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Member of the SNC-Lavalin Group

Kilternan Village SHD
Lands at Wayside, Kilternan Dublin 18
Traffic and Transport Assessment

Liscove Limited

Summer 2022

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Client signoff

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1. Introduction

1.1. Background / Proposed Scheme

This report details the Traffic and Transportation Assessment (TTA) associated with a planning application for the proposed mixed-use development at Lands at Kilternan, Dublin 18. The site is located within the Kilternan / Glenamuck Local Area Plan (LAP) area.

Liscove Limited intend to apply to An Bord Pleanála for permission for a strategic housing development at this c. 10.8 Ha site at lands at Wayside, Enniskerry Road and Glenamuck Road, Kilternan, Dublin 18, which include a derelict dwelling known as 'Rockville' and associated derelict outbuildings, Enniskerry Road, Kilternan, Dublin 18, D18 Y199. The site is generally bounded by the Glenamuck Road to the north; Kilternan Country Market and the Sancta Maria property to the north and west; a recently constructed residential development named "Rockville" to the north-east; the Enniskerry Road to the south-west; dwellings to the south; and lands that will facilitate the future Glenamuck Link Distributor Road to the east.

Road works are also proposed to facilitate access to the development from the Enniskerry Road; to the approved Part 8 Enniskerry Road/Glenamuck Road Junction Upgrade Scheme on Glenamuck Road (DLRCC Part 8 Ref PC/IC/01/17); and to the approved Glenamuck District Roads Scheme (GDRS) (ABP Ref:HA06D.303945) on the Glenamuck Link Distributor Road (GLDR). Drainage and water works are also proposed to connect to services on the Glenamuck Road and Enniskerry Road.

At the Glenamuck Road access point, this will include works, inclusive of any necessary tie-ins, to the footpath and cycle track to create a side road access junction incorporating the provision of an uncontrolled pedestrian crossing across the side road junction on a raised table and the changing of the cycle track to a cycle lane at road level as the cycle facility passes the side road junction. Surface water and foul drainage infrastructure is proposed towards the north of the site into the drainage infrastructure to be constructed as part of the Part 8 scheme. Potable water is to be provided from the existing piped infrastructure adjacent to the site along Glenamuck Road. These interfacing works are proposed on an area measuring c. 0.05 Ha.

At the GLDR access point, this will include works, inclusive of any necessary tie-ins, to the footpath and cycle track to create a side road access junction incorporating the provision of short section of shared path and an uncontrolled shared pedestrian and cyclist crossing across the side road junction on a raised table. The works will also include the provision of a toucan crossing, inclusive of the necessary traffic signal equipment, immediately south of the access point to facilitate pedestrian and cyclist movement across the mainline road. All works at the GLDR access point will include the provision of the necessary tactile paving layouts and are provided on an area measuring c. 0.06 Ha.

At the Enniskerry Road, works are proposed to facilitate 3 No. new accesses for the development along with modifications to Enniskerry Road. The 3 No. side road priority access junctions incorporate the provision of an uncontrolled pedestrian crossing across the side road junction on a raised table. The modifications to Enniskerry Road fronting the development (circa 320 metres) includes the narrowing of the carriageway down to 6.5 metres (i.e. a 3.25 metres running lane in each direction) from the front of the kerb on western side of Enniskerry Road. The remaining former carriageway, which varies in width of c. 2 metres, will be reallocated for other road users and will include the introduction of a widened pedestrian footpath and landscaped buffer on the eastern side of the road adjoining the proposed development. The above works are inclusive of all necessary tie-in works such as new kerb along eastern side of Enniskerry Road, drainage details, road marking, signage and public lighting. Potable water is to be provided from the existing piped infrastructure adjacent to the site along the Enniskerry Road. The interface works on Enniskerry Road measures c. 0.19 Ha.

Surface water and foul drainage infrastructure is proposed to connect into and through the existing Rockville development (DLR Reg. Refs. D17A/0793, D18A/0566 and D20A/0015) on a total area measuring c. 0.09 ha. The development site area and drainage and roads works areas will provide a total application site area of c. 11.2 Ha.

The development will principally consist of: the demolition of c. 573.2 sq m of existing structures on site comprising a derelict dwelling known as 'Rockville' and associated derelict outbuildings; and the provision of a mixed use development consisting of 383 No. residential units (165 No. houses, 118 No. duplex units and 100 No. apartments) and a Neighbourhood Centre, which will provide a creche (439 sq m), office (317 sq m), medical (147 sq m), retail (857 sq m), convenience retail (431 sq m) and a community facility (321 sq m). The 383 No. residential units will consist of 27 No. 1 bedroom units (19 No. apartments and 8 No. duplexes), 128 No. 2 bedroom units (78 No. apartments and 50 No. duplexes), 171 No. 3 bedroom units (108 No. houses, 3 No. apartments and 60 No. duplexes) and 57 No. 4 bedroom units (57 No. houses). The proposed development will

range in height from 2 No. to 5 No. storeys (including podium/undercroft level in Apartment Blocks C and D and in the Neighbourhood Centre).

The development also provides: pedestrian links from Enniskerry Road and within the site to the neighbouring "Rockville" development to the north-east and a pedestrian/cycle route through the Dingle Way from Enniskerry Road to the future Glenamuck Link Distributor Road; 678 No. car parking spaces (110 No. in the undercroft of Blocks C and D and the Neighbourhood Centre and 568 No. at surface level) including 16 No. mobility impaired spaces, 73 No. electric vehicle spaces, 1 No. car share space, 4 No. drop-off spaces/loading bays; motorcycle parking; bicycle parking; bin storage; the decommissioning of the existing telecommunications mast at ground level and provision of new telecommunications infrastructure at roof level of the Neighbourhood Centre including shrouds, antennas and microwave link dishes (18 No. antennas and 6 No. transmission dishes, all enclosed in 9 No. shrouds together with all associated equipment); private balconies, terraces and gardens; hard and soft landscaping; sedum roofs; solar panels; boundary treatments; lighting; substations; plant; and all other associated site works above and below ground. The proposed development has a gross floor space of c. 43,120 sq m in addition to undercroft levels (under Apartment Blocks C and D measuring c. 1,347 sq m and under the Neighbourhood Centre measuring c. 2,183 sq m, which includes parking spaces, external storage, bin storage, bike storage and plant).

As noted above the development lands for part of the Kilternan / Glenamuck Local Area Plan (LAP). To facilitate the development of the LAP lands DLRCC proposes the deliver the Glenamuck District Roads Scheme (GDRS)to improve the areas multi-modal transport infrastructure. The GDRS was developed in collaboration with the NTA, and a Traffic Modeling Report (2013) examined the capacity of the local transport network and identified the necessary infrastructure required to facilitate the sustainable development of the all the LAP lands, including the Liscove Lands. Therefore, it is important to note that the transport impact of this proposal has been considered and accounted for at the macro level.

The proposal is for a mixed-use development that includes residential, retail, commercial and community facilities. The mixed-use nature of the development and the design of the masterplan in accordance with Design Manual for Roads and Streets (DMURS) principles will help to encourage active travel and reduce the need to drive in accordance with the "15 Minute City Principles".

There are reasonably good public transport facilities available adjacent to the site, including a number of bus services with linkages to the Luas at Carrickmines (Ballyogan Wood Stop). Future public transport proposals including bus priority measures associated with the delivery of the GDRS and Bus Connects Network upgrade will provide journey time improvements to bus journey, further enhancing the attractiveness of this mode for future residents, visitors and users of the development.

In January 2021 the National Remote Work Strategy was published by the Department of Enterprise Trade and Employment which lays out the long-term strategy to promote home and remote working for public sector and private sector employees. The strategy mandates that 20% of the public sector workforce move to home and remote working in 2021. Furthermore, the strategy notes that more than 25% of the private sector workers in Ireland are capable of working remotely.

Therefore, in addition to the significant opportunities to travel to work by active travel and public transport modes, residents of the Kilternan Village SHD development may avail of the home and remote working opportunities, including flexible working opportunities, as promoted by the National Remote Work Strategy. This change in work practice will reduce overall work trips and optimise flexible working opportunities that will enable residents to avoid travel to work and to also facilitate residents to commute to their place of employment outside of the peak traffic and travel periods.

In overall terms, the Kilternan Village SHD development will be fully consistent with the National Planning Framework objective of compact growth in a location that will optimise the residents' opportunities to travel by active travel and public transport modes, fully consistent with the overall objectives of the NTA Greater Dublin Area Transport Strategy.

The development therefore presents as an exemplar of integrated land use and transportation planning that is fully consistent with the 'Avoid - Shift -Improve Model' as set out in the Dun Laoghaire Rathdown Development Plan which is based on avoiding or reducing the need to travel, shifting to more environmentally friendly modes and improving the efficiency of motorised transport modes.

In this context, and in the more general context of rapidly changing lifestyles and work patterns, it is anticipated that the impact of the proposed development on the existing road network will be modest and well within the carrying capacity of existing infrastructure.

1.2. Methodology

The methodology for the traffic and transport impact is consistent with the Traffic and Transport Assessments Guidelines. The methodology is summarised as follows:

- **Baseline Transportation Review:** Undertake a review of current planning policies and objectives, existing public transport services, walking and cycling network and existing and roads infrastructure.
- **Baseline Traffic Flow Review:** Undertake site visits to review current traffic conditions and to make observations on same. Identify key junctions where traffic count survey information is required.
- **Future Transport Infrastructure Review:** Undertake a review of current transport policies, plans and strategy to identify future short, medium and long terms transport proposals which may have a material impact on the travel behaviour associated with the proposed development.
- **Development Proposals Review:** Review the proposed development in terms of provision for access by walking, cycling, public transport and car.
- **Transport Characteristics Review:** Undertake an assessment of the likely modal share, trip generation, assignment and distribution having regard to existing and potential future traffic patterns on the local road network.
- **Identification of Local Road Network Proposals**: Identify proposed junction works on the local road network in terms of new junctions, improvements for pedestrians, cyclists and traffic at existing junctions.
- **Assessment of Road Impact- Operational Phase:** Undertake an assessment of the key junctions during the operational base year, opening year, opening year plus five and opening year plus fifteen assessment years for both 'without development' and 'with development' scenarios in order to determine future operation and any necessary mitigation measures required.

1.3. Consultation

A formal pre-application meeting took place with Dun Laoghaire Rathdown County Council on Thursday 29th July 2021 which was attended by the various members of DLRCC including Transport and Roads Department of DLRCC. During which the development including its transport implications was discussed. Additionally, a separate meeting took place on Friday the 18th of June with Adrian Thompson the Senior Transport and Roads Engineer with DLRCC to discuss access from the site onto the Glenamuck Distributor Link Road.

A formal Strategic Housing Development (SHD) meeting took place with An Bord Pleanála and a response to their opinion and that of Planning Authority contained within that opinion letter is set out in Appendix F of this report.

1.4. Reference Document

This TTA should be read with reference to all other submitted planning application documentation including the Mobility Management Plan, Infrastructure Design Report - Roads and Engineering Drawings, and the Architectural and Landscape Architectural Layout Plans.

The accompanying Mobility Management Plan (MMP) describes the travel demand measures for the development that will promote the use of alternative modes to the private car, such as walking, cycling and public transport.

1.5. References

During the preparation of this TTA the following planning and best practice guidance documents were referenced:

Planning Policy Documents

- National Sustainable Mobility Policy
- National Transport Authority: Transport Strategy for the Greater Dublin Area (2016-2035);
- Draft Transport Strategy for the Greater Dublin Area (2022 -20420);
- Dun Laoghaire Rathdown County Development Plan, 2022 – 2028;
- Kilternan Glenamuck Local Area Plan (LAP) 2013;
- National Cycle Policy Framework: 2009 – 2020;
- Greater Dublin Area Cycle Network Plan (2013);

Best Practise Guidance Documents

- Transport Infrastructure Ireland (TII) Traffic and Transport Assessment Guidelines 2014;
- Design Manual for Urban Roads and Streets (DMURS);
- National Transport Authority National Cycle Manual (NCM);
- National Transport Authority: Permeability Best Practise Guide;
- National Roads Authority (NRA) (now Transport Infrastructure Ireland (TII)) Design Manual for Roads and Bridges (DMRB);
- Guidance for Setting and Managing Speed Limits in Ireland (DTTAS, March 2015):
- Standards for Cycle Parking and associated Cycling Facilities for New Developments (DLRCC January 2018)
- Sustainable Urban Housing: Design Standards for New Apartments (DHPLG March 2018):

1.6. Report Structure

Section 2 of the report describes the relevant National, Regional and Local transport policy context;

Section 3 outlines the existing receiving environment in terms of its current transport infrastructure provision;

Section 4 provides details of future transport infrastructure in the area that may impact on travel patterns;

Section 5 provides details of the proposed development;

Section 6 sets out the parking requirements for the development visa vie car parking policy standards;

Section 7 outlines the trip generation and distribution methodology used for the development;

Section 8 details the traffic impact of the development on the surrounding road network; and

Section 9 provides a summary and conclusion

A detailed response to ABP Opinion and that of Planning Authority contained within that opinion letter is set out in Appendix F is set out in **Appendix F.**

2. Transport Policy Context

A summary of the key policy documents pertinent to the proposed development and which have underpinned the development proposals and the preparation of this TTA are summarised below.

2.1.1. National Sustainable Mobility Policy

The Department of Transport published the National Sustainable Mobility Policy in April 2022. The Policy sets out a strategic framework for active and sustainable travel for the period up to 2030 to help Ireland meet its international and national climate obligations to achieve a 51% reduction in carbon emissions by end of this decade.

The overall target is to "*deliver at least 500,000 additional daily active travel and public transport journeys by 2030 and a 10% reduction in the number of kilometres driven by fossil fuelled cars. It will make it easier for people to choose walking, cycling and use public transport daily instead of having to use a petrol or diesel car.*

To achieve this target there are a number of initiatives including:

- Integration of land use and planning
- Improvement to walking and cycle infrastructure
- Improved public transport capacity
- Identifying and implementation of suitable demand management measures
- Behavioural change programmes and measure
- Improved safe, accessible, comfortable, safe and affordable journey for all people and all trips

The policy document is supported by Action Plan 2022-2025 to measure performance of the aims, targets or objective identified in the Policy.

The proposed development incorporates the appropriate measures to enable the vision of both the Policy and Action Plan by ensuring the development is fully accessible for all modes, providing excellent connections to the existing and planned pedestrian, cycling and public transport links, both within the Kilternan Village SHD lands and on the external transport network.

2.1.2. Transport Strategy for the Greater Dublin Area 2016 -2035

The Transport Strategy for the Greater Dublin Area (GDA) 2016-2035 established the framework for transport provision for the city region. This Strategy, which is underpinned by the capital investment program set out in the National Development Plan 2018-2027, is based on the following over-riding objective:

"To contribute to the economic, social and cultural progress of the Greater Dublin Area by providing for the efficient, effective and sustainable movement of people and goods."

In particular, the Strategy aims to achieve a work commuting modal share target of 55% for sustainable travel modes, reducing the single occupancy private car modal share to a maximum 45%, as set out in Smarter Travel Policy. The Strategy presents infrastructure proposals by mode of transport. Albeit not a requirement for the subject site as demonstrated later in this document, those that may benefit the development in the future are as follows:

Transport Strategy Objective	Proposed Site Context
Greater Dublin Area Cycle Network Plan	Inter Urban Route W1/D1 located on the Enniskerry Road. The route will link Dublin- Kilternan- The Scalp _ Enniskerry – Djouce and is planned to be the main access route from Dublin to the Wicklow Mountains for recreational cycling.
Bus Connects	Network redesign will result in higher frequency of services operating on Enniskerry Road and Glenamuck Road with linkages onto other core bus routes.
LUAS	Upgrade to capacity and frequency of Luas green line will benefit future residents through access to the LUAS at Ballyogan Wood stop that can be reached by foot, cycle or on a bus route.

1.1.1. Dun Laoghaire Rathdown County Development Plan 2022-2028

The Dun Laoghaire Rathdown County Development Plan 2012-2028 was adopted and came into effect on the 21st of April 2022 replace the previous Development Plan ("The Plan") covering the period 2016-2022.

The Development Plan states that a holistic approach to transport is required with the aim to reduce dependency on the private car in favour of walking, cycling and public transport. The Plan notes that there has been a move away from the traditional approach of supplying ever more road space to meet increased transport demand and is facilitated by the adoption of the 'Avoid–Shift- Improve' approach. The 'Avoid-Shift-Improve' approach model is detailed below:

- Avoid – reduce or avoid the need to travel, i.e., Irish governments Remote Working Strategy
- Shift – shift to more environmentally friendly modes, i.e., walking, cycling, e-bikes, e-scooters
- Improve – improve energy efficiency of transport modes and vehicle technology, i.e., electrification of public transport vehicles

The overall transport policy approach is:

- To adopt the 'Avoid-Shift-Improve Approach' to transport
- To integrate land use and transport policies.
- To support the demand management approach which focuses on moving people from the private car to more sustainable modes.
- To improve permeability for the pedestrian and cyclist.
- To provide attractive high-quality inclusive and connected walking and cycling networks with direct routes to local destinations and public transport hubs.
- To adopt a balanced approach to road and street design in accordance with the four core principles of the 'Design Manual for Urban Roads and Streets' (2019) (DMURS) - connected networks, multifunctional streets, pedestrian focus and a multi-disciplinary approach resulting in a more place based/integrated street design

This Plan sets out the following relevant objectives which are supported and facilitated by the Kilternan Village SHD Lands as outlined in Table 2-1.

Table 2-1 - DLRCC County Development Plan Policy

Policy Reference	Policy Description	Development Approach
Policy Objective T1: Integration of Land Use and Transport Policies	It is a Policy Objective to actively support sustainable modes of transport and ensure that land use and zoning are aligned with the provision and development of high quality public transport systems. (Consistent with NSO 1, NPO 26 of the NPF, 64, RPO 4.40, 5.3, 8.1 and Guiding Principles on Integration of Land Use and Transport of the RSES)	The masterplan supports and provides opportunities for active and sustainable travel that links into current and future transport infrastructure opportunities.
Policy Objective T2: Local Transport Plans (Area Based Transport Assessments)	It is a Policy Objective to prepare Local Transport Plans (Area Based Transport Assessments (ABTAs)) in tandem with the preparation of Local Area Plans (LAPs) and also prepare ABTAs for key strategic land banks within adopted LAPs, if required, subject to the availability of funding and in accordance with the NTA and TII Guidance Note on Area Based Transport Assessments 2018 or any subsequent updates thereof (Consistent with RPO 8.6).	A Local Area Plan was prepared for the Kilternan – Glenamuck LAP area that covers the proposed site. The masterplan complies with the LAP.
T3: Delivery of Enabling Transport Infrastructure	It is a Policy Objective to support the delivery of enabling transport infrastructure so as to allow development take place in accordance with the Core Strategy of this Plan and the settlement strategy of the RSES. (Consistent with RPO 4.40, 10.2, 10.3, 10.11, 10.16 of the RSES)	The masterplan lands link into the Glenamuck District Roads Scheme (GDRS) and Glenamuck Road – Enniskerry Part 8 junction improvement Scheme
T5: Public Transport Improvements	It is a Policy Objective to expand attractive public transport alternatives to car transport as set out in 'Smarter Travel, A Sustainable Transport Future' and subsequent updates; the NTA's 'Transport Strategy for the Greater Dublin Area 2016-2035' and the NTAs 'Integrated Implementation Plan 2019-2024' and subsequent updates by optimising existing or proposed transport corridors, interchanges, developing new park and rides, taxi ranks and cycling network facilities at appropriate locations. (Consistent with NPO64 of the NPF, RPO 4.40, 5.2, 8.3 and 8.8 of the RSES)	The GDRS provides enhanced public transport opportunities including bus lanes, bus priority measures that will improve public transport in the area that will benefit the development.
T11 Walking & Cycling	It is a Policy Objective to secure the development of a high quality, fully connected and inclusive walking and cycling network across the County and the integration of walking, cycling and physical activity with placemaking including public realm permeability improvements. (Consistent with NPO 27 and 64 of the NPF and RPO 5.2 of the RSES)	The proposed development fully connects and integrates with the existing and planned transport network provide enhanced opportunities for active travel. The development proposes urban realm improvements to Enniskerry Road frontage.
T17 Travel Plans	It is a Policy Objective to require the submission of Travel Plans for developments that generate significant trip demand (reference also Appendix 3 for Development Management Thresholds). Travel Plans should seek to reduce reliance on car based travel and encourage more sustainable modes of transport over the lifetime of a development. (Consistent with RPO 8.7 of the RSES)	A Travel Plan has been developed for the masterplan and is submitted as part of the planning application.
T18 Car Sharing	It is a Policy Objective to support the set up and operation of car sharing schemes to facilitate an overall reduction in car journeys and car parking requirements.	The masterplan proposes to provide a car sharing space subject to agreement with a Car Share provider
T19 Car Parking	It is a Policy Objective to manage carparking as part of the overall strategic transport needs of the County in accordance with the parking standards set out in Section 12.4.5.	Car parking numbers according with DLRCC standards and car parking

Policy Reference	Policy Description	Development Approach
		within the masterplan lands will be managed.
T26 Traffic and Transport Assessments and Road Safety Audits	It is a Policy Objective to require Traffic and Transport Assessments and/or Road Safety Audits for major developments – in accordance with the TII's 'Traffic and Transport Assessment Guidelines' (2014) - to assess the traffic impacts on the surrounding road network and provide measures to mitigate any adverse impacts - all in accordance with best practice guidelines.	A TTA and Quality Audit including an RSA has been prepared for this planning submission.

2.1.3. Kiltiernan Glenamuck Local Area Plan (LAP) 2013;

The lands are zoned for residential and neighbourhood centre uses in the Kiltiernan – Glenamuck Local Area Plan 2013. The Kiltiernan – Glenamuck Local Area Plan was first adopted by Dun Laoghaire Rathdown Country Council on the 9th of July 2007 and subsequently the LAP was updated and extended in 2013 to 2023 following some amendments and updates. An extract from the LAP zoning map is shown in Figure 2-1 with the proposed site shown.

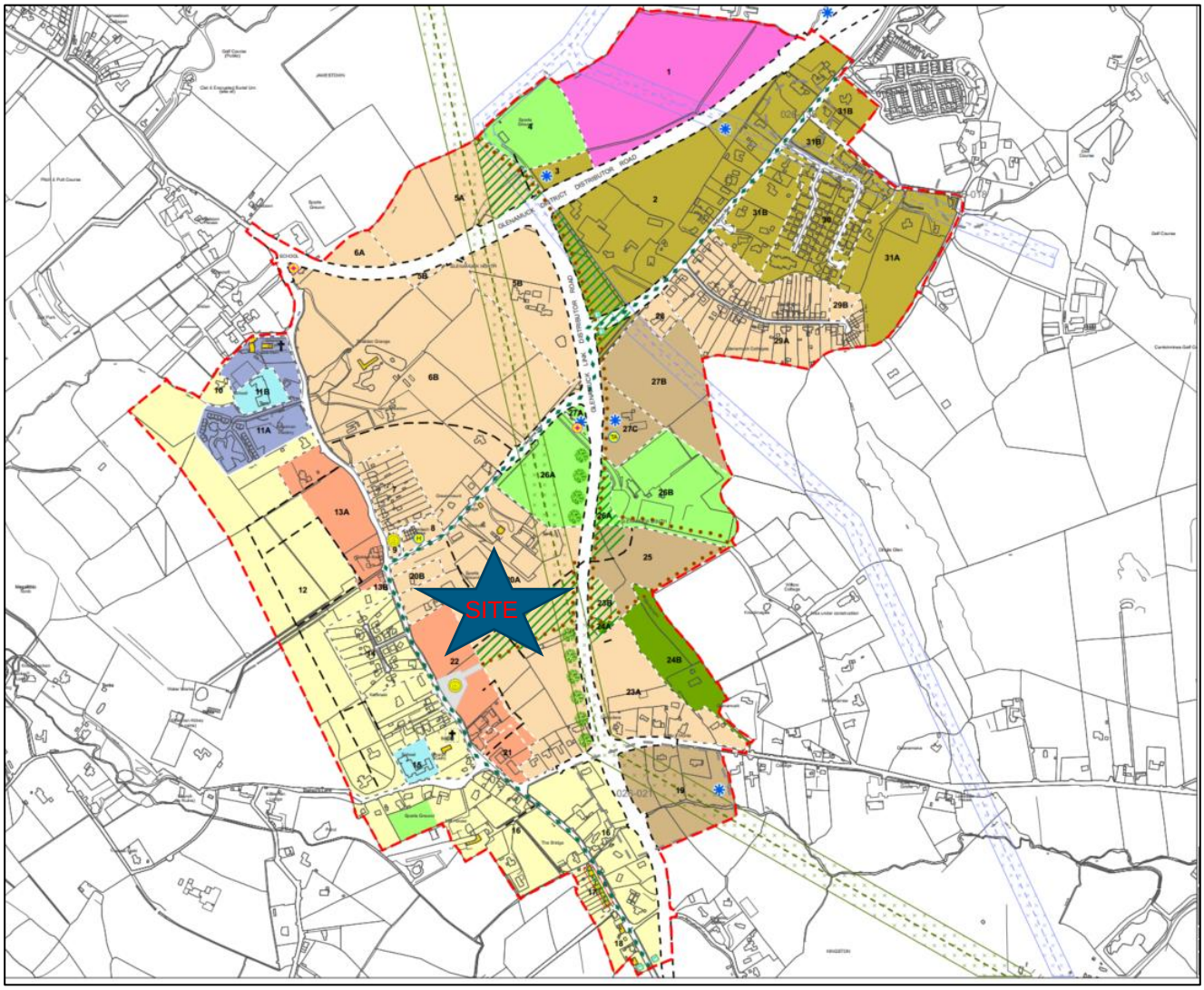


Figure 2-1 - LAP Zoning Map and development site

The LAP envisions that the zoned lands could accommodate circa 2600-3000 residential dwellings and associated supporting community and commercial infrastructure.

Section 5 Movement of the LAP notes the area is served by the Luas Green Line and three bus services. One of the principal transport aims of the LAP is to promote sustainable travel and reduce the need to travel by private car through the integration of mixed land use and transport.

Listed below are the key relevant transport policies of the LAP together with a summary of the corresponding characteristics of the proposed development that relate the delivery of these policies.

Table 2-2 - Relevant LAP Sustainable Transport Policies

Policy Reference	Policy Description	Development Approach
MT01 – To reduce the need for travel by private car within the LAP by:	Facilitating appropriate frequencies and routings of bus services to address increased population levels, including good linkages to Ballyogan Wood Luas stop on the Luas Green Line, Providing and/or facilitating the development of an interlinked cycle and pedestrian network that would connect the LAP to the wider locality, Maximise pedestrian catchment of bus services operating on Enniskerry and Glenamuck Roads, Encouraging mixed use development to optimise internal trips and make accessibility by non-car modes more viable/desirable, requiring Commercial/Retail uses to operate Mobility Management Plans to provide incentives to reduce dependence on travel by car. To reduce the need for travel by private car within the LAP and to acknowledge the amenity and health benefits of off-road recreational cycling by providing both on-road and complementary off-road cycling facilities within the Plan area	The development is located within walking distance of bus stops on Enniskerry Road and Glenamuck Road that provide onward connections to Luas services at Ballyogan Wood The masterplan layout has been informed by external developments, connections, amenities and facilities in mind in order to meet desire lines and promote walking and cycling. The proposal is a mixed use development including a neighbourhood centre that will reduce the need to travel particularly by car. The development provides for off road walking and cycling facilities particularly through the provision of the Dingle Way.
MT02 Waking & Cycling	To promote maximum accessibility through routes of optimised connectivity and permeability for walking, cycling and public transport while establishing safe infrastructure for all vulnerable road users	The development layout has been designed in accordance with DMURS principles with low traffic volumes and speeds to encourage walking and cycling. The layout is highly permeable with a coherent legible network of streets that meets desire lines and provides both internal and external connectivity.
MT03 Cycle Parking	It is an objective of the Plan that all new residential and commercial development schemes must include adequate provisions for safe and secure cycle parking facilities at appropriate locations in accordance with County Development Plan standards	The development will provide secure, sheltered and accessible cycling facilities for all land uses in accordance with DLRCC cycle parking standards.
MT04	To establish the function, shape and usage of the strategic road network generally within the LAP area	The layout of the developments, the location of its access points reflects the form and function of the road hierarchy.
MT05	To establish the future function of Glenamuck Road in terms of providing local access (including car, bus, pedestrian and cycle) to the wider strategic road network	The development provides for connections and linkages to and from the Glenamuck Road.

Policy Reference	Policy Description	Development Approach
MT06	To establish the appropriate functions of Enniskerry Road in terms of minimising through movements while accommodating locally generated movements (car, pedestrian and cycle) from future developments, and also potential future movements associated with the planned neighbourhood centre facility	The scheme proposes improvements to the urban realm on Enniskerry road that will improve the pedestrian and cyclist experience The development provides an active frontage onto Enniskerry Road that will provide active and passive surveillance.
MT07	To introduce appropriate traffic calming measures and to divert through traffic away from the future LAP civic node in order to address issues such as safety, noise and air pollution, and the potentially negative severance of the component parts of the LAP area.	The proposed Enniskerry Road treatment includes the provision for reducing vehicle dominance and reallocation of spaces to walking and cycling and can be delivered in conjunction with the GDRS to provide traffic calming and enhanced environmental improvements.
MT08	In acknowledgement that some car usage is inevitable, to stipulate maximum car parking provision for differing development types on a demand management basis with appropriate restrictions on on-street parking in order not to undermine that objective.	The level of car parking proposed is balanced to reflect the site characteristics and ensure that sustainable and active travel is not undermined. On street car parking will be managed to ensure overspill car parking does not adversely impact on the urban realm and road safety.
MT09	To have regard to the EU Ambient Air Quality Directive, the EU Ozone Directive, the EU guidance documents Greening Transport (EU 2008) and A Sustainable Future for Transport (EU 2009) and the National Transport Strategy Smarter Travel: A Sustainable Transport Future (DTTS 2009) to develop strategies which better reflect the real costs that transport volumes and emissions impose onto society, environment and economic efficiency.	The development facilitates .the provision of electric charging facilities for cars.

2.1.3.1. Glenamuck District Road Scheme (GDRS)

The development of all of the LAP lands will be accommodated by the completion of the Glenamuck District Roads Scheme (GDRS) which is made up of the Glenamuck District Distributor Road (GDDR) and the Glenamuck Link Distributor Road (GLDR). Figure 2-2 below, an extract from the Local Area Plan, illustrates the alignment of these roads and the position of the development lands.

As well as accommodating the traffic volumes associated with the development of all of the LAP lands, these roads will incorporate the provision of the future bus service improvements. The roads also incorporate footpath and cycle track provision which will be linked directly to the proposed development site.

