Popes Hill LRD, Blackpool, Cork

Traffic and Transportation Assessment

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1 Non-Technical Summary

1. The proposed development will consist of a Large-Scale Residential Development (LRD) on a site at Pope's Hill, Pope's Road, Blackpool, Cork City which will include the demolition of a terrace of 4no. existing dwellings, 3no. of which are derelict, and ancillary sheds and their replacement with 1no. single-storey 3-bed detached bungalow accessed via a modified private driveway; and the construction of 103no. dwellings to include 50no. townhouses and 53no. duplex apartments. A total of 104no. dwellings are proposed, accessed via Pope's Road. The proposed development will also include a creche with rear garden and front set down area; 104no. car parking spaces and 128no. cycle spaces; internal roads and pathways; hard and soft landscaping, including boundary treatments; retaining walls; 2no. pedestrian connections with Glentrasna Park to the north; and all associated site development, landscaping and boundary treatment, and drainage works, including SuDS.

2. For the purposes of our assessment, the TRICS database was consulted to provide an equivalent trip rate for the proposed development site.

3. The proposed development will be accessible from Popes road with a vehicular entrance and dedicated pedestrian access that extends to the southeast boundary of the site. There will be also 2 pedestrian access connecting to Glentrasna Park residential estate to the north boundary of the site.

4. Analysis was carried out on 5 Junctions as agreed with Cork City Council on the 10th January 2025. Junction modelling indicates that the proposed development will have very little impact on the surrounding existing junctions and road network.

5. Parking spaces for the proposed development will be provided to meet the requirements set out in the Cork City Council Development Plan and have been reduced, well below the maximum as permitted under the development plan, to encourage modal split.

6. A significant emphasis on pedestrian and cycle connectivity for the development and its surroundings has been incorporated into the design to assist with connectivity to Cork City. New pedestrian linkages are proposed to the north to Glentrasna and the greater Glen area of the City.

7. The junction worst affected by the proposed development is the Popes Road/Rathmore Park Junction (Site 4). Modelling at this junction indicates that the maximum Ratio of flow to capacity (RFC) is 13%. As such, it can be said that the junctions analysed will not experience any significant impact from the proposed development.

The traffic impact assessment for the proposed Large-scale Residential Development (LRD), concluded that the development will have minimal impact on the surrounding road network. Junction modelling shows only a modest increase in traffic. The most affected junctions are projected to continue operating within acceptable capacity thresholds, with overall impacts considered minor. Parking provisions have been reduced below the maximum standards to encourage sustainable transport, and enhanced pedestrian, cycle, and public transport connectivity has been integrated into the design to support modal shift.

2 Introduction

PUNCH Consulting Engineers were commissioned by Pontorac Ltd. to carry out a Traffic and Transportation Assessment (TTA) for a proposed Large-scale Residential Development (LRD) at Popes Road, Cork.

The assessment has been carried out in accordance with TII's Traffic and Transport Assessment Guidelines PE-PDV-02045 (May 2014) and refers to the Design Manual for Urban Roads & Streets (DMURS) and the Cycle Design Manual. Sections from the Cork City Council Development Plan (2022-2028) have been used to help describe the development location and its local context.

The purpose of the TTA report is to assess the potential impact of the proposed development on the existing local transport network and to ensure that the proposed site access will have adequate capacity to carry the development traffic and the future growth in existing road traffic to the design year and beyond. An assessment of the accessibility of the site for cyclists, pedestrians and public transport users has also been made.

2.1 Scoping

Consultations with Cork City Council (CCC) were held in relation to this development. Part of this consultation included LRD Section 247 Pre-Application meeting held on 10th January 2025 and an S32C meeting held on the 1st October 2025.

The content of this TTA reflects comments received from Cork City Council at these Pre-Application meetings and received as part of the minutes of those meetings.

This TTA includes 5 No. Junctions within Blackpool and includes the impacts of Traffic generated by the future Residential Development at Popes Road, known as the Popes Hill site.

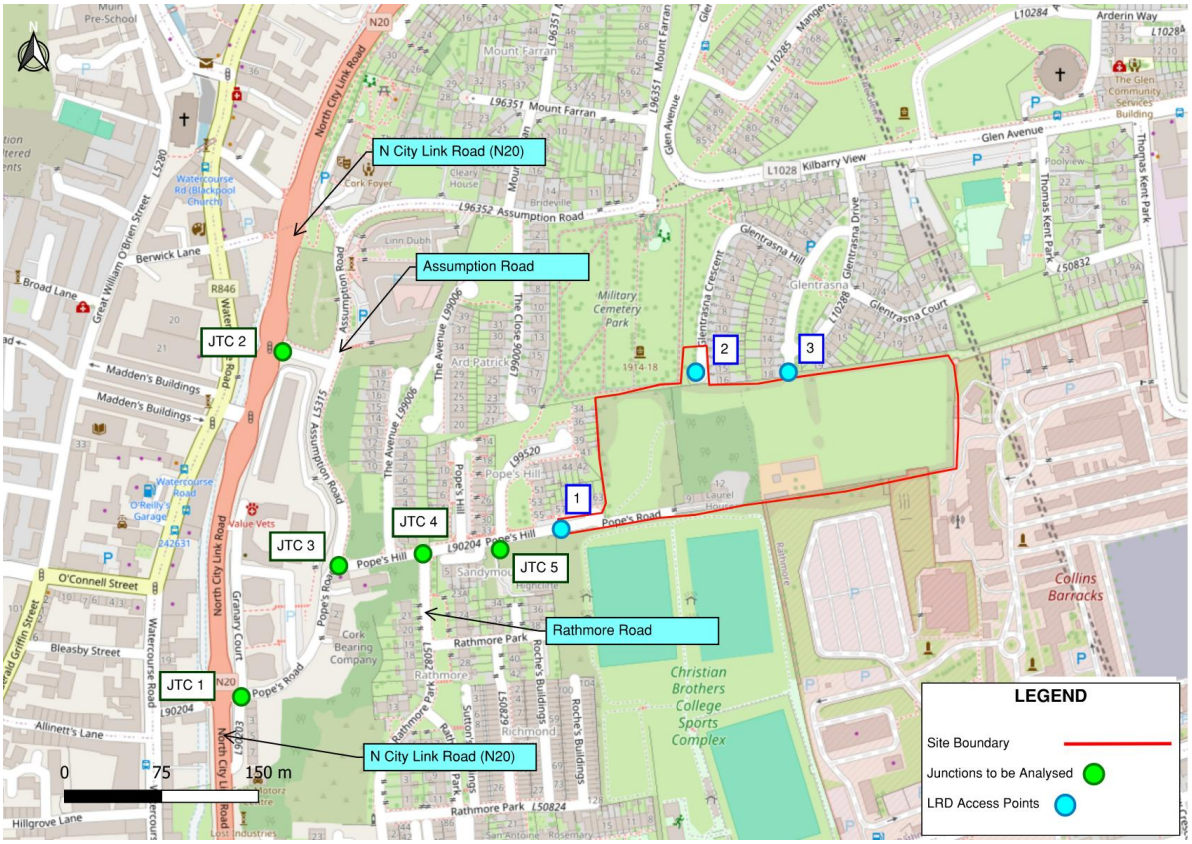


Figure 2-1: Agreed Scope of works

3 Existing Conditions

3.1 Site Location

The proposed development is located within a suburb of Cork City, approximately 1.2km north of the City Centre and is a mostly greenfield site at the Glen, Blackpool, Cork City. The proposed site is approximately 2.581 hectares in area. The Cork City Development Plan (2022–2028) includes the area of the site within the zoning objective ZO 01 for Sustainable Residential Neighbourhoods.

Referring to Figure 3-1, the site is bounded by the Glentrasna residential area and Military Cemetery to the north, Christian Brothers College (CBC) sportsgrounds and Collins Barracks carpark to the south, Popes Hill residential area to the west and Collins Barracks Military Museum to the east and southeast. The N20 North City Link Road is located to the west of the site. The overall topography of the site includes significant elevation changes, with an approximate 25-meter drop from east to west and a 8-meter change from north to south.

The site can currently be accessed via existing entrance off Popes Road to the west.

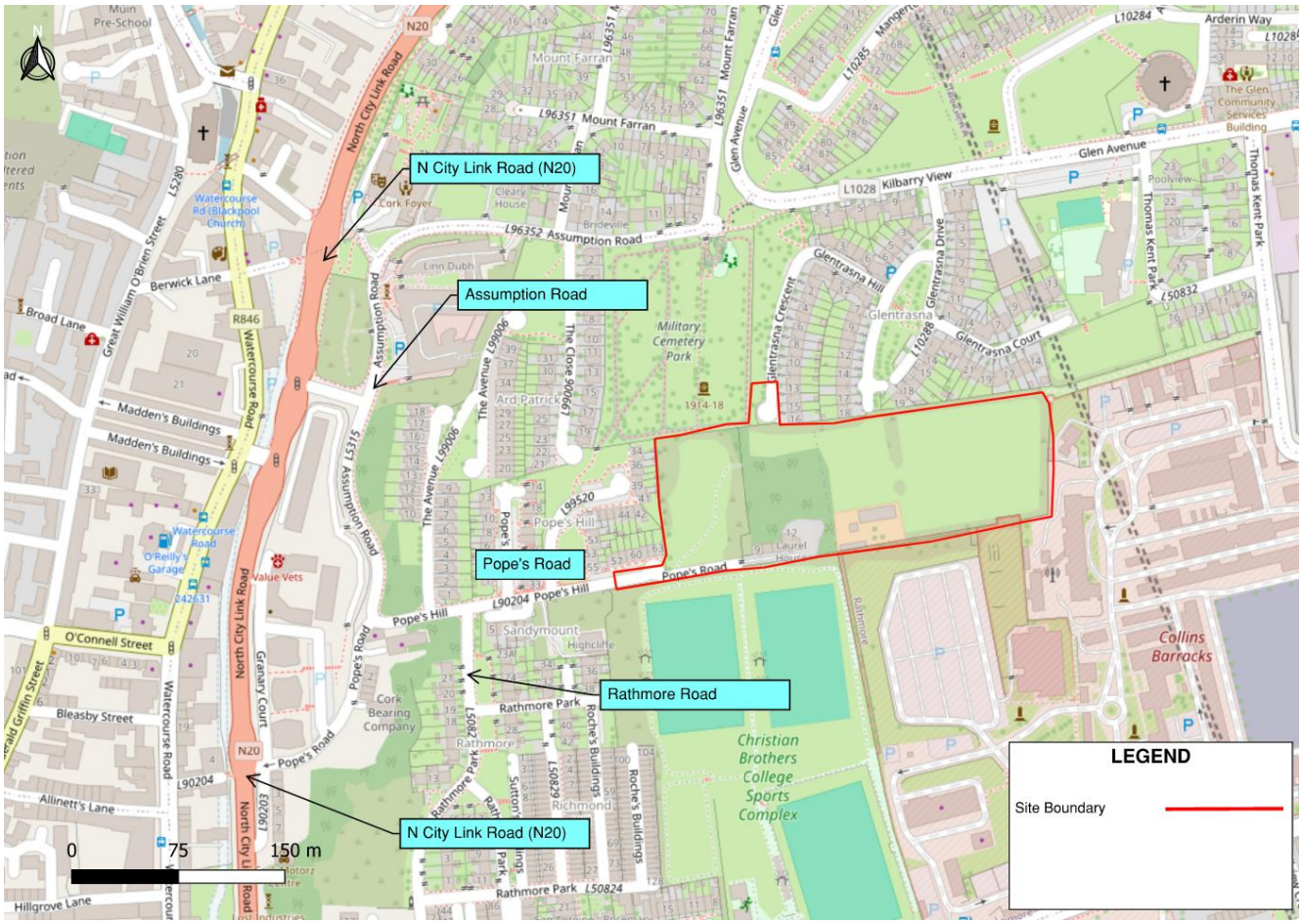


Figure 3-1: Site Location Plan

3.2 Existing Road Network

The site location in relation to the wider road network is detailed in Figure 3-2 below.

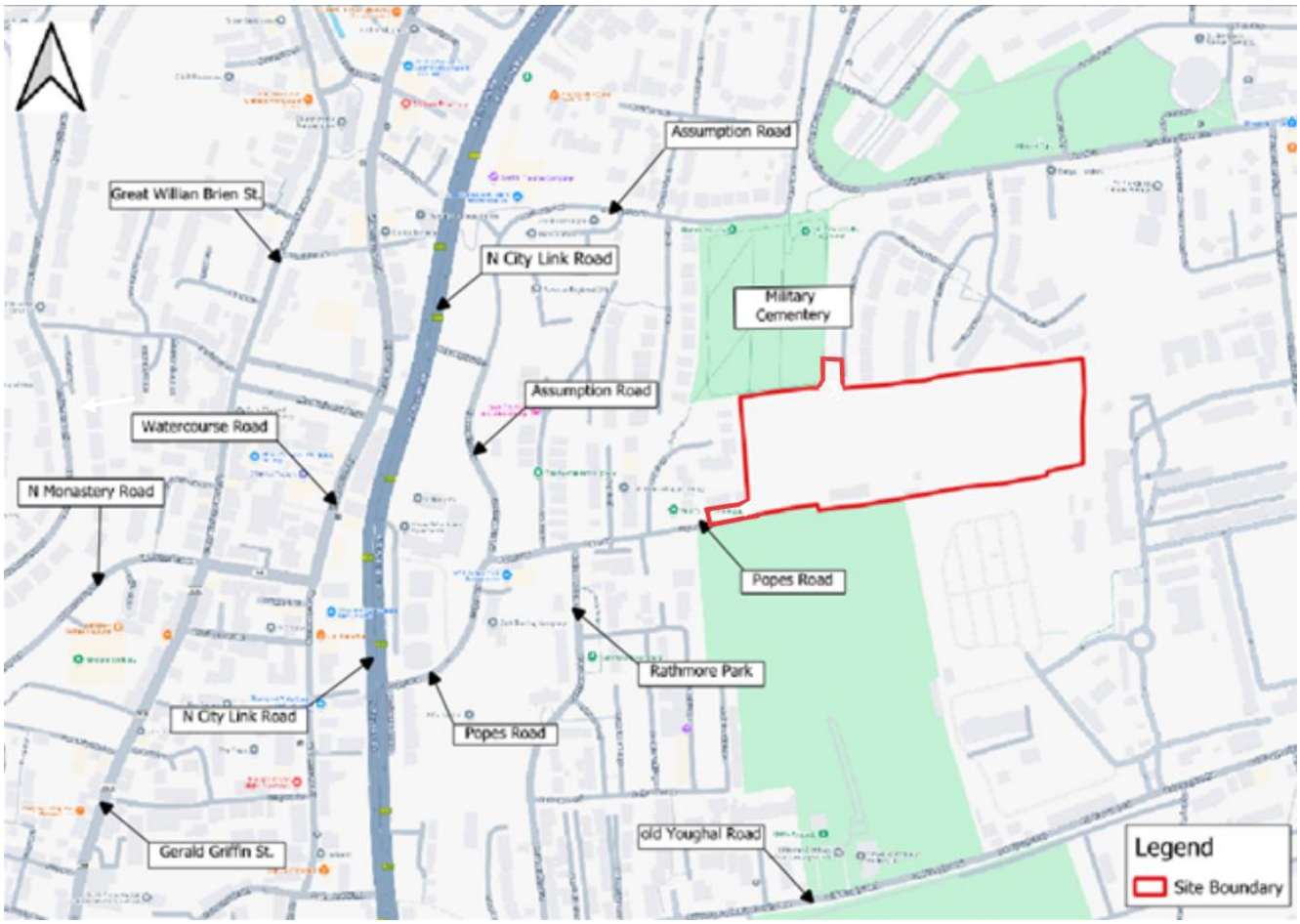


Figure 3-2: Site location and surrounding road network.

A brief description of the local road network and the major road junctions is provided below:

3.2.1 North City Link Road (N20)

The road to the west of the proposed site is the North City Link Road (N20). This road is a two-way dual carriageway road with wide footpaths on both sides. It should be noted that there is no existing designated cycle facilities provided along this road.

Please refer to Figure 3-3 and 3-4, for Google Earth Streetview images of the North City Link Road Northbound and Southbound.

Figure 3-3: North City Link Road (Northbound) © Google Earth Streetview

Figure 3-4: North City Link Road (Southbound) © Google Earth Streetview

3.2.2 North City Link Road (N20)/Popes Road Intersection

The intersection located 350m west of the proposed development onto the National/Regional Road Network is the North City Link Road (N20)/Popes Road Intersection. This intersection comprises three arms of traffic: Popes Road to the West and the North City Link Road (N20) (North & South). There is no entry onto Popes Road from the North City Link Road. Popes Road contains a footpath on the southern side of the road for pedestrian connectivity. There are no dedicated cycle facilities along this road. There is a signalised pedestrian crossing on the North City Link Road north of this intersection.

Figure 3-5: North City Link Road (N20)/ Popes Road Intersection © Google Earth

Figure 3-6: North City Link Road (N20)/ Popes Road Intersection © Google Earth Streetview - View from North City Link Road (N20) (Northbound)

Figure 3-7: North City Link Road (N20)/ Popes Road Intersection © Google Earth Streetview - View from North City Link Road (N20) (Southbound)

Figure 3-8: North City Link Road (N20)/ Popes Road Intersection © Google Earth Streetview - View from Popes Road (Westbound)

3.2.3 North City Link Road (N20)/Assumption Road Intersection

The intersection located 400m West of the proposed development onto the National/Regional Road Network and north of the Popes Road intersection is the North City Link Road (N20)/Assumption Road Intersection. This intersection comprises three arms of traffic: Assumption Road to the West and North City Link Road (N20) (North & South). It should be noted that this intersection is signalised. North City Link Road (N20) and Assumption Road have footpaths on both sides of the road for pedestrian connectivity. There are no dedicated cycle facilities along these roads. The signals include for signalised pedestrian crossings on 2 arms of the junction – Assumption Road and the North City Link Road (North).

Figure 3-9: North City Link Road (N20)/ Assumption Road Intersection © Google Earth Streetview

Figure 3-10: North City Link Road (N20)/ Assumption Road Intersection © Google Earth Streetview - View from N City Link Road (N20) (Southbound)

Figure 3-11: North City Link Road (N20)/ Assumption Road Intersection © Google Earth Streetview - View from N City Link Road (N20) (Northbound)

Figure 3-12 North City Link Road (N20)/ Assumption Road Intersection © Google Earth Streetview - View from Assumption Road (Westbound)

3.2.4 Popes Road

The road located directly southwest of the proposed development is Popes Road linking the development site to Assumption Road and the North City Link Road. This road is a two-way carriageway and cul-de-sac with a footpath on the northern side of the carriageway. There are no dedicated cycle facilities along this road. As a result of the hilly terrain, the footpath features steps with gradients of 7-8%. It should be noted that access to the proposed development is provided via Popes Road.

Figure 3-13 Popes Road (Eastbound) © Google Earth Streetview

Figure 3-14 : Popes Road (Westbound) © Google Earth Streetview

3.2.5 Assumption/Popes Road Intersection

The Assumption/Popes Road Intersection is located to the west of the proposed development. This intersection comprises three arms of traffic: Popes Road to the West and North and Assumption Road to the South. It should be noted that this intersection is a T-junction with the Popes Road (southern arm) the minor arm of the junction. A footpath is provided on the eastern side of Assumption Road and on the south side of Popes Road with dropped kerbs provided on Assumption Road to facilitate pedestrians from Popes Road accessing the footpath. There are no dedicated cycle facilities along these roads.

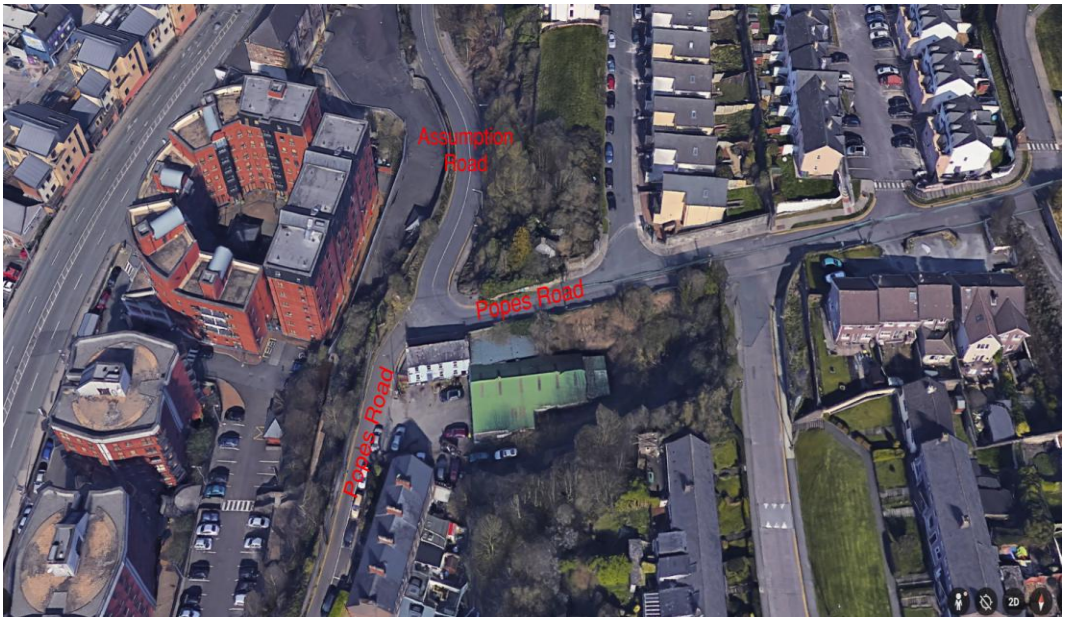


Figure 3-15 : Assumption/Popes Road Intersection © Google Earth Streetview

Figure 3-16: Assumption/Popes Road Intersection © Google Earth Streetview - View from Assumption Road (Southbound)

Figure 3-17: Assumption/Popes Road Intersection © Google Earth Streetview - View from Popes Road (Northbound)

Figure 3-18: Assumption/Popes Road Intersection © Google Earth Streetview - View from Popes Road (Westbound)

3.2.6 Rathmore Park/Popes Road Intersection

The intersection located 150m West of the proposed development is the Rathmore Park/Popes Road Intersection. This intersection comprises three arms of traffic: Rathmore Park to the South, Popes Road to the East and West. It should be noted that this intersection is a T-junction. The Rathmore Park Road has footpaths on both sides. A footpath is provided on the northern side of Popes Road and on the south side of Popes Road west of the intersection. There are no dedicated cycle facilities along these roads.

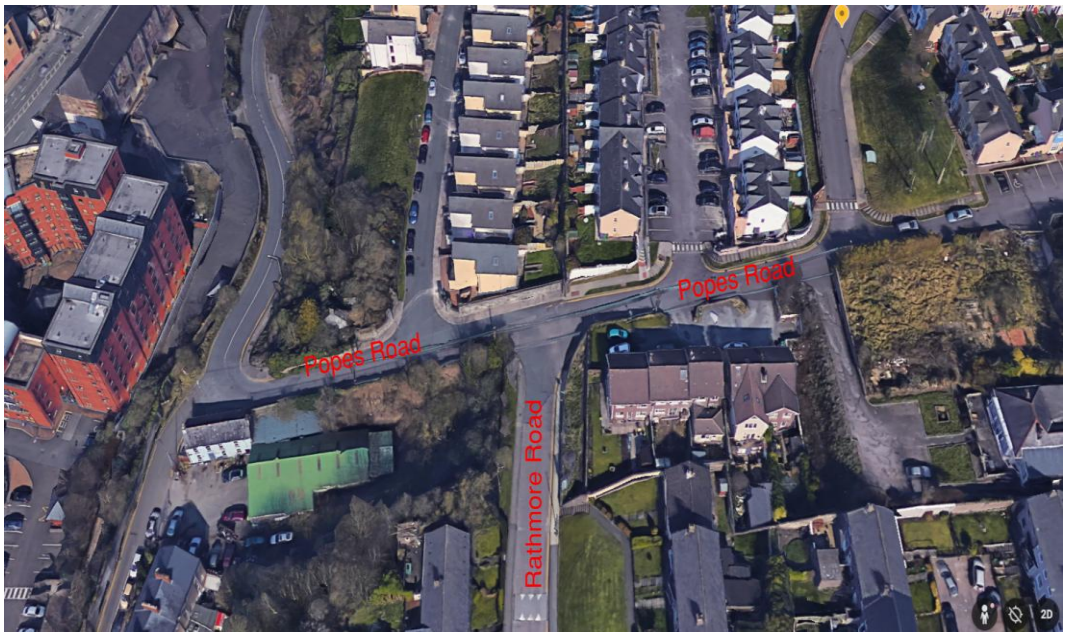


Figure 3-5: Rathmore Park/Popes Road Intersection © Google Earth Streetview

Figure 3-20: Rathmore Park/Popes Road Intersection © Google Earth Streetview - View from Rathmore Park Road (Northbound)

Figure 3-21: Rathmore Park/Popes Road Intersection © Google Earth Streetview - View from Popes Road (Westbound)

Figure 3-22: Rathmore Park /Popes Road Intersection © Google Earth Streetview - View from Popes Road (Eastbound)

3.2.7 Popes Road/Popes Hill Intersections

The intersections located 100m and 125m West of the proposed development are the Popes Road/Popes Hill Intersections. The intersections comprise three arms of traffic: Popes Road to the East/West, and the Popes Hill Roads to the North. It should be noted that Popes Road links onto the North City Link Road (N20) 400m west of the intersections.

The Popes Road/Popes Hill Intersections are T-junctions with Popes Hill being a cul-de-sac in each case. A footpath is provided on the northern side of Popes Road and eastern side of Popes Hill. Raised pedestrian crossings are provided on the Popes Hill roadways linked the stepped footpaths. There are no dedicated cycle facilities along the roadways. The eastern Popes Road/Popes Hill intersection is assessed further in Section 3.3.

Figure 3-6: Popes Road/Popes Hill Intersection © Google Earth Streetview

Figure 3-24: Popes Road/Popes Hill Intersection © Google Earth Streetview - View from Popes Road (Westbound)

Figure 3-25: Popes Road/Popes Hill Intersection © Google Earth Streetview – View from Popes Road (Eastbound)

Figure 3-26: Popes Road/Popes Hill Intersection © Google Earth Streetview – View from Popes Hill (Southbound)

3.3 Existing Traffic Flows

Classified turning count traffic survey of various junctions in the vicinity of the site were carried out by IDASO Ltd on 15th May 2025 (Thursday) and 17th May 2025 (Saturday). Traffic data from the Thursday and Saturday counts was analysed to compare peak hour flows at each of the five surveyed junctions during both the morning (AM) and evening (PM) periods. The analysis found that traffic volumes were consistently higher on Thursday across all junctions. As a result, the Thursday dataset was selected for the junction modelling and analysis.

The traffic survey locations are shown in Figure 3-27. Analysis will be carried out for the junctions listed below:

- Site 1: North City Link Road (N20)/Popes Road Intersection
- Site 2: North City Link Road (N20)/Assumption Road Intersection
- Site 3: Popes Road/Assumption Intersection
- Site 4: Popes Road/Rathmore Park Road Intersection
- Site 5: Popes Road/Popes Hill Intersection

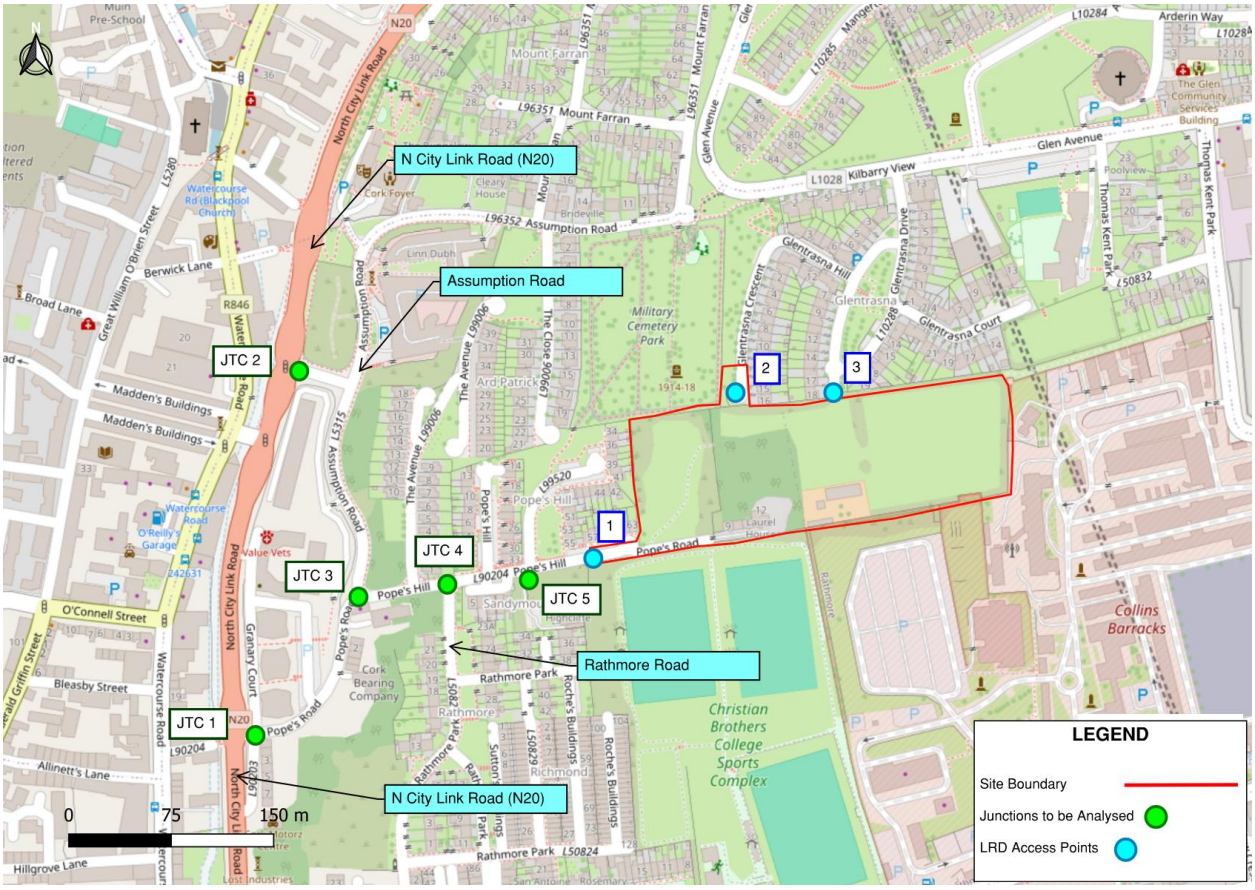


Figure 3-27: Junctions to be analysed

Site 1 traffic surveys undertaken at the **North City Link Road (N20)/Popes Road Intersection** found that the mean morning peak hour traffic flow occurred between 07:30 and 08:30 (AM). The evening peak hour traffic flow was found to be between 14:45 and 15:45 (PM). The surveyed peak hour turning PCUs are presented in Figure 3-28.

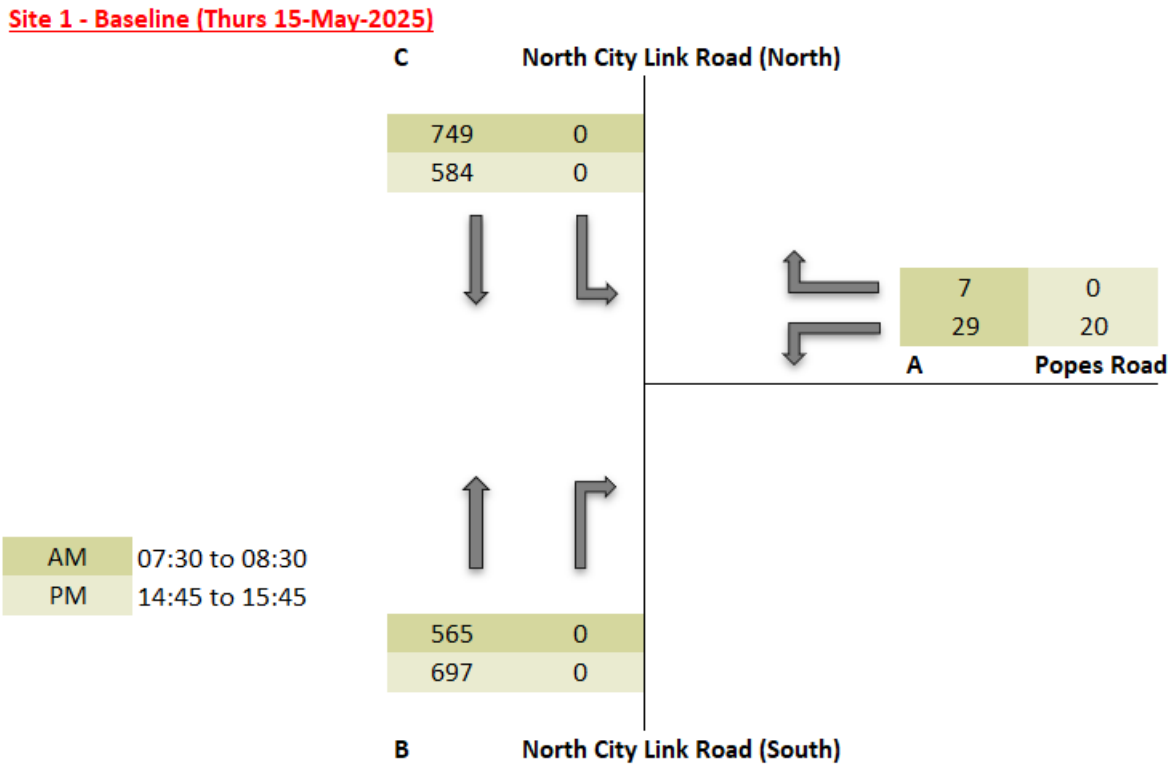


Figure 3-28: May 2025 Peak Hour Traffic Survey Results (PCUs) at Site 1

Site 2 traffic surveys undertaken at the **North City Link Road (N20)/Assumption Road Intersection** found that the mean morning peak hour traffic flow occurred between 07:45 and 08:45 (AM). The evening peak hour traffic flow was found to be between 15:30 and 16:30 (PM). The surveyed peak hour turning PCUs are presented in Figure 3-29.

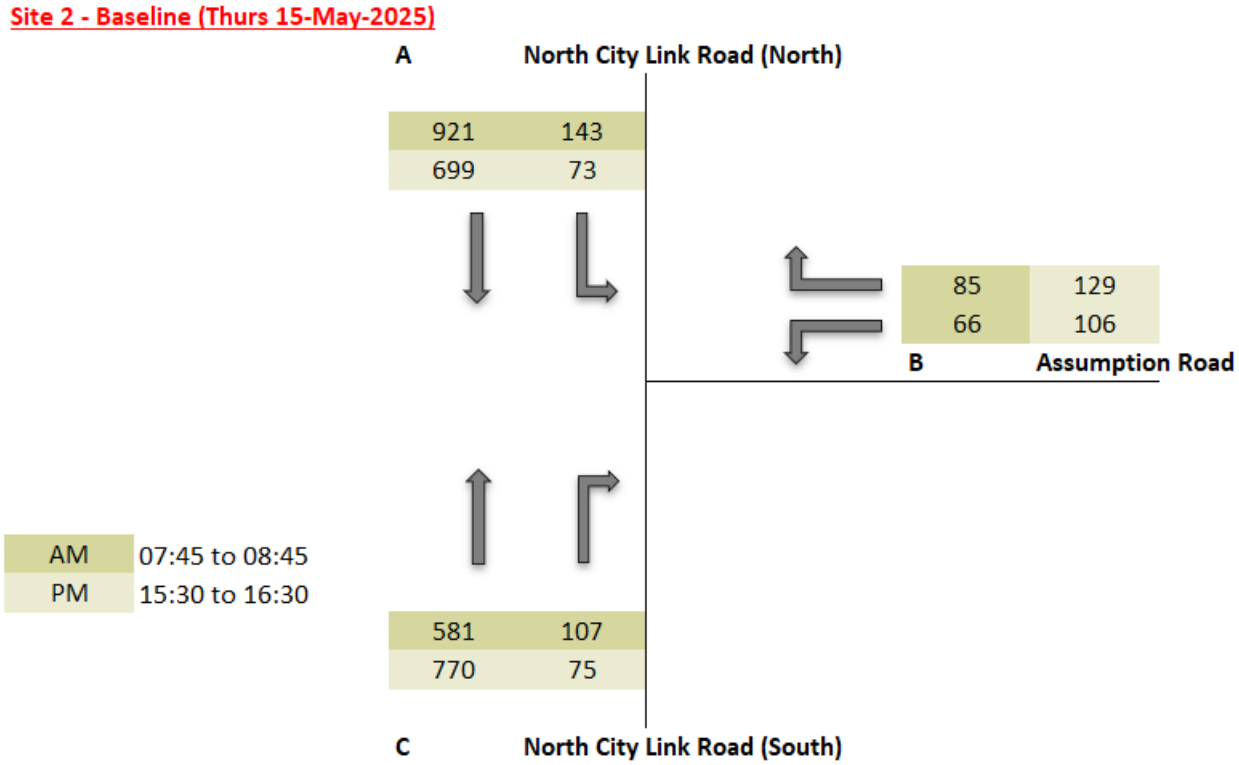


Figure 3-29: May 2025 Peak Hour Traffic Survey Results (PCUs) at Site 2

Site 3 traffic surveys undertaken at the **Popes Road/Assumption Road Intersection** found that the mean morning peak hour traffic flow occurred between 08:00 and 09:00 (AM). The evening peak hour traffic flow was found to be between 15:30 and 16:30 (PM). The surveyed peak hour turning PCUs are presented in Figure 3-30.

