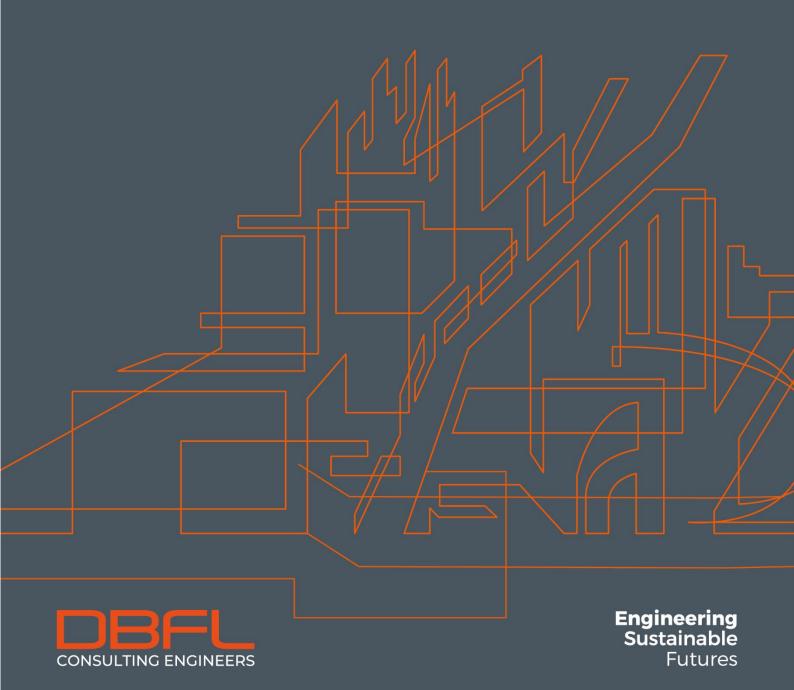
# Ford Site, Cork City, Co. Cork

# **Traffic and Transportation Assessment**

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# 1 INTRODUCTION

#### 1.1 BACKGROUND

DBFL Consulting Engineers (DBFL) has been commissioned by Marina Quarter Limited to compile a Traffic and Transport Assessment (TTA) report in support of a planning application for a proposed mixed-use development at The Former Ford Distribution Site, fronting onto Centre Park Road, Ballintemple, Cork. The proposed development will consist of the construction of 176 no. 1, 2 and 3 bed apartment units in 2 no. blocks, 1 no. creche, 1 no. gym, a retail/café space and all associated ancillary development works.

#### 1.2 SCOPE OF ASSESSMENT

The purpose of this TTA is to quantify the existing transport environment and to detail the results of assessment work undertaken to identify the potential level of transport impact generated as a result of proposed development at The Former Ford Distribution Site, fronting onto Centre Park Road, Ballintemple, Cork.

The scope of the assessment covers transport and sustainability issues including access, pedestrian, cyclist and public transport connections. Recommendations contained within this report are based on existing and proposed road layout plans, site visits, on site traffic observations and the review of junction vehicle turning count data.

During the development of this report, traffic surveys have been undertaken specifically for this assessment, with the objective of providing up to date background information relating to existing traffic movement patterns across the local road network surrounding the subject development site. This information has been supplemented with data obtained from site audits of the local road network, subsequently enabling the identification of existing local travel characteristics and an appreciation of the local receiving environment from a transportation perspective.

#### 1.3 METHODOLOGY

Our approach to the study accords with policy and guidance both at a national and local level. Accordingly, the adopted methodology responds to best practices, current and emerging guidance, exemplified by a series of publications, all of which advocate this method of analysis. Key publications consulted include: -



- Traffic and Transport Assessment Guidelines (May 2014) Tll.
- Traffic Management Guidelines' Dublin Transportation Office & Department of the Environment and Local Government (May 2003);
- Design Manual for Urban Roads and Streets (DMURS) (2019);
- Sustainable Residential Development and Compact Settlements (2024); and
- Cork City Development Plan 2022 2028.

Our methodology incorporated a number of key inter-related stages, including;

- **Site Audit:** A site audit was undertaken to quantify existing road network issues and identify local infrastructure characteristics, in addition to establishing the level of accessibility to the site in terms of walking, cycling and public transport. An inventory of the local road network was also developed during this stage of the assessment.
- Traffic Counts: Junction turning traffic counts were undertaken and analysed with the
  objective of establishing local traffic characteristics in the immediate area of the proposed
  development.
- **Trip Generation:** A trip generation exercise has been carried out to establish the potential level of vehicle trips that could be generated by the proposed development.
- Trip Distribution: Based upon both the existing and future network characteristics, a
  distribution exercise has been undertaken to assign site generated vehicle trips across the
  local road network.
- Network Analysis: Further to quantifying the predicted impact of vehicle movements
  across the local road network for the adopted site access strategy more detailed computer
  simulations have been undertaken to assess the operational performance of key local
  junction's in the post development 2026, 2031 and 2041 development scenarios in
  accordance with TII best practice guidelines.

#### 1.4 REPORT STRUCTURE

As introduced above, this TTA seeks to quantify the potential level of influence generated by the proposed development upon the local road network and subsequently ascertain the existing and future operational performance of the local transport system. The structure of the report responds to the various stages of this exercise including the key tasks summarised below.



**Chapter 2** of this report describes the existing conditions at the proposed development location and surrounding area, whilst **Chapter 3** provides a summary of the relevant transport policies that influence the design and appraisal of the subject proposal.

A description of the proposed development scheme from a transportation perspective is described in **Chapter 4** whilst **Chapter 5** outlines the vehicle trip generation and distribution exercise carried out and the adopted methodology for applying growth factors to establish design year network traffic flows and the predicted scale of impact upon the local road network.

The predicted scale of traffic impact generated by the proposed development upon each of the key local junctions is quantified in **Chapter 6.** 

The operational performance of key local junctions is assessed for the 2026 Opening Year and the 2031 (Opening Year +5 years) and the 2041 (Opening Year +15 years) Horizon Years are summarised within **Chapter 7**.

The main conclusions and recommendations derived from the analysis are summarised in **Chapter 8**.



# 2 RECEIVING ENVIRONMENT

# 2.1 SITE LOCATION

The proposed development is located to the eastern suburb of Cork City, approximately 2km from the city centre, within the South Docklands Area. The general location of the subject site in relation to the surrounding road network is illustrated in **Figure 2-1** below whilst **Figure 2-2** indicatively shows the extent of the subject site boundary and neighbouring lands.



Figure 2-1: Site Location (Source Google Maps)

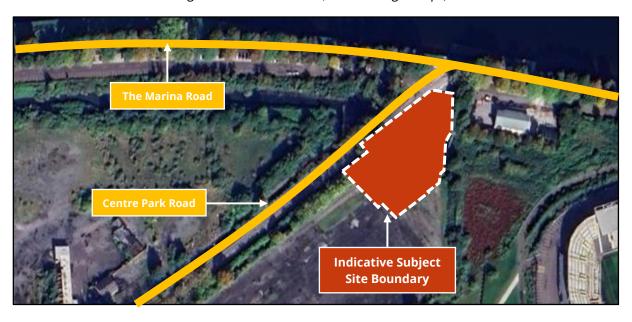


Figure 2-2 : Site Location (Source : Google Maps)



#### 2.2 LAND USE

The subject lands are zoned "ZO 02 New Residential Neighbourhoods – To provide for new residential development in tandem with the provision of the necessary social and physical infrastructure" within the Cork City Development Plan 2022 – 2028 as shown in Figure 2-3 below.

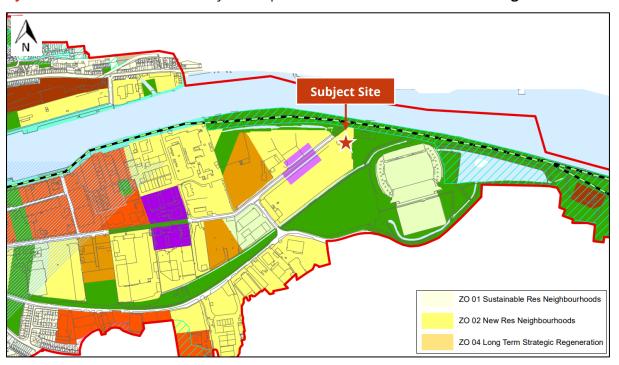


Figure 2-3: Land Use Zoning (Source: Extract from Map 01 of Cork City Development Plan 2022-2028)

# 2.3 EXISTING TRANSPORT FACILITIES & SERVICES

# 2.3.1 Existing Road Network

The subject site is located immediately to the south of the Centre Park Road which is a two-lane road stretching 1.5km in length providing access with Victoria Road Roundabout to the west, and to Marina Road to the northeast. To the south of the subject site, Marquee Road runs north south, giving access between Centre Park and Monahan Road.

Monahan Road, which is a two-lane road, extends from the Victoria Road roundabout in the west to Blackrock Road in the east, passing through Maryville. Located to the northeast of the proposed development, The Marina is a two-lane road which runs along the southern bank of the River Lee, connecting Blackrock Village with Centre Park Road.



# 2.3.2 Pedestrian And Cycle Facilities

To the northwest of the subject site pedestrians can benefit from footpath provided on both sides of the Centre Park Road whilst streetlights are provided on one side of the road corridor. Cyclist's can avail of a protected cycle lane segregated by flexible bollards on the northern side of the road carriageway (Refer **Figure 2-4**). To the south of the subject site, Marquee Road corridor has footpaths provided on both sides of the road and cyclist benefit from provision of protected cycle lane on one side of the road (Refer **Figure 2-5**).

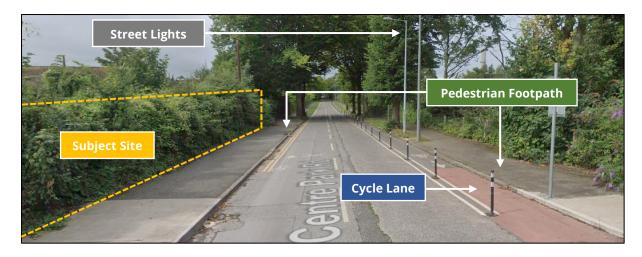


Figure 2-4: Cycle Facilities on Central Park Road

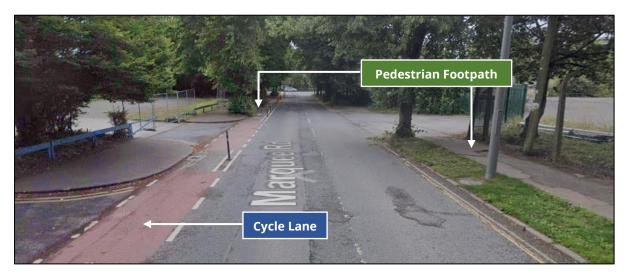


Figure 2-5: Cycle Facilities on Marquee Road

To the northeast of the subject site, The Marina Road corridor provides dedicated pedestrian/cyclist facilities on one side of the road. In the west direction along The Marina Road, pedestrian's and cyclists can benefit from provision of the Cork Harbour Greenway, which runs from Páirc Uí Chaoimh stadium to Passage West, along the route of the former Cork Electric Tramways and



Lighting Company Blackpool — Cork tram line, and Cork, Blackrock and Passage Railway as illustrated in **Figure 2-6** below.



Figure 2-6: Pedestrian & Cycle Facilities on The Marina Road

# 2.3.3 Public Transport - Bus

The subject site benefits from Bus Éireann operated bus Route 212 connecting Kent Station to Mahon Point via Blackrock Road, including the Centre Park Road area. The Bus Éireann Route 212 can be accessed from two nearby bus stops, one located on Centre Park Road and other on Monahan Road. Both stops are approximately 700 meters away (equivalent to a 10-minute walk) from the development site. Approximately 1.1 Kilometres from the subject site, Bus Éireann Routes 202 and 202A can be accessed at bus stops on Blackrock Road. The route 202 operates daily, connecting Mahon Point to Hollyhill via Skehard road, Cork City, and Kilmore Rd. The 202A route offers daily services connecting Mahon Point to Hollyhill via Ringmahon, Cork City and Harbour View Road.

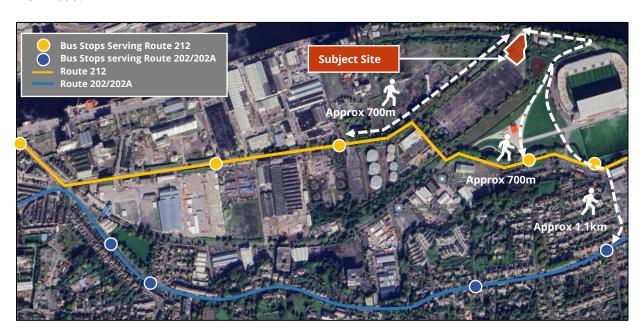


Figure 2-7: Bus Stop Locations



The local Bus stops are all within walking distance of the subject site as illustrated in Figure 2-7.

Route No.	Operator	Route	Mon-Fri	Saturdays	Sunday
242	Duc Fireann	Kent Station to Mahon Point via Blackrock Rd	17	17	15
212	Bus Eireann	Mahon Point to Kent Station via Blackrock Rd	17	17	15
202	Bus Eireann	Mahon Point to Hollyhill via Merchants Quay	47	42	33
		Hollyhill to Mahon Point via Merchants Quay	48	43	32
202A	Bus Eireann	Mahon Point to Hollyhill via Eglinton St	46	42	35
		Hollyhill to Mahon Point via Merchants Quay	49	43	33

Table 2-1: Bus Service Frequency (No. of Services per Day)

# 2.3.4 Public Transport – Heavy Rail

The subject site is located approximately 2.7 km east of Kent Train Station with rail services operating between Dublin, Mallow, Cobh/Midleton, and connection to Tralee, Waterford, Clonmel and Limerick via Limerick Junction Station. The commuter service Mallow-Cobh and Middleton calls at Kent Station approximately every 15 minutes and Intercity services from Cork to Dublin typically run every hour during the day. Waterford-Clonmel-Limerick Junction service operates a few services during morning and evening hours.



Figure 2-8: Train Station Near vicinity of Subject site.



**Table 2-2** below summarises the frequency of services and **Figure 2-8** shows the location of train station from the subject site.

Train Service	Weekdays	Saturdays	Sundays & Bank Holidays
Dublin - Cork Route - Direct Services	17		12
Cork - Dublin - Direct Services	16		12
Mallow - Cork - Midleton - Cobh	63	49	31
Cobh - Midleton - Cork – Mallow	63	49	31
Limerick Junction - Clonmel - Waterford	2		-
Waterford - Clonmel - Limerick Junction	2		-

Table 2-2: Rail Service Frequency (No. of service per day)

# 2.4 SITE ACCESSIBILITY

#### 2.4.1 Pedestrian Catchment

As illustrated in **Figure 2-9** pedestrians from the site benefit from footpaths along the Centre Park Road and Marquee Road.

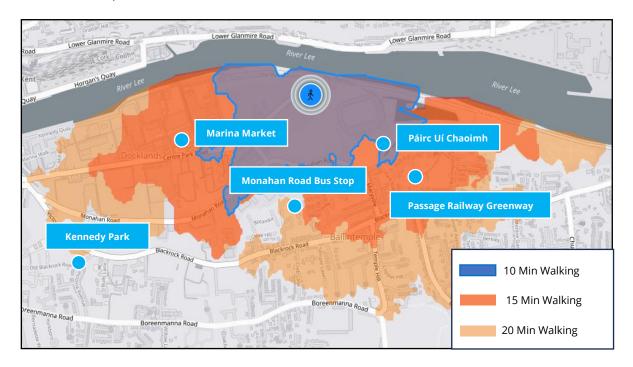


Figure 2-9: Subject Site's Pedestrian Catchment (Source: Traveltime.com)

Future residents / visitors walking to / from the site will be within a 10-minute walk of bus stops, the Marina Walkway, and Páirc Uí Chaoimh. Future residents will also be within a ten minute walk



of Monahan Road Bus stop. Within the 15-minute walking time catchment, pedestrians can access a variety of bus stops, the Marina Market, and the Passage Railway Greenway. Within the 20-minutes walking catchment, pedestrians can access Kennedy Park, Blackrock Road, and various bars and restaurants.

# 2.4.2 Cycling Catchment

The site is very accessible by bicycle being located within a network of cyclable streets some of which currently benefits from dedicated cycle infrastructure. **Figure 2-10** illustrates cycle travel time catchment areas reachable from the subject site.

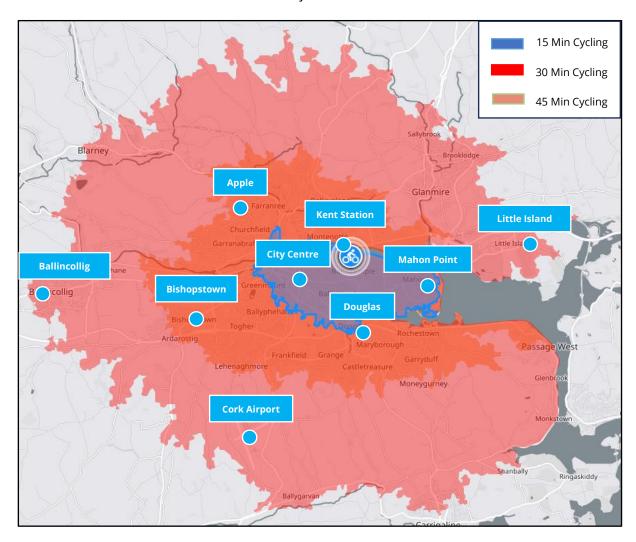


Figure 2-10: Subject Site's Cycling Catchment Area (Source: Traveltime.com)

Cyclist's from the subject site can travel to Mahon Point Shopping Centre, Blackrock, Douglas, and Cork City Centre within a 15-minute cycle. Within this range is a variety of schools including St. Michaels Primary School, Ursula Primary School, and Ashton School. The South Infirmary Victoria University Hospital and Kent Train Station are also located in this catchment. There are a variety



of key destinations within a 30 minute cycle such as Wilton, Rochestown, and Blackpool. Wilton Shopping Centre, University College Cork, Cork University Hospital, several primary and secondary schools, and a variety of key employers such as Dell, Deloitte, and Cadence are all within this catchment also. Within a 45 minute cycle of the site are key employment hubs such as Little Island, Ballincollig, and Glanmire. MTU Cork, the Apple campus, and Cork Airport are within this catchment also.

# 2.4.3 Public Transport Catchment

**Figure 2-11** illustrates the analysis of public transport catchment areas accessible from the subject development site. Within a 30-minute public transport journey are areas such as Cork City Centre, Mahon Point Shopping Centre, and Kent Station. Within a 45-minute public transport journey are areas such as University College Cork, Little Island, Wilton, Cork Airport, and Blackpool. Within a 60-minute public transport journey are key locations such as Midleton, Carrigtwohill, and Carrigaline. Along with these locations are destinations such as Cobh, Middletown, Watergrasshill, Mallow and Ballincollig.

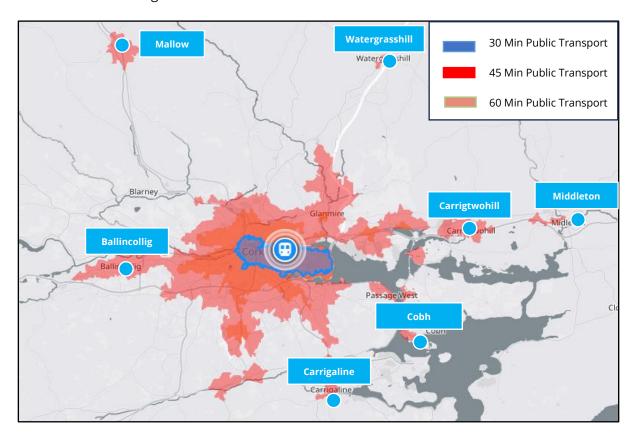


Figure 2-11: Subjects Site Public Transport Catchment (Source: Traveltime.com)



#### 2.5 LOCAL AMENITIES

As illustrated in **Figure 2-12**, the proposed development site is well placed in terms of the availability of and access to local amenities. There are several primary and post primary schools within 3km of the subject site. These include Ballintemple National School, Ashton School, Scoil Aislinn, Our Lady of Lourdes National School, School of Divine Child, St. Michaels Primary School, Beaumont Girls School, and Beaumont Primary School. The site is within 150 meters of the Marina Greenway, offering a scenic walkway and cycle path. The historic Paírc Uí Chaoimh is located within 50 meters of the site, which plays host a variety of events including sporting events and concerts. The site is within 750 meters from the Marina Commercial Park offering both recreational and employment opportunities to the site. The Marina Market is 1 km away from the site, this market has a variety of food options. The site also has various leisure areas such as Kennedy Park, which is 1.6 km away. Aldi is located 1.8 km away from the site. Cork City centre is located 2.7 km away from the site, offering a plethora of services, amenities, and job opportunities.

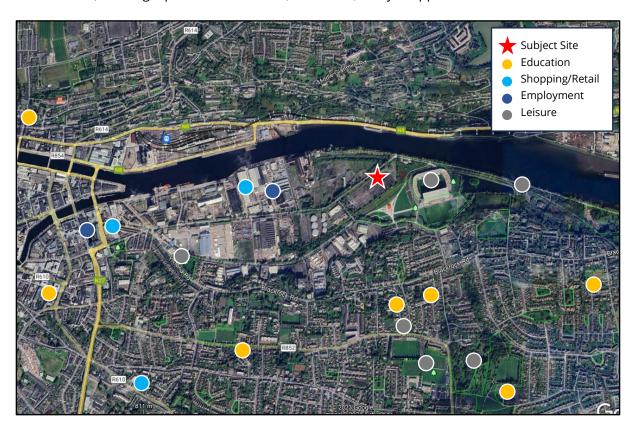


Figure 2-12: Local Amenities in the Vicinity of the Subject Site.



#### 2.6 PROPOSED TRANSPORT INFRASTRUCTURE

# 2.6.1 Cycle Proposals

# Cork City Development Plan 2022-2028

The Cork City Development Plan 2022-2028 outlines how the city can enable growth through planned investment over the six-year period, while continuing to be an innovative, vibrant, healthy and resilient city. Chapter 4 of the Cork City Development Plan discusses Transport and Mobility policies and objectives for the city. In this regard the Cork City Development Plan details a five-year strategy for cycling from 2021 to 2025, and this plan includes the delivery of over 100km of new and improved cycling infrastructure during its term. The specifics of this plan can be seen in **Figure 2-13** below.

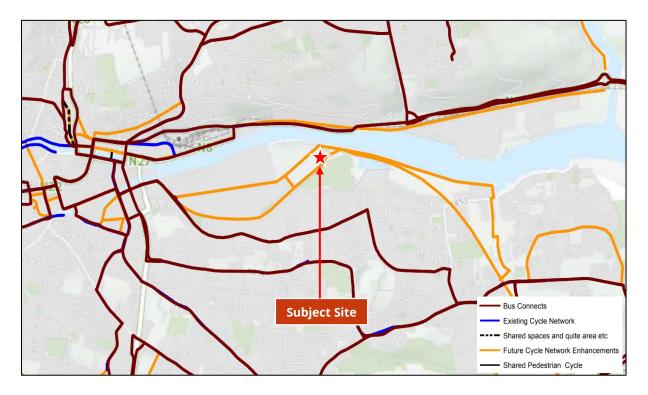


Figure 2-13: Indicative 5 Year Cork Cycle Network Map (Source: Cork City Development Plan 2022-2028)

#### Cork Metropolitan Area Transport Strategy 2040 (CMATS)

The Cork Metropolitan Transport Strategy (CMATS), established by the National Transport Authority, outlines the plans for Cork's transport system by 2040.

CMATS is a unified strategy for land use and transport, designed to accommodate Cork's growing travel needs due to economic and population expansion. It includes the development of a



comprehensive, safe, and appealing cycling network to encourage a transition from private cars to cycling.

The subject site will benefit from secondary level cycle facilities to the north boundary of the site along with greenway connections to the south, west, and east of its vicinity.

The proposed Cycle Network in the vicinity of the subject site is shown in **Figure 2-14**: Proposed Cycle Routes (Source: CMATS 2040) below:

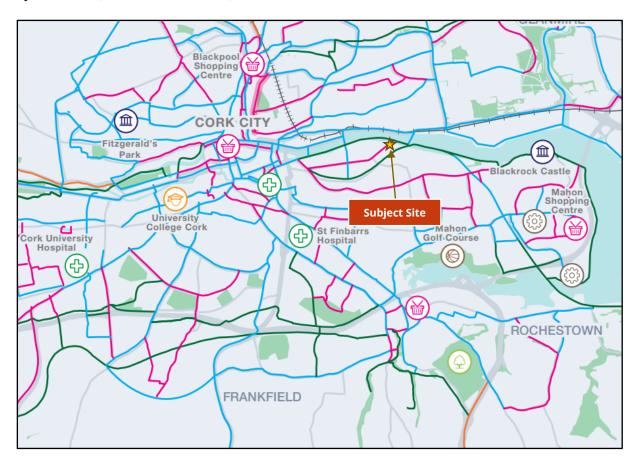


Figure 2-14: Proposed Cycle Routes (Source: CMATS 2040)

#### **CycleConnects**

CycleConnects is an initiative by the NTA that aims to improve sustainable travel by providing the potential for more trips on a safe, accessible, and convenient cycling network, connecting more people to more places. Proposals for cycling links in key cities, towns and villages in each county are included in the plan, in addition to connections between the larger towns, villages and settlements.



The subject site will benefit from a Greenway Route type that runs directly outside of the site. This Greenway Route Type connects directly on to an Urban Secondary Route Type.

The proposed CycleConnects Network in the vicinity of the subject site is shown in **Figure 2-15**: Proposed CycleConnects Network (Source: CycleConnects 2022)below.

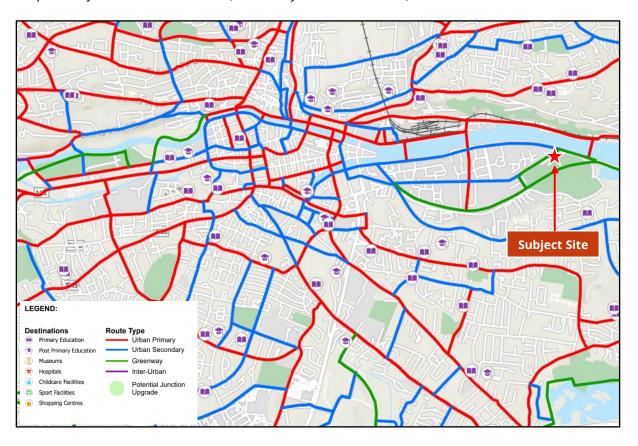


Figure 2-15: Proposed CycleConnects Network (Source: CycleConnects 2022)

# 2.6.2 Public Transport Bus Services

The Cork City Metropolitan Area Transport Strategy (CMATS) has identified that prioritising bus services above general traffic is critical to the delivery of an efficient, frequent, and reliable bus system and is a major part of the overall BusConnects programme. The strategy reveals that proposed increase in bus services and vehicle numbers will benefit a significant proportion of the Cork's population but will not succeed if bus priority is not implemented in full as buses will be held up in general traffic. The existing bus priority measures through Cork City are particularly limited with 14km of bus lanes currently being provided. The proposed bus priority measures include approximately 100km of new bus lanes, representing an increase in bus lanes by a factor of 700%.



The extent of the proposed bus lanes aligns with the proposed Core Bus Network, ensuring efficient, reliable, and frequent services can be accommodated. For identified key bus routes, the objective, in principle, is to provide end-to-end bus priority in each direction, where practicable. The implementation of these measures will lead to a significant improvement in punctuality and bus journey time reliability. The subject site will benefit from the identified priority measures, with Centre Park Road benefitting from being a key public transport corridor. The proposed Bus Priority Measures in the vicinity of the subject site is shown in **Figure 2-16**: Proposed BusConnects Priority Measures (Source: Cork Metropolitan Area Transport Strategy 2040) **below:** 

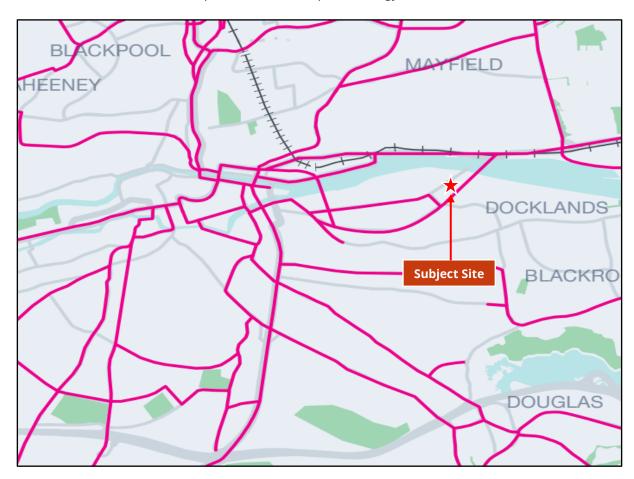


Figure 2-16: Proposed BusConnects Priority Measures (Source: Cork Metropolitan Area Transport

Strategy 2040)

#### 2.6.3 BusConnects

BusConnects is an initiative launched by the National Transport Authority with the aim of overhauling the bus system in Ireland's key urban centres. This initiative includes a review of Cork's bus services, the definition core bus network which comprises radial, orbital and regional core bus



corridors. It also includes enhancements to ticketing and fare systems as well as transition to a new low emission vehicle fleet.

This initiative proposes to implement a redesign of the existing bus network. The fundamental changes to the network expected would be as follows:

- An overall increase of 53% in bus services in Cork.
- Two 24-hour bus services –
- Route 1 running east-west: Ovens/Ballincollig to City Centre to Mahon.
- Route 3A running north-south: Carrigaline to City Centre to Hollyhill.
- Seven all-day high frequency bus routes (services running every 15 minutes or better)
   more during peak periods.
- Provision of bus services to previously unserved areas such as Upper Glanmire,
   Waterfall, Kerry Pike.
- Shorter waits and more direct routes for many people.
- A simpler network and schedules; and
- Additional services at weekend

In relation to the subject site, following this redesign of the bus network, the proposed development will be located in close proximity to the new BusConnects 'Route 4' (Lehenaghmore-Kent) and new BusConnects 'Route 11' (Mahon Point – Farranree). A summary of the aforementioned new routes are summarised in **Table 2-3** below.

Route	From	Via	То	Frequency
4	Lehenaghmore	Pouladuff Road - Green Street - Gregg Road - St. Patrick Street - Merchant's Quay - Centre Park Road - Beaumont Drive - Skehard Road - Mahon Point Shopping Centre	Jacobs Island	Every 15 mins
11	Mahon Point Shopping Centre	Ringmahon Road - Saint Luke's Home - Blackrock - Blackrock Road - Kent Station - MacCurtain Street - Blackpool Shopping Centre - Fairfield Avenue - Upper Fairhill - Parklands Drive	Farranree	Every 30 mins

<sup>\*</sup> Weekday frequency shown in table. Services may be less frequent at weekends/evenings.

Table 2-3: Cork BusConnects Proposal (Source: BusConnects)

**Figure 2-17** illustrates potential future bus service opportunities in the area as detailed within the BusConnects redesign.



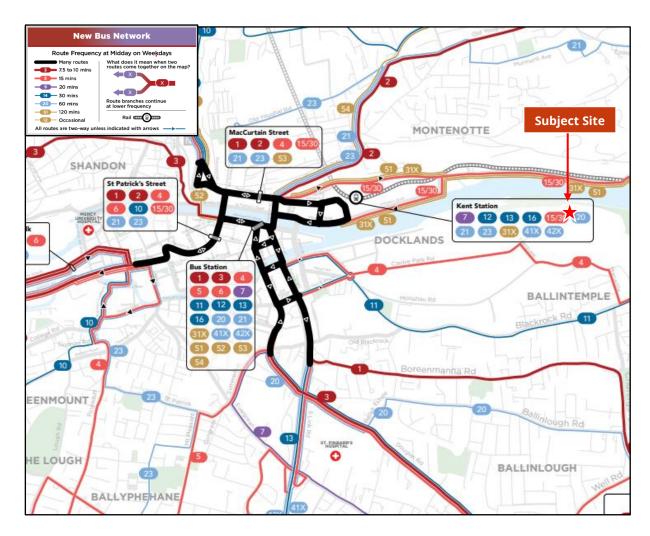


Figure 2-17: Proposed Bus Network (Source: BusConnects 2022)

# 2.6.4 Light Rail

The Cork Metropolitan Area has long aimed to establish a rapid transit corridor running from east to west via the City Centre. The National Planning Framework (NPF) 2040 and the National Development Plan 2018-2027 have both affirmed the commitment to explore the viability of this route. Recent increases in planning activities and interest in key locations along the corridor have further accelerated efforts to assess the feasibility of this project.

Following detailed analysis of projected travel demand within the Cork Metropolitan Area, CMATS has determined that the East-West Transit Corridor is best served through the provision of a new Light Rail Transit (LRT) tram system.

The LRT system is a key enabler for development of Cork City as it will:

 Unlock strategic development areas in its catchment area including: the Cork City Docks, Curraheen, Ballincollig and Mahon.



- Maximise the development potential of windfall sites.
- Provide greater certainty for future planning and development, to pursue higher densities required to meet NPF population and employment targets for Cork City.
- Underpin the planned expansion of University College Cork (UCC), Munster
   Technological University (MTU) and Cork University Hospital (CUH).
- Enable car-free and low car development within its catchment in line with recent changes to government policy outlined in the NPF and Sustainable Apartment guidelines.
- Reduce reliance on the N40, for short trips within the Metropolitan Area.

#### **Proposed LRT Route**

Determination of the final LRT route alignment and depot location has not yet been identified. A definitive route alignment is needed to maximise the ability to provide appropriate densities for development sites at locations along the route and to avoid conflict with emerging development proposals. The indicative alignment of the Light Rail Route is shown in **Figure 2-18** below. The proposed residential development is located in close proximity to two interchanges of the indicative LRT route.

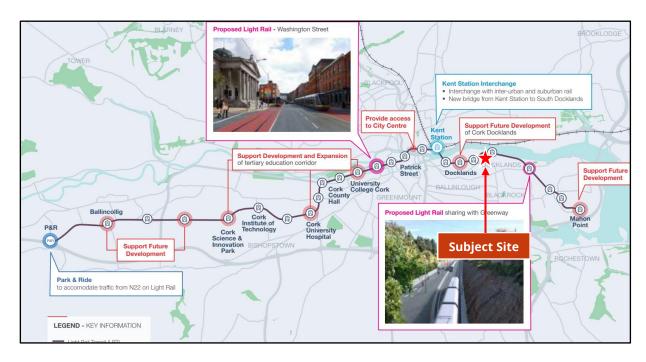


Figure 2-18: Proposed LRT East-West Corridor (Source: Cork Metropolitan Area Transport Strategy 2040)



#### 2.6.5 Suburban Rail

CMATS includes proposals for enhancing the throughput at Kent Station to facilitate direct train services from Mallow to Midleton/Cobh, eliminating the need for passengers to switch services at Kent Station.

To support sustainable growth along an improved railway corridor, new railway stations are being proposed at specific locations. These locations have been chosen to align with the strategic land use planning objectives of both the Cork City Council and Cork County Council:

**Midleton / Cobh- Cork Line**: Tivoli Docks, Dunkettle, Water Rock, Ballynoe and Carrigtwohill West. **Mallow-Cork Line**: Blackpool / Kilbarry, Monard and Blarney / Stoneview. The proposed Suburban Rail Network in the vicinity of the subject site is shown in **Figure 2-19 below**:



Figure 2-19: Proposed Suburban Rail Route (Source: Cork Metropolitan Area Transport Strategy 2040)

# 2.6.6 Road Infrastructure Proposals

# South Docklands Road Infrastructure

The Cork Metropolitan Area Transport Strategy (CMATS) suggests a number of new road-based projects that are considered necessary to facilitate the sustainable movement of people, goods,



and services. These road based projects are designed to complement objectives related to public transport, walking, cycling, and traffic management. The **Docklands to City Centre Road Network** Improvement scheme is recognized by Cork City Council as a crucial project to initiate development in the South Docks of Cork City.Centre Park Road and Monahan Road are the main roads within the South Docklands area. Both roads will require upgrades to accommodate increased demand from public transport, walking, and cycling in long term.

Bus lanes are proposed by CMATS along Monahan Road, and segregated light rail transit is suggested for Centre Park Road. Discrete access points will be needed from Monahan Road, with the number and form of these arrangements determined as part of the Local Area Plan (LAP) process.

Chapter 10 of the Cork City Development Plan 2022-2028 includes objective 10.32g, which states: "To ensure that the Centre Park Road Street corridor is a minimum of 32m in width and other streets are provided considering the transport-related functional requirements outlined in the Transport Strategy and the corresponding DMURS guidance, combined with best practice in urban and landscape design." Centre Park Road will have a corridor width of approximately 32m, which may be exceeded depending on infrastructure requirements. The building lines will need to be set back to frame this key street. The nature of the corridor will vary along its length, responding to the Light Rail Transit (LRT) stops and incidental public open space and plaza provision. The proposed Road Network 2040 in the vicinity of the subject site is shown in Figure 2-20 below:

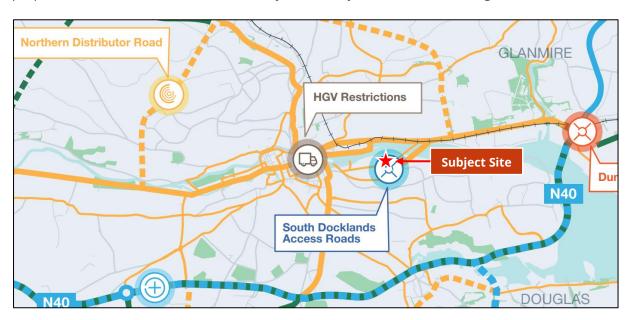


Figure 2-20: Proposed Road Network (Source: Cork Metropolitan Area Transport Strategy 2040)



# 3 POLICY FRAMEWORK AND DEVELOPMENT STANDARDS

#### 3.1 INTRODUCTION

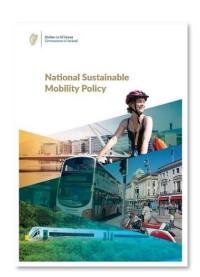
In the context of transportation, the subject site policy framework is influenced by the following key documentations. A common theme through each of these key documents is the emphasis placed upon the importance of travel demand management, with many identifying the need to implement mobility management plans with the objective of promoting sustainable travel patterns. These documents include;

- National Sustainable Mobility Policy Action Plan 2022-2025
- Design Manual for Urban Roads and Streets (DMURS) (2019)
- Sustainable Residential Development and Compact Settlements (2024)
- Cork City Development Plan 2022-2028
- Cork Metropolitan Area Strategic Plan (2021)
- Cork Metropolitan Area Transport Strategy 2040 (2020)

#### 3.2 NATIONAL SUSTAINABLE MOBILITY POLICY

The National Sustainable Mobility Policy was published in April 2022 by the Department of Transport and replaces Smarter Travel 2009. The overall aim of the Policy is to "set out a strategic framework for 2030 for active travel and public transport to support Ireland's overall requirement to achieve a 51% reduction in carbon emissions by the end of this decade".

The Policy is a direct response to the fact that continued growth in demand for road transport is not sustainable due to the resulting adverse impacts of increasing congestion levels, localised air pollution, contribution to global warming and the additional



negative impacts to health through promoting increasingly sedentary lifestyles. The following 3 key Policy areas and 10 goals form the basis of the National Sustainable Mobility Policy:



# Safe and Green Mobility:

- Improve mobility safety.
- Decarbonise public transport.
- Expand availability of sustainable mobility in metropolitan areas.
- Expand availability of sustainable mobility in regional and rural areas.
- Encourage people to choose sustainable mobility over the private car.

# **People Focuses Mobility**

- Take a whole journey approach to mobility, promoting inclusive access for all.
- Design infrastructure according to Universal Design Principles and the Hierarchy of Road Users model.
- Promote sustainable mobility through research and citizen engagement.

# **Better Integrated Mobility**

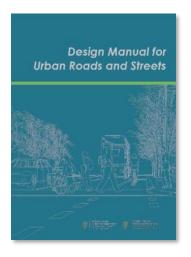
- Better integrate land use and transport planning at all levels.
- Promote smart and integrated mobility through innovative technologies and development of appropriate regulation.

The policy is accompanied by an Action Plan with a total 91 actions organised by goal to be completed by 2025. Each action has been assigned to a specific government department or body with the hope of creating accountability for their implementation. The success of the policy will be measured using an annual National Household Travel Survey administered by the National Transport Authority.

# 3.3 DESIGN MANUAL FOR URBAN ROADS AND STREETS (DMURS) (2019)

DMURS guidance document was produced by the Department of Transport, Tourism and Sports and the Department of Environment, Community and Local Government in March 2013 and updated in May 2019. It provides guidance relating to the design of urban roads and streets. It presents a series of principles, approaches and standards that are necessary to achieve balanced, best practice design outcomes regarding street networks and individual streets.

The manual places a significant emphasis on car dominance in Ireland and the implications this has had regarding the pedestrian





and cycle environment. The document encourages more sustainable travel patterns and safer streets by proposing a hierarchy for user priorities. This hierarchy places pedestrians at the top, indicating that walking is the most sustainable form of transport and that by prioritizing pedestrians first, the number of short car journeys can be reduced, and public transport made more accessible.

Second in the hierarchy are cyclists with public transport third in the hierarchy and private motor vehicles at the bottom. By placing private vehicles at the bottom of the hierarchy, the document indicates that there should be a balance on street networks and cars should no longer take priority over the needs of other users.

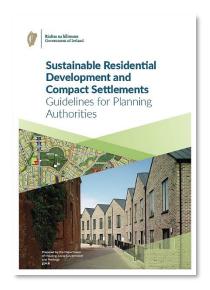
The manual emphasizes that narrow carriageways are one of the most effective design measures that calm traffic. The Standard width of an arterial and link street is between 5.5m and 6m. Desirable footpath widths are between 2m – 4m. The 2m width should be implemented to allow for low to moderate pedestrian activity. A 3m – 4m footpath should be implemented to allow for moderate to high pedestrian activity.

The focus of the manual is to create a place – based sustainable street network that balances the pedestrian and vehicle movements. The manual references the different types of street networks, including arterial streets, link streets, local streets, and highlights the importance of movement.

#### 3.4 SUSTAINABLE RESIDENTIAL DEVELOPMENT AND COMPACT SETTLEMENTS

The 'Sustainable Residential Development and Compact Settlements - Guidelines for Planning Authorities' (January 2024) set out policy and guidance in relation to the planning and development of urban and rural settlements, with a focus on sustainable residential development and the creation of compact settlements.

These Guidelines replace the Sustainable Residential Development in Urban Areas Guidelines for Planning Authorities issued as Ministerial guidelines under Section 28 of the Act in 2009, which in turn replaced the Residential Density Guidelines



issued in 1999. They build on and update previous guidance to take account of current Government policy and economic, social and environmental considerations. There is a renewed



focus in the Guidelines on the renewal of existing settlements and on the interaction between residential density, housing standards and quality urban design and placemaking to support sustainable and compact growth.

Cycling provides a flexible, efficient, and attractive transport option for urban living and these Guidelines require that this transport mode be fully integrated into the design of all new residential scheme. Access to secure storage of bicycles is a key concern for residents in more compact housing developments. SPPR 3 – Car Parking of guideline states the car parking requirements as follows:

- "In city centres and urban neighbourhoods of the five cities, defined in Chapter 3 (Table 3.1 and Table 3.2) car-parking provision should be minimised, substantially reduced or wholly eliminated. The maximum rate of car parking provision for residential development at these locations, where such provision is justified to the satisfaction of the planning authority, shall be 1 no. space per dwelling.
- In accessible locations, defined in Chapter 3 (Table 3.8) car- parking provision should be substantially reduced. The maximum rate of car parking provision for residential development, where such provision is justified to the satisfaction of the planning authority, shall be 1.5 no. spaces per dwelling.
- In **intermediate and peripheral locations**, defined in Chapter 3 (Table 3.8) the maximum rate of car parking provision for residential development, where such provision is justified to the satisfaction of the planning authority, shall be **2 no. spaces per dwelling**."

SPPR 3 (Car Parking) also mentions that there "should be a requirement to provide a rationale and justification for the number of car parking spaces proposed and to satisfy the planning authority that the parking levels are necessary and appropriate, particularly when they are close to the maximum provision. The maximum car parking standards do not include bays assigned for use by a car club, designated short stay on–street Electric Vehicle (EV) charging stations or accessible parking spaces. The maximum car parking standards include the provision for visitor parking."

Furthermore, for the Guidelines state the following requirements for cycle parking and storage are recommended, as per SPPR 4 (i) and SPPR 4 (ii) which are as follows:

 "Quantity – in the case of residential units that do not have ground level open space or have smaller terraces, a general minimum standard of 1 cycle storage space per bedroom should be applied. Visitor cycle parking should also be provided. Any deviation from these standards

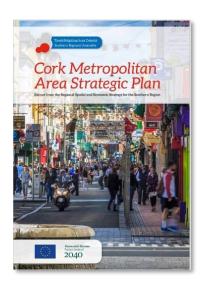


shall be at the discretion of the planning authority and shall be justified with respect to factors such as location, quality of facilities proposed, flexibility for future enhancement/ enlargement, etc. It will be important to make provision for a mix of bicycle parking types including larger/heavier cargo and electric bikes and for individual lockers.

Design – cycle storage facilities should be provided in a dedicated facility of permanent
construction, within the building footprint or, where not feasible, within an adjacent or adjoining
purpose-built structure of permanent construction. Cycle parking areas shall be designed so that
cyclists feel safe. It is best practice that either secure cycle cage/compound or preferably locker
facilities are provided."

#### 3.5 CORK METROPOLITAN AREA STRATEGIC PLAN (2020)

The Cork Metropolitan Area Strategic Plan (MASP) was developed by the National Planning Framework as an essential element of the Regional Spatial and Economic Strategy for the Southern Region which was published in 2020. At over 304,000 in 2016, the Cork Metropolitan Area accounts for almost one fifth of the Region's total population. It is the second largest metropolitan area in the State and is larger in scale than the Limerick-Shannon, Galway and Waterford Metropolitan Areas combined. The NPF recognises that, "Cork is emerging as an international centre of scale and is well placed to complement Dublin but requires significantly accelerated and urban



focused growth to more fully achieve this role". The MASP provides guidance on the development of Cork's Metropolitan area, focusing on achieving compact growth, sustainable transport patterns, and a status as a primary driver of economic and population growth within the region.

In the context of the subject development site and the proposed residential development the most relevant transport policies are summarised as follows:



#### **Sustainable Mobility**

- Policy Objective 7-Integrated Landuse and Transport Planning: "Seek investment and delivery of sustainable transport infrastructure as identified through the Cork Metropolitan Area Transport Strategy and delivery of e-mobility infrastructures."
- Policy Objective 8-Key Transport Objectives: "Integration of All Sustainable Travel Modes: Infrastructure to provide for integration between all modes of transport to support the use of sustainable travel choices."
- Policy Objective 8-Key Transport Objectives: "East-West Light Rail Public Transport Corridor: A east-west public transport corridor from Mahon to Ballincollig via the City Centre, serving CIT, CUH, UCC, Kent Station, Docklands, Mahon Point. The corridor requires development consolidation along it at appropriate nodal points for a high-capacity service.
- Policy Objective 8- Key Transport Objective: "Core Bus Network: A comprehensive network
  of high frequency bus services operating on a core radial and orbital bus network as provided
  for in CMATS."

#### **Transport Orientated Development**

- Policy Objective 7- Integrated Land use and Transport Planning: "The Core Strategies of
  City and County Development Plans in the Cork Metropolitan Area shall allocate the distribution
  of future population and employment growth with the integration of land use and
  transportation planning principles, public transport nodal points and targets identified through
  the Cork Metropolitan Area Transport Strategy."
- Policy Objective 7-Integrated Land use and Transport Planning: "Identify and deliver strategic locations for increased residential and employment use at public transport interchange locations relating to the proposed Light Rail Transit Route, Suburban Rail, and the strategic bus network, where high levels of accessibility by public transport can be achieved. Seek sustainable higher densities where practicable at public transport nodal points."



### 3.6 CORK METROPOLITAN AREA TRANSPORT STRATEGY 2040 (2020)

The Cork Metropolitan Area Transport Strategy (CMATS) was developed by the National Transport Authority, in collaboration with Transport for Ireland and published in 2020. The goal of this document is to deliver an accessible, integrated transport network that enables the sustainable growth of the Cork Metropolitan Area as a dynamic, connected, and internationally



competitive European city region as envisaged by the National Planning Framework 2040. Given that the NPF 2040 envisages Cork to become the fastest -growing city region in Ireland, with a projected 50% to 60% increase of its population by 2040, the significant increase in the demand for travel is managed and planned carefully within this document. CMATS represents a coordinated land use and transport strategy for the Cork Metropolitan area, setting out a framework for the planning and delivery of transport infrastructure and service to support the CMA's development in the period up to 2040.

In the context of the subject development site and the proposed residential development the most relevant areas include:

# **Sustainable Mobility**

- "In terms of employment and education, CMATS prioritises development along its identified high capacity public transport corridors. Increased employment growth along the proposed Ballincollig-City CentreDocklands-Mahon high capacity public transport corridor is envisaged while also serving the significant education, health and research cluster at University College Cork, Cork Institute of Technology and Cork University Hospital."
- "Ensure effective integration between transport and land-use through the delivery of Public Transport Orientated Development (PTOD)."
- "Key future growth enablers for Cork include: The development of a much enhanced Citywide public transport system to incorporate subject to further analysis, proposals for an east-west corridor from Mahon, through the City Centre to Ballincollig."
- "Some key primary cycle routes to be improved within the CMA include: ☐ Segregated routes along the City Docks waterfront areas including the EuroVelo Route 1 from Cork City Centre to Tivoli and Little Island."



 The key roads within the South Docklands area are Centre Park Road and Monahan Road. Both roads will need to be upgraded to accommodate increased demand by public transport, walking and cycling.

### **Transport**

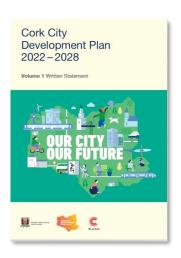
 "Improved road and bridge connectivity to Cork's North, South and Tivoli Docks is required to support the development of these areas."

# **Quality Urban Design**

 "Promote a higher standard of urban design and permeability in new and existing developments, and in highway design, in a fashion that consistently prioritises pedestrian movement and safety over that of the private car."

### 3.7 CORK CITY DEVELOPMENT PLAN 2022-2028

The Cork City Development Plan 2022-2028 sets out how the city will grow and develop over the next six years, while complementing a longer 2040 vision. With a population of over 210,000, Cork is an emerging international city of scale and a national driver of economic and urban growth. Project Ireland 2040 designates the city for significant additional growth over the next 20 years, supported by large scale investment. The Cork City Development Plan 2022-2028 sets out how the city can best enable this growth and investment over the next six years, while continuing to be an innovative, vibrant, healthy, and resilient city.



In the context of the subject development site the most relevant transport policies are summarised as follows:

### **Compact Growth**

• Strategic Vision-Compact Growth: "Integrate land-use and transport planning to achieve a compact city with 50% of all new homes delivered within the existing built-up footprint of the City on regenerated brownfield, infill and greenfield sites identified in the Core Strategy, and to achieve higher population densities aligned with strategic infrastructure delivery."



