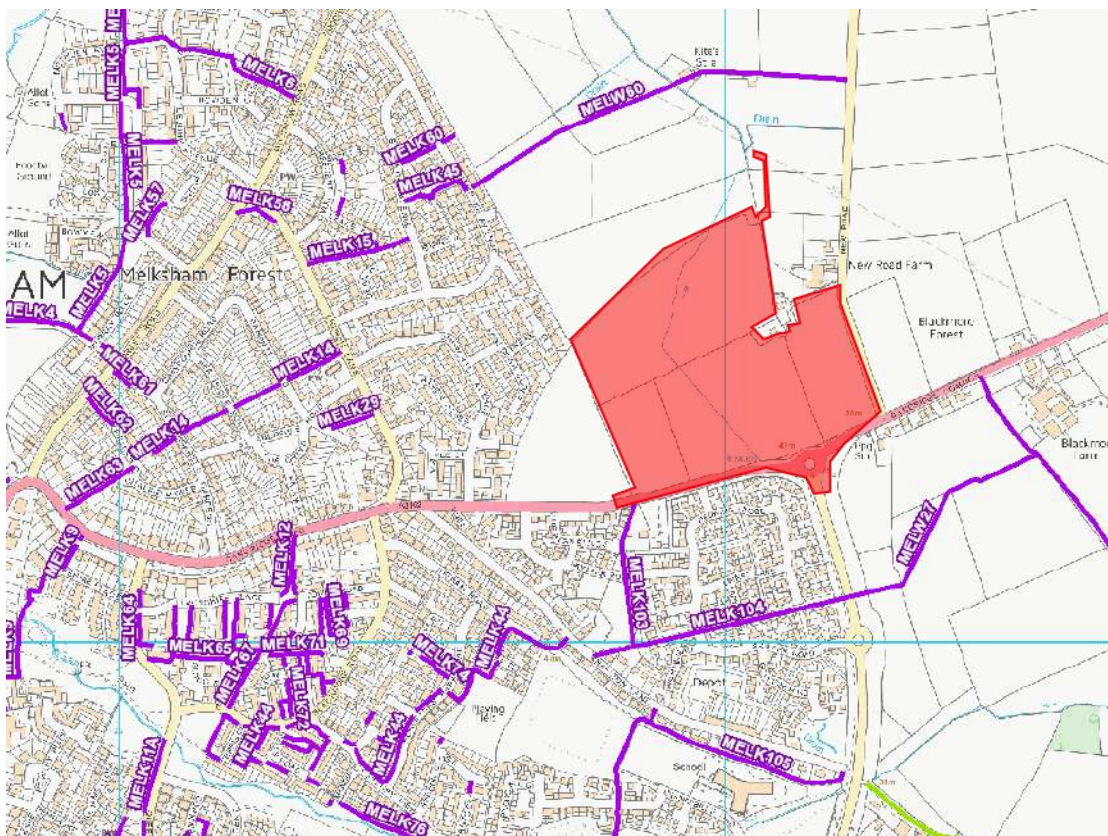


Figure 4: Public Rights of Way Map (Source: Wiltshire Council)

Accessibility to Local Amenities

3.18 It is generally accepted that walking and cycling provide important alternatives to the private car and should be encouraged to form part of longer journeys by public transport. The Chartered Institute of Highways and Transportation (CIHT) has prepared several guidance documents that provide advice with respect to the provision of sustainable travel in conjunction with new developments. Within these documents it is suggested that:

- Most people walk to a destination that is less than one mile or 1.6km (Planning for Walking, 2015);
- The bicycle is a potential mode of transport for all journeys under 8km (Planning for Cycling, 2015); and
- Walking distances to bus stops should not exceed 400 metres, with people prepared to walk twice as far to rail stations (planning for Walking, 2015).

3.19 The location of the site in proximity to the local amenities offers a good opportunity to create a sustainable development. A short summary of the key amenities that would be of interest to the anticipated demographic of the proposed development within the locality of the site is presented in **Table 3** below, applying the average walking speed of 1.4m/s as classified in CIHT's 'Providing for journeys on foot' (2000, Table 3.2).

Amenity	Approximate Distance	Approximate Walking Journey Time	Approximate Cycling Journey Time
Proposed Nursery (within proposed development)	250m	2 minutes	1 minute
Convenience Store (Londis)	600m	7 minutes	1 minute
Convenience Store (Co-operative Food)	750m	10 minutes	2 minutes
Public House (The Foresters Arms)	750m	10 minutes	2 minutes
ATM	750m	10 minutes	2 minutes
Primary School (Forest and Sandridge Primary School)	800m	13 minutes	3 minutes
Fish and Chip Shop (Forest Fish Bar)	850m	14 minutes	3 minutes
Place of Worship (St Andrews Church)	860m	14 minutes	3 minutes
Public House (Water Meadow)	975m	15 minutes	3 minutes
Primary School (Forest and Sandridge Primary School)	975m	15 minutes	3 minutes
Melksham Town Centre	1.8km	24 minutes	5 minutes
Melksham Train Station	2.5km	30 minutes	9 minutes
Secondary School (Melksham Oak Community School)	3.2km	55 minutes	14 minutes

Table 3: Summary of Local Amenities

3.20 As summarised in **Table 3**, there are key amenities within walking distance of the site location that would be of important use to future residents. Facilities such as the nearby primary schools and range of convenience stores would be essential for everyday use.

Public Transport

Bus

3.21 The closest bus stop to the site from the proposed site access is the 'Skylark Road' bus stop, located on the southern side of Skylark Road, circa 330m (4 minute walk) south of the development. This stop provides a circular shuttle bus which runs into Melksham and back by Services 14 and 15, run by Frome Bus, however, it should be noted this is only a request stop at certain times. Additional bus services are available from the 'Ingram Road' stop located along Blackmore Road circa 750m west of the site. A summary of the regular bus services within the vicinity of the site are outlined in **Table 4**.

Bus Service	Bus Stop Location	Destination	Frequency		
			Monday-Friday	Saturday	Sunday
14/15 Frome Bus	Skylark Road	Melksham Circular	Service: Hourly First Bus: 08:16 Last Bus: 17:47	Service: Hourly First Bus: 08:42 Last Bus: 17:15	No Service
271/272/273 Traveline	Blackmore Road	Devizes – Bath City Centre	Service: Hourly First Bus: 06:54 Last Bus: 22:24	Service: Hourly First Bus: 07:11 Last Bus: 22:24	Service: 6 per Sunday (273 only) First Bus: 09:58 Last Bus: 19:55
X34	Bank Street	Chippenham - Frome	Service: Hourly First Bus: 06:54 Last Bus: 18:06	Service: Hourly First Bus: 07:05 Last Bus: 17:59	No Service
555 (School Service)	Blackmore Road/Sandridge Common	Melksham – Corsham School	2 Services daily at 07:46am (to school) and 15:05 (from school)	No Service	No Service

Table 4: Local Bus Services

3.22 In addition to the services raised above, the X76 service routes along Sandridge Common past the site. The X76 operates once a day and routes from Marlborough (via Melksham) to Bath in the morning and provides a return journey in the afternoon.

3.23 As part of the development proposals, and discussed in more detail in **Section 4**, it is proposed that two additional bus stops will be provided along Sandridge Common Road which will be located within 400m of most of the site.

Rail

3.24 Melksham Train Station is located 2.5km west of the site and is accessible either via a 7 minute drive or via the 271 bus service (37 minute journey). The station is operated by Great Western Railway and provides 8 cycle parking spaces. There are regular services, 9 in each direction per day, towards Westbury and Swindon which provide further onward connections to the west, and east towards Salisbury and Southampton Central. This service also provides connections to local stations including Trowbridge and Chippenham. The frequency of the services and the variety of destinations make travel by rail suitable for both commuter and leisure travel.

Summary of Site Accessibility

3.25 The proposed development has been shown to be well located to support a variety of travel modes, and the sustainability of the site has been confirmed by WC Highways as part of the full planning application. The site is well connected to the local road network along with the strategic network including the A3102 and A350. The local pedestrian and cycle networks are well located to promote use by future residents and offer great opportunities for people to walk and cycle to their destinations. The site is also well located to support public transport use with regular bus services located in close

proximity as well as being able to access the local rail network. Such a summary is concurred within the Planning for Melksham July 2023 document, but more importantly the site is currently allocated under Policy 20 of the emerging Local Plan.

Personal Injury Accident (PIA) Data

3.26 Personal Injury Accident (PIA) Data has been obtained from the Department for Transport's (DfT) Mapping Application for Visualising Road Injury Casualties (MAVRIC) assessed to establish the existing safety conditions on the local highway network within the vicinity of the proposed site. This data has been collated for a five-year period from 2020-2024.

3.27 **Figure 5** demonstrates that there have been no collisions resulting in personal injury occurring along the A3102 or Eastern Way within close proximity to the site.

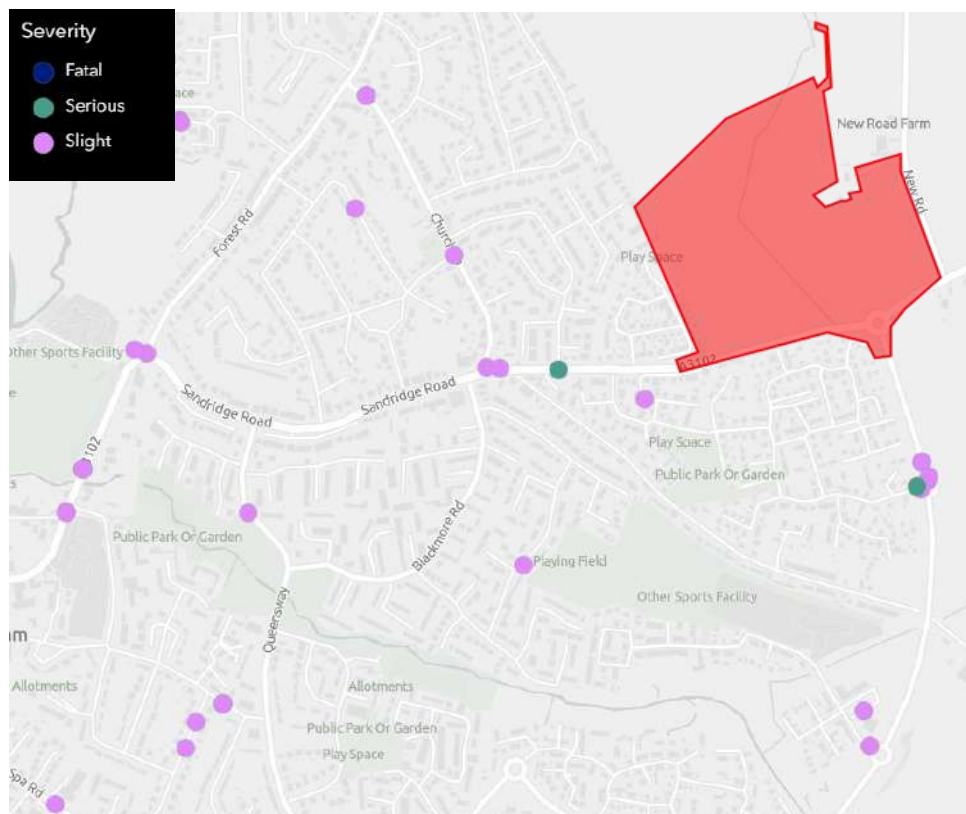


Figure 5: PIA data for the Site 2020 – 2024 (Source: DfT)

3.28 As per **Figure 5**, there are incident clusters noted at the Church Lane/ Blackmore Road /Sandridge Common Road double mini roundabout, at the Forest Road/ Lowbourn double mini-roundabout and at the Eastern Way/ Skylark Road roundabout.

- 3.29 Upon a closer inspection of the incidents that have occurred at the Church Lane/Sandridge Common Road mini roundabout, 3 incidents have occurred within the last 5 year period, with the 2 that occurred on the roundabout classified as 'slight' in nature and 1 incident classified as 'serious', although this did not occur on the mini roundabout. One incident involved a pedestrian and the other involved 2 cars with one casualty. However, it is noted that these incidents were classified as 'slight' in nature and these isolated incidents do not suggest that there are any patterns in the frequency or distribution of incidents and therefore the development proposals will result in a negligible impact upon the operation of the local road network.
- 3.30 Upon a closer inspection of the incident cluster at the Forest Road/Lowbourne double mini-roundabout, both incidents were classified as 'slight' in nature with one incident involving a pedal cyclist and the other involved 2 cars with 1 casualty.
- 3.31 Upon a closer inspection of the incident cluster around the Eastern Way/Skylark Road roundabout, 5 incidents have occurred in this location with 4 classified as 'slight' and 1 classified as 'serious' in nature. The serious incident involved a pedal cyclist and a vehicle occupant, with 3 of the 'slight' incidents involving 1 casualty and the last collision involved 3 vehicles and 3 casualties.
- 3.32 Overall, the recorded incidents do not suggest that there are any patterns in the frequency or distribution of incidents, with highways not raising any issues related to the collision record as part of the full planning application, and therefore the development proposals should be considered acceptable on this basis.

4. PROPOSED DEVELOPMENT

- 4.1 The proposed development comprises 295 residential units, including a mix of affordable and private dwellings and an area of land safeguarded, 0.4ha in size for a Children's Nursery. The current accommodation schedule is unknown due to the application being submitted in outline, whilst the proposed site masterplan is attached within **Appendix A**.
- 4.2 As part of the full planning application, Bloor Homes sought to positively engage with Wiltshire Council Officers in relation to New Road, as it is a known local concern that it is currently utilised as a 'rat run' for vehicles looking to reach south east Melksham avoiding the A350. Upon a review of New Road, it is apparent that further traffic calming would not be appropriate for a number of reasons. Firstly, given it already operates in a priority working arrangement large sections of its length any further traffic calming would do little to dissuade users of this route as it would not present a significant enough change to encourage users to change behaviour. Secondly, any traffic calming proposed would be unlikely to receive technical approval given the existing substandard nature of the carriageway. Therefore, on this basis New Road will not undergo any changes as part of the proposed development, an approach which was considered acceptable by WC Highways as part of the full application.

Access Arrangements

- 4.3 Access to the site will be via one main point of access via a newly constructed 4th arm on the Sandridge Common/Eastern Way Roundabout. As part of the full planning application, it was proposed that the whole roundabout be re-designed into a 'compact' style and this design is also proposed as part of this application. The proposed design of this roundabout is in accordance with DMRB CD116 guidance (also proposed as part of the full planning application), with the proposed drawing attached as **Appendix D**. The design of this roundabout has largely been agreed with WC Highways as part of the full planning application, subject to the necessary Section 278 works.
- 4.4 The geometries of the roundabout are shown at **Appendix D**, with the roundabout design complying with DMRB 116 and specifically, the ICD of the roundabout has been reduced from 42m to 36m to comply with requirements with a compact roundabout. Whilst all entry arms have been reduced to a consistent 4m with 1m hatch alongside, enabling a circulatory carriageway of 6m, and all exit arms measure 4.5m, which in combination create a 4 arm roundabout which is reduced in scale compared to the existing arrangement. All entry path radius' have been assessed and measure <70m, as per DMRB's requirements for compact roundabouts. The reduced scale of the roundabout has been designed alongside swept path analysis to ensure the largest vehicles (such as articulated HGVs) can still navigate the junction. Swept path analysis has been completed for this access point, with the subsequent drawing attached as **Appendix E**.

- 4.5 The second point of access will be located approximately 250m west of the roundabout along Sandridge Common Road that will take the form of an emergency access arrangement and will measure 3.7m wide and will be bollard controlled, which was considered acceptable by WC Highways. Fire tender tracking has been completed at the proposed access point highlighting that a fire tender can access the site should the primary access be blocked, as demonstrated within **Appendix F**.

Pedestrian Infrastructure

- 4.6 To allow for safe pedestrian movement, 2m footways will be provided along all internal roads. Additional pathways throughout the site will also be provided to increase pedestrian permeability and will also measure 2m in width. Where segregated footways are not provided, a 6m road width will be provided to allow for a shared surface arrangement.
- 4.7 As part of the roundabout upgrades, an LTN 1/20 compliant footway/cycleway measuring 3m and crossing points are also proposed along all of the roundabout arms to tie into the existing infrastructure on the southern side. Additionally, it is proposed that there will be two signalised pedestrian crossing points located along Sandridge Common, with one located adjacent to the emergency access and one located approximately 80m east of the roundabout that will facilitate access to the bus stops proposed as part of the consented Blackmore Farm application (ref: PL/2023/11188). Furthermore, two additional bus stops are proposed as part of this scheme that will be located along Sandridge Common. The subsequent location of the pedestrian crossing points with pedestrian visibility splays from the eastern pedestrian point of 1.5m x 53m in the primary direction and 1.5m x 120m in the secondary direction and visibility splays from the western point of 1.5m x 112m in both directions in accordance with the aforementioned ATCs are attached within **Appendix G**.
- 4.8 Furthermore, to comply with LTN 1/20, an internal shared footway/cycleway measuring 3m wide route has also been proposed on the western side of the 4th arm of the Sandridge Common roundabout to further enhance the pedestrian/cyclist facilities within the site.
- 4.9 As part of the latest consultation comments provided by WC highways on the full application, there were comments that related to pedestrian access specifically the inclusion of a 3m leisure connection from the site to the New Road frontage, provision of a 2m footway connecting dwellings to the proposed crossing on the eastern side of the roundabout and the removal of the proposed pedestrian connection to Gladstone Road to the east of the site if this is not deliverable. While this scheme will be outline in nature, the aforementioned points will be considered as part of any subsequent Reserved Matters Application.

Stage 1/2 Road Safety Audit

- 4.10 As part of the Section 278 undertaken on the full planning application, the latest roundabout access design has been subject to a Stage 1/2 Road Safety Audit that was undertaken by an external auditor, with the Stage 1/2 RSA and Designers Response attached within **Appendix H**.
- 4.11 Within the roundabout access RSA, the auditors raised that the entry path curvatures should be detailed, that swept path analysis should be provided, that visibility splays should be provided for the roundabout and the relocated access road, that pedestrian visibility is obstructed by existing signs and that the shared footway/cycleway should have appropriate signage detailing so, which will be suitably addressed through the Designer's Response.

Vehicle Parking Provision

- 4.12 Although the application is outline, any reserved matters application will include a layout in which parking space dimensions will be provided in accordance with WC's Parking Standards.
- 4.13 Wiltshire Council's (WC) adopted car parking standards, which are contained within the Wiltshire Local Transport Plan (2011), have been consulted. The residential car parking standards are set out in **Table 6**, and it is worth noting that these are minimum standards.

Property Type	Minimum Spaces
1 bed	1
2-3 bed	2
4+ bed	3
Visitor Spaces	0.2 spaces per dwelling

Table 6: Residential Parking Standards (Wiltshire Council)

- 4.14 Vehicle parking spaces will measure 2.5m x 5m with parallel spaces measuring 2.5m x 6m, 6m aisle widths are also provided throughout the site.

Cycle Parking Provision

- 4.15 For the future provision of cycle parking standards, the Wiltshire LCWIP standards (2022) have been utilised, which are set out below in **Table 7**. As part of any future reserved matters application, it would be ensured that cycle parking would be sheltered, secure and accessible and where garages are used to facilitate bicycle storage, they will have internal dimensions of 6m x 3m.

Property Type	Minimum Spaces	Unit Numbers	Proposed Provision
1 bed	1	49	49
2 bed	2	56	112
3 bed	3	99	297
4+ bed	3	91	273
Visitor Spaces	1 space per 20 dwellings	-	15
TOTAL		295	746

Table 7: Proposed Cycle Parking Provision

Servicing and Emergency Access Arrangements

- 4.16 Refuse collection will take place on site, with the refuse vehicle able to get within 25m of each property or 25m of a bin collection point. Residents will also not have to drag their bins more than 30m, in accordance with Manual for Streets guidance.

- 4.17 In addition, a fire tender would be able to get within 45m of every dwelling.

5. TRIP GENERATION AND DISTRIBUTION

- 5.1 The proposed development will be submitted in outline and comprises 295 residential dwellings and an area safeguarded for a proposed Children's Nursery. The area safeguarded for the Nursery has not been included within the assessment, as it is expected that this will be self-serving to the development and therefore no further vehicular trip generation external to the site has been accounted for.
- 5.2 The proposed development trip generation was set out as part of the full planning application (PL/24/10345) Transport Assessment, with WC highways agreeing this approach. Therefore, the same trip rates, distribution and modelling results have been set out below.
- 5.3 The 'private houses' criteria has been utilised for the most robust assessment, as these trip rates are typically higher than affordable housing. The results of the TRICS assessment are demonstrated in **Table 8** below with the full outputs in **Appendix I**.

TRICS (V.7.10.2)	AM Peak (0800-0900)		PM Peak (1700-1800)		12 Hour Total Daily Trips
	Arrivals	Departures	Arrivals	Departures	
<i>Trip Rate Per 1 dwelling</i>	0.137	0.390	0.361	0.166	4.522
Trip Generation (295 dwellings)	40	115	106	49	1334

Table 8: Proposed Development Trip Generation (TRICS v.7.10.2)

- 5.4 The proposed development is likely to generate in the order of 155 trips in both the AM and PM peaks, with 1334 trips generated across a 12-hour period. It should be noted that the trip rates presented in **Table 8** are higher than those submitted (two-way movements of 0.515 AM Peak and 0.489 PM peak, compared to the above 0.527 AM Peak and 0.527 in the PM peak), and approved, as part of planning application 15/12454/OUT (Land North of Sandridge Common) and therefore are considered robust.

Trip Distribution

- 5.5 In order to gain an understanding of how the traffic generated by the site may impact the operation of the local highway network, the distribution figures agreed as part of the consented adjacent Land North of Sandridge Common application (approved under 15/12454/OUT) have been utilised here with the appropriate additional distributions calculated. The resultant traffic distribution and traffic flow diagrams are shown in **Appendix J** which were also included as part of the full planning application which have been accepted by WC. In summary it assumes the following distribution of trips (**Table 9**):

Link			Distribution Split			
Sandridge Common East	New Road		21%	10%		
	Sandridge Common (East)			11%		
Sandridge Common West	Church Lane		41%	5%		
	Blackmore Road			13%		
	Sandridge Common (West)	Bank Street		23%	13%	
		High Street			10%	
	Eastern Way	Bath Road		38%	10%	
Western Way		28%				

Table 9: Trip Distribution

Trip Assignment

- 5.6 Utilising the trip distribution information, applied to the vehicular trip generation set out in **Table 9** above, the trip assignment per link is summarised in **Table 10** below (an approach accepted as part of the full planning application), with the resulting development traffic assignment included within **Appendix J**.

Link				Distribution Split				
				AM Peak		PM Peak		
Sandridge Common East	New Road			33	16	33	16	
	Sandridge Common (East)				17		17	
Sandridge Common West	Church Lane			64	8	64	8	
	Blackmore Road				20		20	
	Sandridge Common (West)	Bank Street	36		20		36	20
		High Street			16			16
Eastern Way	Bath Road			59	16	59	16	
	Western Way				44		44	

Table 10: Trip Assignment

- 5.7 The development impact is distributed fairly evenly across the highway network. The impact of this additional vehicular traffic is examined in more detail in the following chapters.

6. HIGHWAYS CAPACITY ASSESSMENT

6.1 In order to quantify the impact of the development on the highway network, as part of the full planning application, independent traffic surveys were undertaken in February 2024. The surveys were as follows:

- Two Automatic Traffic Counts (ATC) on Sandridge Common Road and New Road
- Manual Classified Counts (MCC) at:
 - Eastern Way/Sandridge Common Road Roundabout
 - Cranesbill Road/Eastern Way Roundabout
 - Eastern Way/Snowberry Lane/Rosemary Way Roundabout
 - Spa Road/Campion Drive/Snowberry Lane Roundabout
 - Spa Road/Bath Road/Pathfinder Way/Western Way Roundabout
 - Lowbourne/Bank Street/High Street Mini Roundabout
 - Lowbourne/Forest Road/Sandridge Road Double Mini Roundabout
 - Blackmore Road/Church Lane/Sandridge Common Road Double Mini Roundabout

6.2 The MCC locations are summarised below in **Figure 6**. Beyond this point, the trips disperse across the network and the impact will be negligible.

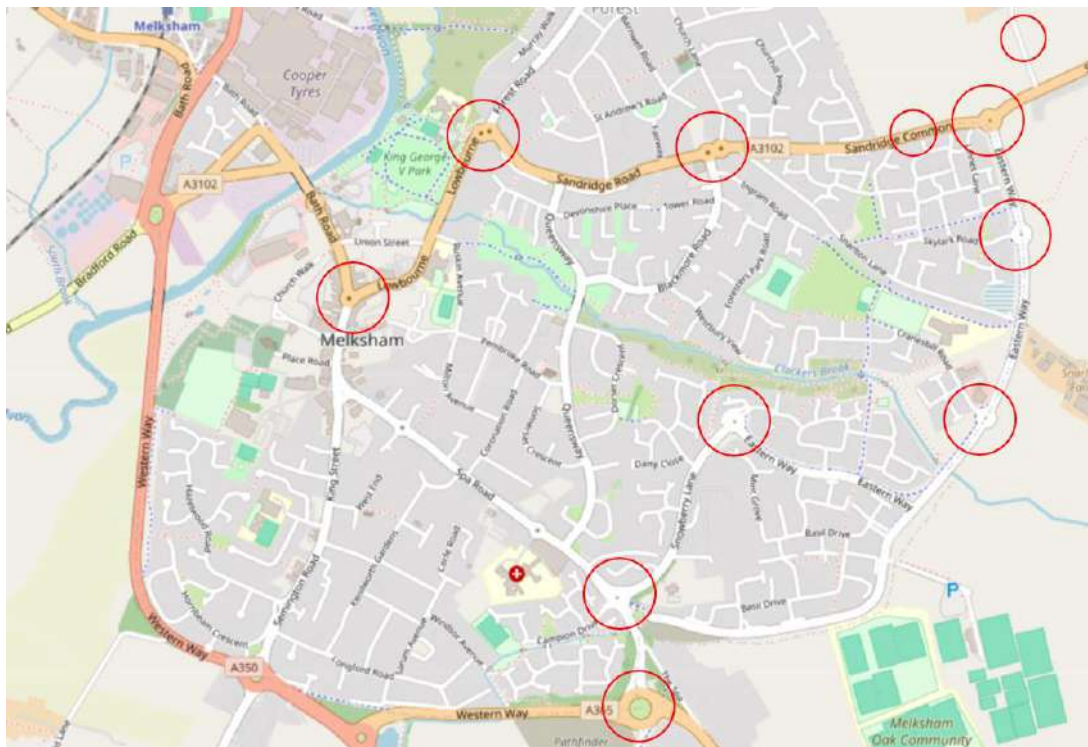


Figure 6: Scope of Turning Count surveys

Assessment Scenarios

6.3 **Table 11** describes each of the scenarios which have been assessed within the TA, for both the typical AM (0800-0900) and PM (1700-1800) weekday periods. These assessment scenarios when compared

to the full planning application have been altered to account for a revised baseline (2024 to 2025) and future year (2029 to 2030) and should therefore be considered acceptable.

Scenario	Scenario Details
1	2025 Base Year
2	2030 Forecast Year + Committed Development
3	2030 Forecast Year + Committed Development + Proposed Development

Table 11: Assessment Scenarios

Traffic Growth

- 6.4 To take into account background traffic growth in future year scenarios, NTEM adjusted growth factors have been obtained from TEMPro 8.1m for a 'Core' Scenario. The TEMPro program is based on the National Trip End Model and takes into account changes in car ownership and local planning forecasts regarding housing and employment. This forecast has been based on 'All Roads' for the Wiltshire 021' MSOA (for the local road network) and 'All' roads. The resulting growth factors for both the 2024 – 2025 scenario and the future growth of 2025 – 2030 are set out in **Table 12**.

Peak Hour	Growth Rate (2024 – 2025)	Growth Rate (2025 – 2030)
AM	1.0043	1.0530
PM	1.0042	1.0541

Table 12: TEMPro Growth Rates

Committed Development

- 6.5 As noted above, the only site considered as part of the additional committed development beyond TEMPro derived background growth is the site at Blackmore Farm. The current application at Blackmore Farm, as detailed in Section 1, comprises 500 dwellings. Therefore, committed development traffic has been derived from the accompanying TA and applied in addition to the TEMPro growth rates to identify the 2030 Forecast + Committed Development scenario.

Highway Capacity Analysis

- 6.6 The impact of the development on the following junctions has been modelled:

Junction 1 – Eastern Way/Sandridge Common Roundabout;

Junction 2 – Cranesbill Road/Eastern Way Roundabout

Junction 3 – Eastern Way/Snowberry Lane/Rosemary Way Roundabout

Junction 4 – Spa Road/Campion Drive/Snowberry Lane Roundabout

Junction 5 – Spa Road/Bath Road/Pathfinder Way/Western Way Roundabout

Junction 6 – Lowbourn/Bank Street/High Street Mini Roundabout

Junction 7 – Lowbourn/Forest Road/Sandridge Road Double Mini Roundabout

Junction 8 – Blackmore Road/Church Lane/Sandridge Common Road Double Mini Roundabout

Modelling Results

1 - Site Access Roundabout

6.7 Capacity analysis of the Primary Site Access Roundabout with Sandridge Common has been undertaken utilising Junctions 9. The geometry for the analysis has been measured from Topographical Survey and the site layout.

6.8 **Table 13** sets out the summary Junctions 9 results for the Primary Site Access roundabout in the 2030 future year with and without development in the AM and PM peak hour periods, whilst the full outputs are included at **Appendix K**. For information the arms of the junction are as follows:

Arm A – Sandridge Common (East)

Arm B – Eastern Way (South)

Arm C – Sandridge Common (West)

Arm D – Internal Spine Road (North)

Scenario	AM Peak (08:00-09:00)			PM Peak (17:00-18:00)		
	Queue	Delay	RFC	Queue	Delay	RFC
2030 + Committed Development + Proposed Development						
Arm A	1.5	7.95	0.61	1.3	6.13	0.57
Arm B	0.5	4.63	0.35	0.8	5.48	0.46
Arm C	1.0	4.91	0.50	0.6	4.28	0.36
Arm D	0.1	4.66	0.09	0.0	4.12	0.04

Table 13: Sandridge Common/Eastern Way Roundabout Modelling Results

6.9 The Sandridge Common/Eastern Way modelling results demonstrate that the junction operates well within capacity with a maximum RFC of 0.57, queues of less than 2 vehicles and a maximum delay of 7.95 seconds.

2 - Cranesbill Road/ Eastern Way Roundabout

6.10 Capacity analysis of the Cranesbill Road/Eastern Way Roundabout has been undertaken utilising Junctions 9. The geometry for the analysis has been measured from OS mapping and supplemented by aerial imagery and on-site observations.

6.11 **Table 14** sets out the summary Junctions 9 results for the Cranesbill Road/ Eastern Way roundabout in the 2024 base year and 2029 Forecast with and without development in the AM and PM peak hour periods, whilst the full outputs are included at **Appendix L**. For information the arms of the junction are as follows:

- Arm 1 – Eastern Way N
- Arm 2 – Eastern Way S
- Arm 3 – Cranesbill Road

Scenario	AM Peak (08:00-09:00)			PM Peak (17:00-18:00)		
	Queue	Delay	RFC	Queue	Delay	RFC
2025 Baseline						
Arm 1	1.4	9.96	0.59	1.4	9.65	0.59
Arm 2	1.0	5.75	0.49	0.8	5.07	0.44
Arm 3	0.4	5.54	0.28	0.2	4.70	0.18
2030 Baseline + CD						
Arm 1	2.1	13.01	0.68	1.8	11.45	0.65
Arm 2	1.2	6.47	0.55	1.0	5.62	0.49
Arm 3	0.4	6.00	0.31	0.2	4.99	0.19
2030 + CD + Proposed Development						
Arm 1	2.7	15.74	0.74	2.0	12.26	0.67
Arm 2	1.3	6.67	0.56	1.1	6.05	0.53
Arm 3	0.4	6.10	0.31	0.2	5.18	0.20

Table 14: Cranesbill Road/Eastern Way Roundabout

- 6.12 The analysis shows that the junction is forecast to operate well within capacity in all scenarios, with negligible queueing and delays of less than 16 seconds and the highest RFC of 0.74. It is therefore considered that the impact on the operation of this junction is acceptable.

3 - Eastern Way/Snowberry Lane/Rosemary Way Roundabout

- 6.13 Capacity analysis of the Eastern Way/Snowberry Lane/Rosemary Way Roundabout has been undertaken utilising Junctions 9. The geometry for the analysis has been measured from OS mapping and supplemented by aerial imagery and on-site observations.
- 6.14 **Table 15** sets out the summary Junctions 9 results for the Eastern Way/Snowberry Lane/ Rosemary Way roundabout in the 2024 base year and 2029 Forecast with and without development in the AM and PM peak hour periods, whilst the full outputs are included at **Appendix M**. For information the arms of the junction are as follows:
- Arm 1 – Eastern Way
 - Arm 2 – Snowberry Lane
 - Arm 3 – Rosemary Way

Scenario	AM Peak (08:00-09:00)			PM Peak (17:00-18:00)		
	Queue	Delay	RFC	Queue	Delay	RFC
2025 Baseline						
Arm 1	0.9	5.49	0.46	0.7	4.93	0.42
Arm 2	0.9	6.37	0.49	1.3	7.61	0.57
Arm 3	0.1	4.42	0.10	0.0	4.29	0.03
2030 Baseline + CD						
Arm 1	1.1	6.20	0.52	0.9	5.34	0.46
Arm 2	1.2	7.17	0.54	1.7	9.02	0.64
Arm 3	0.1	4.65	0.11	0.0	4.52	0.03
2030+ CD + Proposed Development						
Arm 1	1.3	6.77	0.56	0.9	5.51	0.48
Arm 2	1.3	7.41	0.56	2.1	10.19	0.68
Arm 3	0.1	4.71	0.11	0.0	4.68	0.03

Table 15: Eastern Way/Snowberry Lane/ Rosemary Way Roundabout

6.15 Analysis shows that the junction is forecast to operate well within capacity in all scenarios, with negligible queueing and delays less than 11 seconds, with the highest RFC being 0.68. It is therefore considered that the impact on the operation of this junction is acceptable.

4 - Snowberry Lane/Spa Road/Campion Drive Roundabout

6.16 A summary of the results for this junction are shown below in **Table 16**, with the full outputs attached as **Appendix N**. For information the arms of the junctions are as follows:

- Arm 1 – Snowberry Lane
- Arm 2 – Spa Road East
- Arm 3 – Campion Drive
- Arm 4 – Spa Road West

Scenario	AM Peak (08:00-09:00)			PM Peak (17:00-18:00)		
	Queue	Delay	RFC	Queue	Delay	RFC
2025 Baseline						
Arm 1	0.8	4.00	0.44	0.5	3.15	0.34
Arm 2	1.1	4.16	0.53	1.6	5.13	0.62
Arm 3	0.1	3.73	0.06	0.0	3.90	0.02
Arm 4	0.7	4.16	0.40	0.6	4.29	0.38
2030 + CD						
Arm 1	1.0	4.50	0.50	0.6	3.37	0.37
Arm 2	1.3	4.58	0.58	2.1	6.06	0.68
Arm 3	0.1	3.96	0.07	0.0	4.22	0.02
Arm 4	0.7	4.49	0.43	0.7	4.73	0.42
2030 + Committed Development + Proposed Development						
Arm 1	1.5	6.28	0.60	0.6	3.37	0.38
Arm 2	1.8	6.06	0.65	2.2	6.23	0.69
Arm 3	0.1	4.86	0.08	0.0	4.28	0.02
Arm 4	1.0	5.73	0.49	0.7	4.79	0.42

Table 16: Snowberry Lane/Spa Road/Campion Drive Roundabout Modelling Results

6.17 The modelling results show that the Snowberry Lane/Spa Road/Campion Drive Roundabout demonstrates that the junction operates well within capacity with a maximum RFC of 0.69, queues of less than 3 vehicles and a maximum delay of 6.28 seconds.

5 - Spa Road/Bath Road/Pathfinder Way/Western Way Roundabout

6.18 Capacity analysis of the Spa Road/ Bath Road/Pathfinder Way/ Western Way Roundabout has been undertaken utilising Junctions 9. The geometry for the analysis has been measured from OS mapping and supplemented by aerial imagery and on-site observations.

6.19 A summary of the results for this junction are shown below in **Table 17**, with the full outputs attached as **Appendix O**.

- Arm 1 – Spa Road
- Arm 2 – Bath Road
- Arm 3 – Pathfinder Way
- Arm 4 – Western Way

Scenario	AM Peak (08:00-09:00)			PM Peak (17:00-18:00)		
	Queue	Delay	RFC	Queue	Delay	RFC
2025 Baseline						
Arm 1	1.7	5.81	0.64	0.8	3.60	0.45
Arm 2	1.2	5.22	0.54	0.6	3.41	0.38
Arm 3	1.2	5.64	0.54	0.6	3.65	0.37
Arm 4	1.7	7.57	0.63	2.8	10.09	0.74
2030 + CD						
Arm 1	2.4	7.28	0.71	1.0	3.97	0.50
Arm 2	1.4	6.05	0.59	0.7	3.67	0.41
Arm 3	1.5	6.63	0.60	0.7	3.99	0.41
Arm 4	2.1	9.14	0.69	3.9	13.50	0.80
2030 + CD + PD						
Arm 1	2.5	7.52	0.72	1.0	3.95	0.50
Arm 2	1.4	6.01	0.59	0.7	3.66	0.41
Arm 3	1.4	6.54	0.59	0.7	3.96	0.40
Arm 4	2.1	8.90	0.68	4.3	14.55	0.82

Table 17: Spa Road/ Bath Road/ Pathfinder Way/ Western Way Roundabout Modelling Results

6.20 The modelling results show that the Spa Road/ Bath Road/ Pathfinder Way/ Western Way Roundabout demonstrates that the junction operates well within capacity with a maximum RFC of 0.82, queues of less than 15 vehicles and a maximum delay of 14.55 seconds.

6 - Lowbourn/Bank Street/High Street Mini Roundabout

6.21 A summary of the results for this junction are shown below in **Table 18**, with the full outputs attached as **Appendix P**. The arms are labelled as follows:

- Arm 1 – Bank Street
- Arm 2 – Lowbourn Road
- Arm 3 – High Street

Scenario	AM Peak (08:00-09:00)			PM Peak (17:00-18:00)		
	Queue	Delay	RFC	Queue	Delay	RFC
2025 Baseline						
Arm 1	0.4	4.99	0.26	2.5	13.95	0.72
Arm 2	2.0	11.93	0.67	1.0	8.77	0.49
Arm 3	0.5	6.42	0.35	1.0	7.00	0.50
2030 + CD						
Arm 1	0.4	5.39	0.30	4.4	22.97	0.82
Arm 2	3.9	19.57	0.80	1.5	11.10	0.59
Arm 3	0.7	7.48	0.41	1.3	8.45	0.58

2030 + CD + Proposed Development						
Arm 1	0.4	5.46	0.31	5.2	26.29	0.84
Arm 2	4.7	22.86	0.83	1.5	11.53	0.61
Arm 3	0.7	7.70	0.42	1.4	8.74	0.59

Table 18: Lowbourne/Bank Street/High Street Mini Roundabout Modelling Results

- 6.22 The modelling results show that the Lowbourne/Bank Street/High Street mini roundabout operates within capacity with the Bank Street arm operating close to the acceptable RFC value in the 2029 + CD + PD scenario experiences delays of 26.29 seconds and has an RFC of 0.84.

7 - Sandridge Common/Forest Road Double Mini Roundabout

- 6.23 Capacity analysis of the Sandridge Common/Forest Road double mini roundabout has been undertaken utilising Junctions 9. The geometry for the analysis has been measured from OS mapping and supplemented by aerial imagery and on-site observations.
- 6.24 **Table 19** sets out the summary Junctions 9 results for the Sandridge Common/Forest Road double mini roundabout in the 2025 base year and 2030 Forecast with and without development in the AM and PM peak hour periods, whilst the full outputs are included at **Appendix Q**. For information the arms of the junction are as follows:

Junction 1 – Arm 1 – Forest Road (North)

Junction 1 – Arm 2 – Sandridge Common (East)

Junction 1 – Arm 3 – Internal Link (West)

Junction 2 – Arm 1 – Lowbourne Road (North)

Junction 2 – Arm 2 – School/Club Access (North West)

Junction 2 – Arm 3 – Internal Link (East)

Junctions	Scenario	AM Peak (08:00-09:00)			PM Peak (17:00-18:00)		
		Queue	Delay	RFC	Queue	Delay	RFC
2024 Baseline							
Junction 1	Arm A	0.3	6.25	0.21	0.2	7.67	0.18
	Arm B	3.3	17.13	0.77	0.8	6.82	0.44
	Arm C	0.3	4.14	0.26	1.0	6.20	0.50
Junction 2	Arm A	0.5	5.96	0.32	3.0	18.26	0.75
	Arm B	0.1	4.39	0.09	0.0	5.43	0.02
	Arm C	2.1	9.77	0.8	0.7	5.09	0.40
2029 Baseline + Committed Development							
Junction 1	Arm A	0.3	6.60	0.22	0.2	8.62	0.20
	Arm B	2.9	15.19	0.74	0.7	6.68	0.43
	Arm C	0.4	4.47	0.31	1.4	7.55	0.59
Junction 2	Arm A	0.6	6.65	0.39	2.8	14.70	0.74
	Arm B	0.1	4.64	0.10	0.0	6.09	0.04
	Arm C	1.9	9.13	0.66	0.6	5.01	0.39
2029 + Committed Development + Proposed Development							
Junction 1	Arm A	0.3	6.68	0.22	0.3	8.95	0.21

Junction 2	Arm B	3.3	17.13	0.77	0.8	6.82	0.44
	Arm C	0.8	4.52	0.32	1.6	7.97	0.61
	Arm A	0.7	6.74	0.40	3.2	16.36	0.77
	Arm B	0.1	4.68	0.10	0.0	6.27	0.04
	Arm C	2.2	9.79	0.69	0.7	5.09	0.40

Table 19: Sandridge Common/Forest Road Double Mini Roundabout Modelling Results

- 6.25 The Sandridge Common/Forest Road modelling results demonstrate that the junction operates well within capacity with a maximum RFC of 0.77, queues of less than 4 vehicles and a maximum delay of 16.36 seconds.