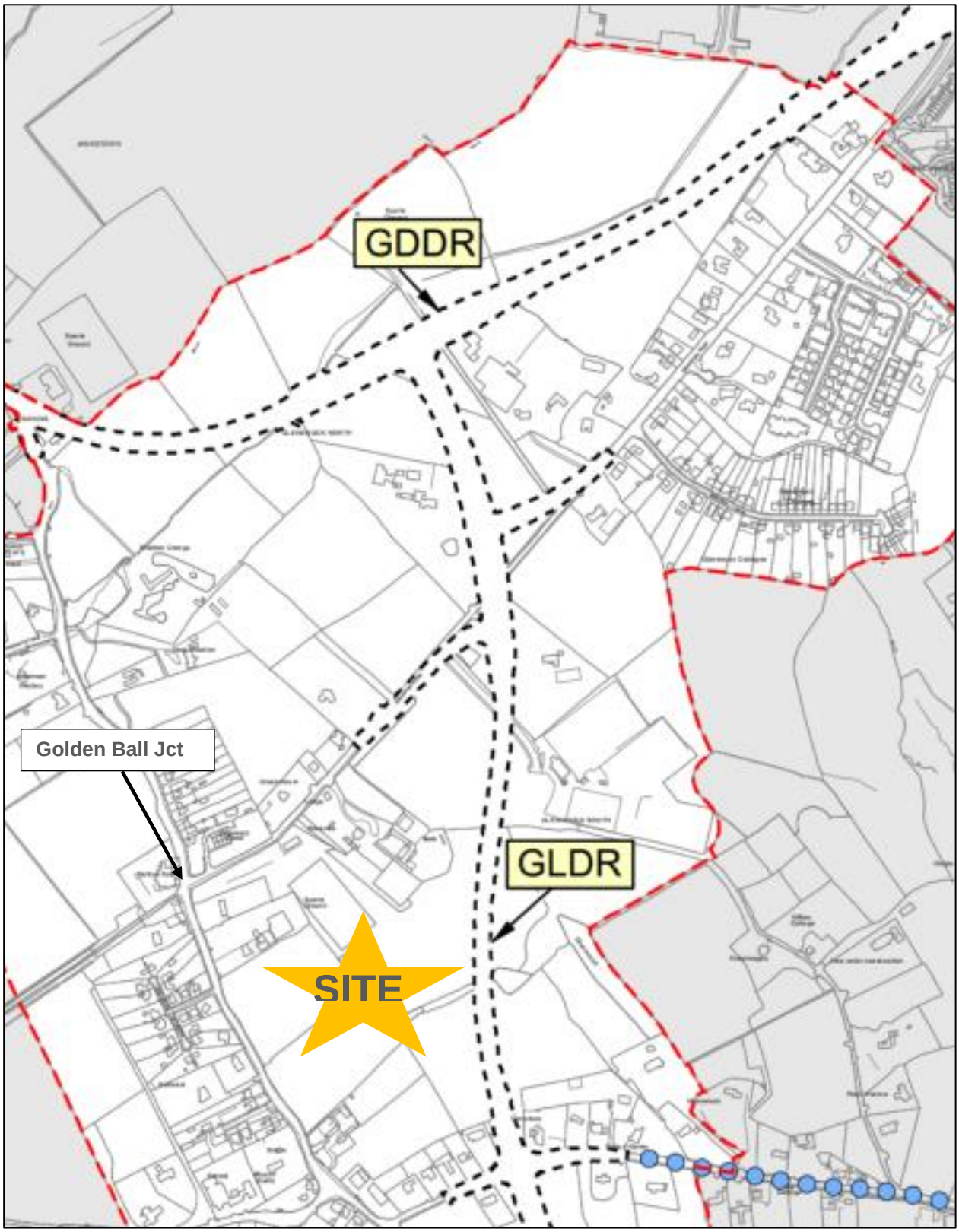


Figure 2-2 - GDRS Scheme

The completion of the Distributor Roads will result in a significant reduction in traffic along Enniskerry Road and Glenamuck Road. Specific proposals including bus gates on Enniskerry Road and Glenamuck Road will copper fasten this reduction in traffic which will result in these roads become more conducive to pedestrian and cycle movement. In particular the provision of footpaths and cycle tracks along the full extent of Glenamuck Road as far as the Link Distributor Road and the upgrading of Enniskerry Road as a traffic calmed street, incorporating

widened footpaths, to facilitate local pedestrian, cycle, bus and other vehicular movements will result in a significant change in the function and form of these roads and the reduction in volume and speed of traffic travelling on these roads.

Further details of the GDRS are outlined in Section 4 Future Transport Proposals

2.1.4. National Remote Working Strategy (2021)- Department of Enterprise Trade and Employment

In January 2021 the National Remote Work Strategy was published by the Department of Enterprise Trade and Employment which sets out the long-term strategy to promote home and remote working for public sector and private sector employees. The strategy mandates that 20% of the public sector workforce to move to home and remote working in 2021. The strategy notes that the Regional Working Analysis study carried out in 2020 shows that more than 25% of the private sector workers in Ireland are capable of working remotely. A key aspect of the strategy is to implement legislation in Q3 of 2021 to provide employees the right to request remote work to ensure that work from home opportunities is available to employees after the removal of Covid-19 restrictions.

Therefore, it can be reasonably assumed that the remote working patterns that have developed from the Covid19 restrictions will continue to be substantial in the post Covid19 scenario. Indeed, it can be reasonably assumed that this will be the case regardless of any legislative provisions given the ability of organisations, both public and private, to adapt to remote working and the clear benefits that maintaining a remote working capability will bring to both employees and employers. In overall terms this longer-term change in working patterns will help achieve a longer-term fundamental change in travel behaviour by reducing the need travel to work on a daily basis. The residents of the Kilternan development will avail of the home and remote working opportunities including flexible working opportunities as promoted by the National Remote Work Strategy.

2.1.5. Best Practice and Planning Guidance Documents

The following best practice and planning guidance documents have fundamentally informed the development of the site layout and the compilation of this TTA:

- Transport Infrastructure Ireland: Traffic and Transport Assessments Guidelines.
- Department of Transport Tourism and Sport: Design Manual for Urban Roads and Streets.
- National Transport Authority: National Cycle Manual.
- National Transport Authority: Permeability Best Practice Guidance.

Of particular importance is the Design Manual for Urban Roads and Streets (DMURS) published in 2013. This document is founded on an integrated design approach that is based on safety, sustainable communities, heritage protection and creating a sense of place. DMURS recognises the higher priority of pedestrians and cyclists in the urban environment within a fundamental design objective to create self-regulating streets that are inherently convenient and safe for use by all vulnerable road users.

3. Receiving Environment

3.1. Site Location

The location of the site is shown in Figure 3-1[1]. The site is located towards the southern end of Glenamuck Road. The site is bounded to the north by the Glenamuck Road and an existing built area, to the west by the Enniskerry Road (R117) and to south by an existing residential dwellings. To the west the site is bounded by existing agricultural lands.

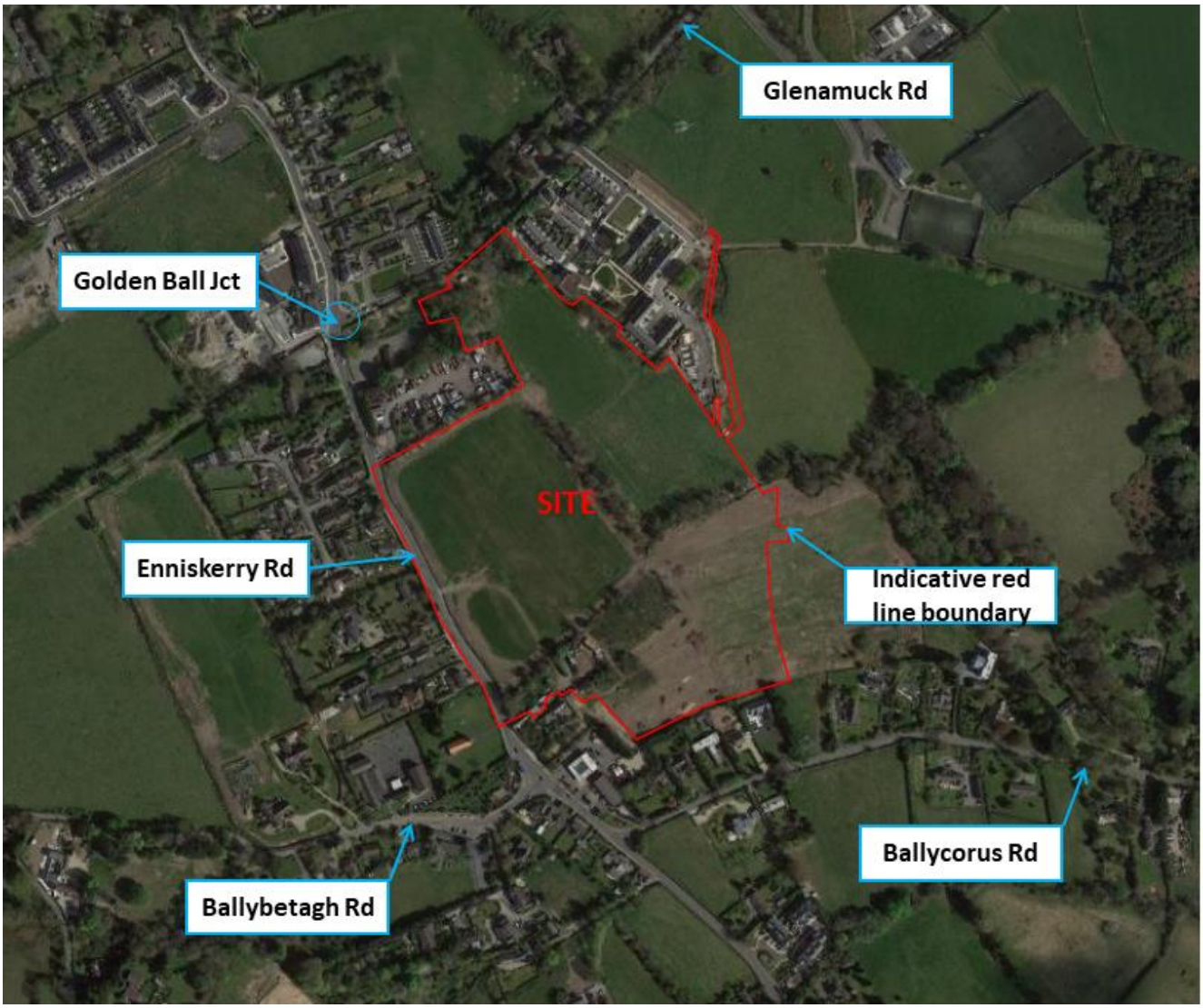


Figure 3-1 - Site Location

The proposed development site is located adjacent to a comprehensive road network consisting of motorways, regional roads and local roads that provides some facilities for walking and cycling. In addition, there are good existing public transport facilities located adjacent to the development including bus and Luas. The following sections provide an outline of transport infrastructure in the vicinity of the site.

[1] Red line is indicative only – refer to architects plans for redline boundary

3.2. Existing Walking and Cycling Infrastructure

3.2.1. Walking facilities

Footpath provision in general is adequate on surrounding roads with most offering footpaths of ample width on both sides of the carriageway.

A footpath is provided on the south side of Glenamuck Road from Cromlech Close at its southwestern end to Carrickmines Manor at its northern end. Footways are provided on both sides of Glenamuck Road in vicinity of its junction with the Enniskerry Road and from Carrickmines Manor to Ballyogan Road / Glenamuck Road North Roundabout.

Crossing facilities at the junction of Glenamuck Road and Enniskerry Road at the Golden Ball Pub are signal controlled pelican crossings. Crossings located at Glenamuck Road North Roundabout and the junction with Ballyogan Road to the north of Glenamuck Road are generally uncontrolled with dropped kerbs.

Footpaths are provided on both sides of the Enniskerry road from its junction with the Glenamuck road to its junction with the Ballycorus Road. An uncontrolled crossing is provided on the Ballybetagh Road in vicinity of its junction with the Enniskerry Road, in addition to a signal-controlled pelican crossing on the Enniskerry Road also in close proximity. A signal-controlled pelican crossing is also provided on the Ballycorus Road as part of its junction with the Enniskerry Road.

Figure 3-2 below illustrates walking times from the site radiating outwards in 5-minute isochrones that shows the range of facilities, services and amenities that are currently within easy walking distance of the site. Maximum preferable walking distances can be achieved to key destinations such as Stepaside Village, The Park Carrickmines and the Ballyogan Wood Luas Stops.

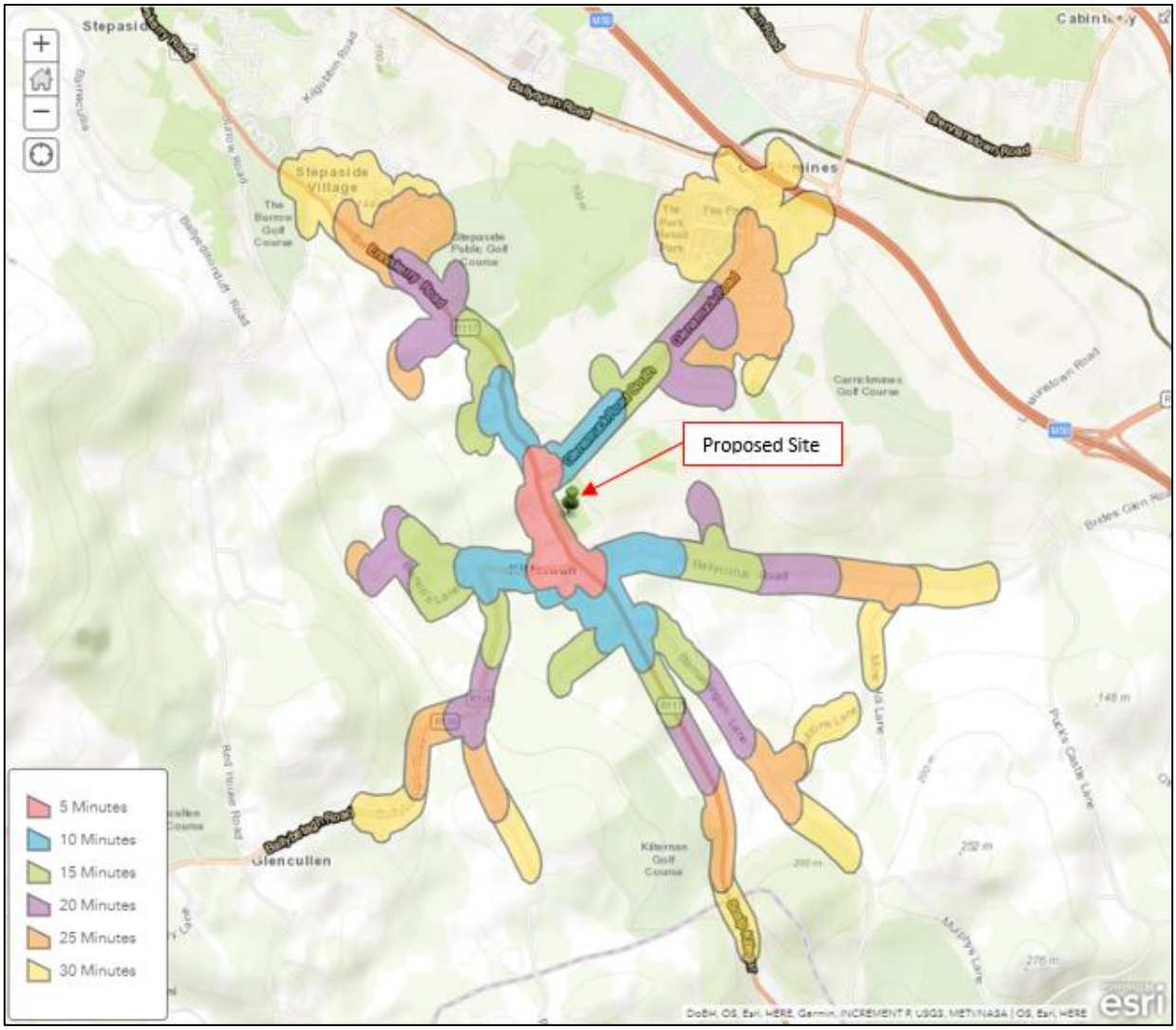


Figure 3-2 - Visualisation of Existing Walking Isochrones

3.2.2. Cycling Facilities

In general cycle facilities provision is provided on the road network shared with vehicles traffic (i.e., Not segregated).

The existing cycling network has been assessed through the generation of cycling isochrones for a maximum cycling time of 20 minutes. Figure 2-3 illustrates cycling times from the site radiating outwards in 5 minute isochrones. Within 15 minutes all local amenities can be reached, including Stepaside Village, The Park Carrickmines and the Ballyogan Wood and Carrickmines Luas Stops.

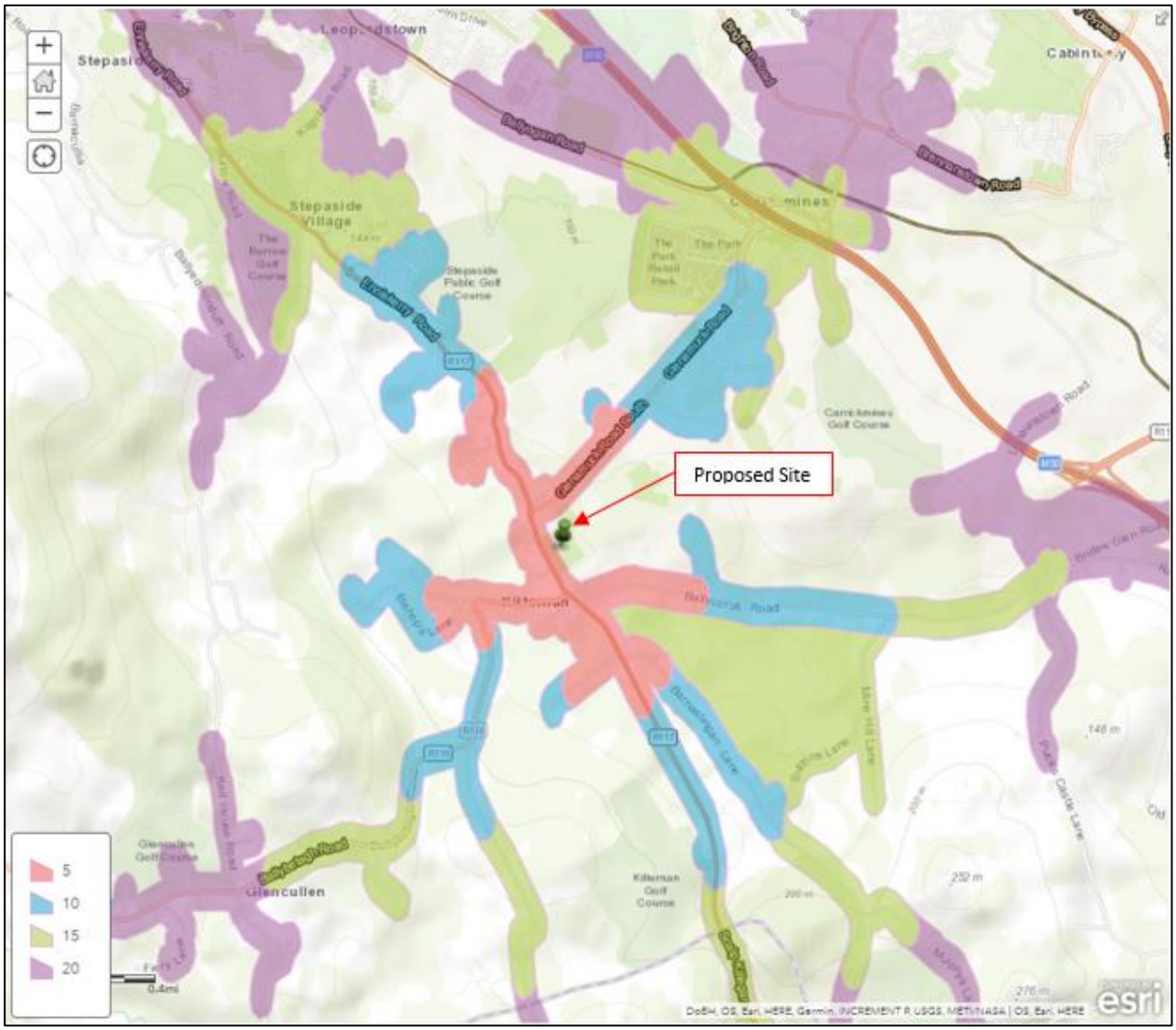


Figure 3-3 Visualisation of Existing Cycling Isochrones

3.3. Public Transport

The following section outlines the existing public transport facilities in the vicinity of the site. Figure 3-4 shows the location of existing bus and Luas services in relation to the development site.

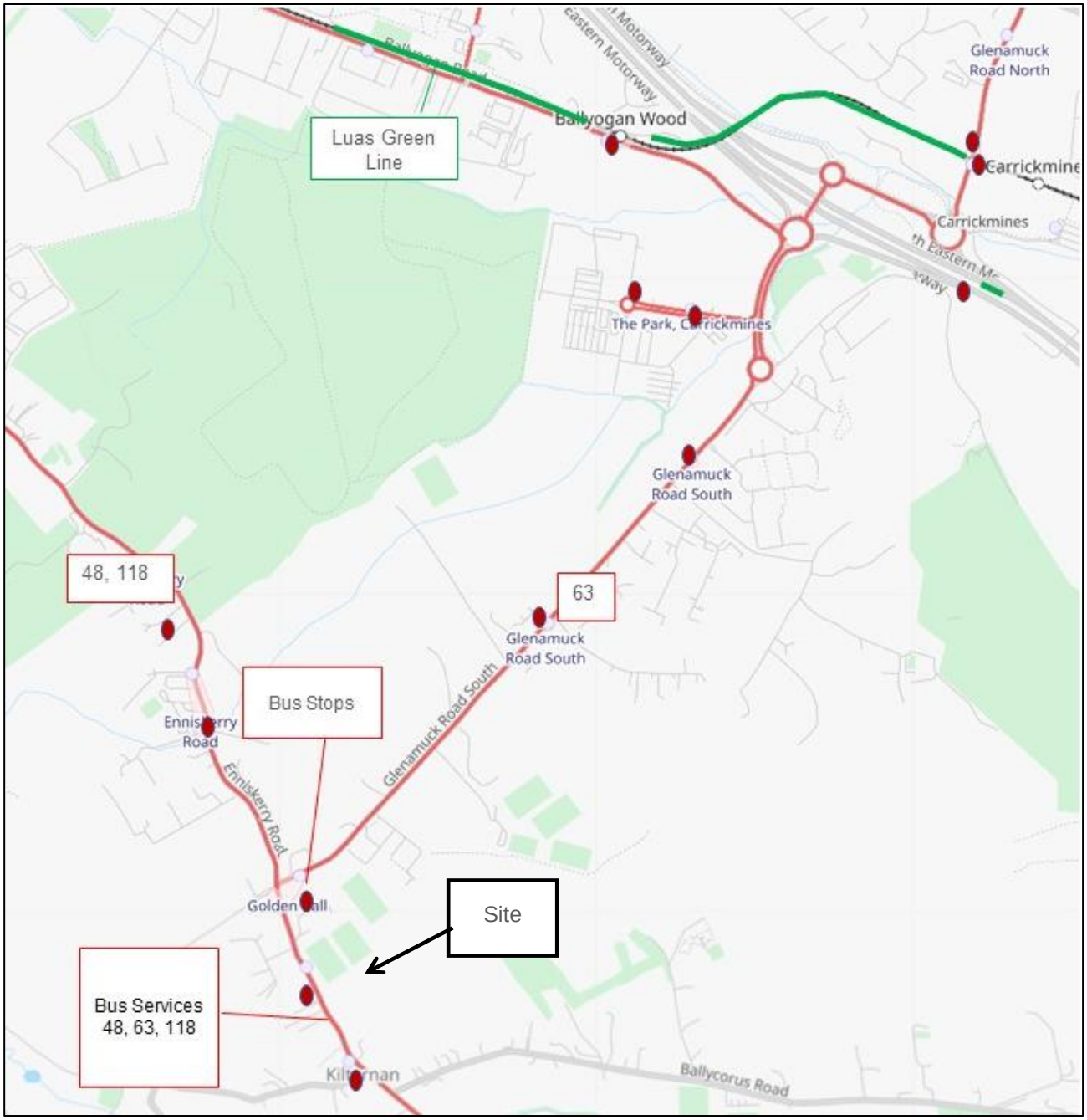


Figure 3-4 - Existing Public Transport Facilities in the vicinity of the site

3.3.1. Bus Services

The following bus services operate within vicinity of the proposed development site and Table 3-1 outlines the specific operational details associated with each service.

- The 63 Dun Laoghaire to Kilternan
- The 44 Townsend Street to Enniskerry;
- The 118 D'Olier Street to Kilternan.

Table 3-1 - Existing Bus Services

Bus Stops	Route			Services Per Day		
	Number	Start	Destination	Mon-Fri	Sat	Sun
3279 (Glenamuck Road) 3284 (Kilternan Road) 3478 (Kilternan Road)	63/63A	Dun Laoghaire	Kilternan	34	34	30
		Kilternan	Dun Laoghaire	35	34	30
3284 (Kilternan Road) 3478 (Kilternan Road)	44	DCU	Enniskerry	19	16	14
		Enniskerry	DCU	18	17	15
	118	Kilternan	D'Oiler Street	1	0	0
		D'Oiler Street	Kilternan	0	0	0

3.3.2. LUAS Services

The Luas green line operates from the City Centre to Carrickmines and provides a high-quality public transport linkage with key stops at Dundrum and Sandyford. The Ballyogan Wood stop is within 2km distance from the proposed development site. This stop is within walking distance of the site and is served by the 63 bus service. Weekday peak hour tram frequencies range from 4 to 14 minutes while Saturday and Sunday frequencies range between 6- and 27-minute intervals. The current tram frequencies are shown in Table 3-2.

Table 3-2 - Existing LUAS Services

Northbound			Southbound		
Mon-Fri	Saturday	Sunday	Mon-Fri	Saturday	Sunday
91	72	73	103	76	78

Another Luas station at Carrickmines is located adjacent to Junction 15 of the M50 and is within 2.5km of the proposed development and consists of a park and ride facility with capacity for over 350 cars.

3.4. Local Road Network

The existing local road network is described below. In the context of cycling, cyclists are facilitated on road. As the development of the LAP continues and, in particular, following the completion of construction of the planned GDRS the local roads described below will be changed fundamentally in terms of through traffic volumes and will form key local routes on which cyclists can continue to cycle on road but in the context of reduced traffic volumes and speeds. Figure3-5 shows the location of the key local road network in the vicinity of the site.

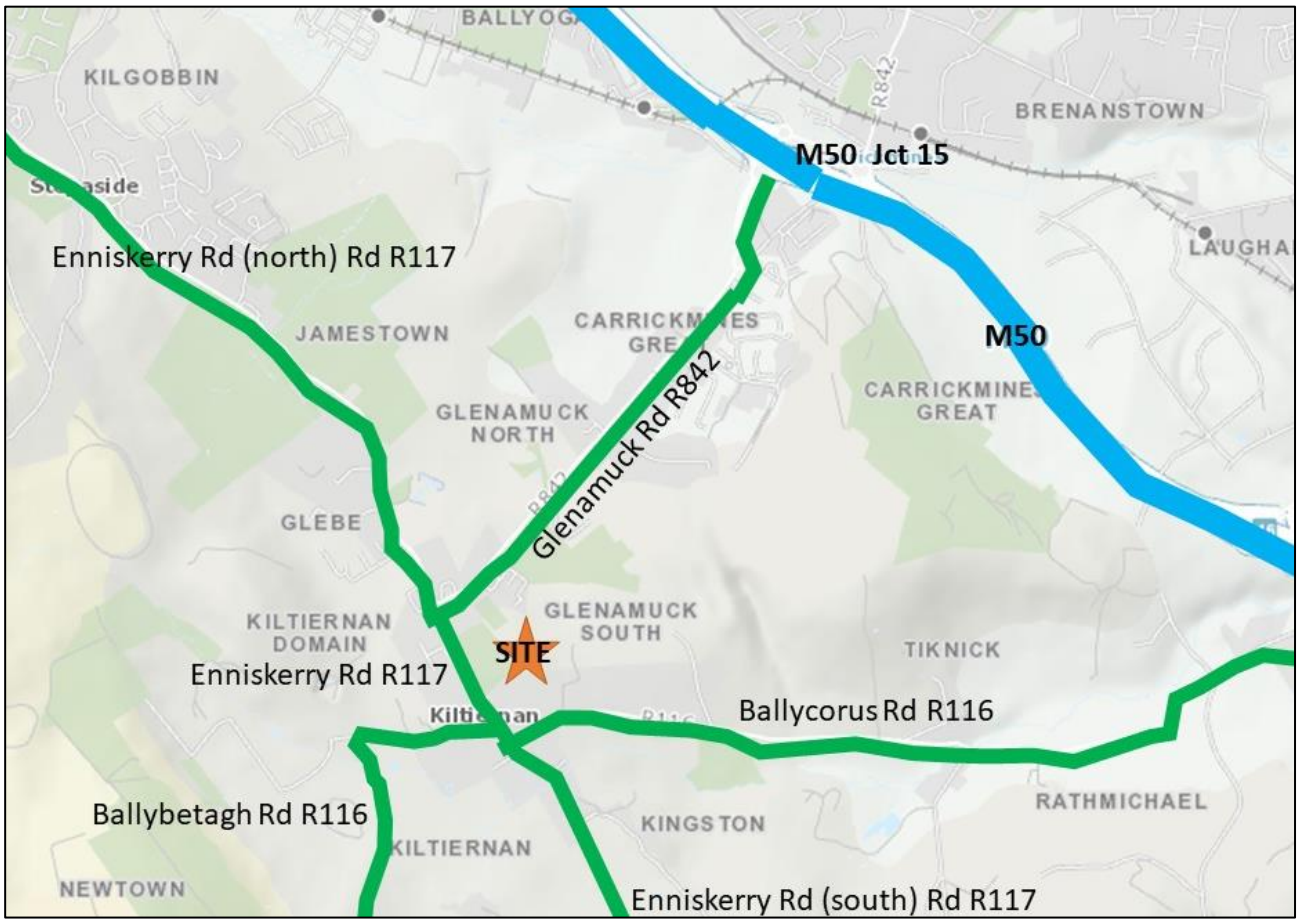


Figure 3-5 - Strategic Road Network serving the site

A description of the key roads is provided below.

3.4.1. Glenamuck Road (R842)

The Glenamuck Road is a classified road (R842) with two traffic lanes (one in each direction) and a 50Kmh speed limit. The road extends for approximately 2km from its intersection with the Enniskerry Road (known as the 'Golden Ball' Junction) at its southwestern extents to the southern roundabout of the Carrickmines Interchange to the northeast. The cross-section of this road varies but is predominantly 6.0m in width. There is a footpath along the southern side of the road, the width of which is varies along its length. There is no footpath along the northern side, however there is a verge of circa 1m width, but again overgrown hedges restrict this width. The development site fronts onto Glenamuck Road from the Golden Balls junction for approximately 100metres[2]. A typical cross section of the Glenamuck Road is shown in Figure 3-6.

Figure 3-6 - Glenamuck Road *(source: google maps)*

3.4.2. Enniskerry Road (R117)

The Enniskerry Road is a classified road (R117) with two traffic lanes (one in each direction) and a 50Kmh speed limit. The R117 extends from Enniskerry Village in the south to Stepaside Village to the north and intersects with the Glenamuck Road at the 'Golden Ball' Junction. The majority of the road is set in a rural context, with mature trees, hedgerows and stone walls located along the majority of the road. The cross section of the road varies but is predominantly 8.5 m in width in Kilternan. The development site has a long frontage onto the western side of Enniskerry road. A footpath is provided along both sides of the road. Within Kilternan there are a number of existing dwellings fronting both sides of the carriageway. A typical cross section is shown in Figure 3-7.

Figure 3-7 - Enniskerry Road *(source: google maps)*

3.4.3. Ballycorus Road (R116)

Ballycorus Road is a classified road (R116) with two lanes (one in each direction) with a 50kph speed limit. The R116 extends from its signalised junction with the Enniskerry Road in Kilternan to Rathmichael. The majority of the road is set in a rural context with mature hedges trees etc. and a limited built up frontage. The road has a pedestrian footpath running along its southern side. The cross section of the road varies but is predominantly 6.5 to 7m in width close to Kilternan. A typical cross section is shown on Figure 3-8.

Figure 3-8 - Ballycorus Road R116 - Typical Cross Section *(source: google maps)*

3.4.4. Ballybetagh Road (R116)

Ballybetagh Road is a classified road (R116) with two lanes (one in each direction) with a 50kph speed limit. The R116 extends from its priority junction with the Enniskerry Road in Kilternan to Glencullen. The majority of the road is set in a rural context with mature hedges trees etc. and a limited built up frontage. The road has a pedestrian footpath on the road near Kilternan but there is no footpath once it goes beyond the built up area. The cross section of the road varies but is predominantly 5.5 to 6m in width close to Kilternan. A typical cross section is shown on Figure 3-9.