- Strategic Vision-A city of neighbourhoods and communities: "Develop a sustainable, liveable city of neighbourhoods and communities based on the 15-minute city concept, ensuring that placemaking, accessibility and safety is at the heart of all development."
- objective 2.10- The 15-Minute City: "To support the delivery of a 15-Minute City that supports Compact Liveable Growth by creating vibrant local communities that can access all necessary amenities within a 10-minute walk/cycle and access workplaces and other neighbourhoods with a 15-minute public transport journey. Implementation will include walkable neighbourhoods, towns and communities with mix of uses, house types and tenure that foster a diverse, resilient, socially inclusive and responsive city. This includes support for public and active travel infrastructure projects and services and enhanced neighbourhood permeability. Strategic infrastructure and large-scale developments shall demonstrate how they contribute to a 15-minute city and enhance Cork City's liveability and accessibility.
- **Objective 2.23 -Strategic Regeneration:** "Support and enable the development and renewal of strategic regeneration sites in Cork Docklands, Cork City Centre and areas throughout the city as key deliverables to achieve NPF growth targets."
- Objective 10.23- Integration into its Surroundings: "It is an objective of Cork City Council to ensure that the City Docks is integrated into its surroundings by... Provision of connections across the river to integrate the North Docks (including Kent Station) and South Docks, and the City Docks with Tivoli Docks and the wider Metropolitan Are. Provisions of adequate capacity for pedestrian/cycle movement between the city docks and the city centre"

### **Transport Orientated Development**

- Objective 4.3-Strategic Location of New Development: "To ensure that all new residential, employment and commercial development are focused in areas with good access to the planned high frequency public transport network."
- Objective 4.4-Active Travel: "To actively promote neighbourhoods with adequate walking and cycling infrastructure connected to high-quality public realm elements... To support the expansion of the Cork Bikes Scheme. To accommodate other innovations such as electric bike hire, and other solutions that will encourage active travel. "walking and cycling as efficient, healthy, and environmentally friendly modes of transport... To support the 15-minute city concept and walkable."



### **Sustainable Mobility**

**Objective 4.5-Permeability**: "All new development, particularly alongside the possible routes identified for public transport improvements, shall include permeability for pedestrians, cyclists, and public transport so as to maximise its accessibility".

**Objective. 10.31-Cork City Transport Strategy**: "To implement the City Docks Transport Strategy and its key recommendations, including: Achieving a 75:25 modal split in favour of sustainable transport modes... High quality walking / cycling streets and strategic routes along the quays... Transit orientated development, including the phased delivery of improvements to public transport from bus services, high quality bus services and the LRT... The delivery of three City Docks Bridges: Kent Station Bridge, Water Street Bridge and the Eastern Gateway Bridge..."

### 3.8 DEVELOPMENT MANAGEMENT STANDARDS

### 3.8.1 Car Parking Standards

In order to determine the appropriate quantum of vehicle parking for the proposed development, reference is made to the following guidance: -

- Sustainable Residential Development and Compact Settlements Guidelines for Planning
   Authorities as published by the Department of Housing, Planning and Local Government
   (DHLGH), January 2024; and
- The **Cork City Development Plan 2022-2028**, which outlines the car parking requirements for the subject site.

Sustainable Residential Development and Compact Settlements Guidelines for Planning Authorities

In reference to the Sustainable Residential Development and Compact Settlements Guidelines for Planning Authorities the site can be considered as lands within City Centre. Within Table 3.1 of Chapter 3 of these guidelines, the definition of City - Centre is "The city centres of Dublin and Cork, comprising the city core and immediately surrounding neighbourhoods6, are the most central and accessible urban locations nationally with the greatest intensity of land uses, including higher order employment, recreation, cultural, education, commercial and retail uses."



The location of subject site as published in Cork City Development Plan 2022-2028 is illustrated in **Figure 3-1**below.

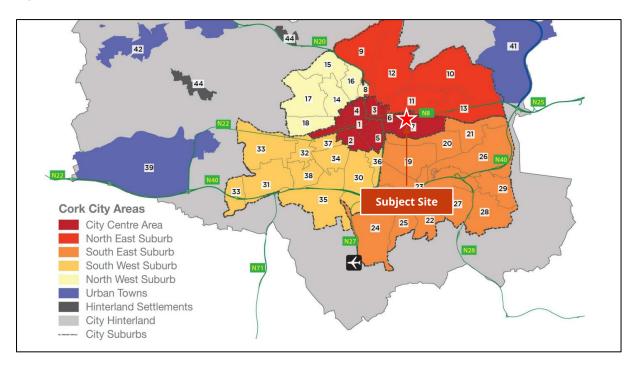


Figure 3-1: Subject site location in city Centre.

The subject site in relation to car parking, within 'City - Centre, the guideline document states:

"In city centres and urban neighbourhoods of the five cities, defined in Chapter 3 (Table 3.1 and Table 3.2) car-parking provision should be minimised, substantially reduced or wholly eliminated. The maximum rate of car parking provision for residential development at these locations, where such provision is justified to the satisfaction of the planning authority, shall be 1 no. space per dwelling.

### Cork City Development Plan 2022-2028

Section 10.93 of the Development Plan states "Car parking standards based upon the transport strategy Car Parking Zones will be applied to the City Docks area, taking into account factors such as finite street capacity, development capacity of the area and mode split targets."

**Figure 3-2** below shows the various proposed parking zones within the South Docklands, with the subject development site being located in the **South Docks East** zone.



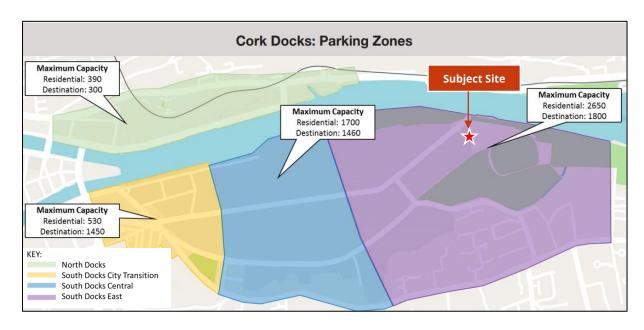


Figure 3-2: CCC Dev. Plan 2022-2028 Car Parking Zones and Maximum Parking Provision.

With reference to Table 10.5 of Cork City Development Plan 2022-2028 and the recommended maximum quantum of car parking for the proposed development is outlined in **Table 3-1** below.

Unit Type	No. of Units	CCC Standard (South Docks East)	CCC Req. (Maximum)	Compact Settlement Standard (Maximum)	Compact Settlement Req.
Apartment (1-Bed)	62	0.25 spaces per 1 Bed	15		62
Apartment (2-Bed)	82	0.5 spaces per 2/2+ Bed	41	1space per dwelling	82
Apartment (3-Bed)	32	0.5 spaces per 2/2+ Bed	16		32
Sub-Total		-	72	-	176
Total Car Parking		-	72		176

Table 3-1: Car Parking Standards and Requirements

# 3.8.2 Disabled Car Parking

Section 11.244 of the Cork City Development Plan 2022-2028 states that 5% of car parking spaces provided should be set aside for disabled car parking, with parking bay widths required to be a minimum of 3.0 metres wide by 4.75 metres long.



# 3.8.3 Electric Vehicle Parking

Section 11.245 states that "Multi-unit residential developments shall provide a minimum of one EV equipped parking space per five car parking. All other parking spaces shall be developed with appropriate infrastructure (ducting) that enables future installation of a charging point for EVs."

### 3.8.4 Motorcycle

The Cork City Development Plan 2022-2028 states that "Motorcycle Parking spaces should be provided on the basis of one motorcycle parking bay per 10 car parking spaces provided for non-residential developments and apartment developments".

# 3.8.5 Bicycle Parking

The appropriate level of cycle parking provision for the development proposals is to be provided in reference to both (i) Cork City Development Plan 2022-2028, and (ii) Sustainable Residential Development and Compact Settlements Guidelines. The corresponding bicycle parking standards and requirement for proposed developments are detailed in **Table 3-2**.

Unit Type	No. of Units	CCC Dev Plan Standards (Minimum)	Settlement Standard (Minimum)  CCC Dev Plan Requirement (Minimum)  (Minimum)		Settlement Standard		Settle Stan	pact ment dard mum)
			Long Stay	Short Stay		Long Stay	Short Stay	
Apartment (1 Bed)	62	1 /unit	1 / bed	"Visitor	62	62		
Apartment (2 Bed)	82	1 / unit	1 / bed	cycle parking should	82	164	-	
Apartment (3 Bed)	32	1 / unit	1 / bed	also be provided."	32	96		
Total Cycle Parking					176	3:	22	

Table 3-2: Cycle Parking Standards and Requirements



# 4 CHARACTERISTICS OF PROPOSALS

### 4.1 **OVERVIEW**

The proposed development will consist of the construction of 176 no. 1, 2 and 3 bed apartment units in 2 no. blocks, 1 no. creche, 1 no. gym, a retail/café space and all associated ancillary development works. A summary of the subject scheme proposals is detailed within **Table 4-1** below.

Unit Ty	pe	Description	Quantity
	Block A 1 bedroom		32
		2 Bedrooms	57
Apartments		1 bedroom	30
	Block B	2 Bedrooms	25
		3 Bedrooms	32
Retai	I	1 no. Ground Floor unit	131.1 sqm
Crech	e		181
	Total No. of A	176	

Table 4-1: Schedule of Accommodation

With reference to the Architect's scheme drawings, the layout of the proposed development is illustrated **Figure 4-1** below.

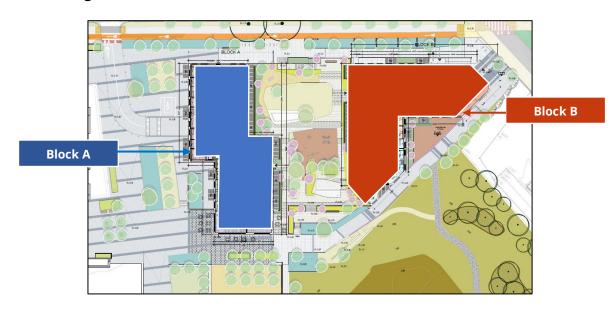


Figure 4-1: Proposed Site Layout



### 4.2 SITE ACCESS ARRANGEMENTS

### 4.2.1 Vehicle Access

The proposed development's small basement car park will be accessed by vehicles via 1 no. access point on Street C of the adjacent permitted development (planning reference: ABP-309059-20) scheme located to the west of Block A. This access via Street C (shared surface arrangement) will connect the basement car park onto Centre Park Road. This access point is proposed to be priority-controlled as illustrated in **Figure 4-2** below.

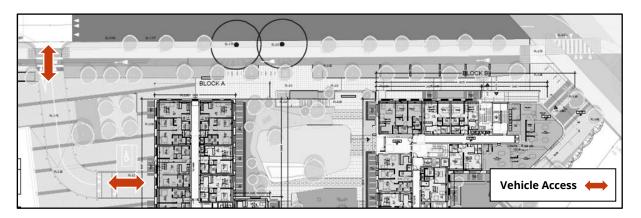


Figure 4-2: Vehicle Access Location in Basement

In reference to drawing **240002-X-04-Z00-XXX-DR-DBFL-CE-1201** clear unobstructed visibility splays of 2.4 m X-Distance an 45m Y-Distance (as per DMURS requirements) are provided for as part of the junction-design proposal as illustrated in **Figure 4-3.** 



Figure 4-3: Proposed Vehicular access to the subject site and Visibility Splays



# 4.2.2 Pedestrians & Cyclists

Dedicated one-way cycle lane is proposed along the northwest site frontage of the subject development site. Cyclists will be able to access the cycle parking in the basement via a dedicated cycle access provided to the north elevation linking street level and the proposed cycle lane as illustrated in **Figure 4-4** below. Cyclist can also access the creche via cycle access provided to the northeast of subject site. Furthermore, pedestrians can access Block A, Block B and Retail area through various access points as illustrated in **Figure 4-5**.

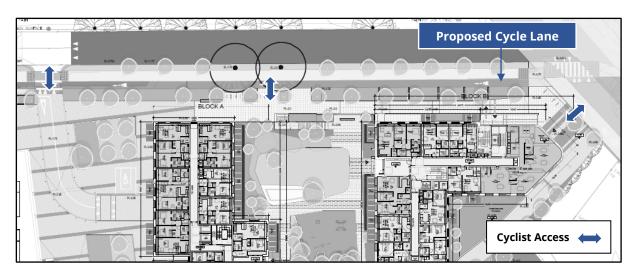


Figure 4-4:Cyclist Access points

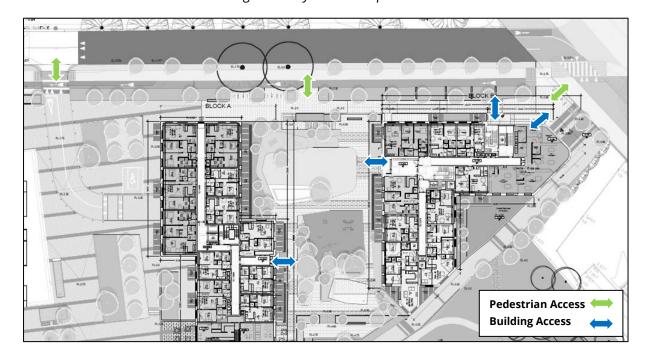


Figure 4-5: Pedestrian Access in Ground Floor.



#### 4.3 PARKING PROVISION

## 4.3.1 Car Parking

The proposed development incorporates a total of 56 no. on site car parking spaces including 3 Disabled spaces and 11 EV Spaces as illustrated in **Figure 4-6**. **Table 4-2** below provides a summary of the proposed vehicle parking provision. This level of provision is considered to be appropriate to accommodate the demand for both residents and visitors in accordance with both local (Cork City Council Development Plan 2022-2028) and national development management standards considering the characteristics of the subject site.

Unit Type	No. Unit Type of Units		CCC Req. (Maximum)	Compact Settlement Standard (Maximum)	Compact Settlement Req.	Proposed
Apartment (1-Bed)	62	0.25 spaces per 1 Bed	15		62	
Apartment (2-Bed)	82	0.5 spaces per 2/2+ Bed	41	1space per dwelling	82	56
Apartment (3-Bed)	32	0.5 spaces per 2/2+ Bed	16		32	
Sub-Total		-	72	-	176	
Total Car Parking		-	72	-	176	56

Table 4-2: Car parking requirement and Proposed Provision

### 4.3.2 Disabled Car Parking

A total of **3no.** disabled car parking spaces are proposed as illustrated in **Figure 4-6.** This equates to 5% of car parking spaces as required within the Cork City Council Development Plan 2022-2028 development management standards.

#### 4.3.3 Electric Vehicles

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. All other parking spaces shall be developed with appropriate infrastructure (ducting) that enables future installation of a charging point for EVs." It is proposed to provide a total of 11 EV car parking spaces (with charge point)



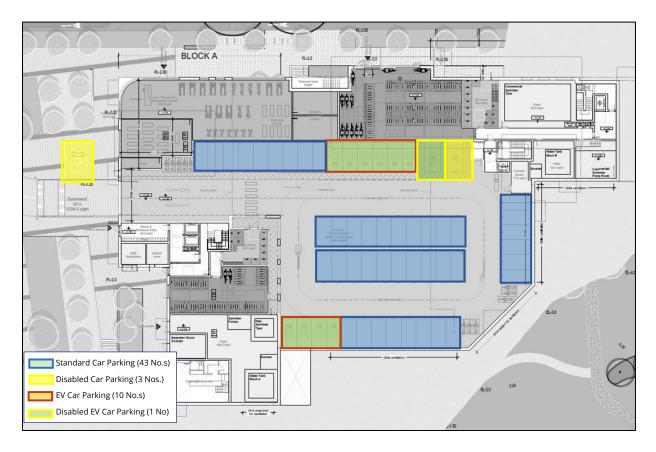


Figure 4-6: Proposed Basement Car Parking

# 4.3.4 Motorcycle

The Cork City Development Plan 2022-2028 states that "Motorcycle Parking spaces should be provided on the basis of one motorcycle parking bay per 10 car parking spaces provided for non-residential developments and apartment developments". A total of 11 no. motorcycle parking bays are provided for the subject development within the secure basement area as illustrated in **Figure 4-7.** 

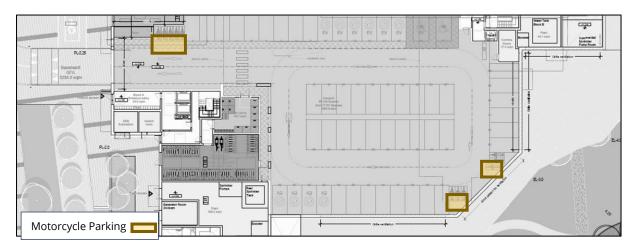


Figure 4-7:Proposed Motorcycle Parking



# 4.4 Bicycle Parking Provisions

A total of **427** no. bicycle parking spaces are proposed as part of the subject development scheme. This includes 384 no. long term parking (Secured and Weather protected) in the basement,13 cargo bikes and 30 no. short term bike parking at surface level as illustrated in **Figure 4-8** and **Figure 4-9**.

Unit Type	No. of Units/GFA	CCC Dev Plan Requirement (Minimum- Long term and Short	Comp Settler Stand	nent	Prop	osed
		term)	Long Stay	Short Stay	Long Stay	Short Stay
Apartment (1 Bed)	62	62	62			30
Apartment (2 Bed)	82	82	164	-	384+13 cargo	
Apartment (3 Bed)	32	32	96		J	
Total Cycle Parking		176	322		427	

Table 4-3: Proposed Cycle Parking

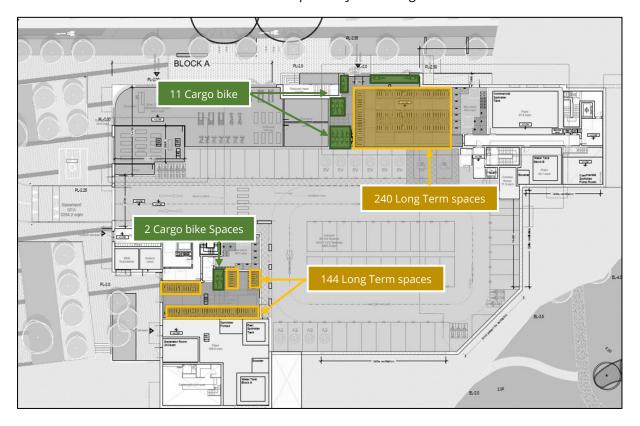


Figure 4-8: Proposed Long term Cycle Parking (Basement)





Figure 4-9: Proposed Short Term Cycle Parking



# 5 TRIP GENERATION AND DISTRIBUTION

### 5.1 BASELINE TRAFFIC CONDITIONS

In order to establish the existing local road networks traffic characteristics and subsequently enable the identification of the potential impact of the proposed mixed use development, traffic survey data recorded on 21st May 2024 was used for the purpose of this assessment.

The aforementioned traffic survey (weekday classified junction turning counts) was conducted by Nationwide Data Collection between 07:00 to 10:00 and 16:00 to 19:00. The surveys undertaken included Junction Turning Counts (JTC). JTCs were carried out at four junctions within close proximity to the proposed development site. The following four locations were included within the survey (**Figure 5-1**).

- Junction 1- Victoria Road/ Centre Park Road/ Albert Road.
- Junction 2- Monahan Road/ Marquee Road.
- Junction 3- Marque Road/ Centre Park Road.
- Junction 4- Centre Park Road/ The Marina.

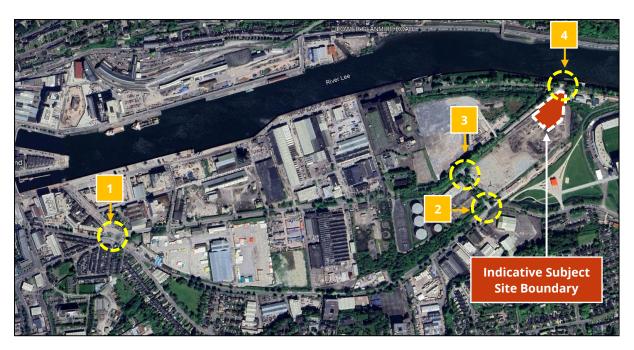


Figure 5-1: Location of Traffic Survey Junctions.

In order to analyse and assess the predicted traffic impact as a result of the proposed residential development upon the local road network, an area wide traffic model incorporating these local



junctions was created. Base traffic flows and the Flow Diagrams for all scenarios are included within **Appendix A**.

### 5.2 TRAFFIC GROWTH

An Opening Year of 2026 has been adopted for this traffic assessment. In accordance with TII (NRA) Guidance, Future Design years (+5 and +15 years) of 2031 and 2041 have also been adopted.

The TII Project Appraisal Guidelines (PAG) have been utilized to determine the traffic growth forecast rates. The traffic growth forecast rates within the PAG ensures local and regional variations and demographic patterns are accounted for.

Table 6.1: Link Based Growth Rates within the PAG (2019) provides Annual National Traffic Growth Factors for the different regions within Ireland. The subject site lies within Cork metropolitan area with the PAG growth factors as outlined within **Table 5-1** below.

	Central Growth Rate								
Metropolitan Area	2016-	2030	2030	-2040	2040-2050				
7 Cu	LV	HV	LV	HV	LV	HV			
Cork	1.0169	1.0294	1.0090	1.0149	1.0083	1.0182			

Table 5-1: National Traffic Growth Forecasts: Annual Growth

Applying the annual factors (central growth) as outlined in **Table 5-1** above for the adopted Opening Year of 2026 and Future Horizon Years of 2031 (+5 years) and 2041 (+15 years), the following growth rates have been adopted to establish corresponding 2026, 2031 and 2041 baseline network flows: -

- 2024 to 2026 1.0169 (or 3.41%);
- 2024 to 2031 1.0090 (or 10.71%); and
- 2024 to 2041 1.0083 (or 20.92%).

Traffic flow diagrams for the 2026, 2031 and 2041 flows are illustrated in **Appendix A** of this report.



#### **5.3 TRAFFIC GENERATION**

This section considers the potential traffic that could be generated by the subject development proposals.

### 5.3.1 Relevant Committed Developments and Their Trip Generation

The review of ABP and CCC online planning portal, revealed that the subject development's receiving environment benefits from having a number of permitted developments which are not yet occupied/completed. As per good practice this assessment has imported these local permitted schemes as 'Committed' developments with the objective of providing a robust appraisal of the local road network. As detailed in following section, a total of 4 separate 'Committed' development schemes have been included within this assessment.

# 5.3.1.1 Former Tedcastles Yard (ABP- 313277)

This includes the demolition of existing structures and the construction of a strategic housing development of 823 no. apartments in 6 no. buildings ranging in height from part-1 to part-35 no. storeys over lower ground floor level. The development will contain 282 no. 1 bedroom apartments, 414 no. 2 bedroom apartments and 127 no. 3 bedroom apartments. The traffic and transport assessment report indicates the associated vehicle traffic generation for the committed development as shown in **Table 5-2**.

LAND USE	,	AM Peak Hou	r	PM Peak Hour			
LAIND USE	Arr	Dep	Two-Way	Arr	Dep	Two-Way	
Phase 1 (Opening year-2025)	16	57	73	67	39	106	
Phase 2 (Opening year- 2030)	31	112	143	131	76	207	

Table 5-2: Committed development trips for Former Tedcastles Yard (ABP- 313277)

### 5.3.1.2 LRD at Goulding's Site (2342106)

This includes a 10-year planning permission for a Large-Scale Residential Development (LRD) at the Goulding's Site, Centre Park Road and Monahan Road, Cork. The proposed development consists of the demolition of the existing on-site buildings and structures and site clearance to facilitate the construction of 1325 no. residential units including apartments and duplexes in 10 no. buildings. A standalone 2 storey creche of 665 sq.m with associated outdoor amenity space is also proposed. The development ranges in height from 2 to 14 storeys over a single basement.

Table 5-3



below indicates the associated vehicle traffic generation for the committed development.

LANDLISE	Α	M Peak Hou	ır	PM Peak Hour			
LAND USE	Arr	Dep	Two-Way	Arr	Dep	Two-Way	
LRD at Goulding's Site	105	269	374	148	90	238	

Table 5-3: Committed development trips for LRD at Goulding's Site (2342106)

### 5.3.1.3 Former Ford Distribution site (ABP-309059)

This includes demolition of existing structures, 10-year permission for the construction of 1,002 no. apartments, Commercial and community facilities, including 5 no. retail units, 1 no. Montessori school, 1 no. creche, a medical centre, bar, café, venue / performance area, 2 no. community resource spaces and ancillary signage. **Table 5-4** below indicates the associated vehicle traffic generation for the committed development. The proposed vehicle trip generation shows that for the proposed design year of 2029 there will be 174 new two-way movements in the AM peak traffic hour (08:00-09:00) and 253 new two-way movements in the PM peak traffic hour (17:00-18:00) to and from the proposed development.

LANDLISE		AM Peak I	lour	PM Peak Hour		
LAND USE	Arr	Dep	Two-Way	Arr	Dep	Two-Way
Phase 1 (Opening Year -2024)	16	56	72	66	38	104
Phase 2 (Opening year 2029)	38	136	174	160	93	253

Table 5-4: Committed development trips for Former Ford Distribution site

### 5.3.1.4 Former Cork Warehouse SHD (ABP-313142)

This includes demolition of existing structures on site and construction of 190 no. apartments, Crèche (358 sqm), Retail (233 sqm), Café/restaurants (231 sqm) and associated site works. The committed development includes a total of 58 No. car parking which equates to a parking ratio of 0.30. The total number of car generated by the proposed development will also be limited by the number of car parking proposed on site. For robust analysis, the trips are discounted to reflect the car parking of the committed development.



LAND USE		AM Peak Hou	ır	PM Peak Hour			
	Arrival	Departure	Two-Way	Arrival	Departure	Two-Way	
190 Apartment*	4	11	14	7	5	12	
Creche	1	1	2	0	0	0	
Retail	1	1	2	1	1	2	
Café	1	0	1	1	1	2	
Total	6	13	19	9	8	17	

<sup>\*</sup>Discounted by 70%

Table 5-5: Committed development trips for Former Cork Warehouse SHD

# **5.3.2 Proposed Development Traffic Generation**

**Table 5-6** below outlines the TRICS generated trip rates for the proposed developments apartment and creche land use during the weekday morning and evening peak hour periods. This trip rate has been discounted to reflect the 'low car allocation' characteristics of the proposed development as outlined in **Table 5-7**. It is assumed that the development's retail unit will serve predominantly the proposed development, the local walking catchment and passing traffic. As such this retail use are not predicted to give rise to material levels of the additional vehicular traffic.

	A	M Peak Hou	ır	PM Peak Hour			
LAND USE		08:00-09:00		18:00-19:00			
	Arr	Dep	Two-Way	Arr	Dep	Two-Way	
Apartments (Block A,B)	0.064	0.064 0.190 0.254		0.121	0.090	0.211	
Creche (181 sqm)	3.189	3.189 2.775 5.964			0.674	0.767	

Table 5-6:Trip Rates for Proposed Development (source TRICS)

	Į.	AM Peak Hou	ır	PM Peak Hour			
LAND USE		08:00-09:00		18:00-19:00			
	Arr	Dep	Two-Way	Arr	Dep	Two-Way	
Apartments (Block A,B)*	0.026	0.076	0.102	0.048	0.036	0.084	
Creche (181 sqm)*	1.28	1.28 1.11 2.39			0.27	0.31	

<sup>\*</sup>Discounted by 60%

Table 5-7:Discounted Trip Rates for Proposed Development (source TRICS)

Based on the above trip rates as illustrated in **Table 5-7** the potential vehicle trips generated in and out of the proposed development during the morning and evening peak hour periods are outlined in **Table 5-8** below.



	Į.	AM Peak Hou	ır	PM Peak Hour			
LAND USE		08:00-09:00					
	Arr	Dep	Two-Way	Arr	Dep	Two-Way	
Apartments (Block A,B)	5	14	18	9	7	15	
Creche	2	2	4	0	0	1	
Total Trips	7	15	22	9	7	15	

Table 5-8:Predicted Vehicle Trip Generation

The trip generation exercise reveals that the proposed development has the potential to generate a total of 22 two-way vehicle trips during AM peak hour and 15 two-way vehicle trips during PM peak hour period.

### 5.4 MODAL SPLIT- Residential

The Central Statistics Office's SAPMAP (Small Areas Population Map) data has also been investigated to determine the travel trends within residential areas in the vicinity of the proposed Fords Site Development. SAPMAP is an interactive mapping tool that allows users to pinpoint a location on the map and access 2022 census data related to that area.

A number of residential developments close to the subject site were analysed to establish current commuter trends in the area. This analysis will form the basis of the initial travel characteristics that could be generated by the proposed development.



Figure 5-2: Residential Areas of Interest for Trend Analysis (Source: SAPMAP 2022)



**Figure 5-2** above illustrates the areas selected for this analysis. These residential settlements were selected due to their proximity to the subject site and as such best represents the proposed development's future travel trends.

The analysis highlights the trend in mode share amongst residents travelling to work or education from their homes. The summary of the data for the 7 selected sites have been summarised and illustrated in the following **Figure 5-3**.

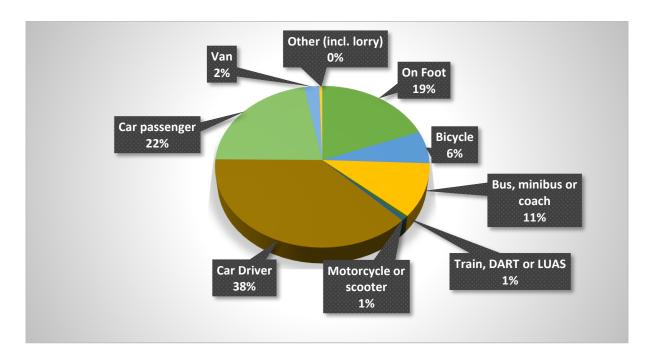


Figure 5-3: Existing Modal Split of Small Area of Residential Interest for Trend Analysis (Source CSO)

The analysis reveals that travel by car accounts for 60% of all trips (comprising 38% driving and 22% as car passengers) with all other modes accounting for 40%. The next highest mode share is walking which accounts for 19%, followed by public transport, which accounts for 12% of all travel.

### 5.5 MODAL SPLIT -NON-RESIDENTIAL

The Central Statistics Office's SAPMAP (Small Areas Population Map) data has also been investigated to determine the travel trends within non-residential areas in the vicinity of the proposed Fords Site Development. **Figure 5-4** below illustrates the area selected for this analysis. These non-residential settlements were selected due to their proximity to the subject site and as such best represents the proposed development's future travel trends.



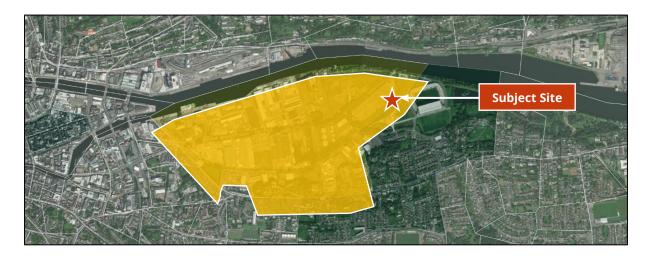


Figure 5-4:Non-Residential Areas of Interest for Trend Analysis (Source: SAPMAP 2022)

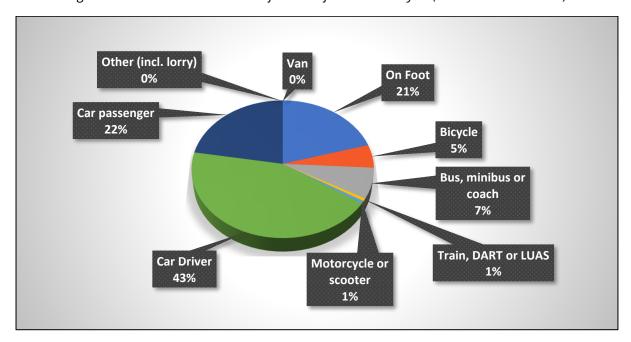


Figure 5-5: Existing Modal Split Percentages for Non-Residential Development (source: SAP MAP)

The above graph in **Figure 5-5** indicates that the car was the primary mode of transportation at maximum of 65%. Walking forms the next most utilised mode of travel with 21% after Car travel of commuters. Less than 10% use public transport such as Bus, Minibus or coach to travel.

### 5.5.1 Public Transport Capacity Assessment - Bus

### **5.5.1.1 Existing Bus Capacity**

The existing public transport (Bus) capacity near subject site is evaluated using the frequency and seat capacity of existing bus serving the site. The subject site benefits from Bus Éireann operated



bus Route 212 connecting Kent Station to Mahon Point via Blackrock Road and Bus Éireann Routes 202,202A at bus stops on Blackrock Road.

Route No.	Operator	Route	No. of Daily service on Weekdays	Average Capacity per Service	Estimated Total Daily Capacity (Inbound)	Estimated Total Daily Capacity (Outbound)
212	Duc Fireann	Kent Station to Mahon Point via Blackrock Rd	17	83	1411	-
212	Bus Eireann	Mahon Point to Kent Station via Blackrock Rd	17	83	-	1411
202		Mahon Point to Hollyhill via Merchants Quay	47	83	-	3901
202	Bus Eireann	Hollyhill to Mahon Point via Merchants Quay	48	83	3984	-
202A	Bus Eireann	Mahon Point to Hollyhill via Eglinton St	46	83	-	3818
ZUZA	bus ciredilli	Hollyhill to Mahon Point via Merchants Quay	49	83	4067	-
					9462	9130
Total Estimated Capacity			18592			

Table 5-9: Estimated Existing Bus Capacity

As illustrated in **Table 5-9** there is a total estimated capacity of 18592 bus trips for existing bus transport near vicinity of subject site.

# 5.5.1.2 Do Minimum Public Transport Travel Demand

Following are the estimated Public Transport (Bus) commuters demand from the permitted neighbouring 3<sup>rd</sup> party development on a typical weekday.

- Former Tedcastles Yard (ABP- 313277) 522 person
- LRD at Goulding's Site (2342106) 893 person
- Former Ford Distribution site (ABP-309059) 625 person
- Former Cork Warehouse SHD (ABP-313142) 119 person

The total estimated Public Transport (bus) commuters from the permitted 3<sup>rd</sup> party development is approximately 2159 persons per day. The demand generated by the permitted 3<sup>rd</sup> party development equates to approximately only 11.6% of the existing local bus capacity services.



# 5.5.1.3 Do Something Public Transport Travel Demand

The primary trip generator will be the residential development followed by staff trips of creche and retail unit. The estimation of development population is illustrated in **Table 5-10**.

Unit Type		Description	Quantity	Average Occupancy	Total Occupants	
	Block A	1 bedroom	32	1.5 per unit	48	
	DIOCK A	2 Bedrooms	57	3 per unit	171	
Apartments		1 bedroom		1.5 per unit	45	
Block B		2 Bedrooms	25	3 per unit	75	
		3 Bedrooms	32	4 residents per unit	128	
Reta	il	1 no. Ground Floor unit	131.1 sqm	3 staffs	3	
Creche			181	8 staff	8	
	Total					

Table 5-10: Estimation of Development Population

The total development population estimated for commuting to work/school/college is 478 which includes residents and staffs working in development. The Central Statistics Office's SAPMAP (Small Areas Population Map) data has also been investigated to determine the travel trends within residential and non-residential areas in the vicinity of the proposed Fords Site Development. SAPMAP is an interactive mapping tool that allows users to pinpoint a location on the map and access 2022 census data related to that area. This analysis will form the basis of the initial travel characteristics that could be generated by the proposed development. Based on this, the estimated modal share targets of the development is as follows.

Mode of Travel	1 <sup>st</sup> Year Target modal split (2026) Residential	1 <sup>st</sup> Year Target modal split (2026) Non-Residential
On Foot	20%	21%
Bicycle	15%	18%
Bus/Minibus/Coach	18%	23%
Train/DART/LUAS	0%	0%
Motorcycle/Scooter	2%	3%
Car Driver	32%	26%
Car Passenger	12 %	8%
Van	1%	1%
Other (incl. lorry)	0%	0%



# Table 5-11: Mode Share Targets for proposed development

Applying these modals share the estimated population gives a total of 172 (86 amount in the AM and 86 in the PM) bus users. The demand generated by the development equates to approximately 0.93% of the existing bus capacity which is considered to be negligible. This assessment has assumed a worst-case scenario where all the residents are either working or attending school/college or undertaking a trip for another purpose.

### 5.6 TRAFFIC DISTRIBUTION

The vehicle distribution assigned to the predicted development vehicle movements is presented in Figure 5 of **Appendix A**. It is assumed that 100% of vehicle trips will be to / from Centre Park Road (Southwest). The traffic distribution at key off intersections on the external road network has been calculated based upon existing network flow turning movements that were observed from the Traffic Surveys carried out in 21st May 2024.



## 6 NETWORK IMPACT ANALYSIS

### **6.1 ASSESSMENT SCOPE**

Two different traffic scenarios have been assessed within this TTA, namely (a) the 'Base' (Do Minimum) traffic characteristics and (b) the 'Post Development' (Do Something) traffic characteristics.

The Do-Minimum traffic includes the base network traffic flows and permitted development flows. The proposed development traffic flows have then been added to the network's 'Do-Minimum' (Base) traffic flows to establish the new 'Post' Development Do-Something traffic flows.

In summary the following network scenarios are considered.

#### **Do Minimum**

- A1 2026 Base Flows + Permitted Development Trips
- A2 2031 Base Flows + Permitted Development Trips
- A3 2041 Base Flows + Permitted Development Trips

### **Do Something**

- B1 2026 Do Nothing (A1) + Proposed Development Flows
- B2 2031 Do Nothing (A2) + Proposed Development Flows
- B3 2041 Do Nothing (A3) + Proposed Development Flows

#### 6.2 ASSESSMENT PERIODS

The local weekday AM and PM peak hour flows have been identified by the commissioned traffic survey as occurring between **08:00-09:00** and **18:00-19:00** respectively. These peak hour periods form the basis of the network assessments.

### 6.3 NETWORK VEHICLE FLOWS

The following Figures as included in **Appendix A** present the vehicle flows across the local road network for each of the adopted development assessment scenarios:

- Figure 2 2026 Do Minimum (A1)
- Figure 3 2031 Do Minimum (A2)
- Figure 4 2041 Do Minimum (A3)
- Figure 7 2026 Do Something (B1)



- Figure 8 2031 Do Something (B2)
- Figure 9 2041 Do Something (B3)

### 6.4 NETWORK IMPACT

The TII document entitled Traffic and Transport Assessment Guidelines (2014) states that the impact of a proposed development upon the local road network is considered material when the level of traffic it generates surpasses 10% and 5% on normal and congested networks respectively. When such levels of impact are generated, a more detailed assessment should be undertaken to ascertain the specific impact upon the network's operational performance.

The key junctions assessed will include the following:

- Junction 1- Victoria Road/ Centre Park Road/ Albert Road.
- Junction 2- Monahan Road/ Marquee Road.
- Junction 3- Marque Road/ Centre Park Road.
- Junction 4- Centre Park Road/ The Marina.

### **6.4.1 Construction Stage**

**Table 6-1** details the percentage impact of the proposals for the worst case during the construction phase.

Juncti on			De Junction Location		AM Peak Hour (08:00 to 09:00)			PM Peak Hour (18:00 to 19:00)		
Node		rear	DM	DS	% lmpact	DM	DS	% Impact		
1	Victoria Road/Centre Park/Alberta Road/Hibernian Building	2025	1521	1535	0.95%	1450	1465	1.00%		
2	Monahan Road/Marquee Road	2025	633	641	1.14%	426	433	1.70%		
3	Centre Park/Marque Road	2025	602	631	4.81%	767	796	3.78%		
4	Centre Park/The Marina	2025	113	113	0.00%	233	233	0.00%		
5	Site Access	2025	112	141	25.951%	231	260	12.54%		

Table 6-1: Network Impact Assessment during Construction Stage



The **Table 6-1** above reveals that the predicted impacts at the key local Junctions during the construction stage are found to be well below the threshold 10% except for site access junction showing immaterial effects on the junctions operations.

# 6.4.2 Operation Stage

**Table 6-3** details the percentage impact of proposed development during the operational stat at the relevant key junctions for the 2026, 2031 and 2041 design years.

Junction	luncation Location	Design	AM Peak Hour (08:00 to 09:00)			PM Peak Hour (18:00 to 19:00)		
ID	Junction Location	Year	DN	DS	% Impact	DN	DS	% Impact
	Victoria Road/Centre	2026	1521	1524	0.22%	1450	1455	0.30%
1	Park/Alberta Road/Hibernian	2031	1510	1513	0.23%	1543	1548	0.28%
	Building	2041	1635	1639	0.21%	1658	1662	0.26%
		2026	633	637	0.54%	426	430	1.01%
2	Monahan Road/Marquee Road	2031	567	570	0.60%	515	520	0.83%
		2041	611	614	0.56%	549	553	0.78%
		2026	602	625	3.69%	767	782	2.01%
3	Centre Park/Marque Road	2031	686	708	3.24%	935	951	1.65%
		2041	719	741	3.09%	978	994	1.57%
		2026	113	113	0.00%	233	233	0.00%
4	Centre Park/The Marina	2031	121	121	0.00%	249	249	0.00%
		2041	132	132	0.00%	272	272	0.00%
		2026	112	134	19.87%	231	247	6.66%
5	Site Access	2031	120	142	18.56%	248	263	6.22%
		2041	131	153	16.99%	271	286	5.70%

Table 6-2: Network Impact Assessment during Operation Stage

The **Table 6-1** reveals that the predicted impacts at the key local Junctions are found to be well below the threshold 10% except for Site Access junction showing a material impact of just over 10%. Despite the minor percentage impact predicted, a more detailed assessment of both the proposed site access junction and Centre Park/ Marque Road Junction regarding their operational performance has been undertaken and discussed further in Chapter 7.





Figure 6-1: Increase in Vehicle Trips Generated through Key of-Site Junctions (2041)



# 7 NETWORK ANALYSIS

#### 7.1 OVERVIEW

The operational assessment of the local road network has been undertaken using the Transport Research Laboratory (TRL) computer package Junctions 9 and the PICADY suite for priority-controlled junctions. When considering priority-controlled junctions/roundabouts a Ratio of Flow to Capacity (RFC) greater than 85% (0.85) would indicate a junction to be approaching capacity, as operation above this RFC value is poor and deteriorates quickly.

For the PICADY analysis, a 90-minute AM and PM period has been simulated, from 07:45 to 09:15 and 17:45 to 18:15. For the PICADY analyses traffic flows were entered using an Origin-Destination table format for the peak hours.

# 7.2 SITE ACCESS JUNCTION

The proposed priority-controlled site access junction is analysed for the 'Do-Something' scenario using the TRL software PICADY. The results of the operational assessment of this proposed site

access junction during the weekday morning and evening peaks are summarised in **Table 7-1.** The arms were labelled as follows within the PICADY model:

- Arm A: Central Park Road (North East)
- Arm B: Site Access
- Arm C: Central Park Road (South West)

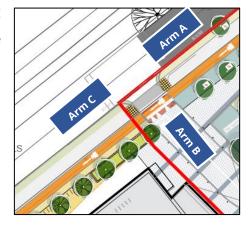


Figure 7-1: Site Access Junction – Arm Labelling

### 7.2.1 Do Something Scenario

The AM peak hour Do Something site access PICADY results (**Table 7-1**) indicate that this junction will operate with significant reserve capacity with a maximum Ratio of Flow to Capacity (RFC) value of 0.03 and a maximum queue of 0.00 pcu's being recorded in 2041 Do Something Scenario. Similarly, the PM peak hour PICADY results indicate that this existing junction will again operate well within capacity with a maximum Ratio of Flow to Capacity (RFC) value of 0.02 and a maximum queue of 0.00 pcu's being recorded 2041 Do Something Scenario.



		AM PEAK (0	8:00-09:00)	PM PEAK (18:00-19:00)		
Scenario	Stream	Queue (PCU)	RFC	Queue (PCU)	RFC	
2026 Do Something Scenario	B-C	0.0	0.02	0.0	0.01	
	B-A	0.0	0.01	0.0	0.02	
2031 Do Something	B-C	0.0	0.02	0.0	0.01	
Scenario	B-A	0.0	0.01	0.0	0.02	
2041 Do Something	B-C	0.0	0.03	0.0	0.01	
Scenario	B-A	0.0	0.01	0.0	0.02	

Table 7-1:Site Access Do Something Modelling Results

# 7.3 Centre Park road/ Marguee Road junction

Centre Park Road/ Marguee Road Junction priority-controlled junction is analysed for the 'Do-minimum' scenario using the TRL software PICADY. Within the PICADY model, the arms of the junction were labelled as followed:

- Arm A: Central Park Road (North East)
- Arm B: Marquee Road (South East)
- Arm C: Central Park Road (South West)



Figure 7-2: Centre Park Road/Marguee Road

Junction– Arm Labelling

### 7.3.1 Do Minimum Scenario

The AM peak hour PICADY results for the Do Minimum PICADY results (**Table 7-2**) indicate that this junction operates with reserve capacity with a maximum Ratio of Flow to Capacity (RFC) value of 0.41 and a maximum queue of 0.8 pcu's being recorded in 2041 Do Something Scenario. Similarly, the PM peak hour PICADY results indicate that this existing junction will again operate within capacity with a maximum Ratio of Flow to Capacity (RFC) value of 0.77 and a maximum queue of 3.3 pcu's being recorded in 2041 Do Something Scenario.



		AM PEAK (0	8:00-09:00)	PM PEAK (18:00-19:00)		
Scenario	Stream	Queue (PCU)	RFC	Queue (PCU)	RFC	
2026 Do Minimum Scenario	B-C	0.6	0.34	0.2	0.14	
	B-A	0.4	0.27	0.9	0.45	
	C-AB	0.2	0.14	0.4	0.20	
	В-С	0.7	0.38	0.2	0.13	
2031 Do Minimum Scenario	B-A	0.3	0.21	2.8	0.73	
	C-AB	0.2	0.13	0.5	0.23	
2041 Do Minimum Scenario	B-C	0.8	0.41	0.2	0.14	
	B-A	0.3	0.22	3.3	0.77	
555.74110	C-AB	0.2	0.14	0.6	0.25	

Table 7-2: Centre Park Road / Marguee Road Junction Do Minimum Modelling Results

# 7.3.2 Do Something Scenario

The AM peak hour Do Something site access PICADY results (**Table 7-3**) indicate that this junction will operate with significant reserve capacity with a maximum Ratio of Flow to Capacity (RFC) value of 0.42 and a maximum queue of 0.8 pcu's being recorded in 2041 Do Something Scenario. Similarly, the PM peak hour PICADY results indicate that this existing junction will again operate well within capacity with a maximum Ratio of Flow to Capacity (RFC) value of 0.79 and a maximum queue of 3.6 pcu's being recorded in 2041 Do Something Scenario.

		AM PEAK (0	8:00-09:00)	PM PEAK (18:00-19:00)		
Scenario	Stream	Queue (PCU)	RFC	Queue (PCU)	RFC	
2026 Do Something Scenario	B-C	0.6	0.35	0.2	0.14	
	B-A	0.4	0.29	0.9	0.46	
	C-AB	0.2	0.14	0.4	0.20	
	B-C	0.7	0.38	0.2	0.13	
2031 Do Something	B-A	0.3	0.22	3.0	0.75	
Scenario	C-AB	0.2	0.13	0.5	0.23	
2041 Do Something Scenario	В-С	0.8	0.42	0.2	0.14	
	B-A	0.3	0.23	3.6	0.79	
	C-AB	0.2	0.14	0.6	0.26	

Table 7-3: Centre Park Road/Marguee Road Junction Do Something Modelling Results



# 8 SUMMARY AND CONCLUSION

#### 8.1 SUMMARY

DBFL Consulting Engineers (DBFL) has been commissioned by Marina Quarter Limited to compile a Traffic and Transport Assessment (TTA) report in support of a planning application for proposed redevelopment at The Former Ford Distribution Site, fronting onto Centre Park Road, Ballintemple, Cork. The proposed development will consist of the construction of 176 no. 1, 2 and 3 bed apartment units in 2 no. blocks, 1 no. creche, 1 no. gym, a retail/café space and all associated ancillary development works.

The proposed development incorporates a total of **56** no. on site car parking spaces including **3** Disabled spaces and **11** EV Spaces.

A total of **427** no. bicycle parking spaces are proposed as part of the subject development scheme. This includes 384 no. long term parking (Secured and Weather protected) in the basement,13 cargo and 30 no. short term bike parking.

The trip generation exercise reveals that the proposed development has the potential to generate total 22 two-way vehicle trips during AM peak hour and 15 two-way vehicle trips during PM peak hour period.

In order to establish the existing local road networks traffic characteristics and subsequently enable the identification of the potential impact of the proposed mixed-use development, traffic survey data recorded on 21<sup>st</sup> May 2024 was used for the purpose of this assessment. The weekday AM and PM peak hour flows have been identified by the traffic survey as occurring between **08:00-09:00** and **18:00-19:00** respectively. These peak hour periods form the basis of the network assessments.

The predicted impacts at the key local Junctions for the construction stage and operational stage are found to be well below the threshold 10% except for the proposed Site Access junction on Central Park Road. A more detailed assessment of the proposed site access junction and Centre Park/ Marque Road Junction regarding its operational performance has been undertaken in PICADY.

The AM and PM Peak Hour PICADY based assessment of proposed developments priority-controlled site access junction on Central Park Road and priority controlled Centre park/ Marque Road junction demonstrates that both will operate well within acceptable operational parameters and with significant reserve capacity being recorded in all future design year scenarios.



### 8.2 CONCLUSION

The analysis of the network's operational performance in each of the adopted design years 'post development' scenarios has established that the proposals will not result in a significant material deterioration of the network's operational performance. This is based on the anticipated levels of traffic generated by the proposed development, the existing and future road infrastructure and the information and analysis summarised in the above report.

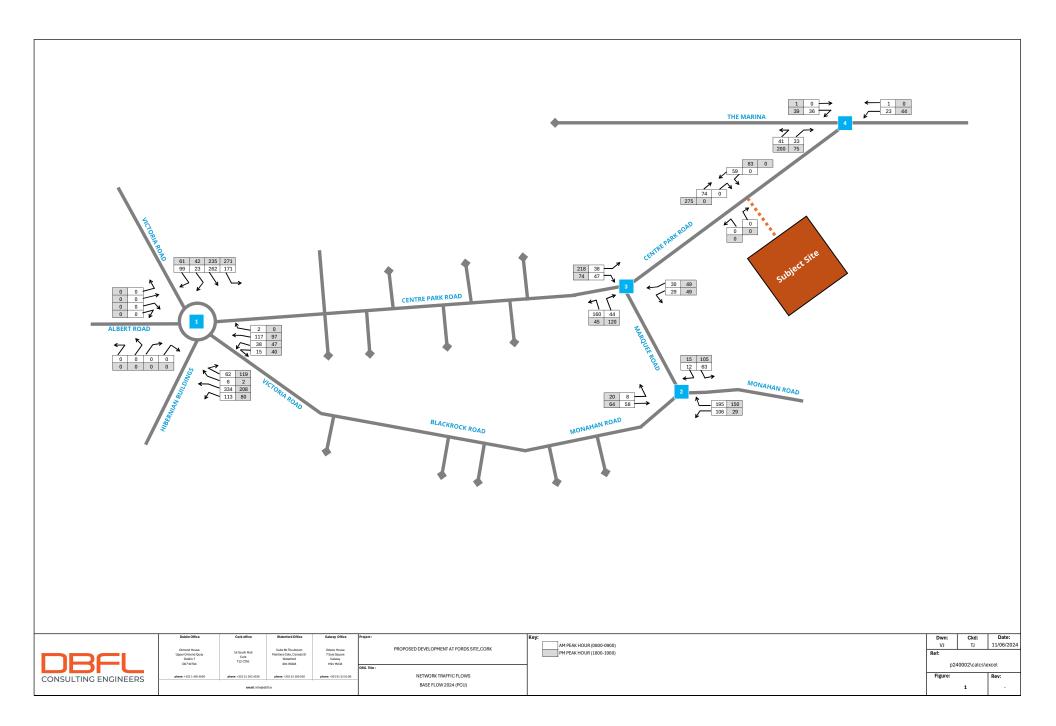
It is concluded that the proposals represent a sustainable and viable design approach to the redevelopment of the subject brownfield site with no material traffic or road safety related reasons that should prevent the granting of planning permission for the proposed development application.