8 - Church Lane/Blackmore Road Double Mini-Roundabout

- 6.26 Capacity analysis of the Church Lane/Blackmore Road double mini-roundabout has been undertaken utilising Junctions 9. The geometry for the analysis has been measured from OS mapping and supplemented by aerial imagery and on-site observations.
- 6.27 **Table 20** sets out the summary Junctions 9 results for the Church Lane/Blackmore Road double mini-roundabout in the 2025 base year and 2030 Forecast with and without development in the AM and PM peak hour periods, whilst the full outputs are included at **Appendix R**. For information the arms of the junction are as follows:

Junction 1 – Arm A – Church Lane (North)

Junction 1 – Arm B – Sandridge Common (East)

Junction 1 – Arm C – Internal Link (West)

Junction 2 – Arm A – Blackmore Road (South)

Junction 2 – Arm B – Sandridge Common (West)

Junction 2 – Arm C – Internal Link (East)

Junctions	Scenario	AM Peak (08:00-09:00)			PM Peak (17:00-18:00)		
		Queue	Delay	RFC	Queue	Delay	RFC
	2025 Baseline						
Junction 1	Arm A	0.6	10.17	0.37	0.5	10.50	0.32
	Arm B	1.7	12.20	0.64	1.1	9.23	0.53
	Arm C	0.7	6.45	0.40	1.5	9.89	0.60
Junction 2	Arm A	1.4	24.94	0.59	0.8	14.11	0.45
	Arm B	0.3	4.30	0.25	0.7	5.60	0.42
	Arm C	3.1	18.33	0.76	1.4	10.84	0.59
2030 Baseline + Committed Development							
Junction 1	Arm A	8.3	163.18	0.96	0.5	11.46	0.33
	Arm B	36.7	223.08	1.07	13	10.07	0.57
	Arm C	0.8	6.87	0.44	1.9	11.46	0.65
Junction 2	Arm A	1.5	27.34	0.60	0.9	16.56	0.48
	Arm B	0.4	4.49	0.28	0.9	6.10	0.47
	Arm C	3.6	20.36	0.80	1.7	12.01	0.63
2030 + Committed Development + Proposed Development							
Junction 1	Arm A	12.1	230.40	1.00	0.6	12.60	0.36
	Arm B	78.8	464.81	1.16	1.8	12.99	0.64

	Arm C	0.8	7.11	0.46	2.3	13.13	0.70
Junction 2	Arm A	1.6	27.91	0.62	1.0	16.51	0.50
	Arm B	0.4	4.57	0.29	1.0	6.49	0.49
	Arm C	3.6	20.36	0.80	1.8	12.78	0.65

Table 20: Church Lane/Blackmore Road Double Mini Roundabout Modelling Results

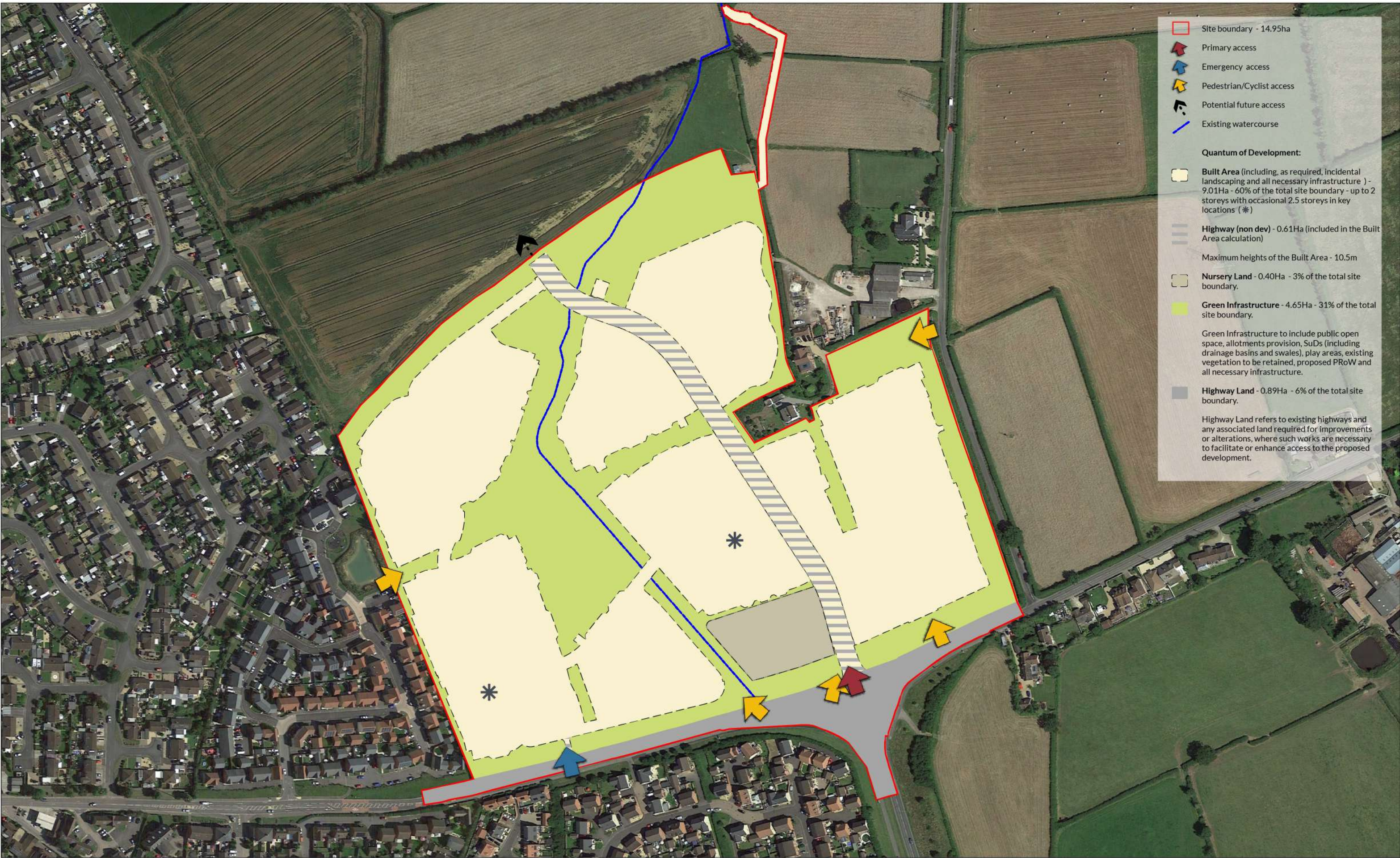
- 6.28 The Church Lane/Blackmore Road modelling results demonstrate that the junction operates mostly within capacity with the exception of Arm 1 (Church Lane N) in the 2030 + CD scenario which experiences delays of 163.18 seconds and has an RFC of 0.96 and Arm 2 (Sandridge Common East) which experiences delays of 223.08 seconds and has an RFC of 1.07. In the 2030 + CD + PD scenario Arm 1 (Church Lane N) experiences delays of 231.18 seconds and has an RFC of 1.01 and Arm 2 (Sandridge Common East) which experiences delays of 464.81 seconds and has an RFC of 1.16. It is worth noting that the junction operates over capacity without the development traffic and therefore the small increase that the development proposals will be negligible at the junction.
- 6.29 Whilst it is acknowledged that Arms 1 and 2 operate over capacity with the development, as part of the full planning application, it was proposed to convert the double mini roundabout into left-right staggered priority junctions, however, at the consultation stage, WC highways accepted that this would operate over capacity with their preference being an improvement in sustainable travel contributions to bring down single occupancy vehicle usage. Therefore, this approach will be taken for this outline application, under the assumption that this would still be acceptable to WC Highways.

7. SUMMARY AND CONCLUSIONS

- 7.1 This Transport Assessment (TA) has been prepared by Paul Basham Associates on behalf of Bloor Homes South West to support an outline planning application for a residential development; public open space including formal play space and allotments; sustainable drainage systems and associated infrastructure; a 100 place nursery and access points for pedestrians and cyclists on Land at New Farm, Melksham. All matters are reserved except for access. Vehicle access would be provided via an improved Eastern Way/A3102 roundabout junction and an emergency access onto the A3102.
- 7.2 The site has been subject to a full planning application (submitted under reference: PL/2024/13045) for 295 homes and an area safeguarded for a 100 space Children's Nursery. At the time of writing, this is a live application. WC's latest highways comments relate to internal layout matters, and therefore it is understood that the other highway principles are agreed, i.e. those that would fall to be considered as part of an outline application with detail of access – including means of access, highway impact and sustainable travel improvements.
- 7.3 The proposed development has been shown to be well located to support a variety of travel modes. The site is well connected to the local road network along with the strategic network including the A3102 and A350. The local pedestrian and cycle networks are well located to promote use by future residents and offer great opportunities for people to walk and cycle to their destinations. The site is also well located to support public transport use with regular bus services located in close proximity as well as being able to access the local rail network. Such a summary is concurred within the emerging Wiltshire Local Plan where the site is referenced under Policy 20: Land north of A3102.
- 7.4 Two ATC surveys were undertaken in February 2024 (as part of the full application) along Sandridge Common and New Road with 85th percentile speeds along the A3102 Sandridge Common Road measuring 41.0mph eastbound and 39.6mph and 85th percentile speeds along New Road are 36.0mph northbound and 39.6mph southbound.
- 7.5 It is proposed that access to the site will be via one main access point via a newly constructed 4th arm on the Sandridge Common/Eastern Way Roundabout as part of the wider roundabout re-design works. Vehicle tracking has been completed from this access point.
- 7.6 There will be a further access point located approximately 250m west of the roundabout along Sandridge Common Road that will take the form of an emergency access and will measure 3.7m wide. Vehicle tracking of a fire tender has been undertaken highlighting that a fire tender is able to utilise this access should the main access point be blocked.

- 7.7 As detailed in the previous section, a 7-day ATC was undertaken on the A3102 Sandridge Common Road to the west of the existing A3102/Eastern Way roundabout in February 2024. The results of the ATC resulted in 85th percentile speeds of 41.9mph eastbound and 39.6mph westbound, Visibility splays at the secondary access point have been shown at 2.4m x 112.3m in the primary direction and 2.4m x 102.5m in the secondary direction.
- 7.8 To allow for safe pedestrian and cyclist movements, 3m shared footway/cycleways will be provided along the internal roads.
- 7.9 As part of the roundabout upgrades, an LTN 1/20 compliant footway/cycleway measuring 3m and crossing points are also proposed along the Sandridge Common western arm to tie into the existing infrastructure on the southern side.
- 7.10 The proposed development is likely to generate in the order of 155 trips in the AM and the PM peaks, with 1334 trips generated across a 12 hour period. It should be noted that the trip rates are higher (two-way movements of 0.515 AM Peak and 0.489 PM peak, compared to the above 0.527 AM Peak and 0.527 in the PM peak), and approved, as part of planning application 15/12454/OUT, and therefore are considered robust.
- 7.11 Junction modelling results outline that the majority of junctions operate well within capacity taking into consideration the proposed development traffic, with the exception the Church Lane/Blackmore Road double mini roundabout. Whilst it is acknowledged that Arms 1 and 2 operate over capacity with the development, as part of the full planning application, it was proposed to convert the double mini roundabout into left-right staggered priority junctions, however, at the consultation stage, WC highways accepted that this would operate over capacity with their preference being an improvement in sustainable travel contributions to bring down single occupancy vehicle usage. The same approach is therefore proposed as part of this outline application.
- 7.12 This TA has therefore demonstrated that the proposed development will not result in a severe impact upon the local road network and therefore is in accordance with NPPF Paragraph 116. The principles are as per the previous full application, and we would therefore ask Wiltshire Council Highways to look favourably upon this application in relation to highways.

Appendix A



Site boundary - 14.95ha

Primary access

Emergency access

Pedestrian/Cyclist access

Potential future access

Existing watercourse

Quantum of Development:

Built Area (including, as required, incidental landscaping and all necessary infrastructure) - 9.01Ha - 60% of the total site boundary - up to 2 storeys with occasional 2.5 storeys in key locations (*)

Highway (non dev) - 0.61Ha (included in the Built Area calculation)

Maximum heights of the Built Area - 10.5m

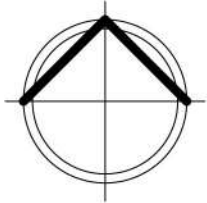
Nursery Land - 0.40Ha - 3% of the total site boundary.

Green Infrastructure - 4.65Ha - 31% of the total site boundary.

Green Infrastructure to include public open space, allotments provision, SuDs (including drainage basins and swales), play areas, existing vegetation to be retained, proposed PRoW and all necessary infrastructure.

Highway Land - 0.89Ha - 6% of the total site boundary.

Highway Land refers to existing highways and any associated land required for improvements or alterations, where such works are necessary to facilitate or enhance access to the proposed development.



Status

FINAL

Client:

Bloor Homes

Project title:

**Land at New Road Farm
Melksham**

Drawing title:

Parameters Plan

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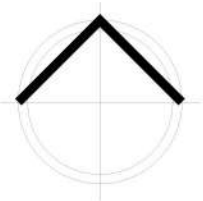
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Client:

Bloor Homes Limited

Project title:

Land off Sandridge Common,
Melksham

Drawing title:

Illustrative Masterplan

Scale:

1:2500@A3

Date:

24.09.2025

Drawn by:

DR

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Criterion	Description	Common Shortfalls	Rating	Appraiser Comments	Local Policy & Guidance
1. Trip generation and assignment	Does the application appropriately forecast all day trips to, from and within the site by walking, wheeling and cycling?	Source data is not representative of the proposed development, is out-of-date or is confined to commuting journeys only. Forecasted trip generation is limited to motor vehicle traffic or peak hours only. Future year forecasts do not realise the potential of the development to support a greater number of walking, wheeling and cycling journeys or do not align with the national target (or any adopted local targets) that half of all journeys in towns and cities shall be walked, wheeled or cycled by 2030.	Pass	This information is contained within the accompanying TP	
2. Active travel route audit	Has an appropriate assessment on the design and accessibility of existing active travel routes in the locality of the site been presented?	Local pedestrian and cycling routes are only identified in application documents by their location, with no assessment provided on whether these are safe, direct, convenient and accessible for people of all abilities (paragraph 82 of the National Design Guide) or coherent, direct, safe, comfortable and attractive (core design principles in LTN 1/20). Applications that include new dwellings have not demonstrated how local schools and colleges will be accessed by active travel modes. Qualitative analysis to inform any necessary improvements to the design and accessibility of key routes does not include maps, photographs and comments nor has regard to the following guidance, tools and plans in the assessment of key routes: • Inclusive Mobility (Chapters 3, 4, 6, 7 and 15; and Sections 5.2, 5.7, 9.1, 9.3, 9.4 and 9.7 as appropriate); • PAS 6463: Design for the Mind (Sections 5.2.1, 5.2.3, 6.4, 7.6.2, 7.6.3, 7.7 and 11.12); • LTN 1/20: Cycle Infrastructure Design (including Appendix A: Cycling Level of Service Tool; and Appendix B: Junction Assessment Tool); • the government's Walking Route Audit Tool; and • any adopted or emerging Local Cycling and Walking Infrastructure Plans (LCWIPs).	Pass	Transport Assessment has been completed for the site detailing all walking and cycling routes available from the site.	
3. Pedestrian access to local amenities	Are most buildings within 800m from a range of amenities (such as primary schools, parks, play areas, food shops, cafes and community buildings) using well-designed routes?	Trip lengths to key amenities as presented in application documents are based on straight-line distances from site boundaries or main access points. There are few everyday amenities within the recommended distance from most buildings using safe and accessible routes for pedestrians. Footpaths/ways to local amenities do not conform to the National Design Guide standards of being safe, direct, convenient and accessible for people of all abilities, which includes but is not limited to routes that: • have a minimum width of 2m, with limited pinch points no less than 1.5m; • are step-free; • have a smooth, even surface; • have seating at regular intervals; • are uncluttered; • have good natural surveillance and clear lines of sight; • have street lighting; • have wayfinding; and • have crossing points suitable for the speed and traffic flow of the road(s).	Pass		
4. Cycling accessibility	Are a range of local amenities, and town centres, railway stations, employment areas and the National Cycle Network as appropriate, accessible for cyclists using well-designed routes?	Cycle routes relied on by the development are not coherent, direct, safe, comfortable or attractive in line with the five core design principles and geometric requirements in LTN 1/20 (see Sections 4.2 and 5). This may be due to physical features, steps, steep gradients or surface quality; or the absence of ramps, lighting or appropriate crossing facilities. The development relies on shared use routes in full or intermittently, which conflicts with the clear position in paragraph 1.6.1 (2) of LTN 1/20 that cycles must be treated as vehicles and not as pedestrians. There is insufficient protection from motor traffic in accordance with the suitability and segregation standards in LTN 1/20 (see Figure 4.1 and Section 6) such that some potential cyclists would be excluded.	Pass	Transport Assessment has been completed for the site detailing all walking and cycling routes available from the site.	
5. Access to public transport	Are all buildings within 400m of a high-frequency bus stop or 800m of a rail/light rail station or tram stop, with appropriate facilities, using well-designed routes?	There are no public transport nodes with a regular service (this will differ between urban and rural areas) within the recommended distances. Local bus stops do not have good natural surveillance or do not provide seating, lighting, shelter, real-time passenger information and raised bus boarders or specialist kerbs. Local rail stations do not provide sufficient cycle parking, including spaces for non-standard cycles. Footpaths/ways to public transport nodes do not conform to the National Design Guide standards of being safe, direct, convenient and accessible for people of all abilities, which includes but is not limited to routes that: • have a minimum width of 2m, with limited pinch points no less than 1.5m; • are step-free; • have a smooth, even surface; • have seating at regular intervals; • are uncluttered; • have good natural surveillance and clear lines of sight; • have street lighting; • have wayfinding; and • have crossing points suitable for the speed and traffic flow of the road(s).	Condition / Obligation to make acceptable	High quality bus stops will be provided as part of the development proposals and therefore the provision of these will improve this access for residents.	
6. Off-site transport infrastructure	Does the application include proposals to enhance local active travel and public transport infrastructure?	The application fails to identify necessary, directly related and proportionate improvements or contributions to: • footpaths/ways in line with the design standards identified in criteria 3 and 5; • cycling routes in line with LTN 1/20 standards identified in criteria 4; or • public transport infrastructure (where this is not provided on-site) that may include: new or extended services; seating, lighting, shelter, real-time passenger information and raised bus boarders or specialist kerbs at bus stops; and secure cycle parking with pumps and repair tools at rail stations and mobility hubs. The application fails to identify the mechanism to secure identified improvements and the trigger point(s) for delivery or payment. Proposed road/junction improvements do not prioritise pedestrian and cycling movements, including appropriate crossings.	Condition / Obligation to make acceptable	High quality bus stops will be provided as part of the development proposals and therefore the provision of these will improve this access for residents.	
7. Site permeability	Does the development prioritise pedestrian and cycle movements within the site?	Opportunities have been missed to maximise accessibility for active travel modes, including: • the development does not provide or safeguard pedestrian and cycling connections to neighbouring sites including future phases of development; • routes for pedestrians and cyclists are not at least as direct – and preferably more direct – than the equivalent by car; • routes are not fully accessible or do not have adjacent accessible alternatives (e.g. ramps alongside steps or bound paths next to unbound paths); • inappropriate or infrequent crossings are proposed (see Inclusive Mobility Sections 4.10-4.11, PAS 6463 Section 7.6.2, LTN 1/20 Table 10-2, Manual for Streets Section 6.3 and Manual for Streets 2 Section 9.3); • pedestrians and cyclists are not prioritised at side road crossing points (see LTN 1/20 Figure 10.13); • priority junctions have radii that interrupts the pedestrian desire line (see Manual for Streets Sections 6.3-6.4 and Manual for Streets 2 Section 9.4); • there are red/zero scores when applying the Junction Assessment Tool in LTN 1/20; • signalised junctions do not have pedestrian aspects on some arms; • where cyclists would mix with motor vehicles, lane widths are between 3.2m and 3.9m (paragraph 7.2.5 of LTN 1/20 identifies that such widths allow motor vehicles to drive alongside a cyclist without a safety margin for their comfort and protection); • there are unsafe or poorly signed transitions for cyclists when moving between cycleways on and off the carriageway; or • cycleways within commercial sites are not continuous through to cycle parking areas. Shared use routes for pedestrians and cyclists are proposed and these do not meet the limited situations listed in paragraph 6.5.6 of LTN 1/20. Where shared use routes are acceptable, their widths are below 3m (<300 cyclists per hour) or below 4.5m elsewhere, contrary to LTN 1/20 Table 6-3.	Pass		

8. Placemaking	Does the development establish a strong sense of place, with well-designed streets, public spaces that feel safe and key amenities provided?	The design of streets does not encourage social interaction or create attractive, safe and accessible open spaces that would support an active life for everyone, contrary to the National Design Guide (See Part 2). This may include missed opportunities to incorporate green infrastructure / street trees, shared space residential streets (such as appropriately designed home-zones, mews and culs-de-sac), equipped play facilities, seating at regular intervals, and clear lines of sight to assist with orientation (including measures to prevent inconsiderate parking). Aspects of the proposed design give rise to personal and highway safety concerns, including: • streets, public transport nodes and other public spaces do not benefit from appropriate levels of natural surveillance and lighting; • the requirements of disabled people have not been appropriately considered; • the development includes 'blind-spots', sharp turns or high-sided boundary treatments; • the development does not provide continuous and legible routes or is not supported by an effective wayfinding strategy; or • residential or local streets encourage traffic movements through the site or are not designed for a 20mph speed limit (see Manual for Streets Section 7.4 for guidance on achieving appropriate traffic speeds). There are gaps in the provision of well-located, on-site amenities to support the quantum of development proposed, in conflict with paragraph 83 of the National Design Guide. For larger residential-led developments, this may include a lack of evidence that the applicant has utilised local authority pupil yield data (or the Department for Education's Pupil Yield Dashboard in the absence of such) to inform the need for new schools and early years settings.	Pass		
9. Cycle parking and trip-end facilities	Does the application provide the requisite amount and quality of cycle parking and trip-end facilities?	Cycle parking is not provided in accordance with up-to-date local standards, or Section 11 of LTN 1/20 in the absence of such. Details of accessibility, parking types and dimensions, security arrangements or lighting as appropriate is not provided (highly accessible cycle parking is essential for people with sensory and/or information processing differences and disabled cyclists who may be unable to walk very far or navigate a change in levels). For workplaces, public buildings (including those used for leisure and recreation) larger retail developments and other developments with communal parking: • internal cycle stores cannot be accessed from building frontages, are not step-free or require passing through more than two sets of doors; • a proportion of cycle parking (typically 5%) is not provided for non-standard cycles to accommodate people with mobility impairments, which is contrary to paragraph 11.3.2 of LTN 1/20 (Table 11-2 also advises on bay lengths and access aisle widths for larger cycles using Sheffield stands); or • high-quality facilities including showers, lockers, changing rooms and drying areas are not provided for cyclists in non-residential settings (see Section 11.7 of LTN 1/20, BREEAM guidance and any local standards). The quantum and quality of the cycle parking and trip-end facilities proposed does not align with travel plan targets for cycling or application objectives to deliver a sustainable form of development.	Pass		
10. Travel planning	Does the travel plan outline ambitious mode share targets and measures to embed active travel, alongside appropriate monitoring and remedial strategies?	A 'full', 'framework' or 'interim' travel plan has not been submitted as appropriate (a framework travel plan is generally only appropriate for commercial developments where the end user is unknown, while an interim travel plan can be acceptable where the split of uses is not yet confirmed). Where the appropriate travel plan has been submitted: • targets for active travel mode share lack ambition or do not align with the national target (or any adopted local target) that half of all journeys in towns and cities shall be walked, wheeled or cycled by 2030; • mode share targets are not set for the end of each phase (where identifiable) nor extend to five years beyond the final occupation of the development; • there is an absence of travel plan targets for all uses proposed within the application site as appropriate; • the travel plan does not provide sufficient detail on the active travel and public transport infrastructure to be provided or improved (both on and off-site) or how its use will be embedded by initiatives and incentives to be secured through planning conditions and obligations; or • there are no details of effective and influential actions to be taken if targets are not met, with the intention for these to be secured and monitored (if triggered) through planning conditions and obligations.	Pass	All outlined within the TP	

Appendix C

Melksham ATC, A3102 Sandridge Common



Direction: Eastbound

Hour Beginning	Fri 23/02/2024	Sat 24/02/2024	Sun 25/02/2024	Mon 26/02/2024	Tue 27/02/2024	Wed 28/02/2024	Thu 29/02/2024	5-Day Ave.	7-Day Ave.
00:00	2	9	27	2	5	7	7	5	8
01:00	1	6	7	1	3	3	1	2	3
02:00	0	3	3	2	4	2	0	2	2
03:00	1	4	2	2	2	1	1	1	2
04:00	9	6	1	12	11	10	10	8	
05:00	50	9	11	48	43	48	45	47	36
06:00	120	28	14	134	128	136	123	128	98
07:00	421	68	26	459	449	445	455	446	332
08:00	570	143	58	525	557	544	531	545	418
09:00	319	204	139	285	292	301	287	297	261
10:00	207	267	175	178	198	173	177	187	196
11:00	207	268	237	210	173	180	216	197	213
12:00	269	244	265	225	214	222	196	225	234
13:00	221	253	234	204	201	204	225	211	230
14:00	309	241	222	233	243	258	261	261	252
15:00	343	216	164	269	250	288	282	286	259
16:00	342	227	173	301	286	287	269	297	289
17:00	350	242	131	302	309	337	285	317	279
18:00	257	180	119	203	212	226	204	220	200
19:00	166	140	100	118	115	118	168	137	132
20:00	81	63	57	75	67	90	91	81	75
21:00	71	68	43	68	59	67	85	70	66
22:00	49	53	22	41	40	40	44	43	41
23:00	29	30	4	9	11	14	23	17	17
Total									
12H(7-19)	3815	2553	1943	3394	3384	3465	3388	3489	3135
16H(6-22)	4253	2852	2157	3789	3753	3876	3855	3905	3505
18H(6-24)	4331	2935	2183	3839	3804	3930	3922	3965	3563
24H(0-24)	4394	2972	2234	3906	3872	4001	3986	4032	3624
AM Peak	08:00	11:00	11:00	08:00	08:00	08:00	08:00	08:00	08:00
	570	268	237	525	557	544	531	545	418
PM Peak	17:00	13:00	12:00	17:00	17:00	17:00	17:00	17:00	17:00
	350	253	265	302	309	337	285	317	279

Paul Castle Associates

Direction: Westbound

Hour Beginning	Fri 23/02/2024	Sat 24/02/2024	Sun 25/02/2024	Mon 26/02/2024	Tue 27/02/2024	Wed 28/02/2024	Thu 29/02/2024	5-Day Ave.	7-Day Ave.
00:00	5	11	22	5	0	5	7	4	8
01:00	0	6	7	2	4	1	1	2	3
02:00	0	2	4	0	2	0	0	0	1
03:00	1	2	2	1	2	3	4	2	2
04:00	2	4	0	4	2	3	3	3	3
05:00	22	4	8	23	23	28	35	26	20
06:00	57	21	10	76	71	72	76	70	55
07:00	357	69	30	329	372	385	379	364	274
08:00	372	140	76	424	411	421	477	421	332
09:00	346	186	139	312	329	347	303	327	280
10:00	214	243	199	177	163	179	187	184	195
11:00	237	287	219	214	159	220	178	202	216
12:00	242	262	244	177	186	238	213	211	223
13:00	235	229	203	191	197	204	226	211	212
14:00	284	254	208	202	235	251	250	244	241
15:00	396	218	165	359	366	391	358	374	322
16:00	401	238	167	375	362	352	387	375	326
17:00	316	222	115	339	364	373	373	353	300
18:00	201	143	122	173	209	225	223	206	185
19:00	142	106	70	118	103	137	128	126	115
20:00	87	71	39	77	77	84	91	83	75
21:00	63	58	33	51	62	66	62	61	56
22:00	46	47	15	25	49	43	54	43	40
23:00	19	29	6	9	9	9	17	13	14
Total									
12H(7-19)	3601	2491	1887	3272	3353	3586	3554	3473	3106
16H(6-22)	3950	2747	2039	3594	3666	3945	3911	3813	3407
18H(6-24)	4015	2823	2060	3628	3724	3997	3982	3869	3461
24H(0-24)	4045	2852	2103	3663	3757	4037	4032	3907	3498
AM Peak	08:00	11:00	11:00	08:00	08:00	08:00	08:00	08:00	08:00
	372	287	219	424	411	421	477	421	332
PM Peak	16:00	12:00	12:00	16:00	15:00	15:00	16:00	16:00	16:00
	401	262	244	375	366	391	387	375	326

Paul Castle Associates

Direction: Total Flow

Hour Beginning	Fri 23/02/2024	Sat 24/02/2024	Sun 25/02/2024	Mon 26/02/2024	Tue 27/02/2024	Wed 28/02/2024	Thu 29/02/2024	5-Day Ave.	7-Day Ave.
00:00	7	20	49	7	5	12	14	9	16
01:00	1	12	14	3	7	4	2	3	6
02:00	0	5	7	2	6	2	0	2	3
03:00	2	6	4	3	4	4	5	4	4
04:00	11	10	1	16	13	13	13	13	11
05:00	72	13	19	71	66	76	80	73	57
06:00	177	49	24	210	199	208	199	199	152
07:00	778	137	56	788	821	830	834	810	606
08:00	942	283	134	949	968	965	1008	966	750
09:00	665	390	278	597	621	648	590	624	541
10:00	421	510	374	355	361	352	364	371	391
11:00	444	555	456	424	332	400	394	399	429
12:00	511	506	509	402	400	460	409	436	457
13:00	456	482	437	395	398	408	451	422	432
14:00	593	495	430	435	478	509	511	505	493
15:00	739	434	329	628	616	679	640	660	581
16:00	743	465	340	676	648	639	656	672	595
17:00	666	464	246	641	673	710	658	670	580
18:00	458	323	241	376	421	451	427	427	385
19:00	308	246	170	236	218	255	296	263	247
20:00	168	134	96	152	144	174	182	164	150
21:00	134	126	76	119	121	133	147	131	122
22:00	95	100	37	66	89	83	98	86	81
23:00	48	59	10	18	20	23	40	30	31
Total									
12H(7-19)	7416	5044	3830	6666	6737	7051	6942	6962	6241
16H(6-22)	8203	5599	4196	7383	7419	7821	7766	7718	6912
18H(6-24)	8346	5758	4243	7467	7528	7927	7904	7834	7025
24H(0-24)	8439	5824	4337	7569	7629	8038	8018	7939	7122
AM Peak	08:00	11:00	11:00	08:00	08:00	08:00	08:00	08:00	08:00
	942	555	456	949	968	965	1008	966	750
PM Peak	16:00	12:00	12:00	16:00	17:00	17:00	17:00	16:00	16:00
	743	506	509	676	673	710	658	672	595

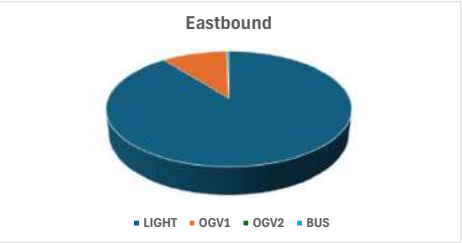
Paul Castle Associates

Melksham ATC, A3102 Sandridge Common

Direction: Eastbound					
	Total Volume	LIGHT	OGV1	OGV2	BUS
Fri 23 Feb 2024	4394	3942	437	6	9
Sat 24 Feb 2024	2972	2760	208	1	3
Sun 25 Feb 2024	2234	2090	137	1	6
Mon 26 Feb 2024	3906	3413	472	8	13
Tue 27 Feb 2024	3872	3405	446	8	13
Wed 28 Feb 2024	4001	3552	430	6	13
Thu 29 Feb 2024	3986	3499	471	5	11
5 Day Ave.	4032	3562	451	7	12
7 Day Ave.	3624	3237	372	5	10

	Total Volume	LIGHT	OGV1	OGV2	BUS
Fri 23 Feb 2024	100.0%	89.7%	9.9%	0.1%	0.2%
Sat 24 Feb 2024	100.0%	92.9%	7.0%	0.0%	0.1%
Sun 25 Feb 2024	100.0%	93.6%	6.1%	0.0%	0.3%
Mon 26 Feb 2024	100.0%	87.4%	12.1%	0.2%	0.3%
Tue 27 Feb 2024	100.0%	87.9%	11.5%	0.2%	0.3%
Wed 28 Feb 2024	100.0%	88.8%	10.7%	0.1%	0.3%
Thu 29 Feb 2024	100.0%	87.8%	11.8%	0.1%	0.3%
5 Day Ave.	100.0%	88.4%	11.2%	0.2%	0.3%
7 Day Ave.	100.0%	89.3%	10.3%	0.1%	0.3%

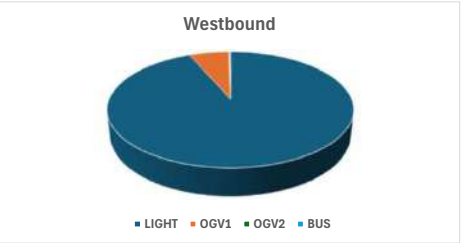
Paul Castle Associates



Direction: Westbound					
	Total Volume	LIGHT	OGV1	OGV2	BUS
Fri 23 Feb 2024	4045	3789	247	2	7
Sat 24 Feb 2024	2852	2724	125	1	2
Sun 25 Feb 2024	2103	2034	68	1	0
Mon 26 Feb 2024	3663	3346	309	2	6
Tue 27 Feb 2024	3757	3463	282	6	6
Wed 28 Feb 2024	4037	3792	235	2	8
Thu 29 Feb 2024	4032	3754	266	2	10
5 Day Ave.	3907	3629	268	3	7
7 Day Ave.	3498	3272	219	2	6

	Total Volume	LIGHT	OGV1	OGV2	BUS
Fri 23 Feb 2024	100.0%	93.7%	6.1%	0.0%	0.2%
Sat 24 Feb 2024	100.0%	95.5%	4.4%	0.0%	0.1%
Sun 25 Feb 2024	100.0%	96.7%	3.2%	0.0%	0.0%
Mon 26 Feb 2024	100.0%	91.3%	8.4%	0.1%	0.2%
Tue 27 Feb 2024	100.0%	92.2%	7.5%	0.2%	0.2%
Wed 28 Feb 2024	100.0%	93.9%	5.8%	0.0%	0.2%
Thu 29 Feb 2024	100.0%	93.1%	6.6%	0.0%	0.2%
5 Day Ave.	100.0%	92.9%	6.9%	0.1%	0.2%
7 Day Ave.	100.0%	93.5%	6.3%	0.1%	0.2%

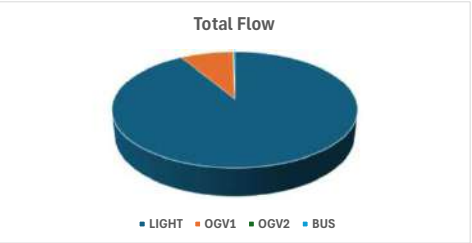
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Direction: Total Flow					
	Total Volume	LIGHT	OGV1	OGV2	BUS
Fri 23 Feb 2024	8439	7731	684	8	16
Sat 24 Feb 2024	5824	5484	333	2	5
Sun 25 Feb 2024	4337	4124	205	2	6
Mon 26 Feb 2024	7569	6759	781	10	19
Tue 27 Feb 2024	7629	6868	728	14	19
Wed 28 Feb 2024	8038	7344	665	8	21
Thu 29 Feb 2024	8018	7253	737	7	21
5 Day Ave.	7939	7191	719	9	19
7 Day Ave.	7122	6509	590	7	15

	Total Volume	LIGHT	OGV1	OGV2	BUS
Fri 23 Feb 2024	100.0%	91.6%	8.1%	0.1%	0.2%
Sat 24 Feb 2024	100.0%	94.2%	5.7%	0.0%	0.1%
Sun 25 Feb 2024	100.0%	95.1%	4.7%	0.0%	0.1%
Mon 26 Feb 2024	100.0%	89.3%	10.3%	0.1%	0.3%
Tue 27 Feb 2024	100.0%	90.0%	9.5%	0.2%	0.2%
Wed 28 Feb 2024	100.0%	91.4%	8.3%	0.1%	0.3%
Thu 29 Feb 2024	100.0%	90.5%	9.2%	0.1%	0.3%
5 Day Ave.	100.0%	90.6%	9.1%	0.1%	0.2%
7 Day Ave.	100.0%	91.4%	8.3%	0.1%	0.2%

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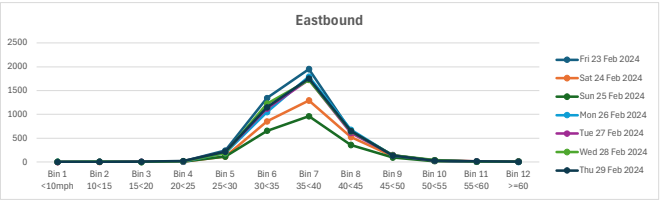


Melksham ATC, A3102 Sandridge Common

Direction: Eastbound

	Total Volume	85th Percentile	Mean Average	Standard Deviation	Bin 1 <10mph	Bin 2 10<15	Bin 3 15<20	Bin 4 20<25	Bin 5 25<30	Bin 6 30<35	Bin 7 35<40	Bin 8 40<45	Bin 9 45<50	Bin 10 50<55	Bin 11 55<60	Bin 12 >=60
Fri 23 Feb 2024	4394	41.7	36.6	4.9	2	4	2	15	239	1346	1952	649	143	31	4	7
Sat 24 Feb 2024	2972	42.4	37.2	5.1	0	1	1	6	117	854	1294	527	125	32	10	5
Sun 25 Feb 2024	2234	42.6	36.9	5.4	2	5	1	5	115	656	963	358	94	16	10	9
Mon 26 Feb 2024	3906	42.0	37.0	4.8	2	4	0	7	189	1050	1796	678	138	34	8	0
Tue 27 Feb 2024	3872	42.0	36.8	5.0	1	2	4	12	206	1122	1727	611	142	29	12	4
Wed 28 Feb 2024	4001	41.9	36.8	5.0	2	4	1	16	187	1226	1726	649	140	40	6	4
Thu 29 Feb 2024	3986	42.0	36.8	5.1	1	2	5	19	219	1149	1756	652	133	31	13	6
5 Day Ave.	4032	41.9	36.8	5.0	2	3	2	14	208	1179	1791	648	139	33	9	4
7 Day Ave.	3624	42.1	36.9	5.1	1	3	2	11	182	1058	1602	589	131	30	9	5

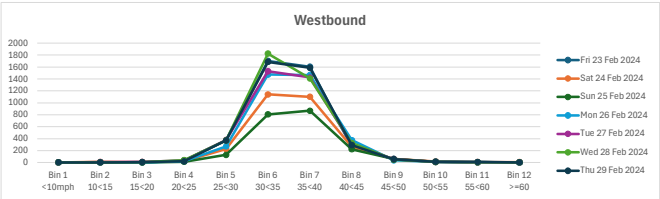
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Direction: Westbound

	Total Volume	85th Percentile	Mean Average	Standard Deviation	Bin 1 <10mph	Bin 2 10<15	Bin 3 15<20	Bin 4 20<25	Bin 5 25<30	Bin 6 30<35	Bin 7 35<40	Bin 8 40<45	Bin 9 45<50	Bin 10 50<55	Bin 11 55<60	Bin 12 >=60
Fri 23 Feb 2024	4045	39.4	34.8	4.4	1	4	2	31	368	1703	1605	259	61	9	1	1
Sat 24 Feb 2024	2852	40.6	35.3	5.0	0	7	5	22	225	1141	1102	265	56	17	6	6
Sun 25 Feb 2024	2103	40.5	35.7	4.6	1	1	1	11	127	807	868	221	55	10	1	0
Mon 26 Feb 2024	3663	39.9	35.3	4.4	0	2	1	23	270	1473	1467	376	36	11	4	0
Tue 27 Feb 2024	3757	39.7	34.9	4.7	1	5	8	32	377	1531	1424	311	54	10	3	1
Wed 28 Feb 2024	4037	39.4	34.7	4.5	2	2	4	38	370	1826	1410	324	47	10	3	1
Thu 29 Feb 2024	4032	39.5	35.0	4.4	0	1	6	19	369	1687	1587	291	53	11	7	1
5 Day Ave.	3907	39.6	34.9	4.5	1	3	4	29	351	1644	1499	312	50	10	4	1
7 Day Ave.	3498	39.8	35.1	4.6	1	3	4	25	301	1453	1352	292	52	11	4	1