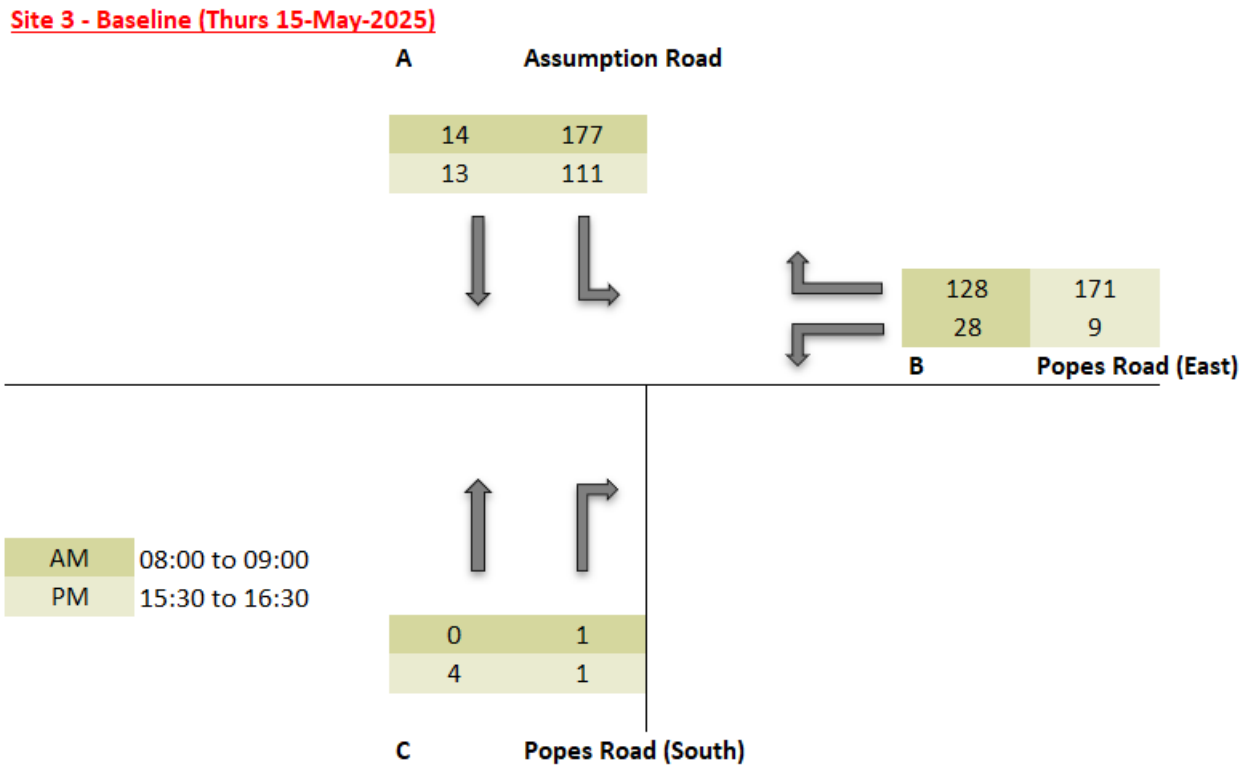


Figure 3-30: May 2025 Peak Hour Traffic Survey Results (PCUs) at Site 3

Site 4 traffic surveys undertaken at the **Popes Road/Rathmore Park Road Intersection** found that the mean morning peak hour traffic flow occurred between 07:45 and 08:45 (AM). The evening peak hour traffic flow was found to be between 15:30 and 16:30 (PM). The surveyed peak hour turning PCUs are presented in Figure 3-31.

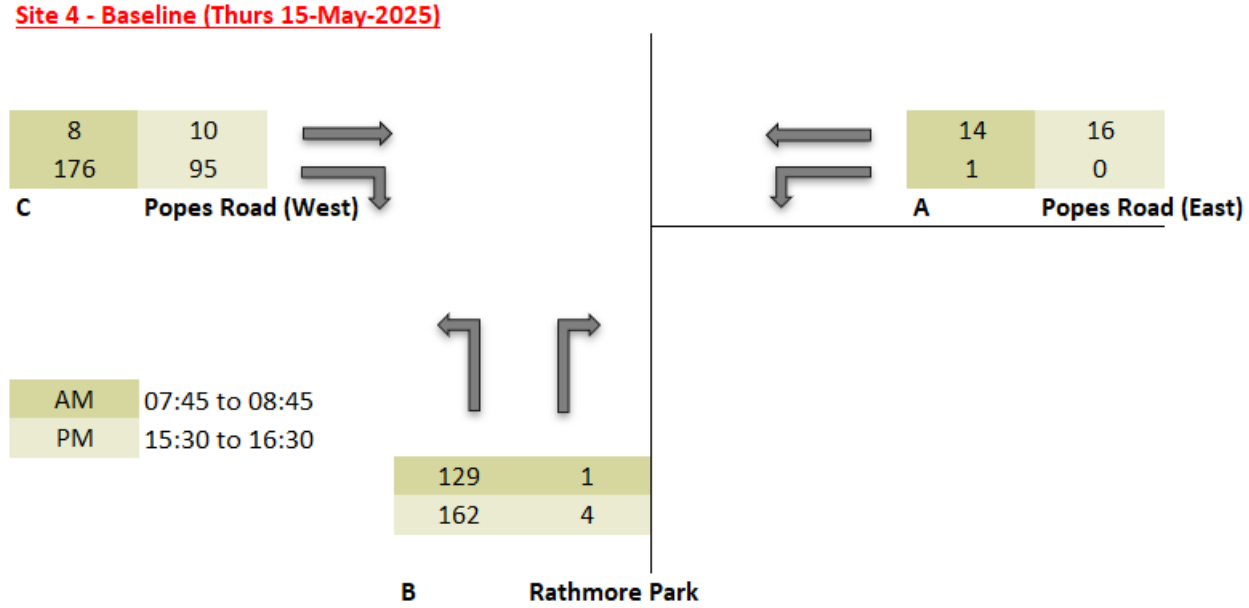


Figure 3-31: May 2025 Peak Hour Traffic Survey Results (PCUs) at Site 4

Site 5 traffic surveys undertaken at the **Popes Road/Popes Hill Intersection** found that the mean morning peak hour traffic flow occurred between 08:15 and 09:15 (AM). The evening peak hour traffic flow was found to be between 14:30 and 15:30 (PM). The surveyed peak hour turning PCUs are presented in Figure 3-32.

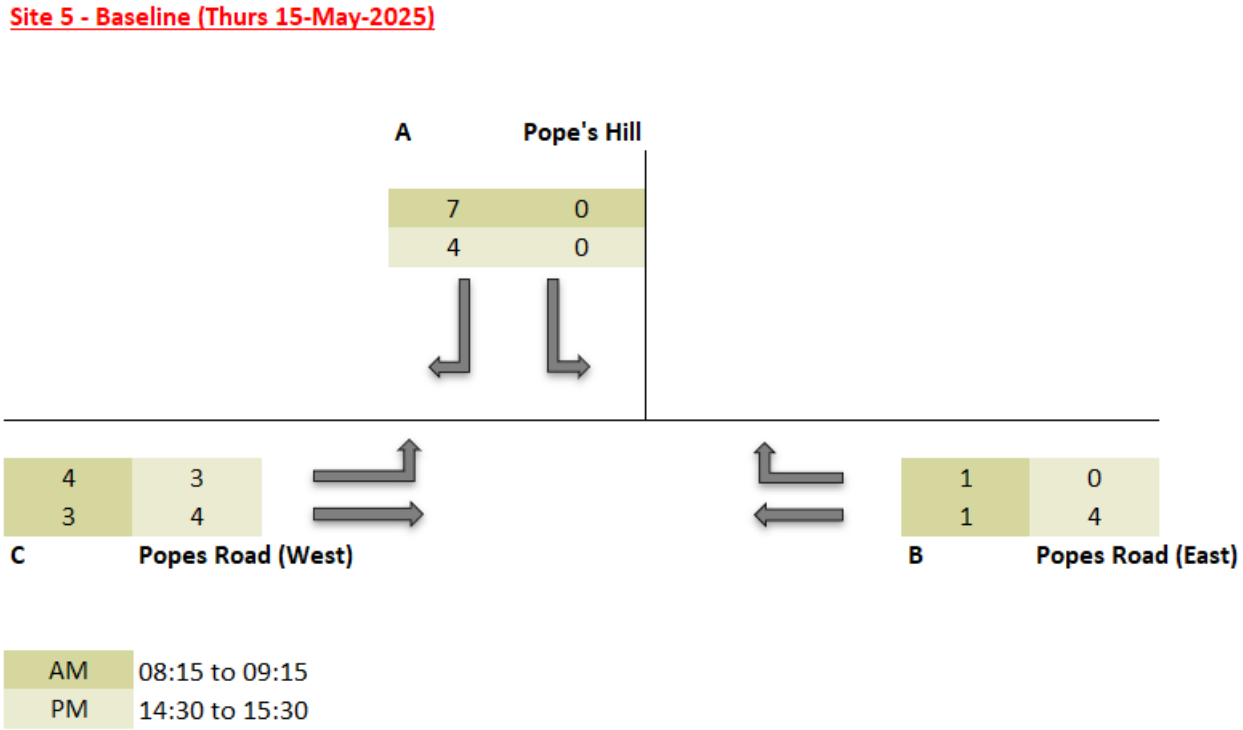


Figure 3-32: May 2025 Peak Hour Traffic Survey Results (PCUs) at Site 5

3.4 Future Transport Proposals

The proposed development site is covered by the Cork City Development Plan where the primary objectives of Transport and Mobility is to promote the use of suburban rail, light rail, bus, cycling, and walking within city limits.

3.4.1 Suburban Rail

The existing rail network provides direct and reliable access to Cork City Centre from a significant portion of the eastern and northern Metropolitan Cork catchment area. Kent station is a 1.9km walk, 2.0km cycle and 3.0km drive from the proposed development. A station is also proposed in the Blackpool/Kilbarry area which may ultimately be a closer option than Kent Station. Refer to Figure 3-33 for the indicative suburban rail planned for Cork City.

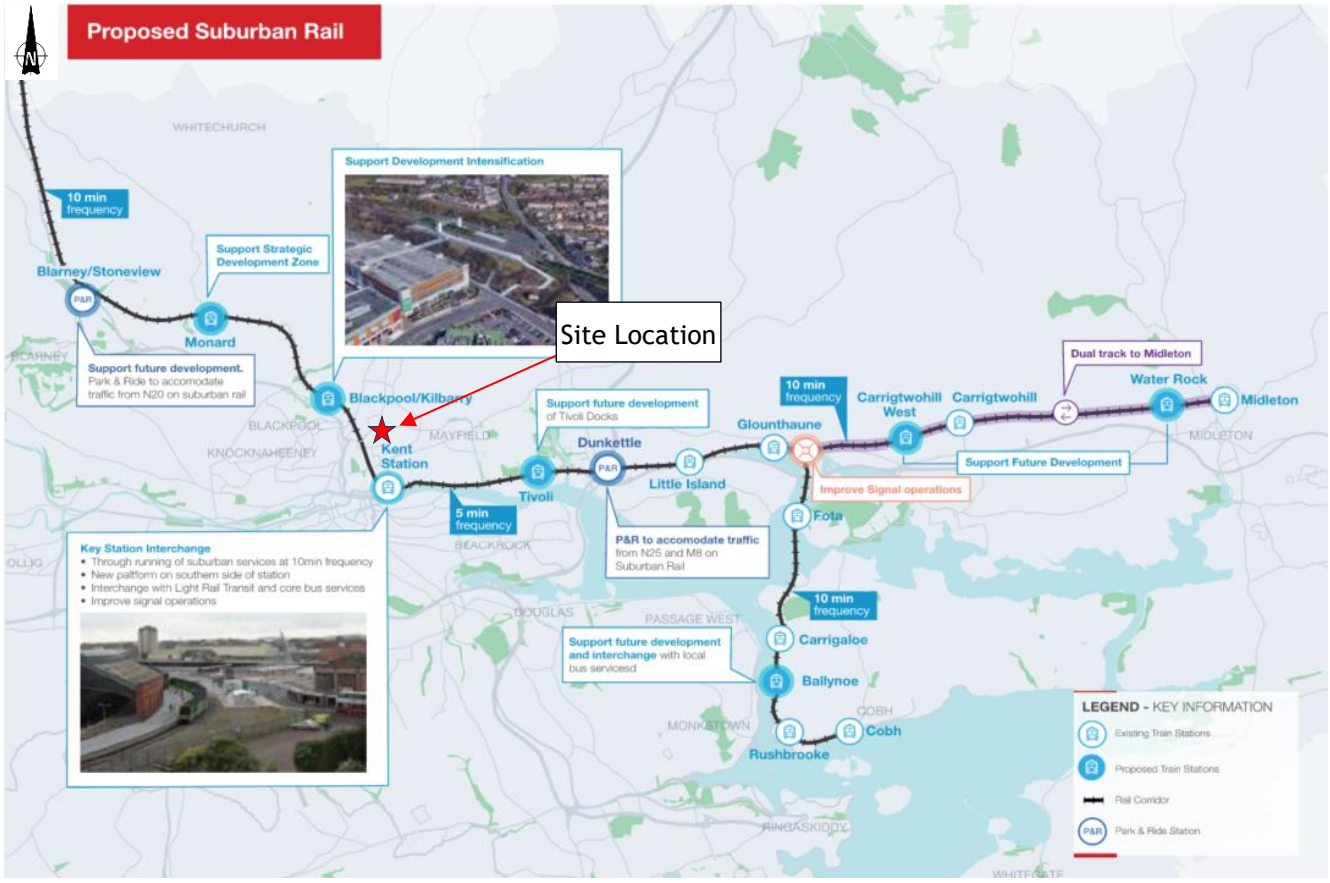


Figure 3-33: Indicative Suburban Rail

3.4.2 Light Rail

Establishing an east-west mass transit, rapid transport corridor has long been a key objective for the Cork Metropolitan Area. This commitment is reinforced by the National Planning Framework (NPF) 2040 and the National Development Plan 2018-2027, alongside a recent surge in planning activities and interest in strategic sites along the corridor, which has added momentum to assess the feasibility of such a route. The topography, existing trip generators, and proposed development areas within Cork City and its suburbs all point to the need for a linear route extending from Ballincollig in the west to Mahon in the east, passing through Cork City Centre.

The proposed light rail alignment extends from Ballincollig to Mahon via the City Centre. This route runs less than 2km from the proposed development. Refer to Figure 3-34 for an illustration of the indicative LRT route.

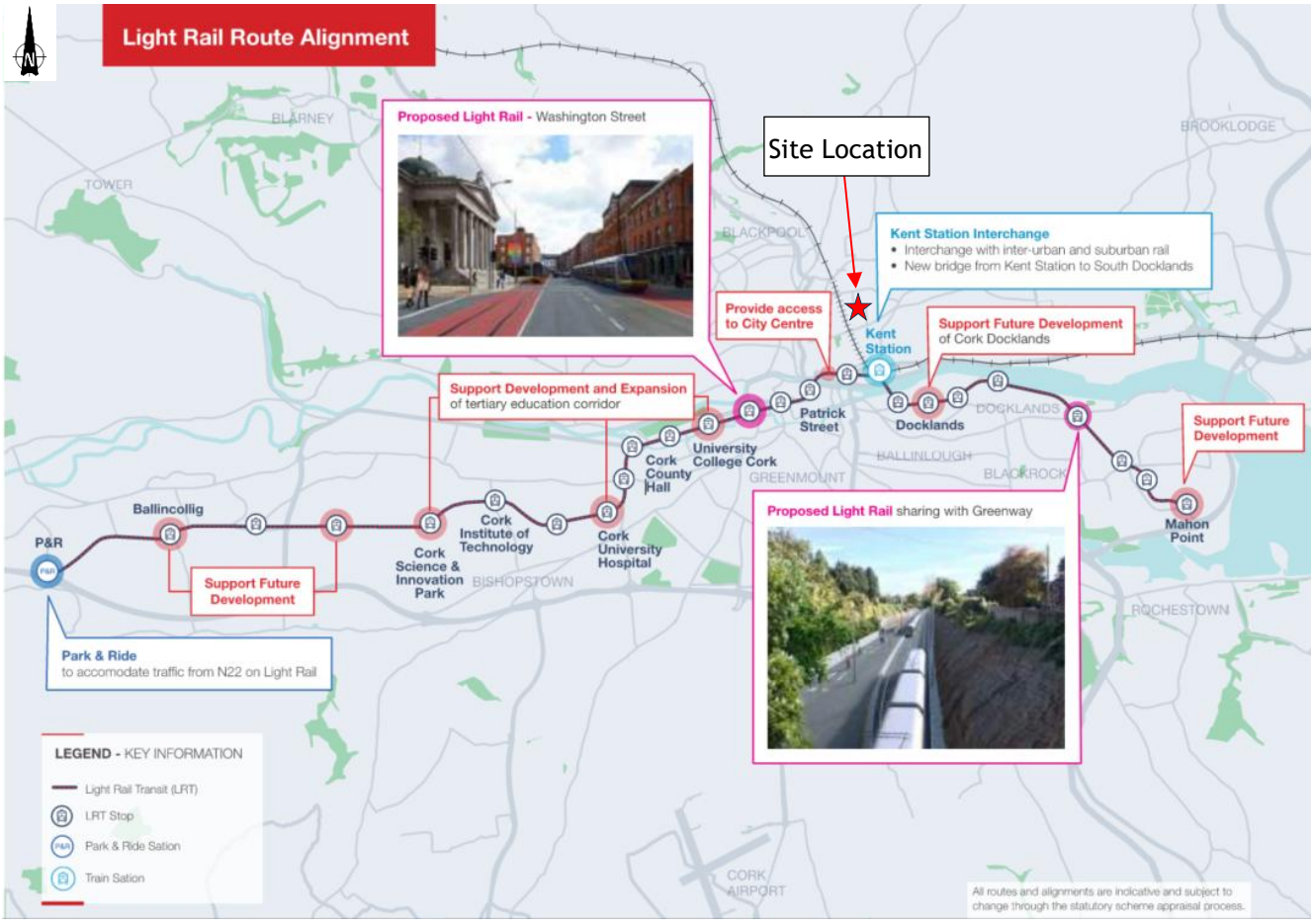


Figure 3-34: Indicative LRT route

3.4.3 BusConnects Network

Improving the bus network aligns with the National Development Plan 2018-2027, which envisions a greatly expanded BusConnects service for Cork by 2027.

The National Transport Authority (NTA) launched its latest design for the Cork Metropolitan Bus Network in June 2022. The new network, part of BusConnects Cork, is intended to transform the public transport network across the Cork Metropolitan Area. The network will involve the creation of new bus routes and improved bus frequencies to help transform the public transport network to meet anticipated growth and future demand in the region. BusConnects will provide an overall increase of 53% in bus services in Cork.

Several routes are proposed running along the nearby North City Link Road and Watercourse Road. These include:

- Route 5: Cork University Hospital (Loop)
- Route 10: CUH - Blackpool Shopping Centre
- Route 11: Mahon Point – Farranree
- Route 16: Cloghroe – Kent
- Route 21: Dublin Hill/ Ballyvolane (Loop)
- Route 52: Whitechurch - City Centre
- Route 53: Blarney - City Centre

Refer to Figure 3-35 for an extract from the BusConnects Cork City Centre network map.

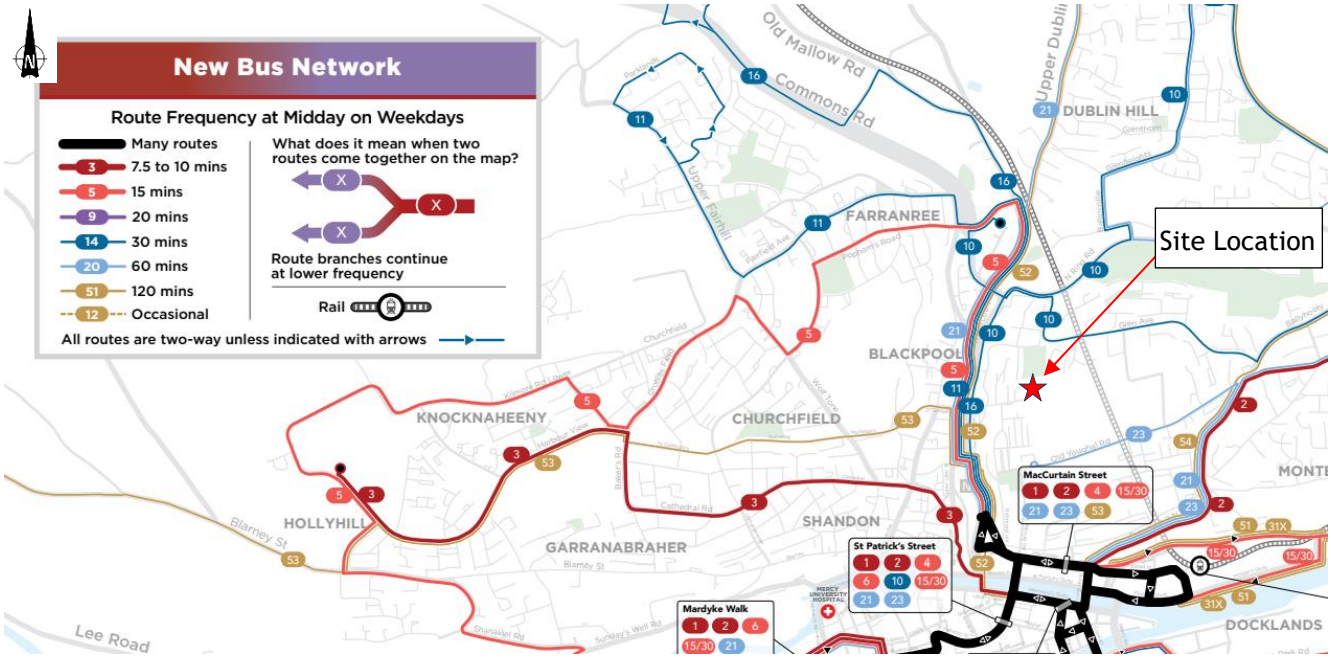


Figure 3-35: Extract from BusConnects Cork City Centre Network Map

3.4.4 Cycling and Walking

Cork's city centre is compact and easily walkable. However, many areas outside the city centre pose challenges for pedestrians due to difficult topography, and some suburban neighbourhoods and parts of the urban towns have developed with limited pedestrian and cycling infrastructure.

The Cork City Development Plan 2022-2028 aims to promote walking and cycling for work, education, and leisure, particularly for short trips of 2-3km. Given that the development is less than 2.0km from Cork City Centre, it supports this objective.

The following list highlights projects in the Planning/Design Phase located in the surrounding area of the proposed development:

- Glen & Mayfield Walking & Cycling Scheme
- Ballyvolane Strategic Transport Corridor

The Cork Cycle Network Plan (CCNP) 2017 outlines a comprehensive strategy to develop an integrated, safe, and efficient cycling network across Cork City and its surrounding areas. The plan aims to enhance cycling infrastructure, promote cycling as a sustainable mode of transportation, and connect key destinations, including residential areas, workplaces, schools, and leisure spots. It proposes the creation of dedicated cycle lanes, improved signage, and better connectivity between existing routes. The plan also emphasizes the importance of linking cycling infrastructure with public transport services to encourage multimodal travel, reduce traffic congestion, and support Cork's broader goals for sustainability and urban mobility.

The Primary Route, Route Code: CCNU12 in the CCNP 2017 is a 3.3km route running along the North City Link Road providing a connection directly to Cork City Centre from the north side of the city and is designed to offer a safe and direct cycling path that connects residential neighbourhoods, commercial districts, and schools to the city centre.

This primary route along with several accompanying secondary routes of the cycle network aim to improve connectivity between key areas in Cork. The plan includes the construction of dedicated cycle lanes, enhancements to road safety, and integration with other transport modes to encourage cycling as a practical option for short and medium-distance travel in this area. The overriding goal is to reduce car dependency, ease traffic congestion, and support Cork's sustainability objectives. Refer to Figure 3-36 and Appendix D for the CMATS Cycle Network Map.

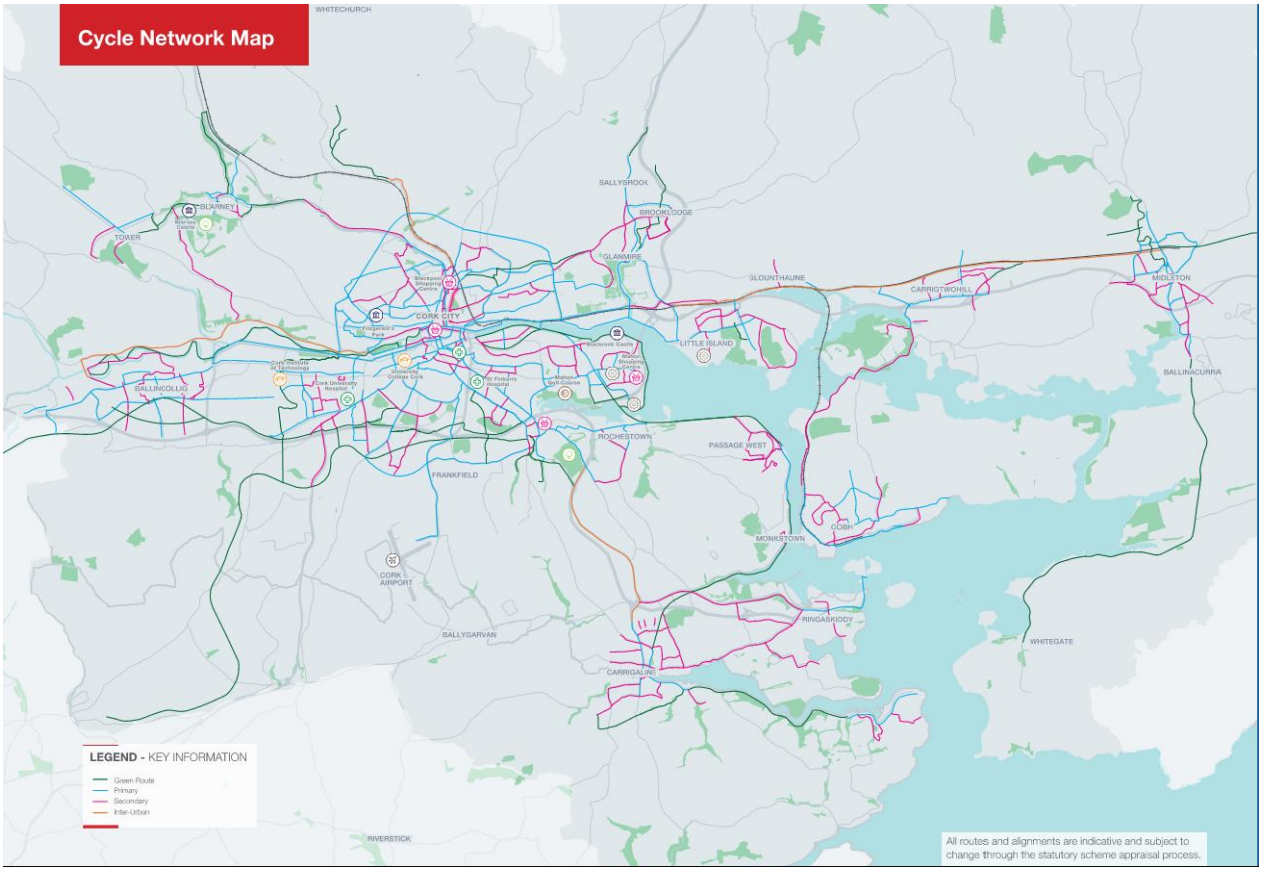


Figure 3-36 CMATS Cycle Network Map

3.4.5 Roads

3.4.5.1 Macro Scale

The Cork City Development Plan 2022-2028 highlights the need for several key road improvements to facilitate the movement of goods and people within and around the city, ensuring easy access, particularly for new development areas. The plan aims to enhance provisions for public transportation, cyclists, and pedestrians in all road projects where appropriate. Planned road projects include the northern and southern distributor roads. Additionally, Cork City will serve as a terminus for the M28 project, improving access to Ringaskiddy, and the N/M20 project, enhancing connectivity between Cork City and Limerick.

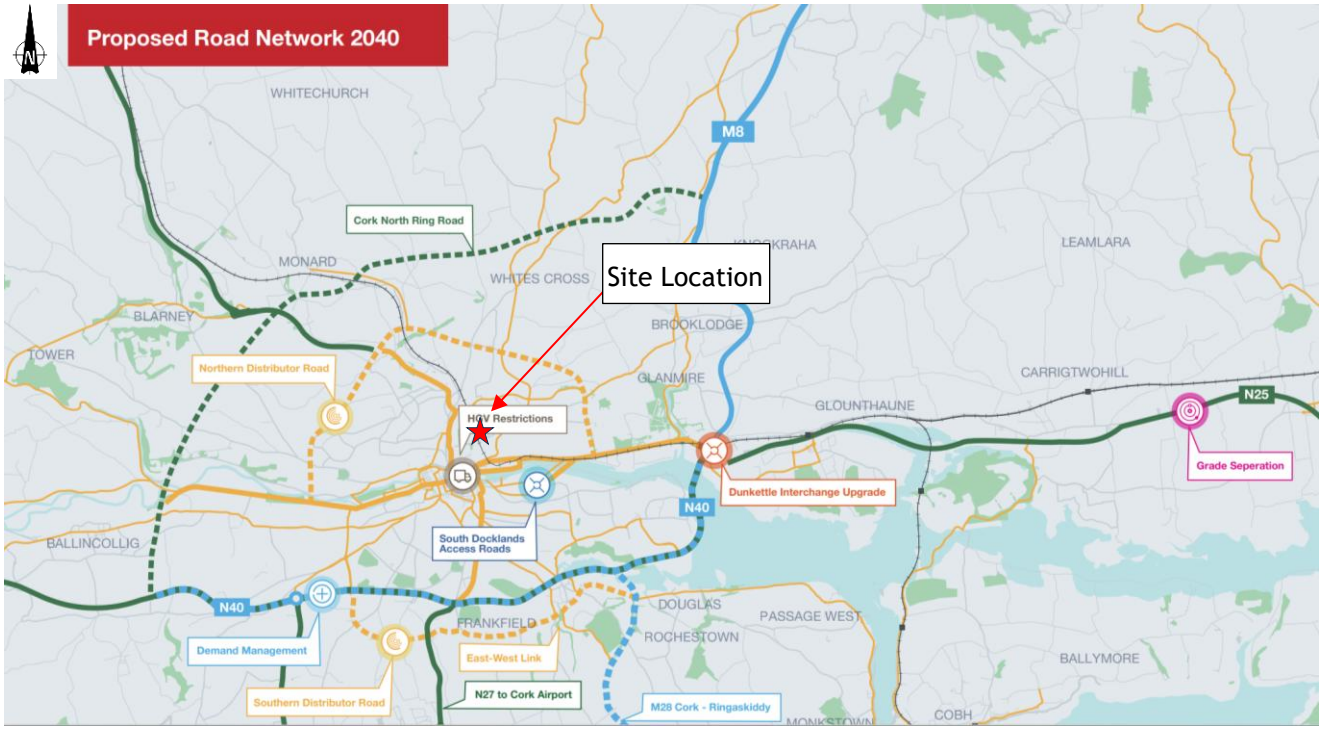


Figure 3-37: Proposed Road Network 2040

3.4.5.2 Micro Scale

The Ballyvolane Strategic Transport Corridor mentioned in Section 3.4.4 is within 2.5km of the proposed development. This Strategic Transport project involves improving and upgrading Ballyhooly Road from North Ring Road junction to Fox & Hounds junction and onwards to Mervue Lawn and also along Ballyvolane Road from North Ring Road to Banduff Road. Some objectives of the project include providing enhanced facilities for all road users, particularly those using public transport, walking, and cycling, and improved connectivity from Ballyvolane to the city centre and the wider city.

Figure 3-38: Proposed Ballyvolane Strategic Transport Corridor

4 Proposed Development

The proposed works are outlined in a series of architectural drawings prepared by Reddy Architecture + Urbanism and engineering drawings prepared by PUNCH Consulting Engineers and supplied to accompany this report.

The proposed development will consist of a Large-Scale Residential Development (LRD) on a site at Pope's Hill, Pope's Road, Blackpool, Cork City which will include the demolition of a terrace of 4no. existing dwellings, 3no. of which are derelict, and ancillary sheds and their replacement with 1no. single-storey 3-bed detached bungalow accessed via a modified private driveway; and the construction of 103no. dwellings to include 50no. townhouses and 53no. duplex apartments. A total of 104no. dwellings are proposed, accessed via Pope's Road. The proposed development will also include a creche with rear garden and front set down area; 104no. car parking spaces and 128no. cycle spaces; internal roads and pathways; hard and soft landscaping, including boundary treatments; retaining walls; 2no. pedestrian connections with Glentrasna Park to the north; and all associated site development, landscaping and boundary treatment, and drainage works, including SuDS.

Access to the proposed development will be in the form of one vehicular, cyclist and pedestrian entrance and two separate pedestrian entrances. The main entrance is along Popes Road with a vehicular and cyclist entrance and dedicated pedestrian access route that extends to the southeast boundary of the site. There will be also 2 pedestrian access routes connecting to the Glentrasna Park residential estate on the north boundary of the site.

The proposed site layout is detailed in the drawing set prepared by Reddy Architecture + Urbanism accompanying this report, with an extract shown in Figure 4-1.

Figure 4-1: Proposed Site Layout

4.1 Proposed Parking

4.1.1 Car Parking

Since the proposed Residential Development is located in Blackpool, it is considered to be governed by Car Parking Standards for Zone 3 in accordance with the Cork City Development Plan 2022-2028. The maximum car parking standards could be found in Table 11.13 of the development plan. The applicable car parking standards are noted in Table 4-1 below:

Table 4-1: Cork City Council Development Plan Car Parking Requirement for New Developments

Unit Type	No units/Gross Floor Area (m^2)	Max Parking Spaces Ratio	Max Parking Spaces Allowed	Total Provided
Residential (1-2 Bedroom)	45 No.	1.25 per dwelling	56	42
Residential (3 - 3+ Bedroom Unit)	59 No.	2.25 per dwelling	132	62
Creche	171.3 m^2	1 space per 3 staff + 1 space per 6 children (38 Children and 9 Staff)*	9	3
Total			**197**	**107**

***Density of children in Creches and Staff-to-Child Ratios in accordance with The Childcare Act 1991 (Early Years Services) Regulations 2016.**

It is proposed to provide 104 No. car parking spaces on the development site, which is less than the maximum permitted (197) under the Cork City Development Plan 2022-2028. This has been agreed as a commitment to assisting in Cork's modal shift targets. 5 No. disabled car parking spaces have been provided throughout the proposed development; this is in line with the 5% required in accordance with the Cork City Development Plan 2022-2028.

Regarding Electric Vehicle (EV) parking, the Cork City Development Plan 2022-2028 states that multi-unit residential developments shall provide a minimum of one EV equipped parking space per five car parking spaces. The proposed development provides 22 No. EV parking spaces which is in line with the required 20% minimum required by the Cork City Development Plan 2022-2028. It should be noted that all dwellings shall be capable of accommodating future charging points as required within the curtilage.

The 'standard' parking spaces will be demarcated with white lines. All car parking spaces will be a minimum of 2.5m by 4.8m, with disabled spaces providing an additional width and length of 1.2m. The parking spaces at the creche will meet the requirements for parent and child bays and will be 3.0m by 4.9m. The majority of the parking spaces are in the public area with private driveways to Blocks D & H.

When coupled with other proposals to enhance sustainable forms of development, such as promotion of cycling as an alternative transport mode, the car parking of the proposed development will deliver significant sustainability benefits by reducing existing levels of reliance on private car usage whilst encouraging the usage of more sustainable modes of transport, especially cycling and the bus services to and from school/work.