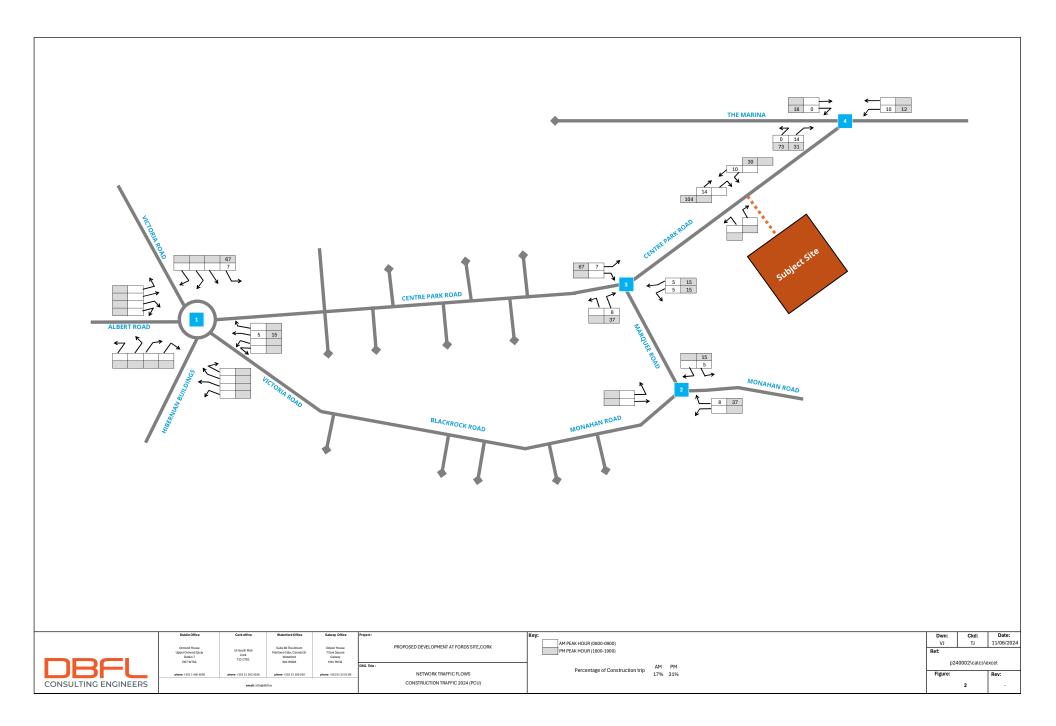
Ford Site, Cork City, Co. Cork Traffic and Transportation Assessment

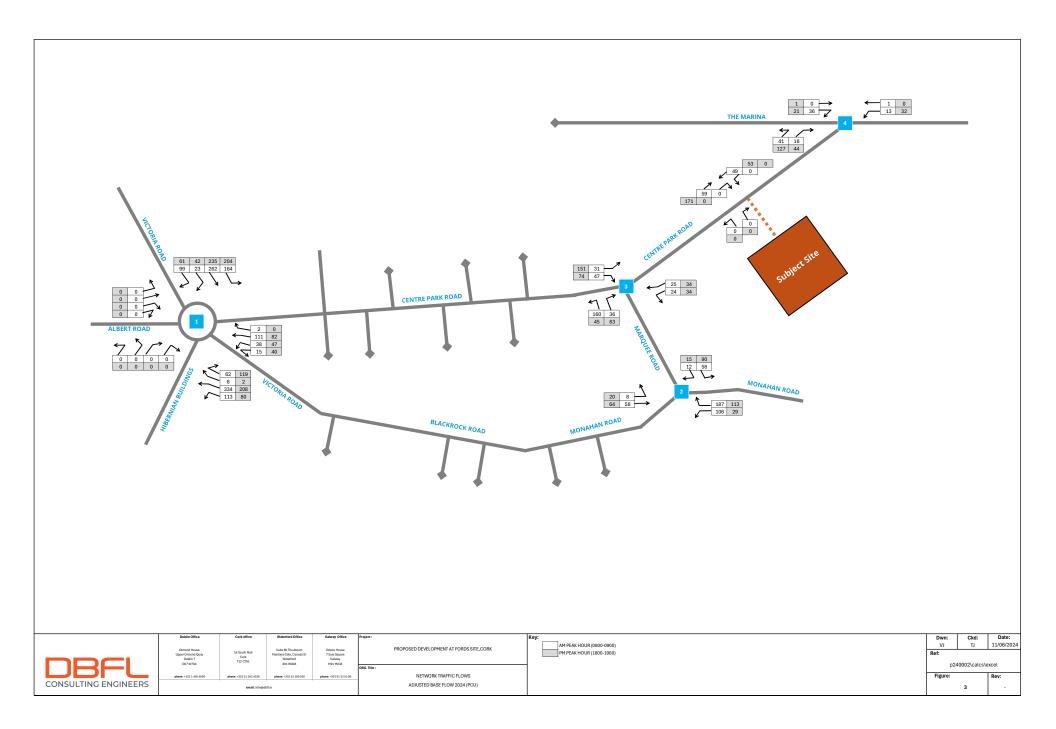


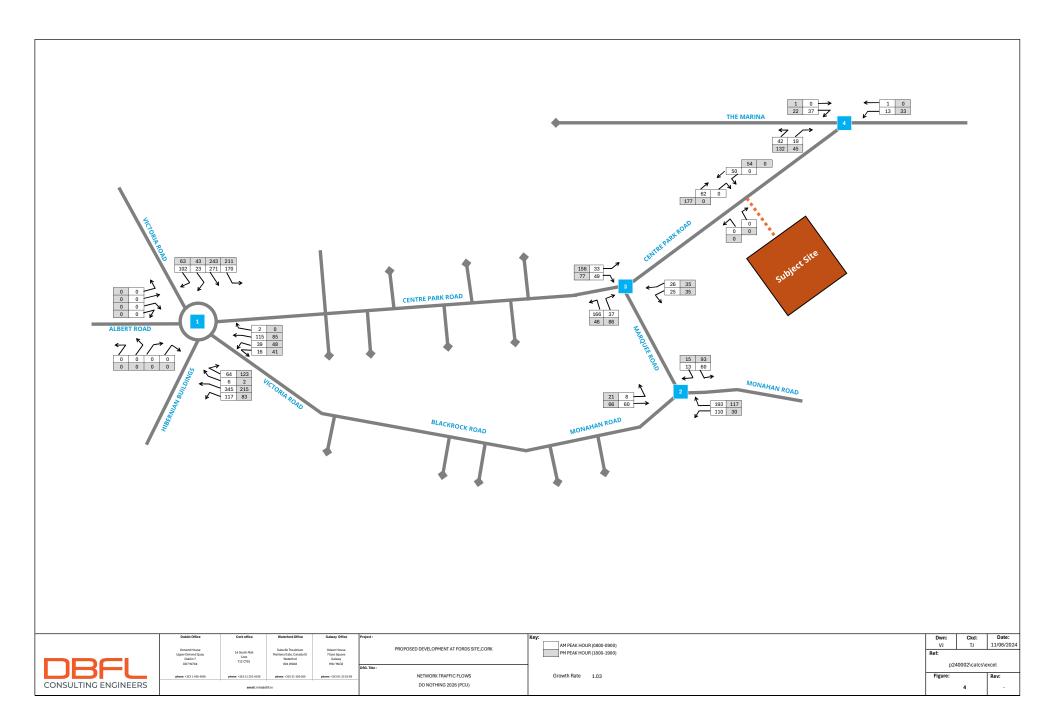


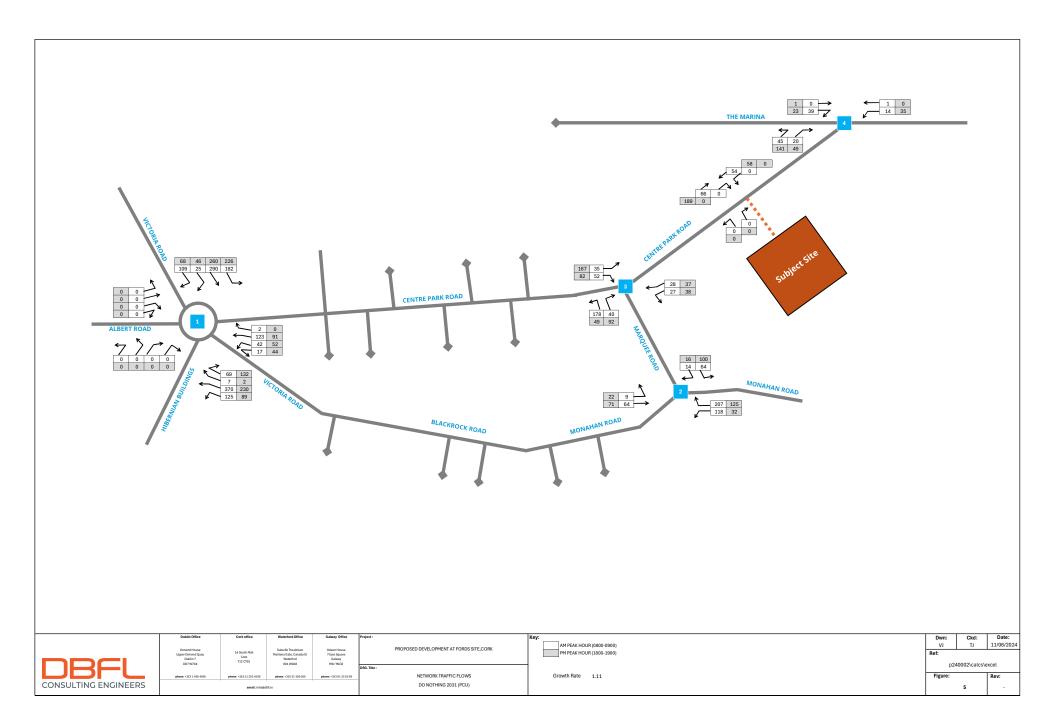
# **Appendix A: Traffic Flow Diagrams**

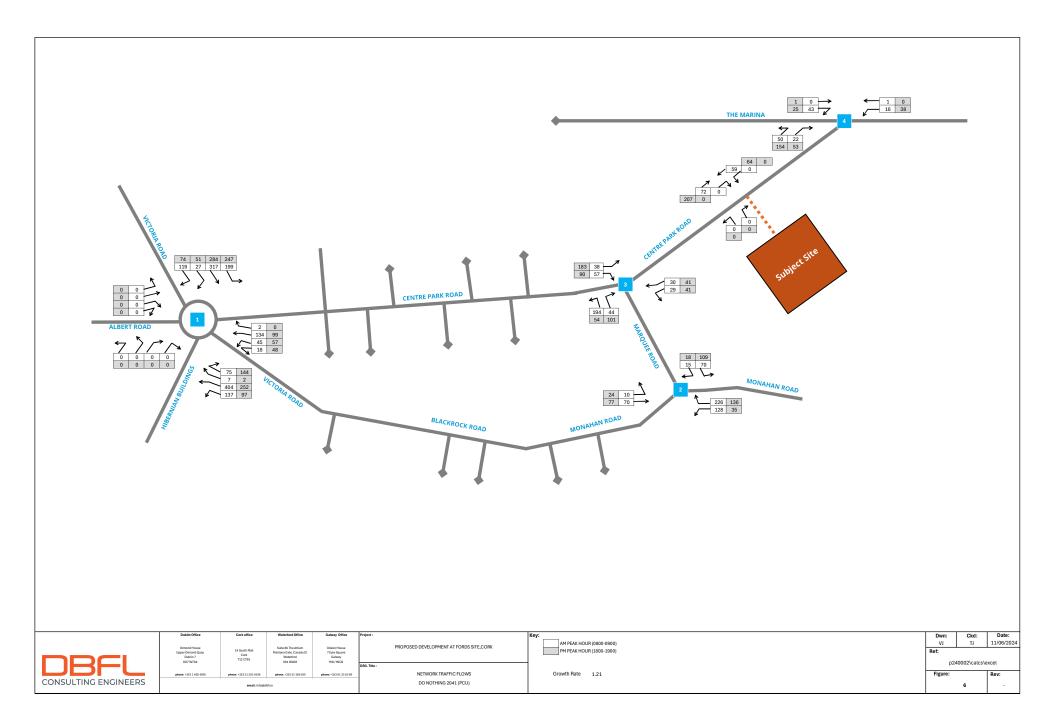


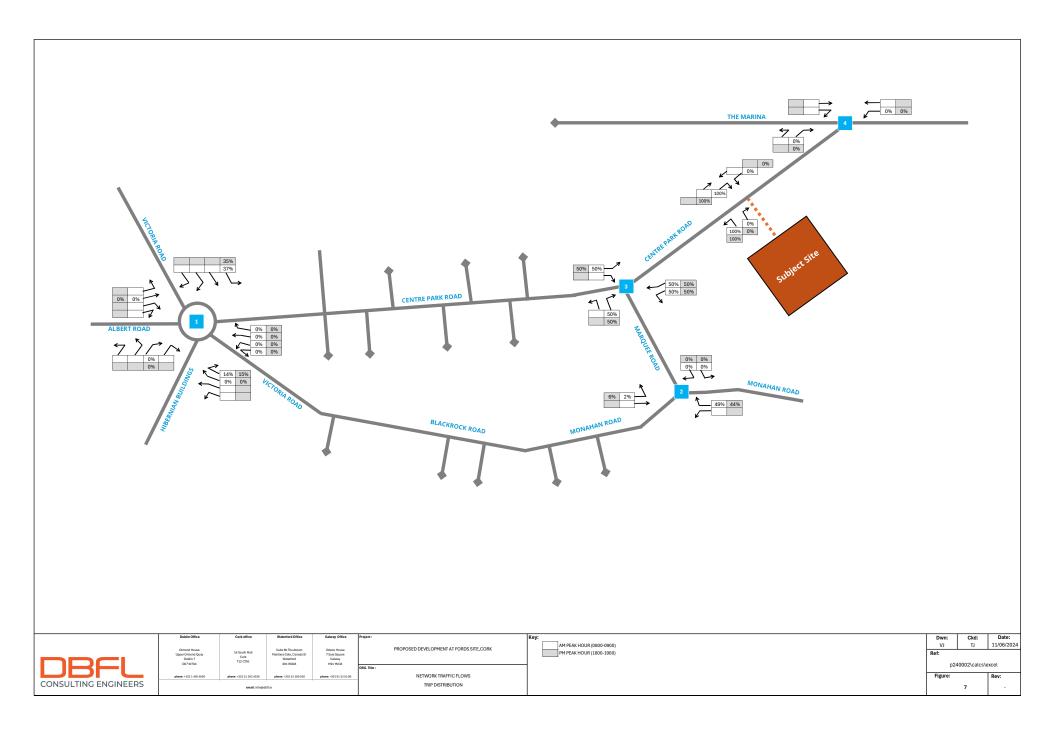


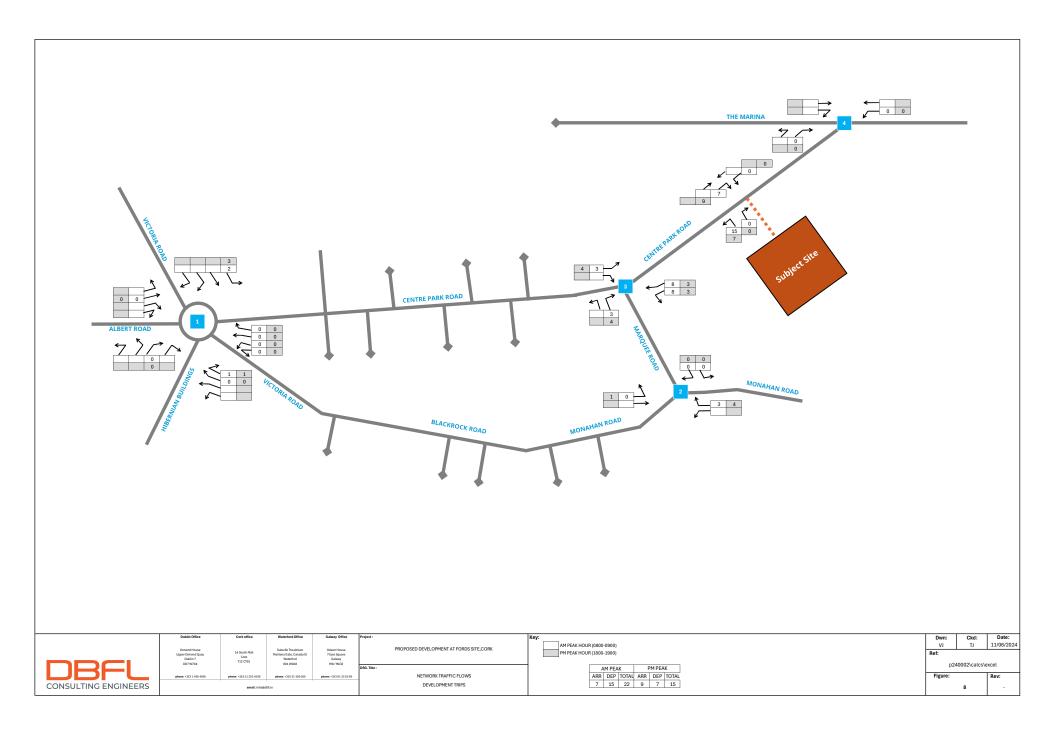


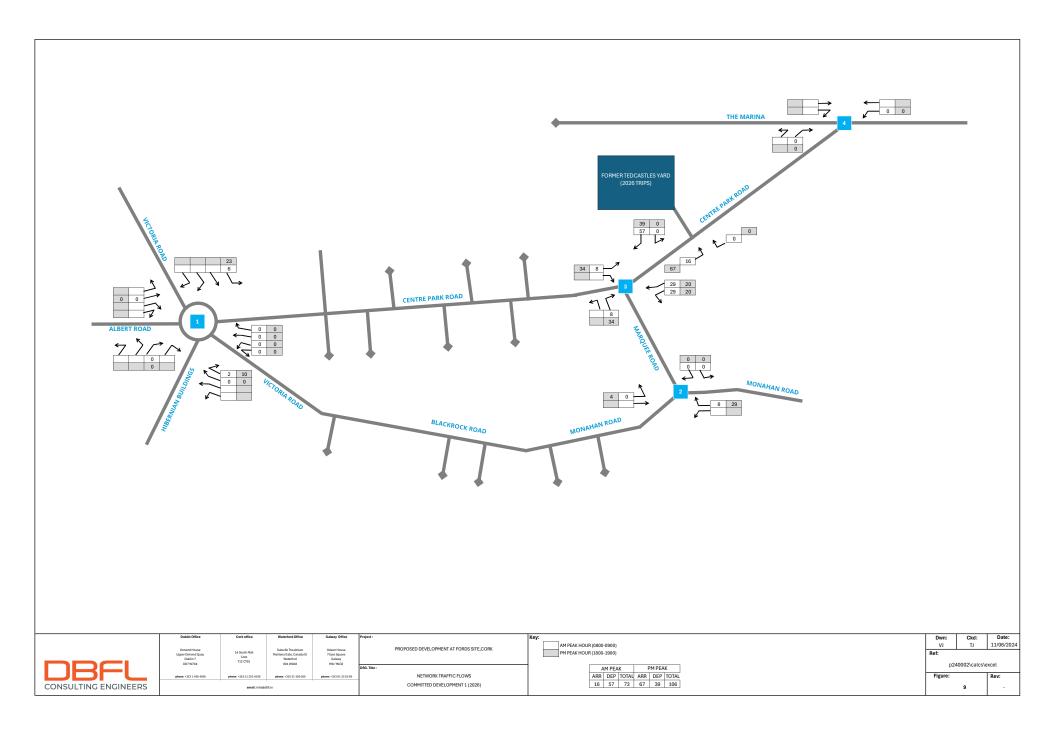


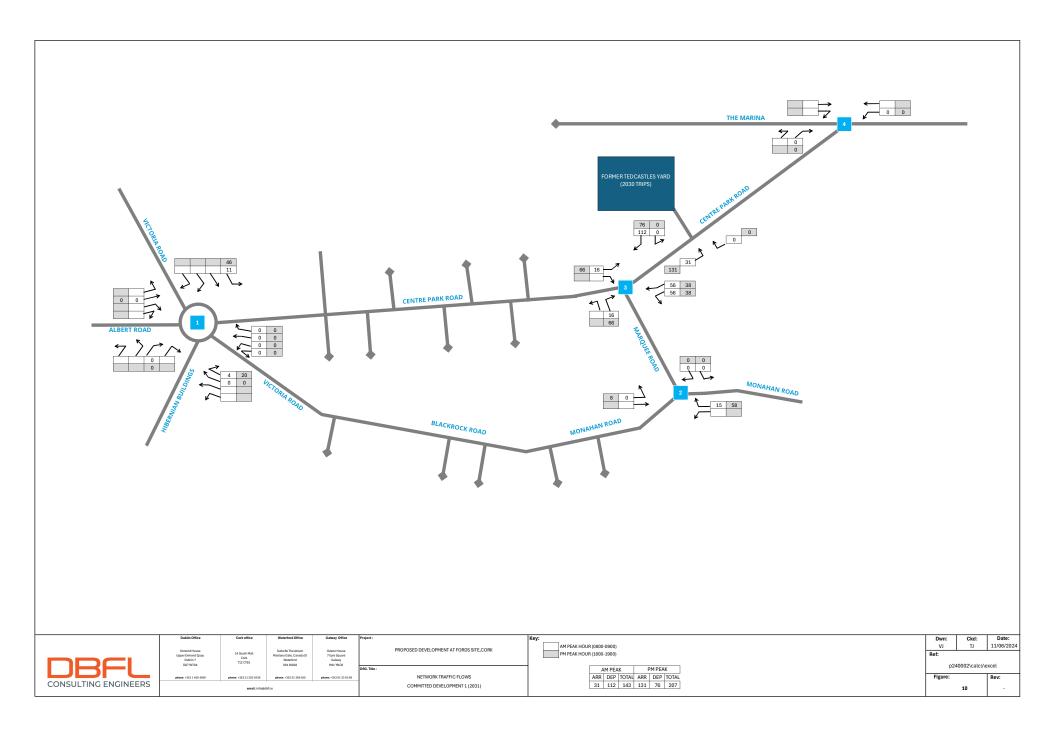


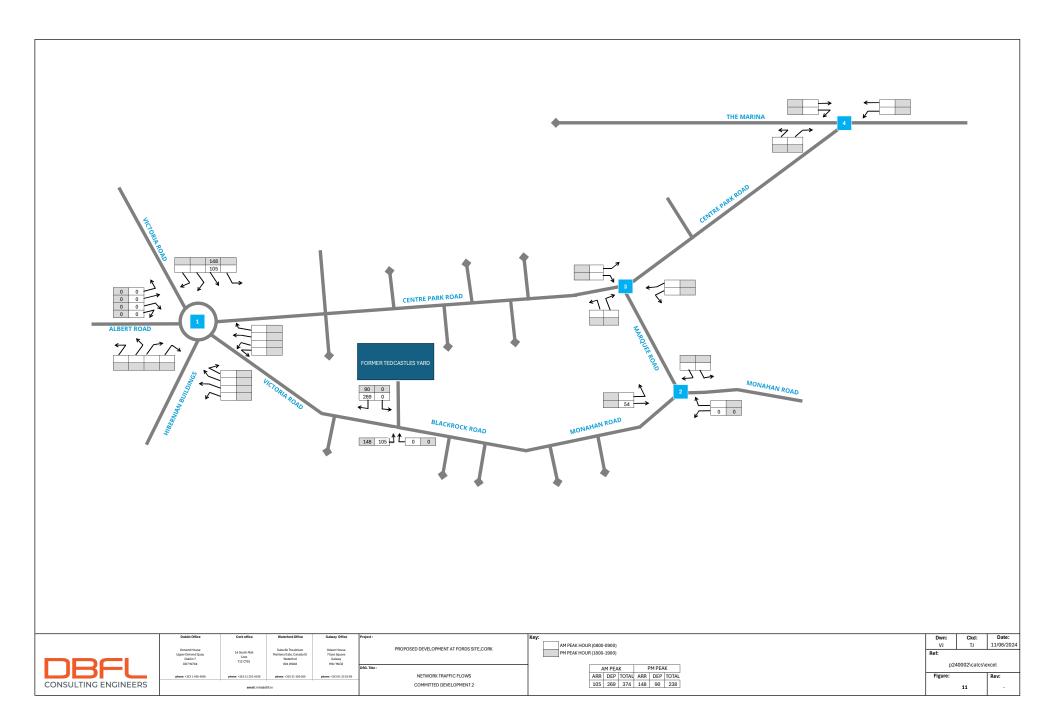


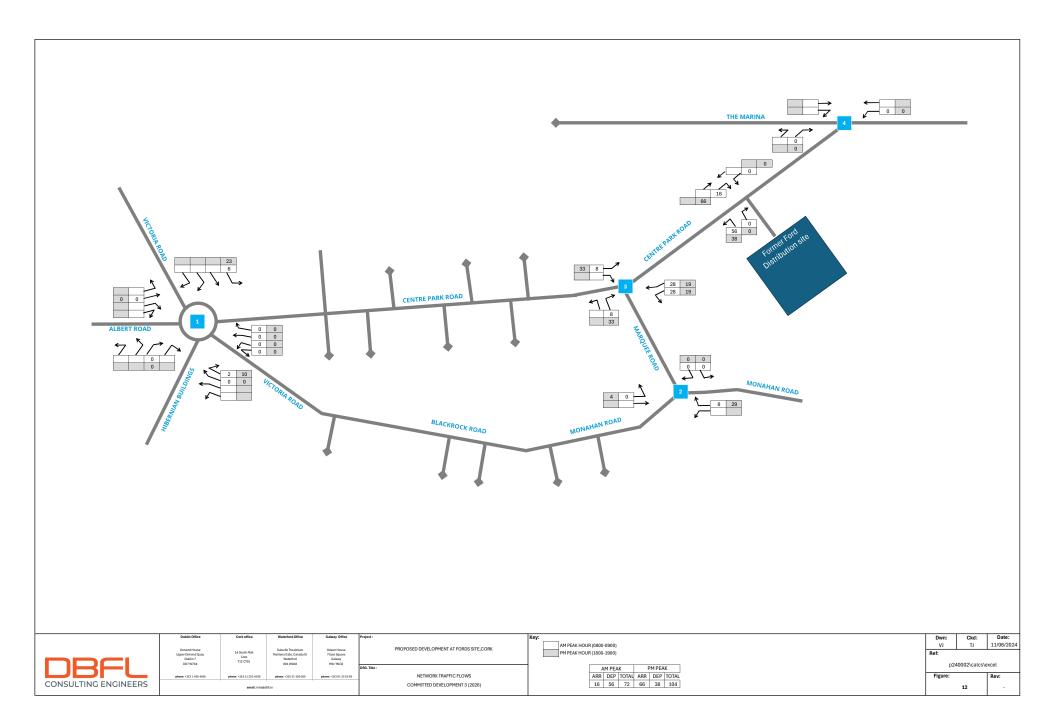


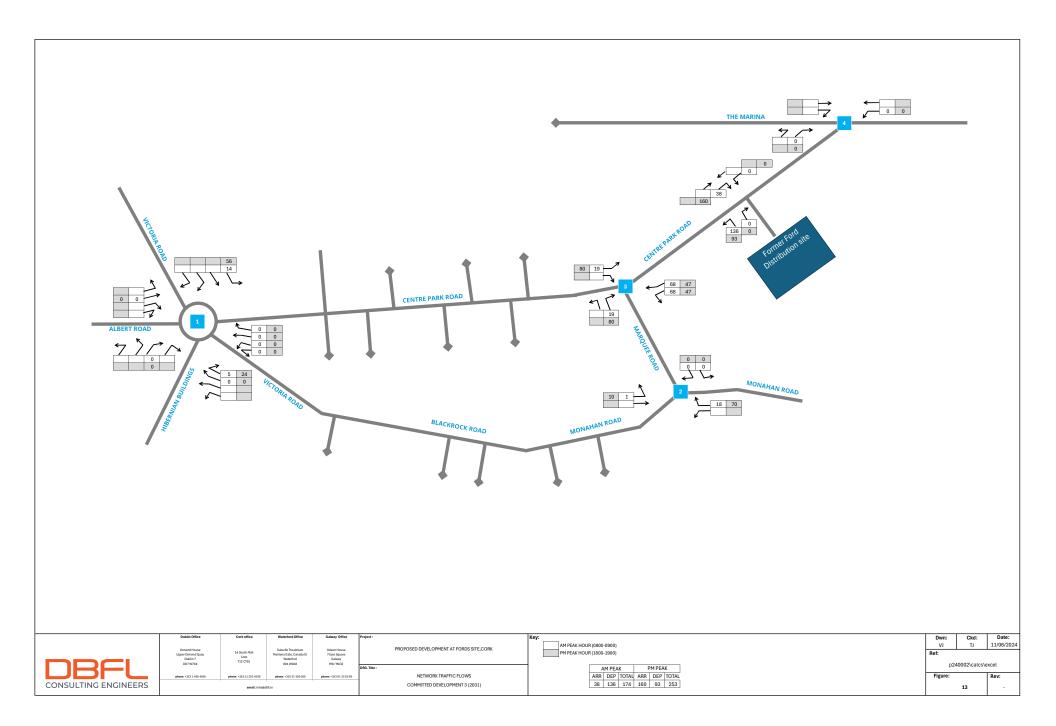


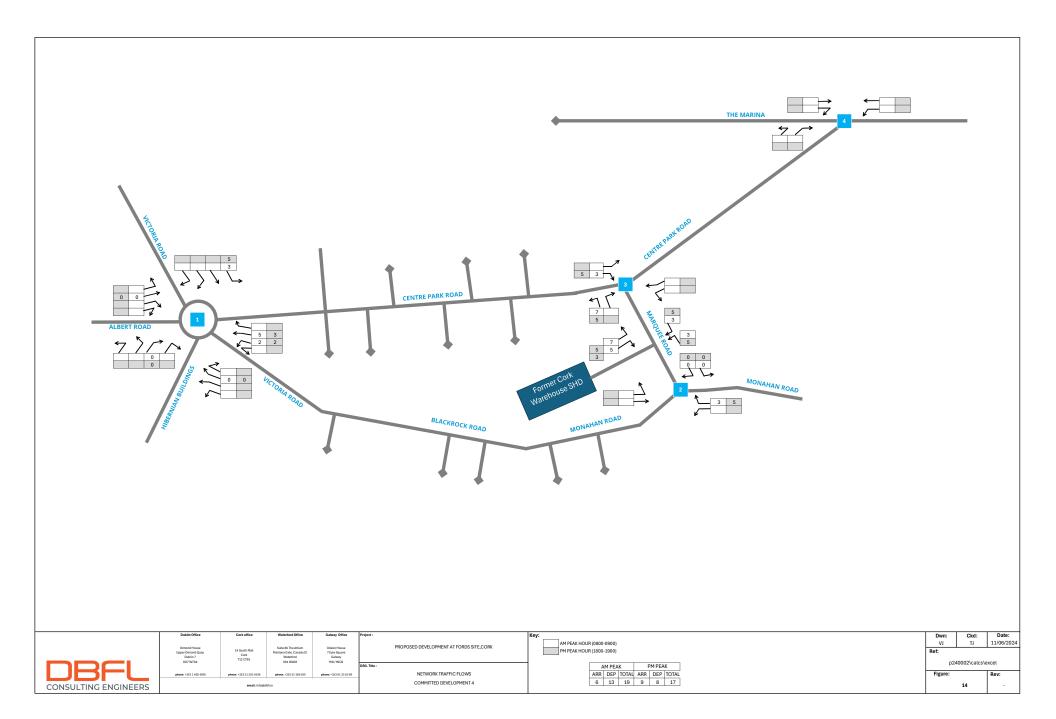


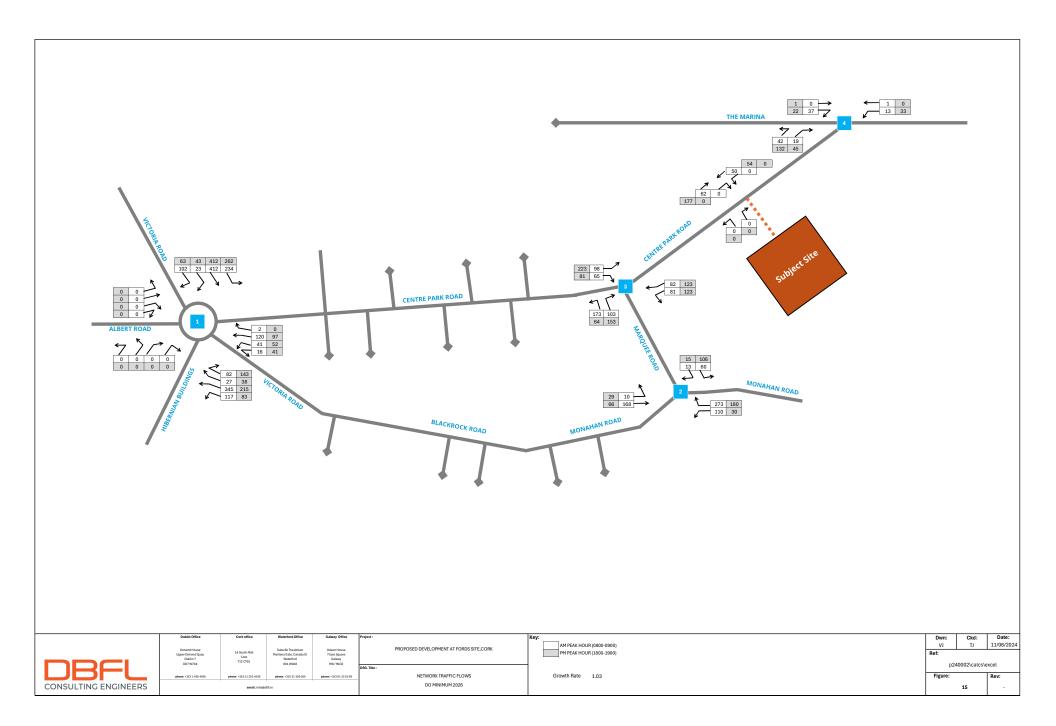


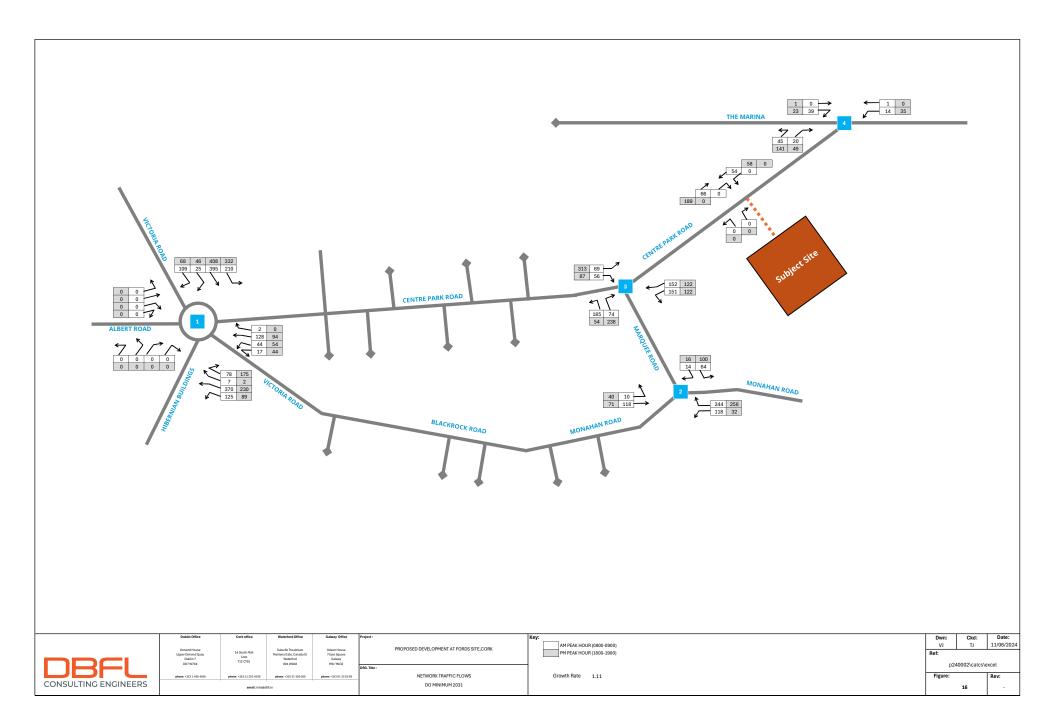


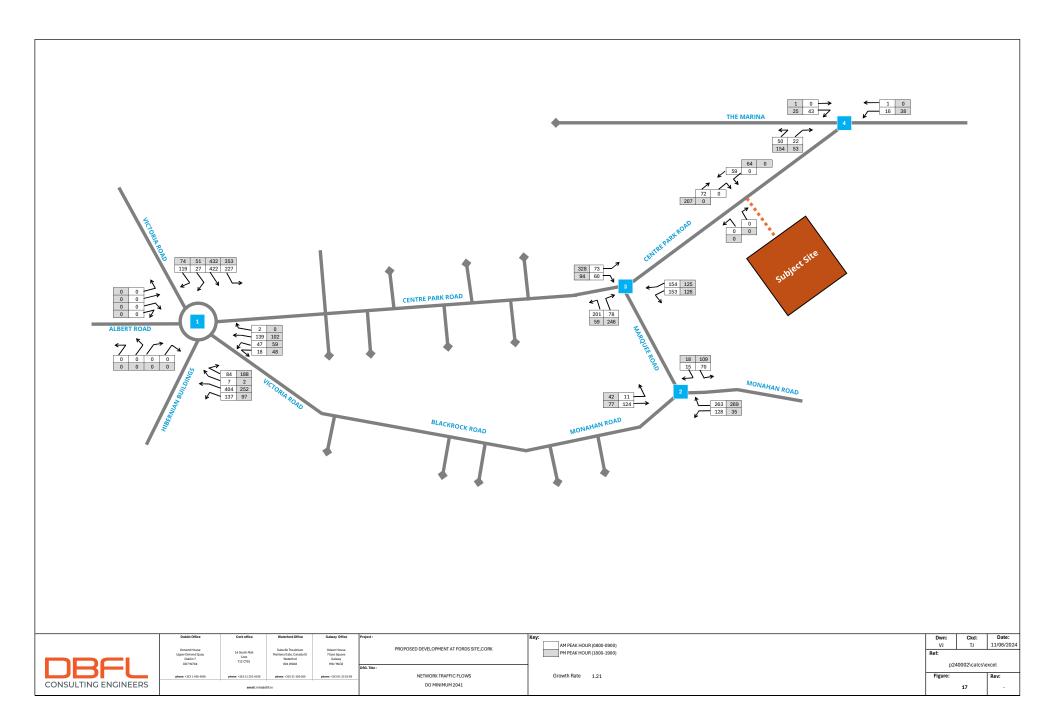


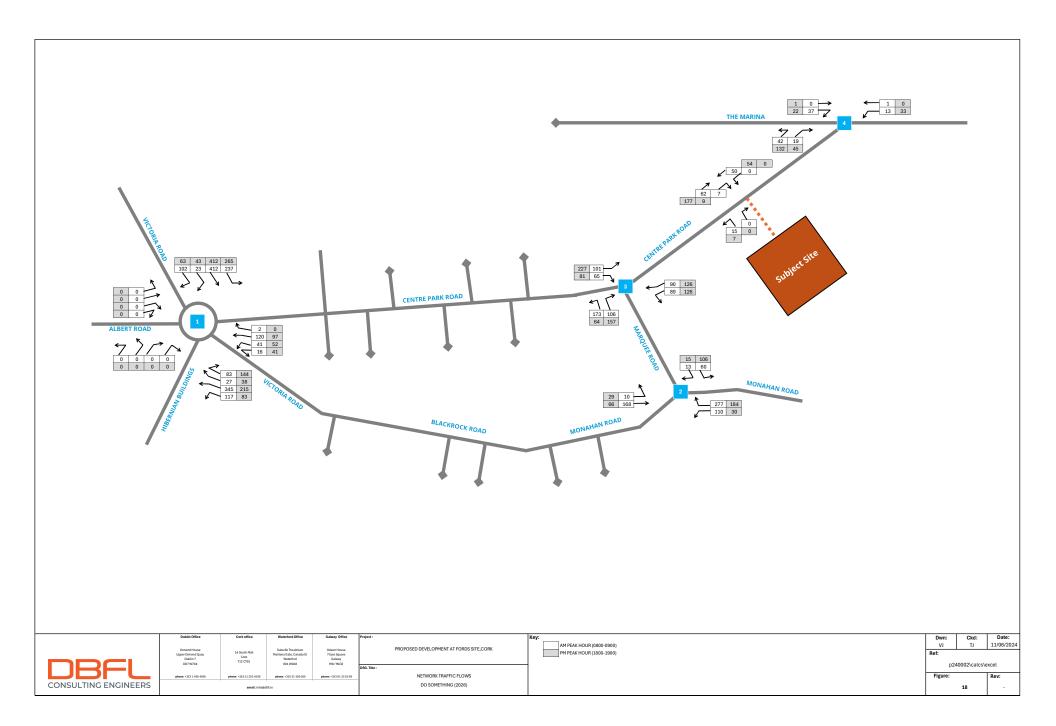


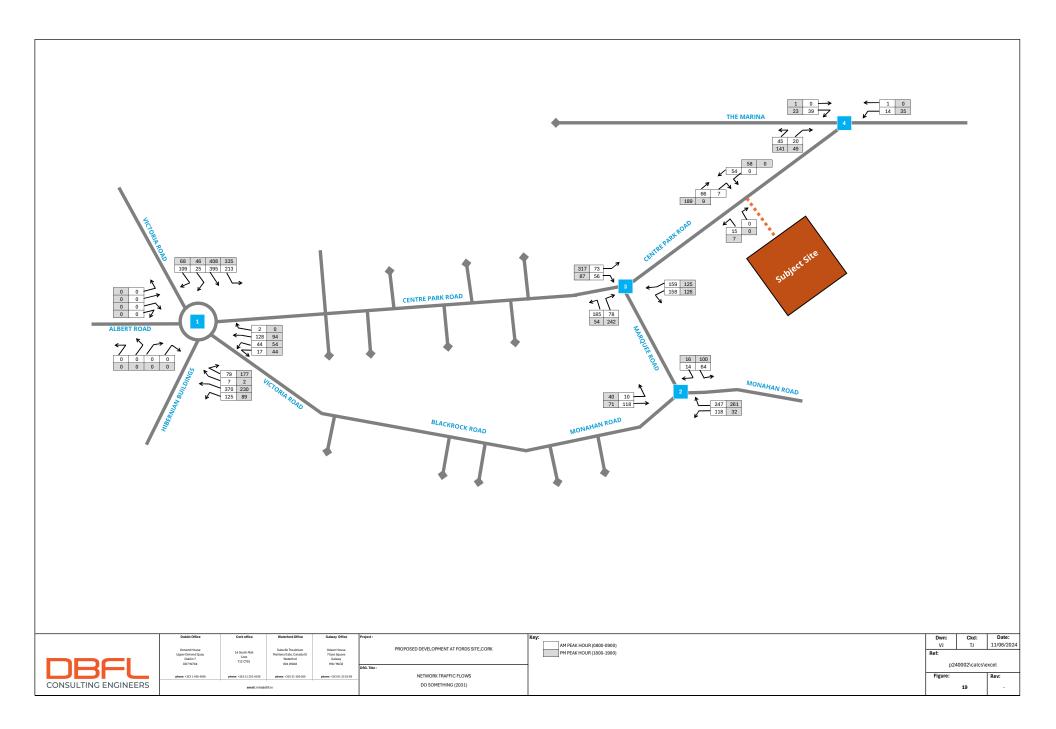


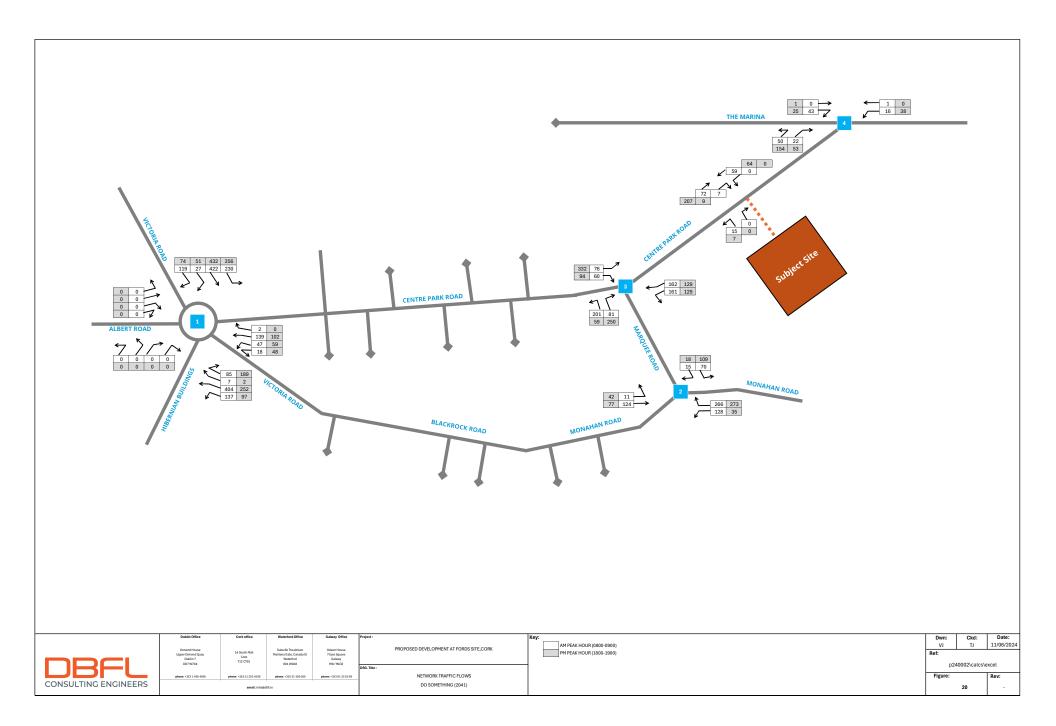














Appendix B: TRICS

Calculation Reference: AUDIT-638801-240611-0630

DBFL Ormond House Dublin Licence No: 638801

TRIP RATE CALCULATION SELECTION PARAMETERS:

Land Use

: 03 - RESIDENTIAL : C - FLATS PRIVATELY OWNED

Category : C - FLA TOTAL VEHICLES

# Selected regions and areas:

04	EAST ANGLIA	
	CA CAMBRIDGESHIRE	1 days
	NF NORFOLK	1 days
	SF SUFFOLK	1 days
05	EAST MIDLANDS	
	DY DERBY	1 days
	LE LEICESTERSHIRE	1 days
	NG NOTTINGHAM	2 days
06	WEST MIDLANDS	
	SH SHROPSHIRE	2 days
80	NORTH WEST	
	MS MERSEYSIDE	2 days
09	NORTH	
	TW TYNE & WEAR	1 days
11	SCOTLAND	
	SR STIRLING	1 days
14	LEINSTER	
	LU LOUTH	1 days
15	GREATER DUBLIN	
	DL DUBLIN	3 days

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

DBFL Ormond House Dublin Licence No: 638801

### Primary Filtering selection:

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

Parameter: No of Dwellings Actual Range: 9 to 332 (units: ) Range Selected by User: 8 to 372 (units: )

Parking Spaces Range: All Surveys Included

Parking Spaces per Dwelling Range: All Surveys Included

Bedrooms per Dwelling Range: All Surveys Included

Percentage of dwellings privately owned: All Surveys Included

# Public Transport Provision:

Selection by: Include all surveys

Date Range: 01/01/16 to 19/06/23

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

## Selected survey days:

 Monday
 3 days

 Tuesday
 5 days

 Wednesday
 5 days

 Friday
 4 days

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

#### Selected survey types:

Manual count 17 days
Directional ATC Count 0 days

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

### Selected Locations:

Suburban Area (PPS6 Out of Centre) 13
Edge of Town 2
Neighbourhood Centre (PPS6 Local Centre) 2

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

# Selected Location Sub Categories:

Development Zone 2
Residential Zone 12
No Sub Category 3

This data displays the number of surveys per location sub-category within the selected set. The location sub-categories consist of Commercial Zone, Industrial Zone, Development Zone, Residential Zone, Retail Zone, Built-Up Zone, Village, Out of Town, High Street and No Sub Category.

# Inclusion of Servicing Vehicles Counts:

Servicing vehicles Included 7 days - Selected Servicing vehicles Excluded 10 days - Selected

Secondary Filtering selection:

## Use Class:

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

### Population within 500m Range:

All Surveys Included

DBFL Ormond House Dublin Licence No: 638801

Secondary Filtering selection (Cont.):

Population within 1 mile:

1,001 to 5,000 3 days 5,001 to 10,000 1 days 20,001 to 25,000 7 days 25,001 to 50,000 6 days

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

Population within 5 miles:

 50,001 to 75,000
 2 days

 75,001 to 100,000
 2 days

 125,001 to 250,000
 4 days

 250,001 to 500,000
 4 days

 500,001 or More
 5 days

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

Car ownership within 5 miles:

 0.5 or Less
 1 days

 0.6 to 1.0
 10 days

 1.1 to 1.5
 6 days

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

Travel Plan:

No 17 days

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

PTAL Rating:

No PTAL Present 17 days

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

Covid-19 Restrictions Yes At least one survey within the selected data set

was undertaken at a time of Covid-19 restrictions

DBFL Dublin Licence No: 638801 Ormond House

## LIST OF SITES relevant to selection parameters

CAMBRI DGESHI RE CA-03-C-03 **BLOCKS OF FLATS** 

CROMWELL ROAD **CAMBRIDGE** 

Suburban Area (PPS6 Out of Centre)

No Sub Category

Total No of Dwellings: 82

Survey date: MONDAY 18/09/17 Survey Type: MANUAL

DL-03-C-16 **BLOCKS OF FLATS DUBLIN BOTANIC AVENUE** 

**DUBLIN** 

DRUMCONDRA

Suburban Area (PPS6 Out of Centre)

Residential Zone

Total No of Dwellings: 31

Survey date: TUESDAY 22/11/16 Survey Type: MANUAL

DL-03-C-17 **BLOCKS OF FLATS** 3 **DUBLIN** 

FINGLAS ROAD **DUBLIN** 

**FINGLAS** 

Suburban Area (PPS6 Out of Centre)

Residential Zone

Total No of Dwellings: 332

Survey date: FRIDAY 23/10/20 Survey Type: MANUAL

DL-03-C-18 **BLOCKS OF FLATS DUBLIN** 

HAROLD'S CROSS ROAD

**DUBLIN** 

Suburban Area (PPS6 Out of Centre)

Residential Zone

Total No of Dwellings: 102

Survey date: WEDNESDAY 19/05/21 Survey Type: MANUAL

5 DY-03-C-03 **BLOCKS OF FLATS DERBY** 

CAESAR STREET

**DERBY** 

Suburban Area (PPS6 Out of Centre)

Residential Zone

Total No of Dwellings: 30

Survey date: WEDNESDAY 25/09/19 Survey Type: MANUAL

LE-03-C-01 **BLOCK OF FLATS LEI CESTERSHI RE** 

**NEW STREET LEICESTER** OADBY

Neighbourhood Centre (PPS6 Local Centre)

Residential Zone

Total No of Dwellings: 19

Survey date: FRIDAY 16/10/20 Survey Type: MANUAL

**BLOCKS OF FLATS** LU-03-C-04 LOUTH

RIVER COURT DROGHEDA

Neighbourhood Centre (PPS6 Local Centre)

Residential Zone

Total No of Dwellings: 42

Survey date: WEDNESDAY 22/09/21 Survey Type: MANUAL

DBFL Ormond House Dublin Licence No: 638801

LIST OF SITES relevant to selection parameters (Cont.)

