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Traffic and Transport Assessment

Former Teagasc Lands

Kinsealy, Co. Dublin

Client: Land Development Agency

Job No. C215

February 2025

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TRAFFIC AND TRANSPORT ASSESSMENT

FORMER TEAGASC LANDS, KINSEALY, CO. DUBLIN

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1.0 INTRODUCTION

Cronin & Sutton Consulting Engineers (CS Consulting) have been commissioned by the Land Development Agency (LDA) to prepare a Traffic and Transport Assessment (TTA) for a proposed Large-scale Residential Development (LRD) on the former Teagasc lands in Kinsealy, Co. Dublin.

The TTA is to be read in conjunction with the engineering drawings and documents submitted by CS Consulting and with all other relevant documentation submitted by other members of the project design team.

1.1 Applicable Reference Documents

In preparing this report, CS Consulting has made reference to the following:

- Fingal Development Plan 2023-2029
- Kinsaley Local Area Plan 2019
- Sustainable Residential Development and Compact Settlements (Guidelines for Planning Authorities) (2024)
- TII Project Appraisal Guidelines (2011)
- TII Traffic and Transport Assessment Guidelines (2014)
- DoT Traffic Signs Manual (2019-2024)
- Trip Rate Information Computer System (TRICS) database
- CSO 2022 Census data
- Design Manual for Urban Roads and Streets (DMURS) 2019
- NDA Building for Everyone: A Universal Design Approach – External environment and approach (2012)
- Building Regulations 2010 Technical Guidance Document M
- NTA Cycle Design Manual (2023)
- Greater Dublin Area Cycle Network Plan (2015)

1.2 Objective

The objective of this report is to examine the traffic implications associated with the proposed development, in terms of integration with existing traffic in the area. The report determines the impact of the proposed development on the existing road network, in particular through the operational assessment of 4no. key junctions on Chapel Road and the Malahide Road. The report also examines the proposed development's vehicular access and servicing arrangements, car and bicycle parking provision, site layout, public transport availability, and facilities for pedestrians and cyclists.

1.3 Study Methodology

The methodology adopted in preparing this report corresponds to industry best practice and follows the guidance set out by Transport Infrastructure Ireland (TII) in its *Project Appraisal Guidelines* and its *Traffic and Transport Assessment Guidelines*. This methodology is summarised as follows:

- <u>Receiving environment</u> – A desktop study of the area surrounding the development site has been conducted, examining the nature of the surrounding existing transport infrastructure, the existing public transport services nearby, and proposed future improvements to transport infrastructure and services.
- <u>Traffic flow data</u> – 12-hour classified vehicular traffic count surveys were undertaken on Tuesday the 12th of September 2023 by Irish Traffic Surveys (ITS) on behalf of CS Consulting. These surveys were conducted between 07:00 and 19:00 at 3no. existing road junction sites in Kinsealy village. A supplementary classified traffic count survey was conducted by ITS on behalf of CS Consulting between 07:00 and 19:00 on Thursday the 25th of April 2024 at the existing access to the Malahide Portmarnock Educate Together National School.

- Trip generation – A multi-modal development trip generation assessment has been carried out using data extracted from the Trip Rate Information Computer System (TRICS) database of traffic surveys, in conjunction with CSO national census data. This quantifies trips to and from the proposed development site, across several modes of transport.
- Trip distribution – Based upon existing traffic characteristics and the surrounding road network, an appropriate distribution has been assigned to site development vehicular trips across the road network.
- Junction performance assessment – In accordance with TII traffic increase threshold guidance, a single existing junction was identified as requiring detailed operational assessment, alongside the development's proposed new access junction on the Malahide Road. Fingal County Council has however requested operational assessment of two additional existing junctions on the surrounding road network, and these have also been assessed. These four junctions were modelled under existing traffic conditions, as well as under a range of future year assessment scenarios. Future year traffic forecasts were derived from TII growth factors and development trip generation figures.
- Parking – Car and bicycle parking provisions within the proposed development have been assessed with reference to the parking standards set out in the *Fingal Development Plan 2023-2029* and the 2024 *Sustainable Residential Development and Compact Settlements (Guidelines for Planning Authorities)*.

1.4 Structure of Report

The structure of this report corresponds to the various stages outlined above, and the key tasks summarised below:

- Section 2 describes the proposed development location, the existing land use, and the development proposals.
- Section 3 provides an overview of the existing local transportation infrastructure, existing traffic flows, and public transport services, as well as identifying relevant proposed improvements to local infrastructure and services.
- Sections 4 and 5 detail the analysis as described in the study methodology above. The analysis examines trip generation, trip distribution, and resulting junction operational performance with the development in place.
- Section 6 assesses the proposed car and bicycle parking provisions for the development, with reference to Local Authority standards and national policy guidance.
- Section 7 examines the development's vehicular access arrangements, internal layout, pedestrian and cyclist facilities, and servicing arrangements.
- Section 8 presents the findings of an independent Quality Audit of the proposed development's access arrangements and internal layout, and details design changes made in response.
- Section 9 responds to specific opinion items issued by Fingal County Council in the course of the LRD application process to date.
- Section 10 presents the conclusions of the report.

2.0 SITE LOCATION AND PROPOSED DEVELOPMENT

2.1 Site Location

The site of the proposed development is located immediately to the east of the Malahide Road (R107) in the village of Kinsealy, Co. Dublin. The site has a total area of 8.2ha and is in the administrative jurisdiction of Fingal County Council. It is bounded to the north and northeast by recently completed residential developments, to the southeast by greenfield lands, to the south by St. Nicholas of Myra National School and commercial premises, and to the west by the Malahide/Portmarnock Educate Together National School, 2no. dwellings, and the Malahide Road (along a road frontage of approx. 35m).

Figure 1 – Location of proposed development site
(map data and imagery: EPA, OSM Contributors, Google)

The location of the proposed development site is shown in **Figure 1**; the extents and context of the development site are shown in more detail in **Figure 2**.

Figure 2 – Site extents and environs
(map data and imagery: NTA, OSM Contributors, Microsoft)

2.2 Existing Site Condition

The subject development site is brownfield, having previously accommodated the majority of a Teagasc agricultural research facility. A number of existing structures are present on the site, as well as a network of internal roads and other hardstanding elements. The site currently generates no vehicular or pedestrian traffic.

2.3 Description of Proposed Development

The proposed development consists of the demolition of existing buildings and structures on a site associated with the former Teagasc Research Centre, and the construction of 193 no. residential dwellings comprising 153 no. two storey houses (consisting of 30 no. two-bed; and 123 no. three-bed terraced houses) and 40 no. duplex units (comprising 20 no. two-bed ground floor apartments with 20 no. three-bed duplexes above) arranged in three storey blocks.

The proposed development includes a single storey childcare facility (approx. 283 sqm gross floor area) with the capacity for approximately 50 children.

The proposed development incorporates approximately 1.64 ha of dedicated public open space comprising a series of open spaces and a central east-west green route linear park and parklands along the east boundary. In addition, 2.2 ha of green belt lands are included to the south and south-east or the residential development area to accommodate the future provision of a soccer pitch.

Vehicular access to the site will be via a new vehicular entrance at Gandon Lane to the north (providing access to the northern part of the site) and a new vehicular access from the Malahide Road, located to the south of the existing Malahide Portmarnock Educate Together National School (providing access to the southern part of the site).

The proposed development includes 230 no. car parking spaces (comprising 193 no. residential spaces, 4 no. childcare drop off spaces, 3 no. childcare staff spaces, 9 no. dedicated EV charging spaces and 21 no. visitor spaces), and 345 no. bicycle parking spaces (201 no. private secure on-curtilage spaces for houses without independent garden access, 100 no. private secure spaces and 20. no. visitor spaces for duplex units, 20 no. childcare drop-off spaces, and 4 no. childcare staff spaces).

The proposed development facilitates pedestrian and cycle links to existing and proposed adjoining developments, including the provision of an east-west greenway connecting residential lands to the east of the site at Newpark to the Malahide Road and the provision of links from the greenway to adjoining lands to the north at Beechwood, and future links south to the green belt lands.

The proposed development has an overall site area of 8.12ha, and includes bin storage, internal roads, boundary treatments, public lighting, 3 no. ESB unit substations, water supply, surface water drainage and foul water drainage infrastructure, and all associated and ancillary site and development works.

3.0 RECEIVING ENVIRONMENT

3.1 Existing Road Network Characteristics

The development site is immediately to the east of the Malahide Road (R107), onto which it has an existing vehicular access. The site is approximately 100m to the south of Chapel Road (L2100), to which it is connected by Gandon Lane. A third key element of the existing surrounding road infrastructure is Baskin Lane (L2055), which meets the Malahide Road approximately 80m north of the development site's existing access.

Figure 3 – Key local roads
(map data and imagery: OSM Contributors, Microsoft)

The R107 is an important regional road, with a north-south alignment generally, which connects Malahide in the north to Fairview in the south. Through Kinsealy, this is a single-carriageway road with a pavement width of between 7m and 10m. A raised pedestrian footpath is in place on the western side of the road.

Chapel Road extends eastward from the R107 at Kinsealy, meeting Drumnigh Road (R124) approximately 1.5km to the east and providing the most direct route between Kinsealy and Portmarnock. This is a single-carriageway local road with a typical pavement width of between 5.5m and 6.5m. Raised pedestrian footpaths are in place on both sides of Chapel Road along its initial 390m stretch from the R107, as is a segregated westbound cycle track on its southern side; these facilities presently terminate at the entrance to the Cooper's Wood development.

Baskin Lane extends westward from the R107 at Kinsealy. It connects to Stockhole Lane approximately 2.5km to the west, which provides a route to the R132 at Dublin Airport and thence to the M1 motorway. A raised pedestrian footpath is in place on the northern side of Baskin Lane.

3.2 Existing Local Vehicular Traffic Flows

Full turning movement classified traffic counts were carried out by Irish Traffic Surveys (ITS), on behalf of CS Consulting, over a 12-hour period (07:00–19:00) on Tuesday the 12th of September 2023. Count information was obtained at the following 3no. existing junction sites (see **Figure 4**):

J1. Malahide Road / Baskin Lane
(3-arm priority-controlled junction)

J2. Malahide Road / Chapel Road
(3-arm signal-controlled junction)

J3. Chapel Road / Kinsealy Lane / Gandon Lane
(4-arm priority-controlled junction)

The peak hour traffic flows across these three initial survey sites were found to occur between 07:45 and 08:45 (AM peak hour) and between 16:15 and 17:15 (PM peak hour).

Figure 4 – Traffic survey sites
(*map data & imagery: OSM Contributors, Microsoft*)

A supplementary classified traffic count survey was conducted by ITS on behalf of CS Consulting between 07:00 and 19:00 on Thursday the 25th of April 2024 at the existing access to the Malahide Portmarnock Educate Together National School on the Malahide Road. This survey site, designated J4, is also shown in **Figure 4**.

As shown in **Table 1**, a comparison of the peak hour two-way traffic flows on the R107 Malahide Road between traffic survey sites J1 and J4 shows that the two-way traffic flows in April 2024 were:

- 7.8% higher during the AM peak hour than in September 2023.
- 7.2% lower during the PM peak hour than in September 2023.
- Almost identical to September 2023 when considering the sum of the two peak hours.

Table 1 – Surveyed Traffic Flows on R107 between J1 and J4

Traffic Flows in Passenger Car Units (PCU)	12th September 2023			25th April 2024		
	AM Peak (07:45-08:45)	PM Peak (16:15-17:15)	Sum of Peak Hours	AM Peak (07:45-08:45)	PM Peak (16:15-17:15)	Sum of Peak Hours
Northbound	522	763	1,285	544	607	1,151
Southbound	571	434	1,005	634	504	1,138
2-Way Total	1,093	1,197	2,290	1,178	1,111	2,289

This comparison shows that, while there is some seasonal variation in traffic patterns in the vicinity of the development site, overall background traffic flows in April 2024 during the identified peak hours were no greater than those recorded in September 2023. As such, the traffic movements and peak hours obtained from the survey on Tuesday the 12th of September 2023 form a robust basis for assessment of junction performance.

Raw data from both traffic surveys are provided in **Appendix A**. The recorded traffic movements at each of the surveyed junctions during the peak hours have been isolated from the count data, converted to Passenger Car Units (PCU), and scaled up to baseline levels for the year 2024 using standard TII growth factors (see sub-section **3.10**). For consistency, the mainline traffic flows recorded in April 2024 at the Malahide Portmarnock ETNS access on the Malahide Road (survey site J4) were adjusted to correspond to those recorded at survey site J1, and were treated thereafter as though recorded in the year 2023.

These total survey year and baseline year peak hour flows are included in the traffic flow matrices given in **Appendix C** and are also given in **Table 2**.

Table 2 – Total Weekday Peak Hour Junction Traffic Movements

Junction Ref.	2023 Survey Year		2024 Baseline Year	
	AM Peak (07:45-08:45)	PM Peak (16:15-17:15)	AM Peak (07:45-08:45)	PM Peak (16:15-17:15)
J1	1,496	1,629	1,515	1,650
J2	1,657	1,732	1,679	1,754
J3	917	934	929	947
J4	1,161 *	1,204 *	1,175	1,219

TII expansion factors have also been used to derive the Annual Average Daily Traffic (AADT) total traffic movements at each surveyed junction. These are given in **Table 3**.

Table 3 – Total AADT Traffic Movements at Surveyed Junctions

Junction Ref.	2023 Survey Year			2024 Baseline Year		
	Light Vehicles	Heavy Vehicles	TOTAL	Light Vehicles	Heavy Vehicles	TOTAL
J1	17,463	599	18,062	17,685	611	18,296
J2	19,142	615	19,757	19,385	627	20,012
J3	10,065	210	10,275	10,192	214	10,406
J4	12,610 †	485 †	13,095 †	12,771	495	13,105

* Figure adjusted for consistency with 2023 survey flows.

† Figure adjusted for consistency with 2023 survey flows.

3.3 Pedestrian Accessibility

Figure 5 shows walking times to and from the population centre of the proposed development (taking into account the proposed internal road and footpath network), based on an average walking speed of 4.8km/h. This illustrates that a number of key amenities are within a 10-minute walk; these include two primary schools, a service station (with convenience retail outlet), and several further commercial, retail, and food/beverage premises at the Kinsealy Village Centre complex (including a crèche and a gym). 6no. bus stops are within a 10-minute walk, while Portmarnock railway station is within approximately 30 minutes' walk.

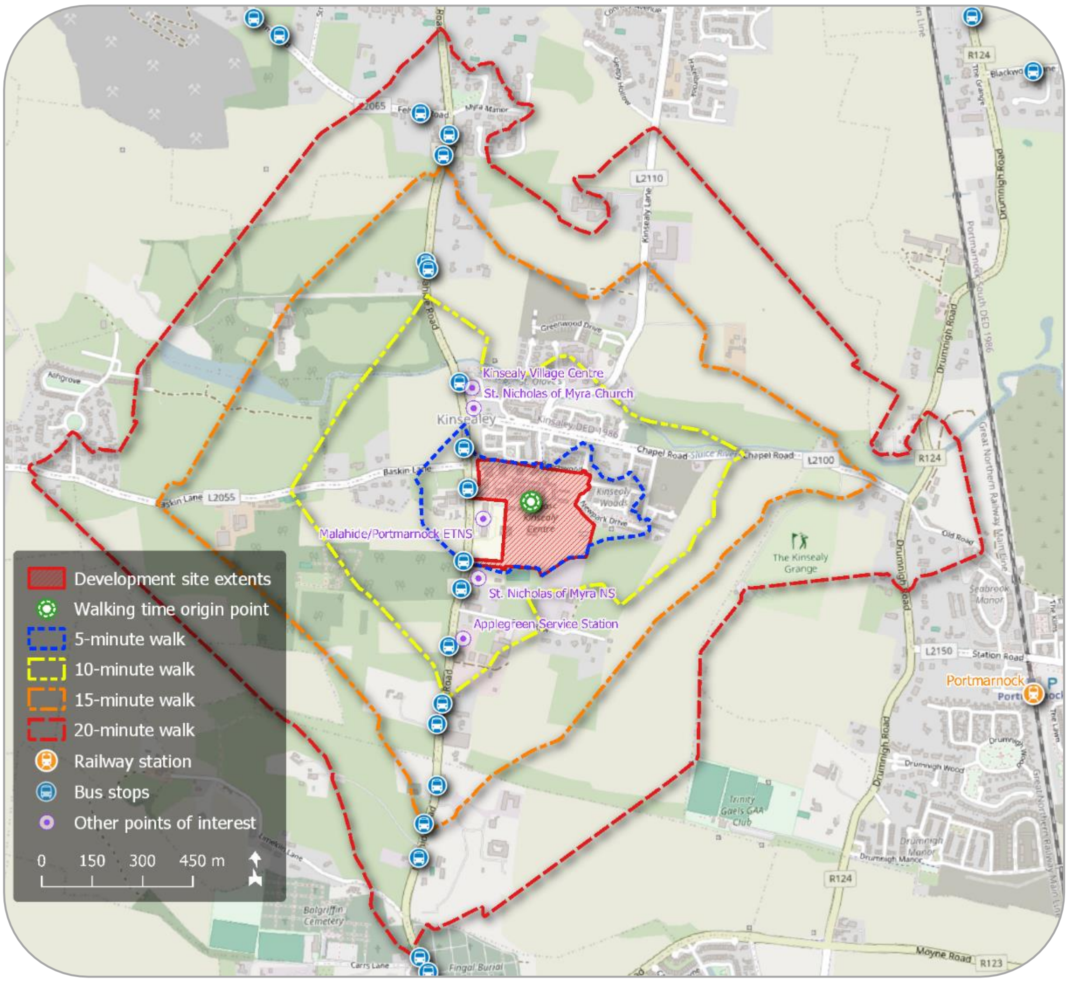

Figure 5 – Walking times to/from development site
(*map data & imagery: NTA, OSi, OSM Contributors*)

3.4 Bicycle Journey Times

Figure 5 shows bicycle journey times to and from the development site, based on an average cycling speed of 16km/h. Portmarnock railway station is within a 10-minute bicycle journey, and Howth Junction & Donaghmede railway station (served by more frequent DART trains) is within a 20-minute bicycle journey. Malahide is within a 15-minute bicycle journey; a 20-minute bicycle journey will reach Clare Hall, Dublin Airport, and the outskirts of Swords.

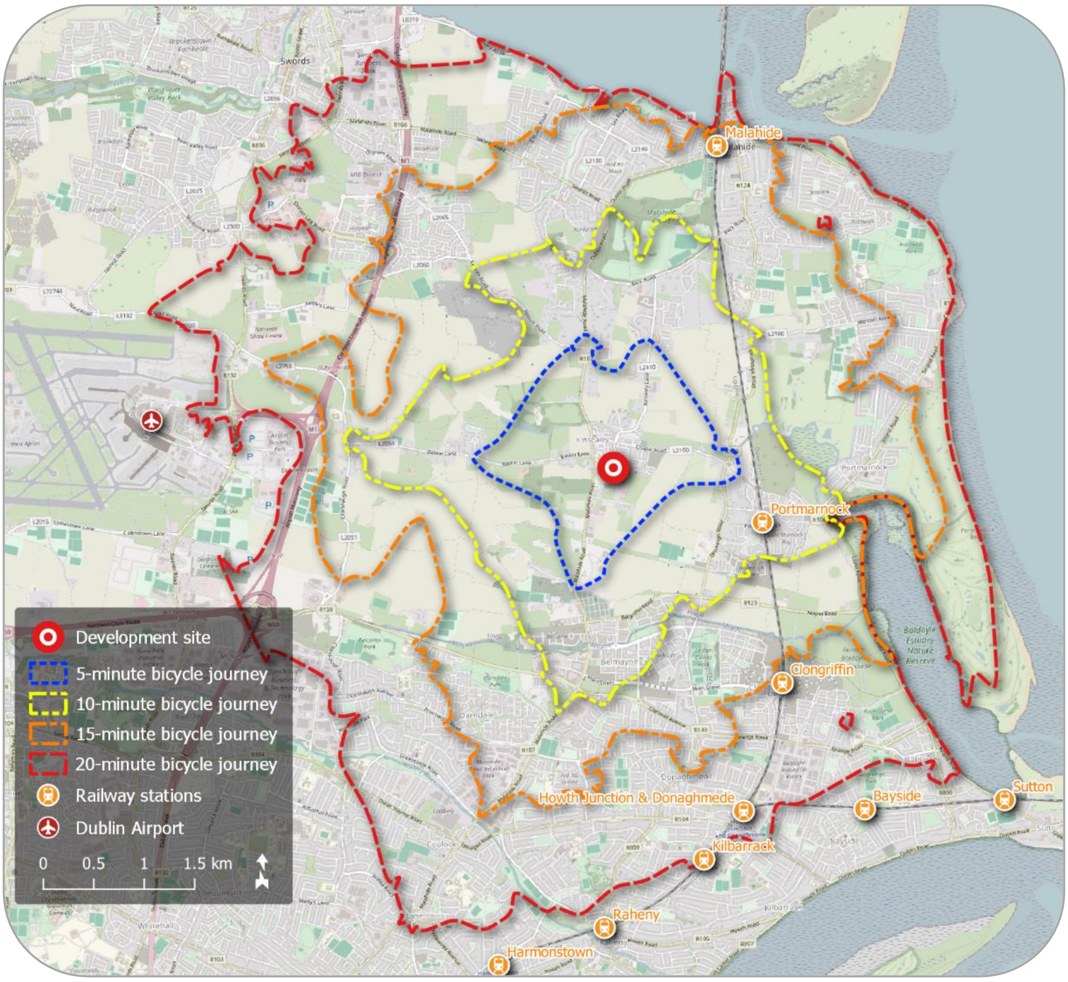

Figure 6 – Bicycle journey times to/from development site
(*map data & imagery: NTA, OSi, OSM Contributors*)

3.5 Existing Public Transport Services

Bus stops on the Malahide Road, in close proximity to the development site, are served by 2no. regular PSO bus routes operated by Dublin Bus: the 42 and the 43.

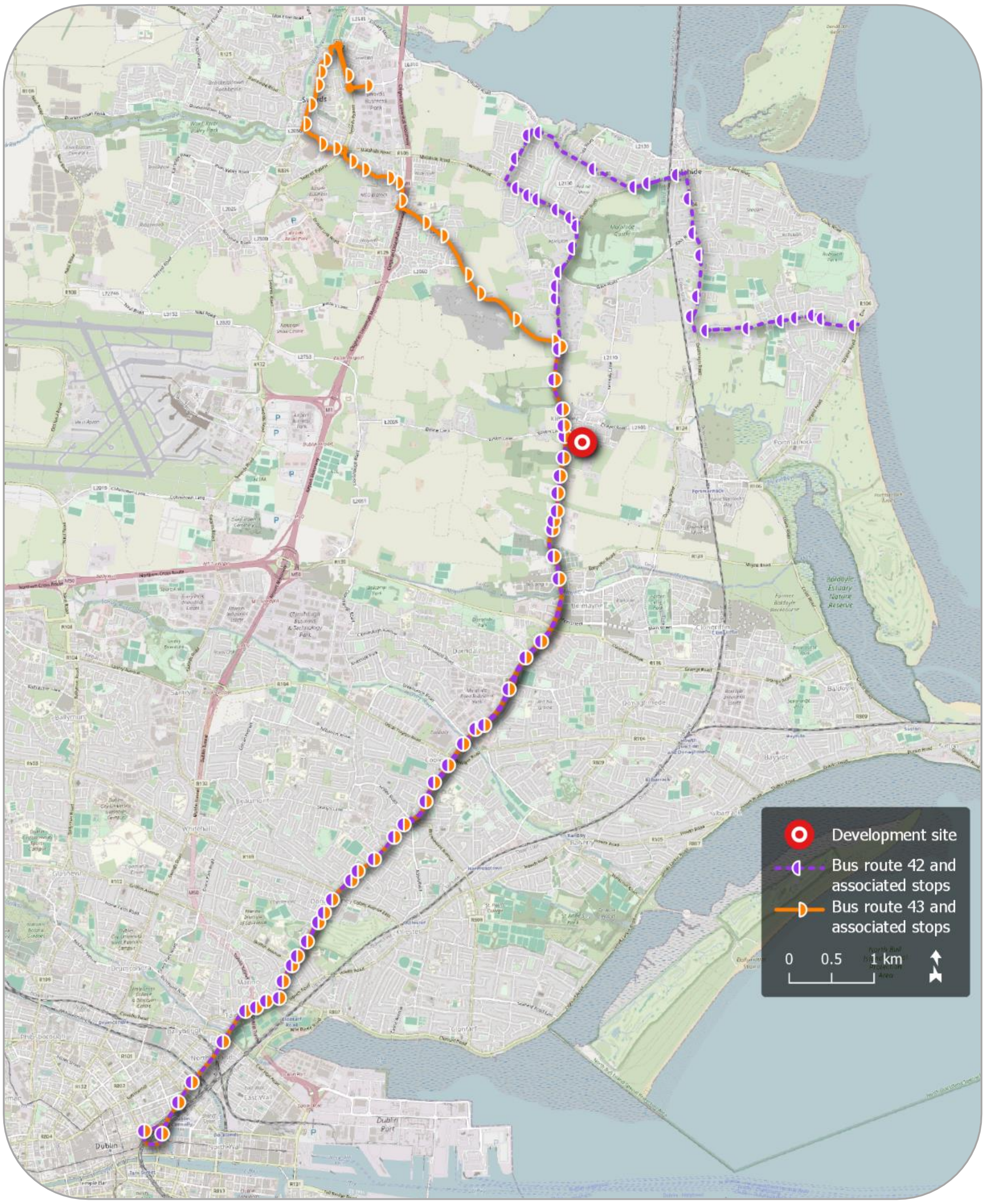

Figure 7 – Existing adjacent bus services
(*map data & imagery: NTA, OSM Contributors*)

Table 4 – Existing Adjacent Bus Services

Route No.	Operator	Destination	Weekday Services	Typical Peak Hour Interval
42	Dublin Bus	Portmarnock (Sand's Hotel)	42	20 min
		Dublin City (Talbot Street)	42	20 min
43	Dublin Bus	Swords Business Park	30	20 min
		Dublin City (Talbot Street)	31	20 min

Portmarnock railway station is approximately 1.4km to the east of the development site, within an 8-minute bicycle journey or a 4-minute car journey. Walking time from the development site to the railway station is approximately 30 minutes. This station is served principally by Dublin Area Rapid Transit (DART) trains operating between Malahide and Bray or Greystones, via Dublin city centre. Commuter rail services on the Drogheda/Dundalk to Dublin/Bray route also call at this station, though less frequently.

Table 5 – Rail Services at Portmarnock Station

Service Type	Direction (Destinations)	Weekday Services	Typical Peak Hour Interval
Dublin Area Rapid Transit (DART)	Northbound (Malahide)	47	15 min
	Southbound (Bray/Greystones via Dublin)	47	20 min
Commuter Rail	Northbound (Drogheda/Dundalk)	3	n/a
	Southbound (Dublin/Bray)	5	15 min

Figure 8 shows the reach of public transport journeys from the development site, by total journey time, based on a weekday departure time of 08:00. These journey times include service interchanges, as well as the time necessary to walk to and between public transport stops.

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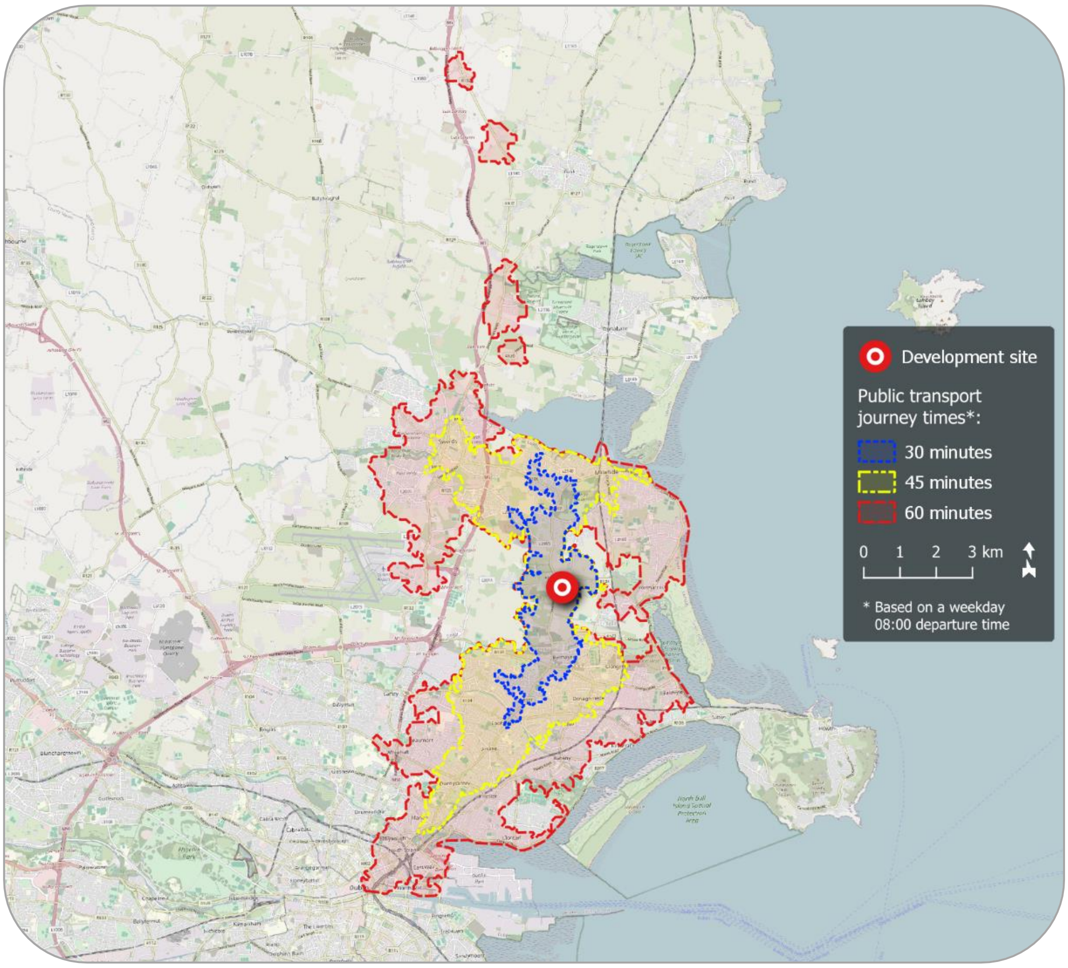


Figure 8 – Public transport journey times
(*map data & imagery: TravelTime platform, OSM Contributors*)

3.6 BusConnects Proposals

The BusConnects Dublin Area Revised Bus Network initiative, which is currently undergoing staged implementation, seeks to improve the overall convenience and efficiency of the city's bus routes. This will see the existing Dublin Bus routes 42 and 43 – which currently serve stops on the Malahide Road in close proximity to the development site – discontinued and replaced by the new routes 20 and 21.

Table 6 – Adjacent Bus Services Proposed Under BusConnects

Route No.	Destination	Weekday Services	Typical Peak Hour Interval
20	Malahide	34	30 min
	Dublin City Centre	34	30 min
21	Swords Business Park	34	30 min
	Dublin City Centre	34	30 min

Figure 9 – BusConnects network redesign – Malahide area
(background map imagery: NTA)

3.7 DART+ Proposals

DART+ is the NTA and Córas Iompair Éireann (CIÉ)'s programme for the expansion and modernisation of Dublin Area Rapid Transit (DART) medium rail services. This will extend the DART network from its current 50km in length to over 150km.

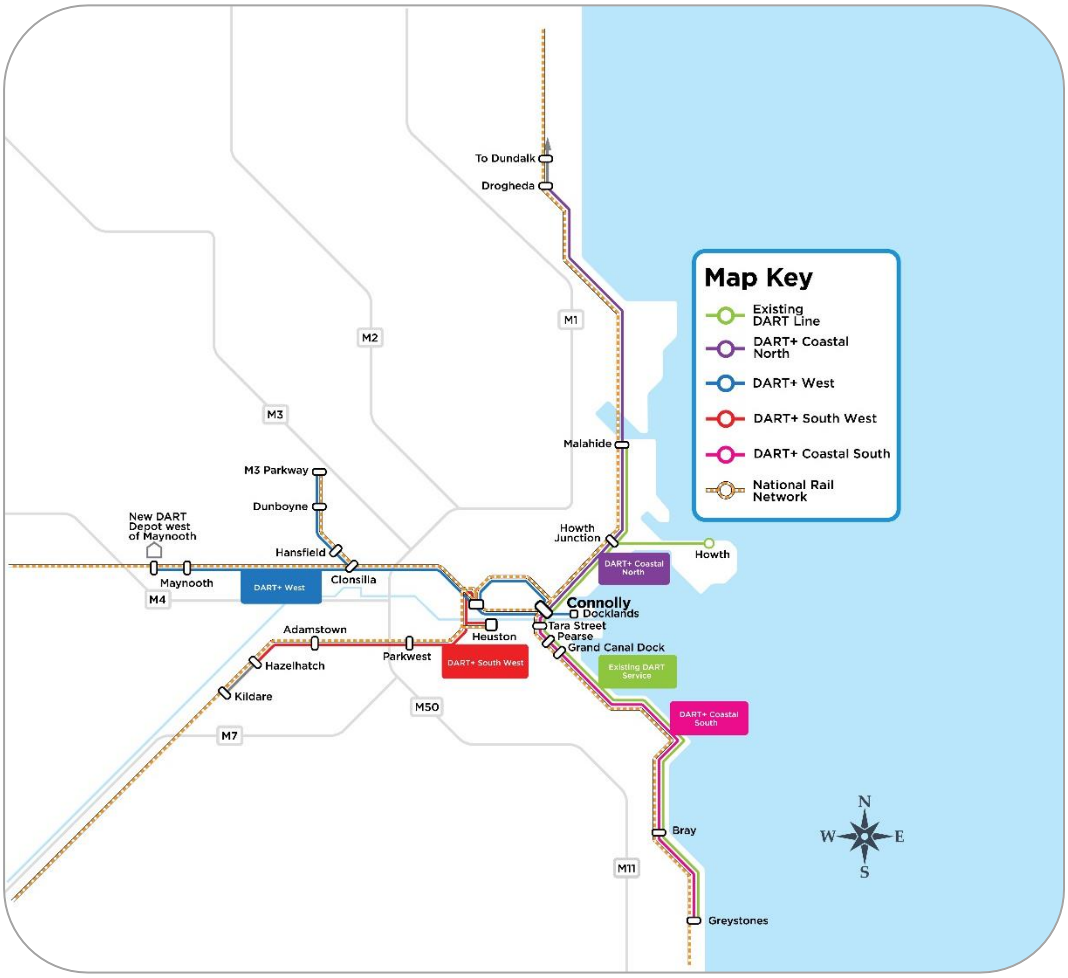


Figure 10 – DART+ proposal extents
(background map imagery: NTA/CIÉ)

The DART+ programme involves the purchase of a new train fleet, as well as rail infrastructure improvements along the following network sections:

- Maynooth and M3 Parkway to the City Centre (DART+ West)
- Hazelhatch & Celbridge to the City Centre (DART+ South West)

- Drogheda to the City Centre (DART+ Coastal North)
- Greystones to the City Centre (DART+ Coastal South)

The DART+ Coastal North Project will provide an extension of the existing electrified rail network from Malahide to Drogheda MacBride station, and will provide the infrastructure to facilitate increased rail capacity on the Northern Line between Dublin City Centre and Drogheda MacBride Station, including the Howth Branch. DART+ Coastal North will increase peak period train frequency between Drogheda and Dublin City Centre from 3.7 trains per hour to 8 trains per hour, and increase passenger capacity from 4,200 per hour to 8,900 per hour. Project elements also include track modifications at various locations and a new platform at Drogheda MacBride Station.

As additional rolling stock is required to support the planned expansion in rail services, provision is made for the purchase of up to 750 electric and battery/electric vehicles over the next decade. Delivery of the first order of 95 cars is expected in 2024, with these entering service in 2025.

CIÉ submitted a Railway Order application to An Bord Pleanála on the 12th of July 2024 for the DART+ Coastal North project. When the necessary permissions have been granted, the detailed design and procurement phases will be undertaken. Pending further approvals, the contract award for the construction phase is anticipated to be in 2025/26.

3.8 Proposed Improvements to the Malahide Road

The 2019 *Kinsaley Local Area Plan* (LAP) notes that peak hour traffic delays are currently experienced at the existing junctions of Chapel Road and Baskin Lane with the R107 Malahide Road, despite traffic signals having been installed at the former. The LAP states that Fingal County Council has commissioned a transport assessment that includes traffic modelling and concept design for further improvements to these two junctions, to include walking and cycling facilities and to accommodate existing and future traffic volumes.

Upgrade of the Chapel Road / Malahide Road junction is anticipated to be facilitated by a boundary setback within development lands to the west of the R107, opposite the Church. The proposed redevelopment of lands to the immediate north and south of Baskin Lane, to the west of the R107, could facilitate the land required to implement junction improvements at that location.

The *Fingal Development Plan 2023-2029* also identifies upgrade of the R107 Malahide Road as a proposed transportation scheme but does not give detailed design proposals. A previous road scheme objective for realignment of the R107, such that it would bypass Balgriffin and Kinsealy, featured in the *Fingal Development Plan 2017-2023* but was omitted from the *Fingal Development Plan 2023-2029*.

3.9 Nearby Committed Developments

A review of extant planning permissions has shown 2no. other committed developments in Kinsealy that may be expected to contribute to future vehicular traffic flows on the road network surrounding the subject site, and which may therefore produce cumulative effects on the road network in conjunction with the proposed development.

These are listed below, and their locations are shown in **Figure 11**.

(A) Reg. Refs. F20A/0242 and F20A/0272 (as amended under Reg. Refs. F21A/0377, F21A/0652, and F22A/0054)
Residential development comprising 41no. houses, with vehicular access to/from Kinsealy Lane.

(B) Reg. Ref. F21A/0647 (ABP Ref. 312855-22)

Mixed-use residential and commercial development comprising 46no. houses, 41no. apartment/duplex units, and a 2,347m^2 convenience foodstore, with vehicular access to/from the Malahide Road.

Figure 11 – Nearby committed developments
(*map data & imagery: DoHPLG, OSM Contributors, Microsoft*)

Committed development (A) is currently under construction. For the purposes of this Traffic and Transport Assessment, it has been assumed that committed development (B) shall also be constructed as permitted, and that both developments shall be fully operational by the time the proposed development is completed. The projected vehicular traffic to be generated by these committed developments has been included in all future year assessment scenarios, as described in sub-section **4.9** of this report.

3.10 Future Year Background Traffic Growth

The operational impact of traffic on the road network within the proposed development's area of influence has been assessed for the following years:

- 2024 Baseline year (existing conditions)
- 2027 Opening year
- 2032 5 years after opening
- 2042 Design year (15 years after opening)

Unit 5.3 of the TII *Project Appraisal Guidelines* (PE-PAG-02017 *Travel Demand Projections*) has been used to apply growth factors to the 2023 surveyed background traffic flows, to obtain traffic flows for the baseline year and for future year junction assessment. The TII annual growth rates applied are given in **Table 7**, and the resultant cumulative growth in background traffic for each assessment year is given in **Table 8**.

Table 7 – TII Central Growth Rates (Light Vehicles)

NTpM ‡ Zone No.	Vehicle Type	Background Traffic Growth per Year		
		2016-2030	2030-2040	2040-2050
8234	Light / PCU	+ 1.27%	+ 0.29%	+ 0.29%
	Heavy	+ 2.05%	+ 0.43%	+ 1.47%

Table 8 – Calculated Background Traffic Growth §

Vehicle Type	2024 Baseline year	2027 Year of opening	2032 Opening year +5	2042 Opening year +15
Light / PCU	+ 1.3%	+ 5.2%	+ 9.9%	+ 13.1%
Heavy	+ 2.1%	+ 8.5%	+ 16.3%	+ 23.9%

‡ TII/NTA National Transport Model

§ Cumulative percentage increases over 2023 surveyed traffic levels.

4.0 TRIP GENERATION AND DISTRIBUTION

4.1 Modal Split

To establish indicative baseline modal splits for residents of (and visitors to) the development, reference has been made to CSO data derived from the 2022 census, in the form of Small Area Population Statistics (SAPS) that give modal splits for residents' trips to places of work or study. For the purposes of the present assessment, these splits are assumed to apply also to visitors. The development site is within Census Small Area (SA) no. 267005001/01 (see **Figure 12**), which is bordered by SAs nos. 267099028/02 and 267099032. The aggregate census modal splits for these 3no. SAs, which have a total combined census population of 665 people, are given in **Table 9**.

Figure 12 – Census Small Areas (SAs)
(map data & imagery: CSO, Microsoft)

Table 9 – CSO 2022 Census Data – Existing Modal Splits

Transport Mode	Local Area Census Modal Shares **
Driving a Car or Van	42%
Passenger in a Car	29%
Bicycle	2%
Motorcycle	0%
Bus	11%
Train or Tram	9%
Walking	7%

It should be noted that these modal shares refer to the greatest proportion (by distance) of each journey. A bus journey, for example, is likely to involve walking or cycling at one or both ends of the trip but will not be classified as a walking or cycling journey.

4.2 Development Resident and Visitor Person-Trip Generation

The proposed development comprises 193no. residential dwellings (a mix of houses and duplex/apartment units) with a total of 529no. bedrooms, distributed as follows:

- 124no. dwellings (with 334no. bedrooms) in its northern section, with vehicular access to and from Chapel Road, via Gandon Lane.
- 69no. dwellings (with 195no. bedrooms) in its southern section, with vehicular access to and from the Malahide Road.

Trip generation factors from the Trip Rate Information Computer System (TRICS) database have been used to predict the total trip generation to and from the proposed development (across all modes) for the weekday AM and PM peak hour periods, as well as for an average full day (AADT). The TRICS survey database is maintained by a consortium of English County

** Excluding 'not stated' responses and those who work mainly from home.

Councils but covers the entirety of Great Britain and Ireland. Full details of the TRICS information used are provided in **Appendix B**.

The TRICS sub-category '03 Residential / A - Houses Privately Owned' has been employed, being the most appropriate to the proposed development. This is described in the TRICS land use category definitions as follows:

> *"Housing developments where at least 75% of units are privately owned. Of the total number of units, 75% must also be houses (sum of "non-split" terraced, detached, semi-detached, bungalows, etc), with no more than 25% of the total units being flats. The TRICS definition of a privately owned dwelling is a dwelling at which residents have any degree of equity, or a dwelling that is owned by a private landlord and rented at market rates. Trip rates are calculated by Site Area, Dwellings, Housing Density, or Total Bedrooms."*

The TRICS trip rates for the proposed development have been selected from the above category, restricted insofar as possible to similar locations, and further refined with reference to 2022 CSO census data on the basis of:

- The population within 1 mile of the development site (7,000 approx.).
- The population within 5 miles of the development site (218,000 approx.).
- The mean car ownership rate within 5 miles of the development site (1.3 cars per household).

The proposed development includes apartment/duplex units and is intended to comprise affordable housing. It is noted that the TRICS database also includes sub-categories for 'Affordable/Local Authority Houses' and for apartments. These typically yield lower trip generation rates than those for 'Houses Privately Owned'. To ensure a robust assessment of trip generation, the trip rates from the 'Houses Privately Owned' sub-category have therefore been applied to all dwellings in the proposed development.

The selected TRICS person-trip rates are given in **Table 10**. These account for all trips to and from the proposed development's dwellings, the majority of which shall be made by residents and their visitors.

Table 10 – TRICS Person-Trip Generation Rates for Houses

Time Period	Arrivals per bedroom	Departures per bedroom
Weekday AM Peak (07:45-08:45)	0.047	0.228
Weekday PM Peak (16:15-17:15)	0.166	0.073
AADT †† (24-hour period)	1.434	1.434

The total person-trip generation figures obtained for the proposed development are given in **Table 11**.

Table 11 – Development Residential Person-Trip Generation from TRICS

Time Period	Arrivals	Departures	Total Trips
Development Northern Section			
Weekday AM Peak	16	76	92
Weekday PM Peak	55	24	79
AADT (24hr)	479	479	958
Development Southern Section			
Weekday AM Peak	9	44	53
Weekday PM Peak	32	14	46
AADT (24hr)	280	280	560
Overall Development			
Weekday AM Peak	25	120	145
Weekday PM Peak	87	38	125
AADT (24hr)	759	759	1,518

4.3 Development Resident and Visitor Trips by Mode

The local modal splits given in **Table 9** have been applied to all weekday peak hour and AADT person-trips to be generated by the proposed

†† Annual Average Daily Traffic

development, as given in **Table 11**. This produces the distribution of development trips across transport modes that is presented in **Table 12**.

Table 12 – Development Trip Generation by Mode

Transport Mode	Direction and Time Period					
	Arrivals			Departures		
	Weekday AM Peak	Weekday PM Peak	AADT	Weekday AM Peak	Weekday PM Peak	AADT
Development Northern Section						
Driving a Car or Van	7	23	203	32	10	203
Passenger in a Car/Van/Taxi	5	16	141	22	7	141
Bicycle	0	1	8	1	0	8
Motorcycle	0	0	0	0	0	0
Bus	2	6	52	8	3	52
Train or Tram	1	5	43	7	2	43
Walking	1	4	32	5	2	32
TOTAL	16	55	479	75	24	479
Development Southern Section						
Driving a Car or Van	4	14	119	19	6	119
Passenger in a Car/Van/Taxi	3	9	82	13	4	82
Bicycle	0	1	5	1	0	5
Motorcycle	0	0	0	0	0	0
Bus	1	3	30	5	2	30
Train or Tram	1	3	25	4	1	25
Walking	1	2	18	3	1	18
TOTAL	10	32	279	45	14	279
Overall Development						
Driving a Car or Van	11	37	322	51	16	322
Passenger in a Car/Van/Taxi	8	25	223	35	11	223
Bicycle	0	2	13	2	0	13
Motorcycle	0	0	0	0	0	0
Bus	3	9	82	13	5	82
Train or Tram	2	8	68	11	3	68
Walking	2	6	50	8	3	50
TOTAL	26	87	758	120	38	758

4.4 Development Residential Servicing Vehicle Trip Generation

In addition to trips made to and from the site by residents and visitors, the proposed development shall also generate vehicular trips by servicing vehicles. These shall be required for operations such as deliveries, maintenance works, and refuse collection, and shall be made by either OGVs (Ordinary Goods Vehicles – rigid or articulated lorries over 7.5t) or LGVs (Light Goods Vehicles, i.e. vans).

To separate these trips from those made by development residents and visitors, specific OGV and LGV trip generation rates have been sourced from the TRICS database (also from the sub-category '03 Residential / A - Houses Privately Owned'); these are given in **Table 13**.

Table 13 – TRICS Residential Servicing Vehicle Trip Generation Rates

Time Period	Arrivals per bedroom		Departures per bedroom	
	OGVs	LGVs	OGVs	LGVs
Weekday AM Peak (07:45-08:45)	0.001	0.005	0.000	0.008
Weekday PM Peak (16:15-17:15)	0.000	0.006	0.001	0.004
AADT (24-hour period)	0.010	0.066	0.010	0.066

The development's resultant predicted servicing vehicle trip generation is given in **Table 14**.

It must be noted that the total person-trip generation figures already established for the development's residential component (**Table 11**) technically already include residential servicing trips, although these have not been removed from the trip numbers calculated for residents and visitors. It is further noted that some of the LGV trips accounted for by the TRICS rates under this vehicle category will in fact be made by residents or visitors driving their own vans, rather than representing additional servicing trips. As such, the trip generation methodology employed will very slightly overestimate the number of servicing vehicle trips to and from the proposed development. This effect does however contribute to a more robust traffic assessment of the development and has therefore not been corrected for.

Table 14 – Development Residential Servicing Trips from TRICS

Time Period	Arrivals		Departures		Total Trips	
	OGVs	LGVs	OGVs	LGVs	OGVs	LGVs
Development Northern Section						
Weekday AM Peak	0	2	0	3	0	5
Weekday PM Peak	0	2	0	1	0	3
AADT (24hr)	3	22	3	22	6	44
Development Southern Section						
Weekday AM Peak	0	1	0	2	0	3
Weekday PM Peak	0	1	0	1	0	2
AADT (24hr)	2	13	2	13	4	26
Overall Development						
Weekday AM Peak	0	3	0	5	0	8
Weekday PM Peak	0	3	0	2	0	5
AADT (24hr)	5	35	5	35	10	70

4.5 Crèche Vehicular Trip Generation

In addition to the 193no. residential dwellings, the proposed development also includes a crèche facility with the capacity for approximately 50no. childcare places. This crèche is located in the northern section of the development, with vehicular access to and from Chapel Road, via Gandon Lane.

Crèche-specific trip generation factors for cars (including taxis), LGVs, and OGVs have been sourced from the TRICS database under the sub-category '04 Education / D – Nursery'. This is described in the TRICS land use category definitions as follows:

> *"Pre-school centres. Trip rates are calculated by Gross Floor Area, Pupils, or Employees."*

The selected TRICS vehicle trip rates for the crèche are given in **Table 15**. These account for crèche users (i.e. parents), crèche staff, and servicing vehicles.

Table 15 – TRICS Crèche Vehicle Trip Generation Rates

Time Period	Arrivals per pupil			Departures per pupil		
	Cars	LGVs	OGVs	Cars	LGVs	OGVs
Weekday AM Peak (07:45-08:45)	0.153	0.002	0.002	0.075	0.002	0.002
Weekday PM Peak (16:15-17:15)	0.067	0.002	0.000	0.088	0.001	0.000
AADT (24-hour period)	0.816	0.025	0.018	0.816	0.025	0.018

The resultant predicted vehicle trip generation for the crèche is given in **Table 16**.

Table 16 – Crèche Vehicle Trip Generation from TRICS

Time Period	Arrivals			Departures		
	Cars	LGVs	OGVs	Cars	LGVs	OGVs
Weekday AM Peak (07:45-08:45)	8	0	0	4	0	0
Weekday PM Peak (16:15-17:15)	3	0	0	4	0	0
AADT (24-hour period)	41	1	1	41	1	1

The proposed crèche is intended to serve the proposed development itself, as well as the immediately adjacent existing residential areas. This is a small catchment area, and the majority of crèche users are expected to live within easy walking or cycling distance. The true rates of car trip generation to and from the crèche are therefore likely to be markedly less than those obtained from the TRICS database. As for residential servicing vehicle trips, however, these higher TRICS car trip rates contribute to a more robust traffic assessment and have therefore not been reduced.

4.6 Maximum Potential Development Vehicular Trips

Table 17 gives the total projected maximum vehicular trip generation of the proposed development, obtained by combining the trip generation figures derived in sub-sections **4.3**, **4.4**, and **4.5**. Car passengers (as listed in **Table 12**) are assumed not to represent separate vehicle trips; these are already accounted for by corresponding car driver trips.

Table 17 – Maximum Potential Development Vehicular Trip Generation

Time Period	Arrivals (PCU)	Departures (PCU)	Total Trips (PCU)
Development Northern Section			
Weekday AM Peak (07:45-08:45)	9	35	44
Weekday PM Peak (16:15-17:15)	25	11	36
AADT (24-hour period)	372	372	744
Development Southern Section			
Weekday AM Peak (07:45-08:45)	5	21	26
Weekday PM Peak (16:15-17:15)	15	7	22
AADT (24-hour period)	218	218	436
Overall Development			
Weekday AM Peak (07:45-08:45)	14	56	70
Weekday PM Peak (16:15-17:15)	40	18	58
AADT (24-hour period)	590	590	1,180

The above vehicular trip generation figures include all motorised vehicles. For analysis and comparison purposes, all vehicle trips have been converted to Passenger Car Units (PCU) on the following basis:

- 1 car or LGV = 1 PCU
- 1 OGV = 2 PCU

4.7 Vehicular Trip Distribution

Vehicular traffic arriving to or departing from either of the development's accesses is expected to leave or enter the immediate surrounding road network via one of the following origin/destination points (see **Figure 13**):

(A) Malahide Road (R107) to/from the north.

(B) Kinsealy Lane (L2110) to/from the northeast.

(C) Chapel Road (L2100) to/from the east.

(D) Malahide Road (R107) to/from the south.

(E) Baskin Lane (L2055) to/from the west.

Figure 13 – Vehicular routes to and from development
(*map data & imagery: OSM Contributors, Microsoft*)

The projected distribution of vehicular trips to and from the proposed development has been established following the proportions of the surveyed inbound and outbound mainline traffic flows at these five points on the local road network; these are given in **Table 18** and **Table 19**.

Table 18 – Distribution of Existing Network Traffic – Weekday Peak Hours

O/D Network Point	Road Name and Direction	AM Peak Flow (as PCU)	PM Peak Flow (as PCU)	% of Total AM Flow	% of Total PM Flow
Inbound Traffic (towards development site)					
A	Malahide Road (N)	664	551	34.8%	26.4%
B	Kinsealy Lane (NW)	113	106	5.9%	5.1%
C	Chapel Road (E)	344	375	18.0%	18.0%
D	Malahide Rd (S)	510	760	26.7%	36.5%
E	Baskin Lane (W)	277	292	14.5%	14.0%
Outbound Traffic (away from development site)					
A	Malahide Road (N)	495	677	26.1%	33.3%
B	Kinsealy Lane (NW)	108	128	5.7%	6.3%
C	Chapel Road (E)	441	411	23.2%	20.2%
D	Malahide Rd (S)	541	433	28.5%	21.3%
E	Baskin Lane (W)	315	385	16.6%	18.9%

Table 19 – Distribution of Existing Network Traffic – AADT Flows

O/D Network Point	Road Name and Direction	Light Vehicles (LV)	Heavy Vehicles (HV)	% of Total LV Flow	% of Total HV Flow
Inbound Traffic (towards development site)					
A	Malahide Road (N)	6,865	236	31.2%	34.4%
B	Kinsealy Lane (NW)	1,145	39	5.2%	5.7%
C	Chapel Road (E)	4,013	78	18.3%	11.4%
D	Malahide Rd (S)	6,613	233	30.1%	34.0%
E	Baskin Lane (W)	3,341	100	15.2%	14.6%
Outbound Traffic (away from development site)					
A	Malahide Road (N)	6,703	251	30.6%	36.4%
B	Kinsealy Lane (NW)	1,203	43	5.5%	6.2%
C	Chapel Road (E)	4,488	61	20.5%	8.9%
D	Malahide Rd (S)	5,751	250	26.3%	36.3%
E	Baskin Lane (W)	3,745	84	17.1%	12.2%

Table 20 to **Table 23** summarise the distribution of development arrival and departure trips according to the network point from which they arrive or to which they depart, both as weekday peak hour figures (in PCU) and as AADT flows. These distributions are presented separately for the proposed development's northern and southern accesses, which are not connected internally.

The tables indicate the proportions and numbers of trips from/to each network point, and the relevant junctions through which they will pass. In addition to the 4no. existing surveyed junctions (see sub-section **3.2**), the development's proposed southern access junction on the Malahide Road is also included as a relevant junction; this has been numbered as Junction 5 (see **Figure 14**).

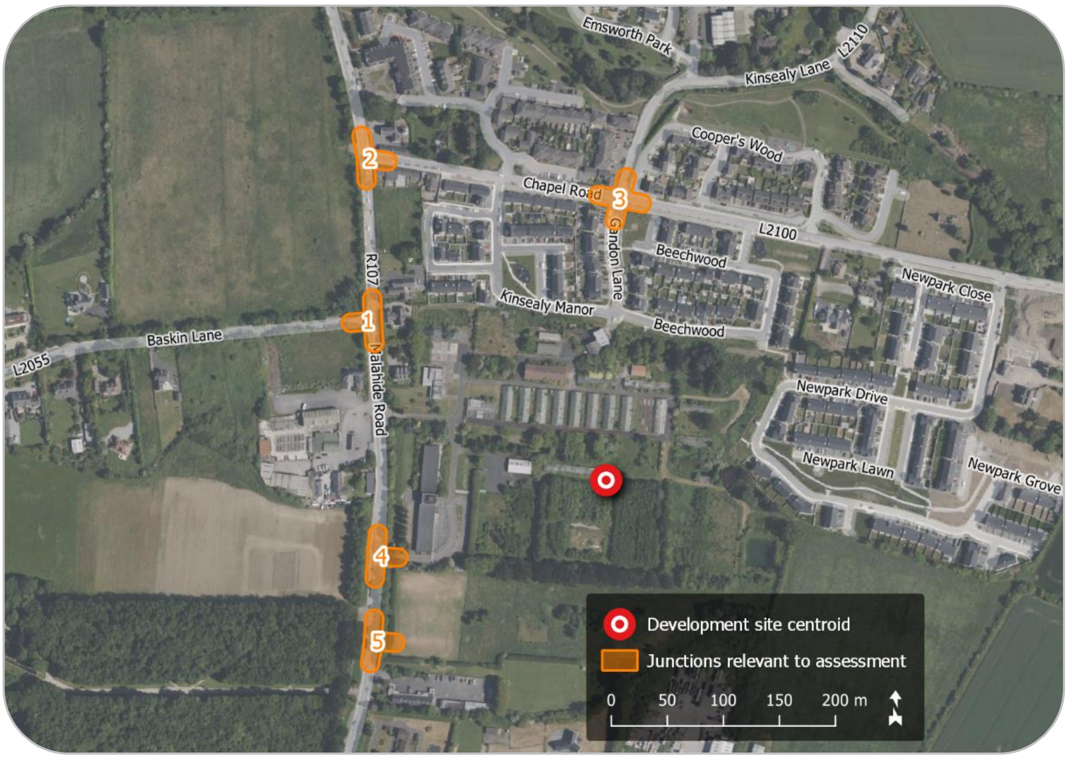


Figure 14 – Relevant assessment junctions
(*map data & imagery: OSM Contributors, Microsoft*)

Table 20 – Development Northern Access Distribution – Weekday Peaks

O/D Network Point	Relevant Junctions Passed Through	% of Total AM Trips	% of Total PM Trips	No. of AM Trips	No. of PM Trips
Vehicular ARRIVAL Trips (as PCU)					
A	2,3	34.8%	26.4%	6	7
B	3	5.9%	5.1%	1	1
C	3	18.0%	18.0%	3	5
D	5,4,1,2,3	26.7%	36.5%	5	10
E	1,2,3	14.5%	14.0%	2	4
Vehicular DEPARTURE Trips (as PCU)					
A	3,2	26.1%	33.3%	10	5
B	3	5.7%	6.3%	2	1
C	3	23.2%	20.2%	9	3
D	3,2,1,4,5	28.5%	21.3%	11	3
E	3,2,1	16.6%	18.9%	6	3

Table 21 – Development Southern Access Distribution – Weekday Peaks

O/D Network Point	Relevant Junctions Passed Through	% of Total AM Trips	% of Total PM Trips	No. of AM Trips	No. of PM Trips
Vehicular ARRIVAL Trips (as PCU)					
A	2,1,4,5	34.8%	26.4%	2	4
B	3,2,1,4,5	5.9%	5.1%	0	1
C	3,2,1,4,5	18.0%	18.0%	1	3
D	5	26.7%	36.5%	1	5
E	1,4,5	14.5%	14.0%	1	2
Vehicular DEPARTURE Trips (as PCU)					
A	5,4,1,2	26.1%	33.3%	5	2
B	5,4,1,2,3	5.7%	6.3%	1	0
C	5,4,1,2,3	23.2%	20.2%	5	1
D	5	28.5%	21.3%	6	1
E	5,4,1	16.6%	18.9%	3	1

Table 22 – Development Northern Access Distribution – AADT

O/D Network Point	Relevant Junctions Passed Through	% of Total LV Trips	% of Total HV Trips	No. of LV Trips	No. of HV Trips
Vehicular ARRIVAL Trips (Light and Heavy Vehicles)					
A	2,3	31.2%	34.4%	127	1
B	3	5.2%	5.7%	21	0
C	3	18.3%	11.4%	75	0
D	5,4,1,2,3	30.1%	34.0%	123	1
E	1,2,3	15.2%	14.6%	62	1
Vehicular DEPARTURE Trips (Light and Heavy Vehicles)					
A	3,2	30.6%	36.4%	125	1
B	3	5.5%	6.2%	22	0
C	3	20.5%	8.9%	84	0
D	3,2,1,4,5	26.3%	36.3%	107	1
E	3,2,1	17.1%	12.2%	70	0

Table 23 – Development Southern Access Distribution – AADT

O/D Network Point	Relevant Junctions Passed Through	% of Total LV Trips	% of Total HV Trips	No. of LV Trips	No. of HV Trips
Vehicular ARRIVAL Trips (Light and Heavy Vehicles)					
A	2,1,4,5	31.2%	34.4%	67	1
B	3,2,1,4,5	5.2%	5.7%	11	0
C	3,2,1,4,5	18.3%	11.4%	39	0
D	5	30.1%	34.0%	64	1
E	1,4,5	15.2%	14.6%	33	0
Vehicular DEPARTURE Trips (Light and Heavy Vehicles)					
A	5,4,1,2	30.6%	36.4%	66	1
B	5,4,1,2,3	5.5%	6.2%	12	0
C	5,4,1,2,3	20.5%	8.9%	44	0
D	5	26.3%	36.3%	56	1
E	5,4,1	17.1%	12.2%	37	0

It has been assumed that all vehicular traffic travelling to and from the development's northern section will pass along Gandon Lane and travel via Junction 3 (Chapel Road / Kinsealy Lane / Gandon Lane). It is acknowledged that alternative routes exist for vehicular traffic travelling between Chapel Road and the development's northern access; namely the adjacent residential streets of Beechwood and Kinsealy Manor. For assessment purposes, however, it is assumed that these alternative routes will not be used, for two reasons:

- The alternative routes do not shorten travel distances and therefore provide no travel time benefit.
- Routing of all northern development traffic via Junction 3 provides a more robust assessment of the development's potential effect on this junction's operation.

4.8 Proportional Increases in Vehicular Traffic

Table 24 and **Table 25** show the absolute and proportional increases in peak hour traffic flows that shall result from the proposed development at each of the 5no. relevant junctions shown in **Figure 14**.

Table 24 – Changes in Junction Traffic Flows – Weekday Peak Hours

Junction Ref.	2024 Baseline Total Traffic (PCU)		Development-Related Trips (PCU)		Proportional Increase	
	AM Peak	PM Peak	AM Peak	PM Peak	AM Peak	PM Peak
J1	1,515	1,650	43	34	2.8%	2.1%
J2	1,679	1,754	55	43	3.3%	2.5%
J3	929	389	63	47	6.8%	12.1%
J4	1,175	1,219	34	27	2.9%	2.2%
J5	1,064	1,208	41	33	3.9%	2.7%

Table 25 – Changes in Junction Traffic Flows – AADT

Jnctn. Ref.	2024 Baseline Total Traffic			Development-Related Trips			Proportional Increase		
	LV	HV	TOTAL	LV	HV	TOTAL	LV	HV	TOTAL
J1	17,685	611	18,296	670	5	675	3.8%	0.8%	3.7%
J2	19,385	627	20,012	853	7	860	4.4%	1.1%	4.3%
J3	10,192	214	10,406	921	5	926	9.0%	2.3%	8.9%
J4	12,771	495	13,266	539	4	543	4.2%	0.8%	4.1%
J5	12,521	493	13014	659	6	665	5.3%	1.2%	5.1%

The TII *Traffic and Transport Assessment Guidelines* (PE-PDV-02045) advise that Transport Assessments should generally be applied where traffic to and from a development is projected to exceed 10% of the existing background traffic on the adjoining road (or 5% at sensitive locations). As shown **in Table 25**, the proposed development shall not result in an increase of more than 10% in total AADT traffic flows at any junction. The existing Junction 3 (Chapel Road / Kinsealy Lane / Gandon Lane) and the proposed development's southern access junction on the Malahide Road (Junction 5) shall however experience AADT increases of over 5%; these are considered sensitive locations in the context of the development proposals.

In its opinion issued at Stage 2 of the LRD planning application process (see **Section** Error! Reference source not found.), Fingal County Council has also r equested that assessments be carried out of the existing Junction 1 (Malahide Road / Baskin Lane) and Junction 2 (Malahide Road / Chapel Road). The following junctions have therefore undergone detailed operational assessment, in the form of junction performance modelling, as described in **Section 5**:

J1. Malahide Road / Baskin Lane
(existing 3-arm priority-controlled junction)

J2. Malahide Road / Chapel Road
(existing 3-arm signal-controlled junction)

J3. Chapel Road / Kinsealy Lane / Gandon Lane
(existing 4-arm priority-controlled junction)

J5. Malahide Road / New Development Access Road
(proposed 3-arm priority-controlled junction)

4.9 Committed Development Trip Generation and Distribution

The projected peak hour operational vehicular traffic to and from the 2no. committed developments described in sub-section **3.9** has been included in the calculated traffic flows at each of the assessed junctions (including the proposed development's access junction on the Malahide Road) for all future assessment years.

Peak hour trip generation figures for these developments (see **Table 26**) have been sourced directly from the relevant technical reports submitted under their respective planning applications:

- Committed development (A) – Traffic and Transport Reports prepared by CS Consulting and submitted under Reg. Refs. F20A/0242 and F20A/0272.
- Committed development (B) – Traffic and Transport Assessment prepared by CS Consulting and submitted under Reg. Ref. F21A/0647.

Table 26 – Committed Development Vehicular Trip Generation

Time Period	Arrivals (PCU)	Departures (PCU)	Total Trips (PCU)
Committed Development (A)			
Weekday AM Peak	5	14	19
Weekday PM Peak	12	6	18
Committed Development (B)			
Weekday AM Peak	55	54	109
Weekday PM Peak	102	81	183

To ensure consistency with the approach taken for the proposed development, the vehicular traffic to and from these developments has been distributed across the surrounding road network in the same manner as traffic to and from the proposed development (see sub-section **4.7**).

It is noted that construction of one or both of these committed developments may be delayed beyond the proposed development's intended opening year of 2027, in which case the associated operational vehicular traffic will not coincide with that generated by the proposed development. It is possible that construction traffic generated by one or both of these committed developments may instead be present; this will however be of lower volume than operational stage traffic and will be less concentrated in the peak hours. The adopted approach of including operational vehicular traffic to and from the 2no. committed developments in all future year assessment scenarios therefore represents the most robust assessment methodology.

5.0 OPERATIONAL ASSESSMENT

To quantify the projected traffic impact of the proposed development, operational assessments of 4no. key existing and proposed junctions have been undertaken using industry-standard TRL Junctions 8 and TRANSYT modelling software, for both the weekday AM peak hour (07:45-08:45) and the weekday PM peak hour (16:15-17:15).

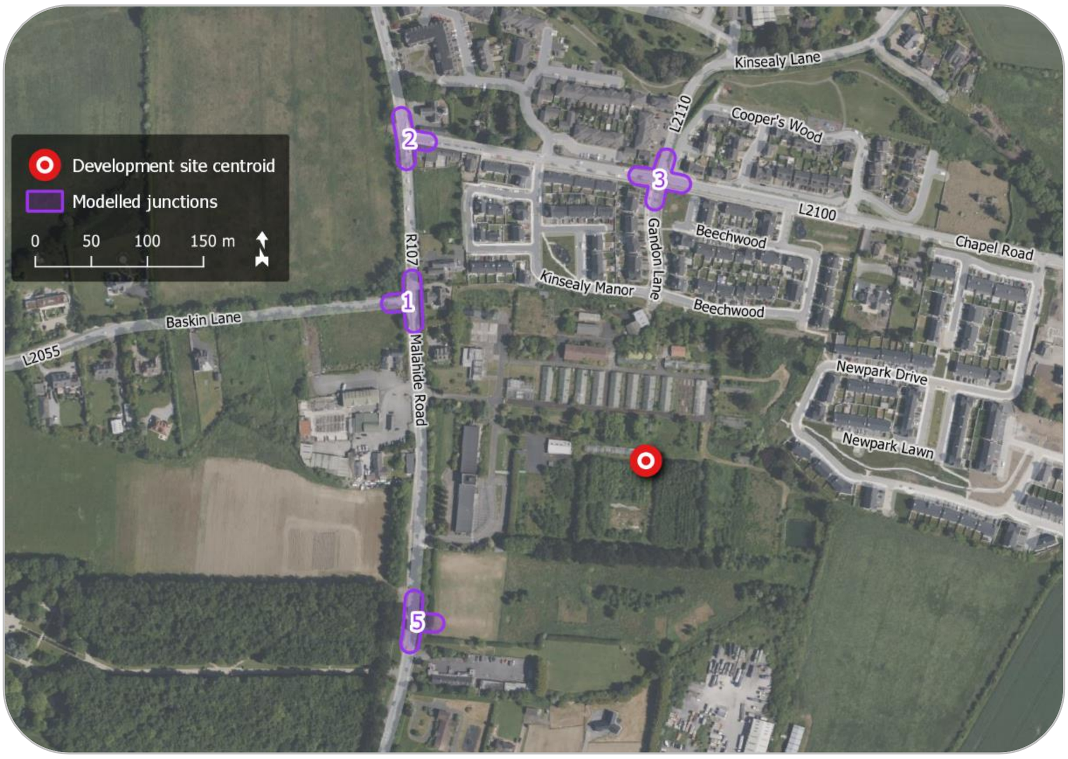


Figure 15 – Junctions modelled
(*map data & imagery: OSM Contributors, Microsoft*)

The following junctions have been modelled (see **Figure 15**):

J3. Malahide Road / Baskin Lane
(existing 3-arm priority-controlled junction)

J4. Malahide Road / Chapel Road
(existing 3-arm signal-controlled junction)

J4. Chapel Road / Kinsealy Lane / Gandon Lane
(existing 4-arm priority-controlled junction)

J6. Malahide Road / New Development Access Road
(proposed 3-arm priority-controlled junction)

Junction performance is assessed based upon the metrics defined in sub-section **5.2**. Full Junctions 8 and TRANSYT outputs are provided in **Appendix D**.

5.1 Assessment Scenarios

Each junction has been assessed under the following scenarios, using the existing and predicted traffic flows given in **Appendix C**:

- 2024 – current baseline traffic conditions
- 2027 (planned year of completion)
  - without proposed development (J3 only)
  - with proposed development operational-phase traffic
- 2032 (5 years after completion)
  - without proposed development (J3 only)
  - with proposed development operational-phase traffic
- 2042 (design year; 15 years after completion)
  - without proposed development (J3 only)
  - with proposed development operational-phase traffic
  - with proposed development in place and with existing ETNS traffic reallocated to new access road ('combined access' scenario; J5 only)

As previously noted, each of the assessment scenarios from 2027 onwards includes the vehicular traffic projected to be generated by nearby committed developments (see sub-sections **3.9** and **4.9**).

5.2 Definitions

Degree of Saturation (DoS):

The ratio of current traffic flow to ultimate capacity (also known as RFC) on a link or traffic stream. Effective capacity for a junction approach (or a junction as a whole) is reached at a DoS of 90%, beyond which a junction will not operate efficiently. A DoS of 100% represents ultimate capacity, beyond which significant operational problems will be experienced.

Mean Maximum Queue (MMQ):

The highest estimated mean number of Passenger Car Units (PCU) queued in any lane of a junction approach, averaged over the entire analysis period.

Mean End of Red Queue:

The mean number of Passenger Car Units (PCU) queued in a signal-controlled junction approach traffic stream at the end of the red signal phase for that stream, averaged over the entire analysis period.

Mean Delay per Vehicle:

The average delay incurred by a vehicle on a junction approach as a result of having to wait at a signal or give way at a priority-controlled junction.

Reserve Capacity:

The percentage by which the arriving traffic flow on a junction approach stream could increase before the that traffic stream would reach its effective capacity (i.e. 90% saturation).

Junction Residual Capacity:

The percentage by which the arriving traffic flow on any approach stream could increase before the junction as a whole would reach its effective capacity (i.e. 90% saturation on any approach).

5.3 Junction 1 Assessment Results

Table 27 gives the Junctions 8 modelling results, for each of the assessment scenarios, at the existing 3-arm priority-controlled junction of Baskin Lane with the Malahide Road.

- Arm A: R107 Malahide Road (south)
- Arm B: L2055 Baskin Lane (west)
- Arm C: R107 Malahide Road (north)

Table 27 – Junction Site J1 Assessment Results – Weekday Peak Hours

Junction Approach Arm	Degree of Saturation		Mean Maximum Queue (PCU)		Mean Delay per Vehicle (s)		Junction Residual Capacity	
	AM	PM	AM	PM	AM	PM	AM	PM
2024 – Baseline Assessment								
A	n/a	n/a	n/a	n/a	n/a	n/a	16%	8%
B	70%	78%	2	3	27	38		
C	38%	43%	1	1	10	12		
2027 – Opening Year Assessment – Without Proposed Development								
A	n/a	n/a	n/a	n/a	n/a	n/a	9%	0%
B	78%	90%	3	7	37	71		
C	42%	50%	1	1	10	14		
2027 – Opening Year Assessment – With Proposed Development in Operation								
A	n/a	n/a	n/a	n/a	n/a	n/a	7%	-2%
B	80%	93%	4	8	41	86		
C	44%	51%	1	1	11	14		
2032 Assessment – Without Proposed Development								
A	n/a	n/a	n/a	n/a	n/a	n/a	4%	-5%
B	83%	97%	4	11	49	111		
C	45%	53%	1	1	11	15		
2032 Assessment – With Proposed Development in Operation								
A	n/a	n/a	n/a	n/a	n/a	n/a	2%	-6%
B	86%	101%	5	14	56	136		
C	46%	55%	1	1	11	15		
2042 – Design Year Assessment – Without Proposed Development								
A	n/a	n/a	n/a	n/a	n/a	n/a	2%	-7%
B	87%	102%	5	16	59	149		
C	46%	56%	1	1	11	16		
2042 – Design Year Assessment – With Proposed Development in Operation								
A	n/a	n/a	n/a	n/a	n/a	n/a	0%	-9%
B	90%	106%	6	20	69	182		
C	48%	57%	1	1	12	16		

The assessment results show that this junction – considered in isolation – currently operates within effective capacity during both the AM peak hour period and the PM peak hour period, though with some vehicle delays on the western approach. Under the influence of background traffic growth and other committed developments, however, the junction will reach its effective capacity on the western approach during the PM peak by the year 2027. Ultimate capacity will be exceeded on this approach between 2032 and 2042.

In the proposed development's opening year of 2027, the vehicular traffic generated by it will result in a maximum increase of 1 PCU in mean vehicle queue length on any junction approach, in either peak hour period, and a maximum increase of 15 seconds in mean vehicle delay on any junction approach. By the design year of 2042, the junction's oversaturated background condition will mean that the proposed development's effects are more pronounced, resulting in a maximum increase of 4 PCU in mean vehicle queue length on any junction approach, in either peak hour period, and a maximum increase of 33 seconds in mean vehicle delay on any junction approach.

5.4 Junction 2 Assessment Results

Table 28 gives the TRANSYT modelling results, for each of the assessment scenarios, at the existing 3-arm signal-controlled junction of Chapel Road with the Malahide Road.

- Arm A: R107 Malahide Road (north)
- Arm B: L2100 Chapel Road (east)
- Arm C: R107 Malahide Road (south)

Table 28 – Junction Site J2 Assessment Results – Weekday Peak Hours

Junction Arm	Traffic Stream ‡‡	Degree of Saturation		Mean End of Red Queue (PCU)		Mean Delay per Vehicle (s)		Practical Reserve Capacity	
		AM	PM	AM	PM	AM	PM	AM	PM
2024 – Baseline Assessment									
A	L/S	86%	76%	11	8	37	28	4%	19%
B	L/R	83%	84%	9	9	48	45	8%	7%
C	S	41%	58%	5	7	13	15	119%	54%
	R	86%	83%	5	5	54	43	4%	9%
2027 – Opening Year Assessment – Without Proposed Development									
A	L/S	95%	90%	16	13	57	47	-5%	0%
B	L/R	91%	90%	12	11	64	57	-1%	0%
C	S	45%	67%	5	8	13	18	99%	34%
	R	96%	93%	8	8	96	72	-6%	-3%
2027 – Opening Year Assessment – With Proposed Development in Operation									
A	L/S	98%	94%	20	15	73	59	-8%	-4%
B	L/R	97%	93%	16	13	91	68	-7%	-4%
C	S	46%	68%	5	8	13	19	97%	33%
	R	99%	96%	10	9	113	87	-9%	-6%
2032 Assessment – Without Proposed Development									
A	L/S	99%	94%	22	15	81	58	-9%	-4%
B	L/R	98%	94%	17	14	102	73	-8%	-5%
C	S	46%	70%	5	9	13	20	94%	28%
	R	98%	99%	10	11	109	111	-8%	-9%
2032 Assessment – With Proposed Development in Operation									
A	L/S	100%	97%	24	19	90	76	-10%	-8%
B	L/R	104%	97%	25	17	160	91	-14%	-8%
C	S	47%	70%	6	9	13	20	92%	28%
	R	104%	102%	14	14	159	138	-13%	-12%
2042 – Design Year Assessment – Without Proposed Development									
A	L/S	98%	98%	20	20	71	83	-8%	-9%
B	L/R	105%	97%	25	16	165	87	-14%	-7%
C	S	47%	72%	6	9	13	21	92%	25%
	R	104%	100%	14	12	162	121	-13%	-10%
2042 – Design Year Assessment – With Proposed Development in Operation									
A	L/S	103%	96%	30	17	116	65	-12%	-6%
B	L/R	107%	103%	31	25	193	144	-16%	-13%
C	S	48%	71%	6	9	14	20	87%	27%
	R	106%	107%	17	19	188	194	-15%	-16%

‡‡ L = left turn; R = right turn; S = straight ahead

This junction includes a signal-controlled pedestrian crossing on each of its three arms. In configuring the TRANSYT model of this junction, it has been assumed that the signal phase governing these crossings will be activated once in every cycle of the traffic signal controller, whereas each of the signal phases governing vehicle movements will be activated twice. This is considered to provide a robust allowance for pedestrian demand.

The assessment results show that this junction – considered in isolation – currently operates within effective capacity during both the AM peak hour period and the PM peak hour period, though with some noticeable vehicle queuing and delays. By the year 2027, under the influence of background traffic growth and other committed developments, the junction will exceed its effective capacity on several approaches during both peak hour periods. Ultimate capacity will be exceeded on its eastern and southern approaches between 2032 and 2042.

In the proposed development's opening year of 2027, the vehicular traffic generated by it will result in a maximum increase of 4 PCU in mean end-of-red vehicle queue length on any junction approach, in either peak hour period, and a maximum increase of 27 seconds in mean vehicle delay on any junction approach. By the design year of 2042, the junction's oversaturated background condition will mean that the proposed development's effects are more pronounced, resulting in a maximum increase of 10 PCU in mean end-of-red vehicle queue length on any junction approach, in either peak hour period, and a maximum increase of 57 seconds in mean vehicle delay on any junction approach.

5.5 Junction 3 Assessment Results

Table 29 – Junction Site J3 Assessment Results – Weekday Peak Hours

Junction Approach Arm	Degree of Saturation		Mean Maximum Queue (PCU)		Mean Delay per Vehicle (s)		Junction Residual Capacity	
	AM	PM	AM	PM	AM	PM	AM	PM
2024 – Baseline Assessment								
A	7%	13%	0	0	5	5	106%	98%
B	2%	2%	0	0	10	9		
C	1%	1%	0	0	4	4		
D	17%	19%	0	0	13	13		
2027 – Opening Year Assessment – Without Proposed Development								
A	9%	14%	0	0	5	5	83%	78%
B	2%	2%	0	0	10	9		
C	1%	1%	0	0	4	4		
D	22%	24%	0	0	14	14		
2027 – Opening Year Assessment – With Proposed Development in Operation								
A	9%	15%	0	0	5	5	75%	71%
B	11%	6%	0	0	9	9		
C	4%	7%	0	0	4	4		
D	23%	25%	0	0	15	15		
2032 Assessment – Without Proposed Development								
A	9%	15%	0	0	5	5	76%	71%
B	2%	3%	0	0	10	9		
C	1%	2%	0	0	4	4		
D	23%	25%	0	0	15	15		
2032 Assessment – With Proposed Development in Operation								
A	9%	15%	0	0	5	5	68%	65%
B	12%	6%	0	0	9	9		
C	4%	8%	0	0	4	4		
D	24%	27%	0	0	15	16		
2042 – Design Year Assessment – Without Proposed Development								
A	9%	16%	0	0	5	5	72%	66%
B	3%	3%	0	0	11	10		
C	1%	2%	0	0	4	4		
D	24%	27%	0	0	15	16		
2042 – Design Year Assessment – With Proposed Development in Operation								
A	10%	16%	0	0	5	5	64%	60%
B	12%	7%	0	0	9	9		
C	4%	8%	0	0	4	4		
D	25%	28%	0	0	16	16		

Table 29 gives the Junctions 8 modelling results, for each of the assessment scenarios, at the existing 4-arm priority-controlled junction of Gandon Lane and Kinsealy Lane with Chapel Road.

- Arm A: L2100 Chapel Road (east)
- Arm B: Gandon Lane (south)
- Arm C: L2100 Chapel Road (west)
- Arm D: L2110 Kinsealy Lane (north)

The assessment results show that this junction – considered in isolation – currently operates well within effective capacity on all approaches during both peak hour periods, and shall continue to do so past the year 2042. In any future assessment year, the addition of the vehicular traffic generated by the proposed development is projected to have a negligible impact, resulting in no meaningful increase in mean vehicle queue length or mean vehicle delay on any junction approach, in either peak hour period.

5.6 Junction 5 Assessment Results

Table 30 gives the Junctions 8 modelling results at the priority-controlled junction of the development's proposed new access road (southern development access) with the Malahide Road. These include each of the 'with development' assessment scenarios, as well as the design year 'combined access' scenario in which existing vehicular traffic to and from the Malahide/Portmarnock ETNS is reallocated to share this access road.

- Arm A: R107 Malahide Road (north)
- Arm B: Proposed New Access Road (east)
- Arm C: R107 Malahide Lane (south)

The assessment results show that this proposed access junction shall operate well within effective capacity on all approaches during both peak hour periods in the development's opening year of 2027, and shall continue to do so past the year 2042. Negligible vehicle queueing is projected on all junction approaches, and only moderate delays. The 'combined access' scenario for the design year 2042 shows that the addition of reallocated vehicular traffic to and from the Malahide/Portmarnock ETNS does not compromise the effective operation of the junction, and results in only minor increases in vehicle queueing and delays.

Table 30 – Junction Site J4 Assessment Results – Weekday Peak Hours

Junction Approach Arm	Degree of Saturation		Mean Maximum Queue (PCU)		Mean Delay per Vehicle (s)		Junction Residual Capacity	
	AM	PM	AM	PM	AM	PM	AM	PM
2027 – Opening Year Assessment – With Proposed Development in Operation								
A	n/a	n/a	n/a	n/a	n/a	n/a	135%	134%
B	6%	2%	0	0	11	12		
C	0%	1%	0	0	7	6		
2032 Assessment – With Proposed Development in Operation								
A	n/a	n/a	n/a	n/a	n/a	n/a	126%	125%
B	7%	2%	0	0	12	12		
C	0%	1%	0	0	7	6		
2042 – Design Year Assessment – With Proposed Development in Operation								
A	n/a	n/a	n/a	n/a	n/a	n/a	120%	119%
B	7%	2%	0	0	12	12		
C	0%	1%	0	0	7	6		
2042 – Combined Access Scenario – Including School Traffic								
A	n/a	n/a	n/a	n/a	n/a	n/a	60%	109%
B	35%	6%	1	0	16	12		
C	8%	2%	0	0	7	6		

6.0 PARKING PROVISION

The proposed development comprises the following elements:

- 30no. 2-bedroom houses
- 123no. 3-bedroom houses
- 20no. 2-bedroom apartment/duplex units
- 20no. 3-bedroom apartment/duplex units
- a crèche facility with 4no. classrooms (approx. 50no. childcare places)

The development shall provide:

- 193no. residents' car parking spaces
- 3no. crèche car parking spaces
- 4no. crèche drop-off spaces
- 21no. visitor car parking spaces
- 9no. dedicated EV charging spaces
- 305no. long-stay bicycle parking spaces
- 40no. short-stay bicycle parking spaces

Refer to architectural drawings for the locations and uses of all car and bicycle parking spaces.

6.1 Overall Car Parking Provision

Tables 14.18 and 14.19 of the *Fingal Development Plan 2023-2029* define two car parking zones:

- Zone 1 sites are those within 800m of an existing high-quality bus service or a BusConnects spine route, or within 1.6km of an existing or planned Luas/DART/Metro Rail station.
- Zone 2 comprises all other locations.

The development site is in a 'transitional' location, as it technically meets Zone 1 criteria but corresponds more broadly to a Zone 2 location. Specifically, the site is within a 1.6km radius of Portmarnock railway station, although the actual walking distance to this station is 2.0km. The site is not within 800m of an existing high-quality bus service or a BusConnects spine route. On the basis that the site is on the threshold of Zone 1, car parking provision is proposed at the rate of 1 space per residential unit, with additional elements of crèche car parking, crèche drop-off spaces, visitor car parking, and EV charging spaces.

Table 31 shows that the proposed development's total car parking provision sits between the *Fingal Development Plan 2023-2029* maximum standard for Zone 1 and its normal standard for Zone 2. The proposed development's car parking provision is therefore appropriate to the location of the development site.

Table 31 – Overall Car Parking Provision Summary

Land Use / Parking Type	Zone 1 Maximum Rate	Zone 2 Normal Rate	Quantum Proposed	Zone 1 Maximum Provision	Zone 2 Normal Provision	Proposed Provision
Residential (1/2-bed)	0.5 spaces per unit	1 space per unit	50 units	25 spaces	50 spaces	193 spaces
Residential (3-bed +)	1 space per unit	2 spaces per unit	143 units	143 spaces	286 spaces	
Crèche	0.5 spaces per classroom	0.5 spaces per classroom	4 classrooms	2 spaces	2 spaces	7 spaces §§
Visitor & EV Parking	n/a	1 space per 5 units ***	193 units	0 spaces	39 spaces	29 spaces †††
TOTALS				170 spaces	377 spaces	230 spaces

§§ Of which 3no. staff parking spaces and 4no. drop-off spaces.
*** Rate applicable to visitor parking only; EV charging requirements are presented in sub-section 6.3.
††† Of which 23no. standard visitor spaces and 6no. EV charging spaces.

In Zone 1, as defined by the *Fingal Development Plan 2023-2029*, no visitor car parking is permitted. In Zone 2, a 'norm' of 1no. visitor car parking space per 5no. residential units is stipulated. The proposed development includes a visitor car parking provision of 21no. spaces (excluding the 9no. dedicated EV charging spaces that are for both visitor and resident use); this is equivalent to 1no. space per 9no. residential units, in keeping with the development site's transitional location between Zones 1 and 2.

6.2 Disabled-Accessible Car Parking

The proposed development includes 6no. designated disabled-accessible car parking spaces. The *Fingal Development Plan 2023-2029* does not stipulate a requirement for the provision of disabled-accessible car parking spaces within residential developments. It notes only that:

> *"A minimum of 5% of car parking spaces provided should be set aside for disabled car parking in nonresidential developments."*

Part M of the Building Regulations also sets a 5% target for the proportional provision of disabled-accessible car parking. However, this is explicitly restricted to non-residential buildings and apartment blocks; it does not apply to houses or duplex units. As such, there is deemed to be no applicable standard against which the proposed development's disabled-accessible car parking provision may be assessed.

6.3 Electric Vehicle Charging Facilities

The *Fingal Development Plan 2023-2029* requires that multi-unit residential developments incorporate EV charging points at 20% of the proposed parking spaces and appropriate infrastructure (e.g. ducting) to allow for future fit out of a charging point at all other parking spaces.

The proposed development includes 153no. houses and 40no. apartment/duplex units. Of these, only the 40no. apartment/duplex units may be considered to represent 'multi-unit residential development'. As shown previously in **Table 31**, The proposed development includes 230no. car parking spaces in total, of which:

- 193no. spaces are to be allocated to residents of the 193no. residential units (one space per residential unit).
- 7no. spaces serve the crèche.
- 29no. spaces are for visitor use.

Of these car parking spaces, 77no. are on-curtilage, and these houses can facilitate the installation of EV charging points. The remaining 116no. residential spaces shall be provided on-street. It is proposed

Table 32 – EV Charging Point Provision

Car Parking Use	Proposed Car Parking Provision	Required EV Charging Proportion	EV Charge Points Required	EV Charge Points Proposed
Apartment/ duplex residents	40 spaces	20%	8	8
House residents (in-curtilage)	77 spaces	n/a	0	0
House residents (on-street)	76 spaces	20%	16	16
Apartment/ duplex visitors	6 spaces	20%	1	1
House visitors	24 spaces	20%	5	5
Crèche	7 spaces	n/a	0	0
TOTALS			30	30

To meet the requirements of the *Fingal Development Plan 2023-2029*, 30no. car parking spaces within the proposed development shall be equipped with EV charging facilities. As also required by the Development Plan, all other car parking spaces shall be 'future-proofed' by the provision of ducting to allow the rapid future installation of additional charging points.

6.4 Bicycle Parking

The proposed development has a total bicycle parking provision of 345no. spaces. These include:

- 201no. secure long-stay bicycle storage spaces for houses without independent garden access.
- 100no. secure long-stay bicycle storage spaces for apartment/duplex units.
- 4no. secure long-stay bicycle storage spaces for crèche staff use.
- 20no. publicly-accessible short-stay bicycle parking spaces for residents' visitors.
- 20no. publicly-accessible short-stay bicycle parking spaces for crèche patrons' use.

Table 33 – Residential Bicycle Parking Provision

Residential Unit Type	Compact Settlements Guidelines Min. Recommendation	Quantum Proposed	Recommended Minimum Provision	Proposed Provision
Long-Stay Bicycle Spaces				
House (2-bedroom)	1 space per bedroom	15 units [‡‡‡]	30 spaces	30 spaces
House (3-bedroom)		57 units [‡‡‡]	171 spaces	171 spaces
Duplex (2-bedroom)		20 units	40 spaces	40 spaces
Duplex (3-bedroom)		20 units	60 spaces	60 spaces
Sub-Total			301 spaces	301 spaces
Short-Stay Bicycle Spaces				
All	*No specific minimum*	72 units [‡‡‡]	*Not specified*	20 spaces
Combined Residential Bicycle Parking Provision				

[‡‡‡] Not including houses with independent garden access.

TOTAL	301 spaces + visitor parking	321 spaces

The proposed development's residential bicycle parking provision has been assessed with respect to the 2024 *Sustainable Residential Development and Compact Settlements (Guidelines for Planning Authorities)*, which give the following recommendations for bicycle parking (see **Table 33**):

- *"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."*
- *"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."*

The development's proposed residential bicycle parking arrangements are considered to comply with this guidance, in terms of both quantity and design, including in the provision of visitor bicycle parking.

Table 34 – Crèche Bicycle Parking Provision

Land Use	Development Plan Minimum Rate	Quantum Proposed	Minimum Provision	Proposed Provision
Long-Stay Bicycle Spaces				
Crèche	1 space per classroom	4 classrooms	4 spaces	4 spaces
Short-Stay Bicycle Spaces				
Crèche	5 spaces per classroom	4 classrooms	20 spaces	20 spaces
Combined Crèche Bicycle Parking Provision				
TOTAL			24 spaces	24 spaces

Bicycle parking for the proposed development's crèche facility has been assessed with respect to the *Fingal Development Plan 2023-2029*, which defines the standard minimum bicycle parking provision for new developments by land use type. **Table 34** shows the applicable bicycle parking standards, illustrating that the proposed bicycle parking provision for the crèche meets the requirements of the Local Authority development plan.

6.5 Motorcycle Parking

The proposed development does not include any parking spaces specifically for motorcycles, although the majority of residential units within the scheme do have sufficient in-curtilage space for the storage of a motorcycle. The *Fingal Development Plan 2023-2029* requires the provision of motorcycle parking spaces only within "non-residential developments and apartment developments".

7.0 ACCESS, LAYOUT, PEDESTRIAN AND CYCLIST FACILITIES, SERVICING

Refer to the following CS Consulting drawings for details of the proposed development's access arrangements and internal road layout:

- **C215-CSC-00-XX-DR-C-0004** and **C215-CSC-00-XX-DR-C-0005** (Proposed General Arrangement)
- **C215-CSC-00-XX-DR-C-0006** and **C215-CSC-00-XX-DR-C-0007** (Proposed Roads Levels and Pavement Areas)
- **C215-CSC-00-XX-DR-C-0008** and **C215-CSC-00-XX-DR-C-0009** (Proposed Road Markings and Traffic Signs)
- **C215-CSC-00-XX-DR-C-0014** (Swept Path Analysis Refuse Vehicle)
- **C215-CSC-00-XX-DR-C-0015** (Swept Path Analysis Fire Tender)
- **C215-CSC-00-XX-DR-C-0023** (Proposed Road Cross Sections)
- **C215-CSC-00-XX-DR-C-0026** to **C215-CSC-00-XX-DR-C-0029** (Proposed Road Profiles)
- **C215-CSC-00-XX-DR-C-0033** (Pedestrian and Cyclist Permeability Links)

7.1 Vehicular Access

Vehicular access to the proposed development shall be at the following two locations;

- The majority of traffic shall enter the development through the development to the north, i.e. via Gandon Lane. This access shall be designed in accordance with DMURS and TII standards.
- Vehicular access to the southern section of the development shall be from the R107 Malahide Road, at the development site's south-western corner, via a new east-west access road to be constructed to the south of the existing Educate Together national school.

The junction of the proposed new access road is designed to DMURS and TII standards. This shall have a minor arm width of 6.0m, allowing two-way traffic flows. Kerb radii shall be restricted to 6.0m, which shall discourage high vehicle speeds on entrance or exit to/from the development.

The R107 at the location of the proposed new access junction is governed by a 50km/h speed limit. For vehicles joining the R107 from the proposed new access road, DMURS and TII standards therefore require the following unobstructed sightlines along the R107:

- 49m to the nearside road edge, measured from a set-back of 2.4m (*Design Manual for Urban Roads and Streets*, 2019).
- 70m to the nearside road edge, measured from a set-back of 3.0m (TII DN-GEO-03060, *Geometric Design of Junctions*, May 2023).

As illustrated on CS Consulting drawing **C215-CSC-00-XX-DR-C-0009** (Proposed Road Markings and Traffic Signs – Sheet 2), an unobstructed sight distance of 70m in either direction along the Malahide Road is achieved for vehicles exiting the new access road, as measured from a set-back of 3.0m from the public road edge. This satisfies the requirements of both the *Design Manual for Urban Roads and Streets* and the TII Design Standards document DN-GEO-03060 (*Geometric Design of Junctions*).

The delivery of a combined school/residential access road to the south of the existing Educate Together national school is an objective under the 2019 *Kinsaley Local Area Plan* (LAP), although this was originally envisaged as connecting to the R107 Malahide Road at a location slightly further north (see **Figure 16**). As discussed in the Architectural Design Statement prepared by Conroy Crowe Kelly Architects, which forms part of this planning submission, the location originally proposed under the LAP is however compromised by the route of a proposed outfall pipeline to be constructed as part of the Greater Dublin Drainage Scheme (GDDS) project; Uisce Éireann has reserved a 20-metre wide permanent wayleave along the route of this outfall pipeline (as shown on Error! Reference source n ot found.), as well as temporary construction wayleaves to either side of this.

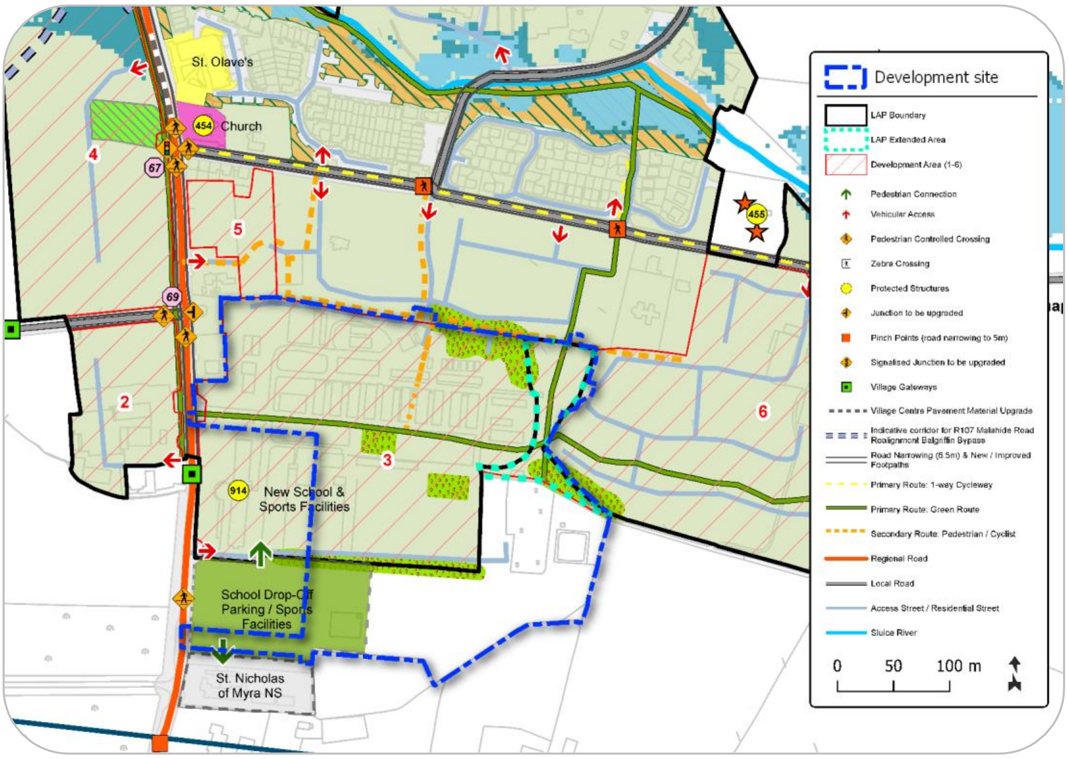


Figure 16 – Kinsaley LAP 2019 mapping
(background map imagery: Fingal County Council)

The alternative location and alignment now proposed for the new combined access road has the following specific advantages:

- Impact and construction conflict with the UÉ wayleaves can be minimised.
- School parking, drop-off and collection will be north of the access road and on the same side as the school campus, such that children will not need to cross the access road to reach the school grounds.
- The access road is located away from the existing Teagasc building, which is a Protected Structure and would be compromised by the proximity of a road so close to its curtilage.

- The existing Teagasc entrance can be closed, as per LAP objectives and the Greenway can be provided as envisaged.

It is considered that the re-location of the proposed access road to a new position south of the UÉ wayleave is not a material change from the Objective as envisaged by the Local Area Plan and is compliant with the Plan's objectives.