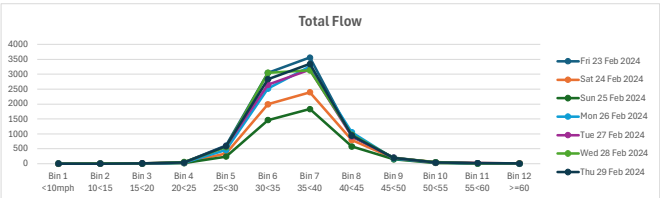
Paul Castle Associates



Direction: Total Flow

	Total Volume	85th Percentile	Mean Average	Standard Deviation	Bin 1 <10mph	Bin 2 10<15	Bin 3 15<20	Bin 4 20<25	Bin 5 25<30	Bin 6 30<35	Bin 7 35<40	Bin 8 40<45	Bin 9 45<50	Bin 10 50<55	Bin 11 55<60	Bin 12 >=60
Fri 23 Feb 2024	8439	40.7	35.7	4.8	3	8	4	46	607	3049	3557	908	204	40	5	8
Sat 24 Feb 2024	5824	41.6	36.3	5.1	0	8	6	28	342	1995	2396	792	181	49	16	11
Sun 25 Feb 2024	4337	41.6	36.3	5.1	3	6	2	16	242	1463	1831	579	149	26	11	9
Mon 26 Feb 2024	7569	41.1	36.2	4.7	2	6	1	30	459	2523	3263	1054	174	45	12	0
Tue 27 Feb 2024	7629	41.0	35.8	4.9	2	7	12	44	583	2653	3151	922	196	39	15	5
Wed 28 Feb 2024	8038	40.8	35.7	4.9	4	6	5	54	557	3052	3136	973	187	50	9	5
Thu 29 Feb 2024	8018	40.9	35.9	4.9	1	3	11	38	588	2836	3343	943	186	42	20	7
5 Day Ave.	7939	40.9	35.9	4.8	2	6	7	42	559	2823	3290	960	189	43	12	5
7 Day Ave.	7122	41.1	36.0	4.9	2	6	6	37	483	2510	2954	882	182	42	13	6

Paul Castle Associates



Melksham ATC, New Road



Direction: Northbound

Hour Beginning	Fri 23/02/2024	Sat 24/02/2024	Sun 25/02/2024	Mon 26/02/2024	Tue 27/02/2024	Wed 28/02/2024	Thu 29/02/2024	5-Day Ave.	7-Day Ave.
06:00	0	0	3	0	0	1	2	1	1
01:00	0	0	2	0	0	0	0	0	0
02:00	0	0	0	0	0	1	0	0	0
03:00	0	1	0	0	0	0	1	0	0
04:00	2	0	0	2	0	0	0	1	1
05:00	3	0	1	6	7	6	7	6	4
06:00	26	3	3	36	39	34	36	34	25
07:00	73	8	8	98	125	137	130	113	83
08:00	84	39	21	119	152	179	143	135	105
09:00	59	33	40	46	68	92	68	67	58
10:00	84	48	46	44	42	55	58	57	54
11:00	84	46	42	34	50	54	41	53	50
12:00	60	44	49	43	49	63	56	54	52
13:00	36	41	29	30	46	46	39	39	38
14:00	53	36	36	54	55	61	61	57	51
15:00	67	38	19	62	58	59	75	64	54
16:00	52	25	14	63	70	58	68	62	50
17:00	29	34	17	45	49	46	51	44	39
18:00	26	32	13	21	36	30	45	32	29
19:00	10	15	14	13	17	12	28	16	16
20:00	5	9	2	4	6	10	10	7	7
21:00	6	4	3	5	7	10	13	8	7
22:00	0	3	4	1	4	2	2	2	2
23:00	1	0	2	0	1	2	0	1	1
Total	707	424	334	659	800	880	835	776	663
12H(7-19)	754	455	356	717	869	946	922	842	717
18H(6-24)	755	458	362	718	874	950	924	844	720
24H(0-24)	760	459	368	726	881	958	934	852	727
AM Peak	08:00	10:00	10:00	08:00	08:00	08:00	08:00	08:00	08:00
	84	48	46	119	152	179	143	135	105
PM Peak	15:00	12:00	12:00	16:00	16:00	12:00	15:00	15:00	15:00
	67	44	49	63	70	63	75	64	54

Paul Castle Associates

Direction: Southbound

Hour Beginning	Fri 23/02/2024	Sat 24/02/2024	Sun 25/02/2024	Mon 26/02/2024	Tue 27/02/2024	Wed 28/02/2024	Thu 29/02/2024	5-Day Ave.	7-Day Ave.
06:00	0	0	4	0	0	1	0	0	1
01:00	0	0	2	1	0	0	0	0	0
02:00	0	0	0	1	0	0	1	0	0
03:00	1	0	1	0	0	0	0	0	0
04:00	0	0	0	2	0	0	1	1	0
05:00	5	1	0	2	3	3	4	3	3
06:00	8	2	1	11	9	6	15	10	7
07:00	24	5	6	27	36	25	54	33	25
08:00	33	11	10	38	38	50	83	48	38
09:00	24	33	14	38	47	65	81	51	43
10:00	35	40	23	26	41	74	54	46	42
11:00	45	33	39	31	42	86	82	57	51
12:00	57	48	44	35	49	95	66	60	56
13:00	50	44	35	29	53	82	101	63	56
14:00	68	44	27	43	70	105	101	77	65
15:00	70	39	30	78	103	152	135	108	87
16:00	82	42	30	106	133	196	179	139	110
17:00	56	37	27	119	125	191	184	135	106
18:00	31	26	22	42	47	85	74	56	47
19:00	11	15	16	17	33	42	35	28	24
20:00	7	9	9	14	10	22	11	13	12
21:00	4	7	6	11	8	10	19	10	9
22:00	6	13	2	7	11	4	17	9	9
23:00	1	6	0	0	2	4	4	2	2
Total	575	402	307	612	784	1206	1194	874	726
12H(7-19)	605	435	339	665	844	1286	1274	935	778
18H(6-24)	612	454	341	672	857	1294	1295	946	789
24H(0-24)	618	455	348	678	860	1298	1301	951	794
AM Peak	11:00	10:00	11:00	08:00	09:00	11:00	08:00	11:00	11:00
	45	40	39	38	47	86	83	57	51
PM Peak	16:00	12:00	12:00	17:00	16:00	16:00	17:00	16:00	16:00
	82	48	44	119	133	196	184	139	110

Paul Castle Associates

Direction: Total Flow

Hour Beginning	Fri 23/02/2024	Sat 24/02/2024	Sun 25/02/2024	Mon 26/02/2024	Tue 27/02/2024	Wed 28/02/2024	Thu 29/02/2024	5-Day Ave.	7-Day Ave.
06:00	0	0	7	0	0	2	2	1	2
01:00	0	0	4	1	0	0	0	0	1
02:00	0	0	0	1	0	1	1	1	0
03:00	1	1	1	0	0	0	1	0	1
04:00	2	0	0	4	0	0	1	1	1
05:00	8	1	1	8	10	9	11	9	7
06:00	34	5	4	47	48	40	51	44	33
07:00	97	13	14	125	161	162	184	146	108
08:00	117	50	31	157	190	229	226	184	143
09:00	83	66	54	84	115	157	149	118	101
10:00	119	88	69	70	83	129	112	103	96
11:00	129	79	81	65	92	140	123	110	101
12:00	117	92	93	78	98	158	122	115	108
13:00	86	85	64	59	99	128	140	102	94
14:00	121	80	63	97	125	166	162	134	116
15:00	137	77	49	140	161	211	210	172	141
16:00	134	67	44	169	203	254	247	201	160
17:00	85	71	44	164	174	237	235	179	144
18:00	57	58	35	63	83	115	119	87	76
19:00	21	30	30	30	50	54	63	44	40
20:00	12	18	11	18	16	32	21	20	18
21:00	10	11	9	16	15	20	32	19	16
22:00	6	16	6	8	15	6	19	11	11
23:00	2	6	2	0	3	6	4	3	3
Total	1282	826	641	1271	1584	2086	2029	1650	1388
12H(7-19)	1359	890	695	1382	1713	2232	2196	1776	1495
18H(6-24)	1367	912	703	1390	1731	2244	2219	1790	1509
24H(0-24)	1378	914	716	1404	1741	2256	2235	1803	1521
AM Peak	11:00	10:00	11:00	08:00	08:00	08:00	08:00	08:00	08:00
	129	88	81	157	190	229	226	184	143
PM Peak	15:00	12:00	12:00	16:00	16:00	16:00	16:00	16:00	16:00
	137	92	93	169	203	254	247	201	160

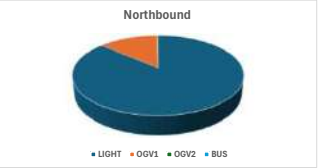
Paul Castle Associates

Melksham ATC, New Road

Direction: Northbound					
	Total Volume	LIGHT	OGV1	OGV2	BUS
Fri 23 Feb 2024	760	640	118	0	2
Sat 24 Feb 2024	459	410	48	1	0
Sun 25 Feb 2024	368	335	32	0	1
Mon 26 Feb 2024	726	614	110	1	1
Tue 27 Feb 2024	881	762	118	0	1
Wed 28 Feb 2024	958	826	130	2	0
Thu 29 Feb 2024	934	807	122	4	1
5 Day Ave.	852	730	120	1	1
7 Day Ave.	727	628	97	1	1

	Total Volume	LIGHT	OGV1	OGV2	BUS
Fri 23 Feb 2024	100.0%	84.2%	15.5%	0.0%	0.3%
Sat 24 Feb 2024	100.0%	89.3%	10.5%	0.2%	0.0%
Sun 25 Feb 2024	100.0%	91.0%	8.7%	0.0%	0.3%
Mon 26 Feb 2024	100.0%	84.6%	15.2%	0.1%	0.1%
Tue 27 Feb 2024	100.0%	86.5%	13.4%	0.0%	0.1%
Wed 28 Feb 2024	100.0%	86.2%	13.6%	0.2%	0.0%
Thu 29 Feb 2024	100.0%	86.4%	13.1%	0.4%	0.1%
5 Day Ave.	100.0%	85.7%	14.0%	0.2%	0.1%
7 Day Ave.	100.0%	86.4%	13.3%	0.2%	0.1%

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Direction: Southbound					
	Total Volume	LIGHT	OGV1	OGV2	BUS
Fri 23 Feb 2024	618	492	120	3	3
Sat 24 Feb 2024	455	404	51	0	0
Sun 25 Feb 2024	348	314	33	0	1
Mon 26 Feb 2024	678	581	97	0	0
Tue 27 Feb 2024	860	733	124	1	2
Wed 28 Feb 2024	1298	1094	199	2	3
Thu 29 Feb 2024	1301	1098	198	0	5
5 Day Ave.	951	800	148	1	3
7 Day Ave.	794	674	117	1	2

	Total Volume	LIGHT	OGV1	OGV2	BUS
Fri 23 Feb 2024	100.0%	79.6%	19.4%	0.5%	0.5%
Sat 24 Feb 2024	100.0%	88.8%	11.2%	0.0%	0.0%
Sun 25 Feb 2024	100.0%	90.2%	9.5%	0.0%	0.3%
Mon 26 Feb 2024	100.0%	85.7%	14.3%	0.0%	0.0%
Tue 27 Feb 2024	100.0%	85.2%	14.4%	0.1%	0.2%
Wed 28 Feb 2024	100.0%	84.3%	15.3%	0.2%	0.2%
Thu 29 Feb 2024	100.0%	84.4%	15.2%	0.0%	0.4%
5 Day Ave.	100.0%	84.1%	15.5%	0.1%	0.3%
7 Day Ave.	100.0%	84.9%	14.8%	0.1%	0.3%

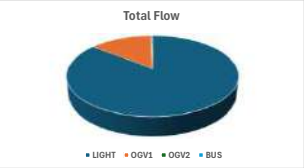
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Direction: Total Flow					
	Total Volume	LIGHT	OGV1	OGV2	BUS
Fri 23 Feb 2024	1378	1132	238	3	5
Sat 24 Feb 2024	914	814	99	1	0
Sun 25 Feb 2024	716	649	65	0	2
Mon 26 Feb 2024	1404	1195	207	1	1
Tue 27 Feb 2024	1741	1495	242	1	3
Wed 28 Feb 2024	2256	1920	329	4	3
Thu 29 Feb 2024	2235	1905	320	4	6
5 Day Ave.	1803	1529	267	3	4
7 Day Ave.	1521	1301	214	2	3

	Total Volume	LIGHT	OGV1	OGV2	BUS
Fri 23 Feb 2024	100.0%	82.1%	17.3%	0.2%	0.4%
Sat 24 Feb 2024	100.0%	89.1%	10.8%	0.1%	0.0%
Sun 25 Feb 2024	100.0%	90.6%	9.1%	0.0%	0.3%
Mon 26 Feb 2024	100.0%	85.1%	14.7%	0.1%	0.1%
Tue 27 Feb 2024	100.0%	85.9%	13.9%	0.1%	0.2%
Wed 28 Feb 2024	100.0%	85.1%	14.6%	0.2%	0.1%
Thu 29 Feb 2024	100.0%	85.3%	14.3%	0.2%	0.3%
5 Day Ave.	100.0%	84.8%	14.8%	0.1%	0.2%
7 Day Ave.	100.0%	85.6%	14.1%	0.1%	0.2%

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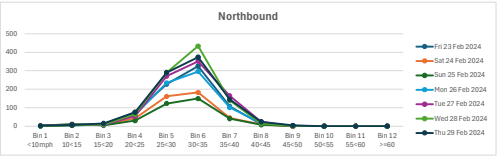


Melksham ATC, New Road

Direction: Northbound

	Total Volume	85th Percentile	Mean Average	Standard Deviation	Bin 1 <10mph	Bin 2 10<15	Bin 3 15<20	Bin 4 20<25	Bin 5 25<30	Bin 6 30<35	Bin 7 35<40	Bin 8 40<45	Bin 9 45<50	Bin 10 50<55	Bin 11 55<60	Bin 12 >=60
Fri 23 Feb 2024	760	35.7	30.5	5.0	0	6	11	73	227	325	106	11	1	0	0	0
Sat 24 Feb 2024	459	35.4	29.7	5.5	4	8	8	42	161	182	45	9	0	0	0	0
Sun 25 Feb 2024	368	35.8	29.9	5.7	2	11	4	30	123	149	41	7	1	0	0	0
Mon 26 Feb 2024	726	36.0	30.7	5.2	2	5	8	61	234	296	101	16	3	0	0	0
Tue 27 Feb 2024	881	36.5	31.2	5.1	2	6	8	55	271	351	164	24	0	0	0	0
Wed 28 Feb 2024	958	35.8	30.9	4.7	1	4	10	65	290	433	139	15	1	0	0	0
Thu 29 Feb 2024	934	36.3	30.8	5.3	2	6	15	76	290	373	145	23	4	0	0	0
5 Day Ave.	852	36.0	30.8	5.0	1	5	10	66	262	356	131	18	2	0	0	0
7 Day Ave.	727	35.9	30.5	5.2	2	7	9	57	228	301	106	15	1	0	0	0

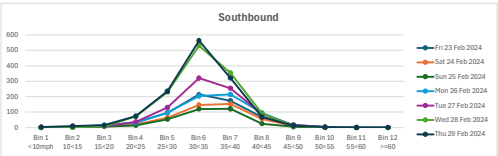
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Direction: Southbound

	Total Volume	85th Percentile	Mean Average	Standard Deviation	Bin 1 <10mph	Bin 2 10<15	Bin 3 15<20	Bin 4 20<25	Bin 5 25<30	Bin 6 30<35	Bin 7 35<40	Bin 8 40<45	Bin 9 45<50	Bin 10 50<55	Bin 11 55<60	Bin 12 >=60
Fri 23 Feb 2024	618	40.3	33.7	6.3	1	2	12	35	95	214	173	67	17	2	0	0
Sat 24 Feb 2024	455	40.4	34.2	6.0	0	3	7	19	63	146	153	55	9	0	0	0
Sun 25 Feb 2024	348	39.6	33.5	5.9	1	3	6	14	53	120	121	25	5	0	0	0
Mon 26 Feb 2024	678	41.0	34.3	6.5	0	4	16	31	96	204	215	95	13	3	1	0
Tue 27 Feb 2024	860	39.9	33.9	5.8	2	2	8	37	130	320	255	87	16	3	0	0
Wed 28 Feb 2024	1298	38.6	33.1	5.2	1	1	8	71	230	531	354	91	11	0	0	0
Thu 29 Feb 2024	1301	38.3	32.6	5.5	2	9	15	74	235	564	321	67	12	2	0	0
5 Day Ave.	951	39.6	33.5	5.9	1	4	12	50	157	367	264	81	14	2	0	0
7 Day Ave.	794	39.7	33.6	5.9	1	3	10	40	129	300	227	70	12	1	0	0

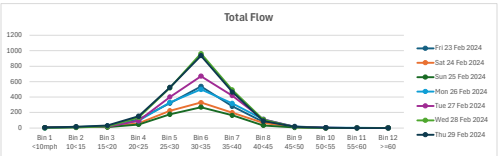
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Direction: Total Flow

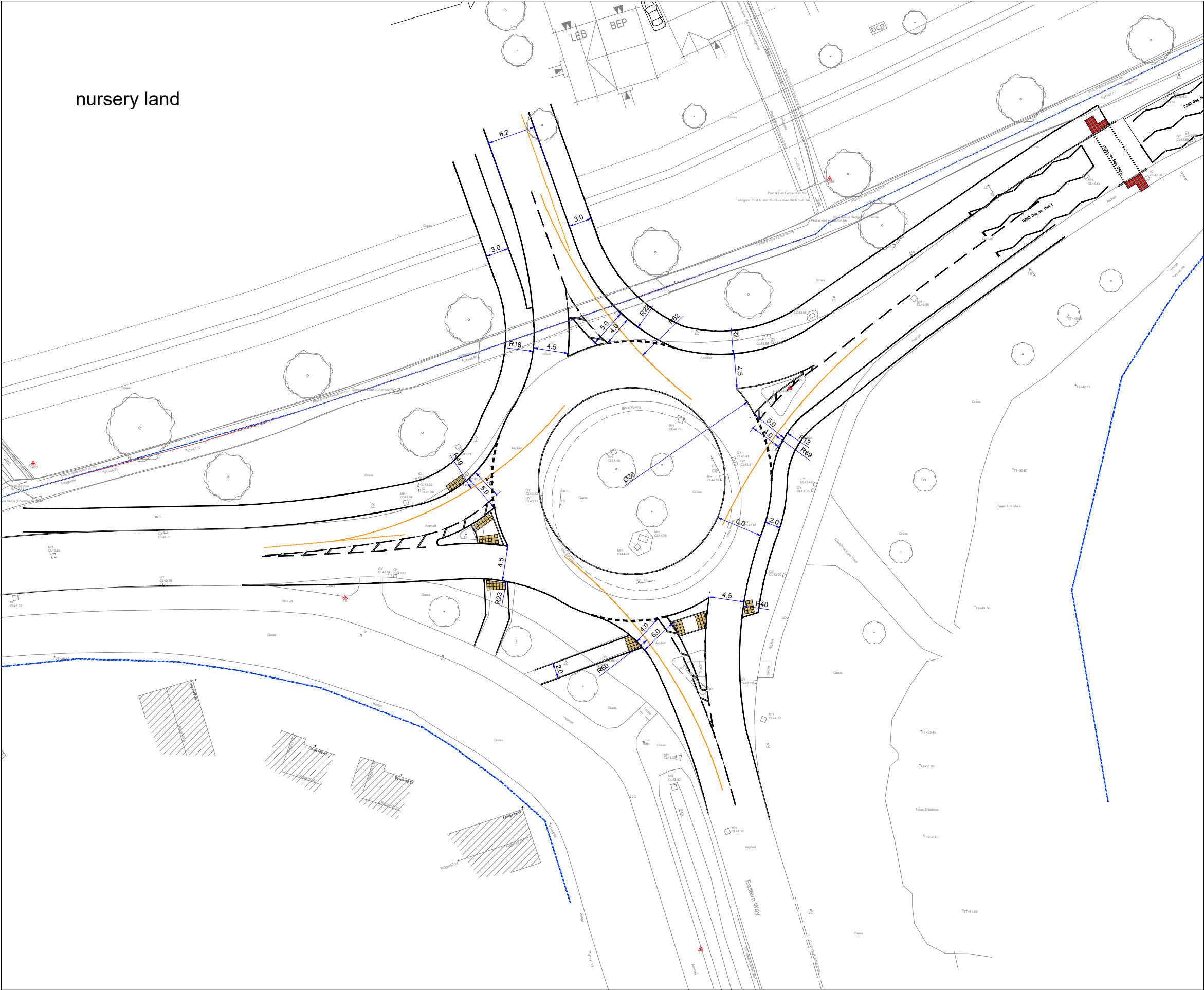
	Total Volume	85th Percentile	Mean Average	Standard Deviation	Bin 1 <10mph	Bin 2 10<15	Bin 3 15<20	Bin 4 20<25	Bin 5 25<30	Bin 6 30<35	Bin 7 35<40	Bin 8 40<45	Bin 9 45<50	Bin 10 50<55	Bin 11 55<60	Bin 12 >=60
Fri 23 Feb 2024	1178	38.0	32.0	5.8	1	8	23	108	322	539	279	76	18	2	0	0
Sat 24 Feb 2024	914	38.4	31.9	6.2	4	11	15	61	224	328	198	64	9	0	0	0
Sun 25 Feb 2024	716	38.0	31.7	6.1	3	14	10	44	176	269	162	32	6	0	0	0
Mon 26 Feb 2024	1404	38.7	32.4	6.1	2	9	24	92	330	500	316	111	16	3	1	0
Tue 27 Feb 2024	1741	38.4	32.5	5.6	4	8	16	92	401	671	419	111	16	3	0	0
Wed 28 Feb 2024	2256	37.5	32.2	5.1	2	5	18	136	520	964	493	106	12	0	0	0
Thu 29 Feb 2024	2235	37.5	31.8	5.5	4	15	30	150	525	937	466	90	16	2	0	0
5 Day Ave.	1803	38.0	32.2	5.6	3	9	22	116	420	722	395	99	16	2	0	0
7 Day Ave.	1521	38.1	32.1	5.8	3	10	19	98	357	601	333	85	13	1	0	0

Paul Castle Associates



Appendix D

nursery land



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 - 4.2. Site Layout
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KEY

INDICATIVE HIGHWAY BOUNDARY



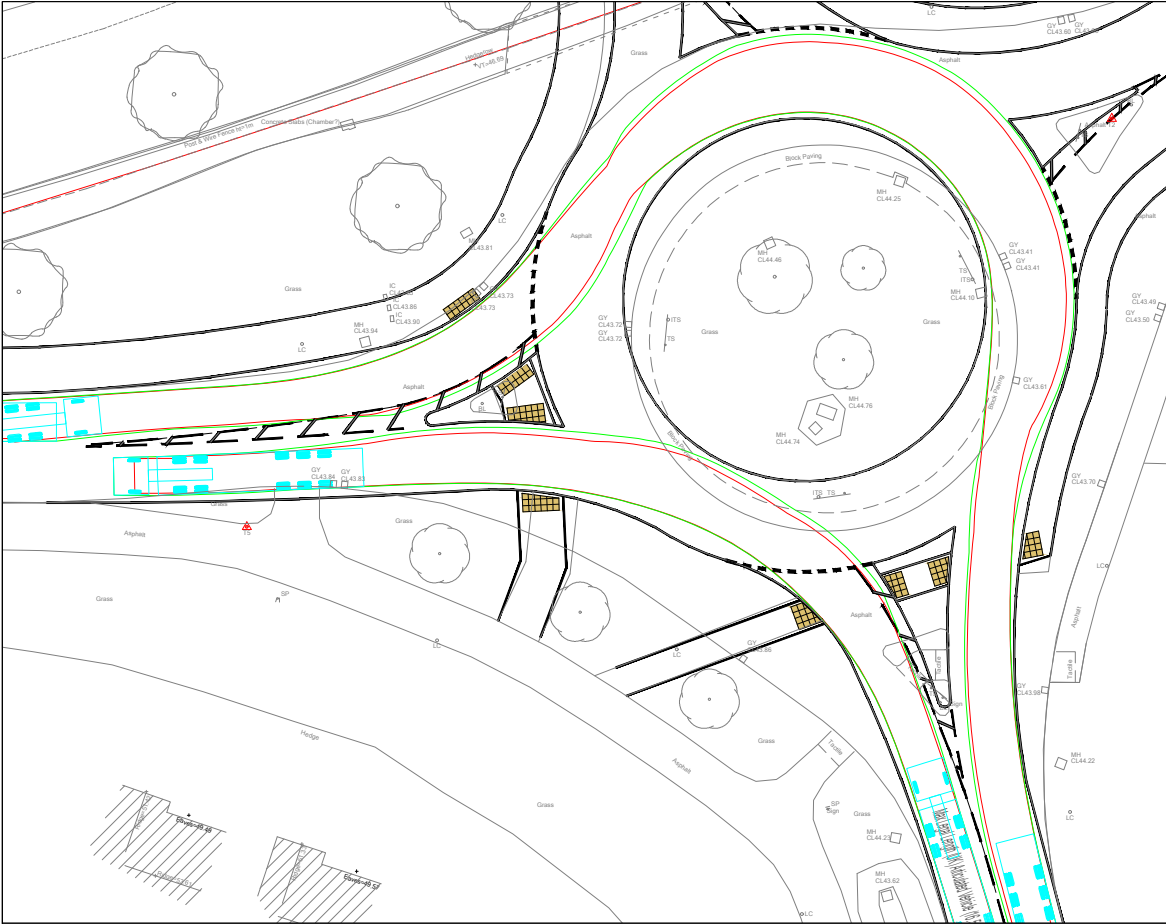
PRELIMINARY

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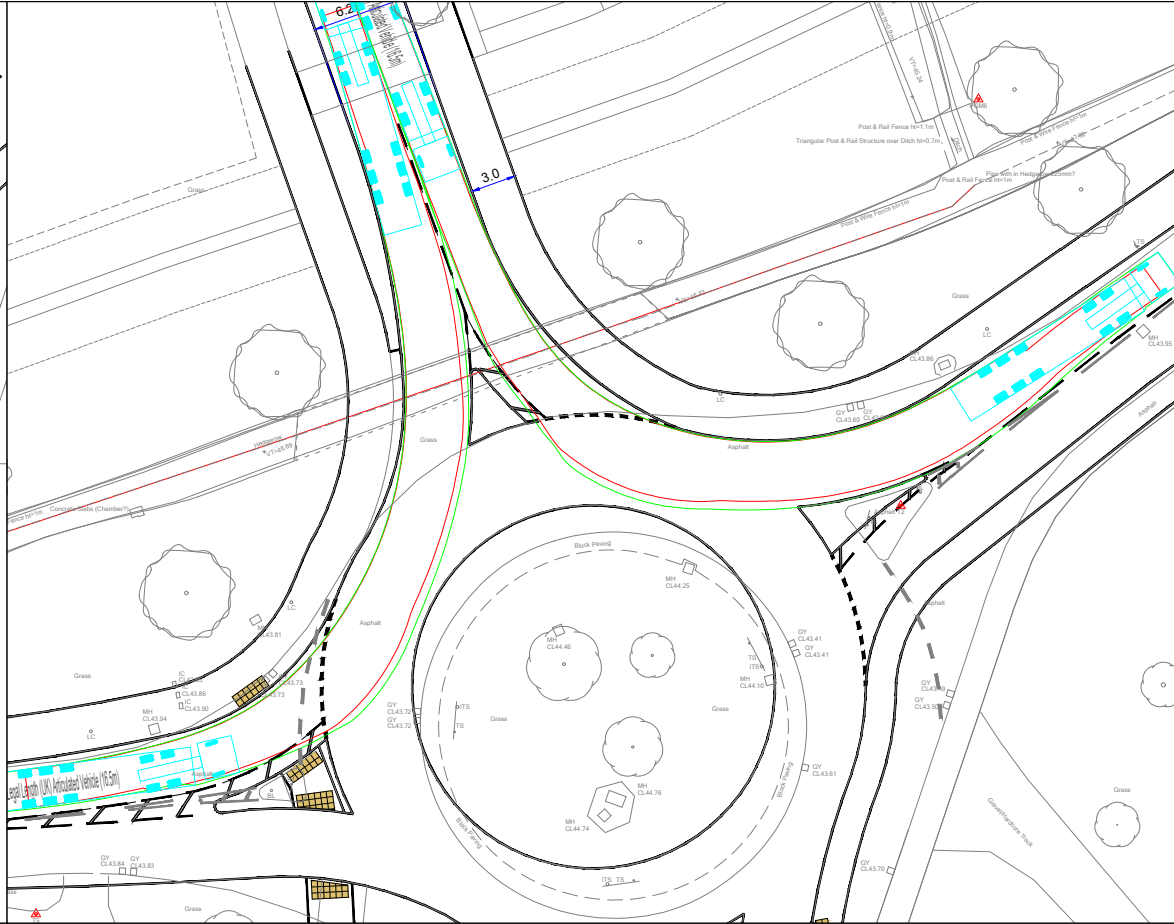
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Rev	Description	Date	By	App'd
Date Created	Drawn By	Approved By	Suitability Code	
03.11.25	IDR	HLC	-	
PBA Project Number		Scale	(AT A3)	
027.0014		1:500		
PBA Drawing No:			Revision	
027.0014-0001			P01	

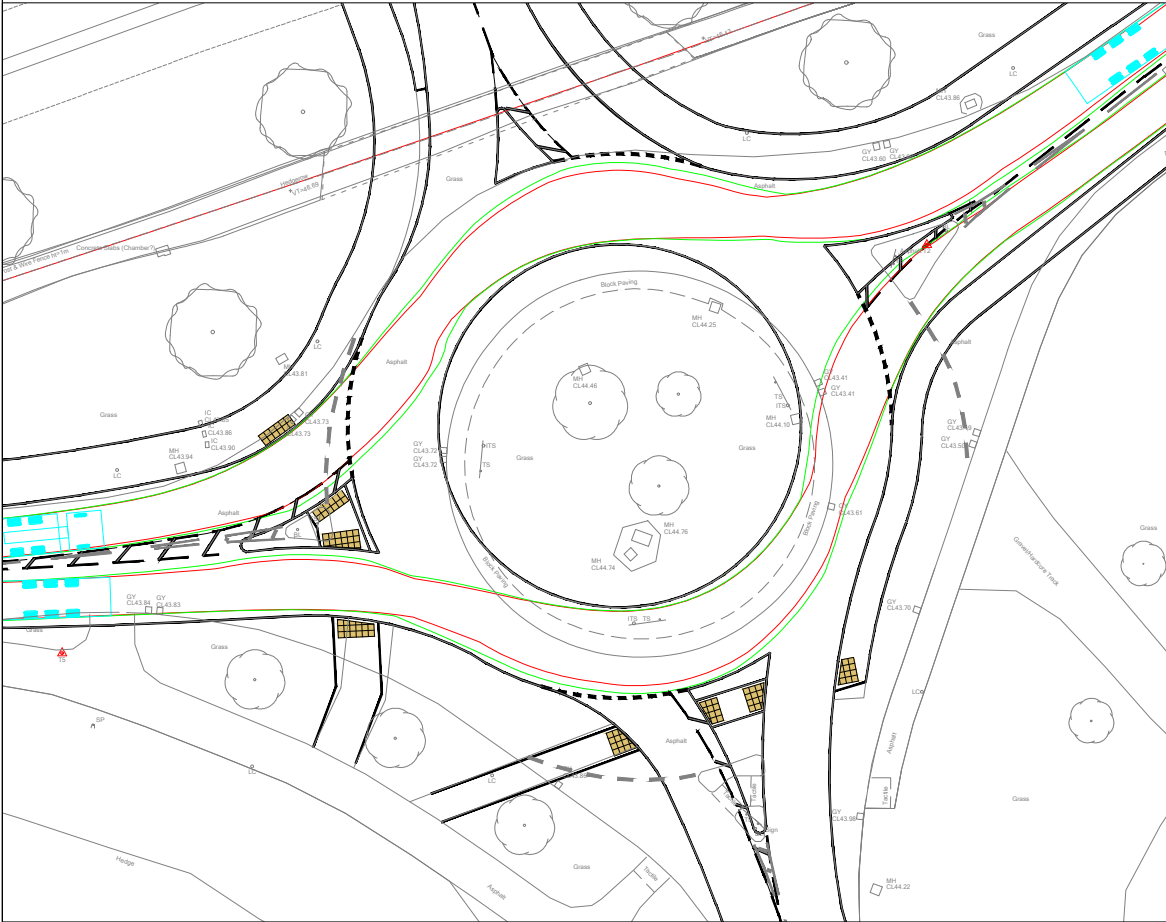
Project Name LAND AT NEW FARM, MELKSHAM (OUTLINE)		Title COMPACT ROUNDABOUT PRELIMINARY DESIGN	 Paul Basham Associates Ltd The Lambourn, Wyndyke Furlong, Abingdon, Oxfordshire, OX14 1UJ 01235 352150 info@paulbashamassociates.com www.paulbashamassociates.com	Client 	Date Created 03.11.25	Drawn By IDR	Approved By HLC	Suitability Code -
Project Phase PRELIMINARY				PBA Project Number 027.0014	Scale 1:500 (AT A3)			
				PBA Drawing No: 027.0014-0001			Revision P01	



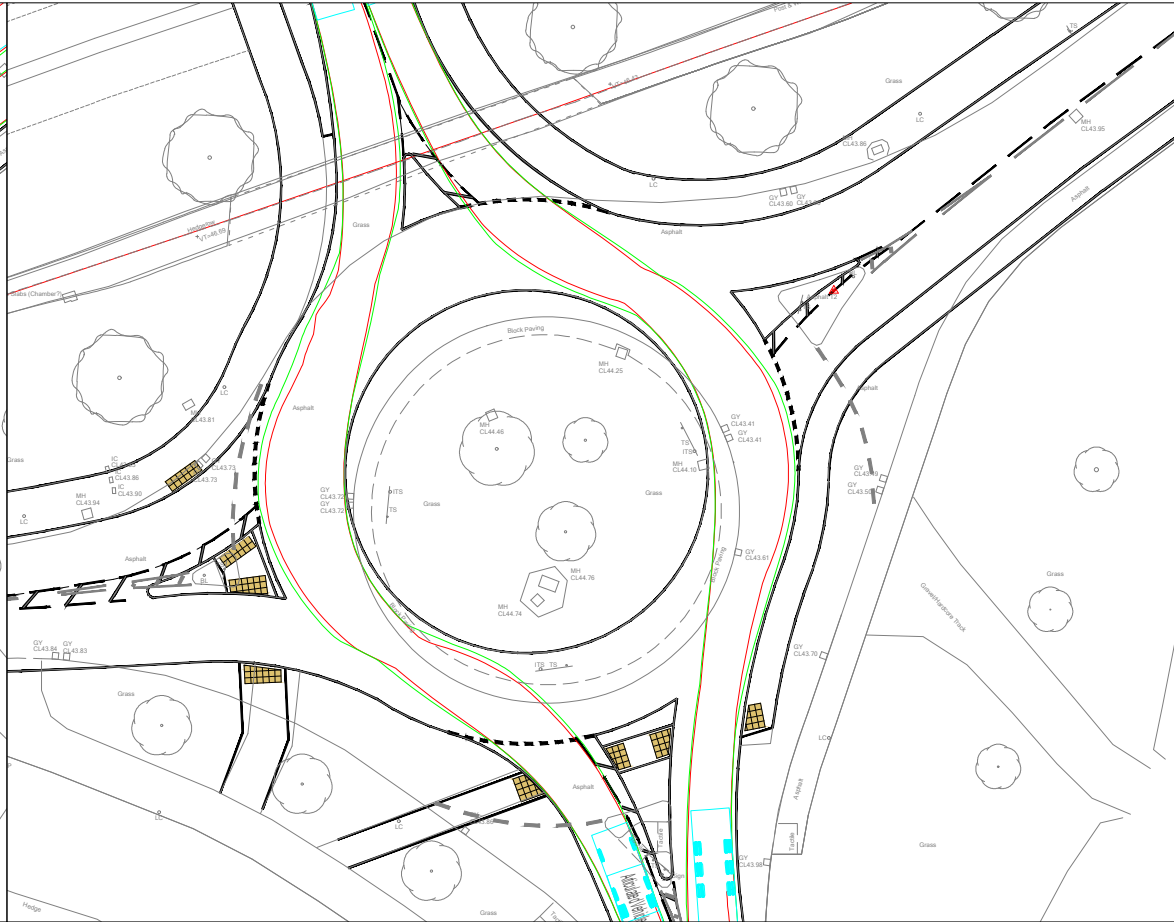
ARTICULATED VEHICLE WEST TO SOUTH AND SOUTH TO WEST



ARTICULATED VEHICLE WEST TO NORTH AND NORTH TO EAST



ARTICULATED VEHICLE WEST TO EAST AND EAST TO WEST



ARTICULATED VEHICLE NORTH TO SOUTH AND SOUTH TO NORTH

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KEY

Max Legal Length (UK) Articulated Vehicle (16.5m)	16.50m
Overall Length	2.550m
Overall Width	3.681m
Overall Body Height	0.411m
Min Body Ground Clearance	2.500m
Max Track Width	6.00s
Lock to lock time	6.530m
Kerb to Kerb Turning Radius	

NORTH

PRELIMINARY

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0m25m

1:500

P01	FIRST ISSUE	03.11.2025	IDR	HLC
Rev	Description	Date	By	App'd
Date Created	Drawn By	Approved By	Suitability Code	
03.11.25	IDR	HLC	-	
PBA Project Number		Scale	(AT A3)	
027.0014		1:500		
PBA Drawing No:			Revision	
027.0014-0002			P01	

Project Name

LAND AT NEW FARM,
MELKSHAM (OUTLINE)

Project Phase

PRELIMINARY

Title

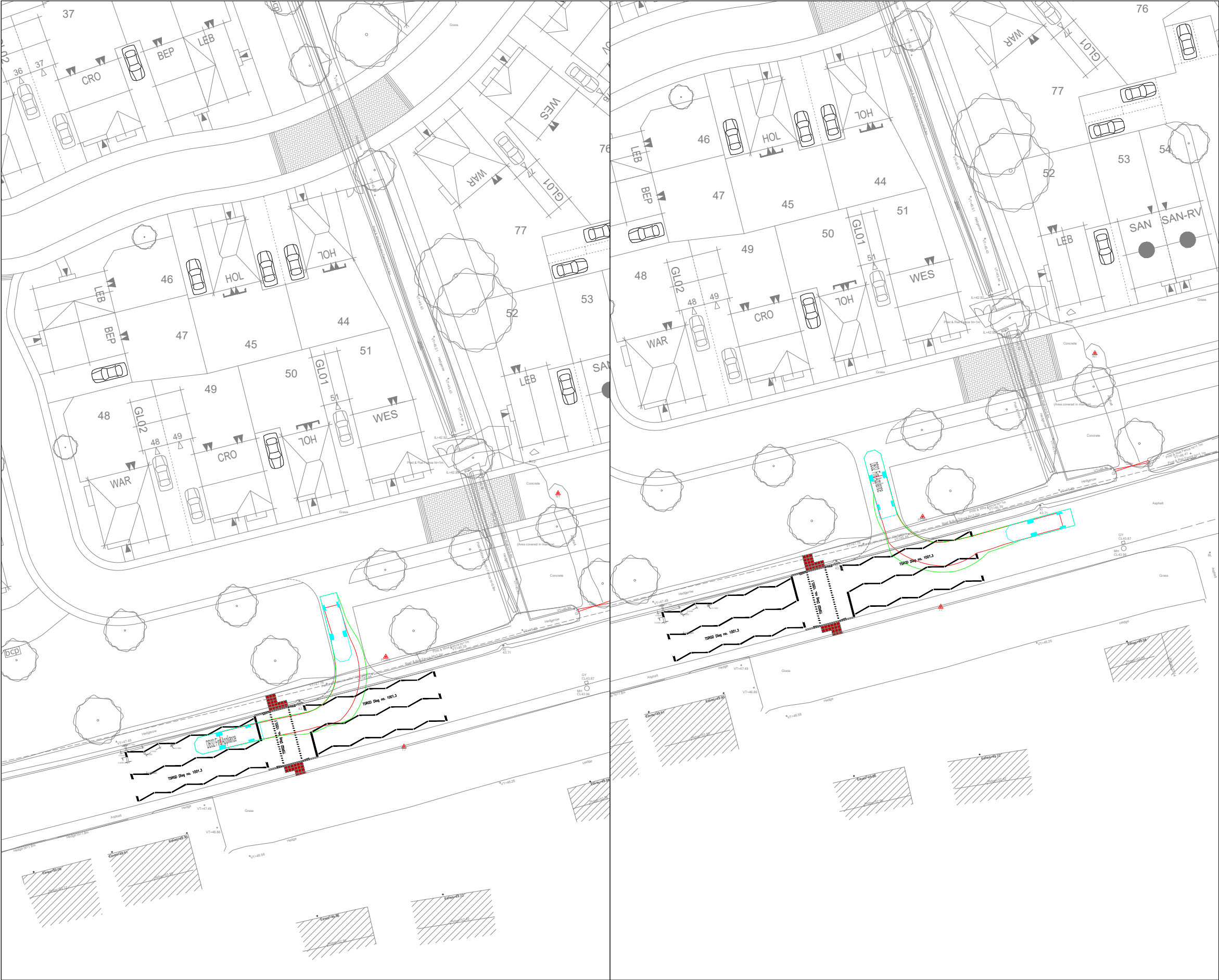
COMPACT ROUNDABOUT
PRELIMINARY DESIGN SWEEP
PATH ANALYSIS

Paul Basham Associates Ltd
The Lambourn, Wyndyke Furlong, Abingdon,
Oxfordshire, OX14 1UJ
01235 352150
info@paulbashamassociates.com www.paulbashamassociates.com