Figure 3-9 - Ballybetagh Road R116 Typical Road Section *(source: google maps)*

3.5. Local Road Junctions

The key junctions in the area of influence of the proposed development in terms of potential vehicular traffic impact are illustrated in Figure 3-10 and described in the following sections.

Figure 3-10 - Local Road Junctions *(source: google maps)*

3.5.1. Enniskerry Road / Glenamuck Road Junction – Golden Ball Junction

The Enniskerry Road / Glenamuck Road Junction (also known as the Golden Ball Junction) operates under traffic signal control with one lane approaches on all arms. Pedestrian crossing facilities are provided on the Enniskerry Road southern arm and the Glenamuck Road arm. The junction also includes an access to the Golden Ball pub car park and future residential development. Access and egress from this junction onto the Golden Ball junction is via demand control linked to sensors in the signal junction. The existing junction configuration is shown in Figure 3-11.

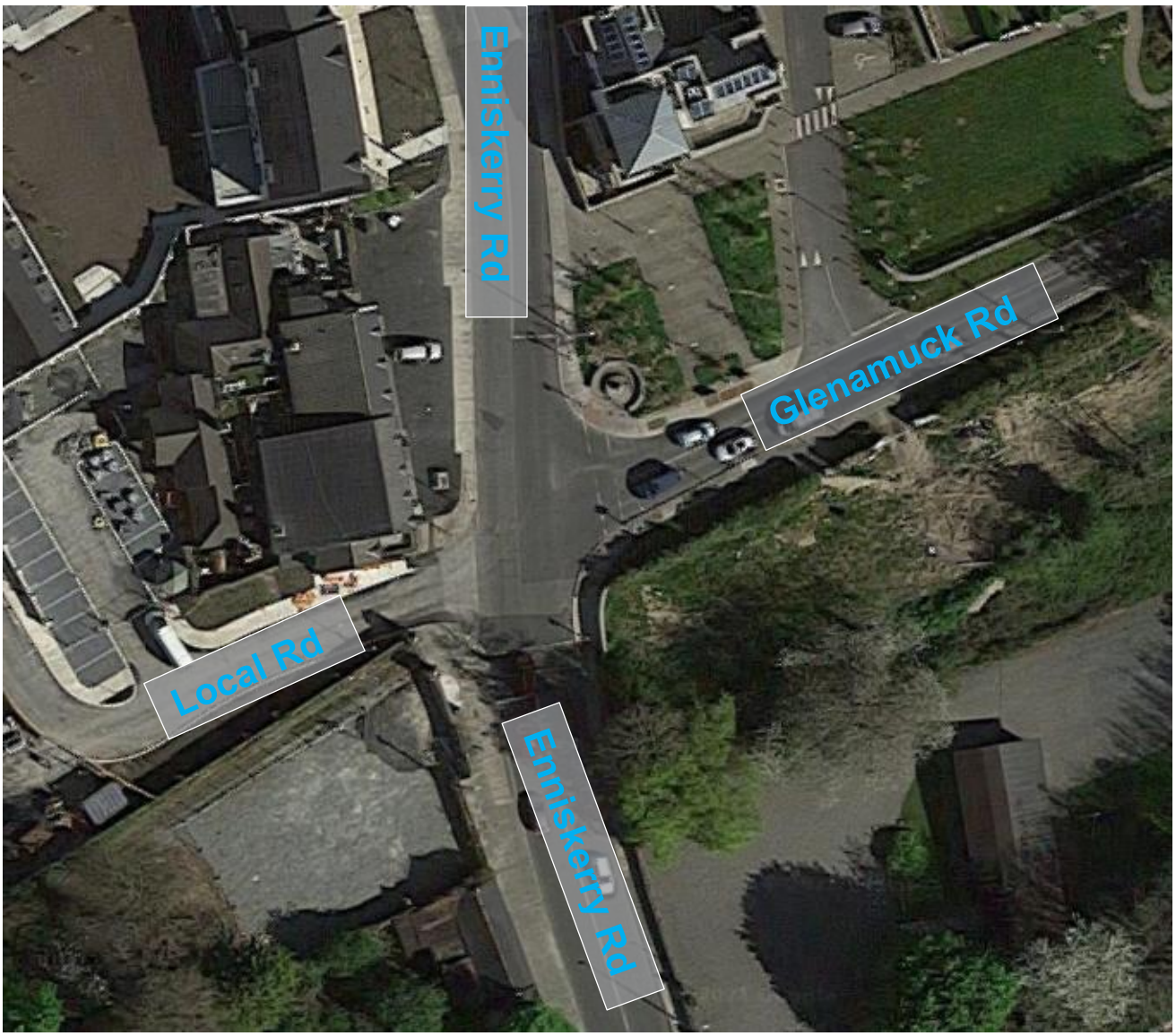


Figure 3-11 - Enniskerry - Glenamuck (Golden Balls) Jct *(source: google maps)*

3.5.2. Enniskerry Road / Ballybetagh Road Junction

The Enniskerry Road / Ballybetagh Road junction operates as a priority junction. Traffic travelling on the Ballybetagh Road yields to traffic along the major arm of the Enniskerry Road. There are stop road markings and a stop sign in place from this approach. There is a south bound bus stop located along the Enniskerry Road situated directly opposite the Ballybetagh Road arm. A northbound bus stop is located immediately north of the junction also on the Enniskerry Road.

There is an uncontrolled pedestrian crossing located on the Ballybetagh Road arm whilst there is a signal-controlled pedestrian crossing located just south of the junction on the Enniskerry Road arm. Footpaths of nominal width are provided on all sides from all approaches. A petrol station and motor vehicle service centre are located in vicinity of the junction to the right-hand side of Enniskerry Road as one approaches from the south. These premises are served by two adjacent access points onto the Enniskerry Road. The junction is shown in Figure 3-12

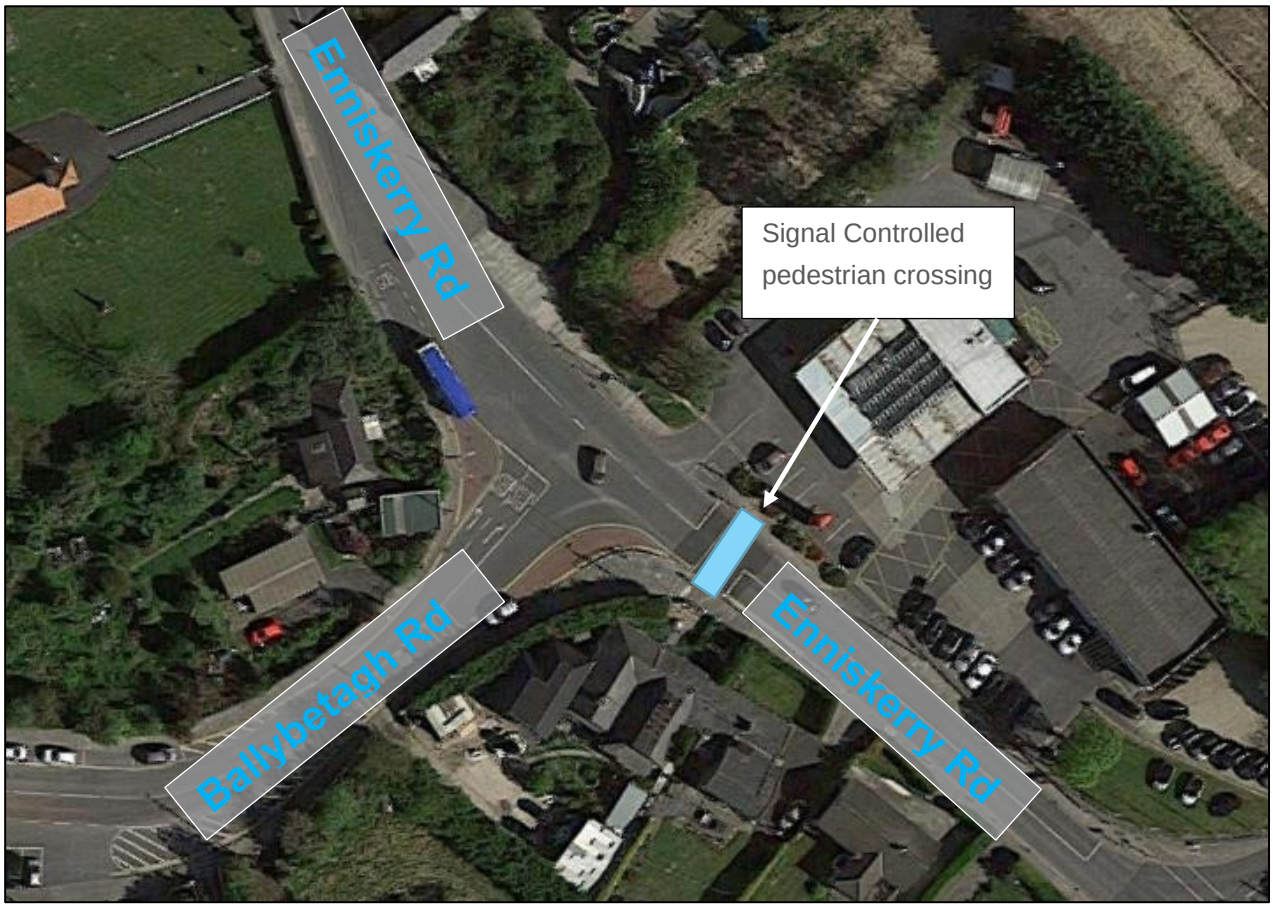


Figure 3-12 - Enniskerry- Ballybetagh Jct *(source: google maps)*

3.5.3. Enniskerry Road / Ballycorus Road Junction

The Enniskerry Road / Ballycorus Road junction operates under the control of traffic signals. All arms are single lane approaches. A signal-controlled pedestrian crossing is located on the Ballycorus Road arm with dropped kerbs and tactile paving in place. There are no crossing facilities on either of the Enniskerry Road arms. Footpaths of nominal width are provided on all sides from all approaches. The junction is shown in Figure 3-13.

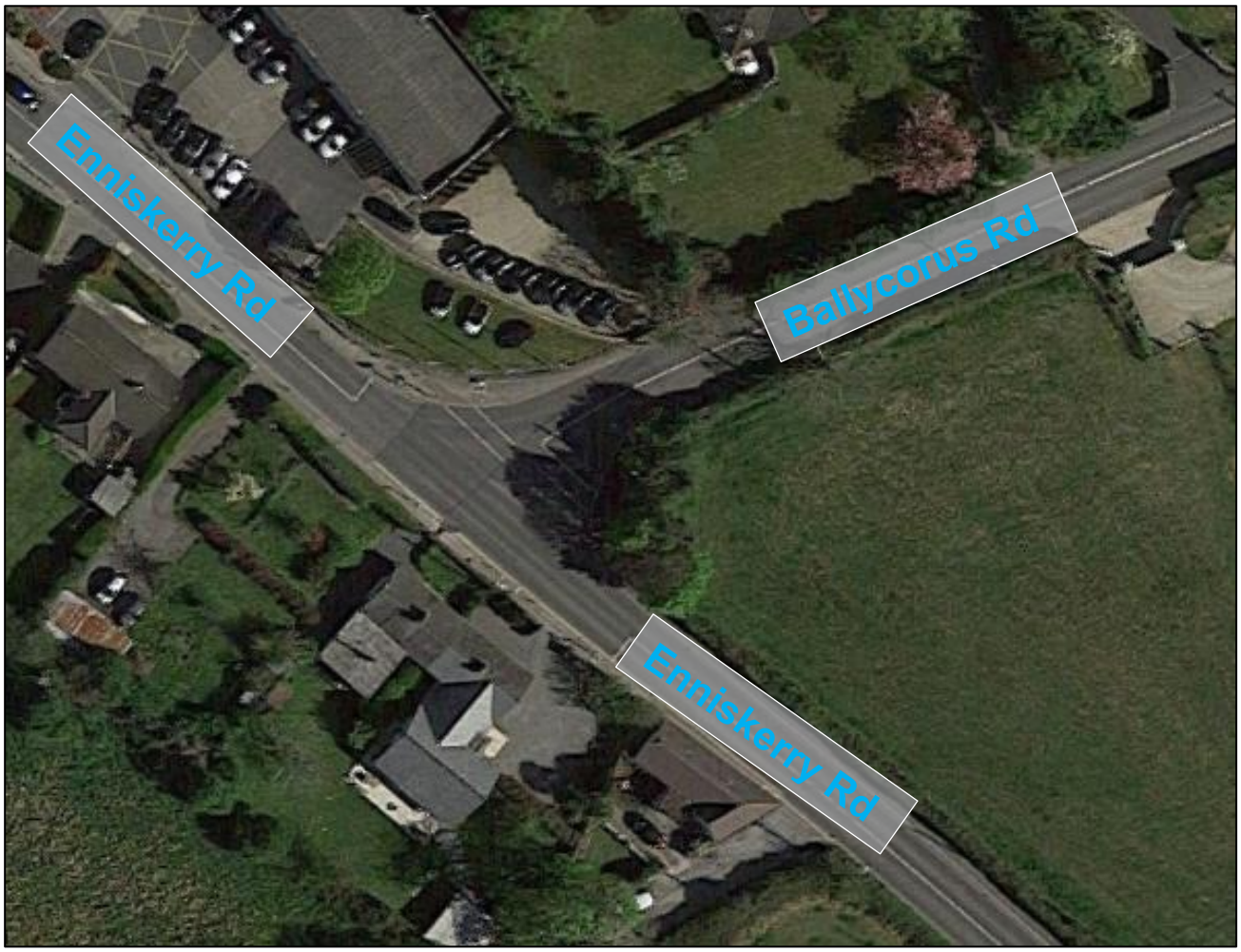


Figure 3-13 - Enniskerry Ballycorus Jct *(source: google maps)*

3.6. Collision History

The collision statistics on the Road Safety Authority (RSA) website[3] were reviewed in order to ascertain the safety record in the vicinity of the subject scheme over the most recent ten-year period. This includes information for the years 2005 to 2016 inclusive and indicates basic information on all reported incidents.

It should be noted that information relating to reported incidents for the years 2017 to 2020 is not yet available on the Road Safety Authority (RSA) website. The RSA records detail only those occasions where the incident was officially recorded such as the Garda being present to formally record details of the incident.

There has been 10 no collisions within 500m of the proposed development site access in the years 2005 to 2016 as outlined in Table 3-3 and shown in Figure 3-14.

[3] https://rsa.ie/RSA/Road-Safety/RSA-Statistics/Collision-Statistics/Ireland-Road-Collisions/

Table 3-3 - Collisions record within the vicinity of the site

Year	Accident Type	Accident Details	Casualties
2016	Serious	Car – single vehicle only	1
2014	Minor	Car	1
2013	Minor	Car	2
2012	Minor	Car	2
2011	Minor	Car -single	1
2011	Minor	Car	1
2009	Minor	Goods Vehicle	1
2008	Minor	Motorcycle	1
2006	Minor	Car – single vehicle only	1
2005	Minor	Motorcycle	1

One of the collisions was classed as serious while the remainder were classed as minor. There is no obvious accident pattern such as multiple accidents at a specific location that might indicate a shortcoming in the existing road transport network.

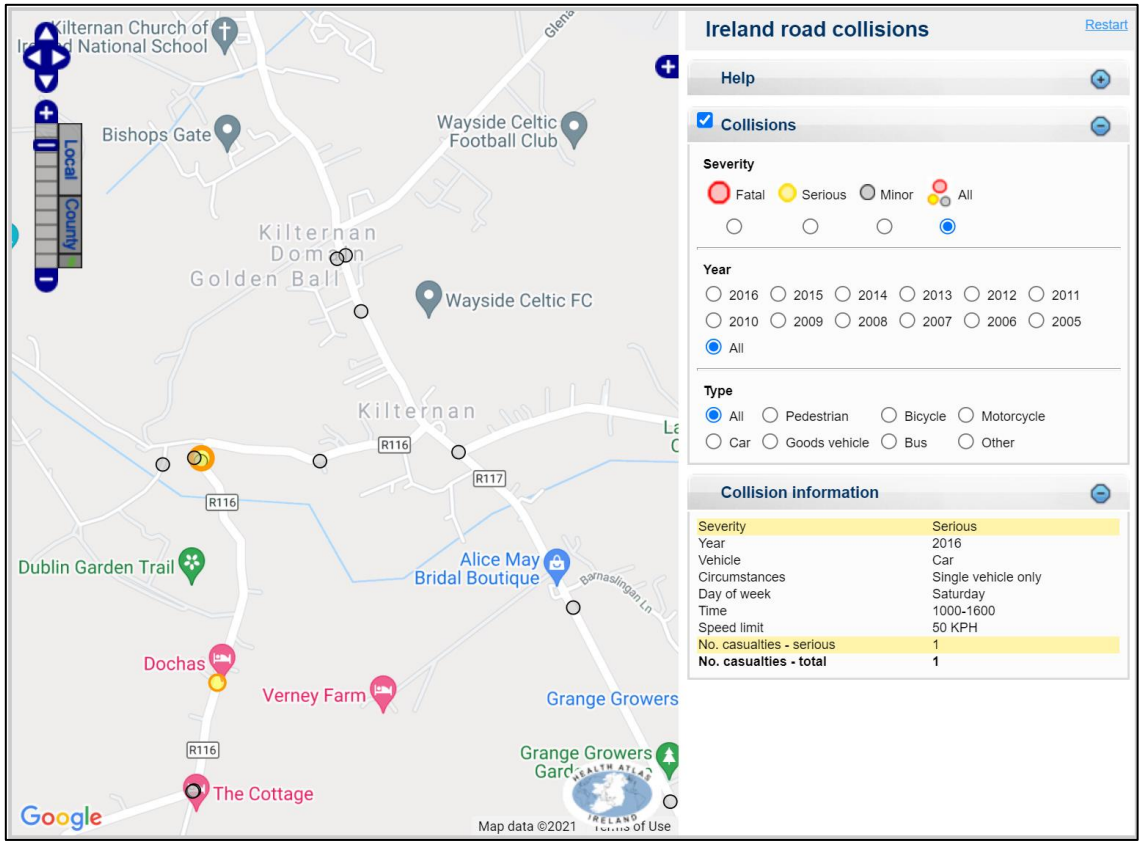


Figure 3-14 - Collision Viewer (source RSA.ie)

4. Future Transport Proposals

4.1. The GDRS

The GDRS is made up of the Glenamuck District Distributor Road (GDDR) and the Glenamuck Link Distributor Road (GLDR).

The Glenamuck District Distributor Road (GDDR) connects from the Enniskerry Road adjacent to De La Salle Palmerstown Rugby Club to a tie in at the Glenamuck Road East/Golf Lane Roundabout. The Glenamuck Link Distributor Road (GLDR) connects from the approximate midpoint of the GDDR to the Enniskerry Road south of Kiltiernan and will connect the new distributor road with the existing Glenamuck Road, Ballycorus Road and Barnaslingan Lane providing an alternative to the Enniskerry Road for north-south travel. The GDRS scheme is shown in Figure 4-1.

Figure 4-1 - GDRS Scheme in wider context

The GDRS has been designed with DMURS principles as link streets and a design speed of 50kph. The scheme provides excellent facilities for pedestrian and cyclists throughout its length with generous paths and segregated cycle facilities to encourage active travel. Junctions across the scheme have been designed in accordance with the National Cycle Manual to ensure cyclist safety is maintained across the scheme.

Bus priority measures including the provision of bus only lanes and bus gates have been incorporated to improve bus journey time reliability at both a local and larger scale as shown in Figure 4-2.

Figure 4-2 - GDRS - Wider Bus Priority Measures

The two bus gates located at the GLDR/ Enniskerry Road junction and on the eastern arm of the GLDR/ Glenamuck Road as shown on the left and right of Figure 4-3.

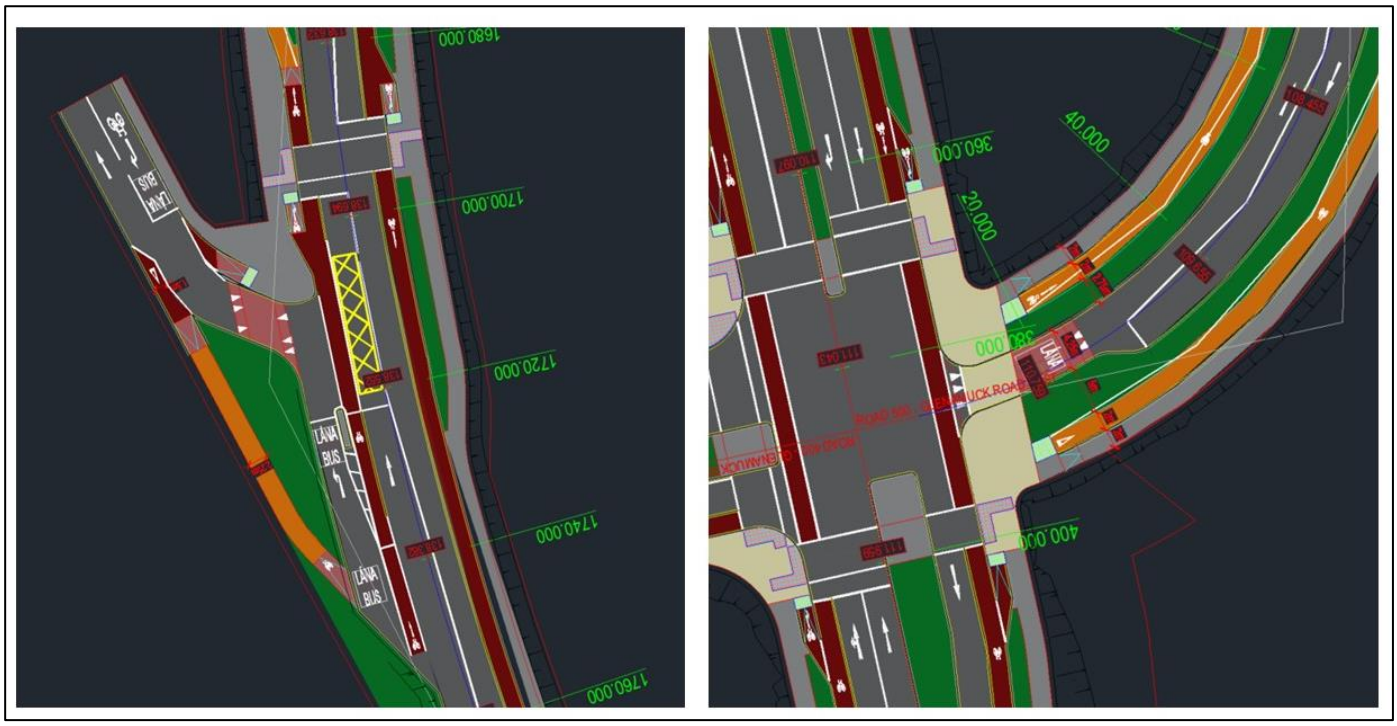


Figure 4-3 - Bus Gates on GDRS

The cross section along the scheme varies as shown in Figure 4-4, with those typical sections layouts A-A to D-D shown in Figure 4-5.

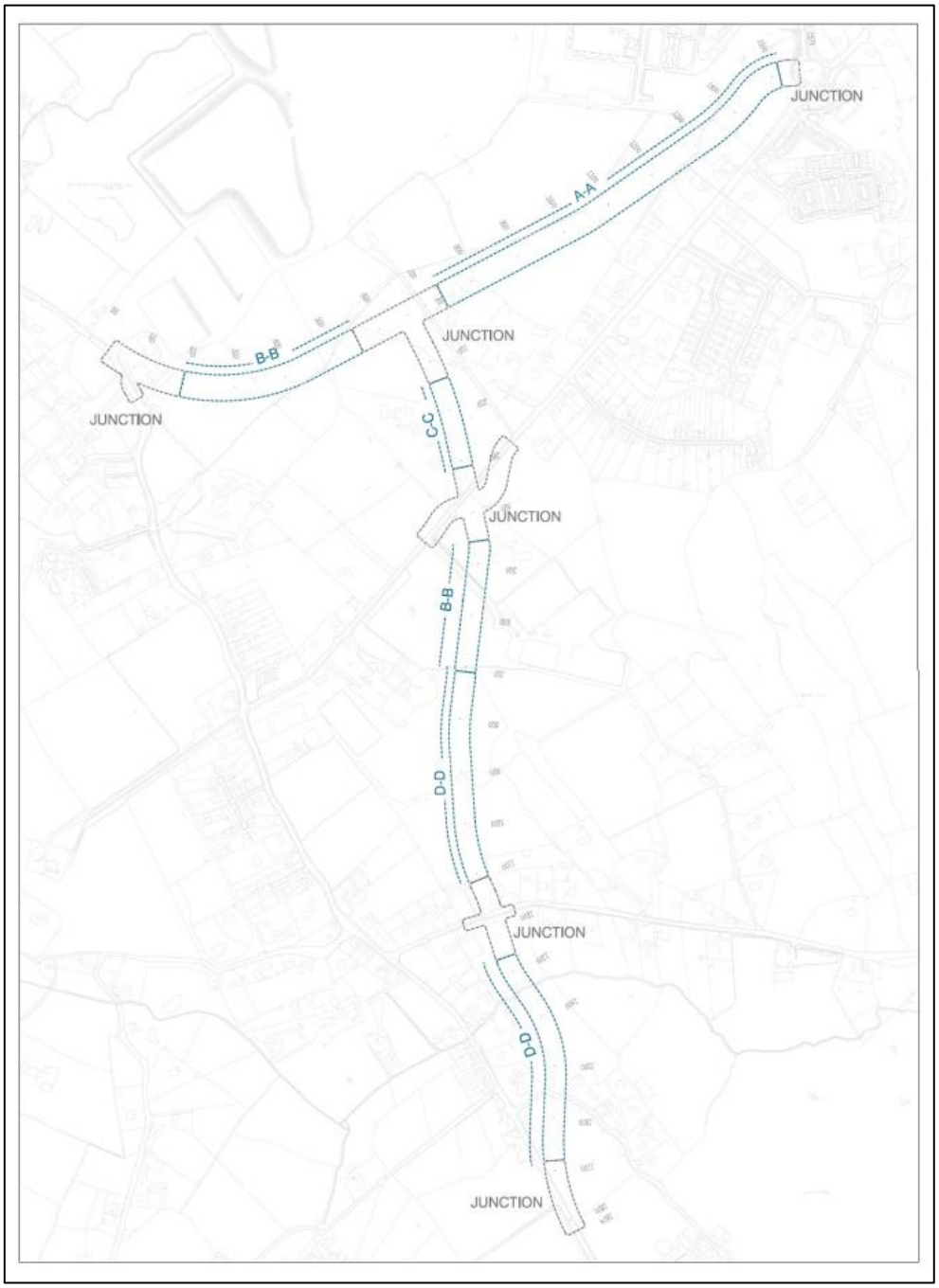


Figure 4-4 - Typical Cross Section along GDRS (source: GDRS EIAR)

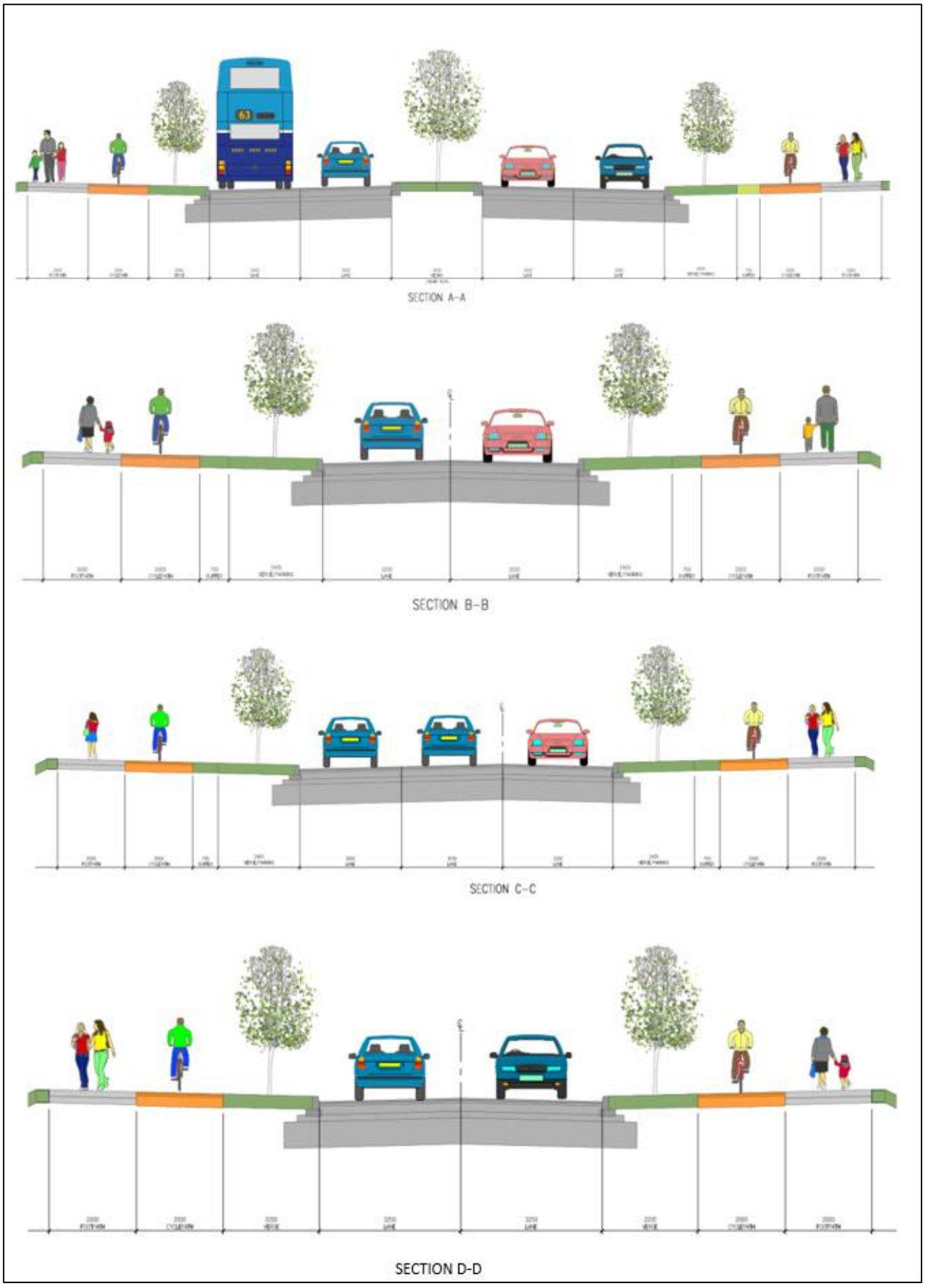


Figure 4-5 - GDRS Typical Sections Layouts (*source: GDRS EIAR*)

4.1.1. Glenamuck Road / Enniskerry Road Part 8Junction Upgrade Scheme

The upgrade of the Enniskerry Road / Glenamuck Road Junction Upgrade Scheme was approved by Dún Laoghaire-Rathdown County Council under Part 8 (DLRCC Ref - PC/IC/01/17) of the Planning and Development Regulations[4].

The approved Part 8 scheme incorporates the following:

- Glenamuck Road approach to junction: provision of left and right turning lanes
- Enniskerry Road - southern approach to junction – provision of new right turning lane
- Improved pedestrian crossings incorporated within signalised junction including new crossings on the northern and western sides of Enniskerry Road.
- Cycle lanes / cycle tracks on Glenamuck Road
- General upgrading of the junction to provide improved pedestrian and cycle facilities
- Removal of the pinch-point on Glenamuck Road adjacent to Cromlech Close
- Upgraded public lighting

The general junction arrangement is shown on Figure 4-6.