8 MS-03-C-02 BLOCKS OF FLATS MERSEYSIDE

SOUTH FERRY QUAY

LIVERPOOL

BRUNSWICK DOCK

Suburban Area (PPS6 Out of Centre)

Development Zone

Total No of Dwellings: 184

Survey date: TUESDAY 13/11/18 Survey Type: MANUAL

MS-03-C-03 BLOCK OF FLATS MERSEYSI DE

MARINERS WHARF LIVERPOOL QUEENS DOCK

Suburban Area (PPS6 Out of Centre)

Development Zone

Total No of Dwellings: 9

Survey date: TUESDAY 13/11/18 Survey Type: MANUAL

10 NF-03-C-02 MIXED FLATS & HOUSES NORFOLK

HALL ROAD NORWICH LAKENHAM

Suburban Area (PPS6 Out of Centre)

Residential Zone

Total No of Dwellings: 82

Survey date: MONDAY 18/11/19 Survey Type: MANUAL

11 NG-03-C-01 HOUSES (SPLIT INTO FLATS) NOTTINGHÂM

LAWRENCE WAY NOTTINGHAM

Suburban Area (PPS6 Out of Centre)

No Sub Category

Total No of Dwellings: 56

Survey date: TUESDAY 08/11/16 Survey Type: MANUAL

2 NG-03-C-02 HOUSES (SPLIT INTO FLATS) NOTTINGHAM

CASTLE MARINA ROAD

NOTTINGHAM

Suburban Area (PPS6 Out of Centre)

No Sub Category

Total No of Dwellings: 135

Survey date: WEDNESDAY 09/11/16 Survey Type: MANUAL

13 SF-03-C-04 BLOCKS OF FLATS SUFFOLK

SAINT MARY'S ROAD

**IPSWICH** 

Suburban Area (PPS6 Out of Centre)

Residential Zone

Total No of Dwellings: 56

Survey date: WEDNESDAY 16/09/20 Survey Type: MANUAL

14 SH-03-C-01 BLOCK OF FLATS SHROPSHI ŘE

ABBEY FOREGATE SHREWSBURY

Suburban Area (PPS6 Out of Centre)

Residential Zone

Total No of Dwellings: 47

Survey date: MONDAY 19/06/23

15 SH-03-C-02 BLOCK OF FLATS SHROPSHIRE

ABBEY FOREGATE

**SHREWSBURY** 

Suburban Area (PPS6 Out of Centre)

Residential Zone

Total No of Dwellings: 12

Survey date: FRIDAY 16/06/23 Survey Type: MANUAL

Survey Type: MANUAL

DBFL Licence No: 638801 Ormond House Dublin

LIST OF SITES relevant to selection parameters (Cont.)

**BLOCK OF FLATS & TERRACED** STIRLING SR-03-C-03

KERSEBONNY ROAD

STIRLING

CAMBUSBARRON

Edge of Town

Residential Zone

Total No of Dwellings:

82 Survey date: TUESDAY

01/09/20

Survey Type: MANUAL

TYNE & WEAR

TW-03-C-01 **BLOCKS OF FLATS** 

**CAULDWELL AVENUE** WHITLEY BAY

MONKESEATON Edge of Town Residential Zone

Total No of Dwellings: 45

> Survey date: FRIDAY 15/10/21 Survey Type: MANUAL

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

TRIP RATE for Land Use 03 - RESIDENTIAL/C - FLATS PRIVATELY OWNED

TOTAL VEHICLES

Calculation factor: 1 DWELLS

BOLD print indicates peak (busiest) period

	ARRIVALS		I	DEPARTURES			TOTALS		
	No.	Ave.	Trip	No.	Ave.	Trip	No.	Ave.	Trip
Time Range	Days	DWELLS	Rate	Days	DWELLS	Rate	Days	DWELLS	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	17	79	0.042	17	79	0.146	17	79	0.188
08:00 - 09:00	17	79	0.064	17	79	0.190	17	79	0.254
09:00 - 10:00	17	79	0.088	17	79	0.084	17	79	0.172
10:00 - 11:00	17	79	0.070	17	79	0.086	17	79	0.156
11:00 - 12:00	17	79	0.057	17	79	0.077	17	79	0.134
12:00 - 13:00	17	79	0.079	17	79	0.085	17	79	0.164
13:00 - 14:00	17	79	0.079	17	79	0.093	17	79	0.172
14:00 - 15:00	17	79	0.095	17	79	0.092	17	79	0.187
15:00 - 16:00	17	79	0.114	17	79	0.077	17	79	0.191
16:00 - 17:00	17	79	0.126	17	79	0.076	17	79	0.202
17:00 - 18:00	17	79	0.163	17	79	0.083	17	79	0.246
18:00 - 19:00	17	79	0.121	17	79	0.090	17	79	0.211
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			1.098			1.179			2.277

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

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

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## Parameter summary

Trip rate parameter range selected: 9 - 332 (units: )
Survey date date range: 01/01/16 - 19/06/23

Number of weekdays (Monday-Friday): 17
Number of Saturdays: 0
Number of Sundays: 0
Surveys automatically removed from selection: 0
Surveys manually removed from selection: 0

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

TRIP RATE for Land Use 03 - RESIDENTIAL/C - FLATS PRIVATELY OWNED

**TAXIS** 

Calculation factor: 1 DWELLS

BOLD print indicates peak (busiest) period

	ARRIVALS		I	DEPARTURES			TOTALS		
	No.	Ave.	Trip	No.	Ave.	Trip	No.	Ave.	Trip
Time Range	Days	DWELLS	Rate	Days	DWELLS	Rate	Days	DWELLS	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	17	79	0.004	17	79	0.004	17	79	0.008
08:00 - 09:00	17	79	0.003	17	79	0.004	17	79	0.007
09:00 - 10:00	17	79	0.007	17	79	0.006	17	79	0.013
10:00 - 11:00	17	79	0.001	17	79	0.003	17	79	0.004
11:00 - 12:00	17	79	0.003	17	79	0.002	17	79	0.005
12:00 - 13:00	17	79	0.004	17	79	0.002	17	79	0.006
13:00 - 14:00	17	79	0.004	17	79	0.005	17	79	0.009
14:00 - 15:00	17	79	0.004	17	79	0.004	17	79	0.008
15:00 - 16:00	17	79	0.002	17	79	0.003	17	79	0.005
16:00 - 17:00	17	79	0.005	17	79	0.004	17	79	0.009
17:00 - 18:00	17	79	0.001	17	79	0.002	17	79	0.003
18:00 - 19:00	17	79	0.005	17	79	0.005	17	79	0.010
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.043			0.044			0.087

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

TRIP RATE for Land Use 03 - RESIDENTIAL/C - FLATS PRIVATELY OWNED

**OGVS** 

Calculation factor: 1 DWELLS

BOLD print indicates peak (busiest) period

	ARRIVALS			DEPARTURES			TOTALS		
	No.	Ave.	Trip	No.	Ave.	Trip	No.	Ave.	Trip
Time Range	Days	DWELLS	Rate	Days	DWELLS	Rate	Days	DWELLS	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	17	79	0.000	17	79	0.000	17	79	0.000
08:00 - 09:00	17	79	0.001	17	79	0.001	17	79	0.002
09:00 - 10:00	17	79	0.001	17	79	0.001	17	79	0.002
10:00 - 11:00	17	79	0.003	17	79	0.003	17	79	0.006
11:00 - 12:00	17	79	0.001	17	79	0.001	17	79	0.002
12:00 - 13:00	17	79	0.003	17	79	0.002	17	79	0.005
13:00 - 14:00	17	79	0.000	17	79	0.000	17	79	0.000
14:00 - 15:00	17	79	0.001	17	79	0.002	17	79	0.003
15:00 - 16:00	17	79	0.000	17	79	0.000	17	79	0.000
16:00 - 17:00	17	79	0.001	17	79	0.000	17	79	0.001
17:00 - 18:00	17	79	0.000	17	79	0.001	17	79	0.001
18:00 - 19:00	17	79	0.000	17	79	0.000	17	79	0.000
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.011			0.011			0.022

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

Licence No: 638801

DBFL Ormond House Dublin

TRIP RATE for Land Use 03 - RESIDENTIAL/C - FLATS PRIVATELY OWNED

**CYCLISTS** 

Calculation factor: 1 DWELLS

BOLD print indicates peak (busiest) period

	ARRIVALS		I	DEPARTURES			TOTALS		
	No.	Ave.	Trip	No.	Ave.	Trip	No.	Ave.	Trip
Time Range	Days	DWELLS	Rate	Days	DWELLS	Rate	Days	DWELLS	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	17	79	0.001	17	79	0.010	17	79	0.011
08:00 - 09:00	17	79	0.001	17	79	0.017	17	79	0.018
09:00 - 10:00	17	79	0.001	17	79	0.006	17	79	0.007
10:00 - 11:00	17	79	0.004	17	79	0.003	17	79	0.007
11:00 - 12:00	17	79	0.006	17	79	0.004	17	79	0.010
12:00 - 13:00	17	79	0.002	17	79	0.006	17	79	0.008
13:00 - 14:00	17	79	0.008	17	79	0.004	17	79	0.012
14:00 - 15:00	17	79	0.007	17	79	0.007	17	79	0.014
15:00 - 16:00	17	79	0.004	17	79	0.004	17	79	0.008
16:00 - 17:00	17	79	0.011	17	79	0.005	17	79	0.016
17:00 - 18:00	17	79	0.015	17	79	0.006	17	79	0.021
18:00 - 19:00	17	79	0.005	17	79	0.008	17	79	0.013
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.065			0.080			0.145

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

TRIP RATE for Land Use 03 - RESIDENTIAL/C - FLATS PRIVATELY OWNED

**CARS** 

Calculation factor: 1 DWELLS

BOLD print indicates peak (busiest) period

	ARRIVALS			[	DEPARTURES			TOTALS		
	No.	Ave.	Trip	No.	Ave.	Trip	No.	Ave.	Trip	
Time Range	Days	DWELLS	Rate	Days	DWELLS	Rate	Days	DWELLS	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	17	79	0.035	17	79	0.134	17	79	0.169	
08:00 - 09:00	17	79	0.051	17	79	0.172	17	79	0.223	
09:00 - 10:00	17	79	0.069	17	79	0.071	17	79	0.140	
10:00 - 11:00	17	79	0.051	17	79	0.065	17	79	0.116	
11:00 - 12:00	17	79	0.046	17	79	0.066	17	79	0.112	
12:00 - 13:00	17	79	0.057	17	79	0.071	17	79	0.128	
13:00 - 14:00	17	79	0.064	17	79	0.073	17	79	0.137	
14:00 - 15:00	17	79	0.083	17	79	0.079	17	79	0.162	
15:00 - 16:00	17	79	0.098	17	79	0.062	17	79	0.160	
16:00 - 17:00	17	79	0.111	17	79	0.062	17	79	0.173	
17:00 - 18:00	17	79	0.152	17	79	0.072	17	79	0.224	
18:00 - 19:00	17	79	0.107	17	79	0.077	17	79	0.184	
19:00 - 20:00										
20:00 - 21:00										
21:00 - 22:00										
22:00 - 23:00										
23:00 - 24:00										
Total Rates:			0.924			1.004			1.928	

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

TRIP RATE for Land Use 03 - RESIDENTIAL/C - FLATS PRIVATELY OWNED

**LGVS** 

Calculation factor: 1 DWELLS

BOLD print indicates peak (busiest) period

	ARRIVALS			[	DEPARTURES			TOTALS		
	No.	Ave.	Trip	No.	Ave.	Trip	No.	Ave.	Trip	
Time Range	Days	DWELLS	Rate	Days	DWELLS	Rate	Days	DWELLS	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	17	79	0.003	17	79	0.007	17	79	0.010	
08:00 - 09:00	17	79	0.009	17	79	0.011	17	79	0.020	
09:00 - 10:00	17	79	0.010	17	79	0.007	17	79	0.017	
10:00 - 11:00	17	79	0.015	17	79	0.016	17	79	0.031	
11:00 - 12:00	17	79	0.007	17	79	0.007	17	79	0.014	
12:00 - 13:00	17	79	0.014	17	79	0.009	17	79	0.023	
13:00 - 14:00	17	79	0.011	17	79	0.014	17	79	0.025	
14:00 - 15:00	17	79	0.006	17	79	0.007	17	79	0.013	
15:00 - 16:00	17	79	0.014	17	79	0.012	17	79	0.026	
16:00 - 17:00	17	79	0.010	17	79	0.009	17	79	0.019	
17:00 - 18:00	17	79	0.009	17	79	0.006	17	79	0.015	
18:00 - 19:00	17	79	0.007	17	79	0.006	17	79	0.013	
19:00 - 20:00										
20:00 - 21:00										
21:00 - 22:00										
22:00 - 23:00										
23:00 - 24:00										
Total Rates:			0.115			0.111			0.226	

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

TRIP RATE for Land Use 03 - RESIDENTIAL/C - FLATS PRIVATELY OWNED

MOTOR CYCLES

Calculation factor: 1 DWELLS

BOLD print indicates peak (busiest) period

	ARRIVALS			[	DEPARTURES			TOTALS		
	No.	Ave.	Trip	No.	Ave.	Trip	No.	Ave.	Trip	
Time Range	Days	DWELLS	Rate	Days	DWELLS	Rate	Days	DWELLS	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	17	79	0.000	17	79	0.001	17	79	0.001	
08:00 - 09:00	17	79	0.000	17	79	0.001	17	79	0.001	
09:00 - 10:00	17	79	0.000	17	79	0.000	17	79	0.000	
10:00 - 11:00	17	79	0.000	17	79	0.000	17	79	0.000	
11:00 - 12:00	17	79	0.000	17	79	0.000	17	79	0.000	
12:00 - 13:00	17	79	0.001	17	79	0.001	17	79	0.002	
13:00 - 14:00	17	79	0.001	17	79	0.001	17	79	0.002	
14:00 - 15:00	17	79	0.001	17	79	0.000	17	79	0.001	
15:00 - 16:00	17	79	0.000	17	79	0.000	17	79	0.000	
16:00 - 17:00	17	79	0.000	17	79	0.000	17	79	0.000	
17:00 - 18:00	17	79	0.001	17	79	0.002	17	79	0.003	
18:00 - 19:00	17	79	0.002	17	79	0.002	17	79	0.004	
19:00 - 20:00										
20:00 - 21:00										
21:00 - 22:00										
22:00 - 23:00										
23:00 - 24:00										
Total Rates:										

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

Calculation Reference: AUDIT-638801-241023-1056

### TRIP RATE CALCULATION SELECTION PARAMETERS:

Land Use : 04 - EDUCATION
Category : D - NURSERY
TOTAL VEHICLES

# Selected regions and areas:

04	EAST ANGLIA	
	CA CAMBRIDGESHIRE	1 days
05	EAST MIDLANDS	
	DY DERBY	1 days
	LN LINCOLNSHIRE	1 days
	NN NORTH NORTHAMPTONSHIRE	1 days
06	WEST MIDLANDS	
	WK WARWICKSHIRE	1 days
07	YORKSHIRE & NORTH LINCOLNSHIRE	
	DR DONCASTER	1 days
	NY NORTH YORKSHIRE	2 days
09	NORTH	
	TV TEES VALLEY	1 days
	TW TYNE & WEAR	1 days
10	WALES	
	MM MONMOUTHSHIRE	1 days
	NW NEWPORT	1 days
	RC RHONDDA CYNON TAFF	1 days
11	SCOTLAND	
	DU DUNDEE CITY	1 days

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

#### Primary Filtering selection:

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

Parameter: Gross floor area

Actual Range: 150 to 1250 (units: sqm) Range Selected by User: 150 to 2350 (units: sqm)

Parking Spaces Range: All Surveys Included

### Public Transport Provision:

Selection by: Include all surveys

Date Range: 01/01/16 to 06/09/23

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

#### Selected survey days:

 Monday
 3 days

 Tuesday
 4 days

 Wednesday
 1 days

 Thursday
 2 days

 Friday
 4 days

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

### Selected survey types:

Manual count 14 days
Directional ATC Count 0 days

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

# Selected Locations:

Suburban Area (PPS6 Out of Centre) 6
Edge of Town 5
Neighbourhood Centre (PPS6 Local Centre) 3

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

## Selected Location Sub Categories:

Industrial Zone	1
Commercial Zone	1
Residential Zone	10
Village	2

This data displays the number of surveys per location sub-category within the selected set. The location sub-categories consist of Commercial Zone, Industrial Zone, Development Zone, Residential Zone, Retail Zone, Built-Up Zone, Village, Out of Town, High Street and No Sub Category.

### Inclusion of Servicing Vehicles Counts:

Servicing vehicles Included 6 days - Selected Servicing vehicles Excluded 9 days - Selected

Secondary Filtering selection:

## Use Class:

E(f) 14 days

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

### Population within 500m Range:

All Surveys Included

Secondary Filtering selection (Cont.):

#### Population within 1 mile:

3 days
1 days
2 days
4 days
4 days

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

#### Population within 5 miles:

25,001 to 50,000	2 days
50,001 to 75,000	1 days
75,001 to 100,000	2 days
100,001 to 125,000	1 days
125,001 to 250,000	6 days
250,001 to 500,000	2 days

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

#### Car ownership within 5 miles:

0.5 or Less	1 days
0.6 to 1.0	6 days
1.1 to 1.5	6 days
2.1 to 2.5	1 days

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

#### *Travel Plan:* No

No 14 days

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

#### PTAL Rating:

No PTAL Present 14 days

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

Covid-19 Restrictions Yes At least one survey within the selected data set

was undertaken at a time of Covid-19 restrictions

**DBFL** Licence No: 638801 Ormond House Dublin

LIST OF SITES relevant to selection parameters

CAMBRI DGESHI RE CA-04-D-01 **NURSERY** 

MILTON ROAD CAMBRIDGE **CHESTERTON** 

Neighbourhood Centre (PPS6 Local Centre)

Residential Zone

Total Gross floor area: 500 sqm

Survey date: MONDAY 26/06/23 Survey Type: MANUAL

DR-04-D-01 NURSERY **DONCASTER** 

**BAWTRY ROAD DONCASTER** 

Suburban Area (PPS6 Out of Centre)

Residential Zone

Total Gross floor area: 1250 sqm

Survey date: FRIDAY 13/05/22 Survey Type: MANUAL

DU-04-D-01 NURSERY **DUNDEE CITY** 

LONGTOWN TERRACE

DUNDEE

Suburban Area (PPS6 Out of Centre)

Residential Zone

Total Gross floor area: 325 sqm

> Survey date: MONDAY 24/04/17 Survey Type: MANUAL

DY-04-D-02 NURSERY **DERBY** 

MAXWELL AVENUE

**DERBY** 

DARLEY ABBEY

Edge of Town

Residential Zone

Total Gross floor area: 415 sqm

Survey date: THURSDAY 12/07/18 Survey Type: MANUAL

LN-04-D-01 NURSERY LINCOLNSHIRE

**NEWARK ROAD** 

LINCOLN

SWALLOW BECK

Suburban Area (PPS6 Out of Centre)

Residential Zone

Total Gross floor area: 600 sqm

Survey date: TUESDAY 31/10/17 Survey Type: MANUAL **MONMOUTHSHIRE** 

MM-04-D-01 NURSERY SPOONER CLOSE

**NEWPORT** 

**COEDKERNEW** 

Edge of Town

Commercial Zone

Total Gross floor area:

860 sqm Survey date: FRIDAY 27/09/19 Survey Type: MANUAL

NORTH NORTHAMPTONSHIRE NN-04-D-01 NURSERY

**ROCKINGHAM ROAD** 

KETTERING

Suburban Area (PPS6 Out of Centre)

Residential Zone

Total Gross floor area: 850 sqm

Survey date: TUESDAY 07/06/22 Survey Type: MANUAL

NW-04-D-01 NURSERY **NEWPORT** 

CHEPSTOW ROAD

**NEAR NEWPORT** 

LANGSTONE

Neighbourhood Centre (PPS6 Local Centre)

Village

Total Gross floor area: 284 sqm

Survey date: WEDNESDAY 12/10/22 Survey Type: MANUAL NORTH YORKSHIRE

NY-04-D-02 NURSERY

> OAKNEY WOOD ROAD SELBY

Edge of Town

Industrial Zone

Total Gross floor area: 450 sqm

Survey date: TUESDAY 10/05/22 Survey Type: MANUAL DBFL Licence No: 638801 Ormond House Dublin

LIST OF SITES relevant to selection parameters (Cont.)

NORTH YORKSHIRE 10 NY-04-D-03 **NURSERY** 

WETHERBY ROAD KNARESBOROUGH

Suburban Area (PPS6 Out of Centre)

Residential Zone

Total Gross floor area: 300 sqm

Survey date: MONDAY 12/06/23 Survey Type: MANUAL RHONDDA CYNON TAFF

RC-04-D-01 NURSERY **HEOL Y COLEG** 

> **NEAR CARDIFF NANTGARW**

Neighbourhood Centre (PPS6 Local Centre)

Village

Total Gross floor area: 664 sqm

Survey date: THURSDAY 06/05/21 Survey Type: MANUAL

TV-04-D-01 12 NURSERY TEES VALLEY

COTSWOLD DRIVE

**REDCAR** 

Edge of Town Residential Zone

Total Gross floor area: 150 sqm

> Survey date: FRIDAY 19/05/17 Survey Type: MANUAL

TW-04-D-03 TYNE & WEAR NURSERY

JUBILEE ROAD

NEWCASTLE UPON TYNE

**GOSFORTH** 

Suburban Area (PPS6 Out of Centre)

Residential Zone

Total Gross floor area: 725 sqm

21/05/19 Survey Type: MANUAL Survey date: TUESDAY WARWIČKŚHIRE

14 WK-04-D-01 NURSERY THE RIDGEWAY

STRATFORD UPON AVON

Edge of Town

Residential Zone

340 sqm Total Gross floor area:

Survey date: FRIDAY Survey Type: MANUAL 29/06/18

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

TRIP RATE for Land Use 04 - EDUCATION/D - NURSERY

TOTAL VEHICLES

Calculation factor: 100 sqm

BOLD print indicates peak (busiest) period

		ARRIVALS		[	DEPARTURES	5		TOTALS				
	No.	Ave.	Trip	No.	Ave.	Trip	No.	Ave.	Trip			
Time Range	Days	GFA	Rate	Days	GFA	Rate	Days	GFA	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	450	0.444	1	450	0.000	1	450	0.444			
07:00 - 08:00	14	551	2.593	14	551	1.322	14	551	3.915			
08:00 - 09:00	14	551	3.189	14	551	2.775	14	551	5.964			
09:00 - 10:00	14	551	1.089	14	551	0.921	14	551	2.010			
10:00 - 11:00	14	551	0.467	14	551	0.324	14	551	0.791			
11:00 - 12:00	14	551	0.363	14	551	0.337	14	551	0.700			
12:00 - 13:00	14	551	0.972	14	551	1.063	14	551	2.035			
13:00 - 14:00	14	551	0.765	14	551	1.258	14	551	2.023			
14:00 - 15:00	14	551	0.415	14	551	0.480	14	551	0.895			
15:00 - 16:00	14	551	0.622	14	551	0.648	14	551	1.270			
16:00 - 17:00	14	551	1.569	14	551	1.595	14	551	3.164			
17:00 - 18:00	14	551	2.723	14	551	3.449	14	551	6.172			
18:00 - 19:00	13	582	0.093	13	582	0.674	13	582	0.767			
19:00 - 20:00	1	450	0.222	1	450	2.222	1	450	2.444			
20:00 - 21:00	1	450	0.000	1	450	0.000	1	450	0.000			
21:00 - 22:00												
22:00 - 23:00												
23:00 - 24:00												
Total Rates:			15.526			17.068			32.594			

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

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

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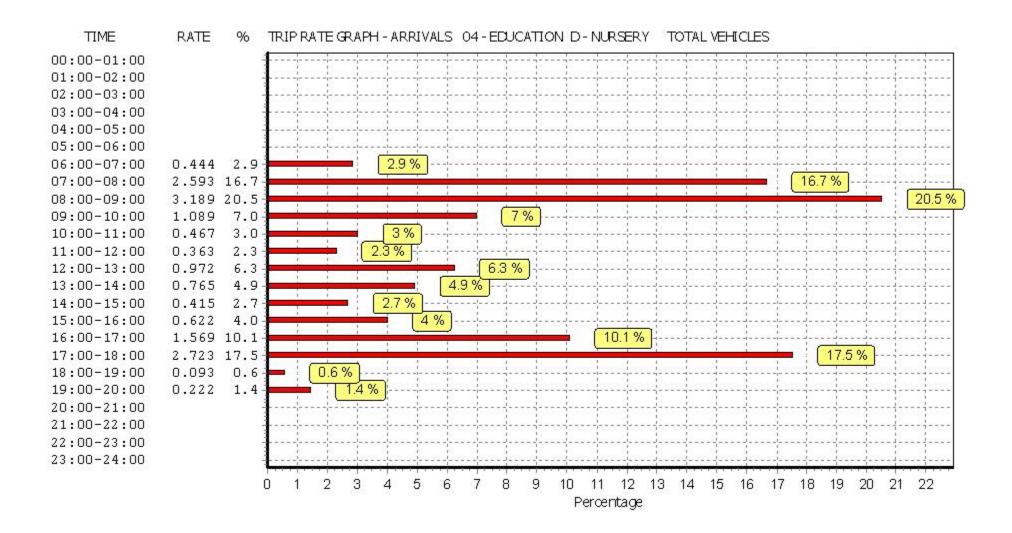
The Company accepts no responsibility for loss which may arise from reliance on data contained in the TRICS Database. [No warranty of any kind, express or implied, is made as to the data contained in the TRICS Database.]

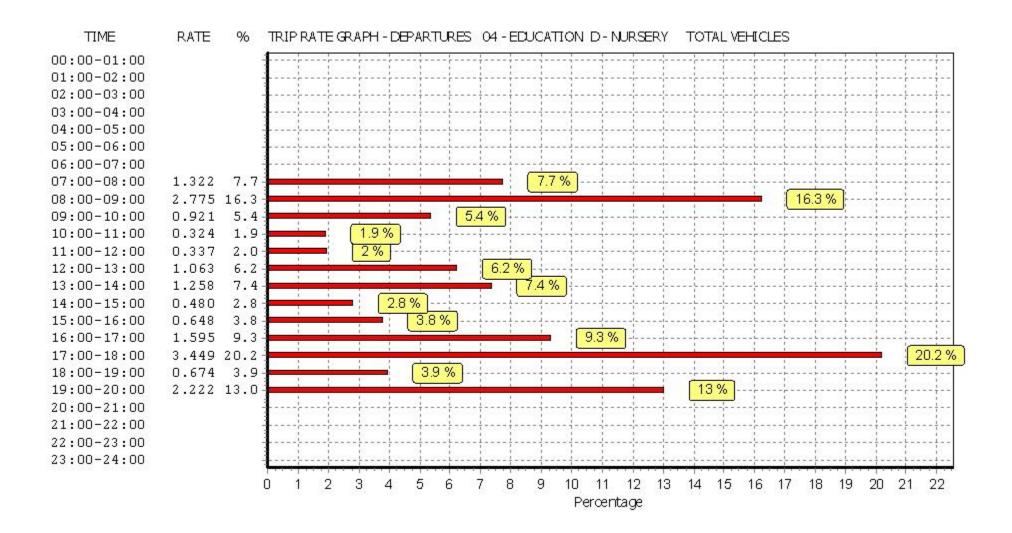
#### Parameter summary

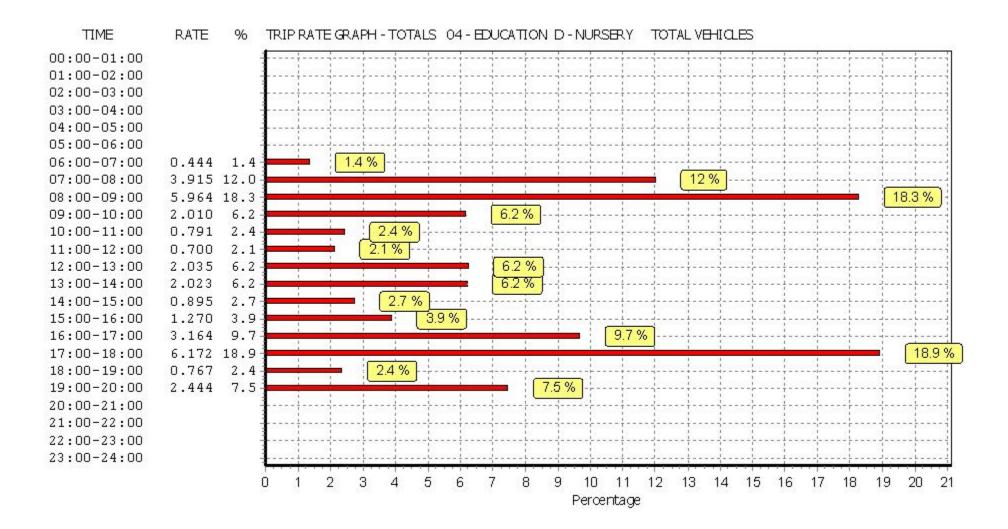
Trip rate parameter range selected: 150 - 1250 (units: sqm) Survey date date range: 01/01/16 - 06/09/23

Number of weekdays (Monday-Friday): 14
Number of Saturdays: 0
Number of Sundays: 0
Surveys automatically removed from selection: 0
Surveys manually removed from selection: 0

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







TRIP RATE for Land Use 04 - EDUCATION/D - NURSERY

**TAXIS** 

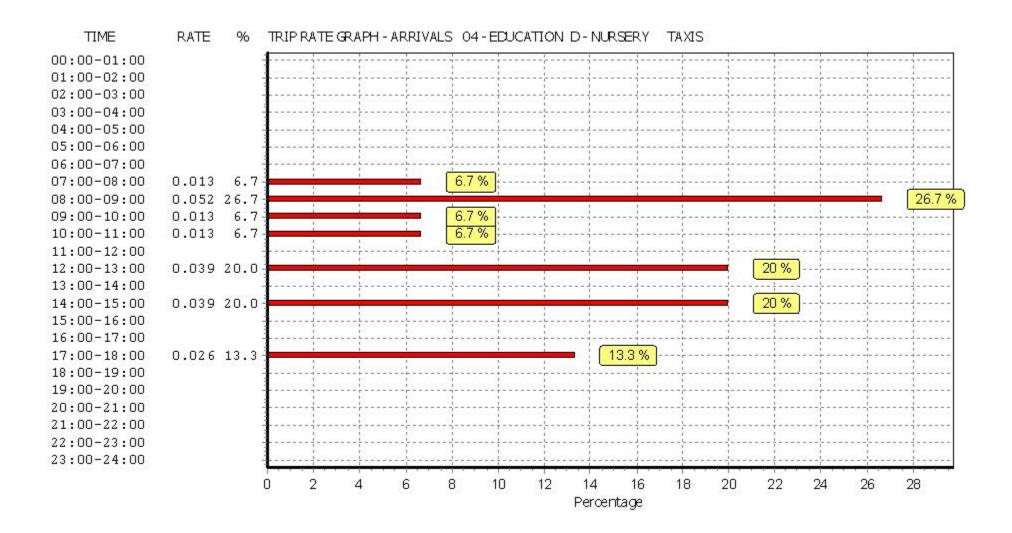
Calculation factor: 100 sqm

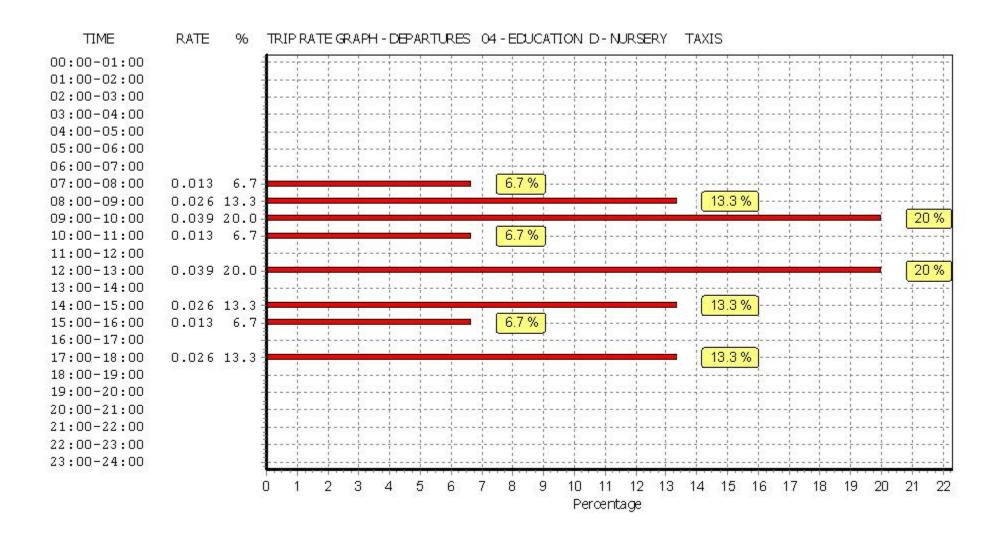
BOLD print indicates peak (busiest) period

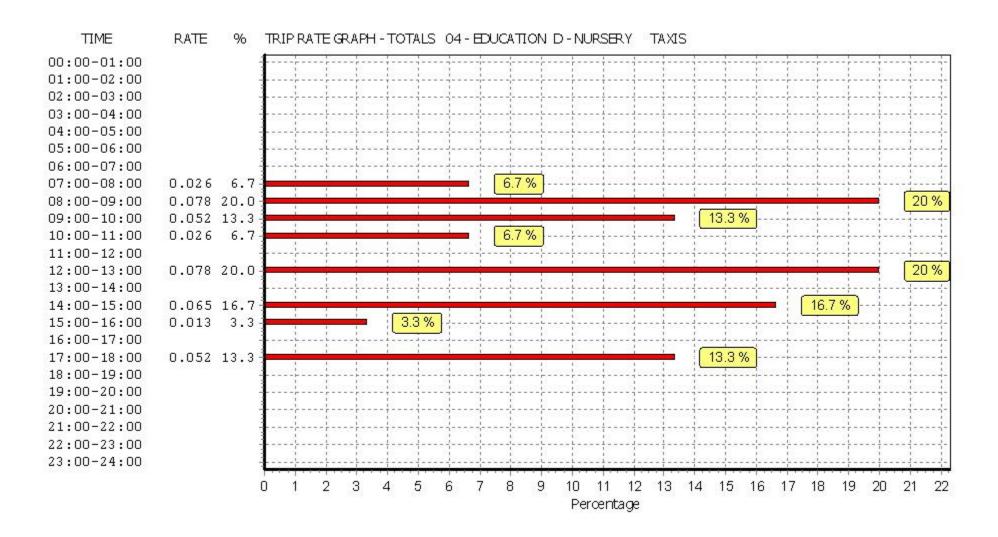
		ARRIVALS		[	DEPARTURES	5		TOTALS	
	No.	Ave.	Trip	No.	Ave.	Trip	No.	Ave.	Trip
Time Range	Days	GFA	Rate	Days	GFA	Rate	Days	GFA	Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00	1	450	0.000	1	450	0.000	1	450	0.000
07:00 - 08:00	14	551	0.013	14	551	0.013	14	551	0.026
08:00 - 09:00	14	551	0.052	14	551	0.026	14	551	0.078
09:00 - 10:00	14	551	0.013	14	551	0.039	14	551	0.052
10:00 - 11:00	14	551	0.013	14	551	0.013	14	551	0.026
11:00 - 12:00	14	551	0.000	14	551	0.000	14	551	0.000
12:00 - 13:00	14	551	0.039	14	551	0.039	14	551	0.078
13:00 - 14:00	14	551	0.000	14	551	0.000	14	551	0.000
14:00 - 15:00	14	551	0.039	14	551	0.026	14	551	0.065
15:00 - 16:00	14	551	0.000	14	551	0.013	14	551	0.013
16:00 - 17:00	14	551	0.000	14	551	0.000	14	551	0.000
17:00 - 18:00	14	551	0.026	14	551	0.026	14	551	0.052
18:00 - 19:00	13	582	0.000	13	582	0.000	13	582	0.000
19:00 - 20:00	1	450	0.000	1	450	0.000	1	450	0.000
20:00 - 21:00	1	450	0.000	1	450	0.000	1	450	0.000
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.195			0.195			0.390

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

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







TRIP RATE for Land Use 04 - EDUCATION/D - NURSERY

**OGVS** 

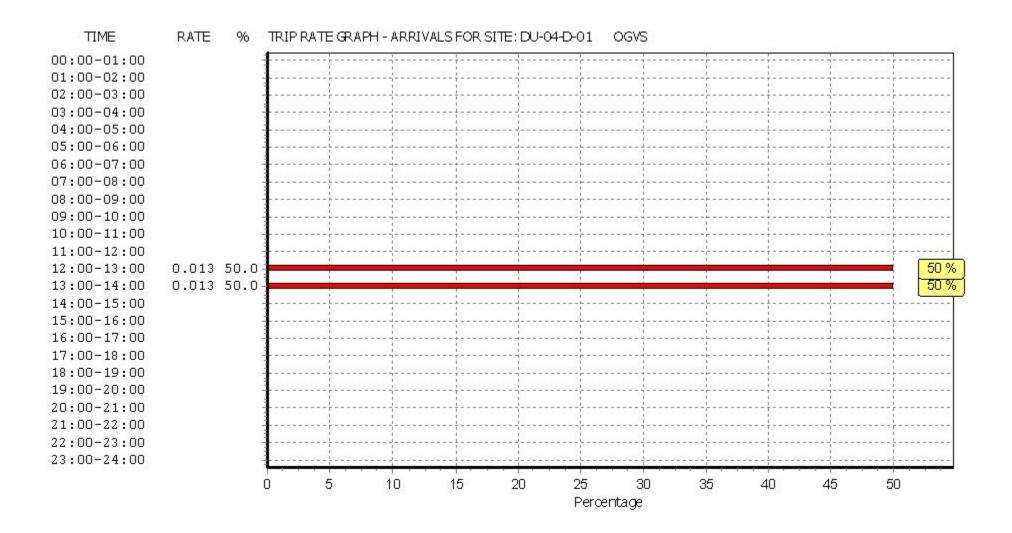
Calculation factor: 100 sqm

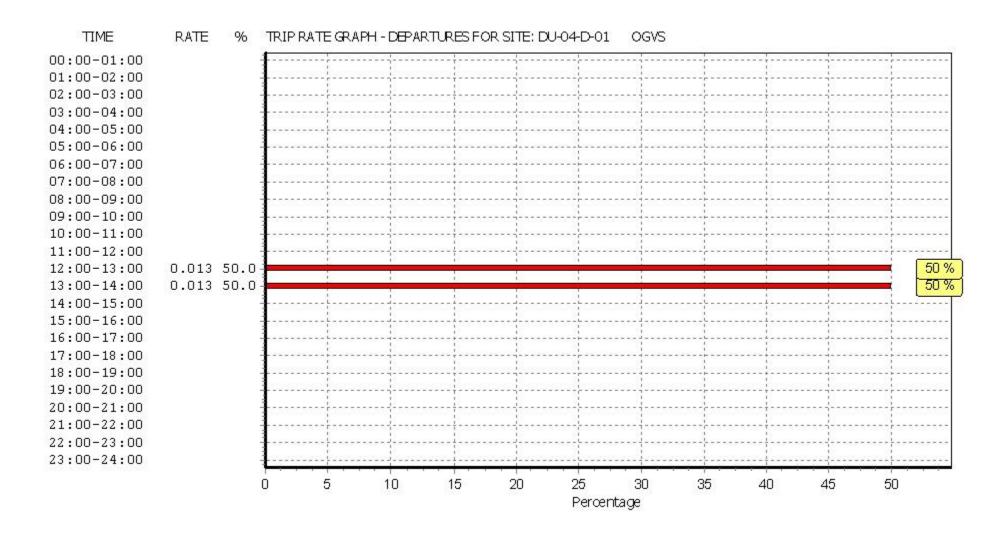
BOLD print indicates peak (busiest) period

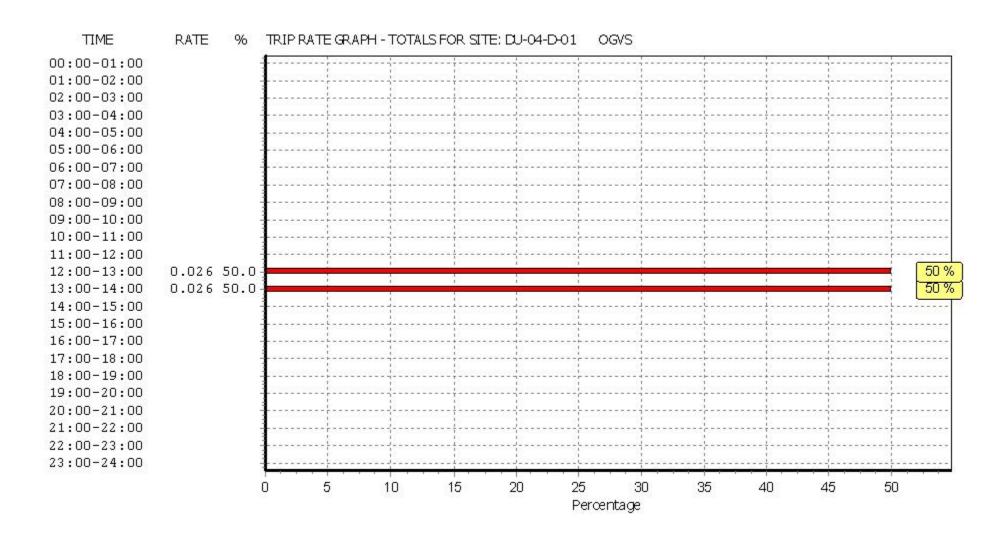
		ARRIVALS		[	DEPARTURES	5		TOTALS	
	No.	Ave.	Trip	No.	Ave.	Trip	No.	Ave.	Trip
Time Range	Days	GFA	Rate	Days	GFA	Rate	Days	GFA	Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00	1	450	0.000	1	450	0.000	1	450	0.000
07:00 - 08:00	14	551	0.000	14	551	0.000	14	551	0.000
08:00 - 09:00	14	551	0.000	14	551	0.000	14	551	0.000
09:00 - 10:00	14	551	0.000	14	551	0.000	14	551	0.000
10:00 - 11:00	14	551	0.000	14	551	0.000	14	551	0.000
11:00 - 12:00	14	551	0.000	14	551	0.000	14	551	0.000
12:00 - 13:00	14	551	0.013	14	551	0.013	14	551	0.026
13:00 - 14:00	14	551	0.013	14	551	0.013	14	551	0.026
14:00 - 15:00	14	551	0.000	14	551	0.000	14	551	0.000
15:00 - 16:00	14	551	0.000	14	551	0.000	14	551	0.000
16:00 - 17:00	14	551	0.000	14	551	0.000	14	551	0.000
17:00 - 18:00	14	551	0.000	14	551	0.000	14	551	0.000
18:00 - 19:00	13	582	0.000	13	582	0.000	13	582	0.000
19:00 - 20:00	1	450	0.000	1	450	0.000	1	450	0.000
20:00 - 21:00	1	450	0.000	1	450	0.000	1	450	0.000
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.026			0.026			0.052

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

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







TRIP RATE for Land Use 04 - EDUCATION/D - NURSERY

**CYCLISTS** 

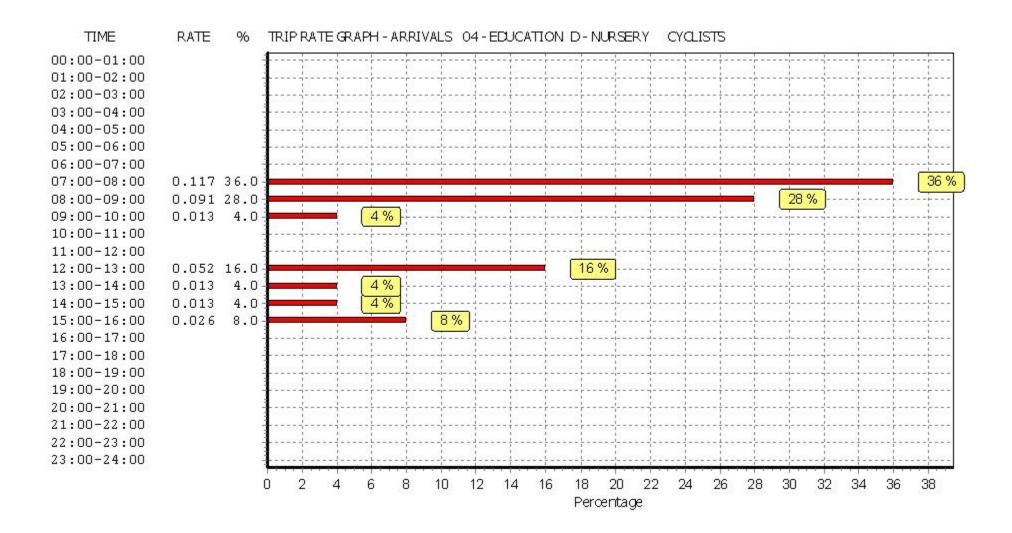
Calculation factor: 100 sqm

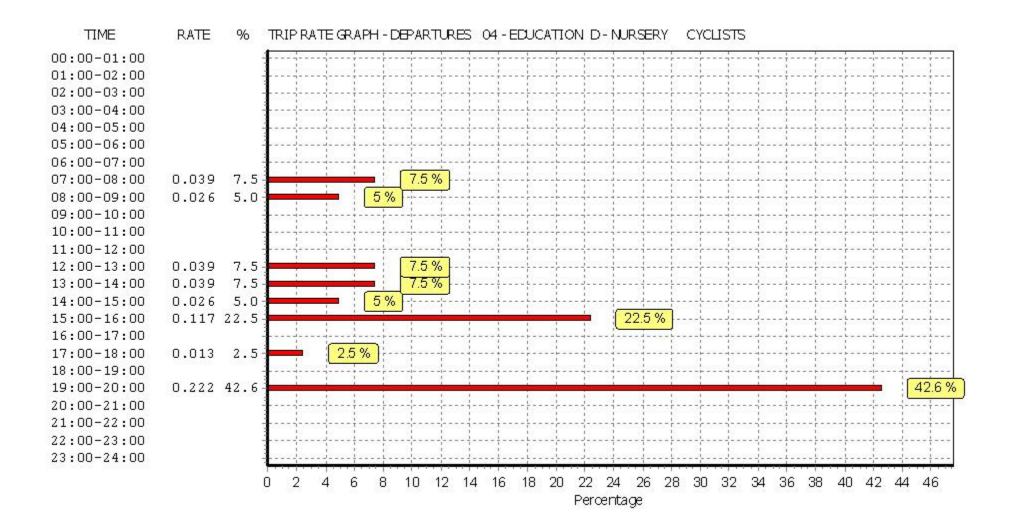
BOLD print indicates peak (busiest) period

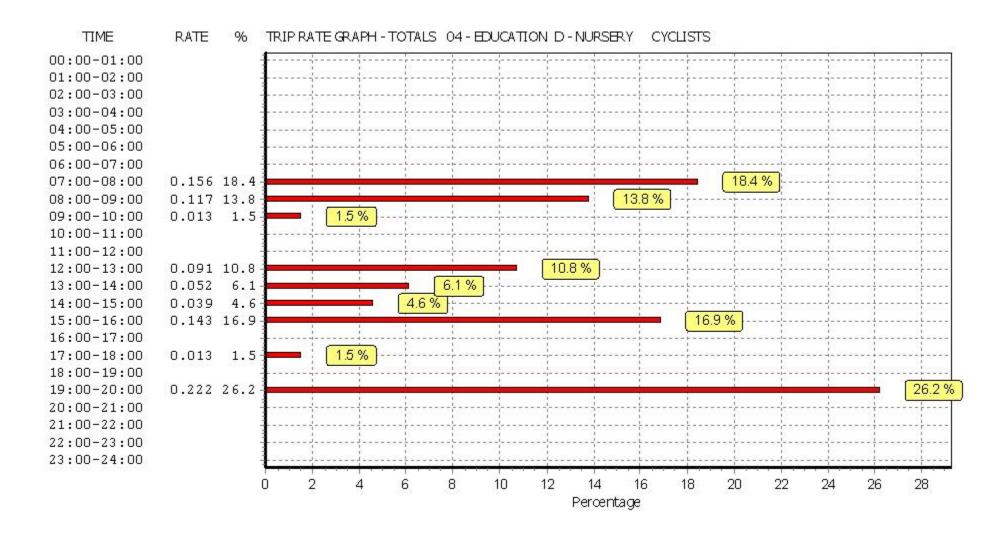
		ARRIVALS		[	DEPARTURES			TOTALS	TOTALS			
	No.	Ave.	Trip	No.	Ave.	Trip	No.	Ave.	Trip			
Time Range	Days	GFA	Rate	Days	GFA	Rate	Days	GFA	Rate			
00:00 - 01:00												
01:00 - 02:00												
02:00 - 03:00												
03:00 - 04:00												
04:00 - 05:00												
05:00 - 06:00												
06:00 - 07:00	1	450	0.000	1	450	0.000	1	450	0.000			
07:00 - 08:00	14	551	0.117	14	551	0.039	14	551	0.156			
08:00 - 09:00	14	551	0.091	14	551	0.026	14	551	0.117			
09:00 - 10:00	14	551	0.013	14	551	0.000	14	551	0.013			
10:00 - 11:00	14	551	0.000	14	551	0.000	14	551	0.000			
11:00 - 12:00	14	551	0.000	14	551	0.000	14	551	0.000			
12:00 - 13:00	14	551	0.052	14	551	0.039	14	551	0.091			
13:00 - 14:00	14	551	0.013	14	551	0.039	14	551	0.052			
14:00 - 15:00	14	551	0.013	14	551	0.026	14	551	0.039			
15:00 - 16:00	14	551	0.026	14	551	0.117	14	551	0.143			
16:00 - 17:00	14	551	0.000	14	551	0.000	14	551	0.000			
17:00 - 18:00	14	551	0.000	14	551	0.013	14	551	0.013			
18:00 - 19:00	13	582	0.000	13	582	0.000	13	582	0.000			
19:00 - 20:00	1	450	0.000	1	450	0.222	1	450	0.222			
20:00 - 21:00	1	450	0.000	1	450	0.000	1	450	0.000			
21:00 - 22:00												
22:00 - 23:00												
23:00 - 24:00												
Total Rates:			0.325			0.521			0.846			