Client

QMS2011/v9/020525/IDR

Appendix F



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KEY

DB32 Fire Appliance	
Overall Length	8.680m
Overall Width	2.180m
Overall Body Height	3.452m
Min Body Ground Clearance	0.337m
Max Track Width	2.121m
Lock to lock time	6.00s
Kerb to Kerb Turning Radius	7.910m

PRELIMINARY

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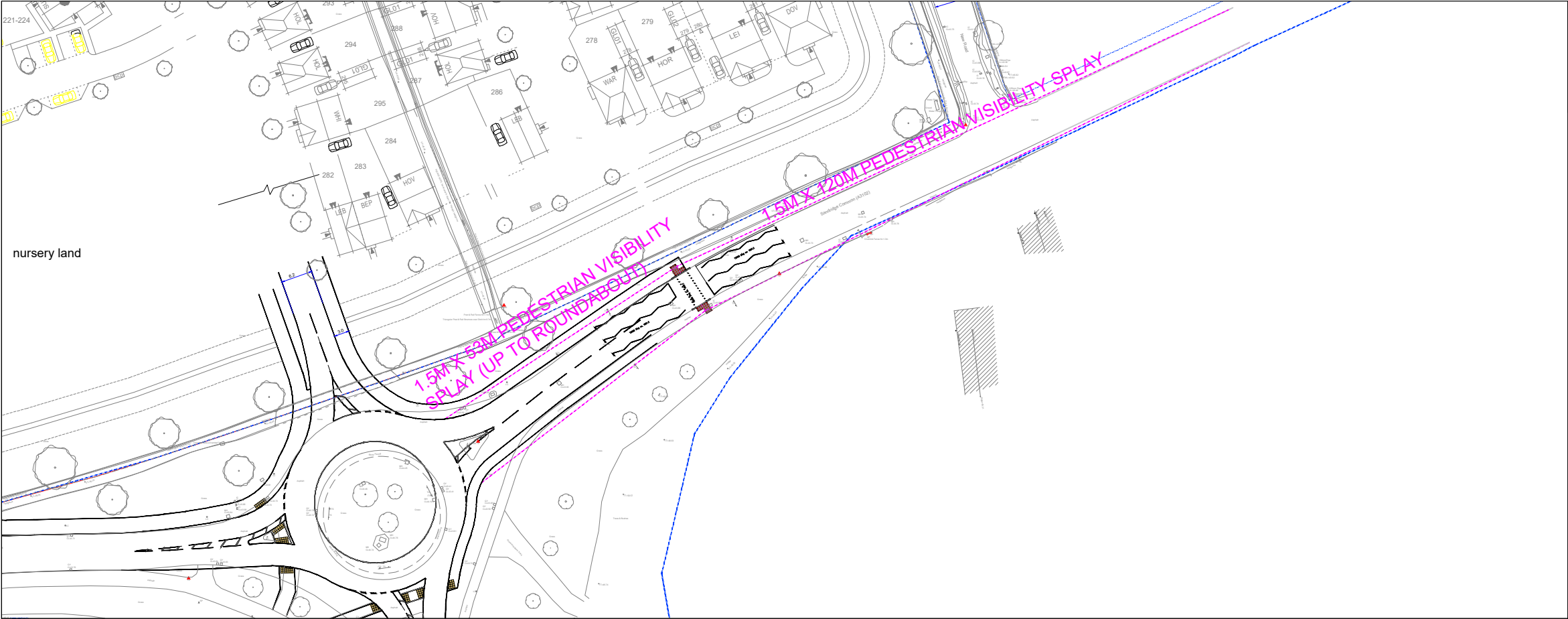
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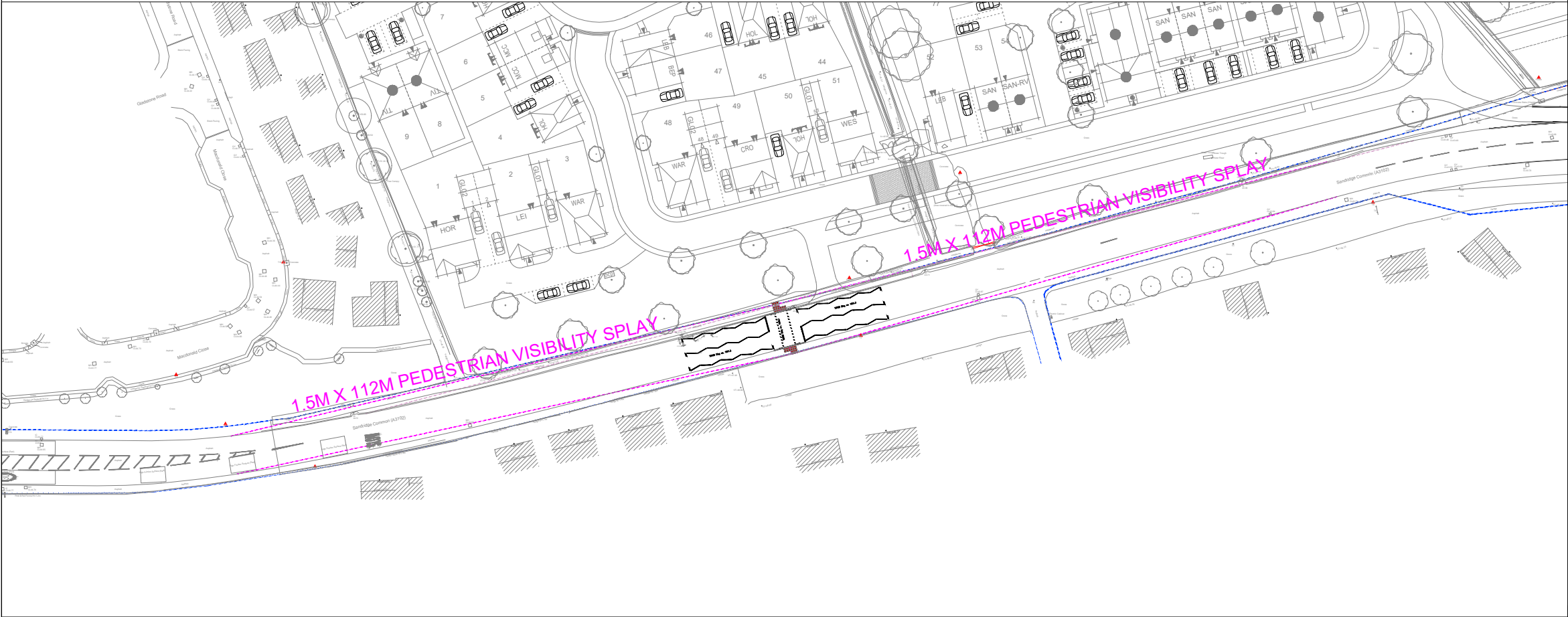
P01	FIRST ISSUE	03.11.2025	IDR	HLC
Rev	Description	Date	By	App'd
Date Created	Drawn By	Approved By	Suitability Code	
03.11.25	IDR	HLC	-	
PBA Project Number		Scale	(AT A3)	
027.0014		1:500		
PBA Drawing No:			Revision	
027.0014-0003			P01	

FIRE TENDER TURNING LEFT IN		FIRE TENDER TURNING LEFT OUT	
Project Name LAND AT NEW FARM, MELKSHAM (OUTLINE)		Title EMERGENCY ACCESS TRACKING	
Project Phase PRELIMINARY		Client	
		Paul Basham Associates Ltd The Lambourn, Wyndyke Furlong, Abingdon, Oxfordshire, OX14 1UJ 01235 352150 info@paulbashamassociates.com www.paulbashamassociates.com	

Appendix G



EASTERN CONTROLLED CROSSING POINT (WITH VISIBILITY)



WESTERN CONTROLLED CROSSING POINT (WITH VISIBILITY)

Project Name	LAND AT NEW FARM, MELKSHAM (OUTLINE)
Project Phase	PRELIMINARY

Title	PROPOSED PEDESTRIAN CROSSING POINT VISIBILITY SPAYS
-------	---



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Client



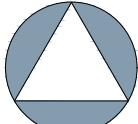
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- VISIBILITY FOR THE WESTERN CROSSING IS BASED ON RECORDED SPEEDS ALONG SANDRIDGE COMMON. VISIBILITY FOR THE EASTERN CROSSING IS BASED ON THE 40MPH SPEED LIMIT

KEY

INDICATIVE HIGHWAY BOUNDARY



NORTH

PRELIMINARY

DRAWING/DESIGN IS STILL 'IN DEVELOPMENT'
YOU ARE ADVISED TO MAKE DUE ALLOWANCE

0m 50m

1:1000

P01	FIRST ISSUE	03.11.2025	IDR	HLC
Rev	Description	Date	By	App'd
Date Created	Drawn By	Approved By	Suitability Code	
03.11.25	IDR	HLC	-	
PBA Project Number		Scale	(AT A3)	
027.0014		1:1000		
PBA Drawing No:			Revision	
027.0014-0004			P01	

QMS2011/v9/020525/IDR



Stage 1/2 Road Safety Audit Report

**New Farm , Sandridge Common,
Melksham, Wiltshire
S278 Highway Works**

**Produced for:
Bloor Homes**

Date: 27th October 2025



trafficmanagementconsultants@hotmail.co.uk



07771 557382

DOCUMENT REGISTER

Project Name: New Farm , Sandridge Common, Melksham, Wiltshire S278 Highway Works

Report Title: Stage 1/2 Road Safety Audit

Date: 27th October 2025

Client: Bloor Homes

Audit Team	Name	Position	Date
Audit Team Leader:	Peter Ronald	Director	27/10/2025
Audit Team Member:	Paul Salmon	Road Safety Auditor	27/10/2025
Approved By:	Peter Ronald	Director	27/10/2025

Revision History					
Revision	Date	Description	Audit Team Leader	Audit Team Member	Approved
-	27/10/2025	Draft	PR	PS	PR
A	27/10/2025	Final	PR	PS	PR

Prepared By: **Traffic Management Consultants Ltd**

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1. Executive Summary

- 1.1 This scheme is promoted by Bloor Homes. This Road Safety Audit is supplied under the provisions of the Safety Audit request dated 15th October 2025. The overseeing authority is Wiltshire County Council.

2. Introduction

- 2.1 This report results from a Stage 1/2 Road Safety Audit carried out on proposed works to add a fourth arm to an existing three-arm roundabout to provide access to a proposed residential development on land to the north of Sandridge Common in Melksham, Wiltshire. A controlled pedestrian crossing is also proposed as part of the S278 works together with a pedestrian crossing point and emergency access point .

2.2 Audit Team Membership

The Audit Team comprised the following individuals:

Peter Ronald I.Eng, AMICE, MCIHT, MSoRSA, (HE - RSA Cert of Comp).
(Audit Team Leader)

Paul Salmon MCIHT, MSoRSA
(Audit Team Member)

2.3 Audit Site Visit and Plan Examination

A site visit was carried out on Friday 24th October 2025 by the Audit Team, between 2:30pm and 3.00pm. The weather conditions were cloudy; the road surface was damp from recent rain. Vehicle flows were low on Sandridge Common. No pedestrians or cyclists were observed.

The Audit also comprised an examination by the team of the drawings provided by Paul Basham Associates and any additional support documents completed by the Audit Team as listed in Appendix A. All safety issues are with reference to the outline design details shown on the drawings.

2.2 Strategic Decisions

The Audit Team has not been advised of any Strategic Decisions made by the local Highway Authority or by the local Planning Authority.

2.3 Audit Brief

The Audit Team were not provided with an Audit Brief.

2.4 Terms of Reference

The terms of reference of the audit are based on “Guidelines for the Safety Audit of Highway Schemes” published by the Institution of Highways and Transportation, other guidance references are the Traffic Signs Regulations and General Directions 2016, and GG 119 Design Manual for Roads and Bridges.

The Audit Team has examined and reported only on the road safety implications of the scheme and has not verified the compliance of the designs to any other criteria. However,

to clearly explain a safety problem or the recommendation to resolve a problem the Audit Team may, on occasion, have referred to a design standard or other guidance documents.

2.5 **Audit Recommendations**

Recommendations included within this report should not be regarded as being prescriptive design solutions to the problems identified. They are only to indicate a proportionate and viable means of eliminating or mitigating the identified road safety audit matters, and in no way imply that a formal design process has been undertaken.

There may be alternative measures of addressing a problem which would be equally acceptable or superior in achieving the desired degree of mitigation and these should be considered by the designer when responding to this report.

2.6 **Scope of Road Safety Audits**

Road Safety Audit shall only be concerned with Road Safety Matters, i.e. *an element of the existing road environment or proposed road environment that could potentially contribute to a road traffic collision or features that could present a risk of injuries to road users.*

Road Safety Audit is not a technical check that the design conforms to standards and/or best practice guidance.

Road Safety Audit is not a check that the scheme has been constructed in accordance with the design.

Road Safety Audit does not consider structural safety.

Road Safety Audit does not cover health and safety issues concerning road workers during the construction phase but may cover the future maintenance and operation of the road.

Road safety matters resulting from the operation of facilities for highway maintenance that affect road users shall be included in the scope of Road Safety Audit.

The needs of all road users shall be assessed when undertaking Road Safety Audits.

3. Risk Assessment

- 3.1 Each of the Auditors' responses is classified as either a 'Problem' or a 'Nil Response/Comment'. Items classified as a 'Problem' denote matters likely to result in significant road safety hazards. Items marked as 'Nil Response/Comment' are less serious but worthy of consideration by the Designer and/or by the Overseeing Organisation.
- 3.2 Although all the problems identified are of sufficient importance to require action, the table below shows their relative urgency based on the risk perceived by the Safety Auditors. The level of risk assigned to each problem is largely subjective and is only intended as a guide to assist the client in determining the priority of the road safety matters raised.

Severity / Risk Level	Probability				
	Frequent	Probable	Occasional	Remote	Improbable
Catastrophic	****Problem**** (Urgent)				
Critical		***Problem*** (High Risk)			
Major			**Problem** (Medium Risk)		
Minor				*Problem* (Low Risk)	
Negligible					Comment

4. Historical Summary

- 4.1 Not known

5. Existing Environment

- 5.1 The site is a green field site to the immediate north of Sandridge Common in Melksham.
- 5.2 The existing three-arm roundabout is located at the junction of Sandridge Common (A3102) and Eastern Way. All three arms are subject to a 40mph speed limit by order. There is a system of street lighting.

6. Collision Data

- 6.1 The Audit Team has not been provided with recorded injury collision data as part of this road safety audit. However, interrogation of www.crashmap.co.uk indicates that there has been no personal injury accidents on the lengths of road that is the subject of this audit during the 2019 – 2023 five-year period.

7. Survey Information

- 7.1 None provided.

8. Audit Assessment

8.1 The table below summarises the findings from this audit which are described in detail within the following pages.

Identified locations of Road Safety Audit Matters are indicated on drawings within **Appendix B** to the rear of this report.

No.	Item	Comments	Notes
B1	General		
B1.1	Departures from Standards		None stated
B1.2	Drainage		
B1.3	Climatic Conditions		
B1.4	Landscaping		
B1.5	Public Utilities/ Services Apparatus		
B1.6	Lay-bys		
B1.7	Access		
B1.8	Skid Resistance		
B1.9	Agriculture		
B1.10	Fences and Road Restraint Systems		
B1.11	Adjacent Proposed Public Right of Way and Roads		
B1.12	Road alignment	Problem	(8.1) Entry path curvatures not detailed
B1.13	General layout		
B2	Local Alignment		
B2.1	Visibility		
B2.2	New/Existing Road Interface		
B3	Junctions		
B3.1	Layout	Problem	(8.2) No swept path analysis for relocated access
B3.2	Visibility	Problems	(8.3) Visibility splays not detailed for roundabout (8.4) Visibility splays not detailed for relocated access road
B3.3	Signing		
B3.4	Road Markings		
B3.5	T, X and Y junctions		
B3.6	All roundabouts		
B3.7	Mini Roundabouts		
B3.8	Traffic Signals	Comment	(9.1) Detailed drawings of controlled crossings not supplied to auditors to audit
B4	Non-Motorised User Provision		
B4.1	Adjacent Land		

B4.2	Pedestrians	Problem	(8.5) Pedestrian visibility obstructed by existing signs (8.6) Shared footway / cycleway signs detailed on existing footway
B4.3	Cyclists		
B4.4	Equestrians		
B5	Road Signs, Carriageway Markings and Lighting		
B5.1	ADS and Local Traffic Signs		
B5.2	Variable Message Signs		
B5.3	Lighting	Comment	(9.2) Street lighting drawings not supplied to auditors
B5.4	Road Markings		
B5.5	Poles and Columns		

8.1 **Problem** (Item B1.12)	
Location:	Approach arms
Summary:	Entry path curvature not detailed
The existing roundabout junction is being altered to include a fourth arm. As part of the alteration, the central island is being altered. Entry path curvatures have not been detailed on the drawings provided. The amendment of the central island appears to enlarge the entry path radius for the westbound manoeuvre from the eastern arm. CD116 has a note relating to entry path curvature; <i>'It is the most important determinant of safety at roundabouts because it governs the speed of vehicles through the junction and whether drivers are likely to give way to circulating vehicles.'</i> The changes to the entry path curvatures may therefore result in drivers entering the roundabout at high speed. This may result in vehicle drivers overshooting the give-way lines and entering the roundabout into the path of vehicles already travelling around the roundabout, resulting in collisions. Check the entry path curvatures for all arms and amend the design where necessary to provide suitable entry path curvature for all approach arms that will provide sufficient deflection to encourage lower entry speeds.	
TYPE OF CONFLICT/COLLISION	
Risk of vehicles entering the roundabout at speed and causing a collision.	
RECOMMENDATION	

Check the entry path curvatures for all arms and amend the design where necessary to provide suitable entry path curvature for all approach arms that will provide sufficient deflection to encourage lower entry speeds.

8.2 *Problem* (Item B3.1)	
Location:	Proposed re-aligned access road
Summary:	No swept path analysis for relocated access
There is an existing field gate access that is accessed via an access route from the south-east of the roundabout; between the eastern and southern arms. It is proposed to re-align the access route to a point on the eastern arm. Swept path analysis of this re-aligned route has not been provided. Vehicles may have difficulty turning left from the re-aligned route due to the splitter island for the roundabout; particularly if it is an articulated vehicle such as a tractor with a trailer. This may result in kerb strike / loss of control hazards. Undertake swept path analysis of the re-aligned route to ensure all likely vehicle types can safely and efficiently manoeuvre to and from the re-aligned access route.	
TYPE OF CONFLICT/COLLISION	
Risk of kerb strike / loss of control hazards.	
RECOMMENDATION	
Undertake swept path analysis of the re-aligned route to ensure all likely vehicle types can safely and efficiently manoeuvre to and from the re-aligned access route.	

8.3 *Problem* (Item B3.2)	
Location:	Roundabout
Summary:	Visibility splays not detailed for roundabout
The existing roundabout junction is being altered to include a fourth arm. As part of the alteration, the central island is being altered. Visibility splays on the approaches have not been detailed, nor have the give-way and circulatory splays been detailed. This may result in loss of control hazards for vehicles approaching the roundabout. Ensure adequate visibility is available to drivers approaching the roundabout.	
TYPE OF CONFLICT/COLLISION	
Loss of control hazards for vehicles approaching the roundabout due to a lack of visibility.	
RECOMMENDATION	

Ensure adequate visibility is available to drivers approaching the roundabout.

8.4 *Problem* (Item B3.2)	
Location:	Proposed re-aligned access road
Summary:	Visibility splays not detailed for relocated access road
There is an existing field gate access that is accessed via an access route from the south-east of the roundabout; between the eastern and southern arms. It is proposed to re-align the access route to a point on the eastern arm. Visibility splays have not been detailed from this access. There are a number of existing signs on the eastern approach arm that may obstruct visibility from the re-aligned route. A lack of appropriate visibility may result in collisions. Ensure adequate visibility is available to drivers leaving the re-aligned access road.	
TYPE OF CONFLICT/COLLISION	
Collisions due to insufficient visibility.	
RECOMMENDATION	
Ensure adequate visibility is available to drivers leaving the re-aligned access road.	

8.5 *Problem* (Item B4.2)	
Location:	Pedestrian crossing point on roundabout splitter islands
Summary:	Pedestrian visibility obstructed by existing signs
 There are a number of existing signs mounted within the splitter islands for the roundabout. The existing signs are annotated as to be relocated on the new splitter islands. The signs currently on the southern splitter island obstruct pedestrian visibility to vehicles approaching from the south. Relocating the signs to a similar location on the new splitter island may result in pedestrian injuries should they step into the path of approaching vehicles due to a lack of visibility. Ensure all relocated signs are positioned such that they do not obstruct required visibility splays.	
TYPE OF CONFLICT/COLLISION	
Pedestrians stepping into the path of approaching vehicles and being struck.	
RECOMMENDATION	
Ensure all relocated signs are positioned such that they do not obstruct required visibility splays.	

8.6 *Problem* (Item B4.2)	
Location:	Proposed controlled crossing points
Summary:	Shared footway / cycleway signs detailed on existing footway
There are proposed shared footway / cycleway signs detailed adjacent to existing areas that are currently footway only; the southern side of Sandridge Common at the eastern arm of the roundabout and at the southern side of the proposed western crossing. The existing footways are only 1.5-2m in width, which are too narrow for pedestrians and cyclists to share. This may result in collisions between pedestrians and cyclists. Widen the existing footways to a suitable width for shared footway cycleways. Relocate the existing end of cycle route sign that is located to the east of the proposed western crossing point.	
TYPE OF CONFLICT/COLLISION	
Pedestrian and cyclist collisions on footways.	
RECOMMENDATION	
Widen the existing footways to a suitable width for shared footway cycleways. Relocate the existing end of cycle route sign that is located to the east of the proposed western crossing point.	

9. Nil Response/Comments

- 9.1 Detailed drawings of controlled crossings not supplied to auditors to audit
- 9.2 Street lighting drawings not supplied to auditors

10. Non-Motorised User Report (NMU's)

- 10.1 This report has identified road safety problems affecting NMU's that should be resolved.

11. Audit Team Statement

I certify that we have examined the drawing listed within **Appendix A** and that the site has been inspected. The examination has been carried out with the sole purpose of identifying road safety matters that can be addressed to improve the safety of the scheme.

The problems identified have been noted in the report together with associated safety improvement suggestions that we recommend should be studied for implementation.

I can confirm that we have not been involved with the scheme design.



Peter Ronald
(Audit Team Leader)

27th October 2025



(Audit Team Member)

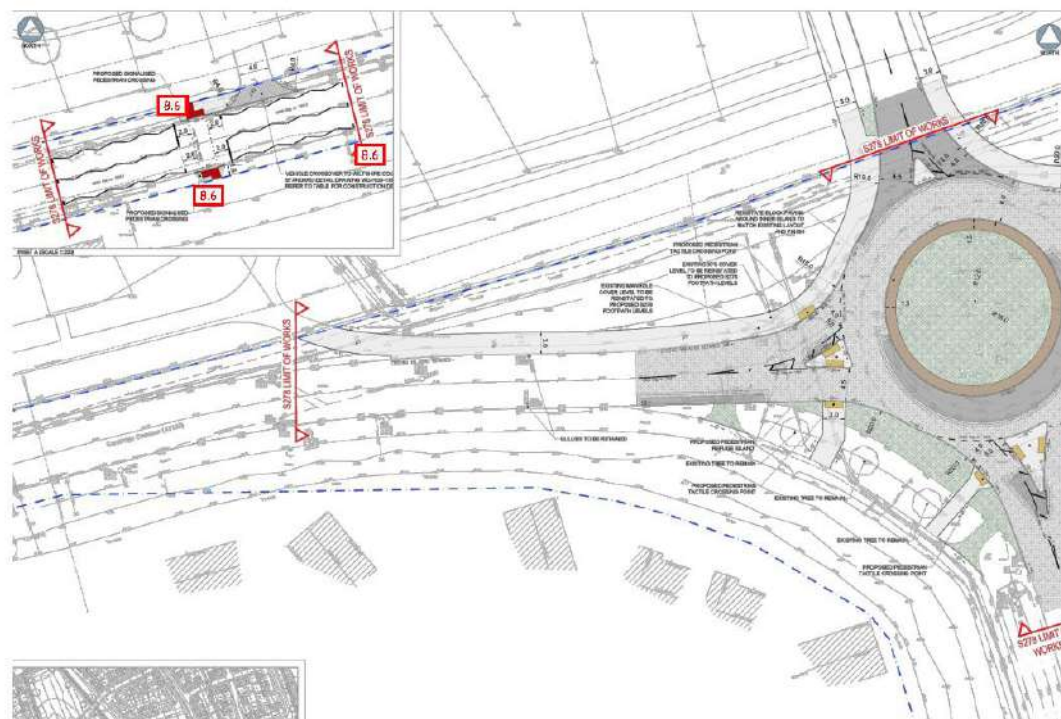
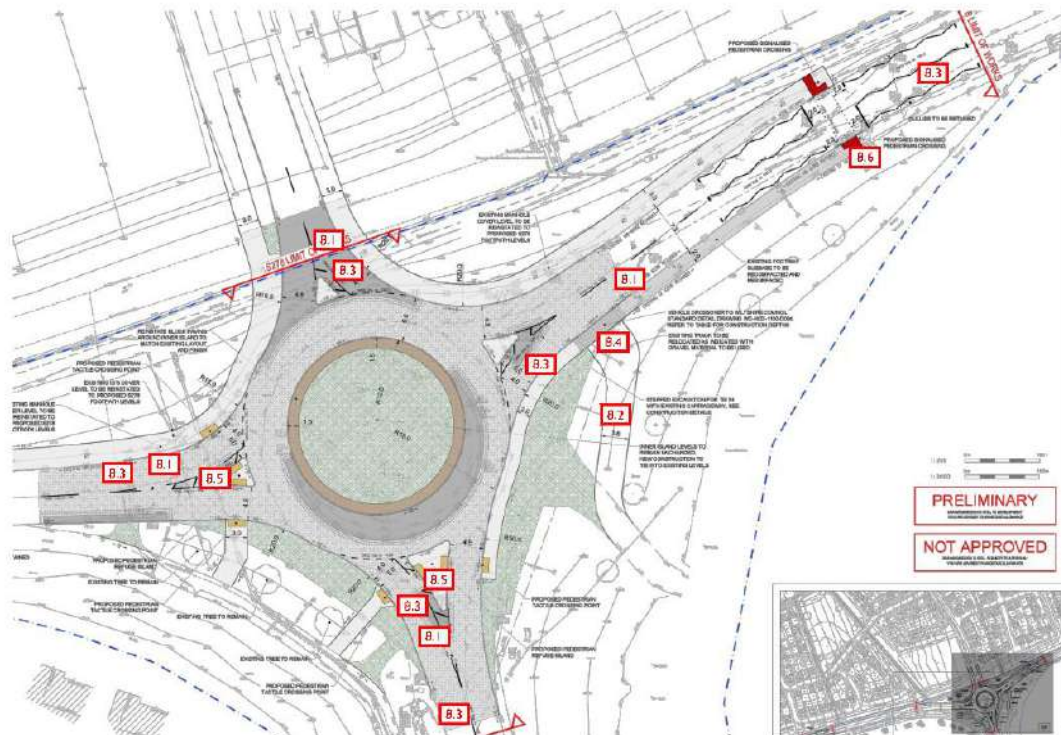
27th October 2025

12. Appendix A - List of Documents

Drawings

- 027.5011.0100.P01 Location Plan
- 027.5011.0101.P01 Engineering Layout Sheet 1 of 2
- 027.5011.0102.P01 Engineering Layout Sheet 2 of 2
- 027.5011.0103.P01 Site Clearance Sheet 1 of 2
- 027.5011.0104.P01 Site Clearance Sheet 2 of 2
- 027.5011.0105.P01 Drainage Layout - Sheet 1 of 2
- 027.5011.0106.P01 Drainage Layout - Sheet 2 of 2
- 027.5011.0107.P01 Vehicle Tracking Sheet 1 of 3
- 027.5011.0108.P01 Vehicle Tracking Sheet 2 of 3
- 027.5011.0109.P01 Vehicle Tracking Sheet 3 of 3
- 027.5011.0110.P01 Levels Layout - Sheet 1 of 2
- 027.5011.0111.P01 Levels Layout - Sheet 2 of 2
- 027.5011.0112.P01 Signs and Visibility Splays
- 027.5011.0113.P01 Longitudinal Sections
- 027.5011.0200.P01 Construction Details

13. Appendix B - Identified Road Safety Audit Matters Location Plans



14. Appendix C - Designer's and Auditor Response to Stage 1/2 Road Safety Audit

Stage 2 (Road Safety Audit) DESIGNER'S ROAD SAFETY AUDIT RESPONSE Scheme Name: Sandridge Common, Melksham S278 highway works				
The issues categorised in this road safety audit as 'Problem' matters are those causing serious concern and are summarised below. The purpose of this form is for the scheme Designer or Overseeing Organisation to respond to the 'Problem' matters. Responses should be returned to Traffic Management Consultants. 'Comments' in this report are made for the benefit of the Designer and are not referred to below.				
RSA Matter	Summary of RSA Problem	Designer's Response	Overseeing Response	Council
8.1	Entry path curvatures not detailed	Amended as per comments. Please refer to drawing no. 027.5011.0112.P02 Signs and Visibility Splays		
8.2	No swept path analysis for relocated access	Noted. Please refer to drawings no's 027.5011.0107.P01, 027.5011.0108.P01 and 027.5011.0109.P01		
8.3	Visibility splays not detailed for roundabout	Please refer to drawing no. 027.5011.0112.P01 Signs and Visibility Splays		
8.4	Visibility splays not detailed for relocated access road	The visibility splays have not been provided, as the location of the proposed vehicle crossover must first be agreed upon with the council prior to finalising the design.		
8.5	Pedestrian visibility obstructed by existing signs	The existing signs will be relocated ensuring their new position do not obstruct visibility splays.		
8.6	Shared footway / cycleway signs detailed on existing footway	The footpath is not intended to function as a shared pedestrian and cycleway. Instead, it is proposed as a standard 2-metre-wide footpath designed for pedestrian use.		

AUDIT TEAM RESPONSE to designers' response

8.1
8.2
8.3
8.4

8.5

8.6

Design Organisation Response

The Design Organisation Response has been prepared by:

Name:

Position / Organisation:

Date:

Overseeing Authority Response

The Overseeing Authority Response has been prepared by:

Name:

Position / Organisation:

Date:

Appendix I

Calculation Reference: AUDIT-247601-230630-0617

TRIP RATE CALCULATION SELECTION PARAMETERS:

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

Selected regions and areas:

02	SOUTH EAST	
	ES	EAST SUSSEX 2 days
	EX	ESSEX 1 days
	HC	HAMPSHIRE 3 days
	HF	HERTFORDSHIRE 1 days
	KC	KENT 3 days
	SC	SURREY 1 days
	SP	SOUTHAMPTON 1 days
	WB	WEST BERKSHIRE 1 days
	WS	WEST SUSSEX 2 days
03	SOUTH WEST	
	DV	DEVON 1 days
04	EAST ANGLIA	
	NF	NORFOLK 9 days
05	EAST MIDLANDS	
	DY	DERBY 1 days
06	WEST MIDLANDS	
	ST	STAFFORDSHIRE 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: 108 to 537 (units:)
 Range Selected by User: 100 to 600 (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 12/10/22

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	5 days
Tuesday	5 days
Wednesday	10 days
Thursday	4 days
Friday	3 days

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

Selected survey types:

Manual count	23 days
Directional ATC Count	4 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 undertaken using machines.

Selected Locations:

Suburban Area (PPS6 Out of Centre)	2
Edge of Town	25

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

Selected Location Sub Categories:

Residential Zone	25
Out of Town	2

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	10 days - Selected
Servicing vehicles Excluded	46 days - Selected

Secondary Filtering selection:

Use Class:

C3	27 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	4 days
5,001 to 10,000	6 days
10,001 to 15,000	9 days
15,001 to 20,000	4 days
20,001 to 25,000	4 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	7 days
25,001 to 50,000	2 days
50,001 to 75,000	3 days
75,001 to 100,000	3 days
125,001 to 250,000	9 days
250,001 to 500,000	3 days

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

Car ownership within 5 miles:

0.6 to 1.0	5 days
1.1 to 1.5	20 days
1.6 to 2.0	2 days

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

Travel Plan:

Yes	19 days
No	8 days

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

PTAL Rating:

No PTAL Present	27 days
-----------------	---------

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

LIST OF SITES relevant to selection parameters

1	DV-03-A-02 MILLHEAD ROAD HONITON	HOUSES & BUNGALOWS	DEVON
	Suburban Area (PPS6 Out of Centre) Residential Zone Total No of Dwellings: 116 Survey date: FRIDAY 25/09/15 Survey Type: MANUAL		
2	DY-03-A-01 RADBOURNE LANE DERBY	MIXED HOUSES	DERBY
	Edge of Town Residential Zone Total No of Dwellings: 371 Survey date: TUESDAY 10/07/18 Survey Type: MANUAL		
3	ES-03-A-03 SHEPHAM LANE POLEGATE	MIXED HOUSES & FLATS	EAST SUSSEX
	Edge of Town Residential Zone Total No of Dwellings: 212 Survey date: MONDAY 11/07/16 Survey Type: MANUAL		
4	ES-03-A-08 WRESTWOOD ROAD BEXHILL	MIXED HOUSES & FLATS	EAST SUSSEX
	Edge of Town Residential Zone Total No of Dwellings: 110 Survey date: WEDNESDAY 12/10/22 Survey Type: MANUAL		
5	EX-03-A-03 KESTREL GROVE RAYLEIGH	MIXED HOUSES	ESSEX
	Edge of Town Residential Zone Total No of Dwellings: 123 Survey date: MONDAY 27/09/21 Survey Type: MANUAL		
6	HC-03-A-24 STONEHAM LANE EASTLEIGH	MIXED HOUSES & FLATS	HAMPSHIRE
	Edge of Town Residential Zone Total No of Dwellings: 243 Survey date: WEDNESDAY 10/11/21 Survey Type: MANUAL		
7	HC-03-A-28 EAGLE AVENUE WATERLOOVILLE LOVEDEAN	MIXED HOUSES & FLATS	HAMPSHIRE
	Edge of Town Residential Zone Total No of Dwellings: 125 Survey date: MONDAY 08/11/21 Survey Type: MANUAL		

LIST OF SITES relevant to selection parameters (Cont.)

8	HC-03-A-29 CROW LANE RINGWOOD CROW Edge of Town Residential Zone Total No of Dwellings: 195 Survey date: THURSDAY 30/06/22	MIXED HOUSES & FLATS	HAMPSHIRE	Survey Type: MANUAL
9	HF-03-A-03 HARE STREET ROAD BUNTINGFORD Edge of Town Residential Zone Total No of Dwellings: 160 Survey date: MONDAY 08/07/19	MIXED HOUSES	HERTFORDSHIRE	Survey Type: MANUAL
10	KC-03-A-04 KILN BARN ROAD AYLESFORD DITTON Edge of Town Residential Zone Total No of Dwellings: 110 Survey date: FRIDAY 22/09/17	SEMI-DETACHED & TERRACED	KENT	Survey Type: MANUAL
11	KC-03-A-06 MARGATE ROAD HERNE BAY Suburban Area (PPS6 Out of Centre) Residential Zone Total No of Dwellings: 363 Survey date: WEDNESDAY 27/09/17	MIXED HOUSES & FLATS	KENT	Survey Type: MANUAL
12	KC-03-A-07 RECULVER ROAD HERNE BAY Edge of Town Residential Zone Total No of Dwellings: 288 Survey date: WEDNESDAY 27/09/17	MIXED HOUSES	KENT	Survey Type: MANUAL
13	NF-03-A-16 NORWICH COMMON WYMONDHAM Edge of Town Residential Zone Total No of Dwellings: 138 Survey date: TUESDAY 20/10/15	MIXED HOUSES & FLATS	NORFOLK	Survey Type: DIRECTIONAL ATC COUNT
14	NF-03-A-23 SILFIELD ROAD WYMONDHAM Edge of Town Out of Town Total No of Dwellings: 514 Survey date: WEDNESDAY 22/09/21	MIXED HOUSES & FLATS	NORFOLK	Survey Type: MANUAL
15	NF-03-A-31 BRANDON ROAD SWAFFHAM Edge of Town Residential Zone Total No of Dwellings: 321 Survey date: THURSDAY 22/09/22	MIXED HOUSES	NORFOLK	Survey Type: DIRECTIONAL ATC COUNT
16	NF-03-A-32 HUNSTANTON ROAD HUNSTANTON Edge of Town Residential Zone Total No of Dwellings: 164 Survey date: WEDNESDAY 21/09/22	MIXED HOUSES & FLATS	NORFOLK	Survey Type: DIRECTIONAL ATC COUNT

LIST OF SITES relevant to selection parameters (Cont.)

17	NF-03-A-33 LONDON ROAD ATTLEBOROUGH	MIXED HOUSES	NORFOLK
	Edge of Town Residential Zone Total No of Dwellings:	143	
	Survey date: THURSDAY	29/09/22	Survey Type: MANUAL
18	NF-03-A-35 REPTON AVENUE NORWICH	MIXED HOUSES & FLATS	NORFOLK
	Edge of Town Residential Zone Total No of Dwellings:	116	
	Survey date: WEDNESDAY	28/09/22	Survey Type: MANUAL
19	NF-03-A-38 BEAUFORT WAY GREAT YARMOUTH BRADWELL	MIXED HOUSES	NORFOLK
	Edge of Town Residential Zone Total No of Dwellings:	537	
	Survey date: TUESDAY	20/09/22	Survey Type: MANUAL
20	NF-03-A-39 HEATH DRIVE HOLT	MIXED HOUSES	NORFOLK
	Edge of Town Residential Zone Total No of Dwellings:	212	
	Survey date: TUESDAY	27/09/22	Survey Type: MANUAL
21	NF-03-A-47 BURGH ROAD AYLSHAM	MIXED HOUSES & FLATS	NORFOLK
	Edge of Town Residential Zone Total No of Dwellings:	300	
	Survey date: WEDNESDAY	21/09/22	Survey Type: DIRECTIONAL ATC COUNT
22	SC-03-A-05 REIGATE ROAD HORLEY	MIXED HOUSES	SURREY
	Edge of Town Residential Zone Total No of Dwellings:	207	
	Survey date: MONDAY	01/04/19	Survey Type: MANUAL
23	SP-03-A-02 BARNFIELD WAY NEAR SOUTHAMPTON HEDGE END	MIXED HOUSES & FLATS	SOUTHAMPTON
	Edge of Town Out of Town Total No of Dwellings:	250	
	Survey date: TUESDAY	12/10/21	Survey Type: MANUAL

LIST OF SITES relevant to selection parameters (Cont.)