7.2 Internal Road Layout

The proposed development's internal road layout comprises two separate sections, accessed independently from the surrounding road network:

- A northern section, serving 124no. residential units and the crèche, accessed from Chapel Road via Gandon Lane.
- A southern section, serving 69no. residential units, accessed from the Malahide Road via the proposed new combined access road.

Both sections consist of local access streets with a carriageway width of between 5.0m and 6.0m, as well as raised 'homezone' shared surfaces. Traffic calming features are included in the form of kerb buildouts, which provide localised road narrowing, and raised pedestrian crossings.

7.3 Swept Path Analysis

Swept path analyses have been carried out for both a refuse collection vehicle and a fire tender circulating within the proposed development. These analyses, shown on CS Consulting drawings **C215-CSC-00-XX-DR-C-0014** and **C215-CSC-00-XX-DR-C-0015**, indicate that the development's access design and internal layout can accommodate these vehicle movements where required.

7.4 Pedestrian and Cyclist Facilities

Footpaths and shared surfaces are provided throughout the development, to cater for pedestrian desire lines. The development also incorporates delivery of a pedestrian and bicycle green route through the site, which is an objective under the 2019 *Kinsaley Local Area Plan*. This connects to the Malahide Road at the development's western boundary and extends to the site's northern and eastern boundaries, where it will connect to pedestrian and bicycle infrastructure in adjacent existing and future residential developments.

The development shall include a total of 345no. bicycle parking spaces, exceeding the requirements of the *Fingal Development Plan 2023-2029* and according with the recommendations of the 2024 *Sustainable Residential Development and Compact Settlements (Guidelines for Planning Authorities)*.

It should be ensured that a funded management scheme is in place for regular maintenance of bicycle storage facilities.

7.5 Development Servicing and Waste Collection

Vehicular servicing of the proposed development – including deliveries and waste collection – shall be conducted on the development's internal road network and shall not obstruct vehicular or pedestrian traffic on the Malahide Road or on the development site's neighbouring residential streets. Domestic refuse collection shall be conducted kerbside by a refuse collection vehicle circulating within the development; households shall be independently responsible for engaging the services of an authorised waste disposal contractor, and for moving refuse bins to a suitable kerbside location for collection.

As noted in **sub-section 4.4**, it is projected that the proposed development will require a maximum of 40no. servicing vehicle visits on average in any given weekday. This figure includes deliveries, waste collection, and all other servicing requirements.

8.0 INDEPENDENT QUALITY AUDIT

An independent Quality Audit of the proposed development layout and access arrangements has been conducted by Roadplan Consulting on behalf of CS Consulting. This incorporates the following components:

- Stage 1/2 Road Safety Audit
- DMURS Street Design Audit
- Walking Audit
- Cycling Audit
- Accessibility Audit

The Quality Audit report document issued by Roadplan Consulting, together with the audit response form, are provided as **Appendix D** to this report.

The Quality Audit was completed in December 2024. Design changes have been made in response to the recommendations of the Quality Audit and the measures adopted have been accepted by the audit team. Refer to CS Consulting drawing **C215-CSC-00-XX-DR-C-0036** for details of these design changes.

The Stage 1/2 Road Safety Audit, the Walking Audit, the Cycling Audit, and the Accessibility Audit each identify specific design issues and make recommendations for addressing them.

9.0 SUMMARY OF CONCLUSIONS

This report provides a preliminary assessment of a proposed Large-scale Residential Development (LRD) at Malahide Road, Kinsealy Village, Co. Dublin, with respect to its potential effects on the surrounding road network's operation. The report also assesses the proposed development's access arrangements, internal layout, parking provisions, cyclist and pedestrian facilities, servicing arrangements, and access to public transport.

The main observations and conclusions of this study are as follows:

- The proposed development shall not generate excessive vehicular traffic flows in its operational phase. Total vehicle trips (arrivals and departures combined) of 70 PCU are predicted during the AM peak hour, and total vehicle trips of 58 PCU in the PM peak hour.
- Where development traffic will access the public road network on Chapel Road, this will result in an increase of 6.8% in total traffic flows during the AM peak hour and 12.1% in the PM peak hour. At the development's future access on the Malahide Road, development traffic will result in an increase of 3.9% in total traffic flows during the AM peak hour and 2.7% in the PM peak hour. All other locations on the surrounding road network will experience lesser increases in total traffic flows as a result of the proposed development.
- Considered in isolation, the existing 4-arm priority-controlled junction of Gandon Lane and Kinsealy Lane with Chapel Road currently operates well within effective capacity on all approaches during both weekday peak hour periods, and shall continue to do so past the year 2042. The addition of vehicular traffic generated by the proposed development is projected to have a negligible impact on this junction's performance, resulting in no meaningful increase in mean vehicle queue length or

mean vehicle delay on any junction approach, in either peak hour period.

- Considered in isolation, the priority-controlled junction of the development's proposed new access road with the Malahide Road shall operate well within effective capacity on all approaches during both weekday peak hour periods in the development's opening year of 2027, and shall continue to do so past the year 2042. Negligible vehicle queueing is projected on all junction approaches, and only moderate delays. The addition of reallocated vehicular traffic to and from the Malahide/Portmarnock ETNS, which may in future share this access road, does not compromise the effective operation of the junction.
- The existing 3-arm priority-controlled junction of Baskin Lane with the Malahide Road and the existing 3-arm signal-controlled junction of Chapel Road with the Malahide Road both currently operate within effective capacity on all approaches during both weekday peak hour periods. Both junctions are however projected to exceed effective capacity during peak hours on at least one approach by the proposed development's opening year of 2027, due to general background traffic growth and the influence of other committed developments. Both junctions are projected to exceed ultimate capacity by the year 2042.
- The proposed development includes a car parking provision in compliance with Local Authority development plan standards and with the recommendations of national policy guidance documents. The provision of EV charging facilities complies with Local Authority development plan standards.
- The development's proposed bicycle parking provision complies with the 2024 Compact Settlements Guidelines recommendations (in respect of residential units) and with Local Authority development plan standards (in respect of crèche bicycle parking).

- Swept path analyses have been carried out for both a refuse collection vehicle and a fire tender circulating within the proposed development. These analyses indicate that the development's access design and internal layout can accommodate these vehicle movements where required.

- An independent Quality Audit of the proposed development layout and access arrangements has been conducted by Roadplan Consulting on behalf of CS Consulting. Design changes have been made in response to the recommendations of the Quality Audit and the measures adopted have been accepted by the audit team. Refer to CS Consulting drawing **C215-CSC-00-XX-DR-C-0036** for details of these design changes.

In summary, this assessment indicates that the proposed development shall not have any significant detrimental effect on the surrounding road network's operation, that the development includes appropriate car and bicycle parking provisions, and that the development access design and internal layout are fit for purpose.

Appendix A

Traffic Survey Data

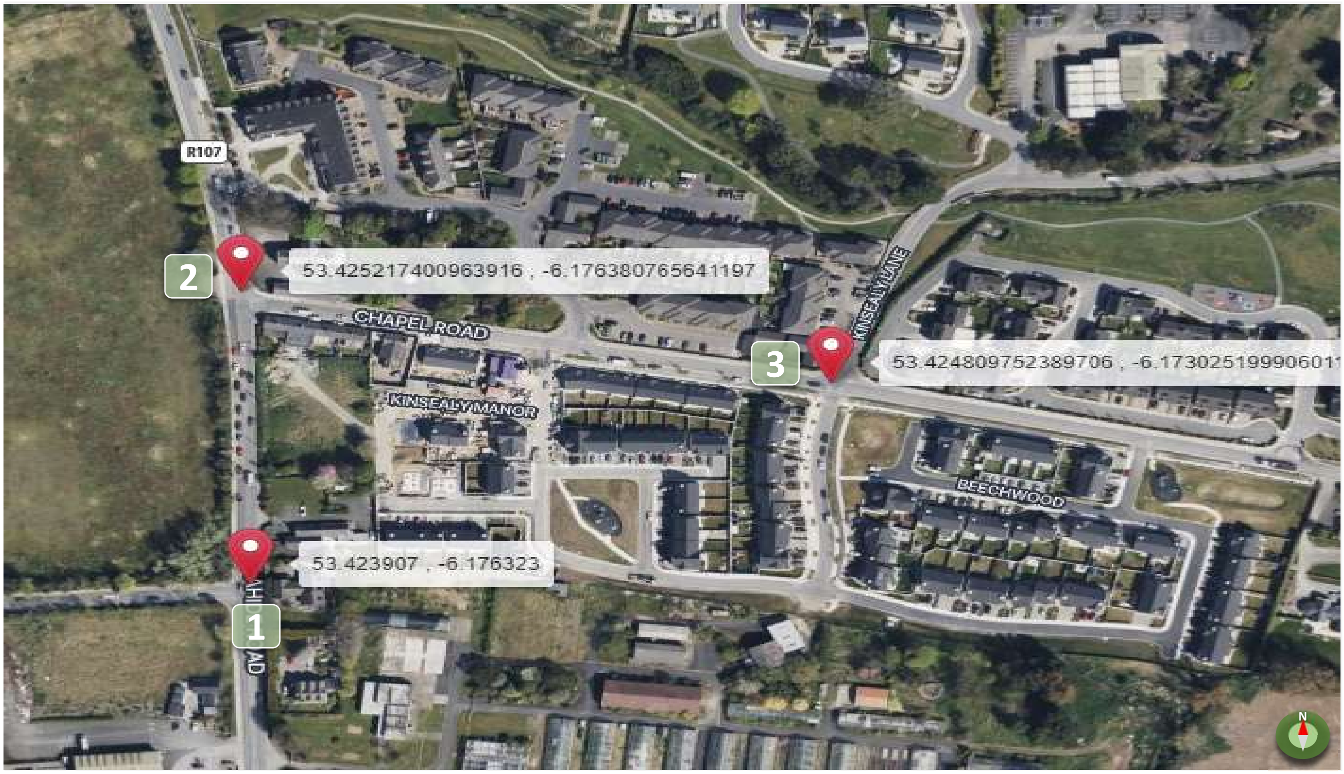
CS CONSULTING

GROUP

Irish Traffic Surveys LTD

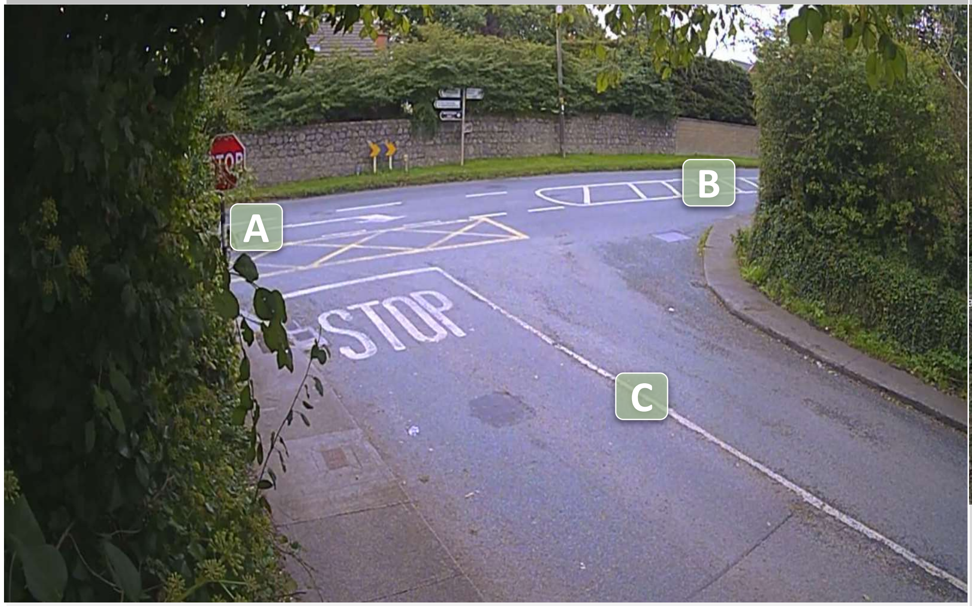
Survey Name :	ITS J-779 Kinsealy
Site:	JTC 1
Date:	12.09.2023
Time:	07:00 - 19:00
Location:	53.423907, -6.176323
Classification:	CAR, LGV, OGV1, OGV2, PSV, MC, PC
Grid Reference:	O 21265 43058
X:	321265
Y:	243058
Latitude:	53.42391
Longitude:	-6.176323
Address (near):	Malahide Road, Balgriffin DED 1986, Kinsealey, Fingal, County Dublin, Leinster, D17 FP52, Ireland

Site Overview

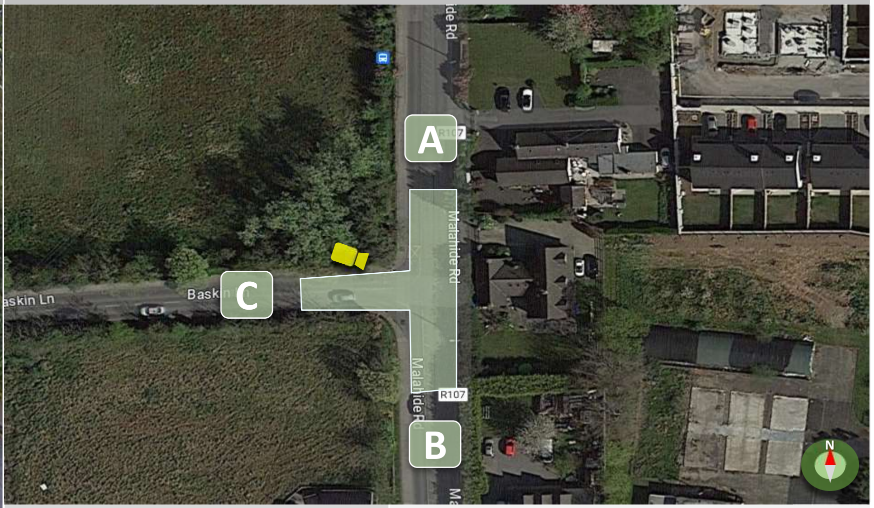


Irish Traffic Surveys LTD	
Survey Name :	ITS J-779 Kinsealy
Site:	JTC 1
Date:	12.09.2023
Time:	07:00 - 19:00
Location:	53.423907, -6.176323
Classification:	CAR, LGV, OGV1, OGV2, PSV, MC, PC

Site 1 Cam ITS 10 View



Aerial View



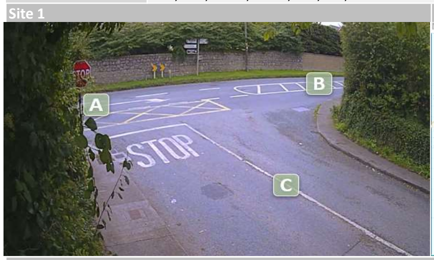
Co-ordinates:	53.423907, -6.176323
Junction Type:	3-Arm
Queues Required:	No
Pedestrian required:	No

Irish Traffic Surveys LTD

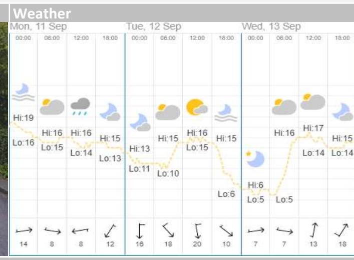
Survey Name :	ITS J-779 Kinsealy
Site:	JTC 1
Date:	12.09.2023
Time:	07:00 - 19:00
Location:	53.423907, -6.176323
Classification:	CAR, LGV, OGV1, OGV2, PSV, MC, PC

Irish Traffic Surveys

Site 1

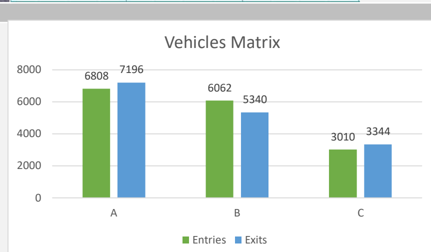


Weather



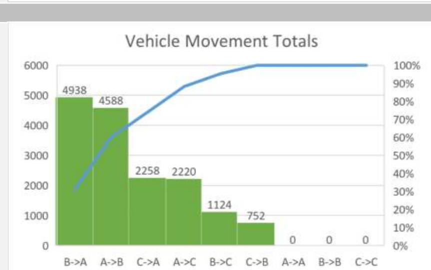
12 Hr Vehicles Matrix

12hr Matrix	A	B	C
A	0	4588	2220
B	4938	0	1124
C	2258	752	0
Totals	**A**	**B**	**C**
Entries	6808	6062	3010
Exits	7196	5340	3344



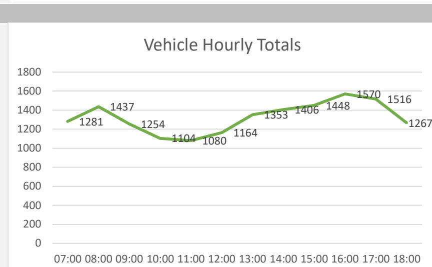
Movement Totals

Movement	12hr Total	% Total
A->A	0	0.0%
A->B	4588	28.9%
A->C	2220	14.0%
B->A	4938	31.1%
B->B	0	0.0%
B->C	1124	7.1%
C->A	2258	14.2%
C->B	752	4.7%
C->C	0	0.0%
Total	**15880**	**100.0%**



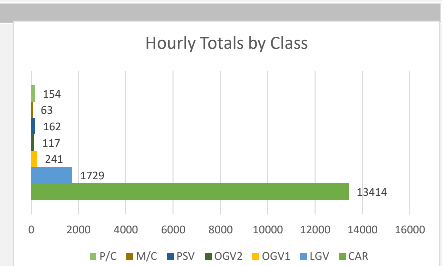
Hourly Totals

TIME	Period total	% of 12hr Total
07:00	1281	8%
08:00	1437	9%
09:00	1254	8%
10:00	1104	7%
11:00	1080	7%
12:00	1164	7%
13:00	1353	9%
14:00	1406	9%
15:00	1448	9%
16:00	1570	10%
17:00	1516	10%
18:00	1267	8%
Total	**15880**	**100%**



Hourly Totals by Class

TIME	CAR	LGV	OGV1	OGV2	PSV	M/C	P/C	% of 12hr Total
07:00	1045	166	15	5	23	3	24	8%
08:00	1233	119	24	10	17	5	29	9%
09:00	1010	169	31	15	17	3	9	8%
10:00	895	145	34	13	9	4	4	7%
11:00	860	160	28	12	11	6	3	7%
12:00	988	128	25	9	6	3	5	7%
13:00	1149	152	17	12	12	2	9	9%
14:00	1206	135	28	12	13	6	6	9%
15:00	1206	180	17	16	15	8	6	9%
16:00	1339	178	10	6	15	10	12	10%
17:00	1343	120	8	5	12	7	21	10%
18:00	1140	77	4	2	12	6	26	8%
Total	**13414**	**1729**	**241**	**117**	**162**	**63**	**154**	
% Total	**84.47%**	**10.89%**	**1.52%**	**0.74%**	**1.02%**	**0.40%**	**0.97%**	



Irish Traffic Surveys LTD

Survey Name :	ITS J-779 Kinsealy
Site:	JTC 1
Date:	12.09.2023
Time:	07:00 - 19:00
Location:	53.423907, -6.176323
Classification:	CAR, LGV, OGV1, OGV2, PSV, MC, PC

	A to A								A to B								A to C							
TIME	CAR	LGV	OGV1	OGV2	PSV	M/C	P/C	TOT	CAR	LGV	OGV1	OGV2	PSV	M/C	P/C	TOT	CAR	LGV	OGV1	OGV2	PSV	M/C	P/C	TOT
07:00	0	0	0	0	0	0	0	0	79	7	0	0	2	0	4	92	49	4	0	0	0	0	1	54
07:15	0	0	0	0	0	0	0	0	80	16	1	1	2	2	2	104	60	6	0	0	1	0	0	67
07:30	0	0	0	0	0	0	0	0	118	11	1	1	3	0	5	139	55	0	0	0	0	0	0	55
07:45	0	0	0	0	0	0	0	0	109	11	1	0	4	0	7	132	60	3	0	0	0	0	1	64
H/TOT	0	0	0	0	0	0	0	0	386	45	3	2	11	2	18	467	224	13	0	0	1	0	2	240
08:00	0	0	0	0	0	0	0	0	121	5	2	1	3	0	7	139	27	2	0	0	1	0	0	30
08:15	0	0	0	0	0	0	0	0	106	5	2	0	2	1	5	121	39	4	0	1	0	1	1	46
08:30	0	0	0	0	0	0	0	0	82	10	2	1	2	2	2	101	59	6	0	0	0	0	1	66
08:45	0	0	0	0	0	0	0	0	75	9	1	1	1	0	1	88	51	2	0	0	0	0	0	53
H/TOT	0	0	0	0	0	0	0	0	384	29	7	3	8	3	15	449	176	14	0	1	1	1	2	195
09:00	0	0	0	0	0	0	0	0	91	11	2	1	5	0	0	110	58	7	1	0	0	0	0	66
09:15	0	0	0	0	0	0	0	0	80	12	2	0	2	0	0	96	57	4	0	0	0	0	0	61
09:30	0	0	0	0	0	0	0	0	67	7	5	1	1	0	3	84	43	2	0	1	0	0	0	46
09:45	0	0	0	0	0	0	0	0	69	15	5	3	2	0	0	94	42	6	0	2	0	0	0	50
H/TOT	0	0	0	0	0	0	0	0	307	45	14	5	10	0	3	384	200	19	1	3	0	0	0	223
10:00	0	0	0	0	0	0	0	0	79	20	0	1	2	0	1	103	35	7	0	0	0	0	0	42
10:15	0	0	0	0	0	0	0	0	56	8	1	0	0	1	1	67	28	5	5	0	0	0	0	38
10:30	0	0	0	0	0	0	0	0	57	11	3	2	1	1	0	75	50	4	0	1	0	0	0	55
10:45	0	0	0	0	0	0	0	0	77	8	0	1	1	0	0	87	31	5	2	0	0	0	0	38
H/TOT	0	0	0	0	0	0	0	0	269	47	4	4	4	2	2	332	144	21	7	1	0	0	0	173
11:00	0	0	0	0	0	0	0	0	63	14	4	0	1	1	0	83	47	5	0	1	0	0	0	53
11:15	0	0	0	0	0	0	0	0	61	21	2	0	2	1	0	87	28	5	0	0	1	0	0	34
11:30	0	0	0	0	0	0	0	0	73	10	1	1	2	0	1	88	26	7	3	1	0	0	0	37
11:45	0	0	0	0	0	0	0	0	61	11	2	1	1	1	0	77	27	8	1	1	0	0	0	37
H/TOT	0	0	0	0	0	0	0	0	258	56	9	2	6	3	1	335	128	25	4	3	1	0	0	161
12:00	0	0	0	0	0	0	0	0	76	5	3	1	1	0	0	86	30	3	1	0	0	0	0	34
12:15	0	0	0	0	0	0	0	0	84	11	1	1	0	1	0	98	25	6	0	0	0	0	0	31
12:30	0	0	0	0	0	0	0	0	93	10	0	0	2	0	1	106	26	5	2	1	0	0	0	34
12:45	0	0	0	0	0	0	0	0	99	9	1	0	0	1	1	111	25	9	0	1	0	0	0	35
H/TOT	0	0	0	0	0	0	0	0	352	35	5	2	3	2	2	401	106	23	3	2	0	0	0	134
13:00	0	0	0	0	0	0	0	0	89	15	0	2	1	0	1	108	36	11	0	0	0	0	0	47
13:15	0	0	0	0	0	0	0	0	76	13	2	0	1	0	1	93	21	4	1	0	0	0	1	27
13:30	0	0	0	0	0	0	0	0	71	14	4	2	2	0	0	93	34	8	0	0	0	1	0	43
13:45	0	0	0	0	0	0	0	0	97	17	1	1	2	0	1	119	35	6	0	1	0	0	0	42
H/TOT	0	0	0	0	0	0	0	0	333	59	7	5	6	0	3	413	126	29	1	1	0	1	1	159
14:00	0	0	0	0	0	0	0	0	80	19	2	2	0	2	1	106	31	7	1	0	0	0	0	39
14:15	0	0	0	0	0	0	0	0	94	5	3	0	2	0	1	105	38	5	1	2	0	0	0	46
14:30	0	0	0	0	0	0	0	0	68	6	2	4	3	0	0	83	49	8	2	0	0	0	0	59
14:45	0	0	0	0	0	0	0	0	80	8	1	1	0	2	0	92	47	3	0	0	1	0	0	51
H/TOT	0	0	0	0	0	0	0	0	322	38	8	7	5	4	2	386	165	23	4	2	1	0	0	195
15:00	0	0	0	0	0	0	0	0	76	12	1	3	2	2	0	96	36	6	3	1	0	1	0	47
15:15	0	0	0	0	0	0	0	0	80	16	3	1	1	0	2	103	44	9	1	1	0	0	0	55
15:30	0	0	0	0	0	0	0	0	74	8	1	0	1	0	0	84	42	12	1	0	0	0	0	55
15:45	0	0	0	0	0	0	0	0	64	9	0	2	1	0	1	77	39	12	1	0	0	1	0	53
H/TOT	0	0	0	0	0	0	0	0	294	45	5	6	5	2	3	360	161	39	6	2	0	2	0	210
16:00	0	0	0	0	0	0	0	0	67	8	1	1	2	1	1	81	47	11	0	0	0	0	2	60
16:15	0	0	0	0	0	0	0	0	75	14	2	0	1	1	0	93	39	11	0	1	0	0	0	51
16:30	0	0	0	0	0	0	0	0	81	5	0	0	2	0	2	90	40	12	0	0	1	0	0	53
16:45	0	0	0	0	0	0	0	0	72	7	0	0	1	0	0	80	43	8	0	0	0	0	1	52
H/TOT	0	0	0	0	0	0	0	0	295	34	3	1	6	2	3	344	169	42	0	1	1	0	3	216
17:00	0	0	0	0	0	0	0	0	94	4	0	0	2	0	1	101	37	11	1	0	0	0	2	51
17:15	0	0	0	0	0	0	0	0	95	3	0	1	2	0	5	106	42	2	0	0	0	0	0	44
17:30	0	0	0	0	0	0	0	0	88	5	1	0	2	0	1	97	47	5	0	0	0	0	0	52
17:45	0	0	0	0	0	0	0	0	86	10	2	1	0	0	1	100	25	4	0	0	0	0	0	29
H/TOT	0	0	0	0	0	0	0	0	363	22	3	2	6	0	8	404	151	22	1	0	0	0	2	176
18:00	0	0	0	0	0	0	0	0	82	1	0	0	2	0	1	86	34	5	0	0	0	0	0	39
18:15	0	0	0	0	0	0	0	0	75	5	0	0	2	0	0	82	30	1	0	0	0	0	0	31
18:30	0	0	0	0	0	0	0	0	66	2	0	0	3	1	2	74	31	1	0	0	0	0	0	32
18:45	0	0	0	0	0	0	0	0	61	7	0	0	0	0	3	71	32	4	0	0	0	0	0	36
H/TOT	0	0	0	0	0	0	0	0	284	15	0	0	7	1	6	313	127	11	0	0	0	0	0	138
24 HR TOT	0	0	0	0	0	0	0	0	3847	470	68	39	77	21	66	4588	1877	281	27	16	5	4	10	2220

B to A								B to B								B to C							
CAR	LGV	OGV1	OGV2	PSV	M/C	P/C	**TOT**	CAR	LGV	OGV1	OGV2	PSV	M/C	P/C	**TOT**	CAR	LGV	OGV1	OGV2	PSV	M/C	P/C	**TOT**
25	3	2	0	3	0	0	33	0	0	0	0	0	0	0	0	15	3	0	0	0	0	0	18
30	16	1	1	3	0	0	51	0	0	0	0	0	0	0	0	17	0	2	0	0	0	0	19
47	14	1	0	3	0	0	65	0	0	0	0	0	0	0	0	15	2	0	0	0	0	0	17
90	14	2	0	1	0	1	108	0	0	0	0	0	0	0	0	25	1	0	0	0	0	0	26
192	47	6	1	10	0	1	257	0	0	0	0	0	0	0	0	72	6	2	0	0	0	0	80
83	3	5	1	1	0	4	97	0	0	0	0	0	0	0	0	20	1	0	0	0	1	0	22
74	8	0	1	3	0	1	87	0	0	0	0	0	0	0	0	37	0	0	0	0	0	0	37
90	13	2	1	2	0	2	110	0	0	0	0	0	0	0	0	22	1	2	0	0	0	0	25
112	5	2	1	1	0	2	123	0	0	0	0	0	0	0	0	32	1	0	0	0	0	1	34
359	29	9	4	7	0	9	417	0	0	0	0	0	0	0	0	111	3	2	0	0	1	1	118
86	9	2	0	1	0	3	101	0	0	0	0	0	0	0	0	20	0	0	0	0	0	0	20
74	8	0	3	2	0	1	88	0	0	0	0	0	0	0	0	21	1	2	0	0	0	0	24
57	19	3	0	1	0	1	81	0	0	0	0	0	0	0	0	20	3	0	0	1	0	0	24
53	10	2	1	1	1	0	68	0	0	0	0	0	0	0	0	10	5	0	0	0	0	0	15
270	46	7	4	5	1	5	338	0	0	0	0	0	0	0	0	71	9	2	0	1	0	0	83
75	12	6	1	2	1	0	97	0	0	0	0	0	0	0	0	11	2	0	0	0	0	0	13
53	8	2	1	1	0	0	65	0	0	0	0	0	0	0	0	15	1	1	0	0	0	1	18
68	9	4	1	2	0	0	84	0	0	0	0	0	0	0	0	16	4	0	0	0	0	1	21
86	11	1	1	0	1	0	100	0	0	0	0	0	0	0	0	19	2	0	0	0	0	0	21
282	40	13	4	5	2	0	346	0	0	0	0	0	0	0	0	61	9	1	0	0	0	2	73
78	14	3	0	1	0	0	96	0	0	0	0	0	0	0	0	13	0	0	0	0	0	0	13
61	11	1	1	0	0	1	75	0	0	0	0	0	0	0	0	11	2	0	0	0	0	0	13
75	9	3	1	3	3	0	94	0	0	0	0	0	0	0	0	15	4	0	1	0	0	0	20
80	6	2	0	0	0	0	88	0	0	0	0	0	0	0	0	10	4	0	0	0	0	0	14
294	40	9	2	4	3	1	353	0	0	0	0	0	0	0	0	49	10	0	1	0	0	0	60
72	7	5	0	1	0	0	85	0	0	0	0	0	0	0	0	12	1	0	0	0	1	0	14
76	7	2	1	1	0	0	87	0	0	0	0	0	0	0	0	12	2	0	0	0	0	0	14
77	10	0	1	1	0	1	90	0	0	0	0	0	0	0	0	17	1	2	0	0	0	0	20
72	8	0	1	0	0	1	82	0	0	0	0	0	0	0	0	14	3	1	0	0	0	0	18
297	32	7	3	3	0	2	344	0	0	0	0	0	0	0	0	55	7	3	0	0	1	0	66
95	13	5	0	1	0	1	115	0	0	0	0	0	0	0	0	17	1	0	0	0	0	0	18
101	10	1	1	2	1	0	116	0	0	0	0	0	0	0	0	13	3	0	0	0	0	0	16
100	7	1	1	1	0	1	111	0	0	0	0	0	0	0	0	15	2	0	0	0	0	0	17
97	4	0	1	2	0	1	105	0	0	0	0	0	0	0	0	13	1	0	0	0	0	0	14
393	34	7	3	6	1	3	447	0	0	0	0	0	0	0	0	58	7	0	0	0	0	0	65
96	16	0	1	3	1	2	119	0	0	0	0	0	0	0	0	23	1	1	0	0	0	0	25
102	7	2	1	0	0	0	112	0	0	0	0	0	0	0	0	8	3	0	1	0	0	0	12
92	11	1	0	2	0	0	106	0	0	0	0	0	0	0	0	28	2	1	0	0	0	0	31
95	9	1	0	2	0	0	107	0	0	0	0	0	0	0	0	28	2	1	0	0	0	0	31
385	43	4	2	7	1	2	444	0	0	0	0	0	0	0	0	87	8	3	1	0	0	0	99
96	10	1	2	2	0	1	112	0	0	0	0	0	0	0	0	18	4	0	1	0	0	0	23
98	6	0	4	5	1	0	114	0	0	0	0	0	0	0	0	22	5	1	0	0	0	0	28
93	13	0	0	1	0	0	107	0	0	0	0	0	0	0	0	30	4	0	0	0	1	0	35
120	15	1	0	2	1	0	139	0	0	0	0	0	0	0	0	36	8	0	0	0	0	0	44
407	44	2	6	10	2	1	472	0	0	0	0	0	0	0	0	106	21	1	1	0	1	0	130
95	15	0	0	2	1	2	115	0	0	0	0	0	0	0	0	23	6	0	1	0	0	0	30
123	14	0	1	2	0	0	140	0	0	0	0	0	0	0	0	34	14	0	0	1	0	0	49
140	17	2	0	1	2	1	163	0	0	0	0	0	0	0	0	37	8	0	0	0	0	0	45
101	9	1	2	2	5	2	122	0	0	0	0	0	0	0	0	39	7	0	0	0	0	0	46
459	55	3	3	7	8	5	540	0	0	0	0	0	0	0	0	133	35	0	1	1	0	0	170
142	12	0	0	1	0	2	157	0	0	0	0	0	0	0	0	28	6	0	1	0	0	1	36
105	8	0	1	2	3	1	120	0	0	0	0	0	0	0	0	22	4	0	1	0	0	0	27
125	13	0	0	0	2	4	144	0	0	0	0	0	0	0	0	26	5	0	0	1	0	1	33
106	10	0	0	2	0	0	118	0	0	0	0	0	0	0	0	14	2	1	0	0	0	0	17
478	43	0	1	5	5	7	539	0	0	0	0	0	0	0	0	90	17	1	2	1	0	2	113
91	6	1	0	2	1	9	110	0	0	0	0	0	0	0	0	16	5	1	0	0	0	0	22
114	4	0	0	1	3	2	124	0	0	0	0	0	0	0	0	13	1	0	0	0	1	0	15
88	11	0	0	2	0	4	105	0	0	0	0	0	0	0	0	14	2	0	0	0	0	0	16
89	10	0	1	0	0	2	102	0	0	0	0	0	0	0	0	13	0	0	0	0	0	1	14
382	31	1	1	5	4	17	441	0	0	0	0	0	0	0	0	56	8	1	0	0	1	1	67
4198	484	68	34	74	27	53	4938	0	0	0	0	0	0	0	0	949	140	16	6	3	4	6	1124

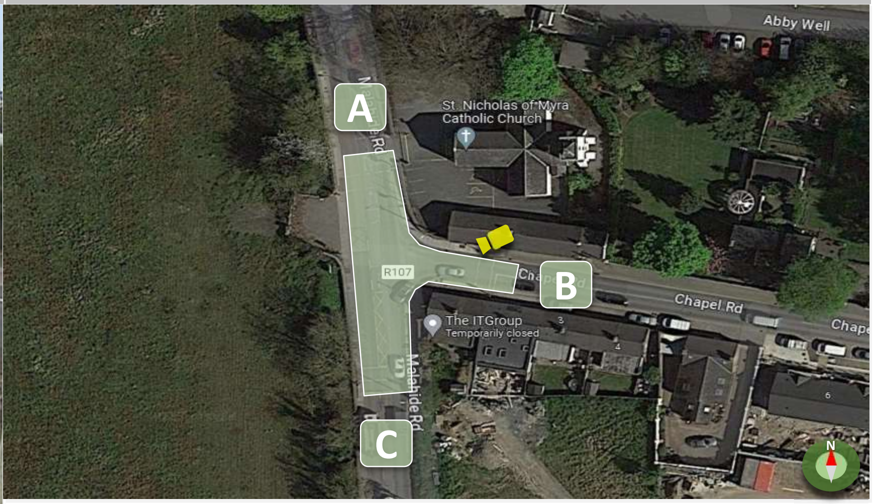
Irish Traffic Surveys

C to A								C to B								C to C							
CAR	LGV	OGV1	OGV2	PSV	M/C	P/C	TOT	CAR	LGV	OGV1	OGV2	PSV	M/C	P/C	TOT	CAR	LGV	OGV1	OGV2	PSV	M/C	P/C	TOT
21	12	0	0	0	0	1	34	7	3	1	0	0	0	0	11	0	0	0	0	0	0	0	0
34	11	0	0	0	0	0	45	12	4	1	0	0	0	0	17	0	0	0	0	0	0	0	0
30	8	0	0	1	1	1	41	13	3	0	1	0	0	0	17	0	0	0	0	0	0	0	0
38	10	2	1	0	0	0	51	16	4	0	0	0	0	1	21	0	0	0	0	0	0	0	0
123	41	2	1	1	1	2	171	48	14	2	1	0	0	1	66	0	0	0	0	0	0	0	0
31	9	0	1	0	0	0	41	17	1	0	0	0	0	1	19	0	0	0	0	0	0	0	0
33	11	1	1	1	0	1	48	13	2	1	0	0	0	0	16	0	0	0	0	0	0	0	0
40	7	4	0	0	0	0	51	21	3	0	0	0	0	0	24	0	0	0	0	0	0	0	0
30	6	0	0	0	0	0	36	18	5	0	0	0	0	0	23	0	0	0	0	0	0	0	0
134	33	5	2	1	0	1	176	69	11	1	0	0	0	1	82	0	0	0	0	0	0	0	0
36	9	0	2	0	0	1	48	13	3	1	0	0	0	0	17	0	0	0	0	0	0	0	0
29	4	1	0	0	0	0	34	9	6	3	0	0	1	0	19	0	0	0	0	0	0	0	0
36	12	0	0	1	0	0	49	7	0	1	0	0	0	0	8	0	0	0	0	0	0	0	0
20	13	1	1	0	0	0	35	12	3	0	0	0	1	0	16	0	0	0	0	0	0	0	0
121	38	2	3	1	0	1	166	41	12	5	0	0	2	0	60	0	0	0	0	0	0	0	0
16	5	3	0	0	0	0	24	2	1	0	0	0	0	0	3	0	0	0	0	0	0	0	0
29	5	2	0	0	0	0	36	10	2	1	1	0	0	0	14	0	0	0	0	0	0	0	0
18	5	1	3	0	0	0	27	14	1	0	0	0	0	0	15	0	0	0	0	0	0	0	0
44	7	2	0	0	0	0	53	6	2	0	0	0	0	0	8	0	0	0	0	0	0	0	0
107	22	8	3	0	0	0	140	32	6	1	1	0	0	0	40	0	0	0	0	0	0	0	0
20	5	1	0	0	0	0	26	11	3	0	0	0	0	0	14	0	0	0	0	0	0	0	0
23	4	0	1	0	0	0	28	9	1	0	0	0	0	0	10	0	0	0	0	0	0	0	0
25	5	2	0	0	0	0	32	8	1	1	0	0	0	1	11	0	0	0	0	0	0	0	0
25	8	1	3	0	0	0	37	10	2	1	0	0	0	0	13	0	0	0	0	0	0	0	0
93	22	4	4	0	0	0	123	38	7	2	0	0	0	1	48	0	0	0	0	0	0	0	0
29	6	1	0	0	0	0	36	5	2	1	0	0	0	0	8	0	0	0	0	0	0	0	0
28	8	3	2	0	0	0	41	13	2	0	0	0	0	1	16	0	0	0	0	0	0	0	0
41	5	1	0	0	0	0	47	18	3	0	0	0	0	0	21	0	0	0	0	0	0	0	0
31	4	1	0	0	0	0	36	13	1	0	0	0	0	0	14	0	0	0	0	0	0	0	0
129	23	6	2	0	0	0	160	49	8	1	0	0	0	1	59	0	0	0	0	0	0	0	0
45	7	0	0	0	0	0	52	11	3	1	0	0	0	0	15	0	0	0	0	0	0	0	0
46	2	0	0	0	0	2	50	12	0	1	0	0	0	0	13	0	0	0	0	0	0	0	0
45	4	0	1	0	0	0	50	14	0	0	0	0	0	0	14	0	0	0	0	0	0	0	0
52	6	0	1	0	0	0	59	14	1	0	1	0	0	0	16	0	0	0	0	0	0	0	0
188	19	0	2	0	0	2	211	51	4	2	1	0	0	0	58	0	0	0	0	0	0	0	0
48	1	2	0	0	0	0	51	11	1	0	0	0	0	0	12	0	0	0	0	0	0	0	0
55	5	1	0	0	0	0	61	21	0	2	0	0	0	0	23	0	0	0	0	0	0	0	0
35	5	1	0	0	0	1	42	7	0	3	0	0	0	1	11	0	0	0	0	0	0	0	0
52	9	0	0	0	0	0	61	18	2	0	0	0	1	0	21	0	0	0	0	0	0	0	0
190	20	4	0	0	0	1	215	57	3	5	0	0	1	1	67	0	0	0	0	0	0	0	0
39	8	1	0	0	0	1	49	9	0	2	0	0	0	0	11	0	0	0	0	0	0	0	0
45	6	0	0	0	0	0	51	11	1	0	0	0	0	0	12	0	0	0	0	0	0	0	0
59	6	0	0	0	0	0	65	11	6	0	0	0	0	0	17	0	0	0	0	0	0	0	0
52	3	0	1	0	1	1	58	12	1	0	0	0	0	0	13	0	0	0	0	0	0	0	0
195	23	1	1	0	1	2	223	43	8	2	0	0	0	0	53	0	0	0	0	0	0	0	0
53	1	1	0	0	0	0	55	17	2	2	0	0	0	0	21	0	0	0	0	0	0	0	0
48	2	0	0	0	0	0	50	13	0	1	0	0	0	0	14	0	0	0	0	0	0	0	0
57	2	0	0	0	0	0	59	10	2	0	0	0	0	0	12	0	0	0	0	0	0	0	0
67	2	0	0	0	0	1	70	18	1	0	0	0	0	0	19	0	0	0	0	0	0	0	0
225	7	1	0	0	0	1	234	58	5	3	0	0	0	0	66	0	0	0	0	0	0	0	0
43	4	0	0	0	0	0	47	20	1	0	0	0	1	0	22	0	0	0	0	0	0	0	0
43	3	0	0	0	0	0	46	19	1	0	0	0	0	0	20	0	0	0	0	0	0	0	0
49	2	0	0	0	0	1	52	18	1	1	0	0	0	0	20	0	0	0	0	0	0	0	0
53	3	0	0	0	1	1	58	16	1	2	0	0	0	0	19	0	0	0	0	0	0	0	0
188	12	0	0	0	1	2	203	73	4	3	0	0	1	0	81	0	0	0	0	0	0	0	0
61	3	0	0	0	0	0	64	24	0	0	0	0	0	0	24	0	0	0	0	0	0	0	0
53	3	0	0	0	0	1	57	21	1	0	1	0	0	1	24	0	0	0	0	0	0	0	0
65	3	0	0	0	0	0	68	9	0	0	0	0	0	0	9	0	0	0	0	0	0	0	0
45	2	0	0	0	0	0	47	13	0	2	0	0	0	0	15	0	0	0	0	0	0	0	0
224	11	0	0	0	0	1	236	67	1	2	1	0	0	1	72	0	0	0	0	0	0	0	0
1917	271	33	18	3	3	13	2258	626	83	29	4	0	4	6	752	0	0	0	0	0	0	0	0

Irish Traffic Surveys LTD	
Survey Name :	ITS J-779 Kinsealy
Site:	JTC 2
Date:	12.09.2023
Time:	07:00 - 19:00
Location:	53.425217, -6.176380
Classification:	CAR, LGV, OGV1, OGV2, PSV, MC, PC

Site 2 Cam S19 View

Aerial View



Co-ordinates:	53.425217, -6.176380
Junction Type:	3-Arm
Queues Required:	No
Pedestrian required:	No

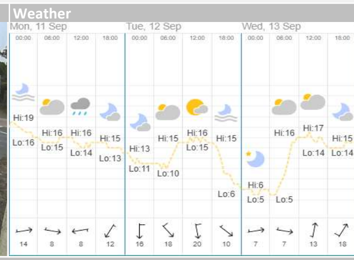
Irish Traffic Surveys LTD

Survey Name :	ITS J-779 Kinsealy
Site:	JTC 2
Date:	12.09.2023
Time:	07:00 - 19:00
Location:	53.425217, -6.176380
Classification:	CAR, LGV, OGV1, OGV2, PSV, MC, PC

Irish Traffic Surveys

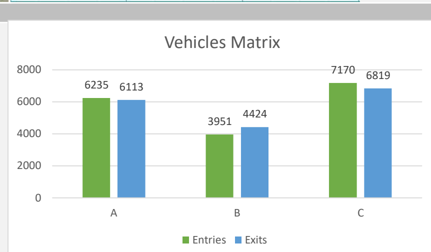
Site 2

Weather



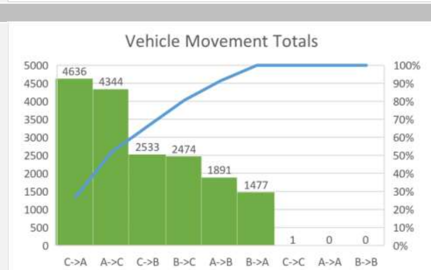
12 Hr Vehicles Matrix

12hr Matrix	A	B	C
A	0	1891	4344
B	1477	0	2474
C	4636	2533	1
Totals	**A**	**B**	**C**
Entries	6235	3951	7170
Exits	6113	4424	6819



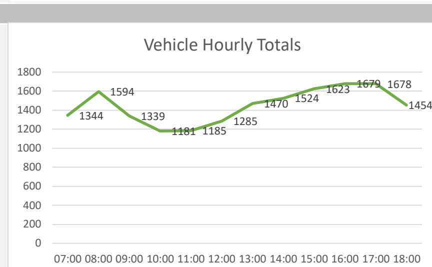
Movement Totals

Movement	12hr Total	% Total
A->A	0	0.0%
A->B	1891	10.9%
A->C	4344	25.0%
B->A	1477	8.5%
B->B	0	0.0%
B->C	2474	14.3%
C->A	4636	26.7%
C->B	2533	14.6%
C->C	1	0.0%
Total	**17356**	**100.0%**



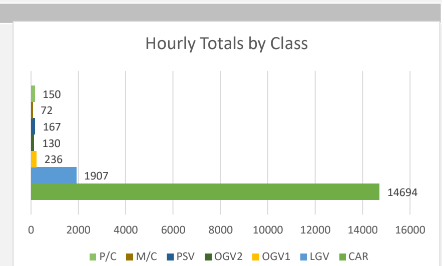
Hourly Totals

TIME	Period total	% of 12hr Total
07:00	1344	8%
08:00	1594	9%
09:00	1339	8%
10:00	1181	7%
11:00	1185	7%
12:00	1285	7%
13:00	1470	8%
14:00	1524	9%
15:00	1623	9%
16:00	1679	10%
17:00	1678	10%
18:00	1454	8%
Total	**17356**	**100%**



Hourly Totals by Class

TIME	CAR	LGV	OGV1	OGV2	PSV	M/C	P/C	% of 12hr Total
07:00	1087	187	14	5	24	6	21	8%
08:00	1359	140	22	14	19	10	30	9%
09:00	1081	187	26	17	16	2	10	8%
10:00	957	156	40	12	9	4	3	7%
11:00	949	176	27	14	10	5	4	7%
12:00	1076	158	30	9	6	2	4	7%
13:00	1245	173	16	12	13	3	8	8%
14:00	1318	146	24	14	14	4	4	9%
15:00	1360	190	23	18	16	7	9	9%
16:00	1431	190	9	8	16	13	12	10%
17:00	1505	124	4	6	12	9	18	10%
18:00	1326	80	1	1	12	7	27	8%
Total	**14694**	**1907**	**236**	**130**	**167**	**72**	**150**	
% Total	**84.66%**	**10.99%**	**1.36%**	**0.75%**	**0.96%**	**0.41%**	**0.86%**	



Irish Traffic Surveys LTD

Survey Name :	ITS J-779 Kinsealy
Site:	JTC 2
Date:	12.09.2023
Time:	07:00 - 19:00
Location:	53.425217, -6.176380
Classification:	CAR, LGV, OGV1, OGV2, PSV, MC, PC

	A to A								A to B								A to C							
TIME	CAR	LGV	OGV1	OGV2	PSV	M/C	P/C	**TOT**	CAR	LGV	OGV1	OGV2	PSV	M/C	P/C	**TOT**	CAR	LGV	OGV1	OGV2	PSV	M/C	P/C	**TOT**
07:00	0	0	0	0	0	0	0	0	19	6	0	0	0	0	0	25	72	12	0	0	2	0	2	88
07:15	0	0	0	0	0	0	0	0	23	4	0	0	0	0	0	27	71	15	1	0	2	3	1	93
07:30	0	0	0	0	0	0	0	0	23	13	0	0	1	0	0	37	123	12	1	1	3	1	1	142
07:45	0	0	0	0	0	0	0	0	41	10	0	0	0	0	0	51	99	9	1	0	4	0	5	118
H/TOT	0	0	0	0	0	0	0	0	106	33	0	0	1	0	0	140	365	48	3	1	11	4	9	441
08:00	0	0	0	0	0	0	0	0	53	6	0	2	1	0	0	62	97	6	1	2	4	1	6	117
08:15	0	0	0	0	0	0	0	0	52	7	1	0	0	0	0	60	105	5	1	0	2	0	5	118
08:30	0	0	0	0	0	0	0	0	33	0	0	0	0	0	1	34	77	10	2	1	2	2	2	96
08:45	0	0	0	0	0	0	0	0	39	8	0	0	0	0	1	48	77	8	1	1	1	0	0	88
H/TOT	0	0	0	0	0	0	0	0	177	21	1	2	1	0	2	204	356	29	5	4	9	3	13	419
09:00	0	0	0	0	0	0	0	0	29	4	0	0	0	0	0	33	91	12	3	1	4	0	1	112
09:15	0	0	0	0	0	0	0	0	25	7	0	0	0	0	0	32	81	11	1	0	2	0	0	95
09:30	0	0	0	0	0	0	0	0	22	8	0	0	0	0	0	30	74	7	4	1	1	0	3	90
09:45	0	0	0	0	0	0	0	0	25	5	1	1	0	0	0	32	62	13	5	3	2	0	0	85
H/TOT	0	0	0	0	0	0	0	0	101	24	1	1	0	0	0	127	308	43	13	5	9	0	4	382
10:00	0	0	0	0	0	0	0	0	16	8	1	0	0	0	0	25	76	16	0	0	2	0	1	95
10:15	0	0	0	0	0	0	0	0	21	5	0	0	0	0	1	27	56	9	1	0	0	1	1	68
10:30	0	0	0	0	0	0	0	0	19	5	0	0	0	0	0	24	59	11	4	2	1	1	0	78
10:45	0	0	0	0	0	0	0	0	20	6	0	0	0	0	0	26	71	9	2	0	1	0	0	83
H/TOT	0	0	0	0	0	0	0	0	76	24	1	0	0	0	1	102	262	45	7	2	4	2	2	324
11:00	0	0	0	0	0	0	0	0	17	3	0	0	0	0	0	20	54	14	3	0	1	1	0	73
11:15	0	0	0	0	0	0	0	0	11	5	0	0	0	0	1	17	72	9	2	0	0	0	0	83
11:30	0	0	0	0	0	0	0	0	25	8	0	0	0	0	0	33	63	11	2	1	2	0	0	79
11:45	0	0	0	0	0	0	0	0	30	1	0	2	0	0	0	33	56	11	2	1	1	1	0	72
H/TOT	0	0	0	0	0	0	0	0	83	17	0	2	0	0	1	103	245	45	9	2	4	2	0	307
12:00	0	0	0	0	0	0	0	0	21	8	0	0	0	0	0	29	67	6	3	1	1	0	0	78
12:15	0	0	0	0	0	0	0	0	24	7	0	0	0	0	1	32	77	11	1	0	0	0	0	89
12:30	0	0	0	0	0	0	0	0	29	7	1	0	0	0	0	37	88	7	0	0	2	0	0	97
12:45	0	0	0	0	0	0	0	0	25	3	2	0	0	0	0	30	91	7	1	0	0	1	0	100
H/TOT	0	0	0	0	0	0	0	0	99	25	3	0	0	0	1	128	323	31	5	1	3	1	0	364
13:00	0	0	0	0	0	0	0	0	32	4	0	0	0	0	0	36	81	15	0	2	1	1	0	100
13:15	0	0	0	0	0	0	0	0	35	0	0	0	0	0	0	35	71	9	2	0	1	0	0	83
13:30	0	0	0	0	0	0	0	0	35	2	0	0	0	0	0	37	68	17	3	1	2	0	0	91
13:45	0	0	0	0	0	0	0	0	24	6	0	0	0	0	0	30	89	13	1	1	2	0	0	106
H/TOT	0	0	0	0	0	0	0	0	126	12	0	0	0	0	0	138	309	54	6	4	6	1	0	380
14:00	0	0	0	0	0	0	0	0	33	5	1	0	0	0	1	40	67	10	1	1	0	1	0	80
14:15	0	0	0	0	0	0	0	0	48	4	3	1	0	0	0	56	101	6	4	1	2	0	0	114
14:30	0	0	0	0	0	0	0	0	28	3	0	0	0	0	0	31	64	9	1	5	3	0	0	82
14:45	0	0	0	0	0	0	0	0	28	2	1	0	0	0	0	31	69	7	1	1	0	2	0	80
H/TOT	0	0	0	0	0	0	0	0	137	14	5	1	0	0	1	158	301	32	7	8	5	3	0	356
15:00	0	0	0	0	0	0	0	0	38	5	2	1	0	0	0	46	81	14	3	2	3	3	0	106
15:15	0	0	0	0	0	0	0	0	41	2	2	0	0	0	0	45	79	14	3	2	1	0	2	101
15:30	0	0	0	0	0	0	0	0	45	2	0	0	0	0	1	48	76	12	2	0	1	0	0	91
15:45	0	0	0	0	0	0	0	0	58	10	0	1	0	0	0	69	66	9	1	2	1	0	1	80
H/TOT	0	0	0	0	0	0	0	0	182	19	4	2	0	0	1	208	302	49	9	6	6	3	3	378
16:00	0	0	0	0	0	0	0	0	36	8	0	0	0	0	0	44	71	15	0	0	2	1	1	90
16:15	0	0	0	0	0	0	0	0	56	4	0	0	0	0	0	60	72	15	2	0	1	1	0	91
16:30	0	0	0	0	0	0	0	0	42	5	0	1	0	0	0	48	70	8	0	0	3	0	1	82
16:45	0	0	0	0	0	0	0	0	41	6	0	0	0	1	0	48	61	13	0	0	1	0	0	75
H/TOT	0	0	0	0	0	0	0	0	175	23	0	1	0	1	0	200	274	51	2	0	7	2	2	338
17:00	0	0	0	0	0	0	0	0	43	6	0	0	0	0	0	49	87	3	0	0	2	0	1	93
17:15	0	0	0	0	0	0	0	0	46	2	0	0	0	0	1	49	91	3	0	0	2	0	4	100
17:30	0	0	0	0	0	0	0	0	45	5	0	0	0	1	0	51	74	3	1	0	2	0	0	80
17:45	0	0	0	0	0	0	0	0	61	2	0	0	0	0	0	63	73	8	0	1	1	0	1	84
H/TOT	0	0	0	0	0	0	0	0	195	15	0	0	0	1	1	212	325	17	1	1	7	0	6	357
18:00	0	0	0	0	0	0	0	0	52	0	0	0	0	0	0	52	73	1	0	0	1	0	0	75
18:15	0	0	0	0	0	0	0	0	36	4	0	0	0	0	0	40	73	4	0	0	2	0	0	79
18:30	0	0	0	0	0	0	0	0	36	0	0	0	0	0	0	36	64	2	0	0	3	1	2	72
18:45	0	0	0	0	0	0	0	0	41	2	0	0	0	0	0	43	62	5	0	0	1	2	2	72
H/TOT	0	0	0	0	0	0	0	0	165	6	0	0	0	0	0	171	272	12	0	0	7	3	4	298
24 HR TOT	0	0	0	0	0	0	0	0	1622	233	15	9	2	2	8	1891	3642	456	67	34	78	24	43	4344

B to A								B to B								B to C							
CAR	LGV	OGV1	OGV2	PSV	M/C	P/C	**TOT**	CAR	LGV	OGV1	OGV2	PSV	M/C	P/C	**TOT**	CAR	LGV	OGV1	OGV2	PSV	M/C	P/C	**TOT**
10	1	1	0	0	0	0	12	0	0	0	0	0	0	0	0	51	4	0	0	0	0	1	56
9	0	0	0	0	0	0	9	0	0	0	0	0	0	0	0	69	8	0	1	1	0	0	79
21	3	0	0	0	0	0	24	0	0	0	0	0	0	0	0	45	1	0	0	0	0	4	50
25	2	1	1	0	0	0	29	0	0	0	0	0	0	0	0	72	4	0	0	0	0	3	79
65	6	2	1	0	0	0	74	0	0	0	0	0	0	0	0	237	17	0	1	1	0	8	264
30	3	0	0	0	0	0	33	0	0	0	0	0	0	0	0	50	3	0	0	0	0	1	54
26	0	0	0	0	1	0	27	0	0	0	0	0	0	0	0	52	4	1	1	0	2	2	62
31	3	0	0	0	1	0	35	0	0	0	0	0	0	0	0	61	6	0	0	0	0	1	68
39	2	1	0	0	0	0	42	0	0	0	0	0	0	0	0	46	3	0	0	0	0	0	49
126	8	1	0	0	2	0	137	0	0	0	0	0	0	0	0	209	16	1	1	0	2	4	233
35	1	1	0	0	1	0	38	0	0	0	0	0	0	0	0	52	8	0	0	1	0	0	61
11	1	1	1	0	0	0	14	0	0	0	0	0	0	0	0	49	7	1	0	0	0	0	57
17	2	0	0	0	0	0	19	0	0	0	0	0	0	0	0	38	3	1	1	0	0	0	43
17	4	0	1	0	0	0	22	0	0	0	0	0	0	0	0	51	10	0	2	0	0	0	63
80	8	2	2	0	1	0	93	0	0	0	0	0	0	0	0	190	28	2	3	1	0	0	224
21	4	1	0	0	0	0	26	0	0	0	0	0	0	0	0	34	11	0	1	0	0	0	46
22	5	3	0	0	0	0	30	0	0	0	0	0	0	0	0	29	4	5	1	0	0	0	39
16	1	0	0	0	0	0	17	0	0	0	0	0	0	0	0	52	3	0	0	0	0	0	55
17	3	0	0	0	0	0	20	0	0	0	0	0	0	0	0	39	3	0	1	0	0	0	43
76	13	4	0	0	0	0	93	0	0	0	0	0	0	0	0	154	21	5	3	0	0	0	183
18	7	0	0	0	0	0	25	0	0	0	0	0	0	0	0	51	6	1	1	0	0	0	59
19	5	1	0	0	0	0	25	0	0	0	0	0	0	0	0	24	7	0	0	2	0	0	33
28	7	0	1	0	0	0	36	0	0	0	0	0	0	0	0	32	5	2	1	0	0	1	41
26	5	0	0	0	0	1	32	0	0	0	0	0	0	0	0	31	8	1	1	0	0	0	41
91	24	1	1	0	0	1	118	0	0	0	0	0	0	0	0	138	26	4	3	2	0	1	174
21	2	0	0	0	0	0	23	0	0	0	0	0	0	0	0	35	7	1	0	0	0	0	43
16	5	1	0	0	0	0	22	0	0	0	0	0	0	0	0	38	5	2	1	0	1	0	47
24	3	2	0	0	0	1	30	0	0	0	0	0	0	0	0	32	5	2	1	0	0	0	40
26	2	0	0	0	0	0	28	0	0	0	0	0	0	0	0	37	11	0	1	0	0	1	50
87	12	3	0	0	0	1	103	0	0	0	0	0	0	0	0	142	28	5	3	0	1	1	180
25	1	1	0	0	0	0	27	0	0	0	0	0	0	0	0	40	12	0	0	0	0	2	54
21	7	0	1	0	0	0	29	0	0	0	0	0	0	0	0	28	8	1	0	0	0	0	37
24	5	0	0	0	0	0	29	0	0	0	0	0	0	0	0	38	6	1	1	0	1	0	47
34	2	0	1	0	0	0	37	0	0	0	0	0	0	0	0	42	8	0	0	1	0	1	52
104	15	1	2	0	0	0	122	0	0	0	0	0	0	0	0	148	34	2	1	1	1	3	190
30	2	0	0	0	0	0	32	0	0	0	0	0	0	0	0	46	7	1	1	0	1	0	56
17	4	0	1	0	0	0	22	0	0	0	0	0	0	0	0	37	3	0	0	0	0	1	41
26	2	1	0	0	0	0	29	0	0	0	0	0	0	0	0	46	6	2	0	0	0	0	54
36	2	1	0	0	0	0	39	0	0	0	0	0	0	0	0	59	7	0	1	1	0	0	68
109	10	2	1	0	0	0	122	0	0	0	0	0	0	0	0	188	23	3	2	1	1	1	219
22	7	1	0	0	0	0	30	0	0	0	0	0	0	0	0	34	7	1	1	0	0	0	43
36	1	0	2	0	0	0	39	0	0	0	0	0	0	0	0	44	9	1	0	0	0	0	54
37	7	2	0	0	0	0	46	0	0	0	0	0	0	0	0	43	9	0	0	0	0	0	52
35	8	1	0	0	0	0	44	0	0	0	0	0	0	0	0	43	10	0	0	0	1	0	54
130	23	4	2	0	0	0	159	0	0	0	0	0	0	0	0	164	35	2	1	0	1	0	203
28	4	1	1	0	0	0	34	0	0	0	0	0	0	0	0	39	6	1	1	0	0	3	50
31	3	1	1	0	0	0	36	0	0	0	0	0	0	0	0	52	9	0	1	0	0	0	62
27	5	0	0	1	1	0	34	0	0	0	0	0	0	0	0	46	11	0	0	0	0	1	58
39	7	0	0	0	0	0	46	0	0	0	0	0	0	0	0	54	3	0	0	0	0	1	58
125	19	2	2	1	1	0	150	0	0	0	0	0	0	0	0	191	29	1	2	0	0	5	228
38	3	0	0	0	1	0	42	0	0	0	0	0	0	0	0	50	12	1	0	0	0	3	66
30	6	0	2	0	0	0	38	0	0	0	0	0	0	0	0	41	2	0	1	0	0	0	44
37	3	0	0	0	0	0	40	0	0	0	0	0	0	0	0	60	7	1	0	0	0	1	69
32	4	0	1	0	0	0	37	0	0	0	0	0	0	0	0	35	7	1	0	0	0	0	43
137	16	0	3	0	1	0	157	0	0	0	0	0	0	0	0	186	28	3	1	0	0	4	222
31	1	0	0	0	1	0	33	0	0	0	0	0	0	0	0	46	5	0	0	0	0	1	52
32	5	0	0	0	0	0	37	0	0	0	0	0	0	0	0	31	2	0	0	0	0	0	33
42	1	0	0	0	0	0	43	0	0	0	0	0	0	0	0	30	1	0	0	0	0	0	31
34	1	0	0	0	0	1	36	0	0	0	0	0	0	0	0	35	3	0	0	0	0	0	38
139	8	0	0	0	1	1	149	0	0	0	0	0	0	0	0	142	11	0	0	0	0	1	154
1269	162	22	14	1	6	3	1477	0	0	0	0	0	0	0	0	2089	296	28	21	6	6	28	2474

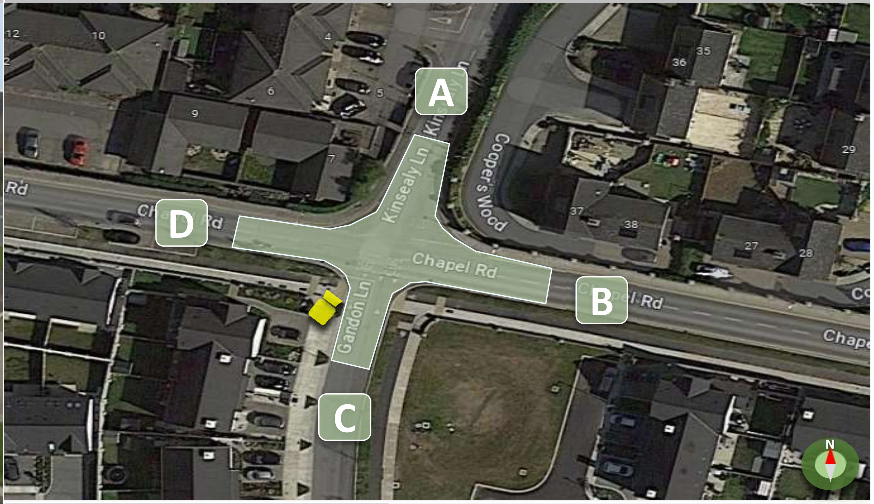
Irish Traffic Surveys

C to A								C to B								C to C							
CAR	LGV	OGV1	OGV2	PSV	M/C	P/C	TOT	CAR	LGV	OGV1	OGV2	PSV	M/C	P/C	TOT	CAR	LGV	OGV1	OGV2	PSV	M/C	P/C	TOT
28	5	1	1	3	0	1	39	20	10	1	0	0	0	2	33	0	0	0	0	0	0	0	0
30	6	1	0	3	0	1	41	31	14	0	1	0	0	0	46	0	0	0	0	0	0	0	0
36	11	2	0	3	1	0	53	42	9	0	0	1	1	0	53	1	0	0	0	0	0	0	1
77	20	2	0	1	0	0	100	49	8	2	0	0	0	0	59	0	0	0	0	0	0	0	0
171	42	6	1	10	1	2	233	142	41	3	1	1	1	2	191	1	0	0	0	0	0	0	1
78	4	3	1	1	0	3	90	36	8	1	2	0	0	0	47	0	0	0	0	0	0	0	0
56	6	1	1	2	0	3	69	40	13	1	1	1	0	0	56	0	0	0	0	0	0	0	0
86	12	2	0	3	1	3	107	57	9	3	0	0	1	0	70	0	0	0	0	0	0	0	0
106	7	2	1	1	0	1	118	32	7	1	1	1	1	1	44	0	0	0	0	0	0	0	0
326	29	8	3	7	1	10	384	165	37	6	4	2	2	1	217	0	0	0	0	0	0	0	0
81	11	1	0	0	0	2	95	42	6	1	2	0	0	2	53	0	0	0	0	0	0	0	0
81	7	1	3	3	0	1	96	35	4	0	0	0	0	0	39	0	0	0	0	0	0	0	0
54	14	2	0	2	0	1	73	37	19	1	0	0	0	0	57	0	0	0	0	0	0	0	0
51	13	1	1	1	1	0	68	21	10	1	0	0	0	0	32	0	0	0	0	0	0	0	0
267	45	5	4	6	1	4	332	135	39	3	2	0	0	2	181	0	0	0	0	0	0	0	0
67	14	8	1	1	1	0	92	24	2	2	1	1	0	0	30	0	0	0	0	0	0	0	0
61	5	2	1	1	0	0	70	27	6	2	0	0	0	0	35	0	0	0	0	0	0	0	0
65	8	4	0	2	0	0	79	22	4	1	3	0	0	0	30	0	0	0	0	0	0	0	0
74	8	2	1	0	1	0	86	49	6	2	0	0	0	0	57	0	0	0	0	0	0	0	0
267	35	16	3	4	2	0	327	122	18	7	4	1	0	0	152	0	0	0	0	0	0	0	0
73	17	3	0	1	0	0	94	28	4	1	0	0	0	0	33	0	0	0	0	0	0	0	0
66	14	1	1	0	0	1	83	22	4	0	1	0	0	0	27	0	0	0	0	0	0	0	0
60	7	4	1	3	3	0	78	38	5	0	0	0	0	0	43	0	0	0	0	0	0	0	0
78	5	3	2	0	0	0	88	27	8	1	1	0	0	0	37	0	0	0	0	0	0	0	0
277	43	11	4	4	3	1	343	115	21	2	2	0	0	0	140	0	0	0	0	0	0	0	0
75	6	5	0	1	0	0	87	31	10	0	0	0	0	0	41	0	0	0	0	0	0	0	0
74	7	5	0	1	0	0	87	26	8	2	3	0	0	0	39	0	0	0	0	0	0	0	0
80	10	1	1	1	0	1	94	40	6	0	0	0	0	0	46	0	0	0	0	0	0	0	0
66	8	0	1	0	0	0	75	33	7	1	0	0	0	0	41	0	0	0	0	0	0	0	0
295	31	11	2	3	0	1	343	130	31	3	3	0	0	0	167	0	0	0	0	0	0	0	0
80	11	4	0	1	0	1	97	59	10	1	0	1	0	1	72	0	0	0	0	0	0	0	0
95	10	1	1	2	1	0	110	41	2	0	0	0	0	2	45	0	0	0	0	0	0	0	0
91	9	1	1	1	0	1	104	42	3	0	1	0	0	0	46	0	0	0	0	0	0	0	0
90	5	0	1	1	0	0	97	60	8	0	1	0	0	0	69	0	0	0	0	0	0	0	0
356	35	6	3	5	1	2	408	202	23	1	2	1	0	3	232	0	0	0	0	0	0	0	0
80	12	1	1	4	0	1	99	64	3	0	0	0	0	1	68	0	0	0	0	0	0	0	0
98	8	3	1	0	0	0	110	54	7	0	0	0	0	0	61	0	0	0	0	0	0	0	0
93	11	0	0	2	0	0	106	50	8	2	0	0	0	0	60	0	0	0	0	0	0	0	0
94	13	1	0	2	0	0	110	50	5	0	0	0	0	0	55	0	0	0	0	0	0	0	0
365	44	5	2	8	0	1	425	218	23	2	0	0	0	1	244	0	0	0	0	0	0	0	0
88	10	0	1	2	0	1	102	43	7	1	1	0	0	1	53	0	0	0	0	0	0	0	0
99	8	1	4	4	1	0	117	51	6	0	0	0	0	0	57	0	0	0	0	0	0	0	0
79	8	0	0	2	0	0	89	56	8	0	0	0	0	0	64	0	0	0	0	0	0	0	0
114	12	1	0	2	1	2	132	52	5	1	1	0	1	1	61	0	0	0	0	0	0	0	0
380	38	2	5	10	2	3	440	202	26	2	2	0	1	2	235	0	0	0	0	0	0	0	0
96	16	0	0	2	1	0	115	61	3	1	0	0	0	1	66	0	0	0	0	0	0	0	0
113	7	0	1	2	0	0	123	44	8	0	0	0	0	0	52	0	0	0	0	0	0	0	0
133	20	2	0	2	2	0	159	67	2	0	0	0	1	0	70	0	0	0	0	0	0	0	0
94	9	1	1	2	3	3	113	58	3	0	1	0	2	1	65	0	0	0	0	0	0	0	0
436	52	3	2	8	6	3	510	230	16	1	1	0	3	2	253	0	0	0	0	0	0	0	0
106	10	0	0	1	0	2	119	74	4	0	0	0	0	0	78	0	0	0	0	0	0	0	0
91	7	0	1	2	2	0	103	49	3	0	0	0	2	0	54	0	0	0	0	0	0	0	0
114	9	0	0	0	2	3	128	65	4	0	0	0	0	2	71	0	0	0	0	0	0	0	0
102	8	0	0	2	0	0	112	61	3	0	0	0	1	0	65	0	0	0	0	0	0	0	0
413	34	0	1	5	4	5	462	249	14	0	0	0	3	2	268	0	0	0	0	0	0	0	0
85	9	1	0	2	1	9	107	68	2	0	0	0	0	2	72	0	0	0	0	0	0	0	0
112	6	0	0	1	1	3	123	62	2	0	0	0	0	0	64	0	0	0	0	0	0	0	0
87	10	0	0	2	1	4	104	58	3	0	0	0	0	1	62	0	0	0	0	0	0	0	0
82	10	0	1	0	0	2	95	54	1	0	0	0	0	0	55	0	0	0	0	0	0	0	0
366	35	1	1	5	3	18	429	242	8	0	0	0	0	3	253	0	0	0	0	0	0	0	0
3919	463	74	31	75	24	50	4636	2152	297	30	21	5	10	18	2533	1	0	0	0	0	0	0	1

Irish Traffic Surveys LTD	
Survey Name :	ITS J-779 Kinsealy
Site:	JTC 3
Date:	12.09.2023
Time:	07:00 - 19:00
Location:	53.424809, -6.173025
Classification:	CAR, LGV, OGV1, OGV2, PSV, MC, PC

Site 3 Cam S37 View

Aerial View



Co-ordinates:	53.424809, -6.173025
Junction Type:	4-Arm
Queues Required:	No
Pedestrian required:	No

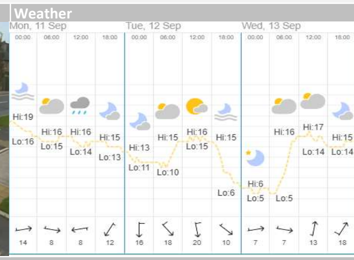
Irish Traffic Surveys LTD

Survey Name :	ITS J-779 Kinsealy
Site:	JTC 3
Date:	12.09.2023
Time:	07:00 - 19:00
Location:	53.424809, -6.173025
Classification:	CAR, LGV, OGV1, OGV2, PSV, MC, PC

Irish Traffic Surveys

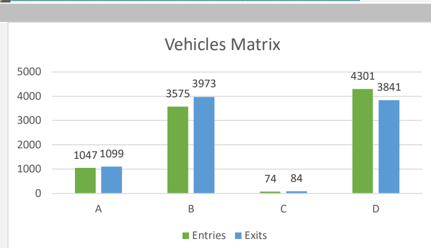
Site 3

Weather



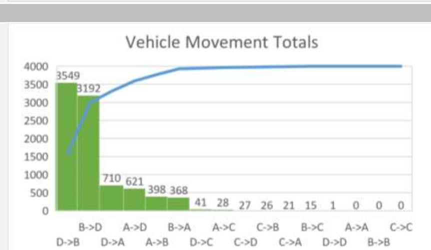
12 Hr Vehicles Matrix

12hr Matrix	A	B	C	D
A	0	398	28	621
B	368	0	15	3192
C	21	26	0	27
D	710	3549	41	1
Totals	**A**	**B**	**C**	**D**
Entries	1047	3575	74	4301
Exits	1099	3973	84	3841



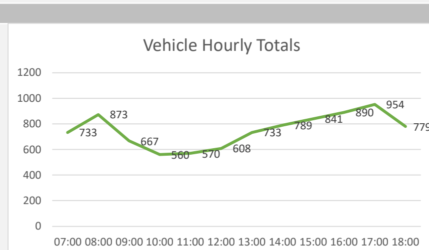
Movement Totals

Movement	12hr Total	% Total
A->A	0	0.0%
A->B	398	4.4%
A->C	28	0.3%
A->D	621	6.9%
B->A	368	4.1%
B->B	0	0.0%
B->C	15	0.2%
B->D	3192	35.5%
C->A	21	0.2%
C->B	26	0.3%
C->C	0	0.0%
C->D	27	0.3%
D->A	710	7.9%
D->B	3549	39.4%
D->C	41	0.5%
D->D	1	0.0%
Total	**8997**	**100.0%**



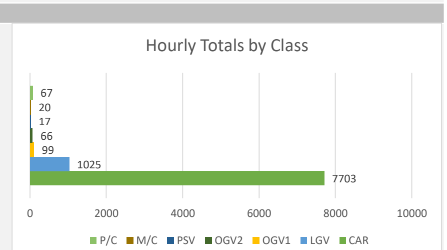
Hourly Totals

TIME	Period total	% of 12hr Total
07:00	733	8%
08:00	873	10%
09:00	667	7%
10:00	560	6%
11:00	570	6%
12:00	608	7%
13:00	733	8%
14:00	789	9%
15:00	841	9%
16:00	890	10%
17:00	954	11%
18:00	779	9%
Total	**8997**	**100%**



Hourly Totals by Class

TIME	CAR	LGV	OGV1	OGV2	PSV	M/C	P/C	% of 12hr Total
07:00	611	97	7	3	3	1	11	8%
08:00	753	87	9	8	3	2	11	10%
09:00	545	102	8	8	1	1	2	7%
10:00	454	80	17	8	0	0	1	6%
11:00	459	90	8	8	2	0	3	6%
12:00	496	92	13	3	0	0	4	7%
13:00	626	88	4	5	2	1	7	8%
14:00	684	76	11	5	4	4	5	9%
15:00	710	104	15	6	0	2	4	9%
16:00	768	97	5	7	1	5	7	10%
17:00	858	76	2	5	1	3	9	11%
18:00	739	36	0	0	0	1	3	9%
Total	**7703**	**1025**	**99**	**66**	**17**	**20**	**67**	
% Total	**85.62%**	**11.39%**	**1.10%**	**0.73%**	**0.19%**	**0.22%**	**0.74%**	



Irish Traffic Surveys LTD

Survey Name : ITS J-779 Kinsealy
Site: JTC 3
Date: 12.09.2023
Time: 07:00 - 19:00
Location: 53.424809, -6.173025
Classification: CAR, LGV, OGV1, OGV2, PSV, MC, PC

	A to A								A to B								A to C								A to D							
TIME	CAR	LGV	OGV1	OGV2	PSV	M/C	P/C	TOT	CAR	LGV	OGV1	OGV2	PSV	M/C	P/C	TOT	CAR	LGV	OGV1	OGV2	PSV	M/C	P/C	TOT	CAR	LGV	OGV1	OGV2	PSV	M/C	P/C	TOT
07:00	0	0	0	0	0	0	0	0	3	0	0	0	0	0	0	3	0	0	0	0	0	0	0	0	8	1	1	0	0	0	0	10
07:15	0	0	0	0	0	0	0	0	5	0	0	0	0	0	1	6	0	0	0	0	0	0	0	0	7	2	0	1	0	0	0	10
07:30	0	0	0	0	0	0	0	0	9	1	0	0	0	0	0	10	0	0	0	0	0	0	0	0	17	0	0	0	0	0	2	19
07:45	0	0	0	0	0	0	0	0	15	0	1	0	1	0	0	17	0	0	0	0	0	0	0	0	16	0	0	0	0	0	2	18
H/TOT	0	0	0	0	0	0	0	0	32	1	1	0	1	0	1	36	0	0	0	0	0	0	0	0	48	3	1	1	0	0	4	57
08:00	0	0	0	0	0	0	0	0	13	0	0	0	0	0	1	14	0	0	0	0	0	0	0	0	17	0	0	0	0	0	0	17
08:15	0	0	0	0	0	0	0	0	19	1	0	0	0	0	0	20	1	0	0	0	0	0	0	1	8	0	1	0	0	0	0	9
08:30	0	0	0	0	0	0	0	0	10	0	0	0	0	0	0	10	1	0	0	0	0	0	0	1	5	1	0	0	0	0	0	6
08:45	0	0	0	0	0	0	0	0	5	1	0	0	0	0	1	7	1	0	0	0	0	0	0	1	10	1	0	1	0	0	0	12
H/TOT	0	0	0	0	0	0	0	0	47	2	0	0	0	0	2	51	3	0	0	0	0	0	0	3	40	2	1	1	0	0	0	44
09:00	0	0	0	0	0	0	0	0	5	0	0	0	0	0	0	5	1	0	0	0	0	0	0	1	7	1	0	0	0	0	0	8
09:15	0	0	0	0	0	0	0	0	7	0	0	0	0	0	0	7	1	0	0	0	0	0	0	1	5	5	0	1	0	0	0	11
09:30	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	2	0	1	0	0	0	0	0	1	3	2	1	1	0	0	0	7
09:45	0	0	0	0	0	0	0	0	3	0	0	0	0	0	0	3	0	0	0	0	0	0	0	0	17	4	0	2	0	0	0	23
H/TOT	0	0	0	0	0	0	0	0	16	1	0	0	0	0	0	17	2	1	0	0	0	0	0	3	32	12	1	4	0	0	0	49
10:00	0	0	0	0	0	0	0	0	5	0	0	0	0	0	0	5	0	0	0	0	0	0	0	0	9	6	0	0	0	0	0	15
10:15	0	0	0	0	0	0	0	0	4	1	0	0	0	0	0	5	0	0	0	0	0	0	0	0	8	2	0	0	0	0	0	10
10:30	0	0	0	0	0	0	0	0	4	1	1	0	0	0	0	6	0	0	0	0	0	0	0	0	13	0	0	0	0	0	0	13
10:45	0	0	0	0	0	0	0	0	6	0	0	0	0	0	0	6	0	0	0	0	0	0	0	0	11	1	0	1	0	0	0	13
H/TOT	0	0	0	0	0	0	0	0	19	2	1	0	0	0	0	22	0	0	0	0	0	0	0	0	41	9	0	1	0	0	0	51
11:00	0	0	0	0	0	0	0	0	5	3	0	0	0	0	0	8	1	0	0	0	0	0	0	1	15	0	1	1	0	0	0	17
11:15	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	3	3	0	0	0	0	0	6
11:30	0	0	0	0	0	0	0	0	5	0	0	0	0	0	0	5	0	0	0	0	0	0	0	0	10	3	1	0	0	0	0	14
11:45	0	0	0	0	0	0	0	0	2	2	0	0	0	0	0	4	1	0	0	0	0	0	0	1	8	2	1	1	0	0	0	12
H/TOT	0	0	0	0	0	0	0	0	13	5	0	0	0	0	0	18	2	0	0	0	0	0	0	2	36	8	3	2	0	0	0	49
12:00	0	0	0	0	0	0	0	0	5	0	0	0	0	0	0	5	0	0	0	0	0	0	0	0	10	1	1	1	0	0	0	13
12:15	0	0	0	0	0	0	0	0	9	1	0	0	0	0	0	10	0	0	0	0	0	0	0	0	7	2	1	0	0	0	0	10
12:30	0	0	0	0	0	0	0	0	4	0	0	0	0	0	0	4	1	0	0	0	0	0	0	1	10	3	1	0	0	0	2	16
12:45	0	0	0	0	0	0	0	0	10	0	0	0	0	0	0	10	0	0	0	0	0	0	0	0	15	3	0	1	0	0	0	19
H/TOT	0	0	0	0	0	0	0	0	28	1	0	0	0	0	0	29	1	0	0	0	0	0	0	1	42	9	3	2	0	0	2	58
13:00	0	0	0	0	0	0	0	0	6	0	0	0	0	0	0	6	2	1	0	0	0	0	0	3	14	5	0	0	0	0	1	20
13:15	0	0	0	0	0	0	0	0	7	1	0	0	0	0	0	8	0	0	0	0	0	0	0	0	6	0	0	0	0	0	0	6
13:30	0	0	0	0	0	0	0	0	9	1	0	0	0	0	0	10	0	0	0	0	0	0	0	0	13	5	1	1	0	0	0	20
13:45	0	0	0	0	0	0	0	0	8	0	0	0	0	0	0	8	2	0	0	0	0	0	0	2	18	1	0	0	0	0	1	20
H/TOT	0	0	0	0	0	0	0	0	30	2	0	0	0	0	0	32	4	1	0	0	0	0	0	5	51	11	1	1	0	0	2	66
14:00	0	0	0	0	0	0	0	0	14	2	0	0	0	1	0	17	1	0	0	0	0	0	0	1	13	2	0	0	0	0	0	15
14:15	0	0	0	0	0	0	0	0	8	1	0	0	0	1	0	10	0	0	0	0	0	0	0	0	9	2	1	1	0	0	1	14
14:30	0	0	0	0	0	0	0	0	7	1	0	0	0	0	0	8	0	0	0	0	0	0	0	0	8	2	1	0	0	0	0	11
14:45	0	0	0	0	0	0	0	0	4	1	0	0	0	0	0	5	0	0	0	0	0	0	0	0	12	1	0	1	0	0	0	14
H/TOT	0	0	0	0	0	0	0	0	33	5	0	0	0	2	0	40	1	0	0	0	0	0	0	1	42	7	2	2	0	0	1	54
15:00	0	0	0	0	0	0	0	0	4	0	0	0	0	0	0	4	0	0	0	0	0	0	0	0	6	2	0	0	0	0	0	8
15:15	0	0	0	0	0	0	0	0	5	1	0	0	0	0	0	6	0	0	0	0	0	0	0	0	9	1	0	0	0	0	0	10
15:30	0	0	0	0	0	0	0	0	7	0	0	0	0	0	0	7	0	0	0	0	0	0	1	1	6	1	0	0	0	0	0	7
15:45	0	0	0	0	0	0	0	0	7	1	0	0	0	0	0	8	1	0	0	0	0	0	0	1	8	1	0	0	0	1	0	10
H/TOT	0	0	0	0	0	0	0	0	23	2	0	0	0	0	0	25	1	0	0	0	0	0	1	2	29	5	0	0	0	1	0	35
16:00	0	0	0	0	0	0	0	0	2	1	0	0	0	0	1	4	0	0	0	0	0	0	0	0	6	2	2	1	0	0	0	11
16:15	0	0	0	0	0	0	0	0	7	2	0	0	0	0	0	9	0	0	0	0	0	0	0	0	5	2	0	0	0	0	0	7
16:30	0	0	0	0	0	0	0	0	13	1	0	0	0	0	0	14	0	0	0	0	0	0	1	1	14	2	0	0	0	0	0	16
16:45	0	0	0	0	0	0	0	0	8	1	0	0	0	0	0	9	2	0	0	0	0	0	0	2	7	3	0	0	0	0	1	11
H/TOT	0	0	0	0	0	0	0	0	30	5	0	0	0	0	1	36	2	0	0	0	0	0	1	3	32	9	2	1	0	0	1	45
17:00	0	0	0	0	0	0	0	0	13	0	0	0	0	0	0	13	1	0	0	0	0	0	0	1	21	1	0	1	0	0	1	24
17:15	0	0	0	0	0	0	0	0	13	0	0	0	0	0	0	13	1	0	0	0	0	0	0	1	12	0	0	0	0	0	0	12
17:30	0	0	0	0	0	0	0	0	11	0	0	0	0	0	0	11	3	0	0	0	0	0	1	4	12	1	1	0	0	0	0	14
17:45	0	0	0	0	0	0	0	0	12	0	0	0	0	0	0	12	2	0	0	0	0	0	0	2	12	2	0	0	0	0	0	14
H/TOT	0	0	0	0	0	0	0	0	49	0	0	0	0	0	0	49	7	0	0	0	0	0	1	8	57	4	1	1	0	0	1	64
18:00	0	0	0	0	0	0	0	0	12	0	0	0	0	0	0	12	0	0	0	0	0	0	0	0	13	0	0	0	0	0	0	13
18:15	0	0	0	0	0	0	0	0	9	0	0	0	0	0	0	9	0	0	0	0	0	0	0	0	16	1	0	0	0	0	0	17
18:30	0	0	0	0	0	0	0	0	11	0	0	0	0	0	0	11	0	0	0	0	0	0	0	0	7	0	0	0	0	0	0	7
18:45	0	0	0	0	0	0	0	0	11	0	0	0	0	0	0	11	0	0	0	0	0	0	0	0	12	0	0	0	0	0	0	12
H/TOT	0	0	0	0	0	0	0	0	43	0	0	0	0	0	0	43	0	0	0	0	0	0	0	0	48	1	0	0	0	0	0	49
24 HR TOT	0	0	0	0	0	0	0	0	363	26	2	0	1	2	4	398	23	2	0	0	0	0	3	28	498	80	15	16	0	1	11	621

B to A								B to B								B to C								B to D							
CAR	LGV	OGV1	OGV2	PSV	M/C	P/C	TOT	CAR	LGV	OGV1	OGV2	PSV	M/C	P/C	TOT	CAR	LGV	OGV1	OGV2	PSV	M/C	P/C	TOT	CAR	LGV	OGV1	OGV2	PSV	M/C	P/C	TOT
1	0	1	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	49	5	0	0	0	0	1	55
6	0	0	0	0	0	0	6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	63	5	0	0	1	0	0	69
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	71	5	1	0	0	0	1	78
6	1	0	0	0	0	0	7	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1	73	5	0	1	0	0	1	80
13	1	1	0	0	0	0	15	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1	256	20	1	1	1	0	3	282
4	0	0	0	0	0	0	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	68	8	0	0	0	0	1	77
7	1	0	0	0	0	0	8	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	63	2	0	1	0	2	2	70
10	2	0	0	0	0	0	12	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	76	8	1	0	0	0	2	87
13	2	0	0	0	0	0	15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	79	6	0	0	0	0	0	85
34	5	0	0	0	0	0	39	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	286	24	1	1	0	2	5	319
9	2	0	0	0	0	0	11	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	2	67	3	1	0	1	1	0	73
7	1	0	0	0	0	0	8	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1	49	3	2	0	0	0	0	54
4	0	0	0	0	0	0	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	55	2	0	0	0	0	0	57
7	1	0	0	0	0	0	8	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	54	8	0	1	0	0	0	63
27	4	0	0	0	0	0	31	0	0	0	0	0	0	0	0	2	1	0	0	0	0	0	3	225	16	3	1	1	1	0	247
5	1	0	0	0	0	0	6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	45	8	1	1	0	0	0	55
4	1	0	0	0	0	0	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	41	5	8	1	0	0	0	55
3	2	0	0	0	0	0	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	52	4	0	0	0	0	0	56
5	1	0	0	0	0	0	6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	45	5	0	0	0	0	0	50
17	5	0	0	0	0	0	22	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	183	22	9	2	0	0	0	216
7	2	0	0	0	0	0	9	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	47	11	0	0	0	0	0	58
5	0	1	0	0	0	0	6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	43	9	1	1	2	0	0	56
5	0	0	0	0	0	0	5	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1	54	11	1	1	0	0	1	68
6	1	0	0	0	0	0	7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	43	9	0	0	0	0	1	53
23	3	1	0	0	0	0	27	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1	187	40	2	2	2	0	2	235
7	0	0	0	0	0	0	7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	41	8	0	0	0	0	0	49
8	0	0	0	0	0	0	8	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	44	6	2	0	0	0	0	52
3	1	0	0	0	0	0	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	48	8	2	1	0	0	0	59
10	1	0	0	0	0	0	11	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	42	6	0	0	0	0	0	48
28	2	0	0	0	0	0	30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	175	28	4	1	0	0	0	208
5	1	0	0	0	0	0	6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	48	9	1	0	0	0	0	58
10	1	0	0	0	0	0	11	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	44	12	1	1	0	0	0	58
2	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	50	8	0	0	0	1	0	59
5	0	0	0	0	0	0	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	60	8	0	1	1	0	0	70
22	2	0	0	0	0	0	24	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	202	37	2	2	1	1	0	245
5	2	0	0	0	0	1	8	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1	46	7	1	1	0	1	0	56
8	0	0	0	0	0	0	8	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	53	7	1	0	0	0	0	61
5	0	0	0	0	0	1	6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	66	7	0	0	0	0	0	73
8	0	0	0	1	0	0	9	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1	70	6	1	0	1	0	0	78
26	2	0	0	1	0	2	31	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	2	235	27	3	1	1	1	0	268
3	0	0	0	0	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	53	11	2	2	0	0	0	68
8	0	0	0	0	0	0	8	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1	62	12	1	0	0	0	0	75
4	0	2	0	0	0	0	6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	69	15	2	0	0	0	0	86
6	0	0	0	0	0	0	6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	70	15	2	0	0	0	0	87
21	0	2	0	0	0	0	23	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1	254	53	7	2	0	0	0	316
3	0	0	0	0	0	0	3	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1	67	11	0	2	0	0	2	82
11	2	0	0	0	1	0	14	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	71	12	1	1	1	0	0	86
15	1	0	0	0	0	0	16	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	63	9	0	0	0	1	0	73
9	1	0	0	0	0	0	10	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	2	70	11	1	0	0	0	0	82
38	4	0	0	0	1	0	43	0	0	0	0	0	0	0	0	3	0	0	0	0	0	0	3	271	43	2	3	1	1	2	323
7	1	0	1	1	0	0	10	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	64	14	0	0	0	0	2	80
14	1	0	0	0	0	1	16	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	2	74	7	0	2	0	0	0	83
11	0	0	0	0	0	0	11	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1	64	9	1	0	0	0	0	74
13	1	0	0	0	0	0	14	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	50	8	0	1	0	0	0	59
45	3	0	1	1	0	1	51	0	0	0	0	0	0	0	0	3	0	0	0	0	0	0	3	252	38	1	3	0	0	2	296
4	1	0	0	0	0	0	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	55	7	0	0	0	1	1	64
7	0	0	0	0	0	0	7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	47	5	0	0	0	0	0	52
9	0	0	0	0	0	0	9	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1	64	2	0	0	0	0	0	66
11	0	0	0	0	0	0	11	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	51	3	0	0	0	0	1	55
31	1	0	0	0	0	0	32	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1	217	17	0	0	0	1	2	237
325	32	4	1	2	1	3	368	0	0	0	0	0	0	0	0	14	1	0	0	0	0	0	15	2743	365	35	19	7	7	16	3192

C to A								C to B								C to C								C to D							
CAR	LGV	OGV1	OGV2	PSV	M/C	P/C	**TOT**	CAR	LGV	OGV1	OGV2	PSV	M/C	P/C	**TOT**	CAR	LGV	OGV1	OGV2	PSV	M/C	P/C	**TOT**	CAR	LGV	OGV1	OGV2	PSV	M/C	P/C	**TOT**
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1
0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	2
1	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1
5	0	0	0	0	0	0	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	4	0	0	0	0	0	0	4	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1
6	0	0	0	0	0	0	6	4	0	0	0	0	0	0	4	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	2
0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	3	0	0	0	0	0	0	3
0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	2	0	0	0	0	0	0	0	0	3	0	0	0	0	0	0	3
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0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	2	2	0	0	0	0	0	4	0	0	0	0	0	0	0	0	7	1	0	0	0	0	0	8
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
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0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	2
0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1
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0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1
3	0	0	0	0	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3	0	0	0	0	0	0	3	0	1	0	0	0	0	0	1	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1
1	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	1	1	1	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1
1	0	0	0	0	0	1	2	1	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	2
1	0	0	0	0	0	0	1	1	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1	0	0	0	0	0	0	1	0	1	0	0	0	0	0	1	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1
2	0	0	0	0	0	0	2	1	1	0	0	0	0	0	2	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	2
0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1	0	0	0	0	0	0	1	1	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	2
0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	2
1	0	0	0	0	0	0	1	5	0	0	0	0	0	0	5	0	0	0	0	0	0	0	0	3	1	0	0	0	0	0	4
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	2
2	0	0	0	0	0	0	2	2	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4	0	0	0	0	0	0	4	3	0	0	0	0	0	0	3	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	2
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1	0	0	0	0	0	0	1	1	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1
1	0	0	0	0	0	0	1	2	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1
20	0	0	0	0	0	1	21	22	4	0	0	0	0	0	26	0	0	0	0	0	0	0	0	24	3	0	0	0	0	0	27