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

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







TRIP RATE for Land Use 04 - EDUCATION/D - NURSERY

**CARS** 

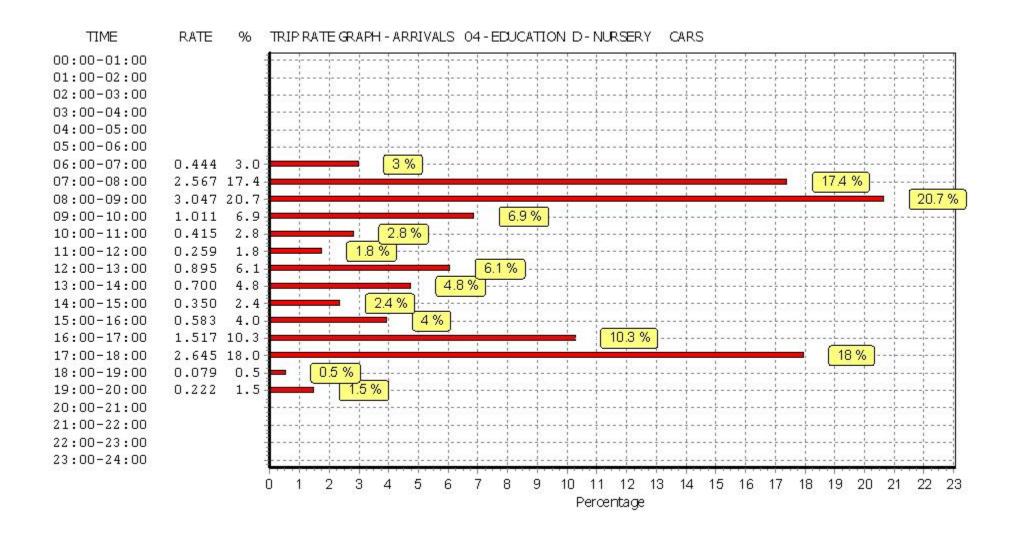
Calculation factor: 100 sqm

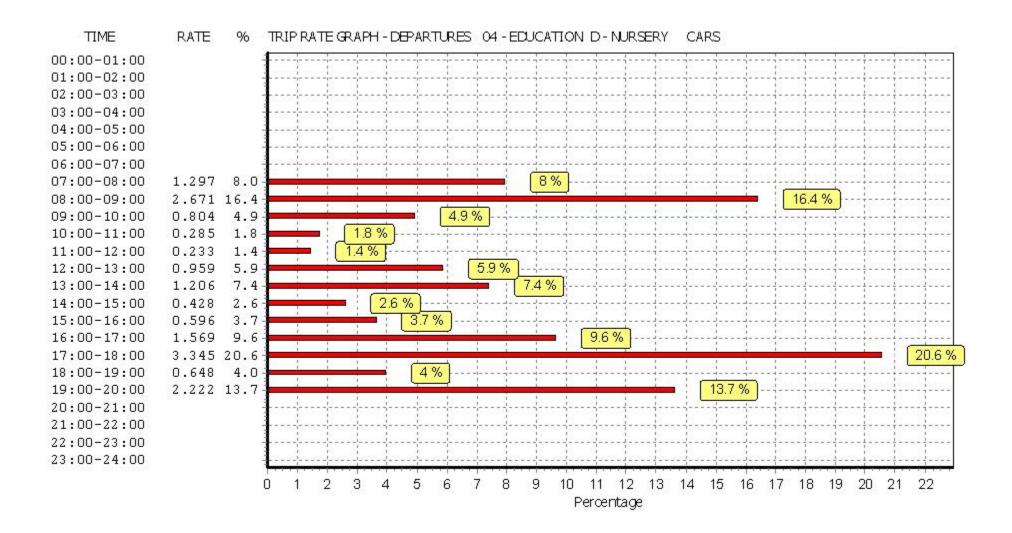
BOLD print indicates peak (busiest) period

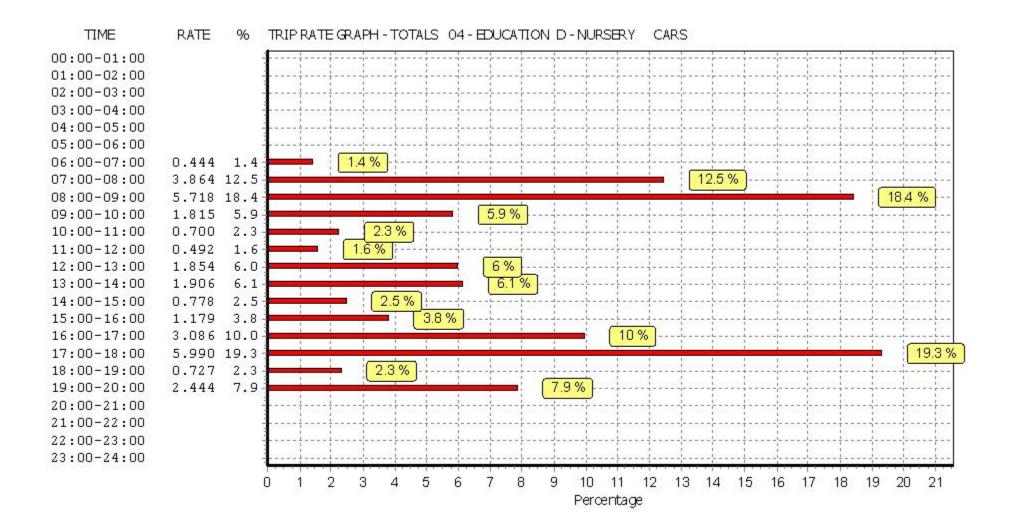
		ARRIVALS DEPARTURES TOTALS							
	No.	Ave.	Trip	No.	Ave.	Trip	No.	Ave.	Trip
Time Range	Days	GFA	Rate	Days	GFA	Rate	Days	GFA	Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00	1	450	0.444	1	450	0.000	1	450	0.444
07:00 - 08:00	14	551	2.567	14	551	1.297	14	551	3.864
08:00 - 09:00	14	551	3.047	14	551	2.671	14	551	5.718
09:00 - 10:00	14	551	1.011	14	551	0.804	14	551	1.815
10:00 - 11:00	14	551	0.415	14	551	0.285	14	551	0.700
11:00 - 12:00	14	551	0.259	14	551	0.233	14	551	0.492
12:00 - 13:00	14	551	0.895	14	551	0.959	14	551	1.854
13:00 - 14:00	14	551	0.700	14	551	1.206	14	551	1.906
14:00 - 15:00	14	551	0.350	14	551	0.428	14	551	0.778
15:00 - 16:00	14	551	0.583	14	551	0.596	14	551	1.179
16:00 - 17:00	14	551	1.517	14	551	1.569	14	551	3.086
17:00 - 18:00	14	551	2.645	14	551	3.345	14	551	5.990
18:00 - 19:00	13	582	0.079	13	582	0.648	13	582	0.727
19:00 - 20:00	1	450	0.222	1	450	2.222	1	450	2.444
20:00 - 21:00	1	450	0.000	1	450	0.000	1	450	0.000
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			14.734			16.263			30.997

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

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







TRIP RATE for Land Use 04 - EDUCATION/D - NURSERY

**LGVS** 

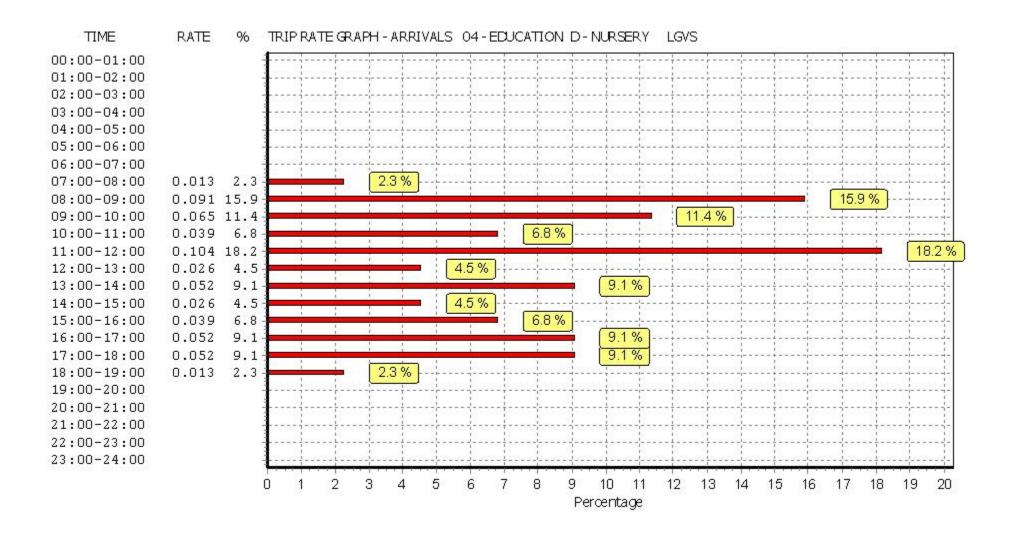
Calculation factor: 100 sqm

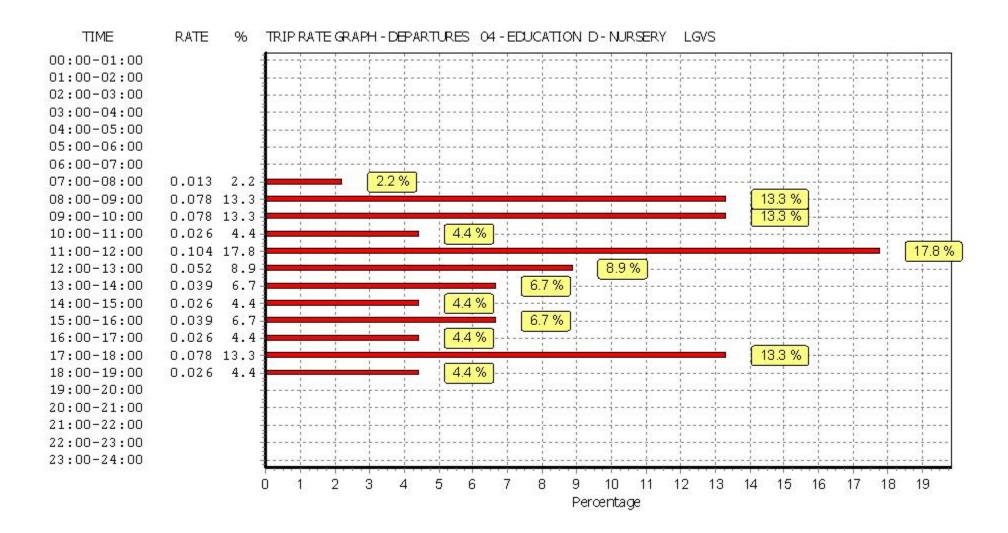
BOLD print indicates peak (busiest) period

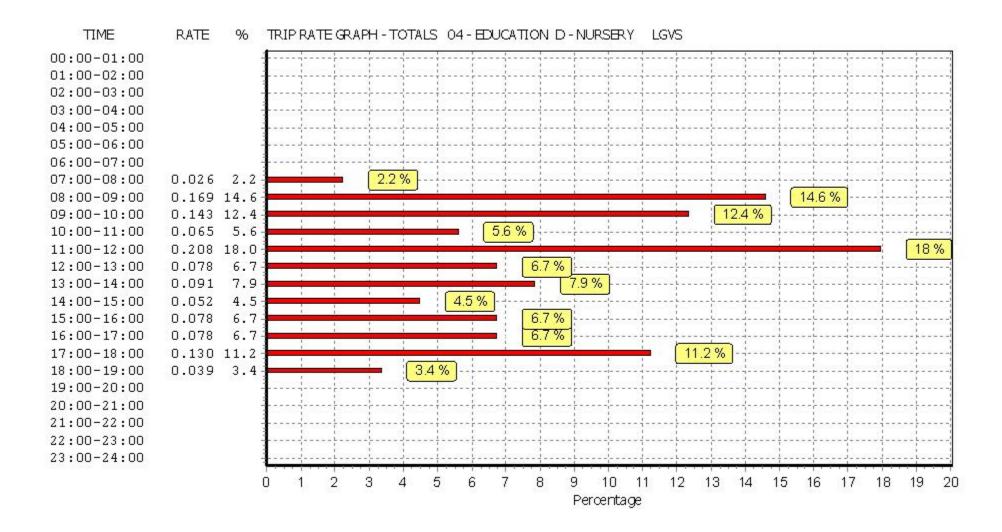
		ARRIVALS		[	DEPARTURES	5		TOTALS	
	No.	Ave.	Trip	No.	Ave.	Trip	No.	Ave.	Trip
Time Range	Days	GFA	Rate	Days	GFA	Rate	Days	GFA	Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00	1	450	0.000	1	450	0.000	1	450	0.000
07:00 - 08:00	14	551	0.013	14	551	0.013	14	551	0.026
08:00 - 09:00	14	551	0.091	14	551	0.078	14	551	0.169
09:00 - 10:00	14	551	0.065	14	551	0.078	14	551	0.143
10:00 - 11:00	14	551	0.039	14	551	0.026	14	551	0.065
11:00 - 12:00	14	551	0.104	14	551	0.104	14	551	0.208
12:00 - 13:00	14	551	0.026	14	551	0.052	14	551	0.078
13:00 - 14:00	14	551	0.052	14	551	0.039	14	551	0.091
14:00 - 15:00	14	551	0.026	14	551	0.026	14	551	0.052
15:00 - 16:00	14	551	0.039	14	551	0.039	14	551	0.078
16:00 - 17:00	14	551	0.052	14	551	0.026	14	551	0.078
17:00 - 18:00	14	551	0.052	14	551	0.078	14	551	0.130
18:00 - 19:00	13	582	0.013	13	582	0.026	13	582	0.039
19:00 - 20:00	1	450	0.000	1	450	0.000	1	450	0.000
20:00 - 21:00	1	450	0.000	1	450	0.000	1	450	0.000
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.572			0.585			1.157

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

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









Appendix C : PICADY



# **Junctions 9**

### **PICADY 9 - Priority Intersection Module**

Version: 9.5.2.1013 © Copyright TRL Limited, 2019

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The users of this computer program for the solution of an engineering problem are in no way relieved of their responsibility for the correctness of the solution

Filename: Centre park road\_Marguee Road\_Junction.j9

Path: G:\2024\p240002\calcs\picady\EIAR Report generation date: 23/10/2024 16:56:04

»Base 2024 - BASE 2024, AM
»Base 2024 - BASE 2024, PM
»Do Minimum - DM 2026, AM
»Do Minimum - DM 2031, AM
»Do Minimum - DM 2031, PM
»Do Minimum - DM 2041, AM
»Do Minimum - DM 2041, PM
»Do Something - DS 2026, PM
»Do Something - DS 2031, AM
»Do Something - DS 2031, AM
»Do Something - DS 2031, PM
»Do Something - DS 2041, AM

»Do Something - DS 2041, PM



## Summary of junction performance

	AM						Р	М		
	Set ID	Queue (PCU)	Delay (s)	RFC	LOS	Set ID	Queue (PCU)	Delay (s)	RFC	LOS
			В	ase 2	2024 -	BASE	2024			
Stream B-C		0.5	9.32	0.29	Α		0.1	7.50	0.09	Α
Stream B-A	A1 D1	0.1	9.69	0.09	Α	A1 D2	0.3	12.14	0.22	В
Stream C-AB		0.1	7.46	0.09	Α		0.3	7.03	0.16	Α

		Α	.M		PM								
	Set ID	Queue (PCU)	Delay (s)	RFC	LOS	Set ID	Queue (PCU)	Delay (s)	RFC	LOS			
				o Mir	nimur	n - DM	2026						
Stream B-C		0.6	10.94	0.34	В		0.2	8.97	0.14	А			
Stream B-A	A2 D3	0.4	13.23	0.27	В	A2 D4	0.9	19.26	0.45	С			
Stream C-AB		0.2	7.58	0.14	Α		0.4	7.21	0.20	Α			
		Do Minimum - DM 2031											
Stream B-C		0.7	11.84	0.38	В		0.2	9.68	0.13	А			
Stream B-A	A2 D5	0.3	12.57	0.21	В	A2 D6	2.8	40.19	0.73	Е			
Stream C-AB		0.2	8.20	0.13	Α		0.5	6.79	0.23	Α			
				o Mir	nimur	n - DM	2041						
Stream B-C		0.8	12.60	0.41	В		0.2	9.99	0.14	А			
Stream B-A	A2 D7	0.3	12.86	0.22	В	A2 D8	3.3	46.69	0.77	Е			
Stream C-AB		0.2	8.26	0.14	Α		0.6	6.90	0.25	Α			

		А	.M		PM								
	Set ID	Queue (PCU)	Delay (s)	RFC	LOS	Set ID	Queue (PCU)	Delay (s)	RFC	Los			
		Do Something - DS 2026											
Stream B-C		0.6	11.08	0.35	В		0.2	9.04	0.14	А			
Stream B-A	A3 D9	0.4	13.53	0.29	В	A3 D10	0.9	19.84	0.46	С			
Stream C-AB		0.2	7.60	0.14	Α		0.4	7.20	0.20	Α			
		Do Something - DS 2031											
Stream B-C		0.7	11.99	0.38	В		0.2	9.77	0.13	А			
Stream B-A	A3 D11	0.3	12.87	0.22	В	A3 D12	3.0	42.75	0.75	Е			
Stream C-AB		0.2	8.21	0.13	Α		0.5	6.79	0.23	Α			
			D	o Son	nethir	ng - DS	2041						
Stream B-C		0.8	12.77	0.42	В		0.2	10.09	0.14	В			
Stream B-A	A3 D13	0.3	13.14	0.23	В	A3 D14	3.6	50.07	0.79	F			
Stream C-AB		0.2	8.29	0.14	Α		0.6	6.90	0.26	Α			

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



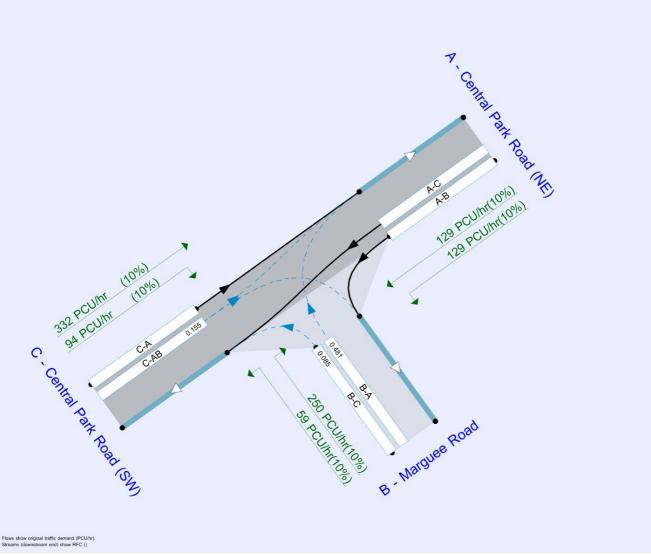
### File summary

### **File Description**

Title	PROPOSED DEVELOPMENT AT FORDS FORDS SITE, CORK
Location	CORK
Site number	
Date	12/06/2024
Version	
Status	
Identifier	
Client	
Jobnumber	240002
Enumerator	VJ
Description	

#### **Units**

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



The junction diagram reflects the last run of Junctions.



# **Analysis Options**

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

## **Demand Set Summary**

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D1	BASE 2024	AM	ONE HOUR	07:45	09:15	15	✓
D2	BASE 2024	PM	ONE HOUR	17:45	19:15	15	✓
D3	DM 2026	AM	ONE HOUR	07:45	09:15	15	✓
D4	DM 2026	PM	ONE HOUR	17:45	19:15	15	✓
D5	DM 2031	AM	ONE HOUR	07:45	09:15	15	✓
D6	DM 2031	PM	ONE HOUR	17:45	19:15	15	✓
D7	DM 2041	AM	ONE HOUR	07:45	09:15	15	✓
D8	DM 2041	PM	ONE HOUR	17:45	19:15	15	✓
D9	DS 2026	AM	ONE HOUR	07:45	09:15	15	✓
D10	DS 2026	PM	ONE HOUR	17:45	19:15	15	✓
D11	DS 2031	AM	ONE HOUR	07:45	09:15	15	✓
D12	DS 2031	PM	ONE HOUR	17:45	19:15	15	✓
D13	DS 2041	AM	ONE HOUR	07:45	09:15	15	✓
D14	DS 2041	PM	ONE HOUR	17:45	19:15	15	✓



# Base 2024 - BASE 2024, AM

#### **Data Errors and Warnings**

No errors or warnings

#### **Analysis Set Details**

ID	Name	Include in report	Use specific Demand Set(s)	Specific Demand Set(s)	Network flow scaling factor (%)	Network capacity scaling factor (%)
A1	Base 2024	✓	<b>✓</b>	D1,D2	100.000	100.000

# **Junction Network**

#### **Junctions**

	Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
ĺ	1	untitled	T-Junction	Two-way		6.84	А

### **Junction Network Options**

Driving side	Lighting
Left	Normal/unknown

### **Arms**

#### **Arms**

Arm	Name	Description	Arm type
Α	Central Park Road (NE)		Major
В	Marguee Road		Minor
С	Central Park Road (SW)		Major

### **Major Arm Geometry**

Arm	Width of carriageway (m)	Has kerbed central reserve	Has right turn bay	Visibility for right turn (m)	Blocks?	Blocking queue (PCU)
C - Central Park Road (SW)	6.00			0.0	✓	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 (Left) (m)	Lane Width (Right) (m)	Visibility to left (m)	Visibility to right (m)
B - Marguee Road	Two lanes	3.00	3.00	0	0

#### 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	478	0.087	0.220	0.138	0.314
B-C	624	0.096	0.242	-	-
С-В	574	0.222	0.222	-	-

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

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

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



# **Traffic Demand**

### **Demand Set Details**

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D1	BASE 2024	AM	ONE HOUR	07:45	09:15	15	✓

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

### **Demand overview (Traffic)**

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A - Central Park Road (NE)		ONE HOUR	✓	49	100.000
B - Marguee Road		ONE HOUR	✓	196	100.000
C - Central Park Road (SW)		ONE HOUR	✓	78	100.000

# **Origin-Destination Data**

### Demand (PCU/hr)

		То									
		A - Central Park Road (NE)	B - Marguee Road	C - Central Park Road (SW)							
	A - Central Park Road (NE)	0	24	25							
From	B - Marguee Road	36	0	160							
	C - Central Park Road (SW)	31	47	0							

# Vehicle Mix

### **Heavy Vehicle Percentages**

		То									
		A - Central Park Road (NE)	B - Marguee Road	C - Central Park Road (SW)							
	A - Central Park Road (NE)	10	10	10							
From	B - Marguee Road	10	10	10							
	C - Central Park Road (SW)	10	10	10							

# Results

### Results Summary for whole modelled period

	•		•					
Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)		
в-с	0.29	9.32	0.5	А	147	220		
B-A	0.09	9.69	0.1	А	33	50		
C-AB	0.09	7.46	0.1	А	45	68		
C-A					26	39		
A-B					22	33		
A-C					23	34		



# Main Results for each time segment

#### 07:45 - 08:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
в-с	120	30	609	0.198	119	0.0	0.3	8.078	А
B-A	27	7	458	0.059	27	0.0	0.1	9.183	А
C-AB	37	9	582	0.063	37	0.0	0.1	7.260	А
C-A	22	5			22				
A-B	18	5			18				
A-C	19	5			19				

### 08:00 - 08:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
в-с	144	36	605	0.238	144	0.3	0.3	8.569	A
B-A	32	8	454	0.071	32	0.1	0.1	9.394	A
C-AB	44	11	583	0.076	44	0.1	0.1	7.347	A
C-A	26	6			26				
A-B	22	5			22				
A-C	22	6			22				

#### 08:15 - 08:30

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
В-С	176	44	601	0.293	176	0.3	0.4	9.301	A
B-A	40	10	448	0.088	40	0.1	0.1	9.683	А
C-AB	55	14	585	0.094	55	0.1	0.1	7.463	A
C-A	31	8			31				
A-B	26	7			26				
A-C	28	7			28				

#### 08:30 - 08:45

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
в-с	176	44	601	0.293	176	0.4	0.5	9.320	А
B-A	40	10	448	0.088	40	0.1	0.1	9.688	А
C-AB	55	14	585	0.094	55	0.1	0.1	7.464	А
C-A	31	8			31				
A-B	26	7			26				
A-C	28	7			28				

#### 08:45 - 09:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
в-с	144	36	605	0.238	144	0.5	0.3	8.596	А
B-A	32	8	454	0.071	32	0.1	0.1	9.402	А
C-AB	44	11	583	0.076	44	0.1	0.1	7.353	А
C-A	26	6			26				
A-B	22	5			22				
A-C	22	6			22				

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#### 09:00 - 09:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
в-с	120	30	608	0.198	121	0.3	0.3	8.125	А
B-A	27	7	458	0.059	27	0.1	0.1	9.201	А
C-AB	37	9	582	0.063	37	0.1	0.1	7.268	А
C-A	22	5			22				
A-B	18	5			18				
A-C	19	5			19				



# Base 2024 - BASE 2024, PM

#### **Data Errors and Warnings**

No errors or warnings

#### **Analysis Set Details**

10	Name	Include in report	Use specific Demand Set(s)	Specific Demand Set(s)	Network flow scaling factor (%)	Network capacity scaling factor (%)
A	Base 2024	✓	✓	D1,D2	100.000	100.000

# **Junction Network**

#### **Junctions**

	Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
ĺ	1	untitled	T-Junction	Two-way		4.78	А

#### **Junction Network Options**

Driving side	Lighting
Left	Normal/unknown

#### **Arms**

#### **Arms**

Arm	Name	Description	Arm type
A Central Park Road (NE)			Major
В	Marguee Road		Minor
С	Central Park Road (SW)		Major

#### **Major Arm Geometry**

Arm	Width of carriageway (m)	Has kerbed central reserve	Has right turn bay	Visibility for right turn (m)	Blocks?	Blocking queue (PCU)
C - Central Park Road (SW)	6.00			0.0	✓	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 (Left) (m)	Lane Width (Right) (m)	Visibility to left (m)	Visibility to right (m)
B - Marguee Road	Two lanes	3.00	3.00	0	0

#### 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	478	0.087	0.220	0.138	0.314
B-C	624	0.096	0.242	-	-
С-В	574	0.222	0.222	-	-

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

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



#### **Demand Set Details**

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D2	BASE 2024	PM	ONE HOUR	17:45	19:15	15	✓

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

#### **Demand overview (Traffic)**

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A - Central Park Road (NE)		ONE HOUR	✓	68	100.000
B - Marguee Road		ONE HOUR	✓	128	100.000
C - Central Park Road (SW)		ONE HOUR	✓	225	100.000

# **Origin-Destination Data**

#### Demand (PCU/hr)

	То							
		A - Central Park Road (NE)	B - Marguee Road	C - Central Park Road (SW)				
F	A - Central Park Road (NE)	0	34	34				
From	B - Marguee Road	83	0	45				
	C - Central Park Road (SW)	151	74	0				

# **Vehicle Mix**

#### **Heavy Vehicle Percentages**

	То							
		A - Central Park Road (NE)	B - Marguee Road	C - Central Park Road (SW)				
F	A - Central Park Road (NE)	10	10	10				
From	B - Marguee Road	10	10	10				
	C - Central Park Road (SW)	10	10	10				

# Results

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
В-С	0.09	7.50	0.1	Α	41	62
B-A	0.22	12.14	0.3	В	76	114
C-AB	0.16	7.03	0.3	А	87	130
C-A					120	179
A-B					31	47
A-C					31	47



#### 17:45 - 18:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
в-с	34	8	593	0.057	34	0.0	0.1	7.072	А
B-A	62	16	437	0.143	62	0.0	0.2	10.540	В
C-AB	68	17	641	0.106	67	0.0	0.2	6.899	А
C-A	102	25			102				
A-B	26	6			26				
A-C	26	6			26				

#### 18:00 - 18:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
в-с	40	10	587	0.069	40	0.1	0.1	7.249	Α
B-A	75	19	429	0.174	74	0.2	0.2	11.175	В
C-AB	84	21	654	0.129	84	0.2	0.2	6.948	A
C-A	118	30			118				
A-B	31	8			31				
A-C	31	8			31				

#### 18:15 - 18:30

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
В-С	50	12	578	0.086	49	0.1	0.1	7.499	A
B-A	91	23	418	0.219	91	0.2	0.3	12.120	В
C-AB	108	27	672	0.161	108	0.2	0.3	7.023	А
C-A	139	35			139				
A-B	37	9			37				
A-C	37	9			37				

#### 18:30 - 18:45

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
в-с	50	12	577	0.086	50	0.1	0.1	7.501	Α
B-A	91	23	417	0.219	91	0.3	0.3	12.144	В
C-AB	109	27	672	0.161	109	0.3	0.3	7.029	А
C-A	139	35			139				
A-B	37	9			37				
A-C	37	9			37				

#### 18:45 - 19:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	40	10	586	0.069	41	0.1	0.1	7.253	А
B-A	75	19	428	0.174	75	0.3	0.2	11.210	В
C-AB	84	21	654	0.129	84	0.3	0.2	6.958	А
C-A	118	30			118				
A-B	31	8			31				
A-C	31	8			31				



#### 19:00 - 19:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
В-С	34	8	593	0.057	34	0.1	0.1	7.083	А
B-A	62	16	437	0.143	63	0.2	0.2	10.598	В
C-AB	68	17	641	0.106	68	0.2	0.2	6.920	А
C-A	102	25			102				
A-B	26	6			26				
A-C	26	6			26				



# Do Minimum - DM 2026, AM

#### **Data Errors and Warnings**

No errors or warnings

#### **Analysis Set Details**

I	D	Name	Include in report	Use specific Demand Set(s)	Specific Demand Set(s)	Network flow scaling factor (%)	Network capacity scaling factor (%)
	<b>A2</b>	Do Minimum	✓	✓	D3,D4,D5,D6,D7,D8	100.000	100.000

# **Junction Network**

#### **Junctions**

	Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
ĺ	1	untitled	T-Junction	Two-way		6.38	А

#### **Junction Network Options**

Driving side	Lighting
Left	Normal/unknown

#### **Arms**

#### **Arms**

Arm	Name	Description	Arm type
Α	Central Park Road (NE)		Major
В	Marguee Road		Minor
С	Central Park Road (SW)		Major

#### **Major Arm Geometry**

Arm	Width of carriageway (m)	Has kerbed central reserve	Has right turn bay	Visibility for right turn (m)	Blocks?	Blocking queue (PCU)
C - Central Park Road (SW)	6.00			0.0	✓	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 (Left) (m)	Lane Width (Right) (m)	Visibility to left (m)	Visibility to right (m)
B - Marguee Road	Two lanes	3.00	3.00	0	0

#### 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	478	0.087	0.220	0.138	0.314
B-C	624	0.096	0.242	-	-
С-В	574	0.222	0.222	-	-

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

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



#### **Demand Set Details**

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D3	DM 2026	AM	ONE HOUR	07:45	09:15	15	✓

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

#### **Demand overview (Traffic)**

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A - Central Park Road (NE)		ONE HOUR	✓	163	100.000
B - Marguee Road		ONE HOUR	✓	276	100.000
C - Central Park Road (SW)		ONE HOUR	✓	163	100.000

# **Origin-Destination Data**

#### Demand (PCU/hr)

		То									
		A - Central Park Road (NE)	B - Marguee Road	C - Central Park Road (SW)							
F	A - Central Park Road (NE)	0	81	82							
From	B - Marguee Road	103	0	173							
	C - Central Park Road (SW)	98	65	0							

# **Vehicle Mix**

#### **Heavy Vehicle Percentages**

		То									
		A - Central Park Road (NE)	B - Marguee Road	C - Central Park Road (SW)							
F	A - Central Park Road (NE)	10	10	10							
From	B - Marguee Road	10	10	10							
	C - Central Park Road (SW)	10	10	10							

# Results

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
В-С	0.34	10.94	0.6	В	159	238
B-A	0.27	13.23	0.4	В	95	142
C-AB	0.14	7.58	0.2	А	70	106
C-A					79	119
A-B					74	111
A-C					75	113



#### 07:45 - 08:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
в-с	130	33	576	0.226	129	0.0	0.3	8.830	А
B-A	78	19	433	0.179	77	0.0	0.2	11.071	В
C-AB	56	14	598	0.093	55	0.0	0.1	7.290	A
C-A	67	17			67				
A-B	61	15			61				
A-C	62	15			62				

#### 08:00 - 08:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
в-с	156	39	566	0.275	155	0.3	0.4	9.626	A
B-A	93	23	425	0.218	92	0.2	0.3	11.908	В
C-AB	69	17	603	0.114	68	0.1	0.2	7.407	A
C-A	78	20			78				
A-B	73	18			73				
A-C	74	18			74				

#### 08:15 - 08:30

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
В-С	190	48	552	0.345	190	0.4	0.6	10.903	В
B-A	113	28	413	0.275	113	0.3	0.4	13.195	В
C-AB	87	22	610	0.143	87	0.2	0.2	7.571	A
C-A	92	23			92				
A-B	89	22			89				
A-C	90	23			90				

#### 08:30 - 08:45

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
в-с	190	48	552	0.345	190	0.6	0.6	10.944	В
B-A	113	28	413	0.275	113	0.4	0.4	13.234	В
C-AB	87	22	610	0.143	87	0.2	0.2	7.575	А
C-A	92	23			92				
A-B	89	22			89				
A-C	90	23			90				

#### 08:45 - 09:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
в-с	156	39	566	0.275	156	0.6	0.4	9.679	A
B-A	93	23	424	0.218	93	0.4	0.3	11.962	В
C-AB	69	17	603	0.114	69	0.2	0.2	7.416	А
C-A	78	19			78				
A-B	73	18			73				
A-C	74	18			74				



#### 09:00 - 09:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
В-С	130	33	576	0.226	131	0.4	0.3	8.905	А
B-A	78	19	433	0.179	78	0.3	0.2	11.154	В
C-AB	56	14	598	0.093	56	0.2	0.1	7.311	А
C-A	67	17			67				
A-B	61	15			61				
A-C	62	15			62				



# Do Minimum - DM 2026, PM

#### **Data Errors and Warnings**

No errors or warnings

#### **Analysis Set Details**

I	D	Name	Include in report	Use specific Demand Set(s)	Specific Demand Set(s)	Network flow scaling factor (%)	Network capacity scaling factor (%)
	<b>A2</b>	Do Minimum	✓	✓	D3,D4,D5,D6,D7,D8	100.000	100.000

# **Junction Network**

#### **Junctions**

	Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
ĺ	1	untitled	T-Junction	Two-way		5.70	А

#### **Junction Network Options**

Driving side	Lighting
Left	Normal/unknown

#### **Arms**

#### **Arms**

Arm	Name	Description	Arm type
Α	Central Park Road (NE)		Major
В	Marguee Road		Minor
С	Central Park Road (SW)		Major

#### **Major Arm Geometry**

Arm	Width of carriageway (m)	Has kerbed central reserve	Has right turn bay	Visibility for right turn (m)	Blocks?	Blocking queue (PCU)
C - Central Park Road (SW)	6.00			0.0	✓	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 (Left) (m)	Lane Width (Right) (m)	Visibility to left (m)	Visibility to right (m)
B - Marguee Road	Two lanes	3.00	3.00	0	0

#### 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	478	0.087	0.220	0.138	0.314
B-C	624	0.096	0.242	-	-
С-В	574	0.222	0.222	-	-

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

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



#### **Demand Set Details**

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D4	DM 2026	PM	ONE HOUR	17:45	19:15	15	✓

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

#### **Demand overview (Traffic)**

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A - Central Park Road (NE)		ONE HOUR	✓	246	100.000
B - Marguee Road		ONE HOUR	✓	217	100.000
C - Central Park Road (SW)		ONE HOUR	✓	304	100.000

# **Origin-Destination Data**

#### Demand (PCU/hr)

		То		
		A - Central Park Road (NE)	B - Marguee Road	C - Central Park Road (SW)
F	A - Central Park Road (NE)	0	123	123
From	B - Marguee Road	153	0	64
	C - Central Park Road (SW)	223	81	0

# **Vehicle Mix**

#### **Heavy Vehicle Percentages**

		То		
		A - Central Park Road (NE)	B - Marguee Road	C - Central Park Road (SW)
F	A - Central Park Road (NE)	10	10	10
From	B - Marguee Road	10	10	10
	C - Central Park Road (SW)	10	10	10

# Results

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
в-с	0.14	8.97	0.2	А	59	88
B-A	0.45	19.26	0.9	С	140	211
C-AB	0.20	7.21	0.4	А	109	163
C-A					170	256
A-B					113	169
A-C					113	169



#### 17:45 - 18:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
В-С	48	12	551	0.087	48	0.0	0.1	7.866	A
B-A	115	29	407	0.283	113	0.0	0.4	13.417	В
C-AB	82	21	651	0.126	81	0.0	0.2	6.947	А
C-A	147	37			147				
A-B	93	23			93				
A-C	93	23			93				

#### 18:00 - 18:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
в-с	58	14	535	0.108	57	0.1	0.1	8.295	A
B-A	138	34	393	0.350	137	0.4	0.6	15.423	С
C-AB	104	26	667	0.157	104	0.2	0.3	7.042	A
C-A	169	42			169				
A-B	111	28			111				
A-C	111	28			111				

#### 18:15 - 18:30

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
В-С	70	18	512	0.138	70	0.1	0.2	8.960	A
B-A	168	42	374	0.450	167	0.6	0.9	19.046	С
C-AB	139	35	689	0.202	139	0.3	0.4	7.196	A
C-A	196	49			196				
A-B	135	34			135				
A-C	135	34			135				

#### 18:30 - 18:45

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
в-с	70	18	512	0.138	70	0.2	0.2	8.973	А
B-A	168	42	374	0.451	168	0.9	0.9	19.257	С
C-AB	139	35	690	0.202	139	0.4	0.4	7.205	A
C-A	196	49			196				
A-B	135	34			135				
A-C	135	34			135				

#### 18:45 - 19:00

	0.00								
Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
в-с	58	14	534	0.108	58	0.2	0.1	8.317	A
B-A	138	34	393	0.350	139	0.9	0.6	15.645	С
C-AB	105	26	667	0.157	105	0.4	0.3	7.057	A
C-A	169	42			169				
A-B	111	28			111				
A-C	111	28			111				



#### 19:00 - 19:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
в-с	48	12	550	0.088	48	0.1	0.1	7.897	А
B-A	115	29	407	0.283	116	0.6	0.4	13.647	В
C-AB	82	21	651	0.127	83	0.3	0.2	6.974	А
C-A	146	37			146				
A-B	93	23			93				
A-C	93	23			93				



# Do Minimum - DM 2031, AM

#### **Data Errors and Warnings**

No errors or warnings

#### **Analysis Set Details**

I	D	Name	Include in report	Use specific Demand Set(s)	Specific Demand Set(s)	Network flow scaling factor (%)	Network capacity scaling factor (%)
	<b>A2</b>	Do Minimum	✓	✓	D3,D4,D5,D6,D7,D8	100.000	100.000

# **Junction Network**

#### **Junctions**

	Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
ĺ	1	untitled	T-Junction	Two-way		5.30	А

#### **Junction Network Options**

Driving side	Lighting
Left	Normal/unknown

#### **Arms**

#### **Arms**

Arm	Name	Description	Arm type
Α	Central Park Road (NE)		Major
В	Marguee Road		Minor
С	Central Park Road (SW)		Major

#### **Major Arm Geometry**

Arm	Width of carriageway (m)	Has kerbed central reserve	Has right turn bay	Visibility for right turn (m)	Blocks?	Blocking queue (PCU)
C - Central Park Road (SW)	6.00			0.0	✓	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 (Left) (m)		Lane Width (Right) (m)	Visibility to left (m)	Visibility to right (m)	
B - Marguee Road	B - Marquee Road Two lanes		3.00	0	0	

#### Slope / Intercept / Capacity

#### **Priority Intersection Slopes and Intercepts**

			•		
Stream	tream Intercept (PCU/hr)				Slope for C-B
B-A	478	0.087	0.220	0.138	0.314
B-C	624	0.096	0.242	-	-
С-В	574	0.222	0.222	-	-

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

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



#### **Demand Set Details**

ID	Scenario name	cenario name   Time Period name   Traffic profile type		Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min) Run automatica		
D5	DM 2031	AM	ONE HOUR	07:45	09:15	15	✓	

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

#### **Demand overview (Traffic)**

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A - Central Park Road (NE)		ONE HOUR	✓	303	100.000
B - Marguee Road		ONE HOUR	✓	259	100.000
C - Central Park Road (SW)		ONE HOUR	✓	125	100.000

# **Origin-Destination Data**

#### Demand (PCU/hr)

	То							
		A - Central Park Road (NE)	B - Marguee Road	C - Central Park Road (SW)				
	A - Central Park Road (NE)	0	151	152				
From	B - Marguee Road	74	0	185				
	C - Central Park Road (SW)	69	56	0				

# **Vehicle Mix**

#### **Heavy Vehicle Percentages**

	То							
		A - Central Park Road (NE)	B - Marguee Road	C - Central Park Road (SW)				
	A - Central Park Road (NE)	10	10	10				
From	B - Marguee Road	10	10	10				
	C - Central Park Road (SW)	10	10	10				

# Results

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
В-С	0.38	11.84	0.7	В	170	255
B-A	0.21	12.57	0.3	В	68	102
C-AB	0.13	8.20	0.2	А	58	87
C-A					56	85
A-B					139	208
A-C					139	209



#### 07:45 - 08:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
в-с	139	35	566	0.246	138	0.0	0.4	9.217	А
B-A	56	14	422	0.132	55	0.0	0.2	10.762	В
C-AB	46	12	560	0.083	46	0.0	0.1	7.699	A
C-A	48	12			48				
A-B	114	28			114				
A-C	114	29			114				

#### 08:00 - 08:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
в-с	166	42	554	0.300	166	0.4	0.5	10.186	В
B-A	67	17	411	0.162	66	0.2	0.2	11.469	В
C-AB	57	14	558	0.102	57	0.1	0.1	7.901	A
C-A	56	14			56				
A-B	136	34			136				
A-C	137	34			137				

#### 08:15 - 08:30

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
В-С	204	51	538	0.379	203	0.5	0.7	11.776	В
B-A	81	20	397	0.205	81	0.2	0.3	12.547	В
C-AB	72	18	555	0.129	71	0.1	0.2	8.193	A
C-A	66	17			66				
A-B	166	42			166				
A-C	167	42			167				

#### 08:30 - 08:45

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
в-с	204	51	538	0.379	204	0.7	0.7	11.841	В
B-A	81	20	396	0.206	81	0.3	0.3	12.571	В
C-AB	72	18	555	0.129	72	0.2	0.2	8.200	А
C-A	66	17			66				
A-B	166	42			166				
A-C	167	42			167				

#### 08:45 - 09:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
в-с	166	42	554	0.300	167	0.7	0.5	10.248	В
B-A	67	17	411	0.162	67	0.3	0.2	11.503	В
C-AB	57	14	558	0.102	57	0.2	0.1	7.912	А
C-A	56	14			56				
A-B	136	34			136				
A-C	137	34			137				



#### 09:00 - 09:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
в-с	139	35	566	0.246	140	0.5	0.4	9.306	А
B-A	56	14	422	0.132	56	0.2	0.2	10.818	В
C-AB	47	12	560	0.083	47	0.1	0.1	7.716	А
C-A	48	12			48				
A-B	114	28			114				
A-C	114	29			114				



# Do Minimum - DM 2031, PM

#### **Data Errors and Warnings**

No errors or warnings

#### **Analysis Set Details**

ID	Name	Include in report	Use specific Demand Set(s)	Specific Demand Set(s)	Network flow scaling factor (%)	Network capacity scaling factor (%)
A2	Do Minimum	✓	✓	D3,D4,D5,D6,D7,D8	100.000	100.000

# **Junction Network**

#### **Junctions**

	Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
ĺ	1	untitled	T-Junction	Two-way		11.84	В

#### **Junction Network Options**

Driving side	Lighting		
Left	Normal/unknown		

#### **Arms**

#### **Arms**

Arm	Name	Description	Arm type
Α	Central Park Road (NE)		Major
В	Marguee Road		Minor
С	Central Park Road (SW)		Major

#### **Major Arm Geometry**

Arm	Width of carriageway (m)	Has kerbed central reserve	Has right turn bay	Visibility for right turn (m)	Blocks?	Blocking queue (PCU)
C - Central Park Road (SW)	6.00			0.0	✓	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 (Left) (m)	Lane Width (Right) (m)	Visibility to left (m)	Visibility to right (m)
B - Marguee Road	Two lanes	3.00	3.00	0	0

#### 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	478	0.087	0.220	0.138	0.314
B-C	624	0.096	0.242	-	-
С-В	574	0.222	0.222	-	-

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

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



#### **Demand Set Details**

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D6	DM 2031	PM	ONE HOUR	17:45	19:15	15	✓

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

#### **Demand overview (Traffic)**

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A - Central Park Road (NE)		ONE HOUR	✓	244	100.000
B - Marguee Road		ONE HOUR	✓	292	100.000
C - Central Park Road (SW)		ONE HOUR	✓	400	100.000

# **Origin-Destination Data**

#### Demand (PCU/hr)

		То		
		A - Central Park Road (NE)	B - Marguee Road	C - Central Park Road (SW)
F	A - Central Park Road (NE)	0	122	122
From	B - Marguee Road	238	0	54
	C - Central Park Road (SW)	313	87	0

# **Vehicle Mix**

#### **Heavy Vehicle Percentages**

		То		
		A - Central Park Road (NE)	B - Marguee Road	C - Central Park Road (SW)
F	A - Central Park Road (NE)	10	10	10
From	B - Marguee Road	10	10	10
	C - Central Park Road (SW)	10	10	10

# Results

Stream	Max RFC	Max RFC Max Delay (s)		Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
в-с	0.13	9.68	0.2	А	50	74
B-A	0.73	40.19	2.8	E	218	328
C-AB	0.23	6.79	0.5	А	135	202
C-A					233	349
A-B					112	168
A-C					112	168



#### 17:45 - 18:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
в-с	41	10	526	0.077	40	0.0	0.1	8.148	А
B-A	179	45	396	0.452	176	0.0	0.9	17.675	С
C-AB	99	25	699	0.141	98	0.0	0.3	6.582	А
C-A	202	51			202				
A-B	92	23			92				
A-C	92	23			92				

#### 18:00 - 18:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
в-с	49	12	503	0.097	48	0.1	0.1	8.709	Α
B-A	214	53	380	0.562	212	0.9	1.3	23.256	С
C-AB	128	32	725	0.177	128	0.3	0.4	6.641	А
C-A	231	58			231				
A-B	110	27			110				
A-C	110	27			110				

#### 18:15 - 18:30

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
В-С	59	15	471	0.126	59	0.1	0.2	9.621	A
B-A	262	66	358	0.731	257	1.3	2.6	37.181	E
C-AB	176	44	761	0.231	175	0.4	0.5	6.773	A
C-A	264	66			264				
A-B	134	34			134				
A-C	134	34			134				

#### 18:30 - 18:45

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
в-с	59	15	469	0.127	59	0.2	0.2	9.678	Α
B-A	262	66	358	0.731	261	2.6	2.8	40.188	Е
C-AB	176	44	761	0.232	176	0.5	0.5	6.787	А
C-A	264	66			264				
A-B	134	34			134				
A-C	134	34			134				

#### 18:45 - 19:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	49	12	500	0.097	49	0.2	0.1	8.776	А
B-A	214	53	380	0.563	219	2.8	1.5	25.295	D
C-AB	129	32	725	0.177	129	0.5	0.4	6.666	А
C-A	231	58			231				
A-B	110	27			110				
A-C	110	27			110				



#### 19:00 - 19:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
В-С	41	10	524	0.078	41	0.1	0.1	8.202	А
B-A	179	45	396	0.452	181	1.5	0.9	18.632	С
C-AB	99	25	699	0.142	100	0.4	0.3	6.614	A
C-A	202	50			202				
A-B	92	23			92				
A-C	92	23			92				



# Do Minimum - DM 2041, AM

#### **Data Errors and Warnings**

No errors or warnings

#### **Analysis Set Details**

I	D	Name	Include in report	Use specific Demand Set(s)	Specific Demand Set(s)	Network flow scaling factor (%)	Network capacity scaling factor (%)
	<b>A2</b>	Do Minimum	✓	✓	D3,D4,D5,D6,D7,D8	100.000	100.000

# **Junction Network**

#### **Junctions**

	Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
ĺ	1	untitled	T-Junction	Two-way		5.70	А

#### **Junction Network Options**

Driving side	Lighting
Left	Normal/unknown

#### **Arms**

#### **Arms**

Arm	Name	Description	Arm type
Α	Central Park Road (NE)		Major
В	Marguee Road		Minor
С	Central Park Road (SW)		Major

#### **Major Arm Geometry**

Arm	Width of carriageway (m)	Has kerbed central reserve	Has right turn bay	Visibility for right turn (m)	Blocks?	Blocking queue (PCU)
C - Central Park Road (SW)	6.00			0.0	✓	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 (Left) (m)	Lane Width (Right) (m)	Visibility to left (m)	Visibility to right (m)
B - Marguee Road	Two lanes	3.00	3.00	0	0

#### 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	478	0.087	0.220	0.138	0.314
B-C	624	0.096	0.242	-	-
С-В	574	0.222	0.222	-	-

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

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



#### **Demand Set Details**

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D7	DM 2041	AM	ONE HOUR	07:45	09:15	15	✓

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

#### **Demand overview (Traffic)**

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A - Central Park Road (NE)		ONE HOUR	✓	307	100.000
B - Marguee Road		ONE HOUR	✓	279	100.000
C - Central Park Road (SW)		ONE HOUR	✓	133	100.000

# **Origin-Destination Data**

#### Demand (PCU/hr)

	То								
		A - Central Park Road (NE)	B - Marguee Road	C - Central Park Road (SW)					
F	A - Central Park Road (NE)	0	153	154					
From	B - Marguee Road	78	0	201					
	C - Central Park Road (SW)	73	60	0					

# **Vehicle Mix**

#### **Heavy Vehicle Percentages**

	То							
		A - Central Park Road (NE)	B - Marguee Road	C - Central Park Road (SW)				
F	A - Central Park Road (NE)	10	10	10				
From	B - Marguee Road	10	10	10				
	C - Central Park Road (SW)	10	10	10				

# Results

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
В-С	0.41	12.60	0.8	В	184	277
B-A	0.22	12.86	0.3	В	72	107
C-AB	0.14	8.26	0.2	А	63	94
C-A					59	89
A-B					140	211
A-C					141	212



#### 07:45 - 08:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
в-с	151	38	564	0.268	150	0.0	0.4	9.513	А
B-A	59	15	421	0.140	58	0.0	0.2	10.904	В
C-AB	50	13	562	0.089	50	0.0	0.1	7.729	А
C-A	50	13			50				
A-B	115	29			115				
A-C	116	29			116				

#### 08:00 - 08:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
в-с	181	45	552	0.327	180	0.4	0.5	10.625	В
B-A	70	18	409	0.171	70	0.2	0.2	11.661	В
C-AB	61	15	560	0.109	61	0.1	0.2	7.943	A
C-A	58	15			58				
A-B	138	34			138				
A-C	138	35			138				