4.1.2 Cycle Parking

Cycle parking serving the proposed strategic housing development is provided in accordance with the Cork City Development Plan 2022-2028 'Table 11.14'. The applicable cycle parking standards are noted in below Table 4-2:

Table 4-2: Cork City Council Development Plan Cycle Parking Requirement for New Developments

Unit Type	Minimum Requirement	No units/Gross Floor Area (m^2)	Minimum Required Spaces
Standard Apartments	0.50 Per Unit in Suburbs	104	52
Creche	1 Per 25 Children	38 Children and 9 Staff*	5
Total			**57**

***Density of children in Creches and Staff-to-Child Ratios in accordance with The Childcare Act 1991 (Early Years Services) Regulations 2016.**

It is proposed to provide 128 No. secure cycle parking spaces across the proposed development site. The number of cycle parking spaces proposed is greater than the minimum requirement required by the Cork City Council Development Plan, and as such provide improved encouragement for bicycle use.

5 Person Trip Generation

5.1 Generated Vehicle Trips

The purpose of this section is to determine the overall number of trips that will be generated by the proposed development. The proposed development includes 104 No. residential dwelling units and a 217.4m^2 creche.

In order to estimate the likely volumes of traffic that will be generated by the proposed development, trip rates recommended by TRICS (Trip Rate Information Computer System) were extracted from the database and applied pro-rata to the number of residential units and gross floor area of the creche within the development. Full details of the TRICS analysis are provided in Appendix B.

Table 5-1: Estimated AM and PM peak hour traffic (PCUs) generated using TRICS for the proposed development

Land Use	Calculation Factor		Trip rate				Additional Number of Trips			
			AM Peak		PM Peak		AM Peak		PM Peak	
	No. of Units	GFA (m^2)	AM Arrive	AM Depart	PM Arrive	PM Depart	AM Arrive	AM Depart	PM Arrive	PM Depart
Residential Units	104		0.128	0.36	0.324	0.151	13	38	34	16
Creche		217.4	4.098	4.204	4.417	4.737	7	7	8	8
Total							**20**	**45**	**42**	**24**

6 Trip Assignment and Distribution

The catchment area will be split into four sites, these are:

- Site 1: North City Link Road (N20)/Popes Road Intersection
- Site 2: North City Link Road (N20)/Assumption Road Intersection
- Site 3: Popes Road/Assumption Intersection
- Site 4: Popes Road/Rathmore Park Road Intersection
- Site 5: Popes Road/Popes Hill Intersection

There will be a predicted increase in traffic generated by the proposed development. It is assumed all additional development traffic will be apportioned in accordance with the existing traffic distribution at each junction. Traffic entering and departing the development at both the AM and PM peaks will be distributed as described below:

- Site 1: North City Link Road (N20)/Popes Road Intersection

  Vehicles traveling to the proposed development cannot use Popes Road from Junction Site 1 due to the one-way system in place at the western end. To maintain current traffic patterns at Junction Site 1, 11.2% of traffic travelling from the proposed development will use the Popes Road exit on to the North City Link Road while 88.8% will use the Assumption Road exit at Junction Site 2.

- Site 2: North City Link Road (N20)/Assumption Road Intersection

  Due to the one-way system in place at the western end of Junction Site 1, all traffic travelling to the proposed development will use Junction Site 2. To maintain current traffic patterns at Junction Site 2, 88.8% of traffic travelling from the proposed development will use Assumption Road to exit on to the North City Link Road at Junction Site 2.

- Site 3: Popes Road/Assumption Intersection

  All traffic travelling to the proposed development will use Assumption Road before heading eastwards along Popes Road. Once again, to maintain current traffic patterns at Junction Site 3, 11.2% of traffic travelling from the proposed development will use the Popes Road exit on to the North City Link Road while 88.8% will use the Assumption Road exit at Junction Site 2.

- Site 4: Popes Road/Rathmore Park Road Intersection

  All traffic travelling to/from the proposed development will remain on Popes Road through Junction Site 4.

- Site 5: Popes Road/Popes Hill Intersection

  All traffic travelling to/from the proposed development will remain on Popes Road through Junction Site 5.

Figure 6-1 to 6-5 illustrates the existing baseline scenario with the development traffic added through the surrounding road network.

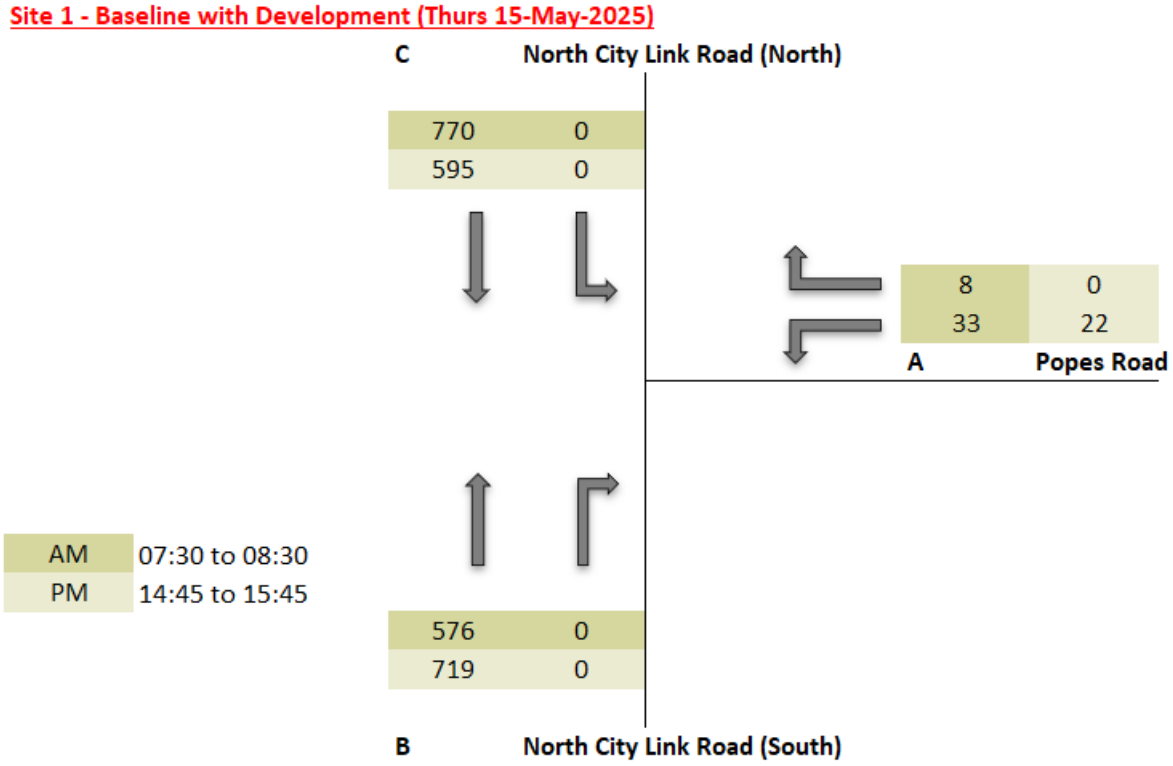


Figure 6-1: Distribution of Development AM & PM peak hour traffic at Site 1

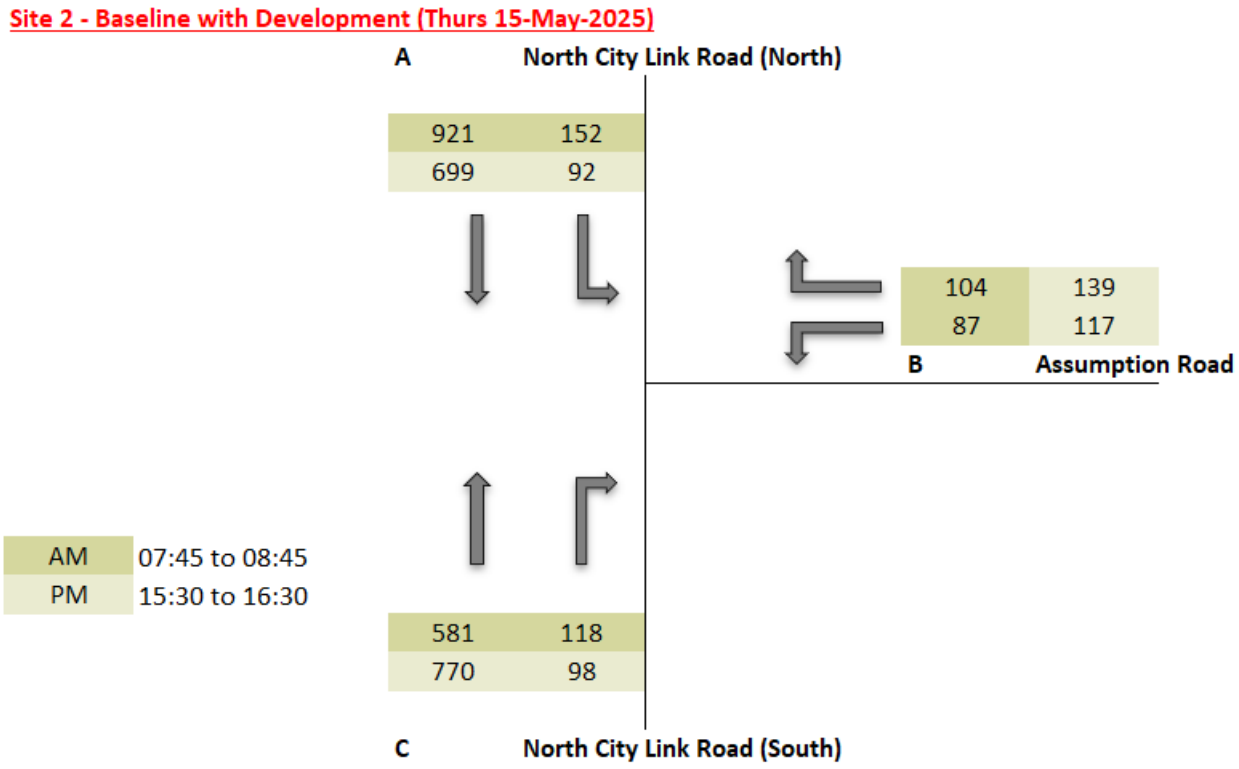


Figure 6-2: Distribution of Development AM & PM peak hour traffic at Site 2

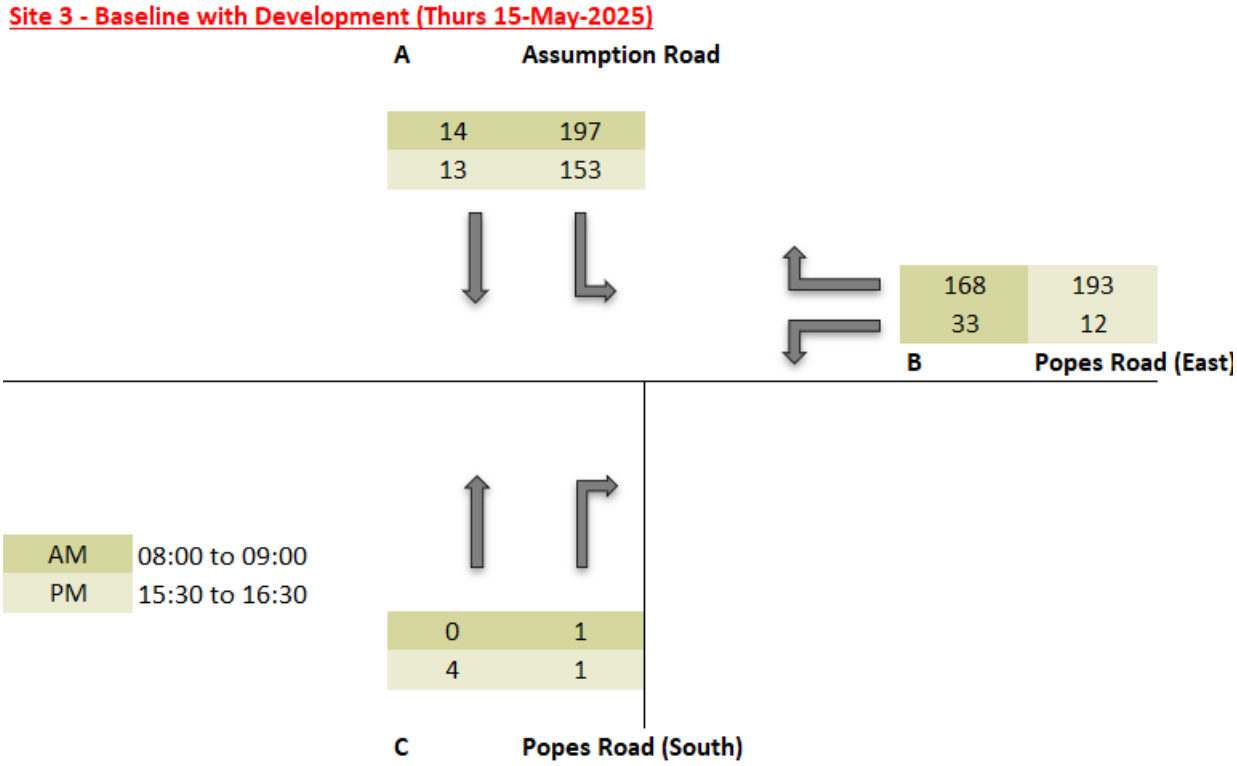


Figure 6-3: Distribution of Development AM & PM peak hour traffic at Site 3

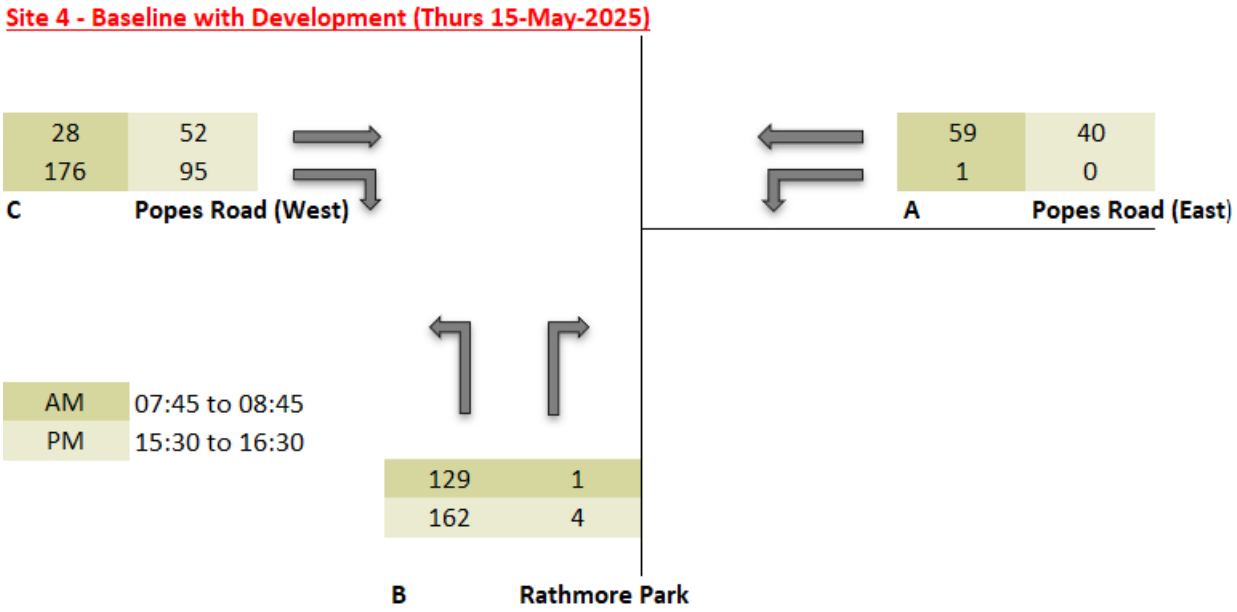
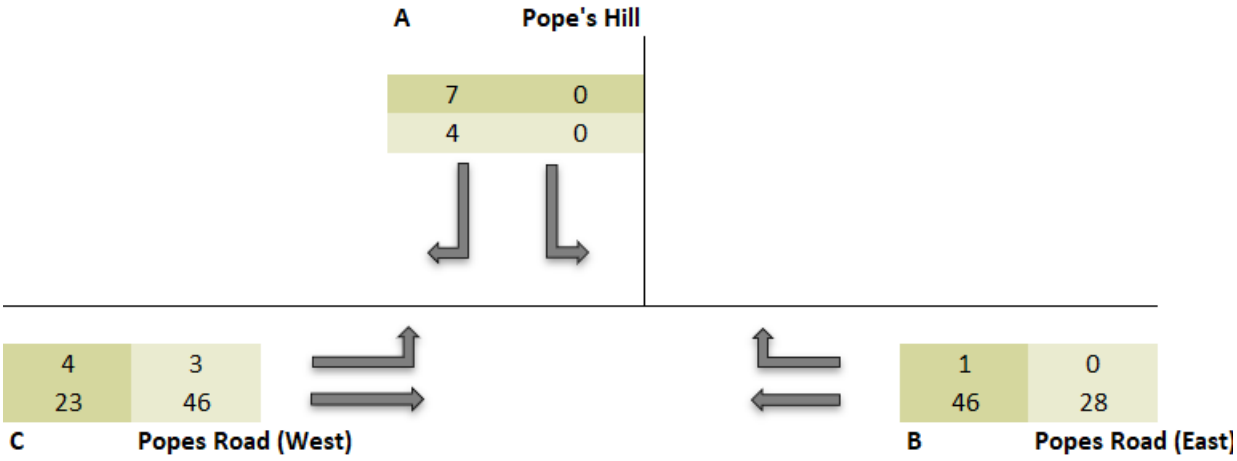


Figure 6-4: Distribution of Development AM & PM peak hour traffic at Site 4

Site 5 - Baseline with Development (Thurs 15-May-2025)



AM	08:15 to 09:15
PM	14:30 to 15:30

Figure 6-5: Distribution of Development AM & PM peak hour traffic at Site 5

7 Traffic Forecasting

7.1 Future Baseline Traffic Growth

In the absence of any specific local traffic growth information, it was assumed that baseline traffic will continue to grow at the levels recommended by the TII in the Project Appraisal Guidelines (PAG) – Unit 5.3 - Travel Demand Projections publication by the TII (Oct 2021). The Project Appraisal Guidelines describe three levels of transport model functionality. The static model, which reflects traffic volumes on the basis of link flows, is best suited to the proposed development. Such models do not attempt any route assignment and hence are applicable for networks where no change in traffic flows will result from a proposed scheme. We have used figures from Table 6.1 'Link-Based Growth Rates' for the Metropolitan area of Cork City.

The year of opening of the scheme was assumed to be 2028. A 15-year analysis period for the scheme would give a design year of 2043. The central growth factors from the Project Appraisal Guidelines – Unit 5.3 publication are appropriate and are detailed below:

- TII Link Based Growth Rates: Annual Growth Factor 2016-2030 = 1.0169 (LVs) and 1.0294 (HVs).
- TII Link Based Growth Rates: Annual Growth Factor 2030-2040 = 1.0090 (LVs) and 1.0149 (HVs).
- TII Link Based Growth Rates: Annual Growth Factor 2040-2050 = 1.0083 (LVs) and 1.0182 (HVs).

With regards to the volume of traffic using the road, generally the passenger car is adopted as the standard unit and other vehicles are assessed in terms of PCU's. Cars and Light Goods Vehicles are grouped together as Light Vehicles (LV). All other Goods Vehicles, Buses and Coaches are defined as Heavy Vehicles (HV).

Estimated future baseline traffic flows on the road network in the vicinity of the proposed development were calculated by applying these factors to the 2025 surveyed flows.

8 Assessment and Road Impact

The impact on the local external road network has been assessed in this TTA. This involved examining the projected traffic flows on the local road network both 'with' and 'without' the proposed development in place. The morning peak period and the evening peak period have been examined in order to assess the busiest case in terms of local traffic on the road network and traffic generated by the proposed development.

8.1 Junction Analysis

The junctions, as detailed in previous sections, were each assessed for the proportion of generated development traffic against the existing background traffic. Given the urban environment of the proposed development, it is assumed the congested threshold of the TII document PE-PDV-02045 applies. Therefore, where the generated development traffic accounted for less than 5% of the existing background traffic, junction capacity modelling of that junction is not required as the predicted development trips generated are deemed to have very little impact on that existing junction.

Referring to Table 8-1, it can be seen that the proposed development generates more than a 5% increase in traffic at Sites 3, 4 and 5.

Table 8-1: Proposed Development Traffic versus existing background traffic at existing junctions analysed

Site	Junction	Trips Generated		Background Traffic	Percentage	Modelling Required
Site 1	North City Link Road/Popes Road (T-Junction)	AM	37	1350	2.7%	No
		PM	36	1303	2.8%	
Site 2	North City Link Road/Assumption Road (Signal-Controlled)	AM	60	1904	3.2%	No
		PM	63	1853	3.4%	
Site 3	Popes Road/Assumption Road (T-Junction)	AM	65	348	18.8%	Yes
		PM	66	310	21.1%	
Site 4	Popes Road/Rathmore Park (T-Junction)	AM	65	330	19.9%	Yes
		PM	66	286	22.9%	
Site 5	Popes Road/Popes Hill (T-Junction)	AM	65	16	409.1%	Yes
		PM	66	16	414.9%	

The following development scenarios were analysed with and without development for the proposed junctions:

1. Survey year: 2025
2. Opening year: 2028
3. Design year: opening year + 5 years: 2033
4. Design year: opening year + 15 years: 2043

The Junctions 10 PICADY software was used for priority junction analysis. The normal design threshold for the ratio of flow to capacity (RFC) is 0.85 for a priority junction.

8.1.1 Site 3: Popes Road/Assumption Road

The Junctions 10 output is summarised below.

Table 8-2: Summary of Junctions 10 Analysis Results for the Popes Road/Assumption Road Junction

	Without Development			With Proposed Development		
Peak Hour Flow	Maximum RFC	Maximum Queue (Vehicles)	Max Delay (Seconds/PCU)	Maximum RFC	Maximum Queue (Vehicles)	Max Delay (Seconds/PCU)
AM 2028 Opening Year	0.03	0.00	5.64	0.04	0.00	5.61
AM 2033 Design Year	0.04	0.10	5.61	0.04	0.10	5.58
AM 2043 Design Year	0.04	0.10	5.57	0.04	0.10	5.53
PM 2028 Opening Year	0.03	0.00	5.99	0.03	0.00	5.82
PM 2033 Design Year	0.03	0.00	5.99	0.03	0.00	5.82
PM 2043 Design Year	0.04	0.00	5.96	0.04	0.10	5.80

The above analysis predicts that by the Design Year 2043 the Popes Road/Assumption Road Junction would be operating well within capacity with the full development in operation during both the AM and PM peak hours, with an RFC of <4% in all scenarios. A junction or link is defined as congested when traffic flows are at 85% of the estimated capacity of the junction or link. Therefore, the Popes Road/Assumption Road Junction will not experience any significant impact from the proposed development.

8.1.2 Site 4: Popes Road/Rathmore Park

The Junctions 10 output is summarised below.

Table 8-3: Summary of Junctions 10 Analysis Results for the Popes Road/Rathmore Park Junction

	Without Development			With Proposed Development		
Peak Hour Flow	Maximum RFC	Maximum Queue (Vehicles)	Max Delay (Seconds/PCU)	Maximum RFC	Maximum Queue (Vehicles)	Max Delay (Seconds/PCU)
AM 2028 Opening Year	0.03	0.00	6.74	0.12	0.10	7.57
AM 2033 Design Year	0.03	0.00	6.83	0.13	0.10	7.68
AM 2043 Design Year	0.04	0.00	6.96	0.13	0.20	7.85
PM 2028 Opening Year	0.03	0.00	6.64	0.08	0.10	7.05
PM 2033 Design Year	0.04	0.00	6.70	0.08	0.10	7.12
PM 2043 Design Year	0.04	0.00	6.82	0.09	0.10	7.24

The above analysis predicts that by the Design Year 2043 the Popes Road/Rathmore Park Junction would be operating well within capacity with the full development in operation during both the AM and PM peak hours, with an RFC of <13% in all scenarios. A junction or link is defined as congested when traffic flows are at 85% of the estimated capacity of the junction or link. Therefore, the Popes Road/Rathmore Park Junction will not experience any significant impact from the proposed development.

8.1.3 Site 5: Popes Road/Popes Hill

The Junctions 10 output is summarised below.

Table 8-2: Summary of Junctions 10 Analysis Results for the Popes Road/Popes Hill Junction

	Without Development			With Proposed Development		
Peak Hour Flow	Maximum RFC	Maximum Queue (Vehicles)	Max Delay (Seconds/PCU)	Maximum RFC	Maximum Queue (Vehicles)	Max Delay (Seconds/PCU)
AM 2028 Opening Year	0.01	0.00	6.16	0.01	0.00	6.34
AM 2033 Design Year	0.01	0.00	6.18	0.02	0.00	6.35
AM 2043 Design Year	0.02	0.00	6.19	0.02	0.00	6.37
PM 2028 Opening Year	0.00	0.00	0.00	0.00	0.00	0.00
PM 2033 Design Year	0.00	0.00	0.00	0.00	0.00	0.00
PM 2043 Design Year	0.01	0.00	6.16	0.01	0.00	6.35

The above analysis predicts that by the Design Year 2043 the Popes Road/Popes Hill Junction would be operating well within capacity with the full development in operation during both the AM and PM peak hours, with an RFC of <2% in all scenarios. A junction or link is defined as congested when traffic flows are at 85% of the estimated capacity of the junction or link. Therefore, the Popes Road/Popes Hill Junction will not experience any significant impact from the proposed development.

9 Internal Layout

The layout of the proposed development is detailed in the architect and landscape architect's drawings submitted as part of this application.

9.1 DMURS

An Outline Construction Traffic Management Plan was completed for the proposed residential development and will be submitted as part of the planning application pack. This DMURS compliance statement provides a review of the proposed development regarding compliance with guidelines in the Design Manual for Urban Roads and Streets (DMURS). The overarching principals of DMURS are addressed initially and followed by compliance with specific DMURS design elements.

9.2 Visibility Splays

The site layout has been developed to provide adequate turning provision and fire tender access. Forward visibility and visibility splays have been provided on the basis of the requirements of Sections 4.4.4 and 4.4.5 of the DMURS manual. Compliance with the requirements is set out on the relevant PUNCH drawings.

9.3 Vehicle Manoeuvring

Autotrack analysis has been undertaken to ensure there are no issues with swept paths and manoeuvrability of fire appliances and refuse vehicles.

10 Mobility Management

To ensure future transport sustainability and to endeavour to make new developments as accessible as possible to travel by other modes of transport, an assessment has been made of the proposed and existing pedestrian, cyclist and public transport facilities. A detailed Mobility Management Plan/Workplace Travel Plan is also provided as a separate report with this planning application.

11 Construction Stage Traffic

An Outline Construction Traffic Management Plan was completed for the proposed residential development and will be submitted as part of the planning application pack.

This Outline Construction Traffic Management Plan (OCTMP) sets out guidelines on traffic management during the construction phase of the development. It has been prepared prior to the appointment of a contractor. It will be the responsibility of the appointed contractor to prepare and submit a full detailed Construction Traffic Management Plan (CTMP) to Cork City Council and An Garda Síochána for agreement and approval, prior to commencement of construction. The CTMP will be a live document that will be updated throughout the project lifecycle by the Appointed Contractor if required.

12 Summary and Conclusion

1. The proposed Large-scale Residential Development (LRD) will consist of 104 no. residential dwelling units, a crèche; car parking and cycle parking.

2. For the purposes of our assessment, the TRICS database was consulted to provide an equivalent trip rate for the proposed development site.

3. The proposed development will be accessible from Popes Road.

4. Analysis was carried out on 5 Junctions as agreed with Cork City Council on the 10th January 2025. Junction modelling indicates that the proposed development will have very little impact on the surrounding existing junctions and road network.

5. Parking spaces for the proposed development will be provided to meet the requirements set out in the Cork City Council Development Plan and have been reduced, well below the maximum as permitted under the development plan, to encourage modal split.

6. Secure cycle parking facilities will be provided within the development to meet the requirements set out in the Cork City Council Development Plan. This has been improved upon from the minimum standards.

7. A significant emphasis on pedestrian and cycle connectivity for the development and its surrounds has been incorporated into the design to assist with connectivity to the Cork City and Kent Train Station.

8. The junctions worst affected by the proposed development are the Popes Road/Assumption Road Junction, the Popes Road/Rathmore Park Junction and the Popes Road/Popes Hill Junction. Modelling at these junctions indicate that the maximum Ratio of flow to capacity (RFC) is 13%. As such, it can be said that the junctions analysed will not experience any significant impact from the proposed development.

In conclusion, the proposed Large-scale Residential Development (LRD) on Popes Road will have a minimal impact on the surrounding road network. Capacity analysis indicates that the surrounding junctions will operate within acceptable limits, with overall impacts considered minor. Several pedestrian and cycle connectivity enhancement projects have been implemented by Cork City Council which have greatly improved transport links across the surrounding areas including to Cork City and Kent Train Station. Parking provisions for the proposed development comply with Cork City Council's Development Plan, and secure cycle parking exceeds minimum standards to support modal shift.

Appendix A Traffic Survey Data

IDASO
Innovative Data Solutions

Project Reference:

25024 - The Glen, Cork Queue Report

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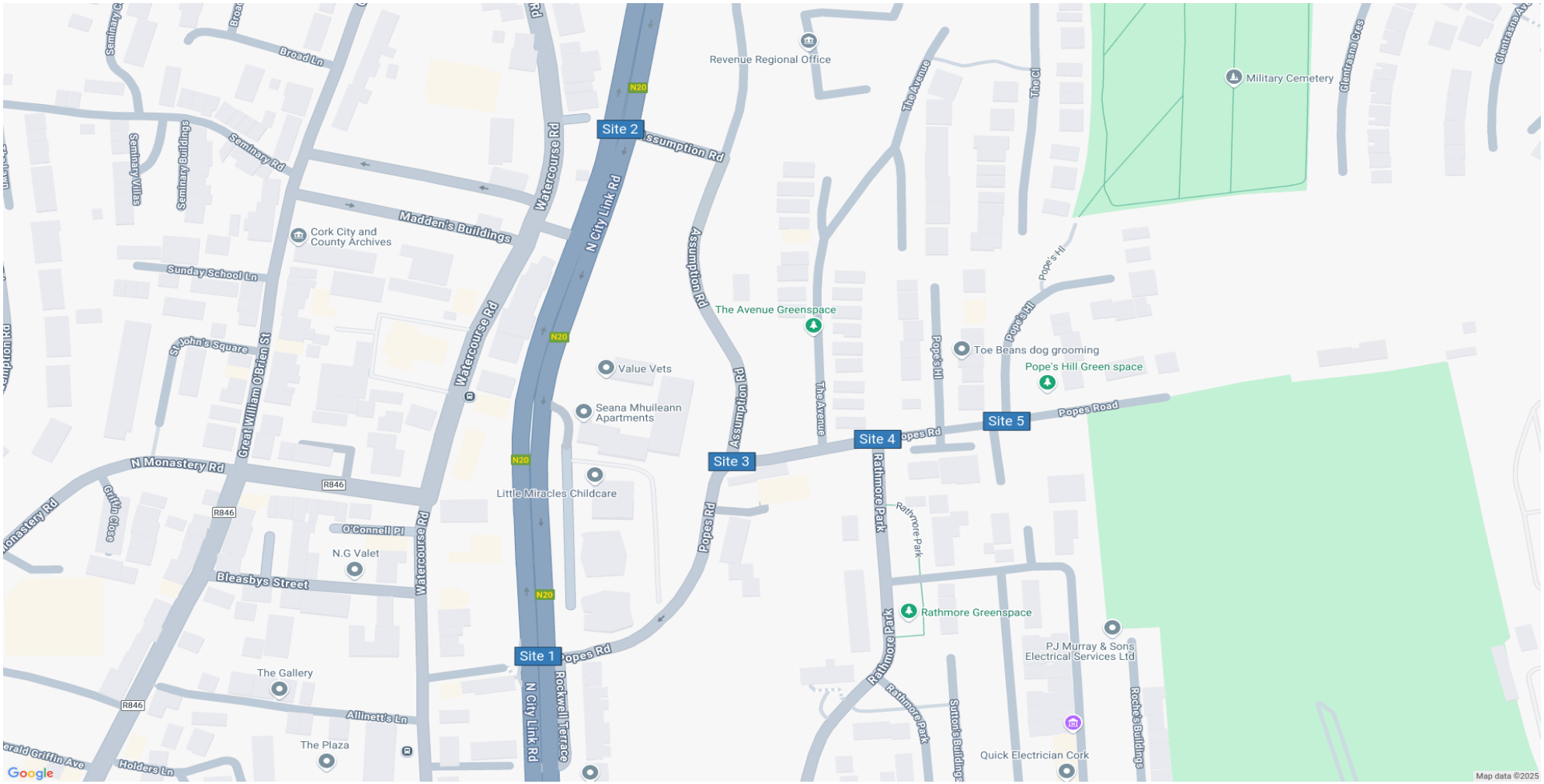
Ireland +353 (0)44 931 8019
Belgium +32 (0)334 606 35

Website: idaso.co
info@idasoltd.com

IDASO

Survey Name: 25024 - The Glen, Cork Queue Report
Date: Thu 15 May 2025 — Sat 17 May 2025



IDASO

Survey Name: 25024 - The Glen, Cork Queue Report
Site: Site 1
Location: Popes Road/North City Link Road Junction
Date: Thu 15-May-2025

Arm A - Popes Road
Arm B - North City Link Road
Arm C - North City Link Road

TIME	A	B1	B2	C1	C2
06:00	0	0	0	0	0
06:15	5	0	0	0	0
06:30	0	0	0	0	0
06:45	5	0	0	0	0
07:00	0	0	0	5	10
07:15	0	5	0	50	5
07:30	0	0	0	60	35
07:45	5	0	0	145	130
08:00	5	10	10	170	160
08:15	5	0	0	185	120
08:30	10	5	5	150	70
08:45	5	5	10	135	95
09:00	5	20	15	10	15
09:15	5	0	0	0	0
09:30	5	0	0	5	5
09:45	5	0	0	80	5
10:00	5	0	0	35	65
10:15	0	0	0	0	0
10:30	5	0	0	10	0

TIME	A	B1	B2	C1	C2
12:00	5	10	5	30	10
12:15	0	5	5	5	5
12:30	5	0	0	0	0
12:45	5	45	15	40	5
13:00	5	0	0	0	0
13:15	0	20	10	5	5
13:30	5	5	5	0	0
13:45	5	30	5	5	0
14:00	10	0	0	10	5
14:15	0	5	5	20	20
14:30	5	0	0	0	0
14:45	5	5	25	10	10
15:00	5	15	20	65	5
15:15	5	0	0	50	15
15:30	10	0	0	15	10
15:45	5	10	15	50	10
16:00	0	45	40	45	45
16:15	0	10	15	20	5
16:30	5	5	0	15	15

TIME	A	B1	B2	C1	C2
18:00	0	50	45	40	5
18:15	5	25	0	25	5
18:30	0	5	5	5	10
18:45	5	0	0	0	0
19:00	0	0	5	20	10
19:15	5	5	0	0	0
19:30	0	0	0	0	0
19:45	0	0	0	0	5
20:00	0	0	0	10	10
20:15	0	30	10	5	0
20:30	5	5	0	5	5
20:45	5	15	10	50	10
21:00	0	5	5	0	0
21:15	5	0	0	0	0
21:30	5	0	0	0	0
21:45	0	0	0	0	0
22:00	0	0	0	0	0
22:15	0	0	0	0	0
22:30	0	0	0	0	0

10:45	5	0	0	20	5
11:00	5	10	5	5	0
11:15	5	0	0	0	0
11:30	10	0	0	0	0
11:45	5	10	5	5	10

16:45	0	10	10	5	0
17:00	0	50	35	40	30
17:15	10	0	5	0	0
17:30	10	10	10	50	20
17:45	10	0	0	0	0

22:45	0	0	0	0	0
23:00	0	0	0	0	0
23:15	0	0	0	0	0
23:30	0	0	0	0	0
23:45	0	0	0	0	0

Queue's are measured in meters

Cannot be seen from camera

\+ Signifies queue stretches to a minimum length of x and beyond the view of the camera

\# Signifies queue stretches to the next significant junction

* Indicates an estimated queue length due to obscured vision.

M Indicates that the lane ends and the vehicles queing merged into another lane to queue.

Queue lengths are compiled from CCTV observations and are therefore subject to the limitations of the camera view.