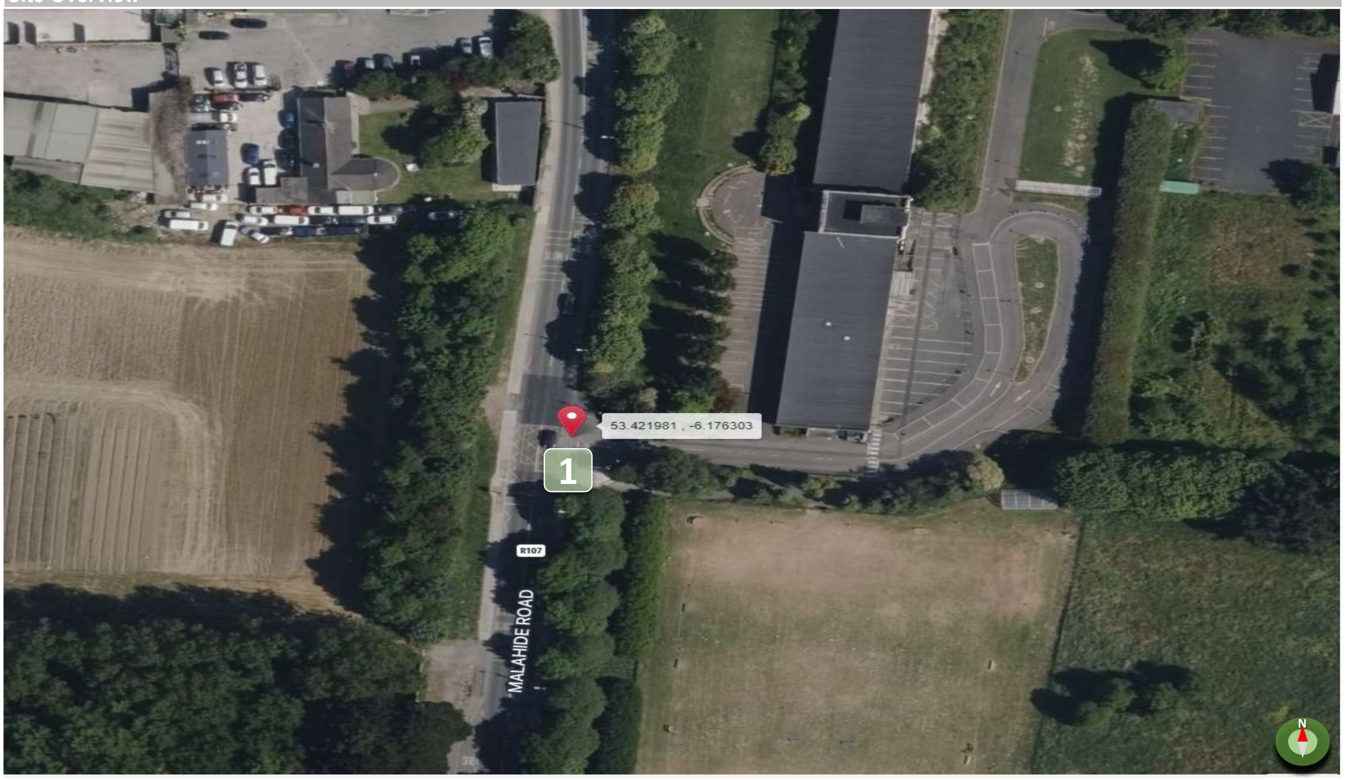
Irish Traffic Surveys

D to A								D to B								D to C								D to D							
CAR	LGV	OGV1	OGV2	PSV	M/C	P/C	TOT	CAR	LGV	OGV1	OGV2	PSV	M/C	P/C	TOT	CAR	LGV	OGV1	OGV2	PSV	M/C	P/C	TOT	CAR	LGV	OGV1	OGV2	PSV	M/C	P/C	TOT
4	2	0	0	0	0	2	8	37	14	1	0	0	0	0	52	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
10	1	0	0	0	0	0	11	41	16	0	0	0	0	0	57	1	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0
16	5	0	1	0	1	1	24	50	16	0	0	1	0	0	67	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
19	2	1	0	0	0	0	22	78	16	1	0	0	0	0	95	2	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0
49	10	1	1	0	1	3	65	206	62	2	0	1	0	0	271	3	0	0	0	0	0	0	3	0	0	0	0	0	0	0	0
10	1	1	0	0	0	0	12	68	13	0	4	1	0	0	86	1	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0
13	2	0	0	0	0	0	15	87	16	0	1	1	0	0	105	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
14	3	2	0	0	0	1	20	72	7	3	0	0	0	1	83	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
16	2	1	1	0	0	1	21	49	10	0	0	1	0	1	61	1	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0
53	8	4	1	0	0	2	68	276	46	3	5	3	0	2	335	2	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0
19	1	1	2	0	0	1	24	48	11	0	0	0	0	1	60	2	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0
14	3	0	0	0	0	0	17	43	8	0	0	0	0	0	51	1	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0
4	7	0	0	0	0	0	11	51	18	1	0	0	0	0	70	1	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0
10	4	1	0	0	0	0	15	38	12	1	1	0	0	0	52	1	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0
47	15	2	2	0	0	1	67	180	49	2	1	0	0	1	233	5	0	0	0	0	0	0	5	0	0	0	0	0	0	0	0
10	2	0	0	0	0	0	12	30	6	3	1	0	0	0	40	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6	2	0	1	0	0	0	9	41	10	1	0	0	0	1	53	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7	1	0	2	0	0	0	10	36	8	1	1	0	0	0	46	1	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0
11	3	1	0	0	0	0	15	50	10	1	0	0	0	0	61	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
34	8	1	3	0	0	0	46	157	34	6	2	0	0	1	200	1	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0
6	0	1	0	0	0	0	7	41	6	0	0	0	0	0	47	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2	1	0	1	0	0	0	4	28	8	0	0	0	0	1	37	1	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0
9	4	0	0	0	0	0	13	48	9	0	0	0	0	0	57	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
14	2	1	1	0	0	0	18	44	4	0	2	0	0	0	50	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
31	7	2	2	0	0	0	42	161	27	0	2	0	0	1	191	1	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0
13	5	0	0	0	0	0	18	37	12	0	0	0	0	0	49	2	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0
8	2	0	0	0	0	0	10	39	12	2	0	0	0	2	55	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
9	1	0	0	0	0	0	10	54	10	1	0	0	0	0	65	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
9	1	1	0	0	0	0	11	45	9	2	0	0	0	0	56	4	0	0	0	0	0	0	4	0	0	0	0	0	0	0	0
39	9	1	0	0	0	0	49	175	43	5	0	0	0	2	225	6	0	0	0	0	0	0	6	0	0	0	0	0	0	0	0
12	6	1	0	0	0	1	20	77	7	0	0	1	0	0	85	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1
12	2	0	0	0	0	0	14	61	1	0	0	0	0	2	64	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0
11	1	0	1	0	0	0	13	60	4	0	0	0	0	0	64	0	1	0	0	0	0	0	1	0	0	0	0	0	0	0	0
13	2	0	0	0	0	1	16	67	9	0	1	0	0	0	77	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
48	11	1	1	0	0	2	63	265	21	0	1	1	0	2	290	0	1	0	0	0	0	1	2	0	1	0	0	0	0	0	1
22	1	0	0	0	0	1	24	78	7	0	0	1	1	0	87	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
13	3	1	1	0	0	0	18	78	7	2	0	1	0	0	88	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6	2	1	0	0	0	0	9	64	9	1	0	0	0	0	74	2	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0
10	1	0	0	0	0	0	11	68	5	1	1	0	0	0	75	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
51	7	2	1	0	0	1	62	288	28	4	1	2	1	0	324	2	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0
8	1	2	1	0	0	0	12	68	10	1	1	0	0	1	81	1	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0
12	1	0	0	0	0	0	13	78	5	2	0	0	0	0	85	1	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0
11	3	0	0	0	0	0	14	84	7	0	0	0	0	1	92	2	1	0	0	0	0	0	3	0	0	0	0	0	0	0	0
20	2	0	1	0	0	0	23	90	13	1	1	0	1	1	107	1	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0
51	7	2	2	0	0	0	62	320	35	4	2	0	1	3	365	5	1	0	0	0	0	0	6	0	0	0	0	0	0	0	0
14	1	0	0	0	0	1	16	81	10	0	0	0	0	0	91	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
10	4	0	0	0	0	0	14	84	6	1	0	0	0	0	91	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
10	0	0	1	0	0	0	11	86	7	0	1	0	0	0	94	3	0	0	0	0	0	0	3	0	0	0	0	0	0	0	0
20	0	0	0	0	1	0	21	74	7	0	1	0	2	1	85	1	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0
54	5	0	1	0	1	1	62	325	30	1	2	0	2	1	361	4	0	0	0	0	0	0	4	0	0	0	0	0	0	0	0
28	2	0	0	0	0	0	30	82	9	0	0	0	0	0	91	2	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0
13	0	0	0	0	0	1	14	70	6	0	0	0	0	1	77	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
20	2	0	0	0	0	1	23	99	7	0	0	0	2	1	109	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
15	0	0	0	0	0	0	15	106	5	0	0	0	1	0	112	1	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0
76	4	0	0	0	0	2	82	357	27	0	0	0	3	2	389	3	0	0	0	0	0	0	3	0	0	0	0	0	0	0	0
16	0	0	0	0	0	0	16	98	2	0	0	0	0	1	101	1	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0
10	0	0	0	0	0	0	10	83	6	0	0	0	0	0	89	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6	0	0	0	0	0	0	6	83	2	0	0	0	0	0	85	1	1	0	0	0	0	0	2	0	0	0	0	0	0	0	0
10	0	0	0	0	0	0	10	85	5	0	0	0	0	0	90	3	0	0	0	0	0	0	3	0	0	0	0	0	0	0	0
42	0	0	0	0	0	0	42	349	15	0	0	0	0	1	365	5	1	0	0	0	0	0	6	0	0	0	0	0	0	0	0
575	91	16	14	0	2	12	710	3059	417	27	16	7	7	16	3549	37	3	0	0	0	0	1	41	0	1	0	0	0	0	0	1

Irish Traffic Surveys LTD

Survey Name :	ITS J-841 Malahide Portmarnock
Site:	JTC 1
Date:	25.04.2024
Time:	07:00 - 19:00
Location:	53.421981, -6.176303
Classification:	CAR, Taxi, LGV, OGV1, OGV2, PSV, M/C, PC-A, PC-C, CGB, SCT-A, SCT-C, PED-A, PED-C, PRAM, WCU
Grid Reference:	O 21272 42844
X:	321272
Y:	242844
Latitude:	53.42198
Longitude:	-6.176303
Address (near):	Malahide Road, Balgriffin ED, Kinsealey, Fingal, County Dublin, Leinster, D17 FP52, Ireland

Site Overview

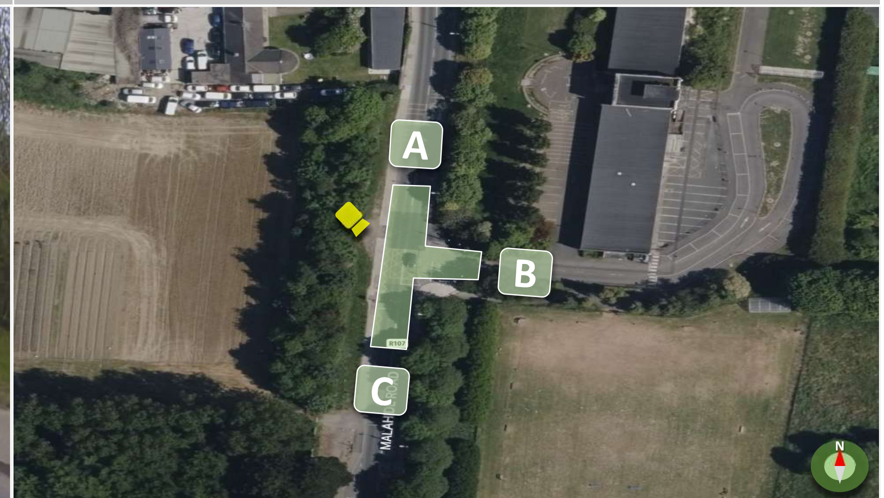


Irish Traffic Surveys LTD	
Survey Name :	ITS J-841 Malahide Portmarnock
Site:	JTC 1
Date:	25.04.2024
Time:	07:00 - 19:00
Location:	53.421981, -6.176303
Classification:	CAR, Taxi, LGV, OGV1, OGV2, PSV, M/C, PC-A, PC-C, CGB, SCT-A, SCT-C, PED-A, PED-C, PRAM, WCU

Irish Traffic Surveys

Site 1 Cam F2 View

Aerial View



Co-ordinates:	53.421981, -6.176303
Junction Type:	3-Arm
Queues Required:	No
Pedestrian required:	No

Irish Traffic Surveys LTD

Survey Name :	ITS J-841 Malahide Portmarnock
Site:	JTC 1
Date:	25.04.2024
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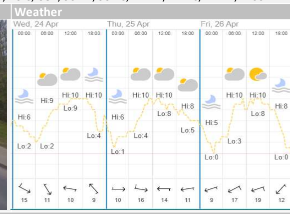
Classification:	CAR, Taxi, LGV, OGV1, OGV2, PSV, M/C, PC-A, PC-C, CGB, SCT-A, SCT-C, PED-A, PED-C, PRAM, WCU

Irish Traffic Surveys

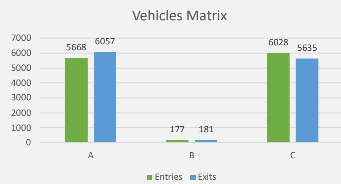
Site 1

Weather



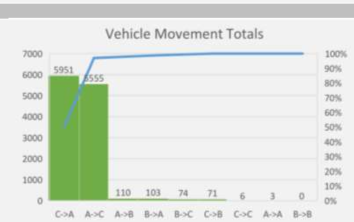
12 Hr Vehicles Matrix

12hr Matrix	A	B	C
A	3	110	5555
B	103	0	74
C	5951	71	6
Totals	**A**	**B**	**C**
Entries	5668	177	6028
Exits	6057	181	5635



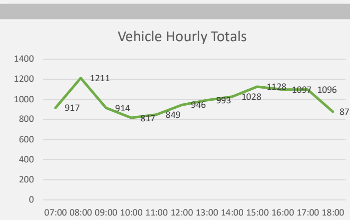
Movement Totals

Movement	12hr Total	% Total
A->A	3	0.0%
A->B	110	0.9%
A->C	5555	46.8%
B->A	103	0.9%
B->B	0	0.0%
B->C	74	0.6%
C->A	5951	50.1%
C->B	71	0.6%
C->C	6	0.1%
Total	**11873**	**100.0%**



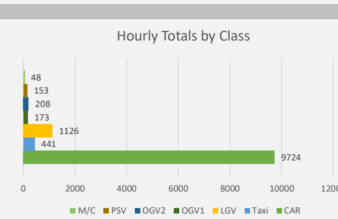
Hourly Totals

TIME	Period total	% of 12hr Total
07:00	917	8%
08:00	1211	10%
09:00	914	8%
10:00	817	7%
11:00	849	7%
12:00	946	8%
13:00	993	8%
14:00	1028	9%
15:00	1128	10%
16:00	1097	9%
17:00	1096	9%
18:00	877	7%
Total	**11873**	**100%**



Hourly Totals by Class

TIME	CAR	Taxi	LGV	OGV1	OGV2	PSV	M/C	% of 12hr Total
07:00	737	26	96	13	18	18	9	8%
08:00	1063	27	73	13	16	16	3	10%
09:00	698	35	113	26	21	13	8	8%
10:00	632	33	104	16	22	10	0	7%
11:00	664	31	96	24	21	10	3	7%
12:00	751	38	105	19	22	8	3	8%
13:00	799	40	98	12	28	14	2	8%
14:00	851	45	76	17	23	14	2	9%
15:00	897	62	117	17	18	15	2	10%
16:00	905	38	119	7	12	11	5	9%
17:00	955	38	77	4	5	12	5	9%
18:00	772	28	52	5	2	12	6	7%
Total	**9724**	**441**	**1126**	**173**	**208**	**153**	**48**	
% Total	**81.90%**	**3.71%**	**9.48%**	**1.46%**	**1.75%**	**1.29%**	**0.40%**	



Irish Traffic Surveys LTD

Survey Name :	ITS J-841 Malahide Portmarnock
Site:	JTC 1
Date:	25.04.2024
Time:	07:00 - 19:00
Location:	53.421981, -6.176303
Classification:	CAR, Taxi, LGV, OGV1, OGV2, PSV, M/C

Irish Traffic Surveys	A to A								A to B								A to C							
TIME	CAR	Taxi	LGV	OGV1	OGV2	PSV	M/C	TOT	CAR	Taxi	LGV	OGV1	OGV2	PSV	M/C	TOT	CAR	Taxi	LGV	OGV1	OGV2	PSV	M/C	TOT
07:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	100	7	11	1	2	1	0	122
07:15	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1	87	3	19	0	4	2	4	119
07:30	0	0	0	0	0	0	0	0	4	0	0	0	0	0	0	4	115	6	12	1	3	3	1	141
07:45	0	0	0	0	0	0	0	0	11	0	0	0	0	0	0	11	137	2	17	4	2	4	3	169
H/TOT	0	0	0	0	0	0	0	0	16	0	0	0	0	0	0	16	439	18	59	6	11	10	8	551
08:00	0	0	0	0	0	0	0	0	29	0	0	0	0	0	0	29	101	1	9	0	2	3	0	116
08:15	0	0	0	0	0	0	0	0	26	1	0	0	0	0	0	27	96	3	6	4	2	1	0	112
08:30	1	0	0	0	0	0	0	1	1	0	0	0	0	0	0	1	122	2	11	3	1	2	2	143
08:45	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1	139	4	14	0	2	2	1	162
H/TOT	1	0	0	0	0	0	0	1	57	1	0	0	0	0	0	58	458	10	40	7	7	8	3	533
09:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	98	3	3	4	3	2	0	113
09:15	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1	96	8	13	4	2	3	0	126
09:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	60	3	7	2	3	0	1	76
09:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	69	7	29	5	3	2	1	116
H/TOT	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1	323	21	52	15	11	7	2	431
10:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	86	3	19	3	3	2	0	116
10:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	61	2	12	1	1	0	0	77
10:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	81	3	12	3	2	1	0	102
10:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	76	4	11	3	4	1	0	99
H/TOT	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	304	12	54	10	10	4	0	394
11:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	88	4	12	2	3	1	0	110
11:15	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1	67	2	13	5	3	1	1	92
11:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	79	3	13	3	3	2	0	103
11:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	79	6	11	2	2	1	0	101
H/TOT	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1	313	15	49	12	11	5	1	406
12:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	95	6	13	2	1	1	0	118
12:15	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1	101	2	7	3	1	0	1	115
12:30	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1	80	8	17	3	4	2	1	115
12:45	0	0	0	0	0	0	0	0	4	0	0	0	0	0	0	4	85	5	14	2	3	0	0	109
H/TOT	0	0	0	0	0	0	0	0	5	1	0	0	0	0	0	6	361	21	51	10	9	3	2	457
13:00	1	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	113	4	10	1	5	1	1	135
13:15	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1	92	4	11	1	1	0	0	109
13:30	0	0	0	0	0	0	0	0	3	0	0	0	0	0	0	3	97	4	9	1	4	3	0	118
13:45	1	0	0	0	0	0	0	1	3	0	0	0	0	1	0	4	89	7	13	2	3	2	1	117
H/TOT	2	0	0	0	0	0	0	2	7	0	0	0	0	1	0	8	391	19	43	5	13	6	2	479
14:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	111	6	8	3	1	1	1	131
14:15	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1	99	6	8	3	5	1	0	122
14:30	0	0	0	0	0	0	0	0	3	0	0	0	0	0	0	3	88	5	11	1	5	2	0	112
14:45	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1	76	6	11	1	2	1	0	97
H/TOT	0	0	0	0	0	0	0	0	5	0	0	0	0	0	0	5	374	23	38	8	13	5	1	462
15:00	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	2	82	5	7	2	3	3	0	102
15:15	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1	90	7	15	3	3	2	0	120
15:30	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1	115	6	10	3	1	1	0	136
15:45	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1	101	8	13	2	0	1	0	125
H/TOT	0	0	0	0	0	0	0	0	4	1	0	0	0	0	0	5	388	26	45	10	7	7	0	483
16:00	0	0	0	0	0	0	0	0	3	0	0	0	0	0	0	3	95	3	11	0	3	2	1	115
16:15	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1	108	8	10	2	1	0	1	130
16:30	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	2	105	3	6	1	2	1	0	118
16:45	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1	95	5	11	2	0	0	0	113
H/TOT	0	0	0	0	0	0	0	0	7	0	0	0	0	0	0	7	403	19	38	5	6	3	2	476
17:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	117	4	5	0	0	2	1	129
17:15	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	2	101	5	11	0	1	1	1	120
17:30	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1	99	4	6	0	0	3	0	112
17:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	101	5	7	1	0	0	1	115
H/TOT	0	0	0	0	0	0	0	0	3	0	0	0	0	0	0	3	418	18	29	1	1	6	3	476
18:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	83	2	5	0	1	2	0	93
18:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	94	4	8	1	0	3	0	110
18:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	109	3	9	1	0	1	0	123
18:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	67	4	7	0	0	1	2	81
H/TOT	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	353	13	29	2	1	7	2	407
12 HR TOT	3	0	0	0	0	0	0	3	106	3	0	0	0	1	0	110	4525	215	527	91	100	71	26	5555

Irish Traffic Surveys LTD

Survey Name :	ITS J-841 Malahide Portmarnock
Site:	JTC 1
Date:	25.04.2024
Time:	07:00 - 19:00
Location:	53.421981, -6.176303
Classification:	CAR, Taxi, LGV, OGV1, OGV2, PSV, M/C

	B to A								B to B								B to C							
TIME	CAR	Taxi	LGV	OGV1	OGV2	PSV	M/C	TOT	CAR	Taxi	LGV	OGV1	OGV2	PSV	M/C	TOT	CAR	Taxi	LGV	OGV1	OGV2	PSV	M/C	TOT
07:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:15	1	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:45	1	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
H/TOT	2	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:00	10	0	0	0	0	0	0	10	0	0	0	0	0	0	0	0	11	0	0	0	0	0	0	11
08:15	29	0	0	0	0	0	0	29	0	0	0	0	0	0	0	0	22	0	0	0	0	0	0	22
08:30	2	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	6	0	0	0	0	0	0	6
08:45	1	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
H/TOT	42	0	0	0	0	0	0	42	0	0	0	0	0	0	0	0	39	0	0	0	0	0	0	39
09:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1
09:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
09:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
09:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
H/TOT	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1
10:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
10:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
10:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1
10:45	1	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
H/TOT	1	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1
11:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	0	1	0	0	0	0	4
11:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
H/TOT	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	0	1	0	0	0	0	4
12:00	1	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12:30	1	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	2
12:45	3	0	0	0	0	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
H/TOT	5	0	0	0	0	0	0	5	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	2
13:00	2	1	0	0	0	0	0	3	0	0	0	0	0	0	0	0	1	1	0	0	0	1	0	3
13:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
13:30	2	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
13:45	2	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
H/TOT	6	1	0	0	0	0	0	7	0	0	0	0	0	0	0	0	1	1	0	0	0	1	0	3
14:00	8	0	0	0	0	1	0	9	0	0	0	0	0	0	0	0	6	0	0	0	0	0	0	6
14:15	4	0	0	0	0	0	0	4	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	2
14:30	2	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
14:45	4	0	0	0	0	0	0	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
H/TOT	18	0	0	0	0	1	0	19	0	0	0	0	0	0	0	0	8	0	0	0	0	0	0	8
15:00	12	0	1	0	0	0	0	13	0	0	0	0	0	0	0	0	7	0	0	0	0	0	0	7
15:15	1	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
15:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	2
15:45	1	0	1	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
H/TOT	14	0	2	0	0	0	0	16	0	0	0	0	0	0	0	0	9	0	0	0	0	0	0	9
16:00	1	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
16:15	4	0	0	0	0	0	0	4	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1
16:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
16:45	2	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1
H/TOT	7	0	0	0	0	0	0	7	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	2
17:00	1	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1
17:15	1	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	3	0	0	0	0	0	0	3
17:30	2	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
17:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1
H/TOT	4	0	0	0	0	0	0	4	0	0	0	0	0	0	0	0	5	0	0	0	0	0	0	5
18:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
18:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
18:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
18:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
H/TOT	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12 HR TOT	99	1	2	0	0	1	0	103	0	0	0	0	0	0	0	0	69	3	1	0	0	1	0	74

Irish Traffic Surveys LTD

Survey Name :	ITS J-841 Malahide Portmarnock
Site:	JTC 1
Date:	25.04.2024
Time:	07:00 - 19:00
Location:	53.421981, -6.176303
Classification:	CAR, Taxi, LGV, OGV1, OGV2, PSV, M/C

	C to A								C to B								C to C							
TIME	CAR	Taxi	LGV	OGV1	OGV2	PSV	M/C	TOT	CAR	Taxi	LGV	OGV1	OGV2	PSV	M/C	TOT	CAR	Taxi	LGV	OGV1	OGV2	PSV	M/C	TOT
07:00	44	2	6	0	4	1	0	57	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:15	58	2	10	4	0	3	0	77	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:30	89	2	7	1	1	3	0	103	2	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0
07:45	82	2	14	2	2	1	1	104	5	0	0	0	0	0	0	5	0	0	0	0	0	0	0	0
H/TOT	273	8	37	7	7	8	1	341	7	0	0	0	0	0	0	7	0	0	0	0	0	0	0	0
08:00	130	5	7	0	3	3	0	148	12	0	0	0	0	0	0	12	0	0	0	0	0	0	0	0
08:15	91	2	6	4	4	3	0	110	12	0	0	0	0	0	0	12	0	0	0	0	0	0	0	0
08:30	99	1	11	1	1	1	0	114	2	0	0	0	0	0	0	2	1	0	0	0	0	0	0	1
08:45	118	8	9	1	1	1	0	138	1	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0
H/TOT	438	16	33	6	9	8	0	510	27	0	0	0	0	0	0	27	1	0	0	0	0	0	0	1
09:00	109	1	15	3	2	1	2	133	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
09:15	88	4	15	4	3	2	1	117	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
09:30	96	7	11	2	3	1	1	121	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
09:45	80	2	20	2	2	2	2	110	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
H/TOT	373	14	61	11	10	6	6	481	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
10:00	74	8	13	1	4	2	0	102	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
10:15	76	3	12	3	4	2	0	100	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
10:30	84	3	11	1	4	2	0	105	1	0	1	0	0	0	0	2	0	0	0	0	0	0	0	0
10:45	92	6	13	1	0	0	0	112	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
H/TOT	326	20	49	6	12	6	0	419	1	0	1	0	0	0	0	2	0	0	0	0	0	0	0	0
11:00	78	5	14	5	2	1	0	105	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11:15	101	1	11	0	4	0	0	117	1	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0
11:30	78	4	15	1	2	3	1	104	1	0	1	0	0	0	0	2	0	0	0	0	0	0	0	0
11:45	88	6	5	6	2	1	1	109	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
H/TOT	345	16	45	12	10	5	2	435	2	0	1	0	0	0	0	3	0	0	0	0	0	0	0	0
12:00	95	1	15	0	4	1	0	116	1	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0
12:15	84	4	11	3	2	0	0	104	1	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0
12:30	92	4	14	2	3	3	0	118	3	0	0	0	0	0	0	3	0	0	0	0	0	0	0	0
12:45	103	4	14	4	4	0	1	130	0	2	0	0	0	1	0	3	0	0	0	0	0	0	0	0
H/TOT	374	13	54	9	13	4	1	468	5	2	0	0	0	1	0	8	0	0	0	0	0	0	0	0
13:00	105	4	12	1	6	2	0	130	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
13:15	85	3	16	2	2	2	0	110	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0
13:30	99	5	11	4	2	1	0	122	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
13:45	102	7	16	0	5	0	0	130	1	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0
H/TOT	391	19	55	7	15	5	0	492	1	0	0	0	0	1	0	2	0	0	0	0	0	0	0	0
14:00	107	6	10	3	3	3	0	132	2	0	0	0	0	0	0	2	1	0	0	0	0	0	0	1
14:15	95	3	8	2	1	2	0	111	1	0	0	0	0	0	0	1	2	0	0	0	0	0	0	2
14:30	126	5	10	2	3	2	0	148	5	1	0	0	0	0	0	6	0	0	0	0	0	0	0	0
14:45	102	7	10	2	3	1	1	126	5	0	0	0	0	0	0	5	0	0	0	0	0	0	0	0
H/TOT	430	21	38	9	10	8	1	517	13	1	0	0	0	0	0	14	3	0	0	0	0	0	0	3
15:00	119	7	30	3	3	1	0	163	3	0	0	0	0	0	0	3	0	0	0	0	0	0	0	0
15:15	112	12	12	2	1	1	0	140	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
15:30	117	8	11	1	1	5	1	144	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
15:45	131	8	17	1	6	1	1	165	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
H/TOT	479	35	70	7	11	8	2	612	3	0	0	0	0	0	0	3	0	0	0	0	0	0	0	0
16:00	138	5	23	2	1	2	1	172	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
16:15	107	3	18	0	3	3	1	135	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
16:30	134	7	23	0	2	1	0	167	1	0	0	0	0	0	0	1	1	0	0	0	0	0	0	1
16:45	105	4	17	0	0	2	1	129	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
H/TOT	484	19	81	2	6	8	3	603	1	0	0	0	0	0	0	1	1	0	0	0	0	0	0	1
17:00	133	5	11	1	1	2	0	153	3	0	0	0	0	0	0	3	0	0	0	0	0	0	0	0
17:15	130	6	15	1	1	0	1	154	1	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0
17:30	112	4	9	0	2	2	1	130	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
17:45	146	4	13	1	0	2	0	166	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1
H/TOT	521	19	48	3	4	6	2	603	4	0	0	0	0	0	0	4	0	1	0	0	0	0	0	1
18:00	112	2	6	0	0	1	1	122	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
18:15	113	4	5	3	1	2	1	129	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
18:30	107	4	6	0	0	1	1	119	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
18:45	87	5	6	0	0	1	1	100	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
H/TOT	419	15	23	3	1	5	4	470	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12 HR TOT	4853	215	594	82	108	77	22	5951	64	3	2	0	0	2	0	71	5	1	0	0	0	0	0	6

Appendix B

TRICS Data

CS CONSULTING

GROUP

Calculation Reference: AUDIT-656801-240326-0310

TRIP RATE CALCULATION SELECTION PARAMETERS:

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

Selected regions and areas:

02	SOUTH EAST		
	MW	MEDWAY	1 days
	SC	SURREY	1 days
	WS	WEST SUSSEX	1 days
03	SOUTH WEST		
	SM	SOMERSET	2 days
04	EAST ANGLIA		
	NF	NORFOLK	3 days
08	NORTH WEST		
	AC	CHESHIRE WEST & CHESTER	1 days
09	NORTH		
	DH	DURHAM	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:	Total Bedrooms
Actual Range:	32 to 5396 (units:)
Range Selected by User:	7 to 5396 (units:)

Parking Spaces Range: All Surveys Included

Parking Spaces per Dwelling Range: All Surveys Included

Bedrooms per Dwelling Range: All Surveys Included

Percentage of dwellings privately owned: All Surveys Included

Public Transport Provision:
Selection by: Include all surveys

Date Range: 01/01/15 to 04/07/23

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	1 days
Tuesday	4 days
Wednesday	2 days
Thursday	1 days
Friday	2 days

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

Selected survey types:

Manual count	10 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)	2
Neighbourhood Centre (PPS6 Local Centre)	8

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

Selected Location Sub Categories:

Residential Zone	2
Village	8

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	17 days - Selected
Servicing vehicles Excluded	37 days - Selected

Secondary Filtering selection:

Use Class:

C3	10 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:

1,001 to 5,000	6 days
5,001 to 10,000	3 days
10,001 to 15,000	1 days

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

Population within 5 miles:

75,001 to 100,000	5 days
100,001 to 125,000	2 days
125,001 to 250,000	3 days

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

Car ownership within 5 miles:

0.6 to 1.0	3 days
1.1 to 1.5	6 days
1.6 to 2.0	1 days

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

Travel Plan:

Yes	4 days
No	6 days

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

PTAL Rating:

No PTAL Present	10 days

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

LIST OF SITES relevant to selection parameters

1 AC-03-A-06 DETACHED HOUSES CHESHIRE WEST & CHESTER
COMMON LANE
NEAR CHESTER
WAVERTON
Neighbourhood Centre (PPS6 Local Centre)
Village
Total Total Bedrooms: 311
Survey date: FRIDAY 29/04/22 Survey Type: MANUAL

2 DH-03-A-01 SEMI DETACHED DURHAM
GREENFIELDS ROAD
BISHOP AUCKLAND

Suburban Area (PPS6 Out of Centre)
Residential Zone
Total Total Bedrooms: 150
Survey date: TUESDAY 28/03/17 Survey Type: MANUAL

3 MW-03-A-01 DETACHED & SEMI-DETACHED MEDWAY
ROCHESTER ROAD
NEAR CHATHAM
BURHAM
Neighbourhood Centre (PPS6 Local Centre)
Village
Total Total Bedrooms: 32
Survey date: FRIDAY 22/09/17 Survey Type: MANUAL

4 NF-03-A-08 MIXED HOUSES & FLATS NORFOLK
SIR ALFRED MUNNINGS RD
NEAR NORWICH
COSTESSEY
Neighbourhood Centre (PPS6 Local Centre)
Village
Total Total Bedrooms: 5396
Survey date: THURSDAY 19/09/19 Survey Type: MANUAL

5 NF-03-A-43 MIXED HOUSES NORFOLK
MILL LANE
NEAR NORWICH
HORSFORD
Neighbourhood Centre (PPS6 Local Centre)
Village
Total Total Bedrooms: 390
Survey date: WEDNESDAY 15/09/21 Survey Type: MANUAL

6 NF-03-A-51 SEMI-DETACHED NORFOLK
CITY ROAD
NORWICH
LAKENHAM
Suburban Area (PPS6 Out of Centre)
Residential Zone
Total Total Bedrooms: 101
Survey date: TUESDAY 13/09/22 Survey Type: MANUAL

7 SC-03-A-10 MIXED HOUSES SURREY
GUILDFORD ROAD
ASH

Neighbourhood Centre (PPS6 Local Centre)
Village
Total Total Bedrooms: 93
Survey date: WEDNESDAY 14/09/22 Survey Type: MANUAL

LIST OF SITES relevant to selection parameters (Cont.)

8 SM-03-A-02 MIXED HOUSES SOMERSET
HYDE LANE
NEAR TAUNTON
CREECH SAINT MICHAEL
Neighbourhood Centre (PPS6 Local Centre)
Village
Total Total Bedrooms: 160
Survey date: TUESDAY 25/09/18 Survey Type: MANUAL

9 SM-03-A-03 MIXED HOUSES SOMERSET
HYDE LANE
NEAR TAUNTON
CREECH ST MICHAEL
Neighbourhood Centre (PPS6 Local Centre)
Village
Total Total Bedrooms: 137
Survey date: TUESDAY 25/09/18 Survey Type: MANUAL

10 WS-03-A-18 MIXED HOUSES & FLATS WEST SUSSEX
LONDON ROAD
HASSOCKS

Neighbourhood Centre (PPS6 Local Centre)
Village
Total Total Bedrooms: 433
Survey date: MONDAY 15/05/23 Survey Type: MANUAL

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

TRIP RATE for Land Use 03 - RESIDENTIAL/A - HOUSES PRIVATELY OWNED
MULTI-MODAL TOTAL VEHICLES
Calculation factor: 1 TOTBED
BOLD print indicates peak (busiest) period
Total People to Total Vehicles ratio (all time periods and directions): 1.82

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. TOTBED	Trip Rate	No. Days	Ave. TOTBED	Trip Rate	No. Days	Ave. TOTBED	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	10	720	0.019	10	720	0.108	10	720	0.127
08:00 - 09:00	10	720	0.034	**10**	**720**	**0.113**	10	720	0.147
09:00 - 10:00	10	720	0.041	10	720	0.057	10	720	0.098
10:00 - 11:00	10	720	0.038	10	720	0.043	10	720	0.081
11:00 - 12:00	10	720	0.037	10	720	0.035	10	720	0.072
12:00 - 13:00	10	720	0.042	10	720	0.042	10	720	0.084
13:00 - 14:00	10	720	0.045	10	720	0.038	10	720	0.083
14:00 - 15:00	10	720	0.048	10	720	0.046	10	720	0.094
15:00 - 16:00	10	720	0.064	10	720	0.049	10	720	0.113
16:00 - 17:00	10	720	0.076	10	720	0.042	10	720	0.118
17:00 - 18:00	**10**	**720**	**0.110**	10	720	0.042	**10**	**720**	**0.152**
18:00 - 19:00	10	720	0.099	10	720	0.050	10	720	0.149
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.653			0.665			1.318

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

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

Parameter summary

Trip rate parameter range selected:	32 - 5396 (units:)
Survey date date range:	01/01/15 - 04/07/23
Number of weekdays (Monday-Friday):	10
Number of Saturdays:	0
Number of Sundays:	0
Surveys automatically removed from selection:	0
Surveys manually removed from selection:	0

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

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

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. TOTBED	Trip Rate	No. Days	Ave. TOTBED	Trip Rate	No. Days	Ave. TOTBED	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	10	720	0.000	10	720	0.000	10	720	0.000
08:00 - 09:00	**10**	**720**	**0.001**	**10**	**720**	**0.001**	**10**	**720**	**0.002**
09:00 - 10:00	10	720	0.001	10	720	0.001	10	720	0.002
10:00 - 11:00	10	720	0.000	10	720	0.001	10	720	0.001
11:00 - 12:00	10	720	0.000	10	720	0.001	10	720	0.001
12:00 - 13:00	10	720	0.000	10	720	0.000	10	720	0.000
13:00 - 14:00	10	720	0.000	10	720	0.000	10	720	0.000
14:00 - 15:00	10	720	0.000	10	720	0.000	10	720	0.000
15:00 - 16:00	10	720	0.001	10	720	0.001	10	720	0.002
16:00 - 17:00	10	720	0.001	10	720	0.001	10	720	0.002
17:00 - 18:00	10	720	0.001	10	720	0.000	10	720	0.001
18:00 - 19:00	10	720	0.001	10	720	0.001	10	720	0.002
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.006			0.007			0.013

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

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

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

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. TOTBED	Trip Rate	No. Days	Ave. TOTBED	Trip Rate	No. Days	Ave. TOTBED	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	10	720	0.001	10	720	0.001	**10**	**720**	**0.002**
08:00 - 09:00	10	720	0.001	10	720	0.000	10	720	0.001
09:00 - 10:00	10	720	0.001	**10**	**720**	**0.001**	10	720	0.002
10:00 - 11:00	10	720	0.001	10	720	0.001	10	720	0.002
11:00 - 12:00	10	720	0.000	10	720	0.001	10	720	0.001
12:00 - 13:00	10	720	0.001	10	720	0.001	10	720	0.002
13:00 - 14:00	10	720	0.000	10	720	0.001	10	720	0.001
14:00 - 15:00	**10**	**720**	**0.001**	10	720	0.001	10	720	0.002
15:00 - 16:00	10	720	0.000	10	720	0.001	10	720	0.001
16:00 - 17:00	10	720	0.000	10	720	0.001	10	720	0.001
17:00 - 18:00	10	720	0.001	10	720	0.000	10	720	0.001
18:00 - 19:00	10	720	0.000	10	720	0.000	10	720	0.000
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.007			0.009			0.016

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

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

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

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. TOTBED	Trip Rate	No. Days	Ave. TOTBED	Trip Rate	No. Days	Ave. TOTBED	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	10	720	0.001	10	720	0.001	10	720	0.002
08:00 - 09:00	10	720	0.001	10	720	0.001	10	720	0.002
09:00 - 10:00	10	720	0.001	10	720	0.001	10	720	0.002
10:00 - 11:00	10	720	0.000	10	720	0.000	10	720	0.000
11:00 - 12:00	10	720	0.001	10	720	0.001	10	720	0.002
12:00 - 13:00	10	720	0.000	10	720	0.000	10	720	0.000
13:00 - 14:00	10	720	0.001	10	720	0.001	10	720	0.002
14:00 - 15:00	10	720	0.001	10	720	0.000	10	720	0.001
15:00 - 16:00	10	720	0.001	10	720	0.001	10	720	0.002
16:00 - 17:00	10	720	0.000	10	720	0.000	10	720	0.000
17:00 - 18:00	10	720	0.001	10	720	0.001	10	720	0.002
18:00 - 19:00	10	720	0.000	10	720	0.000	10	720	0.000
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.008			0.007			0.015

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

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

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

MULTI-MODAL CYCLISTS

Calculation factor: 1 TOTBED

BOLD print indicates peak (busiest) period

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. TOTBED	Trip Rate	No. Days	Ave. TOTBED	Trip Rate	No. Days	Ave. TOTBED	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	10	720	0.000	10	720	0.001	10	720	0.001
08:00 - 09:00	10	720	0.001	**10**	**720**	**0.002**	10	720	0.003
09:00 - 10:00	10	720	0.000	10	720	0.001	10	720	0.001
10:00 - 11:00	10	720	0.001	10	720	0.001	10	720	0.002
11:00 - 12:00	10	720	0.001	10	720	0.001	10	720	0.002
12:00 - 13:00	10	720	0.001	10	720	0.001	10	720	0.002
13:00 - 14:00	10	720	0.001	10	720	0.001	10	720	0.002
14:00 - 15:00	10	720	0.001	10	720	0.001	10	720	0.002
15:00 - 16:00	**10**	**720**	**0.002**	10	720	0.001	10	720	0.003
16:00 - 17:00	10	720	0.002	10	720	0.002	**10**	**720**	**0.004**
17:00 - 18:00	10	720	0.002	10	720	0.002	10	720	0.004
18:00 - 19:00	10	720	0.002	10	720	0.001	10	720	0.003
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.014			0.015			0.029

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

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

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

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. TOTBED	Trip Rate	No. Days	Ave. TOTBED	Trip Rate	No. Days	Ave. TOTBED	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	10	720	0.023	10	720	0.188	10	720	0.211
08:00 - 09:00	10	720	0.047	**10**	**720**	**0.207**	10	720	0.254
09:00 - 10:00	10	720	0.058	10	720	0.094	10	720	0.152
10:00 - 11:00	10	720	0.059	10	720	0.068	10	720	0.127
11:00 - 12:00	10	720	0.056	10	720	0.052	10	720	0.108
12:00 - 13:00	10	720	0.064	10	720	0.059	10	720	0.123
13:00 - 14:00	10	720	0.069	10	720	0.057	10	720	0.126
14:00 - 15:00	10	720	0.088	10	720	0.062	10	720	0.150
15:00 - 16:00	10	720	0.116	10	720	0.071	10	720	0.187
16:00 - 17:00	10	720	0.140	10	720	0.065	10	720	0.205
17:00 - 18:00	**10**	**720**	**0.189**	10	720	0.067	**10**	**720**	**0.256**
18:00 - 19:00	10	720	0.153	10	720	0.081	10	720	0.234
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			1.062			1.071			2.133

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

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

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

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. TOTBED	Trip Rate	No. Days	Ave. TOTBED	Trip Rate	No. Days	Ave. TOTBED	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	10	720	0.002	10	720	0.003	10	720	0.005
08:00 - 09:00	10	720	0.006	**10**	**720**	**0.019**	10	720	0.025
09:00 - 10:00	10	720	0.007	10	720	0.006	10	720	0.013
10:00 - 11:00	10	720	0.005	10	720	0.006	10	720	0.011
11:00 - 12:00	10	720	0.004	10	720	0.006	10	720	0.010
12:00 - 13:00	10	720	0.007	10	720	0.005	10	720	0.012
13:00 - 14:00	10	720	0.003	10	720	0.004	10	720	0.007
14:00 - 15:00	10	720	0.006	10	720	0.007	10	720	0.013
15:00 - 16:00	**10**	**720**	**0.020**	10	720	0.009	**10**	**720**	**0.029**
16:00 - 17:00	10	720	0.005	10	720	0.004	10	720	0.009
17:00 - 18:00	10	720	0.005	10	720	0.003	10	720	0.008
18:00 - 19:00	10	720	0.005	10	720	0.003	10	720	0.008
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.075			0.075			0.150

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

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

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

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. TOTBED	Trip Rate	No. Days	Ave. TOTBED	Trip Rate	No. Days	Ave. TOTBED	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	10	720	0.000	**10**	**720**	**0.008**	**10**	**720**	**0.008**
08:00 - 09:00	10	720	0.000	10	720	0.007	10	720	0.007
09:00 - 10:00	10	720	0.001	10	720	0.003	10	720	0.004
10:00 - 11:00	10	720	0.002	10	720	0.003	10	720	0.005
11:00 - 12:00	10	720	0.002	10	720	0.002	10	720	0.004
12:00 - 13:00	10	720	0.002	10	720	0.002	10	720	0.004
13:00 - 14:00	10	720	0.003	10	720	0.002	10	720	0.005
14:00 - 15:00	10	720	0.003	10	720	0.001	10	720	0.004
15:00 - 16:00	**10**	**720**	**0.006**	10	720	0.002	10	720	0.008
16:00 - 17:00	10	720	0.006	10	720	0.001	10	720	0.007
17:00 - 18:00	10	720	0.005	10	720	0.002	10	720	0.007
18:00 - 19:00	10	720	0.004	10	720	0.001	10	720	0.005
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.034			0.034			0.068

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

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

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

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. TOTBED	Trip Rate	No. Days	Ave. TOTBED	Trip Rate	No. Days	Ave. TOTBED	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	10	720	0.001	10	720	0.002	10	720	0.003
08:00 - 09:00	10	720	0.001	10	720	0.002	10	720	0.003
09:00 - 10:00	10	720	0.000	**10**	**720**	**0.002**	10	720	0.002
10:00 - 11:00	10	720	0.001	10	720	0.000	10	720	0.001
11:00 - 12:00	10	720	0.001	10	720	0.001	10	720	0.002
12:00 - 13:00	10	720	0.002	10	720	0.001	10	720	0.003
13:00 - 14:00	10	720	0.000	10	720	0.000	10	720	0.000
14:00 - 15:00	10	720	0.001	10	720	0.000	10	720	0.001
15:00 - 16:00	10	720	0.001	10	720	0.000	10	720	0.001
16:00 - 17:00	10	720	0.001	10	720	0.000	10	720	0.001
17:00 - 18:00	10	720	0.003	10	720	0.000	10	720	0.003
18:00 - 19:00	**10**	**720**	**0.004**	10	720	0.000	**10**	**720**	**0.004**
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.016			0.008			0.024

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

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

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

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. TOTBED	Trip Rate	No. Days	Ave. TOTBED	Trip Rate	No. Days	Ave. TOTBED	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	10	720	0.000	10	720	0.000	10	720	0.000
08:00 - 09:00	10	720	0.000	10	720	0.000	10	720	0.000
09:00 - 10:00	10	720	0.000	10	720	0.000	10	720	0.000
10:00 - 11:00	10	720	0.000	10	720	0.000	10	720	0.000
11:00 - 12:00	10	720	0.000	10	720	0.000	10	720	0.000
12:00 - 13:00	10	720	0.000	10	720	0.000	10	720	0.000
13:00 - 14:00	10	720	0.000	10	720	0.000	10	720	0.000
14:00 - 15:00	10	720	0.000	10	720	0.000	10	720	0.000
15:00 - 16:00	**10**	**720**	**0.001**	**10**	**720**	**0.001**	**10**	**720**	**0.002**
16:00 - 17:00	10	720	0.000	10	720	0.000	10	720	0.000
17:00 - 18:00	10	720	0.001	10	720	0.001	10	720	0.002
18:00 - 19:00	10	720	0.000	10	720	0.000	10	720	0.000
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.002			0.002			0.004

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

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

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

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. TOTBED	Trip Rate	No. Days	Ave. TOTBED	Trip Rate	No. Days	Ave. TOTBED	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	10	720	0.001	**10**	**720**	**0.010**	**10**	**720**	**0.011**
08:00 - 09:00	10	720	0.001	10	720	0.009	10	720	0.010
09:00 - 10:00	10	720	0.002	10	720	0.006	10	720	0.008
10:00 - 11:00	10	720	0.003	10	720	0.003	10	720	0.006
11:00 - 12:00	10	720	0.003	10	720	0.003	10	720	0.006
12:00 - 13:00	10	720	0.004	10	720	0.003	10	720	0.007
13:00 - 14:00	10	720	0.003	10	720	0.002	10	720	0.005
14:00 - 15:00	10	720	0.004	10	720	0.002	10	720	0.006
15:00 - 16:00	10	720	0.007	10	720	0.003	10	720	0.010
16:00 - 17:00	10	720	0.007	10	720	0.001	10	720	0.008
17:00 - 18:00	**10**	**720**	**0.008**	10	720	0.002	10	720	0.010
18:00 - 19:00	10	720	0.008	10	720	0.001	10	720	0.009
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.051			0.045			0.096

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

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

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

MULTI-MODAL TOTAL PEOPLE

Calculation factor: 1 TOTBED

BOLD print indicates peak (busiest) period

Total People to Total Vehicles ratio (all time periods and directions): 1.82

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. TOTBED	Trip Rate	No. Days	Ave. TOTBED	Trip Rate	No. Days	Ave. TOTBED	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	10	720	0.026	10	720	0.202	10	720	0.228
08:00 - 09:00	10	720	0.054	**10**	**720**	**0.237**	**10**	**720**	**0.291**
09:00 - 10:00	10	720	0.067	10	720	0.107	10	720	0.174
10:00 - 11:00	10	720	0.068	10	720	0.078	10	720	0.146
11:00 - 12:00	10	720	0.064	10	720	0.062	10	720	0.126
12:00 - 13:00	10	720	0.075	10	720	0.068	10	720	0.143
13:00 - 14:00	10	720	0.076	10	720	0.064	10	720	0.140
14:00 - 15:00	10	720	0.099	10	720	0.071	10	720	0.170
15:00 - 16:00	10	720	0.145	10	720	0.084	10	720	0.229
16:00 - 17:00	10	720	0.154	10	720	0.072	10	720	0.226
17:00 - 18:00	**10**	**720**	**0.203**	10	720	0.075	10	720	0.278
18:00 - 19:00	10	720	0.167	10	720	0.086	10	720	0.253
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			1.198			1.206			2.404

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.

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

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. TOTBED	Trip Rate	No. Days	Ave. TOTBED	Trip Rate	No. Days	Ave. TOTBED	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	10	720	0.014	10	720	0.096	10	720	0.110
08:00 - 09:00	10	720	0.026	**10**	**720**	**0.102**	10	720	0.128
09:00 - 10:00	10	720	0.034	10	720	0.051	10	720	0.085
10:00 - 11:00	10	720	0.032	10	720	0.035	10	720	0.067
11:00 - 12:00	10	720	0.030	10	720	0.030	10	720	0.060
12:00 - 13:00	10	720	0.035	10	720	0.036	10	720	0.071
13:00 - 14:00	10	720	0.040	10	720	0.032	10	720	0.072
14:00 - 15:00	10	720	0.042	10	720	0.042	10	720	0.084
15:00 - 16:00	10	720	0.056	10	720	0.041	10	720	0.097
16:00 - 17:00	10	720	0.069	10	720	0.036	10	720	0.105
17:00 - 18:00	**10**	**720**	**0.100**	10	720	0.038	10	720	0.138
18:00 - 19:00	10	720	0.093	10	720	0.046	**10**	**720**	**0.139**
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.571			0.585			1.156

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.

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

Time Range	ARRIVALS			DEPARTURES			TOTALS		
	No. Days	Ave. TOTBED	Trip Rate	No. Days	Ave. TOTBED	Trip Rate	No. Days	Ave. TOTBED	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	10	720	0.003	**10**	**720**	**0.009**	**10**	**720**	**0.012**
08:00 - 09:00	10	720	0.005	10	720	0.007	10	720	0.012
09:00 - 10:00	10	720	0.005	10	720	0.003	10	720	0.008
10:00 - 11:00	10	720	0.004	10	720	0.006	10	720	0.010
11:00 - 12:00	10	720	0.005	10	720	0.003	10	720	0.008
12:00 - 13:00	10	720	0.005	10	720	0.004	10	720	0.009
13:00 - 14:00	10	720	0.004	10	720	0.003	10	720	0.007
14:00 - 15:00	10	720	0.004	10	720	0.003	10	720	0.007
15:00 - 16:00	10	720	0.005	10	720	0.005	10	720	0.010
16:00 - 17:00	10	720	0.006	10	720	0.004	10	720	0.010
17:00 - 18:00	**10**	**720**	**0.007**	10	720	0.003	10	720	0.010
18:00 - 19:00	10	720	0.004	10	720	0.003	10	720	0.007
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.057			0.053			0.110

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.

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

Time Range	ARRIVALS No. Days	ARRIVALS Ave. TOTBED	ARRIVALS Trip Rate	DEPARTURES No. Days	DEPARTURES Ave. TOTBED	DEPARTURES Trip Rate	TOTALS No. Days	TOTALS Ave. TOTBED	TOTALS Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	10	720	0.000	**10**	**720**	**0.002**	**10**	**720**	**0.002**
08:00 - 09:00	10	720	0.000	10	720	0.001	10	720	0.001
09:00 - 10:00	10	720	0.000	10	720	0.000	10	720	0.000
10:00 - 11:00	10	720	0.000	10	720	0.000	10	720	0.000
11:00 - 12:00	10	720	0.001	10	720	0.000	10	720	0.001
12:00 - 13:00	10	720	0.000	10	720	0.000	10	720	0.000
13:00 - 14:00	10	720	0.000	10	720	0.000	10	720	0.000
14:00 - 15:00	10	720	0.001	10	720	0.000	10	720	0.001
15:00 - 16:00	10	720	0.001	10	720	0.000	10	720	0.001
16:00 - 17:00	10	720	0.000	10	720	0.000	10	720	0.000
17:00 - 18:00	10	720	0.001	10	720	0.000	10	720	0.001
18:00 - 19:00	**10**	**720**	**0.001**	10	720	0.000	10	720	0.001
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.005			0.003			0.008

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.

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Calculation Reference: AUDIT-656801-240326-0335

TRIP RATE CALCULATION SELECTION PARAMETERS:

Land Use : 04 - EDUCATION
Category : D - NURSERY

MULTI-MODAL TOTAL VEHICLES

Selected regions and areas:

05	EAST MIDLANDS		
	LN	LINCOLNSHIRE	1 days
	NN	NORTH NORTHAMPTONSHIRE	1 days
07	YORKSHIRE & NORTH LINCOLNSHIRE		
	DR	DONCASTER	1 days
09	NORTH		
	TW	TYNE & WEAR	1 days

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

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:	Number of pupils
Actual Range:	49 to 111 (units:)
Range Selected by User:	37 to 138 (units:)

Parking Spaces Range: All Surveys Included

Public Transport Provision:
Selection by: Include all surveys

Date Range: 01/01/15 to 07/06/22

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

Selected survey days:

Tuesday	3 days
Friday	1 days

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

Selected survey types:

Manual count	4 days
Directional ATC Count	0 days

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

Selected Locations:

Suburban Area (PPS6 Out of Centre)	4

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

Selected Location Sub Categories:

Residential Zone	4

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

Inclusion of Servicing Vehicles Counts:

Servicing vehicles Included	5 days - Selected
Servicing vehicles Excluded	X days - Selected

Secondary Filtering selection:

Use Class:

E(f)	4 days

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

Population within 500m Range:
All Surveys Included
Population within 1 mile:

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

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

Secondary Filtering selection (Cont.):

Population within 5 miles:

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

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

Car ownership within 5 miles:

0.5 or Less	1 days
0.6 to 1.0	1 days
1.1 to 1.5	1 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	4 days

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

PTAL Rating:

No PTAL Present	4 days

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

LIST OF SITES relevant to selection parameters

1 DR-04-D-01 NURSERY DONCASTER
BAWTRY ROAD
DONCASTER

Suburban Area (PPS6 Out of Centre)
Residential Zone
Total Number of pupils: 111
Survey date: FRIDAY 13/05/22 Survey Type: MANUAL

2 LN-04-D-01 NURSERY LINCOLNSHIRE
NEWARK ROAD
LINCOLN
SWALLOW BECK
Suburban Area (PPS6 Out of Centre)
Residential Zone
Total Number of pupils: 49
Survey date: TUESDAY 31/10/17 Survey Type: MANUAL

3 NN-04-D-01 NURSERY NORTH NORTHAMPTONSHIRE
ROCKINGHAM ROAD
KETTERING

Suburban Area (PPS6 Out of Centre)
Residential Zone
Total Number of pupils: 90
Survey date: TUESDAY 07/06/22 Survey Type: MANUAL

4 TW-04-D-03 NURSERY TYNE & WEAR
JUBILEE ROAD
NEWCASTLE UPON TYNE
GOSFORTH
Suburban Area (PPS6 Out of Centre)
Residential Zone
Total Number of pupils: 108
Survey date: TUESDAY 21/05/19 Survey Type: MANUAL

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

TRIP RATE for Land Use 04 - EDUCATION/D - NURSERY
MULTI-MODAL TOTAL VEHICLES
Calculation factor: 1
BOLD print indicates peak (busiest) period
Total People to Total Vehicles ratio (all time periods and directions): 2.50

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. PUPILS	Trip Rate	No. Days	Ave. PUPILS	Trip Rate	No. Days	Ave. PUPILS	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	4	90	0.115	4	90	0.031	4	90	0.146
08:00 - 09:00	4	90	**0.168**	4	90	0.092	4	90	0.260
09:00 - 10:00	4	90	0.059	4	90	0.047	4	90	0.106
10:00 - 11:00	4	90	0.008	4	90	0.006	4	90	0.014
11:00 - 12:00	4	90	0.003	4	90	0.003	4	90	0.006
12:00 - 13:00	4	90	0.067	4	90	0.089	4	90	0.156
13:00 - 14:00	4	90	0.064	4	90	0.087	4	90	0.151
14:00 - 15:00	4	90	0.014	4	90	0.022	4	90	0.036
15:00 - 16:00	4	90	0.028	4	90	0.025	4	90	0.053
16:00 - 17:00	4	90	0.053	4	90	0.056	4	90	0.109
17:00 - 18:00	4	90	0.117	4	90	**0.184**	4	90	**0.301**
18:00 - 19:00	4	90	0.008	4	90	0.061	4	90	0.069
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.704			0.703			1.407

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

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

Parameter summary

Trip rate parameter range selected:	49 - 111 (units:)
Survey date date range:	01/01/15 - 07/06/22
Number of weekdays (Monday-Friday):	4
Number of Saturdays:	0
Number of Sundays:	0
Surveys automatically removed from selection:	0
Surveys manually removed from selection:	0

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

TRIP RATE for Land Use 04 - EDUCATION/D - NURSERY
MULTI-MODAL TAXIS
Calculation factor: 1
BOLD print indicates peak (busiest) period

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. PUPILS	Trip Rate	No. Days	Ave. PUPILS	Trip Rate	No. Days	Ave. PUPILS	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	4	90	0.000	4	90	0.000	4	90	0.000
08:00 - 09:00	4	90	0.000	4	90	0.000	4	90	0.000
09:00 - 10:00	4	90	0.000	4	90	0.000	4	90	0.000
10:00 - 11:00	4	90	0.000	4	90	0.000	4	90	0.000
11:00 - 12:00	4	90	0.000	4	90	0.000	4	90	0.000
12:00 - 13:00	**4**	**90**	**0.008**	**4**	**90**	**0.008**	**4**	**90**	**0.016**
13:00 - 14:00	4	90	0.000	4	90	0.000	4	90	0.000
14:00 - 15:00	4	90	0.000	4	90	0.000	4	90	0.000
15:00 - 16:00	4	90	0.000	4	90	0.000	4	90	0.000
16:00 - 17:00	4	90	0.000	4	90	0.000	4	90	0.000
17:00 - 18:00	4	90	0.003	4	90	0.003	4	90	0.006
18:00 - 19:00	4	90	0.000	4	90	0.000	4	90	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.

*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

MULTI-MODAL CYCLISTS

Calculation factor: 1

BOLD print indicates peak (busiest) period

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. PUPILS	Trip Rate	No. Days	Ave. PUPILS	Trip Rate	No. Days	Ave. PUPILS	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	4	90	0.006	4	90	0.000	4	90	0.006
08:00 - 09:00	4	90	0.003	4	90	0.000	4	90	0.003
09:00 - 10:00	4	90	0.000	4	90	0.000	4	90	0.000
10:00 - 11:00	4	90	0.000	4	90	0.000	4	90	0.000
11:00 - 12:00	4	90	0.000	4	90	0.000	4	90	0.000
12:00 - 13:00	4	90	0.008	4	90	0.003	4	90	0.011
13:00 - 14:00	4	90	0.003	4	90	0.006	4	90	0.009
14:00 - 15:00	4	90	0.000	4	90	0.000	4	90	0.000
15:00 - 16:00	4	90	0.000	4	90	0.006	4	90	0.006
16:00 - 17:00	4	90	0.000	4	90	0.000	4	90	0.000
17:00 - 18:00	4	90	0.000	4	90	0.003	4	90	0.003
18:00 - 19:00	4	90	0.000	4	90	0.000	4	90	0.000
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.020			0.018			0.038

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
MULTI-MODAL VEHICLE OCCUPANTS
Calculation factor: 1
BOLD print indicates peak (busiest) period

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. PUPILS	Trip Rate	No. Days	Ave. PUPILS	Trip Rate	No. Days	Ave. PUPILS	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	4	90	0.190	4	90	0.036	4	90	0.226
08:00 - 09:00	4	90	0.360	4	90	0.115	4	90	0.475
09:00 - 10:00	4	90	0.106	4	90	0.053	4	90	0.159
10:00 - 11:00	4	90	0.008	4	90	0.006	4	90	0.014
11:00 - 12:00	4	90	0.003	4	90	0.003	4	90	0.006
12:00 - 13:00	4	90	0.103	4	90	0.120	4	90	0.223
13:00 - 14:00	4	90	0.098	4	90	0.117	4	90	0.215
14:00 - 15:00	4	90	0.017	4	90	0.036	4	90	0.053
15:00 - 16:00	4	90	0.034	4	90	0.047	4	90	0.081
16:00 - 17:00	4	90	0.056	4	90	0.126	4	90	0.182
17:00 - 18:00	4	90	0.134	4	90	0.349	4	90	0.483
18:00 - 19:00	4	90	0.011	4	90	0.106	4	90	0.117
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			1.120			1.114			2.234

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
MULTI-MODAL PEDESTRIANS
Calculation factor: 1
BOLD print indicates peak (busiest) period

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. PUPILS	Trip Rate	No. Days	Ave. PUPILS	Trip Rate	No. Days	Ave. PUPILS	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	4	90	0.089	4	90	0.025	4	90	0.114
08:00 - 09:00	4	90	0.087	4	90	0.031	4	90	0.118
09:00 - 10:00	4	90	0.025	4	90	0.006	4	90	0.031
10:00 - 11:00	4	90	0.006	4	90	0.003	4	90	0.009
11:00 - 12:00	4	90	0.020	4	90	0.045	4	90	0.065
12:00 - 13:00	4	90	0.092	4	90	0.106	4	90	0.198
13:00 - 14:00	4	90	0.061	4	90	0.070	4	90	0.131
14:00 - 15:00	4	90	0.011	4	90	0.006	4	90	0.017
15:00 - 16:00	4	90	0.020	4	90	0.034	4	90	0.054
16:00 - 17:00	4	90	0.022	4	90	0.045	4	90	0.067
17:00 - 18:00	4	90	0.050	4	90	0.087	4	90	0.137
18:00 - 19:00	4	90	0.003	4	90	0.056	4	90	0.059
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.486			0.514			1.000

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
MULTI-MODAL BUS/TRAM PASSENGERS
Calculation factor: 1
BOLD print indicates peak (busiest) period

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. PUPILS	Trip Rate	No. Days	Ave. PUPILS	Trip Rate	No. Days	Ave. PUPILS	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	4	90	0.031	4	90	0.003	4	90	0.034
08:00 - 09:00	4	90	0.028	4	90	0.003	4	90	0.031
09:00 - 10:00	4	90	0.014	4	90	0.003	4	90	0.017
10:00 - 11:00	4	90	0.003	4	90	0.000	4	90	0.003
11:00 - 12:00	4	90	0.000	4	90	0.017	4	90	0.017
12:00 - 13:00	4	90	0.022	4	90	0.031	4	90	0.053
13:00 - 14:00	4	90	0.003	4	90	0.011	4	90	0.014
14:00 - 15:00	4	90	0.006	4	90	0.003	4	90	0.009
15:00 - 16:00	4	90	0.003	4	90	0.017	4	90	0.020
16:00 - 17:00	4	90	0.003	4	90	0.006	4	90	0.009
17:00 - 18:00	4	90	0.008	4	90	0.011	4	90	0.019
18:00 - 19:00	4	90	0.000	4	90	0.020	4	90	0.020
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.121			0.125			0.246

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
MULTI-MODAL TOTAL RAIL PASSENGERS
Calculation factor: 1
BOLD print indicates peak (busiest) period

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. PUPILS	Trip Rate	No. Days	Ave. PUPILS	Trip Rate	No. Days	Ave. PUPILS	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	4	**90**	**0.008**	4	90	0.000	4	**90**	**0.008**
08:00 - 09:00	4	90	0.000	4	90	0.000	4	90	0.000
09:00 - 10:00	4	90	0.000	4	90	0.000	4	90	0.000
10:00 - 11:00	4	90	0.000	4	90	0.000	4	90	0.000
11:00 - 12:00	4	90	0.000	4	90	0.000	4	90	0.000
12:00 - 13:00	4	90	0.000	4	90	0.000	4	90	0.000
13:00 - 14:00	4	90	0.000	4	90	0.000	4	90	0.000
14:00 - 15:00	4	90	0.000	4	90	0.000	4	90	0.000
15:00 - 16:00	4	90	0.000	4	90	0.000	4	90	0.000
16:00 - 17:00	4	90	0.000	4	90	0.000	4	90	0.000
17:00 - 18:00	4	90	0.000	4	90	0.000	4	90	0.000
18:00 - 19:00	4	90	0.000	4	**90**	**0.006**	4	90	0.006
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.008			0.006			0.014

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

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

TRIP RATE for Land Use 04 - EDUCATION/D - NURSERY
MULTI-MODAL PUBLIC TRANSPORT USERS
Calculation factor: 1
BOLD print indicates peak (busiest) period

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. PUPILS	Trip Rate	No. Days	Ave. PUPILS	Trip Rate	No. Days	Ave. PUPILS	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	4	90	0.039	4	90	0.003	4	90	0.042
08:00 - 09:00	4	90	0.028	4	90	0.003	4	90	0.031
09:00 - 10:00	4	90	0.014	4	90	0.003	4	90	0.017
10:00 - 11:00	4	90	0.003	4	90	0.000	4	90	0.003
11:00 - 12:00	4	90	0.000	4	90	0.017	4	90	0.017
12:00 - 13:00	4	90	0.022	4	90	0.031	4	90	0.053
13:00 - 14:00	4	90	0.003	4	90	0.011	4	90	0.014
14:00 - 15:00	4	90	0.006	4	90	0.003	4	90	0.009
15:00 - 16:00	4	90	0.003	4	90	0.017	4	90	0.020
16:00 - 17:00	4	90	0.003	4	90	0.006	4	90	0.009
17:00 - 18:00	4	90	0.008	4	90	0.011	4	90	0.019
18:00 - 19:00	4	90	0.000	4	90	0.025	4	90	0.025
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.129			0.130			0.259

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
MULTI-MODAL TOTAL PEOPLE
Calculation factor: 1
BOLD print indicates peak (busiest) period
Total People to Total Vehicles ratio (all time periods and directions): 2.50

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. PUPILS	Trip Rate	No. Days	Ave. PUPILS	Trip Rate	No. Days	Ave. PUPILS	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	4	90	0.324	4	90	0.064	4	90	0.388
08:00 - 09:00	4	90	**0.478**	4	90	0.148	4	90	0.626
09:00 - 10:00	4	90	0.145	4	90	0.061	4	90	0.206
10:00 - 11:00	4	90	0.017	4	90	0.008	4	90	0.025
11:00 - 12:00	4	90	0.022	4	90	0.064	4	90	0.086
12:00 - 13:00	4	90	0.226	4	90	0.260	4	90	0.486
13:00 - 14:00	4	90	0.165	4	90	0.204	4	90	0.369
14:00 - 15:00	4	90	0.034	4	90	0.045	4	90	0.079
15:00 - 16:00	4	90	0.056	4	90	0.103	4	90	0.159
16:00 - 17:00	4	90	0.081	4	90	0.176	4	90	0.257
17:00 - 18:00	4	90	0.193	4	90	**0.450**	4	90	**0.643**
18:00 - 19:00	4	90	0.014	4	90	0.187	4	90	0.201
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			1.755			1.770			3.525

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
MULTI-MODAL CARS
Calculation factor: 1
BOLD print indicates peak (busiest) period

Time Range	ARRIVALS			DEPARTURES			TOTALS		
	No. Days	Ave. PUPILS	Trip Rate	No. Days	Ave. PUPILS	Trip Rate	No. Days	Ave. PUPILS	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	4	90	0.115	4	90	0.031	4	90	0.146
08:00 - 09:00	4	90	0.165	4	90	0.089	4	90	0.254
09:00 - 10:00	4	90	0.059	4	90	0.047	4	90	0.106
10:00 - 11:00	4	90	0.006	4	90	0.006	4	90	0.012
11:00 - 12:00	4	90	0.000	4	90	0.000	4	90	0.000
12:00 - 13:00	4	90	0.056	4	90	0.075	4	90	0.131
13:00 - 14:00	4	90	0.061	4	90	0.087	4	90	0.148
14:00 - 15:00	4	90	0.011	4	90	0.020	4	90	0.031
15:00 - 16:00	4	90	0.028	4	90	0.022	4	90	0.050
16:00 - 17:00	4	90	0.050	4	90	0.056	4	90	0.106
17:00 - 18:00	4	90	0.115	4	90	0.179	4	90	0.294
18:00 - 19:00	4	90	0.008	4	90	0.061	4	90	0.069
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.674			0.673			1.347

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
MULTI-MODAL LGVS
Calculation factor: 1
BOLD print indicates peak (busiest) period

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. PUPILS	Trip Rate	No. Days	Ave. PUPILS	Trip Rate	No. Days	Ave. PUPILS	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	4	90	0.000	4	90	0.000	4	90	0.000
08:00 - 09:00	4	90	0.003	4	90	0.003	4	90	0.006
09:00 - 10:00	4	90	0.000	4	90	0.000	4	90	0.000
10:00 - 11:00	4	90	0.003	4	90	0.000	4	90	0.003
11:00 - 12:00	4	90	0.003	4	90	0.003	4	90	0.006
12:00 - 13:00	4	90	0.003	4	90	0.006	4	90	0.009
13:00 - 14:00	4	90	0.003	4	90	0.000	4	90	0.003
14:00 - 15:00	4	90	0.003	4	90	0.003	4	90	0.006
15:00 - 16:00	4	90	0.000	4	90	0.003	4	90	0.003
16:00 - 17:00	4	90	0.003	4	90	0.000	4	90	0.003
17:00 - 18:00	4	90	0.000	4	90	0.003	4	90	0.003
18:00 - 19:00	4	90	0.000	4	90	0.000	4	90	0.000
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.021			0.021			0.042

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
MULTI-MODAL Servicing Vehicles
Calculation factor: 1
BOLD print indicates peak (busiest) period

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. PUPILS	Trip Rate	No. Days	Ave. PUPILS	Trip Rate	No. Days	Ave. PUPILS	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	4	90	0.000	4	90	0.000	4	90	0.000
08:00 - 09:00	4	90	0.003	4	90	0.003	4	90	0.006
09:00 - 10:00	4	90	0.000	4	90	0.000	4	90	0.000
10:00 - 11:00	4	90	0.003	4	90	0.000	4	90	0.003
11:00 - 12:00	4	90	0.003	4	90	0.003	4	90	0.006
12:00 - 13:00	4	90	0.003	4	90	0.006	4	90	0.009
13:00 - 14:00	4	90	0.003	4	90	0.000	4	90	0.003
14:00 - 15:00	4	90	0.000	4	90	0.000	4	90	0.000
15:00 - 16:00	4	90	0.000	4	90	0.003	4	90	0.003
16:00 - 17:00	4	90	0.000	4	90	0.000	4	90	0.000
17:00 - 18:00	4	90	0.000	4	90	0.000	4	90	0.000
18:00 - 19:00	4	90	0.000	4	90	0.000	4	90	0.000
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.015			0.015			0.030

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

Traffic Flow Matrices

CS CONSULTING

GROUP

Junction 1 - Peak Hour Traffic Flow Matrices (Passenger Car Units)

2023 AM Peak (07:45-08:45) **SURVEYED TRAFFIC FLOWS**

To / From	Malahide Road (S)	Baskin Lane (W)	Malahide Road (N)	TOTALS
Malahide Road (S)	0	110	412	522
Baskin Lane (W)	79	0	198	277
Malahide Road (N)	492	205	0	697
TOTALS	571	315	610	1496

2023 PM Peak (16:15-17:15) **SURVEYED TRAFFIC FLOWS**

To / From	Malahide Road (S)	Baskin Lane (W)	Malahide Road (N)	TOTALS
Malahide Road (S)	0	178	585	763
Baskin Lane (W)	67	0	225	292
Malahide Road (N)	367	207	0	574
TOTALS	434	385	810	1629

2024 AM Peak **BASELINE TRAFFIC FLOWS** (surveyed flows + TII growth factor)

To / From	Malahide Road (S)	Baskin Lane (W)	Malahide Road (N)	TOTALS
Malahide Road (S)	0	111	417	528
Baskin Lane (W)	80	0	201	281
Malahide Road (N)	498	208	0	706
TOTALS	578	319	618	1515

2024 PM Peak **BASELINE TRAFFIC FLOWS** (surveyed flows + TII growth factor)

To / From	Malahide Road (S)	Baskin Lane (W)	Malahide Road (N)	TOTALS
Malahide Road (S)	0	180	592	772
Baskin Lane (W)	68	0	228	296
Malahide Road (N)	372	210	0	582
TOTALS	440	390	820	1650

2026 AM Peak **Other committed development flows**

To / From	Malahide Road (S)	Baskin Lane (W)	Malahide Road (N)	TOTALS
Malahide Road (S)	0	0	16	16
Baskin Lane (W)	0	0	9	9
Malahide Road (N)	19	11	0	30
TOTALS	19	11	25	55

2026 PM Peak **Other committed development flows**

To / From	Malahide Road (S)	Baskin Lane (W)	Malahide Road (N)	TOTALS
Malahide Road (S)	0	0	41	41
Baskin Lane (W)	0	0	16	16
Malahide Road (N)	18	16	0	34
TOTALS	18	16	57	91

2027 AM Peak **WITHOUT SUBJECT DEVELOPMENT** (surveyed flows + TII growth factor + committed development)

To / From	Malahide Road (S)	Baskin Lane (W)	Malahide Road (N)	TOTALS
Malahide Road (S)	0	116	449	565
Baskin Lane (W)	83	0	217	300
Malahide Road (N)	536	227	0	763
TOTALS	619	343	666	1628

2027 PM Peak **WITHOUT SUBJECT DEVELOPMENT** (surveyed flows + TII growth factor + committed development)

To / From	Malahide Road (S)	Baskin Lane (W)	Malahide Road (N)	TOTALS
Malahide Road (S)	0	187	656	843
Baskin Lane (W)	70	0	253	323
Malahide Road (N)	404	234	0	638
TOTALS	474	421	909	1804

2027 AM Peak **SUBJECT DEVELOPMENT FLOWS - OPERATIONAL STAGE**

To / From	Malahide Road (S)	Baskin Lane (W)	Malahide Road (N)	TOTALS
Malahide Road (S)	0	3	16	19
Baskin Lane (W)	1	0	2	3
Malahide Road (N)	14	6	0	20
TOTALS	15	9	18	42

2027 PM Peak **SUBJECT DEVELOPMENT FLOWS - OPERATIONAL STAGE**

To / From	Malahide Road (S)	Baskin Lane (W)	Malahide Road (N)	TOTALS
Malahide Road (S)	0	1	13	14
Baskin Lane (W)	2	0	4	6
Malahide Road (N)	11	3	0	14
TOTALS	13	4	17	34

2027 AM Peak **WITH SUBJECT DEVELOPMENT IN OPERATION** (surveyed + TII growth factor + committed dev. + subject dev.)

To / From	Malahide Road (S)	Baskin Lane (W)	Malahide Road (N)	TOTALS
Malahide Road (S)	0	119	465	584
Baskin Lane (W)	84	0	219	303
Malahide Road (N)	550	233	0	783
TOTALS	634	352	684	1670

2027 PM Peak **WITH SUBJECT DEVELOPMENT IN OPERATION** (surveyed + TII growth factor + committed dev. + subject dev.)

To / From	Malahide Road (S)	Baskin Lane (W)	Malahide Road (N)	TOTALS
Malahide Road (S)	0	188	669	857
Baskin Lane (W)	72	0	257	329
Malahide Road (N)	415	237	0	652
TOTALS	487	425	926	1838

2032 AM Peak **WITHOUT SUBJECT DEVELOPMENT** (surveyed flows + TII growth factor + committed development)

To / From	Malahide Road (S)	Baskin Lane (W)	Malahide Road (N)	TOTALS
Malahide Road (S)	0	121	469	590
Baskin Lane (W)	87	0	227	314
Malahide Road (N)	560	236	0	796
TOTALS	647	357	696	1700

2032 PM Peak **WITHOUT SUBJECT DEVELOPMENT** (surveyed flows + TII growth factor + committed development)

To / From	Malahide Road (S)	Baskin Lane (W)	Malahide Road (N)	TOTALS
Malahide Road (S)	0	196	684	880
Baskin Lane (W)	74	0	263	337
Malahide Road (N)	421	243	0	664
TOTALS	495	439	947	1881

2032 AM Peak **WITH SUBJECT DEVELOPMENT IN OPERATION** (surveyed + TII growth factor + committed dev. + subject dev.)

To / From	Malahide Road (S)	Baskin Lane (W)	Malahide Road (N)	TOTALS
Malahide Road (S)	0	124	485	609
Baskin Lane (W)	88	0	229	317
Malahide Road (N)	574	242	0	816
TOTALS	662	366	714	1742

2032 PM Peak **WITH SUBJECT DEVELOPMENT IN OPERATION** (surveyed + TII growth factor + committed dev. + subject dev.)

To / From	Malahide Road (S)	Baskin Lane (W)	Malahide Road (N)	TOTALS
Malahide Road (S)	0	197	697	894
Baskin Lane (W)	76	0	267	343
Malahide Road (N)	432	246	0	678
TOTALS	508	443	964	1915

2042 AM Peak **WITHOUT SUBJECT DEVELOPMENT** (surveyed flows + TII growth factor + committed development)

To / From	Malahide Road (S)	Baskin Lane (W)	Malahide Road (N)	TOTALS
Malahide Road (S)	0	124	482	606
Baskin Lane (W)	89	0	233	322
Malahide Road (N)	575	243	0	818
TOTALS	664	367	715	1746

2042 PM Peak **WITHOUT SUBJECT DEVELOPMENT** (surveyed flows + TII growth factor + committed development)

To / From	Malahide Road (S)	Baskin Lane (W)	Malahide Road (N)	TOTALS
Malahide Road (S)	0	201	703	904
Baskin Lane (W)	76	0	270	346
Malahide Road (N)	433	250	0	683
TOTALS	509	451	973	1933

2042 AM Peak **WITH SUBJECT DEVELOPMENT IN OPERATION** (surveyed + TII growth factor + committed dev. + subject dev.)

To / From	Malahide Road (S)	Baskin Lane (W)	Malahide Road (N)	TOTALS
Malahide Road (S)	0	127	498	625
Baskin Lane (W)	90	0	235	325
Malahide Road (N)	589	249	0	838
TOTALS	679	376	733	1788

2042 PM Peak **WITH SUBJECT DEVELOPMENT IN OPERATION** (surveyed + TII growth factor + committed dev. + subject dev.)

To / From	Malahide Road (S)	Baskin Lane (W)	Malahide Road (N)	TOTALS
Malahide Road (S)	0	202	716	918
Baskin Lane (W)	78	0	274	352
Malahide Road (N)	444	253	0	697
TOTALS	522	455	990	1967

Junction 1 - AADT Traffic Flow Matrices (Light and Heavy Vehicles)

2023 Light Vehicles AADT **SURVEYED TRAFFIC FLOWS**

From \ To	Malahide Road (S)	Baskin Lane (W)	Malahide Road (N)	TOTALS
Malahide Road (S)	0	1256	5399	**6655**
Baskin Lane (W)	818	0	2523	**3341**
Malahide Road (N)	4978	2489	0	**7467**
TOTALS	**5796**	**3745**	**7922**	**17463**

2023 Heavy Vehicles AADT **SURVEYED TRAFFIC FLOWS**

From \ To	Malahide Road (S)	Baskin Lane (W)	Malahide Road (N)	TOTALS
Malahide Road (S)	0	29	203	**232**
Baskin Lane (W)	38	0	62	**100**
Malahide Road (N)	212	55	0	**267**
TOTALS	**250**	**84**	**265**	**599**

2024 Light Vehicles **BASELINE TRAFFIC FLOWS** (surveyed flows + TII growth factor)

From \ To	Malahide Road (S)	Baskin Lane (W)	Malahide Road (N)	TOTALS
Malahide Road (S)	0	1272	5468	**6740**
Baskin Lane (W)	828	0	2555	**3383**
Malahide Road (N)	5041	2521	0	**7562**
TOTALS	**5869**	**3793**	**8023**	**17685**

2024 Heavy Vehicles **BASELINE TRAFFIC FLOWS** (surveyed flows + TII growth factor)

From \ To	Malahide Road (S)	Baskin Lane (W)	Malahide Road (N)	TOTALS
Malahide Road (S)	0	30	207	**237**
Baskin Lane (W)	39	0	63	**102**
Malahide Road (N)	216	56	0	**272**
TOTALS	**255**	**86**	**270**	**611**

2026 Light Vehicles **Other committed development flows**

From \ To	Malahide Road (S)	Baskin Lane (W)	Malahide Road (N)	TOTALS
Malahide Road (S)	0	0	458	**458**
Baskin Lane (W)	0	0	231	**231**
Malahide Road (N)	400	261	0	**661**
TOTALS	**400**	**261**	**689**	**1350**

2026 Heavy Vehicles **Other committed development flows**

From \ To	Malahide Road (S)	Baskin Lane (W)	Malahide Road (N)	TOTALS
Malahide Road (S)	0	0	5	**5**
Baskin Lane (W)	0	0	2	**2**
Malahide Road (N)	6	2	0	**8**
TOTALS	**6**	**2**	**7**	**15**

2027 Light Vehicles **WITHOUT SUBJECT DEVELOPMENT** (surveyed flows + TII growth factor + committed development)

From \ To	Malahide Road (S)	Baskin Lane (W)	Malahide Road (N)	TOTALS
Malahide Road (S)	0	1321	6137	**7458**
Baskin Lane (W)	860	0	2885	**3745**
Malahide Road (N)	5636	2879	0	**8515**
TOTALS	**6496**	**4200**	**9022**	**19718**

2027 Heavy Vehicles **WITHOUT SUBJECT DEVELOPMENT** (surveyed flows + TII growth factor + committed development)

From \ To	Malahide Road (S)	Baskin Lane (W)	Malahide Road (N)	TOTALS
Malahide Road (S)	0	31	225	**256**
Baskin Lane (W)	41	0	69	**110**
Malahide Road (N)	236	62	0	**298**
TOTALS	**277**	**93**	**294**	**664**

2027 Light Vehicles **SUBJECT DEVELOPMENT FLOWS - OPERATIONAL STAGE**

From \ To	Malahide Road (S)	Baskin Lane (W)	Malahide Road (N)	TOTALS
Malahide Road (S)	0	37	245	**282**
Baskin Lane (W)	33	0	62	**95**
Malahide Road (N)	224	70	0	**294**
TOTALS	**257**	**107**	**307**	**671**

2027 Heavy Vehicles **SUBJECT DEVELOPMENT FLOWS - OPERATIONAL STAGE**

From \ To	Malahide Road (S)	Baskin Lane (W)	Malahide Road (N)	TOTALS
Malahide Road (S)	0	0	2	**2**
Baskin Lane (W)	0	0	1	**1**
Malahide Road (N)	2	0	0	**2**
TOTALS	**2**	**0**	**3**	**5**

2027 Light Vehicles **WITH SUBJECT DEVELOPMENT IN OPERATION** (surveyed + TII growth factor + committed dev. + subject dev.)

From \ To	Malahide Road (S)	Baskin Lane (W)	Malahide Road (N)	TOTALS
Malahide Road (S)	0	1358	6382	**7740**
Baskin Lane (W)	893	0	2947	**3840**
Malahide Road (N)	5860	2949	0	**8809**
TOTALS	**6753**	**4307**	**9329**	**20389**

2027 Heavy Vehicles **WITH SUBJECT DEVELOPMENT IN OPERATION** (surveyed + TII growth factor + committed dev. + subject dev.)

From \ To	Malahide Road (S)	Baskin Lane (W)	Malahide Road (N)	TOTALS
Malahide Road (S)	0	31	227	**258**
Baskin Lane (W)	41	0	70	**111**
Malahide Road (N)	238	62	0	**300**
TOTALS	**279**	**93**	**297**	**669**

2032 Light Vehicles **WITHOUT SUBJECT DEVELOPMENT** (surveyed flows + TII growth factor + committed development)

From \ To	Malahide Road (S)	Baskin Lane (W)	Malahide Road (N)	TOTALS
Malahide Road (S)	0	1380	6390	**7770**
Baskin Lane (W)	899	0	3003	**3902**
Malahide Road (N)	5869	2996	0	**8865**
TOTALS	**6768**	**4376**	**9393**	**20537**

2032 Heavy Vehicles **WITHOUT SUBJECT DEVELOPMENT** (surveyed flows + TII growth factor + committed development)

From \ To	Malahide Road (S)	Baskin Lane (W)	Malahide Road (N)	TOTALS
Malahide Road (S)	0	34	241	**275**
Baskin Lane (W)	44	0	74	**118**
Malahide Road (N)	252	66	0	**318**
TOTALS	**296**	**100**	**315**	**711**

2032 Light Vehicles **WITH SUBJECT DEVELOPMENT IN OPERATION** (surveyed + TII growth factor + committed dev. + subject dev.)

From \ To	Malahide Road (S)	Baskin Lane (W)	Malahide Road (N)	TOTALS
Malahide Road (S)	0	1417	6635	**8052**
Baskin Lane (W)	932	0	3065	**3997**
Malahide Road (N)	6093	3066	0	**9159**
TOTALS	**7025**	**4483**	**9700**	**21208**

2032 Heavy Vehicles **WITH SUBJECT DEVELOPMENT IN OPERATION** (surveyed + TII growth factor + committed dev. + subject dev.)

From \ To	Malahide Road (S)	Baskin Lane (W)	Malahide Road (N)	TOTALS
Malahide Road (S)	0	34	243	**277**
Baskin Lane (W)	44	0	75	**119**
Malahide Road (N)	254	66	0	**320**
TOTALS	**298**	**100**	**318**	**716**

2042 Light Vehicles **WITHOUT SUBJECT DEVELOPMENT** (surveyed flows + TII growth factor + committed development)

From \ To	Malahide Road (S)	Baskin Lane (W)	Malahide Road (N)	TOTALS
Malahide Road (S)	0	1421	6564	**7985**
Baskin Lane (W)	925	0	3084	**4009**
Malahide Road (N)	6030	3076	0	**9106**
TOTALS	**6955**	**4497**	**9648**	**21100**

2042 Heavy Vehicles **WITHOUT SUBJECT DEVELOPMENT** (surveyed flows + TII growth factor + committed development)

From \ To	Malahide Road (S)	Baskin Lane (W)	Malahide Road (N)	TOTALS
Malahide Road (S)	0	36	256	**292**
Baskin Lane (W)	47	0	79	**126**
Malahide Road (N)	269	70	0	**339**
TOTALS	**316**	**106**	**335**	**757**

2042 Light Vehicles **WITH SUBJECT DEVELOPMENT IN OPERATION** (surveyed + TII growth factor + committed dev. + subject dev.)

From \ To	Malahide Road (S)	Baskin Lane (W)	Malahide Road (N)	TOTALS
Malahide Road (S)	0	1458	6809	**8267**
Baskin Lane (W)	958	0	3146	**4104**
Malahide Road (N)	6254	3146	0	**9400**
TOTALS	**7212**	**4604**	**9955**	**21771**

2042 Heavy Vehicles **WITH SUBJECT DEVELOPMENT IN OPERATION** (surveyed + TII growth factor + committed dev. + subject dev.)

From \ To	Malahide Road (S)	Baskin Lane (W)	Malahide Road (N)	TOTALS
Malahide Road (S)	0	36	258	**294**
Baskin Lane (W)	47	0	80	**127**
Malahide Road (N)	271	70	0	**341**
TOTALS	**318**	**106**	**338**	**762**

Junction 2 - Peak Hour Traffic Flow Matrices (Passenger Car Units)

2023 AM Peak (07:45-08:45) **SURVEYED TRAFFIC FLOWS**

From \ To	Malahide Road (N)	Chapel Road (E)	Malahide Road (S)	TOTALS
Malahide Road (N)	0	211	453	**664**
Chapel Road (E)	124	0	258	**382**
Malahide Road (S)	371	240	0	**611**
TOTALS	**495**	**451**	**711**	**1657**

2023 PM Peak (16:15-17:15) **SURVEYED TRAFFIC FLOWS**

From \ To	Malahide Road (N)	Chapel Road (E)	Malahide Road (S)	TOTALS
Malahide Road (N)	0	205	346	**551**
Chapel Road (E)	159	0	241	**400**
Malahide Road (S)	518	263	0	**781**
TOTALS	**677**	**468**	**587**	**1732**

2024 AM Peak **BASELINE TRAFFIC FLOWS** (surveyed flows + TII growth factor)

From \ To	Malahide Road (N)	Chapel Road (E)	Malahide Road (S)	TOTALS
Malahide Road (N)	0	214	459	**673**
Chapel Road (E)	126	0	261	**387**
Malahide Road (S)	376	243	0	**619**
TOTALS	**502**	**457**	**720**	**1679**

2024 PM Peak **BASELINE TRAFFIC FLOWS** (surveyed flows + TII growth factor)

From \ To	Malahide Road (N)	Chapel Road (E)	Malahide Road (S)	TOTALS
Malahide Road (N)	0	208	350	**558**
Chapel Road (E)	161	0	244	**405**
Malahide Road (S)	525	266	0	**791**
TOTALS	**686**	**474**	**594**	**1754**

2026 AM Peak **Other committed development flows**

From \ To	Malahide Road (N)	Chapel Road (E)	Malahide Road (S)	TOTALS
Malahide Road (N)	0	18	24	**42**
Chapel Road (E)	17	0	6	**23**
Malahide Road (S)	23	2	0	**25**
TOTALS	**40**	**20**	**30**	**90**

2026 PM Peak **Other committed development flows**

From \ To	Malahide Road (N)	Chapel Road (E)	Malahide Road (S)	TOTALS
Malahide Road (N)	0	24	32	**56**
Chapel Road (E)	25	0	2	**27**
Malahide Road (S)	51	6	0	**57**
TOTALS	**76**	**30**	**34**	**140**

2027 AM Peak **WITHOUT SUBJECT DEVELOPMENT** (surveyed flows + TII growth factor + committed development)

From \ To	Malahide Road (N)	Chapel Road (E)	Malahide Road (S)	TOTALS
Malahide Road (N)	0	240	500	**740**
Chapel Road (E)	147	0	277	**424**
Malahide Road (S)	413	254	0	**667**
TOTALS	**560**	**494**	**777**	**1831**

2027 PM Peak **WITHOUT SUBJECT DEVELOPMENT** (surveyed flows + TII growth factor + committed development)

From \ To	Malahide Road (N)	Chapel Road (E)	Malahide Road (S)	TOTALS
Malahide Road (N)	0	240	396	**636**
Chapel Road (E)	192	0	255	**447**
Malahide Road (S)	596	283	0	**879**
TOTALS	**788**	**523**	**651**	**1962**

2027 AM Peak **SUBJECT DEVELOPMENT FLOWS - OPERATIONAL STAGE**

From \ To	Malahide Road (N)	Chapel Road (E)	Malahide Road (S)	TOTALS
Malahide Road (N)	0	6	2	**8**
Chapel Road (E)	10	0	18	**28**
Malahide Road (S)	5	13	0	**18**
TOTALS	**15**	**19**	**20**	**54**

2027 PM Peak **SUBJECT DEVELOPMENT FLOWS - OPERATIONAL STAGE**

From \ To	Malahide Road (N)	Chapel Road (E)	Malahide Road (S)	TOTALS
Malahide Road (N)	0	7	4	**11**
Chapel Road (E)	5	0	10	**15**
Malahide Road (S)	2	15	0	**17**
TOTALS	**7**	**22**	**14**	**43**

2027 AM Peak **WITH SUBJECT DEVELOPMENT IN OPERATION** (surveyed + TII growth factor + committed dev. + subject dev.)

From \ To	Malahide Road (N)	Chapel Road (E)	Malahide Road (S)	TOTALS
Malahide Road (N)	0	246	502	**748**
Chapel Road (E)	157	0	295	**452**
Malahide Road (S)	418	267	0	**685**
TOTALS	**575**	**513**	**797**	**1885**

2027 PM Peak **WITH SUBJECT DEVELOPMENT IN OPERATION** (surveyed + TII growth factor + committed dev. + subject dev.)

From \ To	Malahide Road (N)	Chapel Road (E)	Malahide Road (S)	TOTALS
Malahide Road (N)	0	247	400	**647**
Chapel Road (E)	197	0	265	**462**
Malahide Road (S)	598	298	0	**896**
TOTALS	**795**	**545**	**665**	**2005**

2032 AM Peak **WITHOUT SUBJECT DEVELOPMENT** (surveyed flows + TII growth factor + committed development)

From \ To	Malahide Road (N)	Chapel Road (E)	Malahide Road (S)	TOTALS
Malahide Road (N)	0	250	522	**772**
Chapel Road (E)	153	0	289	**442**
Malahide Road (S)	431	266	0	**697**
TOTALS	**584**	**516**	**811**	**1911**

2032 PM Peak **WITHOUT SUBJECT DEVELOPMENT** (surveyed flows + TII growth factor + committed development)

From \ To	Malahide Road (N)	Chapel Road (E)	Malahide Road (S)	TOTALS
Malahide Road (N)	0	249	412	**661**
Chapel Road (E)	200	0	267	**467**
Malahide Road (S)	620	295	0	**915**
TOTALS	**820**	**544**	**679**	**2043**

2032 AM Peak **WITH SUBJECT DEVELOPMENT IN OPERATION** (surveyed + TII growth factor + committed dev. + subject dev.)

From \ To	Malahide Road (N)	Chapel Road (E)	Malahide Road (S)	TOTALS
Malahide Road (N)	0	256	524	**780**
Chapel Road (E)	163	0	307	**470**
Malahide Road (S)	436	279	0	**715**
TOTALS	**599**	**535**	**831**	**1965**

2032 PM Peak **WITH SUBJECT DEVELOPMENT IN OPERATION** (surveyed + TII growth factor + committed dev. + subject dev.)

From \ To	Malahide Road (N)	Chapel Road (E)	Malahide Road (S)	TOTALS
Malahide Road (N)	0	256	416	**672**
Chapel Road (E)	205	0	277	**482**
Malahide Road (S)	622	310	0	**932**
TOTALS	**827**	**566**	**693**	**2086**

2042 AM Peak **WITHOUT SUBJECT DEVELOPMENT** (surveyed flows + TII growth factor + committed development)

From \ To	Malahide Road (N)	Chapel Road (E)	Malahide Road (S)	TOTALS
Malahide Road (N)	0	257	536	**793**
Chapel Road (E)	157	0	298	**455**
Malahide Road (S)	443	273	0	**716**
TOTALS	**600**	**530**	**834**	**1964**

2042 PM Peak **WITHOUT SUBJECT DEVELOPMENT** (surveyed flows + TII growth factor + committed development)

From \ To	Malahide Road (N)	Chapel Road (E)	Malahide Road (S)	TOTALS
Malahide Road (N)	0	256	423	**679**
Chapel Road (E)	205	0	275	**480**
Malahide Road (S)	637	303	0	**940**
TOTALS	**842**	**559**	**698**	**2099**

2042 AM Peak **WITH SUBJECT DEVELOPMENT IN OPERATION** (surveyed + TII growth factor + committed dev. + subject dev.)

From \ To	Malahide Road (N)	Chapel Road (E)	Malahide Road (S)	TOTALS
Malahide Road (N)	0	263	538	**801**
Chapel Road (E)	167	0	316	**483**
Malahide Road (S)	448	286	0	**734**
TOTALS	**615**	**549**	**854**	**2018**

2042 PM Peak **WITH SUBJECT DEVELOPMENT IN OPERATION** (surveyed + TII growth factor + committed dev. + subject dev.)

From \ To	Malahide Road (N)	Chapel Road (E)	Malahide Road (S)	TOTALS
Malahide Road (N)	0	263	427	**690**
Chapel Road (E)	210	0	285	**495**
Malahide Road (S)	639	318	0	**957**
TOTALS	**849**	**581**	**712**	**2142**

Junction 2 - AADT Traffic Flow Matrices (Light and Heavy Vehicles)

2023 Light Vehicles AADT **SURVEYED TRAFFIC FLOWS**

From \ To	Malahide Road (N)	Chapel Road (E)	Malahide Road (S)	TOTALS
Malahide Road (N)	0	2139	4726	**6865**
Chapel Road (E)	1650	0	2750	**4400**
Malahide Road (S)	5053	2824	0	**7877**
TOTALS	**6703**	**4963**	**7476**	**19142**

2023 Heavy Vehicles AADT **SURVEYED TRAFFIC FLOWS**

From \ To	Malahide Road (N)	Chapel Road (E)	Malahide Road (S)	TOTALS
Malahide Road (N)	0	30	206	**236**
Chapel Road (E)	43	0	63	**106**
Malahide Road (S)	208	65	0	**273**
TOTALS	**251**	**95**	**269**	**615**

2024 Light Vehicles **BASELINE TRAFFIC FLOWS** (surveyed flows + TII growth factor)

From \ To	Malahide Road (N)	Chapel Road (E)	Malahide Road (S)	TOTALS
Malahide Road (N)	0	2166	4786	**6952**
Chapel Road (E)	1671	0	2785	**4456**
Malahide Road (S)	5117	2860	0	**7977**
TOTALS	**6788**	**5026**	**7571**	**19385**

2024 Heavy Vehicles **BASELINE TRAFFIC FLOWS** (surveyed flows + TII growth factor)

From \ To	Malahide Road (N)	Chapel Road (E)	Malahide Road (S)	TOTALS
Malahide Road (N)	0	31	210	**241**
Chapel Road (E)	44	0	64	**108**
Malahide Road (S)	212	66	0	**278**
TOTALS	**256**	**97**	**274**	**627**

2026 Light Vehicles **Other committed development flows**

From \ To	Malahide Road (N)	Chapel Road (E)	Malahide Road (S)	TOTALS
Malahide Road (N)	0	405	588	**993**
Chapel Road (E)	370	0	73	**443**
Malahide Road (S)	614	75	0	**689**
TOTALS	**984**	**480**	**661**	**2125**

2026 Heavy Vehicles **Other committed development flows**

From \ To	Malahide Road (N)	Chapel Road (E)	Malahide Road (S)	TOTALS
Malahide Road (N)	0	3	7	**10**
Chapel Road (E)	3	0	1	**4**
Malahide Road (S)	6	1	0	**7**
TOTALS	**9**	**4**	**8**	**21**

2027 Light Vehicles **WITHOUT SUBJECT DEVELOPMENT** (surveyed flows + TII growth factor + committed development)

From \ To	Malahide Road (N)	Chapel Road (E)	Malahide Road (S)	TOTALS
Malahide Road (N)	0	2655	5559	**8214**
Chapel Road (E)	2105	0	2965	**5070**
Malahide Road (S)	5929	3045	0	**8974**
TOTALS	**8034**	**5700**	**8524**	**22258**

2027 Heavy Vehicles **WITHOUT SUBJECT DEVELOPMENT** (surveyed flows + TII growth factor + committed development)

From \ To	Malahide Road (N)	Chapel Road (E)	Malahide Road (S)	TOTALS
Malahide Road (N)	0	36	230	**266**
Chapel Road (E)	50	0	69	**119**
Malahide Road (S)	232	71	0	**303**
TOTALS	**282**	**107**	**299**	**688**

2027 Light Vehicles **SUBJECT DEVELOPMENT FLOWS - OPERATIONAL STAGE**

From \ To	Malahide Road (N)	Chapel Road (E)	Malahide Road (S)	TOTALS
Malahide Road (N)	0	127	67	**194**
Chapel Road (E)	125	0	227	**352**
Malahide Road (S)	66	241	0	**307**
TOTALS	**191**	**368**	**294**	**853**

2027 Heavy Vehicles **SUBJECT DEVELOPMENT FLOWS - OPERATIONAL STAGE**

From \ To	Malahide Road (N)	Chapel Road (E)	Malahide Road (S)	TOTALS
Malahide Road (N)	0	1	1	**2**
Chapel Road (E)	1	0	1	**2**
Malahide Road (S)	1	2	0	**3**
TOTALS	**2**	**3**	**2**	**7**

2027 Light Vehicles **WITH SUBJECT DEVELOPMENT IN OPERATION** (surveyed + TII growth factor + committed dev. + subject dev.)

From \ To	Malahide Road (N)	Chapel Road (E)	Malahide Road (S)	TOTALS
Malahide Road (N)	0	2782	5626	**8408**
Chapel Road (E)	2230	0	3192	**5422**
Malahide Road (S)	5995	3286	0	**9281**
TOTALS	**8225**	**6068**	**8818**	**23111**

2027 Heavy Vehicles **WITH SUBJECT DEVELOPMENT IN OPERATION** (surveyed + TII growth factor + committed dev. + subject dev.)