24	ST-03-A-07 BEACONSIDE STAFFORD MARSTON GATE Edge of Town Residential Zone Total No of Dwellings: 248 Survey date: WEDNESDAY 22/11/17	DETACHED & SEMI-DETACHED	STAFFORDSHIRE	Survey Type: MANUAL
25	WB-03-A-03 DORKING WAY READING CALCOT Edge of Town Residential Zone Total No of Dwellings: 108 Survey date: FRIDAY 09/09/22	MIXED HOUSES	WEST BERKSHIRE	Survey Type: MANUAL
26	WS-03-A-08 ROUNDSTONE LANE ANGMERING Edge of Town Residential Zone Total No of Dwellings: 180 Survey date: THURSDAY 19/04/18	MIXED HOUSES	WEST SUSSEX	Survey Type: MANUAL
27	WS-03-A-14 TODDINGTON LANE LITTLEHAMPTON WICK Edge of Town Residential Zone Total No of Dwellings: 117 Survey date: WEDNESDAY 20/10/21	MIXED HOUSES	WEST SUSSEX	Survey Type: MANUAL

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

MANUALLY DESELECTED SITES

Site Ref	Reason for Deselection
HC-03-A-26	COVID
SF-03-A-09	COVID
SF-03-A-10	COVID
WS-03-A-13	COVID

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	ARRIVALS			DEPARTURES			TOTALS		
	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	27	221	0.076	27	221	0.310	27	221	0.386
08:00 - 09:00	27	221	0.137	27	221	0.390	27	221	0.527
09:00 - 10:00	27	221	0.132	27	221	0.162	27	221	0.294
10:00 - 11:00	27	221	0.124	27	221	0.147	27	221	0.271
11:00 - 12:00	27	221	0.132	27	221	0.141	27	221	0.273
12:00 - 13:00	27	221	0.147	27	221	0.145	27	221	0.292
13:00 - 14:00	27	221	0.153	27	221	0.141	27	221	0.294
14:00 - 15:00	27	221	0.163	27	221	0.178	27	221	0.341
15:00 - 16:00	27	221	0.258	27	221	0.165	27	221	0.423
16:00 - 17:00	27	221	0.277	27	221	0.162	27	221	0.439
17:00 - 18:00	27	221	0.361	27	221	0.166	27	221	0.527
18:00 - 19:00	27	221	0.295	27	221	0.160	27	221	0.455
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			2.255			2.267			4.522

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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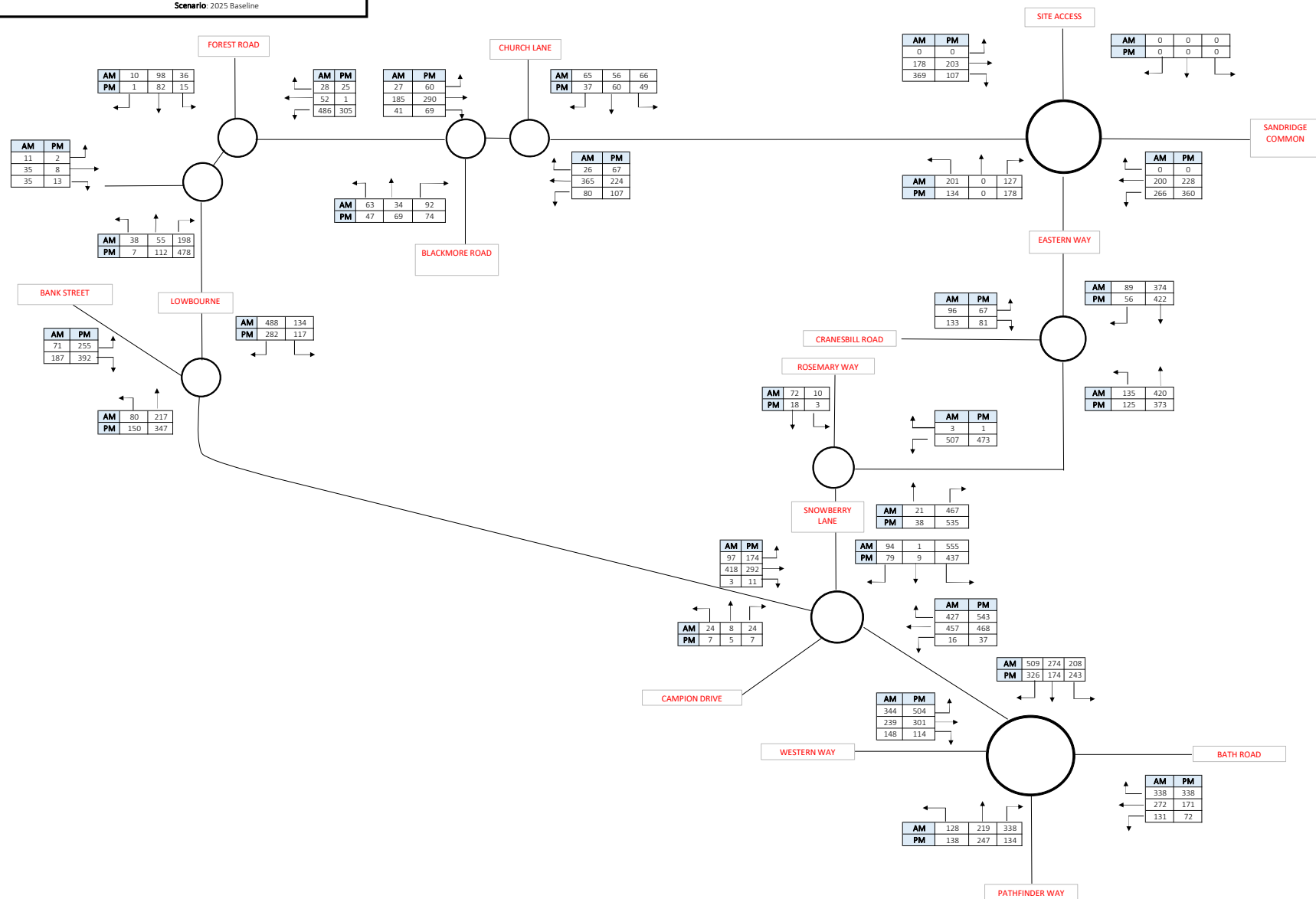
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Parameter summary

Trip rate parameter range selected:	108 - 537 (units:)
Survey date range:	01/01/15 - 12/10/22
Number of weekdays (Monday-Friday):	27
Number of Saturdays:	0
Number of Sundays:	0
Surveys automatically removed from selection:	25
Surveys manually removed from selection:	4

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 shown. Finally, the number of survey days that have been manually removed from the selected set outside of the standard filtering procedure are displayed.

Appendix J



Appendix K

Junctions 9							
ARCADY 9 - Roundabout Module							
Version: 9.0.2.5947							
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+44 (0)1344 770558 software@trl.co.uk www.trlsoftware.co.uk							
The users of this computer program for the solution of an engineering problem are in no way relieved of their responsibility for the correctness of the solution							

Filename: Site Access Roundabout.j9

Path: P:\Southern\020-029\027 Bloor Homes\027.0014 Land at New Farm, Melksham (Outline)\03 Technical\TPL\Modelling

Report generation date: 05/11/2025 09:27:33

«Uses hatching - 2030 Baseline + CD + PD, AM

- »Junction Network
- »Arms
- »Traffic Demand
- »Origin-Destination Data
- »Vehicle Mix
- »Results

Summary of junction performance

	AM				PM			
	Queue (Veh)	Delay (s)	RFC	LOS	Queue (Veh)	Delay (s)	RFC	LOS
Uses hatching - 2030 Baseline + CD + PD								
Arm 1	2.1	10.69	0.68	B	1.7	7.74	0.63	A
Arm 2	0.6	5.01	0.38	A	0.9	5.94	0.48	A
Arm 3	1.3	6.51	0.56	A	0.8	5.64	0.43	A
Arm 4	0.2	5.60	0.17	A	0.1	4.74	0.07	A

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

File summary

File Description

Title	(untitled)
Location	
Site number	
Date	06/06/2024
Version	
Status	(new file)
Identifier	
Client	
Jobnumber	
Enumerator	AD\model.pc
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	Veh	Veh	perHour	s	-Min	perMin

Analysis Options

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

Analysis Set Details

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

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D1	2030 Baseline + CD + PD	AM	ONE HOUR	07:45	09:15	15	✓

Uses hatching - 2030 Baseline + CD + PD, AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout	1, 2, 3, 4	7.61	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Name	Description
1	Sandridge Common E	
2	Eastern Way	
3	Sandridge Common W	
4	Site Access	

Roundabout Geometry

Arm	V - Approach road half-width (m)	E - Entry width (m)	I' - Effective flare length (m)	R - Entry radius (m)	D - Inscribed circle diameter (m)	PHI - Conflict (entry) angle (deg)	Exit only
1	3.65	5.00	10.0	12.0	36.0	13.5	
2	3.65	5.00	15.0	15.0	36.0	18.0	
3	3.65	5.00	15.0	15.0	36.0	18.0	
4	3.10	5.00	10.0	22.0	36.0	19.0	

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Arm	Final slope	Final intercept (PCU/hr)
1	0.602	1426
2	0.609	1460
3	0.609	1460
4	0.593	1353

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

Traffic Demand

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
1		ONE HOUR	✓	639	100.000
2		ONE HOUR	✓	392	100.000
3		ONE HOUR	✓	645	100.000
4		ONE HOUR	✓	117	100.000

Origin-Destination Data

Demand (Veh/hr)

	To				
	1	2	3	4	
From	1	0	329	301	9
	2	164	0	212	16
	3	240	388	0	17
	4	25	44	48	0

Vehicle Mix

Heavy Vehicle Percentages

	To				
	1	2	3	4	
From	1	0	5	5	5
	2	5	0	5	5
	3	5	5	0	5
	4	5	5	5	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
1	0.68	10.69	2.1	B	586	880
2	0.38	5.01	0.6	A	360	540
3	0.56	6.51	1.3	A	592	888
4	0.17	5.60	0.2	A	107	161

Main Results for each time segment

07:45 - 08:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
1	481	120	360	1141	0.421	478	321	0.0	0.7	5.405	A
2	295	74	268	1227	0.241	294	570	0.0	0.3	3.854	A
3	486	121	142	1304	0.372	483	420	0.0	0.6	4.375	A
4	88	22	593	936	0.094	88	31	0.0	0.1	4.239	A

08:00 - 08:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
1	574	144	431	1099	0.523	573	385	0.7	1.1	6.829	A
2	352	88	321	1195	0.295	352	683	0.3	0.4	4.271	A
3	580	145	170	1287	0.451	579	503	0.6	0.8	5.080	A
4	105	26	711	867	0.121	105	38	0.1	0.1	4.726	A

08:15 - 08:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
1	704	176	527	1041	0.676	700	471	1.1	2.0	10.449	B
2	432	108	392	1151	0.375	431	835	0.4	0.6	4.992	A
3	710	178	208	1264	0.562	708	615	0.8	1.3	6.463	A
4	129	32	870	773	0.167	129	46	0.1	0.2	5.590	A

08:30 - 08:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
1	704	176	528	1040	0.677	703	472	2.0	2.1	10.687	B
2	432	108	394	1150	0.375	432	838	0.6	0.6	5.010	A
3	710	178	208	1263	0.562	710	618	1.3	1.3	6.506	A
4	129	32	872	771	0.167	129	46	0.2	0.2	5.602	A

08:45 - 09:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
1	574	144	433	1097	0.523	578	387	2.1	1.1	6.981	A
2	352	88	324	1193	0.295	353	687	0.6	0.4	4.290	A
3	580	145	170	1286	0.451	582	507	1.3	0.8	5.122	A
4	105	26	714	865	0.122	105	38	0.2	0.1	4.742	A

09:00 - 09:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
1	481	120	362	1140	0.422	483	324	1.1	0.7	5.487	A
2	295	74	270	1225	0.241	296	574	0.4	0.3	3.872	A
3	486	121	142	1303	0.373	487	423	0.8	0.6	4.413	A
4	88	22	597	934	0.094	88	32	0.1	0.1	4.257	A

Appendix L

Junctions 9			
ARCADY 9 - Roundabout Module			
Version: 9.0.2.5947 © Copyright TRL Limited, 2017			
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Filename: Cranesbill Road,Eastern Way Roundabout.j9

Path: P:\Southern\020-029\027 Bloor Homes\027.0014 Land at New Farm, Melksham (Outline)\03 Technical\TPL\Modelling

Report generation date: 04/11/2025 11:19:53

»2025, AM
»2025, PM
»2030 + CD, AM
»2030 + CD, PM
»2030 + CD + PD, AM
»2030 + CD + PD, PM

Summary of junction performance

	AM				PM			
	Queue (Veh)	Delay (s)	RFC	LOS	Queue (Veh)	Delay (s)	RFC	LOS
2025								
Arm 1	1.4	9.96	0.59	A	1.4	9.65	0.59	A
Arm 2	1.0	5.75	0.49	A	0.8	5.07	0.44	A
Arm 3	0.4	5.56	0.28	A	0.2	4.70	0.18	A
2030 + CD								
Arm 1	2.1	13.01	0.68	B	1.8	11.45	0.65	B
Arm 2	1.2	6.47	0.55	A	1.0	5.62	0.49	A
Arm 3	0.4	6.00	0.31	A	0.2	4.99	0.19	A
2030 + CD + PD								
Arm 1	2.7	15.74	0.74	C	2.0	12.26	0.67	B
Arm 2	1.3	6.67	0.56	A	1.1	6.05	0.53	A
Arm 3	0.4	6.10	0.31	A	0.2	5.18	0.20	A

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

File summary

File Description

Title	(untitled)
Location	
Site number	
Date	11/09/2024
Version	
Status	(new file)
Identifier	
Client	
Jobnumber	
Enumerator	AD\acmodelling
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	Veh	Veh	perHour	s	-Min	perMin

Analysis Options

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

Demand Set Summary

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D1	2025	AM	ONE HOUR	08:00	09:30	15
D2	2025	PM	ONE HOUR	17:00	18:30	15
D3	2030 + CD	AM	ONE HOUR	08:00	09:30	15
D4	2030 + CD	PM	ONE HOUR	17:00	18:30	15
D5	2030 + CD + PD	AM	ONE HOUR	08:00	09:30	15
D6	2030 + CD + PD	PM	ONE HOUR	17:00	18:30	15

Analysis Set Details

ID	Network flow scaling factor (%)
A1	100.000

2025, AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout	1, 2, 3	7.28	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Name	Description
1	Eastern Way N	
2	Eastern Way S	
3	Cranesbill Road	

Roundabout Geometry

Arm	V - Approach road half-width (m)	E - Entry width (m)	I' - Effective flare length (m)	R - Entry radius (m)	D - Inscribed circle diameter (m)	PHI - Conflict (entry) angle (deg)	Exit only
1	3.00	5.00	3.0	20.0	40.0	47.0	
2	3.00	6.00	9.0	18.0	40.0	12.0	
3	3.00	6.00	5.0	22.0	40.0	17.0	

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Arm	Final slope	Final intercept (PCU/hr)
1	0.492	1037
2	0.604	1426
3	0.573	1281

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

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D1	2025	AM	ONE HOUR	08:00	09:30	15

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

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
1		✓	463	100.000
2		✓	555	100.000
3		✓	229	100.000

Origin-Destination Data

Demand (Veh/hr)

	To			
		1	2	3
From	1	0	374	89
	2	420	0	135
	3	96	133	0

Vehicle Mix

Heavy Vehicle Percentages

	To			
		1	2	3
From	1	10	10	10
	2	10	10	10
	3	10	10	10

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (Veh)	Max LOS
1	0.59	9.96	1.4	A
2	0.49	5.75	1.0	A
3	0.28	5.56	0.4	A

Main Results for each time segment

08:00 - 08:15

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
1	349	100	894	0.390	346	0.6	6.539	A
2	418	67	1256	0.333	416	0.5	4.276	A
3	172	315	984	0.175	172	0.2	4.426	A

08:15 - 08:30

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
1	416	119	884	0.471	415	0.9	7.658	A
2	499	80	1248	0.400	498	0.7	4.798	A
3	206	377	948	0.217	206	0.3	4.847	A

08:30 - 08:45

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
1	510	146	871	0.585	508	1.4	9.851	A
2	611	98	1237	0.494	610	1.0	5.726	A
3	252	462	900	0.280	252	0.4	5.551	A

08:45 - 09:00

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
1	510	146	871	0.585	510	1.4	9.958	A
2	611	98	1237	0.494	611	1.0	5.751	A
3	252	462	899	0.280	252	0.4	5.562	A

09:00 - 09:15

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
1	416	120	884	0.471	418	0.9	7.758	A
2	499	80	1248	0.400	500	0.7	4.825	A
3	206	378	947	0.217	206	0.3	4.860	A

09:15 - 09:30

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
1	349	100	894	0.390	350	0.6	6.630	A
2	418	67	1256	0.333	419	0.5	4.305	A
3	172	317	983	0.175	173	0.2	4.444	A

2025, PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout	1, 2, 3	6.97	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D2	2025	PM	ONE HOUR	17:00	18:30	15

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

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
1		✓	478	100.000
2		✓	498	100.000
3		✓	148	100.000

Origin-Destination Data

Demand (Veh/hr)

	To			
	1	2	3	
From	1	0	422	56
	2	373	0	125
	3	67	81	0

Vehicle Mix

Heavy Vehicle Percentages

	To			
	1	2	3	
From	1	10	10	10
	2	10	10	10
	3	10	10	10

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (Veh)	Max LOS
1	0.59	9.65	1.4	A
2	0.44	5.07	0.8	A
3	0.18	4.70	0.2	A

Main Results for each time segment

17:00 - 17:15

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
1	360	61	913	0.394	357	0.6	6.446	A
2	375	42	1271	0.295	373	0.4	4.003	A
3	111	280	1004	0.111	111	0.1	4.029	A

17:15 - 17:30

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
1	430	73	907	0.474	429	0.9	7.507	A
2	448	50	1266	0.354	447	0.5	4.394	A
3	133	335	972	0.137	133	0.2	4.288	A

17:30 - 17:45

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
1	526	89	899	0.585	524	1.4	9.549	A
2	548	61	1259	0.436	547	0.8	5.053	A
3	163	410	929	0.175	163	0.2	4.695	A

17:45 - 18:00

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
1	526	89	899	0.585	526	1.4	9.647	A
2	548	62	1259	0.436	548	0.8	5.065	A
3	163	411	929	0.175	163	0.2	4.699	A

18:00 - 18:15

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
1	430	73	907	0.474	432	0.9	7.602	A
2	448	51	1266	0.354	449	0.6	4.410	A
3	133	336	972	0.137	133	0.2	4.295	A

18:15 - 18:30

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
1	360	61	913	0.394	361	0.7	6.531	A
2	375	42	1271	0.295	375	0.4	4.023	A
3	111	281	1003	0.111	112	0.1	4.038	A

2030 + CD, AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout	1, 2, 3	8.91	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D3	2030 + CD	AM	ONE HOUR	08:00	09:30	15

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

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
1		✓	537	100.000
2		✓	615	100.000
3		✓	242	100.000

Origin-Destination Data

Demand (Veh/hr)

	To			
		1	2	3
From	1	0	443	94
	2	473	0	142
	3	102	140	0

Vehicle Mix

Heavy Vehicle Percentages

	To			
		1	2	3
From	1	10	10	10
	2	10	10	10
	3	10	10	10

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (Veh)	Max LOS
1	0.68	13.01	2.1	B
2	0.55	6.47	1.2	A
3	0.31	6.00	0.4	A

Main Results for each time segment

08:00 - 08:15

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
1	404	105	892	0.453	401	0.8	7.292	A
2	463	70	1254	0.369	461	0.6	4.527	A
3	182	354	961	0.190	181	0.2	4.609	A

08:15 - 08:30

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
1	483	126	881	0.548	481	1.2	8.966	A
2	553	84	1245	0.444	552	0.8	5.186	A
3	218	425	921	0.236	217	0.3	5.113	A

08:30 - 08:45

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
1	591	154	867	0.682	588	2.1	12.713	B
2	677	103	1234	0.549	675	1.2	6.426	A
3	266	520	867	0.307	266	0.4	5.988	A

08:45 - 09:00

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
1	591	154	867	0.682	591	2.1	13.007	B
2	677	103	1234	0.549	677	1.2	6.468	A
3	266	521	866	0.308	266	0.4	6.005	A

09:00 - 09:15

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
1	483	126	881	0.548	486	1.2	9.194	A
2	553	85	1245	0.444	554	0.8	5.227	A
3	218	426	920	0.237	218	0.3	5.134	A

09:15 - 09:30

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
1	404	106	891	0.454	406	0.8	7.441	A
2	463	71	1253	0.369	464	0.6	4.567	A
3	182	357	960	0.190	182	0.2	4.634	A

2030 + CD, PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout	1, 2, 3	8.02	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D4	2030 + CD	PM	ONE HOUR	17:00	18:30	15

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

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
1		✓	529	100.000
2		✓	560	100.000
3		✓	157	100.000

Origin-Destination Data

Demand (Veh/hr)

	To			
		1	2	3
From	1	0	470	59
	2	429	0	131
	3	71	86	0

Vehicle Mix

Heavy Vehicle Percentages

	To			
		1	2	3
From	1	10	10	10
	2	10	10	10
	3	10	10	10

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (Veh)	Max LOS
1	0.65	11.45	1.8	B
2	0.49	5.62	1.0	A
3	0.19	4.99	0.2	A

Main Results for each time segment

17:00 - 17:15

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
1	398	64	911	0.437	395	0.8	6.935	A
2	422	44	1270	0.332	420	0.5	4.227	A
3	118	321	980	0.121	118	0.1	4.171	A

17:15 - 17:30

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
1	476	77	905	0.525	474	1.1	8.330	A
2	503	53	1264	0.398	503	0.7	4.724	A
3	141	385	944	0.150	141	0.2	4.486	A

17:30 - 17:45

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
1	582	95	897	0.650	580	1.8	11.255	B
2	617	65	1257	0.490	615	1.0	5.600	A
3	173	471	894	0.193	173	0.2	4.988	A

17:45 - 18:00

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
1	582	95	897	0.650	582	1.8	11.446	B
2	617	65	1257	0.491	617	1.0	5.621	A
3	173	472	894	0.193	173	0.2	4.994	A

18:00 - 18:15

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
1	476	77	905	0.525	478	1.1	8.491	A
2	503	53	1264	0.398	505	0.7	4.747	A
3	141	387	943	0.150	141	0.2	4.493	A

18:15 - 18:30

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
1	398	65	911	0.437	400	0.8	7.058	A
2	422	45	1269	0.332	422	0.5	4.253	A
3	118	323	979	0.121	118	0.1	4.183	A

2030 + CD + PD, AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout	1, 2, 3	10.20	B

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D5	2030 + CD + PD	AM	ONE HOUR	08:00	09:30	15

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

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
1		✓	581	100.000
2		✓	630	100.000
3		✓	242	100.000

Origin-Destination Data

Demand (Veh/hr)

	To			
		1	2	3
From	1	0	487	94
	2	488	0	142
	3	102	140	0

Vehicle Mix

Heavy Vehicle Percentages

	To			
		1	2	3
From	1	10	10	10
	2	10	10	10
	3	10	10	10

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (Veh)	Max LOS
1	0.74	15.74	2.7	C
2	0.56	6.67	1.3	A
3	0.31	6.10	0.4	A

Main Results for each time segment

08:00 - 08:15

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
1	437	105	892	0.491	434	0.9	7.800	A
2	474	70	1254	0.378	472	0.6	4.591	A
3	182	366	955	0.191	181	0.2	4.648	A

08:15 - 08:30

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
1	522	126	881	0.593	520	1.4	9.922	A
2	566	84	1245	0.455	565	0.8	5.289	A
3	218	438	913	0.238	217	0.3	5.169	A

08:30 - 08:45

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
1	640	154	867	0.737	635	2.6	15.153	C
2	694	103	1234	0.562	692	1.3	6.618	A
3	266	536	857	0.311	266	0.4	6.084	A

08:45 - 09:00

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
1	640	154	867	0.738	639	2.7	15.739	C
2	694	103	1234	0.562	694	1.3	6.666	A
3	266	537	856	0.311	266	0.4	6.101	A

09:00 - 09:15

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
1	522	126	881	0.593	527	1.5	10.311	B
2	566	85	1245	0.455	568	0.8	5.334	A
3	218	440	912	0.239	218	0.3	5.190	A

09:15 - 09:30

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
1	437	106	891	0.491	439	1.0	8.007	A
2	474	71	1253	0.378	475	0.6	4.634	A
3	182	368	953	0.191	183	0.2	4.671	A

2030 + CD + PD, PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout	1, 2, 3	8.55	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D6	2030 + CD + PD	PM	ONE HOUR	17:00	18:30	15

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

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
1		✓	548	100.000
2		✓	601	100.000
3		✓	157	100.000

Origin-Destination Data

Demand (Veh/hr)

	To			
		1	2	3
From	1	0	489	59
	2	470	0	131
	3	71	86	0

Vehicle Mix

Heavy Vehicle Percentages

	To			
		1	2	3
From	1	10	10	10
	2	10	10	10
	3	10	10	10

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (Veh)	Max LOS
1	0.67	12.26	2.0	B
2	0.53	6.05	1.1	A
3	0.20	5.18	0.2	A

Main Results for each time segment

17:00 - 17:15

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
1	413	64	911	0.453	409	0.8	7.125	A
2	452	44	1270	0.356	450	0.5	4.383	A
3	118	352	963	0.123	118	0.1	4.258	A

17:15 - 17:30

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
1	493	77	905	0.544	491	1.2	8.668	A
2	540	53	1264	0.427	540	0.7	4.962	A
3	141	422	922	0.153	141	0.2	4.605	A

17:30 - 17:45

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
1	603	95	897	0.673	600	2.0	12.008	B
2	662	65	1257	0.526	660	1.1	6.017	A
3	173	516	868	0.199	173	0.2	5.170	A

17:45 - 18:00

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
1	603	95	897	0.673	603	2.0	12.255	B
2	662	65	1257	0.526	662	1.1	6.047	A
3	173	517	868	0.199	173	0.2	5.180	A

18:00 - 18:15

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
1	493	77	905	0.544	496	1.2	8.867	A
2	540	53	1264	0.427	542	0.8	4.996	A
3	141	424	922	0.153	141	0.2	4.615	A

18:15 - 18:30

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
1	413	65	911	0.453	414	0.8	7.266	A
2	452	45	1269	0.357	453	0.6	4.417	A
3	118	354	961	0.123	118	0.1	4.273	A

Appendix M

Junctions 9			
ARCADY 9 - Roundabout Module			
Version: 9.0.2.5947 © Copyright TRL Limited, 2017			
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Filename: Eastern Way, Rosemary Way Roundabout.j9

Path: P:\Southern\020-029\027 Bloor Homes\027.0014 Land at New Farm, Melksham (Outline)\03 Technical\TPL\Modelling

Report generation date: 04/11/2025 11:27:57

»2025, AM

»2025, PM

»2030 Forecast + CD, AM

»2030 Forecast + CD, PM

»2030 Forecast + CD + PD, AM

»2030 Forecast + CD + PD, PM

Summary of junction performance

	AM				PM			
	Queue (Veh)	Delay (s)	RFC	LOS	Queue (Veh)	Delay (s)	RFC	LOS
2025								
Arm 1	0.9	5.49	0.46	A	0.7	4.93	0.42	A
Arm 2	0.9	6.37	0.49	A	1.3	7.61	0.57	A
Arm 3	0.1	4.42	0.10	A	0.0	4.29	0.03	A
2030 Forecast + CD								
Arm 1	1.1	6.20	0.52	A	0.9	5.34	0.46	A
Arm 2	1.2	7.17	0.54	A	1.7	9.02	0.64	A
Arm 3	0.1	4.65	0.11	A	0.0	4.52	0.03	A
2030 Forecast + CD + PD								
Arm 1	1.3	6.77	0.56	A	0.9	5.51	0.48	A
Arm 2	1.3	7.41	0.56	A	2.1	10.19	0.68	B
Arm 3	0.1	4.71	0.11	A	0.0	4.68	0.03	A

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

File summary

File Description

Title	(untitled)
Location	
Site number	
Date	11/09/2024
Version	
Status	(new file)
Identifier	
Client	
Jobnumber	
Enumerator	AD\acmodelling
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	Veh	Veh	perHour	s	-Min	perMin

Analysis Options

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

Demand Set Summary

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D1	2025	AM	ONE HOUR	07:45	09:15	15
D2	2025	PM	ONE HOUR	16:45	18:15	15
D3	2030 Forecast + CD	AM	ONE HOUR	07:45	09:15	15
D4	2030 Forecast + CD	PM	ONE HOUR	16:45	18:15	15
D5	2030 Forecast + CD + PD	AM	ONE HOUR	07:45	09:15	15
D6	2030 Forecast + CD + PD	PM	ONE HOUR	16:45	18:15	15

Analysis Set Details

ID	Network flow scaling factor (%)
A1	100.000

2025, AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout	1, 2, 3	5.80	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Name	Description
1	Eastern Way	
2	Snowberry Lane	
3	Rosemary Way	

Roundabout Geometry

Arm	V - Approach road half-width (m)	E - Entry width (m)	I' - Effective flare length (m)	R - Entry radius (m)	D - Inscribed circle diameter (m)	PHI - Conflict (entry) angle (deg)	Exit only
1	3.65	6.00	4.0	20.0	40.0	22.0	
2	3.30	5.50	5.0	14.0	40.0	38.0	
3	3.65	5.00	3.0	20.0	40.0	19.0	

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Arm	Final slope	Final intercept (PCU/hr)
1	0.589	1391
2	0.530	1215
3	0.578	1322

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

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D1	2025	AM	ONE HOUR	07:45	09:15	15

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

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
1		✓	510	100.000
2		✓	488	100.000
3		✓	82	100.000

Origin-Destination Data

Demand (Veh/hr)

	To			
	1	2	3	
From	1	0	507	3
	2	467	0	21
	3	10	72	0

Vehicle Mix

Heavy Vehicle Percentages

	To			
	1	2	3	
From	1	10	10	10
	2	10	10	10
	3	10	10	10

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (Veh)	Max LOS
1	0.46	5.49	0.9	A
2	0.49	6.37	0.9	A
3	0.10	4.42	0.1	A

Main Results for each time segment

07:45 - 08:00

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
1	384	54	1233	0.312	382	0.4	4.225	A
2	367	2	1103	0.333	365	0.5	4.869	A
3	62	350	1000	0.062	61	0.1	3.836	A

08:00 - 08:15

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
1	458	65	1226	0.374	458	0.6	4.682	A
2	439	3	1103	0.398	438	0.7	5.412	A
3	74	419	960	0.077	74	0.1	4.063	A

08:15 - 08:30

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
1	562	79	1218	0.461	561	0.8	5.460	A
2	537	3	1102	0.487	536	0.9	6.345	A
3	90	513	905	0.100	90	0.1	4.416	A

08:30 - 08:45

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
1	562	79	1218	0.461	562	0.9	5.486	A
2	537	3	1102	0.487	537	0.9	6.370	A
3	90	514	905	0.100	90	0.1	4.419	A

08:45 - 09:00

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
1	458	65	1226	0.374	459	0.6	4.701	A
2	439	3	1103	0.398	440	0.7	5.441	A
3	74	421	959	0.077	74	0.1	4.070	A

09:00 - 09:15

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
1	384	54	1232	0.312	385	0.5	4.248	A
2	367	2	1103	0.333	368	0.5	4.902	A
3	62	352	998	0.062	62	0.1	3.843	A

2025, PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout	1, 2, 3	6.35	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

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

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

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
1		✓	474	100.000
2		✓	573	100.000
3		✓	21	100.000

Origin-Destination Data

Demand (Veh/hr)

	To			
		1	2	3
From	1	0	473	1
	2	535	0	38
	3	3	18	0

Vehicle Mix

Heavy Vehicle Percentages

	To			
		1	2	3
From	1	10	10	10
	2	10	10	10
	3	10	10	10

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (Veh)	Max LOS
1	0.42	4.93	0.7	A
2	0.57	7.61	1.3	A
3	0.03	4.29	0.0	A

Main Results for each time segment

16:45 - 17:00

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
1	357	13	1256	0.284	355	0.4	3.989	A
2	431	0.75	1104	0.391	429	0.6	5.314	A
3	16	400	971	0.016	16	0.0	3.769	A

17:00 - 17:15

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
1	426	16	1255	0.340	426	0.5	4.340	A
2	515	0.90	1104	0.467	514	0.9	6.097	A
3	19	480	924	0.020	19	0.0	3.974	A

17:15 - 17:30

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
1	522	20	1253	0.417	521	0.7	4.916	A
2	631	1	1104	0.572	629	1.3	7.559	A
3	23	587	862	0.027	23	0.0	4.288	A

17:30 - 17:45

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
1	522	20	1253	0.417	522	0.7	4.925	A
2	631	1	1104	0.572	631	1.3	7.612	A
3	23	589	862	0.027	23	0.0	4.293	A

17:45 - 18:00

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
1	426	16	1255	0.340	427	0.5	4.352	A
2	515	0.90	1104	0.467	517	0.9	6.155	A
3	19	483	923	0.020	19	0.0	3.981	A

18:00 - 18:15

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
1	357	14	1256	0.284	357	0.4	4.007	A
2	431	0.75	1104	0.391	432	0.6	5.371	A
3	16	404	969	0.016	16	0.0	3.777	A

2030 Forecast + CD, AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout	1, 2, 3	6.52	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D3	2030 Forecast + CD	AM	ONE HOUR	07:45	09:15	15

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

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
1		✓	576	100.000
2		✓	545	100.000
3		✓	87	100.000

Origin-Destination Data

Demand (Veh/hr)

	To			
	1	2	3	
From	1	0	573	3
	2	523	0	22
	3	11	76	0

Vehicle Mix

Heavy Vehicle Percentages

	To			
	1	2	3	
From	1	10	10	10
	2	10	10	10
	3	10	10	10

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (Veh)	Max LOS
1	0.52	6.20	1.1	A
2	0.54	7.17	1.2	A
3	0.11	4.65	0.1	A

Main Results for each time segment

07:45 - 08:00

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
1	434	57	1231	0.352	431	0.5	4.492	A
2	410	2	1103	0.372	408	0.6	5.162	A
3	65	391	976	0.067	65	0.1	3.953	A

08:00 - 08:15

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
1	518	68	1224	0.423	517	0.7	5.086	A
2	490	3	1103	0.444	489	0.8	5.860	A
3	78	469	931	0.084	78	0.1	4.222	A

08:15 - 08:30

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
1	634	84	1215	0.522	633	1.1	6.166	A
2	600	3	1102	0.544	599	1.2	7.123	A
3	96	574	870	0.110	96	0.1	4.649	A

08:30 - 08:45

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
1	634	84	1215	0.522	634	1.1	6.196	A
2	600	3	1102	0.544	600	1.2	7.166	A
3	96	576	869	0.110	96	0.1	4.654	A

08:45 - 09:00

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
1	518	68	1224	0.423	519	0.7	5.116	A
2	490	3	1103	0.444	491	0.8	5.905	A
3	78	472	929	0.084	78	0.1	4.231	A

09:00 - 09:15

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
1	434	57	1231	0.352	434	0.5	4.527	A
2	410	2	1103	0.372	411	0.6	5.209	A
3	65	395	974	0.067	66	0.1	3.964	A

2030 Forecast + CD, PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout	1, 2, 3	7.31	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D4	2030 Forecast + CD	PM	ONE HOUR	16:45	18:15	15

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

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
1		✓	525	100.000
2		✓	640	100.000
3		✓	22	100.000

Origin-Destination Data

Demand (Veh/hr)

	To			
	1	2	3	
From	1	0	524	1
	2	600	0	40
	3	3	19	0

Vehicle Mix

Heavy Vehicle Percentages

	To			
	1	2	3	
From	1	10	10	10
	2	10	10	10
	3	10	10	10

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (Veh)	Max LOS
1	0.46	5.34	0.9	A
2	0.64	9.02	1.7	A
3	0.03	4.52	0.0	A

Main Results for each time segment

16:45 - 17:00

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
1	395	14	1256	0.315	393	0.5	4.166	A
2	482	0.75	1104	0.437	479	0.8	5.733	A
3	17	449	943	0.018	16	0.0	3.887	A

17:00 - 17:15

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
1	472	17	1254	0.376	471	0.6	4.595	A
2	575	0.90	1104	0.521	574	1.1	6.781	A
3	20	538	891	0.022	20	0.0	4.132	A

17:15 - 17:30

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
1	578	21	1252	0.462	577	0.8	5.326	A
2	705	1	1104	0.639	702	1.7	8.908	A
3	24	658	822	0.029	24	0.0	4.514	A

17:30 - 17:45

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
1	578	21	1252	0.462	578	0.9	5.340	A
2	705	1	1104	0.639	705	1.7	9.017	A
3	24	661	820	0.030	24	0.0	4.522	A

17:45 - 18:00

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
1	472	17	1254	0.376	473	0.6	4.614	A
2	575	0.90	1104	0.521	578	1.1	6.882	A
3	20	542	889	0.022	20	0.0	4.142	A

18:00 - 18:15

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
1	395	14	1256	0.315	396	0.5	4.189	A
2	482	0.75	1104	0.437	483	0.8	5.814	A
3	17	453	940	0.018	17	0.0	3.897	A

2030 Forecast + CD + PD, AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout	1, 2, 3	6.91	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D5	2030 Forecast + CD + PD	AM	ONE HOUR	07:45	09:15	15

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

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
1		✓	621	100.000
2		✓	560	100.000
3		✓	87	100.000

Origin-Destination Data

Demand (Veh/hr)

	To			
	1	2	3	
From	1	0	618	3
	2	538	0	22
	3	11	76	0

Vehicle Mix

Heavy Vehicle Percentages

	To			
	1	2	3	
From	1	10	10	10
	2	10	10	10
	3	10	10	10

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (Veh)	Max LOS
1	0.56	6.77	1.3	A
2	0.56	7.41	1.3	A
3	0.11	4.71	0.1	A

Main Results for each time segment

07:45 - 08:00

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
1	468	57	1231	0.380	465	0.6	4.686	A
2	422	2	1103	0.382	419	0.6	5.246	A
3	65	403	969	0.068	65	0.1	3.981	A

08:00 - 08:15

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
1	558	68	1224	0.456	557	0.8	5.393	A
2	503	3	1103	0.457	503	0.8	5.990	A
3	78	483	923	0.085	78	0.1	4.261	A

08:15 - 08:30

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
1	684	84	1215	0.563	682	1.3	6.731	A
2	617	3	1102	0.559	615	1.2	7.360	A
3	96	591	861	0.111	96	0.1	4.706	A

08:30 - 08:45

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
1	684	84	1215	0.563	684	1.3	6.774	A
2	617	3	1102	0.559	617	1.3	7.409	A
3	96	592	860	0.111	96	0.1	4.712	A

08:45 - 09:00

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
1	558	68	1224	0.456	560	0.8	5.436	A
2	503	3	1103	0.457	505	0.9	6.042	A
3	78	485	922	0.085	78	0.1	4.271	A

09:00 - 09:15

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
1	468	57	1231	0.380	468	0.6	4.730	A
2	422	2	1103	0.382	422	0.6	5.297	A
3	65	406	967	0.068	66	0.1	3.993	A

2030 Forecast + CD + PD, PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout	1, 2, 3	8.06	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D6	2030 Forecast + CD + PD	PM	ONE HOUR	16:45	18:15	15

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

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
1		✓	544	100.000
2		✓	682	100.000
3		✓	22	100.000

Origin-Destination Data

Demand (Veh/hr)

	To			
		1	2	3
From	1	0	543	1
	2	642	0	40
	3	3	19	0

Vehicle Mix

Heavy Vehicle Percentages

	To			
		1	2	3
From	1	10	10	10
	2	10	10	10
	3	10	10	10

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (Veh)	Max LOS
1	0.48	5.51	0.9	A
2	0.68	10.19	2.1	B
3	0.03	4.68	0.0	A

Main Results for each time segment

16:45 - 17:00

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
1	410	14	1256	0.326	408	0.5	4.234	A
2	513	0.75	1104	0.465	510	0.9	6.029	A
3	17	480	925	0.018	16	0.0	3.964	A

17:00 - 17:15

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
1	489	17	1254	0.390	488	0.6	4.696	A
2	613	0.90	1104	0.556	612	1.2	7.294	A
3	20	576	869	0.023	20	0.0	4.237	A

17:15 - 17:30

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
1	599	21	1252	0.478	598	0.9	5.494	A
2	751	1	1104	0.680	748	2.1	9.985	A
3	24	704	795	0.030	24	0.0	4.668	A

17:30 - 17:45

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
1	599	21	1252	0.478	599	0.9	5.511	A
2	751	1	1104	0.680	751	2.1	10.194	B
3	24	707	794	0.031	24	0.0	4.679	A

17:45 - 18:00

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
1	489	17	1254	0.390	490	0.6	4.717	A
2	613	0.90	1104	0.556	616	1.3	7.436	A
3	20	580	867	0.023	20	0.0	4.251	A

18:00 - 18:15

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
1	410	14	1256	0.326	410	0.5	4.261	A
2	513	0.75	1104	0.465	515	0.9	6.130	A
3	17	485	922	0.018	17	0.0	3.978	A

Junctions 9			
ARCADY 9 - Roundabout Module			
Version: 9.0.2.5947 © Copyright TRL Limited, 2017			
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Filename: Campion Drive, Spa Road Roundabout.j9

Path: P:\Southern\020-029\027 Bloor Homes\027.0014 Land at New Farm, Melksham (Outline)\03 Technical\TPL\Modelling

Report generation date: 04/11/2025 12:00:52

»2025, AM

»2025, PM

»2030 Forecast + CD, AM

»2030 Forecast + CD, PM

»2030 Forecast + CD + PD, AM

»2030 Forecast + CD + PD, PM

Summary of junction performance

	AM				PM			
	Queue (Veh)	Delay (s)	RFC	LOS	Queue (Veh)	Delay (s)	RFC	LOS
2025								
Arm 1	0.8	4.00	0.44	A	0.5	3.15	0.34	A
Arm 2	1.1	4.16	0.53	A	1.6	5.13	0.62	A
Arm 3	0.1	3.73	0.06	A	0.0	3.90	0.02	A
Arm 4	0.7	4.16	0.40	A	0.6	4.29	0.38	A
2030 Forecast + CD								
Arm 1	1.0	4.50	0.50	A	0.6	3.37	0.37	A
Arm 2	1.3	4.58	0.58	A	2.1	6.06	0.68	A
Arm 3	0.1	3.96	0.07	A	0.0	4.22	0.02	A
Arm 4	0.7	4.49	0.43	A	0.7	4.73	0.42	A
2030 Forecast + CD + PD								
Arm 1	1.5	6.28	0.60	A	0.6	3.37	0.38	A
Arm 2	1.8	6.06	0.65	A	2.2	6.23	0.69	A
Arm 3	0.1	4.86	0.08	A	0.0	4.28	0.02	A
Arm 4	1.0	5.73	0.49	A	0.7	4.79	0.42	A

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

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

File summary

File Description

Title	(untitled)
Location	
Site number	
Date	06/06/2024
Version	
Status	(new file)
Identifier	
Client	
Jobnumber	
Enumerator	AD\acmodelling
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	Veh	Veh	perHour	s	-Min	perMin

Analysis Options

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

Demand Set Summary

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D1	2025	AM	ONE HOUR	07:45	09:15	15	✓
D2	2025	PM	ONE HOUR	16:45	18:15	15	✓
D3	2030 Forecast + CD	AM	ONE HOUR	07:45	09:15	15	✓
D4	2030 Forecast + CD	PM	ONE HOUR	16:45	18:15	15	✓
D5	2030 Forecast + CD + PD	AM	ONE HOUR	07:45	09:15	15	✓
D6	2030 Forecast + CD + PD	PM	ONE HOUR	16:45	18:15	15	✓

Analysis Set Details

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

2025, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Vehicle Mix		HV% is zero for all movements / time segments. Vehicle Mix matrix should be completed whether working in PCUs or Vehs.