IDASO

Survey Name: 25024 - The Glen, Cork Queue Report
Site: Site 1
Location: Popes Road/North City Link Road Junction
Date: Sat 17-May-2025

Arm A - Popes Road
Arm B - North City Link Road
Arm C - North City Link Road

TIME	A	B1	B2	C1	C2
06:00	5	0	0	0	0
06:15	0	0	0	0	0
06:30	0	0	0	0	0
06:45	5	5	0	0	20
07:00	0	0	0	0	0
07:15	0	0	0	0	0
07:30	5	0	0	0	0
07:45	0	0	0	0	0
08:00	0	0	0	0	0
08:15	0	0	0	0	5
08:30	5	0	0	0	5
08:45	5	35	0	10	0
09:00	5	0	0	0	0
09:15	5	10	10	50	40
09:30	0	0	0	0	0
09:45	5	5	5	5	10
10:00	5	0	0	0	0
10:15	5	10	15	5	5
10:30	0	20	5	50	15

TIME	A	B1	B2	C1	C2
12:00	5	0	0	0	0
12:15	5	0	0	0	10
12:30	5	0	0	15	5
12:45	5	15	15	55	45
13:00	10	10	5	5	5
13:15	5	40	10	15	10
13:30	5	40	0	15	10
13:45	5	0	5	55	15
14:00	10	0	0	0	5
14:15	0	0	5	0	0
14:30	5	10	0	0	5
14:45	0	0	0	0	0
15:00	5	0	0	0	0
15:15	0	0	0	0	0
15:30	10	15	5	0	0
15:45	5	0	0	40	0
16:00	0	5	0	15	5
16:15	5	0	0	50	15
16:30	0	15	10	5	0

TIME	A	B1	B2	C1	C2
18:00	5	45	45	35	10
18:15	0	40	10	100	35
18:30	5	0	0	0	0
18:45	5	40	5	40	10
19:00	5	5	40	10	0
19:15	0	5	10	5	5
19:30	5	20	10	10	5
19:45	0	0	0	0	0
20:00	5	0	0	0	0
20:15	0	0	0	0	0
20:30	0	0	0	0	0
20:45	5	0	5	0	0
21:00	0	5	0	0	0
21:15	5	0	0	0	0
21:30	0	10	0	40	5
21:45	0	0	0	5	0
22:00	0	0	0	0	0
22:15	0	0	0	0	0
22:30	0	0	0	0	0

10:45	5	0	0	0	0
11:00	0	0	5	10	0
11:15	5	15	35	5	5
11:30	5	0	0	5	5
11:45	5	10	0	0	0

16:45	5	35	10	5	5
17:00	0	0	0	0	0
17:15	0	0	0	0	0
17:30	0	0	0	0	0
17:45	5	5	0	0	0

22:45	0	0	0	0	0
23:00	0	0	0	0	0
23:15	0	0	0	0	0
23:30	0	0	0	0	0
23:45	0	0	0	0	0

Queue's are measured in meters

	Cannot be seen from camera
+	Signifies queue stretches to a minimum length of x and beyond the view of the camera
#	Signifies queue stretches to the next significant junction
*	Indicates an estimated queue length due to obscured vision.
M	Indicates that the lane ends and the vehicles queing merged into another lane to queue.

Queue lengths are compiled from CCTV observations and are therefore subject to the limitations of the camera view.


Cam A&B Start Of Queue
A1
B2
B1
C1
C2
Cam C Refer Queue 1
A1
Cam D Refer Queue 1
C1
C2
Cam E Refer Queue 1
C1
C2

IDASO

Survey Name: 25024 - The Glen, Cork Queue Report
Site: Site 2
Location: Assumption Road/North City Link Road Junction
Date: Thu 15-May-2025

Arm A - North City Link Road
Arm B - Assumption Road
Arm C - North City Link Road

TIME	A1	A2	B1	B2	C1	C2
06:00	5	5	5	5	15	10
06:15	10	5	5	5	5	55
06:30	70	10	10	5	10	0
06:45	80+	15	10	5	115	5
07:00	80+	15	15	5	55	75
07:15	80+	15	15	15	65	55
07:30	80+	75	20	5	85	120
07:45	80+	75	25	20	75	125
08:00	80+	80+	30	15	60	75
08:15	80+	80+	15	25	135	130
08:30	80+	80+	25	20	90	75
08:45	80+	20	15	15	40	120
09:00	75	80+	25	15	80	75
09:15	80+	80+	25	10	80	85
09:30	80+	80+	10	15	40	55
09:45	15	80+	15	10	5	80
10:00	75	75	10	10	125	40
10:15	15	30	15	10	55	55
10:30	25	60	15	10	70	40
10:45	75	25	15	10	40	55
11:00	75	80+	10	10	40	90
11:15	40	25	10	10	85	75
11:30	30	20	15	5	10	55
11:45	80+	20	10	15	40	55

TIME	A1	A2	B1	B2	C1	C2
12:00	80+	15	10	15	40	60
12:15	15	25	10	10	10	85
12:30	80+	75	35	10	40	75
12:45	15	30	15	20	70	75
13:00	30	25	10	15	20	50
13:15	75	15	20	10	80	65
13:30	75	75	10	10	20	50
13:45	75	75	15	10	75	125
14:00	80+	80+	25	10	105	110
14:15	80+	80+	15	25	40	60
14:30	55	20	10	5	85	75
14:45	80+	80+	10	20	60	125
15:00	80+	80+	5	15	115	125
15:15	80+	80+	40	10	115	80
15:30	80+	80+	45	40	130	125
15:45	80+	80+	25	20	125	130
16:00	75	65	25	25	245#	245#
16:15	70	65	25	35	245#	200
16:30	80+	80+	40	20	70	230
16:45	65	70	25	15	140	130
17:00	75	70	20	30	15	115
17:15	75	80+	10	15	60	120
17:30	80+	80+	30	20	245#	245#
17:45	70	65	20	25	70	230

TIME	A1	A2	B1	B2	C1	C2
18:00	30	20	10	10	40	55
18:15	35	15	15	15	105	110
18:30	15	75	15	20	40	50
18:45	20	60	10	10	40	65
19:00	25	80+	5	10	55	40
19:15	50	80+	15	10	70	15
19:30	10	15	5	10	5	55
19:45	35	20	20	10	5	85
20:00	35	25	10	20	5	125
20:15	30	65	10	10	80	115
20:30	20	5	10	5	55	65
20:45	65	55	15	5	70	80
21:00	5	5	10	10	60	65
21:15	15	10	10	10	20	65
21:30	5	10	10	5	5	75
21:45	5	10	5	5	10	0
22:00	0	0	0	0	0	0
22:15	0	0	0	0	0	0
22:30	0	0	0	0	0	0
22:45	0	0	0	0	0	0
23:00	0	0	0	0	0	0
23:15	0	0	0	0	0	0
23:30	0	0	0	0	0	0
23:45	0	0	0	0	0	0

Queue's are measured in meters

▒▒▒▒▒▒▒▒	Cannot be seen from camera
+	Signifies queue stretches to a minimum length of x and beyond the view of the camera
#	Signifies queue stretches to the next significant junction
*	Indicates an estimated queue length due to obscured vision.
M	Indicates that the lane ends and the vehicles queing merged into another lane to queue.

Queue lengths are compiled from CCTV observations and are therefore subject to the limitations of the camera view.

IDASO

Survey Name: 25024 - The Glen, Cork Queue Report
Site: Site 2
Location: Assumption Road/North City Link Road Junction
Date: Sat 17-May-2025

Arm A - North City Link Road
Arm B - Assumption Road
Arm C - North City Link Road

TIME	A1	A2	B1	B2	C1	C2
06:00	0	0	0	0	0	0
06:15	0	0	5	5	0	0
06:30	0	10	0	5	0	0
06:45	0	0	5	5	5	5
07:00	5	5	5	5	0	65
07:15	30	0	5	5	55	65
07:30	0	0	5	0	0	0
07:45	0	5	10	10	60	0
08:00	0	10	10	5	10	20
08:15	20	5	10	10	10	75
08:30	15	5	10	5	70	70
08:45	35	5	10	5	10	70
09:00	15	15	10	10	40	65
09:15	40	25	15	15	45	65
09:30	80+	10	15	10	95	60
09:45	35	15	10	10	45	75
10:00	35	15	15	15	40	55
10:15	35	35	15	15	55	70
10:30	50	25	5	10	70	35
10:45	5	15	10	10	0	60
11:00	80+	75	10	15	95	75
11:15	80+	5	5	5	5	55
11:30	80+	80+	15	10	80	85
11:45	75	25	10	10	55	70

TIME	A1	A2	B1	B2	C1	C2
12:00	80+	75	15	10	75	65
12:15	80+	80+	15	10	80	135
12:30	25	65	20	15	70	75
12:45	80+	20	5	10	65	70
13:00	65	20	15	10	70	70
13:15	25	40	15	10	80	70
13:30	65	80	5	10	35	55
13:45	75	15	10	5	80	85
14:00	75	30	5	10	130	110
14:15	30	15	5	10	75	105
14:30	75	80+	15	5	60	95
14:45	10	10	5	10	130	95
15:00	35	10	10	10	95	70
15:15	70	80+	10	10	135	95
15:30	70	80+	15	10	70	150
15:45	30	30	5	10	95	115
16:00	40	50	10	10	95	85
16:15	80+	30	5	10	85	95
16:30	30	80+	15	10	75	85
16:45	10	50	15	5	70	65
17:00	25	10	15	5	125	90
17:15	10	15	10	5	65	70
17:30	35	15	10	5	0	5
17:45	5	10	10	5	60	60

TIME	A1	A2	B1	B2	C1	C2
18:00	20	60	10	10	80	100
18:15	10	5	15	10	90	105
18:30	40	15	10	10	80	110
18:45	20	70	15	10	115	95
19:00	55	60	10	5	40	35
19:15	25	15	10	5	35	55
19:30	50	40	15	5	60	55
19:45	40	60	10	5	50	40
20:00	25	5	10	5	40	60
20:15	25	25	5	5	55	60
20:30	15	5	10	5	65	55
20:45	70	10	10	5	40	60
21:00	20	10	15	10	125	80
21:15	5	0	5	10	80	75
21:30	30	25	5	5	30	80
21:45	0	0	5	5	0	5
22:00	0	0	0	0	0	0
22:15	0	0	0	0	0	0
22:30	0	0	0	0	0	0
22:45	0	0	0	0	0	0
23:00	0	0	0	0	0	0
23:15	0	0	0	0	0	0
23:30	0	0	0	0	0	0
23:45	0	0	0	0	0	0

Queue's are measured in meters

▒▒▒▒▒▒▒▒	Cannot be seen from camera
+	Signifies queue stretches to a minimum length of x and beyond the view of the camera
#	Signifies queue stretches to the next significant junction
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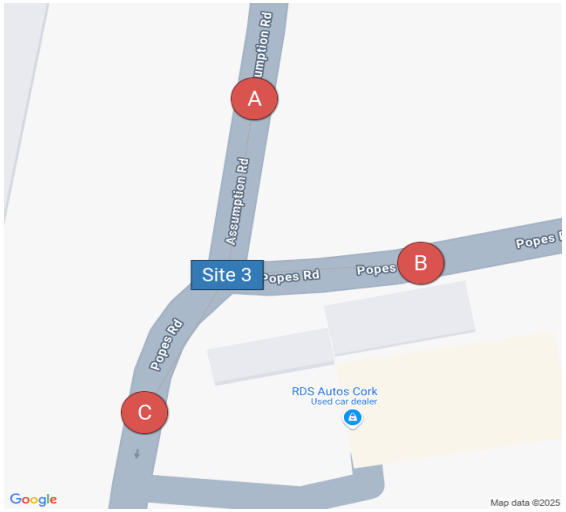
M	Indicates that the lane ends and the vehicles queing merged into another lane to queue.

Queue lengths are compiled from CCTV observations and are therefore subject to the limitations of the camera view.


Cam A&B Start Of Queue
B1
B2
A1
A2
Cam C Refer Queue 1
B1
B2
Cam D Refer Queue 1
A2
A1
Cam E Refer Queue 2
B1



IDASO

Survey Name: 25024 - The Glen, Cork Queue Report
Site: Site 3
Location: Popes Road/Assumption Road Junction
Date: Thu 15-May-2025

Arm A - Assumption Road
Arm B - Popes Road
Arm C - Popes Road

TIME	A	B	C
06:00	0	0	0
06:15	0	0	0
06:30	0	0	0
06:45	5	0	0
07:00	0	0	0
07:15	0	0	0
07:30	0	0	0
07:45	0	0	0
08:00	5	0	0
08:15	5	0	0
08:30	5	0	0
08:45	0	0	0
09:00	5	0	0

TIME	A	B	C
12:00	0	0	0
12:15	0	0	0
12:30	0	0	0
12:45	5	0	0
13:00	0	0	0
13:15	5	0	0
13:30	0	0	0
13:45	5	0	0
14:00	0	0	0
14:15	15	5	0
14:30	0	0	0
14:45	5	0	0
15:00	0	0	0

TIME	A	B	C
18:00	5	0	0
18:15	0	0	0
18:30	0	0	0
18:45	0	0	0
19:00	0	0	0
19:15	0	0	0
19:30	0	0	0
19:45	0	0	0
20:00	0	0	0
20:15	0	0	0
20:30	0	0	0
20:45	0	0	0
21:00	0	0	0

09:15	5	0	0
09:30	0	0	0
09:45	5	0	0
10:00	10	0	0
10:15	0	0	0
10:30	0	0	0
10:45	0	0	0
11:00	0	0	0
11:15	0	0	0
11:30	0	0	0
11:45	0	0	0

15:15	0	0	0
15:30	5	0	0
15:45	0	0	0
16:00	5	0	0
16:15	5	0	0
16:30	0	0	0
16:45	25	0	0
17:00	0	0	0
17:15	20	0	0
17:30	0	0	0
17:45	0	0	0

21:15	0	0	0
21:30	5	0	0
21:45	0	0	0
22:00	0	0	0
22:15	0	0	0
22:30	0	0	0
22:45	0	0	0
23:00	0	0	0
23:15	0	0	0
23:30	0	0	0
23:45	0	0	0

Queue's are measured in meters

Cannot be seen from camera

\+ Signifies queue stretches to a minimum length of x and beyond the view of the camera

\# Signifies queue stretches to the next significant junction

* Indicates an estimated queue length due to obscured vision.

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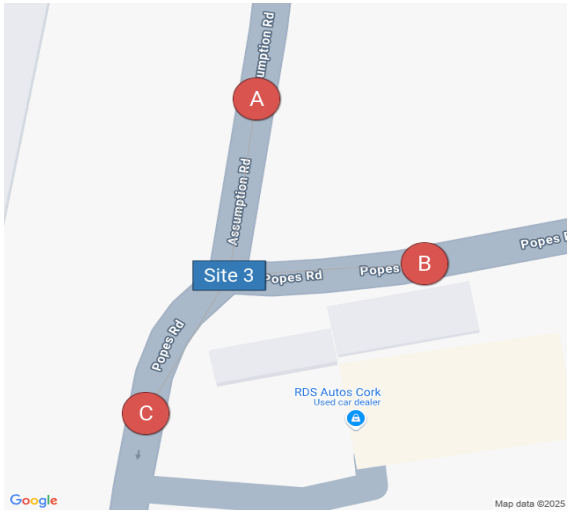
Queue lengths are compiled from CCTV observations and are therefore subject to the limitations of the camera view.



IDASO

Survey Name: 25024 - The Glen, Cork Queue Report
Site: Site 3
Location: Popes Road/Assumption Road Junction
Date: Sat 17-May-2025

Arm A - Assumption Road
Arm B - Popes Road
Arm C - Popes Road

TIME	A	B	C
06:00	0	0	0
06:15	0	0	0
06:30	0	0	0
06:45	0	0	0
07:00	0	0	0
07:15	0	0	0
07:30	0	0	0
07:45	0	0	0
08:00	0	0	0
08:15	0	0	0
08:30	0	0	0
08:45	0	0	0
09:00	0	0	0

TIME	A	B	C
12:00	0	0	0
12:15	0	0	0
12:30	0	0	0
12:45	15	0	0
13:00	0	0	0
13:15	0	0	0
13:30	5	0	0
13:45	0	0	0
14:00	0	0	0
14:15	0	0	0
14:30	0	0	0
14:45	0	0	0
15:00	0	0	0

TIME	A	B	C
18:00	5	0	0
18:15	0	0	0
18:30	0	0	0
18:45	0	0	0
19:00	0	0	0
19:15	0	0	0
19:30	0	0	0
19:45	0	0	0
20:00	0	0	0
20:15	0	0	0
20:30	0	0	0
20:45	0	0	0
21:00	0	0	0

09:15	0	0	0
09:30	0	0	0
09:45	0	0	0
10:00	0	0	0
10:15	5	0	0
10:30	0	0	0
10:45	0	0	0
11:00	0	0	0
11:15	0	0	0
11:30	0	0	0
11:45	0	0	0

15:15	0	0	0
15:30	0	0	0
15:45	5	0	0
16:00	0	0	0
16:15	0	0	0
16:30	0	0	0
16:45	0	0	0
17:00	0	0	0
17:15	0	0	0
17:30	0	0	0
17:45	0	0	0

21:15	0	0	0
21:30	0	0	0
21:45	0	0	0
22:00	0	0	0
22:15	0	0	0
22:30	0	0	0
22:45	0	0	0
23:00	0	0	0
23:15	0	0	0
23:30	0	0	0
23:45	0	0	0

Queue's are measured in meters

Cannot be seen from camera

\+ Signifies queue stretches to a minimum length of x and beyond the view of the camera

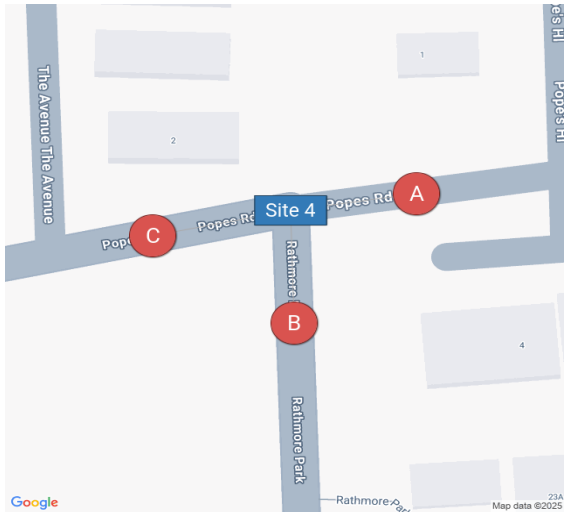
\# Signifies queue stretches to the next significant junction

* Indicates an estimated queue length due to obscured vision.

M Indicates that the lane ends and the vehicles queing merged into another lane to queue.

Queue lengths are compiled from CCTV observations and are therefore subject to the limitations of the camera view.


Cam A&B Start Of Queue
B1
C1
A1
Cam C Refer Queue 1
C1



IDASO

Survey Name: 25024 - The Glen, Cork Queue Report
Site: Site 4
Location: Popes Road/ Rathmore Park Junction
Date: Thu 15-May-2025

Arm A - Popes Road
Arm B - Rathmore Park
Arm C - Popes Road

TIME	A	B	C
06:00	0	0	0
06:15	0	0	0
06:30	0	0	0
06:45	0	0	0
07:00	0	0	0
07:15	0	0	0
07:30	0	0	0
07:45	0	0	0
08:00	0	5	20
08:15	5	0	5
08:30	5	15	0
08:45	0	0	0
09:00	0	0	0

TIME	A	B	C
12:00	0	0	0
12:15	5	0	0
12:30	0	0	0
12:45	0	0	0
13:00	0	5	0
13:15	0	0	0
13:30	0	0	0
13:45	0	0	0
14:00	0	0	0
14:15	0	0	0
14:30	5	0	0
14:45	0	0	0
15:00	0	5	0

TIME	A	B	C
18:00	0	5	0
18:15	0	0	0
18:30	0	0	0
18:45	0	0	0
19:00	5	0	0
19:15	5	0	0
19:30	0	0	0
19:45	0	0	0
20:00	0	0	0
20:15	0	0	0
20:30	0	0	0
20:45	0	0	0
21:00	5	0	0

09:15	0	0	0
09:30	0	0	0
09:45	0	0	0
10:00	0	0	0
10:15	0	0	0
10:30	0	0	0
10:45	0	0	0
11:00	0	0	0
11:15	0	0	0
11:30	0	0	0
11:45	0	0	0

15:15	0	0	0
15:30	0	5	0
15:45	5	0	0
16:00	0	0	0
16:15	0	0	0
16:30	0	0	0
16:45	5	0	0
17:00	0	0	0
17:15	0	0	0
17:30	0	10	0
17:45	0	0	0

21:15	0	0	0
21:30	5	5	0
21:45	0	0	0
22:00	0	0	0
22:15	0	0	0
22:30	0	0	0
22:45	0	0	0
23:00	0	0	0
23:15	0	0	0
23:30	0	0	0
23:45	0	0	0

Queue's are measured in meters

Cannot be seen from camera

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* Indicates an estimated queue length due to obscured vision.

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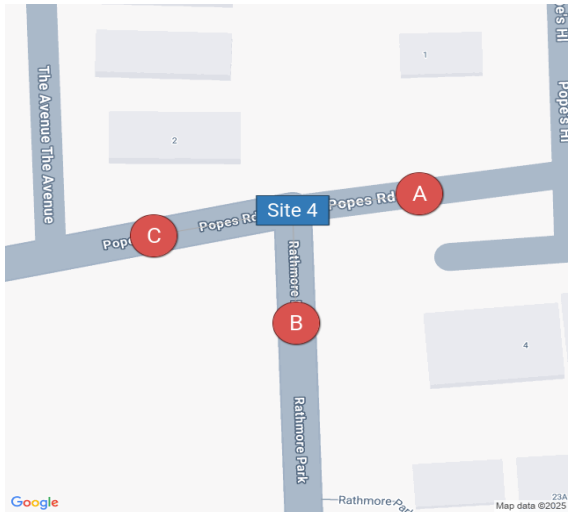


IDASO

Survey Name: 25024 - The Glen, Cork Queue Report
Site: Site 4
Location: Popes Road/ Rathmore Park Junction
Date: Sat 17-May-2025

Arm A - Popes Road
Arm B - Rathmore Park
Arm C - Popes Road

TIME	A	B	C
06:00	0	0	0
06:15	0	0	0
06:30	0	0	0
06:45	0	0	0
07:00	0	0	0
07:15	0	5	0
07:30	0	0	0
07:45	0	0	0
08:00	0	0	0
08:15	0	0	0
08:30	0	0	0
08:45	0	0	0
09:00	0	0	0

TIME	A	B	C
12:00	0	0	0
12:15	0	0	0
12:30	0	0	0
12:45	0	0	0
13:00	0	5	0
13:15	5	0	0
13:30	0	0	0
13:45	0	0	5
14:00	0	0	0
14:15	0	0	0
14:30	0	0	0
14:45	0	0	0
15:00	0	0	0

TIME	A	B	C
18:00	0	0	0
18:15	0	0	0
18:30	0	0	0
18:45	0	0	0
19:00	0	0	0
19:15	0	0	0
19:30	0	0	0
19:45	0	0	0
20:00	0	0	0
20:15	0	0	0
20:30	0	0	0
20:45	0	0	0
21:00	0	0	0

09:15	0	0	0
09:30	0	0	0
09:45	0	0	0
10:00	0	0	0
10:15	0	5	0
10:30	0	0	0
10:45	0	0	0
11:00	0	0	0
11:15	0	0	0
11:30	0	0	0
11:45	0	0	0

15:15	0	5	5
15:30	5	0	0
15:45	0	0	0
16:00	5	0	0
16:15	5	5	0
16:30	0	0	0
16:45	0	0	0
17:00	5	0	0
17:15	5	0	0
17:30	0	0	0
17:45	0	0	0

21:15	0	0	0
21:30	0	0	0
21:45	0	0	0
22:00	0	0	0
22:15	0	0	0
22:30	0	0	0
22:45	0	0	0
23:00	0	0	0
23:15	0	0	0
23:30	0	0	0
23:45	0	0	0

Queue's are measured in meters

Cannot be seen from camera

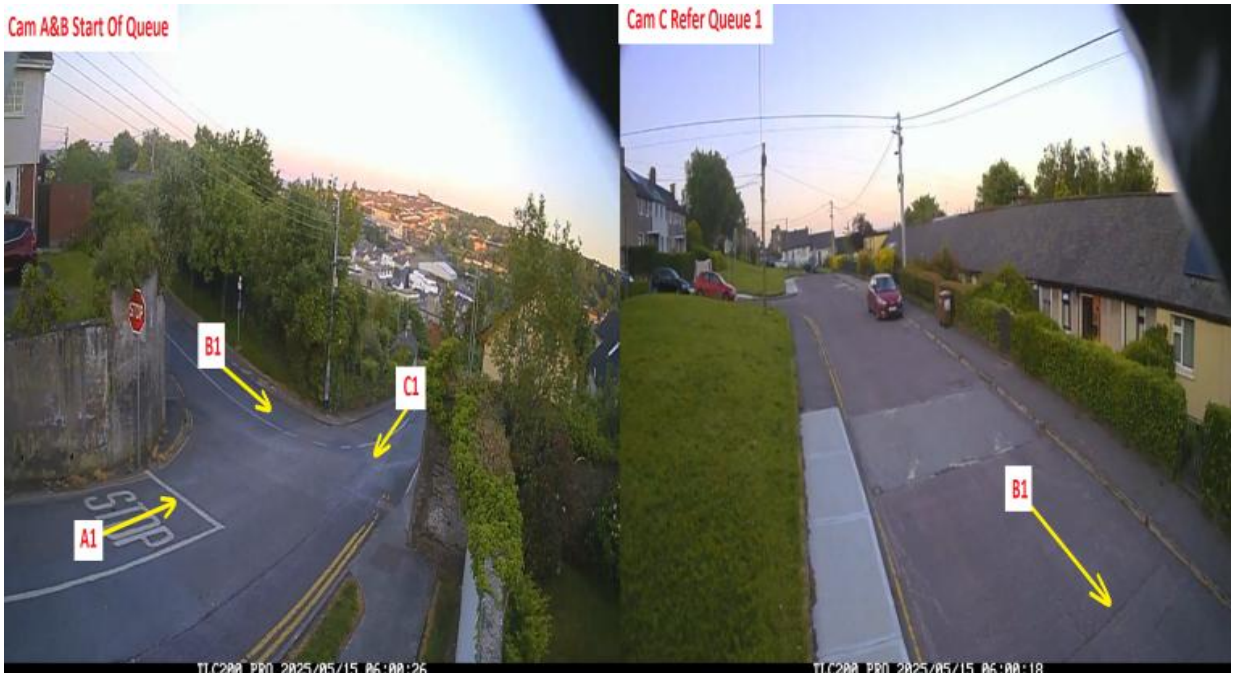
\+ Signifies queue stretches to a minimum length of x and beyond the view of the camera

\# Signifies queue stretches to the next significant junction

* Indicates an estimated queue length due to obscured vision.

M Indicates that the lane ends and the vehicles queing merged into another lane to queue.

Queue lengths are compiled from CCTV observations and are therefore subject to the limitations of the camera view.


Cam A&B Start Of Queue
B1
C1
A1
STOP
TLC200_PRO_2025/05/15_06:00:26
Cam C Refer Queue 1
B1
TLC200_PRO_2025/05/15_06:00:18

IDASO

Survey Name: 25024 - The Glen, Cork Queue Report
Site: Site 5
Location: Popes Road/Pope's Hill Junction
Date: Thu 15-May-2025

Arm A - Pope's Hill
Arm B - Popes Road
Arm C - Popes Road

TIME	A	B	C
06:00	0	0	0
06:15	0	0	0
06:30	0	0	0
06:45	0	0	0
07:00	0	0	0
07:15	0	0	0
07:30	0	0	0
07:45	0	0	0
08:00	0	0	0
08:15	0	0	0
08:30	0	0	0
08:45	0	0	0
09:00	0	0	0
09:15	0	0	0
09:30	0	0	0
09:45	0	0	0

TIME	A	B	C
12:00	0	0	0
12:15	0	0	0
12:30	0	0	0
12:45	0	0	0
13:00	0	0	0
13:15	0	0	0
13:30	0	0	0
13:45	0	0	0
14:00	0	0	0
14:15	0	0	0
14:30	0	0	0
14:45	0	0	0
15:00	0	0	0
15:15	0	0	0
15:30	0	0	0
15:45	0	0	0

TIME	A	B	C
18:00	0	0	0
18:15	0	0	0
18:30	0	0	0
18:45	0	0	0
19:00	0	0	0
19:15	0	0	0
19:30	0	0	0
19:45	0	0	0
20:00	0	0	0
20:15	0	0	0
20:30	0	0	0
20:45	0	0	0
21:00	0	0	0
21:15	0	0	0
21:30	0	0	0
21:45	0	0	0

10:00	0	0	0
10:15	0	0	0
10:30	0	0	0
10:45	0	0	0
11:00	0	0	0
11:15	0	0	0
11:30	0	0	0
11:45	0	0	0

16:00	0	0	0
16:15	5	0	5
16:30	0	0	0
16:45	0	0	0
17:00	0	0	0
17:15	0	0	0
17:30	0	0	0
17:45	0	0	0

22:00	0	0	0
22:15	0	0	0
22:30	0	0	0
22:45	0	0	0
23:00	0	0	0
23:15	0	0	0
23:30	0	0	0
23:45	0	0	0

Queue's are measured in meters

▒▒▒▒▒▒▒▒	Cannot be seen from camera
+	Signifies queue stretches to a minimum length of x and beyond the view of the camera
#	Signifies queue stretches to the next significant junction
*	Indicates an estimated queue length due to obscured vision.
M	Indicates that the lane ends and the vehicles queing merged into another lane to queue.

Queue lengths are compiled from CCTV observations and are therefore subject to the limitations of the camera view.

IDASO

Survey Name: 25024 - The Glen, Cork Queue Report
Site: Site 5
Location: Popes Road/Pope's Hill Junction
Date: Sat 17-May-2025

Arm A - Pope's Hill
Arm B - Popes Road
Arm C - Popes Road

TIME	A	B	C
06:00	0	0	0
06:15	0	0	0
06:30	0	0	0
06:45	5	0	0
07:00	0	0	0
07:15	0	0	0
07:30	0	0	0
07:45	0	0	0
08:00	0	0	0
08:15	0	0	0
08:30	0	0	0
08:45	0	0	0
09:00	0	0	0
09:15	0	0	0
09:30	0	0	0
09:45	0	0	0

TIME	A	B	C
12:00	0	0	0
12:15	0	0	0
12:30	0	0	0
12:45	0	0	0
13:00	0	0	0
13:15	0	0	0
13:30	0	0	0
13:45	0	0	0
14:00	0	0	0
14:15	0	0	0
14:30	0	0	0
14:45	0	0	0
15:00	0	0	0
15:15	0	0	0
15:30	0	0	0
15:45	0	0	0

TIME	A	B	C
18:00	0	0	0
18:15	0	0	0
18:30	0	0	0
18:45	0	0	0
19:00	0	0	0
19:15	0	0	0
19:30	0	0	0
19:45	0	0	0
20:00	0	0	0
20:15	0	0	0
20:30	0	0	0
20:45	0	0	0
21:00	0	0	0
21:15	0	0	0
21:30	0	0	0
21:45	0	0	0

10:00	0	0	0
10:15	0	0	0
10:30	0	0	0
10:45	0	0	0
11:00	0	0	0
11:15	0	0	0
11:30	0	0	0
11:45	0	0	0

16:00	0	0	0
16:15	0	0	0
16:30	0	0	0
16:45	0	0	0
17:00	0	0	0
17:15	0	0	0
17:30	0	0	0
17:45	0	0	0

22:00	0	0	0
22:15	0	0	0
22:30	0	0	0
22:45	0	0	0
23:00	0	0	0
23:15	0	0	0
23:30	0	0	0
23:45	0	0	0

Queue's are measured in meters

Cannot be seen from camera

+ Signifies queue stretches to a minimum length of x and beyond the view of the camera

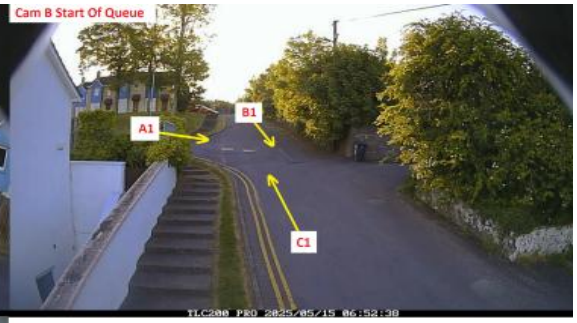
Signifies queue stretches to the next significant junction

* Indicates an estimated queue length due to obscured vision.

M Indicates that the lane ends and the vehicles queing merged into another lane to queue.

Queue lengths are compiled from CCTV observations and are therefore subject to the limitations of the camera view.


Cam A Start Of Queue
C1
B1
A1


Cam B Start Of Queue
B1
A1
C1


Cam C Refer Queue 1
A1

Appendix B TRICS Data

TRICS 7.11.4
Trip Rate Parameter: No of Dwellings

TRIP RATE for Land Use 03 - RESIDENTIAL/A - HOUSES PRIVATELY OWNED
Calculation Factor: 1 DWELLS
Count Type: TOTAL VEHICLES

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate
00:00-01:00									
01:00-02:00									
02:00-03:00									
03:00-04:00									
04:00-05:00									
05:00-06:00									
06:00-07:00									
07:00-08:00	24	433	0.081	24	433	0.323	24	433	0.404
08:00-09:00	24	433	0.128	24	433	0.36	24	433	0.488
09:00-10:00	24	433	0.132	24	433	0.156	24	433	0.288
10:00-11:00	24	433	0.113	24	433	0.13	24	433	0.243
11:00-12:00	24	433	0.114	24	433	0.119	24	433	0.233
12:00-13:00	24	433	0.133	24	433	0.135	24	433	0.268
13:00-14:00	24	433	0.14	24	433	0.134	24	433	0.274
14:00-15:00	24	433	0.144	24	433	0.148	24	433	0.292
15:00-16:00	24	433	0.221	24	433	0.159	24	433	0.38
16:00-17:00	24	433	0.237	24	433	0.151	24	433	0.388
17:00-18:00	24	433	0.324	24	433	0.151	24	433	0.475
18:00-19:00	24	433	0.295	24	433	0.157	24	433	0.452
19:00-20:00									
20:00-21:00									
21:00-22:00									
22:00-23:00									
23:00-24:00									
Daily Trip Rates:			2.062			2.123			4.185

TRICS 7.11.4
Trip Rate Parameter: Gross floor area

TRIP RATE for Land Use 04 - EDUCATION/D - NURSERY
Calculation Factor: 100 sqm
Count Type: TOTAL VEHICLES

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate
00:00-01:00									
01:00-02:00									
02:00-03:00									
03:00-04:00									
04:00-05:00									
05:00-06:00									
06:00-07:00	1	300	0	1	300	0	1	300	0
07:00-08:00	4	470	3.832	4	470	2.661	4	470	6.493
08:00-09:00	4	470	4.098	4	470	4.204	4	470	8.302
09:00-10:00	4	470	1.011	4	470	1.064	4	470	2.075
10:00-11:00	4	470	0.373	4	470	0.16	4	470	0.533
11:00-12:00	4	470	0.585	4	470	0.532	4	470	1.117
12:00-13:00	4	470	0.798	4	470	0.426	4	470	1.224
13:00-14:00	4	470	0.532	4	470	0.798	4	470	1.33
14:00-15:00	4	470	0.319	4	470	0.585	4	470	0.904
15:00-16:00	4	470	0.532	4	470	0.585	4	470	1.117
16:00-17:00	4	470	2.235	4	470	2.342	4	470	4.577
17:00-18:00	4	470	4.417	4	470	4.737	4	470	9.154
18:00-19:00	4	470	0.479	4	470	0.692	4	470	1.171
19:00-20:00									
20:00-21:00									
21:00-22:00									
22:00-23:00									
23:00-24:00									
Daily Trip Rates:			19.211			18.786			37.997

Appendix C Junction Summary Results

Junctions 10

PICADY 10 - Priority Intersection Module

Filename: Site 3 Popes Road-Assumption Road T-Junction.j10
Path: I:\DWGS\244\101-150\244132\3.0 Calculations\1. Civils\2.0 Design Calculations\4.0 Traffic Calculations\02 Junction Modelling\Junctions 10
Report generation date: 28/08/2025 14:11:31

»Site 3 - 2025 Baseline, AM
»Site 3 - 2025 Baseline, PM
»Site 3 - Do Nothing 2028, AM
»Site 3 - Do Nothing 2028, PM
»Site 3 - 2028 Opening Year, AM
»Site 3 - 2028 Opening Year, PM
»Site 3 - Do Nothing 2033, AM
»Site 3 - Do Nothing 2033, PM
»Site 3 - 2033 Opening Year +5 years, AM
»Site 3 - 2033 Opening Year +5 years, PM
»Site 3 - Do Nothing 2043, AM
»Site 3 - Do Nothing 2043, PM
»Site 3 - 2043 Opening Year +15 years, AM
»Site 3 - 2043 Opening Year +15 years, PM

Summary of junction performance

	AM							PM						
	Set ID	Queue (PCU)	Delay (s)	RFC	LOS	Junction Delay (s)	Junction LOS	Set ID	Queue (PCU)	Delay (s)	RFC	LOS	Junction Delay (s)	Junction LOS
	Site 3 - 2025 Baseline													
Stream B-AC	D1	0.0	0.00	0.00	A	0.31	A	D2	0.0	5.52	0.01	A	0.39	A
Stream C-AB		0.0	5.66	0.03	A				0.0	6.00	0.03	A		
	Site 3 - Do Nothing 2028													
Stream B-AC	D3	0.0	0.00	0.00	A	0.31	A	D4	0.0	5.55	0.01	A	0.40	A
Stream C-AB		0.0	5.64	0.03	A				0.0	5.99	0.03	A		
	Site 3 - 2028 Opening Year													
Stream B-AC	D5	0.0	0.00	0.00	A	0.27	A	D6	0.0	5.63	0.01	A	0.34	A
Stream C-AB		0.0	5.61	0.04	A				0.0	5.82	0.03	A		
	Site 3 - Do Nothing 2033													
Stream B-AC	D7	0.0	0.00	0.00	A	0.32	A	D8	0.0	5.58	0.01	A	0.40	A
Stream C-AB		0.1	5.61	0.04	A				0.0	5.99	0.03	A		
	Site 3 - 2033 Opening Year +5 years													
Stream B-AC	D9	0.0	0.00	0.00	A	0.28	A	D10	0.0	5.67	0.01	A	0.35	A
Stream C-AB		0.1	5.58	0.04	A				0.0	5.82	0.03	A		
	Site 3 - Do Nothing 2043													
Stream B-AC	D11	0.0	0.00	0.00	A	0.32	A	D12	0.0	5.58	0.01	A	0.41	A
Stream C-AB		0.1	5.57	0.04	A				0.0	5.96	0.04	A		
	Site 3 - 2043 Opening Year +15 years													
Stream B-AC	D13	0.0	0.00	0.00	A	0.28	A	D14	0.0	5.67	0.01	A	0.36	A
Stream C-AB		0.1	5.53	0.04	A				0.1	5.80	0.04	A		

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

Values shown are the highest values encountered over all time segments. Delay is the maximum value of average delay per arriving vehicle. Junction LOS and Junction Delay are demand-weighted averages.