From \ To	Malahide Road (N)	Chapel Road (E)	Malahide Road (S)	TOTALS
Malahide Road (N)	0	37	231	**268**
Chapel Road (E)	51	0	70	**121**
Malahide Road (S)	233	73	0	**306**
TOTALS	**284**	**110**	**301**	**695**

2032 Light Vehicles **WITHOUT SUBJECT DEVELOPMENT** (surveyed flows + TII growth factor + committed development)

From \ To	Malahide Road (N)	Chapel Road (E)	Malahide Road (S)	TOTALS
Malahide Road (N)	0	2755	5780	**8535**
Chapel Road (E)	2183	0	3094	**5277**
Malahide Road (S)	6166	3178	0	**9344**
TOTALS	**8349**	**5933**	**8874**	**23156**

2032 Heavy Vehicles **WITHOUT SUBJECT DEVELOPMENT** (surveyed flows + TII growth factor + committed development)

From \ To	Malahide Road (N)	Chapel Road (E)	Malahide Road (S)	TOTALS
Malahide Road (N)	0	38	246	**284**
Chapel Road (E)	53	0	74	**127**
Malahide Road (S)	248	77	0	**325**
TOTALS	**301**	**115**	**320**	**736**

2032 Light Vehicles **WITH SUBJECT DEVELOPMENT IN OPERATION** (surveyed + TII growth factor + committed dev. + subject dev.)

From \ To	Malahide Road (N)	Chapel Road (E)	Malahide Road (S)	TOTALS
Malahide Road (N)	0	2882	5847	**8729**
Chapel Road (E)	2308	0	3321	**5629**
Malahide Road (S)	6232	3419	0	**9651**
TOTALS	**8540**	**6301**	**9168**	**24009**

2032 Heavy Vehicles **WITH SUBJECT DEVELOPMENT IN OPERATION** (surveyed + TII growth factor + committed dev. + subject dev.)

From \ To	Malahide Road (N)	Chapel Road (E)	Malahide Road (S)	TOTALS
Malahide Road (N)	0	39	247	**286**
Chapel Road (E)	54	0	75	**129**
Malahide Road (S)	249	79	0	**328**
TOTALS	**303**	**118**	**322**	**743**

2042 Light Vehicles **WITHOUT SUBJECT DEVELOPMENT** (surveyed flows + TII growth factor + committed development)

From \ To	Malahide Road (N)	Chapel Road (E)	Malahide Road (S)	TOTALS
Malahide Road (N)	0	2824	5933	**8757**
Chapel Road (E)	2236	0	3183	**5419**
Malahide Road (S)	6329	3269	0	**9598**
TOTALS	**8565**	**6093**	**9116**	**23774**

2042 Heavy Vehicles **WITHOUT SUBJECT DEVELOPMENT** (surveyed flows + TII growth factor + committed development)

From \ To	Malahide Road (N)	Chapel Road (E)	Malahide Road (S)	TOTALS
Malahide Road (N)	0	40	262	**302**
Chapel Road (E)	56	0	79	**135**
Malahide Road (S)	264	82	0	**346**
TOTALS	**320**	**122**	**341**	**783**

2042 Light Vehicles **WITH SUBJECT DEVELOPMENT IN OPERATION** (surveyed + TII growth factor + committed dev. + subject dev.)

From \ To	Malahide Road (N)	Chapel Road (E)	Malahide Road (S)	TOTALS
Malahide Road (N)	0	2951	6000	**8951**
Chapel Road (E)	2361	0	3410	**5771**
Malahide Road (S)	6395	3510	0	**9905**
TOTALS	**8756**	**6461**	**9410**	**24627**

2042 Heavy Vehicles **WITH SUBJECT DEVELOPMENT IN OPERATION** (surveyed + TII growth factor + committed dev. + subject dev.)

From \ To	Malahide Road (N)	Chapel Road (E)	Malahide Road (S)	TOTALS
Malahide Road (N)	0	41	263	**304**
Chapel Road (E)	57	0	80	**137**
Malahide Road (S)	265	84	0	**349**
TOTALS	**322**	**125**	**343**	**790**

Junction 3 - Peak Hour Traffic Flow Matrices (Passenger Car Units)

2023 AM Peak (07:45-08:45) **SURVEYED TRAFFIC FLOWS**

From \ To	Chapel Road (E)	Gandon Lane (S)	Chapel Road (W)	Kinsealy Lane (N)	TOTALS
Chapel Road (E)	0	1	312	31	**344**
Gandon Lane (S)	0	0	1	6	**7**
Chapel Road (W)	379	3	0	71	**453**
Kinsealy Lane (N)	62	2	49	0	**113**
TOTALS	**441**	**6**	**362**	**108**	**917**

2023 PM Peak (16:15-17:15) **SURVEYED TRAFFIC FLOWS**

From \ To	Chapel Road (E)	Gandon Lane (S)	Chapel Road (W)	Kinsealy Lane (N)	TOTALS
Chapel Road (E)	0	2	322	51	**375**
Gandon Lane (S)	4	0	4	1	**9**
Chapel Road (W)	362	6	0	76	**444**
Kinsealy Lane (N)	45	3	58	0	**106**
TOTALS	**411**	**11**	**384**	**128**	**934**

2024 AM Peak **BASELINE TRAFFIC FLOWS** (surveyed flows + TII growth factor)

From \ To	Chapel Road (E)	Gandon Lane (S)	Chapel Road (W)	Kinsealy Lane (N)	TOTALS
Chapel Road (E)	0	1	316	31	**348**
Gandon Lane (S)	0	0	1	6	**7**
Chapel Road (W)	384	3	0	72	**459**
Kinsealy Lane (N)	63	2	50	0	**115**
TOTALS	**447**	**6**	**367**	**109**	**929**

2024 PM Peak **BASELINE TRAFFIC FLOWS** (surveyed flows + TII growth factor)

From \ To	Chapel Road (E)	Gandon Lane (S)	Chapel Road (W)	Kinsealy Lane (N)	TOTALS
Chapel Road (E)	0	2	326	52	**380**
Gandon Lane (S)	4	0	4	1	**9**
Chapel Road (W)	367	6	0	77	**450**
Kinsealy Lane (N)	46	3	59	0	**108**
TOTALS	**417**	**11**	**389**	**130**	**947**

2026 AM Peak **Other committed development flows**

From \ To	Chapel Road (E)	Gandon Lane (S)	Chapel Road (W)	Kinsealy Lane (N)	TOTALS
Chapel Road (E)	0	0	10	1	**11**
Gandon Lane (S)	0	0	0	0	**0**
Chapel Road (W)	13	0	0	7	**20**
Kinsealy Lane (N)	3	0	13	0	**16**
TOTALS	**16**	**0**	**23**	**8**	**47**

2026 PM Peak **Other committed development flows**

From \ To	Chapel Road (E)	Gandon Lane (S)	Chapel Road (W)	Kinsealy Lane (N)	TOTALS
Chapel Road (E)	0	0	18	2	**20**
Gandon Lane (S)	0	0	0	0	**0**
Chapel Road (W)	16	0	0	14	**30**
Kinsealy Lane (N)	1	0	9	0	**10**
TOTALS	**17**	**0**	**27**	**16**	**60**

2027 AM Peak **WITHOUT SUBJECT DEVELOPMENT** (surveyed flows + TII growth factor + committed development)

From \ To	Chapel Road (E)	Gandon Lane (S)	Chapel Road (W)	Kinsealy Lane (N)	TOTALS
Chapel Road (E)	0	1	338	34	**373**
Gandon Lane (S)	0	0	1	6	**7**
Chapel Road (W)	412	3	0	82	**497**
Kinsealy Lane (N)	68	2	65	0	**135**
TOTALS	**480**	**6**	**404**	**122**	**1012**

2027 PM Peak **WITHOUT SUBJECT DEVELOPMENT** (surveyed flows + TII growth factor + committed development)

From \ To	Chapel Road (E)	Gandon Lane (S)	Chapel Road (W)	Kinsealy Lane (N)	TOTALS
Chapel Road (E)	0	2	357	56	**415**
Gandon Lane (S)	4	0	4	1	**9**
Chapel Road (W)	397	6	0	94	**497**
Kinsealy Lane (N)	48	3	70	0	**121**
TOTALS	**449**	**11**	**431**	**151**	**1042**

2027 AM Peak **SUBJECT DEVELOPMENT FLOWS - OPERATIONAL STAGE**

From \ To	Chapel Road (E)	Gandon Lane (S)	Chapel Road (W)	Kinsealy Lane (N)	TOTALS
Chapel Road (E)	0	3	1	0	**4**
Gandon Lane (S)	9	0	27	2	**38**
Chapel Road (W)	5	13	0	1	**19**
Kinsealy Lane (N)	0	1	0	0	**1**
TOTALS	**14**	**17**	**28**	**3**	**62**

2027 PM Peak **SUBJECT DEVELOPMENT FLOWS - OPERATIONAL STAGE**

From \ To	Chapel Road (E)	Gandon Lane (S)	Chapel Road (W)	Kinsealy Lane (N)	TOTALS
Chapel Road (E)	0	5	3	0	**8**
Gandon Lane (S)	3	0	11	1	**15**
Chapel Road (W)	1	21	0	0	**22**
Kinsealy Lane (N)	0	1	1	0	**2**
TOTALS	**4**	**27**	**15**	**1**	**47**

2027 AM Peak **WITH SUBJECT DEVELOPMENT IN OPERATION** (surveyed + TII growth factor + committed dev. + subject dev.)

From \ To	Chapel Road (E)	Gandon Lane (S)	Chapel Road (W)	Kinsealy Lane (N)	TOTALS
Chapel Road (E)	0	4	339	34	**377**
Gandon Lane (S)	9	0	28	8	**45**
Chapel Road (W)	417	16	0	83	**516**
Kinsealy Lane (N)	68	3	65	0	**136**
TOTALS	**494**	**23**	**432**	**125**	**1074**

2027 PM Peak **WITH SUBJECT DEVELOPMENT IN OPERATION** (surveyed + TII growth factor + committed dev. + subject dev.)

From \ To	Chapel Road (E)	Gandon Lane (S)	Chapel Road (W)	Kinsealy Lane (N)	TOTALS
Chapel Road (E)	0	7	360	56	**423**
Gandon Lane (S)	7	0	15	2	**24**
Chapel Road (W)	398	27	0	94	**519**
Kinsealy Lane (N)	48	4	71	0	**123**
TOTALS	**453**	**38**	**446**	**152**	**1089**

2032 AM Peak **WITHOUT SUBJECT DEVELOPMENT** (surveyed flows + TII growth factor + committed development)

From \ To	Chapel Road (E)	Gandon Lane (S)	Chapel Road (W)	Kinsealy Lane (N)	TOTALS
Chapel Road (E)	0	1	353	35	**389**
Gandon Lane (S)	0	0	1	7	**8**
Chapel Road (W)	429	3	0	85	**517**
Kinsealy Lane (N)	71	2	67	0	**140**
TOTALS	**500**	**6**	**421**	**127**	**1054**

2032 PM Peak **WITHOUT SUBJECT DEVELOPMENT** (surveyed flows + TII growth factor + committed development)

From \ To	Chapel Road (E)	Gandon Lane (S)	Chapel Road (W)	Kinsealy Lane (N)	TOTALS
Chapel Road (E)	0	2	372	58	**432**
Gandon Lane (S)	4	0	4	1	**9**
Chapel Road (W)	414	7	0	98	**519**
Kinsealy Lane (N)	50	3	73	0	**126**
TOTALS	**468**	**12**	**449**	**157**	**1086**

2032 AM Peak **WITH SUBJECT DEVELOPMENT IN OPERATION** (surveyed + TII growth factor + committed dev. + subject dev.)

From \ To	Chapel Road (E)	Gandon Lane (S)	Chapel Road (W)	Kinsealy Lane (N)	TOTALS
Chapel Road (E)	0	4	354	35	**393**
Gandon Lane (S)	9	0	28	9	**46**
Chapel Road (W)	434	16	0	86	**536**
Kinsealy Lane (N)	71	3	67	0	**141**
TOTALS	**514**	**23**	**449**	**130**	**1116**

2032 PM Peak **WITH SUBJECT DEVELOPMENT IN OPERATION** (surveyed + TII growth factor + committed dev. + subject dev.)

From \ To	Chapel Road (E)	Gandon Lane (S)	Chapel Road (W)	Kinsealy Lane (N)	TOTALS
Chapel Road (E)	0	7	375	58	**440**
Gandon Lane (S)	7	0	15	2	**24**
Chapel Road (W)	415	28	0	98	**541**
Kinsealy Lane (N)	50	4	74	0	**128**
TOTALS	**472**	**39**	**464**	**158**	**1133**

2042 AM Peak **WITHOUT SUBJECT DEVELOPMENT** (surveyed flows + TII growth factor + committed development)

From \ To	Chapel Road (E)	Gandon Lane (S)	Chapel Road (W)	Kinsealy Lane (N)	TOTALS
Chapel Road (E)	0	1	363	36	**400**
Gandon Lane (S)	0	0	1	7	**8**
Chapel Road (W)	442	3	0	87	**532**
Kinsealy Lane (N)	73	2	68	0	**143**
TOTALS	**515**	**6**	**432**	**130**	**1083**

2042 PM Peak **WITHOUT SUBJECT DEVELOPMENT** (surveyed flows + TII growth factor + committed development)

From \ To	Chapel Road (E)	Gandon Lane (S)	Chapel Road (W)	Kinsealy Lane (N)	TOTALS
Chapel Road (E)	0	2	382	60	**444**
Gandon Lane (S)	5	0	5	1	**11**
Chapel Road (W)	425	7	0	100	**532**
Kinsealy Lane (N)	52	3	75	0	**130**
TOTALS	**482**	**12**	**462**	**161**	**1117**

2042 AM Peak **WITH SUBJECT DEVELOPMENT IN OPERATION** (surveyed + TII growth factor + committed dev. + subject dev.)

From \ To	Chapel Road (E)	Gandon Lane (S)	Chapel Road (W)	Kinsealy Lane (N)	TOTALS
Chapel Road (E)	0	4	364	36	**404**
Gandon Lane (S)	9	0	28	9	**46**
Chapel Road (W)	447	16	0	88	**551**
Kinsealy Lane (N)	73	3	68	0	**144**
TOTALS	**529**	**23**	**460**	**133**	**1145**

2042 PM Peak **WITH SUBJECT DEVELOPMENT IN OPERATION** (surveyed + TII growth factor + committed dev. + subject dev.)

From \ To	Chapel Road (E)	Gandon Lane (S)	Chapel Road (W)	Kinsealy Lane (N)	TOTALS
Chapel Road (E)	0	7	385	60	**452**
Gandon Lane (S)	8	0	16	2	**26**
Chapel Road (W)	426	28	0	100	**554**
Kinsealy Lane (N)	52	4	76	0	**132**
TOTALS	**486**	**39**	**477**	**162**	**1164**

Junction 3 - AADT Traffic Flow Matrices (Light and Heavy Vehicles)

2023 Light Vehicles AADT — **SURVEYED TRAFFIC FLOWS**

From \ To	Chapel Road (E)	Gandon Lane (S)	Chapel Road (W)	Kinsealy Lane (N)	TOTALS
Chapel Road (E)	0	17	3584	412	4013
Gandon Lane (S)	30	0	31	23	84
Chapel Road (W)	4009	46	0	768	4823
Kinsealy Lane (N)	449	29	667	0	1145
TOTALS	4488	92	4282	1203	10065

2023 Heavy Vehicles AADT — **SURVEYED TRAFFIC FLOWS**

From \ To	Chapel Road (E)	Gandon Lane (S)	Chapel Road (W)	Kinsealy Lane (N)	TOTALS
Chapel Road (E)	0	0	70	8	78
Gandon Lane (S)	0	0	0	0	0
Chapel Road (W)	58	0	0	35	93
Kinsealy Lane (N)	3	0	36	0	39
TOTALS	61	0	106	43	210

2024 Light Vehicles — **BASELINE TRAFFIC FLOWS** (surveyed flows + TII growth factor)

From \ To	Chapel Road (E)	Gandon Lane (S)	Chapel Road (W)	Kinsealy Lane (N)	TOTALS
Chapel Road (E)	0	17	3630	417	4064
Gandon Lane (S)	30	0	31	23	84
Chapel Road (W)	4060	47	0	778	4885
Kinsealy Lane (N)	455	29	675	0	1159
TOTALS	4545	93	4336	1218	10192

2024 Heavy Vehicles — **BASELINE TRAFFIC FLOWS** (surveyed flows + TII growth factor)

From \ To	Chapel Road (E)	Gandon Lane (S)	Chapel Road (W)	Kinsealy Lane (N)	TOTALS
Chapel Road (E)	0	0	71	8	79
Gandon Lane (S)	0	0	0	0	0
Chapel Road (W)	59	0	0	36	95
Kinsealy Lane (N)	3	0	37	0	40
TOTALS	62	0	108	44	214

2026 Light Vehicles — **Other committed development flows**

From \ To	Chapel Road (E)	Gandon Lane (S)	Chapel Road (W)	Kinsealy Lane (N)	TOTALS
Chapel Road (E)	0	0	248	30	278
Gandon Lane (S)	0	0	0	0	0
Chapel Road (W)	278	0	0	202	480
Kinsealy Lane (N)	34	0	195	0	229
TOTALS	312	0	443	232	987

2026 Heavy Vehicles — **Other committed development flows**

From \ To	Chapel Road (E)	Gandon Lane (S)	Chapel Road (W)	Kinsealy Lane (N)	TOTALS
Chapel Road (E)	0	0	1	0	1
Gandon Lane (S)	0	0	0	0	0
Chapel Road (W)	1	0	0	3	4
Kinsealy Lane (N)	0	0	3	0	3
TOTALS	1	0	4	3	8

2027 Light Vehicles — **WITHOUT SUBJECT DEVELOPMENT** (surveyed flows + TII growth factor + committed development)

From \ To	Chapel Road (E)	Gandon Lane (S)	Chapel Road (W)	Kinsealy Lane (N)	TOTALS
Chapel Road (E)	0	18	4018	463	4499
Gandon Lane (S)	32	0	33	24	89
Chapel Road (W)	4495	48	0	1010	5553
Kinsealy Lane (N)	506	31	897	0	1434
TOTALS	5033	97	4948	1497	11575

2027 Heavy Vehicles — **WITHOUT SUBJECT DEVELOPMENT** (surveyed flows + TII growth factor + committed development)

From \ To	Chapel Road (E)	Gandon Lane (S)	Chapel Road (W)	Kinsealy Lane (N)	TOTALS
Chapel Road (E)	0	0	77	9	86
Gandon Lane (S)	0	0	0	0	0
Chapel Road (W)	64	0	0	41	105
Kinsealy Lane (N)	3	0	42	0	45
TOTALS	67	0	119	50	236

2027 Light Vehicles — **SUBJECT DEVELOPMENT FLOWS - OPERATIONAL STAGE**

From \ To	Chapel Road (E)	Gandon Lane (S)	Chapel Road (W)	Kinsealy Lane (N)	TOTALS
Chapel Road (E)	0	75	39	0	114
Gandon Lane (S)	84	0	302	22	408
Chapel Road (W)	44	312	0	12	368
Kinsealy Lane (N)	0	21	11	0	32
TOTALS	128	408	352	34	922

2027 Heavy Vehicles — **SUBJECT DEVELOPMENT FLOWS - OPERATIONAL STAGE**

From \ To	Chapel Road (E)	Gandon Lane (S)	Chapel Road (W)	Kinsealy Lane (N)	TOTALS
Chapel Road (E)	0	0	0	0	0
Gandon Lane (S)	0	0	2	0	2
Chapel Road (W)	0	3	0	0	3
Kinsealy Lane (N)	0	0	0	0	0
TOTALS	0	3	2	0	5

2027 Light Vehicles — **WITH SUBJECT DEVELOPMENT IN OPERATION** (surveyed + TII growth factor + committed dev. + subject dev.)

From \ To	Chapel Road (E)	Gandon Lane (S)	Chapel Road (W)	Kinsealy Lane (N)	TOTALS
Chapel Road (E)	0	93	4057	463	4613
Gandon Lane (S)	116	0	335	46	497
Chapel Road (W)	4539	360	0	1022	5921
Kinsealy Lane (N)	506	52	908	0	1466
TOTALS	5161	505	5300	1531	12497

2027 Heavy Vehicles — **WITH SUBJECT DEVELOPMENT IN OPERATION** (surveyed + TII growth factor + committed dev. + subject dev.)

From \ To	Chapel Road (E)	Gandon Lane (S)	Chapel Road (W)	Kinsealy Lane (N)	TOTALS
Chapel Road (E)	0	0	77	9	86
Gandon Lane (S)	0	0	2	0	2
Chapel Road (W)	64	3	0	41	108
Kinsealy Lane (N)	3	0	42	0	45
TOTALS	67	3	121	50	241

2032 Light Vehicles — **WITHOUT SUBJECT DEVELOPMENT** (surveyed flows + TII growth factor + committed development)

From \ To	Chapel Road (E)	Gandon Lane (S)	Chapel Road (W)	Kinsealy Lane (N)	TOTALS
Chapel Road (E)	0	19	4186	483	4688
Gandon Lane (S)	33	0	34	25	92
Chapel Road (W)	4683	51	0	1046	5780
Kinsealy Lane (N)	527	32	928	0	1487
TOTALS	5243	102	5148	1554	12047

2032 Heavy Vehicles — **WITHOUT SUBJECT DEVELOPMENT** (surveyed flows + TII growth factor + committed development)

From \ To	Chapel Road (E)	Gandon Lane (S)	Chapel Road (W)	Kinsealy Lane (N)	TOTALS
Chapel Road (E)	0	0	82	9	91
Gandon Lane (S)	0	0	0	0	0
Chapel Road (W)	68	0	0	44	112
Kinsealy Lane (N)	3	0	45	0	48
TOTALS	71	0	127	53	251

2032 Light Vehicles — **WITH SUBJECT DEVELOPMENT IN OPERATION** (surveyed + TII growth factor + committed dev. + subject dev.)

From \ To	Chapel Road (E)	Gandon Lane (S)	Chapel Road (W)	Kinsealy Lane (N)	TOTALS
Chapel Road (E)	0	94	4225	483	4802
Gandon Lane (S)	117	0	336	47	500
Chapel Road (W)	4727	363	0	1058	6148
Kinsealy Lane (N)	527	53	939	0	1519
TOTALS	5371	510	5500	1588	12969

2032 Heavy Vehicles — **WITH SUBJECT DEVELOPMENT IN OPERATION** (surveyed + TII growth factor + committed dev. + subject dev.)

From \ To	Chapel Road (E)	Gandon Lane (S)	Chapel Road (W)	Kinsealy Lane (N)	TOTALS
Chapel Road (E)	0	0	82	9	91
Gandon Lane (S)	0	0	2	0	2
Chapel Road (W)	68	3	0	44	115
Kinsealy Lane (N)	3	0	45	0	48
TOTALS	71	3	129	53	256

2042 Light Vehicles — **WITHOUT SUBJECT DEVELOPMENT** (surveyed flows + TII growth factor + committed development)

From \ To	Chapel Road (E)	Gandon Lane (S)	Chapel Road (W)	Kinsealy Lane (N)	TOTALS
Chapel Road (E)	0	19	4301	496	4816
Gandon Lane (S)	34	0	35	26	95
Chapel Road (W)	4812	52	0	1071	5935
Kinsealy Lane (N)	542	33	949	0	1524
TOTALS	5388	104	5285	1593	12370

2042 Heavy Vehicles — **WITHOUT SUBJECT DEVELOPMENT** (surveyed flows + TII growth factor + committed development)

From \ To	Chapel Road (E)	Gandon Lane (S)	Chapel Road (W)	Kinsealy Lane (N)	TOTALS
Chapel Road (E)	0	0	88	10	98
Gandon Lane (S)	0	0	0	0	0
Chapel Road (W)	73	0	0	46	119
Kinsealy Lane (N)	4	0	48	0	52
TOTALS	77	0	136	56	269

2042 Light Vehicles — **WITH SUBJECT DEVELOPMENT IN OPERATION** (surveyed + TII growth factor + committed dev. + subject dev.)

From \ To	Chapel Road (E)	Gandon Lane (S)	Chapel Road (W)	Kinsealy Lane (N)	TOTALS
Chapel Road (E)	0	94	4340	496	4930
Gandon Lane (S)	118	0	337	48	503
Chapel Road (W)	4856	364	0	1083	6303
Kinsealy Lane (N)	542	54	960	0	1556
TOTALS	5516	512	5637	1627	13292

2042 Heavy Vehicles — **WITH SUBJECT DEVELOPMENT IN OPERATION** (surveyed + TII growth factor + committed dev. + subject dev.)

From \ To	Chapel Road (E)	Gandon Lane (S)	Chapel Road (W)	Kinsealy Lane (N)	TOTALS
Chapel Road (E)	0	0	88	10	98
Gandon Lane (S)	0	0	2	0	2
Chapel Road (W)	73	3	0	46	122
Kinsealy Lane (N)	4	0	48	0	52
TOTALS	77	3	138	56	274

Junction 4 - Peak Hour Traffic Flow Matrices (Passenger Car Units)

2023 AM Peak (07:45-08:45) **SURVEYED TRAFFIC FLOWS**

To / From	Malahide Road (N)	MPET School (E)	Malahide Road (S)	TOTALS
Malahide Road (N)	0	68	502	**570**
MPET School (E)	42	0	39	**81**
Malahide Road (S)	479	31	0	**510**
TOTALS	**521**	**99**	**541**	**1161**

2023 PM Peak (16:15-17:15) **SURVEYED TRAFFIC FLOWS**

To / From	Malahide Road (N)	MPET School (E)	Malahide Road (S)	TOTALS
Malahide Road (N)	0	4	430	**434**
MPET School (E)	7	0	3	**10**
Malahide Road (S)	756	4	0	**760**
TOTALS	**763**	**8**	**433**	**1204**

2024 AM Peak **BASELINE TRAFFIC FLOWS** (surveyed flows + TII growth factor)

To / From	Malahide Road (N)	MPET School (E)	Malahide Road (S)	TOTALS
Malahide Road (N)	0	69	508	**577**
MPET School (E)	43	0	39	**82**
Malahide Road (S)	485	31	0	**516**
TOTALS	**528**	**100**	**547**	**1175**

2024 PM Peak **BASELINE TRAFFIC FLOWS** (surveyed flows + TII growth factor)

To / From	Malahide Road (N)	MPET School (E)	Malahide Road (S)	TOTALS
Malahide Road (N)	0	4	435	**439**
MPET School (E)	7	0	3	**10**
Malahide Road (S)	766	4	0	**770**
TOTALS	**773**	**8**	**438**	**1219**

2026 AM Peak **Other committed development flows**

To / From	Malahide Road (N)	MPET School (E)	Malahide Road (S)	TOTALS
Malahide Road (N)	0	0	19	**19**
MPET School (E)	0	0	0	**0**
Malahide Road (S)	16	0	0	**16**
TOTALS	**16**	**0**	**19**	**35**

2026 PM Peak **Other committed development flows**

To / From	Malahide Road (N)	MPET School (E)	Malahide Road (S)	TOTALS
Malahide Road (N)	0	0	18	**18**
MPET School (E)	0	0	0	**0**
Malahide Road (S)	41	0	0	**41**
TOTALS	**41**	**0**	**18**	**59**

2027 AM Peak **WITHOUT SUBJECT DEVELOPMENT** (surveyed flows + TII growth factor + committed development)

To / From	Malahide Road (N)	MPET School (E)	Malahide Road (S)	TOTALS
Malahide Road (N)	0	72	547	**619**
MPET School (E)	44	0	41	**85**
Malahide Road (S)	520	33	0	**553**
TOTALS	**564**	**105**	**588**	**1257**

2027 PM Peak **WITHOUT SUBJECT DEVELOPMENT** (surveyed flows + TII growth factor + committed development)

To / From	Malahide Road (N)	MPET School (E)	Malahide Road (S)	TOTALS
Malahide Road (N)	0	4	470	**474**
MPET School (E)	7	0	3	**10**
Malahide Road (S)	836	4	0	**840**
TOTALS	**843**	**8**	**473**	**1324**

2027 AM Peak **SUBJECT DEVELOPMENT FLOWS - OPERATIONAL STAGE**

To / From	Malahide Road (N)	MPET School (E)	Malahide Road (S)	TOTALS
Malahide Road (N)	0	0	15	**15**
MPET School (E)	0	0	0	**0**
Malahide Road (S)	19	0	0	**19**
TOTALS	**19**	**0**	**15**	**34**

2027 PM Peak **SUBJECT DEVELOPMENT FLOWS - OPERATIONAL STAGE**

To / From	Malahide Road (N)	MPET School (E)	Malahide Road (S)	TOTALS
Malahide Road (N)	0	0	13	**13**
MPET School (E)	0	0	0	**0**
Malahide Road (S)	14	0	0	**14**
TOTALS	**14**	**0**	**13**	**27**

2027 AM Peak **WITH SUBJECT DEVELOPMENT IN OPERATION** (surveyed + TII growth factor + committed dev. + subject dev.)

To / From	Malahide Road (N)	MPET School (E)	Malahide Road (S)	TOTALS
Malahide Road (N)	0	72	562	**634**
MPET School (E)	44	0	41	**85**
Malahide Road (S)	539	33	0	**572**
TOTALS	**583**	**105**	**603**	**1291**

2027 PM Peak **WITH SUBJECT DEVELOPMENT IN OPERATION** (surveyed + TII growth factor + committed dev. + subject dev.)

To / From	Malahide Road (N)	MPET School (E)	Malahide Road (S)	TOTALS
Malahide Road (N)	0	4	483	**487**
MPET School (E)	7	0	3	**10**
Malahide Road (S)	850	4	0	**854**
TOTALS	**857**	**8**	**486**	**1351**

2032 AM Peak **WITHOUT SUBJECT DEVELOPMENT** (surveyed flows + TII growth factor + committed development)

To / From	Malahide Road (N)	MPET School (E)	Malahide Road (S)	TOTALS
Malahide Road (N)	0	75	571	**646**
MPET School (E)	46	0	43	**89**
Malahide Road (S)	542	34	0	**576**
TOTALS	**588**	**109**	**614**	**1311**

2032 PM Peak **WITHOUT SUBJECT DEVELOPMENT** (surveyed flows + TII growth factor + committed development)

To / From	Malahide Road (N)	MPET School (E)	Malahide Road (S)	TOTALS
Malahide Road (N)	0	4	490	**494**
MPET School (E)	8	0	3	**11**
Malahide Road (S)	872	4	0	**876**
TOTALS	**880**	**8**	**493**	**1381**

2032 AM Peak **WITH SUBJECT DEVELOPMENT IN OPERATION** (surveyed + TII growth factor + committed dev. + subject dev.)

To / From	Malahide Road (N)	MPET School (E)	Malahide Road (S)	TOTALS
Malahide Road (N)	0	75	586	**661**
MPET School (E)	46	0	43	**89**
Malahide Road (S)	561	34	0	**595**
TOTALS	**607**	**109**	**629**	**1345**

2032 PM Peak **WITH SUBJECT DEVELOPMENT IN OPERATION** (surveyed + TII growth factor + committed dev. + subject dev.)

To / From	Malahide Road (N)	MPET School (E)	Malahide Road (S)	TOTALS
Malahide Road (N)	0	4	503	**507**
MPET School (E)	8	0	3	**11**
Malahide Road (S)	886	4	0	**890**
TOTALS	**894**	**8**	**506**	**1408**

2042 AM Peak **WITHOUT SUBJECT DEVELOPMENT** (surveyed flows + TII growth factor + committed development)

To / From	Malahide Road (N)	MPET School (E)	Malahide Road (S)	TOTALS
Malahide Road (N)	0	77	587	**664**
MPET School (E)	48	0	44	**92**
Malahide Road (S)	558	35	0	**593**
TOTALS	**606**	**112**	**631**	**1349**

2042 PM Peak **WITHOUT SUBJECT DEVELOPMENT** (surveyed flows + TII growth factor + committed development)

To / From	Malahide Road (N)	MPET School (E)	Malahide Road (S)	TOTALS
Malahide Road (N)	0	5	504	**509**
MPET School (E)	8	0	3	**11**
Malahide Road (S)	896	5	0	**901**
TOTALS	**904**	**10**	**507**	**1421**

2042 AM Peak **WITH SUBJECT DEVELOPMENT IN OPERATION** (surveyed + TII growth factor + committed dev. + subject dev.)

To / From	Malahide Road (N)	MPET School (E)	Malahide Road (S)	TOTALS
Malahide Road (N)	0	77	602	**679**
MPET School (E)	48	0	44	**92**
Malahide Road (S)	577	35	0	**612**
TOTALS	**625**	**112**	**646**	**1383**

2042 PM Peak **WITH SUBJECT DEVELOPMENT IN OPERATION** (surveyed + TII growth factor + committed dev. + subject dev.)

To / From	Malahide Road (N)	MPET School (E)	Malahide Road (S)	TOTALS
Malahide Road (N)	0	5	517	**522**
MPET School (E)	8	0	3	**11**
Malahide Road (S)	910	5	0	**915**
TOTALS	**918**	**10**	**520**	**1448**

Junction 4 - AADT Traffic Flow Matrices (Light and Heavy Vehicles)

2023 Light Vehicles AADT **SURVEYED TRAFFIC FLOWS**

To / From	Malahide Road (N)	MPET School (E)	Malahide Road (S)	TOTALS
Malahide Road (N)	0	127	5666	**5793**
MPET School (E)	119	0	85	**204**
Malahide Road (S)	6533	80	0	**6613**
TOTALS	**6652**	**207**	**5751**	**12610**

2023 Heavy Vehicles AADT **SURVEYED TRAFFIC FLOWS**

To / From	Malahide Road (N)	MPET School (E)	Malahide Road (S)	TOTALS
Malahide Road (N)	0	1	249	**250**
MPET School (E)	1	0	1	**2**
Malahide Road (S)	231	2	0	**233**
TOTALS	**232**	**3**	**250**	**485**

2024 Light Vehicles **BASELINE TRAFFIC FLOWS** (surveyed flows + TII growth factor)

To / From	Malahide Road (N)	MPET School (E)	Malahide Road (S)	TOTALS
Malahide Road (N)	0	129	5738	**5867**
MPET School (E)	121	0	86	**207**
Malahide Road (S)	6616	81	0	**6697**
TOTALS	**6737**	**210**	**5824**	**12771**

2024 Heavy Vehicles **BASELINE TRAFFIC FLOWS** (surveyed flows + TII growth factor)

To / From	Malahide Road (N)	MPET School (E)	Malahide Road (S)	TOTALS
Malahide Road (N)	0	1	254	**255**
MPET School (E)	1	0	1	**2**
Malahide Road (S)	236	2	0	**238**
TOTALS	**237**	**3**	**255**	**495**

2026 Light Vehicles **Other committed development flows**

To / From	Malahide Road (N)	MPET School (E)	Malahide Road (S)	TOTALS
Malahide Road (N)	0	0	400	**400**
MPET School (E)	0	0	0	**0**
Malahide Road (S)	458	0	0	**458**
TOTALS	**458**	**0**	**400**	**858**

2026 Heavy Vehicles **Other committed development flows**

To / From	Malahide Road (N)	MPET School (E)	Malahide Road (S)	TOTALS
Malahide Road (N)	0	0	6	**6**
MPET School (E)	0	0	0	**0**
Malahide Road (S)	5	0	0	**5**
TOTALS	**5**	**0**	**6**	**11**

2027 Light Vehicles **WITHOUT SUBJECT DEVELOPMENT** (surveyed flows + TII growth factor + committed development)

To / From	Malahide Road (N)	MPET School (E)	Malahide Road (S)	TOTALS
Malahide Road (N)	0	134	6359	**6493**
MPET School (E)	125	0	89	**214**
Malahide Road (S)	7329	84	0	**7413**
TOTALS	**7454**	**218**	**6448**	**14120**

2027 Heavy Vehicles **WITHOUT SUBJECT DEVELOPMENT** (surveyed flows + TII growth factor + committed development)

To / From	Malahide Road (N)	MPET School (E)	Malahide Road (S)	TOTALS
Malahide Road (N)	0	1	276	**277**
MPET School (E)	1	0	1	**2**
Malahide Road (S)	256	2	0	**258**
TOTALS	**257**	**3**	**277**	**537**

2027 Light Vehicles **SUBJECT DEVELOPMENT FLOWS - OPERATIONAL STAGE**

To / From	Malahide Road (N)	MPET School (E)	Malahide Road (S)	TOTALS
Malahide Road (N)	0	0	257	**257**
MPET School (E)	0	0	0	**0**
Malahide Road (S)	282	0	0	**282**
TOTALS	**282**	**0**	**257**	**539**

2027 Heavy Vehicles **SUBJECT DEVELOPMENT FLOWS - OPERATIONAL STAGE**

To / From	Malahide Road (N)	MPET School (E)	Malahide Road (S)	TOTALS
Malahide Road (N)	0	0	2	**2**
MPET School (E)	0	0	0	**0**
Malahide Road (S)	2	0	0	**2**
TOTALS	**2**	**0**	**2**	**4**

2027 Light Vehicles **WITH SUBJECT DEVELOPMENT IN OPERATION** (surveyed + TII growth factor + committed dev. + subject dev.)

To / From	Malahide Road (N)	MPET School (E)	Malahide Road (S)	TOTALS
Malahide Road (N)	0	134	6616	**6750**
MPET School (E)	125	0	89	**214**
Malahide Road (S)	7611	84	0	**7695**
TOTALS	**7736**	**218**	**6705**	**14659**

2027 Heavy Vehicles **WITH SUBJECT DEVELOPMENT IN OPERATION** (surveyed + TII growth factor + committed dev. + subject dev.)

To / From	Malahide Road (N)	MPET School (E)	Malahide Road (S)	TOTALS
Malahide Road (N)	0	1	278	**279**
MPET School (E)	1	0	1	**2**
Malahide Road (S)	258	2	0	**260**
TOTALS	**259**	**3**	**279**	**541**

2032 Light Vehicles **WITHOUT SUBJECT DEVELOPMENT** (surveyed flows + TII growth factor + committed development)

To / From	Malahide Road (N)	MPET School (E)	Malahide Road (S)	TOTALS
Malahide Road (N)	0	140	6625	**6765**
MPET School (E)	131	0	93	**224**
Malahide Road (S)	7636	88	0	**7724**
TOTALS	**7767**	**228**	**6718**	**14713**

2032 Heavy Vehicles **WITHOUT SUBJECT DEVELOPMENT** (surveyed flows + TII growth factor + committed development)

To / From	Malahide Road (N)	MPET School (E)	Malahide Road (S)	TOTALS
Malahide Road (N)	0	1	295	**296**
MPET School (E)	1	0	1	**2**
Malahide Road (S)	274	2	0	**276**
TOTALS	**275**	**3**	**296**	**574**

2032 Light Vehicles **WITH SUBJECT DEVELOPMENT IN OPERATION** (surveyed + TII growth factor + committed dev. + subject dev.)

To / From	Malahide Road (N)	MPET School (E)	Malahide Road (S)	TOTALS
Malahide Road (N)	0	140	6882	**7022**
MPET School (E)	131	0	93	**224**
Malahide Road (S)	7918	88	0	**8006**
TOTALS	**8049**	**228**	**6975**	**15252**

2032 Heavy Vehicles **WITH SUBJECT DEVELOPMENT IN OPERATION** (surveyed + TII growth factor + committed dev. + subject dev.)

To / From	Malahide Road (N)	MPET School (E)	Malahide Road (S)	TOTALS
Malahide Road (N)	0	1	297	**298**
MPET School (E)	1	0	1	**2**
Malahide Road (S)	276	2	0	**278**
TOTALS	**277**	**3**	**298**	**578**

2042 Light Vehicles **WITHOUT SUBJECT DEVELOPMENT** (surveyed flows + TII growth factor + committed development)

To / From	Malahide Road (N)	MPET School (E)	Malahide Road (S)	TOTALS
Malahide Road (N)	0	144	6808	**6952**
MPET School (E)	135	0	96	**231**
Malahide Road (S)	7847	90	0	**7937**
TOTALS	**7982**	**234**	**6904**	**15120**

2042 Heavy Vehicles **WITHOUT SUBJECT DEVELOPMENT** (surveyed flows + TII growth factor + committed development)

To / From	Malahide Road (N)	MPET School (E)	Malahide Road (S)	TOTALS
Malahide Road (N)	0	1	314	**315**
MPET School (E)	1	0	1	**2**
Malahide Road (S)	291	2	0	**293**
TOTALS	**292**	**3**	**315**	**610**

2042 Light Vehicles **WITH SUBJECT DEVELOPMENT IN OPERATION** (surveyed + TII growth factor + committed dev. + subject dev.)

To / From	Malahide Road (N)	MPET School (E)	Malahide Road (S)	TOTALS
Malahide Road (N)	0	144	7065	**7209**
MPET School (E)	135	0	96	**231**
Malahide Road (S)	8129	90	0	**8219**
TOTALS	**8264**	**234**	**7161**	**15659**

2042 Heavy Vehicles **WITH SUBJECT DEVELOPMENT IN OPERATION** (surveyed + TII growth factor + committed dev. + subject dev.)

To / From	Malahide Road (N)	MPET School (E)	Malahide Road (S)	TOTALS
Malahide Road (N)	0	1	316	**317**
MPET School (E)	1	0	1	**2**
Malahide Road (S)	293	2	0	**295**
TOTALS	**294**	**3**	**317**	**614**

Junction 5 - Peak Hour Traffic Flow Matrices (Passenger Car Units)

2023 AM Peak (07:45-08:45) **SURVEYED TRAFFIC FLOWS**

From \ To	Malahide Road (N)	New Access Rd (E)	Malahide Road (S)	TOTALS
Malahide Road (N)			541	**541**
New Access Rd (E)				**0**
Malahide Road (S)	510			**510**
TOTALS	**510**	**0**	**541**	**1051**

2023 PM Peak (16:15-17:15) **SURVEYED TRAFFIC FLOWS**

From \ To	Malahide Road (N)	New Access Rd (E)	Malahide Road (S)	TOTALS
Malahide Road (N)			433	**433**
New Access Rd (E)				**0**
Malahide Road (S)	760			**760**
TOTALS	**760**	**0**	**433**	**1193**

2024 AM Peak **BASELINE TRAFFIC FLOWS** (surveyed flows + TII growth factor)

From \ To	Malahide Road (N)	New Access Rd (E)	Malahide Road (S)	TOTALS
Malahide Road (N)	0	0	548	**548**
New Access Rd (E)	0	0	0	**0**
Malahide Road (S)	516	0	0	**516**
TOTALS	**516**	**0**	**548**	**1064**

2024 PM Peak **BASELINE TRAFFIC FLOWS** (surveyed flows + TII growth factor)

From \ To	Malahide Road (N)	New Access Rd (E)	Malahide Road (S)	TOTALS
Malahide Road (N)	0	0	438	**438**
New Access Rd (E)	0	0	0	**0**
Malahide Road (S)	770	0	0	**770**
TOTALS	**770**	**0**	**438**	**1208**

2026 AM Peak **Other committed development flows**

From \ To	Malahide Road (N)	New Access Rd (E)	Malahide Road (S)	TOTALS
Malahide Road (N)	0	0	19	**19**
New Access Rd (E)	0	0	0	**0**
Malahide Road (S)	16	0	0	**16**
TOTALS	**16**	**0**	**19**	**35**

2026 PM Peak **Other committed development flows**

From \ To	Malahide Road (N)	New Access Rd (E)	Malahide Road (S)	TOTALS
Malahide Road (N)	0	0	18	**18**
New Access Rd (E)	0	0	0	**0**
Malahide Road (S)	41	0	0	**41**
TOTALS	**41**	**0**	**18**	**59**

2027 AM Peak **WITHOUT SUBJECT DEVELOPMENT** (surveyed flows + TII growth factor + committed development)

From \ To	Malahide Road (N)	New Access Rd (E)	Malahide Road (S)	TOTALS
Malahide Road (N)	0	0	588	**588**
New Access Rd (E)	0	0	0	**0**
Malahide Road (S)	552	0	0	**552**
TOTALS	**552**	**0**	**588**	**1140**

2027 PM Peak **WITHOUT SUBJECT DEVELOPMENT** (surveyed flows + TII growth factor + committed development)

From \ To	Malahide Road (N)	New Access Rd (E)	Malahide Road (S)	TOTALS
Malahide Road (N)	0	0	473	**473**
New Access Rd (E)	0	0	0	**0**
Malahide Road (S)	840	0	0	**840**
TOTALS	**840**	**0**	**473**	**1313**

2027 AM Peak **SUBJECT DEVELOPMENT FLOWS - OPERATIONAL STAGE**

From \ To	Malahide Road (N)	New Access Rd (E)	Malahide Road (S)	TOTALS
Malahide Road (N)	0	4	11	**15**
New Access Rd (E)	14	0	6	**20**
Malahide Road (S)	5	1	0	**6**
TOTALS	**19**	**5**	**17**	**41**

2027 PM Peak **SUBJECT DEVELOPMENT FLOWS - OPERATIONAL STAGE**

From \ To	Malahide Road (N)	New Access Rd (E)	Malahide Road (S)	TOTALS
Malahide Road (N)	0	10	3	**13**
New Access Rd (E)	4	0	1	**5**
Malahide Road (S)	10	5	0	**15**
TOTALS	**14**	**15**	**4**	**33**

2027 AM Peak **WITH SUBJECT DEVELOPMENT IN OPERATION** (surveyed + TII growth factor + committed dev. + subject dev.)

From \ To	Malahide Road (N)	New Access Rd (E)	Malahide Road (S)	TOTALS
Malahide Road (N)	0	4	599	**603**
New Access Rd (E)	14	0	6	**20**
Malahide Road (S)	557	1	0	**558**
TOTALS	**571**	**5**	**605**	**1181**

2027 PM Peak **WITH SUBJECT DEVELOPMENT IN OPERATION** (surveyed + TII growth factor + committed dev. + subject dev.)

From \ To	Malahide Road (N)	New Access Rd (E)	Malahide Road (S)	TOTALS
Malahide Road (N)	0	10	476	**486**
New Access Rd (E)	4	0	1	**5**
Malahide Road (S)	850	5	0	**855**
TOTALS	**854**	**15**	**477**	**1346**

2032 AM Peak **WITHOUT SUBJECT DEVELOPMENT** (surveyed flows + TII growth factor + committed development)

From \ To	Malahide Road (N)	New Access Rd (E)	Malahide Road (S)	TOTALS
Malahide Road (N)	0	0	613	**613**
New Access Rd (E)	0	0	0	**0**
Malahide Road (S)	576	0	0	**576**
TOTALS	**576**	**0**	**613**	**1189**

2032 PM Peak **WITHOUT SUBJECT DEVELOPMENT** (surveyed flows + TII growth factor + committed development)

From \ To	Malahide Road (N)	New Access Rd (E)	Malahide Road (S)	TOTALS
Malahide Road (N)	0	0	494	**494**
New Access Rd (E)	0	0	0	**0**
Malahide Road (S)	876	0	0	**876**
TOTALS	**876**	**0**	**494**	**1370**

2032 AM Peak **WITH SUBJECT DEVELOPMENT IN OPERATION** (surveyed + TII growth factor + committed dev. + subject dev.)

From \ To	Malahide Road (N)	New Access Rd (E)	Malahide Road (S)	TOTALS
Malahide Road (N)	0	4	624	**628**
New Access Rd (E)	14	0	6	**20**
Malahide Road (S)	581	1	0	**582**
TOTALS	**595**	**5**	**630**	**1230**

2032 PM Peak **WITH SUBJECT DEVELOPMENT IN OPERATION** (surveyed + TII growth factor + committed dev. + subject dev.)

From \ To	Malahide Road (N)	New Access Rd (E)	Malahide Road (S)	TOTALS
Malahide Road (N)	0	10	497	**507**
New Access Rd (E)	4	0	1	**5**
Malahide Road (S)	886	5	0	**891**
TOTALS	**890**	**15**	**498**	**1403**

2042 AM Peak **WITHOUT SUBJECT DEVELOPMENT** (surveyed flows + TII growth factor + committed development)

From \ To	Malahide Road (N)	New Access Rd (E)	Malahide Road (S)	TOTALS
Malahide Road (N)	0	0	631	**631**
New Access Rd (E)	0	0	0	**0**
Malahide Road (S)	593	0	0	**593**
TOTALS	**593**	**0**	**631**	**1224**

2042 PM Peak **WITHOUT SUBJECT DEVELOPMENT** (surveyed flows + TII growth factor + committed development)

From \ To	Malahide Road (N)	New Access Rd (E)	Malahide Road (S)	TOTALS
Malahide Road (N)	0	0	508	**508**
New Access Rd (E)	0	0	0	**0**
Malahide Road (S)	901	0	0	**901**
TOTALS	**901**	**0**	**508**	**1409**

2042 AM Peak **WITH SUBJECT DEVELOPMENT IN OPERATION** (surveyed + TII growth factor + committed dev. + subject dev.)

From \ To	Malahide Road (N)	New Access Rd (E)	Malahide Road (S)	TOTALS
Malahide Road (N)	0	4	642	**646**
New Access Rd (E)	14	0	6	**20**
Malahide Road (S)	598	1	0	**599**
TOTALS	**612**	**5**	**648**	**1265**

2042 PM Peak **WITH SUBJECT DEVELOPMENT IN OPERATION** (surveyed + TII growth factor + committed dev. + subject dev.)

From \ To	Malahide Road (N)	New Access Rd (E)	Malahide Road (S)	TOTALS
Malahide Road (N)	0	10	511	**521**
New Access Rd (E)	4	0	1	**5**
Malahide Road (S)	911	5	0	**916**
TOTALS	**915**	**15**	**512**	**1442**

2042 AM Peak **COMBINED ACCESS SCENARIO** (with existing school traffic reallocated to new access road)

From \ To	Malahide Road (N)	New Access Rd (E)	Malahide Road (S)	TOTALS
Malahide Road (N)	0	81	598	**679**
New Access Rd (E)	62	0	50	**112**
Malahide Road (S)	563	36	0	**599**
TOTALS	**625**	**117**	**648**	**1390**

2042 PM Peak **COMBINED ACCESS SCENARIO** (with existing school traffic reallocated to new access road)

From \ To	Malahide Road (N)	New Access Rd (E)	Malahide Road (S)	TOTALS
Malahide Road (N)	0	15	508	**523**
New Access Rd (E)	12	0	4	**16**
Malahide Road (S)	906	10	0	**916**
TOTALS	**918**	**25**	**512**	**1455**

Junction 5 - AADT Traffic Flow Matrices (Light and Heavy Vehicles)

2023 Light Vehicles AADT **SURVEYED TRAFFIC FLOWS**

From \ To	Malahide Road (N)	New Access Rd (E)	Malahide Road (S)	TOTALS
Malahide Road (N)			5751	**5751**
New Access Rd (E)				**0**
Malahide Road (S)	6613			**6613**
TOTALS	**6613**	**0**	**5751**	**12364**

2023 Heavy Vehicles AADT **SURVEYED TRAFFIC FLOWS**

From \ To	Malahide Road (N)	New Access Rd (E)	Malahide Road (S)	TOTALS
Malahide Road (N)			250	**250**
New Access Rd (E)				**0**
Malahide Road (S)	233			**233**
TOTALS	**233**	**0**	**250**	**483**

2024 Light Vehicles **BASELINE TRAFFIC FLOWS** (surveyed flows + TII growth factor)

From \ To	Malahide Road (N)	New Access Rd (E)	Malahide Road (S)	TOTALS
Malahide Road (N)	0	0	5824	**5824**
New Access Rd (E)	0	0	0	**0**
Malahide Road (S)	6697	0	0	**6697**
TOTALS	**6697**	**0**	**5824**	**12521**

2024 Heavy Vehicles **BASELINE TRAFFIC FLOWS** (surveyed flows + TII growth factor)

From \ To	Malahide Road (N)	New Access Rd (E)	Malahide Road (S)	TOTALS
Malahide Road (N)	0	0	255	**255**
New Access Rd (E)	0	0	0	**0**
Malahide Road (S)	238	0	0	**238**
TOTALS	**238**	**0**	**255**	**493**

2026 Light Vehicles **Other committed development flows**

From \ To	Malahide Road (N)	New Access Rd (E)	Malahide Road (S)	TOTALS
Malahide Road (N)	0	0	400	**400**
New Access Rd (E)	0	0	0	**0**
Malahide Road (S)	458	0	0	**458**
TOTALS	**458**	**0**	**400**	**858**

2026 Heavy Vehicles **Other committed development flows**

From \ To	Malahide Road (N)	New Access Rd (E)	Malahide Road (S)	TOTALS
Malahide Road (N)	0	0	6	**6**
New Access Rd (E)	0	0	0	**0**
Malahide Road (S)	5	0	0	**5**
TOTALS	**5**	**0**	**6**	**11**

2027 Light Vehicles **WITHOUT SUBJECT DEVELOPMENT** (surveyed flows + TII growth factor + committed development)

From \ To	Malahide Road (N)	New Access Rd (E)	Malahide Road (S)	TOTALS
Malahide Road (N)	0	0	6449	**6449**
New Access Rd (E)	0	0	0	**0**
Malahide Road (S)	7413	0	0	**7413**
TOTALS	**7413**	**0**	**6449**	**13862**

2027 Heavy Vehicles **WITHOUT SUBJECT DEVELOPMENT** (surveyed flows + TII growth factor + committed development)

From \ To	Malahide Road (N)	New Access Rd (E)	Malahide Road (S)	TOTALS
Malahide Road (N)	0	0	277	**277**
New Access Rd (E)	0	0	0	**0**
Malahide Road (S)	258	0	0	**258**
TOTALS	**258**	**0**	**277**	**535**

2027 Light Vehicles **SUBJECT DEVELOPMENT FLOWS - OPERATIONAL STAGE**

From \ To	Malahide Road (N)	New Access Rd (E)	Malahide Road (S)	TOTALS
Malahide Road (N)	0	150	107	**257**
New Access Rd (E)	159	0	56	**215**
Malahide Road (S)	123	64	0	**187**
TOTALS	**282**	**214**	**163**	**659**

2027 Heavy Vehicles **SUBJECT DEVELOPMENT FLOWS - OPERATIONAL STAGE**

From \ To	Malahide Road (N)	New Access Rd (E)	Malahide Road (S)	TOTALS
Malahide Road (N)	0	1	1	**2**
New Access Rd (E)	1	0	1	**2**
Malahide Road (S)	1	1	0	**2**
TOTALS	**2**	**2**	**2**	**6**

2027 Light Vehicles **WITH SUBJECT DEVELOPMENT IN OPERATION** (surveyed + TII growth factor + committed dev. + subject dev.)

From \ To	Malahide Road (N)	New Access Rd (E)	Malahide Road (S)	TOTALS
Malahide Road (N)	0	150	6556	**6706**
New Access Rd (E)	159	0	56	**215**
Malahide Road (S)	7536	64	0	**7600**
TOTALS	**7695**	**214**	**6612**	**14521**

2027 Heavy Vehicles **WITH SUBJECT DEVELOPMENT IN OPERATION** (surveyed + TII growth factor + committed dev. + subject dev.)

From \ To	Malahide Road (N)	New Access Rd (E)	Malahide Road (S)	TOTALS
Malahide Road (N)	0	1	278	**279**
New Access Rd (E)	1	0	1	**2**
Malahide Road (S)	259	1	0	**260**
TOTALS	**260**	**2**	**279**	**541**

2032 Light Vehicles **WITHOUT SUBJECT DEVELOPMENT** (surveyed flows + TII growth factor + committed development)

From \ To	Malahide Road (N)	New Access Rd (E)	Malahide Road (S)	TOTALS
Malahide Road (N)	0	0	6719	**6719**
New Access Rd (E)	0	0	0	**0**
Malahide Road (S)	7724	0	0	**7724**
TOTALS	**7724**	**0**	**6719**	**14443**

2032 Heavy Vehicles **WITHOUT SUBJECT DEVELOPMENT** (surveyed flows + TII growth factor + committed development)

From \ To	Malahide Road (N)	New Access Rd (E)	Malahide Road (S)	TOTALS
Malahide Road (N)	0	0	297	**297**
New Access Rd (E)	0	0	0	**0**
Malahide Road (S)	276	0	0	**276**
TOTALS	**276**	**0**	**297**	**573**

2032 Light Vehicles **WITH SUBJECT DEVELOPMENT IN OPERATION** (surveyed + TII growth factor + committed dev. + subject dev.)

From \ To	Malahide Road (N)	New Access Rd (E)	Malahide Road (S)	TOTALS
Malahide Road (N)	0	150	6826	**6976**
New Access Rd (E)	159	0	56	**215**
Malahide Road (S)	7847	64	0	**7911**
TOTALS	**8006**	**214**	**6882**	**15102**

2032 Heavy Vehicles **WITH SUBJECT DEVELOPMENT IN OPERATION** (surveyed + TII growth factor + committed dev. + subject dev.)

From \ To	Malahide Road (N)	New Access Rd (E)	Malahide Road (S)	TOTALS
Malahide Road (N)	0	1	298	**299**
New Access Rd (E)	1	0	1	**2**
Malahide Road (S)	277	1	0	**278**
TOTALS	**278**	**2**	**299**	**579**

2042 Light Vehicles **WITHOUT SUBJECT DEVELOPMENT** (surveyed flows + TII growth factor + committed development)

From \ To	Malahide Road (N)	New Access Rd (E)	Malahide Road (S)	TOTALS
Malahide Road (N)	0	0	6904	**6904**
New Access Rd (E)	0	0	0	**0**
Malahide Road (S)	7937	0	0	**7937**
TOTALS	**7937**	**0**	**6904**	**14841**

2042 Heavy Vehicles **WITHOUT SUBJECT DEVELOPMENT** (surveyed flows + TII growth factor + committed development)

From \ To	Malahide Road (N)	New Access Rd (E)	Malahide Road (S)	TOTALS
Malahide Road (N)	0	0	316	**316**
New Access Rd (E)	0	0	0	**0**
Malahide Road (S)	294	0	0	**294**
TOTALS	**294**	**0**	**316**	**610**

2042 Light Vehicles **WITH SUBJECT DEVELOPMENT IN OPERATION** (surveyed + TII growth factor + committed dev. + subject dev.)

From \ To	Malahide Road (N)	New Access Rd (E)	Malahide Road (S)	TOTALS
Malahide Road (N)	0	150	7011	**7161**
New Access Rd (E)	159	0	56	**215**
Malahide Road (S)	8060	64	0	**8124**
TOTALS	**8219**	**214**	**7067**	**15500**

2042 Heavy Vehicles **WITH SUBJECT DEVELOPMENT IN OPERATION** (surveyed + TII growth factor + committed dev. + subject dev.)

From \ To	Malahide Road (N)	New Access Rd (E)	Malahide Road (S)	TOTALS
Malahide Road (N)	0	1	317	**318**
New Access Rd (E)	1	0	1	**2**
Malahide Road (S)	295	1	0	**296**
TOTALS	**296**	**2**	**318**	**616**

2042 Light Vehicles **COMBINED ACCESS SCENARIO** (with existing school traffic reallocated to new access road)

From \ To	Malahide Road (N)	New Access Rd (E)	Malahide Road (S)	TOTALS
Malahide Road (N)	0	294	6915	**7209**
New Access Rd (E)	294	0	152	**446**
Malahide Road (S)	7970	154	0	**8124**
TOTALS	**8264**	**448**	**7067**	**15779**

2042 Heavy Vehicles **COMBINED ACCESS SCENARIO** (with existing school traffic reallocated to new access road)

From \ To	Malahide Road (N)	New Access Rd (E)	Malahide Road (S)	TOTALS
Malahide Road (N)	0	2	316	**318**
New Access Rd (E)	2	0	2	**4**
Malahide Road (S)	293	3	0	**296**
TOTALS	**295**	**5**	**318**	**618**

Appendix D

Independent Quality Audit Report and Feedback Form

(Roadplan Consulting)

CS CONSULTING

GROUP

24225-01-001

PROPOSED RESIDENTIAL DEVELOPMENT AT KINSEALY

Stage 1 Quality Audit

(Incorporating a DMURS Street Design Audit, and Audits of Accessibility, Cycling, Walking and Road Safety)

for

CS CONSULTING

JANUARY 2025

ROADPLAN CONSULTING

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Kilkenny.
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DOCUMENT CONTROL SHEET

Project Title	Proposed Residential Development
Project No.	24225-01
Client	CS Consulting
Document Title	Stage 1 Quality Audit
Document No.	24225-01-001

Status	Author(s)	Reviewed By	Approved By	Issue Date
Draft 1	GF/GH	GF/DD	GF	17/12/2024
Final	GF/GH	GF/DD	GF	13/01/2025

TABLE OF CONTENTS

1. INTRODUCTION

1.1 Roadplan Consulting has been commissioned by CS Consulting to carry out a Quality Audit of a proposed development at Kinsealy, Co Dublin.

1.2 The proposed development comprises the redevelopment of some existing commercial lands and agricultural lands into a residential development.

1.3 The development is situated at Kinsealy, Co Dublin.

1.4 Figure 1.1 below is a layout drawing of the development.

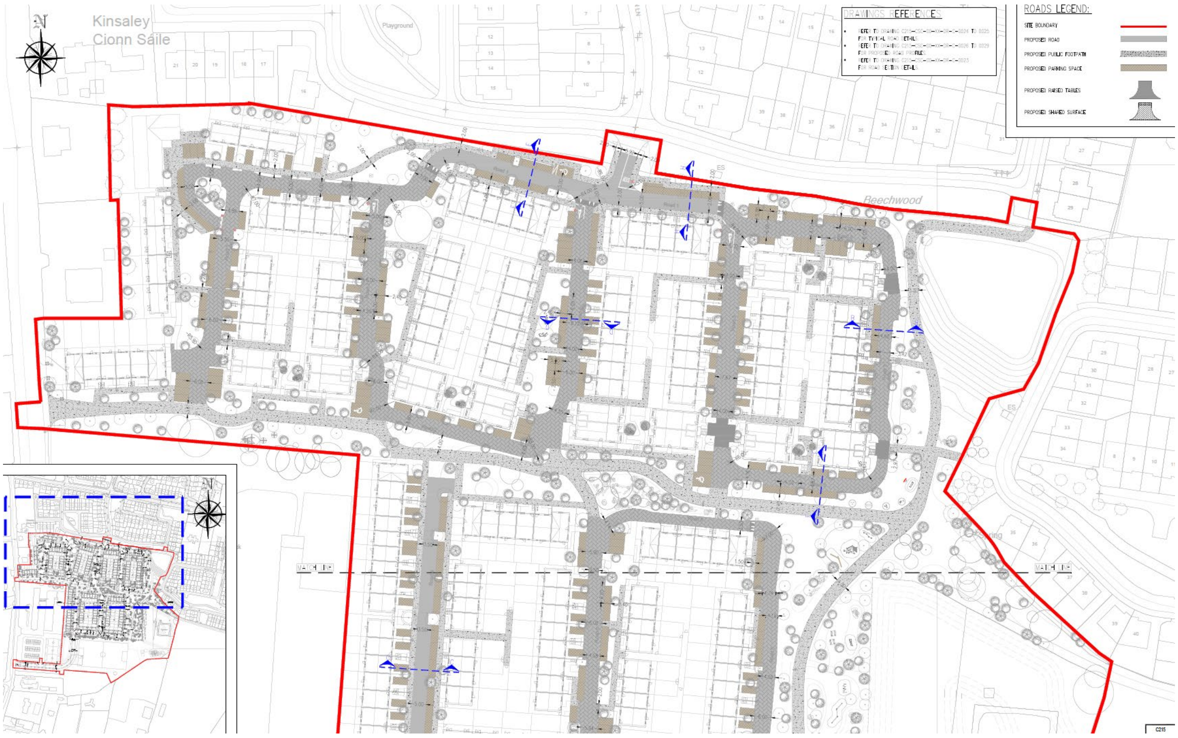

Figure 1.1– *Site Location Map and Site Layout for the development*

2. QUALITY AUDIT

2.1 Quality Audit is a defined process, independent of, but involving, the design team that, through planning, design, construction and management stages of a project provides a check that high quality places are delivered and maintained by all relevant parties, for the benefit of all end users. Quality Audit is a process, applied to urban roads, traffic management or development schemes, which systematically reviews projects using a series of discrete but linked evaluations and ensures that the broad objectives of place, functionality, maintenance and safety are achieved.

2.2 Quality Audit was introduced in the publication Design Manual for Urban Roads and Streets following concerns that in the design of new streets provisions made for motor vehicles frequently led to a poorly designed public realm. In an urban area there is a high level of competing demand from different classes of road users. A well-balanced street will have minimal visual clutter and obstacles; it will use durable materials and most importantly, will encourage a degree of negotiation between road users as they make their way through it.

2.3 Quality Audit involves various assessments of the impacts of a street scheme in terms of road safety, visual quality and the use of streets by the community. Access for disabled people, pedestrians, cyclists and drivers of motor vehicles is considered.

2.4 In the context of a Quality Audit, road safety assessment is considered to be an appropriate method of examining road safety issues as it incorporates both the hazard identification techniques used in road safety audit and formal risk assessment techniques. This allows the opportunity at an early stage for road safety issues to be considered in a more dynamic way within the design process, and to ensure that safety issues are considered as part of the design rather than after design work is completed.

2.5 The Quality Audit Team reports findings with suggestions for future action. It should be noted that, in a Quality Audit, it is not the intention that suggestions would be binding on the design team; they are offered for detailed consideration in the design process.

2.6 DMURS states that Quality Audits should consist of the following parts:

- DMURS Street Design Audit
- Individual Design Audits
- Quality Audit Report

In the case of this report the individual design audits comprise an RSA, an Accessibility audit, a Walking audit and a Cycle audit.

3. METHODOLOGY

3.1 The Audit Team was as follows:

- George Frisby, Chartered Engineer MIEI
- Glenn Hingerty, Chartered Engineer MIEI

3.2 Road safety, non-motorised users, visual quality, access for disabled and functionality were considered in the Quality Audit. This exercise focused on issues such as:

- the design rationale as it related to vehicle, cycle and pedestrian movements;
- pedestrian desire lines both to and through the site;
- access requirements for all modes of transport;
- access requirements for disabled people and other vulnerable users;
- any road safety concerns associated with the scheme;
- how the scheme is experienced by those entering it and moving around within the street, including how this affects road user behavior; and
- any other issues considered relevant to each constituent element of the Quality Audit process.

3.3 The site visit for this quality audit was carried out on 24th November 2024.

The documents provided for the audit were:

Drawing Number	Rev	Drawing Title
C215-CSC-00-XX-DR-C-0004	P4	General Arrangement-Sheet 1 of 2
C215-CSC-00-XX-DR-C-0005	P4	General Arrangement-Sheet 2 of 2
C215-CSC-00-XX-DR-C-0008	P4	Proposed Road Markings and Traffic Signs-Sheet 1 of 2
C215-CSC-00-XX-DR-C-0009	P4	Proposed Road Markings and Traffic Signs-Sheet 2 of 2
C215-CSC-00-XX-DR-C-0014	P4	Swept Path Analysis Refuse Vehicle
C215-CSC-00-XX-DR-C-0015	P4	Swept Path Analysis Fire Tender

Copies of these audited drawings are contained in Appendix A.

Details of drainage or road lighting are not provided. It is assumed that adequate layouts will be provided for each.

In accordance with DMURS Advice Note No. 4 May 2019 (contained on https://www.dmurs.ie/supplementary-material) a Quality Audit should always contain a DMURS Street Design Audit and Other Design Audits (as required). Section 4 of this report contains the Street Design Audit and Section 5 contains the Other Design Audits (Road Safety, Walking, Cycling, Accessibility). The Street Design Audit is in the format provided as a template on the DMURS website.

4. STREET DESIGN AUDIT

CONNECTIVITY			
Key Issues	**Key DMURS Reference**	**Audit Suggestion**	**Design Team Response**
Strategic routes/major desire lines been identified and are clearly incorporated into the design.	3.1 – Integrated Street Network 3.2.1 – Movement Function 3.3.1 – Street layouts 3.3.4 - Wayfinding	No Comment	No Comment
Multiple points of access are provided to the site/place, in particular for sustainable modes.	3.3.1 – Street Layouts 3.3.3 – Retrofitting [1]	No Comment	No Comment
Accessibility throughout the site is maximised for pedestrians and cyclists, ensuring route choice.	3.3.1 – Street Layouts 3.3.2 – Block Sizes 3.4.1 – Vehicle Permeability	3.3.1 – No segregated cycle infrastructure is proposed	The development includes delivery of pedestrian and bicycle greenways through the site, as required by the 2019 Kinsaley Local Area Plan. These connect to the Malahide Road at the development's western boundary and extend to the site's northern and eastern boundaries, where they will connect to pedestrian and bicycle infrastructure in adjacent existing and future residential developments.

[1] *When connecting with existing communities a detailed analysis and extensive community consultation should be carried out to identify the optimal location for connections (refer also to the NTA Permeability in Existing Urban Areas: Best Practice Guide).*

CONNECTIVITY			
Key Issues	**Key DMURS Reference**	**Audit Suggestion**	**Design Team Response**
			These greenway sections will form part of the Kinsealy Walking & Cycling Scheme in preparation by Fingal County Council. They have been configured as shared pedestrian & cyclist spaces, in keeping with the preliminary design drawings published by the Council for this Scheme. Elsewhere within the proposed development, bicycle movements are catered for by homezones and residential access streets with low traffic volumes. The provision of cycle infrastructure completely segregated from both motor vehicle traffic and pedestrian traffic is therefore deemed unnecessary.
Through movements by private vehicles on local streets are discouraged by an appropriate level of traffic calming measures.	3.2.1 – Movement Function 3.2.2 – Place Context 3.4.1 – Vehicle Permeability	No Comment	No Comment

SELF-REGULATING STREET ENVIRONMENT			
Key Issues	**Key DMURS Reference**	**Audit Suggestion**	**Design Team Response**
A suitable range of design speeds have been applied with regard to context and function.	3.2.1 – Movement Function 3.2.2 – Place Context 4.1.1 – A Balanced Approach to Speed [2]	No Comment	No Comment
The street environment will facilitate the creation of a traffic calmed environment via the use of 'softer' or passive measures.[3]	4.2.1 – Building Height and Street Width 4.2.2 – Street Trees 4.2.3 – Active Street Edges 4.2.4 – Signage and Line Marking 4.2.7 – Planting 4.4.2 – Carriageway Surfaces 4.4.9 – On-Street Parking Advice Note 1 – Transitions and Gateways	4.2.2 – Proposed Trees may compromise stopping sight distance and pedestrian visibility 4.2.9 – Ensure adequate manoeuvrability into and out of parking bays	All planting on the development's internal street network will comprise species appropriate to that context. Trees will be of slender stem varieties and will be maintained to ensure that their canopies do not intrude into the space 2m above footpath or carriageway. The accessibility of all parking bays will be verified through swept path analysis, and adjustments made where necessary to ensure that each space is safely usable.
A suitable range of design standards/ measures have been applied that are	4.4.1 – Carriageway Widths 4.4.4 – Forward Visibility 4.4.5 – Visibility Splays 4.4.6 – Alignment and curvature	4.4.5 - Visibility Splays at junctions may be compromised due to proposed parking arrangements and planting.	Sightlines at internal junctions will be verified and it will be ensured that the required unobstructed

[2] *Refer also to the National Speed Limit Guidelines*

[3] *In retrofit situations a detailed analysis should be carried out to establish what measures exist, what their likely effectiveness is and level of intervention required to achieve the designed design speed.*

SELF-REGULATING STREET ENVIRONMENT			
Key Issues	**Key DMURS Reference**	**Audit Suggestion**	**Design Team Response**
consistent with the applied design speeds.	4.4.7 – Horizontal and Vertical Deflections Advice Note 1 – Transitions and Gateways	4.4.6 – Vehicle manoeuvrability within certain street areas may be challenging, especially for larger vehicles.	visibility splays and stopping sight distances are achieved. All planting on the development's internal street network will comprise species appropriate to that context. Trees will be of slender stem varieties and will be maintained to ensure that their canopies do not intrude into the space 2m above footpath or carriageway.

PEDESTRIAN AND CYCLING ENVIRONMENT			
Key Issues	**Key DMURS Reference**	**Audit Suggestion**	**Design Team Response**
The built environment contributes to the creation of a safe and comfortable pedestrian environment.	4.2.1 – Building Height and Street Width 4.2.3 – Active Street Edges 4.2.5 – Street Furniture 4.4.9 – On-Street parking	4.4.6 – On street parking may not be fully accessible for private vehicles which may impact footway space.	The accessibility of all parking bays will be verified through swept path analysis, and adjustments made where necessary to ensure that each space is safely usable.
Footpaths are continuous and wide enough to cater for the anticipated number of pedestrian movements.	3.2.1 – Movement Function 3.2.2 – Place Context 4.2.5 – Street Furniture 4.3.1 - Footways, Verges and Strips 4.3.2 - Pedestrian Crossings	No Comment	No Comment

PEDESTRIAN AND CYCLING ENVIRONMENT			
Key Issues	**Key DMURS Reference**	**Audit Suggestion**	**Design Team Response**
Cycling facilities will cater for cyclists of all ages and abilities.	3.2.1 – Movement Function 3.2.2 – Place Context 4.3.5 - Cycle facilities		
The particular needs of visually and mobility impaired users been identified and incorporated in the design.	4.2.5 - Street Furniture 4.3.1 - Footways, Verges and Strips 4.3.2 - Pedestrian Crossings 4.3.4 - Pedestrianised and Shared Surfaces	There is no provision for tactile paving through the development. This will compromise independent navigation of the development for pedestrians with vision impairments.	Tactile paving will be provided at all relevant locations throughout the development, in accordance with the Guidance on the Use of Tactile Paving Surfaces.

VISUAL QUALITY			
Key Issues	**Key DMURS Reference**	**Audit Suggestion**	**Design Team Response**
The landscape plan responds to the street hierarchy and the value of the place.	3.2.1 – Movement Function 3.2.2 – Place Context 4.2.2 – Street Trees 4.2.7 – Planting Advice Note 1 – Transitions and Gateways	No Comment	No Comment
Street furniture is orderly placed.	3.2.1 – Movement Function 3.2.2 – Place Context 4.2.5 - Street Furniture 4.3.1 - Footways, Verges and Strips	No comment	No Comment
The use of signage and line marking has been minimised.	3.2.1 – Movement Function. 3.2.2 – Place Context. 4.2.4 - Signage and Line Marking.	No comment	No Comment
Materials and finishes used throughout the scheme have	3.2.1 – Movement Function 3.2.2 – Place Context	No comment	No Comment

VISUAL QUALITY			
Key Issues	**Key DMURS Reference**	**Audit Suggestion**	**Design Team Response**
been selected from a limited palette and respond to the value of the place?	4.2.6 – Materials and Finishes 4.2.8 – Historic Contexts 4.3.2 – Pedestrian Crossings 4.4.2 – Carriageway Surfaces Advice Note 2 – Materials and Specifications		

ADDITIONAL COMMENTS

5. ROAD SAFETY

5.1 **Issue**

Visibility splays at the proposed development access from the R107 may be restricted by the existing roadside boundary either side of the access. A lack of adequate visibility splays may contribute to a turning collision at this location.

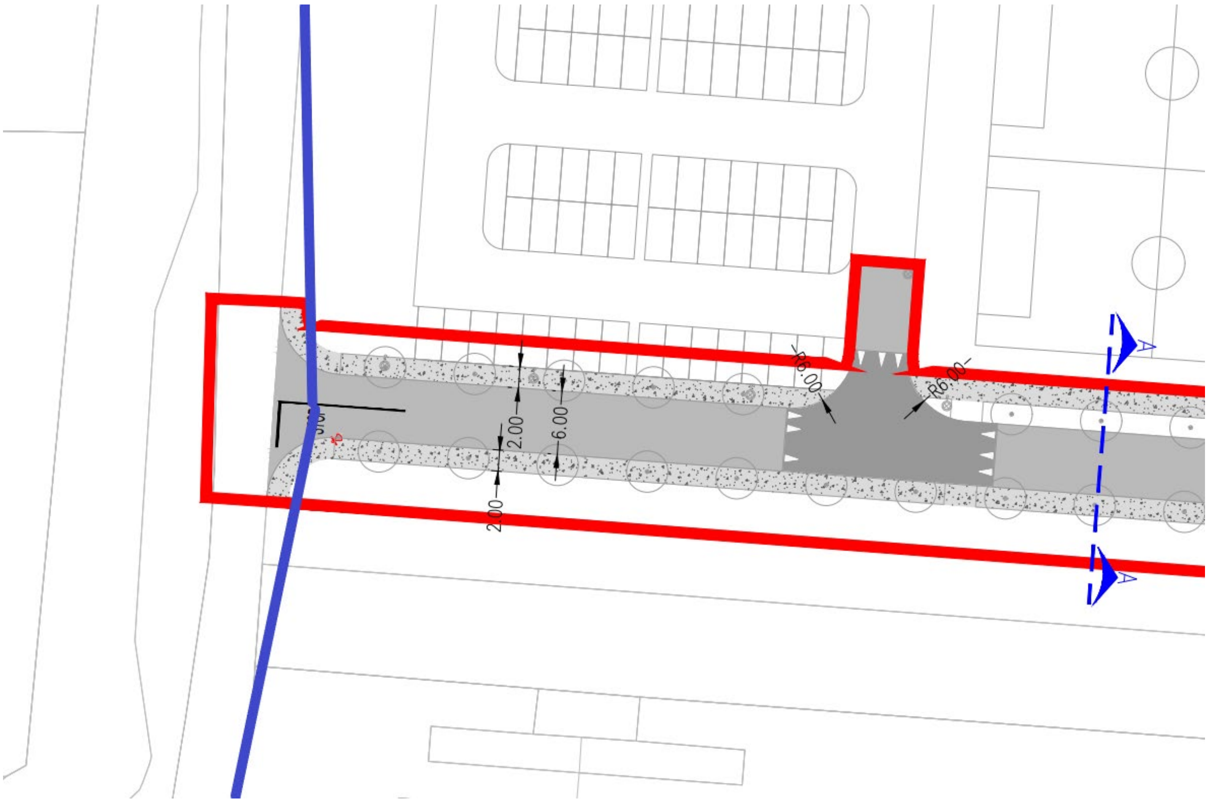

Figure 5.1 – Visibility Splay at development access

Suggestion

Ensure that adequate visibility splays are provided at the proposed development access.

5.2 **Issue**

The visibility splay at various proposed junctions in the development, including but not limited to the one in Figure 5.2, will be compromised by proposed parking, planting, bin storage areas and internal boundaries. This may compromise vehicle-to-vehicle intervisibility, increasing the risk of collisions.

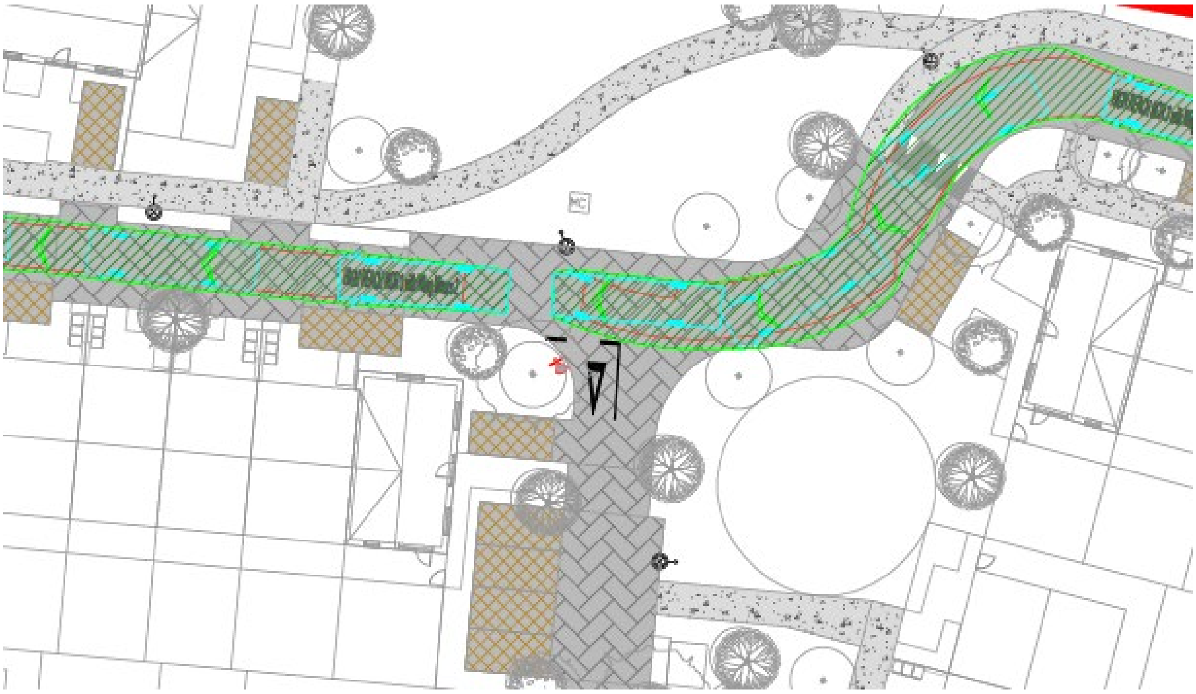

Figure 5.2 – Visibility Splay not shown

Suggestion

Ensure adequate visibility splays at all junctions. Revise parking and planting arrangements as necessary.

5.3 **Issue**

It is unclear if the proposed parking bays are adequate for all likely vehicle manoeuvres due to its arrangement. Vehicle manoeuvrability into and out of some parking bays is unclear. This may give rise to vehicle collisions or kerb mountain with associate pedestrian injuries.

Suggestion

Swept path analyses should be carried out on all parking bays for all vehicle types expected to use the parking bays.

5.4 **Issue**

It is unclear how fire tender and refuse truck movements can occur in certain areas of the development (e.g. Figure 5.3). Tight manoeuvring spaces create a risk of kerb mounting with pedestrian injuries or colliding with parked vehicles. Parked vehicles in this area, on a bend, may also reduce the effective width of the carriageway further.

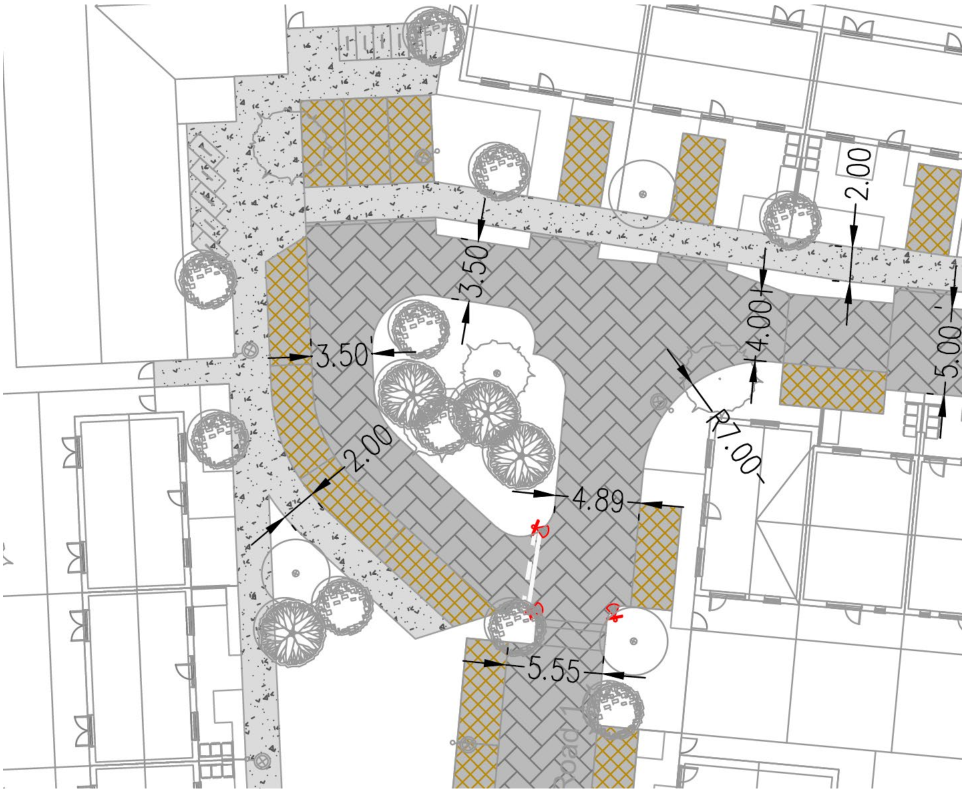

Figure 5.3 – Narrow Carraigeway

Suggestion

Ensure adequate swept path analyses for all vehicles. Consider minimum carraigeway widths as per DMURS and Building Regulations Part M.

5.5 **Issue**

Various raised kerbs and vertical carraigeway deflections are proposed. It is unclear what the proposed drainage arrangements are at these locations. This may result in ponding of water and silting which may create a slipping risk for cyclists.

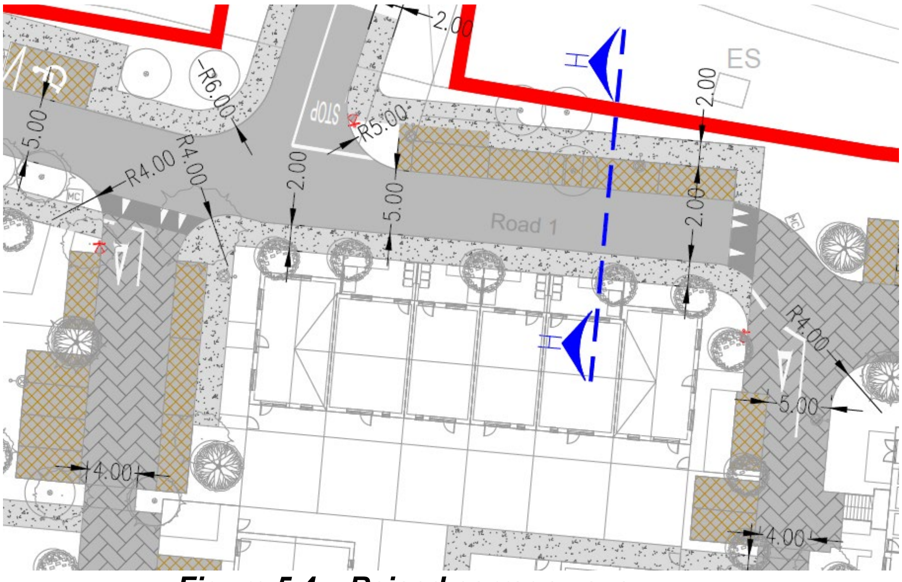

Figure 5.4 – Raised carrageways

Suggestion

Ensure adequate drainage throughout the development.

5.6 **Issue**

In some carriageway areas, the stopping sight distance (at corners) may be compromised by parked vehicles and proposed trees/planting. This may increase the risk of rear shunt, head on vehicles collisions or collisions with pedestrians within the shared space.

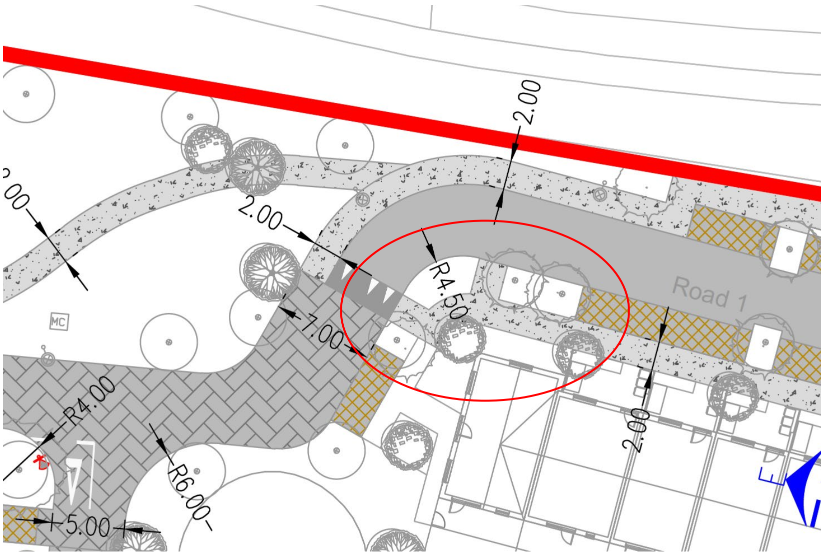

Figure 5.5 – Compromised Stopping Sight Distances

Suggestion

Ensure adequate stopping sight distances for all movements. Remove parking and trees as appropriate.

5.7 **Issue**

Some swept path analyses show vehicle movmeents on pedestrian areas. This will increase risk of pedestrian injury and creation of tripping hazards through footway surface damage.

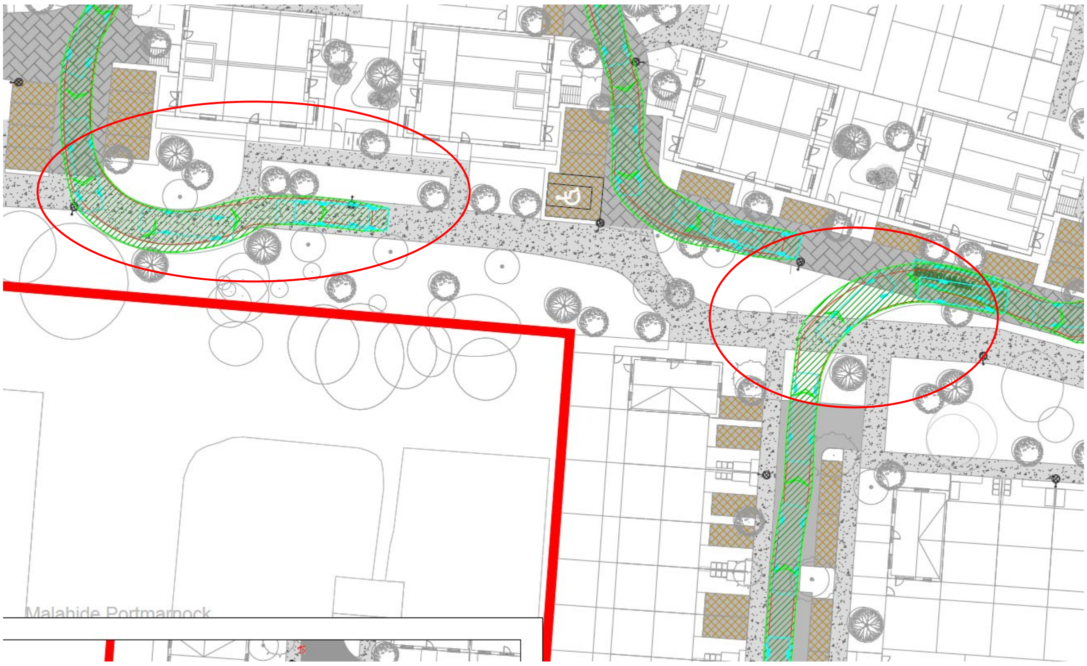

Figure 5.5 – Vehicle movements on pedestrian areas

Suggestion

Ensure adequate separation between pedestrian and vehicular movements.

5.8 **Issue**

Some vehicle movements may only be possible by striking overhanging branches of trees (e.g. Figure 5.6). This may result in pedestrian injury, vehicle collisions or vehicles mounting kerbs to avoid trees causing pedestrian injury.

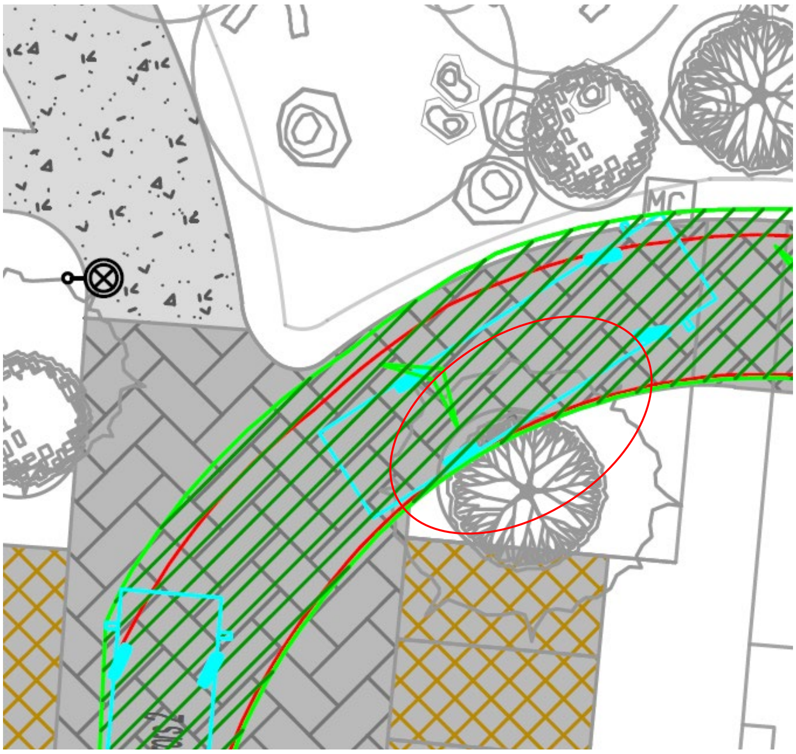

Figure 5.6 – Swept Path Analyses

Suggestion

Ensure all movements are achievable.

5.9 **Issue**

Some proposed road signs may be obscured by proposed trees, result in vehicle collisions.

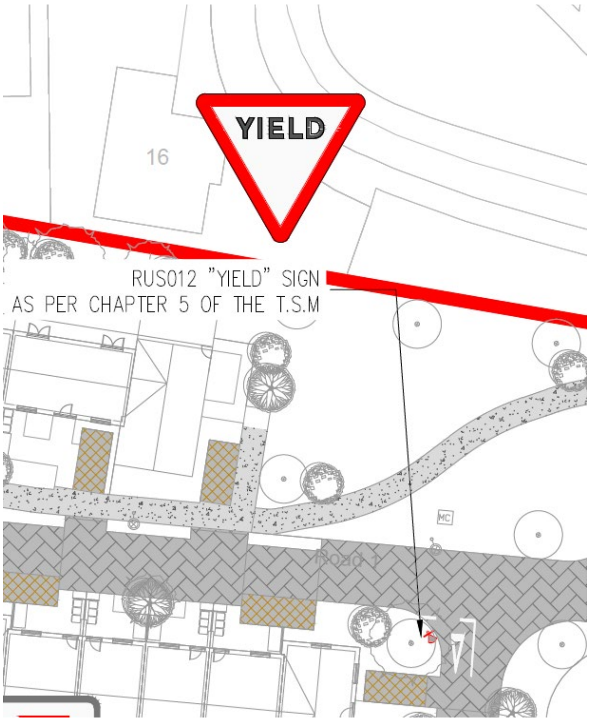

Figure 5.6 – Swept Path Analyses

Suggestion

Ensure all signage is separated from trees.

5.10 **Issue**

It is unclear if the proposed access roads (including shared surfaces) can cater for two-way flow of vehicles. There are a number of abrupt changes in the horizontal alignment and the carriageway widths vary substantially. A lack of appropriate alignment and carriageway widths may contribute to collisions within the proposed development.

Suggestion

Ensure that the proposed alignment and carriageway widths can safety cater for two opposing cars in all locations (including within the shared surfaces). Where pinch points are introduced, ensure that adequate measures are provided at these give-way locations so that priority is clear to approaching motorists.

6. WALKING

6. 1 **Issue**

Not all pedestrian desire lines in the development are considered and some crossings are incomplete (i.e. parking on one side). This will reduce the attractiveness of walking in the development. It is also unclear how pedestrians will access the doors of certain properties.

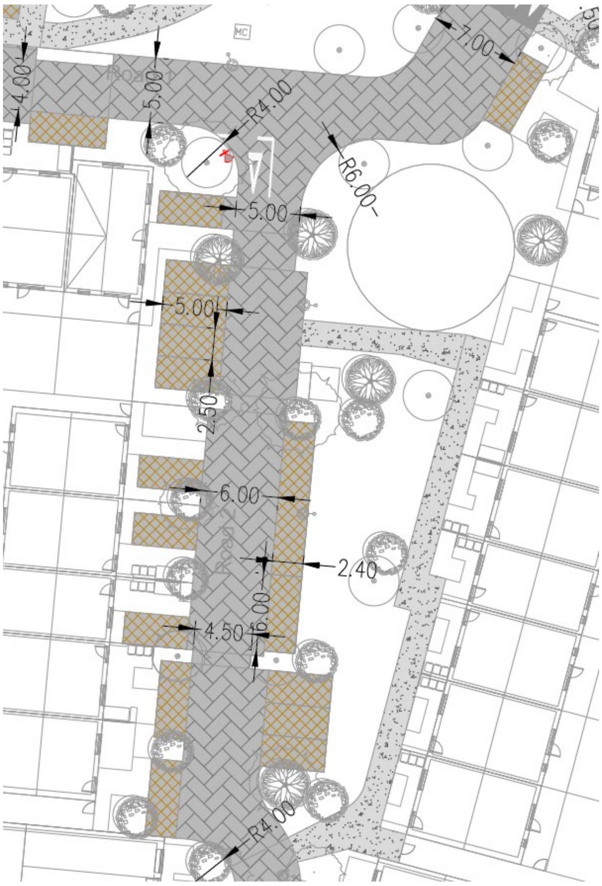

Figure 6.1 – Incomplete pedestrian desire lines

Suggestion

Ensure adequate pedestrian infrastructure for all movements. Ensure all pedestrian crossings are complete.

6. 2 **Issue**

Pedestrian tie-ins at certain locations will be compromised by parked vehicles and trees (e.g. Figure 6.2). This will compromise intervisibility between pedestrians and motorists, potentially conflict and injuries.