#### 08:15 - 08:30

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
В-С	221	55	536	0.413	220	0.5	0.8	12.524	В
B-A	86	21	394	0.218	86	0.2	0.3	12.833	В
C-AB	77	19	557	0.139	77	0.2	0.2	8.251	A
C-A	69	17			69				
A-B	168	42			168				
A-C	170	42			170				

#### 08:30 - 08:45

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
в-с	221	55	535	0.413	221	0.8	0.8	12.598	В
B-A	86	21	394	0.218	86	0.3	0.3	12.861	В
C-AB	77	19	557	0.139	77	0.2	0.2	8.260	А
C-A	69	17			69				
A-B	168	42			168				
A-C	170	42			170				

#### 08:45 - 09:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
в-с	181	45	552	0.327	182	0.8	0.5	10.713	В
B-A	70	18	409	0.171	70	0.3	0.2	11.700	В
C-AB	61	15	560	0.109	61	0.2	0.2	7.955	A
C-A	58	15			58				
A-B	138	34			138				
A-C	138	35			138				



#### 09:00 - 09:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
в-с	151	38	564	0.268	152	0.5	0.4	9.619	А
B-A	59	15	420	0.140	59	0.2	0.2	10.964	В
C-AB	50	13	562	0.089	50	0.2	0.1	7.749	А
C-A	50	12			50				
A-B	115	29			115				
A-C	116	29			116				



# Do Minimum - DM 2041, PM

#### **Data Errors and Warnings**

No errors or warnings

#### **Analysis Set Details**

ID	Name Include in report U		Use specific Demand Set(s)	Specific Demand Set(s)	Network flow scaling factor (%)	Network capacity scaling factor (%)	
A2	Do Minimum	✓	✓	D3,D4,D5,D6,D7,D8	100.000	100.000	

# **Junction Network**

#### **Junctions**

	Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
ĺ	1	untitled	T-Junction	Two-way		13.49	В

#### **Junction Network Options**

Driving side	Lighting
Left	Normal/unknown

#### **Arms**

#### **Arms**

Arm	Name	Description	Arm type
Α	Central Park Road (NE)		Major
В	Marguee Road		Minor
С	Central Park Road (SW)		Major

#### **Major Arm Geometry**

Arm	Width of carriageway (m)	Has kerbed central reserve	Has right turn bay	Visibility for right turn (m)	Blocks?	Blocking queue (PCU)
C - Central Park Road (SW)	6.00			0.0	✓	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**

1						
	Arm	Minor arm type	Lane Width (Left) (m)	Lane Width (Right) (m)	Visibility to left (m)	Visibility to right (m)
	B - Marguee Road	Two lanes	3.00	3.00	0	0

#### Slope / Intercept / Capacity

#### **Priority Intersection Slopes and Intercepts**

•			•		
Stream	Intercept (PCU/hr)	Slope Slope for A-B A-C		Slope for C-A	Slope for C-B
B-A	478	0.087	0.220	0.138	0.314
B-C	B-C 624		0.242	-	-
С-В	574	0.222	0.222	-	-

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

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



#### **Demand Set Details**

ID	Scenario name	cenario name Time Period name Traffic profile type		Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D8	DM 2041	PM	ONE HOUR	17:45	19:15	15	✓

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

#### **Demand overview (Traffic)**

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A - Central Park Road (NE)		ONE HOUR	✓	251	100.000
B - Marguee Road		ONE HOUR	✓	305	100.000
C - Central Park Road (SW)		ONE HOUR	✓	422	100.000

# **Origin-Destination Data**

#### Demand (PCU/hr)

	То									
		A - Central Park Road (NE) B - Marguee		C - Central Park Road (SW)						
	A - Central Park Road (NE)	0	126	125						
From	B - Marguee Road	246	0	59						
	C - Central Park Road (SW)	328	94	0						

# Vehicle Mix

#### **Heavy Vehicle Percentages**

		То									
		A - Central Park Road (NE)	B - Marguee Road	C - Central Park Road (SW)							
F	A - Central Park Road (NE)	10	10	10							
From	B - Marguee Road	10	10	10							
	C - Central Park Road (SW)	10	10	10							

# Results

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
в-с	0.14	9.99	0.2	А	54	81
B-A	0.77	46.69	3.3	Е	226	339
C-AB	0.25	6.90	0.6	А	149	224
C-A					238	357
A-B					116	173
A-C					115	172



#### 17:45 - 18:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
в-с	44	11	522	0.085	44	0.0	0.1	8.273	А
B-A	185	46	392	0.472	181	0.0	0.9	18.455	С
C-AB	109	27	706	0.154	108	0.0	0.3	6.616	А
C-A	209	52			209				
A-B	95	24			95				
A-C	94	24			94				

#### 18:00 - 18:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
в-с	53	13	498	0.106	53	0.1	0.1	8.891	A
B-A	221	55	376	0.589	219	0.9	1.5	24.920	С
C-AB	142	35	733	0.194	141	0.3	0.4	6.700	A
C-A	237	59			237				
A-B	113	28			113				
A-C	112	28			112				

#### 18:15 - 18:30

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
В-С	65	16	464	0.140	65	0.1	0.2	9.913	A
B-A	271	68	353	0.768	265	1.5	3.1	42.096	Е
C-AB	196	49	771	0.254	195	0.4	0.6	6.881	A
C-A	269	67			269				
A-B	139	35			139				
A-C	138	34			138				

#### 18:30 - 18:45

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
в-с	65	16	461	0.141	65	0.2	0.2	9.987	Α
B-A	271	68	352	0.769	270	3.1	3.3	46.691	Е
C-AB	196	49	772	0.254	196	0.6	0.6	6.899	A
C-A	269	67			269				
A-B	139	35			139				
A-C	138	34			138				

#### 18:45 - 19:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	53	13	494	0.107	53	0.2	0.1	8.979	A
B-A	221	55	375	0.589	228	3.3	1.7	27.855	D
C-AB	142	36	734	0.194	143	0.6	0.4	6.729	А
C-A	237	59			237				
A-B	113	28			113				
A-C	112	28			112				



#### 19:00 - 19:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
В-С	44	11	520	0.085	45	0.1	0.1	8.336	А
B-A	185	46	392	0.472	188	1.7	1.0	19.629	С
C-AB	109	27	706	0.155	110	0.4	0.3	6.654	А
C-A	208	52			208				
A-B	95	24			95				
A-C	94	24			94				



# Do Something - DS 2026, AM

#### **Data Errors and Warnings**

No errors or warnings

#### **Analysis Set Details**

ID	Name	Include in report	Use specific Demand Set (s)	Specific Demand Set(s)	Network flow scaling factor (%)	Network capacity scaling factor (%)
A3	Do Something	✓	✓	D9,D10,D11,D12,D13,D14	100.000	100.000

# **Junction Network**

#### **Junctions**

Junctio	n Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way		6.31	А

#### **Junction Network Options**

Driving side	Lighting
Left	Normal/unknown

#### **Arms**

#### **Arms**

Arm	Name	Description	Arm type
Α	Central Park Road (NE)		Major
В	Marguee Road		Minor
С	Central Park Road (SW)		Major

#### **Major Arm Geometry**

Arm	Width of carriageway (m)	Has kerbed central reserve	Has right turn bay	Visibility for right turn (m)	Blocks?	Blocking queue (PCU)
C - Central Park Road (SW)	6.00			0.0	✓	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 (Left) (m)	Lane Width (Right) (m)	Visibility to left (m)	Visibility to right (m)
B - Marquee Road	Two lanes	3.00	3.00	0	0

#### 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	478	0.087	0.220	0.138	0.314
B-C	624	0.096	0.242	-	-
С-В	574	0.222	0.222	-	-

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

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



#### **Demand Set Details**

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D9	DS 2026	AM	ONE HOUR	07:45	09:15	15	✓

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

#### **Demand overview (Traffic)**

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A - Central Park Road (NE)		ONE HOUR	✓	179	100.000
B - Marguee Road		ONE HOUR	✓	279	100.000
C - Central Park Road (SW)		ONE HOUR	✓	166	100.000

# **Origin-Destination Data**

#### Demand (PCU/hr)

		То							
		A - Central Park Road (NE)	B - Marguee Road	C - Central Park Road (SW)					
F	A - Central Park Road (NE)	0	89	90					
From	B - Marguee Road	106	0	173					
	C - Central Park Road (SW)	101	65	0					

# **Vehicle Mix**

#### **Heavy Vehicle Percentages**

	То						
		A - Central Park Road (NE)	B - Marguee Road	C - Central Park Road (SW)			
F	A - Central Park Road (NE)	10	10	10			
From	B - Marguee Road	10	10	10			
	C - Central Park Road (SW)	10	10	10			

# Results

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
В-С	0.35	11.08	0.6	В	159	238
B-A	0.29	13.53	0.4	В	97	146
C-AB	0.14	7.60	0.2	А	71	106
C-A					81	122
A-B					82	123
A-C					83	124



#### 07:45 - 08:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
В-С	130	33	573	0.227	129	0.0	0.3	8.887	A
B-A	80	20	431	0.185	79	0.0	0.2	11.206	В
C-AB	56	14	597	0.094	56	0.0	0.1	7.307	А
C-A	69	17			69				
A-B	67	17			67				
A-C	68	17			68				

#### 08:00 - 08:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
в-с	156	39	563	0.276	155	0.3	0.4	9.708	A
B-A	95	24	422	0.226	95	0.2	0.3	12.098	В
C-AB	69	17	602	0.114	69	0.1	0.2	7.429	A
C-A	80	20			80				
A-B	80	20			80				
A-C	81	20			81				

#### 08:15 - 08:30

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
В-С	190	48	548	0.348	190	0.4	0.6	11.034	В
B-A	117	29	409	0.285	116	0.3	0.4	13.484	В
C-AB	88	22	609	0.144	87	0.2	0.2	7.600	A
C-A	95	24			95				
A-B	98	24			98				
A-C	99	25			99				

#### 08:30 - 08:45

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
в-с	190	48	548	0.348	190	0.6	0.6	11.076	В
B-A	117	29	409	0.285	117	0.4	0.4	13.526	В
C-AB	88	22	609	0.144	88	0.2	0.2	7.604	A
C-A	95	24			95				
A-B	98	24			98				
A-C	99	25			99				

#### 08:45 - 09:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
в-с	156	39	562	0.277	156	0.6	0.4	9.761	А
B-A	95	24	422	0.226	96	0.4	0.3	12.156	В
C-AB	69	17	602	0.115	69	0.2	0.2	7.440	А
C-A	80	20			80				
A-B	80	20			80				
A-C	81	20			81				



#### 09:00 - 09:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
В-С	130	33	573	0.227	131	0.4	0.3	8.964	A
B-A	80	20	431	0.185	80	0.3	0.3	11.293	В
C-AB	56	14	597	0.094	56	0.2	0.1	7.325	A
C-A	69	17			69				
A-B	67	17			67				
A-C	68	17			68				



# Do Something - DS 2026, PM

#### **Data Errors and Warnings**

No errors or warnings

#### **Analysis Set Details**

ID	Name	Include in report	Use specific Demand Set (s)	Specific Demand Set(s)	Network flow scaling factor (%)	Network capacity scaling factor (%)
A3	Do Something	✓	✓	D9,D10,D11,D12,D13,D14	100.000	100.000

# **Junction Network**

#### **Junctions**

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way		5.83	Α

#### **Junction Network Options**

Driving side	Lighting
Left	Normal/unknown

#### **Arms**

#### **Arms**

Arm	Name	Description	Arm type
Α	Central Park Road (NE)		Major
В	Marguee Road		Minor
С	Central Park Road (SW)		Major

#### **Major Arm Geometry**

Arm	Width of carriageway (m)	Has kerbed central reserve	Has right turn bay	Visibility for right turn (m)	Blocks?	Blocking queue (PCU)
C - Central Park Road (SW)	6.00			0.0	✓	0.00

 $\textit{Geometries for Arm C are measured opposite Arm B. Geometries for Arm A (\textit{if relevant}) are \textit{measured opposite Arm D}.$ 

#### **Minor Arm Geometry**

Arm	Minor arm type	Lane Width (Left) (m)	Lane Width (Right) (m)	Visibility to left (m)	Visibility to right (m)
B - Marguee Road	Two lanes	3.00	3.00	0	0

#### 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	478	0.087	0.220	0.138	0.314
B-C	624	0.096	0.242	-	-
С-В	574	0.222	0.222	-	-

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

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



#### **Demand Set Details**

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D10	DS 2026	PM	ONE HOUR	17:45	19:15	15	✓

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

#### **Demand overview (Traffic)**

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A - Central Park Road (NE)		ONE HOUR	✓	252	100.000
B - Marguee Road		ONE HOUR	✓	221	100.000
C - Central Park Road (SW)		ONE HOUR	✓	308	100.000

# **Origin-Destination Data**

#### Demand (PCU/hr)

		То								
		A - Central Park Road (NE)	B - Marguee Road	C - Central Park Road (SW)						
F	A - Central Park Road (NE)	0	126	126						
From	B - Marguee Road	157	0	64						
	C - Central Park Road (SW)	227	81	0						

# **Vehicle Mix**

#### **Heavy Vehicle Percentages**

		То								
		A - Central Park Road (NE)	B - Marguee Road	C - Central Park Road (SW)						
F	A - Central Park Road (NE)	10	10	10						
From	B - Marguee Road	10	10	10						
	C - Central Park Road (SW)	10	10	10						

# Results

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
В-С	0.14	9.04	0.2	А	59	88
B-A	0.46	19.84	0.9	С	144	216
C-AB	0.20	7.20	0.4	А	109	164
C-A					173	260
A-B					116	173
A-C					116	173



#### 17:45 - 18:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
В-С	48	12	549	0.088	48	0.0	0.1	7.896	A
B-A	118	30	406	0.291	116	0.0	0.4	13.601	В
C-AB	83	21	652	0.127	82	0.0	0.2	6.938	A
C-A	149	37			149				
A-B	95	24			95				
A-C	95	24			95				

#### 18:00 - 18:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
В-С	58	14	532	0.108	57	0.1	0.1	8.337	А
B-A	141	35	392	0.360	140	0.4	0.6	15.719	С
C-AB	105	26	668	0.157	105	0.2	0.3	7.032	A
C-A	172	43			172				
A-B	113	28			113				
A-C	113	28			113				

#### 18:15 - 18:30

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
В-С	70	18	509	0.138	70	0.1	0.2	9.015	A
B-A	173	43	372	0.464	172	0.6	0.9	19.598	С
C-AB	140	35	691	0.203	140	0.3	0.4	7.187	A
C-A	199	50			199				
A-B	139	35			139				
A-C	139	35			139				

#### 18:30 - 18:45

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
в-с	70	18	509	0.139	70	0.2	0.2	9.035	А
B-A	173	43	372	0.464	173	0.9	0.9	19.836	С
C-AB	140	35	691	0.203	140	0.4	0.4	7.199	Α
C-A	199	50			199				
A-B	139	35			139				
A-C	139	35			139				

#### 18:45 - 19:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
в-с	58	14	532	0.108	58	0.2	0.1	8.359	А
B-A	141	35	392	0.360	142	0.9	0.6	15.968	С
C-AB	105	26	669	0.157	106	0.4	0.3	7.050	A
C-A	172	43			172				
A-B	113	28			113				
A-C	113	28			113				



#### 19:00 - 19:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
в-с	48	12	548	0.088	48	0.1	0.1	7.928	А
B-A	118	30	406	0.291	119	0.6	0.5	13.845	В
C-AB	83	21	652	0.127	83	0.3	0.2	6.968	A
C-A	149	37			149				
A-B	95	24			95				
A-C	95	24			95				



# Do Something - DS 2031, AM

#### **Data Errors and Warnings**

No errors or warnings

#### **Analysis Set Details**

ID	Name	Include in report	Use specific Demand Set (s)	Specific Demand Set(s)	Network flow scaling factor (%)	Network capacity scaling factor (%)
A3	Do Something	✓	✓	D9,D10,D11,D12,D13,D14	100.000	100.000

## **Junction Network**

#### **Junctions**

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way		5.28	Α

#### **Junction Network Options**

Driving side	Lighting
Left	Normal/unknown

#### **Arms**

#### **Arms**

Arm	Name	Description	Arm type
Α	Central Park Road (NE)		Major
В	Marguee Road		Minor
С	Central Park Road (SW)		Major

#### **Major Arm Geometry**

Arm	Width of carriageway (m)	Has kerbed central reserve	Has right turn bay	Visibility for right turn (m)	Blocks?	Blocking queue (PCU)
C - Central Park Road (SW)	6.00			0.0	✓	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 (Left) (m)	Lane Width (Right) (m)	Visibility to left (m)	Visibility to right (m)
B - Marguee Road	Two lanes	3.00	3.00	0	0

#### 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	478	0.087	0.220	0.138	0.314
B-C	624	0.096	0.242	-	-
С-В	574	0.222	0.222	-	-

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

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



#### **Demand Set Details**

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D11	DS 2031	AM	ONE HOUR	07:45	09:15	15	✓

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

#### **Demand overview (Traffic)**

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A - Central Park Road (NE)		ONE HOUR	✓	317	100.000
B - Marguee Road		ONE HOUR	✓	263	100.000
C - Central Park Road (SW)		ONE HOUR	✓	129	100.000

# **Origin-Destination Data**

#### Demand (PCU/hr)

	То								
		A - Central Park Road (NE)	B - Marguee Road	C - Central Park Road (SW)					
F	A - Central Park Road (NE)	0	159	158					
From	B - Marguee Road	78	0	185					
	C - Central Park Road (SW)	73	56	0					

## **Vehicle Mix**

#### **Heavy Vehicle Percentages**

	То								
		A - Central Park Road (NE)	B - Marguee Road	C - Central Park Road (SW)					
F	A - Central Park Road (NE)	10	10	10					
From	B - Marguee Road	10	10	10					
	C - Central Park Road (SW)	10	10	10					

# Results

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
в-с	0.38	11.99	0.7	В	170	255
B-A	0.22	12.87	0.3	В	72	107
C-AB	0.13	8.21	0.2	А	59	88
C-A					60	90
A-B					146	219
A-C					145	217



#### 07:45 - 08:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
В-С	139	35	563	0.247	138	0.0	0.4	9.277	A
B-A	59	15	420	0.140	58	0.0	0.2	10.907	В
C-AB	47	12	560	0.083	46	0.0	0.1	7.705	A
C-A	50	13			50				
A-B	120	30			120				
A-C	119	30			119				

#### 08:00 - 08:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
в-с	166	42	551	0.302	166	0.4	0.5	10.269	В
B-A	70	18	409	0.171	70	0.2	0.2	11.665	В
C-AB	57	14	558	0.102	57	0.1	0.1	7.909	A
C-A	59	15			59				
A-B	143	36			143				
A-C	142	36			142				

#### 08:15 - 08:30

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
В-С	204	51	534	0.381	203	0.5	0.7	11.931	В
B-A	86	21	394	0.218	86	0.2	0.3	12.839	В
C-AB	72	18	555	0.130	72	0.1	0.2	8.206	A
C-A	70	17			70				
A-B	175	44			175				
A-C	174	43			174				

#### 08:30 - 08:45

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
в-с	204	51	534	0.382	204	0.7	0.7	11.989	В
B-A	86	21	394	0.218	86	0.3	0.3	12.867	В
C-AB	72	18	555	0.130	72	0.2	0.2	8.211	A
C-A	70	17			70				
A-B	175	44			175				
A-C	174	43			174				

#### 08:45 - 09:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
в-с	166	42	551	0.302	167	0.7	0.5	10.341	В
B-A	70	18	409	0.171	70	0.3	0.2	11.704	В
C-AB	57	14	558	0.102	57	0.2	0.1	7.919	A
C-A	59	15			59				
A-B	143	36			143				
A-C	142	36			142				

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#### 09:00 - 09:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
В-С	139	35	563	0.247	140	0.5	0.4	9.367	А
B-A	59	15	420	0.140	59	0.2	0.2	10.965	В
C-AB	47	12	560	0.084	47	0.1	0.1	7.721	A
C-A	50	13			50				
A-B	120	30			120				
A-C	119	30			119				



# Do Something - DS 2031, PM

#### **Data Errors and Warnings**

No errors or warnings

#### **Analysis Set Details**

ID	Name	Include in report	Use specific Demand Set (s)	Specific Demand Set(s)	Network flow scaling factor (%)	Network capacity scaling factor (%)
A3	Do Something	✓	✓	D9,D10,D11,D12,D13,D14	100.000	100.000

## **Junction Network**

#### **Junctions**

	Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
ſ	1	untitled	T-Junction	Two-way		12.49	В

#### **Junction Network Options**

Driving side	Lighting
Left	Normal/unknown

#### **Arms**

#### **Arms**

Arm	Name	Description	Arm type
Α	Central Park Road (NE)		Major
В	Marguee Road		Minor
С	Central Park Road (SW)		Major

#### **Major Arm Geometry**

Arm	Width of carriageway (m)	Has kerbed central reserve	Has right turn bay	Visibility for right turn (m)	Blocks?	Blocking queue (PCU)
C - Central Park Road (SW)	6.00			0.0	✓	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 (Left) (m)	Lane Width (Right) (m)	Visibility to left (m)	Visibility to right (m)
B - Marguee Road	Two lanes	3.00	3.00	0	0

#### 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	478	0.087	0.220	0.138	0.314
B-C	624	0.096	0.242	-	-
С-В	574	0.222	0.222	-	-

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

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



#### **Demand Set Details**

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D12	DS 2031	PM	ONE HOUR	17:45	19:15	15	✓

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

#### **Demand overview (Traffic)**

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A - Central Park Road (NE)		ONE HOUR	✓	251	100.000
B - Marguee Road		ONE HOUR	✓	296	100.000
C - Central Park Road (SW)		ONE HOUR	✓	404	100.000

# **Origin-Destination Data**

#### Demand (PCU/hr)

		То									
		A - Central Park Road (NE)	B - Marguee Road	C - Central Park Road (SW)							
	A - Central Park Road (NE)	0	125	126							
From	B - Marguee Road	242	0	54							
	C - Central Park Road (SW)	317	87	0							

# **Vehicle Mix**

#### **Heavy Vehicle Percentages**

		То									
		A - Central Park Road (NE)	B - Marguee Road	C - Central Park Road (SW)							
F	A - Central Park Road (NE)	10	10	10							
From	B - Marguee Road	10	10	10							
	C - Central Park Road (SW)	10	10	10							

# Results

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
В-С	0.13	9.77	0.2	A	50	74
B-A	0.75	42.75	3.0	Е	222	333
C-AB	0.23	6.79	0.5	А	136	203
C-A					235	353
A-B					115	172
A-C					116	173



#### 17:45 - 18:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
в-с	41	10	524	0.078	40	0.0	0.1	8.185	А
B-A	182	46	395	0.461	179	0.0	0.9	18.000	С
C-AB	99	25	700	0.142	98	0.0	0.3	6.576	А
C-A	205	51			205				
A-B	94	24			94				
A-C	95	24			95				

#### 18:00 - 18:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
В-С	49	12	500	0.097	48	0.1	0.1	8.761	А
B-A	218	54	379	0.574	216	0.9	1.4	23.943	С
C-AB	129	32	726	0.178	129	0.3	0.4	6.636	A
C-A	234	58			234				
A-B	112	28			112				
A-C	113	28			113				

#### 18:15 - 18:30

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
В-С	59	15	467	0.127	59	0.1	0.2	9.705	A
B-A	266	67	357	0.747	261	1.4	2.8	39.153	Е
C-AB	177	44	763	0.233	177	0.4	0.5	6.770	A
C-A	267	67			267				
A-B	138	34			138				
A-C	139	35			139				

#### 18:30 - 18:45

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
в-с	59	15	465	0.128	59	0.2	0.2	9.768	A
B-A	266	67	356	0.748	266	2.8	3.0	42.749	Е
C-AB	178	44	763	0.233	178	0.5	0.5	6.785	A
C-A	267	67			267				
A-B	138	34			138				
A-C	139	35			139				

#### 18:45 - 19:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
в-с	49	12	497	0.098	49	0.2	0.1	8.837	A
B-A	218	54	379	0.575	223	3.0	1.6	26.319	D
C-AB	130	32	727	0.178	130	0.5	0.4	6.659	A
C-A	234	58			234				
A-B	112	28			112				
A-C	113	28			113				

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#### 19:00 - 19:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
В-С	41	10	521	0.078	41	0.1	0.1	8.243	А
B-A	182	46	395	0.461	185	1.6	1.0	19.044	С
C-AB	100	25	700	0.143	100	0.4	0.3	6.611	A
C-A	204	51			204				
A-B	94	24			94				
A-C	95	24			95				



# Do Something - DS 2041, AM

#### **Data Errors and Warnings**

No errors or warnings

#### **Analysis Set Details**

ID	Name	Include in report	Use specific Demand Set (s)	Specific Demand Set(s)	Network flow scaling factor (%)	Network capacity scaling factor (%)
A3	Do Something	✓	✓	D9,D10,D11,D12,D13,D14	100.000	100.000

## **Junction Network**

#### **Junctions**

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way		5.67	Α

#### **Junction Network Options**

Driving side	Lighting
Left	Normal/unknown

#### **Arms**

#### **Arms**

Arm	Name	Description	Arm type
Α	Central Park Road (NE)		Major
В	Marguee Road		Minor
С	Central Park Road (SW)		Major

#### **Major Arm Geometry**

Arm	Width of carriageway (m)	Has kerbed central reserve	Has right turn bay	Visibility for right turn (m)	Blocks?	Blocking queue (PCU)
C - Central Park Road (SW)	6.00			0.0	✓	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 (Left) (m)	Lane Width (Right) (m)	Visibility to left (m)	Visibility to right (m)
B - Marguee Road	Two lanes	3.00	3.00	0	0

#### 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	478	0.087	0.220	0.138	0.314
B-C	624	0.096	0.242	-	-
С-В	574	0.222	0.222	-	-

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

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



#### **Demand Set Details**

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D13	DS 2041	AM	ONE HOUR	07:45	09:15	15	✓

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

#### **Demand overview (Traffic)**

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A - Central Park Road (NE)		ONE HOUR	✓	323	100.000
B - Marguee Road		ONE HOUR	✓	282	100.000
C - Central Park Road (SW)		ONE HOUR	✓	136	100.000

# **Origin-Destination Data**

#### Demand (PCU/hr)

	То							
		A - Central Park Road (NE)	B - Marguee Road	C - Central Park Road (SW)				
	A - Central Park Road (NE)	0	161	162				
From	B - Marguee Road	81	0	201				
	C - Central Park Road (SW)	76	60	0				

# **Vehicle Mix**

#### **Heavy Vehicle Percentages**

	То							
		A - Central Park Road (NE)	B - Marguee Road	C - Central Park Road (SW)				
F	A - Central Park Road (NE)	10	10	10				
From	B - Marguee Road	10	10	10				
	C - Central Park Road (SW)	10	10	10				

# Results

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
В-С	0.42	12.77	0.8	В	184	277
B-A	0.23	13.14	0.3	В	74	111
C-AB	0.14	8.29	0.2	А	63	95
C-A					62	92
A-B					148	222
A-C					149	223



#### 07:45 - 08:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
в-с	151	38	562	0.269	150	0.0	0.4	9.577	А
B-A	61	15	418	0.146	60	0.0	0.2	11.036	В
C-AB	50	13	561	0.090	50	0.0	0.1	7.748	A
C-A	52	13			52				
A-B	121	30			121				
A-C	122	30			122				

#### 08:00 - 08:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
в-с	181	45	549	0.329	180	0.4	0.5	10.723	В
B-A	73	18	407	0.179	73	0.2	0.2	11.847	В
C-AB	62	15	558	0.110	61	0.1	0.2	7.967	A
C-A	61	15			61				
A-B	145	36			145				
A-C	146	36			146				

#### 08:15 - 08:30

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
В-С	221	55	531	0.417	220	0.5	0.8	12.694	В
B-A	89	22	391	0.228	89	0.2	0.3	13.106	В
C-AB	78	19	556	0.140	78	0.2	0.2	8.288	A
C-A	72	18			72				
A-B	177	44			177				
A-C	178	45			178				

#### 08:30 - 08:45

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
в-с	221	55	531	0.417	221	0.8	0.8	12.772	В
B-A	89	22	391	0.228	89	0.3	0.3	13.136	В
C-AB	78	19	556	0.140	78	0.2	0.2	8.294	A
C-A	72	18			72				
A-B	177	44			177				
A-C	178	45			178				

#### 08:45 - 09:00

000	0.00								
Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	181	45	549	0.329	182	0.8	0.5	10.816	В
B-A	73	18	407	0.179	73	0.3	0.2	11.887	В
C-AB	62	15	558	0.110	62	0.2	0.2	7.978	A
C-A	61	15			61				
A-B	145	36			145				
A-C	146	36			146				

55



#### 09:00 - 09:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
В-С	151	38	561	0.270	152	0.5	0.4	9.685	А
B-A	61	15	418	0.146	61	0.2	0.2	11.099	В
C-AB	50	13	561	0.090	51	0.2	0.1	7.766	A
C-A	52	13			52				
A-B	121	30			121				
A-C	122	30			122				



# Do Something - DS 2041, PM

#### **Data Errors and Warnings**

No errors or warnings

#### **Analysis Set Details**

ID	Name	Include in report	Use specific Demand Set (s)	Specific Demand Set(s)	Network flow scaling factor (%)	Network capacity scaling factor (%)
A3	Do Something	✓	✓	D9,D10,D11,D12,D13,D14	100.000	100.000

## **Junction Network**

#### **Junctions**

Juno	ction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	1	untitled	T-Junction	Two-way		14.34	В

#### **Junction Network Options**

Driving side	Lighting
Left	Normal/unknown

#### **Arms**

#### **Arms**

Arm	Name	Description	Arm type
Α	Central Park Road (NE)		Major
В	Marguee Road		Minor
С	Central Park Road (SW)		Major

#### **Major Arm Geometry**

Arm	Width of carriageway (m)	Has kerbed central reserve	Has right turn bay	Visibility for right turn (m)	Blocks?	Blocking queue (PCU)
C - Central Park Road (SW)	6.00			0.0	✓	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 (Left) (m)	Lane Width (Right) (m)	Visibility to left (m)	Visibility to right (m)	
B - Marguee Road	Two lanes	3.00	3.00	0	0	

#### 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	478	0.087	0.220	0.138	0.314
B-C	624	0.096	0.242	-	-
С-В	574	0.222	0.222	-	-

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

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



#### **Demand Set Details**

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D14	DS 2041	PM	ONE HOUR	17:45	19:15	15	✓

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

#### **Demand overview (Traffic)**

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A - Central Park Road (NE)		ONE HOUR	✓	258	100.000
B - Marguee Road		ONE HOUR	✓	309	100.000
C - Central Park Road (SW)		ONE HOUR	✓	426	100.000

# **Origin-Destination Data**

#### Demand (PCU/hr)

	То							
		A - Central Park Road (NE)	B - Marguee Road	C - Central Park Road (SW)				
F	A - Central Park Road (NE)	0	129	129				
From	B - Marguee Road	250	0	59				
	C - Central Park Road (SW)	332	94	0				

## **Vehicle Mix**

#### **Heavy Vehicle Percentages**

	То								
		A - Central Park Road (NE)	B - Marguee Road	C - Central Park Road (SW)					
F	A - Central Park Road (NE)	10	10	10					
From	B - Marguee Road	10	10	10					
	C - Central Park Road (SW)	10	10	10					

# Results

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
В-С	0.14	10.09	0.2	В	54	81
B-A	0.79	50.07	3.6	F	229	344
C-AB	0.26	6.90	0.6	А	150	225
C-A					241	361
A-B					118	178
A-C					118	178



#### 17:45 - 18:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
В-С	44	11	520	0.085	44	0.0	0.1	8.312	A
B-A	188	47	391	0.481	184	0.0	1.0	18.808	С
C-AB	109	27	707	0.155	108	0.0	0.3	6.610	A
C-A	211	53			211				
A-B	97	24			97				
A-C	97	24			97				

#### 18:00 - 18:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
в-с	53	13	495	0.107	53	0.1	0.1	8.947	A
B-A	225	56	374	0.601	222	1.0	1.6	25.703	D
C-AB	143	36	735	0.195	142	0.3	0.4	6.696	A
C-A	240	60			240				
A-B	116	29			116				
A-C	116	29			116				

#### 18:15 - 18:30

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
В-С	65	16	460	0.141	65	0.1	0.2	10.002	В
B-A	275	69	351	0.785	268	1.6	3.3	44.519	Е
C-AB	197	49	773	0.255	197	0.4	0.6	6.880	A
C-A	272	68			272				
A-B	142	36			142				
A-C	142	36			142				

#### 18:30 - 18:45

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
в-с	65	16	458	0.142	65	0.2	0.2	10.087	В
B-A	275	69	351	0.785	274	3.3	3.6	50.070	F
C-AB	198	49	773	0.256	198	0.6	0.6	6.898	A
C-A	271	68			271				
A-B	142	36			142				
A-C	142	36			142				

#### 18:45 - 19:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service			
в-с	53	13	491	0.108	53	0.2	0.1	9.043	A			
B-A	225	56	374	0.601	232	3.6	1.8	29.167	D			
C-AB	143	36	735	0.195	144	0.6	0.4	6.725	A			
C-A	240	60			240							
A-B	116	29			116							
A-C	116	29			116							

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#### 19:00 - 19:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
В-С	44	11	517	0.086	45	0.1	0.1	8.379	А
B-A	188	47	391	0.482	191	1.8	1.1	20.094	С
C-AB	110	28	708	0.156	110	0.4	0.3	6.649	A
C-A	211	53			211				
A-B	97	24			97				
A-C	97	24			97				



## **Junctions 9**

#### **PICADY 9 - Priority Intersection Module**

Version: 9.5.2.1013 © Copyright TRL Limited, 2019

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Filename: Site Access Junction.j9
Path: G:\2024\p240002\calcs\picady\EIAR
Report generation date: 23/10/2024 16:40:31

»Do Minimum - DM 2026, AM »Do Minimum - DM 2026, PM »Do Minimum - DM 2031, AM »Do Minimum - DM 2031, PM »Do Minimum - DM 2041, AM »Do Minimum - DM 2041, PM »Do Something - DS 2026, AM »Do Something - DS 2031, AM »Do Something - DS 2031, PM »Do Something - DS 2041, AM »Do Something - DS 2041, AM »Do Something - DS 2041, PM »Base 2024 - BASE 2024, AM

»Base 2024 - BASE 2024, PM



#### Summary of junction performance

		А	.M				Р	М		
	Set ID	Queue (PCU)	Delay (s)	RFC	LOS	Set ID	Queue (PCU)	Delay (s)	RFC	LOS
			D	o Mir	nimun	n - DM	2026			
Stream B-AC	A1	0.0	0.00	0.00	Α	A1	0.0	0.00	0.00	Α
Stream C-AB	D3	0.0	0.00	0.00	Α	D4	0.0	0.00	0.00	Α
			D	o Mir	nimun	n - DM	2031			
Stream B-AC	A1	0.0	0.00	0.00	Α	A1	0.0	0.00	0.00	Α
Stream C-AB	D5	0.0	0.00	0.00	Α	D6	0.0	0.00	0.00	Α
		Do Minimum - DM 2041								
Stream B-AC	A1	0.0	0.00	0.00	А	A1	0.0	0.00	0.00	А
Stream C-AB	D7	0.0	0.00	0.00	Α	D8	0.0	0.00	0.00	Α

		Α	M				Р	М		
	Set ID	Queue (PCU)	Delay (s)	RFC	LOS	Set ID	Queue (PCU)	Delay (s)	RFC	LOS
			D	o Son	nethir	ng - DS	2026			
Stream B-AC	A2	0.0	6.13	0.02	Α	A2	0.0	6.06	0.01	А
Stream C-AB	D9	0.0	6.69	0.01	Α	D10	0.0	6.11	0.02	Α
			D	o Son	nethir	ng - DS	2031			
Stream B-AC	A2	0.0	6.14	0.02	Α	A2	0.0	6.07	0.01	А
Stream C-AB	D11	0.0	6.68	0.01	Α	D12	0.0	6.06	0.02	Α
		Do Something - DS 2041								
Stream B-AC	A2	0.0	6.15	0.03	А	A2	0.0	6.08	0.01	Α
Stream C-AB	D13	0.0	6.65	0.01	Α	D14	0.0	5.99	0.02	Α

		А	M			PM				
	Set ID Queue (PCU) Delay (s) RFC LOS			Set ID	Queue (PCU)	Delay (s)	RFC	LOS		
	Base 2024 -				- BASE 2024					
Stream B-AC	АЗ	0.0	0.00	0.00	Α	АЗ	0.0	0.00	0.00	Α
Stream C-AB	D1	0.0	0.00	0.00	Α	1	0.0	0.00	0.00	Α

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

#### File summary

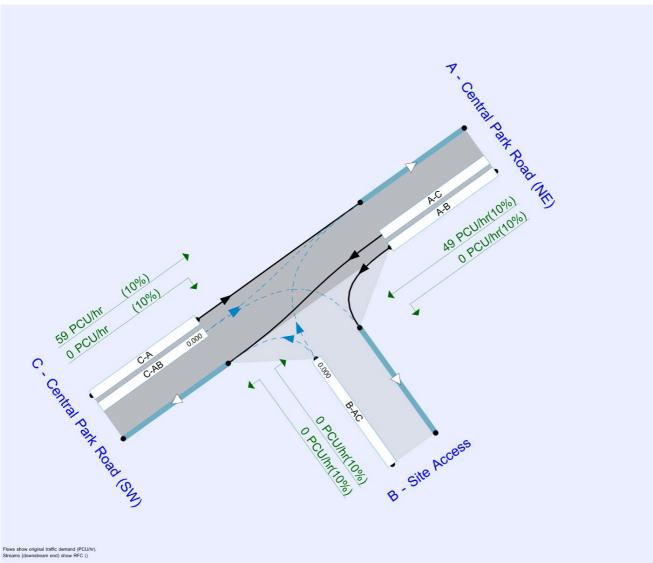
#### **File Description**

Title	PROPOSED DEVELOPMENT AT FORDS FORDS SITE, CORK
Location	CORK
Site number	
Date	12/06/2024
Version	
Status	
Identifier	
Client	
Jobnumber	240002
Enumerator	VJ
Description	

#### Units

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





The junction diagram reflects the last run of Junctions.

#### **Analysis Options**

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



#### **Demand Set Summary**

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D1	BASE 2024	AM	ONE HOUR	07:45	09:15	15	✓
D2	BASE 2024	PM	ONE HOUR	17:45	19:15	15	✓
D3	DM 2026	AM	ONE HOUR	07:45	09:15	15	✓
D4	DM 2026	PM	ONE HOUR	17:45	19:15	15	✓
D5	DM 2031	AM	ONE HOUR	07:45	09:15	15	✓
D6	DM 2031	PM	ONE HOUR	17:45	19:15	15	✓
D7	DM 2041	AM	ONE HOUR	07:45	09:15	15	✓
D8	DM 2041	PM	ONE HOUR	17:45	19:15	15	✓
D9	DS 2026	AM	ONE HOUR	07:45	09:15	15	✓
D10	DS 2026	PM	ONE HOUR	17:45	19:15	15	✓
D11	DS 2031	AM	ONE HOUR	07:45	09:15	15	✓
D12	DS 2031	PM	ONE HOUR	17:45	19:15	15	✓
D13	DS 2041	AM	ONE HOUR	07:45	09:15	15	✓
D14	DS 2041	PM	ONE HOUR	17:45	19:15	15	✓



# Do Minimum - DM 2026, AM

#### **Data Errors and Warnings**

No errors or warnings

#### **Analysis Set Details**

I	D	Name	Include in report	Use specific Demand Set(s)	Specific Demand Set(s)	Network flow scaling factor (%)	Network capacity scaling factor (%)
1	A1	Do Minimum	✓	✓	D3,D4,D5,D6,D7,D8	100.000	100.000

## **Junction Network**

#### **Junctions**

	Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
ĺ	1	untitled	T-Junction	Two-way		0.00	А

#### **Junction Network Options**

Driving side	Lighting	
Left	Normal/unknown	

#### **Arms**

#### **Arms**

Arm	Name	Description	Arm type
Α	Central Park Road (NE)		Major
В	Site Access		Minor
С	Central Park Road (SW)		Major

#### **Major Arm Geometry**

Arm	Width of carriageway (m)	Has kerbed central reserve	Has right turn bay	Visibility for right turn (m)	Blocks?	Blocking queue (PCU)
C - Central Park Road (SW)	6.00			0.0	✓	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 - Site Access	One lane	3.85	0	0

### 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	519	0.094	0.239	0.150	0.341
B-C	677	0.104	0.262	-	-
С-В	574	0.222	0.222	-	-

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

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



#### **Demand Set Details**

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D3	DM 2026	AM	ONE HOUR	07:45	09:15	15	✓

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

#### **Demand overview (Traffic)**

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A - Central Park Road (NE)		ONE HOUR	✓	50	100.000
B - Site Access		ONE HOUR	✓	0	100.000
C - Central Park Road (SW)		ONE HOUR	✓	62	100.000

# **Origin-Destination Data**

#### Demand (PCU/hr)

	То							
		A - Central Park Road (NE)	B - Site Access	C - Central Park Road (SW)				
	A - Central Park Road (NE)	0	0	50				
From	B - Site Access	0	0	0				
	C - Central Park Road (SW)	62	0	0				

# Vehicle Mix

#### **Heavy Vehicle Percentages**

	То								
		A - Central Park Road (NE)	B - Site Access	C - Central Park Road (SW)					
	A - Central Park Road (NE)	10	10	10					
From	B - Site Access	10	10	10					
	C - Central Park Road (SW)	10	10	10					

# Results

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
B-AC	0.00	0.00	0.0	A	0	0
C-AB	0.00	0.00	0.0	А	0	0
C-A					57	85
A-B					0	0
A-C					46	69



#### 07:45 - 08:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	0	0	573	0.000	0	0.0	0.0	0.000	A
C-AB	0	0	566	0.000	0	0.0	0.0	0.000	A
C-A	47	12			47				
A-B	0	0			0				
A-C	38	9			38				

#### 08:00 - 08:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	0	0	571	0.000	0	0.0	0.0	0.000	А
C-AB	0	0	564	0.000	0	0.0	0.0	0.000	A
C-A	56	14			56				
A-B	0	0			0				
A-C	45	11			45				

#### 08:15 - 08:30

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	0	0	567	0.000	0	0.0	0.0	0.000	A
C-AB	0	0	562	0.000	0	0.0	0.0	0.000	A
C-A	68	17			68				
A-B	0	0			0				
A-C	55	14			55				

#### 08:30 - 08:45

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	0	0	567	0.000	0	0.0	0.0	0.000	А
C-AB	0	0	562	0.000	0	0.0	0.0	0.000	A
C-A	68	17			68				
A-B	0	0			0				
A-C	55	14			55				

#### 08:45 - 09:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	0	0	571	0.000	0	0.0	0.0	0.000	А
C-AB	0	0	564	0.000	0	0.0	0.0	0.000	А
C-A	56	14			56				
A-B	0	0			0				
A-C	45	11			45				

#### 09:00 - 09:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	0	0	573	0.000	0	0.0	0.0	0.000	A
C-AB	0	0	566	0.000	0	0.0	0.0	0.000	A
C-A	47	12			47				
A-B	0	0			0				
A-C	38	9			38				



# Do Minimum - DM 2026, PM

#### **Data Errors and Warnings**

No errors or warnings

#### **Analysis Set Details**

ID	Name	Include in report	Use specific Demand Set(s)	Specific Demand Set(s)	Network flow scaling factor (%)	Network capacity scaling factor (%)
<b>A</b> 1	Do Minimum	✓	✓	D3,D4,D5,D6,D7,D8	100.000	100.000

## **Junction Network**

#### **Junctions**

	Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
ĺ	1	untitled	T-Junction	Two-way		0.00	А

#### **Junction Network Options**

Driving side	Lighting
Left	Normal/unknown

#### **Arms**

#### **Arms**

Arm	Name	Description	Arm type
Α	Central Park Road (NE)		Major
В	Site Access		Minor
С	Central Park Road (SW)		Major

#### **Major Arm Geometry**

Arm	Width of carriageway (m)	Has kerbed central reserve	Has right turn bay	Visibility for right turn (m)	Blocks?	Blocking queue (PCU)
C - Central Park Road (SW)	6.00			0.0	✓	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 - Site Access	One lane	3.85	0	0

#### 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	519	0.094	0.239	0.150	0.341
B-C	677	0.104	0.262	-	-
С-В	574	0.222	0.222	-	-

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

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



#### **Demand Set Details**

	ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
ı	D4	DM 2026	PM	ONE HOUR	17:45	19:15	15	✓

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

#### **Demand overview (Traffic)**

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A - Central Park Road (NE)		ONE HOUR	✓	54	100.000
B - Site Access		ONE HOUR	✓	0	100.000
C - Central Park Road (SW)		ONE HOUR	✓	177	100.000

# **Origin-Destination Data**

#### Demand (PCU/hr)

		То			
		A - Central Park Road (NE)	B - Site Access	C - Central Park Road (SW)	
F	A - Central Park Road (NE)	0	0	54	
From	B - Site Access	0	0	0	
	C - Central Park Road (SW)	177	0	0	

## **Vehicle Mix**

#### **Heavy Vehicle Percentages**

		То										
		A - Central Park Road (NE)	B - Site Access	C - Central Park Road (SW)								
	A - Central Park Road (NE)	10	10	10								
From	B - Site Access	10	10	10								
	C - Central Park Road (SW)	10	10	10								

# Results

Stream	n Max RFC Max Delay (s) Max Queu		Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
B-AC	0.00	0.00	0.0	А	Α 0	
C-AB	0.00	0.00	0.0	А	0	0
C-A					162	244
A-B					0	0
A-C					50	74



#### 17:45 - 18:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	0	0	564	0.000	0	0.0	0.0	0.000	A
C-AB	0	0	565	0.000	0	0.0	0.0	0.000	A
C-A	133	33			133				
A-B	0	0			0				
A-C	41	10			41				

#### 18:00 - 18:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	0	0	559	0.000	0	0.0	0.0	0.000	А
C-AB	0	0	563	0.000	0	0.0	0.0	0.000	A
C-A	159	40			159				
A-B	0	0			0				
A-C	49	12			49				

#### 18:15 - 18:30

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	0	0	553	0.000	0	0.0	0.0	0.000	А
C-AB	0	0	561	0.000	0	0.0	0.0	0.000	А
C-A	195	49			195				
A-B	0	0			0				
A-C	59	15			59				

#### 18:30 - 18:45

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	0	0	553	0.000	0	0.0	0.0	0.000	А
C-AB	0	0	561	0.000	0	0.0	0.0	0.000	A
C-A	195	49			195				
A-B	0	0			0				
A-C	59	15			59				

#### 18:45 - 19:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	0	0	559	0.000	0	0.0	0.0	0.000	А
C-AB	0	0	563	0.000	0	0.0	0.0	0.000	Α
C-A	159	40			159				
A-B	0	0			0				
A-C	49	12			49				

#### 19:00 - 19:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	0	0	564	0.000	0	0.0	0.0	0.000	A
C-AB	0	0	565	0.000	0	0.0	0.0	0.000	A
C-A	133	33			133				
A-B	0	0			0				
A-C	41	10			41				

10



# Do Minimum - DM 2031, AM

#### **Data Errors and Warnings**

No errors or warnings

#### **Analysis Set Details**

I	D	Name	Include in report	Use specific Demand Set(s)	Specific Demand Set(s)	Network flow scaling factor (%)	Network capacity scaling factor (%)
1	41	Do Minimum	✓	✓	D3,D4,D5,D6,D7,D8	100.000	100.000

## **Junction Network**

#### **Junctions**

	Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
ĺ	1	untitled	T-Junction	Two-way		0.00	А

#### **Junction Network Options**

Driving side	Lighting
Left	Normal/unknown

#### **Arms**

#### **Arms**

Arm	Name	Description	Arm type
Α	Central Park Road (NE)		Major
В	Site Access		Minor
С	Central Park Road (SW)		Major

#### **Major Arm Geometry**

Arm	Width of carriageway (m)	Has kerbed central reserve	Has right turn bay	Visibility for right turn (m)	Blocks?	Blocking queue (PCU)
C - Central Park Road (SW)	6.00			0.0	✓	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 - Site Access	One lane	3.85	0	0

#### 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	519	0.094	0.239	0.150	0.341
B-C	677	0.104	0.262	-	-
С-В	574	0.222	0.222	-	-

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

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



#### **Demand Set Details**

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D5	DM 2031	AM	ONE HOUR	07:45	09:15	15	✓

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

#### **Demand overview (Traffic)**

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A - Central Park Road (NE)		ONE HOUR	✓	54	100.000
B - Site Access		ONE HOUR	✓	0	100.000
C - Central Park Road (SW)		ONE HOUR	✓	66	100.000

# **Origin-Destination Data**

#### Demand (PCU/hr)

	То							
		A - Central Park Road (NE)	B - Site Access	C - Central Park Road (SW)				
	A - Central Park Road (NE)	0	0	54				
From	B - Site Access	0	0	0				
	C - Central Park Road (SW)	66	0	0				

# **Vehicle Mix**

#### **Heavy Vehicle Percentages**

		То		
		A - Central Park Road (NE)	B - Site Access	C - Central Park Road (SW)
	A - Central Park Road (NE)	10	10	10
From	B - Site Access	10	10	10
	C - Central Park Road (SW)	10	10	10

# Results

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
B-AC	0.00	0.00	0.0	А	0	0
C-AB	0.00	0.00	0.0	А	0	0
C-A					61	91
A-B					0	0
A-C					50	74



#### 07:45 - 08:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	0	0	572	0.000	0	0.0	0.0	0.000	A
C-AB	0	0	565	0.000	0	0.0	0.0	0.000	A
C-A	50	12			50				
A-B	0	0			0				
A-C	41	10			41				

#### 08:00 - 08:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	0	0	569	0.000	0	0.0	0.0	0.000	А
C-AB	0	0	563	0.000	0	0.0	0.0	0.000	A
C-A	59	15			59				
A-B	0	0			0				
A-C	49	12			49				

#### 08:15 - 08:30

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	0	0	565	0.000	0	0.0	0.0	0.000	Α
C-AB	0	0	561	0.000	0	0.0	0.0	0.000	A
C-A	73	18			73				
A-B	0	0			0				
A-C	59	15			59				

#### 08:30 - 08:45

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	0	0	565	0.000	0	0.0	0.0	0.000	A
C-AB	0	0	561	0.000	0	0.0	0.0	0.000	A
C-A	73	18			73				
A-B	0	0			0				
A-C	59	15			59				

#### 08:45 - 09:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	0	0	569	0.000	0	0.0	0.0	0.000	А
C-AB	0	0	563	0.000	0	0.0	0.0	0.000	А
C-A	59	15			59				
A-B	0	0			0				
A-C	49	12			49				

#### 09:00 - 09:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	0	0	572	0.000	0	0.0	0.0	0.000	A
C-AB	0	0	565	0.000	0	0.0	0.0	0.000	A
C-A	50	12			50				
A-B	0	0			0				
A-C	41	10			41				



# Do Minimum - DM 2031, PM

#### **Data Errors and Warnings**

No errors or warnings

#### **Analysis Set Details**

I	D	Name	Include in report	Use specific Demand Set(s)	Specific Demand Set(s)	Network flow scaling factor (%)	Network capacity scaling factor (%)
A	11	Do Minimum	✓	✓	D3,D4,D5,D6,D7,D8	100.000	100.000

## **Junction Network**

#### **Junctions**

	Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
ĺ	1	untitled	T-Junction	Two-way		0.00	А