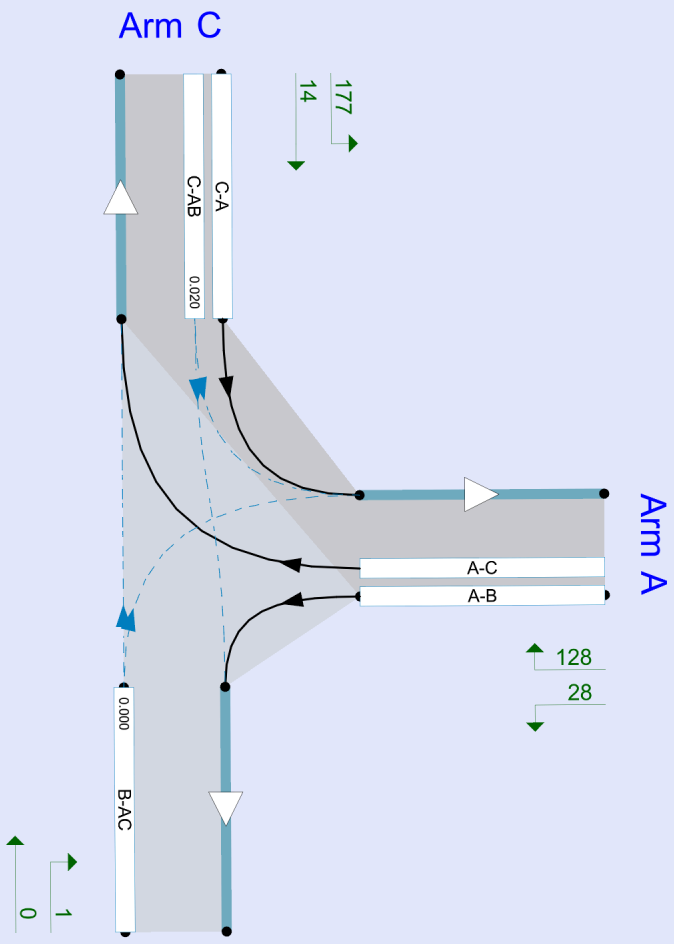
File summary

File Description

Title	
Location	
Site number	
Date	07/07/2025
Version	
Status	(new file)
Identifier	
Client	
Jobnumber	
Enumerator	MPPNET\AMcCarthy
Description	

Units

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



Flows show original traffic demand (PCU/hr).
Streams (downstream end) show RFC ()

The junction diagram reflects the last run of Junctions.

Analysis Options

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

Demand Set Summary

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D1	2025 Baseline	AM	ONE HOUR	08:00	09:30	15
D2	2025 Baseline	PM	ONE HOUR	15:30	17:00	15
D3	Do Nothing 2028	AM	ONE HOUR	08:00	09:30	15
D4	Do Nothing 2028	PM	ONE HOUR	15:30	17:00	15
D5	2028 Opening Year	AM	ONE HOUR	08:00	09:30	15
D6	2028 Opening Year	PM	ONE HOUR	15:30	17:00	15
D7	Do Nothing 2033	AM	ONE HOUR	08:00	09:30	15
D8	Do Nothing 2033	PM	ONE HOUR	15:30	17:00	15
D9	2033 Opening Year +5 years	AM	ONE HOUR	08:00	09:30	15
D10	2033 Opening Year +5 years	PM	ONE HOUR	15:30	17:00	15
D11	Do Nothing 2043	AM	ONE HOUR	08:00	09:30	15
D12	Do Nothing 2043	PM	ONE HOUR	15:30	17:00	15
D13	2043 Opening Year +15 years	AM	ONE HOUR	08:00	09:30	15
D14	2043 Opening Year +15 years	PM	ONE HOUR	15:30	17:00	15

Analysis Set Details

ID	Name	Network flow scaling factor (%)
A1	Site 3	100.000

Site 3 - 2025 Baseline, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Vehicle Mix		HV% is zero for all movements / time segments. Vehicle Mix matrix should be completed whether working in PCUs or Vehs. If HV% at the junction is genuinely zero, please ignore this warning.
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction type	Arm A Direction	Arm B Direction	Arm C Direction	Use circulating lanes	Junction Delay (s)	Junction LOS
3	Popes Road/Assumption Road	T-Junction	Two-way	Two-way	Two-way		0.31	A

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	0.31	A

Arms

Arms

Arm	Name	Description	Arm type
A	Popes Road (East)		Major
B	Popes Road (South)		Minor
C	Assumption Road		Major

Major Arm Geometry

Arm	Width of carriageway (m)	Has kerbed central reserve	Has right-turn storage	Visibility for right turn (m)	Blocks?	Blocking queue (PCU)
C	6.00			18.0	✓	0.00

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

Minor Arm Geometry

Arm	Minor arm type	Lane width (m)	Visibility to left (m)	Visibility to right (m)
B	One lane	5.00	58	14

Slope / Intercept / Capacity

Priority Intersection Slopes and Intercepts

Stream	Intercept (PCU/hr)	Slope for A-B	Slope for A-C	Slope for C-A	Slope for C-B
B-A	604	0.112	0.284	0.179	0.406
B-C	759	0.114	0.288	-	-
C-B	584	0.226	0.226	-	-

The slopes and intercepts shown above include custom intercept adjustments only.
Streams may be combined, in which case capacity will be adjusted.
Values are shown for the first time segment only; they may differ for subsequent time segments.

Traffic Demand

Demand Set Details

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

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		✓	156	100.000
B		✓	1	100.000
C		✓	191	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		A	B	C
From	A	0	28	128
	B	1	0	0
	C	177	14	0

Vehicle Mix

Heavy Vehicle %

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

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max 95th percentile Queue (PCU)	Max LOS
B-AC	0.00	0.00	0.0	~1	A
C-AB	0.03	5.66	0.0	0.5	A
C-A					
A-B					
A-C					

Main Results for each time segment

08:00 - 08:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	0	625	0.000	0	0.0	0.000	A
C-AB	13	650	0.020	13	0.0	5.655	A
C-A	131			131			
A-B	21			21			
A-C	96			96			

08:15 - 08:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	0	615	0.000	0	0.0	0.000	A
C-AB	17	663	0.025	17	0.0	5.569	A
C-A	155			155			
A-B	25			25			
A-C	115			115			

08:30 - 08:45

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	0	602	0.000	0	0.0	0.000	A
C-AB	22	681	0.032	22	0.0	5.456	A
C-A	189			189			
A-B	31			31			
A-C	141			141			

08:45 - 09:00

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	0	602	0.000	0	0.0	0.000	A
C-AB	22	681	0.032	22	0.0	5.456	A
C-A	189			189			
A-B	31			31			
A-C	141			141			

09:00 - 09:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	0	615	0.000	0	0.0	0.000	A
C-AB	17	663	0.025	17	0.0	5.572	A
C-A	155			155			
A-B	25			25			
A-C	115			115			

09:15 - 09:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	0	624	0.000	0	0.0	0.000	A
C-AB	13	650	0.020	13	0.0	5.658	A
C-A	131			131			
A-B	21			21			
A-C	96			96			

Queue Variation Results for each time segment

08:00 - 08:15

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.00	0.00	0.00	0.00	0.00			N/A	N/A
C-AB	0.02	0.00	0.00	0.02	0.02			N/A	N/A

08:15 - 08:30

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.00	0.00	0.00	0.00	0.00			N/A	N/A
C-AB	0.03	0.03	0.25	0.45	0.48			N/A	N/A

08:30 - 08:45

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.00	0.00	0.00	0.00	0.00			N/A	N/A
C-AB	0.04	0.00	0.00	0.04	0.04			N/A	N/A

08:45 - 09:00

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.00	0.00	0.00	0.00	0.00			N/A	N/A
C-AB	0.04	0.00	0.00	0.04	0.04			N/A	N/A

09:00 - 09:15

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.00	0.00	0.00	0.00	0.00			N/A	N/A
C-AB	0.03	0.00	0.00	0.03	0.03			N/A	N/A

09:15 - 09:30

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.00	0.00	0.00	0.00	0.00			N/A	N/A
C-AB	0.02	0.00	0.00	0.02	0.02			N/A	N/A

Site 3 - 2025 Baseline, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Vehicle Mix		HV% is zero for all movements / time segments. Vehicle Mix matrix should be completed whether working in PCUs or Vehs. If HV% at the junction is genuinely zero, please ignore this warning.
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction type	Arm A Direction	Arm B Direction	Arm C Direction	Use circulating lanes	Junction Delay (s)	Junction LOS
3	Popes Road/Assumption Road	T-Junction	Two-way	Two-way	Two-way		0.39	A

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	0.39	A

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 Baseline	PM	ONE HOUR	15:30	17:00	15

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		✓	180	100.000
B		✓	5	100.000
C		✓	124	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		A	B	C
From	A	0	9	171
	B	1	0	4
	C	111	13	0

Vehicle Mix

Heavy Vehicle %

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

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max 95th percentile Queue (PCU)	Max LOS
B-AC	0.01	5.52	0.0	0.5	A
C-AB	0.03	6.00	0.0	0.5	A
C-A					
A-B					
A-C					

Main Results for each time segment

15:30 - 15:45

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	4	679	0.006	4	0.0	5.334	A
C-AB	11	612	0.019	11	0.0	5.997	A
C-A	82			82			
A-B	7			7			
A-C	129			129			

15:45 - 16:00

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	4	670	0.007	4	0.0	5.409	A
C-AB	14	617	0.023	14	0.0	5.967	A
C-A	98			98			
A-B	8			8			
A-C	154			154			

16:00 - 16:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	6	658	0.008	5	0.0	5.516	A
C-AB	18	625	0.029	18	0.0	5.927	A
C-A	119			119			
A-B	10			10			
A-C	188			188			

16:15 - 16:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	6	658	0.008	6	0.0	5.516	A
C-AB	18	625	0.029	18	0.0	5.927	A
C-A	119			119			
A-B	10			10			
A-C	188			188			

16:30 - 16:45

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	4	670	0.007	5	0.0	5.409	A
C-AB	14	617	0.023	14	0.0	5.970	A
C-A	98			98			
A-B	8			8			
A-C	154			154			

16:45 - 17:00

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	4	678	0.006	4	0.0	5.337	A
C-AB	11	612	0.019	11	0.0	5.997	A
C-A	82			82			
A-B	7			7			
A-C	129			129			

Queue Variation Results for each time segment

15:30 - 15:45

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.01	0.00	0.00	0.01	0.01			N/A	N/A
C-AB	0.02	0.00	0.00	0.02	0.02			N/A	N/A

15:45 - 16:00

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.01	0.01	0.25	0.45	0.48			N/A	N/A
C-AB	0.03	0.03	0.25	0.45	0.48			N/A	N/A

16:00 - 16:15

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.01	0.00	0.00	0.01	0.01			N/A	N/A
C-AB	0.04	0.00	0.00	0.04	0.04			N/A	N/A

16:15 - 16:30

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.01	0.00	0.00	0.01	0.01			N/A	N/A
C-AB	0.04	0.00	0.00	0.04	0.04			N/A	N/A

16:30 - 16:45

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.01	0.00	0.00	0.01	0.01			N/A	N/A
C-AB	0.03	0.00	0.00	0.03	0.03			N/A	N/A

16:45 - 17:00

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.01	0.00	0.00	0.01	0.01			N/A	N/A
C-AB	0.02	0.00	0.00	0.02	0.02			N/A	N/A

Site 3 - Do Nothing 2028, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Vehicle Mix		HV% is zero for all movements / time segments. Vehicle Mix matrix should be completed whether working in PCUs or Vehs. If HV% at the junction is genuinely zero, please ignore this warning.
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction type	Arm A Direction	Arm B Direction	Arm C Direction	Use circulating lanes	Junction Delay (s)	Junction LOS
3	Popes Road/Assumption Road	T-Junction	Two-way	Two-way	Two-way		0.31	A

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	0.31	A

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	Do Nothing 2028	AM	ONE HOUR	08:00	09:30	15

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		✓	165	100.000
B		✓	1	100.000
C		✓	201	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		A	B	C
From	A	0	30	135
	B	1	0	0
	C	186	15	0

Vehicle Mix

Heavy Vehicle %

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

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max 95th percentile Queue (PCU)	Max LOS
B-AC	0.00	0.00	0.0	~1	A
C-AB	0.03	5.64	0.0	0.5	A
C-A					
A-B					
A-C					

Main Results for each time segment

08:00 - 08:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	0	622	0.000	0	0.0	0.000	A
C-AB	14	653	0.022	14	0.0	5.636	A
C-A	137			137			
A-B	23			23			
A-C	102			102			

08:15 - 08:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	0	612	0.000	0	0.0	0.000	A
C-AB	18	667	0.027	18	0.0	5.547	A
C-A	163			163			
A-B	27			27			
A-C	121			121			

08:30 - 08:45

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	0	598	0.000	0	0.0	0.000	A
C-AB	24	686	0.034	24	0.0	5.431	A
C-A	198			198			
A-B	33			33			
A-C	149			149			

08:45 - 09:00

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	0	598	0.000	0	0.0	0.000	A
C-AB	24	686	0.034	24	0.0	5.434	A
C-A	198			198			
A-B	33			33			
A-C	149			149			

09:00 - 09:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	0	612	0.000	0	0.0	0.000	A
C-AB	18	667	0.027	18	0.0	5.549	A
C-A	163			163			
A-B	27			27			
A-C	121			121			

09:15 - 09:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	0	622	0.000	0	0.0	0.000	A
C-AB	14	653	0.022	14	0.0	5.639	A
C-A	137			137			
A-B	23			23			
A-C	102			102			

Queue Variation Results for each time segment

08:00 - 08:15

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.00	0.00	0.00	0.00	0.00			N/A	N/A
C-AB	0.03	0.00	0.00	0.03	0.03			N/A	N/A

08:15 - 08:30

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.00	0.00	0.00	0.00	0.00			N/A	N/A
C-AB	0.03	0.03	0.25	0.45	0.48			N/A	N/A

08:30 - 08:45

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.00	0.00	0.00	0.00	0.00			N/A	N/A
C-AB	0.05	0.03	0.25	0.45	0.48			N/A	N/A

08:45 - 09:00

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.00	0.00	0.00	0.00	0.00			N/A	N/A
C-AB	0.05	0.00	0.00	0.05	0.05			N/A	N/A

09:00 - 09:15

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.00	0.00	0.00	0.00	0.00			N/A	N/A
C-AB	0.03	0.00	0.00	0.03	0.03			N/A	N/A

09:15 - 09:30

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.00	0.00	0.00	0.00	0.00			N/A	N/A
C-AB	0.03	0.00	0.00	0.03	0.03			N/A	N/A

Site 3 - Do Nothing 2028, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Vehicle Mix		HV% is zero for all movements / time segments. Vehicle Mix matrix should be completed whether working in PCUs or Vehs. If HV% at the junction is genuinely zero, please ignore this warning.
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction type	Arm A Direction	Arm B Direction	Arm C Direction	Use circulating lanes	Junction Delay (s)	Junction LOS
3	Popes Road/Assumption Road	T-Junction	Two-way	Two-way	Two-way		0.40	A

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	0.40	A

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	Do Nothing 2028	PM	ONE HOUR	15:30	17:00	15

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		✓	190	100.000
B		✓	5	100.000
C		✓	131	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		A	B	C
From	A	0	10	180
	B	1	0	4
	C	117	14	0

Vehicle Mix

Heavy Vehicle %

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

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max 95th percentile Queue (PCU)	Max LOS
B-AC	0.01	5.55	0.0	0.5	A
C-AB	0.03	5.99	0.0	0.5	A
C-A					
A-B					
A-C					

Main Results for each time segment

15:30 - 15:45

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	4	676	0.006	4	0.0	5.353	A
C-AB	12	613	0.020	12	0.0	5.991	A
C-A	86			86			
A-B	8			8			
A-C	136			136			

15:45 - 16:00

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	4	667	0.007	4	0.0	5.432	A
C-AB	15	619	0.025	15	0.0	5.961	A
C-A	103			103			
A-B	9			9			
A-C	162			162			

16:00 - 16:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	6	655	0.008	5	0.0	5.546	A
C-AB	19	627	0.031	19	0.0	5.920	A
C-A	125			125			
A-B	11			11			
A-C	198			198			

16:15 - 16:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	6	655	0.008	6	0.0	5.546	A
C-AB	19	627	0.031	19	0.0	5.923	A
C-A	125			125			
A-B	11			11			
A-C	198			198			

16:30 - 16:45

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	4	667	0.007	5	0.0	5.432	A
C-AB	15	619	0.025	15	0.0	5.962	A
C-A	103			103			
A-B	9			9			
A-C	162			162			

16:45 - 17:00

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	4	676	0.006	4	0.0	5.356	A
C-AB	12	613	0.020	12	0.0	5.992	A
C-A	86			86			
A-B	8			8			
A-C	136			136			

Queue Variation Results for each time segment

15:30 - 15:45

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.01	0.00	0.00	0.01	0.01			N/A	N/A
C-AB	0.02	0.00	0.00	0.02	0.02			N/A	N/A

15:45 - 16:00

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.01	0.01	0.25	0.45	0.48			N/A	N/A
C-AB	0.03	0.03	0.25	0.45	0.48			N/A	N/A

16:00 - 16:15

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.01	0.00	0.00	0.01	0.01			N/A	N/A
C-AB	0.04	0.00	0.00	0.04	0.04			N/A	N/A

16:15 - 16:30

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.01	0.00	0.00	0.01	0.01			N/A	N/A
C-AB	0.04	0.00	0.00	0.04	0.04			N/A	N/A

16:30 - 16:45

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.01	0.00	0.00	0.01	0.01			N/A	N/A
C-AB	0.03	0.00	0.00	0.03	0.03			N/A	N/A

16:45 - 17:00

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.01	0.00	0.00	0.01	0.01			N/A	N/A
C-AB	0.02	0.00	0.00	0.02	0.02			N/A	N/A

Site 3 - 2028 Opening Year, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Vehicle Mix		HV% is zero for all movements / time segments. Vehicle Mix matrix should be completed whether working in PCUs or Vehs. If HV% at the junction is genuinely zero, please ignore this warning.
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction type	Arm A Direction	Arm B Direction	Arm C Direction	Use circulating lanes	Junction Delay (s)	Junction LOS
3	Popes Road/Assumption Road	T-Junction	Two-way	Two-way	Two-way		0.27	A

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	0.27	A

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	2028 Opening Year	AM	ONE HOUR	08:00	09:30	15

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		✓	210	100.000
B		✓	1	100.000
C		✓	221	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		A	B	C
From	A	0	35	175
	B	1	0	0
	C	206	15	0

Vehicle Mix

Heavy Vehicle %

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

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max 95th percentile Queue (PCU)	Max LOS
B-AC	0.00	0.00	0.0	~1	A
C-AB	0.04	5.61	0.0	0.5	A
C-A					
A-B					
A-C					

Main Results for each time segment

08:00 - 08:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	0	611	0.000	0	0.0	0.000	A
C-AB	15	656	0.023	15	0.0	5.610	A
C-A	152			152			
A-B	26			26			
A-C	132			132			

08:15 - 08:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	0	599	0.000	0	0.0	0.000	A
C-AB	19	671	0.028	19	0.0	5.516	A
C-A	180			180			
A-B	31			31			
A-C	157			157			

08:30 - 08:45

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	0	582	0.000	0	0.0	0.000	A
C-AB	25	692	0.036	25	0.0	5.395	A
C-A	219			219			
A-B	39			39			
A-C	193			193			

08:45 - 09:00

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	0	582	0.000	0	0.0	0.000	A
C-AB	25	692	0.036	25	0.0	5.397	A
C-A	219			219			
A-B	39			39			
A-C	193			193			

09:00 - 09:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	0	599	0.000	0	0.0	0.000	A
C-AB	19	671	0.028	19	0.0	5.518	A
C-A	180			180			
A-B	31			31			
A-C	157			157			

09:15 - 09:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	0	611	0.000	0	0.0	0.000	A
C-AB	15	656	0.023	15	0.0	5.611	A
C-A	152			152			
A-B	26			26			
A-C	132			132			

Queue Variation Results for each time segment

08:00 - 08:15

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.00	0.00	0.00	0.00	0.00			N/A	N/A
C-AB	0.03	0.00	0.00	0.03	0.03			N/A	N/A

08:15 - 08:30

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.00	0.00	0.00	0.00	0.00			N/A	N/A
C-AB	0.04	0.03	0.25	0.45	0.48			N/A	N/A

08:30 - 08:45

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.00	0.00	0.00	0.00	0.00			N/A	N/A
C-AB	0.05	0.03	0.25	0.45	0.48			N/A	N/A

08:45 - 09:00

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.00	0.00	0.00	0.00	0.00			N/A	N/A
C-AB	0.05	0.00	0.00	0.05	0.05			N/A	N/A

09:00 - 09:15

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.00	0.00	0.00	0.00	0.00			N/A	N/A
C-AB	0.04	0.00	0.00	0.04	0.04			N/A	N/A

09:15 - 09:30

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.00	0.00	0.00	0.00	0.00			N/A	N/A
C-AB	0.03	0.00	0.00	0.03	0.03			N/A	N/A

Site 3 - 2028 Opening Year, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Vehicle Mix		HV% is zero for all movements / time segments. Vehicle Mix matrix should be completed whether working in PCUs or Vehs. If HV% at the junction is genuinely zero, please ignore this warning.
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction type	Arm A Direction	Arm B Direction	Arm C Direction	Use circulating lanes	Junction Delay (s)	Junction LOS
3	Popes Road/Assumption Road	T-Junction	Two-way	Two-way	Two-way		0.34	A

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	0.34	A

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	2028 Opening Year	PM	ONE HOUR	15:30	17:00	15

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		✓	214	100.000
B		✓	5	100.000
C		✓	173	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		A	B	C
From	A	0	12	202
	B	1	0	4
	C	159	14	0

Vehicle Mix

Heavy Vehicle %

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

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max 95th percentile Queue (PCU)	Max LOS
B-AC	0.01	5.63	0.0	0.5	A
C-AB	0.03	5.82	0.0	0.5	A
C-A					
A-B					
A-C					

Main Results for each time segment

15:30 - 15:45

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	4	669	0.006	4	0.0	5.408	A
C-AB	13	631	0.021	13	0.0	5.823	A
C-A	117			117			
A-B	9			9			
A-C	152			152			

15:45 - 16:00

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	4	659	0.007	4	0.0	5.500	A
C-AB	16	641	0.025	16	0.0	5.762	A
C-A	139			139			
A-B	11			11			
A-C	182			182			

16:00 - 16:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	6	645	0.009	5	0.0	5.633	A
C-AB	21	654	0.032	21	0.0	5.683	A
C-A	169			169			
A-B	13			13			
A-C	222			222			

16:15 - 16:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	6	645	0.009	6	0.0	5.633	A
C-AB	21	654	0.032	21	0.0	5.685	A
C-A	169			169			
A-B	13			13			
A-C	222			222			

16:30 - 16:45

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	4	659	0.007	5	0.0	5.500	A
C-AB	16	641	0.025	16	0.0	5.764	A
C-A	139			139			
A-B	11			11			
A-C	182			182			

16:45 - 17:00

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	4	669	0.006	4	0.0	5.410	A
C-AB	13	631	0.021	13	0.0	5.823	A
C-A	117			117			
A-B	9			9			
A-C	152			152			

Queue Variation Results for each time segment

15:30 - 15:45

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.01	0.00	0.00	0.01	0.01			N/A	N/A
C-AB	0.02	0.00	0.00	0.02	0.02			N/A	N/A

15:45 - 16:00

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.01	0.01	0.25	0.45	0.48			N/A	N/A
C-AB	0.03	0.03	0.25	0.45	0.48			N/A	N/A

16:00 - 16:15

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.01	0.00	0.00	0.01	0.01			N/A	N/A
C-AB	0.04	0.00	0.00	0.04	0.04			N/A	N/A

16:15 - 16:30

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.01	0.00	0.00	0.01	0.01			N/A	N/A
C-AB	0.04	0.00	0.00	0.04	0.04			N/A	N/A

16:30 - 16:45

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.01	0.00	0.00	0.01	0.01			N/A	N/A
C-AB	0.03	0.00	0.00	0.03	0.03			N/A	N/A

16:45 - 17:00

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.01	0.00	0.00	0.01	0.01			N/A	N/A
C-AB	0.03	0.00	0.00	0.03	0.03			N/A	N/A

Site 3 - Do Nothing 2033, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Vehicle Mix		HV% is zero for all movements / time segments. Vehicle Mix matrix should be completed whether working in PCUs or Vehs. If HV% at the junction is genuinely zero, please ignore this warning.
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction type	Arm A Direction	Arm B Direction	Arm C Direction	Use circulating lanes	Junction Delay (s)	Junction LOS
3	Popes Road/Assumption Road	T-Junction	Two-way	Two-way	Two-way		0.32	A

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	0.32	A

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D7	Do Nothing 2033	AM	ONE HOUR	08:00	09:30	15

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		✓	175	100.000
B		✓	1	100.000
C		✓	213	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		A	B	C
From	A	0	32	143
	B	1	0	0
	C	197	16	0

Vehicle Mix

Heavy Vehicle %

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

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max 95th percentile Queue (PCU)	Max LOS
B-AC	0.00	0.00	0.0	~1	A
C-AB	0.04	5.61	0.1	0.5	A
C-A					
A-B					
A-C					

Main Results for each time segment

08:00 - 08:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	0	619	0.000	0	0.0	0.000	A
C-AB	16	657	0.024	15	0.0	5.610	A
C-A	145			145			
A-B	24			24			
A-C	108			108			

08:15 - 08:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	0	608	0.000	0	0.0	0.000	A
C-AB	20	672	0.029	20	0.0	5.518	A
C-A	172			172			
A-B	29			29			
A-C	129			129			

08:30 - 08:45

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	0	593	0.000	0	0.0	0.000	A
C-AB	26	693	0.037	26	0.1	5.398	A
C-A	209			209			
A-B	35			35			
A-C	157			157			

08:45 - 09:00

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	0	593	0.000	0	0.0	0.000	A
C-AB	26	693	0.037	26	0.1	5.398	A
C-A	209			209			
A-B	35			35			
A-C	157			157			

09:00 - 09:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	0	608	0.000	0	0.0	0.000	A
C-AB	20	672	0.029	20	0.0	5.519	A
C-A	172			172			
A-B	29			29			
A-C	129			129			

09:15 - 09:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	0	619	0.000	0	0.0	0.000	A
C-AB	16	657	0.024	16	0.0	5.613	A
C-A	145			145			
A-B	24			24			
A-C	108			108			

Queue Variation Results for each time segment

08:00 - 08:15

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.00	0.00	0.00	0.00	0.00			N/A	N/A
C-AB	0.03	0.00	0.00	0.03	0.03			N/A	N/A

08:15 - 08:30

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.00	0.00	0.00	0.00	0.00			N/A	N/A
C-AB	0.04	0.03	0.25	0.45	0.48			N/A	N/A

08:30 - 08:45

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.00	0.00	0.00	0.00	0.00			N/A	N/A
C-AB	0.05	0.03	0.25	0.45	0.48			N/A	N/A

08:45 - 09:00

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.00	0.00	0.00	0.00	0.00			N/A	N/A
C-AB	0.05	0.00	0.00	0.05	0.05			N/A	N/A

09:00 - 09:15

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.00	0.00	0.00	0.00	0.00			N/A	N/A
C-AB	0.04	0.00	0.00	0.04	0.04			N/A	N/A

09:15 - 09:30

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.00	0.00	0.00	0.00	0.00			N/A	N/A
C-AB	0.03	0.00	0.00	0.03	0.03			N/A	N/A

Site 3 - Do Nothing 2033, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Vehicle Mix		HV% is zero for all movements / time segments. Vehicle Mix matrix should be completed whether working in PCUs or Vehs. If HV% at the junction is genuinely zero, please ignore this warning.
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction type	Arm A Direction	Arm B Direction	Arm C Direction	Use circulating lanes	Junction Delay (s)	Junction LOS
3	Popes Road/Assumption Road	T-Junction	Two-way	Two-way	Two-way		0.40	A

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	0.40	A

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D8	Do Nothing 2033	PM	ONE HOUR	15:30	17:00	15

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		✓	201	100.000
B		✓	5	100.000
C		✓	139	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		A	B	C
From	A	0	10	191
	B	1	0	4
	C	124	15	0

Vehicle Mix

Heavy Vehicle %

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

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max 95th percentile Queue (PCU)	Max LOS
B-AC	0.01	5.58	0.0	0.5	A
C-AB	0.03	5.99	0.0	0.5	A
C-A					
A-B					
A-C					

Main Results for each time segment

15:30 - 15:45

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	4	673	0.006	4	0.0	5.376	A
C-AB	13	615	0.022	13	0.0	5.983	A
C-A	91			91			
A-B	8			8			
A-C	144			144			

15:45 - 16:00

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	4	664	0.007	4	0.0	5.460	A
C-AB	16	621	0.026	16	0.0	5.951	A
C-A	109			109			
A-B	9			9			
A-C	172			172			

16:00 - 16:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	6	650	0.008	5	0.0	5.581	A
C-AB	21	630	0.034	21	0.0	5.908	A
C-A	132			132			
A-B	11			11			
A-C	210			210			

16:15 - 16:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	6	650	0.008	6	0.0	5.581	A
C-AB	21	630	0.034	21	0.0	5.909	A
C-A	132			132			
A-B	11			11			
A-C	210			210			

16:30 - 16:45

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	4	664	0.007	5	0.0	5.460	A
C-AB	16	621	0.027	17	0.0	5.952	A
C-A	108			108			
A-B	9			9			
A-C	172			172			

16:45 - 17:00

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	4	673	0.006	4	0.0	5.378	A
C-AB	13	615	0.022	13	0.0	5.986	A
C-A	91			91			
A-B	8			8			
A-C	144			144			

Queue Variation Results for each time segment

15:30 - 15:45

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.01	0.00	0.00	0.01	0.01			N/A	N/A
C-AB	0.03	0.00	0.00	0.03	0.03			N/A	N/A

15:45 - 16:00

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.01	0.01	0.25	0.45	0.48			N/A	N/A
C-AB	0.03	0.03	0.25	0.45	0.48			N/A	N/A

16:00 - 16:15

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.01	0.00	0.00	0.01	0.01			N/A	N/A
C-AB	0.04	0.00	0.00	0.04	0.04			N/A	N/A

16:15 - 16:30

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.01	0.00	0.00	0.01	0.01			N/A	N/A
C-AB	0.04	0.00	0.00	0.04	0.04			N/A	N/A

16:30 - 16:45

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.01	0.00	0.00	0.01	0.01			N/A	N/A
C-AB	0.03	0.00	0.00	0.03	0.03			N/A	N/A

16:45 - 17:00

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.01	0.00	0.00	0.01	0.01			N/A	N/A
C-AB	0.03	0.00	0.00	0.03	0.03			N/A	N/A

Site 3 - 2033 Opening Year +5 years, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Vehicle Mix		HV% is zero for all movements / time segments. Vehicle Mix matrix should be completed whether working in PCUs or Vehs. If HV% at the junction is genuinely zero, please ignore this warning.
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction type	Arm A Direction	Arm B Direction	Arm C Direction	Use circulating lanes	Junction Delay (s)	Junction LOS
3	Popes Road/Assumption Road	T-Junction	Two-way	Two-way	Two-way		0.28	A

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	0.28	A

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)
D9	2033 Opening Year +5 years	AM	ONE HOUR	08:00	09:30	15

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		✓	220	100.000
B		✓	1	100.000
C		✓	234	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		A	B	C
From	A	0	37	183
	B	1	0	0
	C	218	16	0

Vehicle Mix

Heavy Vehicle %

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

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max 95th percentile Queue (PCU)	Max LOS
B-AC	0.00	0.00	0.0	~1	A
C-AB	0.04	5.58	0.1	0.5	A
C-A					
A-B					
A-C					

Main Results for each time segment

08:00 - 08:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	0	608	0.000	0	0.0	0.000	A
C-AB	16	661	0.024	16	0.0	5.579	A
C-A	160			160			
A-B	28			28			
A-C	138			138			

08:15 - 08:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	0	595	0.000	0	0.0	0.000	A
C-AB	20	677	0.030	20	0.0	5.482	A
C-A	190			190			
A-B	33			33			
A-C	165			165			

08:30 - 08:45

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	0	577	0.000	0	0.0	0.000	A
C-AB	27	699	0.038	27	0.1	5.355	A
C-A	231			231			
A-B	41			41			
A-C	201			201			

08:45 - 09:00

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	0	577	0.000	0	0.0	0.000	A
C-AB	27	699	0.038	27	0.1	5.358	A
C-A	231			231			
A-B	41			41			
A-C	201			201			

09:00 - 09:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	0	595	0.000	0	0.0	0.000	A
C-AB	20	677	0.030	20	0.0	5.486	A
C-A	190			190			
A-B	33			33			
A-C	165			165			

09:15 - 09:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	0	608	0.000	0	0.0	0.000	A
C-AB	16	661	0.024	16	0.0	5.580	A
C-A	160			160			
A-B	28			28			
A-C	138			138			

Queue Variation Results for each time segment

08:00 - 08:15

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.00	0.00	0.00	0.00	0.00			N/A	N/A
C-AB	0.03	0.00	0.00	0.03	0.03			N/A	N/A

08:15 - 08:30

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.00	0.00	0.00	0.00	0.00			N/A	N/A
C-AB	0.04	0.03	0.25	0.45	0.48			N/A	N/A

08:30 - 08:45

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.00	0.00	0.00	0.00	0.00			N/A	N/A
C-AB	0.05	0.03	0.25	0.45	0.48			N/A	N/A

08:45 - 09:00

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.00	0.00	0.00	0.00	0.00			N/A	N/A
C-AB	0.05	0.00	0.00	0.05	0.05			N/A	N/A

09:00 - 09:15

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.00	0.00	0.00	0.00	0.00			N/A	N/A
C-AB	0.04	0.00	0.00	0.04	0.04			N/A	N/A

09:15 - 09:30

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.00	0.00	0.00	0.00	0.00			N/A	N/A
C-AB	0.03	0.00	0.00	0.03	0.03			N/A	N/A

Site 3 - 2033 Opening Year +5 years, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Vehicle Mix		HV% is zero for all movements / time segments. Vehicle Mix matrix should be completed whether working in PCUs or Vehs. If HV% at the junction is genuinely zero, please ignore this warning.
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction type	Arm A Direction	Arm B Direction	Arm C Direction	Use circulating lanes	Junction Delay (s)	Junction LOS
3	Popes Road/Assumption Road	T-Junction	Two-way	Two-way	Two-way		0.35	A