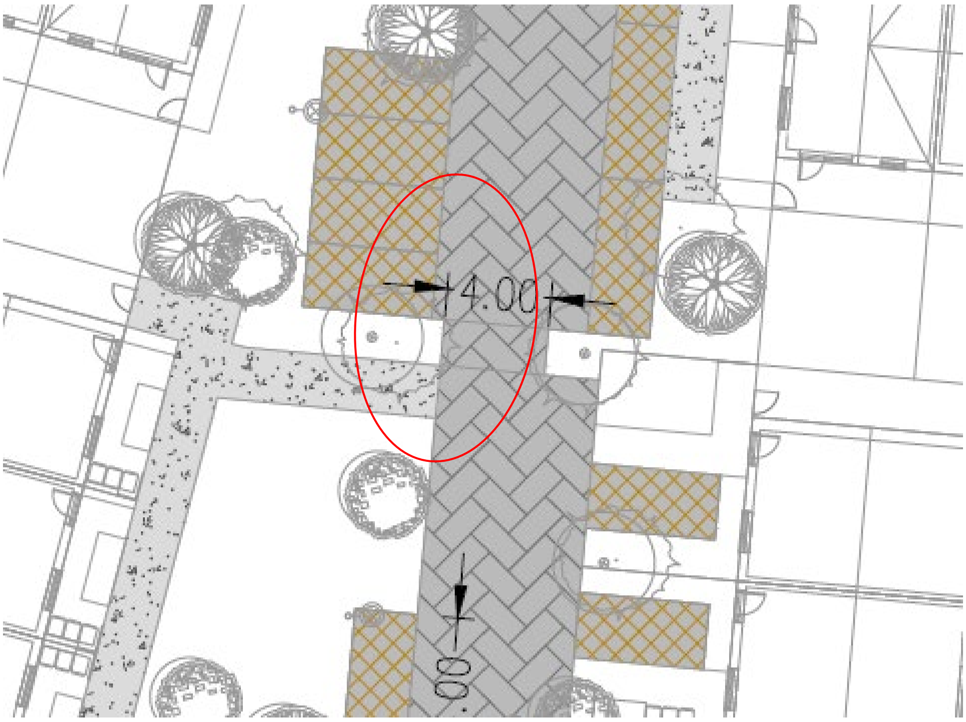

Figure 6.2 – Reduced Intervisibility between pedestrians and motorists

Suggestion

Ensure adequate intervisibility between pedestrians and motorists at all locations.

6. 3 **Issue**

Due to the proximity of the development to a school, and permeability with adjacent developments, footway widths may not be adequate for the required level of service needed at school run times.

Suggestion

Ensure adequate footway widths for all times.

6. 4 **Issue**

It is unclear how bin collection will happen without impeding footway access. This may increase requirements to walk on roadways during bin collection day, especially during school run times.

Suggestion

Ensure adequate footway separation from bin collection with adequate waste collection strategy.

6. 5 **Issue**

The proposed footpath alignment either side of the school access does not align with one another. This may lead to difficulties for visually impaired pedestrians crossing at this location.

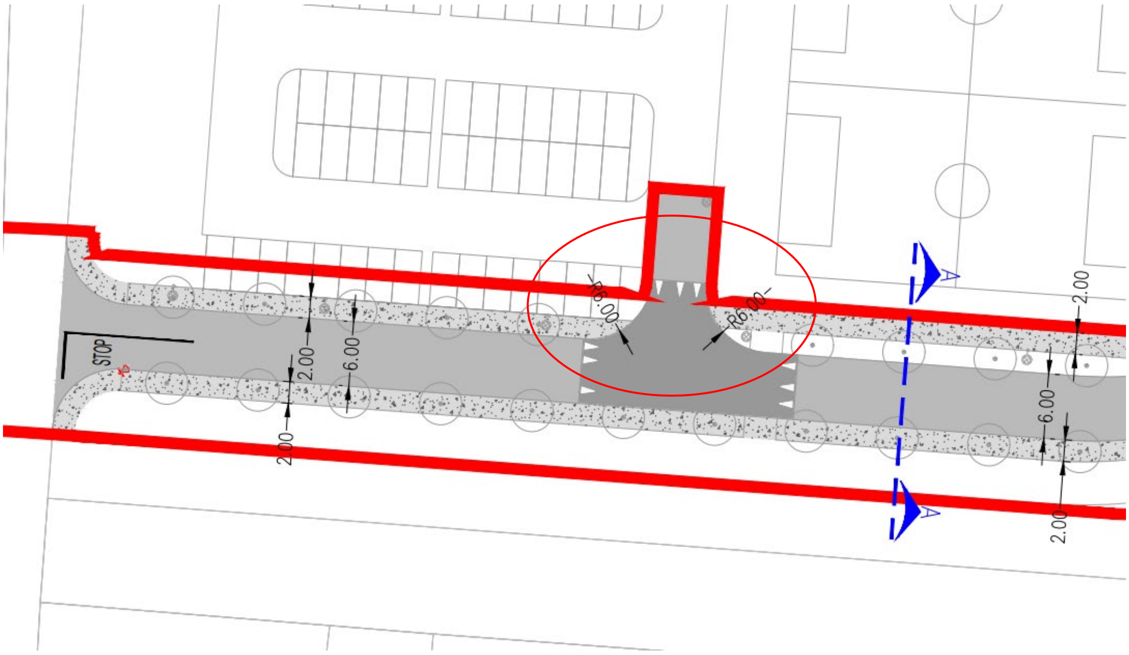

Figure 6.3 – Footpath Alignment

Suggestion

Revise the footpath layout at this location so that the footpaths either side of the junction aligns with one another.

6. 6 **Issue**

Trees are shown to be provided within footpath in a number of locations throughout the proposed development (e.g. Figure 6.4). trees and street furniture located within footpaths reduces its effective width and as a result pedestrians may be forced to travel along the carriageway where they would be at an increased risk of being struck by a passing vehicle.

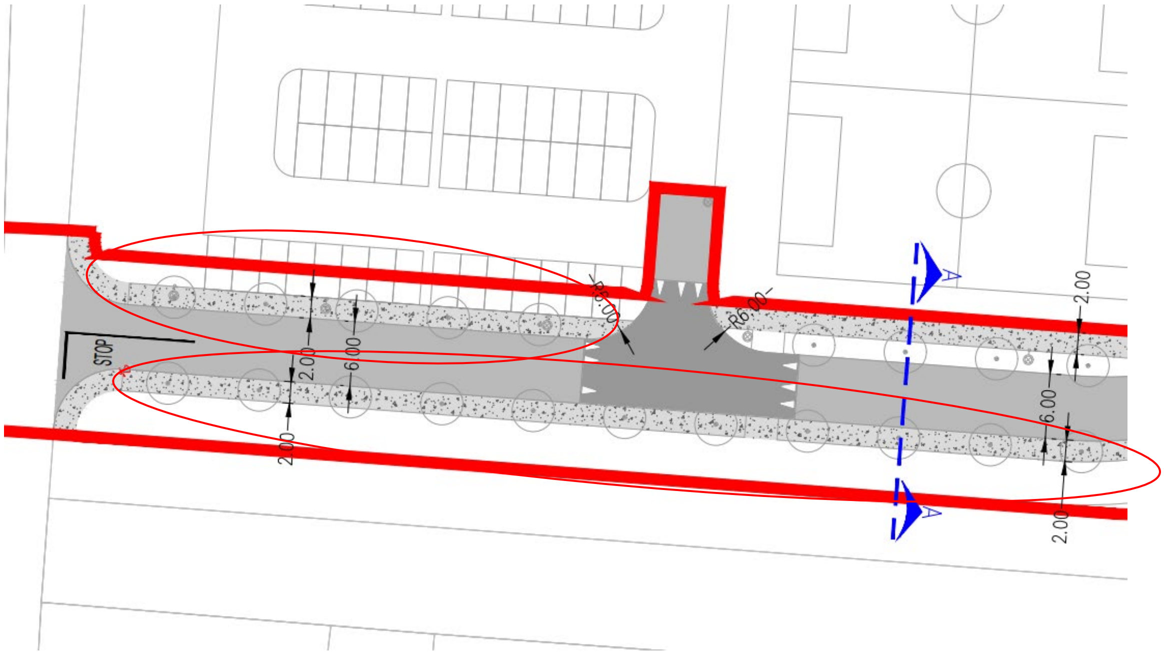

Figure 6.4 – Footpath Alignment

Suggestion

Ensure tress and other street furniture do not reduce the effective width of footpaths within the proposed development.

6. 7 **Issue**

Shared surfaces are proposed within the proposed development. It is unclear what edge definition, if any, is provided along the edges of the shared surfaces. In addition, the width and alignment of the shared surfaces changes abruptly in a number of locations. Where adequate guidance features are not provided, visually impaired pedestrians may become disoriented in the shared space and may stray onto the central access road, increasing the risk of collisions or may collide with objects outside of the shared surfaces where the alignment changes abruptly.

Suggestion

Ensure that the proposed alignment and widths of the shared surface can safety cater for all road users and that measures are provided to safely guide visually impaired pedestrians using the shared surfaces.

6. 8 **Issue**

A pedestrian access is proposed from the development onto the R107. While there is a bus stop on the east side of the R107 at the proposed pedestrian access, there is no existing footpath on this side of the carriageway. This may result in pedestrians travelling along the carriageway or crossing the carriageway at an unsafe location.

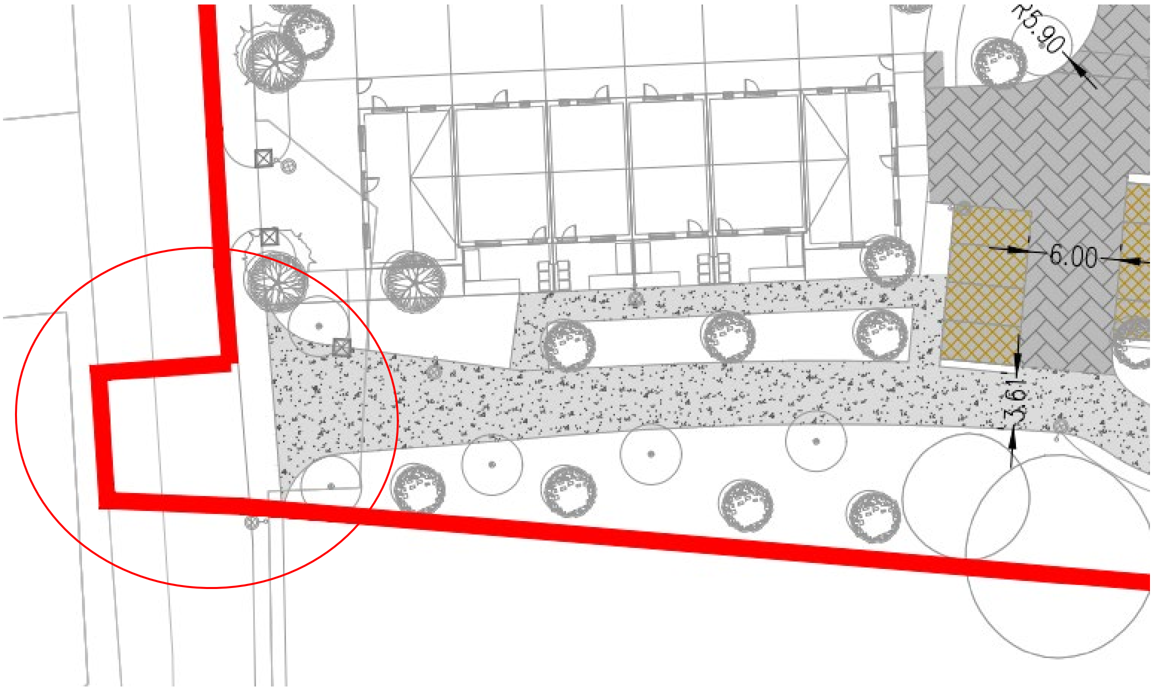

Figure 6.5 – Pedestrian Access

Suggestion

Provide a suitable pedestrian crossing at the proposed pedestrian access to cater for pedestrians crossing the R107 at this location.

7. CYCLING

7. 1 **Issue**

It is unclear how the proposed development will connect to existing/adjacent cycling infrastructure in adjacent developments. Lack of continuation will compromise the cycling experience or attractiveness in the development.

Figure 7.1 – *Tie in to existing footway and pedestrian infrastructure*

Figure 7.2 – *Tie in to existing footway and pedestrian infrastructure*

Suggestion

Consider cycle infrastructure through the development to tie-in to existing.

7. 2 **Issue**

It is unclear if the proposed cycle storage facilities in the development will be adequate for the anticipated volumes of cyclists or if cargo cycles have been considered. As such, it is unclear how attractive cycling, including that of cargo cycles, to/from the development will be.

Suggestion

Ensure adequate provision of cycle storage facilities for all cycle types.

7. 3 **Issue**

It is unclear how the development will tie in to the proposed ‘Primary Radial’ Route in the GDA Cycle network (https://www.nationaltransport.ie/wp-content/uploads/2023/01/2022-GDA-Cycle-Network.pdf). Fragmented cycle networks may reduce the attractiveness of cycling as a mode.

Suggestion

Tie-ins to adjacent cycle infrastructure should be considered.

8. ACCESSIBILITY

8. 1 **Issue**

It is unclear if the proposed development features tactile paving. Lack of tactile paving will pose navigation challenges for pedestrians with vision impairments.

Suggestion

Include tactile paving measures as appropriate throughout the development.

8. 2 **Issue**

In the absence of cycle infrastructure, wider footways may become shared surfaces between cycles and pedestrians. This may increase the conflict between cyclists and pedestrians, especially pedestrians with a vision impairment.

Suggestion

A kerb upstand or tactile delineation line should be included to ensure separation from cyclists for vision impaired pedestrians.

8. 3 **Issue**

Mobility impaired pedestrians may also struggle at crossings proposed at ramps to vehicular grade changes.

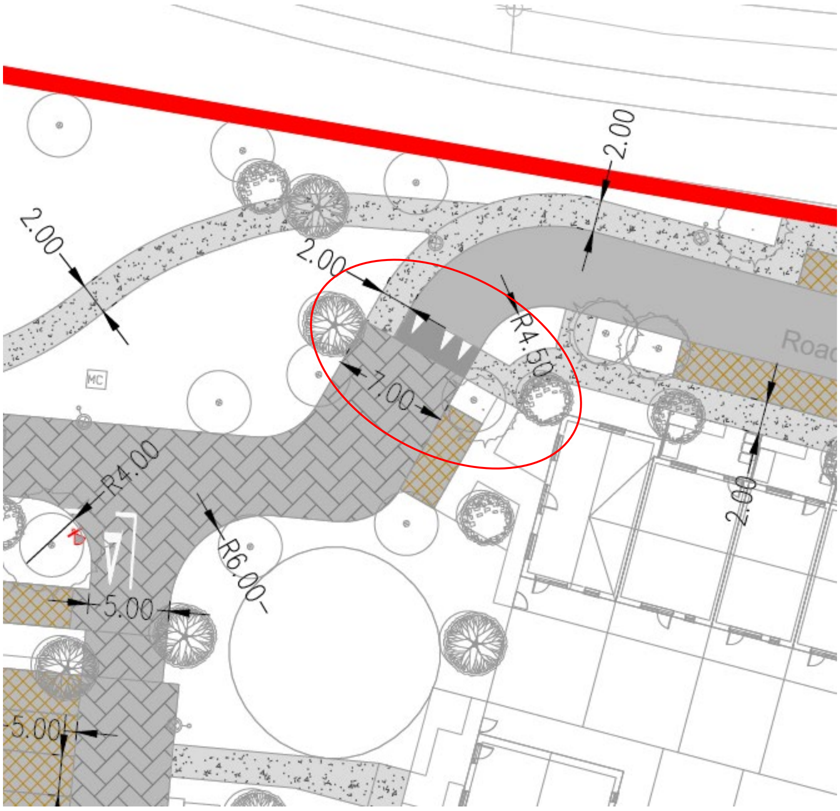

Figure 8.1 – Pedestrian crossing on ramps

Suggestion

Relocate crossing points away from ramps.

8. 4 **Issue**

It is unclear if suitable access will be proposed from disabled parking spaces to the adjacent footpaths (e.g. Figure 8.2). A lack of appropriate dropped kerbs may lead to mobility impaired pedestrians travelling along the carriageway to access the footpaths increasing their risk of being struck by a passing vehicle.

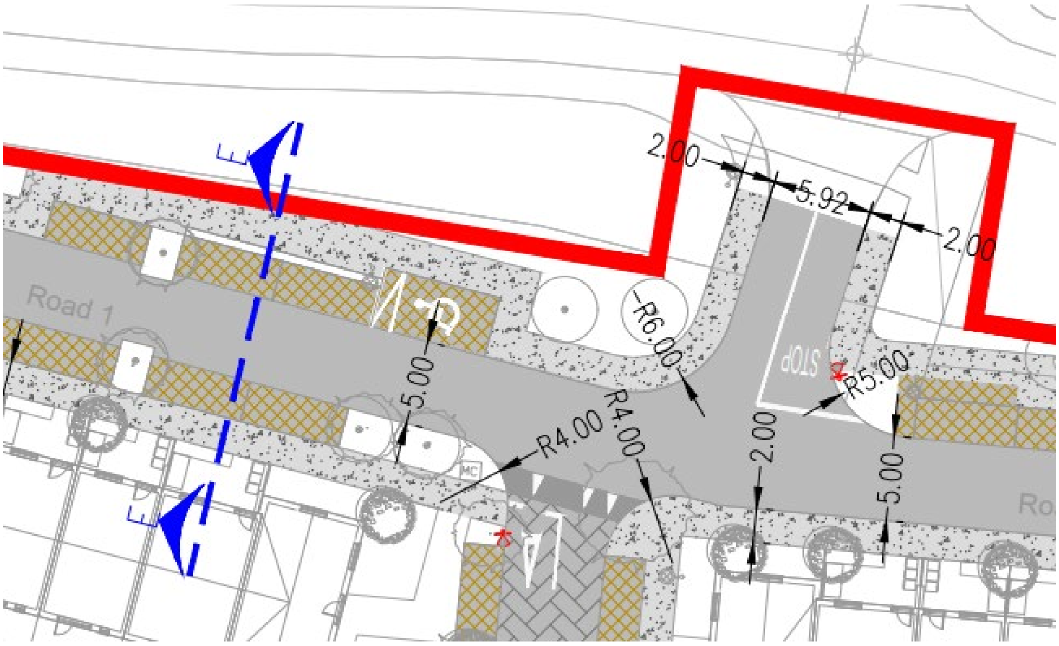

Figure 8.2 – Access to disabled parking

Suggestion

Provide a dropped kerb at all locations where disabled parking spaces are provide adjacent to footpaths.

4. QUALITY AUDIT FEEDBACK FORM

Scheme: Proposed Residential Development at Kinsealy

Document Number: 24225-01-001

Date Audit Completed: 16th December 2024

Paragraph No. in Quality Audit Report	To Be Completed By Designer			To Be Completed by Audit Team
	Issue Accepted (yes/no)	Suggested Measure Accepted (yes/no)	Describe alternative measure(s). Give reasons for not accepting suggested measure. Only complete if suggested measure is not accepted.	Alternative measures or reasons accepted by auditors (yes/no)
5.1	Yes	Yes	--	----------
5.2	Yes	Yes	--	----------
5.3	Yes	Yes	--	----------
5.4	Yes	Yes	--	----------
5.5	Yes	Yes	--	----------
5.6	Yes	Yes	--	----------
5.7	Yes	No	Vehicle movements shown across pedestrian areas are for fire tender access only. These shall occur extremely infrequently.	Yes
5.8	Yes	Yes	--	----------
5.9	Yes	Yes	--	----------
5.10	Yes	Yes	--	----------
6.1	No	No	The locations indicated are not pedestrian crossings but are transitions between footpaths and shared surfaces. Tactile paving and dropped kerbs (as appropriate) will be provided to make this clearer to users.	Yes
6.2	Yes	Yes	--	----------
6.3	Yes	Yes	--	----------
6.4	Yes	Yes	--	----------
6.5	Yes	Yes	--	----------
6.6	Yes	Yes	--	----------
6.7	Yes	Yes	--	----------
6.8	Yes	Yes	--	----------
7.1	Yes	Yes	--	----------
7.2	Yes	Yes	--	----------
7.3	Yes	Yes	--	----------

Paragraph No. in Quality Audit Report	To Be Completed By Designer			To Be Completed by Audit Team
	Issue Accepted (yes/no)	Suggested Measure Accepted (yes/no)	Describe alternative measure(s). Give reasons for not accepting suggested measure. Only complete if suggested measure is not accepted.	Alternative measures or reasons accepted by auditors (yes/no)
8.1	Yes	Yes	--	----------
8.2	Yes	Yes	--	----------
8.3	Yes	Yes	--	----------
8.4	Yes	Yes	--	----------

Safety Audit Signed off
Design Team Leader

Print Name …………Gary Lindsay………… **Date** ……12.01.2025……

Safety Audit

Signed off …… …………. **Audit Team Leader**

Print Name ……**George Frisby**…………. **Date** …13.01.2025…

Please complete and return to: Roadplan Consulting,
7, Ormonde Road
Kilkenny
E-mail: info@roadplan.ie

APPENDIX A – DRAWINGS

DRAWINGS REFERENCES

- REFER TO DRAWING C215-CSC-00-XX-DR-C-0024 TO 0025 FOR TYPICAL ROAD DETAILS.
- REFER TO DRAWING C215-CSC-00-XX-DR-C-0026 TO 0029 FOR PROPOSED ROAD PROFILES.
- REFER TO DRAWING C215-CSC-00-XX-DR-C-0023 FOR ROAD SECTION DETAILS.

ROADS LEGEND:

- SITE BOUNDARY
- PROPOSED ROAD
- PROPOSED PUBLIC FOOTPATH
- PROPOSED PARKING SPACE
- PROPOSED RAISED TABLES
- PROPOSED SHARED SURFACE

PLANNING DRAWING.
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NOTES

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P1	03.09.2024	DRAFT ISSUE	AB	GL
P2	10.09.2024	UPDATED SHARED SURFACE	AC	GL
P3	12.09.2024	ISSUED FOR STAGE 2 PLANNING SUBMISSION	JL	GL
P4	25.11.2024	REVISED SITE LAYOUT	AB	GL

Architect	CCK Architects
Project	Development at Former Teagasc Lands Kinsealy, Co. Dublin
Title	Proposed General Arrangement Sheet 1 of 2
Dwg. No.	C215-CSC-00-XX-DR-0004

Date	Drn by	Chkd by	Aprvd by	Scale	Revision
Sep' 2024	AB	GL	OS	1:500 @A1	P4

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Environment	I.S. EN ISO 14001:2004
Energy	I.S. EN ISO 50001:2011
Health & Safety	OHSAS 18001:2007

ROADS LEGEND:

- SITE BOUNDARY
- PROPOSED ROAD
- PROPOSED PUBLIC FOOTPATH
- PROPOSED PARKING SPACE
- PROPOSED RAISED TABLES
- PROPOSED SHARED SURFACE

DRAWINGS REFERENCES

- REFER TO DRAWING C215-CSC-00-XX-DR-C-0024 TO 0025 FOR TYPICAL ROAD DETAILS.
- REFER TO DRAWING C215-CSC-00-XX-DR-C-0026 TO 0029 FOR PROPOSED ROAD PROFILES.
- REFER TO DRAWING C215-CSC-00-XX-DR-C-0023 FOR ROAD SECTION DETAILS.

C215

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P3	12.09.2024	ISSUED FOR STAGE 2 PLANNING SUBMISSION	JL	GL
P4	25.11.2024	REVISED SITE LAYOUT	AB	GL

Architect	CCK Architects
Project	Development at Former Teagasc Lands Kinsealy, Co. Dublin
Title	Proposed General Arrangement Sheet 2 of 2
Dwg. No.	C215-CSC-00-XX-DR-0005

Date	Drn by	Chkd by	Aprvd by	Scale	Revision
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Health & Safety	OHSAS 18001:2007

TRAFFIC SIGNS.

SIGNS.	DESCRIPTION	DOE TRAFFIC SIGNS MANUAL REFERENCE.
YIELD	YIELD SIGN	RUS026
STOP	STOP SIGN	RUS027
T	CUL-DE-SAC	F350

ROAD MARKINGS.

SYMBOL	DESCRIPTION	REFERENCE	COLOUR
STOP	WORDED 'STOP' MARKING	M114	WHITE
	STOP LINE	RRM017	WHITE
	TRIANGULAR YIELD MARKING	M115	WHITE
	CENTRE LINE	RRM001	WHITE
	BROKEN CENTRE LINE 3m LINE, 3m GAP	RRM002B	WHITE
	NO ENTRY LINE	RRM019	WHITE
	PERPENDICULAR PARKING BAY MARKINGS	RRM013	WHITE
	DISABLED PERSONS SYMBOL	RRM015	WHITE
	ELECTRIC VEHICLE RECHARGING BAY MARKINGS	RRM034	WHITE

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P4	25.11.2024	REVISED SITE LAYOUT		

Architect	CCK Architects
Project	Development at Former Teagasc Lands Kinsealy, Co. Dublin
Title	Proposed Road Markings and Traffic Signs Sheet 1 of 2
Dwg. No.	C215-CSC-00-XX-DR-0008

Date	Drn by	Chkd by	Aprvd by	Scale	Revision
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TRAFFIC SIGNS.

SIGNS.	DESCRIPTION	DOE TRAFFIC SIGNS MANUAL REFERENCE.
YIELD	YIELD SIGN	RUS026
STOP	STOP SIGN	RUS027
T	CUL-DE-SAC	F350

ROAD MARKINGS.

SYMBOL	DESCRIPTION	REFERENCE	COLOUR
STOP	WORDED 'STOP' MARKING	M114	WHITE
	STOP LINE	RRM017	WHITE
	TRIANGULAR YIELD MARKING	M115	WHITE
	CENTRE LINE	RRM001	WHITE
	BROKEN CENTRE LINE 3m LINE, 3m GAP	RRM002B	WHITE
	NO ENTRY LINE	RRM019	WHITE
	PERPENDICULAR PARKING BAY MARKINGS	RRM013	WHITE
	DISABLED PERSONS SYMBOL	RRM015	WHITE
	ELECTRIC VEHICLE RECHARGING BAY MARKINGS	RRM034	WHITE

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P3	12.09.2024	ISSUED FOR STAGE 2 PLANNING SUBMISSION	JL	GL
P4	25.11.2024	REVISED SITE LAYOUT	AB	GL

Architect	CCK Architects
Project	Development at Former Teagasc Lands Kinsealy, Co. Dublin
Title	Proposed Road Markings and Traffic Signs Sheet 2 of 2
Dwg. No.	C215-CSC-00-XX-DR-0009

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P1	03.09.2024	DRAFT ISSUE	AB	GL
P2	10.09.2024	TREE LOCATIONS UPDATED TO FACILITATE SWEPT PATHS	AC	GL
P3	12.09.2024	ISSUED FOR STAGE 2 PLANNING SUBMISSION	JL	GL
P4	25.11.2024	REVISED SITE LAYOUT	AB	GL

Architect	CCK Architects
Project	Development at Former Teagasc Lands Kinsealy, Co. Dublin
Title	Swept Path Analysis Refuse Vehicle
Dwg. No.	C215-CSC-00-XX-DR-0014

Date	Drn by	Chkd by	Aprvd by	Scale	Revision
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P3	12.09.2024	ISSUED FOR STAGE 2 PLANNING SUBMISSION	JL	GL
P4	25.11.2024	REVISED SITE LAYOUT	AB	GL

Architect	CCK Architects
Project	Development at Former Teagasc Lands Kinsealy, Co. Dublin
Title	Swept Path Analysis Fire Tender
Dwg. No.	C215-CSC-00-XX-DR-0015

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Appendix E

Junction Modelling Results

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GROUP

Junctions 8

PICADY 8 - Priority Intersection Module

Version: 8.0.3.332 [14595,13/11/2013]

Filename: C215 J1 PICADY Model 20241210.arc8
Path: J:\C_JOBS\Job-C215\C_CALCULATIONS\B_TRAFFIC\Traffic Modelling
Report generation date: 10/12/2024 19:00:54

Summary of junction performance

	AM					PM				
	Queue (PCU)	Delay (s)	RFC	LOS	Network Residual Capacity	Queue (PCU)	Delay (s)	RFC	LOS	Network Residual Capacity
Default - 2024 Baseline										
Stream B-AC	2.26	27.28	0.70	D	16 % [Stream B-AC]	3.28	38.33	0.78	E	8 % [Stream B-AC]
Stream C-AB	0.61	9.63	0.38	A		0.76	11.76	0.43	B	
Stream C-A	-	-	-	-		-	-	-	-	
Stream A-B	-	-	-	-		-	-	-	-	
Stream A-C	-	-	-	-		-	-	-	-	
Default - 2027 Do-Nothing										
Stream B-AC	3.19	36.72	0.78	E	9 % [Stream B-AC]	6.53	71.36	0.90	F	0 % [Stream B-AC]
Stream C-AB	0.73	10.47	0.42	B		1.01	13.75	0.50	B	
Stream C-A	-	-	-	-		-	-	-	-	
Stream A-B	-	-	-	-		-	-	-	-	
Stream A-C	-	-	-	-		-	-	-	-	
Default - 2027 With Development										
Stream B-AC	3.58	41.05	0.80	E	7 % [Stream B-AC]	8.11	86.11	0.93	F	-2 % [Stream B-AC]
Stream C-AB	0.78	10.83	0.44	B		1.05	14.12	0.51	B	
Stream C-A	-	-	-	-		-	-	-	-	
Stream A-B	-	-	-	-		-	-	-	-	
Stream A-C	-	-	-	-		-	-	-	-	
Default - 2032 Do-Nothing										
Stream B-AC	4.35	48.54	0.83	E	4 % [Stream B-AC]	10.92	110.75	0.97	F	-5 % [Stream B-AC]
Stream C-AB	0.80	10.99	0.45	B		1.14	14.84	0.53	B	
Stream C-A	-	-	-	-		-	-	-	-	
Stream A-B	-	-	-	-		-	-	-	-	
Stream A-C	-	-	-	-		-	-	-	-	
Default - 2032 With Development										
Stream B-										

AC	5.03	55.80	0.86	F	2 % [Stream B-AC]	14.02	136.02	1.01	F	-6 % [Stream B-AC]
Stream C-AB	0.86	11.38	0.46	B		1.19	15.27	0.55	C	
Stream C-A	-	-	-	-		-	-	-	-	
Stream A-B	-	-	-	-		-	-	-	-	
Stream A-C	-	-	-	-		-	-	-	-	
	Default - 2042 Do-Nothing									
Stream B-AC	5.41	59.19	0.87	F	2 % [Stream B-AC]	15.66	148.78	1.02	F	-7 % [Stream B-AC]
Stream C-AB	0.86	11.39	0.46	B		1.26	15.73	0.56	C	
Stream C-A	-	-	-	-		-	-	-	-	
Stream A-B	-	-	-	-		-	-	-	-	
Stream A-C	-	-	-	-		-	-	-	-	
	Default - 2042 With Development									
Stream B-AC	6.38	69.35	0.90	F	0 % [Stream B-AC]	19.95	181.62	1.06	F	-9 % [Stream B-AC]
Stream C-AB	0.92	11.82	0.48	B		1.32	16.21	0.57	C	
Stream C-A	-	-	-	-		-	-	-	-	
Stream A-B	-	-	-	-		-	-	-	-	
Stream A-C	-	-	-	-		-	-	-	-	

Values shown are the maximum values over all time segments. Delay is the maximum value of average delay per arriving vehicle. Network Residual Capacity indicates the amount by which network flow could be increased before a user-definable threshold (see Analysis Options) is met.

"D1 - 2024 Baseline, AM " model duration: 07:30 - 09:00
"D2 - 2024 Baseline, PM" model duration: 16:00 - 17:30
"D3 - 2027 Do-Nothing, AM" model duration: 07:30 - 09:00
"D4 - 2027 Do-Nothing, PM" model duration: 16:00 - 17:30
"D5 - 2027 With Development, AM" model duration: 07:30 - 09:00
"D6 - 2027 With Development, PM" model duration: 16:00 - 17:30
"D7 - 2032 Do-Nothing, AM" model duration: 07:30 - 09:00
"D8 - 2032 Do-Nothing, PM" model duration: 16:00 - 17:30
"D9 - 2032 With Development, AM" model duration: 07:30 - 09:00
"D10 - 2032 With Development, PM" model duration: 16:00 - 17:30
"D11 - 2042 Do-Nothing, AM" model duration: 07:30 - 09:00
"D12 - 2042 Do-Nothing, PM" model duration: 16:00 - 17:30
"D13 - 2042 With Development, AM" model duration: 07:30 - 09:00
"D14 - 2042 With Development, PM" model duration: 16:00 - 17:30

Run using Junctions 8.0.3.332 at 10/12/2024 19:00:46

File summary

File Description

Title	Kinsealy
Location	Co. Dublin
Site Number	1
Date	10/12/2024
Version	
Status	
Identifier	
Client	
Jobnumber	C215
Enumerator	GF
Description	

Analysis Options

Vehicle Length (m)	Do Queue Variations	Calculate Residual Capacity	Residual Capacity Criteria Type	RFC Threshold	Average Delay Threshold (s)	Queue Threshold (PCU)

5.75		✓	RFC	0.90	36.00	20.00

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

Default - 2024 Baseline, AM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

Name	Description	Locked	Network Flow Scaling Factor (%)	Reason For Scaling Factors
Default			100.000	

Demand Set Details

Name	Scenario Name	Time Period Name	Description	Traffic Profile Type	Model Start Time (HH:mm)	Model Finish Time (HH:mm)	Model Time Period Length (min)	Time Segment Length (min)	Single Time Segment Only	Locked
2024 Baseline, AM	2024 Baseline	AM		ONE HOUR	07:30	09:00	90	15		

Junction Network

Junctions

Name	Junction Type	Major Road Direction	Arm Order	Junction Delay (s)	Junction LOS
	T-Junction	Two-way	A,B,C	19.76	C

Junction Network Options

Driving Side	Lighting	Network Residual Capacity (%)	First Arm Reaching Threshold
Left	Normal/unknown	16	Stream B-AC

Arms

Arms

Arm	Name	Description	Arm Type
A	Malahide Road (South)		Major
B	Baskin Lane (West)		Minor
C	Malahide Road (North)		Major

Major Arm Geometry

Arm	Width of carriageway (m)	Has kerbed central reserve	Width of kerbed central reserve (m)	Has right turn bay	Width For Right Turn (m)	Visibility For Right Turn (m)	Blocks?	Blocking Queue (PCU)
C	9.40		0.00	✓	3.10	180.00	✓	5.00

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)	Lane Width (Left) (m)	Lane Width (Right) (m)	Width at give-way (m)	Width at 5m (m)	Width at 10m (m)	Width at 15m (m)	Width at 20m (m)	Estimate Flare Length	Flare Length (PCU)	Visibility To Left (m)	Visibility To Right (m)
	One												

B	lane	3.70								✓		18	18

Pedestrian Crossings

Arm	Crossing Type
A	None
B	None
C	None

Slope / Intercept / Capacity

Priority Intersection Slopes and Intercepts

Junction	Stream	Intercept (PCU/hr)	Slope for A-B	Slope for A-C	Slope for C-A	Slope for C-B
1	B-A	526.806	0.082	0.207	0.130	0.295
1	B-C	679.789	0.089	0.224	-	-
1	C-B	744.634	0.246	0.246	-	-

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 Flows

Demand Set Data Options

Default Vehicle Mix	Vehicle Mix Varies Over Time	Vehicle Mix Varies Over Turn	Vehicle Mix Varies Over Entry	Vehicle Mix Source	PCU Factor for a HV (PCU)	Default Turning Proportions	Estimate from entry/exit counts	Turning Proportions Vary Over Time	Turning Proportions Vary Over Turn	Turning Proportions Vary Over Entry
		✓	✓	HV Percentages	2.00				✓	✓

Entry Flows

General Flows Data

Arm	Profile Type	Use Turning Counts	Average Demand Flow (PCU/hr)	Flow Scaling Factor (%)
A	ONE HOUR	✓	528.00	100.000
B	ONE HOUR	✓	281.00	100.000
C	ONE HOUR	✓	706.00	100.000

Turning Proportions

Turning Counts or Proportions (PCU/hr) - Junction 1 (for whole period)

		To		
		A	**B**	**C**
From	**A**	0.000	111.000	417.000
	B	80.000	0.000	201.000
	C	498.000	208.000	0.000

Turning Proportions (PCU) - Junction 1 (for whole period)

		To		
		A	**B**	**C**
From	**A**	0.00	0.21	0.79
	B	0.28	0.00	0.72

	C	0.71	0.29	0.00

Vehicle Mix

Average PCU Per Vehicle - Junction 1 (for whole period)

		To		
		A	B	C
From	A	1.000	1.000	1.000
	B	1.000	1.000	1.000
	C	1.000	1.000	1.000

Heavy Vehicle Percentages - Junction 1 (for whole period)

		To		
		A	B	C
From	A	0.000	0.000	0.000
	B	0.000	0.000	0.000
	C	0.000	0.000	0.000

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
B-AC	0.70	27.28	2.26	D
C-AB	0.38	9.63	0.61	A
C-A	-	-	-	-
A-B	-	-	-	-
A-C	-	-	-	-

Default - 2024 Baseline, PM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

Name	Description	Locked	Network Flow Scaling Factor (%)	Reason For Scaling Factors
Default			100.000	

Demand Set Details

Name	Scenario Name	Time Period Name	Description	Traffic Profile Type	Model Start Time (HH:mm)	Model Finish Time (HH:mm)	Model Time Period Length (min)	Time Segment Length (min)	Single Time Segment Only	Locked
2024 Baseline, PM	2024 Baseline	PM		ONE HOUR	16:00	17:30	90	15		

Junction Network

Junctions

Name	Junction Type	Major Road Direction	Arm Order	Junction Delay (s)	Junction LOS
	T-Junction	Two-way	A,B,C	27.27	D

Junction Network Options

Driving Side	Lighting	Network Residual Capacity (%)	First Arm Reaching Threshold
Left	Normal/unknown	8	Stream B-AC

Arms

Arms

Arm	Name	Description	Arm Type
A	Malahide Road (South)		Major
B	Baskin Lane (West)		Minor
C	Malahide Road (North)		Major

Major Arm Geometry

Arm	Width of carriageway (m)	Has kerbed central reserve	Width of kerbed central reserve (m)	Has right turn bay	Width For Right Turn (m)	Visibility For Right Turn (m)	Blocks?	Blocking Queue (PCU)
C	9.40		0.00	✓	3.10	180.00	✓	5.00

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)	Lane Width (Left) (m)	Lane Width (Right) (m)	Width at give-way (m)	Width at 5m (m)	Width at 10m (m)	Width at 15m (m)	Width at 20m (m)	Estimate Flare Length	Flare Length (PCU)	Visibility To Left (m)	Visibility To Right (m)
B	One lane	3.70								✓		18	18

Pedestrian Crossings

Arm	Crossing Type
A	None
B	None
C	None

Slope / Intercept / Capacity

Priority Intersection Slopes and Intercepts

Junction	Stream	Intercept (PCU/hr)	Slope for A-B	Slope for A-C	Slope for C-A	Slope for C-B
1	B-A	526.806	0.082	0.207	0.130	0.295
1	B-C	679.789	0.089	0.224	-	-
1	C-B	744.634	0.246	0.246	-	-

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 Flows

Demand Set Data Options

Default Vehicle Mix	Vehicle Mix Varies Over Time	Vehicle Mix Varies Over Turn	Vehicle Mix Varies Over Entry	Vehicle Mix Source	PCU Factor for a HV (PCU)	Default Turning Proportions	Estimate from entry/exit counts	Turning Proportions Vary Over Time	Turning Proportions Vary Over Turn	Turning Proportions Vary Over Entry
		✓	✓	HV	2.00				✓	✓

				Percentages						

Entry Flows

General Flows Data

Arm	Profile Type	Use Turning Counts	Average Demand Flow (PCU/hr)	Flow Scaling Factor (%)
A	ONE HOUR	✓	772.00	100.000
B	ONE HOUR	✓	296.00	100.000
C	ONE HOUR	✓	582.00	100.000

Turning Proportions

Turning Counts or Proportions (PCU/hr) - Junction 1 (for whole period)

		To		
		A	B	C
From	A	0.000	180.000	592.000
	B	68.000	0.000	228.000
	C	372.000	210.000	0.000

Turning Proportions (PCU) - Junction 1 (for whole period)

		To		
		A	B	C
From	A	0.00	0.23	0.77
	B	0.23	0.00	0.77
	C	0.64	0.36	0.00

Vehicle Mix

Average PCU Per Vehicle - Junction 1 (for whole period)

		To		
		A	B	C
From	A	1.000	1.000	1.000
	B	1.000	1.000	1.000
	C	1.000	1.000	1.000

Heavy Vehicle Percentages - Junction 1 (for whole period)

		To		
		A	B	C
From	A	0.000	0.000	0.000
	B	0.000	0.000	0.000
	C	0.000	0.000	0.000

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
B-AC	0.78	38.33	3.28	E
C-AB	0.43	11.76	0.76	B
C-A	-	-	-	-
A-B	-	-	-	-
A-C	-	-	-	-

Default - 2027 Do-Nothing, AM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

Name	Description	Locked	Network Flow Scaling Factor (%)	Reason For Scaling Factors
Default			100.000	

Demand Set Details

Name	Scenario Name	Time Period Name	Description	Traffic Profile Type	Model Start Time (HH:mm)	Model Finish Time (HH:mm)	Model Time Period Length (min)	Time Segment Length (min)	Single Time Segment Only	Locked
2027 Do-Nothing, AM	2027 Do-Nothing	AM		ONE HOUR	07:30	09:00	90	15		

Junction Network

Junctions

Name	Junction Type	Major Road Direction	Arm Order	Junction Delay (s)	Junction LOS
	T-Junction	Two-way	A,B,C	25.37	D

Junction Network Options

Driving Side	Lighting	Network Residual Capacity (%)	First Arm Reaching Threshold
Left	Normal/unknown	9	Stream B-AC

Arms

Arms

Arm	Name	Description	Arm Type
A	Malahide Road (South)		Major
B	Baskin Lane (West)		Minor
C	Malahide Road (North)		Major

Major Arm Geometry

Arm	Width of carriageway (m)	Has kerbed central reserve	Width of kerbed central reserve (m)	Has right turn bay	Width For Right Turn (m)	Visibility For Right Turn (m)	Blocks?	Blocking Queue (PCU)
C	9.40		0.00	✓	3.10	180.00	✓	5.00

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)	Lane Width (Left) (m)	Lane Width (Right) (m)	Width at give-way (m)	Width at 5m (m)	Width at 10m (m)	Width at 15m (m)	Width at 20m (m)	Estimate Flare Length	Flare Length (PCU)	Visibility To Left (m)	Visibility To Right (m)
B	One lane	3.70								✓		18	18

Pedestrian Crossings

Arm	Crossing Type
A	None
B	None
C	None

Slope / Intercept / Capacity

Priority Intersection Slopes and Intercepts

Junction	Stream	Intercept (PCU/hr)	Slope for A-B	Slope for A-C	Slope for C-A	Slope for C-B
1	B-A	526.806	0.082	0.207	0.130	0.295
1	B-C	679.789	0.089	0.224	-	-
1	C-B	744.634	0.246	0.246	-	-

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 Flows

Demand Set Data Options

Default Vehicle Mix	Vehicle Mix Varies Over Time	Vehicle Mix Varies Over Turn	Vehicle Mix Varies Over Entry	Vehicle Mix Source	PCU Factor for a HV (PCU)	Default Turning Proportions	Estimate from entry/exit counts	Turning Proportions Vary Over Time	Turning Proportions Vary Over Turn	Turning Proportions Vary Over Entry
		✓	✓	HV Percentages	2.00				✓	✓

Entry Flows

General Flows Data

Arm	Profile Type	Use Turning Counts	Average Demand Flow (PCU/hr)	Flow Scaling Factor (%)
A	ONE HOUR	✓	565.00	100.000
B	ONE HOUR	✓	300.00	100.000
C	ONE HOUR	✓	763.00	100.000

Turning Proportions

Turning Counts or Proportions (PCU/hr) - Junction 1 (for whole period)

		To		
		A	B	C
From	A	0.000	116.000	449.000
	B	83.000	0.000	217.000
	C	536.000	227.000	0.000

Turning Proportions (PCU) - Junction 1 (for whole period)

		To		
		A	B	C
From	A	0.00	0.21	0.79
	B	0.28	0.00	0.72
	C	0.70	0.30	0.00

Vehicle Mix

Average PCU Per Vehicle - Junction 1 (for whole period)

		To		
		A	B	C
From	A	1.000	1.000	1.000
	B	1.000	1.000	1.000
	C	1.000	1.000	1.000

Heavy Vehicle Percentages - Junction 1 (for whole period)

		To		
		A	B	C
From	A	0.000	0.000	0.000
	B	0.000	0.000	0.000
	C	0.000	0.000	0.000

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
B-AC	0.78	36.72	3.19	E
C-AB	0.42	10.47	0.73	B
C-A	-	-	-	-
A-B	-	-	-	-
A-C	-	-	-	-

Default - 2027 Do-Nothing, PM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

Name	Description	Locked	Network Flow Scaling Factor (%)	Reason For Scaling Factors
Default			100.000	

Demand Set Details

Name	Scenario Name	Time Period Name	Description	Traffic Profile Type	Model Start Time (HH:mm)	Model Finish Time (HH:mm)	Model Time Period Length (min)	Time Segment Length (min)	Single Time Segment Only	Locked
2027 Do-Nothing, PM	2027 Do-Nothing	PM		ONE HOUR	16:00	17:30	90	15		

Junction Network

Junctions

Name	Junction Type	Major Road Direction	Arm Order	Junction Delay (s)	Junction LOS

	T-Junction	Two-way	A,B,C	46.98	E

Junction Network Options

Driving Side	Lighting	Network Residual Capacity (%)	First Arm Reaching Threshold
Left	Normal/unknown	0	Stream B-AC

Arms

Arms

Arm	Name	Description	Arm Type
A	Malahide Road (South)		Major
B	Baskin Lane (West)		Minor
C	Malahide Road (North)		Major

Major Arm Geometry

Arm	Width of carriageway (m)	Has kerbed central reserve	Width of kerbed central reserve (m)	Has right turn bay	Width For Right Turn (m)	Visibility For Right Turn (m)	Blocks?	Blocking Queue (PCU)
C	9.40		0.00	✓	3.10	180.00	✓	5.00

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)	Lane Width (Left) (m)	Lane Width (Right) (m)	Width at give-way (m)	Width at 5m (m)	Width at 10m (m)	Width at 15m (m)	Width at 20m (m)	Estimate Flare Length	Flare Length (PCU)	Visibility To Left (m)	Visibility To Right (m)
B	One lane	3.70								✓		18	18

Pedestrian Crossings

Arm	Crossing Type
A	None
B	None
C	None

Slope / Intercept / Capacity

Priority Intersection Slopes and Intercepts

Junction	Stream	Intercept (PCU/hr)	Slope for A-B	Slope for A-C	Slope for C-A	Slope for C-B
1	B-A	526.806	0.082	0.207	0.130	0.295
1	B-C	679.789	0.089	0.224	-	-
1	C-B	744.634	0.246	0.246	-	-

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 Flows

Demand Set Data Options

Default Vehicle Mix	Vehicle Mix Varies Over Time	Vehicle Mix Varies Over Turn	Vehicle Mix Varies Over Entry	Vehicle Mix Source	PCU Factor for a HV (PCU)	Default Turning Proportions	Estimate from entry/exit counts	Turning Proportions Vary Over Time	Turning Proportions Vary Over Turn	Turning Proportions Vary Over Entry
		✓	✓	HV Percentages	2.00				✓	✓

Entry Flows

General Flows Data

Arm	Profile Type	Use Turning Counts	Average Demand Flow (PCU/hr)	Flow Scaling Factor (%)
A	ONE HOUR	✓	843.00	100.000
B	ONE HOUR	✓	323.00	100.000
C	ONE HOUR	✓	638.00	100.000

Turning Proportions

Turning Counts or Proportions (PCU/hr) - Junction 1 (for whole period)

		To		
		A	B	C
From	A	0.000	187.000	656.000
	B	70.000	0.000	253.000
	C	404.000	234.000	0.000

Turning Proportions (PCU) - Junction 1 (for whole period)

		To		
		A	B	C
From	A	0.00	0.22	0.78
	B	0.22	0.00	0.78
	C	0.63	0.37	0.00

Vehicle Mix

Average PCU Per Vehicle - Junction 1 (for whole period)

		To		
		A	B	C
From	A	1.000	1.000	1.000
	B	1.000	1.000	1.000
	C	1.000	1.000	1.000

Heavy Vehicle Percentages - Junction 1 (for whole period)

		To		
		A	B	C
From	A	0.000	0.000	0.000
	B	0.000	0.000	0.000
	C	0.000	0.000	0.000

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
B-AC	0.90	71.36	6.53	F
C-AB	0.50	13.75	1.01	B
C-A	-	-	-	-
A-B	-	-	-	-
A-C	-	-	-	-

Default - 2027 With Development, AM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

Name	Description	Locked	Network Flow Scaling Factor (%)	Reason For Scaling Factors
Default			100.000	

Demand Set Details

Name	Scenario Name	Time Period Name	Description	Traffic Profile Type	Model Start Time (HH:mm)	Model Finish Time (HH:mm)	Model Time Period Length (min)	Time Segment Length (min)	Single Time Segment Only	Locked
2027 With Development, AM	2027 With Development	AM		ONE HOUR	07:30	09:00	90	15		

Junction Network

Junctions

Name	Junction Type	Major Road Direction	Arm Order	Junction Delay (s)	Junction LOS
	T-Junction	Two-way	A,B,C	27.85	D

Junction Network Options

Driving Side	Lighting	Network Residual Capacity (%)	First Arm Reaching Threshold
Left	Normal/unknown	7	Stream B-AC

Arms

Arms

Arm	Name	Description	Arm Type
A	Malahide Road (South)		Major
B	Baskin Lane (West)		Minor
C	Malahide Road (North)		Major

Major Arm Geometry

Arm	Width of carriageway (m)	Has kerbed central reserve	Width of kerbed central reserve (m)	Has right turn bay	Width For Right Turn (m)	Visibility For Right Turn (m)	Blocks?	Blocking Queue (PCU)
C	9.40		0.00	✓	3.10	180.00	✓	5.00

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)	Lane Width (Left) (m)	Lane Width (Right) (m)	Width at give-way (m)	Width at 5m (m)	Width at 10m (m)	Width at 15m (m)	Width at 20m (m)	Estimate Flare Length	Flare Length (PCU)	Visibility To Left (m)	Visibility To Right (m)
B	One lane	3.70								✓		18	18

Pedestrian Crossings

Arm	Crossing Type
A	None
B	None
C	None

Slope / Intercept / Capacity

Priority Intersection Slopes and Intercepts

Junction	Stream	Intercept (PCU/hr)	Slope for A-B	Slope for A-C	Slope for C-A	Slope for C-B
1	B-A	526.806	0.082	0.207	0.130	0.295
1	B-C	679.789	0.089	0.224	-	-
1	C-B	744.634	0.246	0.246	-	-

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 Flows

Demand Set Data Options

Default Vehicle Mix	Vehicle Mix Varies Over Time	Vehicle Mix Varies Over Turn	Vehicle Mix Varies Over Entry	Vehicle Mix Source	PCU Factor for a HV (PCU)	Default Turning Proportions	Estimate from entry/exit counts	Turning Proportions Vary Over Time	Turning Proportions Vary Over Turn	Turning Proportions Vary Over Entry
		✓	✓	HV Percentages	2.00				✓	✓

Entry Flows

General Flows Data

Arm	Profile Type	Use Turning Counts	Average Demand Flow (PCU/hr)	Flow Scaling Factor (%)
A	ONE HOUR	✓	584.00	100.000
B	ONE HOUR	✓	303.00	100.000
C	ONE HOUR	✓	783.00	100.000

Turning Proportions

Turning Counts or Proportions (PCU/hr) - Junction 1 (for whole period)

		To		
		A	B	C
From	A	0.000	119.000	465.000
	B	84.000	0.000	219.000
	C	550.000	233.000	0.000

Turning Proportions (PCU) - Junction 1 (for whole period)

		To		
		A	B	C
From	A	0.00	0.20	0.80
	B	0.28	0.00	0.72
	C	0.70	0.30	0.00

Vehicle Mix

Average PCU Per Vehicle - Junction 1 (for whole period)

		To		
		A	B	C
From	A	1.000	1.000	1.000
	B	1.000	1.000	1.000
	C	1.000	1.000	1.000

Heavy Vehicle Percentages - Junction 1 (for whole period)

		To		
		A	B	C
From	A	0.000	0.000	0.000
	B	0.000	0.000	0.000
	C	0.000	0.000	0.000

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
B-AC	0.80	41.05	3.58	E
C-AB	0.44	10.83	0.78	B
C-A	-	-	-	-
A-B	-	-	-	-
A-C	-	-	-	-

Default - 2027 With Development, PM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

Name	Description	Locked	Network Flow Scaling Factor (%)	Reason For Scaling Factors
Default			100.000	

Demand Set Details

Name	Scenario Name	Time Period Name	Description	Traffic Profile Type	Model Start Time (HH:mm)	Model Finish Time (HH:mm)	Model Time Period Length (min)	Time Segment Length (min)	Single Time Segment Only	Locked
2027 With Development, PM	2027 With Development	PM		ONE HOUR	16:00	17:30	90	15		

Junction Network

Junctions

Name	Junction Type	Major Road Direction	Arm Order	Junction Delay (s)	Junction LOS

	T-Junction	Two-way	A,B,C	55.71	F

Junction Network Options

Driving Side	Lighting	Network Residual Capacity (%)	First Arm Reaching Threshold
Left	Normal/unknown	-2	Stream B-AC

Arms

Arms

Arm	Name	Description	Arm Type
A	Malahide Road (South)		Major
B	Baskin Lane (West)		Minor
C	Malahide Road (North)		Major

Major Arm Geometry

Arm	Width of carriageway (m)	Has kerbed central reserve	Width of kerbed central reserve (m)	Has right turn bay	Width For Right Turn (m)	Visibility For Right Turn (m)	Blocks?	Blocking Queue (PCU)
C	9.40		0.00	✓	3.10	180.00	✓	5.00

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)	Lane Width (Left) (m)	Lane Width (Right) (m)	Width at give-way (m)	Width at 5m (m)	Width at 10m (m)	Width at 15m (m)	Width at 20m (m)	Estimate Flare Length	Flare Length (PCU)	Visibility To Left (m)	Visibility To Right (m)
B	One lane	3.70								✓		18	18

Pedestrian Crossings

Arm	Crossing Type
A	None
B	None
C	None

Slope / Intercept / Capacity

Priority Intersection Slopes and Intercepts

Junction	Stream	Intercept (PCU/hr)	Slope for A-B	Slope for A-C	Slope for C-A	Slope for C-B
1	B-A	526.806	0.082	0.207	0.130	0.295
1	B-C	679.789	0.089	0.224	-	-
1	C-B	744.634	0.246	0.246	-	-

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 Flows

Demand Set Data Options

Default Vehicle Mix	Vehicle Mix Varies Over Time	Vehicle Mix Varies Over Turn	Vehicle Mix Varies Over Entry	Vehicle Mix Source	PCU Factor for a HV (PCU)	Default Turning Proportions	Estimate from entry/exit counts	Turning Proportions Vary Over Time	Turning Proportions Vary Over Turn	Turning Proportions Vary Over Entry
		✓	✓	HV Percentages	2.00				✓	✓

Entry Flows

General Flows Data

Arm	Profile Type	Use Turning Counts	Average Demand Flow (PCU/hr)	Flow Scaling Factor (%)
A	ONE HOUR	✓	857.00	100.000
B	ONE HOUR	✓	329.00	100.000
C	ONE HOUR	✓	652.00	100.000

Turning Proportions

Turning Counts or Proportions (PCU/hr) - Junction 1 (for whole period)

		To		
		A	B	C
From	A	0.000	188.000	669.000
	B	72.000	0.000	257.000
	C	415.000	237.000	0.000

Turning Proportions (PCU) - Junction 1 (for whole period)

		To		
		A	B	C
From	A	0.00	0.22	0.78
	B	0.22	0.00	0.78
	C	0.64	0.36	0.00

Vehicle Mix

Average PCU Per Vehicle - Junction 1 (for whole period)

		To		
		A	B	C
From	A	1.000	1.000	1.000
	B	1.000	1.000	1.000
	C	1.000	1.000	1.000

Heavy Vehicle Percentages - Junction 1 (for whole period)

		To		
		A	B	C
From	A	0.000	0.000	0.000
	B	0.000	0.000	0.000
	C	0.000	0.000	0.000

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
B-AC	0.93	86.11	8.11	F
C-AB	0.51	14.12	1.05	B
C-A	-	-	-	-
A-B	-	-	-	-
A-C	-	-	-	-

Default - 2032 Do-Nothing, AM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

Name	Description	Locked	Network Flow Scaling Factor (%)	Reason For Scaling Factors
Default			100.000	

Demand Set Details

Name	Scenario Name	Time Period Name	Description	Traffic Profile Type	Model Start Time (HH:mm)	Model Finish Time (HH:mm)	Model Time Period Length (min)	Time Segment Length (min)	Single Time Segment Only	Locked
2032 Do-Nothing, AM	2032 Do-Nothing	AM		ONE HOUR	07:30	09:00	90	15		

Junction Network

Junctions

Name	Junction Type	Major Road Direction	Arm Order	Junction Delay (s)	Junction LOS
	T-Junction	Two-way	A,B,C	32.34	D

Junction Network Options

Driving Side	Lighting	Network Residual Capacity (%)	First Arm Reaching Threshold
Left	Normal/unknown	4	Stream B-AC

Arms

Arms

Arm	Name	Description	Arm Type
A	Malahide Road (South)		Major
B	Baskin Lane (West)		Minor
C	Malahide Road (North)		Major

Major Arm Geometry

Arm	Width of carriageway (m)	Has kerbed central reserve	Width of kerbed central reserve (m)	Has right turn bay	Width For Right Turn (m)	Visibility For Right Turn (m)	Blocks?	Blocking Queue (PCU)
C	9.40		0.00	✓	3.10	180.00	✓	5.00

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)	Lane Width (Left) (m)	Lane Width (Right) (m)	Width at give-way (m)	Width at 5m (m)	Width at 10m (m)	Width at 15m (m)	Width at 20m (m)	Estimate Flare Length	Flare Length (PCU)	Visibility To Left (m)	Visibility To Right (m)
B	One lane	3.70								✓		18	18

Pedestrian Crossings

Arm	Crossing Type
A	None
B	None
C	None

Slope / Intercept / Capacity

Priority Intersection Slopes and Intercepts

Junction	Stream	Intercept (PCU/hr)	Slope for A-B	Slope for A-C	Slope for C-A	Slope for C-B
1	B-A	526.806	0.082	0.207	0.130	0.295
1	B-C	679.789	0.089	0.224	-	-
1	C-B	744.634	0.246	0.246	-	-

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 Flows

Demand Set Data Options

Default Vehicle Mix	Vehicle Mix Varies Over Time	Vehicle Mix Varies Over Turn	Vehicle Mix Varies Over Entry	Vehicle Mix Source	PCU Factor for a HV (PCU)	Default Turning Proportions	Estimate from entry/exit counts	Turning Proportions Vary Over Time	Turning Proportions Vary Over Turn	Turning Proportions Vary Over Entry
		✓	✓	HV Percentages	2.00				✓	✓

Entry Flows

General Flows Data

Arm	Profile Type	Use Turning Counts	Average Demand Flow (PCU/hr)	Flow Scaling Factor (%)
A	ONE HOUR	✓	590.00	100.000
B	ONE HOUR	✓	314.00	100.000
C	ONE HOUR	✓	796.00	100.000

Turning Proportions

Turning Counts or Proportions (PCU/hr) - Junction 1 (for whole period)

		To		
		A	B	C
From	A	0.000	121.000	469.000
	B	87.000	0.000	227.000
	C	560.000	236.000	0.000

Turning Proportions (PCU) - Junction 1 (for whole period)

		To		
		A	B	C
From	A	0.00	0.21	0.79
	B	0.28	0.00	0.72
	C	0.70	0.30	0.00

Vehicle Mix

Average PCU Per Vehicle - Junction 1 (for whole period)

		To		
		A	B	C
From	A	1.000	1.000	1.000
	B	1.000	1.000	1.000
	C	1.000	1.000	1.000

Heavy Vehicle Percentages - Junction 1 (for whole period)

		To		
		A	B	C
From	A	0.000	0.000	0.000
	B	0.000	0.000	0.000
	C	0.000	0.000	0.000

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
B-AC	0.83	48.54	4.35	E
C-AB	0.45	10.99	0.80	B
C-A	-	-	-	-
A-B	-	-	-	-
A-C	-	-	-	-

Default - 2032 Do-Nothing, PM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

Name	Description	Locked	Network Flow Scaling Factor (%)	Reason For Scaling Factors
Default			100.000	

Demand Set Details

Name	Scenario Name	Time Period Name	Description	Traffic Profile Type	Model Start Time (HH:mm)	Model Finish Time (HH:mm)	Model Time Period Length (min)	Time Segment Length (min)	Single Time Segment Only	Locked
2032 Do-Nothing, PM	2032 Do-Nothing	PM		ONE HOUR	16:00	17:30	90	15		

Junction Network

Junctions

Name	Junction Type	Major Road Direction	Arm Order	Junction Delay (s)	Junction LOS

	T-Junction	Two-way	A,B,C	70.15	F

Junction Network Options

Driving Side	Lighting	Network Residual Capacity (%)	First Arm Reaching Threshold
Left	Normal/unknown	-5	Stream B-AC

Arms

Arms

Arm	Name	Description	Arm Type
A	Malahide Road (South)		Major
B	Baskin Lane (West)		Minor
C	Malahide Road (North)		Major

Major Arm Geometry

Arm	Width of carriageway (m)	Has kerbed central reserve	Width of kerbed central reserve (m)	Has right turn bay	Width For Right Turn (m)	Visibility For Right Turn (m)	Blocks?	Blocking Queue (PCU)
C	9.40		0.00	✓	3.10	180.00	✓	5.00

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)	Lane Width (Left) (m)	Lane Width (Right) (m)	Width at give-way (m)	Width at 5m (m)	Width at 10m (m)	Width at 15m (m)	Width at 20m (m)	Estimate Flare Length	Flare Length (PCU)	Visibility To Left (m)	Visibility To Right (m)
B	One lane	3.70								✓		18	18

Pedestrian Crossings

Arm	Crossing Type
A	None
B	None
C	None

Slope / Intercept / Capacity

Priority Intersection Slopes and Intercepts

Junction	Stream	Intercept (PCU/hr)	Slope for A-B	Slope for A-C	Slope for C-A	Slope for C-B
1	B-A	526.806	0.082	0.207	0.130	0.295
1	B-C	679.789	0.089	0.224	-	-
1	C-B	744.634	0.246	0.246	-	-

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 Flows

Demand Set Data Options

Default Vehicle Mix	Vehicle Mix Varies Over Time	Vehicle Mix Varies Over Turn	Vehicle Mix Varies Over Entry	Vehicle Mix Source	PCU Factor for a HV (PCU)	Default Turning Proportions	Estimate from entry/exit counts	Turning Proportions Vary Over Time	Turning Proportions Vary Over Turn	Turning Proportions Vary Over Entry
		✓	✓	HV Percentages	2.00				✓	✓

Entry Flows

General Flows Data

Arm	Profile Type	Use Turning Counts	Average Demand Flow (PCU/hr)	Flow Scaling Factor (%)
A	ONE HOUR	✓	880.00	100.000
B	ONE HOUR	✓	337.00	100.000
C	ONE HOUR	✓	664.00	100.000

Turning Proportions

Turning Counts or Proportions (PCU/hr) - Junction 1 (for whole period)

		To		
		A	B	C
From	A	0.000	196.000	684.000
	B	74.000	0.000	263.000
	C	421.000	243.000	0.000

Turning Proportions (PCU) - Junction 1 (for whole period)

		To		
		A	B	C
From	A	0.00	0.22	0.78
	B	0.22	0.00	0.78
	C	0.63	0.37	0.00

Vehicle Mix

Average PCU Per Vehicle - Junction 1 (for whole period)

		To		
		A	B	C
From	A	1.000	1.000	1.000
	B	1.000	1.000	1.000
	C	1.000	1.000	1.000

Heavy Vehicle Percentages - Junction 1 (for whole period)

		To		
		A	B	C
From	A	0.000	0.000	0.000
	B	0.000	0.000	0.000
	C	0.000	0.000	0.000

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
B-AC	0.97	110.75	10.92	F
C-AB	0.53	14.84	1.14	B
C-A	-	-	-	-
A-B	-	-	-	-
A-C	-	-	-	-

Default - 2032 With Development, AM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

Name	Description	Locked	Network Flow Scaling Factor (%)	Reason For Scaling Factors
Default			100.000	

Demand Set Details

Name	Scenario Name	Time Period Name	Description	Traffic Profile Type	Model Start Time (HH:mm)	Model Finish Time (HH:mm)	Model Time Period Length (min)	Time Segment Length (min)	Single Time Segment Only	Locked
2032 With Development, AM	2032 With Development	AM		ONE HOUR	07:30	09:00	90	15		

Junction Network

Junctions

Name	Junction Type	Major Road Direction	Arm Order	Junction Delay (s)	Junction LOS
	T-Junction	Two-way	A,B,C	36.46	E

Junction Network Options

Driving Side	Lighting	Network Residual Capacity (%)	First Arm Reaching Threshold
Left	Normal/unknown	2	Stream B-AC

Arms

Arms

Arm	Name	Description	Arm Type
A	Malahide Road (South)		Major
B	Baskin Lane (West)		Minor
C	Malahide Road (North)		Major

Major Arm Geometry

Arm	Width of carriageway (m)	Has kerbed central reserve	Width of kerbed central reserve (m)	Has right turn bay	Width For Right Turn (m)	Visibility For Right Turn (m)	Blocks?	Blocking Queue (PCU)
C	9.40		0.00	✓	3.10	180.00	✓	5.00

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)	Lane Width (Left) (m)	Lane Width (Right) (m)	Width at give-way (m)	Width at 5m (m)	Width at 10m (m)	Width at 15m (m)	Width at 20m (m)	Estimate Flare Length	Flare Length (PCU)	Visibility To Left (m)	Visibility To Right (m)
B	One lane	3.70								✓		18	18

Pedestrian Crossings

Arm	Crossing Type
A	None
B	None
C	None

Slope / Intercept / Capacity

Priority Intersection Slopes and Intercepts

Junction	Stream	Intercept (PCU/hr)	Slope for A-B	Slope for A-C	Slope for C-A	Slope for C-B
1	B-A	526.806	0.082	0.207	0.130	0.295
1	B-C	679.789	0.089	0.224	-	-
1	C-B	744.634	0.246	0.246	-	-

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 Flows

Demand Set Data Options

Default Vehicle Mix	Vehicle Mix Varies Over Time	Vehicle Mix Varies Over Turn	Vehicle Mix Varies Over Entry	Vehicle Mix Source	PCU Factor for a HV (PCU)	Default Turning Proportions	Estimate from entry/exit counts	Turning Proportions Vary Over Time	Turning Proportions Vary Over Turn	Turning Proportions Vary Over Entry
		✓	✓	HV Percentages	2.00				✓	✓

Entry Flows

General Flows Data

Arm	Profile Type	Use Turning Counts	Average Demand Flow (PCU/hr)	Flow Scaling Factor (%)
A	ONE HOUR	✓	609.00	100.000
B	ONE HOUR	✓	317.00	100.000
C	ONE HOUR	✓	816.00	100.000

Turning Proportions

Turning Counts or Proportions (PCU/hr) - Junction 1 (for whole period)

		To		
		A	B	C
From	A	0.000	124.000	485.000
	B	88.000	0.000	229.000
	C	574.000	242.000	0.000

Turning Proportions (PCU) - Junction 1 (for whole period)

		To		
		A	B	C
From	A	0.00	0.20	0.80
	B	0.28	0.00	0.72
	C	0.70	0.30	0.00

Vehicle Mix

Average PCU Per Vehicle - Junction 1 (for whole period)

		To		
		A	B	C
From	A	1.000	1.000	1.000
	B	1.000	1.000	1.000
	C	1.000	1.000	1.000

Heavy Vehicle Percentages - Junction 1 (for whole period)

		To		
		A	B	C
From	A	0.000	0.000	0.000
	B	0.000	0.000	0.000
	C	0.000	0.000	0.000

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
B-AC	0.86	55.80	5.03	F
C-AB	0.46	11.38	0.86	B
C-A	-	-	-	-
A-B	-	-	-	-
A-C	-	-	-	-

Default - 2032 With Development, PM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

Name	Description	Locked	Network Flow Scaling Factor (%)	Reason For Scaling Factors
Default			100.000	

Demand Set Details

Name	Scenario Name	Time Period Name	Description	Traffic Profile Type	Model Start Time (HH:mm)	Model Finish Time (HH:mm)	Model Time Period Length (min)	Time Segment Length (min)	Single Time Segment Only	Locked
2032 With Development, PM	2032 With Development	PM		ONE HOUR	16:00	17:30	90	15		

Junction Network

Junctions

Name	Junction Type	Major Road Direction	Arm Order	Junction Delay (s)	Junction LOS

	T-Junction	Two-way	A,B,C	85.00	F

Junction Network Options

Driving Side	Lighting	Network Residual Capacity (%)	First Arm Reaching Threshold
Left	Normal/unknown	-6	Stream B-AC

Arms

Arms

Arm	Name	Description	Arm Type
A	Malahide Road (South)		Major
B	Baskin Lane (West)		Minor
C	Malahide Road (North)		Major

Major Arm Geometry

Arm	Width of carriageway (m)	Has kerbed central reserve	Width of kerbed central reserve (m)	Has right turn bay	Width For Right Turn (m)	Visibility For Right Turn (m)	Blocks?	Blocking Queue (PCU)
C	9.40		0.00	✓	3.10	180.00	✓	5.00

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)	Lane Width (Left) (m)	Lane Width (Right) (m)	Width at give-way (m)	Width at 5m (m)	Width at 10m (m)	Width at 15m (m)	Width at 20m (m)	Estimate Flare Length	Flare Length (PCU)	Visibility To Left (m)	Visibility To Right (m)
B	One lane	3.70								✓		18	18

Pedestrian Crossings

Arm	Crossing Type
A	None
B	None
C	None

Slope / Intercept / Capacity

Priority Intersection Slopes and Intercepts

Junction	Stream	Intercept (PCU/hr)	Slope for A-B	Slope for A-C	Slope for C-A	Slope for C-B
1	B-A	526.806	0.082	0.207	0.130	0.295
1	B-C	679.789	0.089	0.224	-	-
1	C-B	744.634	0.246	0.246	-	-

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 Flows

Demand Set Data Options

Default Vehicle Mix	Vehicle Mix Varies Over Time	Vehicle Mix Varies Over Turn	Vehicle Mix Varies Over Entry	Vehicle Mix Source	PCU Factor for a HV (PCU)	Default Turning Proportions	Estimate from entry/exit counts	Turning Proportions Vary Over Time	Turning Proportions Vary Over Turn	Turning Proportions Vary Over Entry
		✓	✓	HV Percentages	2.00				✓	✓

Entry Flows

General Flows Data

Arm	Profile Type	Use Turning Counts	Average Demand Flow (PCU/hr)	Flow Scaling Factor (%)
A	ONE HOUR	✓	894.00	100.000
B	ONE HOUR	✓	343.00	100.000
C	ONE HOUR	✓	678.00	100.000

Turning Proportions

Turning Counts or Proportions (PCU/hr) - Junction 1 (for whole period)

		To		
		A	B	C
From	A	0.000	197.000	697.000
	B	76.000	0.000	267.000
	C	432.000	246.000	0.000

Turning Proportions (PCU) - Junction 1 (for whole period)

		To		
		A	B	C
From	A	0.00	0.22	0.78
	B	0.22	0.00	0.78
	C	0.64	0.36	0.00

Vehicle Mix

Average PCU Per Vehicle - Junction 1 (for whole period)

		To		
		A	B	C
From	A	1.000	1.000	1.000
	B	1.000	1.000	1.000
	C	1.000	1.000	1.000

Heavy Vehicle Percentages - Junction 1 (for whole period)

		To		
		A	B	C
From	A	0.000	0.000	0.000
	B	0.000	0.000	0.000
	C	0.000	0.000	0.000

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
B-AC	1.01	136.02	14.02	F
C-AB	0.55	15.27	1.19	C
C-A	-	-	-	-
A-B	-	-	-	-
A-C	-	-	-	-

Default - 2042 Do-Nothing, AM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

Name	Description	Locked	Network Flow Scaling Factor (%)	Reason For Scaling Factors
Default			100.000	

Demand Set Details

Name	Scenario Name	Time Period Name	Description	Traffic Profile Type	Model Start Time (HH:mm)	Model Finish Time (HH:mm)	Model Time Period Length (min)	Time Segment Length (min)	Single Time Segment Only	Locked
2042 Do-Nothing, AM	2042 Do-Nothing	AM		ONE HOUR	07:30	09:00	90	15		

Junction Network

Junctions

Name	Junction Type	Major Road Direction	Arm Order	Junction Delay (s)	Junction LOS
	T-Junction	Two-way	A,B,C	38.50	E

Junction Network Options

Driving Side	Lighting	Network Residual Capacity (%)	First Arm Reaching Threshold
Left	Normal/unknown	2	Stream B-AC

Arms

Arms

Arm	Name	Description	Arm Type
A	Malahide Road (South)		Major
B	Baskin Lane (West)		Minor
C	Malahide Road (North)		Major

Major Arm Geometry

Arm	Width of carriageway (m)	Has kerbed central reserve	Width of kerbed central reserve (m)	Has right turn bay	Width For Right Turn (m)	Visibility For Right Turn (m)	Blocks?	Blocking Queue (PCU)
C	9.40		0.00	✓	3.10	180.00	✓	5.00

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)	Lane Width (Left) (m)	Lane Width (Right) (m)	Width at give-way (m)	Width at 5m (m)	Width at 10m (m)	Width at 15m (m)	Width at 20m (m)	Estimate Flare Length	Flare Length (PCU)	Visibility To Left (m)	Visibility To Right (m)
B	One lane	3.70								✓		18	18

Pedestrian Crossings

Arm	Crossing Type
A	None
B	None
C	None

Slope / Intercept / Capacity

Priority Intersection Slopes and Intercepts

Junction	Stream	Intercept (PCU/hr)	Slope for A-B	Slope for A-C	Slope for C-A	Slope for C-B
1	B-A	526.806	0.082	0.207	0.130	0.295
1	B-C	679.789	0.089	0.224	-	-
1	C-B	744.634	0.246	0.246	-	-

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 Flows

Demand Set Data Options

Default Vehicle Mix	Vehicle Mix Varies Over Time	Vehicle Mix Varies Over Turn	Vehicle Mix Varies Over Entry	Vehicle Mix Source	PCU Factor for a HV (PCU)	Default Turning Proportions	Estimate from entry/exit counts	Turning Proportions Vary Over Time	Turning Proportions Vary Over Turn	Turning Proportions Vary Over Entry
		✓	✓	HV Percentages	2.00				✓	✓

Entry Flows

General Flows Data

Arm	Profile Type	Use Turning Counts	Average Demand Flow (PCU/hr)	Flow Scaling Factor (%)
A	ONE HOUR	✓	606.00	100.000
B	ONE HOUR	✓	322.00	100.000
C	ONE HOUR	✓	818.00	100.000

Turning Proportions

Turning Counts or Proportions (PCU/hr) - Junction 1 (for whole period)

		To		
		A	**B**	**C**
From	**A**	0.000	124.000	482.000
	B	89.000	0.000	233.000
	C	575.000	243.000	0.000

Turning Proportions (PCU) - Junction 1 (for whole period)

		To		
		A	**B**	**C**
From	**A**	0.00	0.20	0.80
	B	0.28	0.00	0.72
	C	0.70	0.30	0.00

Vehicle Mix

Average PCU Per Vehicle - Junction 1 (for whole period)

		To		
		A	B	C
From	A	1.000	1.000	1.000
	B	1.000	1.000	1.000
	C	1.000	1.000	1.000

Heavy Vehicle Percentages - Junction 1 (for whole period)

		To		
		A	B	C
From	A	0.000	0.000	0.000
	B	0.000	0.000	0.000
	C	0.000	0.000	0.000

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
B-AC	0.87	59.19	5.41	F
C-AB	0.46	11.39	0.86	B
C-A	-	-	-	-
A-B	-	-	-	-
A-C	-	-	-	-

Default - 2042 Do-Nothing, PM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

Name	Description	Locked	Network Flow Scaling Factor (%)	Reason For Scaling Factors
Default			100.000	

Demand Set Details

Name	Scenario Name	Time Period Name	Description	Traffic Profile Type	Model Start Time (HH:mm)	Model Finish Time (HH:mm)	Model Time Period Length (min)	Time Segment Length (min)	Single Time Segment Only	Locked
2042 Do-Nothing, PM	2042 Do-Nothing	PM		ONE HOUR	16:00	17:30	90	15		

Junction Network

Junctions

Name	Junction Type	Major Road Direction	Arm Order	Junction Delay (s)	Junction LOS

	T-Junction	Two-way	A,B,C	92.24	F

Junction Network Options

Driving Side	Lighting	Network Residual Capacity (%)	First Arm Reaching Threshold
Left	Normal/unknown	-7	Stream B-AC

Arms

Arms

Arm	Name	Description	Arm Type
A	Malahide Road (South)		Major
B	Baskin Lane (West)		Minor
C	Malahide Road (North)		Major

Major Arm Geometry

Arm	Width of carriageway (m)	Has kerbed central reserve	Width of kerbed central reserve (m)	Has right turn bay	Width For Right Turn (m)	Visibility For Right Turn (m)	Blocks?	Blocking Queue (PCU)
C	9.40		0.00	✓	3.10	180.00	✓	5.00

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)	Lane Width (Left) (m)	Lane Width (Right) (m)	Width at give-way (m)	Width at 5m (m)	Width at 10m (m)	Width at 15m (m)	Width at 20m (m)	Estimate Flare Length	Flare Length (PCU)	Visibility To Left (m)	Visibility To Right (m)
B	One lane	3.70								✓		18	18

Pedestrian Crossings

Arm	Crossing Type
A	None
B	None
C	None

Slope / Intercept / Capacity

Priority Intersection Slopes and Intercepts

Junction	Stream	Intercept (PCU/hr)	Slope for A-B	Slope for A-C	Slope for C-A	Slope for C-B
1	B-A	526.806	0.082	0.207	0.130	0.295
1	B-C	679.789	0.089	0.224	-	-
1	C-B	744.634	0.246	0.246	-	-

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 Flows

Demand Set Data Options

Default Vehicle Mix	Vehicle Mix Varies Over Time	Vehicle Mix Varies Over Turn	Vehicle Mix Varies Over Entry	Vehicle Mix Source	PCU Factor for a HV (PCU)	Default Turning Proportions	Estimate from entry/exit counts	Turning Proportions Vary Over Time	Turning Proportions Vary Over Turn	Turning Proportions Vary Over Entry
		✓	✓	HV Percentages	2.00				✓	✓

Entry Flows

General Flows Data

Arm	Profile Type	Use Turning Counts	Average Demand Flow (PCU/hr)	Flow Scaling Factor (%)
A	ONE HOUR	✓	904.00	100.000
B	ONE HOUR	✓	346.00	100.000
C	ONE HOUR	✓	683.00	100.000

Turning Proportions

Turning Counts or Proportions (PCU/hr) - Junction 1 (for whole period)

		To		
		A	B	C
From	A	0.000	201.000	703.000
	B	76.000	0.000	270.000
	C	433.000	250.000	0.000

Turning Proportions (PCU) - Junction 1 (for whole period)

		To		
		A	B	C
From	A	0.00	0.22	0.78
	B	0.22	0.00	0.78
	C	0.63	0.37	0.00

Vehicle Mix

Average PCU Per Vehicle - Junction 1 (for whole period)

		To		
		A	B	C
From	A	1.000	1.000	1.000
	B	1.000	1.000	1.000
	C	1.000	1.000	1.000

Heavy Vehicle Percentages - Junction 1 (for whole period)

		To		
		A	B	C
From	A	0.000	0.000	0.000
	B	0.000	0.000	0.000
	C	0.000	0.000	0.000

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
B-AC	1.02	148.78	15.66	F
C-AB	0.56	15.73	1.26	C
C-A	-	-	-	-
A-B	-	-	-	-
A-C	-	-	-	-

Default - 2042 With Development, AM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

Name	Description	Locked	Network Flow Scaling Factor (%)	Reason For Scaling Factors
Default			100.000	

Demand Set Details

Name	Scenario Name	Time Period Name	Description	Traffic Profile Type	Model Start Time (HH:mm)	Model Finish Time (HH:mm)	Model Time Period Length (min)	Time Segment Length (min)	Single Time Segment Only	Locked
2042 With Development, AM	2042 With Development	AM		ONE HOUR	07:30	09:00	90	15		

Junction Network

Junctions

Name	Junction Type	Major Road Direction	Arm Order	Junction Delay (s)	Junction LOS
	T-Junction	Two-way	A,B,C	44.20	E

Junction Network Options

Driving Side	Lighting	Network Residual Capacity (%)	First Arm Reaching Threshold
Left	Normal/unknown	0	Stream B-AC

Arms

Arms

Arm	Name	Description	Arm Type
A	Malahide Road (South)		Major
B	Baskin Lane (West)		Minor
C	Malahide Road (North)		Major

Major Arm Geometry

Arm	Width of carriageway (m)	Has kerbed central reserve	Width of kerbed central reserve (m)	Has right turn bay	Width For Right Turn (m)	Visibility For Right Turn (m)	Blocks?	Blocking Queue (PCU)
C	9.40		0.00	✓	3.10	180.00	✓	5.00

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)	Lane Width (Left) (m)	Lane Width (Right) (m)	Width at give-way (m)	Width at 5m (m)	Width at 10m (m)	Width at 15m (m)	Width at 20m (m)	Estimate Flare Length	Flare Length (PCU)	Visibility To Left (m)	Visibility To Right (m)
B	One lane	3.70								✓		18	18

Pedestrian Crossings

Arm	Crossing Type
A	None
B	None
C	None

Slope / Intercept / Capacity

Priority Intersection Slopes and Intercepts

Junction	Stream	Intercept (PCU/hr)	Slope for A-B	Slope for A-C	Slope for C-A	Slope for C-B
1	B-A	526.806	0.082	0.207	0.130	0.295
1	B-C	679.789	0.089	0.224	-	-
1	C-B	744.634	0.246	0.246	-	-

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 Flows

Demand Set Data Options

Default Vehicle Mix	Vehicle Mix Varies Over Time	Vehicle Mix Varies Over Turn	Vehicle Mix Varies Over Entry	Vehicle Mix Source	PCU Factor for a HV (PCU)	Default Turning Proportions	Estimate from entry/exit counts	Turning Proportions Vary Over Time	Turning Proportions Vary Over Turn	Turning Proportions Vary Over Entry
		✓	✓	HV Percentages	2.00				✓	✓

Entry Flows

General Flows Data

Arm	Profile Type	Use Turning Counts	Average Demand Flow (PCU/hr)	Flow Scaling Factor (%)
A	ONE HOUR	✓	625.00	100.000
B	ONE HOUR	✓	325.00	100.000
C	ONE HOUR	✓	838.00	100.000

Turning Proportions

Turning Counts or Proportions (PCU/hr) - Junction 1 (for whole period)

		To		
		A	B	C
From	A	0.000	127.000	498.000
	B	90.000	0.000	235.000
	C	589.000	249.000	0.000

Turning Proportions (PCU) - Junction 1 (for whole period)

		To		
		A	B	C
From	A	0.00	0.20	0.80
	B	0.28	0.00	0.72
	C	0.70	0.30	0.00

Vehicle Mix

Average PCU Per Vehicle - Junction 1 (for whole period)

		To		
		A	B	C
From	A	1.000	1.000	1.000
	B	1.000	1.000	1.000
	C	1.000	1.000	1.000

Heavy Vehicle Percentages - Junction 1 (for whole period)

		To		
		A	B	C
From	A	0.000	0.000	0.000
	B	0.000	0.000	0.000
	C	0.000	0.000	0.000

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
B-AC	0.90	69.35	6.38	F
C-AB	0.48	11.82	0.92	B
C-A	-	-	-	-
A-B	-	-	-	-
A-C	-	-	-	-

Default - 2042 With Development, PM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

Name	Description	Locked	Network Flow Scaling Factor (%)	Reason For Scaling Factors
Default			100.000	

Demand Set Details

Name	Scenario Name	Time Period Name	Description	Traffic Profile Type	Model Start Time (HH:mm)	Model Finish Time (HH:mm)	Model Time Period Length (min)	Time Segment Length (min)	Single Time Segment Only	Locked
2042 With Development, PM	2042 With Development	PM		ONE HOUR	16:00	17:30	90	15		

Junction Network

Junctions

Name	Junction Type	Major Road Direction	Arm Order	Junction Delay (s)	Junction LOS

	T-Junction	Two-way	A,B,C	111.42	F

Junction Network Options

Driving Side	Lighting	Network Residual Capacity (%)	First Arm Reaching Threshold
Left	Normal/unknown	-9	Stream B-AC

Arms

Arms

Arm	Name	Description	Arm Type
A	Malahide Road (South)		Major
B	Baskin Lane (West)		Minor
C	Malahide Road (North)		Major

Major Arm Geometry

Arm	Width of carriageway (m)	Has kerbed central reserve	Width of kerbed central reserve (m)	Has right turn bay	Width For Right Turn (m)	Visibility For Right Turn (m)	Blocks?	Blocking Queue (PCU)
C	9.40		0.00	✓	3.10	180.00	✓	5.00

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)	Lane Width (Left) (m)	Lane Width (Right) (m)	Width at give-way (m)	Width at 5m (m)	Width at 10m (m)	Width at 15m (m)	Width at 20m (m)	Estimate Flare Length	Flare Length (PCU)	Visibility To Left (m)	Visibility To Right (m)
B	One lane	3.70								✓		18	18

Pedestrian Crossings

Arm	Crossing Type
A	None
B	None
C	None

Slope / Intercept / Capacity

Priority Intersection Slopes and Intercepts

Junction	Stream	Intercept (PCU/hr)	Slope for A-B	Slope for A-C	Slope for C-A	Slope for C-B
1	B-A	526.806	0.082	0.207	0.130	0.295
1	B-C	679.789	0.089	0.224	-	-
1	C-B	744.634	0.246	0.246	-	-

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 Flows

Demand Set Data Options

Default Vehicle Mix	Vehicle Mix Varies Over Time	Vehicle Mix Varies Over Turn	Vehicle Mix Varies Over Entry	Vehicle Mix Source	PCU Factor for a HV (PCU)	Default Turning Proportions	Estimate from entry/exit counts	Turning Proportions Vary Over Time	Turning Proportions Vary Over Turn	Turning Proportions Vary Over Entry
		✓	✓	HV Percentages	2.00				✓	✓

Entry Flows

General Flows Data

Arm	Profile Type	Use Turning Counts	Average Demand Flow (PCU/hr)	Flow Scaling Factor (%)
A	ONE HOUR	✓	918.00	100.000
B	ONE HOUR	✓	352.00	100.000
C	ONE HOUR	✓	697.00	100.000

Turning Proportions

Turning Counts or Proportions (PCU/hr) - Junction 1 (for whole period)

		To		
		A	B	C
From	A	0.000	202.000	716.000
	B	78.000	0.000	274.000
	C	444.000	253.000	0.000

Turning Proportions (PCU) - Junction 1 (for whole period)

		To		
		A	B	C
From	A	0.00	0.22	0.78
	B	0.22	0.00	0.78
	C	0.64	0.36	0.00

Vehicle Mix

Average PCU Per Vehicle - Junction 1 (for whole period)

		To		
		A	B	C
From	A	1.000	1.000	1.000
	B	1.000	1.000	1.000
	C	1.000	1.000	1.000

Heavy Vehicle Percentages - Junction 1 (for whole period)

		To		
		A	B	C
From	A	0.000	0.000	0.000
	B	0.000	0.000	0.000
	C	0.000	0.000	0.000

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
B-AC	1.06	181.62	19.95	F
C-AB	0.57	16.21	1.32	C
C-A	-	-	-	-
A-B	-	-	-	-
A-C	-	-	-	-

TRANSYT 16

Filename: C215 J2 TRANSYT Model 20241211.t16
Path: J:\C_JOBS\Job-C215\C_CALCULATIONS\B_TRAFFIC\Traffic Modelling
Report generation date: 11/12/2024 12:52:08

Summary of network performance

	AM			
	Set ID	Total delay (PCU-hr/hr)	Highest DOS	Number oversaturated
	1 - 2024 Baseline			
Network	A1 D1	17.02	86% (TS 2C1/2)	0 (0%)

	PM			
	Set ID	Total delay (PCU-hr/hr)	Highest DOS	Number oversaturated
	2 - 2024 Baseline			
Network	A2 D2	15.04	84% (TS 2B/1)	0 (0%)

	AM			
	Set ID	Total delay (PCU-hr/hr)	Highest DOS	Number oversaturated
	3 - 2027 Do-Nothing			
Network	A3 D3	27.68	96% (TS 2C1/2)	3 (21%)

	PM			
	Set ID	Total delay (PCU-hr/hr)	Highest DOS	Number oversaturated
	4 - 2027 Do-Nothing			
Network	A4 D4	24.36	93% (TS 2C1/2)	3 (21%)

	AM			
	Set ID	Total delay (PCU-hr/hr)	Highest DOS	Number oversaturated
	5 - 2027 With Development			
Network	A5 D5	36.56	99% (TS 2C1/2)	3 (21%)

	PM			
	Set ID	Total delay (PCU-hr/hr)	Highest DOS	Number oversaturated
	6 - 2027 With Development			
Network	A6 D6	29.88	96% (TS 2C1/2)	3 (21%)

	AM			
	Set ID	Total delay (PCU-hr/hr)	Highest DOS	Number oversaturated
	7 - 2032 Do-Nothing			
Network	A7 D7	39.67	99% (TS 2A/1)	3 (21%)

	PM			
	Set ID	Total delay (PCU-hr/hr)	Highest DOS	Number oversaturated
	8 - 2032 Do-Nothing			
Network	A8 D8	32.85	99% (TS 2C1/2)	3 (21%)

	AM			
	Set ID	Total delay (PCU-hr/hr)	Highest DOS	Number oversaturated

	9 - 2032 With Development			
Network	A9 D9	54.48	104% (TS 2B/1)	3 (21%)

	PM			
	Set ID	Total delay (PCU-hr/hr)	Highest DOS	Number oversaturated
	10 - 2032 With Development			
Network	A10 D10	42.07	102% (TS 2C1/2)	3 (21%)

	AM			
	Set ID	Total delay (PCU-hr/hr)	Highest DOS	Number oversaturated
	11 - 2042 Do-Nothing			
Network	A11 D11	50.62	105% (TS 2B/1)	3 (21%)

	PM			
	Set ID	Total delay (PCU-hr/hr)	Highest DOS	Number oversaturated
	12 - 2042 Do-Nothing			
Network	A12 D12	41.43	100% (TS 2C1/2)	3 (21%)

	AM			
	Set ID	Total delay (PCU-hr/hr)	Highest DOS	Number oversaturated
	13 - 2042 With Development			
Network	A13 D13	68.52	107% (TS 2B/1)	3 (21%)

	PM			
	Set ID	Total delay (PCU-hr/hr)	Highest DOS	Number oversaturated
	14 - 2042 With Development			
Network	A14 D14	53.29	107% (TS 2C1/2)	3 (21%)

File summary

File description

File title	Kinsealy
Location	
Site number	2
UTCRegion	
Driving side	Left
Date	11/12/2024
Version	
Status	
Identifier	
Client	
Jobnumber	C215
Enumerator	GF
Description	

Model and Results

Enable controller offsets	Enable fuel consumption	Enable quick flares	Display journey time results	Display OD matrix distances	Display level of service results	Display blocking and starvation results	Display end of red and green queue results	Display excess queue results	Display separate uniform and random results	Display unweighted results	Display TRANSYT 12 style timings	Display effective greens in results	Display Red-With-Amber	Display End-Of-Green Amber	Display controller phase minimums
			✓			✓	✓	✓	✓	✓	✓	✓			

Units

Cost units	Speed units	Distance units	Fuel economy units	Fuel rate units	Mass units	Traffic units input	Traffic units results	Flow units	Average delay units	Total delay units	Rate of delay units
€	kph	m	mpg	l/h	kg	PCU	PCU	perHour	s	-Hour	perHour

Sorting

Show names instead of IDs	Sorting direction	Sorting type	Ignore prefixes when sorting	Analysis/demand set sorting	Link grouping	Source grouping	Colour Analysis/Demand Sets
	Ascending	Numerical		ID	Normal	Normal	✓

Simulation options

Criteria type	Stop criteria (%)	Stop criteria time (s)	Stop criteria number of trials	Random seed	Results refresh speed (s)	Average animation capture interval (s)	Use quick response	Do flow sampling	Uniform vehicle generation	Last run random seed	Last run number of trials	Last run time taken (s)
Delay	1.00	10000	10000	-1	3	60	✓			0	0	0.00

A1 - 1
D1 - 2024 Baseline, AM

Summary

Data Errors and Warnings

No errors or warnings

Run Summary

Analysis set used	Run start time	Run finish time	Run duration (s)	Modelling start time (HH:mm)	Network Cycle Time (s)	Performance Index (€ per hr)	Total network delay (PCU-hr/hr)	Highest DOS (%)	Item with highest DOS	Number of oversaturated items	Percentage of oversaturated items (%)	Item with worst signalised PRC	Item with worst unsignalised PRC	Item with worst overall PRC	Network within capacity
1	11/12/2024 12:51:46	11/12/2024 12:51:47	1.27	07:45	120	262.42	17.02	86.46	2C1/2	0	0	2C1/2	2C2/1	2C1/2	✓

Analysis Set Details

Name	Use Simulation	Description	Use specific Demand Set(s)	Specific Demand Set(s)	Optimise specific Demand Set(s)	Demand Set(s) to optimise	Include in report	Locked
1			✓	D1	✓	D1	✓	

Demand Set Details

Scenario name	Time Period name	Description	Composite	Demand sets	Start time (HH:mm)	Locked	Run automatically
2024 Baseline	AM				07:45		✓

T-Junctions

T-Junctions

T-Junction	Name	Description	Auto assign priority	Type	Traffic direction on Arm A	Entry aB	Entry aC	Exit a	Traffic direction on Arm B	Entry bA	Entry bC	Exit b	Traffic direction on Arm C	Entry cA	Entry cB	Exit c	Calculate Slope and Intercept
2			✓	TrafficStream	Two-Way	2A/1	2A/1	2Ax/1	Two-Way	2B/1	2B/1	2Bx/1	Two-Way	2C1/1	2C1/2	2Cx/1	✓

T-Junction Majors

T-Junction	Left Carriageway Width (m)	Right Carriageway Width (m)	Kerbed Central Reserve Width (m)	Width for C-B traffic (m)	Visibility for C-B traffic (m)
2	8.80	8.00	0.00	3.00	170.00

T-Junction Minors

T-Junction	B-C Lane Width (m)	B-A Lane Width (m)	B-C Visibility (m)	B-A Visibility (m)
2	3.00	3.00	21.00	200.00

T-Junction Slope Intercept

T-Junction	BCIntercept (PCU/hr)	BC- aBSlope	BC- aCSlope	BAIntercept (PCU/hr)	BA- aBSlope	BA- aCSlope	BA- cASlope	BA- cBSlope	CBIntercept (PCU/hr)	CB- aBSlope	CB- aCSlope
2	750	0.10	0.26	582	0.10	0.24	0.15	0.35	731	0.25	0.25

Local OD Matrix - Local Matrix: 1

Local Matrix Options

OD Matrix	Name	Use for point to point table	Auto calculate	Allocation mode	Allow paths past exit locations	Allow looped paths on arms	Allow looped paths on traffic nodes	Copy flows	Matrix to copy flows from	Limit paths by length	Path length limit multiplier	Limit paths by number	Path number limit	Limit paths by flow	Low path flow threshold
1	(untitled)	✓	✓	Lane Balancing			✓			✓	1.25				

Normal Input Flows (PCU/hr)

		To		
		2-1	2-2	2-3
From	2-1	0	214	459
	2-2	126	0	261
	2-3	376	243	0

Bus Input Flows not shown as they are blank.

Tram Input Flows not shown as they are blank.

Pedestrian Input Flows not shown as they are blank.