Figure 4-6 - Enniskerry / Glenamuck Road "Golden Balls" Jct

[4] https://www.pleanala.ie/anbordpleanala/media/abp/cases/orders/300/d300731.pdf

Figure 4.7 is an extract from the Local Area Plan, illustrates the alignment of these roads and the position of the development lands.

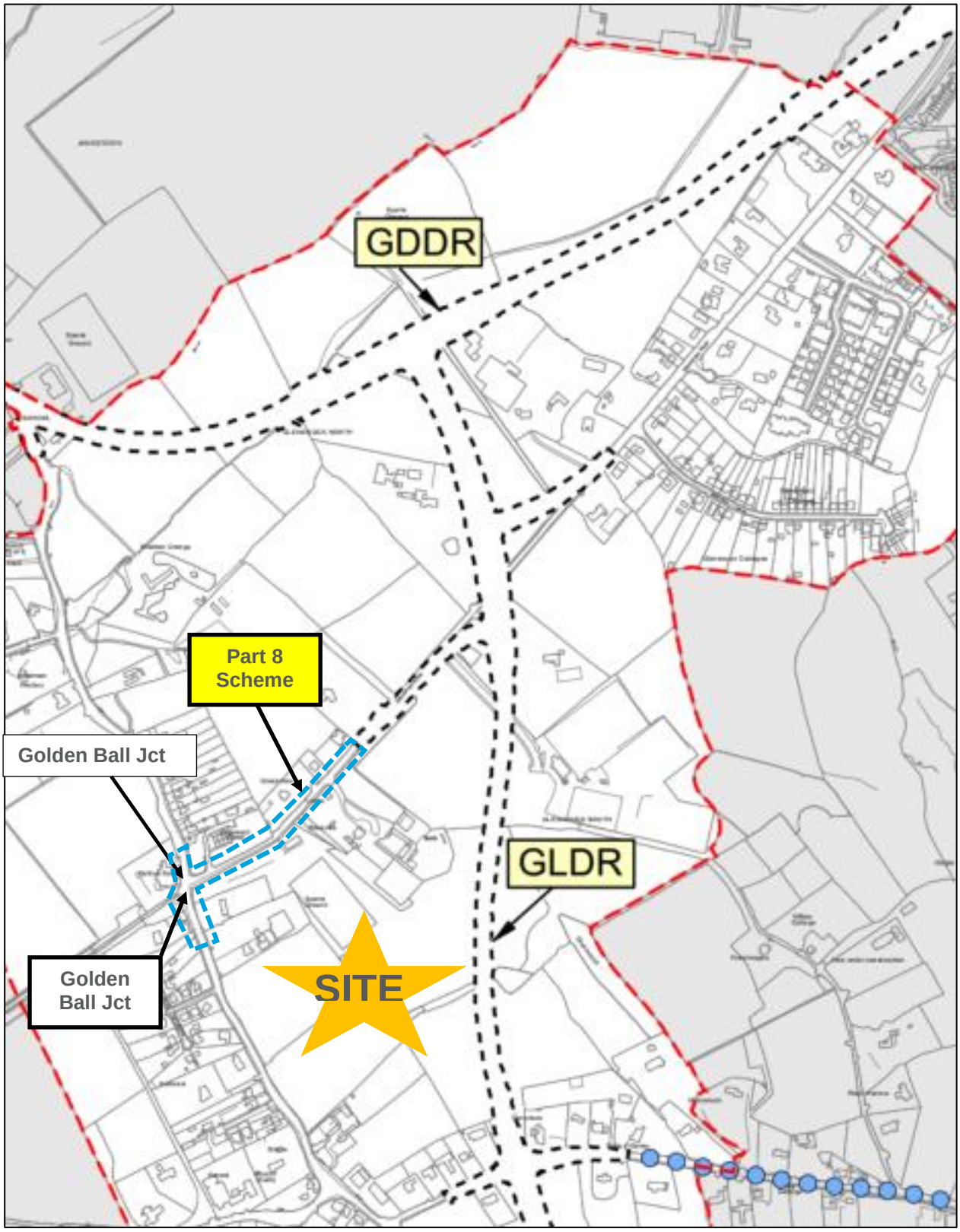


Figure 4-7 - GDRS Scheme in the context of the proposed development

The completion of the Distributor Roads will result in a significant reduction in traffic along Enniskerry Road and Glenamuck Road. Specific proposals including the bus gates on Enniskerry Road and Glenamuck Road will copper fasten this reduction in traffic which will result in these roads become more conducive to pedestrian and cycle movement. In particular the provision of footpaths and cycle tracks along the full extent of Glenamuck Road as far as the Link Distributor Road and the upgrading of Enniskerry Road as a traffic calmed street, incorporating widened footpaths, to facilitate local pedestrian, cycle, bus and other vehicular movements will result in a significant change in the function and form of these roads and the reduction in volume and speed of traffic travelling on these roads.

In correspondence with Gerry D'Arcy DLRCC Roads and Transportation in February 2022 and confirmed again in May 2022 the status of the GDRS is:

- DLRCC intends to deliver the GDRS and Part 8 scheme as one scheme under a single construction contract;
- The scheme(s) have all necessary Statutory Consents;
- The scheme(s) have funding;
- DLRCC are anticipating going out to Tender for Construction in Q2 2022;
- DLRCC expect to be on site Q3-Q4 2022;
- Programme 18 to 21 Months; and
- Scheme Complete circa Q3 -Q4 2024.

The scheme would be delivered in one phase. Based on knowledge of the area and construction impacts DLRCC expects that the first part to be delivered would be the GDDR so that traffic could avoid Kilternan Village and Enniskerry Road and Glenamuck Road and that following that the GLDR would be constructed. However, DLRCC noted that this would need to be agreed with the Contractor upon appointment. This correspondence is attached in **Appendix G.**

4.2. Pedestrian and Cycle Network

Sitting within the heart of the LAP lands the site will benefit from the development of the wider walking and cycling network in accordance with the relevant objectives set out in the County Development Plan and the LAP through the delivery of the GDRS as outlined in the previous section that provides a very high level of service to encourage and facilitate walking and cycling.

The site is located on a designated cycle route as set out in the Greater Dublin Area Cycle Network Plan that overlaps and complements the cycle route objectives of the County Development Plan. The site is located proximate to Route D1 on Enniskerry Road and Route D4 on Ballycorus Road. Glenamuck Road is designated as a feeder cycle route as shown in Figure 4-8.

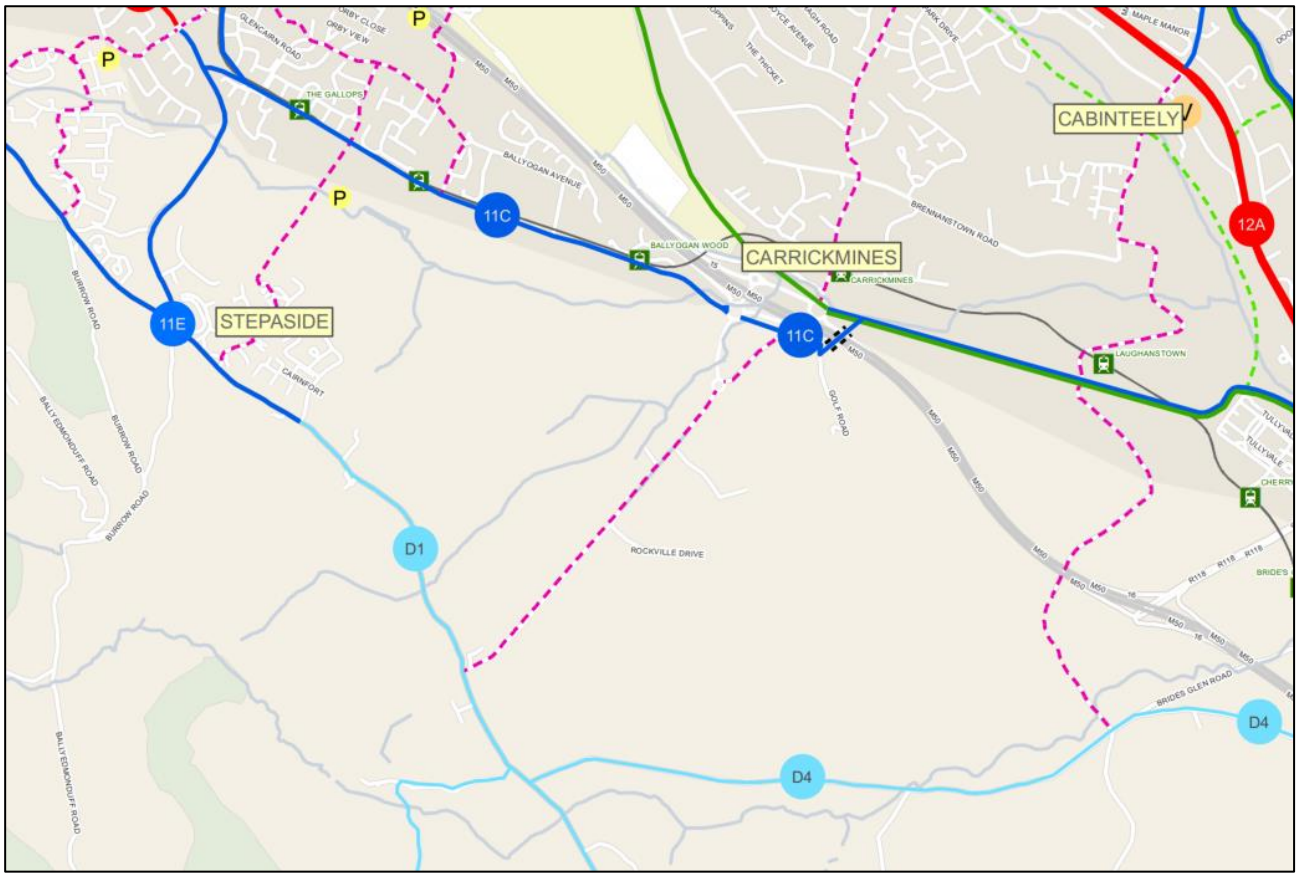


Figure 4-8 - Greater Dublin Area Cycle Network

On the completion of the Glenamuck District Roads Scheme (GDRS) the proposed development site will be directly connected to these improvements and the wider footpath and cycle track improvements along the distributor roads. In overall terms therefore the site is centrally located within the LAP lands so as to be fully integrated into the comprehensive walking and cycling network that will link the development to local amenities and to the wider amenities, services and public transport provision.

4.3. Public Transport

At a regional level the National Transport Authority (NTA) the 'Transport Strategy for the Greater Dublin Area 2016 – 2035 provides the overall strategy for the sustainable development of the GDA region. This strategy sets out the transport objectives for the region in terms of bus, rail, walking, cycling and roads objectives. The development of the LAP lands to the potential provision of up to 3,000 residential units will result in a local population increase of over 8,000 people.

4.3.1. Bus Routes

The New Dublin Area Bus network was published by the NTA in September 2020 with implementation of the network commencing in 2021. Under this new network there are a number of proposed routes that pertain to the proposed development. They are listed below:

- L13: Kilternan - Ringsend Bus garage – weekday frequency every 60 minutes
- L26: Kilternan – Blackrock – weekday frequency every 30 minutes
- P13: Kilternan – UCD – 2 trips in both AM (0700-0900) and PM (16:00-1800) peak hours
- 88: Enniskerry - Mountjoy Square - weekday frequency every 60 minutes

The proposed local bus network under the New Dublin Area Bus network is shown in Figure 4-9.

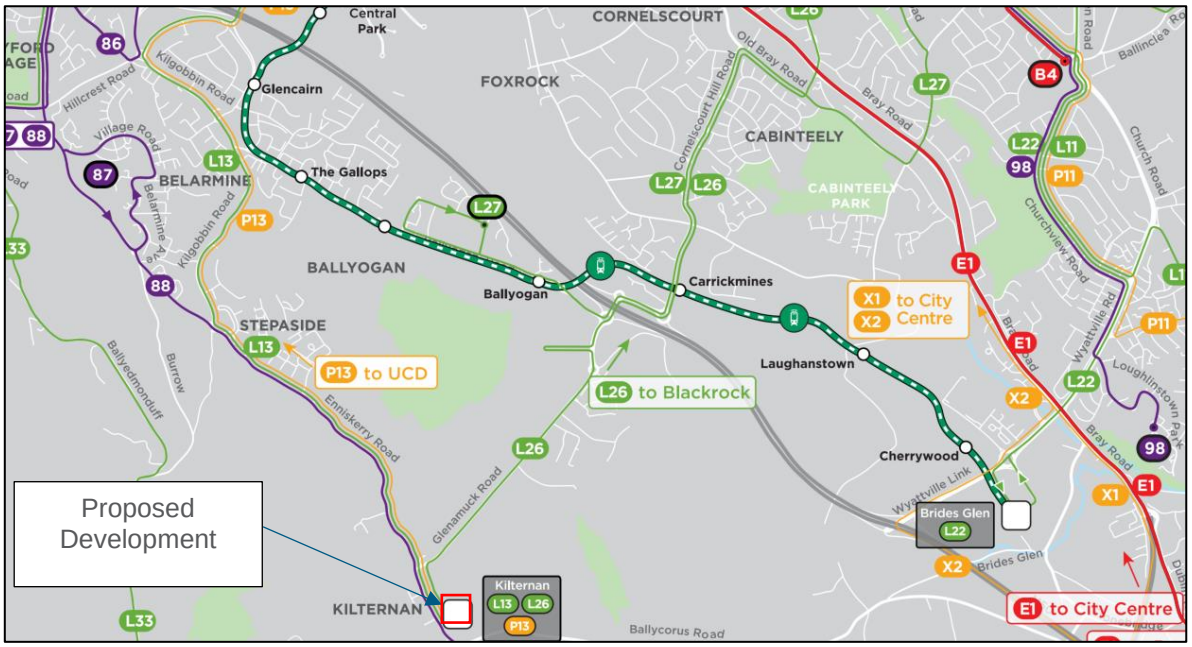


Figure 4-9 - Proposed Local Bus Network under the New Greater Dublin Area Bus Network

The nearest core bus corridor to the proposed development as proposed under Bus Connects is bus corridor 13, Bray to City Centre. The current preferred route runs along the eastern side of the M50 through Cabinteely and Cornelscourt as shown in Figure 4-10. The proposed L26 bus route links up with the core bus corridor 13.

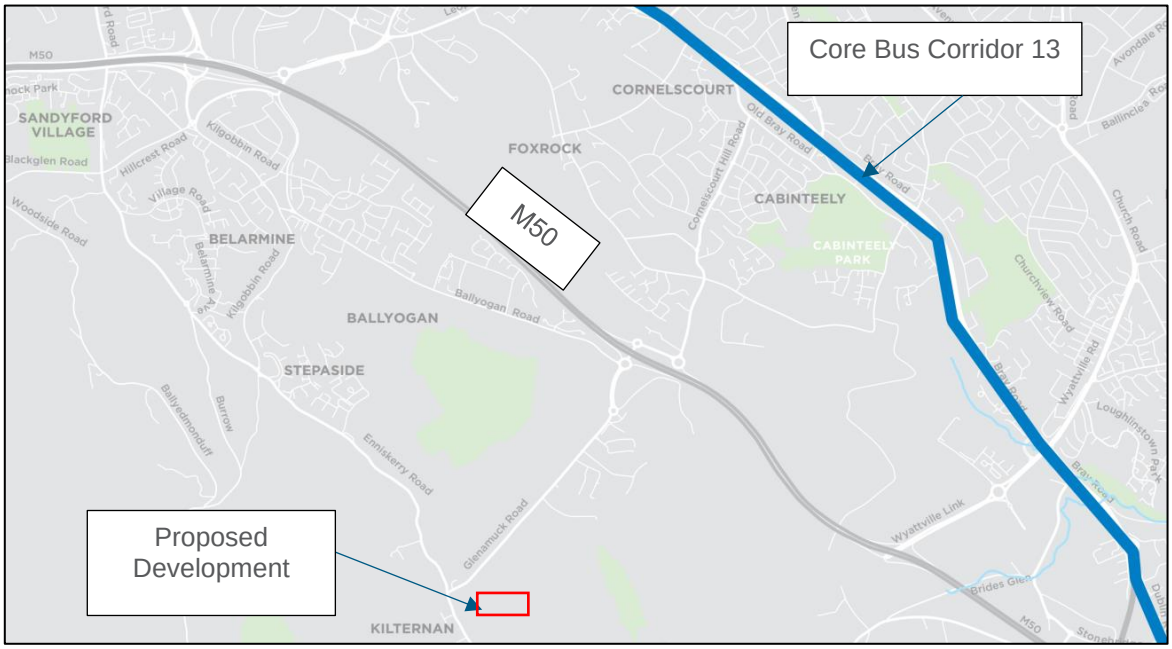


Figure 4-10 - Bus Connects: Core Bus Corridor 13

The scale of growth in the LAP lands will result in a demand for increased bus services and a corresponding substantial increase in the frequency and capacity of bus services serving Kilternan. The development site is ideally located within short walking distance to access bus services that operate on Glenamuck Road, serving the Ballyogan Luas stop and Enniskerry Road serving the City Centre and onwards to the north city. These proposals will include improvements to bus services in Kilternan which will be further improved in terms of frequency as the population grows in line with the planned local population increase to 8,000 people.

In terms of planned bus routes, the previous County Development Plan sets out objectives for Priority Bus Schemes including the following:

- Enniskerry Road - Glenamuck Road South - The Park - Ballyogan Luas Stop. This route runs immediately adjacent the site.
- Cherrywood to Blackrock via Wyattville Dual Carriageway.

- Cherrywood to Dún Laoghaire via Wyattville Dual Carriageway

These routes are illustrated in the Figure 4-11 which is an extract from supplementary map t1 from the previous development plan.

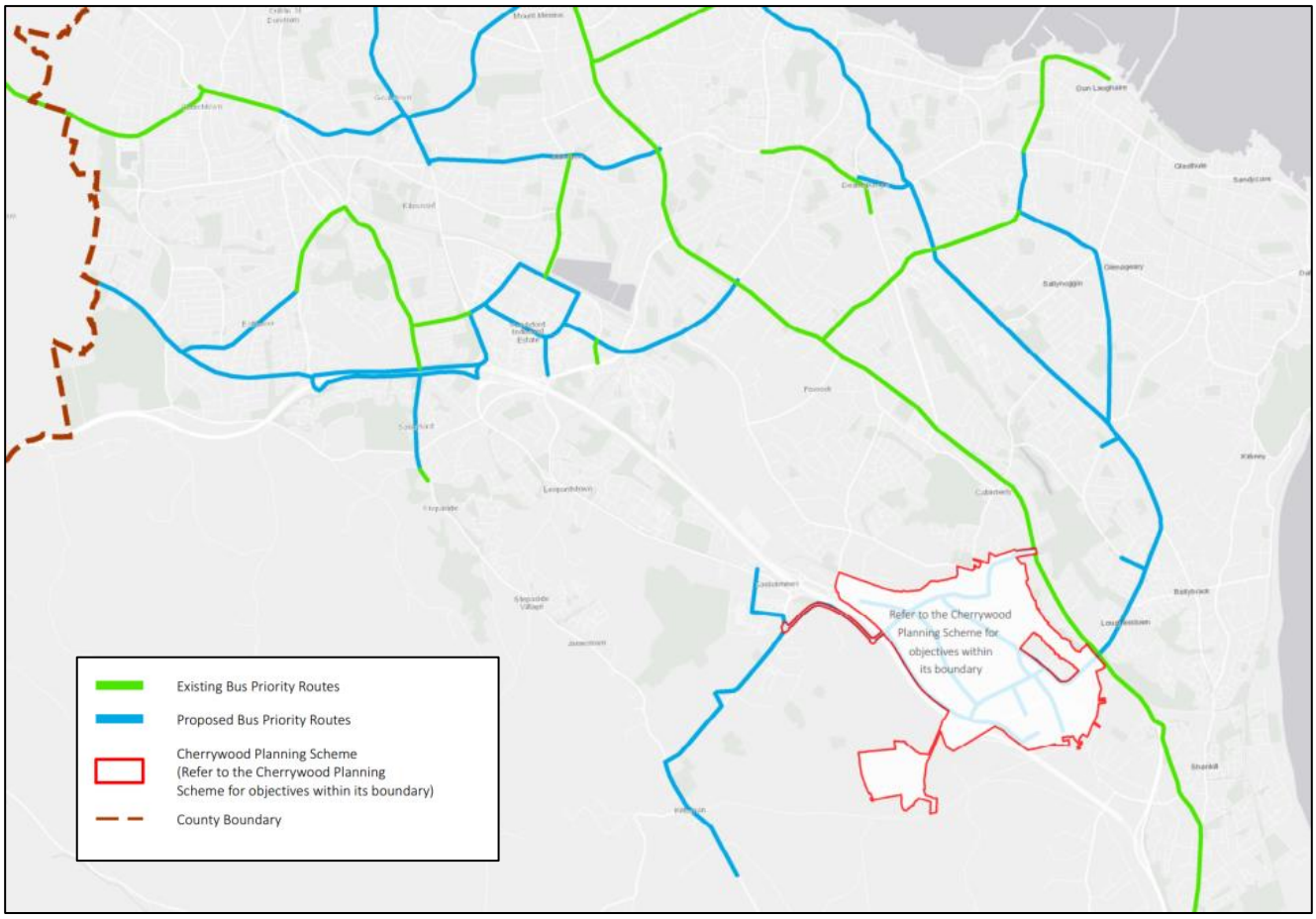


Figure 4-11 - Existing and Planned Bus Routes

Some of the measures outlined in the previous plans for the Enniskerry Road and Glenamuck Road are coincident with the bus priority measures in the GDRS and will therefore be delivered by 2024 when that scheme is finalised.

4.3.2. LUAS and Metro

The current NTA approach for the upgrading the existing Luas Green Line to MetroLink involves a three-stage proposal as outlined below:

- First stage: This would comprise the development of MetroLink from Swords to Charlemont without connecting to the Green Line but continuing the required tunnel boring works to allow the future connection to the existing Luas line.
- Second stage: Incremental improvements to the Green Line to increase its capacity up to 30 trams per hour (55 metre long)
- Third stage: the connection made from the MetroLink tunnel termination point onto the Green Line.

4.4. Summary of Future Transport Proposal

As set out in the above section the delivery of the above transport infrastructure in the Kilternan area will radically transform the way people move about by providing significantly enhanced active and sustainable travel opportunities that has the potential to reduce single occupancy car journey with positive implications for mode share and the environment.

5. Proposed Development

5.1. Subject Application

The development will principally consist of the demolition of c. 573.2 sq m of existing structures on site comprising derelict farmyard buildings; and the provision of a mixed use development consisting of 383 No. residential units and a Neighbourhood Centre with a gross floor area of 2,512sqm. Table 5-1 provides a full breakdown of the schedule of accommodation and residential mix.

Table 5-1 - Kilternan Village SHD Land Uses

Residential Accommodation	**No. of Units**	**Unit Mix**	**No. of Units**
Houses	165	3 Bed	108
		4 Bed	57
Duplexes	118	1 Bed	8
		2 Bed	50
		3 Bed	60
Apartments	100	1 Bed	19
		2 Bed	78
		3 Bed	3
Residential Total	383		
Neighbourhood Centre	**GFA - sqm**		
Creche	**439**		
Office	**317**		
Medical	**147**		
Retail	**857**		
Retail (convenience)	**431**		
Community	**321**		
Neighbourhood centre	**2512 sqm**		

The development also provides three vehicular access from Enniskerry Road and one from Glenamuck Road as well as a vehicular access to the future Glenamuck Link Distributor Road. The development also provides pedestrian links from Enniskerry Road and within the site to the neighbouring “Rockville” development to the north-east and a pedestrian/cycle route through the Dingle Way from Enniskerry Road to the future Glenamuck Link Distributor Road.

The development provides car parking spaces and bicycle parking (as detail in Section 6); bin storage; boundary treatments; private balconies, terraces and gardens; hard and soft landscaping; plant; and all other associated site works above and below ground.

The proposal is for a mixed-use development that includes residential, retail, commercial and community facilities. The mixed-use nature of the development and the design of the masterplan in accordance with Design Manual for Roads and Streets (DMURS) principles will help to encourage active travel and reduce the need to drive in accordance with the “15 Minute Neighbourhood Principles. Further details of the proposed development are outline in the sections below and the layout plan is illustrated in Figure 5-1.

Figure 5-1 -Masterplan of Proposed Development

5.1.1. Phasing

The proposed mixed use development will be delivered over five phases as outlined in Table 5-2.

Table 5-2 - Proposed Phasing Strategy

Phase	Residential Units	Neighbourhood Centre / Commercial	Duration Months	Start	End
Phase 1	91		18	Apr- 23	Sep -24
Phase 2 & 2a	126	2191	24	Apr -24	Mar -26
Phase 3	59		12	Aug -25	Jul-26
Phase 4	97		18	Feb-26	Apr-28
Phase 5	10	321	8	Sep 27	Apr -28
Total	383	2512	80		

Works associated with each phase are shown in Table 5-3.

Table 5-3 - Associated Works with Phasing Plan

Phase	Units	Associated Works
Phase 1	91	Main Public Open Space.
		Central Tree Line.
		Off Site Drainage through Southern Lands.
		Main drainage for scheme.
		Works to Enniskerry Road.
		Main Spin Road to GLDR (make connection in this phase if GLDR Operational otherwise connection made in Phase 2).
Phase 2	73	Associated site development works
		Connection to GLDR if not completed in Phase 1.
Phase 2a	53	Neighbourhood Centre & Associated site development works.
Phase 3	59	Associated site development works
		Public Open Space .
Phase 4	97	Associated site development works
		Public Open Space (under power lines).
Phase 5	10	Associated site development works.

The outline phasing plan is shown on Figure 5-2.

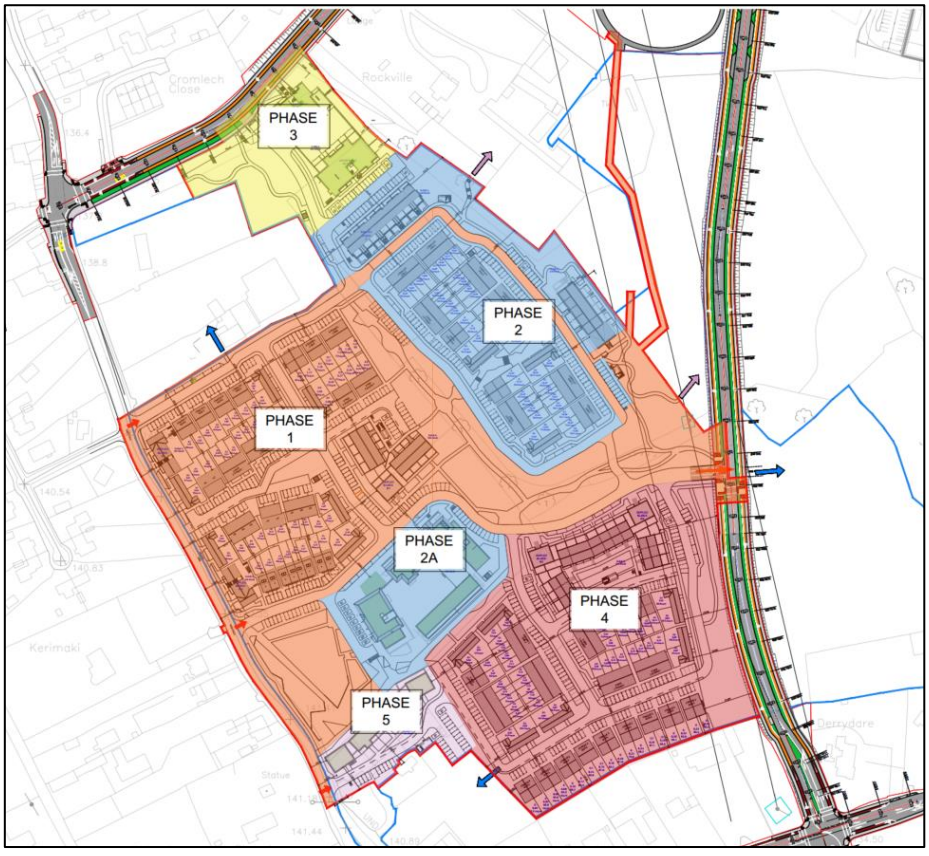


Figure 5-2 - Outline Phasing Strategy

5.1.2. Phasing of the Development

Chapter 10 of the *Kilternan LAP* sets out a phasing strategy for the delivery of housing in Kilternan, which represents an interim proposal to accommodate development in advance of the delivery of the Glenamuck District Roads Scheme (GDRS), which includes the Glenamuck District Distributor Road (GDDR) and Glenamuck Link Distributor Road (GLDR). The interim proposal set out by the *Kilternan LAP* is that 700 No. dwellings could be accommodated on the existing road network (noted as Phase 1), which is broken down into the following sub-phases:

Phase 1 (a) to comprise c. 350 dwelling units:

A. GLENAMUCK ROAD UPPER/NORTH PORTION (c. 200 dwelling units)

This area encompasses the lands designated as 'medium-higher density residential' at the northern section of Glenamuck Road (referred to as Phase 1 (a)(A) where relevant in this document).

B. NODE AT JUNCTION OF ENNISKERRY AND GLENAMUCK ROADS (c. 150 dwelling units)

This area includes the lands designated as 'medium density residential' to the east of the Enniskerry Road. Any proposed developments must include the improvement of Glenamuck Road (referred to as Phase 1 (a)(B) where relevant in this document).

Phase 1 (b) to comprise c. 350 dwelling units:

C. CONCENTRATED AT VILLAGE CORE / ALONG ENNISKERRY ROAD

These lands include the lands zoned as 'Neighbourhood Centre' and 'Residential' along the Enniskerry Road. Development is dependent on the delivery of the Traffic Calming Scheme and must include the improvement of the Enniskerry Road through the 'Village Core' (referred to as Phase 1 (b)(C) where relevant in this document).

Figure 5-3 is an extract from the Kilternan LAP that shows the proposed phasing strategy with the proposed site identified.

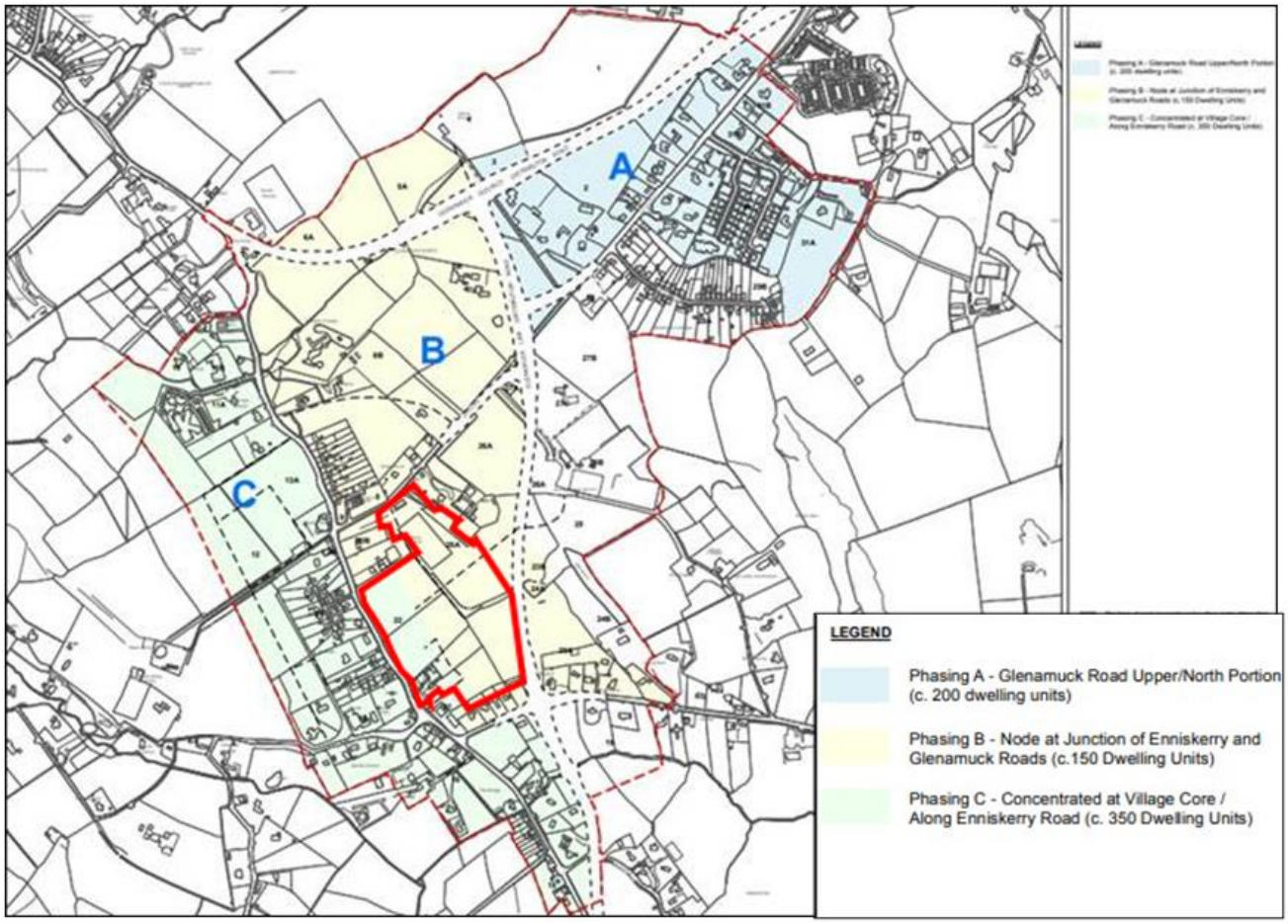


Figure 5-3 - Kilternan LAP Phasing Map with Developable Site Outlined indicatively in Red

As noted in Section 4.1 Glenamuck District Roads Scheme (GDRS) was granted permission by An Bord Pleanála on 18th December 2019 (ABP-303945-19) and is projected to begin construction in Q3/Q4 2022, with completion estimated for Q3/Q4 2024.