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	0.35	A

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)
D10	2033 Opening Year +5 years	PM	ONE HOUR	15:30	17:00	15

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		✓	226	100.000
B		✓	5	100.000
C		✓	181	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		A	B	C
From	A	0	13	213
	B	1	0	4
	C	166	15	0

Vehicle Mix

Heavy Vehicle %

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

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max 95th percentile Queue (PCU)	Max LOS
B-AC	0.01	5.67	0.0	0.5	A
C-AB	0.03	5.82	0.0	0.5	A
C-A					
A-B					
A-C					

Main Results for each time segment

15:30 - 15:45

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	4	666	0.006	4	0.0	5.431	A
C-AB	14	633	0.022	14	0.0	5.816	A
C-A	122			122			
A-B	10			10			
A-C	160			160			

15:45 - 16:00

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	4	655	0.007	4	0.0	5.529	A
C-AB	18	643	0.027	18	0.0	5.755	A
C-A	145			145			
A-B	12			12			
A-C	191			191			

16:00 - 16:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	6	640	0.009	5	0.0	5.671	A
C-AB	23	657	0.035	23	0.0	5.674	A
C-A	176			176			
A-B	14			14			
A-C	235			235			

16:15 - 16:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	6	640	0.009	6	0.0	5.671	A
C-AB	23	657	0.035	23	0.0	5.677	A
C-A	176			176			
A-B	14			14			
A-C	235			235			

16:30 - 16:45

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	4	655	0.007	5	0.0	5.529	A
C-AB	18	643	0.027	18	0.0	5.759	A
C-A	145			145			
A-B	12			12			
A-C	191			191			

16:45 - 17:00

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	4	666	0.006	4	0.0	5.431	A
C-AB	14	633	0.022	14	0.0	5.817	A
C-A	122			122			
A-B	10			10			
A-C	160			160			

Queue Variation Results for each time segment

15:30 - 15:45

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.01	0.00	0.00	0.01	0.01			N/A	N/A
C-AB	0.03	0.00	0.00	0.03	0.03			N/A	N/A

15:45 - 16:00

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.01	0.01	0.25	0.45	0.48			N/A	N/A
C-AB	0.03	0.03	0.25	0.45	0.48			N/A	N/A

16:00 - 16:15

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.01	0.00	0.00	0.01	0.01			N/A	N/A
C-AB	0.05	0.03	0.25	0.45	0.48			N/A	N/A

16:15 - 16:30

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.01	0.00	0.00	0.01	0.01			N/A	N/A
C-AB	0.05	0.00	0.00	0.05	0.05			N/A	N/A

16:30 - 16:45

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.01	0.00	0.00	0.01	0.01			N/A	N/A
C-AB	0.04	0.00	0.00	0.04	0.04			N/A	N/A

16:45 - 17:00

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.01	0.00	0.00	0.01	0.01			N/A	N/A
C-AB	0.03	0.00	0.00	0.03	0.03			N/A	N/A

Site 3 - Do Nothing 2043, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Vehicle Mix		HV% is zero for all movements / time segments. Vehicle Mix matrix should be completed whether working in PCUs or Vehs. If HV% at the junction is genuinely zero, please ignore this warning.
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction type	Arm A Direction	Arm B Direction	Arm C Direction	Use circulating lanes	Junction Delay (s)	Junction LOS
3	Popes Road/Assumption Road	T-Junction	Two-way	Two-way	Two-way		0.32	A

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	0.32	A

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)
D11	Do Nothing 2043	AM	ONE HOUR	08:00	09:30	15

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		✓	191	100.000
B		✓	1	100.000
C		✓	232	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		A	B	C
From	A	0	35	156
	B	1	0	0
	C	215	17	0

Vehicle Mix

Heavy Vehicle %

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

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max 95th percentile Queue (PCU)	Max LOS
B-AC	0.00	0.00	0.0	~1	A
C-AB	0.04	5.57	0.1	0.5	A
C-A					
A-B					
A-C					

Main Results for each time segment

08:00 - 08:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	0	614	0.000	0	0.0	0.000	A
C-AB	17	664	0.025	17	0.0	5.562	A
C-A	158			158			
A-B	26			26			
A-C	117			117			

08:15 - 08:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	0	602	0.000	0	0.0	0.000	A
C-AB	21	680	0.031	21	0.0	5.463	A
C-A	187			187			
A-B	31			31			
A-C	140			140			

08:30 - 08:45

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	0	586	0.000	0	0.0	0.000	A
C-AB	28	703	0.040	28	0.1	5.335	A
C-A	227			227			
A-B	39			39			
A-C	172			172			

08:45 - 09:00

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	0	586	0.000	0	0.0	0.000	A
C-AB	28	703	0.040	28	0.1	5.338	A
C-A	227			227			
A-B	39			39			
A-C	172			172			

09:00 - 09:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	0	602	0.000	0	0.0	0.000	A
C-AB	21	680	0.031	21	0.0	5.467	A
C-A	187			187			
A-B	31			31			
A-C	140			140			

09:15 - 09:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	0	614	0.000	0	0.0	0.000	A
C-AB	17	664	0.026	17	0.0	5.565	A
C-A	158			158			
A-B	26			26			
A-C	117			117			

Queue Variation Results for each time segment

08:00 - 08:15

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.00	0.00	0.00	0.00	0.00			N/A	N/A
C-AB	0.03	0.00	0.00	0.03	0.03			N/A	N/A

08:15 - 08:30

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.00	0.00	0.00	0.00	0.00			N/A	N/A
C-AB	0.04	0.03	0.25	0.45	0.48			N/A	N/A

08:30 - 08:45

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.00	0.00	0.00	0.00	0.00			N/A	N/A
C-AB	0.06	0.03	0.25	0.46	0.48			N/A	N/A

08:45 - 09:00

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.00	0.00	0.00	0.00	0.00			N/A	N/A
C-AB	0.06	0.00	0.00	0.06	0.06			N/A	N/A

09:00 - 09:15

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.00	0.00	0.00	0.00	0.00			N/A	N/A
C-AB	0.04	0.00	0.00	0.04	0.04			N/A	N/A

09:15 - 09:30

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.00	0.00	0.00	0.00	0.00			N/A	N/A
C-AB	0.03	0.00	0.00	0.03	0.03			N/A	N/A

Site 3 - Do Nothing 2043, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Vehicle Mix		HV% is zero for all movements / time segments. Vehicle Mix matrix should be completed whether working in PCUs or Vehs. If HV% at the junction is genuinely zero, please ignore this warning.
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction type	Arm A Direction	Arm B Direction	Arm C Direction	Use circulating lanes	Junction Delay (s)	Junction LOS
3	Popes Road/Assumption Road	T-Junction	Two-way	Two-way	Two-way		0.41	A

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	0.41	A

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)
D12	Do Nothing 2043	PM	ONE HOUR	15:30	17:00	15

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		✓	220	100.000
B		✓	6	100.000
C		✓	152	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		A	B	C
From	A	0	11	209
	B	1	0	5
	C	136	16	0

Vehicle Mix

Heavy Vehicle %

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

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max 95th percentile Queue (PCU)	Max LOS
B-AC	0.01	5.58	0.0	0.5	A
C-AB	0.04	5.96	0.0	0.5	A
C-A					
A-B					
A-C					

Main Results for each time segment

15:30 - 15:45

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	5	676	0.007	4	0.0	5.362	A
C-AB	14	618	0.023	14	0.0	5.962	A
C-A	100			100			
A-B	8			8			
A-C	157			157			

15:45 - 16:00

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	5	665	0.008	5	0.0	5.453	A
C-AB	18	625	0.029	18	0.0	5.926	A
C-A	119			119			
A-B	10			10			
A-C	188			188			

16:00 - 16:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	7	651	0.010	7	0.0	5.584	A
C-AB	23	635	0.036	23	0.0	5.880	A
C-A	144			144			
A-B	12			12			
A-C	230			230			

16:15 - 16:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	7	651	0.010	7	0.0	5.584	A
C-AB	23	635	0.036	23	0.0	5.881	A
C-A	144			144			
A-B	12			12			
A-C	230			230			

16:30 - 16:45

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	5	665	0.008	5	0.0	5.456	A
C-AB	18	625	0.029	18	0.0	5.930	A
C-A	119			119			
A-B	10			10			
A-C	188			188			

16:45 - 17:00

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	5	676	0.007	5	0.0	5.365	A
C-AB	14	618	0.023	14	0.0	5.963	A
C-A	100			100			
A-B	8			8			
A-C	157			157			

Queue Variation Results for each time segment

15:30 - 15:45

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.01	0.00	0.00	0.01	0.01			N/A	N/A
C-AB	0.03	0.00	0.00	0.03	0.03			N/A	N/A

15:45 - 16:00

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.01	0.01	0.25	0.45	0.48			N/A	N/A
C-AB	0.04	0.03	0.25	0.45	0.48			N/A	N/A

16:00 - 16:15

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.01	0.00	0.00	0.01	0.01			N/A	N/A
C-AB	0.05	0.03	0.25	0.45	0.48			N/A	N/A

16:15 - 16:30

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.01	0.00	0.00	0.01	0.01			N/A	N/A
C-AB	0.05	0.00	0.00	0.05	0.05			N/A	N/A

16:30 - 16:45

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.01	0.00	0.00	0.01	0.01			N/A	N/A
C-AB	0.04	0.00	0.00	0.04	0.04			N/A	N/A

16:45 - 17:00

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.01	0.00	0.00	0.01	0.01			N/A	N/A
C-AB	0.03	0.00	0.00	0.03	0.03			N/A	N/A

Site 3 - 2043 Opening Year +15 years, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Vehicle Mix		HV% is zero for all movements / time segments. Vehicle Mix matrix should be completed whether working in PCUs or Vehs. If HV% at the junction is genuinely zero, please ignore this warning.
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction type	Arm A Direction	Arm B Direction	Arm C Direction	Use circulating lanes	Junction Delay (s)	Junction LOS
3	Popes Road/Assumption Road	T-Junction	Two-way	Two-way	Two-way		0.28	A

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	0.28	A

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)
D13	2043 Opening Year +15 years	AM	ONE HOUR	08:00	09:30	15

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		✓	236	100.000
B		✓	1	100.000
C		✓	253	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		A	B	C
From	A	0	40	196
	B	1	0	0
	C	236	17	0

Vehicle Mix

Heavy Vehicle %

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

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max 95th percentile Queue (PCU)	Max LOS
B-AC	0.00	0.00	0.0	~1	A
C-AB	0.04	5.53	0.1	0.5	A
C-A					
A-B					
A-C					

Main Results for each time segment

08:00 - 08:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	0	603	0.000	0	0.0	0.000	A
C-AB	17	668	0.026	17	0.0	5.532	A
C-A	173			173			
A-B	30			30			
A-C	148			148			

08:15 - 08:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	0	589	0.000	0	0.0	0.000	A
C-AB	22	685	0.032	22	0.0	5.428	A
C-A	205			205			
A-B	36			36			
A-C	176			176			

08:30 - 08:45

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	0	569	0.000	0	0.0	0.000	A
C-AB	30	710	0.042	30	0.1	5.293	A
C-A	249			249			
A-B	44			44			
A-C	216			216			

08:45 - 09:00

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	0	569	0.000	0	0.0	0.000	A
C-AB	30	710	0.042	30	0.1	5.294	A
C-A	249			249			
A-B	44			44			
A-C	216			216			

09:00 - 09:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	0	589	0.000	0	0.0	0.000	A
C-AB	22	685	0.032	22	0.0	5.431	A
C-A	205			205			
A-B	36			36			
A-C	176			176			

09:15 - 09:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	0	603	0.000	0	0.0	0.000	A
C-AB	17	668	0.026	18	0.0	5.535	A
C-A	173			173			
A-B	30			30			
A-C	148			148			

Queue Variation Results for each time segment

08:00 - 08:15

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.00	0.00	0.00	0.00	0.00			N/A	N/A
C-AB	0.03	0.00	0.00	0.03	0.03			N/A	N/A

08:15 - 08:30

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.00	0.00	0.00	0.00	0.00			N/A	N/A
C-AB	0.04	0.03	0.25	0.45	0.48			N/A	N/A

08:30 - 08:45

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.00	0.00	0.00	0.00	0.00			N/A	N/A
C-AB	0.06	0.03	0.25	0.46	0.48			N/A	N/A

08:45 - 09:00

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.00	0.00	0.00	0.00	0.00			N/A	N/A
C-AB	0.06	0.00	0.00	0.06	0.06			N/A	N/A

09:00 - 09:15

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.00	0.00	0.00	0.00	0.00			N/A	N/A
C-AB	0.04	0.00	0.00	0.04	0.04			N/A	N/A

09:15 - 09:30

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.00	0.00	0.00	0.00	0.00			N/A	N/A
C-AB	0.03	0.00	0.00	0.03	0.03			N/A	N/A

Site 3 - 2043 Opening Year +15 years, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Vehicle Mix		HV% is zero for all movements / time segments. Vehicle Mix matrix should be completed whether working in PCUs or Vehs. If HV% at the junction is genuinely zero, please ignore this warning.
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction type	Arm A Direction	Arm B Direction	Arm C Direction	Use circulating lanes	Junction Delay (s)	Junction LOS
3	Popes Road/Assumption Road	T-Junction	Two-way	Two-way	Two-way		0.36	A

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	0.36	A

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)
D14	2043 Opening Year +15 years	PM	ONE HOUR	15:30	17:00	15

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		✓	244	100.000
B		✓	6	100.000
C		✓	193	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		A	B	C
From	A	0	14	230
	B	1	0	5
	C	177	16	0

Vehicle Mix

Heavy Vehicle %

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

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max 95th percentile Queue (PCU)	Max LOS
B-AC	0.01	5.67	0.0	0.5	A
C-AB	0.04	5.80	0.1	0.5	A
C-A					
A-B					
A-C					

Main Results for each time segment

15:30 - 15:45

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	5	669	0.007	4	0.0	5.414	A
C-AB	15	636	0.024	15	0.0	5.799	A
C-A	130			130			
A-B	11			11			
A-C	173			173			

15:45 - 16:00

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	5	658	0.008	5	0.0	5.517	A
C-AB	19	647	0.030	19	0.0	5.736	A
C-A	154			154			
A-B	13			13			
A-C	207			207			

16:00 - 16:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	7	642	0.010	7	0.0	5.667	A
C-AB	25	662	0.038	25	0.1	5.652	A
C-A	187			187			
A-B	15			15			
A-C	253			253			

16:15 - 16:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	7	642	0.010	7	0.0	5.667	A
C-AB	25	662	0.038	25	0.1	5.656	A
C-A	187			187			
A-B	15			15			
A-C	253			253			

16:30 - 16:45

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	5	658	0.008	5	0.0	5.517	A
C-AB	19	647	0.030	19	0.0	5.740	A
C-A	154			154			
A-B	13			13			
A-C	207			207			

16:45 - 17:00

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	5	669	0.007	5	0.0	5.414	A
C-AB	15	636	0.024	15	0.0	5.803	A
C-A	130			130			
A-B	11			11			
A-C	173			173			

Queue Variation Results for each time segment

15:30 - 15:45

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.01	0.00	0.00	0.01	0.01			N/A	N/A
C-AB	0.03	0.00	0.00	0.03	0.03			N/A	N/A

15:45 - 16:00

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.01	0.01	0.25	0.45	0.48			N/A	N/A
C-AB	0.04	0.03	0.25	0.45	0.48			N/A	N/A

16:00 - 16:15

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.01	0.00	0.00	0.01	0.01			N/A	N/A
C-AB	0.05	0.03	0.25	0.45	0.48			N/A	N/A

16:15 - 16:30

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.01	0.00	0.00	0.01	0.01			N/A	N/A
C-AB	0.05	0.00	0.00	0.05	0.05			N/A	N/A

16:30 - 16:45

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.01	0.00	0.00	0.01	0.01			N/A	N/A
C-AB	0.04	0.00	0.00	0.04	0.04			N/A	N/A

16:45 - 17:00

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.01	0.00	0.00	0.01	0.01			N/A	N/A
C-AB	0.03	0.00	0.00	0.03	0.03			N/A	N/A

Junctions 10

PICADY 10 - Priority Intersection Module

Filename: Site 4 Popes Road-Rathmore Park T-Junction.j10
Path: I:\DWGS\244\101-150\244132\3.0 Calculations\1. Civils\2.0 Design Calculations\4.0 Traffic Calculations\02 Junction Modelling\Junctions 10
Report generation date: 28/08/2025 14:14:23

»Site 4 - 2025 Baseline, AM
»Site 4 - 2025 Baseline, PM
»Site 4 - Do Nothing 2028, AM
»Site 4 - Do Nothing 2028, PM
»Site 4 - 2028 Opening Year, AM
»Site 4 - 2028 Opening Year, PM
»Site 4 - Do Nothing 2033, AM
»Site 4 - Do Nothing 2033, PM
»Site 4 - 2033 Opening Year +5 years, AM
»Site 4 - 2033 Opening Year +5 years, PM
»Site 4 - Do Nothing 2043, AM
»Site 4 - Do Nothing 2043, PM
»Site 4 - 2043 Opening Year +15 years, AM
»Site 4 - 2043 Opening Year +15 years, PM

Summary of junction performance

	AM							PM						
	Set ID	Queue (PCU)	Delay (s)	RFC	LOS	Junction Delay (s)	Junction LOS	Set ID	Queue (PCU)	Delay (s)	RFC	LOS	Junction Delay (s)	Junction LOS
	Site 4 - 2025 Baseline													
Stream B-AC	D1	0.0	6.66	0.03	A	0.32	A	D2	0.0	6.58	0.03	A	0.46	A
Stream C-AB		0.0	5.62	0.00	A				0.0	5.40	0.01	A		
	Site 4 - Do Nothing 2028													
Stream B-AC	D3	0.0	6.74	0.03	A	0.33	A	D4	0.0	6.64	0.03	A	0.47	A
Stream C-AB		0.0	5.61	0.00	A				0.0	5.37	0.01	A		
	Site 4 - 2028 Opening Year													
Stream B-AC	D5	0.1	7.57	0.12	A	1.14	A	D6	0.1	7.05	0.08	A	0.86	A
Stream C-AB		0.0	5.64	0.00	A				0.0	5.43	0.01	A		
	Site 4 - Do Nothing 2033													
Stream B-AC	D7	0.0	6.83	0.03	A	0.33	A	D8	0.0	6.70	0.04	A	0.47	A
Stream C-AB		0.0	5.59	0.00	A				0.0	5.34	0.01	A		
	Site 4 - 2033 Opening Year +5 years													
Stream B-AC	D9	0.1	7.68	0.13	A	1.12	A	D10	0.1	7.12	0.08	A	0.85	A
Stream C-AB		0.0	5.62	0.00	A				0.0	5.39	0.01	A		
	Site 4 - Do Nothing 2043													
Stream B-AC	D11	0.0	6.96	0.04	A	0.33	A	D12	0.0	6.82	0.04	A	0.49	A
Stream C-AB		0.0	5.56	0.00	A				0.0	5.29	0.01	A		
	Site 4 - 2043 Opening Year +15 years													
Stream B-AC	D13	0.2	7.85	0.13	A	1.08	A	D14	0.1	7.24	0.09	A	0.84	A
Stream C-AB		0.0	5.59	0.00	A				0.0	5.35	0.01	A		

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

Values shown are the highest values encountered over all time segments. Delay is the maximum value of average delay per arriving vehicle. Junction LOS and Junction Delay are demand-weighted averages.

File summary

File Description

Title	
Location	
Site number	
Date	07/07/2025
Version	
Status	(new file)
Identifier	
Client	
Jobnumber	
Enumerator	MPPNET\AMcCarthy
Description	

Units

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

Analysis Options

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

Demand Set Summary

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D1	2025 Baseline	AM	ONE HOUR	07:45	09:15	15
D2	2025 Baseline	PM	ONE HOUR	15:30	17:00	15
D3	Do Nothing 2028	AM	ONE HOUR	07:45	09:15	15
D4	Do Nothing 2028	PM	ONE HOUR	15:30	17:00	15
D5	2028 Opening Year	AM	ONE HOUR	07:45	09:15	15
D6	2028 Opening Year	PM	ONE HOUR	15:30	17:00	15
D7	Do Nothing 2033	AM	ONE HOUR	07:45	09:15	15
D8	Do Nothing 2033	PM	ONE HOUR	15:30	17:00	15
D9	2033 Opening Year +5 years	AM	ONE HOUR	07:45	09:15	15
D10	2033 Opening Year +5 years	PM	ONE HOUR	15:30	17:00	15
D11	Do Nothing 2043	AM	ONE HOUR	07:45	09:15	15
D12	Do Nothing 2043	PM	ONE HOUR	15:30	17:00	15
D13	2043 Opening Year +15 years	AM	ONE HOUR	07:45	09:15	15
D14	2043 Opening Year +15 years	PM	ONE HOUR	15:30	17:00	15

Analysis Set Details

ID	Name	Network flow scaling factor (%)
A1	Site 4	100.000

Site 4 - 2025 Baseline, AM

Data Errors and Warnings

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

Junction Network

Junctions

Junction	Name	Junction type	Arm A Direction	Arm B Direction	Arm C Direction	Use circulating lanes	Junction Delay (s)	Junction LOS
4	Popes Road/Rathmore Park	T-Junction	Two-way	Two-way	Two-way		0.32	A

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	0.32	A

Arms

Arms

Arm	Name	Description	Arm type
A	Popes Road (West)		Major
B	Popes Road (East)		Minor
C	Rathmore Park		Major

Major Arm Geometry

Arm	Width of carriageway (m)	Has kerbed central reserve	Has right-turn storage	Visibility for right turn (m)	Blocks?	Blocking queue (PCU)
C	5.85			58.0	✓	0.00

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

Minor Arm Geometry

Arm	Minor arm type	Lane width (m)	Visibility to left (m)	Visibility to right (m)
B	One lane	5.00	24	82

Slope / Intercept / Capacity

Priority Intersection Slopes and Intercepts

Stream	Intercept (PCU/hr)	Slope for A-B	Slope for A-C	Slope for C-A	Slope for C-B
B-A	631	0.115	0.292	0.184	0.417
B-C	811	0.125	0.317	-	-
C-B	608	0.237	0.237	-	-

The slopes and intercepts shown above include custom intercept adjustments only.
Streams may be combined, in which case capacity will be adjusted.
Values are shown for the first time segment only; they may differ for subsequent time segments.

Traffic Demand

Demand Set Details

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

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		✓	184	100.000
B		✓	15	100.000
C		✓	130	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		A	**B**	**C**
From	**A**	0	8	176
	B	14	0	1
	C	129	1	0

Vehicle Mix

Heavy Vehicle %

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

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max 95th percentile Queue (PCU)	Max LOS
B-AC	0.03	6.66	0.0	0.5	A
C-AB	0.00	5.62	0.0	0.5	A
C-A					
A-B					
A-C					

Main Results for each time segment

07:45 - 08:00

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	11	583	0.019	11	0.0	6.294	A
C-AB	0.89	641	0.001	0.88	0.0	5.624	A
C-A	97			97			
A-B	6			6			
A-C	133			133			

08:00 - 08:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	13	572	0.024	13	0.0	6.443	A
C-AB	1	648	0.002	1	0.0	5.566	A
C-A	116			116			
A-B	7			7			
A-C	158			158			

08:15 - 08:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	17	557	0.030	16	0.0	6.662	A
C-AB	1	657	0.002	1	0.0	5.487	A
C-A	142			142			
A-B	9			9			
A-C	194			194			

08:30 - 08:45

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	17	557	0.030	17	0.0	6.662	A
C-AB	1	657	0.002	1	0.0	5.487	A
C-A	142			142			
A-B	9			9			
A-C	194			194			

08:45 - 09:00

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	13	572	0.024	14	0.0	6.444	A
C-AB	1	648	0.002	1	0.0	5.566	A
C-A	116			116			
A-B	7			7			
A-C	158			158			

09:00 - 09:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	11	583	0.019	11	0.0	6.294	A
C-AB	0.89	641	0.001	0.89	0.0	5.624	A
C-A	97			97			
A-B	6			6			
A-C	133			133			

Queue Variation Results for each time segment

07:45 - 08:00

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.02	0.00	0.00	0.02	0.02			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

08:00 - 08:15

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.02	0.02	0.25	0.45	0.48			N/A	N/A
C-AB	0.00	0.00	0.25	0.45	0.48			N/A	N/A

08:15 - 08:30

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.03	0.00	0.00	0.03	0.03			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

08:30 - 08:45

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.03	0.00	0.00	0.03	0.03			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

08:45 - 09:00

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.02	0.00	0.00	0.02	0.02			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

09:00 - 09:15

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.02	0.00	0.00	0.02	0.02			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

Site 4 - 2025 Baseline, PM

Data Errors and Warnings

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

Junction Network

Junctions

Junction	Name	Junction type	Arm A Direction	Arm B Direction	Arm C Direction	Use circulating lanes	Junction Delay (s)	Junction LOS
4	Popes Road/Rathmore Park	T-Junction	Two-way	Two-way	Two-way		0.46	A

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	0.46	A

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 Baseline	PM	ONE HOUR	15:30	17:00	15

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		✓	105	100.000
B		✓	16	100.000
C		✓	166	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		A	**B**	**C**
From	**A**	0	10	95
	B	16	0	0
	C	162	4	0

Vehicle Mix

Heavy Vehicle %

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

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max 95th percentile Queue (PCU)	Max LOS
B-AC	0.03	6.58	0.0	0.5	A
C-AB	0.01	5.40	0.0	0.5	A
C-A					
A-B					
A-C					

Main Results for each time segment

15:30 - 15:45

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	12	585	0.021	12	0.0	6.277	A
C-AB	4	671	0.005	4	0.0	5.395	A
C-A	121			121			
A-B	8			8			
A-C	72			72			

15:45 - 16:00

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	14	577	0.025	14	0.0	6.402	A
C-AB	5	683	0.007	5	0.0	5.302	A
C-A	145			145			
A-B	9			9			
A-C	85			85			

16:00 - 16:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	18	564	0.031	18	0.0	6.582	A
C-AB	6	701	0.008	6	0.0	5.178	A
C-A	177			177			
A-B	11			11			
A-C	105			105			

16:15 - 16:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	18	564	0.031	18	0.0	6.582	A
C-AB	6	701	0.008	6	0.0	5.178	A
C-A	177			177			
A-B	11			11			
A-C	105			105			

16:30 - 16:45

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	14	577	0.025	14	0.0	6.402	A
C-AB	5	683	0.007	5	0.0	5.302	A
C-A	145			145			
A-B	9			9			
A-C	85			85			

16:45 - 17:00

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	12	585	0.021	12	0.0	6.280	A
C-AB	4	671	0.005	4	0.0	5.397	A
C-A	121			121			
A-B	8			8			
A-C	72			72			

Queue Variation Results for each time segment

15:30 - 15:45

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.02	0.00	0.00	0.02	0.02			N/A	N/A
C-AB	0.01	0.00	0.00	0.01	0.01			N/A	N/A

15:45 - 16:00

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.03	0.03	0.25	0.45	0.48			N/A	N/A
C-AB	0.01	0.01	0.25	0.45	0.48			N/A	N/A

16:00 - 16:15

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.03	0.00	0.00	0.03	0.03			N/A	N/A
C-AB	0.01	0.00	0.00	0.01	0.01			N/A	N/A

16:15 - 16:30

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.03	0.00	0.00	0.03	0.03			N/A	N/A
C-AB	0.01	0.00	0.00	0.01	0.01			N/A	N/A

16:30 - 16:45

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.03	0.00	0.00	0.03	0.03			N/A	N/A
C-AB	0.01	0.00	0.00	0.01	0.01			N/A	N/A

16:45 - 17:00

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.02	0.00	0.00	0.02	0.02			N/A	N/A
C-AB	0.01	0.00	0.00	0.01	0.01			N/A	N/A

Site 4 - Do Nothing 2028, AM

Data Errors and Warnings

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

Junction Network

Junctions

Junction	Name	Junction type	Arm A Direction	Arm B Direction	Arm C Direction	Use circulating lanes	Junction Delay (s)	Junction LOS
4	Popes Road/Rathmore Park	T-Junction	Two-way	Two-way	Two-way		0.33	A

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	0.33	A

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	Do Nothing 2028	AM	ONE HOUR	07:45	09:15	15

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		✓	193	100.000
B		✓	16	100.000
C		✓	136	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		A	**B**	**C**
From	**A**	0	8	185
	B	15	0	1
	C	135	1	0

Vehicle Mix

Heavy Vehicle %

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

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max 95th percentile Queue (PCU)	Max LOS
B-AC	0.03	6.74	0.0	0.5	A
C-AB	0.00	5.61	0.0	0.5	A
C-A					
A-B					
A-C					

Main Results for each time segment

07:45 - 08:00

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	12	580	0.021	12	0.0	6.340	A
C-AB	0.89	642	0.001	0.89	0.0	5.611	A
C-A	101			101			
A-B	6			6			
A-C	139			139			

08:00 - 08:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	14	568	0.025	14	0.0	6.500	A
C-AB	1	650	0.002	1	0.0	5.550	A
C-A	121			121			
A-B	7			7			
A-C	166			166			

08:15 - 08:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	18	552	0.032	18	0.0	6.735	A
C-AB	1	660	0.002	1	0.0	5.467	A
C-A	148			148			
A-B	9			9			
A-C	204			204			

08:30 - 08:45

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	18	552	0.032	18	0.0	6.735	A
C-AB	1	660	0.002	1	0.0	5.469	A
C-A	148			148			
A-B	9			9			
A-C	204			204			

08:45 - 09:00

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	14	568	0.025	14	0.0	6.503	A
C-AB	1	650	0.002	1	0.0	5.552	A
C-A	121			121			
A-B	7			7			
A-C	166			166			

09:00 - 09:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	12	580	0.021	12	0.0	6.343	A
C-AB	0.90	642	0.001	0.90	0.0	5.611	A
C-A	101			101			
A-B	6			6			
A-C	139			139			

Queue Variation Results for each time segment

07:45 - 08:00

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.02	0.00	0.00	0.02	0.02			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

08:00 - 08:15

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.03	0.03	0.25	0.45	0.48			N/A	N/A
C-AB	0.00	0.00	0.25	0.45	0.48			N/A	N/A

08:15 - 08:30

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.03	0.03	0.25	0.45	0.48			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

08:30 - 08:45

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.03	0.00	0.00	0.03	0.03			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

08:45 - 09:00

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.03	0.00	0.00	0.03	0.03			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

09:00 - 09:15

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.02	0.00	0.00	0.02	0.02			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

Site 4 - Do Nothing 2028, PM

Data Errors and Warnings

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

Junction Network

Junctions

Junction	Name	Junction type	Arm A Direction	Arm B Direction	Arm C Direction	Use circulating lanes	Junction Delay (s)	Junction LOS
4	Popes Road/Rathmore Park	T-Junction	Two-way	Two-way	Two-way		0.47	A

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	0.47	A

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	Do Nothing 2028	PM	ONE HOUR	15:30	17:00	15

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		✓	111	100.000
B		✓	17	100.000
C		✓	174	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		A	**B**	**C**
From	**A**	0	11	100
	B	17	0	0
	C	170	4	0

Vehicle Mix

Heavy Vehicle %

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

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max 95th percentile Queue (PCU)	Max LOS
B-AC	0.03	6.64	0.0	0.5	A
C-AB	0.01	5.37	0.0	0.5	A
C-A					
A-B					
A-C					

Main Results for each time segment

15:30 - 15:45

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	13	583	0.022	13	0.0	6.311	A
C-AB	4	674	0.006	4	0.0	5.370	A
C-A	127			127			
A-B	8			8			
A-C	75			75			

15:45 - 16:00

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	15	574	0.027	15	0.0	6.443	A
C-AB	5	687	0.007	5	0.0	5.273	A
C-A	152			152			
A-B	10			10			
A-C	90			90			

16:00 - 16:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	19	561	0.033	19	0.0	6.636	A
C-AB	6	706	0.009	6	0.0	5.145	A
C-A	186			186			
A-B	12			12			
A-C	110			110			

16:15 - 16:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	19	561	0.033	19	0.0	6.636	A
C-AB	6	706	0.009	6	0.0	5.145	A
C-A	186			186			
A-B	12			12			
A-C	110			110			

16:30 - 16:45

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	15	574	0.027	15	0.0	6.444	A
C-AB	5	687	0.007	5	0.0	5.276	A
C-A	152			152			
A-B	10			10			
A-C	90			90			

16:45 - 17:00

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	13	583	0.022	13	0.0	6.311	A
C-AB	4	674	0.006	4	0.0	5.370	A
C-A	127			127			
A-B	8			8			
A-C	75			75			

Queue Variation Results for each time segment

15:30 - 15:45

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.02	0.00	0.00	0.02	0.02			N/A	N/A
C-AB	0.01	0.00	0.00	0.01	0.01			N/A	N/A

15:45 - 16:00

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.03	0.03	0.25	0.45	0.48			N/A	N/A
C-AB	0.01	0.01	0.25	0.45	0.48			N/A	N/A

16:00 - 16:15

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.03	0.03	0.25	0.45	0.48			N/A	N/A
C-AB	0.01	0.00	0.00	0.01	0.01			N/A	N/A

16:15 - 16:30

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.03	0.00	0.00	0.03	0.03			N/A	N/A
C-AB	0.01	0.00	0.00	0.01	0.01			N/A	N/A

16:30 - 16:45

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.03	0.00	0.00	0.03	0.03			N/A	N/A
C-AB	0.01	0.00	0.00	0.01	0.01			N/A	N/A

16:45 - 17:00

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.02	0.00	0.00	0.02	0.02			N/A	N/A
C-AB	0.01	0.00	0.00	0.01	0.01			N/A	N/A

Site 4 - 2028 Opening Year, AM

Data Errors and Warnings

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

Junction Network

Junctions

Junction	Name	Junction type	Arm A Direction	Arm B Direction	Arm C Direction	Use circulating lanes	Junction Delay (s)	Junction LOS
4	Popes Road/Rathmore Park	T-Junction	Two-way	Two-way	Two-way		1.14	A

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	1.14	A

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	2028 Opening Year	AM	ONE HOUR	07:45	09:15	15

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		✓	214	100.000
B		✓	61	100.000
C		✓	136	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		A	**B**	**C**
From	**A**	0	29	185
	B	60	0	1
	C	135	1	0

Vehicle Mix

Heavy Vehicle %

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

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max 95th percentile Queue (PCU)	Max LOS
B-AC	0.12	7.57	0.1	0.5	A
C-AB	0.00	5.64	0.0	0.5	A
C-A					
A-B					
A-C					

Main Results for each time segment

07:45 - 08:00

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	46	571	0.080	46	0.1	6.845	A
C-AB	0.90	639	0.001	0.89	0.0	5.642	A
C-A	101			101			
A-B	22			22			
A-C	139			139			

08:00 - 08:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	55	559	0.098	55	0.1	7.138	A
C-AB	1	645	0.002	1	0.0	5.586	A
C-A	121			121			
A-B	26			26			
A-C	166			166			

08:15 - 08:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	67	542	0.124	67	0.1	7.571	A
C-AB	1	655	0.002	1	0.0	5.509	A
C-A	148			148			
A-B	32			32			
A-C	204			204			

08:30 - 08:45

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	67	542	0.124	67	0.1	7.574	A
C-AB	1	655	0.002	1	0.0	5.511	A
C-A	148			148			
A-B	32			32			
A-C	204			204			

08:45 - 09:00

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	55	559	0.098	55	0.1	7.145	A
C-AB	1	645	0.002	1	0.0	5.586	A
C-A	121			121			
A-B	26			26			
A-C	166			166			

09:00 - 09:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	46	571	0.080	46	0.1	6.859	A
C-AB	0.90	639	0.001	0.90	0.0	5.642	A
C-A	101			101			
A-B	22			22			
A-C	139			139			

Queue Variation Results for each time segment

07:45 - 08:00

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.09	0.00	0.00	0.09	0.09			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

08:00 - 08:15

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.11	0.00	0.00	0.11	0.11			N/A	N/A
C-AB	0.00	0.00	0.25	0.45	0.48			N/A	N/A

08:15 - 08:30

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.14	0.03	0.26	0.46	0.49			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

08:30 - 08:45

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.14	0.03	0.25	0.45	0.48			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

08:45 - 09:00

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.11	0.00	0.00	0.11	0.11			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

09:00 - 09:15

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.09	0.00	0.00	0.09	0.09			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

Site 4 - 2028 Opening Year, PM

Data Errors and Warnings

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

Junction Network

Junctions

Junction	Name	Junction type	Arm A Direction	Arm B Direction	Arm C Direction	Use circulating lanes	Junction Delay (s)	Junction LOS
4	Popes Road/Rathmore Park	T-Junction	Two-way	Two-way	Two-way		0.86	A