Locations

OD Matrix	Location	Name	Entries	Exits	Colour
1	2-1		2A/1	2Ax/1	#FF0000
	2-2		2B/1	2Bx/1	#00FF00
	2-3		2C2/1	2Cx/1	#0000FF

Normal Paths and Flows

OD Matrix	Path	Description	From location	To location	Path items	Allocation type	Normal Calculated Flow (PCU/hr)
1	3		2-1	2-2	2A/1, 2Bx/1	Normal	214
	4		2-1	2-3	2A/1, 2Cx/1	Normal	459
	5		2-2	2-1	2B/1, 2Ax/1	Normal	126
	6		2-2	2-3	2B/1, 2Cx/1	Normal	261
	7		2-3	2-2	2C2/1, 2C1/2, 2Bx/1	Normal	243
	8		2-3	2-1	2C2/1, 2C1/1, 2Ax/1	Normal	376

Signal Timings

Network Default: 120s cycle time; 120 steps

Controller Stream 2

Controller Stream	Name	Description	Use sequence	Cycle time source	Cycle time (s)	Minimum possible cycle time (s)
2			9	NetworkDefault	120	46

Controller Stream 2 - Properties

Controller Stream	Manufacturer name	Type	Model number	(Telephone) Line Number	Site number	Grid reference	Gaining delay type
2	Unspecified						Absolute

Controller Stream 2 - Optimisation

Controller Stream	Allow offset optimisation	Allow green split optimisation	Optimisation level	Auto redistribute	Enable stage constraint
2	✓	✓	Offsets And Green Splits	✓	

Phases

Controller Stream	Phase	Name	Street minimum green (s)	Maximum green (s)	Relative start displacement (s)	Relative end displacement (s)	Type	Blackout Time (s)
2	A	(untitled)	3	300	0	0	Traffic	
	B	(untitled)	3	300	0	0	Traffic	
	C	(untitled)	3	300	0	0	Traffic	
	D	(untitled)	3	300	0	0	Traffic	
	E	(untitled)	3	3	0	0	Pedestrian	0

Library Stages

Controller Stream	Library Stage	Phases in stage	User stage minimum (s)	Run every N cycles	Probability of running (%)
2	1	A, C, D	1	1	100
	2	B	1	1	100
	3	E	1	1	100
	4	C, D	1	1	100

Stage Sequences

Controller Stream	Sequence	Name	Multiple cycling	Stage IDs	Stage ends	Minimum possible cycle time (s)	Exclude from analysis
2	1	(untitled)	Single	1, 2, 3	43, 77, 88	28	✓
	2	(untitled)	Single	1, 3, 2	29, 62, 95	30	✓
	3	(untitled)	Single	1, 2, 3, 4	22, 49, 76, 0	29	✓
	4	(untitled)	Single	1, 3, 2, 4	22, 49, 76, 0	31	✓
	5	(untitled)	Single	1, 2, 4, 3	20, 45, 70, 95	37	✓
	6	(untitled)	Single	1, 3, 4, 2	20, 45, 70, 95	38	✓
	7	(untitled)	Single	1, 4, 2, 3	0, 24, 55, 88	29	✓
	8	(untitled)	Single	1, 4, 3, 2	1, 21, 48, 74	30	✓
	9	(untitled)	Single	1, 4, 2, 3, 1, 4, 2	27, 29, 57, 68, 89, 96, 107	46	

Intergreen Matrix for Controller Stream 2

		To				
		A	B	C	D	E
From	A		5			10
	B	5		5	5	8
	C		5			9
	D		5			8
	E	6	6	6	6	

Banned Stage transitions for Controller Stream 2

		To			
		1	2	3	4
From	1				
	2				
	3				
	4				

Interstage Matrix for Controller Stream 2

		To			
		1	2	3	4
From	1	0	5	10	0
	2	5	0	8	5
	3	6	6	0	6
	4	0	5	9	0

Resultant Stages

Controller Stream	Resultant Stage	Is base stage	Library Stage ID	Phases in this stage	Stage start (s)	Stage end (s)	Stage duration (s)	User stage minimum (s)	Stage minimum (s)
2	1	✓	1	A,C,D	112	27	35	1	3
	2	✓	4	C,D	27	29	2	1	1
	3	✓	2	B	34	57	23	1	3
	4	✓	3	E	65	68	3	1	3
	5	✓	1	A,C,D	74	89	15	1	3
	6	✓	4	C,D	89	96	7	1	1
	7	✓	2	B	101	107	6	1	3

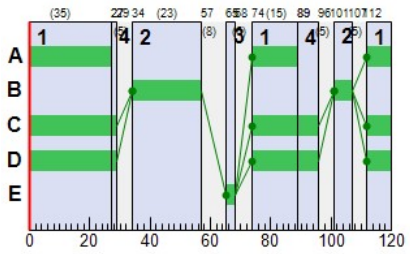
Resultant Phase Green Periods

Controller Stream	Phase	Green period	Is base green period	Start time (s)	End time (s)	Duration (s)
2	A	1	✓	74	89	15
		2	✓	112	27	35
	B	1	✓	34	57	23
		2	✓	101	107	6
	C	1	✓	74	96	22
		2	✓	112	29	37
	D	1	✓	74	96	22
		2	✓	112	29	37
	E	1	✓	65	68	3

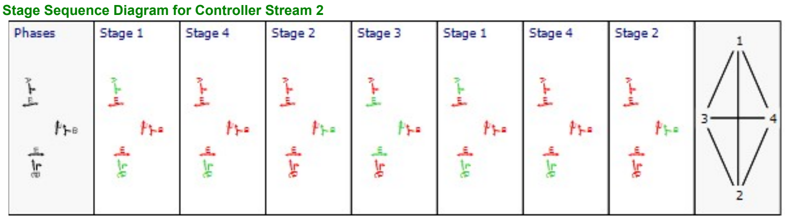
Traffic Stream Green Times

Arm	Traffic Stream	Traffic Node	Controller Stream	Phase	Green Period 1			Green Period 2		
					Start	End	Duration	Start	End	Duration
2A	1	2	2	A	74	89	15	112	27	35
2B	1	2	2	B	34	57	23	101	107	6
2C1	1	2	2	C	74	96	22	112	29	37
2C1	2	2	2	D	74	96	22	112	29	37

Phase Timings Diagram for Controller Stream 2



Stage Sequence Diagram for Controller Stream 2



Resultant penalties

Time Segment	Controller stream	Phase min max penalty (€ per hr)	Intergreen broken penalty (€ per hr)	Stage constraint broken penalty (€ per hr)	Cost of controller stream penalties (€ per hr)
07:45-08:45	2	0.00	0.00	0.00	0.00

Final Prediction Table

Traffic Stream Results

			SIGNALS			FLOWS		PERFORMANCE				PER PCU			QUEUES		WEIGHTS		PENALTIES	P.I.
Arm	Traffic Stream	Name	Traffic node	Controller stream	Phase	Calculated flow entering (PCU/hr)	Calculated sat flow (PCU/hr)	Actual green (s (per cycle))	Wasted time total (s (per cycle))	Degree of saturation (%)	Practical reserve capacity (%)	JourneyTime (s)	Mean Delay per Veh (s)	Mean stops per Veh (%)	Mean max queue (PCU)	Mean end of red queue (PCU)	Delay weighting multiplier (%)	Stop weighting multiplier (%)	Cost of traffic penalties (€ per hr)	P.I.
2A	1	L/S	2	2	A	673	1800	50	0.00	86	4	47.71	36.57	99.39	15.45	11.15	100	100	0.00	105.47
2Ax	1	exit				502	Unrestricted	120	9.00	0	Unrestricted	16.82	0.00	0.00	0.00		100	100	0.00	0.00
2B	1	L/R	2	2	B	387	1800	29	0.00	83	8	58.82	47.50	107.20	10.58	8.75	100	100	0.00	77.72
2Bx	1	exit				457	Unrestricted	120	34.00	0	Unrestricted	16.04	0.00	0.00	0.00		100	100	0.00	0.00
2Cx	1	exit				720	Unrestricted	120	7.00	0	Unrestricted	13.93	0.00	0.00	0.00		100	100	0.00	0.00
2C1	1	S	2	2	C	376 <	1800	59	0.00	41	119	15.39	12.76	60.76	5.89 +	4.74	100	100	0.00	21.78
	2	R	2	2	D	243 <	553	59	0.00	86	4	56.74	54.06	142.57	6.82 +	5.33	100	100	0.00	56.17
2C2	1	feeder	2b			619	1800	120	70.00	34	162	6.57	0.52	0.00	0.09		100	100	0.00	1.28

Network Results

	Distance travelled (PCU-km/hr)	Time spent (PCU-hr/hr)	Mean journey speed (kph)	Uniform delay (PCU-hr/hr)	Random plus oversat delay (PCU-hr/hr)	Weighted cost of delay (€ per hr)	Weighted cost of stops (€ per hr)	Excess queue penalty (€ per hr)	Performance Index (€ per hr)
Normal traffic	358.80	28.98	12.38	9.94	7.07	241.62	20.80	0.00	262.42
Bus									
Tram									
Pedestrians	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
TOTAL	358.80	28.98	12.38	9.94	7.07	241.62	20.80	0.00	262.42

- *< = adjusted flow warning (upstream links/traffic streams are over-saturated)*
- ** = Traffic Stream - Normal, Bus or Tram Stop or Delay weighting has been set to a value other than 100%*
- *^ = Traffic Stream - Normal, Bus or Tram Stop or Delay Path weighting has been set to a value other than 100%*
- *+ = average link/traffic stream excess queue is greater than 0*
- ***P.I. = PERFORMANCE INDEX***

A2 - 2
D2 - 2024 Baseline, PM

Summary

Data Errors and Warnings

No errors or warnings

Run Summary

Analysis set used	Run start time	Run finish time	Run duration (s)	Modelling start time (HH:mm)	Network Cycle Time (s)	Performance Index (€ per hr)	Total network delay (PCU-hr/hr)	Highest DOS (%)	Item with highest DOS	Number of oversaturated items	Percentage of oversaturated items (%)	Item with worst signalised PRC	Item with worst unsignalised PRC	Item with worst overall PRC	Network within capacity
2	11/12/2024 12:51:47	11/12/2024 12:51:47	1.00	16:15	120	234.21	15.04	84.38	2B/1	0	0	2B/1	2C2/1	2B/1	✓

Analysis Set Details

Name	Use Simulation	Description	Use specific Demand Set(s)	Specific Demand Set(s)	Optimise specific Demand Set(s)	Demand Set(s) to optimise	Include in report	Locked
2			✓	D2	✓	D2	✓	

Demand Set Details

Scenario name	Time Period name	Description	Composite	Demand sets	Start time (HH:mm)	Locked	Run automatically
2024 Baseline	PM				16:15		✓

T-Junctions

T-Junctions

T-Junction	Name	Description	Auto assign priority	Type	Traffic direction on Arm A	Entry aB	Entry aC	Exit a	Traffic direction on Arm B	Entry bA	Entry bC	Exit b	Traffic direction on Arm C	Entry cA	Entry cB	Exit c	Calculate Slope and Intercept
2			✓	TrafficStream	Two-Way	2A/1	2A/1	2Ax/1	Two-Way	2B/1	2B/1	2Bx/1	Two-Way	2C1/1	2C1/2	2Cx/1	✓

T-Junction Majors

T-Junction	Left Carriageway Width (m)	Right Carriageway Width (m)	Kerbed Central Reserve Width (m)	Width for C-B traffic (m)	Visibility for C-B traffic (m)
2	8.80	8.00	0.00	3.00	170.00

T-Junction Minors

T-Junction	B-C Lane Width (m)	B-A Lane Width (m)	B-C Visibility (m)	B-A Visibility (m)
2	3.00	3.00	21.00	200.00

T-Junction Slope Intercept

T-Junction	BCIntercept (PCU/hr)	BC- aBSlope	BC- aCSlope	BAIntercept (PCU/hr)	BA- aBSlope	BA- aCSlope	BA- cASlope	BA- cBSlope	CBIntercept (PCU/hr)	CB- aBSlope	CB- aCSlope
2	750	0.10	0.26	582	0.10	0.24	0.15	0.35	731	0.25	0.25

Local OD Matrix - Local Matrix: 1

Local Matrix Options

OD Matrix	Name	Use for point to point table	Auto calculate	Allocation mode	Allow paths past exit locations	Allow looped paths on arms	Allow looped paths on traffic nodes	Copy flows	Matrix to copy flows from	Limit paths by length	Path length limit multiplier	Limit paths by number	Path number limit	Limit paths by flow	Low path flow threshold
1	(untitled)	✓	✓	Lane Balancing			✓			✓	1.25				

Normal Input Flows (PCU/hr)

		To		
		2-1	2-2	2-3
From	2-1	0	208	350
	2-2	161	0	244
	2-3	525	266	0

Bus Input Flows not shown as they are blank.

Tram Input Flows not shown as they are blank.

Pedestrian Input Flows not shown as they are blank.

Locations

OD Matrix	Location	Name	Entries	Exits	Colour
1	2-1		2A/1	2Ax/1	#FF0000
	2-2		2B/1	2Bx/1	#00FF00
	2-3		2C2/1	2Cx/1	#0000FF

Normal Paths and Flows

OD Matrix	Path	Description	From location	To location	Path items	Allocation type	Normal Calculated Flow (PCU/hr)
1	3		2-1	2-2	2A/1, 2Bx/1	Normal	208
	4		2-1	2-3	2A/1, 2Cx/1	Normal	350
	5		2-2	2-1	2B/1, 2Ax/1	Normal	161
	6		2-2	2-3	2B/1, 2Cx/1	Normal	244
	7		2-3	2-2	2C2/1, 2C1/2, 2Bx/1	Normal	266
	8		2-3	2-1	2C2/1, 2C1/1, 2Ax/1	Normal	525

Signal Timings

Network Default: 120s cycle time; 120 steps

Controller Stream 2

Controller Stream	Name	Description	Use sequence	Cycle time source	Cycle time (s)	Minimum possible cycle time (s)
2			9	NetworkDefault	120	46

Controller Stream 2 - Properties

Controller Stream	Manufacturer name	Type	Model number	(Telephone) Line Number	Site number	Grid reference	Gaining delay type
2	Unspecified						Absolute

Controller Stream 2 - Optimisation

Controller Stream	Allow offset optimisation	Allow green split optimisation	Optimisation level	Auto redistribute	Enable stage constraint
2	✓	✓	Offsets And Green Splits	✓	

Phases

Controller Stream	Phase	Name	Street minimum green (s)	Maximum green (s)	Relative start displacement (s)	Relative end displacement (s)	Type	Blackout Time (s)
2	A	(untitled)	3	300	0	0	Traffic	
	B	(untitled)	3	300	0	0	Traffic	
	C	(untitled)	3	300	0	0	Traffic	
	D	(untitled)	3	300	0	0	Traffic	
	E	(untitled)	3	3	0	0	Pedestrian	0

Library Stages

Controller Stream	Library Stage	Phases in stage	User stage minimum (s)	Run every N cycles	Probability of running (%)
2	1	A, C, D	1	1	100
	2	B	1	1	100
	3	E	1	1	100
	4	C, D	1	1	100

Stage Sequences

Controller Stream	Sequence	Name	Multiple cycling	Stage IDs	Stage ends	Minimum possible cycle time (s)	Exclude from analysis
2	1	(untitled)	Single	1, 2, 3	43, 77, 88	28	✓
	2	(untitled)	Single	1, 3, 2	29, 62, 95	30	✓
	3	(untitled)	Single	1, 2, 3, 4	22, 49, 76, 0	29	✓
	4	(untitled)	Single	1, 3, 2, 4	22, 49, 76, 0	31	✓
	5	(untitled)	Single	1, 2, 4, 3	20, 45, 70, 95	37	✓
	6	(untitled)	Single	1, 3, 4, 2	20, 45, 70, 95	38	✓
	7	(untitled)	Single	1, 4, 2, 3	0, 24, 55, 88	29	✓
	8	(untitled)	Single	1, 4, 3, 2	1, 21, 48, 74	30	✓
	9	(untitled)	Single	1, 4, 2, 3, 1, 4, 2	27, 30, 57, 68, 88, 96, 109	46	

Intergreen Matrix for Controller Stream 2

		To				
		A	B	C	D	E
From	A		5			10
	B	5		5	5	8
	C		5			9
	D		5			8
	E	6	6	6	6	

Banned Stage transitions for Controller Stream 2

		To			
		1	2	3	4
From	1				
	2				
	3				
	4				

Interstage Matrix for Controller Stream 2

		To			
		1	2	3	4
From	1	0	5	10	0
	2	5	0	8	5
	3	6	6	0	6
	4	0	5	9	0

Resultant Stages

Controller Stream	Resultant Stage	Is base stage	Library Stage ID	Phases in this stage	Stage start (s)	Stage end (s)	Stage duration (s)	User stage minimum (s)	Stage minimum (s)
2	1	✓	1	A,C,D	114	27	33	1	3
	2	✓	4	C,D	27	30	3	1	1
	3	✓	2	B	35	57	22	1	3
	4	✓	3	E	65	68	3	1	3
	5	✓	1	A,C,D	74	88	14	1	3
	6	✓	4	C,D	88	96	8	1	1
	7	✓	2	B	101	109	8	1	3

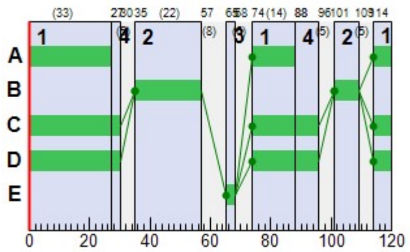
Resultant Phase Green Periods

Controller Stream	Phase	Green period	Is base green period	Start time (s)	End time (s)	Duration (s)
2	A	1	✓	74	88	14
		2	✓	114	27	33
	B	1	✓	35	57	22
		2	✓	101	109	8
	C	1	✓	74	96	22
		2	✓	114	30	36
	D	1	✓	74	96	22
		2	✓	114	30	36
	E	1	✓	65	68	3

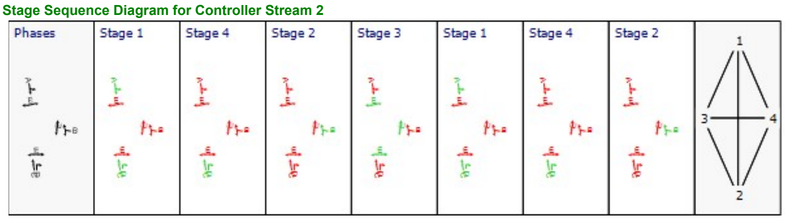
Traffic Stream Green Times

Arm	Traffic Stream	Traffic Node	Controller Stream	Phase	Green Period 1			Green Period 2		
					Start	End	Duration	Start	End	Duration
2A	1	2	2	A	74	88	14	114	27	33
2B	1	2	2	B	35	57	22	101	109	8
2C1	1	2	2	C	74	96	22	114	30	36
2C1	2	2	2	D	74	96	22	114	30	36

Phase Timings Diagram for Controller Stream 2



Stage Sequence Diagram for Controller Stream 2



Resultant penalties

Time Segment	Controller stream	Phase min max penalty (€ per hr)	Intergreen broken penalty (€ per hr)	Stage constraint broken penalty (€ per hr)	Cost of controller stream penalties (€ per hr)
16:15-17:15	2	0.00	0.00	0.00	0.00

Final Prediction Table

Traffic Stream Results

			SIGNALS			FLOWS		PERFORMANCE				PER PCU			QUEUES		WEIGHTS		PENALTIES	P.I.
Arm	Traffic Stream	Name	Traffic node	Controller stream	Phase	Calculated flow entering (PCU/hr)	Calculated sat flow (PCU/hr)	Actual green (s (per cycle))	Wasted time total (s (per cycle))	Degree of saturation (%)	Practical reserve capacity (%)	JourneyTime (s)	Mean Delay per Veh (s)	Mean stops per Veh (%)	Mean max queue (PCU)	Mean end of red queue (PCU)	Delay weighting multiplier (%)	Stop weighting multiplier (%)	Cost of traffic penalties (€ per hr)	P.I.
2A	1	L/S	2	2	A	558	1800	47	0.00	76	19	39.05	27.92	89.86	11.09	8.30	100	100	0.00	67.73
2Ax	1	exit				686	Unrestricted	120	8.00	0	Unrestricted	16.82	0.00	0.00	0.00		100	100	0.00	0.00
2B	1	L/R	2	2	B	405	1800	30	0.00	84	7	56.72	45.41	107.92	10.32	8.52	100	100	0.00	78.02
2Bx	1	exit				474	Unrestricted	120	35.00	0	Unrestricted	16.04	0.00	0.00	0.00		100	100	0.00	0.00
2Cx	1	exit				594	Unrestricted	120	8.00	0	Unrestricted	13.93	0.00	0.00	0.00		100	100	0.00	0.00
2C1	1	S	2	2	C	525 <	1800	58	0.00	58	54	18.00	15.36	71.11	9.16 +	6.68	100	100	0.00	36.50
	2	R	2	2	D	266 <	644	58	0.00	83	9	45.83	43.16	126.61	6.60 +	4.97	100	100	0.00	49.51
2C2	1	feeder	2b			791	1800	120	61.00	44	105	6.83	0.78	0.00	0.17		100	100	0.00	2.44

Network Results

	Distance travelled (PCU-km/hr)	Time spent (PCU-hr/hr)	Mean journey speed (kph)	Uniform delay (PCU-hr/hr)	Random plus oversat delay (PCU-hr/hr)	Weighted cost of delay (€ per hr)	Weighted cost of stops (€ per hr)	Excess queue penalty (€ per hr)	Performance Index (€ per hr)
Normal traffic	375.71	27.56	13.63	9.38	5.66	213.53	20.67	0.00	234.21
Bus									
Tram									
Pedestrians	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
TOTAL	375.71	27.56	13.63	9.38	5.66	213.53	20.67	0.00	234.21

- *< = adjusted flow warning (upstream links/traffic streams are over-saturated)*
- ** = Traffic Stream - Normal, Bus or Tram Stop or Delay weighting has been set to a value other than 100%*
- *^ = Traffic Stream - Normal, Bus or Tram Stop or Delay Path weighting has been set to a value other than 100%*
- *+ = average link/traffic stream excess queue is greater than 0*
- ***P.I. = PERFORMANCE INDEX***

A3 - 3
D3 - 2027 Do-Nothing, AM

Summary

Data Errors and Warnings

No errors or warnings

Run Summary

Analysis set used	Run start time	Run finish time	Run duration (s)	Modelling start time (HH:mm)	Network Cycle Time (s)	Performance Index (€ per hr)	Total network delay (PCU-hr/hr)	Highest DOS (%)	Item with highest DOS	Number of oversaturated items	Percentage of oversaturated items (%)	Item with worst signalised PRC	Item with worst unsignalised PRC	Item with worst overall PRC	Network within capacity
3	11/12/2024 12:51:48	11/12/2024 12:51:48	0.73	07:45	120	418.54	27.68	96.19	2C1/2	3	21	2C1/2	2C2/1	2C1/2	

Analysis Set Details

Name	Use Simulation	Description	Use specific Demand Set(s)	Specific Demand Set(s)	Optimise specific Demand Set(s)	Demand Set(s) to optimise	Include in report	Locked
3			✓	D3	✓	D3	✓	

Demand Set Details

Scenario name	Time Period name	Description	Composite	Demand sets	Start time (HH:mm)	Locked	Run automatically
2027 Do-Nothing	AM				07:45		✓

T-Junctions

T-Junctions

T-Junction	Name	Description	Auto assign priority	Type	Traffic direction on Arm A	Entry aB	Entry aC	Exit a	Traffic direction on Arm B	Entry bA	Entry bC	Exit b	Traffic direction on Arm C	Entry cA	Entry cB	Exit c	Calculate Slope and Intercept
2			✓	TrafficStream	Two-Way	2A/1	2A/1	2Ax/1	Two-Way	2B/1	2B/1	2Bx/1	Two-Way	2C1/1	2C1/2	2Cx/1	✓

T-Junction Majors

T-Junction	Left Carriageway Width (m)	Right Carriageway Width (m)	Kerbed Central Reserve Width (m)	Width for C-B traffic (m)	Visibility for C-B traffic (m)
2	8.80	8.00	0.00	3.00	170.00

T-Junction Minors

T-Junction	B-C Lane Width (m)	B-A Lane Width (m)	B-C Visibility (m)	B-A Visibility (m)
2	3.00	3.00	21.00	200.00

T-Junction Slope Intercept

T-Junction	BCIntercept (PCU/hr)	BC- aBSlope	BC- aCSlope	BAIntercept (PCU/hr)	BA- aBSlope	BA- aCSlope	BA- cASlope	BA- cBSlope	CBIntercept (PCU/hr)	CB- aBSlope	CB- aCSlope
2	750	0.10	0.26	582	0.10	0.24	0.15	0.35	731	0.25	0.25

Local OD Matrix - Local Matrix: 1

Local Matrix Options

OD Matrix	Name	Use for point to point table	Auto calculate	Allocation mode	Allow paths past exit locations	Allow looped paths on arms	Allow looped paths on traffic nodes	Copy flows	Matrix to copy flows from	Limit paths by length	Path length limit multiplier	Limit paths by number	Path number limit	Limit paths by flow	Low path flow threshold
1	(untitled)	✓	✓	Lane Balancing			✓			✓	1.25				

Normal Input Flows (PCU/hr)

		To		
		2-1	2-2	2-3
From	2-1	0	240	500
	2-2	147	0	277
	2-3	413	254	0

Bus Input Flows not shown as they are blank.

Tram Input Flows not shown as they are blank.

Pedestrian Input Flows not shown as they are blank.

Locations

OD Matrix	Location	Name	Entries	Exits	Colour
1	2-1		2A/1	2Ax/1	#FF0000
	2-2		2B/1	2Bx/1	#00FF00
	2-3		2C2/1	2Cx/1	#0000FF

Normal Paths and Flows

OD Matrix	Path	Description	From location	To location	Path items	Allocation type	Normal Calculated Flow (PCU/hr)
1	3		2-1	2-2	2A/1, 2Bx/1	Normal	240
	4		2-1	2-3	2A/1, 2Cx/1	Normal	500
	5		2-2	2-1	2B/1, 2Ax/1	Normal	147
	6		2-2	2-3	2B/1, 2Cx/1	Normal	277
	7		2-3	2-2	2C2/1, 2C1/2, 2Bx/1	Normal	254
	8		2-3	2-1	2C2/1, 2C1/1, 2Ax/1	Normal	413

Signal Timings

Network Default: 120s cycle time; 120 steps

Controller Stream 2

Controller Stream	Name	Description	Use sequence	Cycle time source	Cycle time (s)	Minimum possible cycle time (s)
2			9	NetworkDefault	120	46

Controller Stream 2 - Properties

Controller Stream	Manufacturer name	Type	Model number	(Telephone) Line Number	Site number	Grid reference	Gaining delay type
2	Unspecified						Absolute

Controller Stream 2 - Optimisation

Controller Stream	Allow offset optimisation	Allow green split optimisation	Optimisation level	Auto redistribute	Enable stage constraint
2	✓	✓	Offsets And Green Splits	✓	

Phases

Controller Stream	Phase	Name	Street minimum green (s)	Maximum green (s)	Relative start displacement (s)	Relative end displacement (s)	Type	Blackout Time (s)
2	A	(untitled)	3	300	0	0	Traffic	
	B	(untitled)	3	300	0	0	Traffic	
	C	(untitled)	3	300	0	0	Traffic	
	D	(untitled)	3	300	0	0	Traffic	
	E	(untitled)	3	3	0	0	Pedestrian	0

Library Stages

Controller Stream	Library Stage	Phases in stage	User stage minimum (s)	Run every N cycles	Probability of running (%)
2	1	A, C, D	1	1	100
	2	B	1	1	100
	3	E	1	1	100
	4	C, D	1	1	100

Stage Sequences

Controller Stream	Sequence	Name	Multiple cycling	Stage IDs	Stage ends	Minimum possible cycle time (s)	Exclude from analysis
2	1	(untitled)	Single	1, 2, 3	43, 77, 88	28	✓
	2	(untitled)	Single	1, 3, 2	29, 62, 95	30	✓
	3	(untitled)	Single	1, 2, 3, 4	22, 49, 76, 0	29	✓
	4	(untitled)	Single	1, 3, 2, 4	22, 49, 76, 0	31	✓
	5	(untitled)	Single	1, 2, 4, 3	20, 45, 70, 95	37	✓
	6	(untitled)	Single	1, 3, 4, 2	20, 45, 70, 95	38	✓
	7	(untitled)	Single	1, 4, 2, 3	0, 24, 55, 88	29	✓
	8	(untitled)	Single	1, 4, 3, 2	1, 21, 48, 74	30	✓
	9	(untitled)	Single	1, 4, 2, 3, 1, 4, 2	27, 29, 57, 68, 89, 96, 107	46	

Intergreen Matrix for Controller Stream 2

		To				
		A	B	C	D	E
From	A		5			10
	B	5		5	5	8
	C		5			9
	D		5			8
	E	6	6	6	6	

Banned Stage transitions for Controller Stream 2

		To			
		1	2	3	4
From	1				
	2				
	3				
	4				

Interstage Matrix for Controller Stream 2

		To			
		1	2	3	4
From	1	0	5	10	0
	2	5	0	8	5
	3	6	6	0	6
	4	0	5	9	0

Resultant Stages

Controller Stream	Resultant Stage	Is base stage	Library Stage ID	Phases in this stage	Stage start (s)	Stage end (s)	Stage duration (s)	User stage minimum (s)	Stage minimum (s)
2	1	✓	1	A,C,D	112	27	35	1	3
	2	✓	4	C,D	27	29	2	1	1
	3	✓	2	B	34	57	23	1	3
	4	✓	3	E	65	68	3	1	3
	5	✓	1	A,C,D	74	89	15	1	3
	6	✓	4	C,D	89	96	7	1	1
	7	✓	2	B	101	107	6	1	3

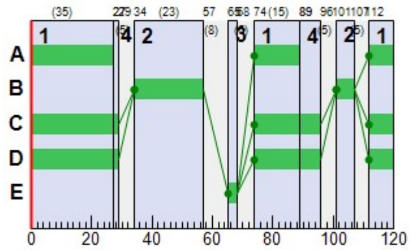
Resultant Phase Green Periods

Controller Stream	Phase	Green period	Is base green period	Start time (s)	End time (s)	Duration (s)
2	A	1	✓	74	89	15
		2	✓	112	27	35
	B	1	✓	34	57	23
		2	✓	101	107	6
	C	1	✓	74	96	22
		2	✓	112	29	37
	D	1	✓	74	96	22
		2	✓	112	29	37
	E	1	✓	65	68	3

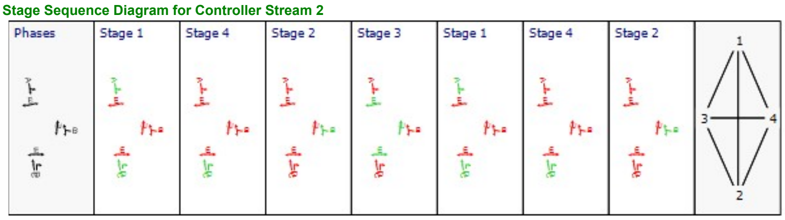
Traffic Stream Green Times

Arm	Traffic Stream	Traffic Node	Controller Stream	Phase	Green Period 1			Green Period 2		
					Start	End	Duration	Start	End	Duration
2A	1	2	2	A	74	89	15	112	27	35
2B	1	2	2	B	34	57	23	101	107	6
2C1	1	2	2	C	74	96	22	112	29	37
2C1	2	2	2	D	74	96	22	112	29	37

Phase Timings Diagram for Controller Stream 2



Stage Sequence Diagram for Controller Stream 2



Resultant penalties

Time Segment	Controller stream	Phase min max penalty (€ per hr)	Intergreen broken penalty (€ per hr)	Stage constraint broken penalty (€ per hr)	Cost of controller stream penalties (€ per hr)
07:45-08:45	2	0.00	0.00	0.00	0.00

Final Prediction Table

Traffic Stream Results

			SIGNALS			FLOWS		PERFORMANCE				PER PCU			QUEUES		WEIGHTS		PENALTIES	P.I.
Arm	Traffic Stream	Name	Traffic node	Controller stream	Phase	Calculated flow entering (PCU/hr)	Calculated sat flow (PCU/hr)	Actual green (s (per cycle))	Wasted time total (s (per cycle))	Degree of saturation (%)	Practical reserve capacity (%)	JourneyTime (s)	Mean Delay per Veh (s)	Mean stops per Veh (%)	Mean max queue (PCU)	Mean end of red queue (PCU)	Delay weighting multiplier (%)	Stop weighting multiplier (%)	Cost of traffic penalties (€ per hr)	P.I.
2A	1	L/S	2	2	A	740 <	1800	50	0.00	95	-5	67.93	56.80	118.26	22.05 +	15.87	100	100	0.00	176.75
2Ax	1	exit				560	Unrestricted	120	7.00	0	Unrestricted	16.82	0.00	0.00	0.00		100	100	0.00	0.00
2B	1	L/R	2	2	B	424	1800	29	0.00	91	-1	75.62	64.31	120.62	13.99	11.64	100	100	0.00	113.96
2Bx	1	exit				494	Unrestricted	120	31.00	0	Unrestricted	16.04	0.00	0.00	0.00		100	100	0.00	0.00
2Cx	1	exit				777	Unrestricted	120	6.00	0	Unrestricted	13.93	0.00	0.00	0.00		100	100	0.00	0.00
2C1	1	S	2	2	C	413 <	1800	59	0.00	45	99	15.94	13.30	62.86	6.72 +	5.23	100	100	0.00	24.93
	2	R	2	2	D	254 <	519	59	0.00	96	-6	99.04	96.37	150.53	10.11 +	8.49	100	100	0.00	101.35
2C2	1	feeder	2b			667	1800	120	120.00	37	143	6.63	0.59	0.00	0.11		100	100	0.00	1.55

Network Results

	Distance travelled (PCU-km/hr)	Time spent (PCU-hr/hr)	Mean journey speed (kph)	Uniform delay (PCU-hr/hr)	Random plus oversat delay (PCU-hr/hr)	Weighted cost of delay (€ per hr)	Weighted cost of stops (€ per hr)	Excess queue penalty (€ per hr)	Performance Index (€ per hr)
Normal traffic	391.67	40.74	9.61	11.76	15.92	393.10	25.43	0.00	418.54
Bus									
Tram									
Pedestrians	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
TOTAL	391.67	40.74	9.61	11.76	15.92	393.10	25.43	0.00	418.54

- *< = adjusted flow warning (upstream links/traffic streams are over-saturated)*
- ** = Traffic Stream - Normal, Bus or Tram Stop or Delay weighting has been set to a value other than 100%*
- *^ = Traffic Stream - Normal, Bus or Tram Stop or Delay Path weighting has been set to a value other than 100%*
- *+ = average link/traffic stream excess queue is greater than 0*
- ***P.I. = PERFORMANCE INDEX***

A4 - 4
D4 - 2027 Do-Nothing, PM

Summary

Data Errors and Warnings

No errors or warnings

Run Summary

Analysis set used	Run start time	Run finish time	Run duration (s)	Modelling start time (HH:mm)	Network Cycle Time (s)	Performance Index (€ per hr)	Total network delay (PCU-hr/hr)	Highest DOS (%)	Item with highest DOS	Number of oversaturated items	Percentage of oversaturated items (%)	Item with worst signalised PRC	Item with worst unsignalised PRC	Item with worst overall PRC	Network within capacity
4	11/12/2024 12:51:48	11/12/2024 12:51:49	1.40	16:15	120	372.93	24.36	92.79	2C1/2	3	21	2C1/2	2C2/1	2C1/2	

Analysis Set Details

Name	Use Simulation	Description	Use specific Demand Set(s)	Specific Demand Set(s)	Optimise specific Demand Set(s)	Demand Set(s) to optimise	Include in report	Locked
4			✓	D4	✓	D4	✓	

Demand Set Details

Scenario name	Time Period name	Description	Composite	Demand sets	Start time (HH:mm)	Locked	Run automatically
2027 Do-Nothing	PM				16:15		✓

T-Junctions

T-Junctions

T-Junction	Name	Description	Auto assign priority	Type	Traffic direction on Arm A	Entry aB	Entry aC	Exit a	Traffic direction on Arm B	Entry bA	Entry bC	Exit b	Traffic direction on Arm C	Entry cA	Entry cB	Exit c	Calculate Slope and Intercept
2			✓	TrafficStream	Two-Way	2A/1	2A/1	2Ax/1	Two-Way	2B/1	2B/1	2Bx/1	Two-Way	2C1/1	2C1/2	2Cx/1	✓

T-Junction Majors

T-Junction	Left Carriageway Width (m)	Right Carriageway Width (m)	Kerbed Central Reserve Width (m)	Width for C-B traffic (m)	Visibility for C-B traffic (m)
2	8.80	8.00	0.00	3.00	170.00

T-Junction Minors

T-Junction	B-C Lane Width (m)	B-A Lane Width (m)	B-C Visibility (m)	B-A Visibility (m)
2	3.00	3.00	21.00	200.00

T-Junction Slope Intercept

T-Junction	BCIntercept (PCU/hr)	BC- aBSlope	BC- aCSlope	BAIntercept (PCU/hr)	BA- aBSlope	BA- aCSlope	BA- cASlope	BA- cBSlope	CBIntercept (PCU/hr)	CB- aBSlope	CB- aCSlope
2	750	0.10	0.26	582	0.10	0.24	0.15	0.35	731	0.25	0.25

Local OD Matrix - Local Matrix: 1

Local Matrix Options

OD Matrix	Name	Use for point to point table	Auto calculate	Allocation mode	Allow paths past exit locations	Allow looped paths on arms	Allow looped paths on traffic nodes	Copy flows	Matrix to copy flows from	Limit paths by length	Path length limit multiplier	Limit paths by number	Path number limit	Limit paths by flow	Low path flow threshold
1	(untitled)	✓	✓	Lane Balancing			✓			✓	1.25				

Normal Input Flows (PCU/hr)

		To		
		2-1	2-2	2-3
From	2-1	0	240	396
	2-2	192	0	255
	2-3	596	283	0

Bus Input Flows not shown as they are blank.

Tram Input Flows not shown as they are blank.

Pedestrian Input Flows not shown as they are blank.

Locations

OD Matrix	Location	Name	Entries	Exits	Colour
1	2-1		2A/1	2Ax/1	#FF0000
	2-2		2B/1	2Bx/1	#00FF00
	2-3		2C2/1	2Cx/1	#0000FF

Normal Paths and Flows

OD Matrix	Path	Description	From location	To location	Path items	Allocation type	Normal Calculated Flow (PCU/hr)
1	3		2-1	2-2	2A/1, 2Bx/1	Normal	240
	4		2-1	2-3	2A/1, 2Cx/1	Normal	396
	5		2-2	2-1	2B/1, 2Ax/1	Normal	192
	6		2-2	2-3	2B/1, 2Cx/1	Normal	255
	7		2-3	2-2	2C2/1, 2C1/2, 2Bx/1	Normal	283
	8		2-3	2-1	2C2/1, 2C1/1, 2Ax/1	Normal	596

Signal Timings

Network Default: 120s cycle time; 120 steps

Controller Stream 2

Controller Stream	Name	Description	Use sequence	Cycle time source	Cycle time (s)	Minimum possible cycle time (s)
2			9	NetworkDefault	120	46

Controller Stream 2 - Properties

Controller Stream	Manufacturer name	Type	Model number	(Telephone) Line Number	Site number	Grid reference	Gaining delay type
2	Unspecified						Absolute

Controller Stream 2 - Optimisation

Controller Stream	Allow offset optimisation	Allow green split optimisation	Optimisation level	Auto redistribute	Enable stage constraint
2	✓	✓	Offsets And Green Splits	✓	

Phases

Controller Stream	Phase	Name	Street minimum green (s)	Maximum green (s)	Relative start displacement (s)	Relative end displacement (s)	Type	Blackout Time (s)
2	A	(untitled)	3	300	0	0	Traffic	
	B	(untitled)	3	300	0	0	Traffic	
	C	(untitled)	3	300	0	0	Traffic	
	D	(untitled)	3	300	0	0	Traffic	
	E	(untitled)	3	3	0	0	Pedestrian	0

Library Stages

Controller Stream	Library Stage	Phases in stage	User stage minimum (s)	Run every N cycles	Probability of running (%)
2	1	A, C, D	1	1	100
	2	B	1	1	100
	3	E	1	1	100
	4	C, D	1	1	100

Stage Sequences

Controller Stream	Sequence	Name	Multiple cycling	Stage IDs	Stage ends	Minimum possible cycle time (s)	Exclude from analysis
2	1	(untitled)	Single	1, 2, 3	43, 77, 88	28	✓
	2	(untitled)	Single	1, 3, 2	29, 62, 95	30	✓
	3	(untitled)	Single	1, 2, 3, 4	22, 49, 76, 0	29	✓
	4	(untitled)	Single	1, 3, 2, 4	22, 49, 76, 0	31	✓
	5	(untitled)	Single	1, 2, 4, 3	20, 45, 70, 95	37	✓
	6	(untitled)	Single	1, 3, 4, 2	20, 45, 70, 95	38	✓
	7	(untitled)	Single	1, 4, 2, 3	0, 24, 55, 88	29	✓
	8	(untitled)	Single	1, 4, 3, 2	1, 21, 48, 74	30	✓
	9	(untitled)	Single	1, 4, 2, 3, 1, 4, 2	27, 29, 57, 68, 85, 95, 108	46	

Intergreen Matrix for Controller Stream 2

		To				
		A	B	C	D	E
From	A		5			10
	B	5		5	5	8
	C		5			9
	D		5			8
	E	6	6	6	6	

Banned Stage transitions for Controller Stream 2

		To			
		1	2	3	4
From	1				
	2				
	3				
	4				

Interstage Matrix for Controller Stream 2

		To			
		1	2	3	4
From	1	0	5	10	0
	2	5	0	8	5
	3	6	6	0	6
	4	0	5	9	0

Resultant Stages

Controller Stream	Resultant Stage	Is base stage	Library Stage ID	Phases in this stage	Stage start (s)	Stage end (s)	Stage duration (s)	User stage minimum (s)	Stage minimum (s)
2	1	✓	1	A,C,D	113	27	34	1	3
	2	✓	4	C,D	27	29	2	1	1
	3	✓	2	B	34	57	23	1	3
	4	✓	3	E	65	68	3	1	3
	5	✓	1	A,C,D	74	85	11	1	3
	6	✓	4	C,D	85	95	10	1	1
	7	✓	2	B	100	108	8	1	3

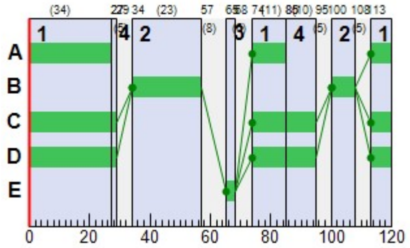
Resultant Phase Green Periods

Controller Stream	Phase	Green period	Is base green period	Start time (s)	End time (s)	Duration (s)
2	A	1	✓	74	85	11
		2	✓	113	27	34
	B	1	✓	34	57	23
		2	✓	100	108	8
	C	1	✓	74	95	21
		2	✓	113	29	36
	D	1	✓	74	95	21
		2	✓	113	29	36
	E	1	✓	65	68	3

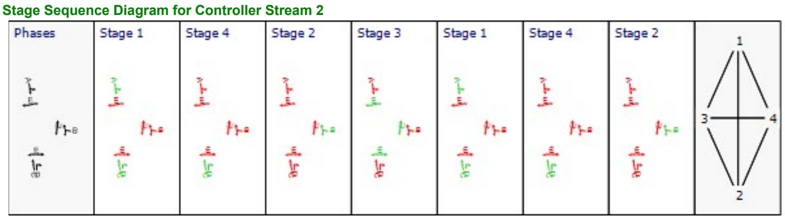
Traffic Stream Green Times

Arm	Traffic Stream	Traffic Node	Controller Stream	Phase	Green Period 1			Green Period 2		
					Start	End	Duration	Start	End	Duration
2A	1	2	2	A	74	85	11	113	27	34
2B	1	2	2	B	34	57	23	100	108	8
2C1	1	2	2	C	74	95	21	113	29	36
2C1	2	2	2	D	74	95	21	113	29	36

Phase Timings Diagram for Controller Stream 2



Stage Sequence Diagram for Controller Stream 2



Resultant penalties

Time Segment	Controller stream	Phase min max penalty (€ per hr)	Intergreen broken penalty (€ per hr)	Stage constraint broken penalty (€ per hr)	Cost of controller stream penalties (€ per hr)
16:15-17:15	2	0.00	0.00	0.00	0.00

Final Prediction Table

Traffic Stream Results

				SIGNALS		FLOWS		PERFORMANCE					PER PCU			QUEUES		WEIGHTS		PENALTIES	P.I.
Arm	Traffic Stream	Name	Traffic node	Controller stream	Phase	Calculated flow entering (PCU/hr)	Calculated sat flow (PCU/hr)	Actual green (s (per cycle))	Wasted time total (s (per cycle))	Degree of saturation (%)	Practical reserve capacity (%)	JourneyTime (s)	Mean Delay per Veh (s)	Mean stops per Veh (%)	Mean max queue (PCU)	Mean end of red queue (PCU)	Delay weighting multiplier (%)	Stop weighting multiplier (%)	Cost of traffic penalties (€ per hr)	P.I.
2A	1	L/S	2	2	A	636 <	1800	45	0.00	90	0	58.61	47.48	108.45	17.46 +	12.69	100	100	0.00	127.75
2Ax	1	exit				788	Unrestricted	120	6.00	0	Unrestricted	16.82	0.00	0.00	0.00		100	100	0.00	0.00
2B	1	L/R	2	2	B	447	1800	31	0.00	90	0	68.25	56.94	117.02	13.33	10.97	100	100	0.00	106.96
2Bx	1	exit				523	Unrestricted	120	32.00	0	Unrestricted	16.04	0.00	0.00	0.00		100	100	0.00	0.00
2Cx	1	exit				651	Unrestricted	120	9.00	0	Unrestricted	13.93	0.00	0.00	0.00		100	100	0.00	0.00
2C1	1	S	2	2	C	596 <	1800	57	0.00	67	34	20.65	18.02	78.66	11.45 +	7.97	100	100	0.00	48.24
	2	R	2	2	D	283 <	620	57	0.00	93	-3	75.06	72.39	165.67	9.13 +	7.56	100	100	0.00	86.68
2C2	1	feeder	2b			879	1800	120	120.00	49	84	6.99	0.95	0.00	0.23		100	100	0.00	3.30

Network Results

	Distance travelled (PCU-km/hr)	Time spent (PCU-hr/hr)	Mean journey speed (kph)	Uniform delay (PCU-hr/hr)	Random plus oversat delay (PCU-hr/hr)	Weighted cost of delay (€ per hr)	Weighted cost of stops (€ per hr)	Excess queue penalty (€ per hr)	Performance Index (€ per hr)
Normal traffic	420.73	38.39	10.96	12.12	12.24	345.97	26.96	0.00	372.93
Bus									
Tram									
Pedestrians	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
TOTAL	420.73	38.39	10.96	12.12	12.24	345.97	26.96	0.00	372.93

- *< = adjusted flow warning (upstream links/traffic streams are over-saturated)*
- ** = Traffic Stream - Normal, Bus or Tram Stop or Delay weighting has been set to a value other than 100%*
- *^ = Traffic Stream - Normal, Bus or Tram Stop or Delay Path weighting has been set to a value other than 100%*
- *+ = average link/traffic stream excess queue is greater than 0*
- ***P.I. = PERFORMANCE INDEX***

A5 - 5
D5 - 2027 With Development, AM

Summary

Data Errors and Warnings

No errors or warnings

Run Summary

Analysis set used	Run start time	Run finish time	Run duration (s)	Modelling start time (HH:mm)	Network Cycle Time (s)	Performance Index (€ per hr)	Total network delay (PCU-hr/hr)	Highest DOS (%)	Item with highest DOS	Number of oversaturated items	Percentage of oversaturated items (%)	Item with worst signalised PRC	Item with worst unsignalised PRC	Item with worst overall PRC	Network within capacity
5	11/12/2024 12:51:49	11/12/2024 12:51:50	1.09	07:45	120	548.12	36.56	98.55	2C1/2	3	21	2C1/2	2C2/1	2C1/2	

Analysis Set Details

Name	Use Simulation	Description	Use specific Demand Set(s)	Specific Demand Set(s)	Optimise specific Demand Set(s)	Demand Set(s) to optimise	Include in report	Locked
5			✓	D5	✓	D5	✓	

Demand Set Details

Scenario name	Time Period name	Description	Composite	Demand sets	Start time (HH:mm)	Locked	Run automatically
2027 With Development	AM				07:45		✓

T-Junctions

T-Junctions

T-Junction	Name	Description	Auto assign priority	Type	Traffic direction on Arm A	Entry aB	Entry aC	Exit a	Traffic direction on Arm B	Entry bA	Entry bC	Exit b	Traffic direction on Arm C	Entry cA	Entry cB	Exit c	Calculate Slope and Intercept
2			✓	TrafficStream	Two-Way	2A/1	2A/1	2Ax/1	Two-Way	2B/1	2B/1	2Bx/1	Two-Way	2C1/1	2C1/2	2Cx/1	✓

T-Junction Majors

T-Junction	Left Carriageway Width (m)	Right Carriageway Width (m)	Kerbed Central Reserve Width (m)	Width for C-B traffic (m)	Visibility for C-B traffic (m)
2	8.80	8.00	0.00	3.00	170.00

T-Junction Minors

T-Junction	B-C Lane Width (m)	B-A Lane Width (m)	B-C Visibility (m)	B-A Visibility (m)
2	3.00	3.00	21.00	200.00

T-Junction Slope Intercept

T-Junction	BCIntercept (PCU/hr)	BC- aBSlope	BC- aCSlope	BAIntercept (PCU/hr)	BA- aBSlope	BA- aCSlope	BA- cASlope	BA- cBSlope	CBIntercept (PCU/hr)	CB- aBSlope	CB- aCSlope
2	750	0.10	0.26	582	0.10	0.24	0.15	0.35	731	0.25	0.25

Local OD Matrix - Local Matrix: 1

Local Matrix Options

OD Matrix	Name	Use for point to point table	Auto calculate	Allocation mode	Allow paths past exit locations	Allow looped paths on arms	Allow looped paths on traffic nodes	Copy flows	Matrix to copy flows from	Limit paths by length	Path length limit multiplier	Limit paths by number	Path number limit	Limit paths by flow	Low path flow threshold
1	(untitled)	✓	✓	Lane Balancing			✓			✓	1.25				

Normal Input Flows (PCU/hr)

		To		
		2-1	2-2	2-3
From	2-1	0	246	502
	2-2	157	0	295
	2-3	418	267	0

Bus Input Flows not shown as they are blank.

Tram Input Flows not shown as they are blank.

Pedestrian Input Flows not shown as they are blank.

Locations

OD Matrix	Location	Name	Entries	Exits	Colour
1	2-1		2A/1	2Ax/1	#FF0000
	2-2		2B/1	2Bx/1	#00FF00
	2-3		2C2/1	2Cx/1	#0000FF

Normal Paths and Flows

OD Matrix	Path	Description	From location	To location	Path items	Allocation type	Normal Calculated Flow (PCU/hr)
1	3		2-1	2-2	2A/1, 2Bx/1	Normal	246
	4		2-1	2-3	2A/1, 2Cx/1	Normal	502
	5		2-2	2-1	2B/1, 2Ax/1	Normal	157
	6		2-2	2-3	2B/1, 2Cx/1	Normal	295
	7		2-3	2-2	2C2/1, 2C1/2, 2Bx/1	Normal	267
	8		2-3	2-1	2C2/1, 2C1/1, 2Ax/1	Normal	418

Signal Timings

Network Default: 120s cycle time; 120 steps

Controller Stream 2

Controller Stream	Name	Description	Use sequence	Cycle time source	Cycle time (s)	Minimum possible cycle time (s)
2			9	NetworkDefault	120	46

Controller Stream 2 - Properties

Controller Stream	Manufacturer name	Type	Model number	(Telephone) Line Number	Site number	Grid reference	Gaining delay type
2	Unspecified						Absolute

Controller Stream 2 - Optimisation

Controller Stream	Allow offset optimisation	Allow green split optimisation	Optimisation level	Auto redistribute	Enable stage constraint
2	✓	✓	Offsets And Green Splits	✓	

Phases

Controller Stream	Phase	Name	Street minimum green (s)	Maximum green (s)	Relative start displacement (s)	Relative end displacement (s)	Type	Blackout Time (s)
2	A	(untitled)	3	300	0	0	Traffic	
	B	(untitled)	3	300	0	0	Traffic	
	C	(untitled)	3	300	0	0	Traffic	
	D	(untitled)	3	300	0	0	Traffic	
	E	(untitled)	3	3	0	0	Pedestrian	0

Library Stages

Controller Stream	Library Stage	Phases in stage	User stage minimum (s)	Run every N cycles	Probability of running (%)
2	1	A, C, D	1	1	100
	2	B	1	1	100
	3	E	1	1	100
	4	C, D	1	1	100

Stage Sequences

Controller Stream	Sequence	Name	Multiple cycling	Stage IDs	Stage ends	Minimum possible cycle time (s)	Exclude from analysis
2	1	(untitled)	Single	1, 2, 3	43, 77, 88	28	✓
	2	(untitled)	Single	1, 3, 2	29, 62, 95	30	✓
	3	(untitled)	Single	1, 2, 3, 4	22, 49, 76, 0	29	✓
	4	(untitled)	Single	1, 3, 2, 4	22, 49, 76, 0	31	✓
	5	(untitled)	Single	1, 2, 4, 3	20, 45, 70, 95	37	✓
	6	(untitled)	Single	1, 3, 4, 2	20, 45, 70, 95	38	✓
	7	(untitled)	Single	1, 4, 2, 3	0, 24, 55, 88	29	✓
	8	(untitled)	Single	1, 4, 3, 2	1, 21, 48, 74	30	✓
	9	(untitled)	Single	1, 4, 2, 3, 1, 4, 2	27, 30, 57, 68, 88, 95, 107	46	

Intergreen Matrix for Controller Stream 2

		To				
		A	B	C	D	E
From	A		5			10
	B	5		5	5	8
	C		5			9
	D		5			8
	E	6	6	6	6	

Banned Stage transitions for Controller Stream 2

		To			
		1	2	3	4
From	1				
	2				
	3				
	4				

Interstage Matrix for Controller Stream 2

		To			
		1	2	3	4
From	1	0	5	10	0
	2	5	0	8	5
	3	6	6	0	6
	4	0	5	9	0

Resultant Stages

Controller Stream	Resultant Stage	Is base stage	Library Stage ID	Phases in this stage	Stage start (s)	Stage end (s)	Stage duration (s)	User stage minimum (s)	Stage minimum (s)
2	1	✓	1	A,C,D	112	27	35	1	3
	2	✓	4	C,D	27	30	3	1	1
	3	✓	2	B	35	57	22	1	3
	4	✓	3	E	65	68	3	1	3
	5	✓	1	A,C,D	74	88	14	1	3
	6	✓	4	C,D	88	95	7	1	1
	7	✓	2	B	100	107	7	1	3

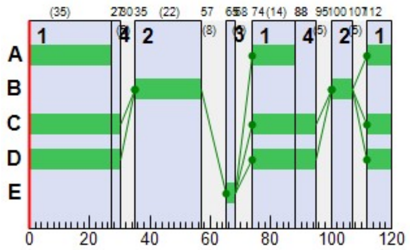
Resultant Phase Green Periods

Controller Stream	Phase	Green period	Is base green period	Start time (s)	End time (s)	Duration (s)
2	A	1	✓	74	88	14
		2	✓	112	27	35
	B	1	✓	35	57	22
		2	✓	100	107	7
	C	1	✓	74	95	21
		2	✓	112	30	38
	D	1	✓	74	95	21
		2	✓	112	30	38
	E	1	✓	65	68	3

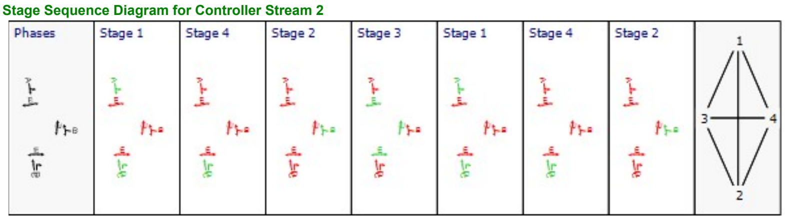
Traffic Stream Green Times

Arm	Traffic Stream	Traffic Node	Controller Stream	Phase	Green Period 1			Green Period 2		
					Start	End	Duration	Start	End	Duration
2A	1	2	2	A	74	88	14	112	27	35
2B	1	2	2	B	35	57	22	100	107	7
2C1	1	2	2	C	74	95	21	112	30	38
2C1	2	2	2	D	74	95	21	112	30	38

Phase Timings Diagram for Controller Stream 2



Stage Sequence Diagram for Controller Stream 2



Resultant penalties

Time Segment	Controller stream	Phase min max penalty (€ per hr)	Intergreen broken penalty (€ per hr)	Stage constraint broken penalty (€ per hr)	Cost of controller stream penalties (€ per hr)
07:45-08:45	2	0.00	0.00	0.00	0.00

Final Prediction Table

Traffic Stream Results

			SIGNALS			FLOWS		PERFORMANCE				PER PCU			QUEUES		WEIGHTS		PENALTIES	P.I.
Arm	Traffic Stream	Name	Traffic node	Controller stream	Phase	Calculated flow entering (PCU/hr)	Calculated sat flow (PCU/hr)	Actual green (s (per cycle))	Wasted time total (s (per cycle))	Degree of saturation (%)	Practical reserve capacity (%)	JourneyTime (s)	Mean Delay per Veh (s)	Mean stops per Veh (%)	Mean max queue (PCU)	Mean end of red queue (PCU)	Delay weighting multiplier (%)	Stop weighting multiplier (%)	Cost of traffic penalties (€ per hr)	P.I.
2A	1	L/S	2	2	A	748 <	1800	49	0.00	98	-8	84.33	73.20	130.94	26.61 +	19.55	100	100	0.00	228.24
2Ax	1	exit				575	Unrestricted	120	5.00	0	Unrestricted	16.82	0.00	0.00	0.00		100	100	0.00	0.00
2B	1	L/R	2	2	B	452 <	1800	29	0.00	97	-7	101.81	90.50	140.63	18.21 +	15.57	100	100	0.00	169.32
2Bx	1	exit				513	Unrestricted	120	29.00	0	Unrestricted	16.04	0.00	0.00	0.00		100	100	0.00	0.00
2Cx	1	exit				797	Unrestricted	120	4.00	0	Unrestricted	13.93	0.00	0.00	0.00		100	100	0.00	0.00
2C1	1	S	2	2	C	418 <	1800	59	0.00	46	97	15.71	13.08	62.90	6.58 +	5.18	100	100	0.00	24.86
	2	R	2	2	D	267 <	533	59	0.00	99	-9	115.34	112.67	160.90	11.60 +	9.97	100	100	0.00	124.04
2C2	1	feeder	2b			685	1800	120	120.00	38	136	6.66	0.61	0.00	0.12		100	100	0.00	1.66

Network Results

	Distance travelled (PCU-km/hr)	Time spent (PCU-hr/hr)	Mean journey speed (kph)	Uniform delay (PCU-hr/hr)	Random plus oversat delay (PCU-hr/hr)	Weighted cost of delay (€ per hr)	Weighted cost of stops (€ per hr)	Excess queue penalty (€ per hr)	Performance Index (€ per hr)
Normal traffic	403.32	50.01	8.07	12.49	24.08	519.19	28.93	0.00	548.12
Bus									
Tram									
Pedestrians	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
TOTAL	403.32	50.01	8.07	12.49	24.08	519.19	28.93	0.00	548.12

- *< = adjusted flow warning (upstream links/traffic streams are over-saturated)*
- ** = Traffic Stream - Normal, Bus or Tram Stop or Delay weighting has been set to a value other than 100%*
- *^ = Traffic Stream - Normal, Bus or Tram Stop or Delay Path weighting has been set to a value other than 100%*
- *+ = average link/traffic stream excess queue is greater than 0*
- ***P.I. = PERFORMANCE INDEX***

A6 - 6
D6 - 2027 With Development, PM

Summary

Data Errors and Warnings

No errors or warnings

Run Summary

Analysis set used	Run start time	Run finish time	Run duration (s)	Modelling start time (HH:mm)	Network Cycle Time (s)	Performance Index (€ per hr)	Total network delay (PCU-hr/hr)	Highest DOS (%)	Item with highest DOS	Number of oversaturated items	Percentage of oversaturated items (%)	Item with worst signalised PRC	Item with worst unsignalised PRC	Item with worst overall PRC	Network within capacity
6	11/12/2024 12:51:50	11/12/2024 12:51:50	0.79	16:15	120	453.57	29.88	95.79	2C1/2	3	21	2C1/2	2C2/1	2C1/2	

Analysis Set Details

Name	Use Simulation	Description	Use specific Demand Set(s)	Specific Demand Set(s)	Optimise specific Demand Set(s)	Demand Set(s) to optimise	Include in report	Locked
6			✓	D6	✓	D6	✓	

Demand Set Details

Scenario name	Time Period name	Description	Composite	Demand sets	Start time (HH:mm)	Locked	Run automatically
2027 With Development	PM				16:15		✓

T-Junctions

T-Junctions

T-Junction	Name	Description	Auto assign priority	Type	Traffic direction on Arm A	Entry aB	Entry aC	Exit a	Traffic direction on Arm B	Entry bA	Entry bC	Exit b	Traffic direction on Arm C	Entry cA	Entry cB	Exit c	Calculate Slope and Intercept
2			✓	TrafficStream	Two-Way	2A/1	2A/1	2Ax/1	Two-Way	2B/1	2B/1	2Bx/1	Two-Way	2C1/1	2C1/2	2Cx/1	✓

T-Junction Majors

T-Junction	Left Carriageway Width (m)	Right Carriageway Width (m)	Kerbed Central Reserve Width (m)	Width for C-B traffic (m)	Visibility for C-B traffic (m)
2	8.80	8.00	0.00	3.00	170.00

T-Junction Minors

T-Junction	B-C Lane Width (m)	B-A Lane Width (m)	B-C Visibility (m)	B-A Visibility (m)
2	3.00	3.00	21.00	200.00

T-Junction Slope Intercept

T-Junction	BCIntercept (PCU/hr)	BC- aBSlope	BC- aCSlope	BAIntercept (PCU/hr)	BA- aBSlope	BA- aCSlope	BA- cASlope	BA- cBSlope	CBIntercept (PCU/hr)	CB- aBSlope	CB- aCSlope
2	750	0.10	0.26	582	0.10	0.24	0.15	0.35	731	0.25	0.25

Local OD Matrix - Local Matrix: 1

Local Matrix Options

OD Matrix	Name	Use for point to point table	Auto calculate	Allocation mode	Allow paths past exit locations	Allow looped paths on arms	Allow looped paths on traffic nodes	Copy flows	Matrix to copy flows from	Limit paths by length	Path length limit multiplier	Limit paths by number	Path number limit	Limit paths by flow	Low path flow threshold
1	(untitled)	✓	✓	Lane Balancing			✓			✓	1.25				

Normal Input Flows (PCU/hr)

		To		
		2-1	2-2	2-3
From	2-1	0	247	400
	2-2	197	0	265
	2-3	598	298	0

Bus Input Flows not shown as they are blank.

Tram Input Flows not shown as they are blank.

Pedestrian Input Flows not shown as they are blank.

Locations

OD Matrix	Location	Name	Entries	Exits	Colour
1	2-1		2A/1	2Ax/1	#FF0000
	2-2		2B/1	2Bx/1	#00FF00
	2-3		2C2/1	2Cx/1	#0000FF

Normal Paths and Flows

OD Matrix	Path	Description	From location	To location	Path items	Allocation type	Normal Calculated Flow (PCU/hr)
1	3		2-1	2-2	2A/1, 2Bx/1	Normal	247
	4		2-1	2-3	2A/1, 2Cx/1	Normal	400
	5		2-2	2-1	2B/1, 2Ax/1	Normal	197
	6		2-2	2-3	2B/1, 2Cx/1	Normal	265
	7		2-3	2-2	2C2/1, 2C1/2, 2Bx/1	Normal	298
	8		2-3	2-1	2C2/1, 2C1/1, 2Ax/1	Normal	598

Signal Timings

Network Default: 120s cycle time; 120 steps

Controller Stream 2

Controller Stream	Name	Description	Use sequence	Cycle time source	Cycle time (s)	Minimum possible cycle time (s)
2			9	NetworkDefault	120	46

Controller Stream 2 - Properties

Controller Stream	Manufacturer name	Type	Model number	(Telephone) Line Number	Site number	Grid reference	Gaining delay type
2	Unspecified						Absolute

Controller Stream 2 - Optimisation

Controller Stream	Allow offset optimisation	Allow green split optimisation	Optimisation level	Auto redistribute	Enable stage constraint
2	✓	✓	Offsets And Green Splits	✓	

Phases

Controller Stream	Phase	Name	Street minimum green (s)	Maximum green (s)	Relative start displacement (s)	Relative end displacement (s)	Type	Blackout Time (s)
2	A	(untitled)	3	300	0	0	Traffic	
	B	(untitled)	3	300	0	0	Traffic	
	C	(untitled)	3	300	0	0	Traffic	
	D	(untitled)	3	300	0	0	Traffic	
	E	(untitled)	3	3	0	0	Pedestrian	0

Library Stages

Controller Stream	Library Stage	Phases in stage	User stage minimum (s)	Run every N cycles	Probability of running (%)
2	1	A, C, D	1	1	100
	2	B	1	1	100
	3	E	1	1	100
	4	C, D	1	1	100

Stage Sequences

Controller Stream	Sequence	Name	Multiple cycling	Stage IDs	Stage ends	Minimum possible cycle time (s)	Exclude from analysis
2	1	(untitled)	Single	1, 2, 3	43, 77, 88	28	✓
	2	(untitled)	Single	1, 3, 2	29, 62, 95	30	✓
	3	(untitled)	Single	1, 2, 3, 4	22, 49, 76, 0	29	✓
	4	(untitled)	Single	1, 3, 2, 4	22, 49, 76, 0	31	✓
	5	(untitled)	Single	1, 2, 4, 3	20, 45, 70, 95	37	✓
	6	(untitled)	Single	1, 3, 4, 2	20, 45, 70, 95	38	✓
	7	(untitled)	Single	1, 4, 2, 3	0, 24, 55, 88	29	✓
	8	(untitled)	Single	1, 4, 3, 2	1, 21, 48, 74	30	✓
	9	(untitled)	Single	1, 4, 2, 3, 1, 4, 2	25, 28, 57, 68, 85, 95, 107	46	

Intergreen Matrix for Controller Stream 2

		To				
		A	B	C	D	E
From	A		5			10
	B	5		5	5	8
	C		5			9
	D		5			8
	E	6	6	6	6	

Banned Stage transitions for Controller Stream 2

		To			
		1	2	3	4
From	1				
	2				
	3				
	4				

Interstage Matrix for Controller Stream 2

		To			
		1	2	3	4
From	1	0	5	10	0
	2	5	0	8	5
	3	6	6	0	6
	4	0	5	9	0

Resultant Stages

Controller Stream	Resultant Stage	Is base stage	Library Stage ID	Phases in this stage	Stage start (s)	Stage end (s)	Stage duration (s)	User stage minimum (s)	Stage minimum (s)
2	1	✓	1	A,C,D	112	25	33	1	3
	2	✓	4	C,D	25	28	3	1	1
	3	✓	2	B	33	57	24	1	3
	4	✓	3	E	65	68	3	1	3
	5	✓	1	A,C,D	74	85	11	1	3
	6	✓	4	C,D	85	95	10	1	1
	7	✓	2	B	100	107	7	1	3

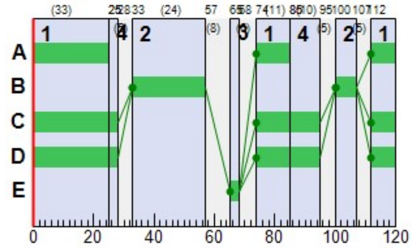
Resultant Phase Green Periods

Controller Stream	Phase	Green period	Is base green period	Start time (s)	End time (s)	Duration (s)
2	A	1	✓	74	85	11
		2	✓	112	25	33
	B	1	✓	33	57	24
		2	✓	100	107	7
	C	1	✓	74	95	21
		2	✓	112	28	36
	D	1	✓	74	95	21
		2	✓	112	28	36
	E	1	✓	65	68	3

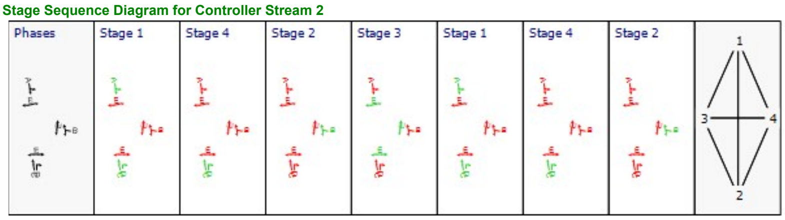
Traffic Stream Green Times

Arm	Traffic Stream	Traffic Node	Controller Stream	Phase	Green Period 1			Green Period 2		
					Start	End	Duration	Start	End	Duration
2A	1	2	2	A	74	85	11	112	25	33
2B	1	2	2	B	33	57	24	100	107	7
2C1	1	2	2	C	74	95	21	112	28	36
2C1	2	2	2	D	74	95	21	112	28	36

Phase Timings Diagram for Controller Stream 2



Stage Sequence Diagram for Controller Stream 2



Resultant penalties

Time Segment	Controller stream	Phase min max penalty (€ per hr)	Intergreen broken penalty (€ per hr)	Stage constraint broken penalty (€ per hr)	Cost of controller stream penalties (€ per hr)
16:15-17:15	2	0.00	0.00	0.00	0.00

Final Prediction Table

Traffic Stream Results

				SIGNALS		FLOWS		PERFORMANCE				PER PCU			QUEUES		WEIGHTS		PENALTIES	P.I.
Arm	Traffic Stream	Name	Traffic node	Controller stream	Phase	Calculated flow entering (PCU/hr)	Calculated sat flow (PCU/hr)	Actual green (s (per cycle))	Wasted time total (s (per cycle))	Degree of saturation (%)	Practical reserve capacity (%)	JourneyTime (s)	Mean Delay per Veh (s)	Mean stops per Veh (%)	Mean max queue (PCU)	Mean end of red queue (PCU)	Delay weighting multiplier (%)	Stop weighting multiplier (%)	Cost of traffic penalties (€ per hr)	P.I.
2A	1	L/S	2	2	A	647 <	1800	44	0.00	94	-4	69.80	58.67	117.85	20.11 +	14.90	100	100	0.00	159.28
2Ax	1	exit				795	Unrestricted	120	5.00	0	Unrestricted	16.82	0.00	0.00	0.00		100	100	0.00	0.00
2B	1	L/R	2	2	B	462	1800	31	0.00	93	-4	79.78	68.47	124.64	15.86	13.03	100	100	0.00	131.99
2Bx	1	exit				545	Unrestricted	120	31.00	0	Unrestricted	16.04	0.00	0.00	0.00		100	100	0.00	0.00
2Cx	1	exit				665	Unrestricted	120	8.00	0	Unrestricted	13.93	0.00	0.00	0.00		100	100	0.00	0.00
2C1	1	S	2	2	C	598 <	1800	57	0.00	68	33	21.22	18.59	76.10	11.83 +	8.17	100	100	0.00	49.55
2C1	2	R	2	2	D	298 <	633	57	0.00	96	-6	89.87	87.20	180.66	10.96 +	9.22	100	100	0.00	109.25
2C2	1	feeder	2b			896	1800	120	120.00	50	81	7.03	0.99	0.00	0.25		100	100	0.00	3.50

Network Results

	Distance travelled (PCU-km/hr)	Time spent (PCU-hr/hr)	Mean journey speed (kph)	Uniform delay (PCU-hr/hr)	Random plus oversat delay (PCU-hr/hr)	Weighted cost of delay (€ per hr)	Weighted cost of stops (€ per hr)	Excess queue penalty (€ per hr)	Performance Index (€ per hr)
Normal traffic	429.95	44.21	9.72	13.16	16.72	424.33	29.24	0.00	453.57
Bus									
Tram									
Pedestrians	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
TOTAL	429.95	44.21	9.72	13.16	16.72	424.33	29.24	0.00	453.57

- *< = adjusted flow warning (upstream links/traffic streams are over-saturated)*
- ** = Traffic Stream - Normal, Bus or Tram Stop or Delay weighting has been set to a value other than 100%*
- *^ = Traffic Stream - Normal, Bus or Tram Stop or Delay Path weighting has been set to a value other than 100%*
- *+ = average link/traffic stream excess queue is greater than 0*
- ***P.I. = PERFORMANCE INDEX***

A7 - 7
D7 - 2032 Do-Nothing, AM

Summary

Data Errors and Warnings

No errors or warnings

Run Summary

Analysis set used	Run start time	Run finish time	Run duration (s)	Modelling start time (HH:mm)	Network Cycle Time (s)	Performance Index (€ per hr)	Total network delay (PCU-hr/hr)	Highest DOS (%)	Item with highest DOS	Number of oversaturated items	Percentage of oversaturated items (%)	Item with worst signalised PRC	Item with worst unsignalised PRC	Item with worst overall PRC	Network within capacity
7	11/12/2024 12:51:50	11/12/2024 12:51:51	1.46	07:45	120	593.38	39.67	98.97	2A/1	3	21	2A/1	2C2/1	2A/1	

Analysis Set Details

Name	Use Simulation	Description	Use specific Demand Set(s)	Specific Demand Set(s)	Optimise specific Demand Set(s)	Demand Set(s) to optimise	Include in report	Locked
7			✓	D7	✓	D7	✓	

Demand Set Details

Scenario name	Time Period name	Description	Composite	Demand sets	Start time (HH:mm)	Locked	Run automatically
2032 Do-Nothing	AM				07:45		✓

T-Junctions

T-Junctions

T-Junction	Name	Description	Auto assign priority	Type	Traffic direction on Arm A	Entry aB	Entry aC	Exit a	Traffic direction on Arm B	Entry bA	Entry bC	Exit b	Traffic direction on Arm C	Entry cA	Entry cB	Exit c	Calculate Slope and Intercept
2			✓	TrafficStream	Two-Way	2A/1	2A/1	2Ax/1	Two-Way	2B/1	2B/1	2Bx/1	Two-Way	2C1/1	2C1/2	2Cx/1	✓

T-Junction Majors

T-Junction	Left Carriageway Width (m)	Right Carriageway Width (m)	Kerbed Central Reserve Width (m)	Width for C-B traffic (m)	Visibility for C-B traffic (m)
2	8.80	8.00	0.00	3.00	170.00

T-Junction Minors

T-Junction	B-C Lane Width (m)	B-A Lane Width (m)	B-C Visibility (m)	B-A Visibility (m)
2	3.00	3.00	21.00	200.00

T-Junction Slope Intercept

T-Junction	BCIntercept (PCU/hr)	BC- aBSlope	BC- aCSlope	BAIntercept (PCU/hr)	BA- aBSlope	BA- aCSlope	BA- cASlope	BA- cBSlope	CBIntercept (PCU/hr)	CB- aBSlope	CB- aCSlope
2	750	0.10	0.26	582	0.10	0.24	0.15	0.35	731	0.25	0.25

Local OD Matrix - Local Matrix: 1

Local Matrix Options

OD Matrix	Name	Use for point to point table	Auto calculate	Allocation mode	Allow paths past exit locations	Allow looped paths on arms	Allow looped paths on traffic nodes	Copy flows	Matrix to copy flows from	Limit paths by length	Path length limit multiplier	Limit paths by number	Path number limit	Limit paths by flow	Low path flow threshold
1	(untitled)	✓	✓	Lane Balancing			✓			✓	1.25				

Normal Input Flows (PCU/hr)

		To		
		2-1	2-2	2-3
From	2-1	0	250	522
	2-2	153	0	289
	2-3	431	266	0

Bus Input Flows not shown as they are blank.

Tram Input Flows not shown as they are blank.

Pedestrian Input Flows not shown as they are blank.

Locations

OD Matrix	Location	Name	Entries	Exits	Colour
1	2-1		2A/1	2Ax/1	#FF0000
	2-2		2B/1	2Bx/1	#00FF00
	2-3		2C2/1	2Cx/1	#0000FF

Normal Paths and Flows

OD Matrix	Path	Description	From location	To location	Path items	Allocation type	Normal Calculated Flow (PCU/hr)
1	3		2-1	2-2	2A/1, 2Bx/1	Normal	250
	4		2-1	2-3	2A/1, 2Cx/1	Normal	522
	5		2-2	2-1	2B/1, 2Ax/1	Normal	153
	6		2-2	2-3	2B/1, 2Cx/1	Normal	289
	7		2-3	2-2	2C2/1, 2C1/2, 2Bx/1	Normal	266
	8		2-3	2-1	2C2/1, 2C1/1, 2Ax/1	Normal	431

Signal Timings

Network Default: 120s cycle time; 120 steps

Controller Stream 2

Controller Stream	Name	Description	Use sequence	Cycle time source	Cycle time (s)	Minimum possible cycle time (s)
2			9	NetworkDefault	120	46

Controller Stream 2 - Properties

Controller Stream	Manufacturer name	Type	Model number	(Telephone) Line Number	Site number	Grid reference	Gaining delay type
2	Unspecified						Absolute

Controller Stream 2 - Optimisation

Controller Stream	Allow offset optimisation	Allow green split optimisation	Optimisation level	Auto redistribute	Enable stage constraint
2	✓	✓	Offsets And Green Splits	✓	

Phases

Controller Stream	Phase	Name	Street minimum green (s)	Maximum green (s)	Relative start displacement (s)	Relative end displacement (s)	Type	Blackout Time (s)
2	A	(untitled)	3	300	0	0	Traffic	
	B	(untitled)	3	300	0	0	Traffic	
	C	(untitled)	3	300	0	0	Traffic	
	D	(untitled)	3	300	0	0	Traffic	
	E	(untitled)	3	3	0	0	Pedestrian	0

Library Stages

Controller Stream	Library Stage	Phases in stage	User stage minimum (s)	Run every N cycles	Probability of running (%)
2	1	A, C, D	1	1	100
	2	B	1	1	100
	3	E	1	1	100
	4	C, D	1	1	100

Stage Sequences

Controller Stream	Sequence	Name	Multiple cycling	Stage IDs	Stage ends	Minimum possible cycle time (s)	Exclude from analysis
2	1	(untitled)	Single	1, 2, 3	43, 77, 88	28	✓
	2	(untitled)	Single	1, 3, 2	29, 62, 95	30	✓
	3	(untitled)	Single	1, 2, 3, 4	22, 49, 76, 0	29	✓
	4	(untitled)	Single	1, 3, 2, 4	22, 49, 76, 0	31	✓
	5	(untitled)	Single	1, 2, 4, 3	20, 45, 70, 95	37	✓
	6	(untitled)	Single	1, 3, 4, 2	20, 45, 70, 95	38	✓
	7	(untitled)	Single	1, 4, 2, 3	0, 24, 55, 88	29	✓
	8	(untitled)	Single	1, 4, 3, 2	1, 21, 48, 74	30	✓
	9	(untitled)	Single	1, 4, 2, 3, 1, 4, 2	27, 29, 57, 68, 89, 97, 107	46	

Intergreen Matrix for Controller Stream 2

		To				
		A	B	C	D	E
From	A		5			10
	B	5		5	5	8
	C		5			9
	D		5			8
	E	6	6	6	6	

Banned Stage transitions for Controller Stream 2

		To			
		1	2	3	4
From	1				
	2				
	3				
	4				

Interstage Matrix for Controller Stream 2

		To			
		1	2	3	4
From	1	0	5	10	0
	2	5	0	8	5
	3	6	6	0	6
	4	0	5	9	0

Resultant Stages

Controller Stream	Resultant Stage	Is base stage	Library Stage ID	Phases in this stage	Stage start (s)	Stage end (s)	Stage duration (s)	User stage minimum (s)	Stage minimum (s)
2	1	✓	1	A,C,D	112	27	35	1	3
	2	✓	4	C,D	27	29	2	1	1
	3	✓	2	B	34	57	23	1	3
	4	✓	3	E	65	68	3	1	3
	5	✓	1	A,C,D	74	89	15	1	3
	6	✓	4	C,D	89	97	8	1	1
	7	✓	2	B	102	107	5	1	3

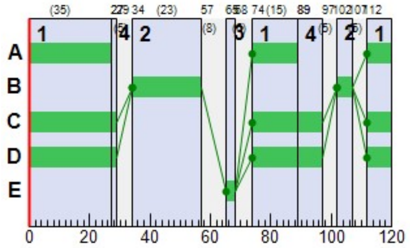
Resultant Phase Green Periods

Controller Stream	Phase	Green period	Is base green period	Start time (s)	End time (s)	Duration (s)
2	A	1	✓	74	89	15
		2	✓	112	27	35
	B	1	✓	34	57	23
		2	✓	102	107	5
	C	1	✓	74	97	23
		2	✓	112	29	37
	D	1	✓	74	97	23
		2	✓	112	29	37
	E	1	✓	65	68	3

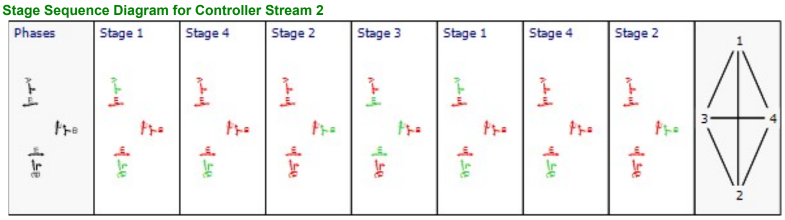
Traffic Stream Green Times

Arm	Traffic Stream	Traffic Node	Controller Stream	Phase	Green Period 1			Green Period 2		
					Start	End	Duration	Start	End	Duration
2A	1	2	2	A	74	89	15	112	27	35
2B	1	2	2	B	34	57	23	102	107	5
2C1	1	2	2	C	74	97	23	112	29	37
2C1	2	2	2	D	74	97	23	112	29	37

Phase Timings Diagram for Controller Stream 2



Stage Sequence Diagram for Controller Stream 2



Resultant penalties

Time Segment	Controller stream	Phase min max penalty (€ per hr)	Intergreen broken penalty (€ per hr)	Stage constraint broken penalty (€ per hr)	Cost of controller stream penalties (€ per hr)
07:45-08:45	2	0.00	0.00	0.00	0.00

Final Prediction Table

Traffic Stream Results

			SIGNALS			FLOWS		PERFORMANCE				PER PCU			QUEUES		WEIGHTS		PENALTIES	P.I.
Arm	Traffic Stream	Name	Traffic node	Controller stream	Phase	Calculated flow entering (PCU/hr)	Calculated sat flow (PCU/hr)	Actual green (s (per cycle))	Wasted time total (s (per cycle))	Degree of saturation (%)	Practical reserve capacity (%)	JourneyTime (s)	Mean Delay per Veh (s)	Mean stops per Veh (%)	Mean max queue (PCU)	Mean end of red queue (PCU)	Delay weighting multiplier (%)	Stop weighting multiplier (%)	Cost of traffic penalties (€ per hr)	P.I.
2A	1	L/S	2	2	A	772 <	1800	50	0.00	99	-9	91.92	80.78	136.94	29.07 +	21.57	100	100	0.00	259.25
2Ax	1	exit				584	Unrestricted	120	5.00	0	Unrestricted	16.82	0.00	0.00	0.00		100	100	0.00	0.00
2B	1	L/R	2	2	B	442 <	1800	28	0.00	98	-8	113.69	102.38	146.37	19.84 +	17.01	100	100	0.00	186.61
2Bx	1	exit				516	Unrestricted	120	30.00	0	Unrestricted	16.04	0.00	0.00	0.00		100	100	0.00	0.00
2Cx	1	exit				811	Unrestricted	120	4.00	0	Unrestricted	13.93	0.00	0.00	0.00		100	100	0.00	0.00
2C1	1	S	2	2	C	431 <	1800	60	0.00	46	94	15.99	13.35	62.65	7.02 +	5.47	100	100	0.00	26.08
	2	R	2	2	D	266 <	524	60	0.00	98	-8	111.72	109.05	158.29	11.53 +	9.83	100	100	0.00	119.70
2C2	1	feeder	2b			697	1800	120	120.00	39	132	6.67	0.63	0.00	0.12		100	100	0.00	1.74

Network Results

	Distance travelled (PCU-km/hr)	Time spent (PCU-hr/hr)	Mean journey speed (kph)	Uniform delay (PCU-hr/hr)	Random plus oversat delay (PCU-hr/hr)	Weighted cost of delay (€ per hr)	Weighted cost of stops (€ per hr)	Excess queue penalty (€ per hr)	Performance Index (€ per hr)
Normal traffic	408.76	53.30	7.67	13.02	26.65	563.34	30.03	0.00	593.38
Bus									
Tram									
Pedestrians	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
TOTAL	408.76	53.30	7.67	13.02	26.65	563.34	30.03	0.00	593.38

- *< = adjusted flow warning (upstream links/traffic streams are over-saturated)*
- ** = Traffic Stream - Normal, Bus or Tram Stop or Delay weighting has been set to a value other than 100%*
- *^ = Traffic Stream - Normal, Bus or Tram Stop or Delay Path weighting has been set to a value other than 100%*
- *+ = average link/traffic stream excess queue is greater than 0*
- ***P.I. = PERFORMANCE INDEX***

A8 - 8
D8 - 2032 Do-Nothing, PM

Summary

Data Errors and Warnings

No errors or warnings

Run Summary

Analysis set used	Run start time	Run finish time	Run duration (s)	Modelling start time (HH:mm)	Network Cycle Time (s)	Performance Index (€ per hr)	Total network delay (PCU-hr/hr)	Highest DOS (%)	Item with highest DOS	Number of oversaturated items	Percentage of oversaturated items (%)	Item with worst signalised PRC	Item with worst unsignalised PRC	Item with worst overall PRC	Network within capacity
8	11/12/2024 12:51:51	11/12/2024 12:51:52	1.15	16:15	120	495.73	32.85	98.78	2C1/2	3	21	2C1/2	2C2/1	2C1/2	

Analysis Set Details

Name	Use Simulation	Description	Use specific Demand Set(s)	Specific Demand Set(s)	Optimise specific Demand Set(s)	Demand Set(s) to optimise	Include in report	Locked
8			✓	D8	✓	D8	✓	

Demand Set Details

Scenario name	Time Period name	Description	Composite	Demand sets	Start time (HH:mm)	Locked	Run automatically
2032 Do-Nothing	PM				16:15		✓

T-Junctions

T-Junctions

T-Junction	Name	Description	Auto assign priority	Type	Traffic direction on Arm A	Entry aB	Entry aC	Exit a	Traffic direction on Arm B	Entry bA	Entry bC	Exit b	Traffic direction on Arm C	Entry cA	Entry cB	Exit c	Calculate Slope and Intercept
2			✓	TrafficStream	Two-Way	2A/1	2A/1	2Ax/1	Two-Way	2B/1	2B/1	2Bx/1	Two-Way	2C1/1	2C1/2	2Cx/1	✓

T-Junction Majors

T-Junction	Left Carriageway Width (m)	Right Carriageway Width (m)	Kerbed Central Reserve Width (m)	Width for C-B traffic (m)	Visibility for C-B traffic (m)
2	8.80	8.00	0.00	3.00	170.00

T-Junction Minors

T-Junction	B-C Lane Width (m)	B-A Lane Width (m)	B-C Visibility (m)	B-A Visibility (m)
2	3.00	3.00	21.00	200.00

T-Junction Slope Intercept

T-Junction	BCIntercept (PCU/hr)	BC- aBSlope	BC- aCSlope	BAIntercept (PCU/hr)	BA- aBSlope	BA- aCSlope	BA- cASlope	BA- cBSlope	CBIntercept (PCU/hr)	CB- aBSlope	CB- aCSlope
2	750	0.10	0.26	582	0.10	0.24	0.15	0.35	731	0.25	0.25

Local OD Matrix - Local Matrix: 1

Local Matrix Options

OD Matrix	Name	Use for point to point table	Auto calculate	Allocation mode	Allow paths past exit locations	Allow looped paths on arms	Allow looped paths on traffic nodes	Copy flows	Matrix to copy flows from	Limit paths by length	Path length limit multiplier	Limit paths by number	Path number limit	Limit paths by flow	Low path flow threshold
1	(untitled)	✓	✓	Lane Balancing			✓			✓	1.25				

Normal Input Flows (PCU/hr)

		To		
		2-1	2-2	2-3
From	2-1	0	249	412
	2-2	200	0	267
	2-3	620	295	0

Bus Input Flows not shown as they are blank.

Tram Input Flows not shown as they are blank.

Pedestrian Input Flows not shown as they are blank.

Locations

OD Matrix	Location	Name	Entries	Exits	Colour
1	2-1		2A/1	2Ax/1	#FF0000
	2-2		2B/1	2Bx/1	#00FF00
	2-3		2C2/1	2Cx/1	#0000FF

Normal Paths and Flows

OD Matrix	Path	Description	From location	To location	Path items	Allocation type	Normal Calculated Flow (PCU/hr)
1	3		2-1	2-2	2A/1, 2Bx/1	Normal	249
	4		2-1	2-3	2A/1, 2Cx/1	Normal	412
	5		2-2	2-1	2B/1, 2Ax/1	Normal	200
	6		2-2	2-3	2B/1, 2Cx/1	Normal	267
	7		2-3	2-2	2C2/1, 2C1/2, 2Bx/1	Normal	295
	8		2-3	2-1	2C2/1, 2C1/1, 2Ax/1	Normal	620

Signal Timings

Network Default: 120s cycle time; 120 steps

Controller Stream 2

Controller Stream	Name	Description	Use sequence	Cycle time source	Cycle time (s)	Minimum possible cycle time (s)
2			9	NetworkDefault	120	46

Controller Stream 2 - Properties

Controller Stream	Manufacturer name	Type	Model number	(Telephone) Line Number	Site number	Grid reference	Gaining delay type
2	Unspecified						Absolute

Controller Stream 2 - Optimisation

Controller Stream	Allow offset optimisation	Allow green split optimisation	Optimisation level	Auto redistribute	Enable stage constraint
2	✓	✓	Offsets And Green Splits	✓	

Phases

Controller Stream	Phase	Name	Street minimum green (s)	Maximum green (s)	Relative start displacement (s)	Relative end displacement (s)	Type	Blackout Time (s)
2	A	(untitled)	3	300	0	0	Traffic	
	B	(untitled)	3	300	0	0	Traffic	
	C	(untitled)	3	300	0	0	Traffic	
	D	(untitled)	3	300	0	0	Traffic	
	E	(untitled)	3	3	0	0	Pedestrian	0

Library Stages

Controller Stream	Library Stage	Phases in stage	User stage minimum (s)	Run every N cycles	Probability of running (%)
2	1	A, C, D	1	1	100
	2	B	1	1	100
	3	E	1	1	100
	4	C, D	1	1	100

Stage Sequences

Controller Stream	Sequence	Name	Multiple cycling	Stage IDs	Stage ends	Minimum possible cycle time (s)	Exclude from analysis
2	1	(untitled)	Single	1, 2, 3	43, 77, 88	28	✓
	2	(untitled)	Single	1, 3, 2	29, 62, 95	30	✓
	3	(untitled)	Single	1, 2, 3, 4	22, 49, 76, 0	29	✓
	4	(untitled)	Single	1, 3, 2, 4	22, 49, 76, 0	31	✓
	5	(untitled)	Single	1, 2, 4, 3	20, 45, 70, 95	37	✓
	6	(untitled)	Single	1, 3, 4, 2	20, 45, 70, 95	38	✓
	7	(untitled)	Single	1, 4, 2, 3	0, 24, 55, 88	29	✓
	8	(untitled)	Single	1, 4, 3, 2	1, 21, 48, 74	30	✓
	9	(untitled)	Single	1, 4, 2, 3, 1, 4, 2	26, 28, 57, 68, 85, 95, 107	46	

Intergreen Matrix for Controller Stream 2

		To				
		A	B	C	D	E
From	A		5			10
	B	5		5	5	8
	C		5			9
	D		5			8
	E	6	6	6	6	

Banned Stage transitions for Controller Stream 2

		To			
		1	2	3	4
From	1				
	2				
	3				
	4				

Interstage Matrix for Controller Stream 2

		To			
		1	2	3	4
From	1	0	5	10	0
	2	5	0	8	5
	3	6	6	0	6
	4	0	5	9	0

Resultant Stages

Controller Stream	Resultant Stage	Is base stage	Library Stage ID	Phases in this stage	Stage start (s)	Stage end (s)	Stage duration (s)	User stage minimum (s)	Stage minimum (s)
2	1	✓	1	A,C,D	112	26	34	1	3
	2	✓	4	C,D	26	28	2	1	1
	3	✓	2	B	33	57	24	1	3
	4	✓	3	E	65	68	3	1	3
	5	✓	1	A,C,D	74	85	11	1	3
	6	✓	4	C,D	85	95	10	1	1
	7	✓	2	B	100	107	7	1	3

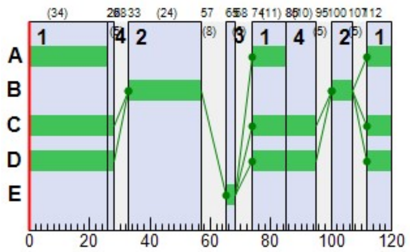
Resultant Phase Green Periods

Controller Stream	Phase	Green period	Is base green period	Start time (s)	End time (s)	Duration (s)
2	A	1	✓	74	85	11
		2	✓	112	26	34
	B	1	✓	33	57	24
		2	✓	100	107	7
	C	1	✓	74	95	21
		2	✓	112	28	36
	D	1	✓	74	95	21
		2	✓	112	28	36
	E	1	✓	65	68	3

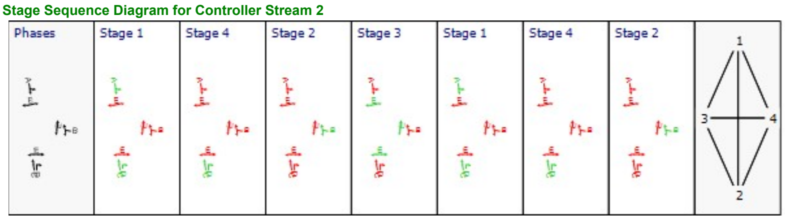
Traffic Stream Green Times

Arm	Traffic Stream	Traffic Node	Controller Stream	Phase	Green Period 1			Green Period 2		
					Start	End	Duration	Start	End	Duration
2A	1	2	2	A	74	85	11	112	26	34
2B	1	2	2	B	33	57	24	100	107	7
2C1	1	2	2	C	74	95	21	112	28	36
2C1	2	2	2	D	74	95	21	112	28	36

Phase Timings Diagram for Controller Stream 2



Stage Sequence Diagram for Controller Stream 2



Resultant penalties

Time Segment	Controller stream	Phase min max penalty (€ per hr)	Intergreen broken penalty (€ per hr)	Stage constraint broken penalty (€ per hr)	Cost of controller stream penalties (€ per hr)
16:15-17:15	2	0.00	0.00	0.00	0.00

Final Prediction Table

Traffic Stream Results

			SIGNALS			FLOWS		PERFORMANCE				PER PCU			QUEUES		WEIGHTS		PENALTIES	P.I.
Arm	Traffic Stream	Name	Traffic node	Controller stream	Phase	Calculated flow entering (PCU/hr)	Calculated sat flow (PCU/hr)	Actual green (s (per cycle))	Wasted time total (s (per cycle))	Degree of saturation (%)	Practical reserve capacity (%)	JourneyTime (s)	Mean Delay per Veh (s)	Mean stops per Veh (%)	Mean max queue (PCU)	Mean end of red queue (PCU)	Delay weighting multiplier (%)	Stop weighting multiplier (%)	Cost of traffic penalties (€ per hr)	P.I.
2A	1	L/S	2	2	A	661 <	1800	45	0.00	94	-4	68.87	57.74	117.24	20.57 +	15.06	100	100	0.00	160.25
2Ax	1	exit				820	Unrestricted	120	5.00	0	Unrestricted	16.82	0.00	0.00	0.00		100	100	0.00	0.00
2B	1	L/R	2	2	B	467 <	1800	31	0.00	94	-5	84.07	72.76	128.00	16.59 +	13.74	100	100	0.00	141.52
2Bx	1	exit				544	Unrestricted	120	31.00	0	Unrestricted	16.04	0.00	0.00	0.00		100	100	0.00	0.00
2Cx	1	exit				679	Unrestricted	120	8.00	0	Unrestricted	13.93	0.00	0.00	0.00		100	100	0.00	0.00
2C1	1	S	2	2	C	620 <	1800	57	0.00	70	28	22.47	19.84	78.79	12.52 +	8.56	100	100	0.00	54.64
	2	R	2	2	D	295 <	607	57	0.00	99	-9	114.13	111.46	159.52	12.97 +	11.25	100	100	0.00	135.59
2C2	1	feeder	2b			915	1800	120	120.00	51	77	7.07	1.03	0.00	0.26		100	100	0.00	3.73

Network Results

	Distance travelled (PCU-km/hr)	Time spent (PCU-hr/hr)	Mean journey speed (kph)	Uniform delay (PCU-hr/hr)	Random plus oversat delay (PCU-hr/hr)	Weighted cost of delay (€ per hr)	Weighted cost of stops (€ per hr)	Excess queue penalty (€ per hr)	Performance Index (€ per hr)
Normal traffic	438.09	47.45	9.23	13.65	19.20	466.50	29.24	0.00	495.73
Bus									
Tram									
Pedestrians	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
TOTAL	438.09	47.45	9.23	13.65	19.20	466.50	29.24	0.00	495.73

- *< = adjusted flow warning (upstream links/traffic streams are over-saturated)*
- ** = Traffic Stream - Normal, Bus or Tram Stop or Delay weighting has been set to a value other than 100%*
- *^ = Traffic Stream - Normal, Bus or Tram Stop or Delay Path weighting has been set to a value other than 100%*
- *+ = average link/traffic stream excess queue is greater than 0*
- ***P.I. = PERFORMANCE INDEX***

A9 - 9
D9 - 2032 With Development, AM

Summary

Data Errors and Warnings

No errors or warnings

Run Summary

Analysis set used	Run start time	Run finish time	Run duration (s)	Modelling start time (HH:mm)	Network Cycle Time (s)	Performance Index (€ per hr)	Total network delay (PCU-hr/hr)	Highest DOS (%)	Item with highest DOS	Number of oversaturated items	Percentage of oversaturated items (%)	Item with worst signalised PRC	Item with worst unsignalised PRC	Item with worst overall PRC	Network within capacity
9	11/12/2024 12:51:52	11/12/2024 12:51:52	0.83	07:45	120	807.91	54.48	104.44	2B/1	3	21	2B/1	2C2/1	2B/1	

Analysis Set Details

Name	Use Simulation	Description	Use specific Demand Set(s)	Specific Demand Set(s)	Optimise specific Demand Set(s)	Demand Set(s) to optimise	Include in report	Locked
9			✓	D9	✓	D9	✓	

Demand Set Details

Scenario name	Time Period name	Description	Composite	Demand sets	Start time (HH:mm)	Locked	Run automatically
2032 With Development	AM				07:45		✓

T-Junctions

T-Junctions

T-Junction	Name	Description	Auto assign priority	Type	Traffic direction on Arm A	Entry aB	Entry aC	Exit a	Traffic direction on Arm B	Entry bA	Entry bC	Exit b	Traffic direction on Arm C	Entry cA	Entry cB	Exit c	Calculate Slope and Intercept
2			✓	TrafficStream	Two-Way	2A/1	2A/1	2Ax/1	Two-Way	2B/1	2B/1	2Bx/1	Two-Way	2C1/1	2C1/2	2Cx/1	✓

T-Junction Majors

T-Junction	Left Carriageway Width (m)	Right Carriageway Width (m)	Kerbed Central Reserve Width (m)	Width for C-B traffic (m)	Visibility for C-B traffic (m)
2	8.80	8.00	0.00	3.00	170.00

T-Junction Minors

T-Junction	B-C Lane Width (m)	B-A Lane Width (m)	B-C Visibility (m)	B-A Visibility (m)
2	3.00	3.00	21.00	200.00

T-Junction Slope Intercept

T-Junction	BCIntercept (PCU/hr)	BC- aBSlope	BC- aCSlope	BAIntercept (PCU/hr)	BA- aBSlope	BA- aCSlope	BA- cASlope	BA- cBSlope	CBIntercept (PCU/hr)	CB- aBSlope	CB- aCSlope
2	750	0.10	0.26	582	0.10	0.24	0.15	0.35	731	0.25	0.25

Local OD Matrix - Local Matrix: 1

Local Matrix Options

OD Matrix	Name	Use for point to point table	Auto calculate	Allocation mode	Allow paths past exit locations	Allow looped paths on arms	Allow looped paths on traffic nodes	Copy flows	Matrix to copy flows from	Limit paths by length	Path length limit multiplier	Limit paths by number	Path number limit	Limit paths by flow	Low path flow threshold
1	(untitled)	✓	✓	Lane Balancing			✓			✓	1.25				

Normal Input Flows (PCU/hr)

		To		
		2-1	2-2	2-3
From	2-1	0	256	524
	2-2	163	0	307
	2-3	436	279	0

Bus Input Flows not shown as they are blank.