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout	1, 2, 3, 4	4.10	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Name	Description
1	Snowberry Lane	
2	Spa Road East	
3	Campion Drive	
4	Spa Road 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)	Exit only
1	3.60	8.10	18.3	22.9	41.9	15.0	
2	4.40	6.60	22.7	21.5	42.3	17.0	
3	3.50	6.80	15.6	17.3	41.9	14.5	
4	4.00	7.00	8.7	81.0	42.3	17.3	

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Arm	Final slope	Final intercept (PCU/hr)
1	0.707	1962
2	0.696	1931
3	0.658	1733
4	0.676	1777

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

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D1	2025	AM	ONE HOUR	07:45	09:15	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
1		ONE HOUR	✓	650	100.000
2		ONE HOUR	✓	900	100.000
3		ONE HOUR	✓	56	100.000
4		ONE HOUR	✓	518	100.000

Origin-Destination Data

Demand (Veh/hr)

	To				
		1	2	3	4
From	1	0	555	1	94
	2	427	0	16	457
	3	8	24	0	24
	4	97	418	3	0

Vehicle Mix

Heavy Vehicle Percentages

	To				
		1	2	3	4
From	1	0	0	0	0
	2	0	0	0	0
	3	0	0	0	0
	4	0	0	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
1	0.44	4.00	0.8	A	596	895
2	0.53	4.16	1.1	A	826	1239
3	0.06	3.73	0.1	A	51	77
4	0.40	4.16	0.7	A	475	713

Main Results for each time segment

07:45 - 08:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
1	489	122	334	1726	0.284	488	399	0.0	0.4	2.903	A
2	678	169	74	1880	0.360	675	748	0.0	0.6	2.983	A
3	42	11	734	1251	0.034	42	15	0.0	0.0	2.978	A
4	390	97	344	1544	0.253	389	431	0.0	0.3	3.112	A

08:00 - 08:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
1	584	146	400	1679	0.348	584	478	0.4	0.5	3.283	A
2	809	202	88	1870	0.433	808	895	0.6	0.8	3.389	A
3	50	13	878	1156	0.044	50	18	0.0	0.0	3.256	A
4	466	116	412	1499	0.311	465	516	0.3	0.4	3.481	A

08:15 - 08:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
1	716	179	489	1616	0.443	715	585	0.5	0.8	3.989	A
2	991	248	108	1856	0.534	989	1096	0.8	1.1	4.146	A
3	62	15	1075	1026	0.060	62	22	0.0	0.1	3.731	A
4	570	143	505	1436	0.397	570	632	0.4	0.7	4.150	A

08:30 - 08:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
1	716	179	490	1616	0.443	716	586	0.8	0.8	3.999	A
2	991	248	108	1856	0.534	991	1098	1.1	1.1	4.159	A
3	62	15	1077	1025	0.060	62	22	0.1	0.1	3.735	A
4	570	143	505	1436	0.397	570	633	0.7	0.7	4.159	A

08:45 - 09:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
1	584	146	401	1679	0.348	585	479	0.8	0.5	3.294	A
2	809	202	88	1870	0.433	811	898	1.1	0.8	3.402	A
3	50	13	881	1154	0.044	50	18	0.1	0.0	3.263	A
4	466	116	413	1498	0.311	466	518	0.7	0.5	3.492	A

09:00 - 09:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
1	489	122	335	1725	0.284	490	401	0.5	0.4	2.918	A
2	678	169	74	1880	0.360	678	751	0.8	0.6	2.999	A
3	42	11	737	1249	0.034	42	15	0.0	0.0	2.986	A
4	390	97	346	1543	0.253	390	433	0.5	0.3	3.122	A

2025, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Vehicle Mix		HV% is zero for all movements / time segments. Vehicle Mix matrix should be completed whether working in PCUs or Vehs.

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout	1, 2, 3, 4	4.42	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

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

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
1		ONE HOUR	✓	525	100.000
2		ONE HOUR	✓	1048	100.000
3		ONE HOUR	✓	19	100.000
4		ONE HOUR	✓	477	100.000

Origin-Destination Data

Demand (Veh/hr)

	To				
		1	2	3	4
From	1	0	437	9	79
	2	543	0	37	468
	3	5	7	0	7
	4	174	292	11	0

Vehicle Mix

Heavy Vehicle Percentages

	To			
	1	2	3	4
From	1	0	0	0
	2	0	0	0
	3	0	0	0
	4	0	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
1	0.34	3.15	0.5	A	482	723
2	0.62	5.13	1.6	A	962	1442
3	0.02	3.90	0.0	A	17	26
4	0.38	4.29	0.6	A	438	657

Main Results for each time segment

16:45 - 17:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
1	395	99	233	1798	0.220	394	542	0.0	0.3	2.562	A
2	789	197	74	1880	0.420	786	552	0.0	0.7	3.284	A
3	14	4	818	1196	0.012	14	43	0.0	0.0	3.046	A
4	359	90	416	1496	0.240	358	416	0.0	0.3	3.161	A

17:00 - 17:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
1	472	118	278	1765	0.267	472	648	0.3	0.4	2.783	A
2	942	236	89	1869	0.504	941	661	0.7	1.0	3.872	A
3	17	4	979	1090	0.016	17	51	0.0	0.0	3.355	A
4	429	107	498	1441	0.298	428	497	0.3	0.4	3.554	A

17:15 - 17:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
1	578	145	341	1721	0.336	577	793	0.4	0.5	3.146	A
2	1154	288	109	1856	0.622	1151	809	1.0	1.6	5.095	A
3	21	5	1198	946	0.022	21	63	0.0	0.0	3.892	A
4	525	131	610	1365	0.385	524	609	0.4	0.6	4.278	A

17:30 - 17:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
1	578	145	341	1721	0.336	578	795	0.5	0.5	3.149	A
2	1154	288	109	1855	0.622	1154	810	1.6	1.6	5.130	A
3	21	5	1200	944	0.022	21	63	0.0	0.0	3.899	A
4	525	131	611	1364	0.385	525	610	0.6	0.6	4.289	A

17:45 - 18:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
1	472	118	279	1765	0.267	473	651	0.5	0.4	2.789	A
2	942	236	89	1869	0.504	945	663	1.6	1.0	3.902	A
3	17	4	982	1087	0.016	17	51	0.0	0.0	3.365	A
4	429	107	500	1439	0.298	430	499	0.6	0.4	3.570	A

18:00 - 18:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
1	395	99	234	1797	0.220	396	544	0.4	0.3	2.571	A
2	789	197	75	1879	0.420	790	555	1.0	0.7	3.307	A
3	14	4	822	1193	0.012	14	43	0.0	0.0	3.054	A
4	359	90	418	1494	0.240	360	418	0.4	0.3	3.172	A

2030 Forecast + CD, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Vehicle Mix		HV% is zero for all movements / time segments. Vehicle Mix matrix should be completed whether working in PCUs or Vehs.

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout	1, 2, 3, 4	4.51	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D3	2030 Forecast + CD	AM	ONE HOUR	07:45	09:15	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
1		ONE HOUR	✓	724	100.000
2		ONE HOUR	✓	968	100.000
3		ONE HOUR	✓	58	100.000
4		ONE HOUR	✓	546	100.000

Origin-Destination Data

Demand (Veh/hr)

	To				
	1	2	3	4	
From	1	0	624	1	99
	2	470	0	17	481
	3	8	25	0	25
	4	103	440	3	0

Vehicle Mix

Heavy Vehicle Percentages

	To				
		1	2	3	4
	1	0	0	0	0
	2	0	0	0	0
	3	0	0	0	0
	4	0	0	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
1	0.50	4.50	1.0	A	664	997
2	0.58	4.58	1.3	A	888	1332
3	0.07	3.96	0.1	A	53	80
4	0.43	4.49	0.7	A	501	752

Main Results for each time segment

07:45 - 08:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
1	545	136	351	1714	0.318	543	436	0.0	0.5	3.069	A
2	729	182	77	1878	0.388	726	817	0.0	0.6	3.120	A
3	44	11	788	1215	0.036	44	16	0.0	0.0	3.072	A
4	411	103	377	1522	0.270	410	454	0.0	0.4	3.231	A

08:00 - 08:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
1	651	163	420	1665	0.391	650	522	0.5	0.6	3.546	A
2	870	218	92	1867	0.466	869	978	0.6	0.9	3.605	A
3	52	13	943	1113	0.047	52	19	0.0	0.0	3.391	A
4	491	123	452	1472	0.333	490	543	0.4	0.5	3.665	A

08:15 - 08:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
1	797	199	514	1598	0.499	796	639	0.6	1.0	4.478	A
2	1066	266	113	1853	0.575	1064	1197	0.9	1.3	4.553	A
3	64	16	1154	974	0.066	64	23	0.0	0.1	3.953	A
4	601	150	553	1404	0.428	600	665	0.5	0.7	4.474	A

08:30 - 08:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
1	797	199	515	1598	0.499	797	640	1.0	1.0	4.495	A
2	1066	266	113	1852	0.575	1066	1199	1.3	1.3	4.576	A
3	64	16	1156	973	0.066	64	23	0.1	0.1	3.959	A
4	601	150	554	1403	0.428	601	666	0.7	0.7	4.489	A

08:45 - 09:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
1	651	163	422	1664	0.391	652	523	1.0	0.6	3.562	A
2	870	218	93	1867	0.466	872	981	1.3	0.9	3.627	A
3	52	13	946	1111	0.047	52	19	0.1	0.0	3.401	A
4	491	123	453	1471	0.334	492	545	0.7	0.5	3.679	A

09:00 - 09:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
1	545	136	353	1713	0.318	546	438	0.6	0.5	3.086	A
2	729	182	78	1877	0.388	730	821	0.9	0.6	3.138	A
3	44	11	792	1213	0.036	44	16	0.0	0.0	3.078	A
4	411	103	379	1521	0.270	412	456	0.5	0.4	3.245	A

2030 Forecast + CD, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Vehicle Mix		HV% is zero for all movements / time segments. Vehicle Mix matrix should be completed whether working in PCUs or Vehs.

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout	1, 2, 3, 4	5.05	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D4	2030 Forecast + CD	PM	ONE HOUR	16:45	18:15	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
1		ONE HOUR	✓	580	100.000
2		ONE HOUR	✓	1141	100.000
3		ONE HOUR	✓	19	100.000
4		ONE HOUR	✓	503	100.000

Origin-Destination Data

Demand (Veh/hr)

	To				
		1	2	3	4
From	1	0	486	10	84
	2	609	0	39	493
	3	5	7	0	7
	4	183	308	12	0

Vehicle Mix

Heavy Vehicle Percentages

	To				
		1	2	3	4
	1	0	0	0	0
	2	0	0	0	0
	3	0	0	0	0
From	4	0	0	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
1	0.37	3.37	0.6	A	532	798
2	0.68	6.06	2.1	A	1047	1571
3	0.02	4.22	0.0	A	17	26
4	0.42	4.73	0.7	A	462	692

Main Results for each time segment

16:45 - 17:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
1	437	109	245	1789	0.244	435	598	0.0	0.3	2.658	A
2	859	215	80	1876	0.458	856	601	0.0	0.8	3.516	A
3	14	4	889	1148	0.012	14	46	0.0	0.0	3.173	A
4	379	95	466	1463	0.259	377	438	0.0	0.3	3.312	A

17:00 - 17:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
1	521	130	294	1754	0.297	521	716	0.3	0.4	2.919	A
2	1026	256	95	1865	0.550	1024	719	0.8	1.2	4.273	A
3	17	4	1065	1033	0.017	17	55	0.0	0.0	3.542	A
4	452	113	557	1401	0.323	452	524	0.3	0.5	3.792	A

17:15 - 17:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
1	639	160	359	1708	0.374	638	875	0.4	0.6	3.363	A
2	1256	314	117	1850	0.679	1253	881	1.2	2.1	5.991	A
3	21	5	1302	877	0.024	21	67	0.0	0.0	4.205	A
4	554	138	682	1317	0.421	553	641	0.5	0.7	4.708	A

17:30 - 17:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
1	639	160	360	1707	0.374	639	877	0.6	0.6	3.367	A
2	1256	314	117	1850	0.679	1256	882	2.1	2.1	6.059	A
3	21	5	1306	875	0.024	21	67	0.0	0.0	4.216	A
4	554	138	684	1315	0.421	554	643	0.7	0.7	4.727	A

17:45 - 18:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
1	521	130	295	1754	0.297	522	719	0.6	0.4	2.926	A
2	1026	256	95	1865	0.550	1029	721	2.1	1.2	4.326	A
3	17	4	1070	1030	0.017	17	55	0.0	0.0	3.556	A
4	452	113	560	1399	0.323	453	527	0.7	0.5	3.812	A

18:00 - 18:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
1	437	109	247	1788	0.244	437	601	0.4	0.3	2.665	A
2	859	215	80	1876	0.458	861	604	1.2	0.9	3.553	A
3	14	4	894	1145	0.012	14	46	0.0	0.0	3.185	A
4	379	95	468	1461	0.259	379	440	0.5	0.4	3.331	A

2030 Forecast + CD + PD, AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout	1, 2, 3, 4	6.03	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D5	2030 Forecast + CD + PD	AM	ONE HOUR	07:45	09:15	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
1		ONE HOUR	✓	769	100.000
2		ONE HOUR	✓	984	100.000
3		ONE HOUR	✓	58	100.000
4		ONE HOUR	✓	546	100.000

Origin-Destination Data

Demand (Veh/hr)

	To				
	1	2	3	4	
From	1	0	669	1	99
	2	486	0	17	481
	3	8	25	0	25
	4	103	440	3	0

Vehicle Mix

Heavy Vehicle Percentages

	To				
	1	2	3	4	
From	1	10	10	10	10
	2	10	10	10	10
	3	10	10	10	10
	4	10	10	10	10

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
1	0.60	6.28	1.5	A	706	1058
2	0.65	6.06	1.8	A	903	1354
3	0.08	4.86	0.1	A	53	80
4	0.49	5.73	1.0	A	501	752

Main Results for each time segment

07:45 - 08:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
1	579	145	351	1536	0.377	577	448	0.0	0.6	3.744	A
2	741	185	77	1702	0.435	738	850	0.0	0.8	3.720	A
3	44	11	799	1050	0.042	43	16	0.0	0.0	3.576	A
4	411	103	389	1353	0.304	409	454	0.0	0.4	3.810	A

08:00 - 08:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
1	691	173	420	1487	0.465	690	536	0.6	0.9	4.515	A
2	885	221	92	1691	0.523	883	1018	0.8	1.1	4.447	A
3	52	13	957	946	0.055	52	19	0.0	0.1	4.025	A
4	491	123	466	1301	0.377	490	543	0.4	0.6	4.437	A

08:15 - 08:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
1	847	212	514	1420	0.596	844	656	0.9	1.5	6.224	A
2	1083	271	113	1677	0.646	1081	1245	1.1	1.8	6.006	A
3	64	16	1171	806	0.079	64	23	0.1	0.1	4.850	A
4	601	150	570	1231	0.489	600	664	0.6	0.9	5.694	A

08:30 - 08:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
1	847	212	515	1419	0.596	847	657	1.5	1.5	6.284	A
2	1083	271	113	1677	0.646	1083	1248	1.8	1.8	6.063	A
3	64	16	1174	804	0.079	64	23	0.1	0.1	4.863	A
4	601	150	571	1230	0.489	601	666	0.9	1.0	5.727	A

08:45 - 09:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
1	691	173	422	1485	0.465	694	538	1.5	0.9	4.561	A
2	885	221	93	1691	0.523	887	1023	1.8	1.1	4.496	A
3	52	13	961	944	0.055	52	19	0.1	0.1	4.041	A
4	491	123	468	1299	0.378	492	546	1.0	0.6	4.466	A

09:00 - 09:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
1	579	145	353	1534	0.377	580	450	0.9	0.6	3.776	A
2	741	185	78	1702	0.435	742	855	1.1	0.8	3.755	A
3	44	11	804	1047	0.042	44	16	0.1	0.0	3.587	A
4	411	103	391	1351	0.304	412	456	0.6	0.4	3.833	A

2030 Forecast + CD + PD, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Vehicle Mix		HV% is zero for all movements / time segments. Vehicle Mix matrix should be completed whether working in PCUs or Vehs.

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout	1, 2, 3, 4	5.16	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D6	2030 Forecast + CD + PD	PM	ONE HOUR	16:45	18:15	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
1		ONE HOUR	✓	586	100.000
2		ONE HOUR	✓	1159	100.000
3		ONE HOUR	✓	19	100.000
4		ONE HOUR	✓	492	100.000

Origin-Destination Data

Demand (Veh/hr)

	To				
		1	2	3	4
From	1	0	495	9	82
	2	638	0	38	483
	3	5	7	0	7
	4	179	302	11	0

Vehicle Mix

Heavy Vehicle Percentages

	To			
	1	2	3	4
From	1	0	0	0
	2	0	0	0
	3	0	0	0
	4	0	0	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
1	0.38	3.37	0.6	A	538	807
2	0.69	6.23	2.2	A	1064	1595
3	0.02	4.28	0.0	A	17	26
4	0.42	4.79	0.7	A	451	677

Main Results for each time segment

16:45 - 17:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
1	441	110	240	1792	0.246	440	616	0.0	0.3	2.659	A
2	873	218	77	1878	0.465	869	603	0.0	0.9	3.556	A
3	14	4	902	1140	0.013	14	44	0.0	0.0	3.197	A
4	370	93	487	1448	0.256	369	429	0.0	0.3	3.332	A

17:00 - 17:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
1	527	132	287	1759	0.300	526	738	0.3	0.4	2.921	A
2	1042	260	92	1868	0.558	1040	722	0.9	1.2	4.344	A
3	17	4	1080	1023	0.017	17	52	0.0	0.0	3.577	A
4	442	111	583	1383	0.320	442	514	0.3	0.5	3.822	A

17:15 - 17:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
1	645	161	352	1713	0.377	644	903	0.4	0.6	3.366	A
2	1276	319	112	1853	0.689	1272	884	1.2	2.2	6.158	A
3	21	5	1321	865	0.024	21	64	0.0	0.0	4.266	A
4	542	135	714	1295	0.418	541	628	0.5	0.7	4.766	A

17:30 - 17:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
1	645	161	352	1713	0.377	645	905	0.6	0.6	3.370	A
2	1276	319	112	1853	0.689	1276	885	2.2	2.2	6.234	A
3	21	5	1324	862	0.024	21	64	0.0	0.0	4.278	A
4	542	135	716	1294	0.419	542	630	0.7	0.7	4.786	A

17:45 - 18:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
1	527	132	288	1758	0.300	527	741	0.6	0.4	2.926	A
2	1042	260	92	1867	0.558	1046	724	2.2	1.3	4.400	A
3	17	4	1085	1020	0.017	17	52	0.0	0.0	3.592	A
4	442	111	586	1381	0.320	443	516	0.7	0.5	3.844	A

18:00 - 18:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
1	441	110	241	1791	0.246	442	620	0.4	0.3	2.667	A
2	873	218	77	1878	0.465	874	606	1.3	0.9	3.594	A
3	14	4	907	1137	0.013	14	44	0.0	0.0	3.206	A
4	370	93	490	1446	0.256	371	431	0.5	0.3	3.352	A

Appendix O

Junctions 9			
ARCADY 9 - Roundabout Module			
Version: 9.0.2.5947 © Copyright TRL Limited, 2017			
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Filename: Spa Road, Pathfinder Way Roundabout.j9

Path: P:\Southern\020-029\027 Bloor Homes\027.0014 Land at New Farm, Melksham (Outline)\03 Technical\TPL\Modelling

Report generation date: 04/11/2025 12:27:51

»2025, AM

»2025, PM

»2030 Forecast + CD, AM

»2030 Forecast + CD, PM

»2030 Forecast + CD + PD, AM

»2030 Forecast + CD + PD, PM

Summary of junction performance

	AM				PM			
	Queue (Veh)	Delay (s)	RFC	LOS	Queue (Veh)	Delay (s)	RFC	LOS
2025								
Arm 1	1.7	5.81	0.64	A	0.8	3.60	0.45	A
Arm 2	1.2	5.22	0.54	A	0.6	3.41	0.38	A
Arm 3	1.2	5.64	0.54	A	0.6	3.65	0.37	A
Arm 4	1.7	7.57	0.63	A	2.8	10.09	0.74	B
2030 Forecast + CD								
Arm 1	2.4	7.28	0.71	A	1.0	3.97	0.50	A
Arm 2	1.4	6.05	0.59	A	0.7	3.67	0.41	A
Arm 3	1.5	6.63	0.60	A	0.7	3.99	0.41	A
Arm 4	2.1	9.14	0.69	A	3.9	13.51	0.80	B
2030 Forecast + CD + PD								
Arm 1	2.5	7.52	0.72	A	1.0	3.95	0.50	A
Arm 2	1.4	6.01	0.59	A	0.7	3.66	0.41	A
Arm 3	1.4	6.54	0.59	A	0.7	3.96	0.40	A
Arm 4	2.1	8.90	0.68	A	4.3	14.55	0.82	B

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

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

File summary

File Description

Title	(untitled)
Location	
Site number	
Date	06/06/2024
Version	
Status	(new file)
Identifier	
Client	
Jobnumber	
Enumerator	AD\acmodelling
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	Veh	Veh	perHour	s	-Min	perMin

Analysis Options

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

Demand Set Summary

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D1	2025	AM	ONE HOUR	07:45	09:15	15
D2	2025	PM	ONE HOUR	16:45	18:15	15
D3	2030 Forecast + CD	AM	ONE HOUR	07:45	09:15	15
D4	2030 Forecast + CD	PM	ONE HOUR	16:45	18:15	15
D5	2030 Forecast + CD + PD	AM	ONE HOUR	07:45	09:15	15
D6	2030 Forecast + CD + PD	PM	ONE HOUR	16:45	18:15	15

Analysis Set Details

ID	Network flow scaling factor (%)
A1	100.000

2025, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	Arm 1 - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Geometry	Arm 2 - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Geometry	Arm 3 - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Geometry	Arm 4 - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout	1, 2, 3, 4	6.04	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Name	Description
1	Spa Road	
2	Bath Road	
3	Pathfinder Way	
4	Western Way	

Roundabout Geometry

Arm	V - Approach road half-width (m)	E - Entry width (m)	I' - Effective flare length (m)	R - Entry radius (m)	D - Inscribed circle diameter (m)	PHI - Conflict (entry) angle (deg)	Exit only
1	4.20	8.30	75.1	27.8	92.1	29.7	
2	3.70	8.20	56.8	30.2	92.1	27.5	
3	5.50	8.00	34.8	20.9	92.1	34.9	
4	3.70	7.50	103.7	36.6	92.1	69.6	

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Arm	Final slope	Final intercept (PCU/hr)
1	0.551	2365
2	0.539	2264
3	0.529	2248
4	0.458	1904

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

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D1	2025	AM	ONE HOUR	07:45	09:15	15

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

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
1		✓	991	100.000
2		✓	741	100.000
3		✓	685	100.000
4		✓	730	100.000

Origin-Destination Data

Demand (Veh/hr)

	To				
		1	2	3	4
From	1	0	208	274	509
	2	338	0	131	272
	3	219	338	0	128
	4	344	238	148	0

Vehicle Mix

Heavy Vehicle Percentages

	To				
		1	2	3	4
From	1	10	10	10	10
	2	10	10	10	10
	3	10	10	10	10
	4	10	10	10	10

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (Veh)	Max LOS
1	0.64	5.81	1.7	A
2	0.54	5.22	1.2	A
3	0.54	5.64	1.2	A
4	0.63	7.57	1.7	A

Main Results for each time segment

07:45 - 08:00

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
1	746	543	1850	0.403	743	0.7	3.244	A
2	558	698	1682	0.332	556	0.5	3.191	A
3	516	839	1600	0.322	514	0.5	3.308	A
4	550	671	1423	0.386	547	0.6	4.099	A

08:00 - 08:15

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
1	891	650	1791	0.497	890	1.0	3.986	A
2	666	836	1608	0.414	665	0.7	3.816	A
3	616	1005	1513	0.407	615	0.7	4.006	A
4	656	804	1362	0.482	655	0.9	5.082	A

08:15 - 08:30

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
1	1091	795	1711	0.638	1088	1.7	5.748	A
2	816	1022	1507	0.541	814	1.2	5.179	A
3	754	1229	1394	0.541	752	1.2	5.589	A
4	804	983	1280	0.628	801	1.7	7.465	A

08:30 - 08:45

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
1	1091	797	1710	0.638	1091	1.7	5.812	A
2	816	1025	1506	0.542	816	1.2	5.218	A
3	754	1232	1393	0.542	754	1.2	5.636	A
4	804	985	1279	0.628	804	1.7	7.571	A

08:45 - 09:00

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
1	891	653	1789	0.498	894	1.0	4.034	A
2	666	840	1606	0.415	668	0.7	3.848	A
3	616	1009	1511	0.408	618	0.7	4.039	A
4	656	807	1361	0.482	659	0.9	5.154	A

09:00 - 09:15

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
1	746	546	1848	0.404	747	0.7	3.272	A
2	558	702	1680	0.332	559	0.5	3.212	A
3	516	844	1598	0.323	517	0.5	3.330	A
4	550	675	1421	0.387	551	0.6	4.142	A

2025, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	Arm 1 - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Geometry	Arm 2 - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Geometry	Arm 3 - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Geometry	Arm 4 - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout	1, 2, 3, 4	5.73	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

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

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

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
1		✓	743	100.000
2		✓	581	100.000
3		✓	519	100.000
4		✓	919	100.000

Origin-Destination Data

Demand (Veh/hr)

	To				
	1	2	3	4	
From	1	0	243	174	326
	2	338	0	72	171
	3	247	134	0	138
	4	504	301	114	0

Vehicle Mix

Heavy Vehicle Percentages

	To				
		1	2	3	4
	1	10	10	10	10
	2	10	10	10	10
	3	10	10	10	10
From	4	10	10	10	10

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (Veh)	Max LOS
1	0.45	3.60	0.8	A
2	0.38	3.41	0.6	A
3	0.37	3.65	0.6	A
4	0.74	10.09	2.8	B

Main Results for each time segment

16:45 - 17:00

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
1	559	411	1923	0.291	558	0.4	2.633	A
2	437	461	1810	0.242	436	0.3	2.617	A
3	391	627	1713	0.228	390	0.3	2.718	A
4	692	540	1483	0.466	688	0.9	4.508	A

17:00 - 17:15

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
1	668	493	1878	0.356	667	0.5	2.972	A
2	522	551	1761	0.297	522	0.4	2.905	A
3	467	750	1648	0.283	466	0.4	3.047	A
4	826	646	1435	0.576	824	1.3	5.881	A

17:15 - 17:30

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
1	818	602	1818	0.450	817	0.8	3.594	A
2	640	675	1695	0.377	639	0.6	3.408	A
3	571	918	1559	0.367	571	0.6	3.642	A
4	1012	791	1368	0.740	1006	2.7	9.797	A

17:30 - 17:45

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
1	818	604	1816	0.450	818	0.8	3.605	A
2	640	676	1694	0.378	640	0.6	3.413	A
3	571	919	1558	0.367	571	0.6	3.647	A
4	1012	792	1368	0.740	1012	2.8	10.090	B

17:45 - 18:00

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
1	668	496	1876	0.356	669	0.6	2.986	A
2	522	553	1760	0.297	523	0.4	2.913	A
3	467	752	1647	0.283	467	0.4	3.053	A
4	826	647	1434	0.576	832	1.4	6.032	A

18:00 - 18:15

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
1	559	414	1921	0.291	560	0.4	2.647	A
2	437	463	1809	0.242	438	0.3	2.627	A
3	391	629	1711	0.228	391	0.3	2.729	A
4	692	542	1482	0.467	694	0.9	4.579	A

2030 Forecast + CD, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	Arm 1 - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Geometry	Arm 2 - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Geometry	Arm 3 - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Geometry	Arm 4 - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout	1, 2, 3, 4	7.28	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D3	2030 Forecast + CD	AM	ONE HOUR	07:45	09:15	15

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

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
1		✓	1083	100.000
2		✓	781	100.000
3		✓	732	100.000
4		✓	777	100.000

Origin-Destination Data

Demand (Veh/hr)

	To				
	1	2	3	4	
From	1	0	221	311	551
	2	357	0	137	287
	3	242	356	0	134
	4	370	252	155	0

Vehicle Mix

Heavy Vehicle Percentages

	To				
		1	2	3	4
	1	10	10	10	10
	2	10	10	10	10
	3	10	10	10	10
From	4	10	10	10	10

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (Veh)	Max LOS
1	0.71	7.28	2.4	A
2	0.59	6.05	1.4	A
3	0.60	6.63	1.5	A
4	0.69	9.14	2.1	A

Main Results for each time segment

07:45 - 08:00

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
1	815	572	1834	0.445	812	0.8	3.512	A
2	588	763	1647	0.357	586	0.6	3.384	A
3	551	896	1570	0.351	549	0.5	3.517	A
4	585	716	1402	0.417	582	0.7	4.374	A

08:00 - 08:15

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
1	974	685	1772	0.549	972	1.2	4.490	A
2	702	913	1566	0.448	701	0.8	4.155	A
3	658	1073	1477	0.446	657	0.8	4.385	A
4	699	857	1338	0.522	697	1.1	5.607	A

08:15 - 08:30

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
1	1192	837	1688	0.706	1188	2.3	7.128	A
2	860	1115	1457	0.590	857	1.4	5.981	A
3	806	1311	1351	0.597	803	1.5	6.544	A
4	855	1048	1250	0.684	851	2.1	8.936	A

08:30 - 08:45

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
1	1192	840	1686	0.707	1192	2.4	7.279	A
2	860	1120	1455	0.591	860	1.4	6.052	A
3	806	1316	1349	0.598	806	1.5	6.630	A
4	855	1051	1249	0.685	855	2.1	9.142	A

08:45 - 09:00

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
1	974	689	1770	0.550	978	1.2	4.574	A
2	702	919	1563	0.449	705	0.8	4.206	A
3	658	1079	1474	0.446	661	0.8	4.442	A
4	699	862	1336	0.523	703	1.1	5.725	A

09:00 - 09:15

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
1	815	576	1832	0.445	817	0.8	3.554	A
2	588	767	1645	0.358	589	0.6	3.415	A
3	551	901	1568	0.352	552	0.5	3.551	A
4	585	720	1400	0.418	587	0.7	4.432	A

2030 Forecast + CD, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	Arm 1 - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Geometry	Arm 2 - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Geometry	Arm 3 - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Geometry	Arm 4 - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout	1, 2, 3, 4	7.05	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D4	2030 Forecast + CD	PM	ONE HOUR	16:45	18:15	15

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

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
1		✓	810	100.000
2		✓	615	100.000
3		✓	566	100.000
4		✓	974	100.000

Origin-Destination Data

Demand (Veh/hr)

	To				
	1	2	3	4	
From	1	0	258	198	354
	2	359	0	76	180
	3	280	141	0	145
	4	535	318	121	0

Vehicle Mix

Heavy Vehicle Percentages

	To				
		1	2	3	4
	1	10	10	10	10
	2	10	10	10	10
	3	10	10	10	10
From	4	10	10	10	10

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (Veh)	Max LOS
1	0.50	3.97	1.0	A
2	0.41	3.67	0.7	A
3	0.41	3.99	0.7	A
4	0.80	13.51	3.9	B

Main Results for each time segment

16:45 - 17:00

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
1	610	435	1910	0.319	608	0.5	2.761	A
2	463	505	1786	0.259	462	0.3	2.715	A
3	426	670	1690	0.252	425	0.3	2.843	A
4	733	585	1462	0.501	729	1.0	4.885	A

17:00 - 17:15

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
1	728	520	1863	0.391	727	0.6	3.169	A
2	553	604	1733	0.319	552	0.5	3.048	A
3	509	802	1620	0.314	508	0.5	3.236	A
4	876	701	1410	0.621	873	1.6	6.681	A

17:15 - 17:30

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
1	892	634	1800	0.496	890	1.0	3.953	A
2	677	739	1660	0.408	676	0.7	3.656	A
3	623	982	1525	0.409	622	0.7	3.983	A
4	1072	858	1338	0.802	1064	3.8	12.757	B

17:30 - 17:45

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
1	892	638	1798	0.496	892	1.0	3.974	A
2	677	741	1659	0.408	677	0.7	3.665	A
3	623	983	1524	0.409	623	0.7	3.994	A
4	1072	859	1337	0.802	1072	3.9	13.509	B

17:45 - 18:00

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
1	728	526	1860	0.392	730	0.6	3.188	A
2	553	607	1731	0.319	554	0.5	3.059	A
3	509	804	1619	0.314	510	0.5	3.247	A
4	876	702	1409	0.622	885	1.7	6.983	A

18:00 - 18:15

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
1	610	438	1908	0.320	611	0.5	2.775	A
2	463	507	1785	0.259	463	0.4	2.726	A
3	426	673	1688	0.252	427	0.3	2.856	A
4	733	588	1461	0.502	736	1.0	4.981	A

2030 Forecast + CD + PD, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	Arm 1 - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Geometry	Arm 2 - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Geometry	Arm 3 - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Geometry	Arm 4 - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout	1, 2, 3, 4	7.28	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D5	2030 Forecast + CD + PD	AM	ONE HOUR	07:45	09:15	15

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

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
1		✓	1106	100.000
2		✓	770	100.000
3		✓	718	100.000
4		✓	774	100.000

Origin-Destination Data

Demand (Veh/hr)

	To				
	1	2	3	4	
From	1	0	228	305	573
	2	354	0	135	281
	3	237	349	0	132
	4	375	247	152	0

Vehicle Mix

Heavy Vehicle Percentages

	To				
		1	2	3	4
	1	10	10	10	10
	2	10	10	10	10
	3	10	10	10	10
From	4	10	10	10	10

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (Veh)	Max LOS
1	0.72	7.52	2.5	A
2	0.59	6.01	1.4	A
3	0.59	6.54	1.4	A
4	0.68	8.90	2.1	A

Main Results for each time segment

07:45 - 08:00

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
1	833	561	1840	0.452	829	0.8	3.548	A
2	580	772	1642	0.353	578	0.5	3.374	A
3	541	906	1565	0.345	538	0.5	3.499	A
4	583	705	1407	0.414	580	0.7	4.335	A

08:00 - 08:15

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
1	994	671	1780	0.559	993	1.3	4.564	A
2	692	924	1560	0.444	691	0.8	4.140	A
3	645	1084	1471	0.439	644	0.8	4.350	A
4	696	844	1344	0.518	694	1.1	5.530	A

08:15 - 08:30

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
1	1218	820	1697	0.717	1213	2.5	7.359	A
2	848	1129	1449	0.585	845	1.4	5.936	A
3	791	1326	1343	0.588	788	1.4	6.452	A
4	852	1032	1258	0.678	848	2.0	8.709	A

08:30 - 08:45

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
1	1218	823	1696	0.718	1218	2.5	7.524	A
2	848	1134	1447	0.586	848	1.4	6.007	A
3	791	1330	1341	0.589	790	1.4	6.536	A
4	852	1035	1256	0.678	852	2.1	8.898	A

08:45 - 09:00

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
1	994	676	1777	0.560	999	1.3	4.656	A
2	692	931	1557	0.445	695	0.8	4.187	A
3	645	1090	1468	0.440	648	0.8	4.407	A
4	696	848	1342	0.519	700	1.1	5.639	A

09:00 - 09:15

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
1	833	564	1838	0.453	834	0.8	3.594	A
2	580	777	1639	0.354	581	0.6	3.403	A
3	541	911	1562	0.346	542	0.5	3.532	A
4	583	709	1406	0.415	584	0.7	4.390	A

2030 Forecast + CD + PD, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	Arm 1 - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Geometry	Arm 2 - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Geometry	Arm 3 - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Geometry	Arm 4 - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout	1, 2, 3, 4	7.43	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D6	2030 Forecast + CD + PD	PM	ONE HOUR	16:45	18:15	15

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

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
1		✓	812	100.000
2		✓	613	100.000
3		✓	555	100.000
4		✓	994	100.000

Origin-Destination Data

Demand (Veh/hr)

	To				
	1	2	3	4	
From	1	0	257	194	361
	2	362	0	75	176
	3	275	138	0	142
	4	565	311	118	0

Vehicle Mix

Heavy Vehicle Percentages

	To				
		1	2	3	4
	1	10	10	10	10
	2	10	10	10	10
	3	10	10	10	10
From	4	10	10	10	10

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (Veh)	Max LOS
1	0.50	3.95	1.0	A
2	0.41	3.66	0.7	A
3	0.40	3.96	0.7	A
4	0.82	14.55	4.3	B

Main Results for each time segment

16:45 - 17:00

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
1	611	425	1915	0.319	609	0.5	2.753	A
2	461	505	1786	0.258	460	0.3	2.712	A
3	418	675	1687	0.248	417	0.3	2.830	A
4	748	582	1464	0.511	744	1.0	4.974	A

17:00 - 17:15

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
1	730	508	1869	0.391	729	0.6	3.156	A
2	551	604	1733	0.318	551	0.5	3.043	A
3	499	807	1617	0.309	498	0.4	3.216	A
4	894	696	1412	0.633	891	1.7	6.881	A

17:15 - 17:30

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
1	894	620	1808	0.495	893	1.0	3.928	A
2	675	739	1660	0.407	674	0.7	3.647	A
3	611	988	1522	0.402	610	0.7	3.946	A
4	1094	852	1340	0.817	1085	4.1	13.605	B

17:30 - 17:45

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
1	894	624	1806	0.495	894	1.0	3.949	A
2	675	741	1659	0.407	675	0.7	3.657	A
3	611	990	1521	0.402	611	0.7	3.956	A
4	1094	853	1340	0.817	1094	4.3	14.549	B

17:45 - 18:00

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
1	730	514	1866	0.391	731	0.6	3.177	A
2	551	607	1731	0.318	552	0.5	3.054	A
3	499	810	1616	0.309	500	0.4	3.229	A
4	894	698	1411	0.633	904	1.8	7.236	A

18:00 - 18:15

Arm	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	LOS
1	611	428	1913	0.319	612	0.5	2.769	A
2	461	507	1785	0.259	462	0.4	2.721	A
3	418	678	1686	0.248	418	0.3	2.840	A
4	748	584	1463	0.512	751	1.1	5.079	A

Appendix P

Junctions 9			
ARCADY 9 - Roundabout Module			
Version: 9.0.2.5947 © Copyright TRL Limited, 2017			
For sales and distribution information, program advice and maintenance, contact TRL: +44 (0)1344 770558 software@trl.co.uk www.trlsoftware.co.uk			
The users of this computer program for the solution of an engineering problem are in no way relieved of their responsibility for the correctness of the solution			

Filename: Bank Street Mini.j9

Path: P:\Southern\020-029\027 Bloor Homes\027.0014 Land at New Farm, Melksham (Outline)\03

Technical\TPL\Modelling\Lowbourn Road, High Street, Bank Street Mini_Junctions 9 Report

Report generation date: 04/11/2025 12:38:38

»2025, AM

»2025, PM

»2030 Forecast + CD, AM

»2030 Forecast + CD, PM

»2030 Forecast + CD + PD, AM

»2030 Forecast + CD + PD, PM

Summary of junction performance

	AM				PM			
	Queue (Veh)	Delay (s)	RFC	LOS	Queue (Veh)	Delay (s)	RFC	LOS
2025								
Arm 1	0.4	4.99	0.26	A	2.5	13.95	0.72	B
Arm 2	2.0	11.93	0.67	B	1.0	8.77	0.49	A
Arm 3	0.5	6.42	0.35	A	1.0	7.00	0.50	A
2030 Forecast + CD								
Arm 1	0.4	5.39	0.30	A	4.4	22.97	0.82	C
Arm 2	3.9	19.57	0.80	C	1.5	11.10	0.59	B
Arm 3	0.7	7.48	0.41	A	1.3	8.45	0.58	A
2030 Forecast + CD + PD								
Arm 1	0.4	5.46	0.31	A	5.2	26.29	0.84	D
Arm 2	4.7	22.86	0.83	C	1.5	11.53	0.61	B
Arm 3	0.7	7.70	0.42	A	1.4	8.74	0.59	A

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

File summary

File Description

Title	(untitled)
Location	
Site number	
Date	06/06/2024
Version	
Status	(new file)
Identifier	
Client	
Jobnumber	
Enumerator	AD\acmodelling
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	Veh	Veh	perHour	s	-Min	perMin

Analysis Options

Mini-roundabout model	Vehicle length (m)	Calculate Queue Percentiles	Calculate detailed queueing delay	Calculate residual capacity	RFC Threshold	Average Delay threshold (s)	Queue threshold (PCU)
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	2025	AM	FLAT	08:00	09:00	60	15	✓
D2	2025	PM	FLAT	17:00	18:00	60	15	✓
D3	2030 Forecast + CD	AM	FLAT	08:00	09:00	60	15	✓
D4	2030 Forecast + CD	PM	FLAT	17:00	18:00	60	15	✓
D5	2030 Forecast + CD + PD	AM	FLAT	08:00	09:00	60	15	✓
D6	2030 Forecast + CD + PD	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

2025, AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Mini-roundabout	1, 2, 3	9.03	A

Junction Network Options

Driving side	Lighting	Road surface	In London
Left	Normal/unknown	Normal/unknown	

Arms

Arms

Arm	Name	Description
1	Bank Street	
2	Lowbourne Road	
3	High Street	

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	4.60	4.60	5.10	0.9	10.00	6.90	0.0	✓
2	4.80	4.80	5.40	11.2	10.00	5.50	0.0	✓
3	3.00	3.00	5.50	7.5	16.50	18.00	0.0	

Pelican/Puffin Crossings

Arm	Space between crossing and junction entry (Signalised) (PCU)	Amber time preceding red (s)	Amber time regarded as green (s)	Time from traffic red start to green man start (s)	Time period green man shown (s)	Clearance Period (s)	Traffic minimum green (s)
3	4.00	3.00	2.90	1.00	6.00	6.00	7.00

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Arm	Final slope	Final intercept (PCU/hr)
1	0.547	1116
2	0.567	1058
3	0.748	1295

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	2025	AM	FLAT	08:00	09:00	60	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
1		FLAT	✓	258	100.000
2		FLAT	✓	622	100.000
3		FLAT	✓	297	100.000

Demand overview (Pedestrians)

Arm	Profile type	Average pedestrian flow (Ped/hr)
1		
2		
3	[FLAT]	30.00

Origin-Destination Data

Demand (Veh/hr)