#### **Junction Network Options**

Driving side	Lighting
Left	Normal/unknown

#### **Arms**

#### **Arms**

Arm	Name	Description	Arm type
Α	Central Park Road (NE)		Major
В	Site Access		Minor
С	Central Park Road (SW)		Major

#### **Major Arm Geometry**

Arm	Width of carriageway Has kerbed central (m) reserve		Has right turn bay	Visibility for right turn (m)	Blocks?	Blocking queue (PCU)
C - Central Park Road (SW)	6.00			0.0	✓	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 - Site Access	One lane	3.85	0	0

#### Slope / Intercept / Capacity

#### **Priority Intersection Slopes and Intercepts**

•			•			
Stream	Intercept (PCU/hr)			Slope for C-A	Slope for C-B	
B-A	519	0.094	0.239	0.150	0.341	
B-C	677	0.104	0.262	-	-	
С-В	574	0.222	0.222	-	-	

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

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



#### **Demand Set Details**

ID	Scenario name	nario name   Time Period name   Traffic profile type		Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D6	DM 2031	PM	ONE HOUR	17:45	19:15	15	✓

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

#### **Demand overview (Traffic)**

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A - Central Park Road (NE)		ONE HOUR	✓	58	100.000
B - Site Access		ONE HOUR	✓	0	100.000
C - Central Park Road (SW)		ONE HOUR	✓	189	100.000

# **Origin-Destination Data**

#### Demand (PCU/hr)

	То							
		A - Central Park Road (NE)	B - Site Access	C - Central Park Road (SW)				
	A - Central Park Road (NE)	0	0	58				
From	B - Site Access	0	0	0				
	C - Central Park Road (SW)	189	0	0				

# Vehicle Mix

#### **Heavy Vehicle Percentages**

	То							
		A - Central Park Road (NE)	B - Site Access	C - Central Park Road (SW)				
F	A - Central Park Road (NE)	10	10	10				
From	B - Site Access	10	10	10				
	C - Central Park Road (SW)	10	10	10				

# Results

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
B-AC	0.00	0.00	0.0	А	0	0
C-AB	0.00	0.00	0.0	А	0	0
C-A					173	260
A-B					0	0
A-C					53	80



#### 17:45 - 18:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	0	0	562	0.000	0	0.0	0.0	0.000	A
C-AB	0	0	564	0.000	0	0.0	0.0	0.000	A
C-A	142	36			142				
A-B	0	0			0				
A-C	44	11			44				

#### 18:00 - 18:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	0	0	557	0.000	0	0.0	0.0	0.000	А
C-AB	0	0	562	0.000	0	0.0	0.0	0.000	A
C-A	170	42			170				
A-B	0	0			0				
A-C	52	13			52				

#### 18:15 - 18:30

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	0	0	551	0.000	0	0.0	0.0	0.000	A
C-AB	0	0	560	0.000	0	0.0	0.0	0.000	A
C-A	208	52			208				
A-B	0	0			0				
A-C	64	16			64				

#### 18:30 - 18:45

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	0	0	551	0.000	0	0.0	0.0	0.000	A
C-AB	0	0	560	0.000	0	0.0	0.0	0.000	A
C-A	208	52			208				
A-B	0	0			0				
A-C	64	16			64				

#### 18:45 - 19:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	0	0	557	0.000	0	0.0	0.0	0.000	А
C-AB	0	0	562	0.000	0	0.0	0.0	0.000	А
C-A	170	42			170				
A-B	0	0			0				
A-C	52	13			52				

#### 19:00 - 19:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	0	0	562	0.000	0	0.0	0.0	0.000	A
C-AB	0	0	564	0.000	0	0.0	0.0	0.000	A
C-A	142	36			142				
A-B	0	0			0				
A-C	44	11			44				



# Do Minimum - DM 2041, AM

#### **Data Errors and Warnings**

No errors or warnings

#### **Analysis Set Details**

ID	Name	Include in report	Use specific Demand Set(s)	Specific Demand Set(s)	Network flow scaling factor (%)	Network capacity scaling factor (%)
A1	Do Minimum	✓	✓	D3,D4,D5,D6,D7,D8	100.000	100.000

## **Junction Network**

#### **Junctions**

	Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
ĺ	1	untitled	T-Junction	Two-way		0.00	А

#### **Junction Network Options**

Driving side	Lighting
Left	Normal/unknown

#### **Arms**

#### **Arms**

Arm	Name	Description	Arm type
Α	Central Park Road (NE)		Major
В	Site Access		Minor
С	Central Park Road (SW)		Major

#### **Major Arm Geometry**

Arm	Width of carriageway (m)	Has kerbed central reserve	Has right turn bay	Visibility for right turn (m)	Blocks?	Blocking queue (PCU)
C - Central Park Road (SW)	6.00			0.0	✓	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 - Site Access	One lane	3.85	0	0

#### 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	519	0.094	0.239	0.150	0.341
B-C	677	0.104	0.262	-	-
С-В	574	0.222	0.222	-	-

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

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



#### **Demand Set Details**

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D7	DM 2041	AM	ONE HOUR	07:45	09:15	15	✓

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

#### **Demand overview (Traffic)**

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A - Central Park Road (NE)		ONE HOUR	✓	59	100.000
B - Site Access		ONE HOUR	✓	0	100.000
C - Central Park Road (SW)		ONE HOUR	✓	72	100.000

# **Origin-Destination Data**

#### Demand (PCU/hr)

		То		
		A - Central Park Road (NE)	B - Site Access	C - Central Park Road (SW)
	A - Central Park Road (NE)	0	0	59
From	B - Site Access	0	0	0
	C - Central Park Road (SW)	72	0	0

# Vehicle Mix

#### **Heavy Vehicle Percentages**

		То		
		A - Central Park Road (NE)	B - Site Access	C - Central Park Road (SW)
	A - Central Park Road (NE)	10	10	10
From	B - Site Access	10	10	10
	C - Central Park Road (SW)	10	10	10

# Results

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
B-AC	0.00	0.00	0.0	А	0	0
C-AB	0.00	0.00	0.0	А	0	0
C-A					66	99
A-B					0	0
A-C					54	81



#### 07:45 - 08:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	0	0	571	0.000	0	0.0	0.0	0.000	А
C-AB	0	0	564	0.000	0	0.0	0.0	0.000	А
C-A	54	14			54				
A-B	0	0			0				
A-C	44	11			44				

#### 08:00 - 08:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	0	0	568	0.000	0	0.0	0.0	0.000	A
C-AB	0	0	562	0.000	0	0.0	0.0	0.000	A
C-A	65	16			65				
A-B	0	0			0				
A-C	53	13			53				

#### 08:15 - 08:30

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	0	0	563	0.000	0	0.0	0.0	0.000	Α
C-AB	0	0	560	0.000	0	0.0	0.0	0.000	А
C-A	79	20			79				
A-B	0	0			0				
A-C	65	16			65				

#### 08:30 - 08:45

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	0	0	563	0.000	0	0.0	0.0	0.000	А
C-AB	0	0	560	0.000	0	0.0	0.0	0.000	A
C-A	79	20			79				
A-B	0	0			0				
A-C	65	16			65				

#### 08:45 - 09:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	0	0	568	0.000	0	0.0	0.0	0.000	А
C-AB	0	0	562	0.000	0	0.0	0.0	0.000	А
C-A	65	16			65				
A-B	0	0			0				
A-C	53	13			53				

#### 09:00 - 09:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	0	0	571	0.000	0	0.0	0.0	0.000	A
C-AB	0	0	564	0.000	0	0.0	0.0	0.000	A
C-A	54	14			54				
A-B	0	0			0				
A-C	44	11			44				



# Do Minimum - DM 2041, PM

#### **Data Errors and Warnings**

No errors or warnings

#### **Analysis Set Details**

I	D	Name	Include in report	Use specific Demand Set(s)	Specific Demand Set(s)	Network flow scaling factor (%)	Network capacity scaling factor (%)	
1	41	Do Minimum	✓	✓	D3,D4,D5,D6,D7,D8	100.000	100.000	

## **Junction Network**

#### **Junctions**

	Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
ĺ	1	untitled	T-Junction	Two-way		0.00	А

#### **Junction Network Options**

Driving side	Lighting		
Left	Normal/unknown		

#### **Arms**

#### **Arms**

Arm	Name	Description	Arm type
Α	Central Park Road (NE)		Major
В	Site Access		Minor
С	Central Park Road (SW)		Major

#### **Major Arm Geometry**

Arm	Width of carriageway (m)	Has kerbed central reserve	Has right turn bay	Visibility for right turn (m)	Blocks?	Blocking queue (PCU)
C - Central Park Road (SW)	6.00			0.0	✓	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 - Site Access	One lane	3.85	0	0	

#### 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	519	0.094	0.239	0.150	0.341
B-C	677	0.104	0.262	-	-
С-В	574	0.222	0.222	-	-

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

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



# **Demand Set Details**

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D8	DM 2041	PM	ONE HOUR	17:45	19:15	15	✓

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

# **Demand overview (Traffic)**

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A - Central Park Road (NE)		ONE HOUR	✓	64	100.000
B - Site Access		ONE HOUR	✓	0	100.000
C - Central Park Road (SW)		ONE HOUR	✓	207	100.000

# **Origin-Destination Data**

# Demand (PCU/hr)

	То								
		A - Central Park Road (NE)	B - Site Access	C - Central Park Road (SW)					
	A - Central Park Road (NE)	0	0	64					
From	B - Site Access	0	0	0					
	C - Central Park Road (SW)	207	0	0					

# Vehicle Mix

# **Heavy Vehicle Percentages**

		То									
		A - Central Park Road (NE)	B - Site Access	C - Central Park Road (SW)							
F	A - Central Park Road (NE)	10	10	10							
From	B - Site Access	10	10	10							
	C - Central Park Road (SW)	10	10	10							

# Results

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
B-AC	0.00	0.00	0.0	А	0	0
C-AB	0.00	0.00	0.0	А	0	0
C-A					190	285
A-B					0	0
A-C					59	88



## 17:45 - 18:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	0	0	560	0.000	0	0.0	0.0	0.000	A
C-AB	0	0	563	0.000	0	0.0	0.0	0.000	A
C-A	156	39			156				
A-B	0	0			0				
A-C	48	12			48				

## 18:00 - 18:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	0	0	554	0.000	0	0.0	0.0	0.000	A
C-AB	0	0	561	0.000	0	0.0	0.0	0.000	A
C-A	186	47			186				
A-B	0	0			0				
A-C	58	14			58				

## 18:15 - 18:30

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	0	0	547	0.000	0	0.0	0.0	0.000	А
C-AB	0	0	558	0.000	0	0.0	0.0	0.000	А
C-A	228	57			228				
A-B	0	0			0				
A-C	70	18			70				

# 18:30 - 18:45

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	0	0	547	0.000	0	0.0	0.0	0.000	A
C-AB	0	0	558	0.000	0	0.0	0.0	0.000	A
C-A	228	57			228				
A-B	0	0			0				
A-C	70	18			70				

## 18:45 - 19:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	0	0	554	0.000	0	0.0	0.0	0.000	А
C-AB	0	0	561	0.000	0	0.0	0.0	0.000	A
C-A	186	47			186				
A-B	0	0			0				
A-C	58	14			58				

# 19:00 - 19:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	0	0	560	0.000	0	0.0	0.0	0.000	A
C-AB	0	0	563	0.000	0	0.0	0.0	0.000	A
C-A	156	39			156				
A-B	0	0			0				
A-C	48	12			48				



# Do Something - DS 2026, AM

## **Data Errors and Warnings**

No errors or warnings

## **Analysis Set Details**

ID	Name	Include in report	Use specific Demand Set (s)	Specific Demand Set(s)	Network flow scaling factor (%)	Network capacity scaling factor (%)
A2	Do Something	✓	✓	D9,D10,D11,D12,D13,D14	100.000	100.000

# **Junction Network**

# **Junctions**

Junctio	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way		1.07	A

## **Junction Network Options**

Driving side	Lighting
Left	Normal/unknown

# **Arms**

#### **Arms**

Arm	Name	Description	Arm type
Α	Central Park Road (NE)		Major
В	Site Access		Minor
С	Central Park Road (SW)		Major

## **Major Arm Geometry**

Arm	Width of carriageway (m)	Has kerbed central reserve	Has right turn bay	Visibility for right turn (m)	Blocks?	Blocking queue (PCU)
C - Central Park Road (SW)	6.00			0.0	✓	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 - Site Access	One lane	3.85	0	0

# 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	519	0.094	0.239	0.150	0.341
B-C	677	0.104	0.262	-	-
С-В	574	0.222	0.222	-	-

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

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



# **Demand Set Details**

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D9	DS 2026	AM	ONE HOUR	07:45	09:15	15	✓

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

# **Demand overview (Traffic)**

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A - Central Park Road (NE)		ONE HOUR	✓	50	100.000
B - Site Access		ONE HOUR	✓	15	100.000
C - Central Park Road (SW)		ONE HOUR	✓	69	100.000

# **Origin-Destination Data**

# Demand (PCU/hr)

	То						
		A - Central Park Road (NE)	B - Site Access	C - Central Park Road (SW)			
	A - Central Park Road (NE)	0	0	50			
From	B - Site Access	0	0	15			
	C - Central Park Road (SW)	62	7	0			

# Vehicle Mix

# **Heavy Vehicle Percentages**

	То							
		A - Central Park Road (NE)	B - Site Access	C - Central Park Road (SW)				
	A - Central Park Road (NE)	10	10	10				
From	B - Site Access	10	10	10				
	C - Central Park Road (SW)	10	10	10				

# Results

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
B-AC	0.02	6.13	0.0	А	14	21
C-AB	0.01	6.69	0.0	А	7	11
C-A					56	84
A-B					0	0
A-C					46	69



## 07:45 - 08:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	11	3	667	0.017	11	0.0	0.0	6.037	A
C-AB	6	1	598	0.010	6	0.0	0.0	6.689	A
C-A	46	12			46				
A-B	0	0			0				
A-C	38	9			38				

# 08:00 - 08:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	13	3	665	0.020	13	0.0	0.0	6.075	Α
C-AB	7	2	602	0.012	7	0.0	0.0	6.651	А
C-A	55	14			55				
A-B	0	0			0				
A-C	45	11			45				

## 08:15 - 08:30

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	17	4	663	0.025	16	0.0	0.0	6.128	Α
C-AB	9	2	609	0.014	9	0.0	0.0	6.599	A
C-A	67	17			67				
A-B	0	0			0				
A-C	55	14			55				

# 08:30 - 08:45

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	17	4	663	0.025	17	0.0	0.0	6.128	A
C-AB	9	2	609	0.014	9	0.0	0.0	6.599	A
C-A	67	17			67				
A-B	0	0			0				
A-C	55	14			55				

## 08:45 - 09:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	13	3	665	0.020	14	0.0	0.0	6.077	А
C-AB	7	2	602	0.012	7	0.0	0.0	6.654	А
C-A	55	14			55				
A-B	0	0			0				
A-C	45	11			45				

# 09:00 - 09:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	11	3	667	0.017	11	0.0	0.0	6.037	A
C-AB	6	1	598	0.010	6	0.0	0.0	6.690	А
C-A	46	12			46				
A-B	0	0			0				
A-C	38	9			38				



# Do Something - DS 2026, PM

## **Data Errors and Warnings**

No errors or warnings

## **Analysis Set Details**

ID	Name	Include in report	Use specific Demand Set (s)	Specific Demand Set(s)	Network flow scaling factor (%)	Network capacity scaling factor (%)
A2	Do Something	✓	✓	D9,D10,D11,D12,D13,D14	100.000	100.000

# **Junction Network**

# **Junctions**

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way		0.47	Α

## **Junction Network Options**

Driving side	Lighting
Left	Normal/unknown

# **Arms**

#### **Arms**

Arm	Name	Description	Arm type
Α	Central Park Road (NE)		Major
В	Site Access		Minor
С	Central Park Road (SW)		Major

# **Major Arm Geometry**

Arm	Width of carriageway (m)	Has kerbed central reserve	Has right turn bay	Visibility for right turn (m)	Blocks?	Blocking queue (PCU)
C - Central Park Road (SW)	6.00			0.0	✓	0.00

 $\textit{Geometries for Arm C are measured opposite Arm B. Geometries for Arm A (\textit{if relevant}) are \textit{measured opposite Arm D}.$ 

# **Minor Arm Geometry**

Arm	Minor arm type	Lane width (m)	Visibility to left (m)	Visibility to right (m)	
B - Site Access	One lane	3.85	0	0	

# Slope / Intercept / Capacity

## **Priority Intersection Slopes and Intercepts**

Stream	Stream Intercept (PCU/hr)		Slope for A-C	Slope for C-A	Slope for C-B
B-A	519	0.094	0.239	0.150	0.341
B-C	677	0.104	0.262	-	-
С-В	574	0.222	0.222	-	-

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

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



# **Demand Set Details**

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D10	DS 2026	PM	ONE HOUR	17:45	19:15	15	✓

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

# **Demand overview (Traffic)**

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A - Central Park Road (NE)		ONE HOUR	✓	54	100.000
B - Site Access		ONE HOUR	✓	7	100.000
C - Central Park Road (SW)		ONE HOUR	✓	186	100.000

# **Origin-Destination Data**

# Demand (PCU/hr)

	То									
		A - Central Park Road (NE)	B - Site Access	C - Central Park Road (SW)						
	A - Central Park Road (NE)	0	0	54						
From	B - Site Access	0	0	7						
	C - Central Park Road (SW)	177	9	0						

# Vehicle Mix

# **Heavy Vehicle Percentages**

		То								
		A - Central Park Road (NE)	B - Site Access	C - Central Park Road (SW)						
F	A - Central Park Road (NE)	10	10	10						
From	B - Site Access	10	10	10						
	C - Central Park Road (SW)	10	10	10						

# Results

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
B-AC	0.01	6.06	0.0	Α	6	10
C-AB	0.02	6.11	0.0	А	11	16
C-A					160	240
A-B					0	0
A-C					50	74



## 17:45 - 18:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	5	1	666	0.008	5	0.0	0.0	5.989	A
C-AB	9	2	656	0.013	8	0.0	0.0	6.111	A
C-A	132	33			132				
A-B	0	0			0				
A-C	41	10			41				

## 18:00 - 18:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	6	2	664	0.009	6	0.0	0.0	6.017	A
C-AB	11	3	673	0.016	11	0.0	0.0	5.982	A
C-A	157	39			157				
A-B	0	0			0				
A-C	49	12			49				

## 18:15 - 18:30

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	8	2	661	0.012	8	0.0	0.0	6.056	Α
C-AB	14	3	695	0.020	14	0.0	0.0	5.813	A
C-A	191	48			191				
A-B	0	0			0				
A-C	59	15			59				

# 18:30 - 18:45

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	8	2	661	0.012	8	0.0	0.0	6.056	A
C-AB	14	3	695	0.020	14	0.0	0.0	5.815	A
C-A	191	48			191				
A-B	0	0			0				
A-C	59	15			59				

## 18:45 - 19:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	6	2	664	0.009	6	0.0	0.0	6.017	А
C-AB	11	3	673	0.016	11	0.0	0.0	5.985	А
C-A	157	39			157				
A-B	0	0			0				
A-C	49	12			49				

# 19:00 - 19:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	5	1	666	0.008	5	0.0	0.0	5.989	A
C-AB	9	2	656	0.013	9	0.0	0.0	6.114	А
C-A	132	33			132				
A-B	0	0			0				
A-C	41	10			41				



# Do Something - DS 2031, AM

## **Data Errors and Warnings**

No errors or warnings

## **Analysis Set Details**

ID	Name	Include in report	Use specific Demand Set (s)	Specific Demand Set(s)	Network flow scaling factor (%)	Network capacity scaling factor (%)
A2	Do Something	✓	✓	D9,D10,D11,D12,D13,D14	100.000	100.000

# **Junction Network**

# **Junctions**

ĺ	Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
ĺ	1	untitled	T-Junction	Two-way		1.02	А

# **Junction Network Options**

Driving side	Lighting
Left	Normal/unknown

# **Arms**

#### **Arms**

Arm	Name	Description	Arm type
Α	Central Park Road (NE)		Major
В	Site Access		Minor
С	Central Park Road (SW)		Major

# **Major Arm Geometry**

Arm	Width of carriageway (m)	Has kerbed central reserve	Has right turn bay	Visibility for right turn (m)	Blocks?	Blocking queue (PCU)
C - Central Park Road (SW)	6.00			0.0	✓	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 - Site Access	One lane	3.85	0	0

# 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	519	0.094	0.239	0.150	0.341
B-C	677	0.104	0.262	-	-
С-В	574	0.222	0.222	-	-

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

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



# **Demand Set Details**

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D11	DS 2031	AM	ONE HOUR	07:45	09:15	15	✓

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

# **Demand overview (Traffic)**

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A - Central Park Road (NE)		ONE HOUR	✓	54	100.000
B - Site Access		ONE HOUR	✓	15	100.000
C - Central Park Road (SW)		ONE HOUR	✓	73	100.000

# **Origin-Destination Data**

# Demand (PCU/hr)

		То		
		A - Central Park Road (NE)	B - Site Access	C - Central Park Road (SW)
	A - Central Park Road (NE)	0	0	54
From	B - Site Access	0	0	15
	C - Central Park Road (SW)	66	7	0

# Vehicle Mix

# **Heavy Vehicle Percentages**

		То					
		A - Central Park Road (NE)	B - Site Access	C - Central Park Road (SW)			
F	A - Central Park Road (NE)	10	10	10			
From	B - Site Access	10	10	10			
	C - Central Park Road (SW)	10	10	10			

# Results

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
B-AC	0.02	6.14	0.0	А	14	21
C-AB	0.01	6.68	0.0	А	7	11
C-A					60	90
A-B					0	0
A-C					50	74



## 07:45 - 08:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	11	3	666	0.017	11	0.0	0.0	6.044	A
C-AB	6	1	599	0.010	6	0.0	0.0	6.674	A
C-A	49	12			49				
A-B	0	0			0				
A-C	41	10			41				

# 08:00 - 08:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	13	3	664	0.020	13	0.0	0.0	6.084	Α
C-AB	7	2	604	0.012	7	0.0	0.0	6.632	A
C-A	59	15			59				
A-B	0	0			0				
A-C	49	12			49				

## 08:15 - 08:30

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	17	4	661	0.025	16	0.0	0.0	6.139	Α
C-AB	9	2	611	0.014	9	0.0	0.0	6.577	A
C-A	72	18			72				
A-B	0	0			0				
A-C	59	15			59				

# 08:30 - 08:45

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	17	4	661	0.025	17	0.0	0.0	6.139	A
C-AB	9	2	611	0.014	9	0.0	0.0	6.577	A
C-A	72	18			72				
A-B	0	0			0				
A-C	59	15			59				

## 08:45 - 09:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	13	3	664	0.020	14	0.0	0.0	6.086	А
C-AB	7	2	604	0.012	7	0.0	0.0	6.633	А
C-A	59	15			59				
A-B	0	0			0				
A-C	49	12			49				

# 09:00 - 09:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	11	3	666	0.017	11	0.0	0.0	6.047	A
C-AB	6	1	599	0.010	6	0.0	0.0	6.677	A
C-A	49	12			49				
A-B	0	0			0				
A-C	41	10			41				



# Do Something - DS 2031, PM

## **Data Errors and Warnings**

No errors or warnings

## **Analysis Set Details**

ı	ID	Name	Include in report	Use specific Demand Set (s)	Specific Demand Set(s)	Network flow scaling factor (%)	Network capacity scaling factor (%)
	A2	Do Something	✓	✓	D9,D10,D11,D12,D13,D14	100.000	100.000

# **Junction Network**

# **Junctions**

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way		0.44	Α

## **Junction Network Options**

Driving side	Lighting
Left	Normal/unknown

# **Arms**

#### **Arms**

Arm	Name	Description	Arm type
Α	Central Park Road (NE)		Major
В	Site Access		Minor
С	Central Park Road (SW)		Major

# **Major Arm Geometry**

Arm	Width of carriageway (m)	Has kerbed central reserve	Has right turn bay	Visibility for right turn (m)	Blocks?	Blocking queue (PCU)
C - Central Park Road (SW)	6.00			0.0	✓	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 ty		Lane width (m)	Visibility to left (m)	Visibility to right (m)	
B - Site Access	One lane	3.85	0	0	

# Slope / Intercept / Capacity

## **Priority Intersection Slopes and Intercepts**

litority	Tiority intersection olopes and intercepts									
Stream	Intercept (PCU/hr)	Slope for A-B	Slope for A-C	Slope for C-A	Slope for C-B					
B-A	519	0.094	0.239	0.150	0.341					
B-C	677	0.104	0.262	-	-					
С-В	574	0.222	0.222	-	-					

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

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



# **Demand Set Details**

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D12	DS 2031	PM	ONE HOUR	17:45	19:15	15	✓

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

# **Demand overview (Traffic)**

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A - Central Park Road (NE)		ONE HOUR	✓	58	100.000
B - Site Access		ONE HOUR	✓	7	100.000
C - Central Park Road (SW)		ONE HOUR	✓	198	100.000

# **Origin-Destination Data**

# Demand (PCU/hr)

	То							
		A - Central Park Road (NE)	B - Site Access	C - Central Park Road (SW)				
	A - Central Park Road (NE)	0	0	58				
From	B - Site Access	0	0	7				
	C - Central Park Road (SW)	189	9	0				

# Vehicle Mix

# **Heavy Vehicle Percentages**

	То							
		A - Central Park Road (NE)	B - Site Access	C - Central Park Road (SW)				
F	A - Central Park Road (NE)	10	10	10				
From	B - Site Access	10	10	10				
	C - Central Park Road (SW)	10	10	10				

# Results

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
B-AC	0.01	6.07	0.0	Α	6	10
C-AB	0.02	6.06	0.0	А	11	17
C-A					171	256
A-B					0	0
A-C					53	80



## 17:45 - 18:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	5	1	666	0.008	5	0.0	0.0	5.996	A
C-AB	9	2	662	0.013	9	0.0	0.0	6.060	A
C-A	140	35			140				
A-B	0	0			0				
A-C	44	11			44				

## 18:00 - 18:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	6	2	663	0.009	6	0.0	0.0	6.026	A
C-AB	11	3	679	0.016	11	0.0	0.0	5.923	A
C-A	167	42			167				
A-B	0	0			0				
A-C	52	13			52				

## 18:15 - 18:30

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	8	2	660	0.012	8	0.0	0.0	6.067	Α
C-AB	14	4	703	0.020	14	0.0	0.0	5.746	A
C-A	204	51			204				
A-B	0	0			0				
A-C	64	16			64				

# 18:30 - 18:45

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	8	2	660	0.012	8	0.0	0.0	6.067	А
C-AB	14	4	703	0.020	14	0.0	0.0	5.748	A
C-A	204	51			204				
A-B	0	0			0				
A-C	64	16			64				

## 18:45 - 19:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	6	2	663	0.009	6	0.0	0.0	6.028	А
C-AB	11	3	679	0.016	11	0.0	0.0	5.924	А
C-A	167	42			167				
A-B	0	0			0				
A-C	52	13			52				

# 19:00 - 19:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	5	1	666	0.008	5	0.0	0.0	5.998	A
C-AB	9	2	662	0.013	9	0.0	0.0	6.063	A
C-A	140	35			140				
A-B	0	0			0				
A-C	44	11			44				



# Do Something - DS 2041, AM

## **Data Errors and Warnings**

No errors or warnings

## **Analysis Set Details**

ID	Name	Include in report	Use specific Demand Set (s)	Specific Demand Set(s)	Network flow scaling factor (%)	Network capacity scaling factor (%)
A2	Do Something	✓	✓	D9,D10,D11,D12,D13,D14	100.000	100.000

# **Junction Network**

# **Junctions**

June	ction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
	1	untitled	T-Junction	Two-way		0.95	Α

## **Junction Network Options**

Driving side	Lighting
Left	Normal/unknown

# **Arms**

#### **Arms**

Arm	Name	Description	Arm type	
Α	Central Park Road (NE)		Major	
В	Site Access		Minor	
С	Central Park Road (SW)		Major	

# **Major Arm Geometry**

Arm	Width of carriageway (m)	Has kerbed central reserve	Has right turn bay	Visibility for right turn (m)	Blocks?	Blocking queue (PCU)
C - Central Park Road (SW)	6.00			0.0	✓	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 - Site Access	One lane	3.85	0	0

# 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	519	0.094	0.239	0.150	0.341
B-C	677	0.104	0.262	-	-
С-В	574	0.222	0.222	-	-

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

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



# **Demand Set Details**

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D13	DS 2041	AM	ONE HOUR	07:45	09:15	15	✓

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

# **Demand overview (Traffic)**

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A - Central Park Road (NE)		ONE HOUR	✓	59	100.000
B - Site Access		ONE HOUR	✓	15	100.000
C - Central Park Road (SW)		ONE HOUR	✓	79	100.000

# **Origin-Destination Data**

# Demand (PCU/hr)

	То									
		A - Central Park Road (NE)	B - Site Access	C - Central Park Road (SW)						
	A - Central Park Road (NE)	0	0	59						
From	B - Site Access	0	0	15						
	C - Central Park Road (SW)	72	7	0						

# **Vehicle Mix**

# **Heavy Vehicle Percentages**

		То		
		A - Central Park Road (NE)	B - Site Access	C - Central Park Road (SW)
	A - Central Park Road (NE)	10	10	10
From	B - Site Access	10	10	10
	C - Central Park Road (SW)	10	10	10

# Results

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
B-AC	0.03	6.15	0.0	Α	14	21
C-AB	0.01	6.65	0.0	А	7	11
C-A					65	98
A-B					0	0
A-C					54	81



## 07:45 - 08:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	11	3	665	0.017	11	0.0	0.0	6.053	A
C-AB	6	1	601	0.010	6	0.0	0.0	6.648	A
C-A	54	13			54				
A-B	0	0			0				
A-C	44	11			44				

# 08:00 - 08:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	13	3	663	0.020	13	0.0	0.0	6.095	А
C-AB	7	2	607	0.012	7	0.0	0.0	6.603	A
C-A	64	16			64				
A-B	0	0			0				
A-C	53	13			53				

# 08:15 - 08:30

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	17	4	660	0.025	16	0.0	0.0	6.153	А
C-AB	9	2	614	0.014	9	0.0	0.0	6.541	А
C-A	78	20			78				
A-B	0	0			0				
A-C	65	16			65				

# 08:30 - 08:45

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	17	4	660	0.025	17	0.0	0.0	6.153	A
C-AB	9	2	614	0.014	9	0.0	0.0	6.544	A
C-A	78	20			78				
A-B	0	0			0				
A-C	65	16			65				

## 08:45 - 09:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	13	3	663	0.020	14	0.0	0.0	6.097	А
C-AB	7	2	607	0.012	7	0.0	0.0	6.603	Α
C-A	64	16			64				
A-B	0	0			0				
A-C	53	13			53				

# 09:00 - 09:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	11	3	665	0.017	11	0.0	0.0	6.053	A
C-AB	6	1	601	0.010	6	0.0	0.0	6.651	A
C-A	54	13			54				
A-B	0	0			0				
A-C	44	11			44				



# Do Something - DS 2041, PM

## **Data Errors and Warnings**

No errors or warnings

## **Analysis Set Details**

ID	Name	Include in report	Use specific Demand Set (s)	Specific Demand Set(s)	Network flow scaling factor (%)	Network capacity scaling factor (%)
A2	Do Something	✓	✓	D9,D10,D11,D12,D13,D14	100.000	100.000

# **Junction Network**

# **Junctions**

Junctio	n Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way		0.41	Α

## **Junction Network Options**

Driving side	Lighting	
Left	Normal/unknown	

# **Arms**

#### **Arms**

Arm	Name	Name Description	
Α	Central Park Road (NE)		Major
В	Site Access		Minor
С	Central Park Road (SW)		Major

# **Major Arm Geometry**

Arm	Width of carriageway (m)	Has kerbed central reserve	Has right turn bay	Visibility for right turn (m)	Blocks?	Blocking queue (PCU)
C - Central Park Road (SW)	6.00			0.0	✓	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 - Site Access	One lane	3.85	0	0

# 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	519	0.094	0.239	0.150	0.341
B-C	677	0.104	0.262	-	-
С-В	574	0.222	0.222	-	-

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

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



# **Demand Set Details**

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D14	DS 2041	PM	ONE HOUR	17:45	19:15	15	✓

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

# **Demand overview (Traffic)**

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A - Central Park Road (NE)		ONE HOUR	✓	64	100.000
B - Site Access		ONE HOUR	✓	7	100.000
C - Central Park Road (SW)		ONE HOUR	✓	216	100.000

# **Origin-Destination Data**

# Demand (PCU/hr)

	То							
		A - Central Park Road (NE)	B - Site Access	C - Central Park Road (SW)				
F	A - Central Park Road (NE)	0	0	64				
From	B - Site Access	0	0	7				
	C - Central Park Road (SW)	207	9	0				

# **Vehicle Mix**

# **Heavy Vehicle Percentages**

	То						
From		A - Central Park Road (NE)	B - Site Access	C - Central Park Road (SW)			
	A - Central Park Road (NE)	10	10	10			
	B - Site Access	10	10	10			
	C - Central Park Road (SW)	10	10	10			

# Results

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
B-AC	0.01	6.08	0.0	А	6	10
C-AB	0.02	5.99	0.0	А	12	17
C-A					187	280
A-B					0	0
A-C					59	88



## 17:45 - 18:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	5	1	664	0.008	5	0.0	0.0	6.007	A
C-AB	9	2	670	0.013	9	0.0	0.0	5.985	A
C-A	154	38			154				
A-B	0	0			0				
A-C	48	12			48				

## 18:00 - 18:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	6	2	662	0.010	6	0.0	0.0	6.039	А
C-AB	11	3	689	0.016	11	0.0	0.0	5.838	A
C-A	183	46			183				
A-B	0	0			0				
A-C	58	14			58				

## 18:15 - 18:30

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	8	2	659	0.012	8	0.0	0.0	6.083	Α
C-AB	15	4	716	0.020	15	0.0	0.0	5.648	А
C-A	223	56			223				
A-B	0	0			0				
A-C	70	18			70				

# 18:30 - 18:45

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	8	2	659	0.012	8	0.0	0.0	6.083	A
C-AB	15	4	716	0.020	15	0.0	0.0	5.649	A
C-A	223	56			223				
A-B	0	0			0				
A-C	70	18			70				

## 18:45 - 19:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	6	2	662	0.010	6	0.0	0.0	6.039	А
C-AB	11	3	689	0.016	11	0.0	0.0	5.839	А
C-A	183	46			183				
A-B	0	0			0				
A-C	58	14			58				

# 19:00 - 19:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	5	1	664	0.008	5	0.0	0.0	6.007	A
C-AB	9	2	670	0.013	9	0.0	0.0	5.988	A
C-A	154	38			154				
A-B	0	0			0				
A-C	48	12			48				



# Base 2024 - BASE 2024, AM

## **Data Errors and Warnings**

No errors or warnings

## **Analysis Set Details**

П	Name	Include in report	Use specific Demand Set(s)	Specific Demand Set(s)	Network flow scaling factor (%)	Network capacity scaling factor (%)
Α	Base 2024	✓	✓	D1,D2	100.000	100.000

# **Junction Network**

#### **Junctions**

	Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
ĺ	1	untitled	T-Junction	Two-way		0.00	А

# **Junction Network Options**

Driving side	Lighting
Left	Normal/unknown

# **Arms**

#### **Arms**

Arm	Name	Description	Arm type
Α	Central Park Road (NE)		Major
В	Site Access		Minor
С	Central Park Road (SW)		Major

# **Major Arm Geometry**

Arm	Width of carriageway (m)	Has kerbed central reserve	Has right turn bay	Visibility for right turn (m)	Blocks?	Blocking queue (PCU)
C - Central Park Road (SW)	6.00			0.0	✓	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 - Site Access	One lane	3.85	0	0

# Slope / Intercept / Capacity

#### **Priority Intersection Slopes and Intercepts**

•			•		
Stream	Intercept (PCU/hr)	Slope Slope for for AB AC		Slope for C-A	Slope for C-B
B-A	519	0.094	0.239	0.150	0.341
B-C	677	0.104	0.262	-	-
С-В	574	0.222	0.222	-	-

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

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



# **Demand Set Details**

ID	Scenario name	Scenario name Time Period name		Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D1	BASE 2024	AM	ONE HOUR	07:45	09:15	15	✓

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

# **Demand overview (Traffic)**

Arm	Linked arm	Profile type Use O-D o		Average Demand (PCU/hr)	Scaling Factor (%)
A - Central Park Road (NE)		ONE HOUR	✓	49	100.000
B - Site Access		ONE HOUR	✓	0	100.000
C - Central Park Road (SW)		ONE HOUR	✓	59	100.000

# **Origin-Destination Data**

# Demand (PCU/hr)

		То										
		A - Central Park Road (NE)	B - Site Access	C - Central Park Road (SW)								
F	A - Central Park Road (NE)	0	0	49								
From	B - Site Access	0	0	0								
	C - Central Park Road (SW)	59	0	0								

# **Vehicle Mix**

# **Heavy Vehicle Percentages**

		То										
		A - Central Park Road (NE)	B - Site Access	C - Central Park Road (SW)								
	A - Central Park Road (NE)	10	10	10								
From	B - Site Access	10	10	10								
	C - Central Park Road (SW)	10	10	10								

# Results

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
B-AC	0.00	0.00	0.0	A	0	0
C-AB	0.00	0.00	0.0	А	0	0
C-A					54	81
A-B					0	0
A-C					45	67



## 07:45 - 08:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	0	0	574	0.000	0	0.0	0.0	0.000	A
C-AB	0	0	566	0.000	0	0.0	0.0	0.000	A
C-A	44	11			44				
A-B	0	0			0				
A-C	37	9			37				

# 08:00 - 08:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	0	0	571	0.000	0	0.0	0.0	0.000	A
C-AB	0	0	564	0.000	0	0.0	0.0	0.000	A
C-A	53	13			53				
A-B	0	0			0				
A-C	44	11			44				

## 08:15 - 08:30

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	0	0	567	0.000	0	0.0	0.0	0.000	А
C-AB	0	0	562	0.000	0	0.0	0.0	0.000	А
C-A	65	16			65				
A-B	0	0			0				
A-C	54	13			54				

# 08:30 - 08:45

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	0	0	567	0.000	0	0.0	0.0	0.000	A
C-AB	0	0	562	0.000	0	0.0	0.0	0.000	A
C-A	65	16			65				
A-B	0	0			0				
A-C	54	13			54				

## 08:45 - 09:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	0	0	571	0.000	0	0.0	0.0	0.000	А
C-AB	0	0	564	0.000	0	0.0	0.0	0.000	А
C-A	53	13			53				
A-B	0	0			0				
A-C	44	11			44				

# 09:00 - 09:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	0	0	574	0.000	0	0.0	0.0	0.000	A
C-AB	0	0	566	0.000	0	0.0	0.0	0.000	A
C-A	44	11			44				
A-B	0	0			0				
A-C	37	9			37				



# Base 2024 - BASE 2024, PM

## **Data Errors and Warnings**

No errors or warnings

## **Analysis Set Details**

ID	Name	Include in report	Use specific Demand Set(s)	Specific Demand Set(s)	Network flow scaling factor (%)	Network capacity scaling factor (%)
A3	Base 2024	✓	✓	D1,D2	100.000	100.000

# **Junction Network**

#### **Junctions**

	Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
ĺ	1	untitled	T-Junction	Two-way		0.00	А

# **Junction Network Options**

Driving side	Lighting
Left	Normal/unknown

# **Arms**

#### **Arms**

Arm	Name	Description	Arm type
Α	Central Park Road (NE)		Major
В	Site Access		Minor
С	Central Park Road (SW)		Major

# **Major Arm Geometry**

Arm	Width of carriageway (m)	Has kerbed central reserve	Has right turn bay	Visibility for right turn (m)	Blocks?	Blocking queue (PCU)
C - Central Park Road (SW)	6.00			0.0	✓	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 - Site Access	One lane	3.85	0	0

# 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	519	0.094	0.239	0.150	0.341
B-C	677	0.104	0.262	-	-
С-В	574	0.222	0.222	-	-

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

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



# **Demand Set Details**

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D2	BASE 2024	PM	ONE HOUR	17:45	19:15	15	✓

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

# **Demand overview (Traffic)**

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A - Central Park Road (NE)		ONE HOUR	✓	53	100.000
B - Site Access		ONE HOUR	✓	0	100.000
C - Central Park Road (SW)		ONE HOUR	✓	171	100.000

# **Origin-Destination Data**

# Demand (PCU/hr)

	То								
		A - Central Park Road (NE)	B - Site Access	C - Central Park Road (SW)					
	A - Central Park Road (NE)	0	0	53					
From	B - Site Access	0	0	0					
	C - Central Park Road (SW)	171	0	0					

# Vehicle Mix

# **Heavy Vehicle Percentages**

		То									
		A - Central Park Road (NE)	B - Site Access	C - Central Park Road (SW)							
F	A - Central Park Road (NE)	10	10	10							
From	B - Site Access	10	10	10							
	C - Central Park Road (SW)	10	10	10							

# Results

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
B-AC	0.00	0.00	0.0	А	0	0
C-AB	0.00	0.00	0.0	А	0	0
C-A					157	235
A-B					0	0
A-C					49	73



## 17:45 - 18:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	0	0	565	0.000	0	0.0	0.0	0.000	A
C-AB	0	0	565	0.000	0	0.0	0.0	0.000	A
C-A	129	32			129				
A-B	0	0			0				
A-C	40	10			40				

## 18:00 - 18:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	0	0	560	0.000	0	0.0	0.0	0.000	А
C-AB	0	0	563	0.000	0	0.0	0.0	0.000	A
C-A	154	38			154				
A-B	0	0			0				
A-C	48	12			48				

## 18:15 - 18:30

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	0	0	554	0.000	0	0.0	0.0	0.000	Α
C-AB	0	0	561	0.000	0	0.0	0.0	0.000	А
C-A	188	47			188				
A-B	0	0			0				
A-C	58	15			58				

# 18:30 - 18:45

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	0	0	554	0.000	0	0.0	0.0	0.000	A
C-AB	0	0	561	0.000	0	0.0	0.0	0.000	A
C-A	188	47			188				
A-B	0	0			0				
A-C	58	15			58				

# 18:45 - 19:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	0	0	560	0.000	0	0.0	0.0	0.000	А
C-AB	0	0	563	0.000	0	0.0	0.0	0.000	Α
C-A	154	38			154				
A-B	0	0			0				
A-C	48	12			48				

# 19:00 - 19:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	0	0	565	0.000	0	0.0	0.0	0.000	A
C-AB	0	0	565	0.000	0	0.0	0.0	0.000	A
C-A	129	32			129				
A-B	0	0			0				
A-C	40	10			40				



# **Junctions 9**

# **PICADY 9 - Priority Intersection Module**

Version: 9.5.2.1013 © Copyright TRL Limited, 2019

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Filename: Site Access Junction.j9
Path: G:\2024\p240002\calcs\picady\EIAR
Report generation date: 23/10/2024 16:40:31

»Do Minimum - DM 2026, AM »Do Minimum - DM 2026, PM »Do Minimum - DM 2031, AM »Do Minimum - DM 2031, PM »Do Minimum - DM 2041, AM »Do Minimum - DM 2041, PM »Do Something - DS 2026, AM »Do Something - DS 2031, AM »Do Something - DS 2031, PM »Do Something - DS 2041, AM »Do Something - DS 2041, AM »Do Something - DS 2041, PM »Base 2024 - BASE 2024, AM

»Base 2024 - BASE 2024, PM



# Summary of junction performance

		А	.M			РМ				
	Set ID	Queue (PCU)	Delay (s)	RFC	LOS	Set ID	Queue (PCU)	Delay (s)	RFC	LOS
		Do Minimum - DM 2026								
Stream B-AC	A1	0.0	0.00	0.00	Α	A1	0.0	0.00	0.00	Α
Stream C-AB	D3	0.0	0.00	0.00	Α	D4	0.0	0.00	0.00	Α
		Do Minimum - DM 2031								
Stream B-AC	A1	0.0	0.00	0.00	Α	A1	0.0	0.00	0.00	Α
Stream C-AB	D5	0.0	0.00	0.00	Α	D6	0.0	0.00	0.00	Α
	Do Minimum - DM 2041									
Stream B-AC	A1	0.0	0.00	0.00	А	A1	0.0	0.00	0.00	А
Stream C-AB	D7	0.0	0.00	0.00	Α	D8	0.0	0.00	0.00	Α

		Α	M			PM				
	Set ID	Queue (PCU)	Delay (s)	RFC	LOS	Set ID	Queue (PCU)	Delay (s)	RFC	LOS
		Do Something - DS 2026								
Stream B-AC	A2	0.0	6.13	0.02	Α	A2	0.0	6.06	0.01	А
Stream C-AB	D9	0.0	6.69	0.01	Α	D10	0.0	6.11	0.02	Α
			D	o Son	nethir	ng - DS	2031			
Stream B-AC	A2	0.0	6.14	0.02	А	A2	0.0	6.07	0.01	А
Stream C-AB	D11	0.0	6.68	0.01	Α	D12	0.0	6.06	0.02	Α
		Do Something - DS 2041								
Stream B-AC	A2	0.0	6.15	0.03	Α	A2	0.0	6.08	0.01	Α
Stream C-AB	D13	0.0	6.65	0.01	Α	D14	0.0	5.99	0.02	Α

		А	M		PM					
	Set ID	Queue (PCU)	Delay (s)	RFC	LOS	Set ID	Queue (PCU)	Delay (s)	RFC	LOS
			В	ase 2	2024 -	- BASE 2024				
Stream B-AC	АЗ	0.0	0.00	0.00	Α	АЗ	0.0	0.00	0.00	Α
Stream C-AB	D1	0.0	0.00	0.00	Α	D2	0.0	0.00	0.00	Α

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

# File summary

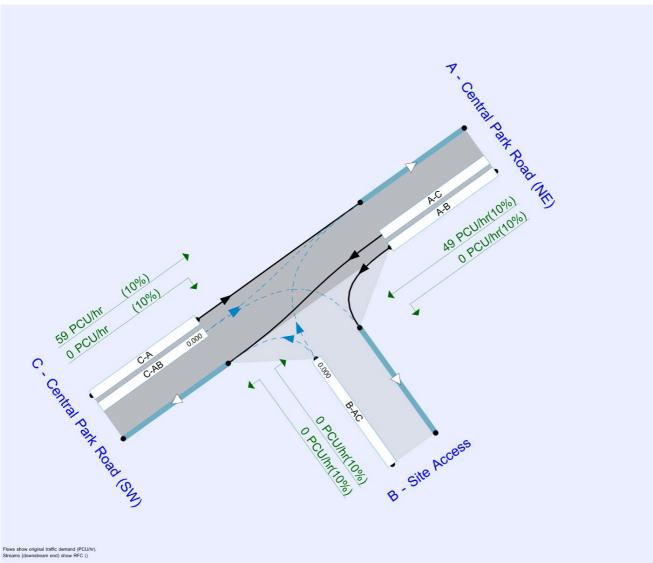
# **File Description**

Title	PROPOSED DEVELOPMENT AT FORDS FORDS SITE, CORK
Location	CORK
Site number	
Date	12/06/2024
Version	
Status	
Identifier	
Client	
Jobnumber	240002
Enumerator	VJ
Description	

## Units

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





The junction diagram reflects the last run of Junctions.