Tram Input Flows not shown as they are blank.

Pedestrian Input Flows not shown as they are blank.

Locations

OD Matrix	Location	Name	Entries	Exits	Colour
1	2-1		2A/1	2Ax/1	#FF0000
	2-2		2B/1	2Bx/1	#00FF00
	2-3		2C2/1	2Cx/1	#0000FF

Normal Paths and Flows

OD Matrix	Path	Description	From location	To location	Path items	Allocation type	Normal Calculated Flow (PCU/hr)
1	3		2-1	2-2	2A/1, 2Bx/1	Normal	256
	4		2-1	2-3	2A/1, 2Cx/1	Normal	524
	5		2-2	2-1	2B/1, 2Ax/1	Normal	163
	6		2-2	2-3	2B/1, 2Cx/1	Normal	307
	7		2-3	2-2	2C2/1, 2C1/2, 2Bx/1	Normal	279
	8		2-3	2-1	2C2/1, 2C1/1, 2Ax/1	Normal	436

Signal Timings

Network Default: 120s cycle time; 120 steps

Controller Stream 2

Controller Stream	Name	Description	Use sequence	Cycle time source	Cycle time (s)	Minimum possible cycle time (s)
2			9	NetworkDefault	120	46

Controller Stream 2 - Properties

Controller Stream	Manufacturer name	Type	Model number	(Telephone) Line Number	Site number	Grid reference	Gaining delay type
2	Unspecified						Absolute

Controller Stream 2 - Optimisation

Controller Stream	Allow offset optimisation	Allow green split optimisation	Optimisation level	Auto redistribute	Enable stage constraint
2	✓	✓	Offsets And Green Splits	✓	

Phases

Controller Stream	Phase	Name	Street minimum green (s)	Maximum green (s)	Relative start displacement (s)	Relative end displacement (s)	Type	Blackout Time (s)
2	A	(untitled)	3	300	0	0	Traffic	
	B	(untitled)	3	300	0	0	Traffic	
	C	(untitled)	3	300	0	0	Traffic	
	D	(untitled)	3	300	0	0	Traffic	
	E	(untitled)	3	3	0	0	Pedestrian	0

Library Stages

Controller Stream	Library Stage	Phases in stage	User stage minimum (s)	Run every N cycles	Probability of running (%)
2	1	A, C, D	1	1	100
	2	B	1	1	100
	3	E	1	1	100
	4	C, D	1	1	100

Stage Sequences

Controller Stream	Sequence	Name	Multiple cycling	Stage IDs	Stage ends	Minimum possible cycle time (s)	Exclude from analysis
2	1	(untitled)	Single	1, 2, 3	43, 77, 88	28	✓
	2	(untitled)	Single	1, 3, 2	29, 62, 95	30	✓
	3	(untitled)	Single	1, 2, 3, 4	22, 49, 76, 0	29	✓
	4	(untitled)	Single	1, 3, 2, 4	22, 49, 76, 0	31	✓
	5	(untitled)	Single	1, 2, 4, 3	20, 45, 70, 95	37	✓
	6	(untitled)	Single	1, 3, 4, 2	20, 45, 70, 95	38	✓
	7	(untitled)	Single	1, 4, 2, 3	0, 24, 55, 88	29	✓
	8	(untitled)	Single	1, 4, 3, 2	1, 21, 48, 74	30	✓
	9	(untitled)	Single	1, 4, 2, 3, 1, 4, 2	27, 29, 57, 68, 88, 96, 106	46	

Intergreen Matrix for Controller Stream 2

		To				
		A	B	C	D	E
From	A		5			10
	B	5		5	5	8
	C		5			9
	D		5			8
	E	6	6	6	6	

Banned Stage transitions for Controller Stream 2

		To			
		1	2	3	4
From	1				
	2				
	3				
	4				

Interstage Matrix for Controller Stream 2

		To			
		1	2	3	4
From	1	0	5	10	0
	2	5	0	8	5
	3	6	6	0	6
	4	0	5	9	0

Resultant Stages

Controller Stream	Resultant Stage	Is base stage	Library Stage ID	Phases in this stage	Stage start (s)	Stage end (s)	Stage duration (s)	User stage minimum (s)	Stage minimum (s)
2	1	✓	1	A,C,D	111	27	36	1	3
	2	✓	4	C,D	27	29	2	1	1
	3	✓	2	B	34	57	23	1	3
	4	✓	3	E	65	68	3	1	3
	5	✓	1	A,C,D	74	88	14	1	3
	6	✓	4	C,D	88	96	8	1	1
	7	✓	2	B	101	106	5	1	3

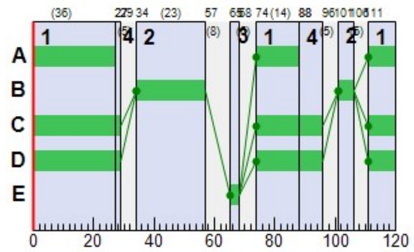
Resultant Phase Green Periods

Controller Stream	Phase	Green period	Is base green period	Start time (s)	End time (s)	Duration (s)
2	A	1	✓	74	88	14
		2	✓	111	27	36
	B	1	✓	34	57	23
		2	✓	101	106	5
	C	1	✓	74	96	22
		2	✓	111	29	38
	D	1	✓	74	96	22
		2	✓	111	29	38
	E	1	✓	65	68	3

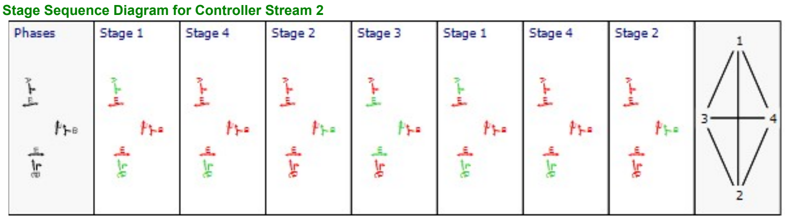
Traffic Stream Green Times

Arm	Traffic Stream	Traffic Node	Controller Stream	Phase	Green Period 1			Green Period 2		
					Start	End	Duration	Start	End	Duration
2A	1	2	2	A	74	88	14	111	27	36
2B	1	2	2	B	34	57	23	101	106	5
2C1	1	2	2	C	74	96	22	111	29	38
2C1	2	2	2	D	74	96	22	111	29	38

Phase Timings Diagram for Controller Stream 2



Stage Sequence Diagram for Controller Stream 2



Resultant penalties

Time Segment	Controller stream	Phase min max penalty (€ per hr)	Intergreen broken penalty (€ per hr)	Stage constraint broken penalty (€ per hr)	Cost of controller stream penalties (€ per hr)
07:45-08:45	2	0.00	0.00	0.00	0.00

Final Prediction Table

Traffic Stream Results

				SIGNALS		FLOWS		PERFORMANCE				PER PCU			QUEUES		WEIGHTS		PENALTIES	P.I.
Arm	Traffic Stream	Name	Traffic node	Controller stream	Phase	Calculated flow entering (PCU/hr)	Calculated sat flow (PCU/hr)	Actual green (s (per cycle))	Wasted time total (s (per cycle))	Degree of saturation (%)	Practical reserve capacity (%)	JourneyTime (s)	Mean Delay per Veh (s)	Mean stops per Veh (%)	Mean max queue (PCU)	Mean end of red queue (PCU)	Delay weighting multiplier (%)	Stop weighting multiplier (%)	Cost of traffic penalties (€ per hr)	P.I.
2A	1	L/S	2	2	A	780 <	1800	50	0.00	100	-10	101.01	89.88	143.15	31.76 +	23.96	100	100	0.00	290.52
2Ax	1	exit				592	Unrestricted	120	4.00	0	Unrestricted	16.82	0.00	0.00	0.00		100	100	0.00	0.00
2B	1	L/R	2	2	B	470 <	1800	28	0.00	104	-14	171.41	160.10	185.21	28.33 +	25.45	100	100	0.00	307.25
2Bx	1	exit				525	Unrestricted	120	30.00	0	Unrestricted	16.04	0.00	0.00	0.00		100	100	0.00	0.00
2Cx	1	exit				818	Unrestricted	120	3.00	0	Unrestricted	13.93	0.00	0.00	0.00		100	100	0.00	0.00
2C1	1	S	2	2	C	436 <	1800	60	0.00	47	92	16.06	13.43	62.89	7.23 +	5.54	100	100	0.00	26.54
	2	R	2	2	D	279 <	520	60	0.00	104	-13	161.98	159.30	190.75	15.84 +	14.19	100	100	0.00	181.75
2C2	1	feeder	2b			715	1800	120	120.00	40	127	6.70	0.66	0.00	0.13		100	100	0.00	1.86

Network Results

	Distance travelled (PCU-km/hr)	Time spent (PCU-hr/hr)	Mean journey speed (kph)	Uniform delay (PCU-hr/hr)	Random plus oversat delay (PCU-hr/hr)	Weighted cost of delay (€ per hr)	Weighted cost of stops (€ per hr)	Excess queue penalty (€ per hr)	Performance Index (€ per hr)
Normal traffic	416.57	68.36	6.09	13.44	41.04	773.59	34.32	0.00	807.91
Bus									
Tram									
Pedestrians	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
TOTAL	416.57	68.36	6.09	13.44	41.04	773.59	34.32	0.00	807.91

- *< = adjusted flow warning (upstream links/traffic streams are over-saturated)*
- ** = Traffic Stream - Normal, Bus or Tram Stop or Delay weighting has been set to a value other than 100%*
- *^ = Traffic Stream - Normal, Bus or Tram Stop or Delay Path weighting has been set to a value other than 100%*
- *+ = average link/traffic stream excess queue is greater than 0*
- ***P.I. = PERFORMANCE INDEX***

A10 - 10
D10 - 2032 With Development, PM

Summary

Data Errors and Warnings

No errors or warnings

Run Summary

Analysis set used	Run start time	Run finish time	Run duration (s)	Modelling start time (HH:mm)	Network Cycle Time (s)	Performance Index (€ per hr)	Total network delay (PCU-hr/hr)	Highest DOS (%)	Item with highest DOS	Number of oversaturated items	Percentage of oversaturated items (%)	Item with worst signalised PRC	Item with worst unsignalised PRC	Item with worst overall PRC	Network within capacity
10	11/12/2024 12:51:52	11/12/2024 12:51:54	2.03	16:15	120	629.74	42.07	101.72	2C1/2	3	21	2C1/2	2C2/1	2C1/2	

Analysis Set Details

Name	Use Simulation	Description	Use specific Demand Set(s)	Specific Demand Set(s)	Optimise specific Demand Set(s)	Demand Set(s) to optimise	Include in report	Locked
10			✓	D10	✓	D10	✓	

Demand Set Details

Scenario name	Time Period name	Description	Composite	Demand sets	Start time (HH:mm)	Locked	Run automatically
2032 With Development	PM				16:15		✓

T-Junctions

T-Junctions

T-Junction	Name	Description	Auto assign priority	Type	Traffic direction on Arm A	Entry aB	Entry aC	Exit a	Traffic direction on Arm B	Entry bA	Entry bC	Exit b	Traffic direction on Arm C	Entry cA	Entry cB	Exit c	Calculate Slope and Intercept
2			✓	TrafficStream	Two-Way	2A/1	2A/1	2Ax/1	Two-Way	2B/1	2B/1	2Bx/1	Two-Way	2C1/1	2C1/2	2Cx/1	✓

T-Junction Majors

T-Junction	Left Carriageway Width (m)	Right Carriageway Width (m)	Kerbed Central Reserve Width (m)	Width for C-B traffic (m)	Visibility for C-B traffic (m)
2	8.80	8.00	0.00	3.00	170.00

T-Junction Minors

T-Junction	B-C Lane Width (m)	B-A Lane Width (m)	B-C Visibility (m)	B-A Visibility (m)
2	3.00	3.00	21.00	200.00

T-Junction Slope Intercept

T-Junction	BCIntercept (PCU/hr)	BC- aBSlope	BC- aCSlope	BAIntercept (PCU/hr)	BA- aBSlope	BA- aCSlope	BA- cASlope	BA- cBSlope	CBIntercept (PCU/hr)	CB- aBSlope	CB- aCSlope
2	750	0.10	0.26	582	0.10	0.24	0.15	0.35	731	0.25	0.25

Local OD Matrix - Local Matrix: 1

Local Matrix Options

OD Matrix	Name	Use for point to point table	Auto calculate	Allocation mode	Allow paths past exit locations	Allow looped paths on arms	Allow looped paths on traffic nodes	Copy flows	Matrix to copy flows from	Limit paths by length	Path length limit multiplier	Limit paths by number	Path number limit	Limit paths by flow	Low path flow threshold
1	(untitled)	✓	✓	Lane Balancing			✓			✓	1.25				

Normal Input Flows (PCU/hr)

		To		
		2-1	2-2	2-3
From	2-1	0	256	416
	2-2	205	0	277
	2-3	622	310	0

Bus Input Flows not shown as they are blank.

Tram Input Flows not shown as they are blank.

Pedestrian Input Flows not shown as they are blank.

Locations

OD Matrix	Location	Name	Entries	Exits	Colour
1	2-1		2A/1	2Ax/1	#FF0000
	2-2		2B/1	2Bx/1	#00FF00
	2-3		2C2/1	2Cx/1	#0000FF

Normal Paths and Flows

OD Matrix	Path	Description	From location	To location	Path items	Allocation type	Normal Calculated Flow (PCU/hr)
1	3		2-1	2-2	2A/1, 2Bx/1	Normal	256
	4		2-1	2-3	2A/1, 2Cx/1	Normal	416
	5		2-2	2-1	2B/1, 2Ax/1	Normal	205
	6		2-2	2-3	2B/1, 2Cx/1	Normal	277
	7		2-3	2-2	2C2/1, 2C1/2, 2Bx/1	Normal	310
	8		2-3	2-1	2C2/1, 2C1/1, 2Ax/1	Normal	622

Signal Timings

Network Default: 120s cycle time; 120 steps

Controller Stream 2

Controller Stream	Name	Description	Use sequence	Cycle time source	Cycle time (s)	Minimum possible cycle time (s)
2			9	NetworkDefault	120	46

Controller Stream 2 - Properties

Controller Stream	Manufacturer name	Type	Model number	(Telephone) Line Number	Site number	Grid reference	Gaining delay type
2	Unspecified						Absolute

Controller Stream 2 - Optimisation

Controller Stream	Allow offset optimisation	Allow green split optimisation	Optimisation level	Auto redistribute	Enable stage constraint
2	✓	✓	Offsets And Green Splits	✓	

Phases

Controller Stream	Phase	Name	Street minimum green (s)	Maximum green (s)	Relative start displacement (s)	Relative end displacement (s)	Type	Blackout Time (s)
2	A	(untitled)	3	300	0	0	Traffic	
	B	(untitled)	3	300	0	0	Traffic	
	C	(untitled)	3	300	0	0	Traffic	
	D	(untitled)	3	300	0	0	Traffic	
	E	(untitled)	3	3	0	0	Pedestrian	0

Library Stages

Controller Stream	Library Stage	Phases in stage	User stage minimum (s)	Run every N cycles	Probability of running (%)
2	1	A, C, D	1	1	100
	2	B	1	1	100
	3	E	1	1	100
	4	C, D	1	1	100

Stage Sequences

Controller Stream	Sequence	Name	Multiple cycling	Stage IDs	Stage ends	Minimum possible cycle time (s)	Exclude from analysis
2	1	(untitled)	Single	1, 2, 3	43, 77, 88	28	✓
	2	(untitled)	Single	1, 3, 2	29, 62, 95	30	✓
	3	(untitled)	Single	1, 2, 3, 4	22, 49, 76, 0	29	✓
	4	(untitled)	Single	1, 3, 2, 4	22, 49, 76, 0	31	✓
	5	(untitled)	Single	1, 2, 4, 3	20, 45, 70, 95	37	✓
	6	(untitled)	Single	1, 3, 4, 2	20, 45, 70, 95	38	✓
	7	(untitled)	Single	1, 4, 2, 3	0, 24, 55, 88	29	✓
	8	(untitled)	Single	1, 4, 3, 2	1, 21, 48, 74	30	✓
	9	(untitled)	Single	1, 4, 2, 3, 1, 4, 2	25, 27, 57, 68, 85, 96, 107	46	

Intergreen Matrix for Controller Stream 2

		To				
		A	B	C	D	E
From	A		5			10
	B	5		5	5	8
	C		5			9
	D		5			8
	E	6	6	6	6	

Banned Stage transitions for Controller Stream 2

		To			
		1	2	3	4
From	1				
	2				
	3				
	4				

Interstage Matrix for Controller Stream 2

		To			
		1	2	3	4
From	1	0	5	10	0
	2	5	0	8	5
	3	6	6	0	6
	4	0	5	9	0

Resultant Stages

Controller Stream	Resultant Stage	Is base stage	Library Stage ID	Phases in this stage	Stage start (s)	Stage end (s)	Stage duration (s)	User stage minimum (s)	Stage minimum (s)
2	1	✓	1	A,C,D	112	25	33	1	3
	2	✓	4	C,D	25	27	2	1	1
	3	✓	2	B	32	57	25	1	3
	4	✓	3	E	65	68	3	1	3
	5	✓	1	A,C,D	74	85	11	1	3
	6	✓	4	C,D	85	96	11	1	1
	7	✓	2	B	101	107	6	1	3

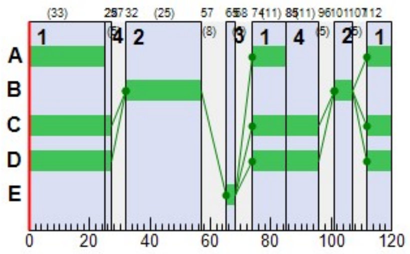
Resultant Phase Green Periods

Controller Stream	Phase	Green period	Is base green period	Start time (s)	End time (s)	Duration (s)
2	A	1	✓	74	85	11
		2	✓	112	25	33
	B	1	✓	32	57	25
		2	✓	101	107	6
	C	1	✓	74	96	22
		2	✓	112	27	35
	D	1	✓	74	96	22
		2	✓	112	27	35
	E	1	✓	65	68	3

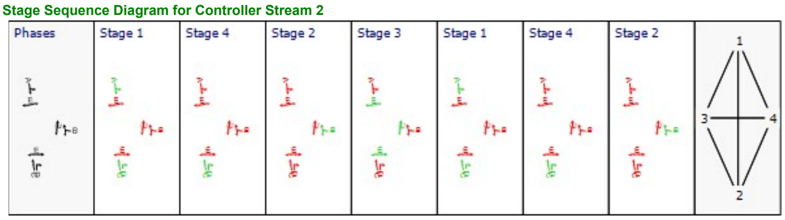
Traffic Stream Green Times

Arm	Traffic Stream	Traffic Node	Controller Stream	Phase	Green Period 1			Green Period 2		
					Start	End	Duration	Start	End	Duration
2A	1	2	2	A	74	85	11	112	25	33
2B	1	2	2	B	32	57	25	101	107	6
2C1	1	2	2	C	74	96	22	112	27	35
2C1	2	2	2	D	74	96	22	112	27	35

Phase Timings Diagram for Controller Stream 2



Stage Sequence Diagram for Controller Stream 2



Resultant penalties

Time Segment	Controller stream	Phase min max penalty (€ per hr)	Intergreen broken penalty (€ per hr)	Stage constraint broken penalty (€ per hr)	Cost of controller stream penalties (€ per hr)
16:15-17:15	2	0.00	0.00	0.00	0.00

Final Prediction Table

Traffic Stream Results

				SIGNALS		FLOWS		PERFORMANCE				PER PCU			QUEUES		WEIGHTS		PENALTIES	P.I.
Arm	Traffic Stream	Name	Traffic node	Controller stream	Phase	Calculated flow entering (PCU/hr)	Calculated sat flow (PCU/hr)	Actual green (s (per cycle))	Wasted time total (s (per cycle))	Degree of saturation (%)	Practical reserve capacity (%)	JourneyTime (s)	Mean Delay per Veh (s)	Mean stops per Veh (%)	Mean max queue (PCU)	Mean end of red queue (PCU)	Delay weighting multiplier (%)	Stop weighting multiplier (%)	Cost of traffic penalties (€ per hr)	P.I.
2A	1	L/S	2	2	A	672 <	1800	44	0.00	97	-8	87.43	76.30	131.58	24.77 +	18.80	100	100	0.00	213.33
2Ax	1	exit				827	Unrestricted	120	4.00	0	Unrestricted	16.82	0.00	0.00	0.00		100	100	0.00	0.00
2B	1	L/R	2	2	B	482 <	1800	31	0.00	97	-8	102.51	91.20	139.81	20.03 +	16.81	100	100	0.00	181.84
2Bx	1	exit				561	Unrestricted	120	32.00	0	Unrestricted	16.04	0.00	0.00	0.00		100	100	0.00	0.00
2Cx	1	exit				693	Unrestricted	120	8.00	0	Unrestricted	13.93	0.00	0.00	0.00		100	100	0.00	0.00
2C1	1	S	2	2	C	622 <	1800	57	0.00	70	28	22.76	20.13	78.82	12.74 +	8.77	100	100	0.00	55.53
	2	R	2	2	D	310 <	620	57	0.00	102	-12	140.38	137.70	175.78	16.07 +	14.20	100	100	0.00	175.10
2C2	1	feeder	2b			932	1800	120	120.00	52	74	7.11	1.07	0.00	0.28		100	100	0.00	3.94

Network Results

	Distance travelled (PCU-km/hr)	Time spent (PCU-hr/hr)	Mean journey speed (kph)	Uniform delay (PCU-hr/hr)	Random plus oversat delay (PCU-hr/hr)	Weighted cost of delay (€ per hr)	Weighted cost of stops (€ per hr)	Excess queue penalty (€ per hr)	Performance Index (€ per hr)
Normal traffic	446.60	56.95	7.84	14.76	27.31	597.34	32.40	0.00	629.74
Bus									
Tram									
Pedestrians	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
TOTAL	446.60	56.95	7.84	14.76	27.31	597.34	32.40	0.00	629.74

- *< = adjusted flow warning (upstream links/traffic streams are over-saturated)*
- ** = Traffic Stream - Normal, Bus or Tram Stop or Delay weighting has been set to a value other than 100%*
- *^ = Traffic Stream - Normal, Bus or Tram Stop or Delay Path weighting has been set to a value other than 100%*
- *+ = average link/traffic stream excess queue is greater than 0*
- ***P.I. = PERFORMANCE INDEX***

A11 - 11
D11 - 2042 Do-Nothing, AM

Summary

Data Errors and Warnings

No errors or warnings

Run Summary

Analysis set used	Run start time	Run finish time	Run duration (s)	Modelling start time (HH:mm)	Network Cycle Time (s)	Performance Index (€ per hr)	Total network delay (PCU-hr/hr)	Highest DOS (%)	Item with highest DOS	Number of oversaturated items	Percentage of oversaturated items (%)	Item with worst signalised PRC	Item with worst unsignalised PRC	Item with worst overall PRC	Network within capacity
11	11/12/2024 12:51:54	11/12/2024 12:51:54	0.78	07:45	120	751.71	50.62	104.60	2B/1	3	21	2B/1	2C2/1	2B/1	

Analysis Set Details

Name	Use Simulation	Description	Use specific Demand Set(s)	Specific Demand Set(s)	Optimise specific Demand Set(s)	Demand Set(s) to optimise	Include in report	Locked
11			✓	D11	✓	D11	✓	

Demand Set Details

Scenario name	Time Period name	Description	Composite	Demand sets	Start time (HH:mm)	Locked	Run automatically
2042 Do-Nothing	AM				07:45		✓

T-Junctions

T-Junctions

T-Junction	Name	Description	Auto assign priority	Type	Traffic direction on Arm A	Entry aB	Entry aC	Exit a	Traffic direction on Arm B	Entry bA	Entry bC	Exit b	Traffic direction on Arm C	Entry cA	Entry cB	Exit c	Calculate Slope and Intercept
2			✓	TrafficStream	Two-Way	2A/1	2A/1	2Ax/1	Two-Way	2B/1	2B/1	2Bx/1	Two-Way	2C1/1	2C1/2	2Cx/1	✓

T-Junction Majors

T-Junction	Left Carriageway Width (m)	Right Carriageway Width (m)	Kerbed Central Reserve Width (m)	Width for C-B traffic (m)	Visibility for C-B traffic (m)
2	8.80	8.00	0.00	3.00	170.00

T-Junction Minors

T-Junction	B-C Lane Width (m)	B-A Lane Width (m)	B-C Visibility (m)	B-A Visibility (m)
2	3.00	3.00	21.00	200.00

T-Junction Slope Intercept

T-Junction	BCIntercept (PCU/hr)	BC- aBSlope	BC- aCSlope	BAIntercept (PCU/hr)	BA- aBSlope	BA- aCSlope	BA- cASlope	BA- cBSlope	CBIntercept (PCU/hr)	CB- aBSlope	CB- aCSlope
2	750	0.10	0.26	582	0.10	0.24	0.15	0.35	731	0.25	0.25

Local OD Matrix - Local Matrix: 1

Local Matrix Options

OD Matrix	Name	Use for point to point table	Auto calculate	Allocation mode	Allow paths past exit locations	Allow looped paths on arms	Allow looped paths on traffic nodes	Copy flows	Matrix to copy flows from	Limit paths by length	Path length limit multiplier	Limit paths by number	Path number limit	Limit paths by flow	Low path flow threshold
1	(untitled)	✓	✓	Lane Balancing			✓			✓	1.25				

Normal Input Flows (PCU/hr)

		To		
		2-1	2-2	2-3
From	2-1	0	257	536
	2-2	157	0	298
	2-3	443	273	0

Bus Input Flows not shown as they are blank.

Tram Input Flows not shown as they are blank.

Pedestrian Input Flows not shown as they are blank.

Locations

OD Matrix	Location	Name	Entries	Exits	Colour
1	2-1		2A/1	2Ax/1	#FF0000
	2-2		2B/1	2Bx/1	#00FF00
	2-3		2C2/1	2Cx/1	#0000FF

Normal Paths and Flows

OD Matrix	Path	Description	From location	To location	Path items	Allocation type	Normal Calculated Flow (PCU/hr)
1	3		2-1	2-2	2A/1, 2Bx/1	Normal	257
	4		2-1	2-3	2A/1, 2Cx/1	Normal	536
	5		2-2	2-1	2B/1, 2Ax/1	Normal	157
	6		2-2	2-3	2B/1, 2Cx/1	Normal	298
	7		2-3	2-2	2C2/1, 2C1/2, 2Bx/1	Normal	273
	8		2-3	2-1	2C2/1, 2C1/1, 2Ax/1	Normal	443

Signal Timings

Network Default: 120s cycle time; 120 steps

Controller Stream 2

Controller Stream	Name	Description	Use sequence	Cycle time source	Cycle time (s)	Minimum possible cycle time (s)
2			9	NetworkDefault	120	46

Controller Stream 2 - Properties

Controller Stream	Manufacturer name	Type	Model number	(Telephone) Line Number	Site number	Grid reference	Gaining delay type
2	Unspecified						Absolute

Controller Stream 2 - Optimisation

Controller Stream	Allow offset optimisation	Allow green split optimisation	Optimisation level	Auto redistribute	Enable stage constraint
2	✓	✓	Offsets And Green Splits	✓	

Phases

Controller Stream	Phase	Name	Street minimum green (s)	Maximum green (s)	Relative start displacement (s)	Relative end displacement (s)	Type	Blackout Time (s)
2	A	(untitled)	3	300	0	0	Traffic	
	B	(untitled)	3	300	0	0	Traffic	
	C	(untitled)	3	300	0	0	Traffic	
	D	(untitled)	3	300	0	0	Traffic	
	E	(untitled)	3	3	0	0	Pedestrian	0

Library Stages

Controller Stream	Library Stage	Phases in stage	User stage minimum (s)	Run every N cycles	Probability of running (%)
2	1	A, C, D	1	1	100
	2	B	1	1	100
	3	E	1	1	100
	4	C, D	1	1	100

Stage Sequences

Controller Stream	Sequence	Name	Multiple cycling	Stage IDs	Stage ends	Minimum possible cycle time (s)	Exclude from analysis
2	1	(untitled)	Single	1, 2, 3	43, 77, 88	28	✓
	2	(untitled)	Single	1, 3, 2	29, 62, 95	30	✓
	3	(untitled)	Single	1, 2, 3, 4	22, 49, 76, 0	29	✓
	4	(untitled)	Single	1, 3, 2, 4	22, 49, 76, 0	31	✓
	5	(untitled)	Single	1, 2, 4, 3	20, 45, 70, 95	37	✓
	6	(untitled)	Single	1, 3, 4, 2	20, 45, 70, 95	38	✓
	7	(untitled)	Single	1, 4, 2, 3	0, 24, 55, 88	29	✓
	8	(untitled)	Single	1, 4, 3, 2	1, 21, 48, 74	30	✓
	9	(untitled)	Single	1, 4, 2, 3, 1, 4, 2	28, 29, 57, 68, 89, 97, 106	46	

Intergreen Matrix for Controller Stream 2

		To				
		A	B	C	D	E
From	A		5			10
	B	5		5	5	8
	C		5			9
	D		5			8
	E	6	6	6	6	

Banned Stage transitions for Controller Stream 2

		To			
		1	2	3	4
From	1				
	2				
	3				
	4				

Interstage Matrix for Controller Stream 2

		To			
		1	2	3	4
From	1	0	5	10	0
	2	5	0	8	5
	3	6	6	0	6
	4	0	5	9	0

Resultant Stages

Controller Stream	Resultant Stage	Is base stage	Library Stage ID	Phases in this stage	Stage start (s)	Stage end (s)	Stage duration (s)	User stage minimum (s)	Stage minimum (s)
2	1	✓	1	A,C,D	111	28	37	1	3
	2	✓	4	C,D	28	29	1	1	1
	3	✓	2	B	34	57	23	1	3
	4	✓	3	E	65	68	3	1	3
	5	✓	1	A,C,D	74	89	15	1	3
	6	✓	4	C,D	89	97	8	1	1
	7	✓	2	B	102	106	4	1	3

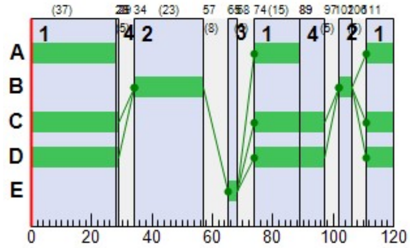
Resultant Phase Green Periods

Controller Stream	Phase	Green period	Is base green period	Start time (s)	End time (s)	Duration (s)
2	A	1	✓	74	89	15
		2	✓	111	28	37
	B	1	✓	34	57	23
		2	✓	102	106	4
	C	1	✓	74	97	23
		2	✓	111	29	38
	D	1	✓	74	97	23
		2	✓	111	29	38
	E	1	✓	65	68	3

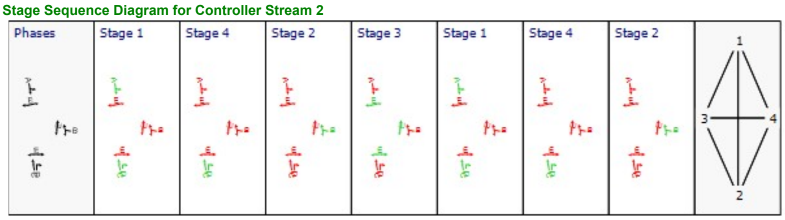
Traffic Stream Green Times

Arm	Traffic Stream	Traffic Node	Controller Stream	Phase	Green Period 1			Green Period 2		
					Start	End	Duration	Start	End	Duration
2A	1	2	2	A	74	89	15	111	28	37
2B	1	2	2	B	34	57	23	102	106	4
2C1	1	2	2	C	74	97	23	111	29	38
2C1	2	2	2	D	74	97	23	111	29	38

Phase Timings Diagram for Controller Stream 2



Stage Sequence Diagram for Controller Stream 2



Resultant penalties

Time Segment	Controller stream	Phase min max penalty (€ per hr)	Intergreen broken penalty (€ per hr)	Stage constraint broken penalty (€ per hr)	Cost of controller stream penalties (€ per hr)
07:45-08:45	2	0.00	0.00	0.00	0.00

Final Prediction Table

Traffic Stream Results

				SIGNALS		FLOWS		PERFORMANCE				PER PCU			QUEUES		WEIGHTS		PENALTIES	P.I.
Arm	Traffic Stream	Name	Traffic node	Controller stream	Phase	Calculated flow entering (PCU/hr)	Calculated sat flow (PCU/hr)	Actual green (s (per cycle))	Wasted time total (s (per cycle))	Degree of saturation (%)	Practical reserve capacity (%)	JourneyTime (s)	Mean Delay per Veh (s)	Mean stops per Veh (%)	Mean max queue (PCU)	Mean end of red queue (PCU)	Delay weighting multiplier (%)	Stop weighting multiplier (%)	Cost of traffic penalties (€ per hr)	P.I.
2A	1	L/S	2	2	A	793 <	1800	52	0.00	98	-8	82.53	71.40	130.17	27.75 +	20.04	100	100	0.00	236.26
2Ax	1	exit				593	Unrestricted	120	4.00	0	Unrestricted	16.82	0.00	0.00	0.00		100	100	0.00	0.00
2B	1	L/R	2	2	B	455 <	1800	27	0.00	105	-14	175.98	164.67	186.84	28.17 +	25.39	100	100	0.00	305.73
2Bx	1	exit				520	Unrestricted	120	30.00	0	Unrestricted	16.04	0.00	0.00	0.00		100	100	0.00	0.00
2Cx	1	exit				821	Unrestricted	120	3.00	0	Unrestricted	13.93	0.00	0.00	0.00		100	100	0.00	0.00
2C1	1	S	2	2	C	443 <	1800	61	0.00	47	92	15.95	13.32	62.22	7.34 +	5.62	100	100	0.00	26.72
	2	R	2	2	D	273 <	501	61	0.00	104	-13	165.00	162.33	192.21	15.87 +	14.19	100	100	0.00	181.13
2C2	1	feeder	2b			716	1800	120	120.00	40	126	6.70	0.66	0.00	0.13		100	100	0.00	1.86

Network Results

	Distance travelled (PCU-km/hr)	Time spent (PCU-hr/hr)	Mean journey speed (kph)	Uniform delay (PCU-hr/hr)	Random plus oversat delay (PCU-hr/hr)	Weighted cost of delay (€ per hr)	Weighted cost of stops (€ per hr)	Excess queue penalty (€ per hr)	Performance Index (€ per hr)
Normal traffic	416.24	64.49	6.45	13.29	37.33	718.79	32.92	0.00	751.71
Bus									
Tram									
Pedestrians	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
TOTAL	416.24	64.49	6.45	13.29	37.33	718.79	32.92	0.00	751.71

- *< = adjusted flow warning (upstream links/traffic streams are over-saturated)*
- ** = Traffic Stream - Normal, Bus or Tram Stop or Delay weighting has been set to a value other than 100%*
- *^ = Traffic Stream - Normal, Bus or Tram Stop or Delay Path weighting has been set to a value other than 100%*
- *+ = average link/traffic stream excess queue is greater than 0*
- ***P.I. = PERFORMANCE INDEX***

A12 - 12
D12 - 2042 Do-Nothing, PM

Summary

Data Errors and Warnings

No errors or warnings

Run Summary

Analysis set used	Run start time	Run finish time	Run duration (s)	Modelling start time (HH:mm)	Network Cycle Time (s)	Performance Index (€ per hr)	Total network delay (PCU-hr/hr)	Highest DOS (%)	Item with highest DOS	Number of oversaturated items	Percentage of oversaturated items (%)	Item with worst signalised PRC	Item with worst unsignalised PRC	Item with worst overall PRC	Network within capacity
12	11/12/2024 12:51:54	11/12/2024 12:51:55	1.47	16:15	120	621.01	41.43	100.01	2C1/2	3	21	2C1/2	2C2/1	2C1/2	

Analysis Set Details

Name	Use Simulation	Description	Use specific Demand Set(s)	Specific Demand Set(s)	Optimise specific Demand Set(s)	Demand Set(s) to optimise	Include in report	Locked
12			✓	D12	✓	D12	✓	

Demand Set Details

Scenario name	Time Period name	Description	Composite	Demand sets	Start time (HH:mm)	Locked	Run automatically
2042 Do-Nothing	PM				16:15		✓

T-Junctions

T-Junctions

T-Junction	Name	Description	Auto assign priority	Type	Traffic direction on Arm A	Entry aB	Entry aC	Exit a	Traffic direction on Arm B	Entry bA	Entry bC	Exit b	Traffic direction on Arm C	Entry cA	Entry cB	Exit c	Calculate Slope and Intercept
2			✓	TrafficStream	Two-Way	2A/1	2A/1	2Ax/1	Two-Way	2B/1	2B/1	2Bx/1	Two-Way	2C1/1	2C1/2	2Cx/1	✓

T-Junction Majors

T-Junction	Left Carriageway Width (m)	Right Carriageway Width (m)	Kerbed Central Reserve Width (m)	Width for C-B traffic (m)	Visibility for C-B traffic (m)
2	8.80	8.00	0.00	3.00	170.00

T-Junction Minors

T-Junction	B-C Lane Width (m)	B-A Lane Width (m)	B-C Visibility (m)	B-A Visibility (m)
2	3.00	3.00	21.00	200.00

T-Junction Slope Intercept

T-Junction	BCIntercept (PCU/hr)	BC- aBSlope	BC- aCSlope	BAIntercept (PCU/hr)	BA- aBSlope	BA- aCSlope	BA- cASlope	BA- cBSlope	CBIntercept (PCU/hr)	CB- aBSlope	CB- aCSlope
2	750	0.10	0.26	582	0.10	0.24	0.15	0.35	731	0.25	0.25

Local OD Matrix - Local Matrix: 1

Local Matrix Options

OD Matrix	Name	Use for point to point table	Auto calculate	Allocation mode	Allow paths past exit locations	Allow looped paths on arms	Allow looped paths on traffic nodes	Copy flows	Matrix to copy flows from	Limit paths by length	Path length limit multiplier	Limit paths by number	Path number limit	Limit paths by flow	Low path flow threshold
1	(untitled)	✓	✓	Lane Balancing			✓			✓	1.25				

Normal Input Flows (PCU/hr)

		To		
		2-1	2-2	2-3
From	2-1	0	256	423
	2-2	205	0	275
	2-3	637	303	0

Bus Input Flows not shown as they are blank.

Tram Input Flows not shown as they are blank.

Pedestrian Input Flows not shown as they are blank.

Locations

OD Matrix	Location	Name	Entries	Exits	Colour
1	2-1		2A/1	2Ax/1	#FF0000
	2-2		2B/1	2Bx/1	#00FF00
	2-3		2C2/1	2Cx/1	#0000FF

Normal Paths and Flows

OD Matrix	Path	Description	From location	To location	Path items	Allocation type	Normal Calculated Flow (PCU/hr)
1	3		2-1	2-2	2A/1, 2Bx/1	Normal	256
	4		2-1	2-3	2A/1, 2Cx/1	Normal	423
	5		2-2	2-1	2B/1, 2Ax/1	Normal	205
	6		2-2	2-3	2B/1, 2Cx/1	Normal	275
	7		2-3	2-2	2C2/1, 2C1/2, 2Bx/1	Normal	303
	8		2-3	2-1	2C2/1, 2C1/1, 2Ax/1	Normal	637

Signal Timings

Network Default: 120s cycle time; 120 steps

Controller Stream 2

Controller Stream	Name	Description	Use sequence	Cycle time source	Cycle time (s)	Minimum possible cycle time (s)
2			9	NetworkDefault	120	46

Controller Stream 2 - Properties

Controller Stream	Manufacturer name	Type	Model number	(Telephone) Line Number	Site number	Grid reference	Gaining delay type
2	Unspecified						Absolute

Controller Stream 2 - Optimisation

Controller Stream	Allow offset optimisation	Allow green split optimisation	Optimisation level	Auto redistribute	Enable stage constraint
2	✓	✓	Offsets And Green Splits	✓	

Phases

Controller Stream	Phase	Name	Street minimum green (s)	Maximum green (s)	Relative start displacement (s)	Relative end displacement (s)	Type	Blackout Time (s)
2	A	(untitled)	3	300	0	0	Traffic	
	B	(untitled)	3	300	0	0	Traffic	
	C	(untitled)	3	300	0	0	Traffic	
	D	(untitled)	3	300	0	0	Traffic	
	E	(untitled)	3	3	0	0	Pedestrian	0

Library Stages

Controller Stream	Library Stage	Phases in stage	User stage minimum (s)	Run every N cycles	Probability of running (%)
2	1	A, C, D	1	1	100
	2	B	1	1	100
	3	E	1	1	100
	4	C, D	1	1	100

Stage Sequences

Controller Stream	Sequence	Name	Multiple cycling	Stage IDs	Stage ends	Minimum possible cycle time (s)	Exclude from analysis
2	1	(untitled)	Single	1, 2, 3	43, 77, 88	28	✓
	2	(untitled)	Single	1, 3, 2	29, 62, 95	30	✓
	3	(untitled)	Single	1, 2, 3, 4	22, 49, 76, 0	29	✓
	4	(untitled)	Single	1, 3, 2, 4	22, 49, 76, 0	31	✓
	5	(untitled)	Single	1, 2, 4, 3	20, 45, 70, 95	37	✓
	6	(untitled)	Single	1, 3, 4, 2	20, 45, 70, 95	38	✓
	7	(untitled)	Single	1, 4, 2, 3	0, 24, 55, 88	29	✓
	8	(untitled)	Single	1, 4, 3, 2	1, 21, 48, 74	30	✓
	9	(untitled)	Single	1, 4, 2, 3, 1, 4, 2	25, 28, 57, 68, 85, 95, 107	46	

Intergreen Matrix for Controller Stream 2

		To				
		A	B	C	D	E
From	A		5			10
	B	5		5	5	8
	C		5			9
	D		5			8
	E	6	6	6	6	

Banned Stage transitions for Controller Stream 2

		To			
		1	2	3	4
From	1				
	2				
	3				
	4				

Interstage Matrix for Controller Stream 2

		To			
		1	2	3	4
From	1	0	5	10	0
	2	5	0	8	5
	3	6	6	0	6
	4	0	5	9	0

Resultant Stages

Controller Stream	Resultant Stage	Is base stage	Library Stage ID	Phases in this stage	Stage start (s)	Stage end (s)	Stage duration (s)	User stage minimum (s)	Stage minimum (s)
2	1	✓	1	A,C,D	112	25	33	1	3
	2	✓	4	C,D	25	28	3	1	1
	3	✓	2	B	33	57	24	1	3
	4	✓	3	E	65	68	3	1	3
	5	✓	1	A,C,D	74	85	11	1	3
	6	✓	4	C,D	85	95	10	1	1
	7	✓	2	B	100	107	7	1	3

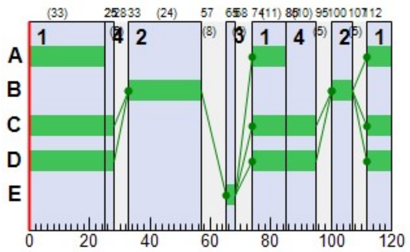
Resultant Phase Green Periods

Controller Stream	Phase	Green period	Is base green period	Start time (s)	End time (s)	Duration (s)
2	A	1	✓	74	85	11
		2	✓	112	25	33
	B	1	✓	33	57	24
		2	✓	100	107	7
	C	1	✓	74	95	21
		2	✓	112	28	36
	D	1	✓	74	95	21
		2	✓	112	28	36
	E	1	✓	65	68	3

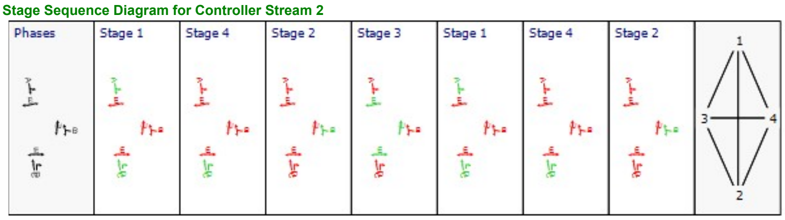
Traffic Stream Green Times

Arm	Traffic Stream	Traffic Node	Controller Stream	Phase	Green Period 1			Green Period 2		
					Start	End	Duration	Start	End	Duration
2A	1	2	2	A	74	85	11	112	25	33
2B	1	2	2	B	33	57	24	100	107	7
2C1	1	2	2	C	74	95	21	112	28	36
2C1	2	2	2	D	74	95	21	112	28	36

Phase Timings Diagram for Controller Stream 2



Stage Sequence Diagram for Controller Stream 2



Resultant penalties

Time Segment	Controller stream	Phase min max penalty (€ per hr)	Intergreen broken penalty (€ per hr)	Stage constraint broken penalty (€ per hr)	Cost of controller stream penalties (€ per hr)
16:15-17:15	2	0.00	0.00	0.00	0.00

Final Prediction Table

Traffic Stream Results

			SIGNALS			FLOWS		PERFORMANCE				PER PCU			QUEUES		WEIGHTS		PENALTIES	P.I.
Arm	Traffic Stream	Name	Traffic node	Controller stream	Phase	Calculated flow entering (PCU/hr)	Calculated sat flow (PCU/hr)	Actual green (s (per cycle))	Wasted time total (s (per cycle))	Degree of saturation (%)	Practical reserve capacity (%)	JourneyTime (s)	Mean Delay per Veh (s)	Mean stops per Veh (%)	Mean max queue (PCU)	Mean end of red queue (PCU)	Delay weighting multiplier (%)	Stop weighting multiplier (%)	Cost of traffic penalties (€ per hr)	P.I.
2A	1	L/S	2	2	A	679 <	1800	44	0.00	98	-9	94.37	83.23	136.71	26.34 +	20.31	100	100	0.00	234.56
2Ax	1	exit				842	Unrestricted	120	4.00	0	Unrestricted	16.82	0.00	0.00	0.00		100	100	0.00	0.00
2B	1	L/R	2	2	B	480 <	1800	31	0.00	97	-7	98.26	86.95	138.07	19.09 +	16.03	100	100	0.00	172.93
2Bx	1	exit				559	Unrestricted	120	30.00	0	Unrestricted	16.04	0.00	0.00	0.00		100	100	0.00	0.00
2Cx	1	exit				698	Unrestricted	120	7.00	0	Unrestricted	13.93	0.00	0.00	0.00		100	100	0.00	0.00
2C1	1	S	2	2	C	637 <	1800	57	0.00	72	25	23.50	20.87	80.65	12.94 +	8.87	100	100	0.00	58.87
	2	R	2	2	D	303 <	616	57	0.00	100	-10	123.45	120.78	164.77	14.07 +	12.30	100	100	0.00	150.61
2C2	1	feeder	2b			940	1800	120	120.00	52	72	7.13	1.09	0.00	0.28		100	100	0.00	4.05

Network Results

	Distance travelled (PCU-km/hr)	Time spent (PCU-hr/hr)	Mean journey speed (kph)	Uniform delay (PCU-hr/hr)	Random plus oversat delay (PCU-hr/hr)	Weighted cost of delay (€ per hr)	Weighted cost of stops (€ per hr)	Excess queue penalty (€ per hr)	Performance Index (€ per hr)
Normal traffic	450.09	56.44	7.98	14.55	26.88	588.36	32.65	0.00	621.01
Bus									
Tram									
Pedestrians	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
TOTAL	450.09	56.44	7.98	14.55	26.88	588.36	32.65	0.00	621.01

- *< = adjusted flow warning (upstream links/traffic streams are over-saturated)*
- ** = Traffic Stream - Normal, Bus or Tram Stop or Delay weighting has been set to a value other than 100%*
- *^ = Traffic Stream - Normal, Bus or Tram Stop or Delay Path weighting has been set to a value other than 100%*
- *+ = average link/traffic stream excess queue is greater than 0*
- ***P.I. = PERFORMANCE INDEX***

A13 - 13
D13 - 2042 With Development, AM

Summary

Data Errors and Warnings

No errors or warnings

Run Summary

Analysis set used	Run start time	Run finish time	Run duration (s)	Modelling start time (HH:mm)	Network Cycle Time (s)	Performance Index (€ per hr)	Total network delay (PCU-hr/hr)	Highest DOS (%)	Item with highest DOS	Number of oversaturated items	Percentage of oversaturated items (%)	Item with worst signalised PRC	Item with worst unsignalised PRC	Item with worst overall PRC	Network within capacity
13	11/12/2024 12:51:55	11/12/2024 12:51:56	1.62	07:45	120	1011.01	68.52	107.33	2B/1	3	21	2B/1	2C2/1	2B/1	

Analysis Set Details

Name	Use Simulation	Description	Use specific Demand Set(s)	Specific Demand Set(s)	Optimise specific Demand Set(s)	Demand Set(s) to optimise	Include in report	Locked
13			✓	D13	✓	D13	✓	

Demand Set Details

Scenario name	Time Period name	Description	Composite	Demand sets	Start time (HH:mm)	Locked	Run automatically
2042 With Development	AM				07:45		✓

T-Junctions

T-Junctions

T-Junction	Name	Description	Auto assign priority	Type	Traffic direction on Arm A	Entry aB	Entry aC	Exit a	Traffic direction on Arm B	Entry bA	Entry bC	Exit b	Traffic direction on Arm C	Entry cA	Entry cB	Exit c	Calculate Slope and Intercept
2			✓	TrafficStream	Two-Way	2A/1	2A/1	2Ax/1	Two-Way	2B/1	2B/1	2Bx/1	Two-Way	2C1/1	2C1/2	2Cx/1	✓

T-Junction Majors

T-Junction	Left Carriageway Width (m)	Right Carriageway Width (m)	Kerbed Central Reserve Width (m)	Width for C-B traffic (m)	Visibility for C-B traffic (m)
2	8.80	8.00	0.00	3.00	170.00

T-Junction Minors

T-Junction	B-C Lane Width (m)	B-A Lane Width (m)	B-C Visibility (m)	B-A Visibility (m)
2	3.00	3.00	21.00	200.00

T-Junction Slope Intercept

T-Junction	BCIntercept (PCU/hr)	BC- aBSlope	BC- aCSlope	BAIntercept (PCU/hr)	BA- aBSlope	BA- aCSlope	BA- cASlope	BA- cBSlope	CBIntercept (PCU/hr)	CB- aBSlope	CB- aCSlope
2	750	0.10	0.26	582	0.10	0.24	0.15	0.35	731	0.25	0.25

Local OD Matrix - Local Matrix: 1

Local Matrix Options

OD Matrix	Name	Use for point to point table	Auto calculate	Allocation mode	Allow paths past exit locations	Allow looped paths on arms	Allow looped paths on traffic nodes	Copy flows	Matrix to copy flows from	Limit paths by length	Path length limit multiplier	Limit paths by number	Path number limit	Limit paths by flow	Low path flow threshold
1	(untitled)	✓	✓	Lane Balancing			✓			✓	1.25				

Normal Input Flows (PCU/hr)

		To		
		2-1	2-2	2-3
From	2-1	0	263	538
	2-2	167	0	316
	2-3	448	286	0

Bus Input Flows not shown as they are blank.

Tram Input Flows not shown as they are blank.

Pedestrian Input Flows not shown as they are blank.

Locations

OD Matrix	Location	Name	Entries	Exits	Colour
1	2-1		2A/1	2Ax/1	#FF0000
	2-2		2B/1	2Bx/1	#00FF00
	2-3		2C2/1	2Cx/1	#0000FF

Normal Paths and Flows

OD Matrix	Path	Description	From location	To location	Path items	Allocation type	Normal Calculated Flow (PCU/hr)
1	3		2-1	2-2	2A/1, 2Bx/1	Normal	263
	4		2-1	2-3	2A/1, 2Cx/1	Normal	538
	5		2-2	2-1	2B/1, 2Ax/1	Normal	167
	6		2-2	2-3	2B/1, 2Cx/1	Normal	316
	7		2-3	2-2	2C2/1, 2C1/2, 2Bx/1	Normal	286
	8		2-3	2-1	2C2/1, 2C1/1, 2Ax/1	Normal	448

Signal Timings

Network Default: 120s cycle time; 120 steps

Controller Stream 2

Controller Stream	Name	Description	Use sequence	Cycle time source	Cycle time (s)	Minimum possible cycle time (s)
2			9	NetworkDefault	120	46

Controller Stream 2 - Properties

Controller Stream	Manufacturer name	Type	Model number	(Telephone) Line Number	Site number	Grid reference	Gaining delay type
2	Unspecified						Absolute

Controller Stream 2 - Optimisation

Controller Stream	Allow offset optimisation	Allow green split optimisation	Optimisation level	Auto redistribute	Enable stage constraint
2	✓	✓	Offsets And Green Splits	✓	

Phases

Controller Stream	Phase	Name	Street minimum green (s)	Maximum green (s)	Relative start displacement (s)	Relative end displacement (s)	Type	Blackout Time (s)
2	A	(untitled)	3	300	0	0	Traffic	
	B	(untitled)	3	300	0	0	Traffic	
	C	(untitled)	3	300	0	0	Traffic	
	D	(untitled)	3	300	0	0	Traffic	
	E	(untitled)	3	3	0	0	Pedestrian	0

Library Stages

Controller Stream	Library Stage	Phases in stage	User stage minimum (s)	Run every N cycles	Probability of running (%)
2	1	A, C, D	1	1	100
	2	B	1	1	100
	3	E	1	1	100
	4	C, D	1	1	100

Stage Sequences

Controller Stream	Sequence	Name	Multiple cycling	Stage IDs	Stage ends	Minimum possible cycle time (s)	Exclude from analysis
2	1	(untitled)	Single	1, 2, 3	43, 77, 88	28	✓
	2	(untitled)	Single	1, 3, 2	29, 62, 95	30	✓
	3	(untitled)	Single	1, 2, 3, 4	22, 49, 76, 0	29	✓
	4	(untitled)	Single	1, 3, 2, 4	22, 49, 76, 0	31	✓
	5	(untitled)	Single	1, 2, 4, 3	20, 45, 70, 95	37	✓
	6	(untitled)	Single	1, 3, 4, 2	20, 45, 70, 95	38	✓
	7	(untitled)	Single	1, 4, 2, 3	0, 24, 55, 88	29	✓
	8	(untitled)	Single	1, 4, 3, 2	1, 21, 48, 74	30	✓
	9	(untitled)	Single	1, 4, 2, 3, 1, 4, 2	26, 29, 57, 68, 89, 96, 106	46	

Intergreen Matrix for Controller Stream 2

		To				
		A	B	C	D	E
From	A		5			10
	B	5		5	5	8
	C		5			9
	D		5			8
	E	6	6	6	6	

Banned Stage transitions for Controller Stream 2

		To			
		1	2	3	4
From	1				
	2				
	3				
	4				

Interstage Matrix for Controller Stream 2

		To			
		1	2	3	4
From	1	0	5	10	0
	2	5	0	8	5
	3	6	6	0	6
	4	0	5	9	0

Resultant Stages

Controller Stream	Resultant Stage	Is base stage	Library Stage ID	Phases in this stage	Stage start (s)	Stage end (s)	Stage duration (s)	User stage minimum (s)	Stage minimum (s)
2	1	✓	1	A,C,D	111	26	35	1	3
	2	✓	4	C,D	26	29	3	1	1
	3	✓	2	B	34	57	23	1	3
	4	✓	3	E	65	68	3	1	3
	5	✓	1	A,C,D	74	89	15	1	3
	6	✓	4	C,D	89	96	7	1	1
	7	✓	2	B	101	106	5	1	3

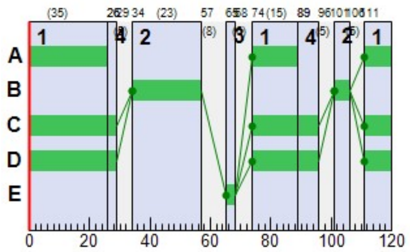
Resultant Phase Green Periods

Controller Stream	Phase	Green period	Is base green period	Start time (s)	End time (s)	Duration (s)
2	A	1	✓	74	89	15
		2	✓	111	26	35
	B	1	✓	34	57	23
		2	✓	101	106	5
	C	1	✓	74	96	22
		2	✓	111	29	38
	D	1	✓	74	96	22
		2	✓	111	29	38
	E	1	✓	65	68	3

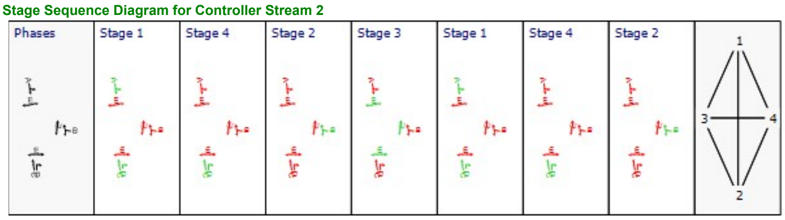
Traffic Stream Green Times

Arm	Traffic Stream	Traffic Node	Controller Stream	Phase	Green Period 1			Green Period 2		
					Start	End	Duration	Start	End	Duration
2A	1	2	2	A	74	89	15	111	26	35
2B	1	2	2	B	34	57	23	101	106	5
2C1	1	2	2	C	74	96	22	111	29	38
2C1	2	2	2	D	74	96	22	111	29	38

Phase Timings Diagram for Controller Stream 2



Stage Sequence Diagram for Controller Stream 2



Resultant penalties

Time Segment	Controller stream	Phase min max penalty (€ per hr)	Intergreen broken penalty (€ per hr)	Stage constraint broken penalty (€ per hr)	Cost of controller stream penalties (€ per hr)
07:45-08:45	2	0.00	0.00	0.00	0.00

Final Prediction Table

Traffic Stream Results

				SIGNALS		FLOWS		PERFORMANCE				PER PCU			QUEUES		WEIGHTS		PENALTIES	P.I.
Arm	Traffic Stream	Name	Traffic node	Controller stream	Phase	Calculated flow entering (PCU/hr)	Calculated sat flow (PCU/hr)	Actual green (s (per cycle))	Wasted time total (s (per cycle))	Degree of saturation (%)	Practical reserve capacity (%)	JourneyTime (s)	Mean Delay per Veh (s)	Mean stops per Veh (%)	Mean max queue (PCU)	Mean end of red queue (PCU)	Delay weighting multiplier (%)	Stop weighting multiplier (%)	Cost of traffic penalties (€ per hr)	P.I.
2A	1	L/S	2	2	A	801 <	1800	50	0.00	103	-12	127.19	116.05	163.27	37.64 +	30.06	100	100	0.00	382.64
2Ax	1	exit				604	Unrestricted	120	4.00	0	Unrestricted	16.82	0.00	0.00	0.00		100	100	0.00	0.00
2B	1	L/R	2	2	B	483 <	1800	28	0.00	107	-16	204.74	193.43	204.57	33.38 +	30.50	100	100	0.00	380.06
2Bx	1	exit				525	Unrestricted	120	29.00	0	Unrestricted	16.04	0.00	0.00	0.00		100	100	0.00	0.00
2Cx	1	exit				818	Unrestricted	120	3.00	0	Unrestricted	13.93	0.00	0.00	0.00		100	100	0.00	0.00
2C1	1	S	2	2	C	448 <	1800	60	0.00	48	87	16.26	13.63	63.66	7.44 +	5.70	100	100	0.00	27.66
	2	R	2	2	D	286 <	520	60	0.00	106	-15	190.33	187.66	206.59	18.27 +	16.55	100	100	0.00	218.66
2C2	1	feeder	2b			734	1800	120	120.00	41	121	6.73	0.69	0.00	0.14		100	100	0.00	1.99

Network Results

	Distance travelled (PCU-km/hr)	Time spent (PCU-hr/hr)	Mean journey speed (kph)	Uniform delay (PCU-hr/hr)	Random plus oversat delay (PCU-hr/hr)	Weighted cost of delay (€ per hr)	Weighted cost of stops (€ per hr)	Excess queue penalty (€ per hr)	Performance Index (€ per hr)
Normal traffic	422.80	82.61	5.12	13.53	54.99	972.96	38.05	0.00	1011.01
Bus									
Tram									
Pedestrians	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
TOTAL	422.80	82.61	5.12	13.53	54.99	972.96	38.05	0.00	1011.01

- *< = adjusted flow warning (upstream links/traffic streams are over-saturated)*
- ** = Traffic Stream - Normal, Bus or Tram Stop or Delay weighting has been set to a value other than 100%*
- *^ = Traffic Stream - Normal, Bus or Tram Stop or Delay Path weighting has been set to a value other than 100%*
- *+ = average link/traffic stream excess queue is greater than 0*
- ***P.I. = PERFORMANCE INDEX***

A14 - 14
D14 - 2042 With Development, PM

Summary

Data Errors and Warnings

No errors or warnings

Run Summary

Analysis set used	Run start time	Run finish time	Run duration (s)	Modelling start time (HH:mm)	Network Cycle Time (s)	Performance Index (€ per hr)	Total network delay (PCU-hr/hr)	Highest DOS (%)	Item with highest DOS	Number of oversaturated items	Percentage of oversaturated items (%)	Item with worst signalised PRC	Item with worst unsignalised PRC	Item with worst overall PRC	Network within capacity
14	11/12/2024 12:51:56	11/12/2024 12:51:57	1.40	16:15	120	792.07	53.29	106.94	2C1/2	3	21	2C1/2	2C2/1	2C1/2	

Analysis Set Details

Name	Use Simulation	Description	Use specific Demand Set(s)	Specific Demand Set(s)	Optimise specific Demand Set(s)	Demand Set(s) to optimise	Include in report	Locked
14			✓	D14	✓	D14	✓	

Demand Set Details

Scenario name	Time Period name	Description	Composite	Demand sets	Start time (HH:mm)	Locked	Run automatically
2042 With Development	PM				16:15		✓

T-Junctions

T-Junctions

T-Junction	Name	Description	Auto assign priority	Type	Traffic direction on Arm A	Entry aB	Entry aC	Exit a	Traffic direction on Arm B	Entry bA	Entry bC	Exit b	Traffic direction on Arm C	Entry cA	Entry cB	Exit c	Calculate Slope and Intercept
2			✓	TrafficStream	Two-Way	2A/1	2A/1	2Ax/1	Two-Way	2B/1	2B/1	2Bx/1	Two-Way	2C1/1	2C1/2	2Cx/1	✓

T-Junction Majors

T-Junction	Left Carriageway Width (m)	Right Carriageway Width (m)	Kerbed Central Reserve Width (m)	Width for C-B traffic (m)	Visibility for C-B traffic (m)
2	8.80	8.00	0.00	3.00	170.00

T-Junction Minors

T-Junction	B-C Lane Width (m)	B-A Lane Width (m)	B-C Visibility (m)	B-A Visibility (m)
2	3.00	3.00	21.00	200.00

T-Junction Slope Intercept

T-Junction	BCIntercept (PCU/hr)	BC- aBSlope	BC- aCSlope	BAIntercept (PCU/hr)	BA- aBSlope	BA- aCSlope	BA- cASlope	BA- cBSlope	CBIntercept (PCU/hr)	CB- aBSlope	CB- aCSlope
2	750	0.10	0.26	582	0.10	0.24	0.15	0.35	731	0.25	0.25

Local OD Matrix - Local Matrix: 1

Local Matrix Options

OD Matrix	Name	Use for point to point table	Auto calculate	Allocation mode	Allow paths past exit locations	Allow looped paths on arms	Allow looped paths on traffic nodes	Copy flows	Matrix to copy flows from	Limit paths by length	Path length limit multiplier	Limit paths by number	Path number limit	Limit paths by flow	Low path flow threshold
1	(untitled)	✓	✓	Lane Balancing			✓			✓	1.25				

Normal Input Flows (PCU/hr)

		To		
		2-1	2-2	2-3
From	2-1	0	263	427
	2-2	210	0	285
	2-3	639	318	0

Bus Input Flows not shown as they are blank.

Tram Input Flows not shown as they are blank.

Pedestrian Input Flows not shown as they are blank.

Locations

OD Matrix	Location	Name	Entries	Exits	Colour
1	2-1		2A/1	2Ax/1	#FF0000
	2-2		2B/1	2Bx/1	#00FF00
	2-3		2C2/1	2Cx/1	#0000FF

Normal Paths and Flows

OD Matrix	Path	Description	From location	To location	Path items	Allocation type	Normal Calculated Flow (PCU/hr)
1	3		2-1	2-2	2A/1, 2Bx/1	Normal	263
	4		2-1	2-3	2A/1, 2Cx/1	Normal	427
	5		2-2	2-1	2B/1, 2Ax/1	Normal	210
	6		2-2	2-3	2B/1, 2Cx/1	Normal	285
	7		2-3	2-2	2C2/1, 2C1/2, 2Bx/1	Normal	318
	8		2-3	2-1	2C2/1, 2C1/1, 2Ax/1	Normal	639

Signal Timings

Network Default: 120s cycle time; 120 steps

Controller Stream 2

Controller Stream	Name	Description	Use sequence	Cycle time source	Cycle time (s)	Minimum possible cycle time (s)
2			9	NetworkDefault	120	46

Controller Stream 2 - Properties

Controller Stream	Manufacturer name	Type	Model number	(Telephone) Line Number	Site number	Grid reference	Gaining delay type
2	Unspecified						Absolute

Controller Stream 2 - Optimisation

Controller Stream	Allow offset optimisation	Allow green split optimisation	Optimisation level	Auto redistribute	Enable stage constraint
2	✓	✓	Offsets And Green Splits	✓	

Phases

Controller Stream	Phase	Name	Street minimum green (s)	Maximum green (s)	Relative start displacement (s)	Relative end displacement (s)	Type	Blackout Time (s)
2	A	(untitled)	3	300	0	0	Traffic	
	B	(untitled)	3	300	0	0	Traffic	
	C	(untitled)	3	300	0	0	Traffic	
	D	(untitled)	3	300	0	0	Traffic	
	E	(untitled)	3	3	0	0	Pedestrian	0

Library Stages

Controller Stream	Library Stage	Phases in stage	User stage minimum (s)	Run every N cycles	Probability of running (%)
2	1	A, C, D	1	1	100
	2	B	1	1	100
	3	E	1	1	100
	4	C, D	1	1	100

Stage Sequences

Controller Stream	Sequence	Name	Multiple cycling	Stage IDs	Stage ends	Minimum possible cycle time (s)	Exclude from analysis
2	1	(untitled)	Single	1, 2, 3	43, 77, 88	28	✓
	2	(untitled)	Single	1, 3, 2	29, 62, 95	30	✓
	3	(untitled)	Single	1, 2, 3, 4	22, 49, 76, 0	29	✓
	4	(untitled)	Single	1, 3, 2, 4	22, 49, 76, 0	31	✓
	5	(untitled)	Single	1, 2, 4, 3	20, 45, 70, 95	37	✓
	6	(untitled)	Single	1, 3, 4, 2	20, 45, 70, 95	38	✓
	7	(untitled)	Single	1, 4, 2, 3	0, 24, 55, 88	29	✓
	8	(untitled)	Single	1, 4, 3, 2	1, 21, 48, 74	30	✓
	9	(untitled)	Single	1, 4, 2, 3, 1, 4, 2	26, 27, 57, 68, 86, 97, 107	46	

Intergreen Matrix for Controller Stream 2

		To				
		A	B	C	D	E
From	A		5			10
	B	5		5	5	8
	C		5			9
	D		5			8
	E	6	6	6	6	

Banned Stage transitions for Controller Stream 2

		To			
		1	2	3	4
From	1				
	2				
	3				
	4				

Interstage Matrix for Controller Stream 2

		To			
		1	2	3	4
From	1	0	5	10	0
	2	5	0	8	5
	3	6	6	0	6
	4	0	5	9	0

Resultant Stages

Controller Stream	Resultant Stage	Is base stage	Library Stage ID	Phases in this stage	Stage start (s)	Stage end (s)	Stage duration (s)	User stage minimum (s)	Stage minimum (s)
2	1	✓	1	A,C,D	112	26	34	1	3
	2	✓	4	C,D	26	27	1	1	1
	3	✓	2	B	32	57	25	1	3
	4	✓	3	E	65	68	3	1	3
	5	✓	1	A,C,D	74	86	12	1	3
	6	✓	4	C,D	86	97	11	1	1
	7	✓	2	B	102	107	5	1	3

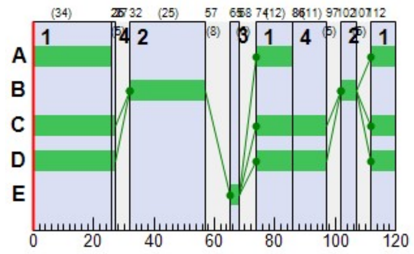
Resultant Phase Green Periods

Controller Stream	Phase	Green period	Is base green period	Start time (s)	End time (s)	Duration (s)
2	A	1	✓	74	86	12
		2	✓	112	26	34
	B	1	✓	32	57	25
		2	✓	102	107	5
	C	1	✓	74	97	23
		2	✓	112	27	35
	D	1	✓	74	97	23
		2	✓	112	27	35
	E	1	✓	65	68	3

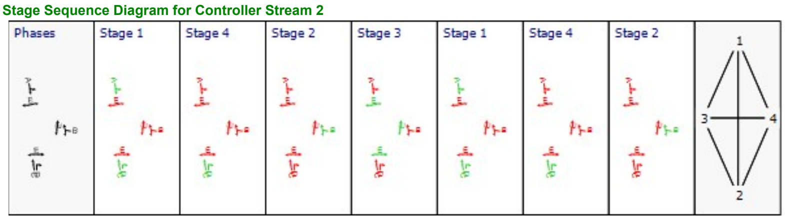
Traffic Stream Green Times

Arm	Traffic Stream	Traffic Node	Controller Stream	Phase	Green Period 1			Green Period 2		
					Start	End	Duration	Start	End	Duration
2A	1	2	2	A	74	86	12	112	26	34
2B	1	2	2	B	32	57	25	102	107	5
2C1	1	2	2	C	74	97	23	112	27	35
2C1	2	2	2	D	74	97	23	112	27	35

Phase Timings Diagram for Controller Stream 2



Stage Sequence Diagram for Controller Stream 2



Resultant penalties

Time Segment	Controller stream	Phase min max penalty (€ per hr)	Intergreen broken penalty (€ per hr)	Stage constraint broken penalty (€ per hr)	Cost of controller stream penalties (€ per hr)
16:15-17:15	2	0.00	0.00	0.00	0.00

Final Prediction Table

Traffic Stream Results

				SIGNALS		FLOWS		PERFORMANCE				PER PCU			QUEUES		WEIGHTS		PENALTIES	P.I.
Arm	Traffic Stream	Name	Traffic node	Controller stream	Phase	Calculated flow entering (PCU/hr)	Calculated sat flow (PCU/hr)	Actual green (s (per cycle))	Wasted time total (s (per cycle))	Degree of saturation (%)	Practical reserve capacity (%)	JourneyTime (s)	Mean Delay per Veh (s)	Mean stops per Veh (%)	Mean max queue (PCU)	Mean end of red queue (PCU)	Delay weighting multiplier (%)	Stop weighting multiplier (%)	Cost of traffic penalties (€ per hr)	P.I.
2A	1	L/S	2	2	A	690 <	1800	46	0.00	96	-6	76.43	65.29	123.85	22.89 +	16.95	100	100	0.00	188.43
2Ax	1	exit				843	Unrestricted	120	3.00	0	Unrestricted	16.82	0.00	0.00	0.00		100	100	0.00	0.00
2B	1	L/R	2	2	B	495 <	1800	30	0.00	103	-13	155.10	143.79	175.05	27.87 +	24.54	100	100	0.00	291.29
2Bx	1	exit				560	Unrestricted	120	32.00	0	Unrestricted	16.04	0.00	0.00	0.00		100	100	0.00	0.00
2Cx	1	exit				703	Unrestricted	120	7.00	0	Unrestricted	13.93	0.00	0.00	0.00		100	100	0.00	0.00
2C1	1	S	2	2	C	639 <	1800	58	0.00	71	27	22.84	20.21	78.61	13.28 +	9.02	100	100	0.00	57.23
	2	R	2	2	D	318 <	595	58	0.00	107	-16	196.46	193.79	208.32	21.38 +	19.48	100	100	0.00	250.84
2C2	1	feeder	2b			957	1800	120	120.00	53	69	7.17	1.13	0.00	0.30		100	100	0.00	4.28

Network Results

	Distance travelled (PCU-km/hr)	Time spent (PCU-hr/hr)	Mean journey speed (kph)	Uniform delay (PCU-hr/hr)	Random plus oversat delay (PCU-hr/hr)	Weighted cost of delay (€ per hr)	Weighted cost of stops (€ per hr)	Excess queue penalty (€ per hr)	Performance Index (€ per hr)
Normal traffic	454.65	68.45	6.64	15.00	38.29	756.75	35.32	0.00	792.07
Bus									
Tram									
Pedestrians	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
TOTAL	454.65	68.45	6.64	15.00	38.29	756.75	35.32	0.00	792.07

- *< = adjusted flow warning (upstream links/traffic streams are over-saturated)*
- ** = Traffic Stream - Normal, Bus or Tram Stop or Delay weighting has been set to a value other than 100%*
- *^ = Traffic Stream - Normal, Bus or Tram Stop or Delay Path weighting has been set to a value other than 100%*
- *+ = average link/traffic stream excess queue is greater than 0*
- ***P.I. = PERFORMANCE INDEX***

Junctions 8

PICADY 8 - Priority Intersection Module

Version: 8.0.3.332 [14595,13/11/2013]

For sales and distribution information, program advice and maintenance, contact TRL:
Tel: +44 (0)1344 770758 E-mail: software@trl.co.uk Web: http://www.trlsoftware.co.uk

Filename: C215 J3 PICADY Model 20240909.arc8
Path: J:\C_JOBS\Job-C215\C_CALCULATIONS\B_TRAFFIC\Traffic Modelling
Report generation date: 09/09/2024 22:19:06

Summary of junction performance

	AM				PM			
	Queue (PCU)	**Delay (s)**	**RFC**	**Network Residual Capacity**	**Queue (PCU)**	**Delay (s)**	**RFC**	**Network Residual Capacity**
	Default - 2024 Baseline							
Stream B-ACD	0.02	9.78	0.02	106 % [Stream D-AB]	0.02	8.84	0.02	98 % [Stream D-AB]
Stream A-BCD	0.13	4.94	0.07		0.25	5.08	0.13	
Stream A-B	-	-	-		-	-	-	
Stream A-C	-	-	-		-	-	-	
Stream D-AB	0.15	7.77	0.13		0.12	7.95	0.10	
Stream D-BC	0.20	12.76	0.17		0.24	12.89	0.19	
Stream C-ABD	0.01	4.22	0.01		0.02	4.30	0.01	
Stream C-D	-	-	-		-	-	-	
Stream C-A	-	-	-		-	-	-	
	Default - 2027 Do-Nothing							
Stream B-ACD	0.02	10.13	0.02	83 % [Stream D-AB]	0.03	9.20	0.02	78 % [Stream D-AB]
Stream A-BCD	0.16	4.94	0.09		0.30	5.10	0.14	
Stream A-B	-	-	-		-	-	-	
Stream A-C	-	-	-		-	-	-	
Stream D-AB	0.18	8.39	0.15		0.13	8.41	0.11	
Stream D-BC	0.28	13.93	0.22		0.31	14.25	0.24	
Stream C-ABD	0.01	4.16	0.01		0.02	4.23	0.01	
Stream C-D	-	-	-		-	-	-	
Stream C-A	-	-	-		-	-	-	
	Default - 2027 With Development							

Stream B-ACD	0.12	9.04	0.11		0.06	8.77	0.06	
Stream A-BCD	0.17	4.96	0.09		0.31	5.13	0.15	
Stream A-B	-	-	-		-	-	-	
Stream A-C	-	-	-		-	-	-	
Stream D-AB	0.18	8.56	0.15	75 % [Stream D-AB]	0.13	8.58	0.12	71 % [Stream D-AB]
Stream D-BC	0.30	14.74	0.23		0.33	14.95	0.25	
Stream C-ABD	0.05	4.23	0.04		0.13	4.37	0.07	
Stream C-D	-	-	-		-	-	-	
Stream C-A	-	-	-		-	-	-	
	Default - 2032 Do-Nothing							
Stream B-ACD	0.03	10.47	0.02		0.03	9.40	0.03	
Stream A-BCD	0.18	4.93	0.09		0.33	5.12	0.15	
Stream A-B	-	-	-		-	-	-	
Stream A-C	-	-	-		-	-	-	
Stream D-AB	0.19	8.58	0.16	76 % [Stream D-AB]	0.14	8.63	0.12	71 % [Stream D-AB]
Stream D-BC	0.30	14.56	0.23		0.34	14.96	0.25	
Stream C-ABD	0.01	4.13	0.01		0.02	4.20	0.02	
Stream C-D	-	-	-		-	-	-	
Stream C-A	-	-	-		-	-	-	
	Default - 2032 With Development							
Stream B-ACD	0.13	9.31	0.12		0.07	8.95	0.06	
Stream A-BCD	0.18	4.94	0.09		0.34	5.15	0.15	
Stream A-B	-	-	-		-	-	-	
Stream A-C	-	-	-		-	-	-	
Stream D-AB	0.19	8.77	0.16	68 % [Stream D-AB]	0.14	8.81	0.12	65 % [Stream D-AB]
Stream D-BC	0.32	15.41	0.24		0.36	15.74	0.27	
Stream C-ABD	0.06	4.20	0.04		0.14	4.34	0.08	
Stream C-D	-	-	-		-	-	-	
Stream C-A	-	-	-		-	-	-	
	Default - 2042 Do-Nothing							
Stream B-ACD	0.03	10.63	0.03		0.03	9.54	0.03	
Stream A-BCD	0.19	4.92	0.09		0.35	5.13	0.16	

Stream A-B	-	-	-	72 % [Stream D-AB]	-	-	-	66 % [Stream D-AB]
Stream A-C	-	-	-		-	-	-	
Stream D-AB	0.20	8.72	0.17		0.14	8.78	0.13	
Stream D-BC	0.31	15.02	0.24		0.36	15.52	0.27	
Stream C-ABD	0.01	4.11	0.01		0.02	4.19	0.02	
Stream C-D	-	-	-		-	-	-	
Stream C-A	-	-	-		-	-	-	
	Default - 2042 With Development							
Stream B-ACD	0.13	9.43	0.12	64 % [Stream D-AB]	0.07	9.18	0.07	60 % [Stream D-AB]
Stream A-BCD	0.19	4.94	0.10		0.36	5.16	0.16	
Stream A-B	-	-	-		-	-	-	
Stream A-C	-	-	-		-	-	-	
Stream D-AB	0.20	8.92	0.17		0.15	8.98	0.13	
Stream D-BC	0.33	15.94	0.25		0.38	16.36	0.28	
Stream C-ABD	0.06	4.18	0.04		0.14	4.33	0.08	
Stream C-D	-	-	-		-	-	-	
Stream C-A	-	-	-		-	-	-	

Values shown are the maximum values over all time segments. Delay is the maximum value of average delay per arriving vehicle. Network Residual Capacity indicates the amount by which network flow could be increased before a user-definable threshold (see Analysis Options) is met.

"D1 - 2024 Baseline, AM " model duration: 07:30 - 09:00
"D2 - 2024 Baseline, PM" model duration: 16:00 - 17:30
"D3 - 2027 Do-Nothing, AM" model duration: 07:30 - 09:00
"D4 - 2027 Do-Nothing, PM" model duration: 16:00 - 17:30
"D5 - 2027 With Development, AM" model duration: 07:30 - 09:00
"D6 - 2027 With Development, PM" model duration: 16:00 - 17:30
"D7 - 2032 Do-Nothing, AM" model duration: 07:30 - 09:00
"D8 - 2032 Do-Nothing, PM" model duration: 16:00 - 17:30
"D9 - 2032 With Development, AM" model duration: 07:30 - 09:00
"D10 - 2032 With Development, PM" model duration: 16:00 - 17:30
"D11 - 2042 Do-Nothing, AM" model duration: 07:30 - 09:00
"D12 - 2042 Do-Nothing, PM" model duration: 16:00 - 17:30
"D13 - 2042 With Development, AM" model duration: 07:30 - 09:00
"D14 - 2042 With Development, PM" model duration: 16:00 - 17:30

Run using Junctions 8.0.3.332 at 09/09/2024 22:18:57

File summary

File Description

Title	Kinsealy
Location	Co. Dublin
Site Number	3
Date	09/09/2024
Version	
Status	
Identifier	
Client	
Jobnumber	C215

Enumerator	GF
Description	

Analysis Options

Vehicle Length (m)	Do Queue Variations	Calculate Residual Capacity	Residual Capacity Criteria Type	RFC Threshold	Average Delay Threshold (s)	Queue Threshold (PCU)
5.75		✓	RFC	0.90	36.00	20.00

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

Default - 2024 Baseline, AM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

Name	Description	Locked	Network Flow Scaling Factor (%)	Reason For Scaling Factors
Default			100.000	

Demand Set Details

Name	Scenario Name	Time Period Name	Description	Traffic Profile Type	Model Start Time (HH:mm)	Model Finish Time (HH:mm)	Model Time Period Length (min)	Time Segment Length (min)	Single Time Segment Only	Locked
2024 Baseline, AM	2024 Baseline	AM		ONE HOUR	07:30	09:00	90	15		

Junction Network

Junctions

Name	Junction Type	Major Road Direction	Arm Order	Junction Delay (s)	Junction LOS
	Crossroads	Two-way	A,B,C,D	8.39	A

Junction Network Options

Driving Side	Lighting	Network Residual Capacity (%)	First Arm Reaching Threshold
Left	Normal/unknown	106	Stream D-AB

Arms

Arms

Arm	Name	Description	Arm Type
A	Chapel Road (East)		Major
B	Gandon Lane (South)		Minor
C	Chapel Road (West)		Major
D	Kinsealy Lane (North)		Minor

Major Arm Geometry

Arm	Width of carriageway (m)	Has kerbed central reserve	Width of kerbed central reserve (m)	Has right turn bay	Width For Right Turn (m)	Visibility For Right Turn (m)	Blocks?	Blocking Queue (PCU)
A	6.00		0.00		2.20	220.00	✓	0.00
C	6.00		0.00		2.20	250.00	✓	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)	Lane Width (Left) (m)	Lane Width (Right) (m)	Width at give-way (m)	Width at 5m (m)	Width at 10m (m)	Width at 15m (m)	Width at 20m (m)	Estimate Flare Length	Flare Length (PCU)	Visibility To Left (m)	Visibility To Right (m)
B	One lane	3.00								✓		25	80
D	One lane plus flare				9.60	4.70	3.30	3.00	3.00	✓	1.00	20	20

Pedestrian Crossings

Arm	Crossing Type
A	None
B	None
C	None
D	None

Slope / Intercept / Capacity

Priority Intersection Slopes and Intercepts

Junction	Stream	Intercept (PCU/hr)	Slope for A-B	Slope for A-C	Slope for A-D	Slope for B-A	Slope for B-C	Slope for B-D	Slope for C-A	Slope for C-B	Slope for C-D	Slope for D-A	Slope for D-B	Slope for D-C
3	A-D	701.368	-	-	-	-	-	-	0.272	0.388	0.272	-	-	-
3	B-A	524.935	0.096	0.242	0.242	-	-	-	0.152	0.345	-	0.242	0.242	0.121
3	B-C	674.299	0.103	0.261	-	-	-	-	-	-	-	-	-	-
3	B-D, nearside lane	524.935	0.096	0.242	0.242	-	-	-	0.152	0.345	0.152	-	-	-
3	B-D, offside lane	524.935	0.096	0.242	0.242	-	-	-	0.152	0.345	0.152	-	-	-
3	C-B	718.741	0.278	0.278	0.398	-	-	-	-	-	-	-	-	-
3	D-A	686.706	-	-	-	-	-	-	0.266	-	0.105	-	-	-
3	D-B, nearside lane	532.860	0.154	0.154	0.350	-	-	-	0.245	0.245	0.097	-	-	-
3	D-B, offside lane	511.854	0.148	0.148	0.337	-	-	-	0.236	0.236	0.093	-	-	-
3	D-C	511.854	-	0.148	0.337	0.118	0.236	0.236	0.236	0.236	0.093	-	-	-

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 Flows

Demand Set Data Options

Default Vehicle Mix	Vehicle Mix Varies Over	Vehicle Mix Varies Over	Vehicle Mix Varies Over	Vehicle Mix Source	PCU Factor for a HV	Default Turning Proportions	Estimate from entry/exit	Turning Proportions Vary Over	Turning Proportions Vary Over	Turning Proportions Vary Over

	Time	Turn	Entry		(PCU)		counts	Time	Turn	Entry
		✓	✓	HV Percentages	2.00				✓	✓

Entry Flows

General Flows Data

Arm	Profile Type	Use Turning Counts	Average Demand Flow (PCU/hr)	Flow Scaling Factor (%)
A	ONE HOUR	✓	348.00	100.000
B	ONE HOUR	✓	7.00	100.000
C	ONE HOUR	✓	459.00	100.000
D	ONE HOUR	✓	115.00	100.000

Turning Proportions

Turning Counts or Proportions (PCU/hr) - Junction 3 (for whole period)

		To			
		A	B	C	D
From	A	0.000	1.000	316.000	31.000
	B	0.000	0.000	1.000	6.000
	C	384.000	3.000	0.000	72.000
	D	63.000	2.000	50.000	0.000

Turning Proportions (PCU) - Junction 3 (for whole period)

		To			
		A	B	C	D
From	A	0.00	0.00	0.91	0.09
	B	0.00	0.00	0.14	0.86
	C	0.84	0.01	0.00	0.16
	D	0.55	0.02	0.43	0.00

Vehicle Mix

Average PCU Per Vehicle - Junction 3 (for whole period)

		To			
		A	B	C	D
From	A	1.000	1.000	1.000	1.000
	B	1.000	1.000	1.000	1.000
	C	1.000	1.000	1.000	1.000
	D	1.000	1.000	1.000	1.000

Heavy Vehicle Percentages - Junction 3 (for whole period)

		To			
		A	B	C	D
From	A	0.000	0.000	0.000	0.000
	B	0.000	0.000	0.000	0.000
	C	0.000	0.000	0.000	0.000
	D	0.000	0.000	0.000	0.000

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
B-ACD	0.02	9.78	0.02	A
A-BCD	0.07	4.94	0.13	A
A-B	-	-	-	-
A-C	-	-	-	-
D-AB	0.13	7.77	0.15	A
D-BC	0.17	12.76	0.20	B
C-ABD	0.01	4.22	0.01	A
C-D	-	-	-	-
C-A	-	-	-	-

Default - 2024 Baseline, PM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

Name	Description	Locked	Network Flow Scaling Factor (%)	Reason For Scaling Factors
Default			100.000	

Demand Set Details

Name	Scenario Name	Time Period Name	Description	Traffic Profile Type	Model Start Time (HH:mm)	Model Finish Time (HH:mm)	Model Time Period Length (min)	Time Segment Length (min)	Single Time Segment Only	Locked
2024 Baseline, PM	2024 Baseline	PM		ONE HOUR	16:00	17:30	90	15		

Junction Network

Junctions

Name	Junction Type	Major Road Direction	Arm Order	Junction Delay (s)	Junction LOS
	Crossroads	Two-way	A,B,C,D	8.06	A

Junction Network Options

Driving Side	Lighting	Network Residual Capacity (%)	First Arm Reaching Threshold
Left	Normal/unknown	98	Stream D-AB

Arms

Arms

Arm	Name	Description	Arm Type
A	Chapel Road (East)		Major
B	Gandon Lane (South)		Minor
C	Chapel Road (West)		Major
D	Kinsealy Lane (North)		Minor

Major Arm Geometry

Arm	Width of carriageway (m)	Has kerbed central reserve	Width of kerbed central reserve (m)	Has right turn bay	Width For Right Turn (m)	Visibility For Right Turn (m)	Blocks?	Blocking Queue (PCU)
A	6.00		0.00		2.20	220.00	✓	0.00
C	6.00		0.00		2.20	250.00	✓	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)	Lane Width (Left) (m)	Lane Width (Right) (m)	Width at give-way (m)	Width at 5m (m)	Width at 10m (m)	Width at 15m (m)	Width at 20m (m)	Estimate Flare Length	Flare Length (PCU)	Visibility To Left (m)	Visibility To Right (m)
B	One lane	3.00								✓		25	80
D	One lane plus flare				9.60	4.70	3.30	3.00	3.00	✓	1.00	20	20

Pedestrian Crossings

Arm	Crossing Type
A	None
B	None
C	None
D	None

Slope / Intercept / Capacity

Priority Intersection Slopes and Intercepts

Junction	Stream	Intercept (PCU/hr)	Slope for A-B	Slope for A-C	Slope for A-D	Slope for B-A	Slope for B-C	Slope for B-D	Slope for C-A	Slope for C-B	Slope for C-D	Slope for D-A	Slope for D-B	Slope for D-C
3	A-D	701.368	-	-	-	-	-	-	0.272	0.388	0.272	-	-	-
3	B-A	524.935	0.096	0.242	0.242	-	-	-	0.152	0.345	-	0.242	0.242	0.121
3	B-C	674.299	0.103	0.261	-	-	-	-	-	-	-	-	-	-
3	B-D, nearside lane	524.935	0.096	0.242	0.242	-	-	-	0.152	0.345	0.152	-	-	-
3	B-D, offside lane	524.935	0.096	0.242	0.242	-	-	-	0.152	0.345	0.152	-	-	-
3	C-B	718.741	0.278	0.278	0.398	-	-	-	-	-	-	-	-	-
3	D-A	659.864	-	-	-	-	-	-	0.256	-	0.101	-	-	-
3	D-B, nearside lane	512.032	0.148	0.148	0.337	-	-	-	0.236	0.236	0.093	-	-	-
3	D-B, offside lane	532.682	0.154	0.154	0.350	-	-	-	0.245	0.245	0.097	-	-	-
3	D-C	532.682	-	0.154	0.350	0.123	0.245	0.245	0.245	0.245	0.097	-	-	-

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 Flows

Demand Set Data Options

Default Vehicle Mix	Vehicle Mix Varies Over Time	Vehicle Mix Varies Over Turn	Vehicle Mix Varies Over Entry	Vehicle Mix Source	PCU Factor for a HV (PCU)	Default Turning Proportions	Estimate from entry/exit counts	Turning Proportions Vary Over Time	Turning Proportions Vary Over Turn	Turning Proportions Vary Over Entry
		✓	✓	HV Percentages	2.00				✓	✓

Entry Flows

General Flows Data

Arm	Profile Type	Use Turning Counts	Average Demand Flow (PCU/hr)	Flow Scaling Factor (%)
A	ONE HOUR	✓	380.00	100.000
B	ONE HOUR	✓	9.00	100.000
C	ONE HOUR	✓	450.00	100.000
D	ONE HOUR	✓	108.00	100.000

Turning Proportions

Turning Counts or Proportions (PCU/hr) - Junction 3 (for whole period)

		To			
		A	B	C	D
From	A	0.000	2.000	326.000	52.000
	B	4.000	0.000	4.000	1.000
	C	367.000	6.000	0.000	77.000
	D	46.000	3.000	59.000	0.000

Turning Proportions (PCU) - Junction 3 (for whole period)

		To			
		A	B	C	D
From	A	0.00	0.01	0.86	0.14
	B	0.44	0.00	0.44	0.11
	C	0.82	0.01	0.00	0.17
	D	0.43	0.03	0.55	0.00

Vehicle Mix

Average PCU Per Vehicle - Junction 3 (for whole period)

		To			
		A	B	C	D
From	A	1.000	1.000	1.000	1.000
	B	1.000	1.000	1.000	1.000
	C	1.000	1.000	1.000	1.000
	D	1.000	1.000	1.000	1.000

Heavy Vehicle Percentages - Junction 3 (for whole period)

		To			
		A	B	C	D
From	A	0.000	0.000	0.000	0.000
	B	0.000	0.000	0.000	0.000
	C	0.000	0.000	0.000	0.000
	D	0.000	0.000	0.000	0.000

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
B-ACD	0.02	8.84	0.02	A
A-BCD	0.13	5.08	0.25	A
A-B	-	-	-	-
A-C	-	-	-	-
D-AB	0.10	7.95	0.12	A
D-BC	0.19	12.89	0.24	B
C-ABD	0.01	4.30	0.02	A
C-D	-	-	-	-
C-A	-	-	-	-

Default - 2027 Do-Nothing, AM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

Name	Description	Locked	Network Flow Scaling Factor (%)	Reason For Scaling Factors
Default			100.000	

Demand Set Details

Name	Scenario Name	Time Period Name	Description	Traffic Profile Type	Model Start Time (HH:mm)	Model Finish Time (HH:mm)	Model Time Period Length (min)	Time Segment Length (min)	Single Time Segment Only	Locked
2027 Do-Nothing, AM	2027 Do-Nothing	AM		ONE HOUR	07:30	09:00	90	15		

Junction Network

Junctions

Name	Junction Type	Major Road Direction	Arm Order	Junction Delay (s)	Junction LOS
	Crossroads	Two-way	A,B,C,D	9.17	A

Junction Network Options

Driving Side	Lighting	Network Residual Capacity (%)	First Arm Reaching Threshold
Left	Normal/unknown	83	Stream D-AB

Arms

Arms

Arm	Name	Description	Arm Type
A	Chapel Road (East)		Major
B	Gandon Lane (South)		Minor
C	Chapel Road (West)		Major
D	Kinsealy Lane (North)		Minor

Major Arm Geometry

Arm	Width of carriageway (m)	Has kerbed central reserve	Width of kerbed central reserve (m)	Has right turn bay	Width For Right Turn (m)	Visibility For Right Turn (m)	Blocks?	Blocking Queue (PCU)
A	6.00		0.00		2.20	220.00	✓	0.00
C	6.00		0.00		2.20	250.00	✓	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)	Lane Width (Left) (m)	Lane Width (Right) (m)	Width at give-way (m)	Width at 5m (m)	Width at 10m (m)	Width at 15m (m)	Width at 20m (m)	Estimate Flare Length	Flare Length (PCU)	Visibility To Left (m)	Visibility To Right (m)
B	One lane	3.00								✓		25	80
D	One lane plus flare				9.60	4.70	3.30	3.00	3.00	✓	1.00	20	20

Pedestrian Crossings

Arm	Crossing Type
A	None
B	None
C	None
D	None

Slope / Intercept / Capacity

Priority Intersection Slopes and Intercepts

Junction	Stream	Intercept (PCU/hr)	Slope for A-B	Slope for A-C	Slope for A-D	Slope for B-A	Slope for B-C	Slope for B-D	Slope for C-A	Slope for C-B	Slope for C-D	Slope for D-A	Slope for D-B	Slope for D-C
3	A-D	701.368	-	-	-	-	-	-	0.272	0.388	0.272	-	-	-
3	B-A	524.935	0.096	0.242	0.242	-	-	-	0.152	0.345	-	0.242	0.242	0.121
3	B-C	674.299	0.103	0.261	-	-	-	-	-	-	-	-	-	-
3	B-D, nearside lane	524.935	0.096	0.242	0.242	-	-	-	0.152	0.345	0.152	-	-	-
3	B-D, offside lane	524.935	0.096	0.242	0.242	-	-	-	0.152	0.345	0.152	-	-	-
3	C-B	718.741	0.278	0.278	0.398	-	-	-	-	-	-	-	-	-
3	D-A	674.858	-	-	-	-	-	-	0.261	-	0.103	-	-	-
3	D-B, nearside lane	523.666	0.152	0.152	0.344	-	-	-	0.241	0.241	0.095	-	-	-

3	D-B, offside lane	521.047	0.151	0.151	0.343	-	-	-	0.240	0.240	0.095	-	-	-
3	D-C	521.047	-	0.151	0.343	0.120	0.240	0.240	0.240	0.240	0.095	-	-	-

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 Flows

Demand Set Data Options

Default Vehicle Mix	Vehicle Mix Varies Over Time	Vehicle Mix Varies Over Turn	Vehicle Mix Varies Over Entry	Vehicle Mix Source	PCU Factor for a HV (PCU)	Default Turning Proportions	Estimate from entry/exit counts	Turning Proportions Vary Over Time	Turning Proportions Vary Over Turn	Turning Proportions Vary Over Entry
		✓	✓	HV Percentages	2.00				✓	✓

Entry Flows

General Flows Data

Arm	Profile Type	Use Turning Counts	Average Demand Flow (PCU/hr)	Flow Scaling Factor (%)
A	ONE HOUR	✓	373.00	100.000
B	ONE HOUR	✓	7.00	100.000
C	ONE HOUR	✓	496.00	100.000
D	ONE HOUR	✓	135.00	100.000

Turning Proportions

Turning Counts or Proportions (PCU/hr) - Junction 3 (for whole period)

		To			
		A	**B**	**C**	**D**
From	**A**	0.000	1.000	338.000	34.000
	B	0.000	0.000	1.000	6.000
	C	411.000	3.000	0.000	82.000
	D	68.000	2.000	65.000	0.000

Turning Proportions (PCU) - Junction 3 (for whole period)

		To			
		A	**B**	**C**	**D**
From	**A**	0.00	0.00	0.91	0.09
	B	0.00	0.00	0.14	0.86
	C	0.83	0.01	0.00	0.17
	D	0.50	0.01	0.48	0.00

Vehicle Mix

Average PCU Per Vehicle - Junction 3 (for whole period)

		To			
		A	**B**	**C**	**D**

From	A	1.000	1.000	1.000	1.000
	B	1.000	1.000	1.000	1.000
	C	1.000	1.000	1.000	1.000
	D	1.000	1.000	1.000	1.000

Heavy Vehicle Percentages - Junction 3 (for whole period)

		To			
		A	B	C	D
From	A	0.000	0.000	0.000	0.000
	B	0.000	0.000	0.000	0.000
	C	0.000	0.000	0.000	0.000
	D	0.000	0.000	0.000	0.000

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
B-ACD	0.02	10.13	0.02	B
A-BCD	0.09	4.94	0.16	A
A-B	-	-	-	-
A-C	-	-	-	-
D-AB	0.15	8.39	0.18	A
D-BC	0.22	13.93	0.28	B
C-ABD	0.01	4.16	0.01	A
C-D	-	-	-	-
C-A	-	-	-	-

Default - 2027 Do-Nothing, PM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

Name	Description	Locked	Network Flow Scaling Factor (%)	Reason For Scaling Factors
Default			100.000	

Demand Set Details

Name	Scenario Name	Time Period Name	Description	Traffic Profile Type	Model Start Time (HH:mm)	Model Finish Time (HH:mm)	Model Time Period Length (min)	Time Segment Length (min)	Single Time Segment Only	Locked
2027 Do-Nothing, PM	2027 Do-Nothing	PM		ONE HOUR	16:00	17:30	90	15		