Since the publication of the *Kilternan LAP*, a Part 8 application for the Glenamuck Road upgrade was permitted in 2017 (Ref. PC/IC/01/17), which will facilitate an additional 50% of units to be allowed in the *Kilternan LAP* area, up to a total of 1,050 No. units. This Part 8 is intended to be constructed at the same time as the GDRS.

As shown in Figure 5-3 the subject site is located within both Phase 1 (a)(B) and Phase 1 (b)(C) on the Phasing Map (B and C on the map above). As detailed in the table accompanying Figure 8.6 below, planning permission has been granted for 657 No. dwellings within Phase 1 (a)(B) and for 565 No. dwellings within Phase 1 (b)(C) to date, which is a total of 1,222 No. dwellings. In addition, some 148 No. dwellings have been granted permission in Phase 1 (a)(A) with permission pending for 3 No. additional dwellings.

In total, there are 1,370 No. dwellings granted permission in the 3 No. Phases and an additional 3 No. units pending a decision. If permission is granted for the subject development of 383 No. units, this will bring the total to 1,753 No. dwellings (plus 3 No. dwellings pending) if the Bord is minded to grant planning permission. The location of these permission is shown in Figure 5-4 and outlined in Table 5-4.

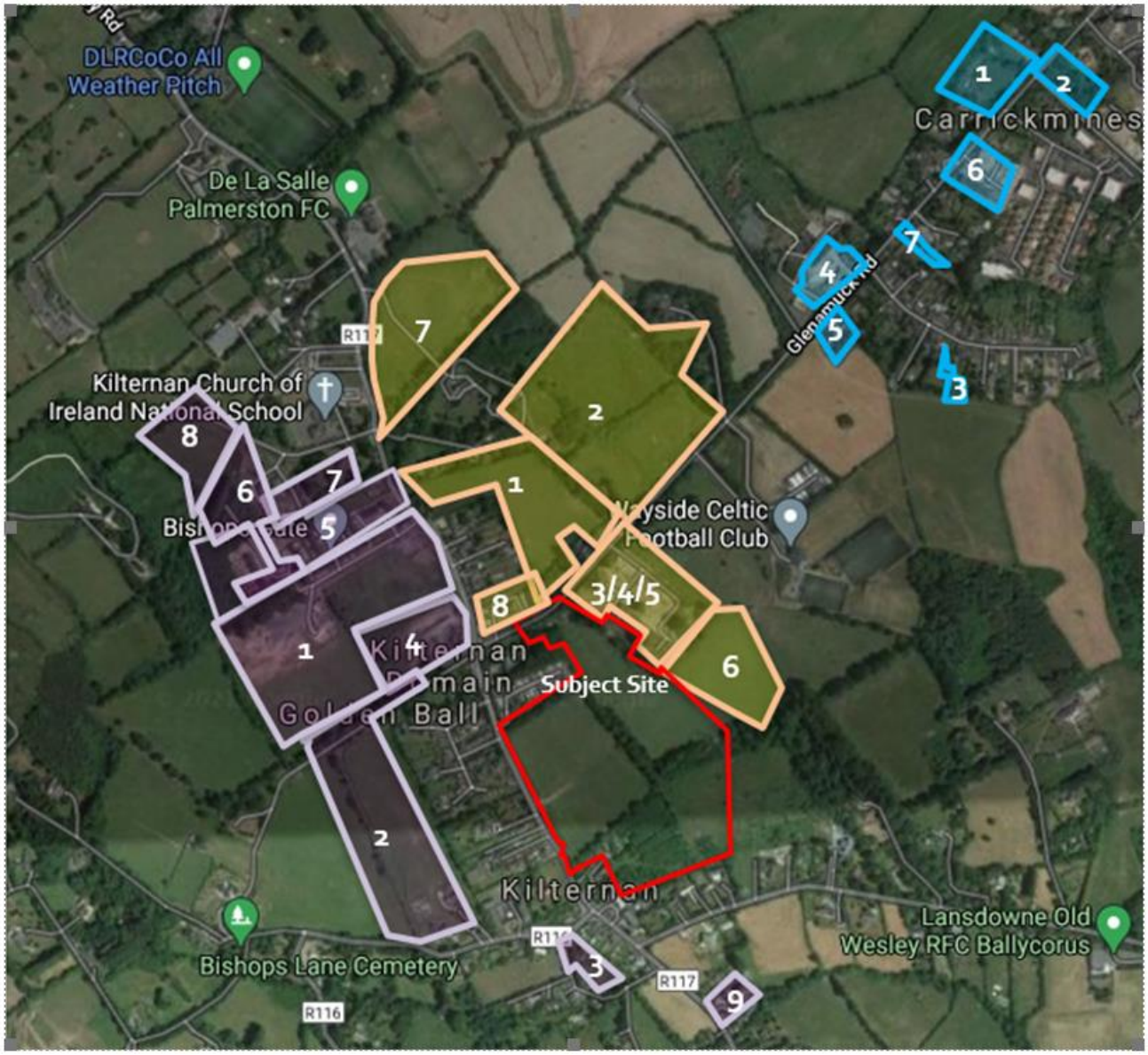


Figure 5-4 - Planning Applications in Kilternan Village in the vicinity of the site(red line indicative only)

Table 5-4 - List of Planning Applications in Kilternan Area

Map Ref	Phasing Zone (LAP)	Site Locations	Reg. Ref	No. of units	Final Grant	Commenced	Live Permission or Expired
1	A	The Leys, Glenamuck Road South	D21A/0100 [ABP-310089-21]	61 No. units	12th November 2021	Yes	Live
2	A	Drumkeen, Glenamuck Road	D17A/0520 [ABP-249144-17]	15 No. units	7th February 2018	No	Live
3	A	No. 13 Glenamuck Cottages	D16A/0154	2 No. units	29th November 2016	Yes [complete]	Expired
4	A	Willow Glen, Glenamuck Road	D15A/0443	31 No. units	1st June 2016	Yes [complete]	Expired
5	A	Brambledown, Glenamuck Road	D14A/0766	11 No. units	6th May 2015	Yes [complete]	Expired
6	A	Saxaroon and Inglenook, Glenamuck Road	D14A/0765 [ABP-244520-15]	28 No. units	1st July 2015	Yes [complete]	Expired
7	A	Tandesann, Glenamuck Road South	D21A/1002	3 No. additional units	Pending – Decision Due 15th June 2022	N/A	N/A
1	B	Glenamuck Road/ Enniskerry Road SHD	ABP-306160-19	197 No. units	6th April 2020	Yes	Live
2	B	Glenamuck Road SHD	ABP-303978-19	203 No. units	26th June 2019	Yes	Live
3	B	Rockville Phase 1	D17A/0793	49 No. units	25th January 2018	Yes [complete]	Live
4	B	Rockville Phase 1	D19A/0242 [amendment to D17A/0793]	2 No. units	13th November 2019	Yes [complete]	Live
5	B	Rockville Phase 2A	D18A/0566 amended by D18A/1191 [ABP-303871-19]	5 No. units	8th November 2018 / 24th June 2019	Yes	Live

Map Ref	Phasing Zone (LAP)	Site Locations	Reg. Ref	No. of units	Final Grant	Commenced	Live Permission or Expired
6	B	Rockville Phase 2B	D20A/0015 [ABP-306999-20]	56 No. units	2nd September 2020	No	Live
7	B	Shaldon Grange SHD	Permission refused under ABP-307506-20 on Material Contravention technicality. Permission granted for relodged application under ABP-312214-21	130 No. units	11th April 2022	No	Live
8	A	Cromlech Close	PC/01/07 [Part 8 application]	15 No. units	11th June 2007	Yes [complete]	Expired
1	C	Enniskerry Road SHD [Adjoining Bishop's Gate]	ABP-309846-21	203 No. units	15th July 2021	No – Due to commence in the Summer 2022	Live
2	C	Suttons Field SHD	ABP-307043-20	116 No. units	28th August 2020	Yes	Live
3	C	Slievenamon	D18A/0347 [ABP-303491-19]	22 No. units	28th June 2019	Yes	Live
4	C	Golden Ball Pub	D16A/0090 [ABP Ref.PL06D.246537] D17A/1022 D18A/1133 D18A/1239	61 No. units	Parent permission 27th October 2016 [Extension of Duration Granted on 15th November 2021 (D16A/0090/E)]	Yes	Live
5	C	Bishop's Gate Phase 1	D10A/0716 [ABP Ref. PL06D.239662]	68 No. units	31st October 2012	Yes [complete]	Live (EOD Granted 6th November 2017)
6	C	Bishop's Gate Phase 2	D18A/0083	27 No. units	13th September 2018	Yes [complete]	Live
7	C	Rockhurst	D18A/0137 [ABP-303753-19]	18 No. units	15th August 2019	No	Live
8	C	Glebe Road	D16A/0586	38 No. units	24th February 2017	Yes [near completion]	Live

Map Ref	Phasing Zone (LAP)	Site Locations	Reg. Ref	No. of units	Final Grant	Commenced	Live Permission or Expired
9	C	Kingston	D07A/0899 [ABP Ref. PL06D.227440] [extension of permission granted to 2018]	12 No. units	31st October 2008	Yes [complete]	Expired

As shown in Table 5-4 out of 1,370No. units granted permission, some 1,136No. residential units have either commenced or completed construction at the time of writing this report (133 No. in Phase 1 (a)(A), 456 No. in Phase 1 (a)(B) and 547 No. in Phase 1 (b)(C)).

However, as the GDRS is projected to begin construction in Q3/Q4 2022 and estimated to be completed by Q3/Q4 2024, this lines up with the estimated opening of Phase 1 of the subject development (Q3 2024). Therefore, the proposed development will not give rise to any planning difficulties as the infrastructure is soon to be constructed.

In their assessment of the Enniskerry Road SHD (ABP Reg. Ref. ABP-309846-19), which was granted permission on 15th July 2021, the following was stated in An Bord Pleanála's Order in relation to phasing:

> *'The Board considered that the* ***proposed development is, apart from the phasing parameters of the Kilternan-Glenamuck Local Area Plan 2013, as extended to 2023, broadly compliant with the Dún Laoghaire-Rathdown County Development Plan 2016-2022 and the Kilternan- Glenamuck Local Area Plan 2013, as extended to 2023, and would, therefore, be in accordance with the proper planning and sustainable development of the area.***
>
> *The Board considered that, while a grant of permission for the proposed Strategic Housing Development would not materially contravene a zoning objective of the Development Plan,* ***it would materially contravene the Local Area Plan with respect to the programme and phasing of development. The Board considers that, having regard to the provisions of section 37(2) of the Planning and Development Act, 2000, as amended, a grant of permission in material contravention of the Local Area Plan would be justified for the following reasons and considerations****:*
>
> *In relation to section 37 (2)(b)(i) of the Planning and Development Act 2000, as amended, the proposed development is in accordance with the definition of Strategic Housing Development, as set out in section 3 of the Planning and Development (Housing) and Residential Tenancies Act 2016, as amended, and complies with the Government's policy to increase the delivery of housing as set out in Rebuilding Ireland Action Plan for Housing and Homelessness 2016.*
>
> *In relation to section 37 (2)(b)(iii) of the Planning and Development Act 2000, as amended, the proposed development is in accordance with national policy as set out in the Project Ireland 2040 National Planning Framework, specifically, National Policy Objective 3(b) which seeks to deliver at least 50% of all new homes targeted in the five cities and suburbs of Dublin, Cork, Limerick, Galway and Waterford, within their existing built up footprints. The proposed development would also supply 94 number high quality apartment units in compliance with the Sustainable Urban Housing: Design Standards for New Apartments, Guidelines for Planning Authorities issued by the Department of Housing, Planning and Local Government in December 2020.*
>
> *In relation to section 37 (2)(b)(iv) of the Planning and Development Act 2000, as amended, the Board has previously granted planning permission for residential schemes in the immediate vicinity of the subject site, including 197 number residential units (An Bord Pleanála Reference Number ABP-306160-19) and 203 number residential units (An Bord Pleanála Reference Number ABP-307043-20). The proposed development will reflect the pattern of these permitted developments.*

Furthermore, the Bord considered that, subject to compliance with the conditions set out below, the proposed development would constitute an acceptable quantum and density of development in this location, would not seriously injure the residential or visual amenities of the area, would be acceptable in terms of urban design, height, density and quantum of development and would be acceptable in terms of pedestrian and traffic safety. The proposed development would, therefore, be in accordance with the proper planning and sustainable development of the area.' [Our Emphasis]

In their assessment of the Shaldon Grange SHD (ABP Reg. Ref. ABP-312214-21), which was very recently granted permission on 11th April 2022 (130 No. units), the following was stated in An Bord Pleanála Inspector's Report in relation to phasing:

*'To conclude**, I do not have undue concerns in relation to traffic or transportation issues**. **As dealt with above, in the previous section on phasing, I am satisfied that the proposed development can be accommodated on the existing road network until such time as the GDDRS is completed and operational**. I note that the Transport Division of the planning authority recommend refusal of permission in relation to phasing/prematurity (this matter is dealt with above), however as stated elsewhere within my assessment, **it appears that works to begin construction of the GDDRS are imminent and that the timelines in relation to the construction of this proposed development and the roads scheme would be similar'**.* [Our Emphasis]

The An Bord Pleanála Order stated the following:

*'**The Board considered that a grant of permission could material contravene section 10 of the Kilternan-Glenamuck Local Area Plan 2013 in relation to phasing, which applies to the site, would be justified** in accordance with sections 37(2)(b)(i),(iii) and (iv) of the Planning and Development Act 2000, as amended having regard to:*

*The **proposed development is considered to be of strategic or national importance** by reason of its potential to contribute to the achievement of the Government's Policy to increase delivery of housing set out in the Rebuilding Ireland Action Plan for Housing and Homelessness 2016, and to facilitate residential development in an urban centre close to public transport and centres of employment.*

*It is considered that permission for the proposal should be granted **having regard to Government policies as set out in the Eastern and Midland Regional Assembly Regional Spatial and Economic Strategy 2019-2031** which includes the Metropolitan Area Strategic Plan which identifies strategic residential and employment corridors.*

*It is considered that permission for the proposal should be granted **having regard to the Project Ireland 2040 National Planning Framework,** National Policy Objective 3b which seeks to 'deliver at least half (50%) of all new homes that are targeted in the five Cities and suburbs of Dublin, Cork, Limerick, Galway and Waterford, within their existing built-up footprints'.*

*It is considered that **permission for the proposal should be granted having regard to the pattern of development and permissions in the vicinity since the adoption of the Kilternan-Glenamuck Local Area Plan 2013**.*

In accordance with section 37(2)(b)(i)(iii) and (iv) of the Planning and Development Act 2000, as amended, was satisfied for the reasons and considerations set out in the decision.' [Our Emphasis]

Therefore, having regard to this recent grant of permission and the earlier precedents which were considered in assessing this more recent application, it is clear that a material contravention of the phasing of development in Kilternan has been accepted and the same parameters pertain to the subject lands.

As further set out in Section 8.2 for opening year assessment (2024) two scenarios have been modelled at "with GDRS" and "without GDRS" scenario to understand the impact of the phase1 development traffic on the road network. As outlined in Section 11.1 it is shown that Enniskerry / Glenamuck Road Junction experiences minor

increases in capacity versus the baseline without development in the AM peak period but operates within capacity in the PM peak. For further details see Section 11.1.

5.2. Site Access and Internal Layout and Circulation

The masterplanning of the lands has been developed in a collaborative and iterative process amongst the design team to ensure that the layout was designed to follow the road hierarchy, as set out in DMURS, with pedestrian at the top and vehicles at the bottom of the hierarchy. The internal layout looks to maximise permeability and opportunities for walking and cycling. External access points including some pedestrian cycle only access points are located along predicted desire lines to facilitate easy access to local services and amenities. The layout follows DMURS principles as set out in the following section.

5.3. DMURS

DMURS is the appropriate design guidance to be applied to urban environments such as cities, towns villages and urban developments such as residential estates.

"*The principles, approaches and standards set out in the Manual apply to the design of all urban roads and streets (that is streets and roads with a speed limit of 60km/h or less)…*"

DMURS requires a collaborative design process and a holistic design approach to the layout and design of urban streets; to this end the design team consisting of planners, architects, engineers and the client have engaged in a consultative process to ensure that the proposed development incorporates the design principles espoused in DMURS.

The street layouts have been developed to deliver a high place function wherein the streets and open spaces form part of the social fabric and are used for congregation and play. Achievement of this function can be greatly facilitated by developing a self-regulating street environment wherein vehicular movement function should be limited, as much as is practicable and a desirable maximum design speed of 20kph being achieved.

The street layout accommodates high levels of permeability for pedestrians and cyclists along streets and through open spaces, and onto Enniskerry Road and Glenamuck Road. Vehicular permeability has been predominantly limited to local access only, predominantly for residents with appropriate access provision for emergency and service vehicles.

All streets have been designed in the context of achieving a shared street provision in the street carriageway, per the National Cycle Manual, wherein the road space is shared between cyclists and vehicles based on low traffic low speed street environments. The side of the street remains the preserve of the pedestrian on the footway. Paramount to achieving this outcome is significantly limiting vehicle volumes and achieving, by design, a self-regulating desirable maximum speed of 20kph.

The design of the streetscape including the provision of car parking will significantly influence the achievement of lower traffic speeds and the required quality of street design.

5.3.1. Compliance with DMURS

A 30km/h slow zone, as required on residential streets that have no strategic or distributor function, will be promoted via the combination of the design elements below:

- Horizontal and vertical alignment to achieve a 30km/h design speed;
- Carriageway widths in line with DMURS requirement for street type;
- Constrained junction radii in line with DMURS requirement;
- Raised table entry treatments at access junctions;
- Provision of raised tables at internal Junctions.

Landscaping has been proposed so as not to create 'blind spots' and ensure that inter-visibility is maintained between pedestrians, cyclists and motorists.

5.3.2. Internal Road Street Layout

Best practice in relation to the design was referenced from the following current design documents and guidelines:

- Design Manual for Urban Roads and Streets (DMURS),
- The National Cycle Manual (NCM); and
- National Transport Authority: Permeability Best Practise Guide.

The site layout has been developed in accordance with the principles of DMURS taking note of the site constraints associated with the level changes across the site. In the context of these constraints and the required open space provision, the site layout for the development has been developed as a local street between the Glenamuck Road and Enniskerry Road and home zone streets off the local street to provide access within the development.

The internal street layout is based on the internal link street linking the three site junctions but designed to preclude rat running through the site. This street is a specific objective of the LAP with junctions located onto the Enniskerry Road and provision of a junction to the GLDR.

The street layout for the development essentially consists of two types of street typology, as outlined below:

- Local Street
- Home Zone Street

The street hierarchy and typology are shown in Figure 5-5. Further details are shown on Atkins drawing (Ref 5158632/HTR/DR/02/0100).

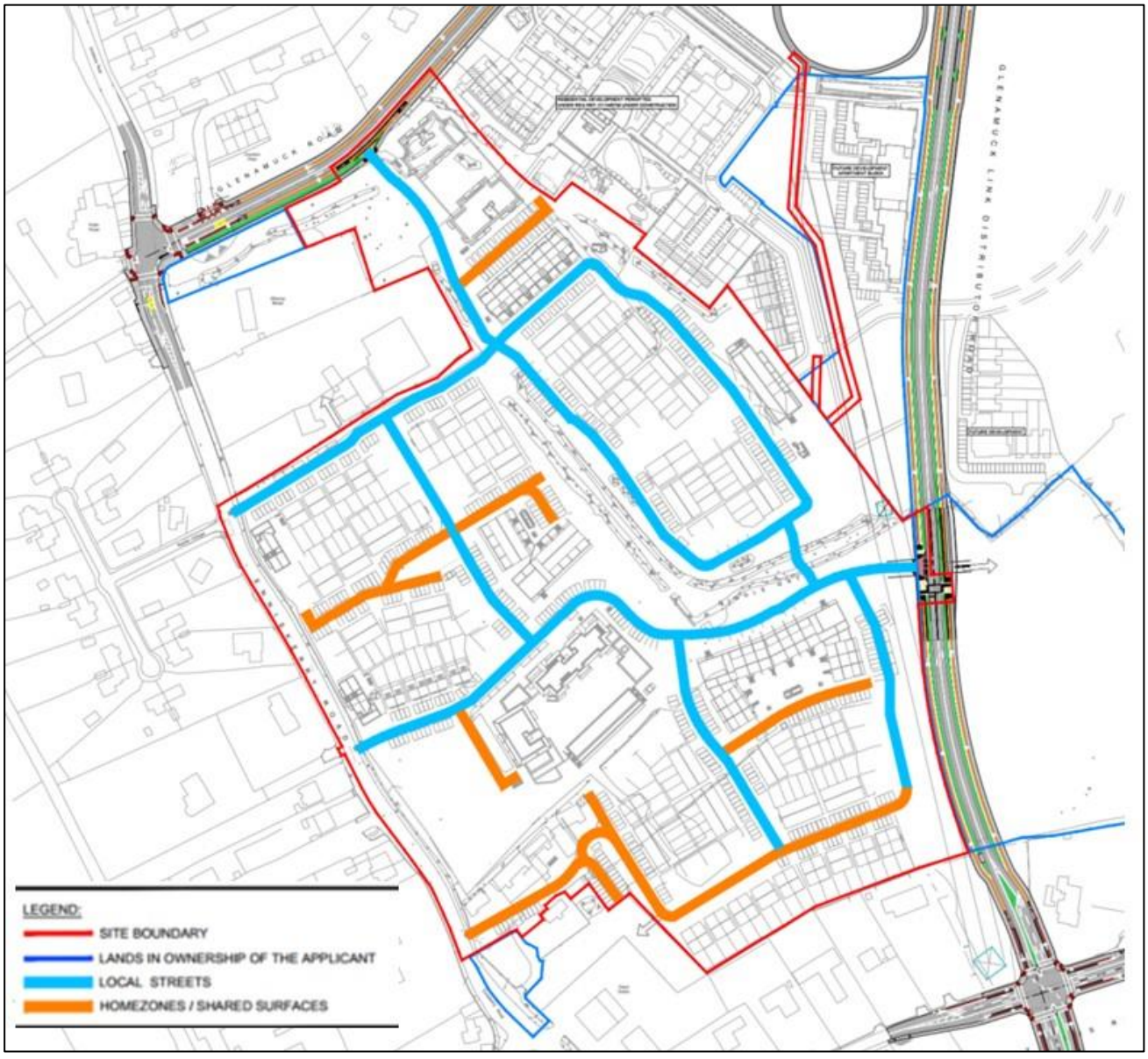


Figure 5-5 - Street Typology

In the context of this particular site this is the street layout that optimises permeability whilst responding to the prevailing topography and the critical elements of open space provision and retention of trees. Vehicular permeability is provided through the local streets with appropriate provision for vehicular access to the adjacent masterplan lands. The streets are all designed to facilitate pedestrian and cyclist permeability to the adjacent lands and onto the Enniskerry Road and pedestrian and cyclist facilities of the GDRS and Part 8 schemes.

5.3.3. Street Typology

The design criteria for the street types are detailed in Table 5-5.

Table 5-5 - Design Criteria

Design Criteria	Local Street	Home Zone Street
DMURS Recommended Design Speed	10-30km/h	10-30km/h
Adopted Design Speed	30km/h	30km/h
Minimum Horizontal Radius	11m	11m
Maximum Gradient	5%	5%
Minimum Gradient	0.5%	0.5%
Carriageway Width	5.5m-6.0m	4.8m
Footway Width	2.0m	1.2m
Junction Radii	6m between Local Street and Enniskerry Road 3.0m-4.5m between Local Street and Local Street	3m between Home Zone Streets and Local Street
Junction Approach Gradient	2%	2%

The Home Zones are designed as shared space streets, albeit with separate 1.2M wide footway provision, wherein the shared space will become central to the social fabric of the area as an informal space wherein children can play and the community can congregate, directly adjacent their residence. This shared space provision will be fundamentally established in the context of very low volumes of traffic movements taking place at very low self-regulating traffic speeds.

Typical cross sections outlining the above design principles is shown in Figure 5-6. Further cross sections throughout the development are shown on Atkins drawings 5158632/HTR/DR/0115 to 0120.

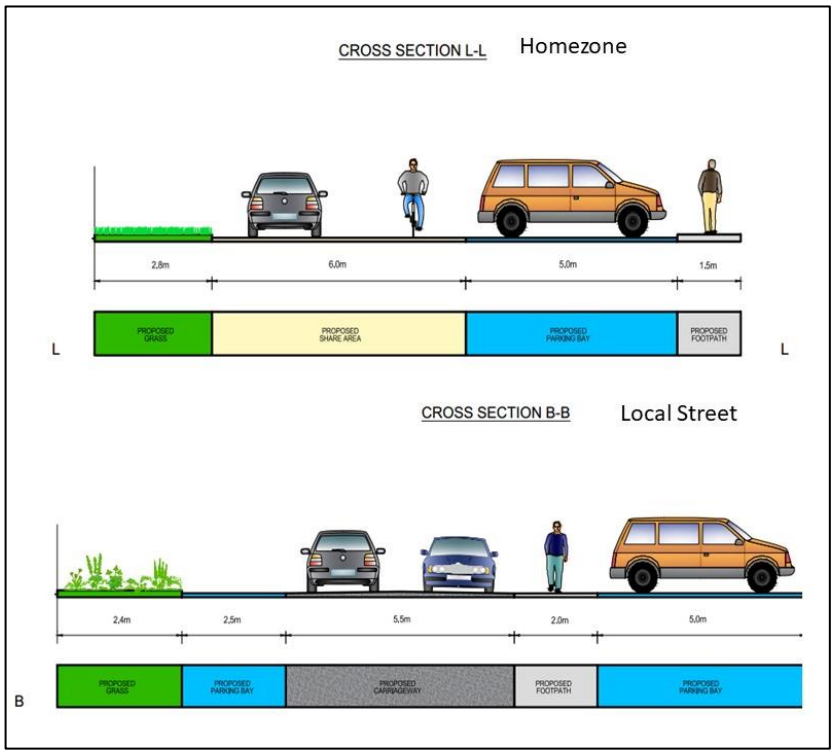


Figure 5-6 - Typical Cross Sections for Masterplan Streets

The design vehicle for service and delivery access is a refuse vehicle. Delivery vehicles are facilitated to turn and reverse a short distance along the Home Zone streets to facilitate the collection of refuse. This is common practice along cul de sacs and precludes the overbearing requirement of providing large turning areas at the end of cul de sacs to serve a vehicular movement that occurs once a week. Furthermore, these large turning areas are invariably used as car parking areas that preclude the turning of larger vehicles.

5.3.4. Junction Design

The design of the junctions is based on the proposed cross section at these locations and vehicle swept path analysis has been utilised to determine if any of the junctions require amendment to incorporate the largest expected vehicle manoeuvres, a refuse vehicle, through the junction. In general, tight corner radii are proposed in order to reduce traffic speeds which, in turn, create a safer urban environment for pedestrians and cyclists.

Junction arrangements for the proposed development are shown on Atkins drawings 5158632/HTR/DR/0104 to 0107. Visibility Splays at the junctions are shown on Atkins Drawings 5158632/HTR/DR/0108 to 0111.

5.3.4.1. Internal Junctions

Internal junctions between Local Streets are designed in accordance with DMURS generally with 4.5m junction radii. Sight lines are to provide a visibility splay of 23m commensurate with a design speed of 30km/h at a setback of 2.0m.

Internal junctions between Home Zone Streets and Local Street are designed in accordance with DMURS generally with 4.5m junction radii. Sight lines are to provide a visibility splay of 23m commensurate with a design speed of 30km/h at a setback of 2.0m. An example of an internal junction treatment is shown in Figure 5-7.

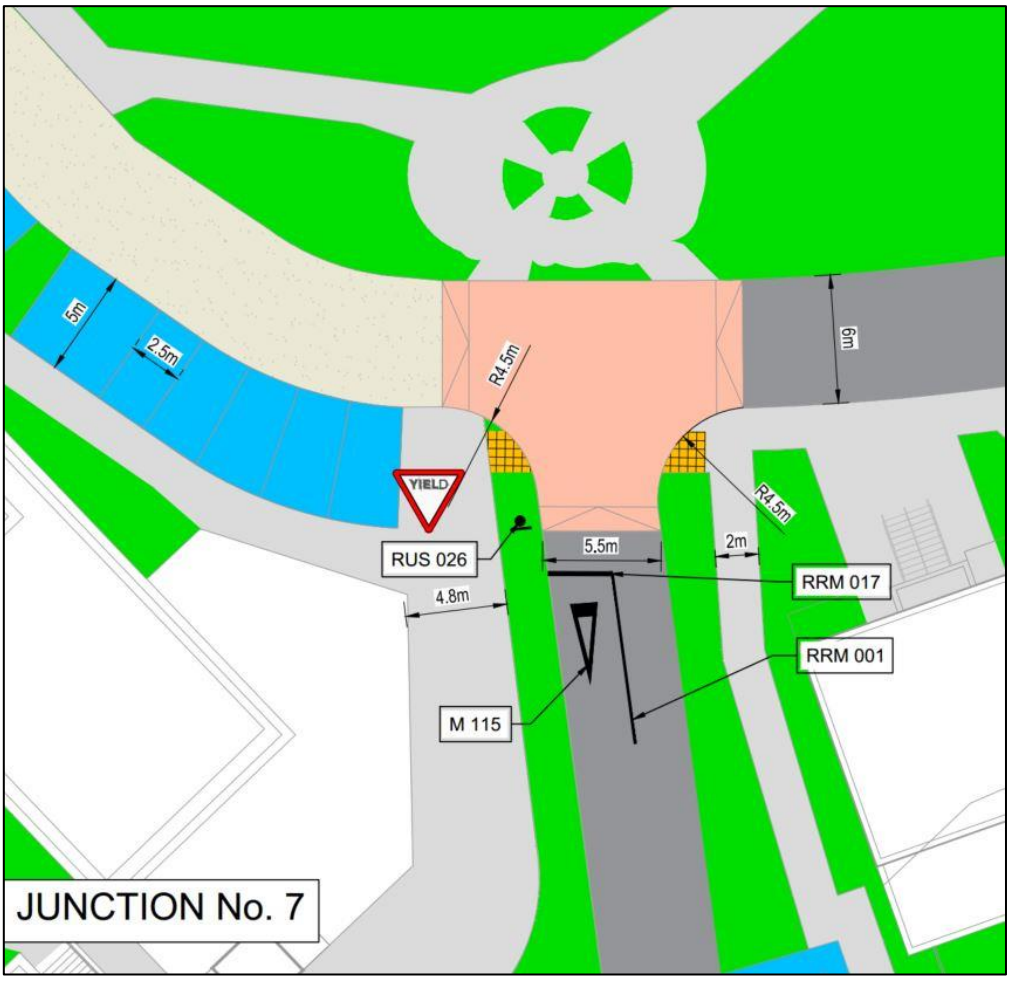


Figure 5-7 - Internal junction geometry and layout

5.3.4.2. External Access Junctions

The geometry of the site access junctions is designed in accordance with DMURS. In general, these junctions incorporate 6.0m junction radii. Sight lines accommodate a visibility splay of 49m commensurate with a design speed of 50km/h at a setback of 2.4m. The three junctions onto the Enniskerry road will incorporate raised entries to facilitate pedestrian priority and to encourage low traffic speeds. Raised entry treatments are also provided for the access onto Glenamuck Road and GLDR. An example of raised entry treatment is shown in Figure 5-8.