	To			
		1	2	3
From	1	0	71	187
	2	488	0	134
	3	80	217	0

Vehicle Mix

Heavy Vehicle Percentages

	To			
		1	2	3
From	1	0	3	1
	2	3	0	3
	3	3	3	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
1	0.26	4.99	0.4	A	258	258
2	0.67	11.93	2.0	B	622	622
3	0.35	6.42	0.5	A	297	297

Main Results for each time segment

08:00 - 08:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Pedestrian demand (Ped/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
1	258	65	215		980	0.263	257	561	0.0	0.4	4.969	A
2	622	156	186		924	0.673	614	286	0.0	2.0	11.339	B
3	297	74	482	30.00	854	0.348	295	318	0.0	0.5	6.410	A

08:15 - 08:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Pedestrian demand (Ped/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
1	258	65	217		979	0.264	258	568	0.4	0.4	4.993	A
2	622	156	187		924	0.673	622	288	2.0	2.0	11.911	B
3	297	74	488	30.00	857	0.346	297	321	0.5	0.5	6.423	A

08:30 - 08:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Pedestrian demand (Ped/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
1	258	65	217		979	0.264	258	568	0.4	0.4	4.993	A
2	622	156	187		924	0.673	622	288	2.0	2.0	11.922	B
3	297	74	488	30.00	857	0.346	297	321	0.5	0.5	6.424	A

08:45 - 09:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Pedestrian demand (Ped/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
1	258	65	217		979	0.264	258	568	0.4	0.4	4.993	A
2	622	156	187		924	0.673	622	288	2.0	2.0	11.927	B
3	297	74	488	30.00	857	0.346	297	321	0.5	0.5	6.424	A

2025, PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Mini-roundabout	1, 2, 3	10.36	B

Junction Network Options

Driving side	Lighting	Road surface	In London
Left	Normal/unknown	Normal/unknown	

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time period length (min)	Time segment length (min)	Run automatically
D2	2025	PM	FLAT	17:00	18:00	60	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
1		FLAT	✓	647	100.000
2		FLAT	✓	399	100.000
3		FLAT	✓	497	100.000

Demand overview (Pedestrians)

Arm	Profile type	Average pedestrian flow (Ped/hr)
1		
2		
3	[FLAT]	30.00

Origin-Destination Data

Demand (Veh/hr)

	To			
		1	2	3
From	1	0	255	392
	2	282	0	117
	3	150	347	0

Vehicle Mix

Heavy Vehicle Percentages

	To			
		1	2	3
	From	1	0	3
		2	3	0
		3	3	3
		0		

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
1	0.72	13.95	2.5	B	647	647
2	0.49	8.77	1.0	A	399	399
3	0.50	7.00	1.0	A	497	497

Main Results for each time segment

17:00 - 17:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Pedestrian demand (Ped/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
1	647	162	344		906	0.714	638	428	0.0	2.4	12.984	B
2	399	100	386		813	0.491	395	596	0.0	0.9	8.545	A
3	497	124	279	30.00	1003	0.495	493	502	0.0	1.0	7.004	A

17:15 - 17:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Pedestrian demand (Ped/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
1	647	162	347		905	0.715	647	432	2.4	2.4	13.919	B
2	399	100	392		810	0.493	399	602	0.9	1.0	8.761	A
3	497	124	282	30.00	1015	0.490	497	509	1.0	1.0	6.954	A

17:30 - 17:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Pedestrian demand (Ped/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
1	647	162	347		905	0.715	647	432	2.4	2.5	13.946	B
2	399	100	392		810	0.493	399	602	1.0	1.0	8.764	A
3	497	124	282	30.00	1015	0.490	497	509	1.0	1.0	6.952	A

17:45 - 18:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Pedestrian demand (Ped/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
1	647	162	347		905	0.715	647	432	2.5	2.5	13.954	B
2	399	100	392		810	0.493	399	602	1.0	1.0	8.766	A
3	497	124	282	30.00	1015	0.490	497	509	1.0	1.0	6.955	A

2030 Forecast + CD, AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Mini-roundabout	1, 2, 3	13.58	B

Junction Network Options

Driving side	Lighting	Road surface	In London
Left	Normal/unknown	Normal/unknown	

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time period length (min)	Time segment length (min)	Run automatically
D3	2030 Forecast + CD	AM	FLAT	08:00	09:00	60	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
1		FLAT	✓	291	100.000
2		FLAT	✓	735	100.000
3		FLAT	✓	337	100.000

Demand overview (Pedestrians)

Arm	Profile type	Average pedestrian flow (Ped/hr)
1		
2		
3	[FLAT]	30.00

Origin-Destination Data

Demand (Veh/hr)

	To			
		1	2	3
From	1	0	94	197
	2	550	0	185
	3	85	252	0

Vehicle Mix

Heavy Vehicle Percentages

	To			
From		1	2	3
	1	0	3	1
	2	3	0	3
	3	3	3	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
1	0.30	5.39	0.4	A	291	291
2	0.80	19.57	3.9	C	735	735
3	0.41	7.48	0.7	A	337	337

Main Results for each time segment

08:00 - 08:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Pedestrian demand (Ped/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
1	291	73	250		960	0.303	289	623	0.0	0.4	5.355	A
2	735	184	196		919	0.800	720	343	0.0	3.6	17.093	C
3	337	84	539	30.00	816	0.413	334	377	0.0	0.7	7.429	A

08:15 - 08:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Pedestrian demand (Ped/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
1	291	73	252		959	0.304	291	634	0.4	0.4	5.391	A
2	735	184	197		918	0.801	734	346	3.6	3.8	19.399	C
3	337	84	549	30.00	818	0.412	337	382	0.7	0.7	7.476	A

08:30 - 08:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Pedestrian demand (Ped/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
1	291	73	252		959	0.304	291	635	0.4	0.4	5.391	A
2	735	184	197		918	0.801	735	346	3.8	3.9	19.522	C
3	337	84	550	30.00	818	0.412	337	382	0.7	0.7	7.479	A

08:45 - 09:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Pedestrian demand (Ped/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
1	291	73	252		959	0.304	291	635	0.4	0.4	5.391	A
2	735	184	197		918	0.801	735	346	3.9	3.9	19.568	C
3	337	84	550	30.00	818	0.412	337	382	0.7	0.7	7.479	A

2030 Forecast + CD, PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Mini-roundabout	1, 2, 3	15.05	C

Junction Network Options

Driving side	Lighting	Road surface	In London
Left	Normal/unknown	Normal/unknown	

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time period length (min)	Time segment length (min)	Run automatically
D4	2030 Forecast + CD	PM	FLAT	17:00	18:00	60	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
1		FLAT	✓	715	100.000
2		FLAT	✓	474	100.000
3		FLAT	✓	566	100.000

Demand overview (Pedestrians)

Arm	Profile type	Average pedestrian flow (Ped/hr)
1		
2		
3	[FLAT]	30.00

Origin-Destination Data

Demand (Veh/hr)

	To			
		1	2	3
From	1	0	302	413
	2	321	0	153
	3	158	408	0

Vehicle Mix

Heavy Vehicle Percentages

	To			
		1	2	3
	From	1	0	3
		2	3	0
		3	3	3

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
1	0.82	22.97	4.4	C	715	715
2	0.59	11.10	1.5	B	474	474
3	0.58	8.45	1.3	A	566	566

Main Results for each time segment

17:00 - 17:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Pedestrian demand (Ped/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
1	715	179	404		873	0.819	699	474	0.0	4.0	19.263	C
2	474	119	404		803	0.590	468	699	0.0	1.4	10.587	B
3	566	142	317	30.00	982	0.577	561	555	0.0	1.3	8.448	A

17:15 - 17:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Pedestrian demand (Ped/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
1	715	179	408		870	0.821	714	479	4.0	4.3	22.643	C
2	474	119	412		798	0.594	474	710	1.4	1.4	11.085	B
3	566	142	321	30.00	997	0.568	566	565	1.3	1.3	8.348	A

17:30 - 17:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Pedestrian demand (Ped/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
1	715	179	408		870	0.821	715	479	4.3	4.4	22.884	C
2	474	119	413		798	0.594	474	710	1.4	1.4	11.101	B
3	566	142	321	30.00	997	0.568	566	566	1.3	1.3	8.353	A

17:45 - 18:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Pedestrian demand (Ped/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
1	715	179	408		870	0.821	715	479	4.4	4.4	22.972	C
2	474	119	413		798	0.594	474	710	1.4	1.5	11.104	B
3	566	142	321	30.00	997	0.568	566	566	1.3	1.3	8.354	A

2030 Forecast + CD + PD, AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Mini-roundabout	1, 2, 3	15.50	C

Junction Network Options

Driving side	Lighting	Road surface	In London
Left	Normal/unknown	Normal/unknown	

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time period length (min)	Time segment length (min)	Run automatically
D5	2030 Forecast + CD + PD	AM	FLAT	08:00	09:00	60	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
1		FLAT	✓	297	100.000
2		FLAT	✓	762	100.000
3		FLAT	✓	341	100.000

Demand overview (Pedestrians)

Arm	Profile type	Average pedestrian flow (Ped/hr)
1		
2		
3	[FLAT]	30.00

Origin-Destination Data

Demand (Veh/hr)

	To			
		1	2	3
From	1	0	100	197
	2	565	0	197
	3	85	256	0

Vehicle Mix

Heavy Vehicle Percentages

	To			
		1	2	3
	From	1	0	3
		2	3	0
		3	3	3
		0		

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
1	0.31	5.46	0.4	A	297	297
2	0.83	22.86	4.7	C	762	762
3	0.42	7.70	0.7	A	341	341

Main Results for each time segment

08:00 - 08:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Pedestrian demand (Ped/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
1	297	74	254		957	0.310	295	637	0.0	0.4	5.423	A
2	762	191	196		919	0.829	745	353	0.0	4.3	19.165	C
3	341	85	552	30.00	807	0.422	338	388	0.0	0.7	7.628	A

08:15 - 08:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Pedestrian demand (Ped/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
1	297	74	256		956	0.311	297	649	0.4	0.4	5.461	A
2	762	191	197		918	0.830	761	356	4.3	4.6	22.534	C
3	341	85	564	30.00	809	0.422	341	394	0.7	0.7	7.695	A

08:30 - 08:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Pedestrian demand (Ped/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
1	297	74	256		956	0.311	297	650	0.4	0.4	5.461	A
2	762	191	197		918	0.830	762	356	4.6	4.7	22.771	C
3	341	85	565	30.00	809	0.422	341	394	0.7	0.7	7.699	A

08:45 - 09:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Pedestrian demand (Ped/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
1	297	74	256		956	0.311	297	650	0.4	0.4	5.461	A
2	762	191	197		918	0.830	762	356	4.7	4.7	22.861	C
3	341	85	565	30.00	808	0.422	341	394	0.7	0.7	7.700	A

2030 Forecast + CD + PD, PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Mini-roundabout	1, 2, 3	16.59	C

Junction Network Options

Driving side	Lighting	Road surface	In London
Left	Normal/unknown	Normal/unknown	

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time period length (min)	Time segment length (min)	Run automatically
D6	2030 Forecast + CD + PD	PM	FLAT	17:00	18:00	60	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
1		FLAT	✓	729	100.000
2		FLAT	✓	486	100.000
3		FLAT	✓	577	100.000

Demand overview (Pedestrians)

Arm	Profile type	Average pedestrian flow (Ped/hr)
1		
2		
3	[FLAT]	30.00

Origin-Destination Data

Demand (Veh/hr)

	To			
		1	2	3
From	1	0	316	413
	2	328	0	158
	3	158	419	0

Vehicle Mix

Heavy Vehicle Percentages

	To			
		1	2	3
	From	1	0	3
		2	3	0
		3	3	3
		0		

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
1	0.84	26.29	5.2	D	729	729
2	0.61	11.53	1.5	B	486	486
3	0.59	8.74	1.4	A	577	577

Main Results for each time segment

17:00 - 17:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Pedestrian demand (Ped/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
1	729	182	415		866	0.841	711	480	0.0	4.6	21.161	C
2	486	122	403		804	0.605	480	723	0.0	1.5	10.934	B
3	577	144	324	30.00	978	0.590	571	559	0.0	1.4	8.740	A

17:15 - 17:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Pedestrian demand (Ped/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
1	729	182	419		864	0.844	728	486	4.6	4.9	25.719	D
2	486	122	412		798	0.609	486	734	1.5	1.5	11.504	B
3	577	144	328	30.00	994	0.580	577	570	1.4	1.4	8.627	A

17:30 - 17:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Pedestrian demand (Ped/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
1	729	182	419		864	0.844	728	486	4.9	5.1	26.128	D
2	486	122	413		798	0.609	486	735	1.5	1.5	11.526	B
3	577	144	328	30.00	994	0.580	577	571	1.4	1.4	8.632	A

17:45 - 18:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Pedestrian demand (Ped/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
1	729	182	419		864	0.844	729	486	5.1	5.2	26.286	D
2	486	122	413		798	0.609	486	735	1.5	1.5	11.531	B
3	577	144	328	30.00	994	0.580	577	571	1.4	1.4	8.632	A

Junctions 9			
ARCADY 9 - Roundabout Module			
Version: 9.0.2.5947 © Copyright TRL Limited, 2017			
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Filename: Sandridge Common, Forest Road Double Mini.j9

Path: P:\Southern\020-029\027 Bloor Homes\027.0014 Land at New Farm, Melksham (Outline)\03 Technical\TPL\Modelling

Report generation date: 04/11/2025 12:56:40

»2025, AM

»2025, PM

»2030 Forecast + CD, AM

»2030 Forecast + CD, PM

»2030 Forecast + CD + PD, AM

»2030 Forecast + CD + PD, PM

Summary of junction performance

	AM				PM			
	Queue (Veh)	Delay (s)	RFC	LOS	Queue (Veh)	Delay (s)	RFC	LOS
2025								
Junction 1 - Arm 1	0.3	6.25	0.21	A	0.2	7.67	0.18	A
Junction 1 - Arm 2	3.3	17.13	0.77	C	0.8	6.82	0.44	A
Junction 1 - Arm 3	0.3	4.14	0.26	A	1.0	6.20	0.50	A
Junction 2 - Arm 1	0.5	5.96	0.32	A	3.0	18.26	0.75	C
Junction 2 - Arm 2	0.1	4.39	0.09	A	0.0	5.43	0.02	A
Junction 2 - Arm 3	2.1	9.77	0.68	A	0.7	5.09	0.40	A
2030 Forecast + CD								
Junction 1 - Arm 1	0.3	6.60	0.22	A	0.2	8.62	0.20	A
Junction 1 - Arm 2	2.9	15.19	0.74	C	0.7	6.68	0.43	A
Junction 1 - Arm 3	0.4	4.47	0.31	A	1.4	7.55	0.59	A
Junction 2 - Arm 1	0.7	6.65	0.39	A	2.8	14.70	0.74	B
Junction 2 - Arm 2	0.1	4.64	0.10	A	0.0	6.09	0.04	A
Junction 2 - Arm 3	1.9	9.13	0.66	A	0.6	5.01	0.39	A
2030 Forecast + CD + PD								
Junction 1 - Arm 1	0.3	6.68	0.22	A	0.3	8.95	0.21	A
Junction 1 - Arm 2	3.3	17.13	0.77	C	0.8	6.82	0.44	A
Junction 1 - Arm 3	0.5	4.52	0.32	A	1.6	7.97	0.61	A
Junction 2 - Arm 1	0.7	6.74	0.40	A	3.2	16.36	0.77	C
Junction 2 - Arm 2	0.1	4.68	0.10	A	0.0	6.27	0.04	A
Junction 2 - Arm 3	2.2	9.79	0.69	A	0.7	5.09	0.40	A

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

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

File summary

File Description

Title	(untitled)
Location	
Site number	
Date	06/06/2024
Version	
Status	(new file)
Identifier	
Client	
Jobnumber	
Enumerator	AD\acmodelling
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	Veh	Veh	perHour	s	-Min	perMin

Analysis Options

Mini-roundabout model	Vehicle length (m)	Calculate Queue Percentiles	Calculate detailed queueing delay	Calculate residual capacity	RFC Threshold	Average Delay threshold (s)	Queue threshold (PCU)
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	2025	AM	FLAT	08:00	09:00	60	15	✓
D2	2025	PM	FLAT	17:00	18:00	60	15	✓
D3	2030 Forecast + CD	AM	FLAT	08:00	09:00	60	15	✓
D4	2030 Forecast + CD	PM	FLAT	17:00	18:00	60	15	✓
D5	2030 Forecast + CD + PD	AM	FLAT	08:00	09:00	60	15	✓
D6	2030 Forecast + CD + PD	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

2025, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Mini-roundabout	Junction 1	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 87% of the total flow for the roundabout for one or more time segments]
Warning	Mini-roundabout	Junction 2	Mini-roundabout appears to have unbalanced flows and may behave like a priority junction; treat results with caution. See User Guide for details.[Arms 1 and 3 have 91% of the total flow for the roundabout for one or more time segments]
Warning	Linked Roundabout	Junction 1 - Arm 3	If the distance between linked junctions is small, results should be treated with caution. The linked junctions will be modelled as separate junctions, but the real behaviour may be that of a complex system with interactions that cannot be modelled.
Warning	Linked Roundabout	Junction 2 - Arm 3	If the distance between linked junctions is small, results should be treated with caution. The linked junctions will be modelled as separate junctions, but the real behaviour may be that of a complex system with interactions that cannot be modelled.

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (s)	Junction LOS
1	Forest Road	Mini-roundabout	1, 2, 3	12.39	B
2	Club/School	Mini-roundabout	1, 2, 3	8.45	A

Junction Network Options

Driving side	Lighting	Road surface	In London
Left	Normal/unknown	Normal/unknown	

Arms

Arms

Junction	Arm	Name	Description
1	1	Forest Rd (N)	
	2	A3012 Sandridge Common (E)	
	3	Internal Link W	
2	1	A3102 Lowbourne Road (SW)	
	2	School/Club Access	
	3	Internal Link E	

Mini Roundabout Geometry

Junction	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	1	3.50	3.50	5.60	1.2	11.50	6.50	0.0	
	2	3.00	3.00	4.50	6.8	14.10	12.30	0.0	
	3	5.90	5.90	6.40	0.1	11.10	8.00	0.0	
2	1	2.90	2.90	4.60	2.9	12.90	9.10	0.0	
	2	3.50	3.50	5.60	15.5	10.40	7.50	0.0	
	3	6.00	6.00	6.60	0.1	15.20	13.80	0.0	

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Junction	Arm	Final slope	Final intercept (PCU/hr)
1	1	0.621	905
	2	0.630	1026
	3	0.702	1224
2	1	0.610	965
	2	0.665	1101
	3	0.719	1228

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	2025	AM	FLAT	08:00	09:00	60	15	✓

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

Linked Arm Data

Junction	Arm	Feeding Junction	Feeding Arm	Link Type	Flow source	Uniform flow (Veh/hr)	Flow multiplier (%)	Internal storage space (PCU)
1	3	2	3	Simple (vertical queueing)	Normal	0	100.00	
2	3	1	3	Simple (vertical queueing)	Normal	0	100.00	

Demand overview (Traffic)

Junction	Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
1	1		FLAT	✓	152	100.000
	2		FLAT	✓	715	100.000
	3	✓				
2	1		FLAT	✓	290	100.000
	2		FLAT	✓	81	100.000
	3	✓				

Origin-Destination Data

Demand (Veh/hr)

Junction 1

		To		
		1	2	3
From	1	0	38	114
	2	30	0	685
	3	70	308	0

Demand (Veh/hr)

Junction 2

		To		
		1	2	3
From	1	0	38	252
	2	35	0	46
	3	536	52	0

Vehicle Mix

Heavy Vehicle Percentages

Junction 1

	To			
		1	2	3
	1	0	3	3
	2	3	0	3
	3	3	3	0

Heavy Vehicle Percentages

Junction 2

	To			
		1	2	3
	1	0	3	3
	2	3	0	3
	3	3	3	0

Results

Results Summary for whole modelled period

Junction	Arm	Max RFC	Max delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
1	1	0.21	6.25	0.3	A	152	152
	2	0.77	17.13	3.3	C	715	715
	3	0.26	4.14	0.3	A	298	298
2	1	0.32	5.96	0.5	A	290	290
	2	0.09	4.39	0.1	A	81	81
	3	0.68	9.77	2.1	A	796	796

Main Results for each time segment

08:00 - 08:15

Junction	Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
1	1	152	38	240	730	0.208	151	84	0.0	0.3	6.207	A
	2	715	179	113	925	0.773	702	278	0.0	3.2	15.405	C
	3	296	74	29	1168	0.254	295	786	0.0	0.3	4.117	A
2	1	290	73	69	895	0.324	288	744	0.0	0.5	5.917	A
	2	81	20	250	902	0.090	81	107	0.0	0.1	4.378	A
	3	786	197	35	1167	0.674	778	296	0.0	2.0	9.080	A

08:15 - 08:30

Junction	Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
1	1	152	38	243	728	0.209	152	85	0.3	0.3	6.246	A
	2	715	179	114	925	0.773	715	281	3.2	3.3	17.038	C
	3	298	74	30	1168	0.255	298	799	0.3	0.3	4.139	A
2	1	290	73	71	894	0.325	290	762	0.5	0.5	5.962	A
	2	81	20	252	901	0.090	81	109	0.1	0.1	4.387	A
	3	799	200	35	1167	0.684	798	298	2.0	2.1	9.737	A

08:30 - 08:45

Junction	Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
1	1	152	38	243	728	0.209	152	85	0.3	0.3	6.246	A
	2	715	179	114	925	0.773	715	281	3.3	3.3	17.105	C
	3	298	74	30	1168	0.255	298	799	0.3	0.3	4.139	A
2	1	290	73	71	894	0.325	290	763	0.5	0.5	5.963	A
	2	81	20	252	901	0.090	81	109	0.1	0.1	4.387	A
	3	799	200	35	1167	0.685	799	298	2.1	2.1	9.768	A

08:45 - 09:00

Junction	Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
1	1	152	38	243	728	0.209	152	85	0.3	0.3	6.246	A
	2	715	179	114	925	0.773	715	281	3.3	3.3	17.130	C
	3	298	74	30	1168	0.255	298	799	0.3	0.3	4.139	A
2	1	290	73	71	894	0.325	290	763	0.5	0.5	5.963	A
	2	81	20	252	901	0.090	81	109	0.1	0.1	4.387	A
	3	799	200	35	1167	0.685	799	298	2.1	2.1	9.774	A

2025, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Mini-roundabout	Junction 1	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 91% of the total flow for the roundabout for one or more time segments]
Warning	Mini-roundabout	Junction 2	Mini-roundabout appears to have unbalanced flows and may behave like a priority junction; treat results with caution. See User Guide for details.[Arms 1 and 3 have 98% of the total flow for the roundabout for one or more time segments]
Warning	Linked Roundabout	Junction 1 - Arm 3	If the distance between linked junctions is small, results should be treated with caution. The linked junctions will be modelled as separate junctions, but the real behaviour may be that of a complex system with interactions that cannot be modelled.
Warning	Linked Roundabout	Junction 2 - Arm 3	If the distance between linked junctions is small, results should be treated with caution. The linked junctions will be modelled as separate junctions, but the real behaviour may be that of a complex system with interactions that cannot be modelled.

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (s)	Junction LOS
1	Forest Road	Mini-roundabout	1, 2, 3	6.57	A
2	Club/School	Mini-roundabout	1, 2, 3	12.32	B

Junction Network Options

Driving side	Lighting	Road surface	In London
Left	Normal/unknown	Normal/unknown	

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time period length (min)	Time segment length (min)	Run automatically
D2	2025	PM	FLAT	17:00	18:00	60	15	✓

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

Linked Arm Data

Junction	Arm	Feeding Junction	Feeding Arm	Link Type	Flow source	Uniform flow (Veh/hr)	Flow multiplier (%)	Internal storage space (PCU)
1	3	2	3	Simple (vertical queueing)	Normal	0	100.00	
2	3	1	3	Simple (vertical queueing)	Normal	0	100.00	

Demand overview (Traffic)

Junction	Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
1	1		FLAT	✓	104	100.000
	2		FLAT	✓	413	100.000
	3	✓				
2	1		FLAT	✓	595	100.000
	2		FLAT	✓	15	100.000
	3	✓				

Origin-Destination Data

Demand (Veh/hr)

Junction 1

		To		
		1	2	3
From	1	0	16	88
	2	26	0	387
	3	121	612	0

Demand (Veh/hr)

Junction 2

		To		
		1	2	3
From	1	0	7	588
	2	13	0	2
	3	304	305	0

Vehicle Mix

Heavy Vehicle Percentages

Junction 1

		To		
		1	2	3
From	1	0	3	3
	2	3	0	3
	3	3	3	0

Heavy Vehicle Percentages

Junction 2

		To		
		1	2	3
From	1	0	3	3
	2	3	0	3
	3	3	3	0

Results

Results Summary for whole modelled period

Junction	Arm	Max RFC	Max delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
1	1	0.18	7.67	0.2	A	104	104
	2	0.44	6.82	0.8	A	413	413
	3	0.50	6.20	1.0	A	587	587
2	1	0.75	18.26	3.0	C	595	595
	2	0.02	5.43	0.0	A	15	15
	3	0.40	5.09	0.7	A	474	474

Main Results for each time segment

17:00 - 17:15

Junction	Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
1	1	104	26	480	581	0.179	103	121	0.0	0.2	7.524	A
	2	413	103	87	941	0.439	410	496	0.0	0.8	6.735	A
	3	579	145	26	1171	0.495	575	471	0.0	1.0	6.008	A
2	1	595	149	235	794	0.750	584	247	0.0	2.8	16.403	C
	2	15	4	577	685	0.022	15	242	0.0	0.0	5.371	A
	3	471	118	13	1183	0.399	469	579	0.0	0.7	5.023	A

17:15 - 17:30

Junction	Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
1	1	104	26	492	573	0.181	104	123	0.2	0.2	7.670	A
	2	413	103	88	941	0.439	413	508	0.8	0.8	6.818	A
	3	590	147	26	1170	0.504	589	475	1.0	1.0	6.193	A
2	1	595	149	238	792	0.752	595	250	2.8	2.9	18.153	C
	2	15	4	588	678	0.022	15	245	0.0	0.0	5.428	A
	3	475	119	13	1183	0.402	475	590	0.7	0.7	5.085	A

17:30 - 17:45

Junction	Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
1	1	104	26	492	573	0.181	104	123	0.2	0.2	7.673	A
	2	413	103	88	941	0.439	413	508	0.8	0.8	6.818	A
	3	590	147	26	1170	0.504	590	475	1.0	1.0	6.199	A
2	1	595	149	238	792	0.752	595	250	2.9	2.9	18.230	C
	2	15	4	588	678	0.022	15	245	0.0	0.0	5.429	A
	3	475	119	13	1183	0.402	475	590	0.7	0.7	5.085	A

17:45 - 18:00

Junction	Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
1	1	104	26	493	573	0.181	104	123	0.2	0.2	7.674	A
	2	413	103	88	941	0.439	413	509	0.8	0.8	6.818	A
	3	590	147	26	1170	0.504	590	475	1.0	1.0	6.200	A
2	1	595	149	238	792	0.752	595	250	2.9	3.0	18.255	C
	2	15	4	588	678	0.022	15	245	0.0	0.0	5.430	A
	3	475	119	13	1183	0.402	475	590	0.7	0.7	5.085	A

2030 Forecast + CD, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Mini-roundabout	Junction 1	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 87% of the total flow for the roundabout for one or more time segments]
Warning	Mini-roundabout	Junction 2	Mini-roundabout appears to have unbalanced flows and may behave like a priority junction; treat results with caution. See User Guide for details.[Arms 1 and 3 have 92% of the total flow for the roundabout for one or more time segments]
Warning	Linked Roundabout	Junction 1 - Arm 3	If the distance between linked junctions is small, results should be treated with caution. The linked junctions will be modelled as separate junctions, but the real behaviour may be that of a complex system with interactions that cannot be modelled.
Warning	Linked Roundabout	Junction 2 - Arm 3	If the distance between linked junctions is small, results should be treated with caution. The linked junctions will be modelled as separate junctions, but the real behaviour may be that of a complex system with interactions that cannot be modelled.

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (s)	Junction LOS
1	Forest Road	Mini-roundabout	1, 2, 3	10.88	B
2	Club/School	Mini-roundabout	1, 2, 3	8.09	A

Junction Network Options

Driving side	Lighting	Road surface	In London
Left	Normal/unknown	Normal/unknown	

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time period length (min)	Time segment length (min)	Run automatically
D3	2030 Forecast + CD	AM	FLAT	08:00	09:00	60	15	✓

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

Linked Arm Data

Junction	Arm	Feeding Junction	Feeding Arm	Link Type	Flow source	Uniform flow (Veh/hr)	Flow multiplier (%)	Internal storage space (PCU)
1	3	2	3	Simple (vertical queueing)	Normal	0	100.00	
2	3	1	3	Simple (vertical queueing)	Normal	0	100.00	

Demand overview (Traffic)

Junction	Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
1	1		FLAT	✓	152	100.000
	2		FLAT	✓	688	100.000
	3	✓				
2	1		FLAT	✓	353	100.000
	2		FLAT	✓	84	100.000
	3	✓				

Origin-Destination Data

Demand (Veh/hr)

Junction 1

	To			
		1	2	3
From	1	0	38	114
	2	30	0	658
	3	70	298	0

Demand (Veh/hr)

Junction 2

	To			
		1	2	3
From	1	0	39	314
	2	36	0	48
	3	646	64	0

Vehicle Mix

Heavy Vehicle Percentages

Junction 1

	To			
		1	2	3
From	1	0	3	3
	2	3	0	3
	3	3	3	0

Heavy Vehicle Percentages

Junction 2

	To			
		1	2	3
From	1	0	3	3
	2	3	0	3
	3	3	3	0

Results

Results Summary for whole modelled period

Junction	Arm	Max RFC	Max delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
1	1	0.22	6.60	0.3	A	152	152
	2	0.74	15.19	2.9	C	688	688
	3	0.31	4.47	0.4	A	361	361
2	1	0.39	6.65	0.7	A	353	353
	2	0.10	4.64	0.1	A	84	84
	3	0.66	9.13	1.9	A	769	769

Main Results for each time segment

08:00 - 08:15

Junction	Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
1	1	152	38	290	699	0.217	151	98	0.0	0.3	6.553	A
	2	688	172	113	925	0.744	677	327	0.0	2.7	13.966	B
	3	359	90	30	1168	0.308	358	761	0.0	0.4	4.433	A
2	1	353	88	68	895	0.394	350	721	0.0	0.6	6.577	A
	2	84	21	312	862	0.097	84	107	0.0	0.1	4.625	A
	3	761	190	36	1166	0.652	753	359	0.0	1.8	8.574	A

08:15 - 08:30

Junction	Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
1	1	152	38	293	697	0.218	152	99	0.3	0.3	6.605	A
	2	688	172	114	925	0.744	688	331	2.7	2.8	15.138	C
	3	362	90	30	1168	0.310	362	772	0.4	0.4	4.467	A
2	1	353	88	70	894	0.395	353	738	0.6	0.6	6.649	A
	2	84	21	314	860	0.098	84	109	0.1	0.1	4.638	A
	3	772	193	36	1166	0.662	771	362	1.8	1.9	9.101	A

08:30 - 08:45

Junction	Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
1	1	152	38	293	697	0.218	152	99	0.3	0.3	6.605	A
	2	688	172	114	925	0.744	688	331	2.8	2.8	15.177	C
	3	362	90	30	1168	0.310	362	772	0.4	0.4	4.468	A
2	1	353	88	70	894	0.395	353	738	0.6	0.6	6.649	A
	2	84	21	314	860	0.098	84	109	0.1	0.1	4.638	A
	3	772	193	36	1166	0.662	772	362	1.9	1.9	9.120	A

08:45 - 09:00

Junction	Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
1	1	152	38	293	697	0.218	152	99	0.3	0.3	6.605	A
	2	688	172	114	925	0.744	688	331	2.8	2.9	15.192	C
	3	362	90	30	1168	0.310	362	772	0.4	0.4	4.468	A
2	1	353	88	70	894	0.395	353	738	0.6	0.7	6.649	A
	2	84	21	314	860	0.098	84	109	0.1	0.1	4.638	A
	3	772	193	36	1166	0.662	772	362	1.9	1.9	9.125	A

2030 Forecast + CD, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Mini-roundabout	Junction 1	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 91% of the total flow for the roundabout for one or more time segments]
Warning	Mini-roundabout	Junction 2	Mini-roundabout appears to have unbalanced flows and may behave like a priority junction; treat results with caution. See User Guide for details.[Arms 1 and 3 have 98% of the total flow for the roundabout for one or more time segments]
Warning	Linked Roundabout	Junction 1 - Arm 3	If the distance between linked junctions is small, results should be treated with caution. The linked junctions will be modelled as separate junctions, but the real behaviour may be that of a complex system with interactions that cannot be modelled.
Warning	Linked Roundabout	Junction 2 - Arm 3	If the distance between linked junctions is small, results should be treated with caution. The linked junctions will be modelled as separate junctions, but the real behaviour may be that of a complex system with interactions that cannot be modelled.

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (s)	Junction LOS
1	Forest Road	Mini-roundabout	1, 2, 3	7.35	A
2	Club/School	Mini-roundabout	1, 2, 3	10.72	B

Junction Network Options

Driving side	Lighting	Road surface	In London
Left	Normal/unknown	Normal/unknown	

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time period length (min)	Time segment length (min)	Run automatically
D4	2030 Forecast + CD	PM	FLAT	17:00	18:00	60	15	✓

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

Linked Arm Data

Junction	Arm	Feeding Junction	Feeding Arm	Link Type	Flow source	Uniform flow (Veh/hr)	Flow multiplier (%)	Internal storage space (PCU)
1	3	2	3	Simple (vertical queueing)	Normal	0	100.00	
2	3	1	3	Simple (vertical queueing)	Normal	0	100.00	

Demand overview (Traffic)

Junction	Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
1	1		FLAT	✓	104	100.000
	2		FLAT	✓	402	100.000
	3	✓				
2	1		FLAT	✓	691	100.000
	2		FLAT	✓	23	100.000
	3	✓				

Origin-Destination Data

Demand (Veh/hr)

Junction 1

	To			
		1	2	3
From	1	0	16	88
	2	26	0	376
	3	121	587	0

Demand (Veh/hr)

Junction 2

	To			
		1	2	3
From	1	0	7	684
	2	13	0	10
	3	453	2	0

Vehicle Mix

Heavy Vehicle Percentages

Junction 1

	To			
		1	2	3
From	1	0	3	3
	2	3	0	3
	3	3	3	0

Heavy Vehicle Percentages

Junction 2

	To			
		1	2	3
From	1	0	3	3
	2	3	0	3
	3	3	3	0

Results

Results Summary for whole modelled period

Junction	Arm	Max RFC	Max delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
1	1	0.20	8.62	0.2	A	104	104
	2	0.43	6.68	0.7	A	402	402
	3	0.59	7.55	1.4	A	691	691
2	1	0.74	14.70	2.8	B	691	691
	2	0.04	6.09	0.0	A	23	23
	3	0.39	5.01	0.6	A	463	463

Main Results for each time segment

17:00 - 17:15

Junction	Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
1	1	104	26	562	530	0.196	103	142	0.0	0.2	8.417	A
	2	402	101	87	941	0.427	399	578	0.0	0.7	6.602	A
	3	683	171	26	1171	0.584	678	460	0.0	1.4	7.229	A
2	1	691	173	2	936	0.739	680	469	0.0	2.7	13.597	B
	2	23	6	673	621	0.037	23	9	0.0	0.0	6.017	A
	3	460	115	13	1183	0.389	458	683	0.0	0.6	4.949	A

17:15 - 17:30

Junction	Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
1	1	104	26	575	522	0.199	104	145	0.2	0.2	8.616	A
	2	402	101	88	941	0.427	402	591	0.7	0.7	6.679	A
	3	694	173	26	1170	0.593	693	464	1.4	1.4	7.541	A
2	1	691	173	2	935	0.739	691	475	2.7	2.7	14.657	B
	2	23	6	684	614	0.037	23	9	0.0	0.0	6.088	A
	3	464	116	13	1183	0.392	464	694	0.6	0.6	5.007	A

17:30 - 17:45

Junction	Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
1	1	104	26	575	522	0.199	104	145	0.2	0.2	8.620	A
	2	402	101	88	941	0.427	402	591	0.7	0.7	6.679	A
	3	694	173	26	1170	0.593	694	464	1.4	1.4	7.553	A
2	1	691	173	2	935	0.739	691	475	2.7	2.8	14.688	B
	2	23	6	684	614	0.037	23	9	0.0	0.0	6.090	A
	3	464	116	13	1183	0.392	464	694	0.6	0.6	5.007	A

17:45 - 18:00

Junction	Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
1	1	104	26	575	522	0.199	104	145	0.2	0.2	8.621	A
	2	402	101	88	941	0.427	402	591	0.7	0.7	6.679	A
	3	694	173	26	1170	0.593	694	464	1.4	1.4	7.553	A
2	1	691	173	2	935	0.739	691	475	2.8	2.8	14.700	B
	2	23	6	684	614	0.037	23	9	0.0	0.0	6.090	A
	3	464	116	13	1183	0.392	464	694	0.6	0.6	5.007	A

2030 Forecast + CD + PD, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Mini-roundabout	Junction 1	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 87% of the total flow for the roundabout for one or more time segments]
Warning	Mini-roundabout	Junction 2	Mini-roundabout appears to have unbalanced flows and may behave like a priority junction; treat results with caution. See User Guide for details.[Arms 1 and 3 have 93% of the total flow for the roundabout for one or more time segments]
Warning	Linked Roundabout	Junction 1 - Arm 3	If the distance between linked junctions is small, results should be treated with caution. The linked junctions will be modelled as separate junctions, but the real behaviour may be that of a complex system with interactions that cannot be modelled.
Warning	Linked Roundabout	Junction 2 - Arm 3	If the distance between linked junctions is small, results should be treated with caution. The linked junctions will be modelled as separate junctions, but the real behaviour may be that of a complex system with interactions that cannot be modelled.

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (s)	Junction LOS
1	Forest Road	Mini-roundabout	1, 2, 3	12.07	B
2	Club/School	Mini-roundabout	1, 2, 3	8.56	A

Junction Network Options

Driving side	Lighting	Road surface	In London
Left	Normal/unknown	Normal/unknown	

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time period length (min)	Time segment length (min)	Run automatically
D5	2030 Forecast + CD + PD	AM	FLAT	08:00	09:00	60	15	✓

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

Linked Arm Data

Junction	Arm	Feeding Junction	Feeding Arm	Link Type	Flow source	Uniform flow (Veh/hr)	Flow multiplier (%)	Internal storage space (PCU)
1	3	2	3	Simple (vertical queueing)	Normal	0	100.00	
2	3	1	3	Simple (vertical queueing)	Normal	0	100.00	

Demand overview (Traffic)

Junction	Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
1	1		FLAT	✓	152	100.000
	2		FLAT	✓	715	100.000
	3	✓				
2	1		FLAT	✓	363	100.000
	2		FLAT	✓	84	100.000
	3	✓				

Origin-Destination Data

Demand (Veh/hr)

Junction 1

		To		
		1	2	3
From	1	0	38	114
	2	30	0	685
	3	70	308	0

Demand (Veh/hr)

Junction 2

		To		
		1	2	3
From	1	0	39	324
	2	36	0	48
	3	721	64	0

Vehicle Mix

Heavy Vehicle Percentages

Junction 1

		To		
		1	2	3
From	1	0	3	3
	2	3	0	3
	3	3	3	0

Heavy Vehicle Percentages

Junction 2

		To		
		1	2	3
From	1	0	3	3
	2	3	0	3
	3	3	3	0

Results

Results Summary for whole modelled period

Junction	Arm	Max RFC	Max delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
1	1	0.22	6.68	0.3	A	152	152
	2	0.77	17.13	3.3	C	715	715
	3	0.32	4.52	0.5	A	371	371
2	1	0.40	6.74	0.7	A	363	363
	2	0.10	4.68	0.1	A	84	84
	3	0.69	9.79	2.2	A	796	796

Main Results for each time segment

08:00 - 08:15

Junction	Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
1	1	152	38	299	693	0.219	151	98	0.0	0.3	6.627	A
	2	715	179	113	925	0.773	702	337	0.0	3.2	15.404	C
	3	369	92	29	1168	0.316	368	786	0.0	0.5	4.487	A
2	1	363	91	63	898	0.404	360	750	0.0	0.7	6.661	A
	2	84	21	322	855	0.098	84	102	0.0	0.1	4.664	A
	3	786	197	36	1166	0.674	778	369	0.0	2.0	9.093	A

08:15 - 08:30

Junction	Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
1	1	152	38	303	691	0.220	152	99	0.3	0.3	6.681	A
	2	715	179	114	925	0.773	715	341	3.2	3.3	17.038	C
	3	372	93	30	1168	0.319	372	799	0.5	0.5	4.524	A
2	1	363	91	65	897	0.405	363	769	0.7	0.7	6.740	A
	2	84	21	324	853	0.098	84	104	0.1	0.1	4.678	A
	3	799	200	36	1166	0.685	798	372	2.0	2.1	9.756	A

08:30 - 08:45

Junction	Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
1	1	152	38	303	691	0.220	152	99	0.3	0.3	6.681	A
	2	715	179	114	925	0.773	715	341	3.3	3.3	17.105	C
	3	372	93	30	1168	0.319	372	799	0.5	0.5	4.524	A
2	1	363	91	65	897	0.405	363	770	0.7	0.7	6.740	A
	2	84	21	324	853	0.098	84	104	0.1	0.1	4.678	A
	3	799	200	36	1166	0.685	799	372	2.1	2.1	9.787	A

08:45 - 09:00

Junction	Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
1	1	152	38	303	691	0.220	152	99	0.3	0.3	6.681	A
	2	715	179	114	925	0.773	715	341	3.3	3.3	17.130	C
	3	372	93	30	1168	0.319	372	799	0.5	0.5	4.524	A
2	1	363	91	65	897	0.405	363	770	0.7	0.7	6.740	A
	2	84	21	324	853	0.098	84	104	0.1	0.1	4.678	A
	3	799	200	36	1166	0.685	799	372	2.1	2.2	9.793	A

2030 Forecast + CD + PD, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Mini-roundabout	Junction 1	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 91% of the total flow for the roundabout for one or more time segments]
Warning	Mini-roundabout	Junction 2	Mini-roundabout appears to have unbalanced flows and may behave like a priority junction; treat results with caution. See User Guide for details.[Arms 1 and 3 have 98% of the total flow for the roundabout for one or more time segments]
Warning	Linked Roundabout	Junction 1 - Arm 3	If the distance between linked junctions is small, results should be treated with caution. The linked junctions will be modelled as separate junctions, but the real behaviour may be that of a complex system with interactions that cannot be modelled.
Warning	Linked Roundabout	Junction 2 - Arm 3	If the distance between linked junctions is small, results should be treated with caution. The linked junctions will be modelled as separate junctions, but the real behaviour may be that of a complex system with interactions that cannot be modelled.