Junction Network

Junctions

Name	Junction Type	Major Road Direction	Arm Order	Junction Delay (s)	Junction LOS
	Crossroads	Two-way	A,B,C,D	8.65	A

Junction Network Options

Driving Side	Lighting	Network Residual Capacity (%)	First Arm Reaching Threshold
Left	Normal/unknown	78	Stream D-AB

Arms

Arms

Arm	Name	Description	Arm Type
A	Chapel Road (East)		Major
B	Gandon Lane (South)		Minor
C	Chapel Road (West)		Major
D	Kinsealy Lane (North)		Minor

Major Arm Geometry

Arm	Width of carriageway (m)	Has kerbed central reserve	Width of kerbed central reserve (m)	Has right turn bay	Width For Right Turn (m)	Visibility For Right Turn (m)	Blocks?	Blocking Queue (PCU)
A	6.00		0.00		2.20	220.00	✓	0.00
C	6.00		0.00		2.20	250.00	✓	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)	Lane Width (Left) (m)	Lane Width (Right) (m)	Width at give-way (m)	Width at 5m (m)	Width at 10m (m)	Width at 15m (m)	Width at 20m (m)	Estimate Flare Length	Flare Length (PCU)	Visibility To Left (m)	Visibility To Right (m)
B	One lane	3.00								✓		25	80
D	One lane plus flare				9.60	4.70	3.30	3.00	3.00	✓	1.00	20	20

Pedestrian Crossings

Arm	Crossing Type
A	None
B	None
C	None
D	None

Slope / Intercept / Capacity

Priority Intersection Slopes and Intercepts

Junction	Stream	Intercept (PCU/hr)	Slope for A-B	Slope for A-C	Slope for A-D	Slope for B-A	Slope for B-C	Slope for B-D	Slope for C-A	Slope for C-B	Slope for C-D	Slope for D-A	Slope for D-B	Slope for D-C
3	A-D	701.368	-	-	-	-	-	-	0.272	0.388	0.272	-	-	-
3	B-A	524.935	0.096	0.242	0.242	-	-	-	0.152	0.345	-	0.242	0.242	0.121
3	B-C	674.299	0.103	0.261	-	-	-	-	-	-	-	-	-	-
3	B-D, nearside lane	524.935	0.096	0.242	0.242	-	-	-	0.152	0.345	0.152	-	-	-

3	B-D, offside lane	524.935	0.096	0.242	0.242	-	-	-	0.152	0.345	0.152	-	-	-
3	C-B	718.741	0.278	0.278	0.398	-	-	-	-	-	-	-	-	-
3	D-A	655.040	-	-	-	-	-	-	0.254	-	0.100	-	-	-
3	D-B, nearside lane	508.288	0.147	0.147	0.334	-	-	-	0.234	0.234	0.093	-	-	-
3	D-B, offside lane	536.426	0.155	0.155	0.353	-	-	-	0.247	0.247	0.098	-	-	-
3	D-C	536.426	-	0.155	0.353	0.123	0.247	0.247	0.247	0.247	0.098	-	-	-

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 Flows

Demand Set Data Options

Default Vehicle Mix	Vehicle Mix Varies Over Time	Vehicle Mix Varies Over Turn	Vehicle Mix Varies Over Entry	Vehicle Mix Source	PCU Factor for a HV (PCU)	Default Turning Proportions	Estimate from entry/exit counts	Turning Proportions Vary Over Time	Turning Proportions Vary Over Turn	Turning Proportions Vary Over Entry
		✓	✓	HV Percentages	2.00				✓	✓

Entry Flows

General Flows Data

Arm	Profile Type	Use Turning Counts	Average Demand Flow (PCU/hr)	Flow Scaling Factor (%)
A	ONE HOUR	✓	415.00	100.000
B	ONE HOUR	✓	9.00	100.000
C	ONE HOUR	✓	497.00	100.000
D	ONE HOUR	✓	121.00	100.000

Turning Proportions

Turning Counts or Proportions (PCU/hr) - Junction 3 (for whole period)

		To			
		A	**B**	**C**	**D**
From	**A**	0.000	2.000	357.000	56.000
	B	4.000	0.000	4.000	1.000
	C	397.000	6.000	0.000	94.000
	D	48.000	3.000	70.000	0.000

Turning Proportions (PCU) - Junction 3 (for whole period)

		To			
		A	**B**	**C**	**D**
From	**A**	0.00	0.00	0.86	0.13
	B	0.44	0.00	0.44	0.11
	C	0.80	0.01	0.00	0.19
	D	0.40	0.02	0.58	0.00

Vehicle Mix

Average PCU Per Vehicle - Junction 3 (for whole period)

		To			
		A	B	C	D
From	A	1.000	1.000	1.000	1.000
	B	1.000	1.000	1.000	1.000
	C	1.000	1.000	1.000	1.000
	D	1.000	1.000	1.000	1.000

Heavy Vehicle Percentages - Junction 3 (for whole period)

		To			
		A	B	C	D
From	A	0.000	0.000	0.000	0.000
	B	0.000	0.000	0.000	0.000
	C	0.000	0.000	0.000	0.000
	D	0.000	0.000	0.000	0.000

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
B-ACD	0.02	9.20	0.03	A
A-BCD	0.14	5.10	0.30	A
A-B	-	-	-	-
A-C	-	-	-	-
D-AB	0.11	8.41	0.13	A
D-BC	0.24	14.25	0.31	B
C-ABD	0.01	4.23	0.02	A
C-D	-	-	-	-
C-A	-	-	-	-

Default - 2027 With Development, AM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

Name	Description	Locked	Network Flow Scaling Factor (%)	Reason For Scaling Factors
Default			100.000	

Demand Set Details

Name	Scenario Name	Time Period Name	Description	Traffic Profile Type	Model Start Time (HH:mm)	Model Finish Time (HH:mm)	Model Time Period Length (min)	Time Segment Length (min)	Single Time Segment Only	Locked

2027 With Development, AM	2027 With Development	AM		ONE HOUR	07:30	09:00	90	15		

Junction Network

Junctions

Name	Junction Type	Major Road Direction	Arm Order	Junction Delay (s)	Junction LOS
	Crossroads	Two-way	A,B,C,D	8.92	A

Junction Network Options

Driving Side	Lighting	Network Residual Capacity (%)	First Arm Reaching Threshold
Left	Normal/unknown	75	Stream D-AB

Arms

Arms

Arm	Name	Description	Arm Type
A	Chapel Road (East)		Major
B	Gandon Lane (South)		Minor
C	Chapel Road (West)		Major
D	Kinsealy Lane (North)		Minor

Major Arm Geometry

Arm	Width of carriageway (m)	Has kerbed central reserve	Width of kerbed central reserve (m)	Has right turn bay	Width For Right Turn (m)	Visibility For Right Turn (m)	Blocks?	Blocking Queue (PCU)
A	6.00		0.00		2.20	220.00	✓	0.00
C	6.00		0.00		2.20	250.00	✓	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)	Lane Width (Left) (m)	Lane Width (Right) (m)	Width at give-way (m)	Width at 5m (m)	Width at 10m (m)	Width at 15m (m)	Width at 20m (m)	Estimate Flare Length	Flare Length (PCU)	Visibility To Left (m)	Visibility To Right (m)
B	One lane	3.00								✓		25	80
D	One lane plus flare				9.60	4.70	3.30	3.00	3.00	✓	1.00	20	20

Pedestrian Crossings

Arm	Crossing Type
A	None
B	None
C	None
D	None

Slope / Intercept / Capacity

Priority Intersection Slopes and Intercepts

Junction	Stream	Intercept (PCU/hr)	Slope for A-B	Slope for A-C	Slope for A-D	Slope for B-A	Slope for B-C	Slope for B-D	Slope for C-A	Slope for C-B	Slope for C-D	Slope for D-A	Slope for D-B	Slope for D-C
3	A-D	701.368	-	-	-	-	-	-	0.272	0.388	0.272	-	-	-
3	B-A	524.935	0.096	0.242	0.242	-	-	-	0.152	0.345	-	0.242	0.242	0.121
3	B-C	674.299	0.103	0.261	-	-	-	-	-	-	-	-	-	-
3	B-D, nearside lane	524.935	0.096	0.242	0.242	-	-	-	0.152	0.345	0.152	-	-	-
3	B-D, offside lane	524.935	0.096	0.242	0.242	-	-	-	0.152	0.345	0.152	-	-	-
3	C-B	718.741	0.278	0.278	0.398	-	-	-	-	-	-	-	-	-
3	D-A	673.170	-	-	-	-	-	-	0.261	-	0.103	-	-	-
3	D-B, nearside lane	522.357	0.151	0.151	0.344	-	-	-	0.240	0.240	0.095	-	-	-
3	D-B, offside lane	522.357	0.151	0.151	0.344	-	-	-	0.240	0.240	0.095	-	-	-
3	D-C	522.357	-	0.151	0.344	0.120	0.240	0.240	0.240	0.240	0.095	-	-	-

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 Flows

Demand Set Data Options

Default Vehicle Mix	Vehicle Mix Varies Over Time	Vehicle Mix Varies Over Turn	Vehicle Mix Varies Over Entry	Vehicle Mix Source	PCU Factor for a HV (PCU)	Default Turning Proportions	Estimate from entry/exit counts	Turning Proportions Vary Over Time	Turning Proportions Vary Over Turn	Turning Proportions Vary Over Entry
		✓	✓	HV Percentages	2.00				✓	✓

Entry Flows

General Flows Data

Arm	Profile Type	Use Turning Counts	Average Demand Flow (PCU/hr)	Flow Scaling Factor (%)
A	ONE HOUR	✓	377.00	100.000
B	ONE HOUR	✓	45.00	100.000
C	ONE HOUR	✓	516.00	100.000
D	ONE HOUR	✓	136.00	100.000

Turning Proportions

Turning Counts or Proportions (PCU/hr) - Junction 3 (for whole period)

		To			
		A	B	C	D
From	A	0.000	4.000	339.000	34.000
	B	9.000	0.000	28.000	8.000
	C	417.000	16.000	0.000	83.000
	D	68.000	3.000	65.000	0.000

Turning Proportions (PCU) - Junction 3 (for whole period)

		To			

		A	B	C	D
From	A	0.00	0.01	0.90	0.09
	B	0.20	0.00	0.62	0.18
	C	0.81	0.03	0.00	0.16
	D	0.50	0.02	0.48	0.00

Vehicle Mix

Average PCU Per Vehicle - Junction 3 (for whole period)

		To			
		A	B	C	D
From	A	1.000	1.000	1.000	1.000
	B	1.000	1.000	1.000	1.000
	C	1.000	1.000	1.000	1.000
	D	1.000	1.000	1.000	1.000

Heavy Vehicle Percentages - Junction 3 (for whole period)

		To			
		A	B	C	D
From	A	0.000	0.000	0.000	0.000
	B	0.000	0.000	0.000	0.000
	C	0.000	0.000	0.000	0.000
	D	0.000	0.000	0.000	0.000

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
B-ACD	0.11	9.04	0.12	A
A-BCD	0.09	4.96	0.17	A
A-B	-	-	-	-
A-C	-	-	-	-
D-AB	0.15	8.56	0.18	A
D-BC	0.23	14.74	0.30	B
C-ABD	0.04	4.23	0.05	A
C-D	-	-	-	-
C-A	-	-	-	-

Default - 2027 With Development, PM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

Name	Description	Locked	Network Flow Scaling Factor (%)	Reason For Scaling Factors
Default			100.000	

Demand Set Details

Name	Scenario Name	Time Period Name	Description	Traffic Profile Type	Model Start Time (HH:mm)	Model Finish Time (HH:mm)	Model Time Period Length (min)	Time Segment Length (min)	Single Time Segment Only	Locked
2027 With Development, PM	2027 With Development	PM		ONE HOUR	16:00	17:30	90	15		

Junction Network

Junctions

Name	Junction Type	Major Road Direction	Arm Order	Junction Delay (s)	Junction LOS
	Crossroads	Two-way	A,B,C,D	8.26	A

Junction Network Options

Driving Side	Lighting	Network Residual Capacity (%)	First Arm Reaching Threshold
Left	Normal/unknown	71	Stream D-AB

Arms

Arms

Arm	Name	Description	Arm Type
A	Chapel Road (East)		Major
B	Gandon Lane (South)		Minor
C	Chapel Road (West)		Major
D	Kinsealy Lane (North)		Minor

Major Arm Geometry

Arm	Width of carriageway (m)	Has kerbed central reserve	Width of kerbed central reserve (m)	Has right turn bay	Width For Right Turn (m)	Visibility For Right Turn (m)	Blocks?	Blocking Queue (PCU)
A	6.00		0.00		2.20	220.00	✓	0.00
C	6.00		0.00		2.20	250.00	✓	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)	Lane Width (Left) (m)	Lane Width (Right) (m)	Width at give-way (m)	Width at 5m (m)	Width at 10m (m)	Width at 15m (m)	Width at 20m (m)	Estimate Flare Length	Flare Length (PCU)	Visibility To Left (m)	Visibility To Right (m)
B	One lane	3.00								✓		25	80
D	One lane plus flare				9.60	4.70	3.30	3.00	3.00	✓	1.00	20	20

Pedestrian Crossings

Arm	Crossing Type
A	None
B	None
C	None

D	None

Slope / Intercept / Capacity

Priority Intersection Slopes and Intercepts

Junction	Stream	Intercept (PCU/hr)	Slope for A-B	Slope for A-C	Slope for A-D	Slope for B-A	Slope for B-C	Slope for B-D	Slope for C-A	Slope for C-B	Slope for C-D	Slope for D-A	Slope for D-B	Slope for D-C
3	A-D	701.368	-	-	-	-	-	-	0.272	0.388	0.272	-	-	-
3	B-A	524.935	0.096	0.242	0.242	-	-	-	0.152	0.345	-	0.242	0.242	0.121
3	B-C	674.299	0.103	0.261	-	-	-	-	-	-	-	-	-	-
3	B-D, nearside lane	524.935	0.096	0.242	0.242	-	-	-	0.152	0.345	0.152	-	-	-
3	B-D, offside lane	524.935	0.096	0.242	0.242	-	-	-	0.152	0.345	0.152	-	-	-
3	C-B	718.741	0.278	0.278	0.398	-	-	-	-	-	-	-	-	-
3	D-A	655.231	-	-	-	-	-	-	0.254	-	0.100	-	-	-
3	D-B, nearside lane	508.436	0.147	0.147	0.334	-	-	-	0.234	0.234	0.093	-	-	-
3	D-B, offside lane	536.277	0.155	0.155	0.353	-	-	-	0.247	0.247	0.098	-	-	-
3	D-C	536.277	-	0.155	0.353	0.123	0.247	0.247	0.247	0.247	0.098	-	-	-

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 Flows

Demand Set Data Options

Default Vehicle Mix	Vehicle Mix Varies Over Time	Vehicle Mix Varies Over Turn	Vehicle Mix Varies Over Entry	Vehicle Mix Source	PCU Factor for a HV (PCU)	Default Turning Proportions	Estimate from entry/exit counts	Turning Proportions Vary Over Time	Turning Proportions Vary Over Turn	Turning Proportions Vary Over Entry
		✓	✓	HV Percentages	2.00				✓	✓

Entry Flows

General Flows Data

Arm	Profile Type	Use Turning Counts	Average Demand Flow (PCU/hr)	Flow Scaling Factor (%)
A	ONE HOUR	✓	423.00	100.000
B	ONE HOUR	✓	24.00	100.000
C	ONE HOUR	✓	519.00	100.000
D	ONE HOUR	✓	123.00	100.000

Turning Proportions

Turning Counts or Proportions (PCU/hr) - Junction 3 (for whole period)

		To			
		A	B	C	D
From	A	0.000	7.000	360.000	56.000
	B	7.000	0.000	15.000	2.000

	C	398.000	27.000	0.000	94.000
	D	48.000	4.000	71.000	0.000

Turning Proportions (PCU) - Junction 3 (for whole period)

		To			
		A	B	C	D
From	A	0.00	0.02	0.85	0.13
	B	0.29	0.00	0.63	0.08
	C	0.77	0.05	0.00	0.18
	D	0.39	0.03	0.58	0.00

Vehicle Mix

Average PCU Per Vehicle - Junction 3 (for whole period)

		To			
		A	B	C	D
From	A	1.000	1.000	1.000	1.000
	B	1.000	1.000	1.000	1.000
	C	1.000	1.000	1.000	1.000
	D	1.000	1.000	1.000	1.000

Heavy Vehicle Percentages - Junction 3 (for whole period)

		To			
		A	B	C	D
From	A	0.000	0.000	0.000	0.000
	B	0.000	0.000	0.000	0.000
	C	0.000	0.000	0.000	0.000
	D	0.000	0.000	0.000	0.000

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
B-ACD	0.06	8.77	0.06	A
A-BCD	0.15	5.13	0.31	A
A-B	-	-	-	-
A-C	-	-	-	-
D-AB	0.12	8.58	0.13	A
D-BC	0.25	14.95	0.33	B
C-ABD	0.07	4.37	0.13	A
C-D	-	-	-	-
C-A	-	-	-	-

Default - 2032 Do-Nothing, AM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

Name	Description	Locked	Network Flow Scaling Factor (%)	Reason For Scaling Factors
Default			100.000	

Demand Set Details

Name	Scenario Name	Time Period Name	Description	Traffic Profile Type	Model Start Time (HH:mm)	Model Finish Time (HH:mm)	Model Time Period Length (min)	Time Segment Length (min)	Single Time Segment Only	Locked
2032 Do-Nothing, AM	2032 Do-Nothing	AM		ONE HOUR	07:30	09:00	90	15		

Junction Network

Junctions

Name	Junction Type	Major Road Direction	Arm Order	Junction Delay (s)	Junction LOS
	Crossroads	Two-way	A,B,C,D	9.42	A

Junction Network Options

Driving Side	Lighting	Network Residual Capacity (%)	First Arm Reaching Threshold
Left	Normal/unknown	76	Stream D-AB

Arms

Arms

Arm	Name	Description	Arm Type
A	Chapel Road (East)		Major
B	Gandon Lane (South)		Minor
C	Chapel Road (West)		Major
D	Kinsealy Lane (North)		Minor

Major Arm Geometry

Arm	Width of carriageway (m)	Has kerbed central reserve	Width of kerbed central reserve (m)	Has right turn bay	Width For Right Turn (m)	Visibility For Right Turn (m)	Blocks?	Blocking Queue (PCU)
A	6.00		0.00		2.20	220.00	✓	0.00
C	6.00		0.00		2.20	250.00	✓	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)	Lane Width (Left) (m)	Lane Width (Right) (m)	Width at give-way (m)	Width at 5m (m)	Width at 10m (m)	Width at 15m (m)	Width at 20m (m)	Estimate Flare Length	Flare Length (PCU)	Visibility To Left (m)	Visibility To Right (m)
B	One lane	3.00								✓		25	80
D	One lane plus flare				9.60	4.70	3.30	3.00	3.00	✓	1.00	20	20

Pedestrian Crossings

Arm	Crossing Type
A	None
B	None
C	None
D	None

Slope / Intercept / Capacity

Priority Intersection Slopes and Intercepts

Junction	Stream	Intercept (PCU/hr)	Slope for A-B	Slope for A-C	Slope for A-D	Slope for B-A	Slope for B-C	Slope for B-D	Slope for C-A	Slope for C-B	Slope for C-D	Slope for D-A	Slope for D-B	Slope for D-C
3	A-D	701.368	-	-	-	-	-	-	0.272	0.388	0.272	-	-	-
3	B-A	524.935	0.096	0.242	0.242	-	-	-	0.152	0.345	-	0.242	0.242	0.121
3	B-C	674.299	0.103	0.261	-	-	-	-	-	-	-	-	-	-
3	B-D, nearside lane	524.935	0.096	0.242	0.242	-	-	-	0.152	0.345	0.152	-	-	-
3	B-D, offside lane	524.935	0.096	0.242	0.242	-	-	-	0.152	0.345	0.152	-	-	-
3	C-B	718.741	0.278	0.278	0.398	-	-	-	-	-	-	-	-	-
3	D-A	676.425	-	-	-	-	-	-	0.262	-	0.104	-	-	-
3	D-B, nearside lane	524.882	0.152	0.152	0.345	-	-	-	0.242	0.242	0.096	-	-	-
3	D-B, offside lane	519.831	0.151	0.151	0.342	-	-	-	0.239	0.239	0.095	-	-	-
3	D-C	519.831	-	0.151	0.342	0.120	0.239	0.239	0.239	0.239	0.095	-	-	-

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 Flows

Demand Set Data Options

Default Vehicle Mix	Vehicle Mix Varies Over Time	Vehicle Mix Varies Over Turn	Vehicle Mix Varies Over Entry	Vehicle Mix Source	PCU Factor for a HV (PCU)	Default Turning Proportions	Estimate from entry/exit counts	Turning Proportions Vary Over Time	Turning Proportions Vary Over Turn	Turning Proportions Vary Over Entry
		✓	✓	HV Percentages	2.00				✓	✓

Entry Flows

General Flows Data

Arm	Profile Type	Use Turning Counts	Average Demand Flow (PCU/hr)	Flow Scaling Factor (%)
A	ONE HOUR	✓	389.00	100.000
B	ONE HOUR	✓	8.00	100.000
C	ONE HOUR	✓	516.00	100.000
D	ONE HOUR	✓	140.00	100.000

Turning Proportions

Turning Counts or Proportions (PCU/hr) - Junction 3 (for whole period)

		To			
		A	B	C	D
From	A	0.000	1.000	353.000	35.000
	B	0.000	0.000	1.000	7.000
	C	428.000	3.000	0.000	85.000
	D	71.000	2.000	67.000	0.000

Turning Proportions (PCU) - Junction 3 (for whole period)

		To			
		A	B	C	D
From	A	0.00	0.00	0.91	0.09
	B	0.00	0.00	0.13	0.88
	C	0.83	0.01	0.00	0.16
	D	0.51	0.01	0.48	0.00

Vehicle Mix

Average PCU Per Vehicle - Junction 3 (for whole period)

		To			
		A	B	C	D
From	A	1.000	1.000	1.000	1.000
	B	1.000	1.000	1.000	1.000
	C	1.000	1.000	1.000	1.000
	D	1.000	1.000	1.000	1.000

Heavy Vehicle Percentages - Junction 3 (for whole period)

		To			
		A	B	C	D
From	A	0.000	0.000	0.000	0.000
	B	0.000	0.000	0.000	0.000
	C	0.000	0.000	0.000	0.000
	D	0.000	0.000	0.000	0.000

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
B-ACD	0.02	10.47	0.03	B
A-BCD	0.09	4.93	0.18	A
A-B	-	-	-	-
A-C	-	-	-	-
D-AB	0.16	8.58	0.19	A
D-BC	0.23	14.56	0.30	B
C-ABD	0.01	4.13	0.01	A
C-D	-	-	-	-
C-A	-	-	-	-

Default - 2032 Do-Nothing, PM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

Name	Description	Locked	Network Flow Scaling Factor (%)	Reason For Scaling Factors
Default			100.000	

Demand Set Details

Name	Scenario Name	Time Period Name	Description	Traffic Profile Type	Model Start Time (HH:mm)	Model Finish Time (HH:mm)	Model Time Period Length (min)	Time Segment Length (min)	Single Time Segment Only	Locked
2032 Do-Nothing, PM	2032 Do-Nothing	PM		ONE HOUR	16:00	17:30	90	15		

Junction Network

Junctions

Name	Junction Type	Major Road Direction	Arm Order	Junction Delay (s)	Junction LOS
	Crossroads	Two-way	A,B,C,D	8.86	A

Junction Network Options

Driving Side	Lighting	Network Residual Capacity (%)	First Arm Reaching Threshold
Left	Normal/unknown	71	Stream D-AB

Arms

Arms

Arm	Name	Description	Arm Type
A	Chapel Road (East)		Major
B	Gandon Lane (South)		Minor
C	Chapel Road (West)		Major
D	Kinsealy Lane (North)		Minor

Major Arm Geometry

Arm	Width of carriageway (m)	Has kerbed central reserve	Width of kerbed central reserve (m)	Has right turn bay	Width For Right Turn (m)	Visibility For Right Turn (m)	Blocks?	Blocking Queue (PCU)
A	6.00		0.00		2.20	220.00	✓	0.00
C	6.00		0.00		2.20	250.00	✓	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)	Lane Width (Left)	Lane Width (Right)	Width at give-way	Width at 5m (m)	Width at 10m (m)	Width at 15m (m)	Width at 20m (m)	Estimate Flare Length	Flare Length (PCU)	Visibility To Left (m)	Visibility To Right (m)

			(m)	(m)	(m)								
B	One lane	3.00								✓		25	80
D	One lane plus flare				9.60	4.70	3.30	3.00	3.00	✓	1.00	20	20

Pedestrian Crossings

Arm	Crossing Type
A	None
B	None
C	None
D	None

Slope / Intercept / Capacity

Priority Intersection Slopes and Intercepts

Junction	Stream	Intercept (PCU/hr)	Slope for A-B	Slope for A-C	Slope for A-D	Slope for B-A	Slope for B-C	Slope for B-D	Slope for C-A	Slope for C-B	Slope for C-D	Slope for D-A	Slope for D-B	Slope for D-C
3	A-D	701.368	-	-	-	-	-	-	0.272	0.388	0.272	-	-	-
3	B-A	524.935	0.096	0.242	0.242	-	-	-	0.152	0.345	-	0.242	0.242	0.121
3	B-C	674.299	0.103	0.261	-	-	-	-	-	-	-	-	-	-
3	B-D, nearside lane	524.935	0.096	0.242	0.242	-	-	-	0.152	0.345	0.152	-	-	-
3	B-D, offside lane	524.935	0.096	0.242	0.242	-	-	-	0.152	0.345	0.152	-	-	-
3	C-B	718.741	0.278	0.278	0.398	-	-	-	-	-	-	-	-	-
3	D-A	654.912	-	-	-	-	-	-	0.254	-	0.100	-	-	-
3	D-B, nearside lane	508.189	0.147	0.147	0.334	-	-	-	0.234	0.234	0.093	-	-	-
3	D-B, offside lane	536.525	0.155	0.155	0.353	-	-	-	0.247	0.247	0.098	-	-	-
3	D-C	536.525	-	0.155	0.353	0.124	0.247	0.247	0.247	0.247	0.098	-	-	-

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 Flows

Demand Set Data Options

Default Vehicle Mix	Vehicle Mix Varies Over Time	Vehicle Mix Varies Over Turn	Vehicle Mix Varies Over Entry	Vehicle Mix Source	PCU Factor for a HV (PCU)	Default Turning Proportions	Estimate from entry/exit counts	Turning Proportions Vary Over Time	Turning Proportions Vary Over Turn	Turning Proportions Vary Over Entry
		✓	✓	HV Percentages	2.00				✓	✓

Entry Flows

General Flows Data

Arm	Profile Type	Use Turning Counts	Average Demand Flow (PCU/hr)	Flow Scaling Factor (%)
A	ONE HOUR	✓	432.00	100.000
B	ONE HOUR	✓	9.00	100.000

C	ONE HOUR	✓	519.00	100.000
D	ONE HOUR	✓	126.00	100.000

Turning Proportions

Turning Counts or Proportions (PCU/hr) - Junction 3 (for whole period)

		To			
		A	**B**	**C**	**D**
From	**A**	0.000	2.000	372.000	58.000
	B	4.000	0.000	4.000	1.000
	C	414.000	7.000	0.000	98.000
	D	50.000	3.000	73.000	0.000

Turning Proportions (PCU) - Junction 3 (for whole period)

		To			
		A	**B**	**C**	**D**
From	**A**	0.00	0.00	0.86	0.13
	B	0.44	0.00	0.44	0.11
	C	0.80	0.01	0.00	0.19
	D	0.40	0.02	0.58	0.00

Vehicle Mix

Average PCU Per Vehicle - Junction 3 (for whole period)

		To			
		A	**B**	**C**	**D**
From	**A**	1.000	1.000	1.000	1.000
	B	1.000	1.000	1.000	1.000
	C	1.000	1.000	1.000	1.000
	D	1.000	1.000	1.000	1.000

Heavy Vehicle Percentages - Junction 3 (for whole period)

		To			
		A	**B**	**C**	**D**
From	**A**	0.000	0.000	0.000	0.000
	B	0.000	0.000	0.000	0.000
	C	0.000	0.000	0.000	0.000
	D	0.000	0.000	0.000	0.000

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
B-ACD	0.03	9.40	0.03	A
A-BCD	0.15	5.12	0.33	A
A-B	-	-	-	-
A-C	-	-	-	-
D-AB	0.12	8.63	0.14	A
D-BC	0.25	14.96	0.34	B
C-ABD	0.02	4.20	0.02	A

C-D	-	-	-	-
C-A	-	-	-	-

Default - 2032 With Development, AM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

Name	Description	Locked	Network Flow Scaling Factor (%)	Reason For Scaling Factors
Default			100.000	

Demand Set Details

Name	Scenario Name	Time Period Name	Description	Traffic Profile Type	Model Start Time (HH:mm)	Model Finish Time (HH:mm)	Model Time Period Length (min)	Time Segment Length (min)	Single Time Segment Only	Locked
2032 With Development, AM	2032 With Development	AM		ONE HOUR	07:30	09:00	90	15		

Junction Network

Junctions

Name	Junction Type	Major Road Direction	Arm Order	Junction Delay (s)	Junction LOS
	Crossroads	Two-way	A,B,C,D	9.16	A

Junction Network Options

Driving Side	Lighting	Network Residual Capacity (%)	First Arm Reaching Threshold
Left	Normal/unknown	68	Stream D-AB

Arms

Arms

Arm	Name	Description	Arm Type
A	Chapel Road (East)		Major
B	Gandon Lane (South)		Minor
C	Chapel Road (West)		Major
D	Kinsealy Lane (North)		Minor

Major Arm Geometry

Arm	Width of carriageway (m)	Has kerbed central reserve	Width of kerbed central reserve (m)	Has right turn bay	Width For Right Turn (m)	Visibility For Right Turn (m)	Blocks?	Blocking Queue (PCU)
A	6.00		0.00		2.20	220.00	✓	0.00
C	6.00		0.00		2.20	250.00	✓	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)	Lane Width (Left) (m)	Lane Width (Right) (m)	Width at give-way (m)	Width at 5m (m)	Width at 10m (m)	Width at 15m (m)	Width at 20m (m)	Estimate Flare Length	Flare Length (PCU)	Visibility To Left (m)	Visibility To Right (m)
B	One lane	3.00								✓		25	80
D	One lane plus flare				9.60	4.70	3.30	3.00	3.00	✓	1.00	20	20

Pedestrian Crossings

Arm	Crossing Type
A	None
B	None
C	None
D	None

Slope / Intercept / Capacity

Priority Intersection Slopes and Intercepts

Junction	Stream	Intercept (PCU/hr)	Slope for A-B	Slope for A-C	Slope for A-D	Slope for B-A	Slope for B-C	Slope for B-D	Slope for C-A	Slope for C-B	Slope for C-D	Slope for D-A	Slope for D-B	Slope for D-C
3	A-D	701.368	-	-	-	-	-	-	0.272	0.388	0.272	-	-	-
3	B-A	524.935	0.096	0.242	0.242	-	-	-	0.152	0.345	-	0.242	0.242	0.121
3	B-C	674.299	0.103	0.261	-	-	-	-	-	-	-	-	-	-
3	B-D, nearside lane	524.935	0.096	0.242	0.242	-	-	-	0.152	0.345	0.152	-	-	-
3	B-D, offside lane	524.935	0.096	0.242	0.242	-	-	-	0.152	0.345	0.152	-	-	-
3	C-B	718.741	0.278	0.278	0.398	-	-	-	-	-	-	-	-	-
3	D-A	674.786	-	-	-	-	-	-	0.261	-	0.103	-	-	-
3	D-B, nearside lane	523.611	0.152	0.152	0.344	-	-	-	0.241	0.241	0.095	-	-	-
3	D-B, offside lane	521.103	0.151	0.151	0.343	-	-	-	0.240	0.240	0.095	-	-	-
3	D-C	521.103	-	0.151	0.343	0.120	0.240	0.240	0.240	0.240	0.095	-	-	-

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 Flows

Demand Set Data Options

Default Vehicle Mix	Vehicle Mix Varies Over Time	Vehicle Mix Varies Over Turn	Vehicle Mix Varies Over Entry	Vehicle Mix Source	PCU Factor for a HV (PCU)	Default Turning Proportions	Estimate from entry/exit counts	Turning Proportions Vary Over Time	Turning Proportions Vary Over Turn	Turning Proportions Vary Over Entry
		✓	✓	HV Percentages	2.00				✓	✓

Entry Flows

General Flows Data

Arm	Profile Type	Use Turning Counts	Average Demand Flow (PCU/hr)	Flow Scaling Factor (%)
A	ONE HOUR	✓	393.00	100.000
B	ONE HOUR	✓	46.00	100.000
C	ONE HOUR	✓	536.00	100.000
D	ONE HOUR	✓	141.00	100.000

Turning Proportions

Turning Counts or Proportions (PCU/hr) - Junction 3 (for whole period)

		To			
		A	B	C	D
From	A	0.000	4.000	354.000	35.000
	B	9.000	0.000	28.000	9.000
	C	434.000	16.000	0.000	86.000
	D	71.000	3.000	67.000	0.000

Turning Proportions (PCU) - Junction 3 (for whole period)

		To			
		A	B	C	D
From	A	0.00	0.01	0.90	0.09
	B	0.20	0.00	0.61	0.20
	C	0.81	0.03	0.00	0.16
	D	0.50	0.02	0.48	0.00

Vehicle Mix

Average PCU Per Vehicle - Junction 3 (for whole period)

		To			
		A	B	C	D
From	A	1.000	1.000	1.000	1.000
	B	1.000	1.000	1.000	1.000
	C	1.000	1.000	1.000	1.000
	D	1.000	1.000	1.000	1.000

Heavy Vehicle Percentages - Junction 3 (for whole period)

		To			
		A	B	C	D
From	A	0.000	0.000	0.000	0.000
	B	0.000	0.000	0.000	0.000
	C	0.000	0.000	0.000	0.000
	D	0.000	0.000	0.000	0.000

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
B-ACD	0.12	9.31	0.13	A
A-BCD	0.09	4.94	0.18	A
A-B	-	-	-	-

A-C	-	-	-	-
D-AB	0.16	8.77	0.19	A
D-BC	0.24	15.41	0.32	C
C-ABD	0.04	4.20	0.06	A
C-D	-	-	-	-
C-A	-	-	-	-

Default - 2032 With Development, PM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

Name	Description	Locked	Network Flow Scaling Factor (%)	Reason For Scaling Factors
Default			100.000	

Demand Set Details

Name	Scenario Name	Time Period Name	Description	Traffic Profile Type	Model Start Time (HH:mm)	Model Finish Time (HH:mm)	Model Time Period Length (min)	Time Segment Length (min)	Single Time Segment Only	Locked
2032 With Development, PM	2032 With Development	PM		ONE HOUR	16:00	17:30	90	15		

Junction Network

Junctions

Name	Junction Type	Major Road Direction	Arm Order	Junction Delay (s)	Junction LOS
	Crossroads	Two-way	A,B,C,D	8.45	A

Junction Network Options

Driving Side	Lighting	Network Residual Capacity (%)	First Arm Reaching Threshold
Left	Normal/unknown	65	Stream D-AB

Arms

Arms

Arm	Name	Description	Arm Type
A	Chapel Road (East)		Major
B	Gandon Lane (South)		Minor
C	Chapel Road (West)		Major
D	Kinsealy Lane (North)		Minor

Major Arm Geometry

	Width of	Has kerbed	Width of kerbed	Has right	Width For	Visibility For		Blocking

Arm	carriageway (m)	central reserve	central reserve (m)	turn bay	Right Turn (m)	Right Turn (m)	Blocks?	Queue (PCU)
A	6.00		0.00		2.20	220.00	✓	0.00
C	6.00		0.00		2.20	250.00	✓	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)	Lane Width (Left) (m)	Lane Width (Right) (m)	Width at give-way (m)	Width at 5m (m)	Width at 10m (m)	Width at 15m (m)	Width at 20m (m)	Estimate Flare Length	Flare Length (PCU)	Visibility To Left (m)	Visibility To Right (m)
B	One lane	3.00								✓		25	80
D	One lane plus flare				9.60	4.70	3.30	3.00	3.00	✓	1.00	20	20

Pedestrian Crossings

Arm	Crossing Type
A	None
B	None
C	None
D	None

Slope / Intercept / Capacity

Priority Intersection Slopes and Intercepts

Junction	Stream	Intercept (PCU/hr)	Slope for A-B	Slope for A-C	Slope for A-D	Slope for B-A	Slope for B-C	Slope for B-D	Slope for C-A	Slope for C-B	Slope for C-D	Slope for D-A	Slope for D-B	Slope for D-C
3	A-D	701.368	-	-	-	-	-	-	0.272	0.388	0.272	-	-	-
3	B-A	524.935	0.096	0.242	0.242	-	-	-	0.152	0.345	-	0.242	0.242	0.121
3	B-C	674.299	0.103	0.261	-	-	-	-	-	-	-	-	-	-
3	B-D, nearside lane	524.935	0.096	0.242	0.242	-	-	-	0.152	0.345	0.152	-	-	-
3	B-D, offside lane	524.935	0.096	0.242	0.242	-	-	-	0.152	0.345	0.152	-	-	-
3	C-B	718.741	0.278	0.278	0.398	-	-	-	-	-	-	-	-	-
3	D-A	655.098	-	-	-	-	-	-	0.254	-	0.100	-	-	-
3	D-B, nearside lane	508.333	0.147	0.147	0.334	-	-	-	0.234	0.234	0.093	-	-	-
3	D-B, offside lane	536.381	0.155	0.155	0.353	-	-	-	0.247	0.247	0.098	-	-	-
3	D-C	536.381	-	0.155	0.353	0.123	0.247	0.247	0.247	0.247	0.098	-	-	-

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 Flows

Demand Set Data Options

Default Vehicle Mix	Vehicle Mix Varies Over Time	Vehicle Mix Varies Over Turn	Vehicle Mix Varies Over Entry	Vehicle Mix Source	PCU Factor for a HV (PCU)	Default Turning Proportions	Estimate from entry/exit counts	Turning Proportions Vary Over Time	Turning Proportions Vary Over Turn	Turning Proportions Vary Over Entry
				HV						

		✓	✓	Percentages	2.00			✓	✓

Entry Flows

General Flows Data

Arm	Profile Type	Use Turning Counts	Average Demand Flow (PCU/hr)	Flow Scaling Factor (%)
A	ONE HOUR	✓	440.00	100.000
B	ONE HOUR	✓	24.00	100.000
C	ONE HOUR	✓	541.00	100.000
D	ONE HOUR	✓	128.00	100.000

Turning Proportions

Turning Counts or Proportions (PCU/hr) - Junction 3 (for whole period)

		To			
		A	B	C	D
From	A	0.000	7.000	375.000	58.000
	B	7.000	0.000	15.000	2.000
	C	415.000	28.000	0.000	98.000
	D	50.000	4.000	74.000	0.000

Turning Proportions (PCU) - Junction 3 (for whole period)

		To			
		A	B	C	D
From	A	0.00	0.02	0.85	0.13
	B	0.29	0.00	0.63	0.08
	C	0.77	0.05	0.00	0.18
	D	0.39	0.03	0.58	0.00

Vehicle Mix

Average PCU Per Vehicle - Junction 3 (for whole period)

		To			
		A	B	C	D
From	A	1.000	1.000	1.000	1.000
	B	1.000	1.000	1.000	1.000
	C	1.000	1.000	1.000	1.000
	D	1.000	1.000	1.000	1.000

Heavy Vehicle Percentages - Junction 3 (for whole period)

		To			
		A	B	C	D
From	A	0.000	0.000	0.000	0.000
	B	0.000	0.000	0.000	0.000
	C	0.000	0.000	0.000	0.000
	D	0.000	0.000	0.000	0.000

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
B-ACD	0.06	8.95	0.07	A
A-BCD	0.15	5.15	0.34	A
A-B	-	-	-	-
A-C	-	-	-	-
D-AB	0.12	8.81	0.14	A
D-BC	0.27	15.74	0.36	C
C-ABD	0.08	4.34	0.14	A
C-D	-	-	-	-
C-A	-	-	-	-

Default - 2042 Do-Nothing, AM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

Name	Description	Locked	Network Flow Scaling Factor (%)	Reason For Scaling Factors
Default			100.000	

Demand Set Details

Name	Scenario Name	Time Period Name	Description	Traffic Profile Type	Model Start Time (HH:mm)	Model Finish Time (HH:mm)	Model Time Period Length (min)	Time Segment Length (min)	Single Time Segment Only	Locked
2042 Do-Nothing, AM	2042 Do-Nothing	AM		ONE HOUR	07:30	09:00	90	15		

Junction Network

Junctions

Name	Junction Type	Major Road Direction	Arm Order	Junction Delay (s)	Junction LOS
	Crossroads	Two-way	A,B,C,D	9.56	A

Junction Network Options

Driving Side	Lighting	Network Residual Capacity (%)	First Arm Reaching Threshold
Left	Normal/unknown	72	Stream D-AB

Arms

Arms

Arm	Name	Description	Arm Type
A	Chapel Road (East)		Major
B	Gandon Lane (South)		Minor
C	Chapel Road (West)		Major

D	Kinsealy Lane (North)		Minor

Major Arm Geometry

Arm	Width of carriageway (m)	Has kerbed central reserve	Width of kerbed central reserve (m)	Has right turn bay	Width For Right Turn (m)	Visibility For Right Turn (m)	Blocks?	Blocking Queue (PCU)
A	6.00		0.00		2.20	220.00	✓	0.00
C	6.00		0.00		2.20	250.00	✓	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)	Lane Width (Left) (m)	Lane Width (Right) (m)	Width at give-way (m)	Width at 5m (m)	Width at 10m (m)	Width at 15m (m)	Width at 20m (m)	Estimate Flare Length	Flare Length (PCU)	Visibility To Left (m)	Visibility To Right (m)
B	One lane	3.00								✓		25	80
D	One lane plus flare				9.60	4.70	3.30	3.00	3.00	✓	1.00	20	20

Pedestrian Crossings

Arm	Crossing Type
A	None
B	None
C	None
D	None

Slope / Intercept / Capacity

Priority Intersection Slopes and Intercepts

Junction	Stream	Intercept (PCU/hr)	Slope for A-B	Slope for A-C	Slope for A-D	Slope for B-A	Slope for B-C	Slope for B-D	Slope for C-A	Slope for C-B	Slope for C-D	Slope for D-A	Slope for D-B	Slope for D-C
3	A-D	701.368	-	-	-	-	-	-	0.272	0.388	0.272	-	-	-
3	B-A	524.935	0.096	0.242	0.242	-	-	-	0.152	0.345	-	0.242	0.242	0.121
3	B-C	674.299	0.103	0.261	-	-	-	-	-	-	-	-	-	-
3	B-D, nearside lane	524.935	0.096	0.242	0.242	-	-	-	0.152	0.345	0.152	-	-	-
3	B-D, offside lane	524.935	0.096	0.242	0.242	-	-	-	0.152	0.345	0.152	-	-	-
3	C-B	718.741	0.278	0.278	0.398	-	-	-	-	-	-	-	-	-
3	D-A	677.950	-	-	-	-	-	-	0.263	-	0.104	-	-	-
3	D-B, nearside lane	526.066	0.152	0.152	0.346	-	-	-	0.242	0.242	0.096	-	-	-
3	D-B, offside lane	518.648	0.150	0.150	0.341	-	-	-	0.239	0.239	0.094	-	-	-
3	D-C	518.648	-	0.150	0.341	0.119	0.239	0.239	0.239	0.239	0.094	-	-	-

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 Flows

Demand Set Data Options

Default Vehicle Mix	Vehicle Mix Varies Over Time	Vehicle Mix Varies Over Turn	Vehicle Mix Varies Over Entry	Vehicle Mix Source	PCU Factor for a HV (PCU)	Default Turning Proportions	Estimate from entry/exit counts	Turning Proportions Vary Over Time	Turning Proportions Vary Over Turn	Turning Proportions Vary Over Entry
		✓	✓	HV Percentages	2.00				✓	✓

Entry Flows

General Flows Data

Arm	Profile Type	Use Turning Counts	Average Demand Flow (PCU/hr)	Flow Scaling Factor (%)
A	ONE HOUR	✓	400.00	100.000
B	ONE HOUR	✓	8.00	100.000
C	ONE HOUR	✓	531.00	100.000
D	ONE HOUR	✓	143.00	100.000

Turning Proportions

Turning Counts or Proportions (PCU/hr) - Junction 3 (for whole period)

		To			
		A	B	C	D
From	A	0.000	1.000	363.000	36.000
	B	0.000	0.000	1.000	7.000
	C	441.000	3.000	0.000	87.000
	D	73.000	2.000	68.000	0.000

Turning Proportions (PCU) - Junction 3 (for whole period)

		To			
		A	B	C	D
From	A	0.00	0.00	0.91	0.09
	B	0.00	0.00	0.13	0.88
	C	0.83	0.01	0.00	0.16
	D	0.51	0.01	0.48	0.00

Vehicle Mix

Average PCU Per Vehicle - Junction 3 (for whole period)

		To			
		A	B	C	D
From	A	1.000	1.000	1.000	1.000
	B	1.000	1.000	1.000	1.000
	C	1.000	1.000	1.000	1.000
	D	1.000	1.000	1.000	1.000

Heavy Vehicle Percentages - Junction 3 (for whole period)

		To			
		A	B	C	D
From	A	0.000	0.000	0.000	0.000
	B	0.000	0.000	0.000	0.000
	C	0.000	0.000	0.000	0.000

	D	0.000	0.000	0.000	0.000

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
B-ACD	0.03	10.63	0.03	B
A-BCD	0.09	4.92	0.19	A
A-B	-	-	-	-
A-C	-	-	-	-
D-AB	0.17	8.72	0.20	A
D-BC	0.24	15.02	0.31	C
C-ABD	0.01	4.11	0.01	A
C-D	-	-	-	-
C-A	-	-	-	-

Default - 2042 Do-Nothing, PM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

Name	Description	Locked	Network Flow Scaling Factor (%)	Reason For Scaling Factors
Default			100.000	

Demand Set Details

Name	Scenario Name	Time Period Name	Description	Traffic Profile Type	Model Start Time (HH:mm)	Model Finish Time (HH:mm)	Model Time Period Length (min)	Time Segment Length (min)	Single Time Segment Only	Locked
2042 Do-Nothing, PM	2042 Do-Nothing	PM		ONE HOUR	16:00	17:30	90	15		

Junction Network

Junctions

Name	Junction Type	Major Road Direction	Arm Order	Junction Delay (s)	Junction LOS
	Crossroads	Two-way	A,B,C,D	9.03	A

Junction Network Options

Driving Side	Lighting	Network Residual Capacity (%)	First Arm Reaching Threshold
Left	Normal/unknown	66	Stream D-AB

Arms

Arms

Arm	Name	Description	Arm Type
A	Chapel Road (East)		Major
B	Gandon Lane (South)		Minor
C	Chapel Road (West)		Major
D	Kinsealy Lane (North)		Minor

Major Arm Geometry

Arm	Width of carriageway (m)	Has kerbed central reserve	Width of kerbed central reserve (m)	Has right turn bay	Width For Right Turn (m)	Visibility For Right Turn (m)	Blocks?	Blocking Queue (PCU)
A	6.00		0.00		2.20	220.00	✓	0.00
C	6.00		0.00		2.20	250.00	✓	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)	Lane Width (Left) (m)	Lane Width (Right) (m)	Width at give-way (m)	Width at 5m (m)	Width at 10m (m)	Width at 15m (m)	Width at 20m (m)	Estimate Flare Length	Flare Length (PCU)	Visibility To Left (m)	Visibility To Right (m)
B	One lane	3.00								✓		25	80
D	One lane plus flare				9.60	4.70	3.30	3.00	3.00	✓	1.00	20	20

Pedestrian Crossings

Arm	Crossing Type
A	None
B	None
C	None
D	None

Slope / Intercept / Capacity

Priority Intersection Slopes and Intercepts

Junction	Stream	Intercept (PCU/hr)	Slope for A-B	Slope for A-C	Slope for A-D	Slope for B-A	Slope for B-C	Slope for B-D	Slope for C-A	Slope for C-B	Slope for C-D	Slope for D-A	Slope for D-B	Slope for D-C
3	A-D	701.368	-	-	-	-	-	-	0.272	0.388	0.272	-	-	-
3	B-A	524.935	0.096	0.242	0.242	-	-	-	0.152	0.345	-	0.242	0.242	0.121
3	B-C	674.299	0.103	0.261	-	-	-	-	-	-	-	-	-	-
3	B-D, nearside lane	524.935	0.096	0.242	0.242	-	-	-	0.152	0.345	0.152	-	-	-
3	B-D, offside lane	524.935	0.096	0.242	0.242	-	-	-	0.152	0.345	0.152	-	-	-
3	C-B	718.741	0.278	0.278	0.398	-	-	-	-	-	-	-	-	-
3	D-A	655.278	-	-	-	-	-	-	0.254	-	0.100	-	-	-
3	D-B, nearside lane	508.473	0.147	0.147	0.334	-	-	-	0.234	0.234	0.093	-	-	-
3	D-B, offside lane	536.241	0.155	0.155	0.353	-	-	-	0.247	0.247	0.098	-	-	-
3	D-C	536.241	-	0.155	0.353	0.123	0.247	0.247	0.247	0.247	0.098	-	-	-

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 Flows

Demand Set Data Options

Default Vehicle Mix	Vehicle Mix Varies Over Time	Vehicle Mix Varies Over Turn	Vehicle Mix Varies Over Entry	Vehicle Mix Source	PCU Factor for a HV (PCU)	Default Turning Proportions	Estimate from entry/exit counts	Turning Proportions Vary Over Time	Turning Proportions Vary Over Turn	Turning Proportions Vary Over Entry
		✓	✓	HV Percentages	2.00				✓	✓

Entry Flows

General Flows Data

Arm	Profile Type	Use Turning Counts	Average Demand Flow (PCU/hr)	Flow Scaling Factor (%)
A	ONE HOUR	✓	444.00	100.000
B	ONE HOUR	✓	11.00	100.000
C	ONE HOUR	✓	532.00	100.000
D	ONE HOUR	✓	130.00	100.000

Turning Proportions

Turning Counts or Proportions (PCU/hr) - Junction 3 (for whole period)

		To			
		A	B	C	D
From	A	0.000	2.000	382.000	60.000
	B	5.000	0.000	5.000	1.000
	C	425.000	7.000	0.000	100.000
	D	52.000	3.000	75.000	0.000

Turning Proportions (PCU) - Junction 3 (for whole period)

		To			
		A	B	C	D
From	A	0.00	0.00	0.86	0.14
	B	0.45	0.00	0.45	0.09
	C	0.80	0.01	0.00	0.19
	D	0.40	0.02	0.58	0.00

Vehicle Mix

Average PCU Per Vehicle - Junction 3 (for whole period)

		To			
		A	B	C	D
From	A	1.000	1.000	1.000	1.000
	B	1.000	1.000	1.000	1.000
	C	1.000	1.000	1.000	1.000
	D	1.000	1.000	1.000	1.000

Heavy Vehicle Percentages - Junction 3 (for whole period)

		To			
		A	B	C	D
From	A	0.000	0.000	0.000	0.000
	B	0.000	0.000	0.000	0.000
	C	0.000	0.000	0.000	0.000
	D	0.000	0.000	0.000	0.000

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
B-ACD	0.03	9.54	0.03	A
A-BCD	0.16	5.13	0.35	A
A-B	-	-	-	-
A-C	-	-	-	-
D-AB	0.13	8.78	0.14	A
D-BC	0.27	15.52	0.36	C
C-ABD	0.02	4.19	0.02	A
C-D	-	-	-	-
C-A	-	-	-	-

Default - 2042 With Development, AM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

Name	Description	Locked	Network Flow Scaling Factor (%)	Reason For Scaling Factors
Default			100.000	

Demand Set Details

Name	Scenario Name	Time Period Name	Description	Traffic Profile Type	Model Start Time (HH:mm)	Model Finish Time (HH:mm)	Model Time Period Length (min)	Time Segment Length (min)	Single Time Segment Only	Locked
2042 With Development, AM	2042 With Development	AM		ONE HOUR	07:30	09:00	90	15		

Junction Network

Junctions

Name	Junction Type	Major Road Direction	Arm Order	Junction Delay (s)	Junction LOS
	Crossroads	Two-way	A,B,C,D	9.31	A

Junction Network Options

Driving Side	Lighting	Network Residual Capacity (%)	First Arm Reaching Threshold
Left	Normal/unknown	64	Stream D-AB

Arms

Arms

Arm	Name	Description	Arm Type
A	Chapel Road (East)		Major
B	Gandon Lane (South)		Minor
C	Chapel Road (West)		Major
D	Kinsealy Lane (North)		Minor

Major Arm Geometry

Arm	Width of carriageway (m)	Has kerbed central reserve	Width of kerbed central reserve (m)	Has right turn bay	Width For Right Turn (m)	Visibility For Right Turn (m)	Blocks?	Blocking Queue (PCU)
A	6.00		0.00		2.20	220.00	✓	0.00
C	6.00		0.00		2.20	250.00	✓	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)	Lane Width (Left) (m)	Lane Width (Right) (m)	Width at give-way (m)	Width at 5m (m)	Width at 10m (m)	Width at 15m (m)	Width at 20m (m)	Estimate Flare Length	Flare Length (PCU)	Visibility To Left (m)	Visibility To Right (m)
B	One lane	3.00								✓		25	80
D	One lane plus flare				9.60	4.70	3.30	3.00	3.00	✓	1.00	20	20

Pedestrian Crossings

Arm	Crossing Type
A	None
B	None
C	None
D	None

Slope / Intercept / Capacity

Priority Intersection Slopes and Intercepts

Junction	Stream	Intercept (PCU/hr)	Slope for A-B	Slope for A-C	Slope for A-D	Slope for B-A	Slope for B-C	Slope for B-D	Slope for C-A	Slope for C-B	Slope for C-D	Slope for D-A	Slope for D-B	Slope for D-C
3	A-D	701.368	-	-	-	-	-	-	0.272	0.388	0.272	-	-	-
3	B-A	524.935	0.096	0.242	0.242	-	-	-	0.152	0.345	-	0.242	0.242	0.121
3	B-C	674.299	0.103	0.261	-	-	-	-	-	-	-	-	-	-
3	B-D, nearside lane	524.935	0.096	0.242	0.242	-	-	-	0.152	0.345	0.152	-	-	-
3	B-D, offside lane	524.935	0.096	0.242	0.242	-	-	-	0.152	0.345	0.152	-	-	-
3	C-B	718.741	0.278	0.278	0.398	-	-	-	-	-	-	-	-	-
3	D-A	676.335	-	-	-	-	-	-	0.262	-	0.104	-	-	-
3	D-B, nearside lane	524.812	0.152	0.152	0.345	-	-	-	0.242	0.242	0.096	-	-	-

3	D-B, offside lane	519.901	0.151	0.151	0.342	-	-	-	0.239	0.239	0.095	-	-	-
3	D-C	519.901	-	0.151	0.342	0.120	0.239	0.239	0.239	0.239	0.095	-	-	-

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 Flows

Demand Set Data Options

Default Vehicle Mix	Vehicle Mix Varies Over Time	Vehicle Mix Varies Over Turn	Vehicle Mix Varies Over Entry	Vehicle Mix Source	PCU Factor for a HV (PCU)	Default Turning Proportions	Estimate from entry/exit counts	Turning Proportions Vary Over Time	Turning Proportions Vary Over Turn	Turning Proportions Vary Over Entry
		✓	✓	HV Percentages	2.00				✓	✓

Entry Flows

General Flows Data

Arm	Profile Type	Use Turning Counts	Average Demand Flow (PCU/hr)	Flow Scaling Factor (%)
A	ONE HOUR	✓	404.00	100.000
B	ONE HOUR	✓	46.00	100.000
C	ONE HOUR	✓	551.00	100.000
D	ONE HOUR	✓	144.00	100.000

Turning Proportions

Turning Counts or Proportions (PCU/hr) - Junction 3 (for whole period)

		To			
		A	B	C	D
From	A	0.000	4.000	364.000	36.000
	B	9.000	0.000	28.000	9.000
	C	447.000	16.000	0.000	88.000
	D	73.000	3.000	68.000	0.000

Turning Proportions (PCU) - Junction 3 (for whole period)

		To			
		A	B	C	D
From	A	0.00	0.01	0.90	0.09
	B	0.20	0.00	0.61	0.20
	C	0.81	0.03	0.00	0.16
	D	0.51	0.02	0.47	0.00

Vehicle Mix

Average PCU Per Vehicle - Junction 3 (for whole period)

		To			
		A	B	C	D

From	A	1.000	1.000	1.000	1.000
	B	1.000	1.000	1.000	1.000
	C	1.000	1.000	1.000	1.000
	D	1.000	1.000	1.000	1.000

Heavy Vehicle Percentages - Junction 3 (for whole period)

		To			
		A	B	C	D
From	A	0.000	0.000	0.000	0.000
	B	0.000	0.000	0.000	0.000
	C	0.000	0.000	0.000	0.000
	D	0.000	0.000	0.000	0.000

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
B-ACD	0.12	9.43	0.13	A
A-BCD	0.10	4.94	0.19	A
A-B	-	-	-	-
A-C	-	-	-	-
D-AB	0.17	8.92	0.20	A
D-BC	0.25	15.94	0.33	C
C-ABD	0.04	4.18	0.06	A
C-D	-	-	-	-
C-A	-	-	-	-

Default - 2042 With Development, PM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

Name	Description	Locked	Network Flow Scaling Factor (%)	Reason For Scaling Factors
Default			100.000	

Demand Set Details

Name	Scenario Name	Time Period Name	Description	Traffic Profile Type	Model Start Time (HH:mm)	Model Finish Time (HH:mm)	Model Time Period Length (min)	Time Segment Length (min)	Single Time Segment Only	Locked
2042 With Development, PM	2042 With Development	PM		ONE HOUR	16:00	17:30	90	15		

Junction Network

Junctions

Name	Junction Type	Major Road Direction	Arm Order	Junction Delay (s)	Junction LOS
	Crossroads	Two-way	A,B,C,D	8.63	A

Junction Network Options

Driving Side	Lighting	Network Residual Capacity (%)	First Arm Reaching Threshold
Left	Normal/unknown	60	Stream D-AB

Arms

Arms

Arm	Name	Description	Arm Type
A	Chapel Road (East)		Major
B	Gandon Lane (South)		Minor
C	Chapel Road (West)		Major
D	Kinsealy Lane (North)		Minor

Major Arm Geometry

Arm	Width of carriageway (m)	Has kerbed central reserve	Width of kerbed central reserve (m)	Has right turn bay	Width For Right Turn (m)	Visibility For Right Turn (m)	Blocks?	Blocking Queue (PCU)
A	6.00		0.00		2.20	220.00	✓	0.00
C	6.00		0.00		2.20	250.00	✓	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)	Lane Width (Left) (m)	Lane Width (Right) (m)	Width at give-way (m)	Width at 5m (m)	Width at 10m (m)	Width at 15m (m)	Width at 20m (m)	Estimate Flare Length	Flare Length (PCU)	Visibility To Left (m)	Visibility To Right (m)
B	One lane	3.00								✓		25	80
D	One lane plus flare				9.60	4.70	3.30	3.00	3.00	✓	1.00	20	20

Pedestrian Crossings

Arm	Crossing Type
A	None
B	None
C	None
D	None

Slope / Intercept / Capacity

Priority Intersection Slopes and Intercepts

Junction	Stream	Intercept (PCU/hr)	Slope for A-B	Slope for A-C	Slope for A-D	Slope for B-A	Slope for B-C	Slope for B-D	Slope for C-A	Slope for C-B	Slope for C-D	Slope for D-A	Slope for D-B	Slope for D-C
3	A-D	701.368	-	-	-	-	-	-	0.272	0.388	0.272	-	-	-
3	B-A	524.935	0.096	0.242	0.242	-	-	-	0.152	0.345	-	0.242	0.242	0.121
3	B-C	674.299	0.103	0.261	-	-	-	-	-	-	-	-	-	-
3	B-D, nearside lane	524.935	0.096	0.242	0.242	-	-	-	0.152	0.345	0.152	-	-	-

3	B-D, offside lane	524.935	0.096	0.242	0.242	-	-	-	0.152	0.345	0.152	-	-	-
3	C-B	718.741	0.278	0.278	0.398	-	-	-	-	-	-	-	-	-
3	D-A	655.452	-	-	-	-	-	-	0.254	-	0.100	-	-	-
3	D-B, nearside lane	508.608	0.147	0.147	0.335	-	-	-	0.234	0.234	0.093	-	-	-
3	D-B, offside lane	536.105	0.155	0.155	0.353	-	-	-	0.247	0.247	0.098	-	-	-
3	D-C	536.105	-	0.155	0.353	0.123	0.247	0.247	0.247	0.247	0.098	-	-	-

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 Flows

Demand Set Data Options

Default Vehicle Mix	Vehicle Mix Varies Over Time	Vehicle Mix Varies Over Turn	Vehicle Mix Varies Over Entry	Vehicle Mix Source	PCU Factor for a HV (PCU)	Default Turning Proportions	Estimate from entry/exit counts	Turning Proportions Vary Over Time	Turning Proportions Vary Over Turn	Turning Proportions Vary Over Entry
		✓	✓	HV Percentages	2.00				✓	✓

Entry Flows

General Flows Data

Arm	Profile Type	Use Turning Counts	Average Demand Flow (PCU/hr)	Flow Scaling Factor (%)
A	ONE HOUR	✓	452.00	100.000
B	ONE HOUR	✓	26.00	100.000
C	ONE HOUR	✓	554.00	100.000
D	ONE HOUR	✓	132.00	100.000

Turning Proportions

Turning Counts or Proportions (PCU/hr) - Junction 3 (for whole period)

		To			
		A	**B**	**C**	**D**
From	**A**	0.000	7.000	385.000	60.000
	B	8.000	0.000	16.000	2.000
	C	426.000	28.000	0.000	100.000
	D	52.000	4.000	76.000	0.000

Turning Proportions (PCU) - Junction 3 (for whole period)

		To			
		A	**B**	**C**	**D**
From	**A**	0.00	0.02	0.85	0.13
	B	0.31	0.00	0.62	0.08
	C	0.77	0.05	0.00	0.18
	D	0.39	0.03	0.58	0.00

Vehicle Mix

Average PCU Per Vehicle - Junction 3 (for whole period)

		To			
		A	B	C	D
From	A	1.000	1.000	1.000	1.000
	B	1.000	1.000	1.000	1.000
	C	1.000	1.000	1.000	1.000
	D	1.000	1.000	1.000	1.000

Heavy Vehicle Percentages - Junction 3 (for whole period)

		To			
		A	B	C	D
From	A	0.000	0.000	0.000	0.000
	B	0.000	0.000	0.000	0.000
	C	0.000	0.000	0.000	0.000
	D	0.000	0.000	0.000	0.000

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
B-ACD	0.07	9.18	0.07	A
A-BCD	0.16	5.16	0.36	A
A-B	-	-	-	-
A-C	-	-	-	-
D-AB	0.13	8.98	0.15	A
D-BC	0.28	16.36	0.38	C
C-ABD	0.08	4.33	0.14	A
C-D	-	-	-	-
C-A	-	-	-	-

Junctions 8

PICADY 8 - Priority Intersection Module

Version: 8.0.3.332 [14595,13/11/2013]

For sales and distribution information, program advice and maintenance, contact TRL:
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Filename: C215 J5 PICADY Model 20240909.arc8
Path: J:\C_JOBS\Job-C215\C_CALCULATIONS\B_TRAFFIC\Traffic Modelling
Report generation date: 09/09/2024 22:13:24

Summary of junction performance

	AM					PM				
	Queue (PCU)	Delay (s)	RFC	LOS	Network Residual Capacity	Queue (PCU)	Delay (s)	RFC	LOS	Network Residual Capacity
Default - 2027 With Development										
Stream B-AC	0.07	11.27	0.06	B	135 % [Stream B-AC]	0.02	11.62	0.02	B	134 % [Stream B-AC]
Stream C-AB	0.00	6.50	0.00	A		0.01	6.18	0.01	A	
Stream C-A	-	-	-	-		-	-	-	-	
Stream A-B	-	-	-	-		-	-	-	-	
Stream A-C	-	-	-	-		-	-	-	-	
Default - 2032 With Development										
Stream B-AC	0.07	11.56	0.07	B	126 % [Stream B-AC]	0.02	11.96	0.02	B	125 % [Stream B-AC]
Stream C-AB	0.00	6.57	0.00	A		0.01	6.23	0.01	A	
Stream C-A	-	-	-	-		-	-	-	-	
Stream A-B	-	-	-	-		-	-	-	-	
Stream A-C	-	-	-	-		-	-	-	-	
Default - 2042 Combined Access										
Stream B-AC	0.54	15.82	0.35	C	60 % [Stream B-AC]	0.06	12.39	0.06	B	109 % [Stream B-AC]
Stream C-AB	0.09	6.87	0.08	A		0.02	6.26	0.02	A	
Stream C-A	-	-	-	-		-	-	-	-	
Stream A-B	-	-	-	-		-	-	-	-	
Stream A-C	-	-	-	-		-	-	-	-	
Default - 2042 With Development										
Stream B-AC	0.07	11.77	0.07	B	120 % [Stream B-AC]	0.02	12.21	0.02	B	119 % [Stream B-AC]
Stream C-AB	0.00	6.62	0.00	A		0.01	6.26	0.01	A	
Stream C-A	-	-	-	-		-	-	-	-	
Stream A-B	-	-	-	-		-	-	-	-	
Stream A-C	-	-	-	-		-	-	-	-	

Values shown are the maximum values over all time segments. Delay is the maximum value of average delay per arriving vehicle. Network Residual Capacity *indicates the amount by which network flow could be increased before a user-definable threshold (see Analysis Options) is met.*

"D1 - 2027 With Development, AM " model duration: 07:30 - 09:00
"D2 - 2027 With Development, PM" model duration: 16:00 - 17:30
"D3 - 2032 With Development, AM" model duration: 07:30 - 09:00
"D4 - 2032 With Development, PM" model duration: 16:00 - 17:30
"D5 - 2042 With Development, AM" model duration: 07:30 - 09:00
"D6 - 2042 With Development, PM" model duration: 16:00 - 17:30
"D7 - 2042 Combined Access, AM" model duration: 07:30 - 09:00
"D8 - 2042 Combined Access, PM" model duration: 16:00 - 17:30

Run using Junctions 8.0.3.332 at 09/09/2024 22:13:21

File summary

File Description

Title	Kinsealy
Location	Co. Dublin
Site Number	5
Date	09/09/2024
Version	
Status	
Identifier	
Client	
Jobnumber	C215
Enumerator	GF
Description	

Analysis Options

Vehicle Length (m)	Do Queue Variations	Calculate Residual Capacity	Residual Capacity Criteria Type	RFC Threshold	Average Delay Threshold (s)	Queue Threshold (PCU)
5.75		✓	RFC	0.90	36.00	20.00

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

Default - 2027 With Development, AM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

Name	Description	Locked	Network Flow Scaling Factor (%)	Reason For Scaling Factors
Default			100.000	

Demand Set Details

Name	Scenario Name	Time Period Name	Description	Traffic Profile Type	Model Start Time (HH:mm)	Model Finish Time (HH:mm)	Model Time Period Length (min)	Time Segment Length (min)	Single Time Segment Only	Locked
2027 With Development, AM	2027 With Development	AM		ONE HOUR	07:30	09:00	90	15		

Junction Network

Junctions

Name	Junction Type	Major Road Direction	Arm Order	Junction Delay (s)	Junction LOS
Southern Site Access	T-Junction	Two-way	A,B,C	11.04	B

Junction Network Options

Driving Side	Lighting	Network Residual Capacity (%)	First Arm Reaching Threshold
Left	Normal/unknown	135	Stream B-AC

Arms

Arms

Arm	Name	Description	Arm Type
A	Malahide Road (North)		Major
B	New Access Road (East)		Minor
C	Malahide Road (South)		Major

Major Arm Geometry

Arm	Width of carriageway (m)	Has kerbed central reserve	Width of kerbed central reserve (m)	Has right turn bay	Width For Right Turn (m)	Visibility For Right Turn (m)	Blocks?	Blocking Queue (PCU)
C	10.50		0.00		2.20	215.00	✓	1.00

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)	Lane Width (Left) (m)	Lane Width (Right) (m)	Width at give-way (m)	Width at 5m (m)	Width at 10m (m)	Width at 15m (m)	Width at 20m (m)	Estimate Flare Length	Flare Length (PCU)	Visibility To Left (m)	Visibility To Right (m)
B	One lane	3.00								✓		16	16

Pedestrian Crossings

Arm	Crossing Type
A	None
B	None
C	None

Slope / Intercept / Capacity

Priority Intersection Slopes and Intercepts

Junction	Stream	Intercept (PCU/hr)	Slope for A-B	Slope for A-C	Slope for C-A	Slope for C-B
5	B-A	490.688	0.072	0.182	0.114	0.260
5	B-C	634.009	0.078	0.198	-	-
5	C-B	698.472	0.218	0.218	-	-

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 Flows

Demand Set Data Options

Default Vehicle Mix	Vehicle Mix Varies Over Time	Vehicle Mix Varies Over Turn	Vehicle Mix Varies Over Entry	Vehicle Mix Source	PCU Factor for a HV (PCU)	Default Turning Proportions	Estimate from entry/exit counts	Turning Proportions Vary Over Time	Turning Proportions Vary Over Turn	Turning Proportions Vary Over Entry
		✓	✓	HV Percentages	2.00				✓	✓

Entry Flows

General Flows Data

Arm	Profile Type	Use Turning Counts	Average Demand Flow (PCU/hr)	Flow Scaling Factor (%)
A	ONE HOUR	✓	603.00	100.000
B	ONE HOUR	✓	20.00	100.000
C	ONE HOUR	✓	558.00	100.000

Turning Proportions

Turning Counts or Proportions (PCU/hr) - Junction 5 (for whole period)

		To		
		A	B	C
From	A	0.000	4.000	599.000
	B	14.000	0.000	6.000
	C	557.000	1.000	0.000

Turning Proportions (PCU) - Junction 5 (for whole period)

		To		
		A	B	C
From	A	0.00	0.01	0.99
	B	0.70	0.00	0.30
	C	1.00	0.00	0.00

Vehicle Mix

Average PCU Per Vehicle - Junction 5 (for whole period)

		To		
		A	B	C
From	A	1.000	1.000	1.000
	B	1.000	1.000	1.000
	C	1.000	1.000	1.000

Heavy Vehicle Percentages - Junction 5 (for whole period)

		To		
		A	B	C
From	A	0.000	0.000	0.000
	B	0.000	0.000	0.000
	C	0.000	0.000	0.000

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
B-AC	0.06	11.27	0.07	B
C-AB	0.00	6.50	0.00	A
C-A	-	-	-	-
A-B	-	-	-	-
A-C	-	-	-	-

Default - 2027 With Development, PM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

Name	Description	Locked	Network Flow Scaling Factor (%)	Reason For Scaling Factors
Default			100.000	

Demand Set Details

Name	Scenario Name	Time Period Name	Description	Traffic Profile Type	Model Start Time (HH:mm)	Model Finish Time (HH:mm)	Model Time Period Length (min)	Time Segment Length (min)	Single Time Segment Only	Locked
2027 With Development, PM	2027 With Development	PM		ONE HOUR	16:00	17:30	90	15		

Junction Network

Junctions

Name	Junction Type	Major Road Direction	Arm Order	Junction Delay (s)	Junction LOS
Southern Site Access	T-Junction	Two-way	A,B,C	8.89	A

Junction Network Options

Driving Side	Lighting	Network Residual Capacity (%)	First Arm Reaching Threshold
Left	Normal/unknown	134	Stream B-AC

Arms

Arms

Arm	Name	Description	Arm Type
A	Malahide Road (North)		Major
B	New Access Road (East)		Minor
C	Malahide Road (South)		Major

Major Arm Geometry

Arm	Width of carriageway (m)	Has kerbed central reserve	Width of kerbed central reserve (m)	Has right turn bay	Width For Right Turn (m)	Visibility For Right Turn (m)	Blocks?	Blocking Queue (PCU)
C	10.50		0.00		2.20	215.00	✓	1.00

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)	Lane Width (Left) (m)	Lane Width (Right) (m)	Width at give-way (m)	Width at 5m (m)	Width at 10m (m)	Width at 15m (m)	Width at 20m (m)	Estimate Flare Length	Flare Length (PCU)	Visibility To Left (m)	Visibility To Right (m)
B	One lane	3.00								✓		16	16

Pedestrian Crossings

Arm	Crossing Type
A	None
B	None
C	None

Slope / Intercept / Capacity

Priority Intersection Slopes and Intercepts

Junction	Stream	Intercept (PCU/hr)	Slope for A-B	Slope for A-C	Slope for C-A	Slope for C-B
5	B-A	490.688	0.072	0.182	0.114	0.260
5	B-C	634.009	0.078	0.198	-	-
5	C-B	698.472	0.218	0.218	-	-

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 Flows

Demand Set Data Options

Default Vehicle Mix	Vehicle Mix Varies Over Time	Vehicle Mix Varies Over Turn	Vehicle Mix Varies Over Entry	Vehicle Mix Source	PCU Factor for a HV (PCU)	Default Turning Proportions	Estimate from entry/exit counts	Turning Proportions Vary Over Time	Turning Proportions Vary Over Turn	Turning Proportions Vary Over Entry
		✓	✓	HV Percentages	2.00				✓	✓

Entry Flows

General Flows Data

Arm	Profile Type	Use Turning Counts	Average Demand Flow (PCU/hr)	Flow Scaling Factor (%)
A	ONE HOUR	✓	486.00	100.000
B	ONE HOUR	✓	5.00	100.000
C	ONE HOUR	✓	855.00	100.000

Turning Proportions

Turning Counts or Proportions (PCU/hr) - Junction 5 (for whole period)

		To		
		A	B	C
From	A	0.000	10.000	476.000
	B	4.000	0.000	1.000
	C	850.000	5.000	0.000

Turning Proportions (PCU) - Junction 5 (for whole period)

		To		
		A	B	C
From	A	0.00	0.02	0.98
	B	0.80	0.00	0.20
	C	0.99	0.01	0.00

Vehicle Mix

Average PCU Per Vehicle - Junction 5 (for whole period)

		To		
		A	B	C
From	A	1.000	1.000	1.000
	B	1.000	1.000	1.000
	C	1.000	1.000	1.000

Heavy Vehicle Percentages - Junction 5 (for whole period)

		To		
		A	B	C
From	A	0.000	0.000	0.000
	B	0.000	0.000	0.000
	C	0.000	0.000	0.000

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
B-AC	0.02	11.62	0.02	B
C-AB	0.01	6.18	0.01	A
C-A	-	-	-	-
A-B	-	-	-	-
A-C	-	-	-	-

Default - 2032 With Development, AM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

Name	Description	Locked	Network Flow Scaling Factor (%)	Reason For Scaling Factors
Default			100.000	

Demand Set Details

Name	Scenario Name	Time Period Name	Description	Traffic Profile Type	Model Start Time (HH:mm)	Model Finish Time (HH:mm)	Model Time Period Length (min)	Time Segment Length (min)	Single Time Segment Only	Locked
2032 With Development, AM	2032 With Development	AM		ONE HOUR	07:30	09:00	90	15		

Junction Network

Junctions

Name	Junction Type	Major Road Direction	Arm Order	Junction Delay (s)	Junction LOS

Southern Site Access	T-Junction	Two-way	A,B,C	11.32	B

Junction Network Options

Driving Side	Lighting	Network Residual Capacity (%)	First Arm Reaching Threshold
Left	Normal/unknown	126	Stream B-AC

Arms

Arms

Arm	Name	Description	Arm Type
A	Malahide Road (North)		Major
B	New Access Road (East)		Minor
C	Malahide Road (South)		Major

Major Arm Geometry

Arm	Width of carriageway (m)	Has kerbed central reserve	Width of kerbed central reserve (m)	Has right turn bay	Width For Right Turn (m)	Visibility For Right Turn (m)	Blocks?	Blocking Queue (PCU)
C	10.50		0.00		2.20	215.00	✓	1.00

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)	Lane Width (Left) (m)	Lane Width (Right) (m)	Width at give-way (m)	Width at 5m (m)	Width at 10m (m)	Width at 15m (m)	Width at 20m (m)	Estimate Flare Length	Flare Length (PCU)	Visibility To Left (m)	Visibility To Right (m)
B	One lane	3.00								✓		16	16

Pedestrian Crossings

Arm	Crossing Type
A	None
B	None
C	None

Slope / Intercept / Capacity

Priority Intersection Slopes and Intercepts

Junction	Stream	Intercept (PCU/hr)	Slope for A-B	Slope for A-C	Slope for C-A	Slope for C-B
5	B-A	490.688	0.072	0.182	0.114	0.260
5	B-C	634.009	0.078	0.198	-	-
5	C-B	698.472	0.218	0.218	-	-

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 Flows

Demand Set Data Options

Default Vehicle Mix	Vehicle Mix Varies Over Time	Vehicle Mix Varies Over Turn	Vehicle Mix Varies Over Entry	Vehicle Mix Source	PCU Factor for a HV (PCU)	Default Turning Proportions	Estimate from entry/exit counts	Turning Proportions Vary Over Time	Turning Proportions Vary Over Turn	Turning Proportions Vary Over Entry
		✓	✓	HV Percentages	2.00				✓	✓

Entry Flows

General Flows Data

Arm	Profile Type	Use Turning Counts	Average Demand Flow (PCU/hr)	Flow Scaling Factor (%)
A	ONE HOUR	✓	628.00	100.000
B	ONE HOUR	✓	20.00	100.000
C	ONE HOUR	✓	582.00	100.000

Turning Proportions

Turning Counts or Proportions (PCU/hr) - Junction 5 (for whole period)

		To		
		A	B	C
From	A	0.000	4.000	624.000
	B	14.000	0.000	6.000
	C	581.000	1.000	0.000

Turning Proportions (PCU) - Junction 5 (for whole period)

		To		
		A	B	C
From	A	0.00	0.01	0.99
	B	0.70	0.00	0.30
	C	1.00	0.00	0.00

Vehicle Mix

Average PCU Per Vehicle - Junction 5 (for whole period)

		To		
		A	B	C
From	A	1.000	1.000	1.000
	B	1.000	1.000	1.000
	C	1.000	1.000	1.000

Heavy Vehicle Percentages - Junction 5 (for whole period)

		To		
		A	B	C
From	A	0.000	0.000	0.000
	B	0.000	0.000	0.000
	C	0.000	0.000	0.000

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
B-AC	0.07	11.56	0.07	B
C-AB	0.00	6.57	0.00	A
C-A	-	-	-	-
A-B	-	-	-	-
A-C	-	-	-	-

Default - 2032 With Development, PM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

Name	Description	Locked	Network Flow Scaling Factor (%)	Reason For Scaling Factors
Default			100.000	

Demand Set Details

Name	Scenario Name	Time Period Name	Description	Traffic Profile Type	Model Start Time (HH:mm)	Model Finish Time (HH:mm)	Model Time Period Length (min)	Time Segment Length (min)	Single Time Segment Only	Locked
2032 With Development, PM	2032 With Development	PM		ONE HOUR	16:00	17:30	90	15		

Junction Network

Junctions

Name	Junction Type	Major Road Direction	Arm Order	Junction Delay (s)	Junction LOS
Southern Site Access	T-Junction	Two-way	A,B,C	9.08	A

Junction Network Options

Driving Side	Lighting	Network Residual Capacity (%)	First Arm Reaching Threshold
Left	Normal/unknown	125	Stream B-AC

Arms

Arms

Arm	Name	Description	Arm Type
A	Malahide Road (North)		Major
B	New Access Road (East)		Minor
C	Malahide Road (South)		Major

Major Arm Geometry

Arm	Width of carriageway (m)	Has kerbed central reserve	Width of kerbed central reserve (m)	Has right turn bay	Width For Right Turn (m)	Visibility For Right Turn (m)	Blocks?	Blocking Queue (PCU)
C	10.50		0.00		2.20	215.00	✓	1.00

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)	Lane Width (Left) (m)	Lane Width (Right) (m)	Width at give-way (m)	Width at 5m (m)	Width at 10m (m)	Width at 15m (m)	Width at 20m (m)	Estimate Flare Length	Flare Length (PCU)	Visibility To Left (m)	Visibility To Right (m)
B	One lane	3.00								✓		16	16

Pedestrian Crossings

Arm	Crossing Type
A	None
B	None
C	None

Slope / Intercept / Capacity

Priority Intersection Slopes and Intercepts

Junction	Stream	Intercept (PCU/hr)	Slope for A-B	Slope for A-C	Slope for C-A	Slope for C-B
5	B-A	490.688	0.072	0.182	0.114	0.260
5	B-C	634.009	0.078	0.198	-	-
5	C-B	698.472	0.218	0.218	-	-

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 Flows

Demand Set Data Options

Default Vehicle Mix	Vehicle Mix Varies Over Time	Vehicle Mix Varies Over Turn	Vehicle Mix Varies Over Entry	Vehicle Mix Source	PCU Factor for a HV (PCU)	Default Turning Proportions	Estimate from entry/exit counts	Turning Proportions Vary Over Time	Turning Proportions Vary Over Turn	Turning Proportions Vary Over Entry
		✓	✓	HV Percentages	2.00				✓	✓

Entry Flows

General Flows Data

Arm	Profile Type	Use Turning Counts	Average Demand Flow (PCU/hr)	Flow Scaling Factor (%)
A	ONE HOUR	✓	507.00	100.000
B	ONE HOUR	✓	5.00	100.000
C	ONE HOUR	✓	891.00	100.000

Turning Proportions

Turning Counts or Proportions (PCU/hr) - Junction 5 (for whole period)

		To		
		A	B	C
From	A	0.000	10.000	497.000
	B	4.000	0.000	1.000
	C	886.000	5.000	0.000

Turning Proportions (PCU) - Junction 5 (for whole period)

		To		
		A	B	C
From	A	0.00	0.02	0.98
	B	0.80	0.00	0.20
	C	0.99	0.01	0.00

Vehicle Mix

Average PCU Per Vehicle - Junction 5 (for whole period)

		To		
		A	B	C
From	A	1.000	1.000	1.000
	B	1.000	1.000	1.000
	C	1.000	1.000	1.000

Heavy Vehicle Percentages - Junction 5 (for whole period)

		To		
		A	B	C
From	A	0.000	0.000	0.000
	B	0.000	0.000	0.000
	C	0.000	0.000	0.000

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
B-AC	0.02	11.96	0.02	B
C-AB	0.01	6.23	0.01	A
C-A	-	-	-	-
A-B	-	-	-	-
A-C	-	-	-	-

Default - 2042 With Development, AM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

Name	Description	Locked	Network Flow Scaling Factor (%)	Reason For Scaling Factors
Default			100.000	

Demand Set Details

Name	Scenario Name	Time Period Name	Description	Traffic Profile Type	Model Start Time (HH:mm)	Model Finish Time (HH:mm)	Model Time Period Length (min)	Time Segment Length (min)	Single Time Segment Only	Locked
2042 With Development, AM	2042 With Development	AM		ONE HOUR	07:30	09:00	90	15		

Junction Network

Junctions

Name	Junction Type	Major Road Direction	Arm Order	Junction Delay (s)	Junction LOS

Southern Site Access	T-Junction	Two-way	A,B,C	11.53	B

Junction Network Options

Driving Side	Lighting	Network Residual Capacity (%)	First Arm Reaching Threshold
Left	Normal/unknown	120	Stream B-AC

Arms

Arms

Arm	Name	Description	Arm Type
A	Malahide Road (North)		Major
B	New Access Road (East)		Minor
C	Malahide Road (South)		Major

Major Arm Geometry

Arm	Width of carriageway (m)	Has kerbed central reserve	Width of kerbed central reserve (m)	Has right turn bay	Width For Right Turn (m)	Visibility For Right Turn (m)	Blocks?	Blocking Queue (PCU)
C	10.50		0.00		2.20	215.00	✓	1.00

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)	Lane Width (Left) (m)	Lane Width (Right) (m)	Width at give-way (m)	Width at 5m (m)	Width at 10m (m)	Width at 15m (m)	Width at 20m (m)	Estimate Flare Length	Flare Length (PCU)	Visibility To Left (m)	Visibility To Right (m)
B	One lane	3.00								✓		16	16

Pedestrian Crossings

Arm	Crossing Type
A	None
B	None
C	None

Slope / Intercept / Capacity

Priority Intersection Slopes and Intercepts

Junction	Stream	Intercept (PCU/hr)	Slope for A-B	Slope for A-C	Slope for C-A	Slope for C-B
5	B-A	490.688	0.072	0.182	0.114	0.260
5	B-C	634.009	0.078	0.198	-	-
5	C-B	698.472	0.218	0.218	-	-

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 Flows

Demand Set Data Options

Default Vehicle Mix	Vehicle Mix Varies Over Time	Vehicle Mix Varies Over Turn	Vehicle Mix Varies Over Entry	Vehicle Mix Source	PCU Factor for a HV (PCU)	Default Turning Proportions	Estimate from entry/exit counts	Turning Proportions Vary Over Time	Turning Proportions Vary Over Turn	Turning Proportions Vary Over Entry
		✓	✓	HV Percentages	2.00				✓	✓

Entry Flows

General Flows Data

Arm	Profile Type	Use Turning Counts	Average Demand Flow (PCU/hr)	Flow Scaling Factor (%)
A	ONE HOUR	✓	646.00	100.000
B	ONE HOUR	✓	20.00	100.000
C	ONE HOUR	✓	599.00	100.000

Turning Proportions

Turning Counts or Proportions (PCU/hr) - Junction 5 (for whole period)

		To		
		A	B	C
From	A	0.000	4.000	642.000
	B	14.000	0.000	6.000
	C	598.000	1.000	0.000

Turning Proportions (PCU) - Junction 5 (for whole period)

		To		
		A	B	C
From	A	0.00	0.01	0.99
	B	0.70	0.00	0.30
	C	1.00	0.00	0.00

Vehicle Mix

Average PCU Per Vehicle - Junction 5 (for whole period)

		To		
		A	B	C
From	A	1.000	1.000	1.000
	B	1.000	1.000	1.000
	C	1.000	1.000	1.000

Heavy Vehicle Percentages - Junction 5 (for whole period)

		To		
		A	B	C
From	A	0.000	0.000	0.000
	B	0.000	0.000	0.000
	C	0.000	0.000	0.000

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
B-AC	0.07	11.77	0.07	B
C-AB	0.00	6.62	0.00	A
C-A	-	-	-	-
A-B	-	-	-	-
A-C	-	-	-	-

Default - 2042 With Development, PM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

Name	Description	Locked	Network Flow Scaling Factor (%)	Reason For Scaling Factors
Default			100.000	

Demand Set Details

Name	Scenario Name	Time Period Name	Description	Traffic Profile Type	Model Start Time (HH:mm)	Model Finish Time (HH:mm)	Model Time Period Length (min)	Time Segment Length (min)	Single Time Segment Only	Locked
2042 With Development, PM	2042 With Development	PM		ONE HOUR	16:00	17:30	90	15		

Junction Network

Junctions

Name	Junction Type	Major Road Direction	Arm Order	Junction Delay (s)	Junction LOS
Southern Site Access	T-Junction	Two-way	A,B,C	9.22	A

Junction Network Options

Driving Side	Lighting	Network Residual Capacity (%)	First Arm Reaching Threshold
Left	Normal/unknown	119	Stream B-AC

Arms

Arms

Arm	Name	Description	Arm Type
A	Malahide Road (North)		Major
B	New Access Road (East)		Minor
C	Malahide Road (South)		Major

Major Arm Geometry

Arm	Width of carriageway (m)	Has kerbed central reserve	Width of kerbed central reserve (m)	Has right turn bay	Width For Right Turn (m)	Visibility For Right Turn (m)	Blocks?	Blocking Queue (PCU)
C	10.50		0.00		2.20	215.00	✓	1.00

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)	Lane Width (Left) (m)	Lane Width (Right) (m)	Width at give-way (m)	Width at 5m (m)	Width at 10m (m)	Width at 15m (m)	Width at 20m (m)	Estimate Flare Length	Flare Length (PCU)	Visibility To Left (m)	Visibility To Right (m)
B	One lane	3.00								✓		16	16

Pedestrian Crossings

Arm	Crossing Type
A	None
B	None
C	None

Slope / Intercept / Capacity

Priority Intersection Slopes and Intercepts

Junction	Stream	Intercept (PCU/hr)	Slope for A-B	Slope for A-C	Slope for C-A	Slope for C-B
5	B-A	490.688	0.072	0.182	0.114	0.260
5	B-C	634.009	0.078	0.198	-	-
5	C-B	698.472	0.218	0.218	-	-

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 Flows

Demand Set Data Options

Default Vehicle Mix	Vehicle Mix Varies Over Time	Vehicle Mix Varies Over Turn	Vehicle Mix Varies Over Entry	Vehicle Mix Source	PCU Factor for a HV (PCU)	Default Turning Proportions	Estimate from entry/exit counts	Turning Proportions Vary Over Time	Turning Proportions Vary Over Turn	Turning Proportions Vary Over Entry
		✓	✓	HV Percentages	2.00				✓	✓

Entry Flows

General Flows Data

Arm	Profile Type	Use Turning Counts	Average Demand Flow (PCU/hr)	Flow Scaling Factor (%)
A	ONE HOUR	✓	521.00	100.000
B	ONE HOUR	✓	5.00	100.000
C	ONE HOUR	✓	916.00	100.000

Turning Proportions

Turning Counts or Proportions (PCU/hr) - Junction 5 (for whole period)

		To		
		A	B	C
From	A	0.000	10.000	511.000
	B	4.000	0.000	1.000
	C	911.000	5.000	0.000

Turning Proportions (PCU) - Junction 5 (for whole period)

		To		
		A	B	C
From	A	0.00	0.02	0.98
	B	0.80	0.00	0.20
	C	0.99	0.01	0.00

Vehicle Mix

Average PCU Per Vehicle - Junction 5 (for whole period)

		To		
		A	B	C
From	A	1.000	1.000	1.000
	B	1.000	1.000	1.000
	C	1.000	1.000	1.000

Heavy Vehicle Percentages - Junction 5 (for whole period)

		To		
		A	B	C
From	A	0.000	0.000	0.000
	B	0.000	0.000	0.000
	C	0.000	0.000	0.000

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
B-AC	0.02	12.21	0.02	B
C-AB	0.01	6.26	0.01	A
C-A	-	-	-	-
A-B	-	-	-	-
A-C	-	-	-	-

Default - 2042 Combined Access, AM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

Name	Description	Locked	Network Flow Scaling Factor (%)	Reason For Scaling Factors
Default			100.000	

Demand Set Details

Name	Scenario Name	Time Period Name	Description	Traffic Profile Type	Model Start Time (HH:mm)	Model Finish Time (HH:mm)	Model Time Period Length (min)	Time Segment Length (min)	Single Time Segment Only	Locked
2042 Combined Access, AM	2042 Combined Access	AM		ONE HOUR	07:30	09:00	90	15		

Junction Network

Junctions

Name	Junction Type	Major Road Direction	Arm Order	Junction Delay (s)	Junction LOS

Southern Site Access	T-Junction	Two-way	A,B,C	13.55	B

Junction Network Options

Driving Side	Lighting	Network Residual Capacity (%)	First Arm Reaching Threshold
Left	Normal/unknown	60	Stream B-AC

Arms

Arms

Arm	Name	Description	Arm Type
A	Malahide Road (North)		Major
B	New Access Road (East)		Minor
C	Malahide Road (South)		Major

Major Arm Geometry

Arm	Width of carriageway (m)	Has kerbed central reserve	Width of kerbed central reserve (m)	Has right turn bay	Width For Right Turn (m)	Visibility For Right Turn (m)	Blocks?	Blocking Queue (PCU)
C	10.50		0.00		2.20	215.00	✓	1.00

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)	Lane Width (Left) (m)	Lane Width (Right) (m)	Width at give-way (m)	Width at 5m (m)	Width at 10m (m)	Width at 15m (m)	Width at 20m (m)	Estimate Flare Length	Flare Length (PCU)	Visibility To Left (m)	Visibility To Right (m)
B	One lane	3.00								✓		16	16

Pedestrian Crossings

Arm	Crossing Type
A	None
B	None
C	None

Slope / Intercept / Capacity

Priority Intersection Slopes and Intercepts

Junction	Stream	Intercept (PCU/hr)	Slope for A-B	Slope for A-C	Slope for C-A	Slope for C-B
5	B-A	490.688	0.072	0.182	0.114	0.260
5	B-C	634.009	0.078	0.198	-	-
5	C-B	698.472	0.218	0.218	-	-

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 Flows

Demand Set Data Options

Default Vehicle Mix	Vehicle Mix Varies Over Time	Vehicle Mix Varies Over Turn	Vehicle Mix Varies Over Entry	Vehicle Mix Source	PCU Factor for a HV (PCU)	Default Turning Proportions	Estimate from entry/exit counts	Turning Proportions Vary Over Time	Turning Proportions Vary Over Turn	Turning Proportions Vary Over Entry
		✓	✓	HV Percentages	2.00				✓	✓

Entry Flows

General Flows Data

Arm	Profile Type	Use Turning Counts	Average Demand Flow (PCU/hr)	Flow Scaling Factor (%)
A	ONE HOUR	✓	679.00	100.000
B	ONE HOUR	✓	112.00	100.000
C	ONE HOUR	✓	599.00	100.000

Turning Proportions

Turning Counts or Proportions (PCU/hr) - Junction 5 (for whole period)

		To		
		A	B	C
From	A	0.000	81.000	598.000
	B	62.000	0.000	50.000
	C	563.000	36.000	0.000

Turning Proportions (PCU) - Junction 5 (for whole period)

		To		
		A	B	C
From	A	0.00	0.12	0.88
	B	0.55	0.00	0.45
	C	0.94	0.06	0.00

Vehicle Mix

Average PCU Per Vehicle - Junction 5 (for whole period)

		To		
		A	B	C
From	A	1.000	1.000	1.000
	B	1.000	1.000	1.000
	C	1.000	1.000	1.000

Heavy Vehicle Percentages - Junction 5 (for whole period)

		To		
		A	B	C
From	A	0.000	0.000	0.000
	B	0.000	0.000	0.000
	C	0.000	0.000	0.000

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
B-AC	0.35	15.82	0.54	C
C-AB	0.08	6.87	0.09	A
C-A	-	-	-	-
A-B	-	-	-	-
A-C	-	-	-	-

Default - 2042 Combined Access, PM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

Name	Description	Locked	Network Flow Scaling Factor (%)	Reason For Scaling Factors
Default			100.000	

Demand Set Details

Name	Scenario Name	Time Period Name	Description	Traffic Profile Type	Model Start Time (HH:mm)	Model Finish Time (HH:mm)	Model Time Period Length (min)	Time Segment Length (min)	Single Time Segment Only	Locked
2042 Combined Access, PM	2042 Combined Access	PM		ONE HOUR	16:00	17:30	90	15		

Junction Network

Junctions

Name	Junction Type	Major Road Direction	Arm Order	Junction Delay (s)	Junction LOS
Southern Site Access	T-Junction	Two-way	A,B,C	10.00	A

Junction Network Options

Driving Side	Lighting	Network Residual Capacity (%)	First Arm Reaching Threshold
Left	Normal/unknown	109	Stream B-AC

Arms

Arms

Arm	Name	Description	Arm Type
A	Malahide Road (North)		Major
B	New Access Road (East)		Minor
C	Malahide Road (South)		Major

Major Arm Geometry

Arm	Width of carriageway (m)	Has kerbed central reserve	Width of kerbed central reserve (m)	Has right turn bay	Width For Right Turn (m)	Visibility For Right Turn (m)	Blocks?	Blocking Queue (PCU)
C	10.50		0.00		2.20	215.00	✓	1.00

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)	Lane Width (Left) (m)	Lane Width (Right) (m)	Width at give-way (m)	Width at 5m (m)	Width at 10m (m)	Width at 15m (m)	Width at 20m (m)	Estimate Flare Length	Flare Length (PCU)	Visibility To Left (m)	Visibility To Right (m)
B	One lane	3.00								✓		16	16

Pedestrian Crossings

Arm	Crossing Type
A	None
B	None
C	None

Slope / Intercept / Capacity

Priority Intersection Slopes and Intercepts

Junction	Stream	Intercept (PCU/hr)	Slope for A-B	Slope for A-C	Slope for C-A	Slope for C-B
5	B-A	490.688	0.072	0.182	0.114	0.260
5	B-C	634.009	0.078	0.198	-	-
5	C-B	698.472	0.218	0.218	-	-

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 Flows

Demand Set Data Options

Default Vehicle Mix	Vehicle Mix Varies Over Time	Vehicle Mix Varies Over Turn	Vehicle Mix Varies Over Entry	Vehicle Mix Source	PCU Factor for a HV (PCU)	Default Turning Proportions	Estimate from entry/exit counts	Turning Proportions Vary Over Time	Turning Proportions Vary Over Turn	Turning Proportions Vary Over Entry
		✓	✓	HV Percentages	2.00				✓	✓

Entry Flows

General Flows Data

Arm	Profile Type	Use Turning Counts	Average Demand Flow (PCU/hr)	Flow Scaling Factor (%)
A	ONE HOUR	✓	523.00	100.000
B	ONE HOUR	✓	16.00	100.000
C	ONE HOUR	✓	916.00	100.000

Turning Proportions

Turning Counts or Proportions (PCU/hr) - Junction 5 (for whole period)

		To		
		A	B	C
From	A	0.000	15.000	508.000
	B	12.000	0.000	4.000
	C	906.000	10.000	0.000

Turning Proportions (PCU) - Junction 5 (for whole period)

		To		
		A	B	C
From	A	0.00	0.03	0.97
	B	0.75	0.00	0.25
	C	0.99	0.01	0.00

Vehicle Mix

Average PCU Per Vehicle - Junction 5 (for whole period)

		To		
		A	B	C
From	A	1.000	1.000	1.000
	B	1.000	1.000	1.000
	C	1.000	1.000	1.000

Heavy Vehicle Percentages - Junction 5 (for whole period)

		To		
		A	B	C
From	A	0.000	0.000	0.000
	B	0.000	0.000	0.000
	C	0.000	0.000	0.000

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
B-AC	0.06	12.39	0.06	B
C-AB	0.02	6.26	0.02	A
C-A	-	-	-	-
A-B	-	-	-	-
A-C	-	-	-	-