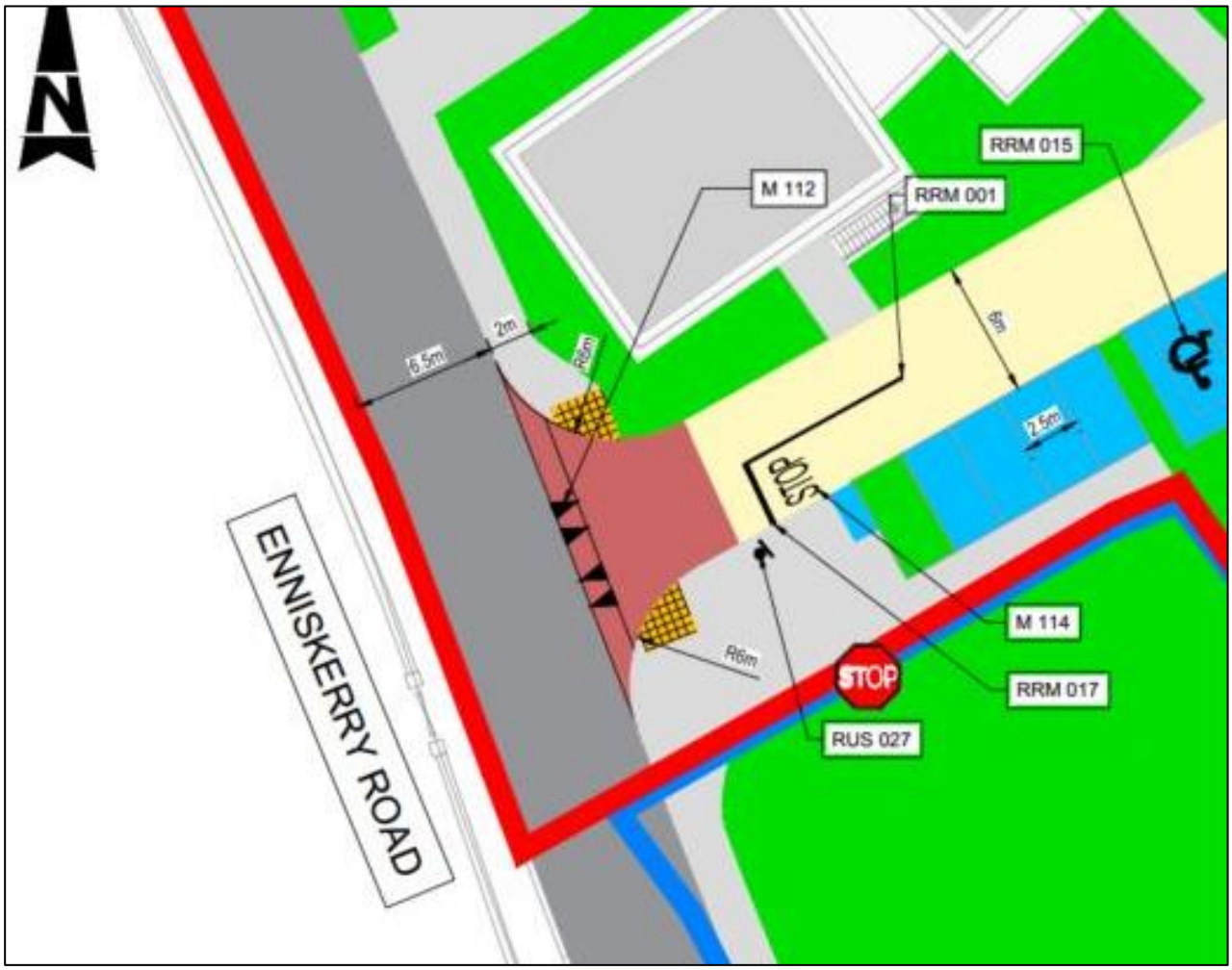


Figure 5-8 -External Raised Entry Junction Treatment

5.3.5. Facilities for Pedestrians and Cyclists

The provision of high quality pedestrian and cyclist facilities within the development is central to the design principles adopted in relation to the development proposals. Cycle facilities will be on street facilities in line with the principles set out in the National Cycle Manual and reinforced within DMURS. The design of the streets to a self-regulating 20kmh speed limit is central to the safe provision of the shared street cycle regime.

In addition, pedestrian linkages through and around the proposed development have been considered in the context of desire lines and onwards towards existing and proposed amenities. The masterplan layout has been developed to accommodate these desire lines and linkages.

Drop kerb crossings will be provided at the majority of junctions throughout the site with raised table pedestrian crossings provided in certain locations. The use of raised pedestrian table crossing points will have the benefit of providing both a convenient crossing point and a traffic calming effect. The raised table pedestrian crossing design is based on the recommendations in DMURS and the Traffic Management Guidelines. Raised pedestrian crossing will also be provided along the footpaths at the site junctions on Glenamuck Road and Enniskerry Road. Internal raised entrance details are shown in Figure 5-9. Details are shown on Atkins drawings 5158632/HTR/DR/0101 to 0103.

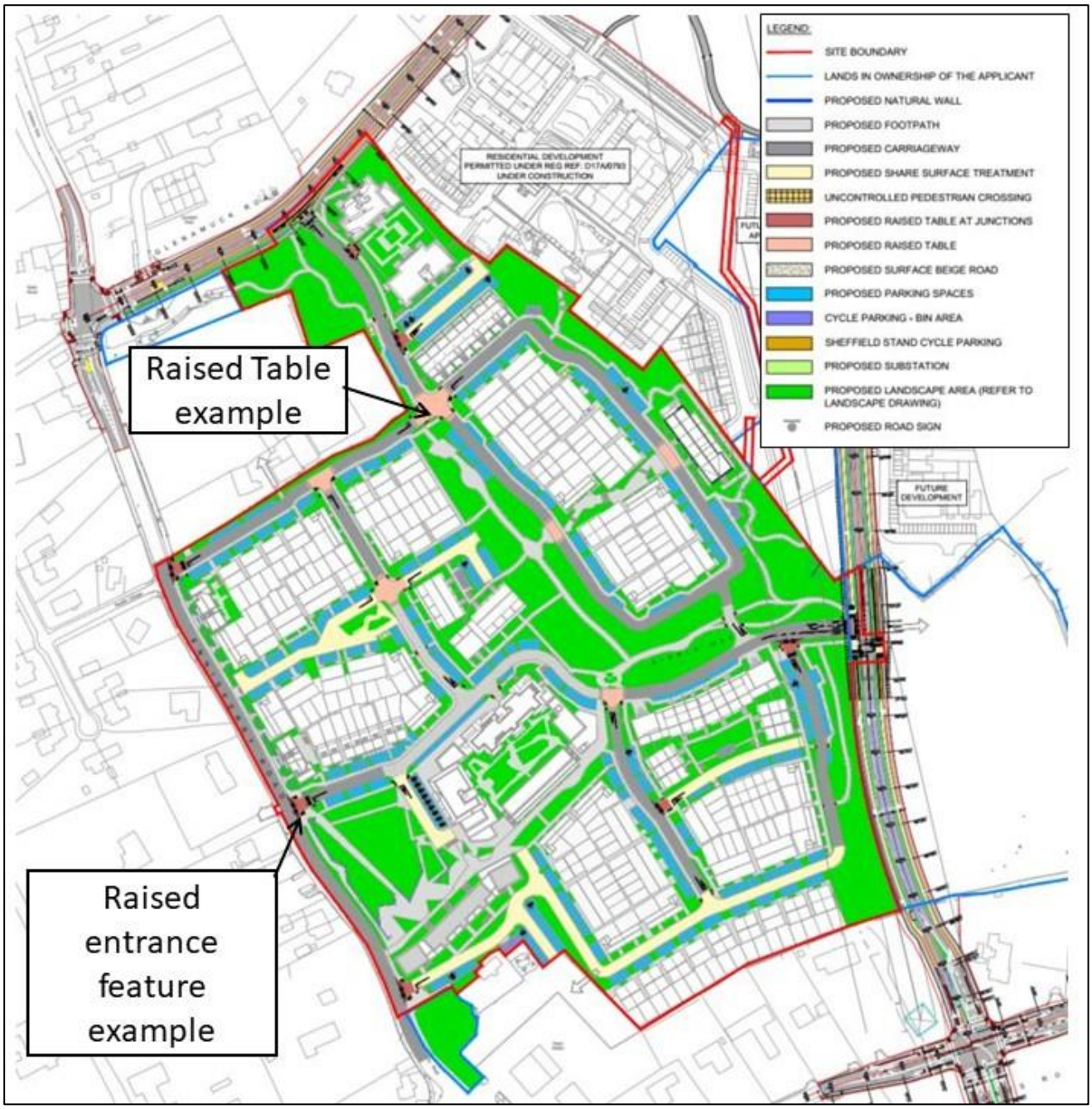


Figure 5-9 - Location of internal raised tables and traffic calming

5.3.5.1. Walking and Cycling facilities

The pedestrian network provide is legible, direct, safe and overlooked and meets expected desire lines in order to promote walking. On local street footpaths are provided, while in homezones walking is shared on street in low traffic, low speed environments. In addition to the above there is a network of off road greenways through the site including the Dingle Way that provides comfortable leisurely walking opportunities. Figure 5-10 shows the network of walking facilities provided within the masterplan lands

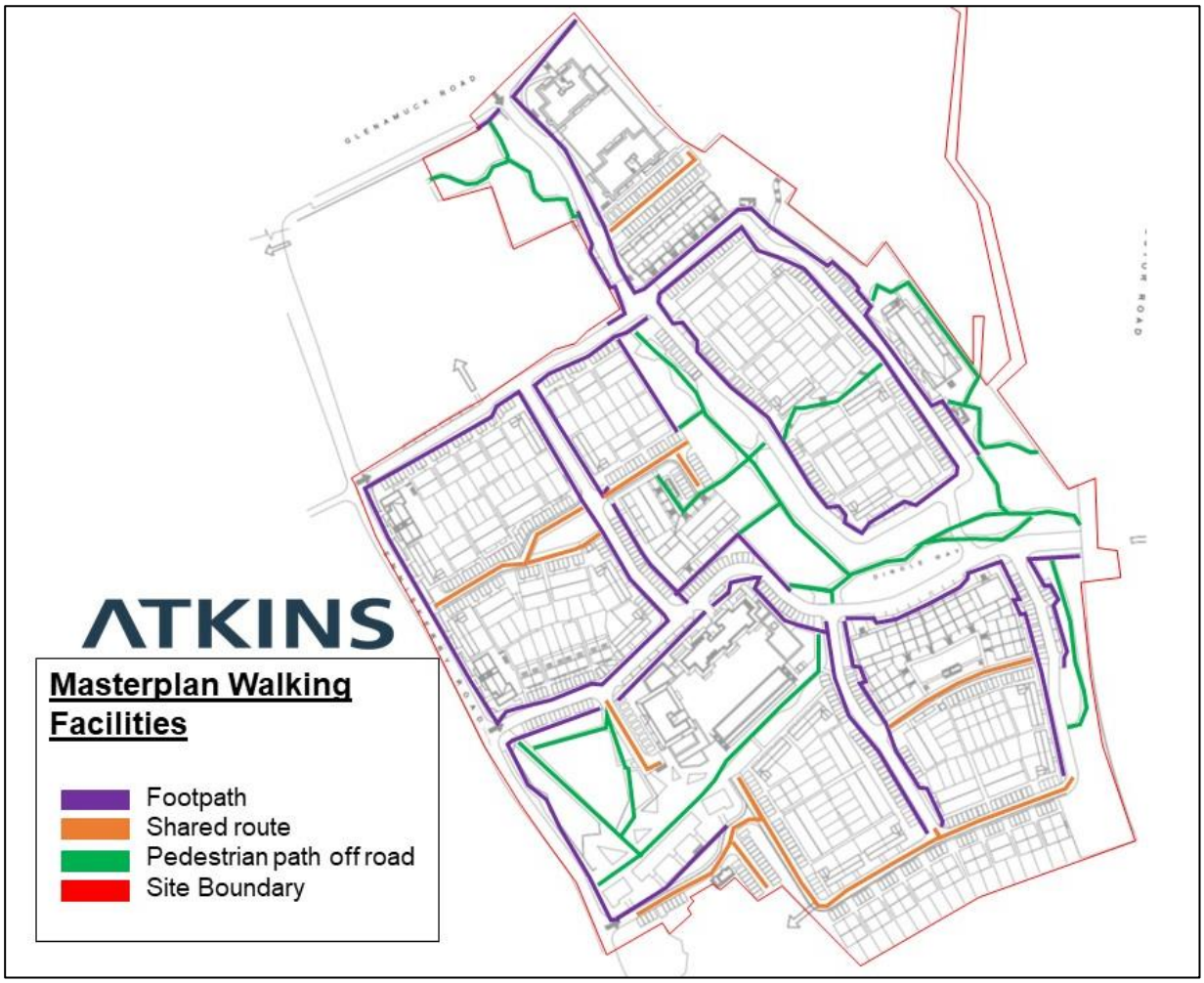


Figure 5-10 - Masterplan Walking Facilities

As the road network is designed for low traffic volumes and speeds in accordance with DMURS principles cycle provision is provided on street. This accords with the recommendations in the National Cycle Manual. Cycle facilities within the masterplan are shown in Figure 5-11.

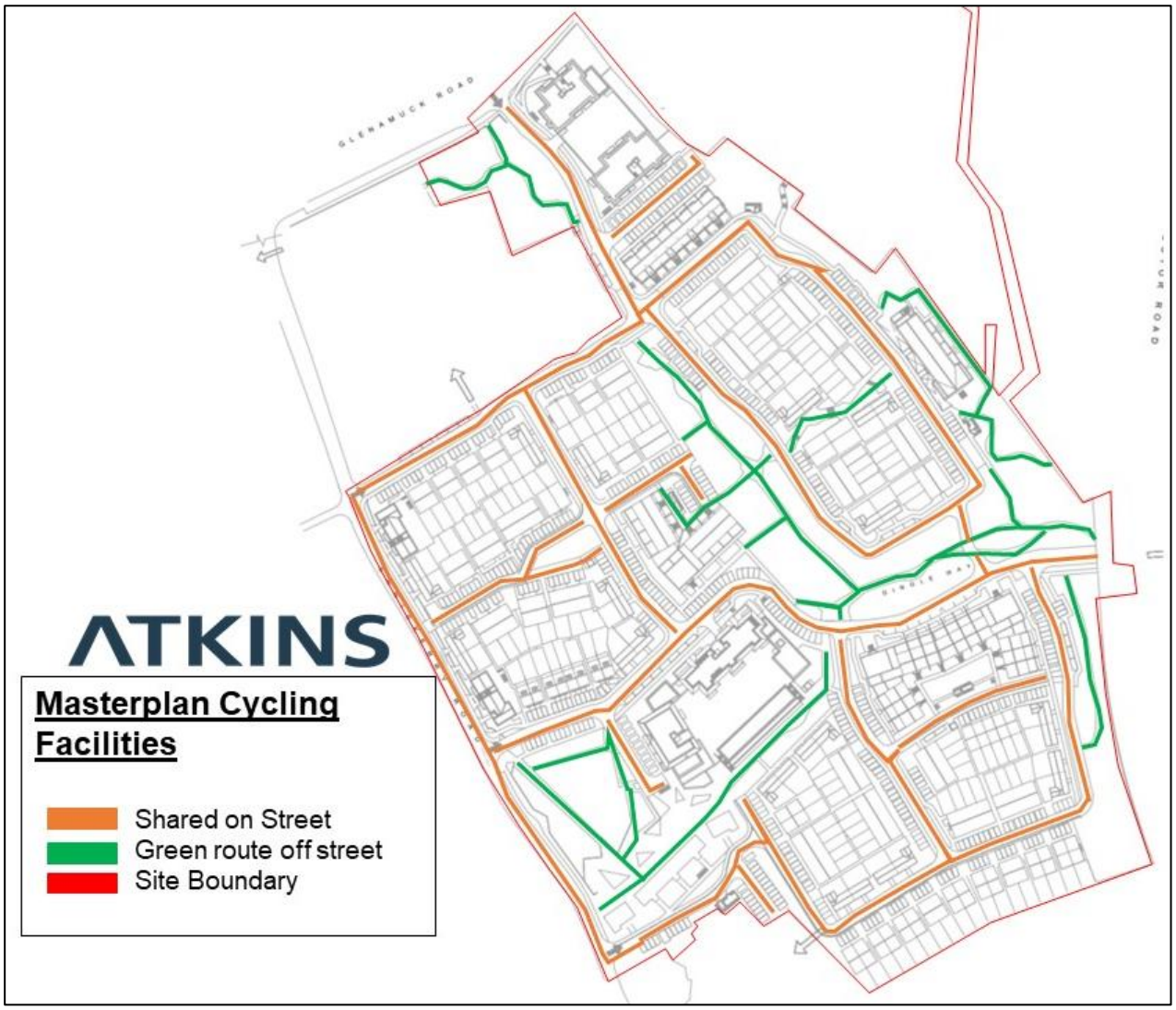


Figure 5-11 - Masterplan Cycling Facilities

5.4. External Connections

As outlined in DMURS, NTA's Permeability Best Practice Guidance and DLR Development Pan and the LAP the proposed development has been designed to maximise external walking and cycling linkages to adjoining developments such as Rockville, as well as to local facilities and amenities including the new park at the junction of the GLDR and Glenamuck Road. RMDA Landscape Rationale (Ref 1609-Rev-1 _Kilternan- Landscape Rationale)) shows these linkages in detail. Figure 5-12 is an extract that shows the wider connections. Sitting in the heart of the LAP and with the provision of neighbourhood facilities the development maximises opportunities for wider connections, reducing walking distances and providing improved access to facilities and amenities.

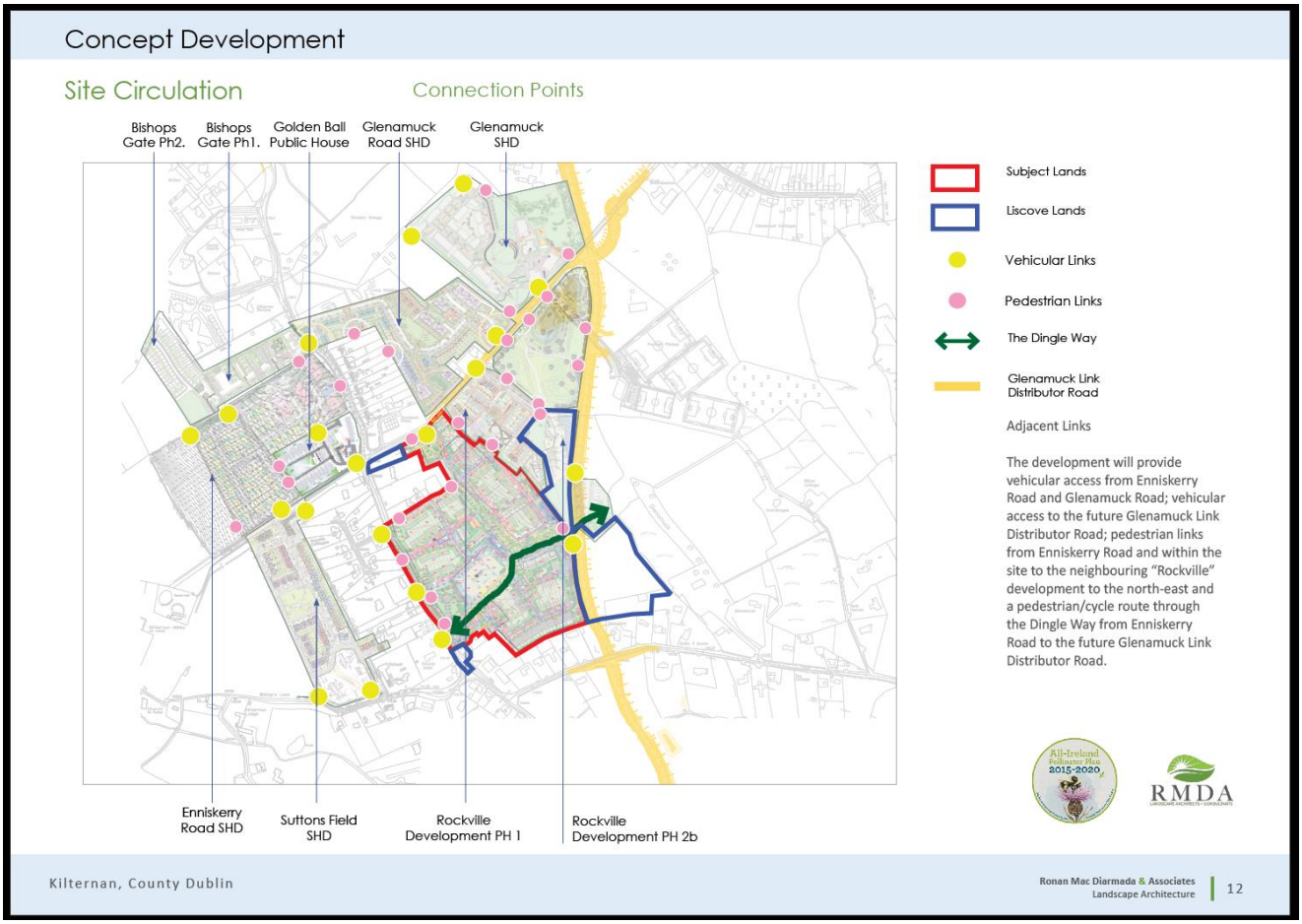


Figure 5-12 - Wider Connections (*source RMDA*)

5.5. Enniskerry Road Treatment

As noted in the LAP the delivery of the GDRS will result in significantly reduced traffic flows on the road network in the area as shown Figure 5-13. The data has been extracted from the GDRS EIAR.

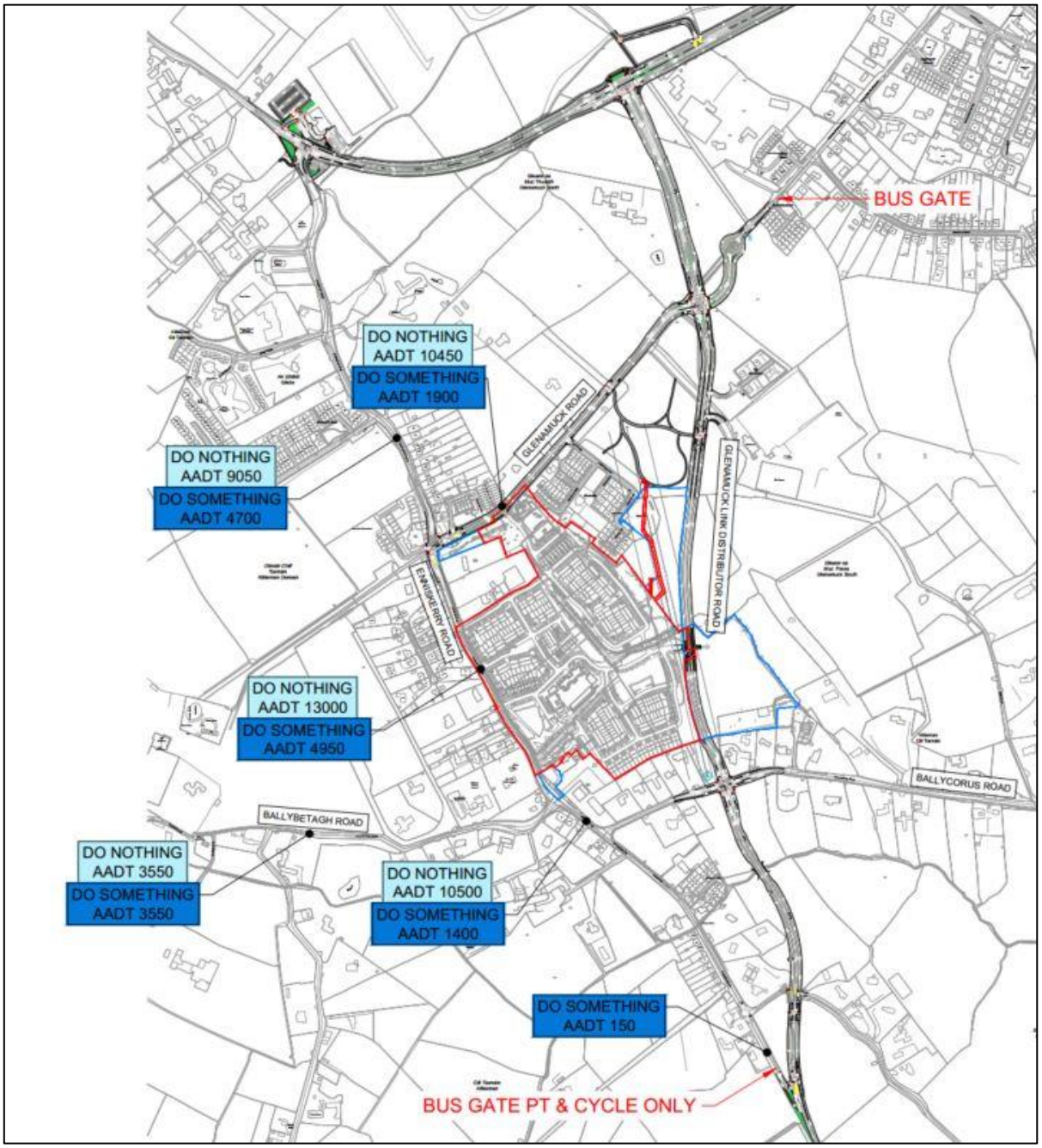


Figure 5-13 - AADT traffic data on local road network before and after GDRS

Specifically in relation to the Enniskerry Road fronting the site Average Annual Daily Traffic (AADT) will reduce from circa 12,100 PCU to circa 4950 PCU a 61.9% reduction in traffic flows as shown in Table 5-6 and outlined in Figure 5-14. This data is taken from Chapter 7 of the GDRS EIAR.

Table 5-6 - Pre and Post AADT on Enniskerry Road

Road	Base AADT	Post GDRS AADT	Reduction
Enniskerry Road	12,100	4950	61.9%

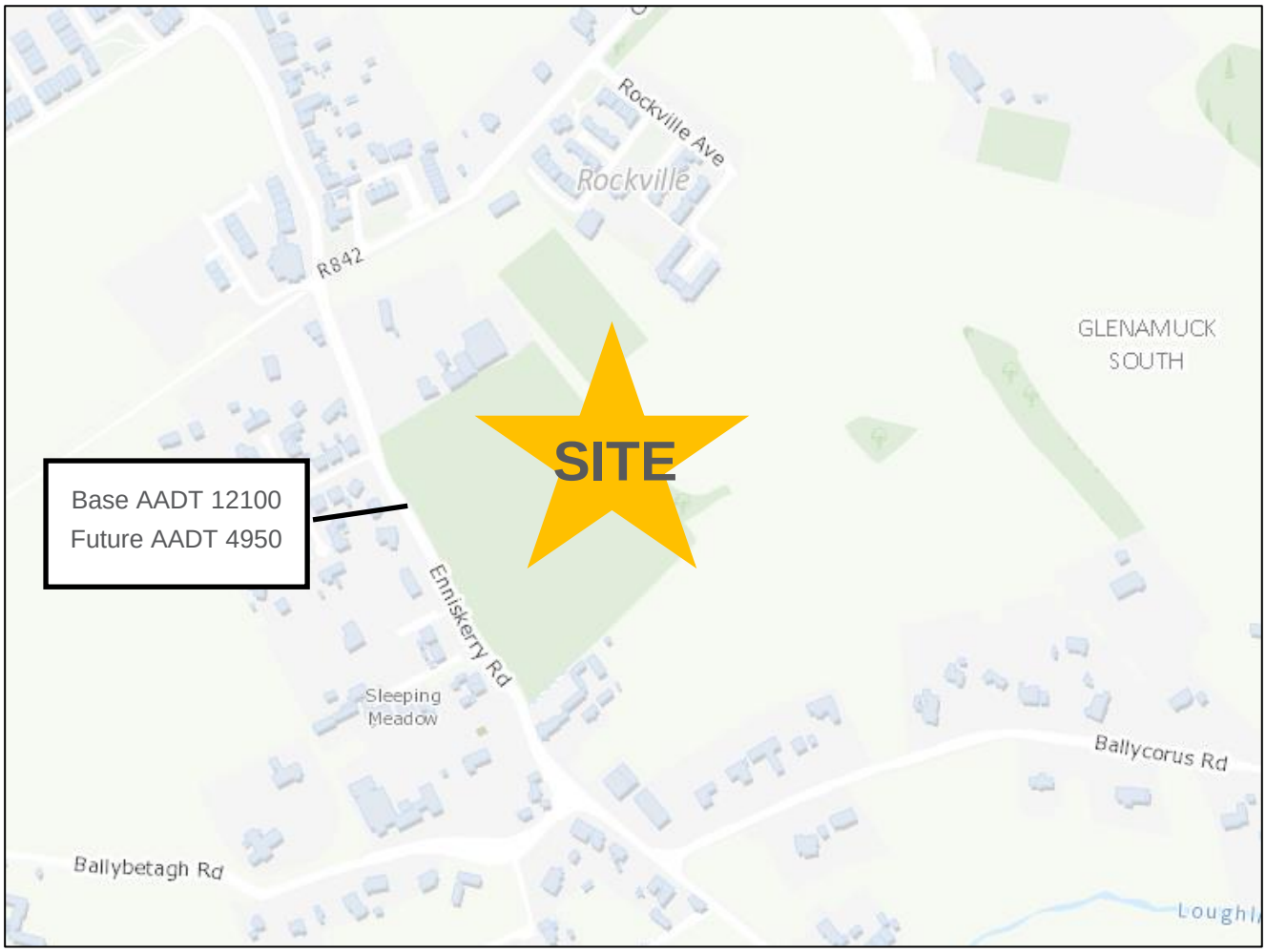


Figure 5-14 - Location of AADT data

This reduction in traffic flow will facilitate a revised treatment along Enniskerry Road fronting the site.

Existing Condition on Enniskerry Road fronting the development is:

- Typically, the carriageway is 8.5 metre wide with one lane in each direction;
- Footpath on development side (eastern) varies from circa 1.8 to 2m; and
- On the western side of Enniskerry Rd the footpath width is varies from 1.2 to 2m.

The proposal is to narrow the carriageway down to 6.5m, i.e., a 3.25m running lane in each direction allowing for continued use by bus services. The remaining former carriageway (i.e., 2m) would be reallocated for other road users with the introduction of a widened pedestrian and landscaped feature on the eastern side of the road adjoining and complementing the proposed landscape and pedestrian environment within the development. Given the reduction in traffic flow the proposal is to cater for cyclists on the carriageway. This approach accords with National Cycle Manual design for lower traffic volume and speed roads.