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (s)	Junction LOS
1	Forest Road	Mini-roundabout	1, 2, 3	7.67	A
2	Club/School	Mini-roundabout	1, 2, 3	11.76	B

Junction Network Options

Driving side	Lighting	Road surface	In London
Left	Normal/unknown	Normal/unknown	

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time period length (min)	Time segment length (min)	Run automatically
D6	2030 Forecast + CD + PD	PM	FLAT	17:00	18:00	60	15	✓

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

Linked Arm Data

Junction	Arm	Feeding Junction	Feeding Arm	Link Type	Flow source	Uniform flow (Veh/hr)	Flow multiplier (%)	Internal storage space (PCU)
1	3	2	3	Simple (vertical queueing)	Normal	0	100.00	
2	3	1	3	Simple (vertical queueing)	Normal	0	100.00	

Demand overview (Traffic)

Junction	Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
1	1		FLAT	✓	104	100.000
	2		FLAT	✓	413	100.000
	3	✓				
2	1		FLAT	✓	716	100.000
	2		FLAT	✓	23	100.000
	3	✓				

Origin-Destination Data

Demand (Veh/hr)

Junction 1

	To			
		1	2	3
From	1	0	16	88
	2	26	0	387
	3	121	612	0

Demand (Veh/hr)

Junction 2

	To			
		1	2	3
From	1	0	7	709
	2	13	0	10
	3	465	2	0

Vehicle Mix

Heavy Vehicle Percentages

Junction 1

	To			
		1	2	3
From	1	0	3	3
	2	3	0	3
	3	3	3	0

Heavy Vehicle Percentages

Junction 2

	To			
		1	2	3
From	1	0	3	3
	2	3	0	3
	3	3	3	0

Results

Results Summary for whole modelled period

Junction	Arm	Max RFC	Max delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
1	1	0.21	8.95	0.3	A	104	104
	2	0.44	6.82	0.8	A	413	413
	3	0.61	7.97	1.6	A	716	716
2	1	0.77	16.36	3.2	C	716	716
	2	0.04	6.27	0.0	A	23	23
	3	0.40	5.09	0.7	A	474	474

Main Results for each time segment

17:00 - 17:15

Junction	Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
1	1	104	26	585	515	0.202	103	142	0.0	0.2	8.708	A
	2	413	103	87	941	0.439	410	601	0.0	0.8	6.734	A
	3	707	177	26	1171	0.604	701	471	0.0	1.5	7.574	A
2	1	716	179	2	936	0.765	704	480	0.0	3.0	14.852	B
	2	23	6	697	605	0.038	23	9	0.0	0.0	6.178	A
	3	471	118	13	1183	0.398	469	707	0.0	0.7	5.023	A

17:15 - 17:30

Junction	Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
1	1	104	26	600	506	0.205	104	145	0.2	0.3	8.945	A
	2	413	103	88	941	0.439	413	616	0.8	0.8	6.818	A
	3	719	180	26	1170	0.614	718	475	1.5	1.6	7.954	A
2	1	716	179	2	935	0.765	716	486	3.0	3.1	16.287	C
	2	23	6	709	598	0.038	23	9	0.0	0.0	6.264	A
	3	475	119	13	1183	0.402	475	719	0.7	0.7	5.085	A

17:30 - 17:45

Junction	Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
1	1	104	26	600	506	0.205	104	145	0.3	0.3	8.951	A
	2	413	103	88	941	0.439	413	616	0.8	0.8	6.818	A
	3	719	180	26	1170	0.614	719	475	1.6	1.6	7.968	A
2	1	716	179	2	935	0.765	716	486	3.1	3.2	16.339	C
	2	23	6	709	597	0.039	23	9	0.0	0.0	6.266	A
	3	475	119	13	1183	0.402	475	719	0.7	0.7	5.085	A

17:45 - 18:00

Junction	Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
1	1	104	26	600	506	0.206	104	145	0.3	0.3	8.952	A
	2	413	103	88	941	0.439	413	616	0.8	0.8	6.818	A
	3	719	180	26	1170	0.614	719	475	1.6	1.6	7.970	A
2	1	716	179	2	935	0.765	716	486	3.2	3.2	16.359	C
	2	23	6	709	597	0.039	23	9	0.0	0.0	6.266	A
	3	475	119	13	1183	0.402	475	719	0.7	0.7	5.085	A

Appendix R

Junctions 9			
ARCADY 9 - Roundabout Module			
Version: 9.0.2.5947 © Copyright TRL Limited, 2017			
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Filename: Church Lane,Blackmore Road Mins.j9

Path: P:\Southern\020-029\027 Bloor Homes\027.0014 Land at New Farm, Melksham (Outline)\03 Technical\TPL\Modelling

Report generation date: 25/11/2025 11:41:03

»2025, AM
»2025, PM
»2030 + CD, AM
»2030 + CD, PM
»2030 + CD + PD, AM
»2030 + CD + PD, PM

Summary of junction performance

	AM				PM			
	Queue (Veh)	Delay (s)	RFC	LOS	Queue (Veh)	Delay (s)	RFC	LOS
2025								
Junction 1 - Arm 1	0.5	9.00	0.34	A	0.4	8.62	0.28	A
Junction 1 - Arm 2	1.1	9.40	0.53	A	0.6	7.09	0.39	A
Junction 1 - Arm 3	0.5	5.75	0.33	A	0.8	7.10	0.44	A
Junction 2 - Arm 1	0.7	15.48	0.42	C	0.4	9.98	0.27	A
Junction 2 - Arm 2	0.3	4.01	0.22	A	0.5	4.70	0.34	A
Junction 2 - Arm 3	1.9	12.71	0.65	B	0.8	8.01	0.44	A
2030 + CD								
Junction 1 - Arm 1	8.3	163.18	0.96	F	0.5	11.02	0.32	B
Junction 1 - Arm 2	36.7	223.08	1.07	F	1.3	10.07	0.57	B
Junction 1 - Arm 3	0.8	6.87	0.44	A	1.7	10.56	0.62	B
Junction 2 - Arm 1	1.5	27.34	0.60	D	0.8	15.04	0.46	C
Junction 2 - Arm 2	0.4	4.49	0.28	A	0.8	5.83	0.44	A
Junction 2 - Arm 3	3.6	20.36	0.80	C	1.7	12.01	0.63	B
2030 + CD + PD								
Junction 1 - Arm 1	12.0	230.57	1.00	F	0.6	12.60	0.36	B
Junction 1 - Arm 2	78.8	458.99	1.16	F	1.8	12.99	0.64	B
Junction 1 - Arm 3	0.8	7.12	0.46	A	2.3	13.13	0.70	B
Junction 2 - Arm 1	1.6	27.91	0.62	D	1.0	16.51	0.50	C
Junction 2 - Arm 2	0.4	4.57	0.29	A	1.0	6.49	0.49	A
Junction 2 - Arm 3	3.6	20.36	0.80	C	1.8	12.78	0.65	B

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

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

File summary

File Description

Title	(untitled)
Location	
Site number	
Date	06/06/2024
Version	
Status	(new file)
Identifier	
Client	
Jobnumber	
Enumerator	AD\model.pc
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	Veh	Veh	perHour	s	-Min	perMin

Analysis Options

Mini-roundabout model	Vehicle length (m)	Calculate Queue Percentiles	Calculate detailed queueing delay	Calculate residual capacity	RFC Threshold	Average Delay threshold (s)	Queue threshold (PCU)
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	2025	AM	ONE HOUR	08:00	09:30		15	✓
D2	2025	PM	ONE HOUR	17:00	18:30		15	✓
D3	2030 + CD	AM	FLAT	08:00	09:00	60	15	✓
D4	2030 + CD	PM	FLAT	17:00	18:00	60	15	✓
D5	2030 + CD + PD	AM	FLAT	08:00	09:00	60	15	✓
D6	2030 + CD + PD	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

2025, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Mini-roundabout	Junction 2	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 82% of the total flow for the roundabout for one or more time segments]
Warning	Pedestrian Crossing	Junction 1 - Arm 3 - Pedestrian crossing	Pedestrian crossing uses default flow of 0. Is this correct?

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (s)	Junction LOS
1	Church Lane	Mini-roundabout	1, 2, 3	8.13	A
2	Blackmore Road	Mini-roundabout	1, 2, 3	10.94	B

Junction Network Options

Driving side	Lighting	Road surface	In London
Left	Normal/unknown	Normal/unknown	

Arms

Arms

Junction	Arm	Name	Description
1	1	Church Lane (N)	
	2	A3102 Sandridge Common (E)	
	3	Internal Link W	
2	1	Blackmore Road (S)	
	2	A3102 Sandridge Common (W)	
	3	Internal Link E	

Mini Roundabout Geometry

Junction	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	1	2.50	2.50	3.70	9.0	8.60	4.90	0.0	
	2	3.20	3.20	3.30	0.2	16.50	16.70	0.0	✓
	3	4.00	4.00	4.10	0.1	11.30	8.30	0.0	✓
2	1	3.20	3.20	3.40	1.7	11.80	8.30	0.0	
	2	3.40	3.40	3.40	0.0	19.90	19.90	0.0	✓
	3	3.70	3.70	3.70	0.0	13.10	10.00	0.0	✓

Zebra Crossings

Junction	Arm	Space between crossing and junction entry (Zebra) (PCU)	Vehicles queueing on exit (Zebra) (PCU)	Central Refuge	Crossing data type	Crossing length (entry side) (m)	Crossing time (entry side) (s)	Crossing length (exit side) (m)	Crossing time (exit side) (s)
1	3	1.00	1.00	✓	Distance	4.00	2.86	4.00	2.86

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Junction	Arm	Final slope	Final intercept (PCU/hr)
1	1	0.603	820
	2	0.546	975
	3	0.519	1040
2	1	0.604	702
	2	0.783	1348
	3	0.508	926

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

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D1	2025	AM	ONE HOUR	08:00	09:30	15	✓

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

Linked Arm Data

Junction	Arm	Feeding Junction	Feeding Arm	Link Type	Flow source	Uniform flow (Veh/hr)	Flow multiplier (%)	Internal storage space (PCU)
1	3	2	3	Queue limited	Normal	0	100.00	4.00
2	3	1	3	Queue limited	Normal	0	100.00	4.00

Demand overview (Traffic)

Junction	Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
1	1		ONE HOUR	✓	188	100.000
	2		ONE HOUR	✓	391	100.000
	3	✓				
2	1		ONE HOUR	✓	155	100.000
	2		ONE HOUR	✓	226	100.000
	3	✓				

Demand overview (Pedestrians)

Junction	Arm	Profile type	Average pedestrian flow (Ped/hr)
1	1		
	2		
	3	[ONEHOUR]	0.00
2	1		
	2		
	3		

Origin-Destination Data

Demand (Veh/hr)

Junction 1

		To		
		1	2	3
From	1	0	66	122
	2	26	0	365
	3	61	185	0

Demand (Veh/hr)

Junction 2

	To			
		1	2	3
From	1	0	63	92
	2	41	0	185
	3	137	365	0

Vehicle Mix

Heavy Vehicle Percentages

Junction 1

	To			
		1	2	3
From	1	10	10	10
	2	10	10	10
	3	10	10	10

Heavy Vehicle Percentages

Junction 2

	To			
		1	2	3
From	1	10	10	10
	2	10	10	10
	3	10	10	10

Results

Results Summary for whole modelled period

Junction	Arm	Max RFC	Max delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
1	1	0.34	9.00	0.5	A	173	259
	2	0.53	9.40	1.1	A	359	538
	3	0.33	5.75	0.5	A	254	381
2	1	0.42	15.48	0.7	C	142	213
	2	0.22	4.01	0.3	A	207	311
	3	0.65	12.71	1.9	B	446	670

Main Results for each time segment

08:00 - 08:15

Junction	Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Pedestrian demand (Ped/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
1	1	142	35	155		652	0.217	140	71	0.0	0.3	7.024	A
	2	294	74	91		837	0.352	292	204	0.0	0.5	6.586	A
	3	207	52	19	0.00	936	0.222	206	364	0.0	0.3	4.928	A
2	1	117	29	262		480	0.243	115	129	0.0	0.3	9.845	A
	2	170	43	69		1172	0.145	169	309	0.0	0.2	3.590	A
	3	364	91	31		826	0.441	361	207	0.0	0.8	7.691	A

08:15 - 08:30

Junction	Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Pedestrian demand (Ped/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
1	1	169	42	187		633	0.267	169	85	0.3	0.4	7.750	A
	2	352	88	109		827	0.425	351	246	0.5	0.7	7.549	A
	3	249	62	23	0.00	934	0.266	248	437	0.3	0.4	5.250	A
2	1	139	35	317		447	0.312	139	156	0.3	0.4	11.658	B
	2	203	51	82		1161	0.175	203	373	0.2	0.2	3.757	A
	3	437	109	37		823	0.531	436	249	0.8	1.1	9.262	A

08:30 - 08:45

Junction	Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Pedestrian demand (Ped/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
1	1	207	52	228		608	0.341	206	104	0.4	0.5	8.957	A
	2	430	108	134		813	0.529	429	301	0.7	1.1	9.327	A
	3	304	76	29	0.00	931	0.327	304	534	0.4	0.5	5.731	A
2	1	171	43	387		405	0.422	170	190	0.4	0.7	15.231	C
	2	249	62	101		1147	0.217	249	455	0.2	0.3	4.008	A
	3	534	134	45		819	0.653	532	304	1.1	1.8	12.417	B

08:45 - 09:00

Junction	Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Pedestrian demand (Ped/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
1	1	207	52	229		607	0.341	207	104	0.5	0.5	8.996	A
	2	430	108	134		813	0.529	430	302	1.1	1.1	9.402	A
	3	305	76	29	0.00	931	0.328	305	536	0.5	0.5	5.751	A
2	1	171	43	390		403	0.423	171	191	0.7	0.7	15.483	C
	2	249	62	101		1146	0.217	249	459	0.3	0.3	4.011	A
	3	536	134	45		819	0.655	536	305	1.8	1.9	12.715	B

09:00 - 09:15

Junction	Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Pedestrian demand (Ped/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
1	1	169	42	188		632	0.267	170	86	0.5	0.4	7.796	A
	2	352	88	110		826	0.425	353	248	1.1	0.8	7.628	A
	3	250	62	23	0.00	934	0.268	250	440	0.5	0.4	5.272	A
2	1	139	35	322		444	0.314	140	158	0.7	0.5	11.893	B
	2	203	51	83		1160	0.175	203	379	0.3	0.2	3.762	A
	3	440	110	37		823	0.534	442	250	1.9	1.2	9.528	A

09:15 - 09:30

Junction	Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Pedestrian demand (Ped/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
1	1	142	35	157		650	0.218	142	72	0.4	0.3	7.085	A
	2	294	74	92		836	0.352	295	207	0.8	0.5	6.664	A
	3	209	52	20	0.00	935	0.223	209	368	0.4	0.3	4.961	A
2	1	117	29	268		476	0.245	117	132	0.5	0.3	10.041	B
	2	170	43	70		1171	0.145	170	316	0.2	0.2	3.600	A
	3	368	92	31		826	0.445	369	209	1.2	0.8	7.906	A

2025, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Mini-roundabout	Junction 1	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 82% of the total flow for the roundabout for one or more time segments]
Warning	Mini-roundabout	Junction 2	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 85% of the total flow for the roundabout for one or more time segments]
Warning	Pedestrian Crossing	Junction 1 - Arm 3 - Pedestrian crossing	Pedestrian crossing uses default flow of 0. Is this correct?

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (s)	Junction LOS
1	Church Lane	Mini-roundabout	1, 2, 3	7.37	A
2	Blackmore Road	Mini-roundabout	1, 2, 3	6.82	A

Junction Network Options

Driving side	Lighting	Road surface	In London
Left	Normal/unknown	Normal/unknown	

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D2	2025	PM	ONE HOUR	17:00	18:30	15	✓

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

Linked Arm Data

Junction	Arm	Feeding Junction	Feeding Arm	Link Type	Flow source	Uniform flow (Veh/hr)	Flow multiplier (%)	Internal storage space (PCU)
1	3	2	3	Queue limited	Normal	0	100.00	4.00
2	3	1	3	Queue limited	Normal	0	100.00	4.00

Demand overview (Traffic)

Junction	Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
1	1		ONE HOUR	✓	146	100.000
	2		ONE HOUR	✓	291	100.000
	3	✓				
2	1		ONE HOUR	✓	121	100.000
	2		ONE HOUR	✓	359	100.000
	3	✓				

Demand overview (Pedestrians)

Junction	Arm	Profile type	Average pedestrian flow (Ped/hr)
1	1		
	2		
	3	[ONEHOUR]	0.00
2	1		
	2		
	3		

Origin-Destination Data

Demand (Veh/hr)

Junction 1

	To			
		1	2	3
From	1	0	49	97
	2	67	0	224
	3	130	290	0

Demand (Veh/hr)

Junction 2

	To			
		1	2	3
From	1	0	47	74
	2	69	0	290
	3	107	224	0

Vehicle Mix

Heavy Vehicle Percentages

Junction 1

	To			
		1	2	3
From	1	10	10	10
	2	10	10	10
	3	10	10	10

Heavy Vehicle Percentages

Junction 2

	To			
		1	2	3
From	1	10	10	10
	2	10	10	10
	3	10	10	10

Results

Results Summary for whole modelled period

Junction	Arm	Max RFC	Max delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
1	1	0.28	8.62	0.4	A	134	201
	2	0.39	7.09	0.6	A	267	401
	3	0.44	7.10	0.8	A	334	501
2	1	0.27	9.98	0.4	A	111	167
	2	0.34	4.70	0.5	A	329	494
	3	0.44	8.01	0.8	A	294	441

Main Results for each time segment

17:00 - 17:15

Junction	Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Pedestrian demand (Ped/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
1	1	110	27	187		633	0.174	109	134	0.0	0.2	6.865	A
	2	219	55	72		847	0.259	218	224	0.0	0.3	5.707	A
	3	273	68	50	0.00	920	0.296	271	240	0.0	0.4	5.534	A
2	1	91	23	161		541	0.168	90	129	0.0	0.2	7.977	A
	2	270	68	55		1182	0.229	269	196	0.0	0.3	3.938	A
	3	240	60	52		815	0.294	238	273	0.0	0.4	6.223	A

17:15 - 17:30

Junction	Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Pedestrian demand (Ped/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
1	1	131	33	225		610	0.215	131	161	0.2	0.3	7.519	A
	2	262	65	87		839	0.312	261	269	0.3	0.4	6.226	A
	3	327	82	60	0.00	914	0.357	326	288	0.4	0.6	6.115	A
2	1	109	27	195		521	0.209	109	155	0.2	0.3	8.726	A
	2	323	81	66		1173	0.275	322	237	0.3	0.4	4.227	A
	3	288	72	62		810	0.356	288	327	0.4	0.5	6.882	A

17:30 - 17:45

Junction	Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Pedestrian demand (Ped/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
1	1	161	40	276		579	0.278	160	197	0.3	0.4	8.586	A
	2	320	80	107		828	0.387	320	329	0.4	0.6	7.066	A
	3	400	100	74	0.00	907	0.441	399	353	0.6	0.8	7.069	A
2	1	133	33	238		495	0.269	133	190	0.3	0.4	9.940	A
	2	395	99	81		1162	0.340	395	290	0.4	0.5	4.690	A
	3	353	88	76		803	0.439	352	400	0.5	0.8	7.960	A

17:45 - 18:00

Junction	Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Pedestrian demand (Ped/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
1	1	161	40	277		579	0.278	161	198	0.4	0.4	8.616	A
	2	320	80	107		828	0.387	320	331	0.6	0.6	7.087	A
	3	401	100	74	0.00	907	0.442	401	353	0.8	0.8	7.104	A
2	1	133	33	239		494	0.270	133	190	0.4	0.4	9.980	A
	2	395	99	81		1162	0.340	395	291	0.5	0.5	4.697	A
	3	353	88	76		803	0.440	353	401	0.8	0.8	8.005	A

18:00 - 18:15

Junction	Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Pedestrian demand (Ped/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
1	1	131	33	227		609	0.216	132	162	0.4	0.3	7.558	A
	2	262	65	87		839	0.312	262	271	0.6	0.5	6.251	A
	3	328	82	60	0.00	914	0.359	329	289	0.8	0.6	6.158	A
2	1	109	27	196		520	0.209	109	156	0.4	0.3	8.777	A
	2	323	81	67		1173	0.275	323	239	0.5	0.4	4.239	A
	3	289	72	62		810	0.357	290	328	0.8	0.6	6.936	A

18:15 - 18:30

Junction	Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Pedestrian demand (Ped/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
1	1	110	27	190		631	0.174	110	136	0.3	0.2	6.918	A
	2	219	55	73		847	0.259	220	227	0.5	0.4	5.746	A
	3	274	69	51	0.00	919	0.299	275	242	0.6	0.4	5.590	A
2	1	91	23	164		539	0.169	91	130	0.3	0.2	8.043	A
	2	270	68	56		1182	0.229	271	200	0.4	0.3	3.954	A
	3	242	61	52		815	0.297	243	274	0.6	0.4	6.296	A

2030 + CD, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Mini-roundabout	Junction 1	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 83% of the total flow for the roundabout for one or more time segments]
Warning	Mini-roundabout	Junction 2	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 83% of the total flow for the roundabout for one or more time segments]
Warning	Pedestrian Crossing	Junction 1 - Arm 3 - Pedestrian crossing	Pedestrian crossing uses default flow of 0. Is this correct?

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (s)	Junction LOS
1	Church Lane	Mini-roundabout	1, 2, 3	139.16	F
2	Blackmore Road	Mini-roundabout	1, 2, 3	17.21	C

Junction Network Options

Driving side	Lighting	Road surface	In London
Left	Normal/unknown	Normal/unknown	

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time period length (min)	Time segment length (min)	Run automatically
D3	2030 + CD	AM	FLAT	08:00	09:00	60	15	✓

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

Linked Arm Data

Junction	Arm	Feeding Junction	Feeding Arm	Link Type	Flow source	Uniform flow (Veh/hr)	Flow multiplier (%)	Internal storage space (PCU)
1	3	2	3	Queue limited	Normal	0	100.00	4.00
2	3	1	3	Queue limited	Normal	0	100.00	4.00

Demand overview (Traffic)

Junction	Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
1	1		FLAT	✓	198	100.000
	2		FLAT	✓	586	100.000
	3	✓				
2	1		FLAT	✓	200	100.000
	2		FLAT	✓	319	100.000
	3	✓				

Demand overview (Pedestrians)

Junction	Arm	Profile type	Average pedestrian flow (Ped/hr)
1	1		
	2		
	3	[FLAT]	0.00
2	1		
	2		
	3		

Origin-Destination Data

Demand (Veh/hr)

Junction 1

		To		
		1	2	3
From	1	0	70	128
	2	27	0	559
	3	65	345	0

Demand (Veh/hr)

Junction 2

		To		
		1	2	3
From	1	0	67	133
	2	43	0	276
	3	144	543	0

Vehicle Mix

Heavy Vehicle Percentages

Junction 1

		To		
		1	2	3
From	1	10	10	10
	2	10	10	10
	3	10	10	10

Heavy Vehicle Percentages

Junction 2

		To		
		1	2	3
From	1	10	10	10
	2	10	10	10
	3	10	10	10

Results

Results Summary for whole modelled period

Junction	Arm	Max RFC	Max delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
1	1	0.96	163.18	8.3	F	198	198
	2	1.07	223.08	36.7	F	586	586
	3	0.44	6.87	0.8	A	408	408
2	1	0.60	27.34	1.5	D	200	200
	2	0.28	4.49	0.4	A	319	319
	3	0.80	20.36	3.6	C	647	647

Main Results for each time segment

08:00 - 08:15

Junction	Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Pedestrian demand (Ped/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
1	1	198	50	337		294	0.674	191	89	0.0	1.8	32.888	D
	2	586	147	123		647	0.906	560	405	0.0	6.5	34.980	D
	3	404	101	26	0.00	932	0.433	401	658	0.0	0.8	6.737	A
2	1	200	50	508		331	0.604	194	178	0.0	1.4	25.345	D
	2	319	80	129		1124	0.284	317	573	0.0	0.4	4.454	A
	3	658	164	43		820	0.802	643	404	0.0	3.6	19.050	C

08:15 - 08:30

Junction	Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Pedestrian demand (Ped/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
1	1	198	50	344		224	0.883	188	90	1.8	4.4	81.476	F
	2	586	147	121		568	1.032	547	410	6.5	16.3	92.876	F
	3	409	102	25	0.00	933	0.438	409	643	0.8	0.8	6.869	A
2	1	200	50	508		331	0.603	200	178	1.4	1.5	27.245	D
	2	319	80	133		1121	0.284	319	575	0.4	0.4	4.486	A
	3	643	161	43		820	0.784	643	409	3.6	3.6	20.360	C

08:30 - 08:45

Junction	Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Pedestrian demand (Ped/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
1	1	198	50	344		210	0.941	190	90	4.4	6.5	126.805	F
	2	586	147	123		554	1.058	546	411	16.3	26.4	157.414	F
	3	409	102	25	0.00	933	0.438	409	643	0.8	0.8	6.873	A
2	1	200	50	508		331	0.603	200	178	1.5	1.5	27.314	D
	2	319	80	133		1121	0.284	319	575	0.4	0.4	4.486	A
	3	643	161	43		820	0.784	643	409	3.6	3.6	20.362	C

08:45 - 09:00

Junction	Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Pedestrian demand (Ped/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
1	1	198	50	344		206	0.963	191	90	6.5	8.3	163.177	F
	2	586	147	123		549	1.067	545	412	26.4	36.7	223.083	F
	3	409	102	25	0.00	933	0.439	409	643	0.8	0.8	6.873	A
2	1	200	50	508		331	0.603	200	178	1.5	1.5	27.338	D
	2	319	80	133		1121	0.284	319	575	0.4	0.4	4.486	A
	3	643	161	43		820	0.784	643	409	3.6	3.6	20.361	C

2030 + CD, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Mini-roundabout	Junction 1	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 87% of the total flow for the roundabout for one or more time segments]
Warning	Mini-roundabout	Junction 2	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 83% of the total flow for the roundabout for one or more time segments]
Warning	Pedestrian Crossing	Junction 1 - Arm 3 - Pedestrian crossing	Pedestrian crossing uses default flow of 0. Is this correct?

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (s)	Junction LOS
1	Church Lane	Mini-roundabout	1, 2, 3	10.42	B
2	Blackmore Road	Mini-roundabout	1, 2, 3	9.99	A

Junction Network Options

Driving side	Lighting	Road surface	In London
Left	Normal/unknown	Normal/unknown	

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time period length (min)	Time segment length (min)	Run automatically
D4	2030 + CD	PM	FLAT	17:00	18:00	60	15	✓

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

Linked Arm Data

Junction	Arm	Feeding Junction	Feeding Arm	Link Type	Flow source	Uniform flow (Veh/hr)	Flow multiplier (%)	Internal storage space (PCU)
1	3	2	3	Queue limited	Normal	0	100.00	4.00
2	3	1	3	Queue limited	Normal	0	100.00	4.00

Demand overview (Traffic)

Junction	Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
1	1		FLAT	✓	155	100.000
	2		FLAT	✓	473	100.000
	3	✓				
2	1		FLAT	✓	201	100.000
	2		FLAT	✓	490	100.000
	3	✓				

Demand overview (Pedestrians)

Junction	Arm	Profile type	Average pedestrian flow (Ped/hr)
1	1		
	2		
	3	[FLAT]	0.00
2	1		
	2		
	3		

Origin-Destination Data

Demand (Veh/hr)

Junction 1

		To		
		1	2	3
From	1	0	52	103
	2	71	0	402
	3	137	459	0

Demand (Veh/hr)

Junction 2

		To		
		1	2	3
From	1	0	50	151
	2	73	0	417
	3	177	328	0

Vehicle Mix

Heavy Vehicle Percentages

Junction 1

		To		
		1	2	3
From	1	10	10	10
	2	10	10	10
	3	10	10	10

Heavy Vehicle Percentages

Junction 2

		To		
		1	2	3
From	1	10	10	10
	2	10	10	10
	3	10	10	10

Results

Results Summary for whole modelled period

Junction	Arm	Max RFC	Max delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
1	1	0.32	11.02	0.5	B	155	155
	2	0.57	10.07	1.3	B	473	473
	3	0.62	10.56	1.7	B	567	567
2	1	0.46	15.04	0.8	C	201	201
	2	0.44	5.83	0.8	A	490	490
	3	0.63	12.01	1.7	B	504	504

Main Results for each time segment

17:00 - 17:15

Junction	Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Pedestrian demand (Ped/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
1	1	155	39	429		487	0.318	153	198	0.0	0.5	10.729	B
	2	473	118	102		831	0.569	468	480	0.0	1.3	9.785	A
	3	563	141	70	0.00	909	0.619	557	499	0.0	1.6	10.039	B
2	1	201	50	320		445	0.452	198	245	0.0	0.8	14.392	B
	2	490	123	149		1109	0.442	487	369	0.0	0.8	5.757	A
	3	499	125	73		805	0.621	493	563	0.0	1.6	11.335	B

17:15 - 17:30

Junction	Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Pedestrian demand (Ped/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
1	1	155	39	437		482	0.322	155	201	0.5	0.5	11.015	B
	2	473	118	103		830	0.570	473	489	1.3	1.3	10.068	B
	3	568	142	71	0.00	909	0.625	568	505	1.6	1.6	10.539	B
2	1	201	50	328		440	0.456	201	250	0.8	0.8	15.020	C
	2	490	123	151		1107	0.443	490	378	0.8	0.8	5.831	A
	3	505	126	73		805	0.628	505	568	1.6	1.6	11.985	B

17:30 - 17:45

Junction	Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Pedestrian demand (Ped/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
1	1	155	39	437		482	0.322	155	202	0.5	0.5	11.020	B
	2	473	118	103		830	0.570	473	489	1.3	1.3	10.072	B
	3	568	142	71	0.00	909	0.625	568	505	1.6	1.6	10.554	B
2	1	201	50	328		440	0.457	201	250	0.8	0.8	15.038	C
	2	490	123	151		1107	0.443	490	378	0.8	0.8	5.832	A
	3	505	126	73		805	0.628	505	568	1.6	1.7	12.008	B

17:45 - 18:00

Junction	Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Pedestrian demand (Ped/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
1	1	155	39	437		482	0.322	155	202	0.5	0.5	11.021	B
	2	473	118	103		830	0.570	473	489	1.3	1.3	10.072	B
	3	568	142	71	0.00	909	0.625	568	505	1.6	1.7	10.556	B
2	1	201	50	328		440	0.457	201	250	0.8	0.8	15.042	C
	2	490	123	151		1107	0.443	490	378	0.8	0.8	5.832	A
	3	505	126	73		804	0.628	505	568	1.7	1.7	12.011	B

2030 + CD + PD, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Mini-roundabout	Junction 1	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 84% of the total flow for the roundabout for one or more time segments]
Warning	Mini-roundabout	Junction 2	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 83% of the total flow for the roundabout for one or more time segments]
Warning	Pedestrian Crossing	Junction 1 - Arm 3 - Pedestrian crossing	Pedestrian crossing uses default flow of 0. Is this correct?

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (s)	Junction LOS
1	Church Lane	Mini-roundabout	1, 2, 3	270.46	F
2	Blackmore Road	Mini-roundabout	1, 2, 3	17.28	C

Junction Network Options

Driving side	Lighting	Road surface	In London
Left	Normal/unknown	Normal/unknown	

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time period length (min)	Time segment length (min)	Run automatically
D5	2030 + CD + PD	AM	FLAT	08:00	09:00	60	15	✓

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

Linked Arm Data

Junction	Arm	Feeding Junction	Feeding Arm	Link Type	Flow source	Uniform flow (Veh/hr)	Flow multiplier (%)	Internal storage space (PCU)
1	3	2	3	Queue limited	Normal	0	100.00	4.00
2	3	1	3	Queue limited	Normal	0	100.00	4.00

Demand overview (Traffic)

Junction	Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
1	1		FLAT	✓	200	100.000
	2		FLAT	✓	634	100.000
	3	✓				
2	1		FLAT	✓	206	100.000
	2		FLAT	✓	329	100.000
	3	✓				

Demand overview (Pedestrians)

Junction	Arm	Profile type	Average pedestrian flow (Ped/hr)
1	1		
	2		
	3	[FLAT]	0.00
2	1		
	2		
	3		

Origin-Destination Data

Demand (Veh/hr)

Junction 1

		To		
		1	2	3
From	1	0	72	128
	2	33	0	601
	3	65	360	0

Demand (Veh/hr)

Junction 2

		To		
		1	2	3
From	1	0	67	139
	2	43	0	286
	3	159	570	0

Vehicle Mix

Heavy Vehicle Percentages

Junction 1

		To		
		1	2	3
From	1	10	10	10
	2	10	10	10
	3	10	10	10

Heavy Vehicle Percentages

Junction 2

		To		
		1	2	3
From	1	10	10	10
	2	10	10	10
	3	10	10	10

Results

Results Summary for whole modelled period

Junction	Arm	Max RFC	Max delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
1	1	1.00	230.57	12.0	F	200	200
	2	1.16	458.99	78.8	F	634	634
	3	0.46	7.12	0.8	A	424	424
2	1	0.62	27.91	1.6	D	206	206
	2	0.29	4.57	0.4	A	329	329
	3	0.80	20.36	3.6	C	647	647

Main Results for each time segment

08:00 - 08:15

Junction	Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Pedestrian demand (Ped/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
1	1	200	50	353		231	0.867	184	93	0.0	4.0	64.444	F
	2	634	159	118		605	1.049	569	419	0.0	16.2	68.004	F
	3	420	105	30	0.00	930	0.451	416	658	0.0	0.8	6.962	A
2	1	206	52	503		335	0.616	200	183	0.0	1.5	25.746	D
	2	329	82	135		1120	0.294	327	568	0.0	0.4	4.534	A
	3	658	164	43		820	0.802	643	420	0.0	3.6	19.050	C

08:15 - 08:30

Junction	Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Pedestrian demand (Ped/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
1	1	200	50	360		202	0.990	186	94	4.0	7.6	140.885	F
	2	634	159	119		557	1.137	553	427	16.2	36.4	188.432	F
	3	425	106	29	0.00	931	0.456	425	643	0.8	0.8	7.112	A
2	1	206	52	503		335	0.615	206	183	1.5	1.5	27.797	D
	2	329	82	139		1117	0.295	329	570	0.4	0.4	4.569	A
	3	643	161	43		820	0.784	643	425	3.6	3.6	20.360	C

08:30 - 08:45

Junction	Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Pedestrian demand (Ped/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
1	1	200	50	360		199	1.004	189	94	7.6	10.4	197.690	F
	2	634	159	121		552	1.148	551	428	36.4	57.2	320.237	F
	3	425	106	29	0.00	931	0.457	425	643	0.8	0.8	7.115	A
2	1	206	52	503		335	0.615	206	183	1.5	1.6	27.876	D
	2	329	82	139		1117	0.295	329	570	0.4	0.4	4.570	A
	3	643	161	43		820	0.784	643	425	3.6	3.6	20.361	C

08:45 - 09:00

Junction	Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Pedestrian demand (Ped/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
1	1	200	50	360		203	0.986	193	94	10.4	12.0	230.565	F
	2	634	159	124		548	1.156	548	430	57.2	78.8	458.991	F
	3	425	106	29	0.00	931	0.457	425	643	0.8	0.8	7.114	A
2	1	206	52	503		335	0.615	206	183	1.6	1.6	27.906	D
	2	329	82	139		1117	0.295	329	570	0.4	0.4	4.570	A
	3	643	161	43		820	0.784	643	425	3.6	3.6	20.362	C

2030 + CD + PD, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Mini-roundabout	Junction 1	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 87% of the total flow for the roundabout for one or more time segments]
Warning	Mini-roundabout	Junction 2	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 83% of the total flow for the roundabout for one or more time segments]

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (s)	Junction LOS
1	Church Lane	Mini-roundabout	1, 2, 3	13.01	B
2	Blackmore Road	Mini-roundabout	1, 2, 3	10.74	B

Junction Network Options

Driving side	Lighting	Road surface	In London
Left	Normal/unknown	Normal/unknown	

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time period length (min)	Time segment length (min)	Run automatically
D6	2030 + CD + PD	PM	FLAT	17:00	18:00	60	15	✓

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

Linked Arm Data

Junction	Arm	Feeding Junction	Feeding Arm	Link Type	Flow source	Uniform flow (Veh/hr)	Flow multiplier (%)	Internal storage space (PCU)
1	3	2	3	Queue limited	Normal	0	100.00	4.00
2	3	1	3	Queue limited	Normal	0	100.00	4.00

Demand overview (Traffic)

Junction	Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
1	1		FLAT	✓	160	100.000
	2		FLAT	✓	493	100.000
	3	✓				
2	1		FLAT	✓	215	100.000
	2		FLAT	✓	542	100.000
	3	✓				

Demand overview (Pedestrians)

Junction	Arm	Profile type	Average pedestrian flow (Ped/hr)
1	1		
	2		
	3	[FLAT]	5.00
2	1		
	2		
	3		

Origin-Destination Data

Demand (Veh/hr)

Junction 1

	To			
		1	2	3
From	1	0	57	103
	2	73	0	420
	3	137	498	0

Demand (Veh/hr)

Junction 2

	To			
		1	2	3
From	1	0	50	165
	2	73	0	469
	3	183	340	0

Vehicle Mix

Heavy Vehicle Percentages

Junction 1

	To			
		1	2	3
From	1	10	10	10
	2	10	10	10
	3	10	10	10

Heavy Vehicle Percentages

Junction 2

	To			
		1	2	3
From	1	10	10	10
	2	10	10	10
	3	10	10	10

Results

Results Summary for whole modelled period

Junction	Arm	Max RFC	Max delay (s)	Max Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
1	1	0.36	12.60	0.6	B	160	160
	2	0.64	12.99	1.8	B	493	493
	3	0.70	13.13	2.3	B	632	632
2	1	0.50	16.51	1.0	C	215	215
	2	0.49	6.49	1.0	A	542	542
	3	0.65	12.78	1.8	B	521	521

Main Results for each time segment

17:00 - 17:15

Junction	Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Pedestrian demand (Ped/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
1	1	160	40	486		453	0.354	158	206	0.0	0.5	12.133	B
	2	493	123	102		772	0.638	486	542	0.0	1.7	12.306	B
	3	628	157	72	5.00	908	0.691	619	516	0.0	2.1	12.129	B
2	1	215	54	331		439	0.490	211	251	0.0	0.9	15.604	C
	2	542	136	162		1098	0.493	538	380	0.0	1.0	6.382	A
	3	516	129	72		805	0.641	509	628	0.0	1.7	11.911	B

17:15 - 17:30

Junction	Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Pedestrian demand (Ped/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
1	1	160	40	497		446	0.359	160	210	0.5	0.6	12.587	B
	2	493	123	103		770	0.640	493	554	1.7	1.7	12.966	B
	3	634	158	73	5.00	908	0.698	633	523	2.1	2.2	13.082	B
2	1	215	54	340		433	0.496	215	256	0.9	1.0	16.467	C
	2	542	136	165		1096	0.494	542	390	1.0	1.0	6.494	A
	3	523	131	73		805	0.650	522	634	1.7	1.8	12.734	B

17:30 - 17:45

Junction	Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Pedestrian demand (Ped/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
1	1	160	40	497		446	0.359	160	210	0.6	0.6	12.601	B
	2	493	123	103		770	0.640	493	554	1.7	1.8	12.984	B
	3	634	158	73	5.00	908	0.698	634	523	2.2	2.3	13.124	B
2	1	215	54	340		433	0.496	215	256	1.0	1.0	16.498	C
	2	542	136	165		1096	0.494	542	390	1.0	1.0	6.494	A
	3	523	131	73		805	0.650	523	634	1.8	1.8	12.770	B

17:45 - 18:00

Junction	Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Pedestrian demand (Ped/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	LOS
1	1	160	40	497		446	0.359	160	210	0.6	0.6	12.605	B
	2	493	123	103		770	0.640	493	554	1.8	1.8	12.989	B
	3	634	158	73	5.00	908	0.698	634	523	2.3	2.3	13.135	B
2	1	215	54	340		433	0.497	215	256	1.0	1.0	16.505	C
	2	542	136	165		1096	0.494	542	390	1.0	1.0	6.494	A
	3	523	131	73		804	0.650	523	634	1.8	1.8	12.776	B