# **Analysis Options**

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



# **Demand Set Summary**

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D1	BASE 2024	AM	ONE HOUR	07:45	09:15	15	✓
D2	BASE 2024	PM	ONE HOUR	17:45	19:15	15	✓
D3	DM 2026	AM	ONE HOUR	07:45	09:15	15	✓
D4	DM 2026	PM	ONE HOUR	17:45	19:15	15	✓
D5	DM 2031	AM	ONE HOUR	07:45	09:15	15	✓
D6	DM 2031	PM	ONE HOUR	17:45	19:15	15	✓
D7	DM 2041	AM	ONE HOUR	07:45	09:15	15	✓
D8	DM 2041	PM	ONE HOUR	17:45	19:15	15	✓
D9	DS 2026	AM	ONE HOUR	07:45	09:15	15	✓
D10	DS 2026	PM	ONE HOUR	17:45	19:15	15	✓
D11	DS 2031	AM	ONE HOUR	07:45	09:15	15	✓
D12	DS 2031	PM	ONE HOUR	17:45	19:15	15	✓
D13	DS 2041	AM	ONE HOUR	07:45	09:15	15	✓
D14	DS 2041	PM	ONE HOUR	17:45	19:15	15	✓



# Do Minimum - DM 2026, AM

## **Data Errors and Warnings**

No errors or warnings

## **Analysis Set Details**

I	D	Name	Include in report	Use specific Demand Set(s)	Specific Demand Set(s)	Network flow scaling factor (%)	Network capacity scaling factor (%)
1	A1	Do Minimum	✓	✓	D3,D4,D5,D6,D7,D8	100.000	100.000

# **Junction Network**

#### **Junctions**

	Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
ĺ	1	untitled	T-Junction	Two-way		0.00	А

# **Junction Network Options**

Driving side	Lighting
Left	Normal/unknown

# **Arms**

#### **Arms**

Arm	Name	Description	Arm type
Α	Central Park Road (NE)		Major
В	Site Access		Minor
С	Central Park Road (SW)		Major

# **Major Arm Geometry**

Arm	Width of carriageway (m)	Has kerbed central reserve	Has right turn bay	Visibility for right turn (m)	Blocks?	Blocking queue (PCU)
C - Central Park Road (SW)	6.00			0.0	✓	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 - Site Access	One lane	3.85	0	0

# 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	519	0.094	0.239	0.150	0.341
B-C	677	0.104	0.262	-	-
С-В	574	0.222	0.222	-	-

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

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



# **Demand Set Details**

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D3	DM 2026	AM	ONE HOUR	07:45	09:15	15	✓

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

# **Demand overview (Traffic)**

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A - Central Park Road (NE)		ONE HOUR	✓	50	100.000
B - Site Access		ONE HOUR	✓	0	100.000
C - Central Park Road (SW)		ONE HOUR	✓	62	100.000

# **Origin-Destination Data**

# Demand (PCU/hr)

		То								
		A - Central Park Road (NE)	B - Site Access	C - Central Park Road (SW)						
	A - Central Park Road (NE)	0	0	50						
From	B - Site Access	0	0	0						
	C - Central Park Road (SW)	62	0	0						

# Vehicle Mix

# **Heavy Vehicle Percentages**

		То		
		A - Central Park Road (NE)	B - Site Access	C - Central Park Road (SW)
	A - Central Park Road (NE)	10	10	10
From	B - Site Access	10	10	10
	C - Central Park Road (SW)	10	10	10

# Results

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
B-AC	0.00	0.00	0.0	A	0	0
C-AB	0.00	0.00	0.0	А	0	0
C-A					57	85
A-B					0	0
A-C					46	69



## 07:45 - 08:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	0	0	573	0.000	0	0.0	0.0	0.000	A
C-AB	0	0	566	0.000	0	0.0	0.0	0.000	A
C-A	47	12			47				
A-B	0	0			0				
A-C	38	9			38				

# 08:00 - 08:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	0	0	571	0.000	0	0.0	0.0	0.000	A
C-AB	0	0	564	0.000	0	0.0	0.0	0.000	A
C-A	56	14			56				
A-B	0	0			0				
A-C	45	11			45				

## 08:15 - 08:30

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	0	0	567	0.000	0	0.0	0.0	0.000	A
C-AB	0	0	562	0.000	0	0.0	0.0	0.000	A
C-A	68	17			68				
A-B	0	0			0				
A-C	55	14			55				

# 08:30 - 08:45

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	0	0	567	0.000	0	0.0	0.0	0.000	A
C-AB	0	0	562	0.000	0	0.0	0.0	0.000	A
C-A	68	17			68				
A-B	0	0			0				
A-C	55	14			55				

## 08:45 - 09:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	0	0	571	0.000	0	0.0	0.0	0.000	А
C-AB	0	0	564	0.000	0	0.0	0.0	0.000	А
C-A	56	14			56				
A-B	0	0			0				
A-C	45	11			45				

# 09:00 - 09:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	0	0	573	0.000	0	0.0	0.0	0.000	A
C-AB	0	0	566	0.000	0	0.0	0.0	0.000	A
C-A	47	12			47				
A-B	0	0			0				
A-C	38	9			38				



# Do Minimum - DM 2026, PM

## **Data Errors and Warnings**

No errors or warnings

## **Analysis Set Details**

ID	Name	Include in report	Use specific Demand Set(s)	Specific Demand Set(s)	Network flow scaling factor (%)	Network capacity scaling factor (%)
<b>A</b> 1	Do Minimum	✓	✓	D3,D4,D5,D6,D7,D8	100.000	100.000

# **Junction Network**

#### **Junctions**

	Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
ĺ	1	untitled	T-Junction	Two-way		0.00	А

# **Junction Network Options**

Driving side	Lighting
Left	Normal/unknown

# **Arms**

#### **Arms**

Arm	Name	Description	Arm type
Α	Central Park Road (NE)		Major
В	Site Access		Minor
С	Central Park Road (SW)		Major

# **Major Arm Geometry**

Arm	Width of carriageway (m)	Has kerbed central reserve	Has right turn bay	Visibility for right turn (m)	Blocks?	Blocking queue (PCU)
C - Central Park Road (SW)	6.00			0.0	✓	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 - Site Access	One lane	3.85	0	0

## 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	519	0.094	0.239	0.150	0.341
B-C	677	0.104	0.262	-	-
С-В	574	0.222	0.222	-	-

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

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



# **Demand Set Details**

	ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
ı	D4	DM 2026	PM	ONE HOUR	17:45	19:15	15	✓

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

# **Demand overview (Traffic)**

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A - Central Park Road (NE)		ONE HOUR	✓	54	100.000
B - Site Access		ONE HOUR	✓	0	100.000
C - Central Park Road (SW)		ONE HOUR	✓	177	100.000

# **Origin-Destination Data**

# Demand (PCU/hr)

	То									
		A - Central Park Road (NE)	B - Site Access	C - Central Park Road (SW)						
F	A - Central Park Road (NE)	0	0	54						
From	B - Site Access	0	0	0						
	C - Central Park Road (SW)	177	0	0						

# **Vehicle Mix**

# **Heavy Vehicle Percentages**

	То								
		A - Central Park Road (NE)	B - Site Access	C - Central Park Road (SW)					
	A - Central Park Road (NE)	10	10	10					
From	B - Site Access	10	10	10					
	C - Central Park Road (SW)	10	10	10					

# Results

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
B-AC	0.00	0.00	0.0	А	0	0
C-AB	0.00	0.00	0.0	А	0	0
C-A					162	244
A-B					0	0
A-C					50	74



## 17:45 - 18:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	0	0	564	0.000	0	0.0	0.0	0.000	A
C-AB	0	0	565	0.000	0	0.0	0.0	0.000	A
C-A	133	33			133				
A-B	0	0			0				
A-C	41	10			41				

## 18:00 - 18:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	0	0	559	0.000	0	0.0	0.0	0.000	А
C-AB	0	0	563	0.000	0	0.0	0.0	0.000	A
C-A	159	40			159				
A-B	0	0			0				
A-C	49	12			49				

## 18:15 - 18:30

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	0	0	553	0.000	0	0.0	0.0	0.000	А
C-AB	0	0	561	0.000	0	0.0	0.0	0.000	А
C-A	195	49			195				
A-B	0	0			0				
A-C	59	15			59				

# 18:30 - 18:45

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	0	0	553	0.000	0	0.0	0.0	0.000	А
C-AB	0	0	561	0.000	0	0.0	0.0	0.000	A
C-A	195	49			195				
A-B	0	0			0				
A-C	59	15			59				

# 18:45 - 19:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	0	0	559	0.000	0	0.0	0.0	0.000	А
C-AB	0	0	563	0.000	0	0.0	0.0	0.000	A
C-A	159	40			159				
A-B	0	0			0				
A-C	49	12			49				

# 19:00 - 19:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	0	0	564	0.000	0	0.0	0.0	0.000	A
C-AB	0	0	565	0.000	0	0.0	0.0	0.000	A
C-A	133	33			133				
A-B	0	0			0				
A-C	41	10			41				

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## Do Minimum - DM 2031, AM

#### **Data Errors and Warnings**

No errors or warnings

#### **Analysis Set Details**

I	D	Name	Include in report	Use specific Demand Set(s)	Specific Demand Set(s)	Network flow scaling factor (%)	Network capacity scaling factor (%)
1	41	Do Minimum	✓	✓	D3,D4,D5,D6,D7,D8	100.000	100.000

## **Junction Network**

#### **Junctions**

	Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
ĺ	1	untitled	T-Junction	Two-way		0.00	А

#### **Junction Network Options**

Driving side	Lighting
Left	Normal/unknown

#### **Arms**

#### **Arms**

Arm	Name	Description	Arm type
Α	Central Park Road (NE)		Major
В	Site Access		Minor
С	Central Park Road (SW)		Major

#### **Major Arm Geometry**

Arm	Width of carriageway (m)	Has kerbed central reserve	Has right turn bay	Visibility for right turn (m)	Blocks?	Blocking queue (PCU)
C - Central Park Road (SW)	6.00			0.0	✓	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 - Site Access	One lane	3.85	0	0

#### 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	519	0.094	0.239	0.150	0.341
B-C	677	0.104	0.262	-	-
С-В	574	0.222	0.222	-	-

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

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



#### **Demand Set Details**

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D5	DM 2031	AM	ONE HOUR	07:45	09:15	15	✓

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

#### **Demand overview (Traffic)**

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A - Central Park Road (NE)		ONE HOUR	✓	54	100.000
B - Site Access		ONE HOUR	✓	0	100.000
C - Central Park Road (SW)		ONE HOUR	✓	66	100.000

## **Origin-Destination Data**

#### Demand (PCU/hr)

	То							
		A - Central Park Road (NE)	B - Site Access	C - Central Park Road (SW)				
	A - Central Park Road (NE)	0	0	54				
From	B - Site Access	0	0	0				
	C - Central Park Road (SW)	66	0	0				

## **Vehicle Mix**

#### **Heavy Vehicle Percentages**

	То							
		A - Central Park Road (NE)	B - Site Access	C - Central Park Road (SW)				
	A - Central Park Road (NE)	10	10	10				
From	B - Site Access	10	10	10				
	C - Central Park Road (SW)	10	10	10				

## Results

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
B-AC	0.00	0.00	0.0	A	0	0
C-AB	0.00	0.00	0.0	А	0	0
C-A					61	91
A-B					0	0
A-C					50	74



#### 07:45 - 08:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	0	0	572	0.000	0	0.0	0.0	0.000	A
C-AB	0	0	565	0.000	0	0.0	0.0	0.000	A
C-A	50	12			50				
A-B	0	0			0				
A-C	41	10			41				

#### 08:00 - 08:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	0	0	569	0.000	0	0.0	0.0	0.000	А
C-AB	0	0	563	0.000	0	0.0	0.0	0.000	A
C-A	59	15			59				
A-B	0	0			0				
A-C	49	12			49				

#### 08:15 - 08:30

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	0	0	565	0.000	0	0.0	0.0	0.000	Α
C-AB	0	0	561	0.000	0	0.0	0.0	0.000	A
C-A	73	18			73				
A-B	0	0			0				
A-C	59	15			59				

#### 08:30 - 08:45

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	0	0	565	0.000	0	0.0	0.0	0.000	A
C-AB	0	0	561	0.000	0	0.0	0.0	0.000	A
C-A	73	18			73				
A-B	0	0			0				
A-C	59	15			59				

#### 08:45 - 09:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	0	0	569	0.000	0	0.0	0.0	0.000	А
C-AB	0	0	563	0.000	0	0.0	0.0	0.000	А
C-A	59	15			59				
A-B	0	0			0				
A-C	49	12			49				

#### 09:00 - 09:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	0	0	572	0.000	0	0.0	0.0	0.000	A
C-AB	0	0	565	0.000	0	0.0	0.0	0.000	A
C-A	50	12			50				
A-B	0	0			0				
A-C	41	10			41				



## Do Minimum - DM 2031, PM

#### **Data Errors and Warnings**

No errors or warnings

#### **Analysis Set Details**

I	D	Name	Include in report	Use specific Demand Set(s)	Specific Demand Set(s)	Network flow scaling factor (%)	Network capacity scaling factor (%)
A	11	Do Minimum	✓	✓	D3,D4,D5,D6,D7,D8	100.000	100.000

## **Junction Network**

#### **Junctions**

	Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
ĺ	1	untitled	T-Junction	Two-way		0.00	А

#### **Junction Network Options**

Driving side	Lighting
Left	Normal/unknown

#### **Arms**

#### **Arms**

Arm	Name	Description	Arm type
Α	Central Park Road (NE)		Major
В	Site Access		Minor
С	Central Park Road (SW)		Major

#### **Major Arm Geometry**

Arm	Width of carriageway (m)	Has kerbed central reserve	Has right turn bay	Visibility for right turn (m)	Blocks?	Blocking queue (PCU)
C - Central Park Road (SW)	6.00			0.0	✓	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 - Site Access	One lane	3.85	0	0	

#### 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	519	0.094	0.239	0.150	0.341
B-C	677	0.104	0.262	-	-
С-В	574	0.222	0.222	-	-

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

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



#### **Demand Set Details**

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D6	DM 2031	PM	ONE HOUR	17:45	19:15	15	✓

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

#### **Demand overview (Traffic)**

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A - Central Park Road (NE)		ONE HOUR	✓	58	100.000
B - Site Access		ONE HOUR	✓	0	100.000
C - Central Park Road (SW)		ONE HOUR	✓	189	100.000

## **Origin-Destination Data**

#### Demand (PCU/hr)

	То								
		A - Central Park Road (NE)	B - Site Access	C - Central Park Road (SW)					
_	A - Central Park Road (NE)	0	0	58					
From	B - Site Access	0	0	0					
	C - Central Park Road (SW)	189	0	0					

## Vehicle Mix

#### **Heavy Vehicle Percentages**

	То								
		A - Central Park Road (NE) B - Site		C - Central Park Road (SW)					
From	A - Central Park Road (NE)	10	10	10					
	B - Site Access	10	10	10					
	C - Central Park Road (SW)	10	10	10					

## Results

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
B-AC	0.00	0.00	0.0	А	0	0
C-AB	0.00	0.00	0.0	А	0	0
C-A					173	260
A-B					0	0
A-C					53	80



#### 17:45 - 18:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	0	0	562	0.000	0	0.0	0.0	0.000	A
C-AB	0	0	564	0.000	0	0.0	0.0	0.000	A
C-A	142	36			142				
A-B	0	0			0				
A-C	44	11			44				

#### 18:00 - 18:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	0	0	557	0.000	0	0.0	0.0	0.000	A
C-AB	0	0	562	0.000	0	0.0	0.0	0.000	A
C-A	170	42			170				
A-B	0	0			0				
A-C	52	13			52				

#### 18:15 - 18:30

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	0	0	551	0.000	0	0.0	0.0	0.000	A
C-AB	0	0	560	0.000	0	0.0	0.0	0.000	А
C-A	208	52			208				
A-B	0	0			0				
A-C	64	16			64				

#### 18:30 - 18:45

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	0	0	551	0.000	0	0.0	0.0	0.000	A
C-AB	0	0	560	0.000	0	0.0	0.0	0.000	A
C-A	208	52			208				
A-B	0	0			0				
A-C	64	16			64				

#### 18:45 - 19:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	0	0	557	0.000	0	0.0	0.0	0.000	А
C-AB	0	0	562	0.000	0	0.0	0.0	0.000	А
C-A	170	42			170				
A-B	0	0			0				
A-C	52	13			52				

#### 19:00 - 19:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	0	0	562	0.000	0	0.0	0.0	0.000	A
C-AB	0	0	564	0.000	0	0.0	0.0	0.000	A
C-A	142	36			142				
A-B	0	0			0				
A-C	44	11			44				



## Do Minimum - DM 2041, AM

#### **Data Errors and Warnings**

No errors or warnings

#### **Analysis Set Details**

ID	Name	Include in report	Use specific Demand Set(s)	Specific Demand Set(s)	Network flow scaling factor (%)	Network capacity scaling factor (%)
A1	Do Minimum	✓	✓	D3,D4,D5,D6,D7,D8	100.000	100.000

## **Junction Network**

#### **Junctions**

	Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
ĺ	1	untitled	T-Junction	Two-way		0.00	А

#### **Junction Network Options**

Driving side	Lighting
Left	Normal/unknown

#### **Arms**

#### **Arms**

Arm	Name	Description	Arm type
Α	Central Park Road (NE)		Major
В	Site Access		Minor
С	Central Park Road (SW)		Major

#### **Major Arm Geometry**

Arm	Width of carriageway (m)	Has kerbed central reserve	Has right turn bay	Visibility for right turn (m)	Blocks?	Blocking queue (PCU)
C - Central Park Road (SW)	6.00			0.0	✓	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 - Site Access	One lane	3.85	0	0

#### 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	519	0.094	0.239	0.150	0.341
B-C	677	0.104	0.262	-	-
С-В	574	0.222	0.222	-	-

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

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



#### **Demand Set Details**

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D7	DM 2041	AM	ONE HOUR	07:45	09:15	15	✓

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

#### **Demand overview (Traffic)**

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A - Central Park Road (NE)		ONE HOUR	✓	59	100.000
B - Site Access		ONE HOUR	✓	0	100.000
C - Central Park Road (SW)		ONE HOUR	✓	72	100.000

## **Origin-Destination Data**

#### Demand (PCU/hr)

		То		
		A - Central Park Road (NE)	B - Site Access	C - Central Park Road (SW)
	A - Central Park Road (NE)	0	0	59
From	B - Site Access	0	0	0
	C - Central Park Road (SW)	72	0	0

## Vehicle Mix

#### **Heavy Vehicle Percentages**

		То		
		A - Central Park Road (NE)	B - Site Access	C - Central Park Road (SW)
	A - Central Park Road (NE)	10	10	10
From	B - Site Access	10	10	10
	C - Central Park Road (SW)	10	10	10

## Results

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
B-AC	0.00	0.00	0.0	А	0	0
C-AB	0.00	0.00	0.0	А	0	0
C-A					66	99
A-B					0	0
A-C					54	81



#### 07:45 - 08:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	0	0	571	0.000	0	0.0	0.0	0.000	А
C-AB	0	0	564	0.000	0	0.0	0.0	0.000	А
C-A	54	14			54				
A-B	0	0			0				
A-C	44	11			44				

#### 08:00 - 08:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	0	0	568	0.000	0	0.0	0.0	0.000	A
C-AB	0	0	562	0.000	0	0.0	0.0	0.000	A
C-A	65	16			65				
A-B	0	0			0				
A-C	53	13			53				

#### 08:15 - 08:30

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	0	0	563	0.000	0	0.0	0.0	0.000	Α
C-AB	0	0	560	0.000	0	0.0	0.0	0.000	А
C-A	79	20			79				
A-B	0	0			0				
A-C	65	16			65				

#### 08:30 - 08:45

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	0	0	563	0.000	0	0.0	0.0	0.000	А
C-AB	0	0	560	0.000	0	0.0	0.0	0.000	A
C-A	79	20			79				
A-B	0	0			0				
A-C	65	16			65				

#### 08:45 - 09:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	0	0	568	0.000	0	0.0	0.0	0.000	А
C-AB	0	0	562	0.000	0	0.0	0.0	0.000	А
C-A	65	16			65				
A-B	0	0			0				
A-C	53	13			53				

#### 09:00 - 09:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	0	0	571	0.000	0	0.0	0.0	0.000	A
C-AB	0	0	564	0.000	0	0.0	0.0	0.000	A
C-A	54	14			54				
A-B	0	0			0				
A-C	44	11			44				



## Do Minimum - DM 2041, PM

#### **Data Errors and Warnings**

No errors or warnings

#### **Analysis Set Details**

I	D	Name	Include in report	Use specific Demand Set(s)	Specific Demand Set(s)	Network flow scaling factor (%)	Network capacity scaling factor (%)
1	41	Do Minimum	✓	✓	D3,D4,D5,D6,D7,D8	100.000	100.000

## **Junction Network**

#### **Junctions**

	Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
ĺ	1	untitled	T-Junction	Two-way		0.00	А

#### **Junction Network Options**

Driving side				
Left	Normal/unknown			

#### **Arms**

#### **Arms**

Arm	Name	Description	Arm type
Α	Central Park Road (NE)		Major
В	Site Access		Minor
С	Central Park Road (SW)		Major

#### **Major Arm Geometry**

Arm	Width of carriageway (m)	Has kerbed central reserve	Has right turn bay	Visibility for right turn (m)	Blocks?	Blocking queue (PCU)
C - Central Park Road (SW)	6.00			0.0	✓	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 - Site Access	One lane	3.85	0	0

#### 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	519	0.094	0.239	0.150	0.341		
B-C	677	0.104	0.262	-	-		
С-В	574	0.222	0.222	-	-		

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

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



#### **Demand Set Details**

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D8	DM 2041	PM	ONE HOUR	17:45	19:15	15	✓

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

#### **Demand overview (Traffic)**

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A - Central Park Road (NE)		ONE HOUR	✓	64	100.000
B - Site Access		ONE HOUR	✓	0	100.000
C - Central Park Road (SW)		ONE HOUR	✓	207	100.000

## **Origin-Destination Data**

#### Demand (PCU/hr)

	То							
		A - Central Park Road (NE)	B - Site Access	C - Central Park Road (SW)				
	A - Central Park Road (NE)	0	0	64				
From	B - Site Access	0	0	0				
	C - Central Park Road (SW)	207	0	0				

## Vehicle Mix

#### **Heavy Vehicle Percentages**

	То							
		A - Central Park Road (NE)	B - Site Access	C - Central Park Road (SW)				
F	A - Central Park Road (NE)	10	10	10				
From	B - Site Access	10	10	10				
	C - Central Park Road (SW)	10	10	10				

## Results

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
B-AC	0.00	0.00	0.0	A	0	0
C-AB	0.00	0.00	0.0	А	0	0
C-A					190	285
A-B					0	0
A-C					59	88



#### 17:45 - 18:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	0	0	560	0.000	0	0.0	0.0	0.000	A
C-AB	0	0	563	0.000	0	0.0	0.0	0.000	A
C-A	156	39			156				
A-B	0	0			0				
A-C	48	12			48				

#### 18:00 - 18:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	0	0	554	0.000	0	0.0	0.0	0.000	A
C-AB	0	0	561	0.000	0	0.0	0.0	0.000	A
C-A	186	47			186				
A-B	0	0			0				
A-C	58	14			58				

#### 18:15 - 18:30

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	0	0	547	0.000	0	0.0	0.0	0.000	А
C-AB	0	0	558	0.000	0	0.0	0.0	0.000	А
C-A	228	57			228				
A-B	0	0			0				
A-C	70	18			70				

#### 18:30 - 18:45

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	0	0	547	0.000	0	0.0	0.0	0.000	A
C-AB	0	0	558	0.000	0	0.0	0.0	0.000	A
C-A	228	57			228				
A-B	0	0			0				
A-C	70	18			70				

#### 18:45 - 19:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	0	0	554	0.000	0	0.0	0.0	0.000	А
C-AB	0	0	561	0.000	0	0.0	0.0	0.000	A
C-A	186	47			186				
A-B	0	0			0				
A-C	58	14			58				

#### 19:00 - 19:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	0	0	560	0.000	0	0.0	0.0	0.000	A
C-AB	0	0	563	0.000	0	0.0	0.0	0.000	A
C-A	156	39			156				
A-B	0	0			0				
A-C	48	12			48				



## Do Something - DS 2026, AM

#### **Data Errors and Warnings**

No errors or warnings

#### **Analysis Set Details**

ID	Name	Include in report	Use specific Demand Set (s)	Specific Demand Set(s)	Network flow scaling factor (%)	Network capacity scaling factor (%)	
A2	Do Something	✓	✓	D9,D10,D11,D12,D13,D14	100.000	100.000	

## **Junction Network**

#### **Junctions**

Junctio	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way		1.07	A

#### **Junction Network Options**

Driving side	Lighting			
Left	Normal/unknown			

#### **Arms**

#### **Arms**

Arm	Name	Description	Arm type
Α	Central Park Road (NE)		Major
В	Site Access		Minor
С	Central Park Road (SW)		Major

#### **Major Arm Geometry**

Arm	Width of carriageway (m)	Has kerbed central reserve	Has right turn bay	Visibility for right turn (m)	Blocks?	Blocking queue (PCU)
C - Central Park Road (SW)	6.00			0.0	✓	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 - Site Access	One lane	3.85	0	0	

#### 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	519	0.094	0.239	0.150	0.341
B-C	677	0.104	0.262	-	-
С-В	574	0.222	0.222	-	-

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

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



#### **Demand Set Details**

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D9	DS 2026	AM	ONE HOUR	07:45	09:15	15	✓

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

#### **Demand overview (Traffic)**

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A - Central Park Road (NE)		ONE HOUR	✓	50	100.000
B - Site Access		ONE HOUR	✓	15	100.000
C - Central Park Road (SW)		ONE HOUR	✓	69	100.000

## **Origin-Destination Data**

#### Demand (PCU/hr)

	То										
		A - Central Park Road (NE)	B - Site Access	C - Central Park Road (SW)							
	A - Central Park Road (NE)	0	0	50							
From	B - Site Access	0	0	15							
	C - Central Park Road (SW)	62	7	0							

## Vehicle Mix

#### **Heavy Vehicle Percentages**

		То										
		A - Central Park Road (NE)	B - Site Access	C - Central Park Road (SW)								
	A - Central Park Road (NE)	10	10	10								
From	B - Site Access	10	10	10								
	C - Central Park Road (SW)	10	10	10								

## Results

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
B-AC	0.02	6.13	0.0	А	14	21
C-AB	0.01	6.69	0.0	А	7	11
C-A					56	84
A-B					0	0
A-C					46	69



#### 07:45 - 08:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	11	3	667	0.017	11	0.0	0.0	6.037	A
C-AB	6	1	598	0.010	6	0.0	0.0	6.689	A
C-A	46	12			46				
A-B	0	0			0				
A-C	38	9			38				

#### 08:00 - 08:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	13	3	665	0.020	13	0.0	0.0	6.075	A
C-AB	7	2	602	0.012	7	0.0	0.0	6.651	A
C-A	55	14			55				
A-B	0	0			0				
A-C	45	11			45				

#### 08:15 - 08:30

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	17	4	663	0.025	16	0.0	0.0	6.128	А
C-AB	9	2	609	0.014	9	0.0	0.0	6.599	A
C-A	67	17			67				
A-B	0	0			0				
A-C	55	14			55				

#### 08:30 - 08:45

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	17	4	663	0.025	17	0.0	0.0	6.128	A
C-AB	9	2	609	0.014	9	0.0	0.0	6.599	A
C-A	67	17			67				
A-B	0	0			0				
A-C	55	14			55				

#### 08:45 - 09:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	13	3	665	0.020	14	0.0	0.0	6.077	А
C-AB	7	2	602	0.012	7	0.0	0.0	6.654	A
C-A	55	14			55				
A-B	0	0			0				
A-C	45	11			45				

#### 09:00 - 09:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	11	3	667	0.017	11	0.0	0.0	6.037	A
C-AB	6	1	598	0.010	6	0.0	0.0	6.690	А
C-A	46	12			46				
A-B	0	0			0				
A-C	38	9			38				



## Do Something - DS 2026, PM

#### **Data Errors and Warnings**

No errors or warnings

#### **Analysis Set Details**

ID	Name	Include in report	Use specific Demand Set (s)	Specific Demand Set(s)	Network flow scaling factor (%)	Network capacity scaling factor (%)
A2	Do Something	✓	✓	D9,D10,D11,D12,D13,D14	100.000	100.000

## **Junction Network**

#### **Junctions**

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way		0.47	Α

#### **Junction Network Options**

Driving side	Lighting	
Left	Normal/unknown	

#### **Arms**

#### **Arms**

Arm	Name	Description	Arm type
Α	Central Park Road (NE)		Major
В	Site Access		Minor
С	Central Park Road (SW)		Major

#### **Major Arm Geometry**

Arm	Width of carriageway (m)	Has kerbed central reserve	Has right turn bay	Visibility for right turn (m)	Blocks?	Blocking queue (PCU)
C - Central Park Road (SW)	6.00			0.0	✓	0.00

 $\textit{Geometries for Arm C are measured opposite Arm B. Geometries for Arm A (\textit{if relevant}) are \textit{measured opposite Arm D}.$ 

#### **Minor Arm Geometry**

Arm	Minor arm type	Lane width (m)	Visibility to left (m)	Visibility to right (m)	
B - Site Access	One lane	3.85	0	0	

#### 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	519	0.094	0.239	0.150	0.341
B-C	677	0.104	0.262	-	-
С-В	574	0.222	0.222	-	-

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

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



#### **Demand Set Details**

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D10	DS 2026	PM	ONE HOUR	17:45	19:15	15	✓

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

#### **Demand overview (Traffic)**

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A - Central Park Road (NE)		ONE HOUR	✓	54	100.000
B - Site Access		ONE HOUR	✓	7	100.000
C - Central Park Road (SW)		ONE HOUR	✓	186	100.000

## **Origin-Destination Data**

#### Demand (PCU/hr)

	То							
		A - Central Park Road (NE)	B - Site Access	C - Central Park Road (SW)				
	A - Central Park Road (NE)	0	0	54				
From	B - Site Access	0	0	7				
	C - Central Park Road (SW)	177	9	0				

## Vehicle Mix

#### **Heavy Vehicle Percentages**

	То							
		A - Central Park Road (NE)	B - Site Access	C - Central Park Road (SW)				
F	A - Central Park Road (NE)	10	10	10				
From	B - Site Access	10	10	10				
	C - Central Park Road (SW)	10	10	10				

## Results

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
B-AC	0.01	6.06	0.0	A	6	10
C-AB	0.02	6.11	0.0	А	11	16
C-A					160	240
A-B					0	0
A-C					50	74



#### 17:45 - 18:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	5	1	666	0.008	5	0.0	0.0	5.989	A
C-AB	9	2	656	0.013	8	0.0	0.0	6.111	A
C-A	132	33			132				
A-B	0	0			0				
A-C	41	10			41				

#### 18:00 - 18:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	6	2	664	0.009	6	0.0	0.0	6.017	A
C-AB	11	3	673	0.016	11	0.0	0.0	5.982	A
C-A	157	39			157				
A-B	0	0			0				
A-C	49	12			49				

#### 18:15 - 18:30

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	8	2	661	0.012	8	0.0	0.0	6.056	Α
C-AB	14	3	695	0.020	14	0.0	0.0	5.813	A
C-A	191	48			191				
A-B	0	0			0				
A-C	59	15			59				

#### 18:30 - 18:45

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	8	2	661	0.012	8	0.0	0.0	6.056	A
C-AB	14	3	695	0.020	14	0.0	0.0	5.815	A
C-A	191	48			191				
A-B	0	0			0				
A-C	59	15			59				

#### 18:45 - 19:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	6	2	664	0.009	6	0.0	0.0	6.017	А
C-AB	11	3	673	0.016	11	0.0	0.0	5.985	А
C-A	157	39			157				
A-B	0	0			0				
A-C	49	12			49				

#### 19:00 - 19:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	5	1	666	0.008	5	0.0	0.0	5.989	A
C-AB	9	2	656	0.013	9	0.0	0.0	6.114	А
C-A	132	33			132				
A-B	0	0			0				
A-C	41	10			41				



## Do Something - DS 2031, AM

#### **Data Errors and Warnings**

No errors or warnings

#### **Analysis Set Details**

ID	Name	Include in report	Use specific Demand Set (s)	Specific Demand Set(s)	Network flow scaling factor (%)	Network capacity scaling factor (%)	
A2	Do Something	✓	✓	D9,D10,D11,D12,D13,D14	100.000	100.000	

## **Junction Network**

#### **Junctions**

ĺ	Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
ĺ	1	untitled	T-Junction	Two-way		1.02	А

#### **Junction Network Options**

Driving side	Lighting
Left	Normal/unknown

#### **Arms**

#### **Arms**

Arm	Name	Description	Arm type
Α	Central Park Road (NE)		Major
В	Site Access		Minor
С	Central Park Road (SW)		Major

#### **Major Arm Geometry**

Arm	Width of carriageway (m)	Has kerbed central reserve	Has right turn bay	Visibility for right turn (m)	Blocks?	Blocking queue (PCU)
C - Central Park Road (SW)	6.00			0.0	✓	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 - Site Access	One lane	3.85	0	0

#### 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	519	0.094	0.239	0.150	0.341
B-C	677	0.104	0.262	-	-
С-В	574	0.222	0.222	-	-

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

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



#### **Demand Set Details**

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D11	DS 2031	AM	ONE HOUR	07:45	09:15	15	✓

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

#### **Demand overview (Traffic)**

Arm	Linked arm	Profile type Use O-D data		Average Demand (PCU/hr)	Scaling Factor (%)
A - Central Park Road (NE)		ONE HOUR	✓	54	100.000
B - Site Access		ONE HOUR	✓	15	100.000
C - Central Park Road (SW)		ONE HOUR	✓	73	100.000

## **Origin-Destination Data**

#### Demand (PCU/hr)

		То										
		A - Central Park Road (NE) B - Sit		C - Central Park Road (SW)								
_	A - Central Park Road (NE)	0	0	54								
From	B - Site Access	0	0	15								
	C - Central Park Road (SW)	66	7	0								

## Vehicle Mix

#### **Heavy Vehicle Percentages**

		То									
		A - Central Park Road (NE)	B - Site Access	C - Central Park Road (SW)							
_	A - Central Park Road (NE)	10	10	10							
From	B - Site Access	10	10	10							
	C - Central Park Road (SW)	10	10	10							

## Results

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
B-AC	0.02	6.14	0.0	A	14	21
C-AB	0.01	6.68	0.0	А	7	11
C-A					60	90
A-B					0	0
A-C					50	74



#### 07:45 - 08:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	11	3	666	0.017	11	0.0	0.0	6.044	A
C-AB	6	1	599	0.010	6	0.0	0.0	6.674	A
C-A	49	12			49				
A-B	0	0			0				
A-C	41	10			41				

#### 08:00 - 08:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	13	3	664	0.020	13	0.0	0.0	6.084	Α
C-AB	7	2	604	0.012	7	0.0	0.0	6.632	A
C-A	59	15			59				
A-B	0	0			0				
A-C	49	12			49				

#### 08:15 - 08:30

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	17	4	661	0.025	16	0.0	0.0	6.139	Α
C-AB	9	2	611	0.014	9	0.0	0.0	6.577	A
C-A	72	18			72				
A-B	0	0			0				
A-C	59	15			59				

#### 08:30 - 08:45

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	17	4	661	0.025	17	0.0	0.0	6.139	A
C-AB	9	2	611	0.014	9	0.0	0.0	6.577	A
C-A	72	18			72				
A-B	0	0			0				
A-C	59	15			59				

#### 08:45 - 09:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	13	3	664	0.020	14	0.0	0.0	6.086	А
C-AB	7	2	604	0.012	7	0.0	0.0	6.633	А
C-A	59	15			59				
A-B	0	0			0				
A-C	49	12			49				

#### 09:00 - 09:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	11	3	666	0.017	11	0.0	0.0	6.047	A
C-AB	6	1	599	0.010	6	0.0	0.0	6.677	A
C-A	49	12			49				
A-B	0	0			0				
A-C	41	10			41				



## Do Something - DS 2031, PM

#### **Data Errors and Warnings**

No errors or warnings

#### **Analysis Set Details**

ı	ID	Name	Include in report	Use specific Demand Set (s)	Specific Demand Set(s)	Network flow scaling factor (%)	Network capacity scaling factor (%)
	A2	Do Something	✓	✓	D9,D10,D11,D12,D13,D14	100.000	100.000

## **Junction Network**

#### **Junctions**

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way		0.44	Α

#### **Junction Network Options**

Driving side	Lighting
Left	Normal/unknown

#### **Arms**

#### **Arms**

Arm	Name	Description	Arm type
Α	Central Park Road (NE)		Major
В	Site Access		Minor
С	Central Park Road (SW)		Major

#### **Major Arm Geometry**

Arm	Width of carriageway (m)	Has kerbed central reserve	Has right turn bay	Visibility for right turn (m)	Blocks?	Blocking queue (PCU)
C - Central Park Road (SW)	6.00			0.0	✓	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 - Site Access	One lane	3.85	0	0

#### Slope / Intercept / Capacity

#### **Priority Intersection Slopes and Intercepts**

litority	mornly intersection diopes and intercepts							
Stream	Intercept (PCU/hr)	Slope for A-B	Slope for A-C	Slope for C-A	Slope for C-B			
B-A	519	0.094	0.239	0.150	0.341			
B-C	677	0.104	0.262	-	-			
С-В	574	0.222	0.222	-	-			

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

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



#### **Demand Set Details**

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D12	DS 2031	PM	ONE HOUR	17:45	19:15	15	✓

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

#### **Demand overview (Traffic)**

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A - Central Park Road (NE)		ONE HOUR	✓	58	100.000
B - Site Access		ONE HOUR	✓	7	100.000
C - Central Park Road (SW)		ONE HOUR	✓	198	100.000

## **Origin-Destination Data**

#### Demand (PCU/hr)

	То						
		A - Central Park Road (NE)	B - Site Access	C - Central Park Road (SW)			
	A - Central Park Road (NE)	0	0	58			
From	B - Site Access	0	0	7			
	C - Central Park Road (SW)	189	9	0			

## Vehicle Mix

#### **Heavy Vehicle Percentages**

	То							
		A - Central Park Road (NE)	B - Site Access	C - Central Park Road (SW)				
F	A - Central Park Road (NE)	10	10	10				
From	B - Site Access	10	10	10				
	C - Central Park Road (SW)	10	10	10				

## Results

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
B-AC	0.01	6.07	0.0	А	6	10
C-AB	0.02	6.06	0.0	А	11	17
C-A					171	256
A-B					0	0
A-C					53	80



#### 17:45 - 18:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	5	1	666	0.008	5	0.0	0.0	5.996	A
C-AB	9	2	662	0.013	9	0.0	0.0	6.060	A
C-A	140	35			140				
A-B	0	0			0				
A-C	44	11			44				

#### 18:00 - 18:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	6	2	663	0.009	6	0.0	0.0	6.026	A
C-AB	11	3	679	0.016	11	0.0	0.0	5.923	A
C-A	167	42			167				
A-B	0	0			0				
A-C	52	13			52				

#### 18:15 - 18:30

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	8	2	660	0.012	8	0.0	0.0	6.067	Α
C-AB	14	4	703	0.020	14	0.0	0.0	5.746	A
C-A	204	51			204				
A-B	0	0			0				
A-C	64	16			64				

#### 18:30 - 18:45

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	8	2	660	0.012	8	0.0	0.0	6.067	А
C-AB	14	4	703	0.020	14	0.0	0.0	5.748	A
C-A	204	51			204				
A-B	0	0			0				
A-C	64	16			64				

#### 18:45 - 19:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	6	2	663	0.009	6	0.0	0.0	6.028	А
C-AB	11	3	679	0.016	11	0.0	0.0	5.924	А
C-A	167	42			167				
A-B	0	0			0				
A-C	52	13			52				

#### 19:00 - 19:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	5	1	666	0.008	5	0.0	0.0	5.998	A
C-AB	9	2	662	0.013	9	0.0	0.0	6.063	A
C-A	140	35			140				
A-B	0	0			0				
A-C	44	11			44				



## Do Something - DS 2041, AM

#### **Data Errors and Warnings**

No errors or warnings

#### **Analysis Set Details**

ID	Name	Include in report	Use specific Demand Set (s)	Specific Demand Set(s)	Network flow scaling factor (%)	Network capacity scaling factor (%)
A2	Do Something	✓	✓	D9,D10,D11,D12,D13,D14	100.000	100.000

## **Junction Network**

#### **Junctions**

June	ction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
	1	untitled	T-Junction	Two-way		0.95	Α

#### **Junction Network Options**

Driving side	Lighting
Left	Normal/unknown

#### **Arms**

#### **Arms**

Arm	Name	Description	Arm type
Α	Central Park Road (NE)		Major
В	Site Access		Minor
С	Central Park Road (SW)		Major

#### **Major Arm Geometry**

Arm	Width of carriageway (m)	Has kerbed central reserve	Has right turn bay	Visibility for right turn (m)	Blocks?	Blocking queue (PCU)
C - Central Park Road (SW)	6.00			0.0	✓	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 typ		Lane width (m)	Visibility to left (m)	Visibility to right (m)
B - Site Access	One lane	3.85	0	0

#### 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	519	0.094	0.239	0.150	0.341
B-C	677	0.104	0.262	-	-
С-В	574	0.222	0.222	-	-

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

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



#### **Demand Set Details**

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D13	DS 2041	AM	ONE HOUR	07:45	09:15	15	✓

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

#### **Demand overview (Traffic)**

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A - Central Park Road (NE)		ONE HOUR	✓	59	100.000
B - Site Access		ONE HOUR	✓	15	100.000
C - Central Park Road (SW)		ONE HOUR	✓	79	100.000

## **Origin-Destination Data**

#### Demand (PCU/hr)

		То								
		A - Central Park Road (NE)	B - Site Access	C - Central Park Road (SW)						
	A - Central Park Road (NE)	0	0	59						
From	B - Site Access	0	0	15						
	C - Central Park Road (SW)	72	7	0						

## **Vehicle Mix**

#### **Heavy Vehicle Percentages**

		То								
		A - Central Park Road (NE)	B - Site Access	C - Central Park Road (SW)						
	A - Central Park Road (NE)	10	10	10						
From	B - Site Access	10	10	10						
	C - Central Park Road (SW)	10	10	10						

## Results

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
B-AC	0.03	6.15	0.0	Α	14	21
C-AB	0.01	6.65	0.0	А	7	11
C-A					65	98
A-B					0	0
A-C					54	81



#### 07:45 - 08:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	11	3	665	0.017	11	0.0	0.0	6.053	A
C-AB	6	1	601	0.010	6	0.0	0.0	6.648	A
C-A	54	13			54				
A-B	0	0			0				
A-C	44	11			44				

#### 08:00 - 08:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	13	3	663	0.020	13	0.0	0.0	6.095	А
C-AB	7	2	607	0.012	7	0.0	0.0	6.603	A
C-A	64	16			64				
A-B	0	0			0				
A-C	53	13			53				

#### 08:15 - 08:30

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	17	4	660	0.025	16	0.0	0.0	6.153	А
C-AB	9	2	614	0.014	9	0.0	0.0	6.541	А
C-A	78	20			78				
A-B	0	0			0				
A-C	65	16			65				

#### 08:30 - 08:45

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	17	4	660	0.025	17	0.0	0.0	6.153	A
C-AB	9	2	614	0.014	9	0.0	0.0	6.544	A
C-A	78	20			78				
A-B	0	0			0				
A-C	65	16			65				

#### 08:45 - 09:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	13	3	663	0.020	14	0.0	0.0	6.097	А
C-AB	7	2	607	0.012	7	0.0	0.0	6.603	А
C-A	64	16			64				
A-B	0	0			0				
A-C	53	13			53				

#### 09:00 - 09:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	11	3	665	0.017	11	0.0	0.0	6.053	A
C-AB	6	1	601	0.010	6	0.0	0.0	6.651	A
C-A	54	13			54				
A-B	0	0			0				
A-C	44	11			44				



## Do Something - DS 2041, PM

#### **Data Errors and Warnings**

No errors or warnings

#### **Analysis Set Details**

ID	Name	Include in report	Use specific Demand Set (s)	Specific Demand Set(s)	Network flow scaling factor (%)	Network capacity scaling factor (%)
A2	Do Something	✓	✓	D9,D10,D11,D12,D13,D14	100.000	100.000

## **Junction Network**

#### **Junctions**

Junctio	n Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way		0.41	Α

#### **Junction Network Options**

Driving side	Lighting
Left	Normal/unknown

#### **Arms**

#### **Arms**

Arm	Name	Description	Arm type
Α	Central Park Road (NE)		Major
В	Site Access		Minor
С	Central Park Road (SW)		Major

#### **Major Arm Geometry**

Arm	Width of carriageway (m)	Has kerbed central reserve	Has right turn bay	Visibility for right turn (m)	Blocks?	Blocking queue (PCU)
C - Central Park Road (SW)	6.00			0.0	✓	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 - Site Access	One lane	3.85	0	0

#### 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	519	0.094	0.239	0.150	0.341
B-C	677	0.104	0.262	-	-
С-В	574	0.222	0.222	-	-

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

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



#### **Demand Set Details**

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D14	DS 2041	PM	ONE HOUR	17:45	19:15	15	✓

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

#### **Demand overview (Traffic)**

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A - Central Park Road (NE)		ONE HOUR	✓	64	100.000
B - Site Access		ONE HOUR	✓	7	100.000
C - Central Park Road (SW)		ONE HOUR	✓	216	100.000

## **Origin-Destination Data**

#### Demand (PCU/hr)

		То		
		A - Central Park Road (NE)	B - Site Access	C - Central Park Road (SW)
F	A - Central Park Road (NE)	0	0	64
From	B - Site Access	0	0	7
	C - Central Park Road (SW)	207	9	0

## **Vehicle Mix**

#### **Heavy Vehicle Percentages**

		То		
		A - Central Park Road (NE)	B - Site Access	C - Central Park Road (SW)
F	A - Central Park Road (NE)	10	10	10
From	B - Site Access	10	10	10
	C - Central Park Road (SW)	10	10	10

## Results

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
B-AC	0.01	6.08	0.0	А	6	10
C-AB	0.02	5.99	0.0	А	12	17
C-A					187	280
A-B					0	0
A-C					59	88



#### 17:45 - 18:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	5	1	664	0.008	5	0.0	0.0	6.007	A
C-AB	9	2	670	0.013	9	0.0	0.0	5.985	A
C-A	154	38			154				
A-B	0	0			0				
A-C	48	12			48				

#### 18:00 - 18:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	6	2	662	0.010	6	0.0	0.0	6.039	А
C-AB	11	3	689	0.016	11	0.0	0.0	5.838	A
C-A	183	46			183				
A-B	0	0			0				
A-C	58	14			58				

#### 18:15 - 18:30

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	8	2	659	0.012	8	0.0	0.0	6.083	Α
C-AB	15	4	716	0.020	15	0.0	0.0	5.648	А
C-A	223	56			223				
A-B	0	0			0				
A-C	70	18			70				

#### 18:30 - 18:45

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	8	2	659	0.012	8	0.0	0.0	6.083	A
C-AB	15	4	716	0.020	15	0.0	0.0	5.649	A
C-A	223	56			223				
A-B	0	0			0				
A-C	70	18			70				

#### 18:45 - 19:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	6	2	662	0.010	6	0.0	0.0	6.039	А
C-AB	11	3	689	0.016	11	0.0	0.0	5.839	А
C-A	183	46			183				
A-B	0	0			0				
A-C	58	14			58				

#### 19:00 - 19:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	5	1	664	0.008	5	0.0	0.0	6.007	A
C-AB	9	2	670	0.013	9	0.0	0.0	5.988	A
C-A	154	38			154				
A-B	0	0			0				
A-C	48	12			48				



## Base 2024 - BASE 2024, AM

#### **Data Errors and Warnings**

No errors or warnings

#### **Analysis Set Details**

П	Name	Include in report	Use specific Demand Set(s)	Specific Demand Set(s)	Network flow scaling factor (%)	Network capacity scaling factor (%)
Α	Base 2024	✓	✓	D1,D2	100.000	100.000

## **Junction Network**

#### **Junctions**

	Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
ĺ	1	untitled	T-Junction	Two-way		0.00	А

#### **Junction Network Options**

Driving side	Lighting
Left	Normal/unknown

#### **Arms**

#### **Arms**

Arm	Name	Description	Arm type
Α	Central Park Road (NE)		Major
В	Site Access		Minor
С	Central Park Road (SW)		Major

#### **Major Arm Geometry**

Arm	Width of carriageway (m)	Has kerbed central reserve	Has right turn bay	Visibility for right turn (m)	Blocks?	Blocking queue (PCU)
C - Central Park Road (SW)	6.00			0.0	✓	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 - Site Access	One lane	3.85	0	0

#### 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	519	0.094	0.239	0.150	0.341
B-C	677	0.104	0.262	-	-
С-В	574	0.222	0.222	-	-

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

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



#### **Demand Set Details**

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D1	BASE 2024	AM	ONE HOUR	07:45	09:15	15	✓

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

#### **Demand overview (Traffic)**

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A - Central Park Road (NE)		ONE HOUR	✓	49	100.000
B - Site Access		ONE HOUR	✓	0	100.000
C - Central Park Road (SW)		ONE HOUR	✓	59	100.000

## **Origin-Destination Data**

#### Demand (PCU/hr)

	То									
		A - Central Park Road (NE)	B - Site Access	C - Central Park Road (SW)						
F	A - Central Park Road (NE)	0	0	49						
From	B - Site Access	0	0	0						
	C - Central Park Road (SW)	59	0	0						

## **Vehicle Mix**

#### **Heavy Vehicle Percentages**

	То								
		A - Central Park Road (NE)	B - Site Access	C - Central Park Road (SW)					
	A - Central Park Road (NE)	10	10	10					
From	B - Site Access	10	10	10					
	C - Central Park Road (SW)	10	10	10					

## Results

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
B-AC	0.00	0.00	0.0	A	0	0
C-AB	0.00	0.00	0.0	А	0	0
C-A					54	81
A-B					0	0
A-C					45	67



#### 07:45 - 08:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	0	0	574	0.000	0	0.0	0.0	0.000	A
C-AB	0	0	566	0.000	0	0.0	0.0	0.000	A
C-A	44	11			44				
A-B	0	0			0				
A-C	37	9			37				

#### 08:00 - 08:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	0	0	571	0.000	0	0.0	0.0	0.000	А
C-AB	0	0	564	0.000	0	0.0	0.0	0.000	A
C-A	53	13			53				
A-B	0	0			0				
A-C	44	11			44				

#### 08:15 - 08:30

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	0	0	567	0.000	0	0.0	0.0	0.000	А
C-AB	0	0	562	0.000	0	0.0	0.0	0.000	А
C-A	65	16			65				
A-B	0	0			0				
A-C	54	13			54				

#### 08:30 - 08:45

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	0	0	567	0.000	0	0.0	0.0	0.000	A
C-AB	0	0	562	0.000	0	0.0	0.0	0.000	A
C-A	65	16			65				
A-B	0	0			0				
A-C	54	13			54				

#### 08:45 - 09:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	0	0	571	0.000	0	0.0	0.0	0.000	А
C-AB	0	0	564	0.000	0	0.0	0.0	0.000	А
C-A	53	13			53				
A-B	0	0			0				
A-C	44	11			44				

#### 09:00 - 09:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	0	0	574	0.000	0	0.0	0.0	0.000	A
C-AB	0	0	566	0.000	0	0.0	0.0	0.000	A
C-A	44	11			44				
A-B	0	0			0				
A-C	37	9			37				



## Base 2024 - BASE 2024, PM

#### **Data Errors and Warnings**

No errors or warnings

#### **Analysis Set Details**

ID	Name	Include in report	Use specific Demand Set(s)	Specific Demand Set(s)	Network flow scaling factor (%)	Network capacity scaling factor (%)
A3	Base 2024 ✓		✓	D1,D2	100.000	100.000

## **Junction Network**

#### **Junctions**

	Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
ĺ	1	untitled	T-Junction	Two-way		0.00	А

#### **Junction Network Options**

Driving side	Lighting		
Left	Normal/unknown		

#### **Arms**

#### **Arms**

Arm	Name	Description	Arm type
Α	Central Park Road (NE)		Major
В	Site Access		Minor
С	Central Park Road (SW)		Major

#### **Major Arm Geometry**

Arm	Width of carriageway (m)	Has kerbed central reserve	Has right turn bay	Visibility for right turn (m)	Blocks?	Blocking queue (PCU)
C - Central Park Road (SW)	6.00			0.0	✓	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 typ		Lane width (m)	Visibility to left (m)	Visibility to right (m)	
B - Site Access	One lane	3.85	0	0	

#### 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	519	0.094	0.239	0.150	0.341
B-C	677	0.104	0.262	-	-
С-В	574	0.222	0.222	-	-

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

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



#### **Demand Set Details**

ID	Scenario name Time Period name		Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D2	BASE 2024	PM	ONE HOUR	17:45	19:15	15	✓

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

#### **Demand overview (Traffic)**

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A - Central Park Road (NE)		ONE HOUR	✓	53	100.000
B - Site Access		ONE HOUR	✓	0	100.000
C - Central Park Road (SW)		ONE HOUR	✓	171	100.000

## **Origin-Destination Data**

#### Demand (PCU/hr)

		То		
		A - Central Park Road (NE)	B - Site Access	C - Central Park Road (SW)
	A - Central Park Road (NE)	0	0	53
From	B - Site Access	0	0	0
	C - Central Park Road (SW)	171	0	0

## Vehicle Mix

#### **Heavy Vehicle Percentages**

		То									
		A - Central Park Road (NE)	B - Site Access	C - Central Park Road (SW)							
F	A - Central Park Road (NE)	10	10	10							
From	B - Site Access	10	10	10							
	C - Central Park Road (SW)	10	10	10							

## Results

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
B-AC	0.00	0.00	0.0	А	0	0
C-AB	0.00	0.00	0.0	А	0	0
C-A					157	235
A-B					0	0
A-C					49	73



#### 17:45 - 18:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	0	0	565	0.000	0	0.0	0.0	0.000	A
C-AB	0	0	565	0.000	0	0.0	0.0	0.000	A
C-A	129	32			129				
A-B	0	0			0				
A-C	40	10			40				

#### 18:00 - 18:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	0	0	560	0.000	0	0.0	0.0	0.000	А
C-AB	0	0	563	0.000	0	0.0	0.0	0.000	A
C-A	154	38			154				
A-B	0	0			0				
A-C	48	12			48				

#### 18:15 - 18:30

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	0	0	554	0.000	0	0.0	0.0	0.000	Α
C-AB	0	0	561	0.000	0	0.0	0.0	0.000	А
C-A	188	47			188				
A-B	0	0			0				
A-C	58	15			58				

#### 18:30 - 18:45

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	0	0	554	0.000	0	0.0	0.0	0.000	A
C-AB	0	0	561	0.000	0	0.0	0.0	0.000	A
C-A	188	47			188				
A-B	0	0			0				
A-C	58	15			58				

#### 18:45 - 19:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	0	0	560	0.000	0	0.0	0.0	0.000	А
C-AB	0	0	563	0.000	0	0.0	0.0	0.000	А
C-A	154	38			154				
A-B	0	0			0				
A-C	48	12			48				

#### 19:00 - 19:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	0	0	565	0.000	0	0.0	0.0	0.000	A
C-AB	0	0	565	0.000	0	0.0	0.0	0.000	A
C-A	129	32			129				
A-B	0	0			0				
A-C	40	10			40				







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