The outline design approach is shown in Figure 5-15. Further details are provided on the Landscape Architectures RMDA drawings (ref 1609-Rev-I- Kilternan_ Enniskerry Road Sections).

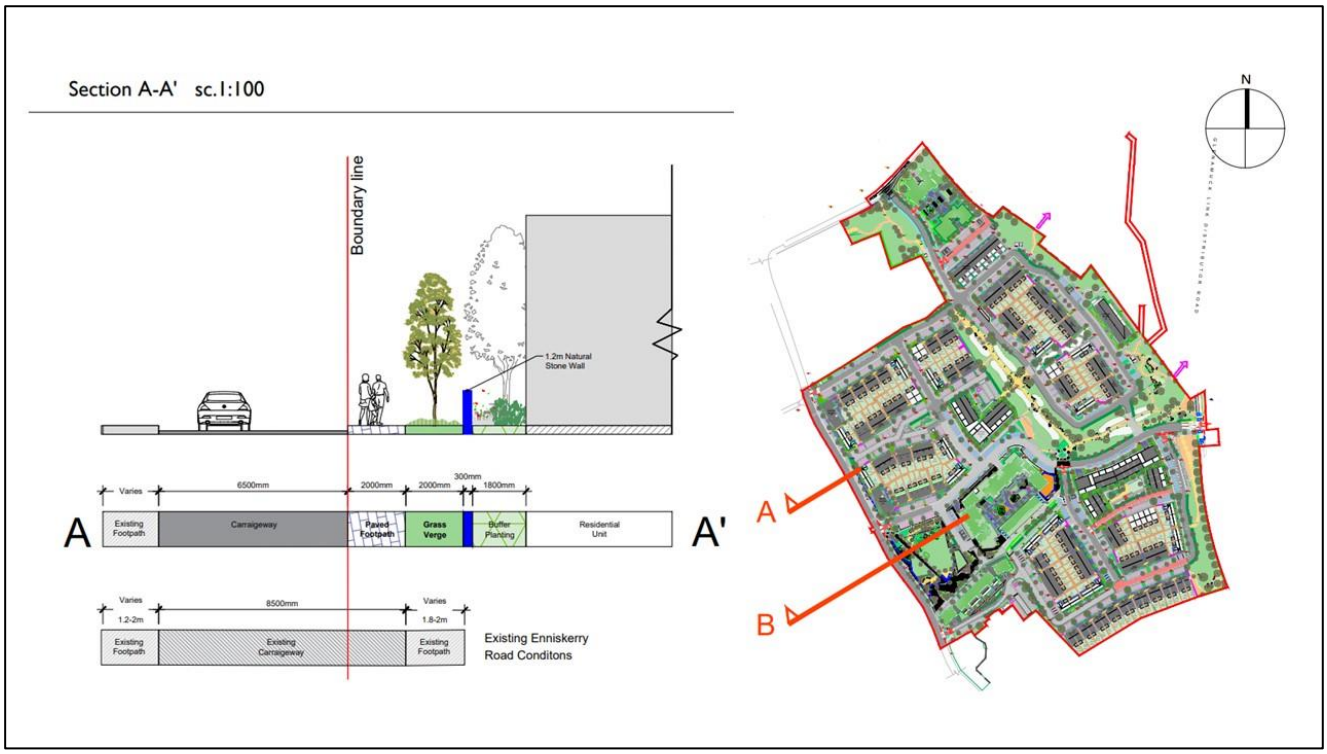


Figure 5-15 - Proposed Enniskerry Road Treatment – extract from RMDA landscape Drawings

5.6. Proposed Development Access Junctions

As recommended in DMURS there are number of multi-modal access points to and from the development onto the surrounding road network. This ensures that traffic is spread onto the network minimising adverse impact such as congestion. A total of five vehicle access points is proposed as set out in Table 5-7.

Table 5-7 - Access Junction Type

Junction No	Roads	Junction Type	Road Configuration
A1	GLDR and internal Local Street	Priority	1 lane out with right turning flare 1 lane in
A2	Enniskerry Rd / Internal Local Street (north)	Priority	1 lane out 1 lane in
A3	Enniskerry Rd / Internal Local Street (central)	Priority	1 lane out 1 lane in
A4	Enniskerry Rd / Internal Local Street (south)	Priority	1 lane out 1 lane in
A5	Glenamuck Rd / Internal Local Street	Priority	1 lane out 1 lane in

The location of these access points is shown in Figure 5-16.

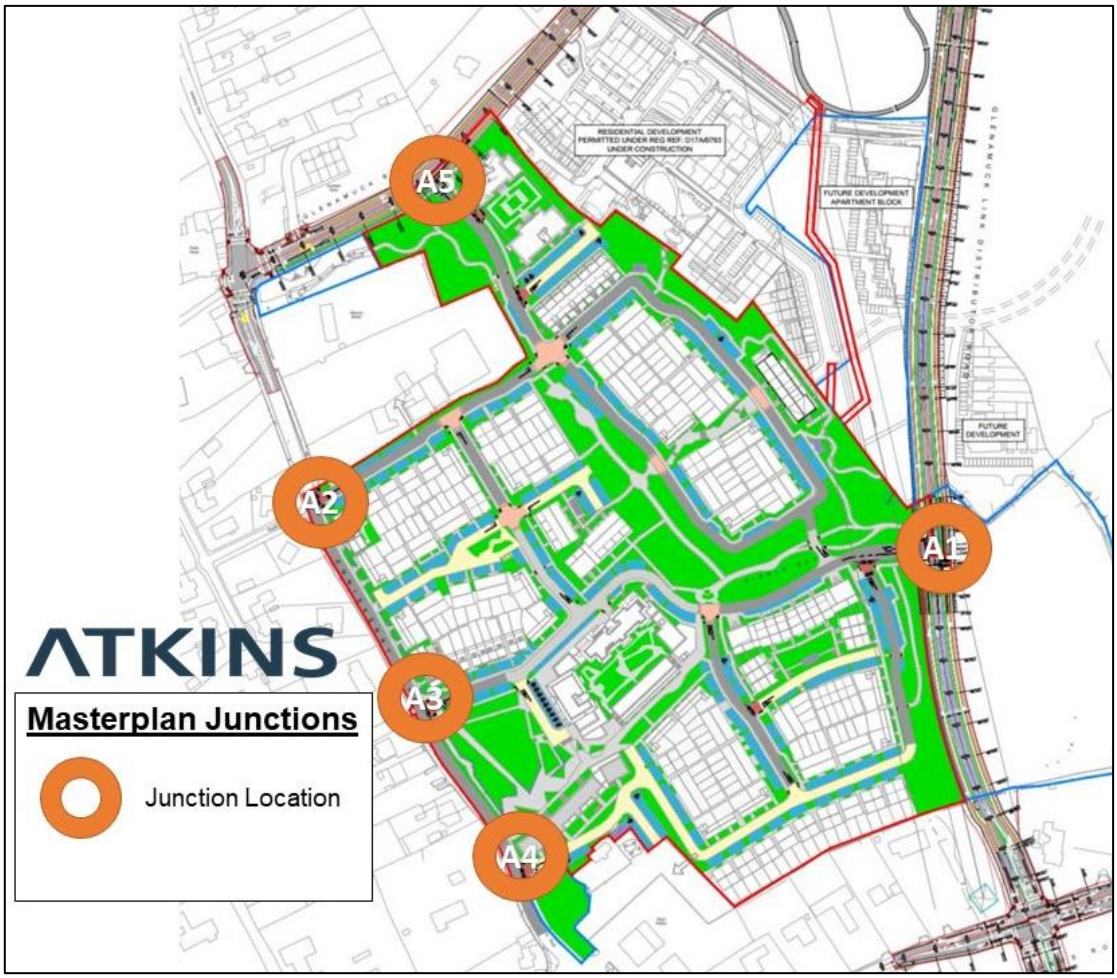


Figure 5-16 - Masterplan Junction locations

Visibility from the five external junctions onto the road network complies with DMURS standards with a visibility splay of 49m commensurate with a design speed of 50km/h at a setback of 2.4m.The visibility splays are

shown in Atkins Drawing 5158632/01/HTR/DR/0109, an extract of which is shown in Figure 5-17 - Visibility Splays at the Glenamuck Road Access Junction.

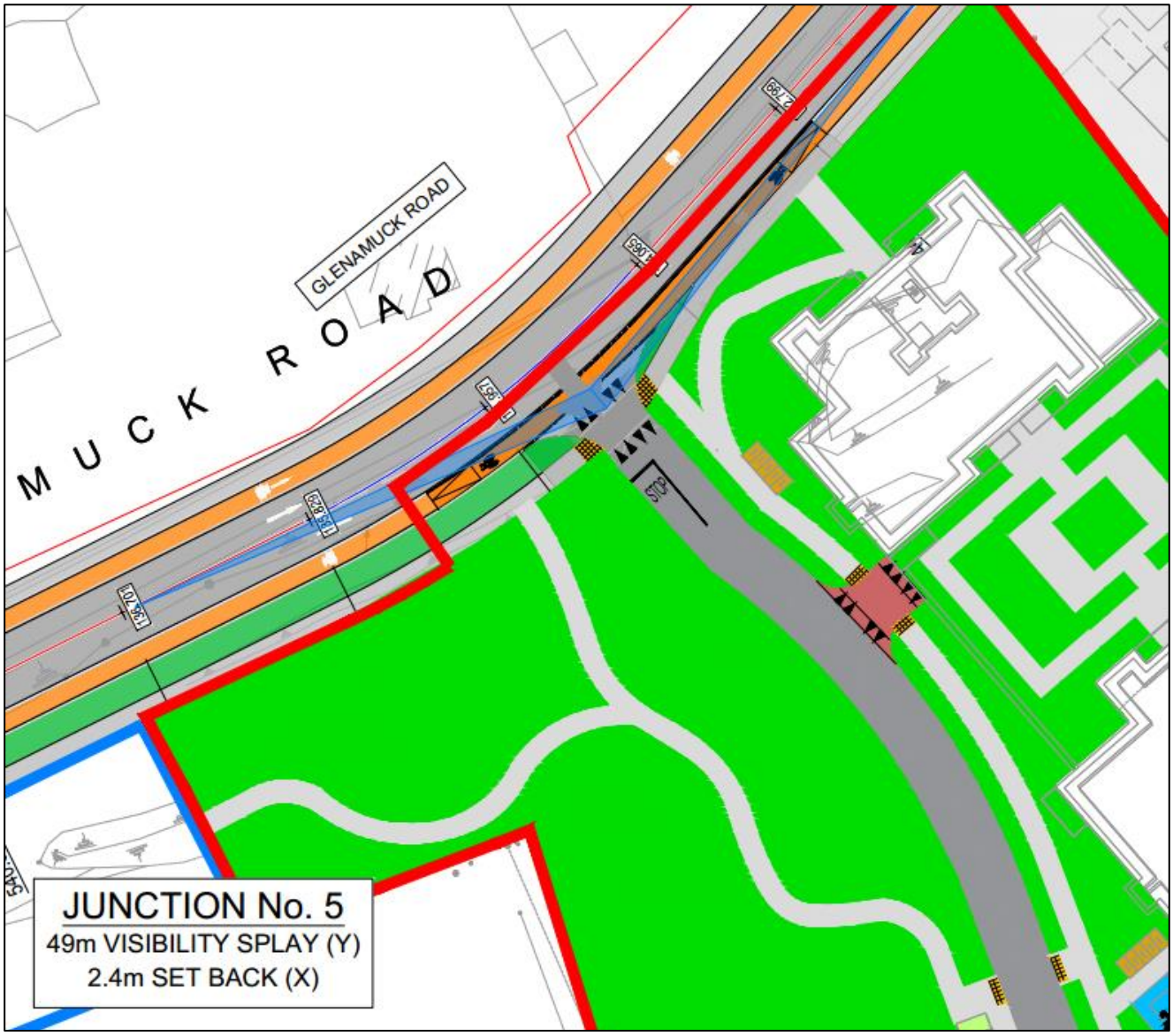


Figure 5-17 - Visibility Splays at the Glenamuck Road Access Junction

5.7. Servicing and Emergency Vehicle Access

As set out in DMURS and Manual for Streets it is important that the design of roads and junctions is not overly engineered for the occasional use by larger vehicles such as refuse and emergency vehicles as this leads to wider junctions and roads that in turn leads to higher traffic speeds that adversely impacts on safety for all road users and discourages walking and cycling.

The layout accommodates refuse and emergency access through the design of a network of looped local streets and looped home zone streets that remove the need for the vehicle to reverse on these streets thus mitigating potential conflicts with pedestrians and cyclists.

Refuse Vehicle circulation is shown on Atkins drawing 5158632/01/HTR/DR/0112 to 113, while Fire appliance circulation is shown on Atkins drawings 5158632/01/HTR/DR/0124 to 125.

An extract from refuse vehicle circulation track is shown in Figure 5-18.

Figure 5-18 - Refuse Vehicle Track through the development

5.7.1. Neighbourhood Centre servicing

Specific loading and unloading facilities have been provided for the commercial uses associated with the neighbourhood centre uses that will minimise conflict with other roads users, particularly vulnerable road users. The location of the Neighbourhood Centre Loading bay is shown on Figure 5-19.

It is anticipated that the loading bay could be dual purpose, functioning as a loading bay at specific times during the day to coincide with peak deliveries and at other times could be used for visitor parking. Traffic Regulation Orders would be in place to donate times when loading only was allowed.

Figure 5-19 - Neighbourhood Centre Loading Bay

5.7.2. Other Servicing

As noted earlier both DMURS and Manual for Streets state that is it is important that the design of roads and junctions is not overly engineered for the occasional use by larger vehicles such as refuse and emergency vehicles as this leads to wider junctions and roads that in turn leads to higher traffic speeds that adversely impacts on safety for all road users and discourages walking and cycling. In general, the proposed layout is conducive to allow for occasional deliveries associated with smaller van type vehicles to occur from the road frontage that would not adversely impact on the operation or road safety. In order to accommodate deliveries for the apartments and Phase 5 uses dedicated loading bays that can accommodate smaller servicing vehicles have been provided as illustrated in Figure 5-20.

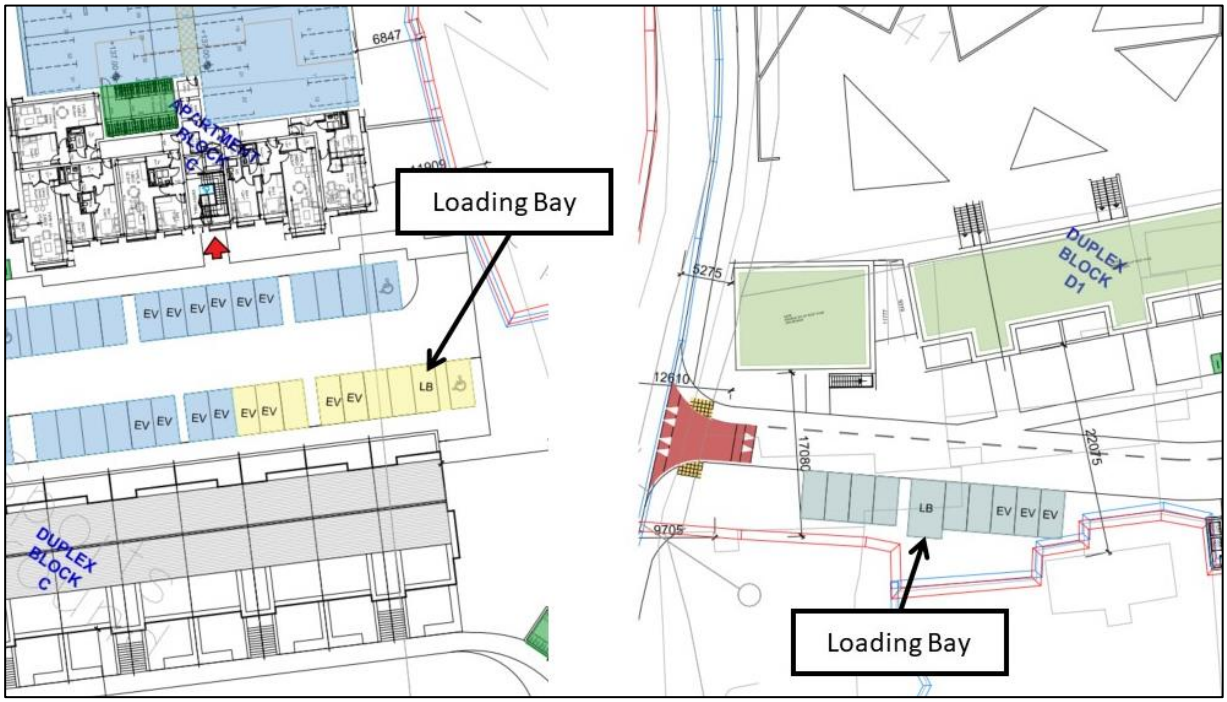


Figure 5-20 - Other Loading Facilities

6. Parking Provisions

Car and cycle parking for residential houses and non-residential elements will be provided for in line with the parking standards set out in the Dun Laoghaire Rathdown County Development Plan and the Department of Housing Planning and Local Governments (DHPLG) document 'Design Standards for New Apartments'.

6.1. Residential Car Parking Standards

The relevant residential car parking provision for the DLRCC Development Plan (Table 12.5) are shown in Table 6-1 and while the standards as set out in the DHPLG for New Apartments are shown in Table 6-2. As set out in Development Plan Section 12.4.5.1 Parking Zones, the development is located in Parking Zone 3. Zone 3 is characterised by:

- Access to a level of existing or planned public transport services;
- A reasonable level of service accessibility, existing and planned, by walking or cycling; and
- A capacity to accommodate a higher density of development than rural areas.

Table 6-1 - DLRCC - Maximum Car Parking Standards

		DLRCC Development Plan 2022-2028 – Zone 3		
Type	No. Units	Parking Standard	Visitor Car Parking	Potential Car Parking Spaces
1 Bed Apartment / Duplex	27	1 space per unit	Plus 1 in 10 visitor parking in zone 3	30
2 Bed Apartment / Duplex	128	1 space per unit	Plus 1 in 10 visitor parking in zone 3	141
3 bed + Apartment / Duplex	63	2 spaces per 1 unit	Plus 1 in 10 visitor parking in zone 3	139
3 Bed or more Houses	165	2 spaces per 1 unit	N/A	330
Total	383			640

Based on the DLRCC Development Plan the proposed development could provide a maximum of 640No. residential car parking space.

Table 6-2 - DHPLG: Design Standards for New Apartments

DHPLG: Design Standards for new Apartments					
Type	Beds	No. Units / Area	Parking Standard	Factor	Potential Parking Provision
Apartments / Duplex	1	27	1 space per unit	1	27
Apartments /Duplex	2	128	1 space per unit	1	128
Apartments / Duplex	3	63	1 space per unit	1	63
Visitor Car Parking	1 space per 3-4 apartments[5]				55
Total		218			273

Based on the DHPLG Design Standards for New Apartments the proposed development could provide a maximum of 218No. apartment / duplex[6] car parking spaces and a general guide of 55No. spaces for visitors.

[5] Section 4.22 DHPLG – Apartment Guidelines 1 space per 3-4 apartments should generally be required

[6] DHPLG –Design Standards for new Apartments does not have a standard for houses so this number is excluded from this maximum figure

6.2. Development Proposals

Section 12.4.5.6 Residential Parking of the Dún Laoghaire-Rathdown County Development Plan 2022-2028 outlines that:

"*Car parking* proposals will be assessed having regard to their impact on place making as well as providing residents with adequate and safe access to their private vehicle. Any surface carparking should be suitably integrated into the site with soft landscaping proposals and have regard to SuDS"

The subject scheme proposes residential car parking as set out in Table **6-3**.

Table 6-3 **- Proposed Residential Car Parking**

Unit Type	Car Parking	Visitor Parking	Total
House	330	N/A	330
Duplex	109	38	147
Apartments	112	32	144
	551	70	621

Excluding visitor car parking the proposed development provides:

- 330 No. car-parking spaces to serve the 165 No. houses which is in accordance with the Development Plan standards (2 No. per unit)
- 221 No. car parking spaces to serve 218No. apartment and duplex units at a ratio of approximately 1 space per unit.
- 70No. visitor car parking spaces to serve 218No. apartment and duplex units at a ratio of 0.32 per unit.

Paragraph 4.22 and 4.23 of the Sustainable Urban Housing: Design Standards for New Apartments, Guidelines for Planning Authorities (December 2020) ("Apartment Guidelines, 2020") states the following in relation to 'Peripheral and/or Less Accessible Urban Locations (which is the location of the subject lands):

'*As a benchmark guideline for apartments in relatively peripheral or less accessible urban locations, one car parking space per unit, together with an element of visitor parking, such as one space for every 3-4 apartments, should generally be required.*

For all types of location, where it is sought to eliminate or reduce car parking provision, it is necessary to ensure, where possible, the provision of an appropriate number of drop off, service, visitor parking spaces and parking for the mobility impaired. Provision is also to be made for alternative mobility solutions including facilities for car sharing club vehicles and cycle parking and secure storage. It is also a requirement to demonstrate specific measures that enable car parking provision to be reduced or avoided.'

The parking ratio outlined above for the proposed apartments is in accordance with the Apartment Guidelines, 2020, in that it provides

- 221 No. car parking spaces to serve 218 No. apartment and duplex units at a ratio of 1 space per unit.
- 70No. visitor car parking spaces to serve 218No. apartment and duplex units at a ratio of 0.32 per unit.

The location of car parking spaces and the car parking allocation can be seen on Architects drawings (Ref MCORM PL601 –Car Parking Plan)

Section 12.4.5.2 of the Dún Laoghaire-Rathdown County Development Plan 2022-2028 further outlines that car parking provision can be reduced in certain circumstances as shown in Table 6-4.

Table 6-4 - DLRRC Development Plan - car parking reduction criteria

Section 12.4.5.2 Reduction in car parking provision criteria	Development Context
Proximity to public transport services and level of service and interchange available.	Number of bus services located in the vicinity of the site and Ballyogan Wood Luas stop within 2km on bus routes – see Section 3.3
Walking and cycling accessibility/permeability and any improvement to same.	Good existing walking facilities as outlined in Section 3.2 and significant improvements to walking and cycling proposed Section 4.2 including GDRS facilities
The need to safeguard investment in sustainable transport and encourage a modal shift.	Level of car parking looks to balance between provision of necessary amount while not adversely impacting on encouraging mode shift.
Availability of car sharing and bike / e-bike sharing facilities.	Car Sharing facility provided on site subject to agreement with share provider
Existing availability of parking and its potential for dual use.	Mixed use nature of the development with different land uses and car parking demand and utilisation provides flexibility
The range of services available within the area.	Development provides creche, office, medical, community and retail use which would facilitate internal trips reducing car trips and car ownership
Impact on traffic safety and the amenities of the area.	Level of car parking is balanced so as to not adversely impact on safety
Capacity of the surrounding road network.	Reduced car parking versus DLRCC standard car parking rates will result in fewer trips on the network that will have a positive impact on capacity versus higher parking version.
Urban design, regeneration and civic benefits including street vibrancy.	Level of car parking is a balance to achieving an optimal urban realm that includes landscaping and amenity, play, safety and place making
Robustness of Mobility Management Plan to support the development.	A standard MMP is provided as part of the planning application
The availability of on street parking controls in the immediate vicinity.	N/A
Any specific sustainability measures being implemented including but not limited to: The provision of bespoke public transport services. The provision of bespoke mobility interventions.	N/A

Having regard to Section 12.4.5.2 of the Development Plan, as set out in our responses in Table 6-4 a reduced provision of car parking versus the DLRCC Development Plan standard car parking ratio is justified.

6.2.1. Disabled Parking

In accordance with the County Development Plan Section 12.4.5.3 a 4% of car parking provision shall be suitable for use by disabled person. It is considered that all residential in-curtilage car parking spaces are adaptable for universal access. Based on the remaining car parking spaces 4% equates to 12No spaces which are provided within the development.

The location of disabled car parking spaces and the car parking allocation can be seen on Architects drawings (Ref MCORM PL601 –Car Parking Plan)

6.2.2. EV- Charging

Electric Car (E-Car) charging points are provided in accordance with Section 12.4.11 (Electrically Operated Vehicles) of the Dún Laoghaire-Rathdown County Development Plan 2022-2028 which states the following:

"Residential multi-unit developments both new buildings and buildings undergoing major renovations (with private car spaces including visitor car parking spaces) - a minimum of one car parking space per five car parking spaces should be equipped with one fully functional EV. Charging Point. Ducting for every parking space shall also be provided."

Therefore 61No. of the residential car parking spaces shall be equipped with charging points. Additional ducting will be provided to allow for retrospective installation of additional charging points. In curtilage car parking spaces can easily be EV compliant. Specific EV charging facilities will be provided in the residential undercroft parking areas.

The location of disabled car parking spaces and the car parking allocation can be seen on Architects drawings (Ref MCORM PL601 –Car Parking Plan).

6.2.3. Motorcycle Parking

The County Development Plan Section 12.4.7 states the following in relation to Motorcycle Parking:

"It is an objective of the Council to require developments to provide motorcycle parking spaces at a minimum of four or more spaces per 100 car parking spaces"

Assuming motorcycle parking for residential houses can be accommodated with the curtilage of that dwelling the above standard has been applied to remaining car parking spaces. Using this rate, a minimum of 12No. motorcycle parking spaces is required. The location of disabled car parking spaces and the car parking allocation can be seen on Architects drawings (Ref MCORM PL601 –Car Parking Plan).

6.3. Non Residential Car Parking Standards

The relevant non-residential car parking provision for the DLRCC Development Plan (Table 12.5) are shown in Table 6-5.

Table 6-5 - DLRCC Development Plan Non-residential car parking

Land Use	Gross Floor Area sqm	DLRCC Standard	Car Parking
Creche	439	1 per 40sqm	11
Office	317	1 space per 100 sqm	4
Medical	147	2 spaces per consulting room	2
Retail	857	1 space per 50 sqm	18
Retail Convenience	431	1 space per 30 sqm	15
Community	321	1 space per 50sqm	7
Total	2512sqm		57

Based on the current DLRCC Development Plan the proposed development could provide a maximum of 57No. non- residential car parking spaces.

6.4. Development Car Parking Proposal for Non-Residential Uses

The development is proposing to provide 57No. non-residential car parking spaces which is in line with the maximum standards as set out in the DLRCC Development Plan. The location of these car parking spaces, and the car parking allocation can be seen on Architects drawing (Ref MCORM PL601 – Parking Allocation).

6.4.1. E-Charging

Electric Car (E-Car) charging points are provided in accordance with Section 12.4.11 (Electrically Operated Vehicles) of the Dún Laoghaire-Rathdown County Development Plan 2022-2028 which states the following.

"Developments with publicly accessible spaces (e.g., supermarket car park, cinema etc.) - provide at least 1 recharging point and a minimum of one car parking space per five car parking spaces should be equipped with one fully functional EV Charging Point"

The development provides 12No. of the 57No. retail spaces shall be equipped with charging points.

6.4.2. Non-Residential Disabled and Parent and Child

In accordance with Section 12.4.5.3 of Dún Laoghaire-Rathdown County Development Plan 2022-2028

4% of parking should be suitable by disabled – 4No. spaces are provided

4% should be reserved for parent and child - 3No. spaces are provided

6.5. Total Development Parking

The total development car parking for both residential and non-residential uses is shown in Table 6-6

Table 6-6 - Total Development Car Parking Provision

Residential Car Parking Provision	621
Non -residential Car Parking Provision	57
Total Development Car Parking	678

The location of these car parking spaces, and the car parking allocation can be seen on Architects drawing (Ref MCORM PL601 – Parking Allocation), an extract of which is shown in Figure 6-1.

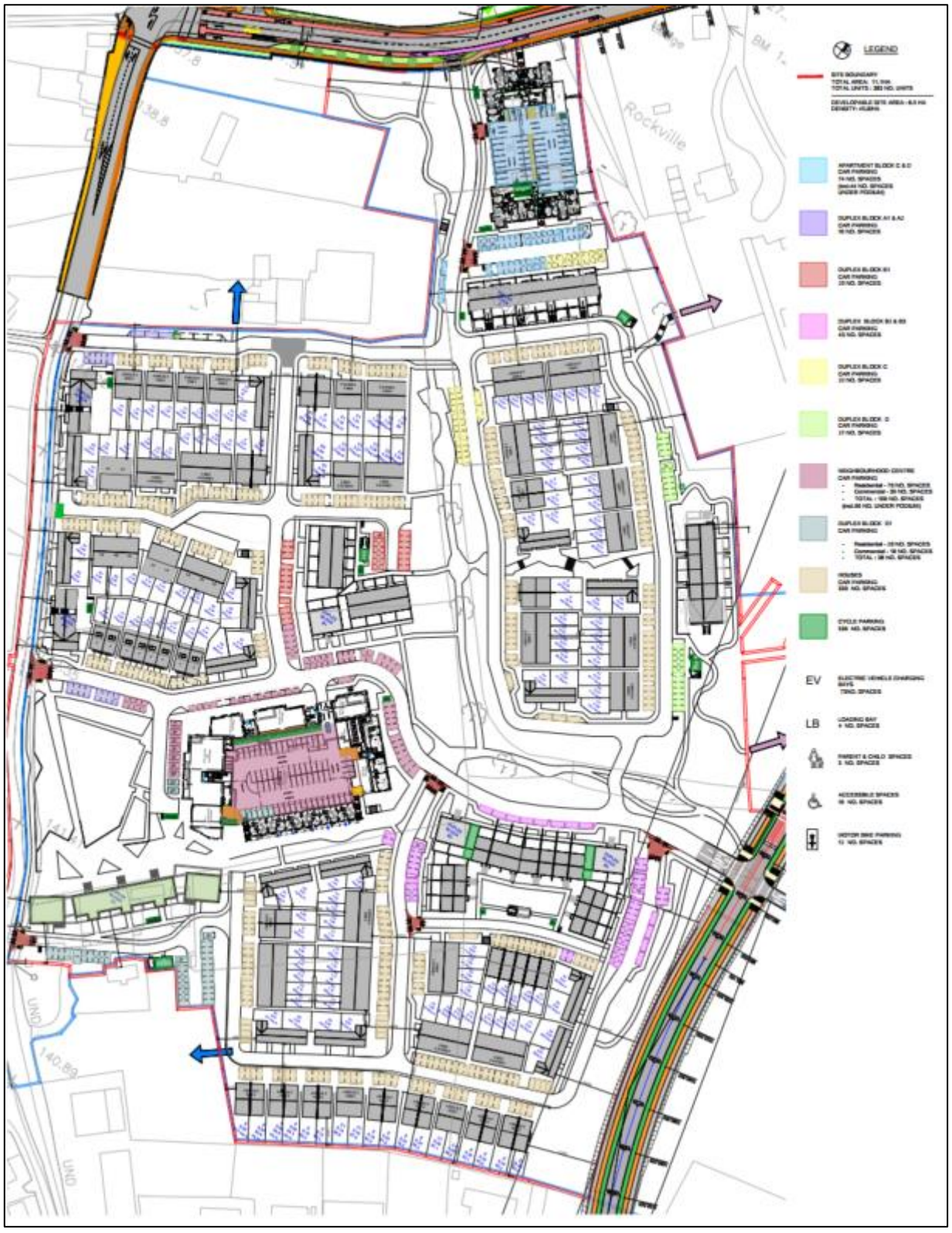


Figure 6-1 - Development Car Parking

6.6. Cycle Parking

6.6.1. Residential Cycle Parking Standards

Bicycle parking is provided for all residential units (apartments, duplexes and housing units) and for visitors in accordance with the cycle parking standards set out in the DLR Standards for Cycle Parking and associated Cycling Facilities for New Developments (Table 4-1).