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	0.86	A

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	2028 Opening Year	PM	ONE HOUR	15:30	17:00	15

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		✓	152	100.000
B		✓	41	100.000
C		✓	174	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		A	**B**	**C**
From	**A**	0	52	100
	B	41	0	0
	C	170	4	0

Vehicle Mix

Heavy Vehicle %

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

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max 95th percentile Queue (PCU)	Max LOS
B-AC	0.08	7.05	0.1	0.5	A
C-AB	0.01	5.43	0.0	0.5	A
C-A					
A-B					
A-C					

Main Results for each time segment

15:30 - 15:45

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	31	580	0.053	31	0.1	6.554	A
C-AB	4	667	0.006	4	0.0	5.425	A
C-A	127			127			
A-B	39			39			
A-C	75			75			

15:45 - 16:00

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	37	570	0.065	37	0.1	6.756	A
C-AB	5	679	0.007	5	0.0	5.336	A
C-A	152			152			
A-B	47			47			
A-C	90			90			

16:00 - 16:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	45	556	0.081	45	0.1	7.047	A
C-AB	6	696	0.009	6	0.0	5.216	A
C-A	186			186			
A-B	57			57			
A-C	110			110			

16:15 - 16:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	45	556	0.081	45	0.1	7.047	A
C-AB	6	696	0.009	6	0.0	5.216	A
C-A	186			186			
A-B	57			57			
A-C	110			110			

16:30 - 16:45

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	37	570	0.065	37	0.1	6.758	A
C-AB	5	679	0.007	5	0.0	5.338	A
C-A	152			152			
A-B	47			47			
A-C	90			90			

16:45 - 17:00

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	31	580	0.053	31	0.1	6.561	A
C-AB	4	667	0.006	4	0.0	5.425	A
C-A	127			127			
A-B	39			39			
A-C	75			75			

Queue Variation Results for each time segment

15:30 - 15:45

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.06	0.00	0.00	0.06	0.06			N/A	N/A
C-AB	0.01	0.00	0.00	0.01	0.01			N/A	N/A

15:45 - 16:00

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.07	0.03	0.25	0.45	0.48			N/A	N/A
C-AB	0.01	0.01	0.25	0.45	0.48			N/A	N/A

16:00 - 16:15

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.09	0.03	0.26	0.47	0.49			N/A	N/A
C-AB	0.01	0.00	0.00	0.01	0.01			N/A	N/A

16:15 - 16:30

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.09	0.00	0.00	0.09	0.09			N/A	N/A
C-AB	0.01	0.00	0.00	0.01	0.01			N/A	N/A

16:30 - 16:45

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.07	0.00	0.00	0.07	0.07			N/A	N/A
C-AB	0.01	0.00	0.00	0.01	0.01			N/A	N/A

16:45 - 17:00

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.06	0.00	0.00	0.06	0.06			N/A	N/A
C-AB	0.01	0.00	0.00	0.01	0.01			N/A	N/A

Site 4 - Do Nothing 2033, AM

Data Errors and Warnings

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

Junction Network

Junctions

Junction	Name	Junction type	Arm A Direction	Arm B Direction	Arm C Direction	Use circulating lanes	Junction Delay (s)	Junction LOS
4	Popes Road/Rathmore Park	T-Junction	Two-way	Two-way	Two-way		0.33	A

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	0.33	A

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D7	Do Nothing 2033	AM	ONE HOUR	07:45	09:15	15

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		✓	206	100.000
B		✓	17	100.000
C		✓	145	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		A	**B**	**C**
From	**A**	0	9	197
	B	16	0	1
	C	144	1	0

Vehicle Mix

Heavy Vehicle %

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

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max 95th percentile Queue (PCU)	Max LOS
B-AC	0.03	6.83	0.0	0.5	A
C-AB	0.00	5.59	0.0	0.5	A
C-A					
A-B					
A-C					

Main Results for each time segment

07:45 - 08:00

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	13	575	0.022	13	0.0	6.399	A
C-AB	0.91	645	0.001	0.90	0.0	5.590	A
C-A	108			108			
A-B	7			7			
A-C	148			148			

08:00 - 08:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	15	563	0.027	15	0.0	6.573	A
C-AB	1	653	0.002	1	0.0	5.525	A
C-A	129			129			
A-B	8			8			
A-C	177			177			

08:15 - 08:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	19	546	0.034	19	0.0	6.830	A
C-AB	1	664	0.002	1	0.0	5.436	A
C-A	158			158			
A-B	10			10			
A-C	217			217			

08:30 - 08:45

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	19	546	0.034	19	0.0	6.830	A
C-AB	1	664	0.002	1	0.0	5.436	A
C-A	158			158			
A-B	10			10			
A-C	217			217			

08:45 - 09:00

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	15	563	0.027	15	0.0	6.574	A
C-AB	1	653	0.002	1	0.0	5.527	A
C-A	129			129			
A-B	8			8			
A-C	177			177			

09:00 - 09:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	13	575	0.022	13	0.0	6.400	A
C-AB	0.91	645	0.001	0.91	0.0	5.592	A
C-A	108			108			
A-B	7			7			
A-C	148			148			

Queue Variation Results for each time segment

07:45 - 08:00

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.02	0.00	0.00	0.02	0.02			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

08:00 - 08:15

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.03	0.03	0.25	0.45	0.48			N/A	N/A
C-AB	0.00	0.00	0.25	0.45	0.48			N/A	N/A

08:15 - 08:30

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.04	0.03	0.25	0.45	0.48			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

08:30 - 08:45

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.04	0.00	0.00	0.04	0.04			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

08:45 - 09:00

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.03	0.00	0.00	0.03	0.03			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

09:00 - 09:15

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.02	0.00	0.00	0.02	0.02			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

Site 4 - Do Nothing 2033, PM

Data Errors and Warnings

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

Junction Network

Junctions

Junction	Name	Junction type	Arm A Direction	Arm B Direction	Arm C Direction	Use circulating lanes	Junction Delay (s)	Junction LOS
4	Popes Road/Rathmore Park	T-Junction	Two-way	Two-way	Two-way		0.47	A

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	0.47	A

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D8	Do Nothing 2033	PM	ONE HOUR	15:30	17:00	15

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		✓	117	100.000
B		✓	18	100.000
C		✓	185	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		A	**B**	**C**
From	**A**	0	11	106
	B	18	0	0
	C	181	4	0

Vehicle Mix

Heavy Vehicle %

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

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max 95th percentile Queue (PCU)	Max LOS
B-AC	0.04	6.70	0.0	0.5	A
C-AB	0.01	5.34	0.0	0.5	A
C-A					
A-B					
A-C					

Main Results for each time segment

15:30 - 15:45

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	14	580	0.023	13	0.0	6.351	A
C-AB	4	679	0.006	4	0.0	5.334	A
C-A	136			136			
A-B	8			8			
A-C	80			80			

15:45 - 16:00

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	16	571	0.028	16	0.0	6.493	A
C-AB	5	693	0.007	5	0.0	5.232	A
C-A	162			162			
A-B	10			10			
A-C	95			95			

16:00 - 16:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	20	557	0.036	20	0.0	6.701	A
C-AB	6	712	0.009	6	0.0	5.096	A
C-A	198			198			
A-B	12			12			
A-C	117			117			

16:15 - 16:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	20	557	0.036	20	0.0	6.701	A
C-AB	6	712	0.009	6	0.0	5.096	A
C-A	198			198			
A-B	12			12			
A-C	117			117			

16:30 - 16:45

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	16	571	0.028	16	0.0	6.494	A
C-AB	5	693	0.007	5	0.0	5.234	A
C-A	162			162			
A-B	10			10			
A-C	95			95			

16:45 - 17:00

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	14	580	0.023	14	0.0	6.351	A
C-AB	4	679	0.006	4	0.0	5.336	A
C-A	136			136			
A-B	8			8			
A-C	80			80			

Queue Variation Results for each time segment

15:30 - 15:45

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.02	0.00	0.00	0.02	0.02			N/A	N/A
C-AB	0.01	0.00	0.00	0.01	0.01			N/A	N/A

15:45 - 16:00

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.03	0.03	0.25	0.45	0.48			N/A	N/A
C-AB	0.01	0.01	0.25	0.45	0.48			N/A	N/A

16:00 - 16:15

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.04	0.03	0.25	0.45	0.48			N/A	N/A
C-AB	0.01	0.00	0.00	0.01	0.01			N/A	N/A

16:15 - 16:30

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.04	0.00	0.00	0.04	0.04			N/A	N/A
C-AB	0.01	0.00	0.00	0.01	0.01			N/A	N/A

16:30 - 16:45

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.03	0.00	0.00	0.03	0.03			N/A	N/A
C-AB	0.01	0.00	0.00	0.01	0.01			N/A	N/A

16:45 - 17:00

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.02	0.00	0.00	0.02	0.02			N/A	N/A
C-AB	0.01	0.00	0.00	0.01	0.01			N/A	N/A

Site 4 - 2033 Opening Year +5 years, AM

Data Errors and Warnings

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

Junction Network

Junctions

Junction	Name	Junction type	Arm A Direction	Arm B Direction	Arm C Direction	Use circulating lanes	Junction Delay (s)	Junction LOS
4	Popes Road/Rathmore Park	T-Junction	Two-way	Two-way	Two-way		1.12	A

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	1.12	A

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)
D9	2033 Opening Year +5 years	AM	ONE HOUR	07:45	09:15	15

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		✓	226	100.000
B		✓	62	100.000
C		✓	145	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		A	**B**	**C**
From	**A**	0	29	197
	B	61	0	1
	C	144	1	0

Vehicle Mix

Heavy Vehicle %

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

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max 95th percentile Queue (PCU)	Max LOS
B-AC	0.13	7.68	0.1	0.5	A
C-AB	0.00	5.62	0.0	0.5	A
C-A					
A-B					
A-C					

Main Results for each time segment

07:45 - 08:00

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	47	567	0.082	46	0.1	6.907	A
C-AB	0.91	641	0.001	0.90	0.0	5.619	A
C-A	108			108			
A-B	22			22			
A-C	148			148			

08:00 - 08:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	56	554	0.101	56	0.1	7.218	A
C-AB	1	649	0.002	1	0.0	5.559	A
C-A	129			129			
A-B	26			26			
A-C	177			177			

08:15 - 08:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	68	537	0.127	68	0.1	7.681	A
C-AB	1	659	0.002	1	0.0	5.475	A
C-A	158			158			
A-B	32			32			
A-C	217			217			

08:30 - 08:45

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	68	537	0.127	68	0.1	7.684	A
C-AB	1	659	0.002	1	0.0	5.475	A
C-A	158			158			
A-B	32			32			
A-C	217			217			

08:45 - 09:00

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	56	554	0.101	56	0.1	7.222	A
C-AB	1	649	0.002	1	0.0	5.559	A
C-A	129			129			
A-B	26			26			
A-C	177			177			

09:00 - 09:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	47	567	0.082	47	0.1	6.920	A
C-AB	0.91	641	0.001	0.91	0.0	5.619	A
C-A	108			108			
A-B	22			22			
A-C	148			148			

Queue Variation Results for each time segment

07:45 - 08:00

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.09	0.00	0.00	0.09	0.09			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

08:00 - 08:15

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.11	0.00	0.00	0.11	0.11			N/A	N/A
C-AB	0.00	0.00	0.25	0.45	0.48			N/A	N/A

08:15 - 08:30

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.14	0.03	0.26	0.46	0.49			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

08:30 - 08:45

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.15	0.03	0.25	0.45	0.48			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

08:45 - 09:00

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.11	0.00	0.00	0.11	0.11			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

09:00 - 09:15

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.09	0.00	0.00	0.09	0.09			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

Site 4 - 2033 Opening Year +5 years, PM

Data Errors and Warnings

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

Junction Network

Junctions

Junction	Name	Junction type	Arm A Direction	Arm B Direction	Arm C Direction	Use circulating lanes	Junction Delay (s)	Junction LOS
4	Popes Road/Rathmore Park	T-Junction	Two-way	Two-way	Two-way		0.85	A

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	0.85	A

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)
D10	2033 Opening Year +5 years	PM	ONE HOUR	15:30	17:00	15

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		✓	159	100.000
B		✓	42	100.000
C		✓	185	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		A	**B**	**C**
From	**A**	0	53	106
	B	42	0	0
	C	181	4	0

Vehicle Mix

Heavy Vehicle %

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

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max 95th percentile Queue (PCU)	Max LOS
B-AC	0.08	7.12	0.1	0.5	A
C-AB	0.01	5.39	0.0	0.5	A
C-A					
A-B					
A-C					

Main Results for each time segment

15:30 - 15:45

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	32	577	0.055	31	0.1	6.598	A
C-AB	4	672	0.006	4	0.0	5.390	A
C-A	135			135			
A-B	40			40			
A-C	80			80			

15:45 - 16:00

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	38	566	0.067	38	0.1	6.812	A
C-AB	5	685	0.007	5	0.0	5.294	A
C-A	162			162			
A-B	48			48			
A-C	95			95			

16:00 - 16:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	46	552	0.084	46	0.1	7.122	A
C-AB	6	703	0.009	6	0.0	5.167	A
C-A	198			198			
A-B	58			58			
A-C	117			117			

16:15 - 16:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	46	552	0.084	46	0.1	7.122	A
C-AB	6	703	0.009	6	0.0	5.169	A
C-A	198			198			
A-B	58			58			
A-C	117			117			

16:30 - 16:45

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	38	566	0.067	38	0.1	6.814	A
C-AB	5	685	0.007	5	0.0	5.297	A
C-A	162			162			
A-B	48			48			
A-C	95			95			

16:45 - 17:00

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	32	577	0.055	32	0.1	6.605	A
C-AB	4	672	0.006	4	0.0	5.392	A
C-A	135			135			
A-B	40			40			
A-C	80			80			

Queue Variation Results for each time segment

15:30 - 15:45

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.06	0.00	0.00	0.06	0.06			N/A	N/A
C-AB	0.01	0.00	0.00	0.01	0.01			N/A	N/A

15:45 - 16:00

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.07	0.03	0.25	0.45	0.48			N/A	N/A
C-AB	0.01	0.01	0.25	0.45	0.48			N/A	N/A

16:00 - 16:15

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.09	0.03	0.26	0.47	0.49			N/A	N/A
C-AB	0.01	0.00	0.00	0.01	0.01			N/A	N/A

16:15 - 16:30

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.09	0.00	0.00	0.09	0.09			N/A	N/A
C-AB	0.01	0.00	0.00	0.01	0.01			N/A	N/A

16:30 - 16:45

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.07	0.00	0.00	0.07	0.07			N/A	N/A
C-AB	0.01	0.00	0.00	0.01	0.01			N/A	N/A

16:45 - 17:00

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.06	0.00	0.00	0.06	0.06			N/A	N/A
C-AB	0.01	0.00	0.00	0.01	0.01			N/A	N/A

Site 4 - Do Nothing 2043, AM

Data Errors and Warnings

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

Junction Network

Junctions

Junction	Name	Junction type	Arm A Direction	Arm B Direction	Arm C Direction	Use circulating lanes	Junction Delay (s)	Junction LOS
4	Popes Road/Rathmore Park	T-Junction	Two-way	Two-way	Two-way		0.33	A

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	0.33	A

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)
D11	Do Nothing 2043	AM	ONE HOUR	07:45	09:15	15

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		✓	225	100.000
B		✓	18	100.000
C		✓	158	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		A	**B**	**C**
From	**A**	0	10	215
	B	17	0	1
	C	157	1	0

Vehicle Mix

Heavy Vehicle %

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

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max 95th percentile Queue (PCU)	Max LOS
B-AC	0.04	6.96	0.0	0.5	A
C-AB	0.00	5.56	0.0	0.5	A
C-A					
A-B					
A-C					

Main Results for each time segment

07:45 - 08:00

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	14	569	0.024	13	0.0	6.480	A
C-AB	0.92	648	0.001	0.91	0.0	5.559	A
C-A	118			118			
A-B	8			8			
A-C	162			162			

08:00 - 08:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	16	555	0.029	16	0.0	6.675	A
C-AB	1	657	0.002	1	0.0	5.489	A
C-A	141			141			
A-B	9			9			
A-C	193			193			

08:15 - 08:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	20	537	0.037	20	0.0	6.964	A
C-AB	1	669	0.002	1	0.0	5.392	A
C-A	172			172			
A-B	11			11			
A-C	237			237			

08:30 - 08:45

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	20	537	0.037	20	0.0	6.964	A
C-AB	1	669	0.002	1	0.0	5.394	A
C-A	172			172			
A-B	11			11			
A-C	237			237			

08:45 - 09:00

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	16	555	0.029	16	0.0	6.676	A
C-AB	1	657	0.002	1	0.0	5.489	A
C-A	141			141			
A-B	9			9			
A-C	193			193			

09:00 - 09:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	14	569	0.024	14	0.0	6.481	A
C-AB	0.92	648	0.001	0.92	0.0	5.562	A
C-A	118			118			
A-B	8			8			
A-C	162			162			

Queue Variation Results for each time segment

07:45 - 08:00

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.02	0.00	0.00	0.02	0.02			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

08:00 - 08:15

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.03	0.03	0.25	0.45	0.48			N/A	N/A
C-AB	0.00	0.00	0.25	0.45	0.48			N/A	N/A

08:15 - 08:30

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.04	0.03	0.25	0.45	0.48			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

08:30 - 08:45

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.04	0.00	0.00	0.04	0.04			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

08:45 - 09:00

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.03	0.00	0.00	0.03	0.03			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

09:00 - 09:15

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.02	0.00	0.00	0.02	0.02			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

Site 4 - Do Nothing 2043, PM

Data Errors and Warnings

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

Junction Network

Junctions

Junction	Name	Junction type	Arm A Direction	Arm B Direction	Arm C Direction	Use circulating lanes	Junction Delay (s)	Junction LOS
4	Popes Road/Rathmore Park	T-Junction	Two-way	Two-way	Two-way		0.49	A

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	0.49	A

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)
D12	Do Nothing 2043	PM	ONE HOUR	15:30	17:00	15

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		✓	128	100.000
B		✓	20	100.000
C		✓	202	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		A	**B**	**C**
From	**A**	0	12	116
	B	20	0	0
	C	197	5	0

Vehicle Mix

Heavy Vehicle %

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

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max 95th percentile Queue (PCU)	Max LOS
B-AC	0.04	6.82	0.0	0.5	A
C-AB	0.01	5.29	0.0	0.5	A
C-A					
A-B					
A-C					

Main Results for each time segment

15:30 - 15:45

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	15	576	0.026	15	0.0	6.422	A
C-AB	5	685	0.007	5	0.0	5.293	A
C-A	147			147			
A-B	9			9			
A-C	87			87			

15:45 - 16:00

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	18	565	0.032	18	0.0	6.583	A
C-AB	6	700	0.009	6	0.0	5.184	A
C-A	176			176			
A-B	11			11			
A-C	104			104			

16:00 - 16:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	22	550	0.040	22	0.0	6.818	A
C-AB	8	722	0.011	8	0.0	5.041	A
C-A	215			215			
A-B	13			13			
A-C	128			128			

16:15 - 16:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	22	550	0.040	22	0.0	6.818	A
C-AB	8	722	0.011	8	0.0	5.041	A
C-A	215			215			
A-B	13			13			
A-C	128			128			

16:30 - 16:45

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	18	565	0.032	18	0.0	6.583	A
C-AB	6	700	0.009	6	0.0	5.184	A
C-A	176			176			
A-B	11			11			
A-C	104			104			

16:45 - 17:00

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	15	576	0.026	15	0.0	6.423	A
C-AB	5	685	0.007	5	0.0	5.295	A
C-A	147			147			
A-B	9			9			
A-C	87			87			

Queue Variation Results for each time segment

15:30 - 15:45

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.03	0.00	0.00	0.03	0.03			N/A	N/A
C-AB	0.01	0.00	0.00	0.01	0.01			N/A	N/A

15:45 - 16:00

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.03	0.03	0.25	0.45	0.48			N/A	N/A
C-AB	0.01	0.01	0.25	0.45	0.48			N/A	N/A

16:00 - 16:15

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.04	0.03	0.25	0.46	0.48			N/A	N/A
C-AB	0.01	0.00	0.00	0.01	0.01			N/A	N/A

16:15 - 16:30

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.04	0.00	0.00	0.04	0.04			N/A	N/A
C-AB	0.01	0.00	0.00	0.01	0.01			N/A	N/A

16:30 - 16:45

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.03	0.00	0.00	0.03	0.03			N/A	N/A
C-AB	0.01	0.00	0.00	0.01	0.01			N/A	N/A

16:45 - 17:00

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.03	0.00	0.00	0.03	0.03			N/A	N/A
C-AB	0.01	0.00	0.00	0.01	0.01			N/A	N/A

Site 4 - 2043 Opening Year +15 years, AM

Data Errors and Warnings

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

Junction Network

Junctions

Junction	Name	Junction type	Arm A Direction	Arm B Direction	Arm C Direction	Use circulating lanes	Junction Delay (s)	Junction LOS
4	Popes Road/Rathmore Park	T-Junction	Two-way	Two-way	Two-way		1.08	A

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	1.08	A

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)
D13	2043 Opening Year +15 years	AM	ONE HOUR	07:45	09:15	15

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		✓	245	100.000
B		✓	63	100.000
C		✓	158	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		A	**B**	**C**
From	**A**	0	30	215
	B	62	0	1
	C	157	1	0

Vehicle Mix

Heavy Vehicle %

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

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max 95th percentile Queue (PCU)	Max LOS
B-AC	0.13	7.85	0.2	0.5	A
C-AB	0.00	5.59	0.0	0.5	A
C-A					
A-B					
A-C					

Main Results for each time segment

07:45 - 08:00

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	47	561	0.085	47	0.1	6.996	A
C-AB	0.92	645	0.001	0.92	0.0	5.588	A
C-A	118			118			
A-B	23			23			
A-C	162			162			

08:00 - 08:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	57	547	0.103	57	0.1	7.334	A
C-AB	1	653	0.002	1	0.0	5.522	A
C-A	141			141			
A-B	27			27			
A-C	193			193			

08:15 - 08:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	69	528	0.131	69	0.1	7.842	A
C-AB	1	664	0.002	1	0.0	5.430	A
C-A	172			172			
A-B	33			33			
A-C	237			237			

08:30 - 08:45

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	69	528	0.131	69	0.2	7.846	A
C-AB	1	664	0.002	1	0.0	5.430	A
C-A	172			172			
A-B	33			33			
A-C	237			237			

08:45 - 09:00

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	57	547	0.103	57	0.1	7.341	A
C-AB	1	653	0.002	1	0.0	5.524	A
C-A	141			141			
A-B	27			27			
A-C	193			193			

09:00 - 09:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	47	561	0.085	48	0.1	7.009	A
C-AB	0.92	645	0.001	0.92	0.0	5.588	A
C-A	118			118			
A-B	23			23			
A-C	162			162			

Queue Variation Results for each time segment

07:45 - 08:00

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.09	0.00	0.00	0.09	0.09			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

08:00 - 08:15

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.11	0.00	0.00	0.11	0.11			N/A	N/A
C-AB	0.00	0.00	0.25	0.45	0.48			N/A	N/A

08:15 - 08:30

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.15	0.03	0.26	0.46	0.49			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

08:30 - 08:45

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.15	0.03	0.25	0.45	0.48			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

08:45 - 09:00

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.12	0.00	0.00	0.12	0.12			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

09:00 - 09:15

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.09	0.00	0.00	0.09	0.09			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

Site 4 - 2043 Opening Year +15 years, PM

Data Errors and Warnings

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

Junction Network

Junctions

Junction	Name	Junction type	Arm A Direction	Arm B Direction	Arm C Direction	Use circulating lanes	Junction Delay (s)	Junction LOS
4	Popes Road/Rathmore Park	T-Junction	Two-way	Two-way	Two-way		0.84	A

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	0.84	A

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)
D14	2043 Opening Year +15 years	PM	ONE HOUR	15:30	17:00	15

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		✓	170	100.000
B		✓	43	100.000
C		✓	202	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		A	**B**	**C**
From	**A**	0	54	116
	B	43	0	0
	C	197	5	0

Vehicle Mix

Heavy Vehicle %

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

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max 95th percentile Queue (PCU)	Max LOS
B-AC	0.09	7.24	0.1	0.5	A
C-AB	0.01	5.35	0.0	0.5	A
C-A					
A-B					
A-C					

Main Results for each time segment

15:30 - 15:45

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	32	572	0.057	32	0.1	6.666	A
C-AB	5	678	0.007	5	0.0	5.347	A
C-A	147			147			
A-B	41			41			
A-C	87			87			

15:45 - 16:00

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	39	560	0.069	39	0.1	6.898	A
C-AB	6	692	0.009	6	0.0	5.245	A
C-A	176			176			
A-B	49			49			
A-C	104			104			

16:00 - 16:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	47	545	0.087	47	0.1	7.238	A
C-AB	8	712	0.011	8	0.0	5.110	A
C-A	214			214			
A-B	59			59			
A-C	128			128			

16:15 - 16:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	47	545	0.087	47	0.1	7.238	A
C-AB	8	712	0.011	8	0.0	5.110	A
C-A	214			214			
A-B	59			59			
A-C	128			128			

16:30 - 16:45

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	39	560	0.069	39	0.1	6.901	A
C-AB	6	692	0.009	6	0.0	5.248	A
C-A	176			176			
A-B	49			49			
A-C	104			104			

16:45 - 17:00

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	32	572	0.057	32	0.1	6.676	A
C-AB	5	678	0.007	5	0.0	5.349	A
C-A	147			147			
A-B	41			41			
A-C	87			87			

Queue Variation Results for each time segment

15:30 - 15:45

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.06	0.00	0.00	0.06	0.06			N/A	N/A
C-AB	0.01	0.00	0.00	0.01	0.01			N/A	N/A

15:45 - 16:00

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.07	0.03	0.25	0.45	0.48			N/A	N/A
C-AB	0.01	0.01	0.25	0.45	0.48			N/A	N/A

16:00 - 16:15

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.09	0.03	0.26	0.47	0.49			N/A	N/A
C-AB	0.01	0.00	0.00	0.01	0.01			N/A	N/A

16:15 - 16:30

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.09	0.03	0.25	0.45	0.48			N/A	N/A
C-AB	0.01	0.00	0.00	0.01	0.01			N/A	N/A

16:30 - 16:45

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.07	0.00	0.00	0.07	0.07			N/A	N/A
C-AB	0.01	0.00	0.00	0.01	0.01			N/A	N/A

16:45 - 17:00

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.06	0.00	0.00	0.06	0.06			N/A	N/A
C-AB	0.01	0.00	0.00	0.01	0.01			N/A	N/A

Junctions 10

PICADY 10 - Priority Intersection Module

Filename: Site 5 Popes Road-Popes Hill T-Junction.j10
Path: I:\DWGS\244\101-150\244132\3.0 Calculations\1. Civils\2.0 Design Calculations\4.0 Traffic Calculations\02 Junction Modelling\Junctions 10
Report generation date: 28/08/2025 14:15:38

»Site 5 - 2025 Baseline, AM
»Site 5 - 2025 Baseline, PM
»Site 5 - Do Nothing 2028, AM
»Site 5 - Do Nothing 2028, PM
»Site 5 - 2028 Opening Year, AM
»Site 5 - 2028 Opening Year, PM
»Site 5 - Do Nothing 2033, AM
»Site 5 - Do Nothing 2033, PM
»Site 5 - 2033 Opening Year +5 years, AM
»Site 5 - 2033 Opening Year +5 years, PM
»Site 5 - Do Nothing 2043, AM
»Site 5 - Do Nothing 2043, PM
»Site 5 - 2043 Opening Year +15 years, AM
»Site 5 - 2043 Opening Year +15 years, PM

Summary of junction performance

	AM							PM						
	Set ID	Queue (PCU)	Delay (s)	RFC	LOS	Junction Delay (s)	Junction LOS	Set ID	Queue (PCU)	Delay (s)	RFC	LOS	Junction Delay (s)	Junction LOS
	Site 5 - 2025 Baseline													
Stream B-AC	D1	0.0	6.16	0.01	A	3.08	A	D2	0.0	0.00	0.00	A	0.00	A
Stream C-AB		0.0	0.00	0.00	A				0.0	0.00	0.00	A		
	Site 5 - Do Nothing 2028													
Stream B-AC	D3	0.0	6.16	0.01	A	3.08	A	D4	0.0	0.00	0.00	A	0.00	A
Stream C-AB		0.0	0.00	0.00	A				0.0	0.00	0.00	A		
	Site 5 - 2028 Opening Year													
Stream B-AC	D5	0.0	6.34	0.01	A	0.61	A	D6	0.0	0.00	0.00	A	0.00	A
Stream C-AB		0.0	5.45	0.00	A				0.0	0.00	0.00	A		
	Site 5 - Do Nothing 2033													
Stream B-AC	D7	0.0	6.18	0.01	A	3.29	A	D8	0.0	0.00	0.00	A	0.00	A
Stream C-AB		0.0	0.00	0.00	A				0.0	0.00	0.00	A		
	Site 5 - 2033 Opening Year +5 years													
Stream B-AC	D9	0.0	6.35	0.02	A	0.68	A	D10	0.0	0.00	0.00	A	0.00	A
Stream C-AB		0.0	5.45	0.00	A				0.0	0.00	0.00	A		
	Site 5 - Do Nothing 2043													
Stream B-AC	D11	0.0	6.19	0.02	A	3.10	A	D12	0.0	6.16	0.01	A	1.62	A
Stream C-AB		0.0	0.00	0.00	A				0.0	0.00	0.00	A		
	Site 5 - 2043 Opening Year +15 years													
Stream B-AC	D13	0.0	6.37	0.02	A	0.74	A	D14	0.0	6.35	0.01	A	0.37	A
Stream C-AB		0.0	5.45	0.00	A				0.0	0.00	0.00	A		

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

Values shown are the highest values encountered over all time segments. Delay is the maximum value of average delay per arriving vehicle. Junction LOS and Junction Delay are demand-weighted averages.

File summary

File Description

Title	
Location	
Site number	
Date	07/07/2025
Version	
Status	(new file)
Identifier	
Client	
Jobnumber	
Enumerator	MPPNET\AMcCarthy
Description	

Units

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

Analysis Options

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

Demand Set Summary

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D1	2025 Baseline	AM	ONE HOUR	08:15	09:45	15
D2	2025 Baseline	PM	ONE HOUR	14:30	16:00	15
D3	Do Nothing 2028	AM	ONE HOUR	08:15	09:45	15
D4	Do Nothing 2028	PM	ONE HOUR	14:30	16:00	15
D5	2028 Opening Year	AM	ONE HOUR	08:15	09:45	15
D6	2028 Opening Year	PM	ONE HOUR	14:30	16:00	15
D7	Do Nothing 2033	AM	ONE HOUR	08:15	09:45	15
D8	Do Nothing 2033	PM	ONE HOUR	14:30	16:00	15
D9	2033 Opening Year +5 years	AM	ONE HOUR	08:15	09:45	15
D10	2033 Opening Year +5 years	PM	ONE HOUR	14:30	16:00	15
D11	Do Nothing 2043	AM	ONE HOUR	08:15	09:45	15
D12	Do Nothing 2043	PM	ONE HOUR	14:30	16:00	15
D13	2043 Opening Year +15 years	AM	ONE HOUR	08:15	09:45	15
D14	2043 Opening Year +15 years	PM	ONE HOUR	14:30	16:00	15

Analysis Set Details

ID	Name	Network flow scaling factor (%)
A1	Site 5	100.000

Site 5 - 2025 Baseline, AM

Data Errors and Warnings

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

Junction Network

Junctions

Junction	Name	Junction type	Arm A Direction	Arm B Direction	Arm C Direction	Use circulating lanes	Junction Delay (s)	Junction LOS
5	Popes Road/Popes Hill	T-Junction	Two-way	Two-way	Two-way		3.08	A

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	3.08	A

Arms

Arms

Arm	Name	Description	Arm type
A	Popes Road (West)		Major
B	Popes Hill		Minor
C	Popes Road (East)		Major

Major Arm Geometry

Arm	Width of carriageway (m)	Has kerbed central reserve	Has right-turn storage	Visibility for right turn (m)	Blocks?	Blocking queue (PCU)
C	4.95			122.0	✓	0.00

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

Minor Arm Geometry

Arm	Minor arm type	Lane width (m)	Visibility to left (m)	Visibility to right (m)
B	One lane	5.00	27	16

Slope / Intercept / Capacity

Priority Intersection Slopes and Intercepts

Stream	Intercept (PCU/hr)	Slope for A-B	Slope for A-C	Slope for C-A	Slope for C-B
B-A	593	0.113	0.286	0.180	0.409
B-C	761	0.122	0.308	-	-
C-B	645	0.261	0.261	-	-

The slopes and intercepts shown above include custom intercept adjustments only.
Streams may be combined, in which case capacity will be adjusted.
Values are shown for the first time segment only; they may differ for subsequent time segments.

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D1	2025 Baseline	AM	ONE HOUR	08:15	09:45	15

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		✓	7	100.000
B		✓	7	100.000
C		✓	2	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		A	**B**	**C**
From	**A**	0	4	3
	B	7	0	0
	C	1	1	0

Vehicle Mix

Heavy Vehicle %

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

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max 95th percentile Queue (PCU)	Max LOS
B-AC	0.01	6.16	0.0	0.5	A
C-AB	0.00	0.00	0.0	~1	A
C-A					
A-B					
A-C					

Main Results for each time segment

08:15 - 08:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	5	592	0.009	5	0.0	6.133	A
C-AB	0	643	0.000	0	0.0	0.000	A
C-A	0			0			
A-B	3			3			
A-C	2			2			

08:30 - 08:45

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	6	592	0.011	6	0.0	6.146	A
C-AB	0	643	0.000	0	0.0	0.000	A
C-A	0			0			
A-B	4			4			
A-C	3			3			

08:45 - 09:00

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	8	592	0.013	8	0.0	6.164	A
C-AB	0	643	0.000	0	0.0	0.000	A
C-A	0			0			
A-B	4			4			
A-C	3			3			

09:00 - 09:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	8	592	0.013	8	0.0	6.164	A
C-AB	0	643	0.000	0	0.0	0.000	A
C-A	0			0			
A-B	4			4			
A-C	3			3			

09:15 - 09:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	6	592	0.011	6	0.0	6.146	A
C-AB	0	643	0.000	0	0.0	0.000	A
C-A	0			0			
A-B	4			4			
A-C	3			3			

09:30 - 09:45

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	5	592	0.009	5	0.0	6.134	A
C-AB	0	643	0.000	0	0.0	0.000	A
C-A	0			0			
A-B	3			3			
A-C	2			2			

Queue Variation Results for each time segment

08:15 - 08:30

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.01	0.00	0.00	0.01	0.01			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

08:30 - 08:45

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.01	0.01	0.25	0.45	0.48			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

08:45 - 09:00

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.01	0.00	0.00	0.01	0.01			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

09:00 - 09:15

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.01	0.00	0.00	0.01	0.01			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

09:15 - 09:30

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.01	0.00	0.00	0.01	0.01			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

09:30 - 09:45

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.01	0.00	0.00	0.01	0.01			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

Site 5 - 2025 Baseline, PM

Data Errors and Warnings

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

Junction Network

Junctions

Junction	Name	Junction type	Arm A Direction	Arm B Direction	Arm C Direction	Use circulating lanes	Junction Delay (s)	Junction LOS
5	Popes Road/Popes Hill	T-Junction	Two-way	Two-way	Two-way		0.00	A

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	0.00	A

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 Baseline	PM	ONE HOUR	14:30	16:00	15

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		✓	7	100.000
B		✓	4	100.000
C		✓	4	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		A	**B**	**C**
From	**A**	0	3	4
	B	4	0	0
	C	4	0	0

Vehicle Mix

Heavy Vehicle %

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

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max 95th percentile Queue (PCU)	Max LOS
B-AC	0.00	0.00	0.0	~1	A
C-AB	0.00	0.00	0.0	~1	A
C-A					
A-B					
A-C					

Main Results for each time segment

14:30 - 14:45

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	0	665	0.000	0	0.0	0.000	A
C-AB	0	643	0.000	0	0.0	0.000	A
C-A	0			0			
A-B	2			2			
A-C	3			3			

14:45 - 15:00

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	0	665	0.000	0	0.0	0.000	A
C-AB	0	643	0.000	0	0.0	0.000	A
C-A	0			0			
A-B	3			3			
A-C	4			4			

15:00 - 15:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	0	665	0.000	0	0.0	0.000	A
C-AB	0	643	0.000	0	0.0	0.000	A
C-A	0			0			
A-B	3			3			
A-C	4			4			

15:15 - 15:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	0	665	0.000	0	0.0	0.000	A
C-AB	0	643	0.000	0	0.0	0.000	A
C-A	0			0			
A-B	3			3			
A-C	4			4			

15:30 - 15:45

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	0	665	0.000	0	0.0	0.000	A
C-AB	0	643	0.000	0	0.0	0.000	A
C-A	0			0			
A-B	3			3			
A-C	4			4			

15:45 - 16:00

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	0	665	0.000	0	0.0	0.000	A
C-AB	0	643	0.000	0	0.0	0.000	A
C-A	0			0			
A-B	2			2			
A-C	3			3			

Queue Variation Results for each time segment

14:30 - 14:45

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.00	0.00	0.00	0.00	0.00			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

14:45 - 15:00

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.00	0.00	0.00	0.00	0.00			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

15:00 - 15:15

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.00	0.00	0.00	0.00	0.00			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

15:15 - 15:30

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.00	0.00	0.00	0.00	0.00			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

15:30 - 15:45

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.00	0.00	0.00	0.00	0.00			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

15:45 - 16:00

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.00	0.00	0.00	0.00	0.00			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

Site 5 - Do Nothing 2028, AM

Data Errors and Warnings

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

Junction Network

Junctions

Junction	Name	Junction type	Arm A Direction	Arm B Direction	Arm C Direction	Use circulating lanes	Junction Delay (s)	Junction LOS
5	Popes Road/Popes Hill	T-Junction	Two-way	Two-way	Two-way		3.08	A

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	3.08	A

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	Do Nothing 2028	AM	ONE HOUR	08:15	09:45	15

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		✓	7	100.000
B		✓	7	100.000
C		✓	2	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		A	**B**	**C**
From	**A**	0	4	3
	B	7	0	0
	C	1	1	0

Vehicle Mix

Heavy Vehicle %

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

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max 95th percentile Queue (PCU)	Max LOS
B-AC	0.01	6.16	0.0	0.5	A
C-AB	0.00	0.00	0.0	~1	A
C-A					
A-B					
A-C					

Main Results for each time segment

08:15 - 08:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	5	592	0.009	5	0.0	6.133	A
C-AB	0	643	0.000	0	0.0	0.000	A
C-A	0			0			
A-B	3			3			
A-C	2			2			

08:30 - 08:45

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	6	592	0.011	6	0.0	6.146	A
C-AB	0	643	0.000	0	0.0	0.000	A
C-A	0			0			
A-B	4			4			
A-C	3			3			

08:45 - 09:00

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	8	592	0.013	8	0.0	6.164	A
C-AB	0	643	0.000	0	0.0	0.000	A
C-A	0			0			
A-B	4			4			
A-C	3			3			

09:00 - 09:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	8	592	0.013	8	0.0	6.164	A
C-AB	0	643	0.000	0	0.0	0.000	A
C-A	0			0			
A-B	4			4			
A-C	3			3			

09:15 - 09:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	6	592	0.011	6	0.0	6.146	A
C-AB	0	643	0.000	0	0.0	0.000	A
C-A	0			0			
A-B	4			4			
A-C	3			3			

09:30 - 09:45

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	5	592	0.009	5	0.0	6.134	A
C-AB	0	643	0.000	0	0.0	0.000	A
C-A	0			0			
A-B	3			3			
A-C	2			2			

Queue Variation Results for each time segment

08:15 - 08:30

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.01	0.00	0.00	0.01	0.01			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

08:30 - 08:45

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.01	0.01	0.25	0.45	0.48			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

08:45 - 09:00

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.01	0.00	0.00	0.01	0.01			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

09:00 - 09:15

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.01	0.00	0.00	0.01	0.01			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

09:15 - 09:30

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.01	0.00	0.00	0.01	0.01			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

09:30 - 09:45

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.01	0.00	0.00	0.01	0.01			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

Site 5 - Do Nothing 2028, PM

Data Errors and Warnings

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

Junction Network

Junctions

Junction	Name	Junction type	Arm A Direction	Arm B Direction	Arm C Direction	Use circulating lanes	Junction Delay (s)	Junction LOS
5	Popes Road/Popes Hill	T-Junction	Two-way	Two-way	Two-way		0.00	A

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	0.00	A

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	Do Nothing 2028	PM	ONE HOUR	14:30	16:00	15

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		✓	8	100.000
B		✓	4	100.000
C		✓	5	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		A	**B**	**C**
From	**A**	0	3	5
	B	4	0	0
	C	5	0	0

Vehicle Mix

Heavy Vehicle %

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

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max 95th percentile Queue (PCU)	Max LOS
B-AC	0.00	0.00	0.0	~1	A
C-AB	0.00	0.00	0.0	~1	A
C-A					
A-B					
A-C					

Main Results for each time segment

14:30 - 14:45

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	0	665	0.000	0	0.0	0.000	A
C-AB	0	643	0.000	0	0.0	0.000	A
C-A	4			4			
A-B	2			2			
A-C	4			4			

14:45 - 15:00

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	0	664	0.000	0	0.0	0.000	A
C-AB	0	643	0.000	0	0.0	0.000	A
C-A	4			4			
A-B	3			3			
A-C	4			4			

15:00 - 15:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	0	664	0.000	0	0.0	0.000	A
C-AB	0	642	0.000	0	0.0	0.000	A
C-A	6			6			
A-B	3			3			
A-C	6			6			

15:15 - 15:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	0	664	0.000	0	0.0	0.000	A
C-AB	0	642	0.000	0	0.0	0.000	A
C-A	6			6			
A-B	3			3			
A-C	6			6			

15:30 - 15:45

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	0	664	0.000	0	0.0	0.000	A
C-AB	0	643	0.000	0	0.0	0.000	A
C-A	4			4			
A-B	3			3			
A-C	4			4			

15:45 - 16:00

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	0	665	0.000	0	0.0	0.000	A
C-AB	0	643	0.000	0	0.0	0.000	A
C-A	4			4			
A-B	2			2			
A-C	4			4			

Queue Variation Results for each time segment

14:30 - 14:45

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.00	0.00	0.00	0.00	0.00			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

14:45 - 15:00

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.00	0.00	0.00	0.00	0.00			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

15:00 - 15:15

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.00	0.00	0.00	0.00	0.00			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

15:15 - 15:30

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.00	0.00	0.00	0.00	0.00			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

15:30 - 15:45

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.00	0.00	0.00	0.00	0.00			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

15:45 - 16:00

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.00	0.00	0.00	0.00	0.00			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

Site 5 - 2028 Opening Year, AM

Data Errors and Warnings

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

Junction Network

Junctions

Junction	Name	Junction type	Arm A Direction	Arm B Direction	Arm C Direction	Use circulating lanes	Junction Delay (s)	Junction LOS
5	Popes Road/Popes Hill	T-Junction	Two-way	Two-way	Two-way		0.61	A

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	0.61	A

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	2028 Opening Year	AM	ONE HOUR	08:15	09:45	15

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		✓	28	100.000
B		✓	7	100.000
C		✓	47	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		A	**B**	**C**
From	**A**	0	4	24
	B	7	0	0
	C	46	1	0

Vehicle Mix

Heavy Vehicle %

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

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max 95th percentile Queue (PCU)	Max LOS
B-AC	0.01	6.34	0.0	0.5	A
C-AB	0.00	5.45	0.0	0.5	A
C-A					
A-B					
A-C					

Main Results for each time segment

08:15 - 08:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	5	581	0.009	5	0.0	6.251	A
C-AB	0.79	661	0.001	0.79	0.0	5.448	A
C-A	35			35			
A-B	3			3			
A-C	18			18			

08:30 - 08:45

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	6	579	0.011	6	0.0	6.288	A
C-AB	0.96	665	0.001	0.96	0.0	5.422	A
C-A	41			41			
A-B	4			4			
A-C	22			22			

08:45 - 09:00

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	8	575	0.013	8	0.0	6.340	A
C-AB	1	669	0.002	1	0.0	5.387	A
C-A	51			51			
A-B	4			4			
A-C	26			26			

09:00 - 09:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	8	575	0.013	8	0.0	6.340	A
C-AB	1	669	0.002	1	0.0	5.387	A
C-A	51			51			
A-B	4			4			
A-C	26			26			

09:15 - 09:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	6	579	0.011	6	0.0	6.288	A
C-AB	0.96	665	0.001	0.96	0.0	5.425	A
C-A	41			41			
A-B	4			4			
A-C	22			22			

09:30 - 09:45

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	5	581	0.009	5	0.0	6.251	A
C-AB	0.79	661	0.001	0.80	0.0	5.448	A
C-A	35			35			
A-B	3			3			
A-C	18			18			

Queue Variation Results for each time segment

08:15 - 08:30

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.01	0.00	0.00	0.01	0.01			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

08:30 - 08:45

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.01	0.01	0.25	0.45	0.48			N/A	N/A
C-AB	0.00	0.00	0.25	0.45	0.48			N/A	N/A

08:45 - 09:00

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.01	0.00	0.00	0.01	0.01			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

09:00 - 09:15

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.01	0.00	0.00	0.01	0.01			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

09:15 - 09:30

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.01	0.00	0.00	0.01	0.01			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

09:30 - 09:45

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.01	0.00	0.00	0.01	0.01			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

Site 5 - 2028 Opening Year, PM

Data Errors and Warnings

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

Junction Network

Junctions

Junction	Name	Junction type	Arm A Direction	Arm B Direction	Arm C Direction	Use circulating lanes	Junction Delay (s)	Junction LOS
5	Popes Road/Popes Hill	T-Junction	Two-way	Two-way	Two-way		0.00	A

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	0.00	A

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	2028 Opening Year	PM	ONE HOUR	14:30	16:00	15

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		✓	49	100.000
B		✓	4	100.000
C		✓	29	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		A	**B**	**C**
From	**A**	0	3	46
	B	4	0	0
	C	29	0	0

Vehicle Mix

Heavy Vehicle %

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

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max 95th percentile Queue (PCU)	Max LOS
B-AC	0.00	0.00	0.0	~1	A
C-AB	0.00	0.00	0.0	~1	A
C-A					
A-B					
A-C					

Main Results for each time segment

14:30 - 14:45

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	0	654	0.000	0	0.0	0.000	A
C-AB	0	635	0.000	0	0.0	0.000	A
C-A	22			22			
A-B	2			2			
A-C	35			35			

14:45 - 15:00

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	0	651	0.000	0	0.0	0.000	A
C-AB	0	633	0.000	0	0.0	0.000	A
C-A	26			26			
A-B	3			3			
A-C	41			41			

15:00 - 15:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	0	647	0.000	0	0.0	0.000	A
C-AB	0	631	0.000	0	0.0	0.000	A
C-A	32			32			
A-B	3			3			
A-C	51			51			

15:15 - 15:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	0	647	0.000	0	0.0	0.000	A
C-AB	0	631	0.000	0	0.0	0.000	A
C-A	32			32			
A-B	3			3			
A-C	51			51			

15:30 - 15:45

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	0	651	0.000	0	0.0	0.000	A
C-AB	0	633	0.000	0	0.0	0.000	A
C-A	26			26			
A-B	3			3			
A-C	41			41			

15:45 - 16:00

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	0	654	0.000	0	0.0	0.000	A
C-AB	0	635	0.000	0	0.0	0.000	A
C-A	22			22			
A-B	2			2			
A-C	35			35			

Queue Variation Results for each time segment

14:30 - 14:45

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.00	0.00	0.00	0.00	0.00			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

14:45 - 15:00

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.00	0.00	0.00	0.00	0.00			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

15:00 - 15:15

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.00	0.00	0.00	0.00	0.00			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

15:15 - 15:30

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.00	0.00	0.00	0.00	0.00			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

15:30 - 15:45

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.00	0.00	0.00	0.00	0.00			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

15:45 - 16:00

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.00	0.00	0.00	0.00	0.00			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

Site 5 - Do Nothing 2033, AM

Data Errors and Warnings

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

Junction Network

Junctions

Junction	Name	Junction type	Arm A Direction	Arm B Direction	Arm C Direction	Use circulating lanes	Junction Delay (s)	Junction LOS
5	Popes Road/Popes Hill	T-Junction	Two-way	Two-way	Two-way		3.29	A

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	3.29	A

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D7	Do Nothing 2033	AM	ONE HOUR	08:15	09:45	15

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		✓	7	100.000
B		✓	8	100.000
C		✓	2	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		A	**B**	**C**
From	**A**	0	4	3
	B	8	0	0
	C	1	1	0

Vehicle Mix

Heavy Vehicle %

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

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max 95th percentile Queue (PCU)	Max LOS
B-AC	0.01	6.18	0.0	0.5	A
C-AB	0.00	0.00	0.0	~1	A
C-A					
A-B					
A-C					

Main Results for each time segment

08:15 - 08:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	6	592	0.010	6	0.0	6.141	A
C-AB	0	643	0.000	0	0.0	0.000	A
C-A	0			0			
A-B	3			3			
A-C	2			2			

08:30 - 08:45

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	7	592	0.012	7	0.0	6.156	A
C-AB	0	643	0.000	0	0.0	0.000	A
C-A	0			0			
A-B	4			4			
A-C	3			3			

08:45 - 09:00

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	9	592	0.015	9	0.0	6.175	A
C-AB	0	643	0.000	0	0.0	0.000	A
C-A	0			0			
A-B	4			4			
A-C	3			3			

09:00 - 09:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	9	592	0.015	9	0.0	6.175	A
C-AB	0	643	0.000	0	0.0	0.000	A
C-A	0			0			
A-B	4			4			
A-C	3			3			

09:15 - 09:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	7	592	0.012	7	0.0	6.158	A
C-AB	0	643	0.000	0	0.0	0.000	A
C-A	0			0			
A-B	4			4			
A-C	3			3			

09:30 - 09:45

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	6	592	0.010	6	0.0	6.144	A
C-AB	0	643	0.000	0	0.0	0.000	A
C-A	0			0			
A-B	3			3			
A-C	2			2			

Queue Variation Results for each time segment

08:15 - 08:30

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.01	0.00	0.00	0.01	0.01			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

08:30 - 08:45

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.01	0.01	0.25	0.45	0.48			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

08:45 - 09:00

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.02	0.00	0.00	0.02	0.02			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

09:00 - 09:15

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.02	0.00	0.00	0.02	0.02			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

09:15 - 09:30

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.01	0.00	0.00	0.01	0.01			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

09:30 - 09:45

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.01	0.00	0.00	0.01	0.01			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

Site 5 - Do Nothing 2033, PM

Data Errors and Warnings

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

Junction Network

Junctions

Junction	Name	Junction type	Arm A Direction	Arm B Direction	Arm C Direction	Use circulating lanes	Junction Delay (s)	Junction LOS
5	Popes Road/Popes Hill	T-Junction	Two-way	Two-way	Two-way		0.00	A

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	0.00	A

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D8	Do Nothing 2033	PM	ONE HOUR	14:30	16:00	15

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		✓	8	100.000
B		✓	4	100.000
C		✓	5	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		A	**B**	**C**
From	**A**	0	3	5
	B	4	0	0
	C	5	0	0

Vehicle Mix

Heavy Vehicle %

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

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max 95th percentile Queue (PCU)	Max LOS
B-AC	0.00	0.00	0.0	~1	A
C-AB	0.00	0.00	0.0	~1	A
C-A					
A-B					
A-C					

Main Results for each time segment

14:30 - 14:45

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	0	665	0.000	0	0.0	0.000	A
C-AB	0	643	0.000	0	0.0	0.000	A
C-A	4			4			
A-B	2			2			
A-C	4			4			

14:45 - 15:00

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	0	664	0.000	0	0.0	0.000	A
C-AB	0	643	0.000	0	0.0	0.000	A
C-A	4			4			
A-B	3			3			
A-C	4			4			

15:00 - 15:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	0	664	0.000	0	0.0	0.000	A
C-AB	0	642	0.000	0	0.0	0.000	A
C-A	6			6			
A-B	3			3			
A-C	6			6			

15:15 - 15:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	0	664	0.000	0	0.0	0.000	A
C-AB	0	642	0.000	0	0.0	0.000	A
C-A	6			6			
A-B	3			3			
A-C	6			6			

15:30 - 15:45

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	0	664	0.000	0	0.0	0.000	A
C-AB	0	643	0.000	0	0.0	0.000	A
C-A	4			4			
A-B	3			3			
A-C	4			4			

15:45 - 16:00

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	0	665	0.000	0	0.0	0.000	A
C-AB	0	643	0.000	0	0.0	0.000	A
C-A	4			4			
A-B	2			2			
A-C	4			4			

Queue Variation Results for each time segment

14:30 - 14:45

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.00	0.00	0.00	0.00	0.00			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

14:45 - 15:00

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.00	0.00	0.00	0.00	0.00			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

15:00 - 15:15

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.00	0.00	0.00	0.00	0.00			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

15:15 - 15:30

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.00	0.00	0.00	0.00	0.00			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

15:30 - 15:45

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.00	0.00	0.00	0.00	0.00			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

15:45 - 16:00

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.00	0.00	0.00	0.00	0.00			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

Site 5 - 2033 Opening Year +5 years, AM

Data Errors and Warnings

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

Junction Network

Junctions

Junction	Name	Junction type	Arm A Direction	Arm B Direction	Arm C Direction	Use circulating lanes	Junction Delay (s)	Junction LOS
5	Popes Road/Popes Hill	T-Junction	Two-way	Two-way	Two-way		0.68	A

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	0.68	A

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)
D9	2033 Opening Year +5 years	AM	ONE HOUR	08:15	09:45	15

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		✓	28	100.000
B		✓	8	100.000
C		✓	47	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		A	**B**	**C**
From	**A**	0	4	24
	B	8	0	0
	C	46	1	0

Vehicle Mix

Heavy Vehicle %

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

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max 95th percentile Queue (PCU)	Max LOS
B-AC	0.02	6.35	0.0	0.5	A
C-AB	0.00	5.45	0.0	0.5	A
C-A					
A-B					
A-C					

Main Results for each time segment

08:15 - 08:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	6	581	0.010	6	0.0	6.259	A
C-AB	0.79	661	0.001	0.79	0.0	5.448	A
C-A	35			35			
A-B	3			3			
A-C	18			18			

08:30 - 08:45

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	7	579	0.012	7	0.0	6.298	A
C-AB	0.96	665	0.001	0.96	0.0	5.422	A
C-A	41			41			
A-B	4			4			
A-C	22			22			

08:45 - 09:00

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	9	575	0.015	9	0.0	6.352	A
C-AB	1	669	0.002	1	0.0	5.387	A
C-A	51			51			
A-B	4			4			
A-C	26			26			

09:00 - 09:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	9	575	0.015	9	0.0	6.352	A
C-AB	1	669	0.002	1	0.0	5.387	A
C-A	51			51			
A-B	4			4			
A-C	26			26			

09:15 - 09:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	7	579	0.012	7	0.0	6.298	A
C-AB	0.96	665	0.001	0.96	0.0	5.425	A
C-A	41			41			
A-B	4			4			
A-C	22			22			

09:30 - 09:45

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	6	581	0.010	6	0.0	6.262	A
C-AB	0.79	661	0.001	0.80	0.0	5.448	A
C-A	35			35			
A-B	3			3			
A-C	18			18			

Queue Variation Results for each time segment

08:15 - 08:30

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.01	0.00	0.00	0.01	0.01			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

08:30 - 08:45

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.01	0.01	0.25	0.45	0.48			N/A	N/A
C-AB	0.00	0.00	0.25	0.45	0.48			N/A	N/A

08:45 - 09:00

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.02	0.00	0.00	0.02	0.02			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

09:00 - 09:15

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.02	0.00	0.00	0.02	0.02			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

09:15 - 09:30

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.01	0.00	0.00	0.01	0.01			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

09:30 - 09:45

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.01	0.00	0.00	0.01	0.01			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

Site 5 - 2033 Opening Year +5 years, PM

Data Errors and Warnings

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

Junction Network

Junctions

Junction	Name	Junction type	Arm A Direction	Arm B Direction	Arm C Direction	Use circulating lanes	Junction Delay (s)	Junction LOS
5	Popes Road/Popes Hill	T-Junction	Two-way	Two-way	Two-way		0.00	A

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	0.00	A

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)
D10	2033 Opening Year +5 years	PM	ONE HOUR	14:30	16:00	15

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		✓	50	100.000
B		✓	4	100.000
C		✓	29	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		A	**B**	**C**
From	**A**	0	3	47
	B	4	0	0
	C	29	0	0

Vehicle Mix

Heavy Vehicle %

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

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max 95th percentile Queue (PCU)	Max LOS
B-AC	0.00	0.00	0.0	~1	A
C-AB	0.00	0.00	0.0	~1	A
C-A					
A-B					
A-C					

Main Results for each time segment

14:30 - 14:45

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	0	653	0.000	0	0.0	0.000	A
C-AB	0	635	0.000	0	0.0	0.000	A
C-A	22			22			
A-B	2			2			
A-C	35			35			

14:45 - 15:00

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	0	651	0.000	0	0.0	0.000	A
C-AB	0	633	0.000	0	0.0	0.000	A
C-A	26			26			
A-B	3			3			
A-C	42			42			

15:00 - 15:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	0	647	0.000	0	0.0	0.000	A
C-AB	0	630	0.000	0	0.0	0.000	A
C-A	32			32			
A-B	3			3			
A-C	52			52			

15:15 - 15:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	0	647	0.000	0	0.0	0.000	A
C-AB	0	630	0.000	0	0.0	0.000	A
C-A	32			32			
A-B	3			3			
A-C	52			52			

15:30 - 15:45

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	0	651	0.000	0	0.0	0.000	A
C-AB	0	633	0.000	0	0.0	0.000	A
C-A	26			26			
A-B	3			3			
A-C	42			42			

15:45 - 16:00

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	0	653	0.000	0	0.0	0.000	A
C-AB	0	635	0.000	0	0.0	0.000	A
C-A	22			22			
A-B	2			2			
A-C	35			35			

Queue Variation Results for each time segment

14:30 - 14:45

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.00	0.00	0.00	0.00	0.00			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

14:45 - 15:00

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.00	0.00	0.00	0.00	0.00			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

15:00 - 15:15

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.00	0.00	0.00	0.00	0.00			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

15:15 - 15:30

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.00	0.00	0.00	0.00	0.00			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

15:30 - 15:45

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.00	0.00	0.00	0.00	0.00			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

15:45 - 16:00

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.00	0.00	0.00	0.00	0.00			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

Site 5 - Do Nothing 2043, AM

Data Errors and Warnings

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

Junction Network

Junctions

Junction	Name	Junction type	Arm A Direction	Arm B Direction	Arm C Direction	Use circulating lanes	Junction Delay (s)	Junction LOS
5	Popes Road/Popes Hill	T-Junction	Two-way	Two-way	Two-way		3.10	A

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	3.10	A

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)
D11	Do Nothing 2043	AM	ONE HOUR	08:15	09:45	15

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		✓	9	100.000
B		✓	9	100.000
C		✓	2	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		A	**B**	**C**
From	**A**	0	5	4
	B	9	0	0
	C	1	1	0

Vehicle Mix

Heavy Vehicle %

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

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max 95th percentile Queue (PCU)	Max LOS
B-AC	0.02	6.19	0.0	0.5	A
C-AB	0.00	0.00	0.0	~1	A
C-A					
A-B					
A-C					

Main Results for each time segment

08:15 - 08:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	7	592	0.011	7	0.0	6.152	A
C-AB	0	643	0.000	0	0.0	0.000	A
C-A	0			0			
A-B	4			4			
A-C	3			3			

08:30 - 08:45

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	8	592	0.014	8	0.0	6.169	A
C-AB	0	643	0.000	0	0.0	0.000	A
C-A	0			0			
A-B	4			4			
A-C	4			4			

08:45 - 09:00

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	10	591	0.017	10	0.0	6.192	A
C-AB	0	642	0.000	0	0.0	0.000	A
C-A	0			0			
A-B	6			6			
A-C	4			4			

09:00 - 09:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	10	591	0.017	10	0.0	6.192	A
C-AB	0	642	0.000	0	0.0	0.000	A
C-A	0			0			
A-B	6			6			
A-C	4			4			

09:15 - 09:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	8	592	0.014	8	0.0	6.169	A
C-AB	0	643	0.000	0	0.0	0.000	A
C-A	0			0			
A-B	4			4			
A-C	4			4			

09:30 - 09:45

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	7	592	0.011	7	0.0	6.153	A
C-AB	0	643	0.000	0	0.0	0.000	A
C-A	0			0			
A-B	4			4			
A-C	3			3			

Queue Variation Results for each time segment

08:15 - 08:30

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.01	0.00	0.00	0.01	0.01			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

08:30 - 08:45

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.01	0.01	0.25	0.45	0.48			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

08:45 - 09:00

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.02	0.00	0.00	0.02	0.02			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

09:00 - 09:15

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.02	0.00	0.00	0.02	0.02			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

09:15 - 09:30

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.01	0.00	0.00	0.01	0.01			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

09:30 - 09:45

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.01	0.00	0.00	0.01	0.01			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

Site 5 - Do Nothing 2043, PM

Data Errors and Warnings

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

Junction Network

Junctions

Junction	Name	Junction type	Arm A Direction	Arm B Direction	Arm C Direction	Use circulating lanes	Junction Delay (s)	Junction LOS
5	Popes Road/Popes Hill	T-Junction	Two-way	Two-way	Two-way		1.62	A

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	1.62	A

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)
D12	Do Nothing 2043	PM	ONE HOUR	14:30	16:00	15

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		✓	9	100.000
B		✓	5	100.000
C		✓	5	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		A	**B**	**C**
From	**A**	0	4	5
	B	5	0	0
	C	5	0	0

Vehicle Mix

Heavy Vehicle %

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

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max 95th percentile Queue (PCU)	Max LOS
B-AC	0.01	6.16	0.0	0.5	A
C-AB	0.00	0.00	0.0	~1	A
C-A					
A-B					
A-C					

Main Results for each time segment

14:30 - 14:45

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	4	591	0.006	4	0.0	6.129	A
C-AB	0	643	0.000	0	0.0	0.000	A
C-A	4			4			
A-B	3			3			
A-C	4			4			

14:45 - 15:00

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	4	591	0.008	4	0.0	6.141	A
C-AB	0	643	0.000	0	0.0	0.000	A
C-A	4			4			
A-B	4			4			
A-C	4			4			

15:00 - 15:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	6	590	0.009	5	0.0	6.158	A
C-AB	0	642	0.000	0	0.0	0.000	A
C-A	6			6			
A-B	4			4			
A-C	6			6			

15:15 - 15:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	6	590	0.009	6	0.0	6.158	A
C-AB	0	642	0.000	0	0.0	0.000	A
C-A	6			6			
A-B	4			4			
A-C	6			6			

15:30 - 15:45

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	4	591	0.008	5	0.0	6.144	A
C-AB	0	643	0.000	0	0.0	0.000	A
C-A	4			4			
A-B	4			4			
A-C	4			4			

15:45 - 16:00

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	4	591	0.006	4	0.0	6.132	A
C-AB	0	643	0.000	0	0.0	0.000	A
C-A	4			4			
A-B	3			3			
A-C	4			4			

Queue Variation Results for each time segment

14:30 - 14:45

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.01	0.00	0.00	0.01	0.01			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

14:45 - 15:00

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.01	0.01	0.25	0.45	0.48			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

15:00 - 15:15

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.01	0.00	0.00	0.01	0.01			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

15:15 - 15:30

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.01	0.00	0.00	0.01	0.01			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

15:30 - 15:45

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.01	0.00	0.00	0.01	0.01			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

15:45 - 16:00

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.01	0.00	0.00	0.01	0.01			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

Site 5 - 2043 Opening Year +15 years, AM

Data Errors and Warnings

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

Junction Network

Junctions

Junction	Name	Junction type	Arm A Direction	Arm B Direction	Arm C Direction	Use circulating lanes	Junction Delay (s)	Junction LOS
5	Popes Road/Popes Hill	T-Junction	Two-way	Two-way	Two-way		0.74	A

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	0.74	A

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)
D13	2043 Opening Year +15 years	AM	ONE HOUR	08:15	09:45	15

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		✓	29	100.000
B		✓	9	100.000
C		✓	47	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		A	**B**	**C**
From	**A**	0	5	24
	B	9	0	0
	C	46	1	0

Vehicle Mix

Heavy Vehicle %

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

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max 95th percentile Queue (PCU)	Max LOS
B-AC	0.02	6.37	0.0	0.5	A
C-AB	0.00	5.45	0.0	0.5	A
C-A					
A-B					
A-C					

Main Results for each time segment

08:15 - 08:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	7	581	0.012	7	0.0	6.269	A
C-AB	0.79	661	0.001	0.79	0.0	5.450	A
C-A	35			35			
A-B	4			4			
A-C	18			18			

08:30 - 08:45

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	8	579	0.014	8	0.0	6.309	A
C-AB	0.96	665	0.001	0.96	0.0	5.424	A
C-A	41			41			
A-B	4			4			
A-C	22			22			

08:45 - 09:00

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	10	575	0.017	10	0.0	6.366	A
C-AB	1	669	0.002	1	0.0	5.390	A
C-A	51			51			
A-B	6			6			
A-C	26			26			

09:00 - 09:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	10	575	0.017	10	0.0	6.366	A
C-AB	1	669	0.002	1	0.0	5.392	A
C-A	51			51			
A-B	6			6			
A-C	26			26			

09:15 - 09:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	8	579	0.014	8	0.0	6.312	A
C-AB	0.96	665	0.001	0.96	0.0	5.426	A
C-A	41			41			
A-B	4			4			
A-C	22			22			

09:30 - 09:45

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	7	581	0.012	7	0.0	6.271	A
C-AB	0.79	661	0.001	0.80	0.0	5.452	A
C-A	35			35			
A-B	4			4			
A-C	18			18			

Queue Variation Results for each time segment

08:15 - 08:30

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.01	0.00	0.00	0.01	0.01			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

08:30 - 08:45

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.01	0.01	0.25	0.45	0.48			N/A	N/A
C-AB	0.00	0.00	0.25	0.45	0.48			N/A	N/A

08:45 - 09:00

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.02	0.00	0.00	0.02	0.02			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

09:00 - 09:15

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.02	0.00	0.00	0.02	0.02			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

09:15 - 09:30

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.01	0.00	0.00	0.01	0.01			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

09:30 - 09:45

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.01	0.00	0.00	0.01	0.01			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

Site 5 - 2043 Opening Year +15 years, PM

Data Errors and Warnings

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

Junction Network

Junctions

Junction	Name	Junction type	Arm A Direction	Arm B Direction	Arm C Direction	Use circulating lanes	Junction Delay (s)	Junction LOS
5	Popes Road/Popes Hill	T-Junction	Two-way	Two-way	Two-way		0.37	A

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	0.37	A

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)
D14	2043 Opening Year +15 years	PM	ONE HOUR	14:30	16:00	15

Demand overview (Traffic)

Arm	Linked arm	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		✓	51	100.000
B		✓	5	100.000
C		✓	29	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		A	**B**	**C**
From	**A**	0	4	47
	B	5	0	0
	C	29	0	0

Vehicle Mix

Heavy Vehicle %

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

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max 95th percentile Queue (PCU)	Max LOS
B-AC	0.01	6.35	0.0	0.5	A
C-AB	0.00	0.00	0.0	~1	A
C-A					
A-B					
A-C					

Main Results for each time segment

14:30 - 14:45

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	4	579	0.007	4	0.0	6.260	A
C-AB	0	635	0.000	0	0.0	0.000	A
C-A	22			22			
A-B	3			3			
A-C	35			35			

14:45 - 15:00

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	4	576	0.008	4	0.0	6.299	A
C-AB	0	633	0.000	0	0.0	0.000	A
C-A	26			26			
A-B	4			4			
A-C	42			42			

15:00 - 15:15

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	6	572	0.010	5	0.0	6.353	A
C-AB	0	630	0.000	0	0.0	0.000	A
C-A	32			32			
A-B	4			4			
A-C	52			52			

15:15 - 15:30

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	6	572	0.010	6	0.0	6.353	A
C-AB	0	630	0.000	0	0.0	0.000	A
C-A	32			32			
A-B	4			4			
A-C	52			52			

15:30 - 15:45

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	4	576	0.008	5	0.0	6.299	A
C-AB	0	633	0.000	0	0.0	0.000	A
C-A	26			26			
A-B	4			4			
A-C	42			42			

15:45 - 16:00

Stream	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	4	579	0.007	4	0.0	6.263	A
C-AB	0	635	0.000	0	0.0	0.000	A
C-A	22			22			
A-B	3			3			
A-C	35			35			

Queue Variation Results for each time segment

14:30 - 14:45

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.01	0.00	0.00	0.01	0.01			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

14:45 - 15:00

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.01	0.01	0.25	0.45	0.48			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

15:00 - 15:15

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.01	0.00	0.00	0.01	0.01			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

15:15 - 15:30

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.01	0.00	0.00	0.01	0.01			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

15:30 - 15:45

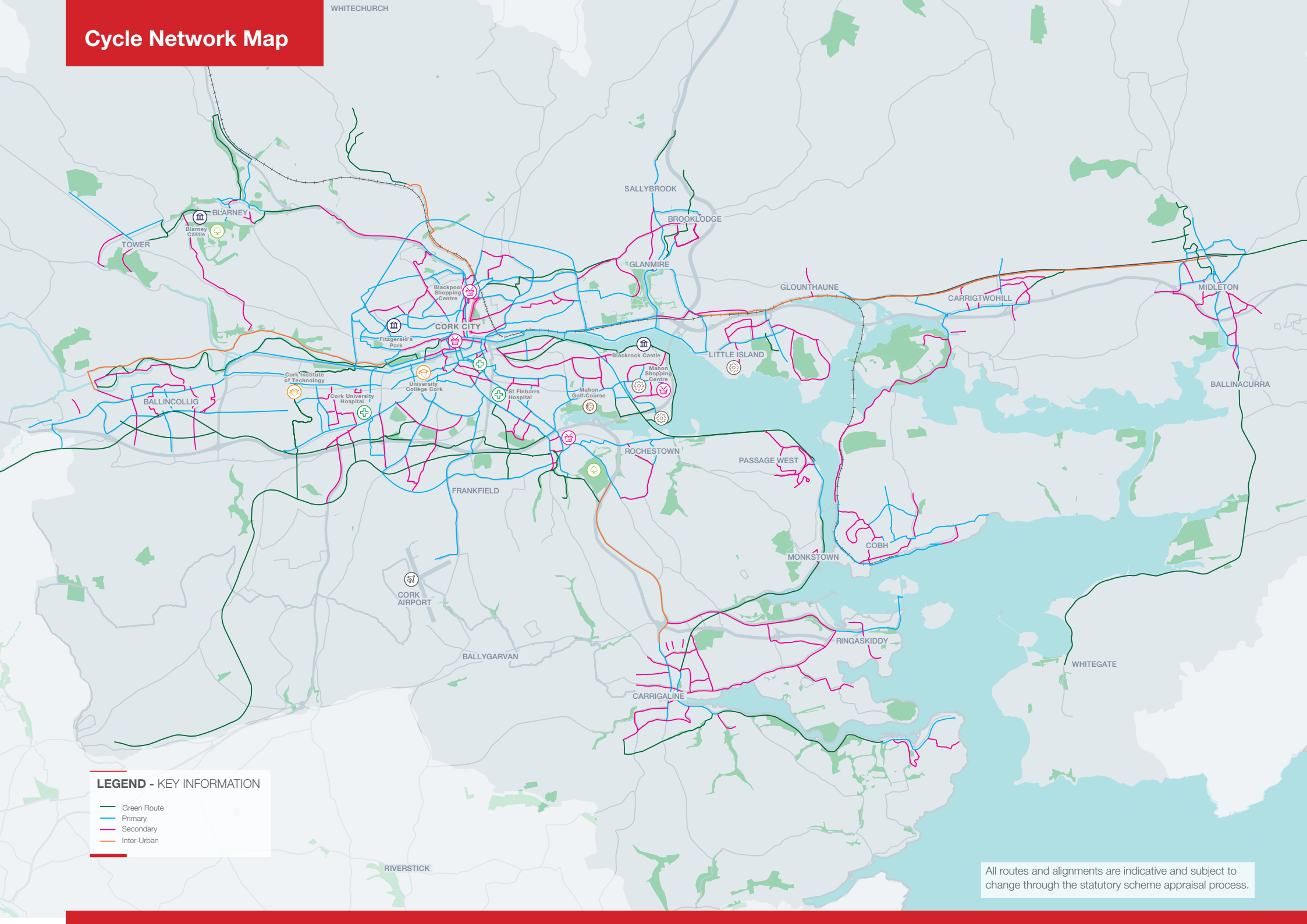
Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.01	0.00	0.00	0.01	0.01			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

15:45 - 16:00

Stream	Mean (PCU)	Q05 (PCU)	Q50 (PCU)	Q90 (PCU)	Q95 (PCU)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.01	0.00	0.00	0.01	0.01			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

Appendix D CMATS Cycle Network Map

Cycle Network Map



LEGEND - KEY INFORMATION

- Green Route
- Primary
- Secondary
- Inter-Urban

All routes and alignments are indicative and subject to change through the statutory scheme appraisal process.