The parking requirements for the above-mentioned standards are given in Table 6-7.

Table 6-7 - DLR Cycle Parking Standards

	Short Stay	Long Stay
Apartments, Flats, Sheltered housing	1 space per 5 units	1 space per unit
Houses – 2 bed dwelling	1 space per 5 units	1 space per unit
Houses – 3+ bed dwelling	1 space per 5 units	1 space per unit

6.6.2. Development Cycle Parking Provision for Residential Uses

The development proposes to provide residential cycle parking in accordance with the ratio set out in Table 6-8, which accords with the ratio in the DLR Cycle Standards as set out in Table 6-7 above.

Table 6-8 - Proposed Residential Cycle Parking Ratio

Type	Rate
Houses	In curtilage > 1 space per unit
Duplex	1 space per unit
Duplex Visitor	0.2 space per unit (i.e., 1 per 5 units)
Apartment	1 space per unit
Apartment Visitor	0.2 space per unit (i.e., 1 per 5 units)

The proposed allocation of cycle parking for the development is shown in Table 6-9.

Table 6-9 - Proposed Apartment and Duplex Cycle Parking

Type	Units	Long Stay	Visitor	Total
Houses	165	165	33	198
Apartments & Duplex	218	223	52	275
Total	383	388	85	473

Long stay cycle parking is provided in secure, sheltered, and accessible locations, while visitor parking is interspersed at appropriate locations in the development to reflect likely locations of demand.

The location of cycle parking spaces and the car parking allocation can be seen on Architects drawings (Ref MCORM PL601 – Parking Allocation).

6.6.3. Non-Residential Cycle Parking Standards

Bicycle parking is provided for all non- residential units (in accordance with the cycle parking standards set out in the DLR Standards for Cycle Parking and associated Cycling Facilities for New Developments (Table 4-2).

The parking requirements for the above-mentioned standards are given in Table 6-10.

Table 6-10 - DLR Cycle Parking Standards

Uses	Short Stay	Long Stay
Retail	1 space per 100sqm	1 space per 5 staff
Retail Convenience	1 space per 100sqm	1 space per 5 staff
Medical Centre	1 space per 2 consulting rooms	1 space per 5 staff
Office	1 space per 200sqm	1 space per 200sqm
Creche	1 space per 10 children	1 space per 5 staff
Community	1 space per 100sqm	1 space per 5 staff

In accordance with DLR Standards for Cycle Parking for New Developments Guidance (2018) "*where the number of staff is not known at planning application stage, the following can be used as a guide*:

- *Office type uses 20 m2 per staff member*
- *Warehousing or small industry type uses 50 m2 per staff member*
- *All other uses including retail 40 m2 per staff member*"

As the end users are currently unknown and therefore staffing numbers difficult to predict we have estimated staff as per the above guidance. DLR cycle standards are minimum.

Table 6-11 - Assumed Staff Numbers based on DLR Guidance

Uses	GFA	Ratio	Staff	DLR Standard	Long Stay Cycle Parking No.
Retail	857	1 per 40 sqm	21	1 space per 5 staff	4
Retail Convenience	431	1 per 40 sqm	11	1 space per 5 staff	3
Medical Centre	147	1 per 40 sqm	5	1 space per 5 staff	1
Office	317	N/A	N/a	1 space per 200sqm	2
Creche	439	1 per 40 sqm	11	1 space per 5 staff	3
Community	321	1 per 40 sqm	8	1 space per 5 staff	2
				Total	15

As noted in Table 6-11 based on DLR guidance there is a requirement to provide a 15 No. long stay cycle parking.

Table 6-12 outlines the minimum short stay cycle parking required in accordance with DLR Standards for Cycle Parking for New Developments.

Table 6-12 - DLR Short Stay Cycle Parking Requirements

Uses	GFA	DLR Standard Ratio	Short Stay
Retail	857	1 space per 100sqm	9
Retail Convenience	431	1 space per 100sqm	4
Medical Centre	147	1 space per 2 consulting rooms	1
Office	317	1 space per 200sqm	2
Creche	439	1 space per 10 children	8
Community	321	1 space per 100sqm	3
		Total	27

6.6.4. Development Cycle Parking Provision for Non- Residential Uses

The proposed allocation of cycle parking for non-residential uses is shown in Table 6-13.

Table 6-13 - Cycle Parking Allocation for Non-residential uses

Uses	Long Stay	Short Stay
Retail	6	9
Retail Convenience	4	4
Medical Centre	2	2
Office	2	2
Creche	15	9
Community	2	6
Total	31	32

For non-residential uses the proposed development will provide a total of 63No. cycle spaces made up of 31No. long stay space for staff and 32No.short stay (visitor) spaces.

The number of cycle parking exceeds DLR Standards for Cycle Parking for New Developments Non-residential minimum standards.

The location of cycle parking spaces and the car parking allocation can be seen on Architects drawings (Ref MCORM PL601 – Parking Allocation and Atkins Drawings 5158632/HTR/DR/02/0128 Cycle Storage Location Plan and 5158632/HTR/DR/02/0129 Cycle Storage facilities

6.6.5. Total Development Cycle Parking

The total development[7] cycle parking is shown in Table 6-14.

Table 6-14 - Total Development Cycle Parking

Long Stay parking (residential and non-residential)	419
Short Stay – residential and non -residential	117
Total	536

[7] Excluding residential dwelling where cycle parking is provided in curtilage as noted earlier in this section.

6.6.6. Cycle Audit

As required under Section 12.4.6.1 of the DLRCC Development Plan for new development of 5 residential units or more or non-residential development of 400sqm or over a Cycle Audit is required and has been prepared. Table 6-15 provides our response to the cycle audit questions outlined in section 12.4.6.2 Cycle Parking Assessment Criteria of the DLRCC Development Plan.

Table 6-15 – DLR Cycle Audit - Designer Response to Criteria

DLR Cycle Parking Assessment Criteria	Response
Is the number of cycle parking spaces and footprint adequate and is there suitable provision for parking of outsized formats (cargo bikes etc)?	Yes. Cycle parking numbers, both long stay and short stay for residential and non-residential uses accords with DLR Cycle Parking standards as shown in Section 6.6. The development proposes a range of cycle parking including double stacked cycle parking for apartment duplex units, sheffield style stands and spaces for oversized cycle such as cargo bikes. Sheffield stands are widely distributed across the development , particularly at high density destinations such as apartments / duplexes, neighbourhood centre where demand is anticipated.
Is the location of cycle parking convenient, appropriate, and secure with adequate provision for covered parking?	Yes. Cycle parking for different uses is located in the most appropriate location for that use to ensure its usability and optimal functionality. The apartment cycle parking is covered with the undercroft areas. There are numerous dedicated covered cycle storage facilities for duplex units adjacent to their buildings.
Is the cycle parking area accessible in terms of dedicated access routes with ramps and/or kerb dishing where required?	Yes – cycle parking areas are accessible with gradients within tolerances
Do the internal cycle access routes connect well with off-site cycle facilities – existing and proposed?	Yes. Cycle provision links with proposed cycle network provide as part of the GRDS via direct connection onto segregated cycle facilities on the GLDR. Also connects with Part 8 Glenamuck / Enniskerry Rd Junction scheme. Proposal will also connect to shared cycle provision on Enniskerry road via an improved urban realm with reduced vehicle throughput.
Is there adequate and appropriately designed and integrated provision for ancillary cycling and pedestrian facilities including showers, locker / changing rooms and drying areas?	Yes – residential uses have access to changing and showering facilities.
For short-term cycle parking (e.g., for customers or visitors), cycle parking is required at ground level. This should be located within 25 metres of the destination in an area of good passive surveillance. Weather protected covered facilities should be considered where appropriate. Consideration should be given to using green roofs in the design of standalone cycle parking shelters. Appropriate cycle parking signage may also be required to direct cyclists to the end destination.	Yes, short term non-residential cycle parking is provided at ground floor level and is located within 25m of destination, for example cycle parking associated with the neighbourhood centre. Visitor cycle parking to apartments and duplexes is adjacent the main access to these apartment blocks.

DLR Cycle Parking Assessment Criteria	Response
For long-term cycle parking (e.g., for more than 3 hours for residents, staff, students), secure covered cycle parking is a requirement. This should be conveniently located within 50 metres of the destination and located near building access points where possible.	Yes, long term cycle parking is covered and located within 50m of destination.
In all cases it is a requirement to provide showers, changing facilities, lockers and clothes drying facilities, for use by staff that walk or cycle to work. CCTV cameras or passive surveillance of car parks and cycle parks may be required for personal safety and security considerations.	Yes – contained with residential units. CCTV of car parking can be provided if required.
All cycle facilities in multi-storey car parks shall be at ground floor level and completely segregated from vehicular traffic. Cyclists should also have designated entry and exit routes at the car park and with minimum headroom of 2.4 metres to facilitate access by cyclists.	Development does not provide multi-storey car parks within. Cycle parking is providing undercroft facilities. These are low traffic low speed environments with good lighting that are suitable for shared provision. Head height clearance of 2.4m is maintained in these undercroft situations.
Within larger new developments cycle routes shall link to the existing cycle network where possible and maintain a high degree of permeability through developments. Cycle Audits may be required in such developments.	Cycle permeability is provided across the masterplan lands. Cycle provision links to existing and proposed external cycle infrastructure. Design of cycle network accords with NTA Cycle Manual. DMURS Quality Audit including Cycle Audit has been undertaken as part of the development. Cycle measures identified will be included in the scheme.

Further details of cycle parking facilities can be seen on the drawings prepared by the Architects. Details of the cycle parking in plan format are shown in Appendix D.

7. Traffic Survey

7.1. Traffic Surveys Undertaken

As the part of the preliminary analysis, traffic count data undertaken in November 2018 that formed part of the EIAR for the Glenamuck District Roads Scheme was used to assess background traffic flows on the surrounding road network. This was done due to impact of COVID-19 on travel patterns and traffic. This approach was discussed with and agreed with Adrian Thompson the Senior Transport and Roads Engineer DLRCC.

However, a new JTC (Junction Turning Count) survey was undertaken in November 2021 by the applicant for the key junctions. Initially a comparison was drawn between traffic data obtained in 2018 to determine the impact of Covid-19 restrictions on the general traffic on the road network.

7.1.1. Impact of Covid-19 Restrictions

Due to the COVID – 19 pandemic and associated restrictions, the general traffic on the road network was at a reduced level during the survey time as compared to the pre-COVID scenario. Therefore, in order to determine the impact of Covid-19, a comparison was carried out between the traffic counts undertaken in November 2018 and in November 2021. These are set out in the table below for the key junctions.

Table 7-1 – Comparison of Traffic Survey Data

Junction	12-hour (7am to 7pm) PCU volume for 2018	12-hour (7am to 7pm) PCU volume for 2021	Ratio (2021:2018)
Enniskerry Road/Glenamuck Road Junction	10285	10881	1.05
Enniskerry Road/R116 Junction	8775	8524	0.97
Enniskerry Road/Ballycorus Road Junction	6873	6619	0.96

Due to the COVID-19 pandemic and associate restrictions, there has been an accelerated transition to remote and home working and education. In response to this the National Transport Authority (NTA) have produced a report titled '*Alternative Future Scenario for Travel Demand'* to research the potential impact on travel behaviour and patterns post Covid-19. Based on this report, an alternative scenario is predicted for the future in which a significant reduction in the total number of trips on the transport network (approximately 8% lower than previous projections, i.e., 92% of the pre-Covid scenario) could be expected. This is shown by the orange line in the Figure 7-1 provided below.

Furthermore, in January 2021, the National Remote Work Strategy was published by the Department of Enterprise, Trade and Employment. This document lays out the long-term strategy to promote home and remote working for public sector and private sector employees. The strategy mandates that 20% of the public sector workforce move to home and remote working in 2021. The strategy notes that more than 25% of the private sector workers in Ireland are capable of working remotely.

Based on the above documents, it is considered that the application of an 8% reduction in traffic volumes from the pre-COVID 19 period due to the transition of the work force to remote and home working is both a reasonable and conservative assumption of future travel demand projections.

Based on Table 7-1, the traffic on the network during which time the surveys were undertaken was found to be in the order of around 95-105% of the traffic before the COVID19 restrictions. Hence, the traffic represents the baseline travel demand in the post-COVID scenario and therefore, no modification to the baseline traffic survey counts was carried out for the analysis.

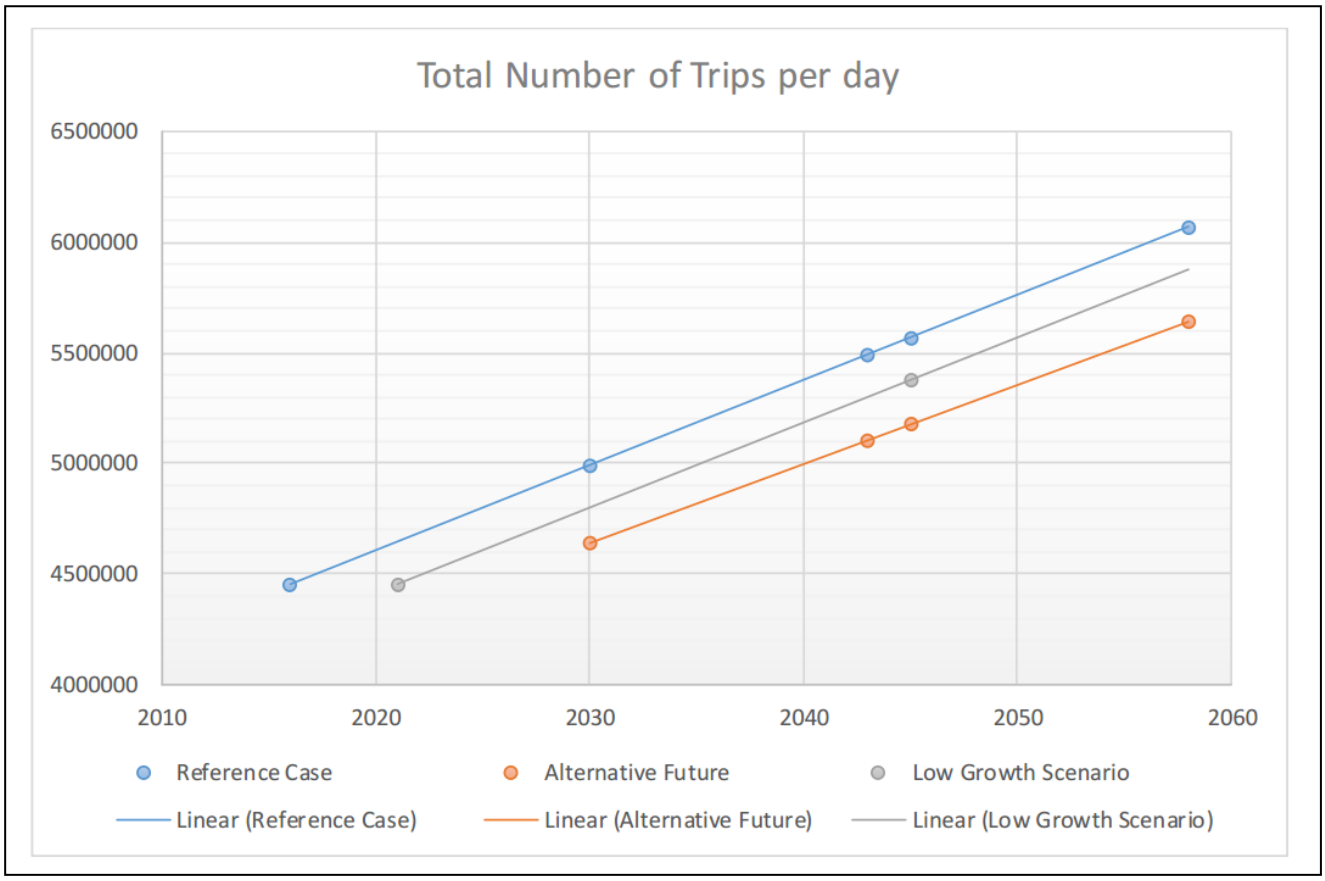


Figure 7-1 - Growth in number of trips per day (NTA National Forecasting Model)

Based on the above analysis, it can be said that the traffic data for 2021 represents the travel demand in post-Covid scenario. Therefore, data from these traffic surveys were used further for the analysis.

7.2. Current Baseline Traffic

Traffic surveys were commissioned and undertaken by NDC on November 11, 2021. The survey included Junction Turning Counts survey for the key junctions summarised in the Figure 7-2 below. The survey was undertaken between 07:00 am to 07:00 pm for 12 hours.

Based on the survey data following peak hours were determined:

- **AM Peak:** 8am to 9am
- **PM Peak:** 4pm to 5pm

These traffic counts have been collected in fifteen-minute intervals and were classified into four vehicle categories of Car, Light Vehicles (LV), Heavy Vehicles (HV) and bus. These vehicle counts have been converted to Passenger Carrier Units (PCU) as follows:

- Car = 1.0 PCU
- LGV = 1.0 PCU
- OGV1 = 1.5 PCU
- OGV2 = 2.3 PCU
- PSV = 2.0 PCU
- M/C = 0.4 PCU
- P/C = 0.2 PCU

Figure 7-2 - Location of key junctions for JTC Survey (November 2021)

8. Future Year Traffic Assessment

8.1. Background Growth (NTA Growth)

The baseline traffic has then been grown in accordance with the growth of the number of trips per day per the NTA National Demand Forecasting Model which is shown in the Figure 7-1 in the previous section.

Based on the Figure 7-1, the growth in number of trips per day for the Reference Case (Blue line) is summarised in Table 8-1.

Table 8-1 - Growth in number of trips per day (NTA National forecasting Model)

Year	Person Trip	Growth Rate over 10 years
2020	4,600,000	
2030	5,000,000	0.087
2040	5,400,000	0.080
2050	5,800,000	0.074
Average growth over each 10 year period		**0.080**
Average growth per year		**0.008**
Growth Factor		**1.008**

Based on the above table, the number of trips per day is expected to increase by a factor of approximately 0.8% per year. The trips per day consist of all modes of transport including cars, public transport, and active mode of travel. Thus, the actual growth per mode may differ. In reality, considering modal shift targets and national policy, it is likely that the vehicle trip growth rate will be less than the overall trip growth rate. However, taking a conservative approach, it has been assumed that the overall growth factor applies to the baseline traffic.

8.2. Modelled Scenarios

The model was run for following scenarios for both AM and PM peak:

- Opening Year (2024) – Background Growth + Committed Development without GDRS
- Opening Year (2024) – Background Growth + All Development without GDRS
- Opening Year (2024) – Background Growth + Committed Development with GDRS
- Opening Year (2024) – Background Growth + All Development with GDRS
- Opening Year+5 (2029) – Background Growth + Committed Development with GDRS
- Opening Year+5 (2029) – Background Growth + All Development with GDRS
- Opening Year+15 (2039) – Background Growth + Committed Development with GDRS
- Opening Year+15 (2039) – Background Growth + All Development with GDRS

The committed development scenarios include the developments that have recently been granted planning permission in the vicinity of the proposed development that will result in additional traffic at key junctions. The All development scenarios consist of the traffic associated with the proposed mixed use development and trips associated with the committed development.

It is important to note that as stated in Section 9 of the Environment & Modelling Report accompanying the GDRS Part 8 Scheme the impact of the full build out of the Glenamuck / Enniskerry LAP on the surrounding and strategic road network was modelled. The Part 8 Scheme modelling report accounted for some 1050 units within the LAP lands. This includes the Kilternan Village SHD lands quantum of development. The provision of the GDRS road network will therefore provide sufficient capacity on the road network for all the LAP lands including this proposed development.

In the medium to longer term, the construction of the Glenamuck District Roads Scheme will reduce traffic volumes along both Glenamuck Road and Enniskerry Road as shown in Figure 5-13. As such the medium to longer term impact of the proposed development on the local road network is already addressed by the distributor schemes and the accompanying Modelling Report (Review of Glenamuck Local Area Plan – Traffic Modelling Report; Dun Laoghaire Rathdown County Council May 2013).

Therefore, in the context of the changing and improving local road network, the impact of the proposed development only needs to be addressed in the short to medium term context of its impact on both the Glenamuck Road and Enniskerry Road post construction of the Part 8 Scheme and prior to completion of the two distributor roads.

The timeframe for the completion of GDRS is Q3 2024. This ties into the opening time for phase1 of the development. However, in case there is a delay to delivery of the GDRS we have separate scenarios: one "without GDRS" and one "with GDRS" for the Phase1 lands.

For Opening+5 and+15 year scenarios, it is assumed that GDRS will be completed.

The details about the developments (committed and proposed development) are summarised in the following sections.

8.3. Proposed Mixed Use Development at Kilternan

As stated in the section 5 of the report, the mixed use development consists of 5 phases. By the opening year scenarios, Phase 1 developments are supposed to be developed. By other design year scenarios (Opening+5 and Opening+15), all the Phase 1 to 5 developments are supposed to be developed.

Table 8-2 - Schedule of Accommodation for mixed use development

Phase	Developments	Units/Area
Opening Year (2024)		
Phase 1	Apartments	0 unit
	Duplexes	32 units
	Houses	59 units
Opening Year +5 (2029) and Opening Year + 15 (2039)		
Phase 1 to 5	Apartments	100 units
	Duplexes	118 units
	Houses	165 units
	Creche	439 sq. m.
	Office	317 sq. m.
	Medical	147 sq. m
	Retail	857 sq. m.
	Retail (Convenience)	431 sq. m.
	Community	321 sq. m.

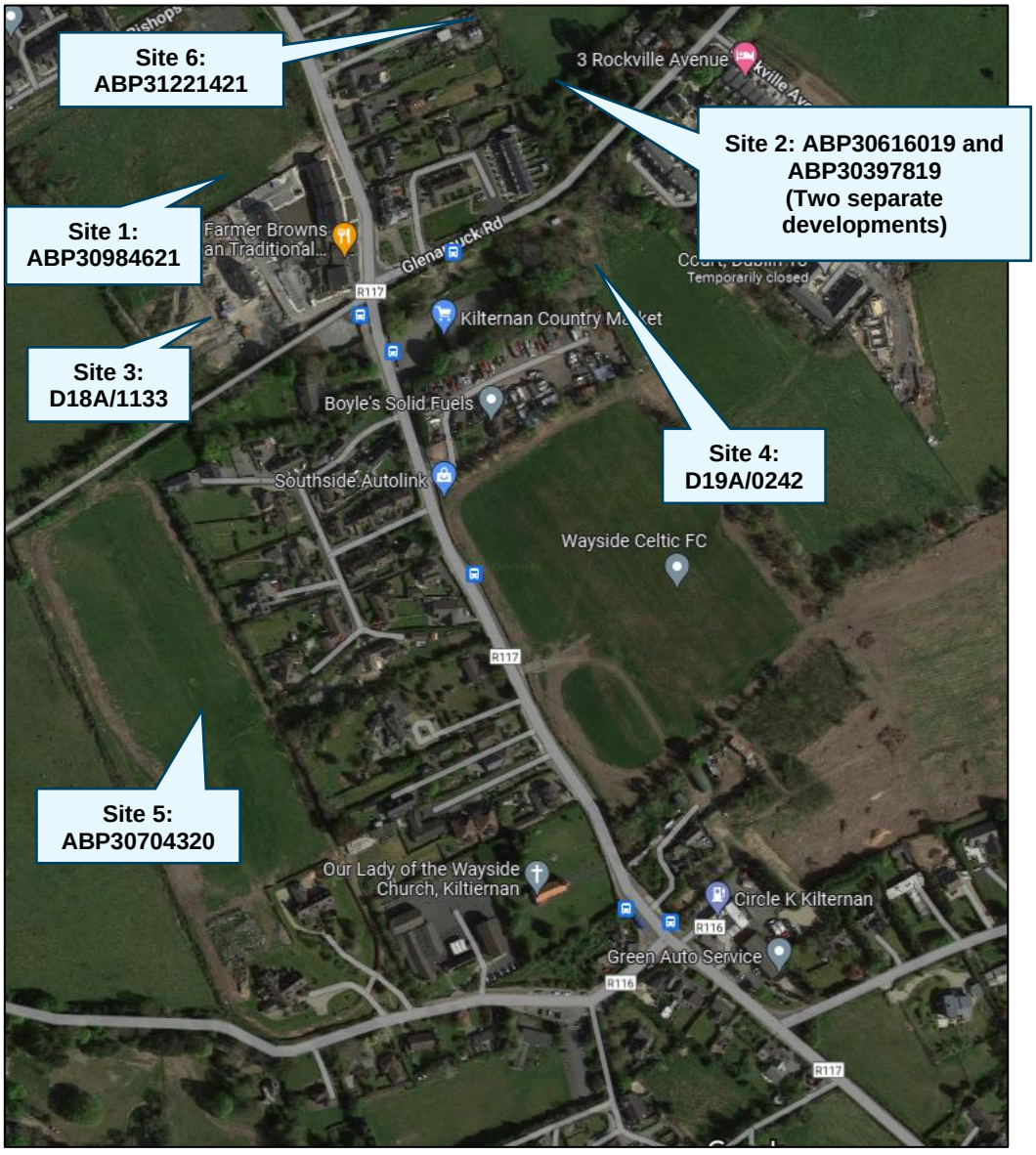
8.4. Committed Development

Committed developments are the additional developments that have recently been granted planning permission in the vicinity of the proposed development that will result in additional traffic at key junctions along the Enniskerry Road (Figure 7-2). These developments are summarised in the Figure 8-1 below with their planning references and detailed below.

- **Site 1: ABP30984621 –** It consists of 203-unit residential development and a 380m2 neighbourhood focussed creche at Enniskerry Road, Kilternan, Co. Dublin.

- **Site 2: ABP30616019 –** It consists of residential development of 197 residential units comprising 62 no. housing units and 135 no. apartment units.
- **Site 2: ABP30397819 –** It consists of residential development of 203 residential units comprising 30 no. housing units and 173 no. apartment units
- **Site 3: D18A/1133 –** It consists of Mixed Use Development including 61 no. residential units comprising 20 housing units and 41 no. apartment / duplex units including the partial demolition & reconfiguration of the existing Golden Tavern Public House to include 292.7sqm public house and 304sqm of office use.
- **Site 4: D19A/0242 –** It consists of Residential Development of 51 residential units comprising 39 no. housing units and 12 no. apartment units.
- **Site 5: ABP30704320 –** It Consists of Residential Development of 116 residential units comprising 85 no. houses and 31 no. apartments.
- **Site 6: ABP31221421** – It consists of construction of 203 residential units (comprising 30 houses and 173 apartments, the provision of a creche/childcare facility, the provision of a retail unit, and the provision of a social/amenity facility.

Figure 8-1 - Location of committed developments considered



The trip generation associated with the proposed and committed developments are summarised in the following section.

9. Trip Generation and Distribution

9.1. Trip Rates for the proposed development

The person trip rates were used for the residential developments, while the vehicular trip rate was used for the non-residential developments.

9.1.1. Residential Trip Rate

The person trip rate for the residential developments was estimated using the TRICS (Trip Rate Information Computer System) database using the "Residential – Houses Privately Owned" and "Residential – Flats Privately Owned" subcategories respectively for Houses and Apartment Units. The direct output from TRICS is included in Appendix A and summarised in the Table 9-1.

Table 9-1 - People trip rate from TRICS: Residential Development

Period	TRICS Trip Rates (People)	
	Arrivals	Departures
Apartments		
AM Peak	0.141	0.341
PM Peak	0.412	0.212
Houses		
AM Peak	0.238	0.89
PM Peak	0.659	0.31

9.1.2. Non-Residential Trip Rate

TRICS database were again used to determine the vehicle trips rates for the non- residential developments. The categories sued for estimating trips rate were:

- **Retail – Shopping Centre: Local Shops** for Retail
- **Education – Nursery** for Creche
- **Health/Clinic** for Medical facilities
- **Employment – Office** for Office trips
- **Retail – Convenience Store** for convenience stores.

For Community development no trips were assumed as these trips will be internal. The vehicle trip rate associated with all these non-residential development lands are summarised in the Table 9-2.

Table 9-2 - Vehicle trip rate from TRICS: Non-Residential Development (per 100 vehicle)

Usage	AM Peak		PM Peak	
	Arrivals	Departures	Arrivals	Departures
Retail	3.482	3.261	6.11	5.92
Creche	2.4	1.657	2	2.171
Medical	0.725	0	0.415	0.518
Office	2.157	0.092	0.118	1.947
Convenience stores	5.826	5.404	5.601	6.079

9.2. Trip Generation

Based on the above trip rate and quantum of proposed development types, the trip generation were calculated.

9.2.1. Residential Development: People Trip Generation

Since, the trip rate for these developments are people trip rates the number of person trips were calculated for all design years and are summarised in the Table 9-3. Since, duplexes resemble apartments more than individual houses an apartment trip rate was used.

Table 9-3 - People trips from residential development

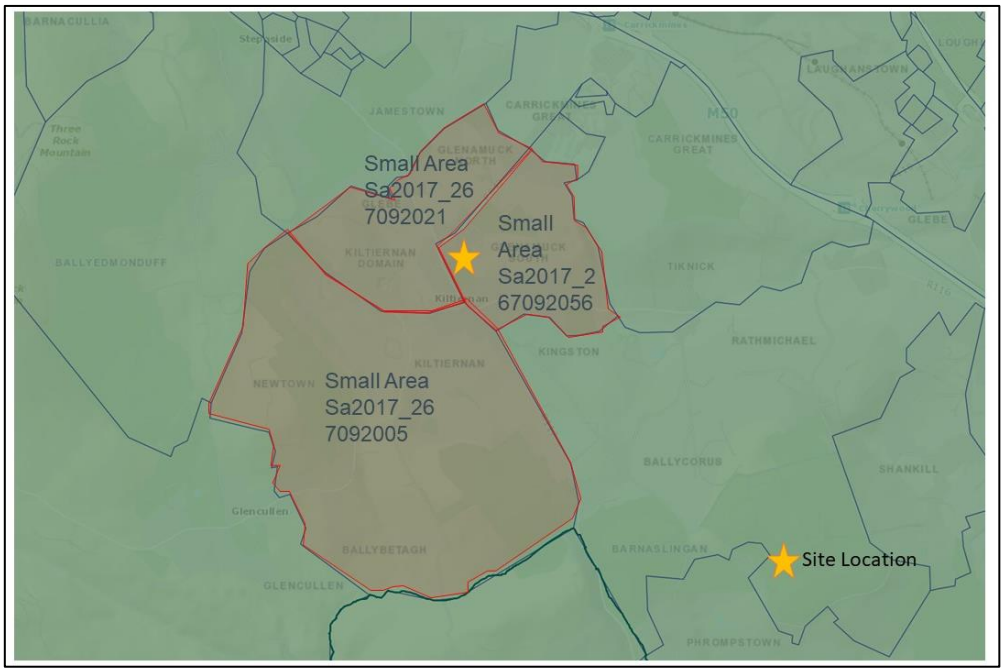
Development types	No. Of Dwells	AM Peak		PM Peak	
		Arrivals	Departures	Arrivals	Departures
Opening Year – Phase 1 only					
Apartments	**0**	0	0	0	0
Duplexes	**32**	5	11	13	7
Houses	**59**	14	53	39	18
Total	**91**	**19**	**63**	**52**	**25**
Opening Year+5 and +15 – Phase 1 to Phase 5					
Apartments	**100**	14	34	41	21
Duplexes	**118**	17	40	49	25
Houses	**165**	39	147	109	51
Total	**383**	**70**	**221**	**199**	**97**

These people trips are multiplied with the percentage of cars mode share to estimate the vehicle trips generation.

9.2.1.1. Mode Share

The existing mode share for the development site has been taken from the CSO Census 2016 'Small Areas' data. A review of the 'Small Areas' (SA) adjacent to the site were reviewed and amalgamated to derive an appropriate mode share. These areas are shown in Figure 7-2. The 'Small Areas' utilised are presented Figure 9-1.

Figure 9-1 - CSO Small Area Populations Map

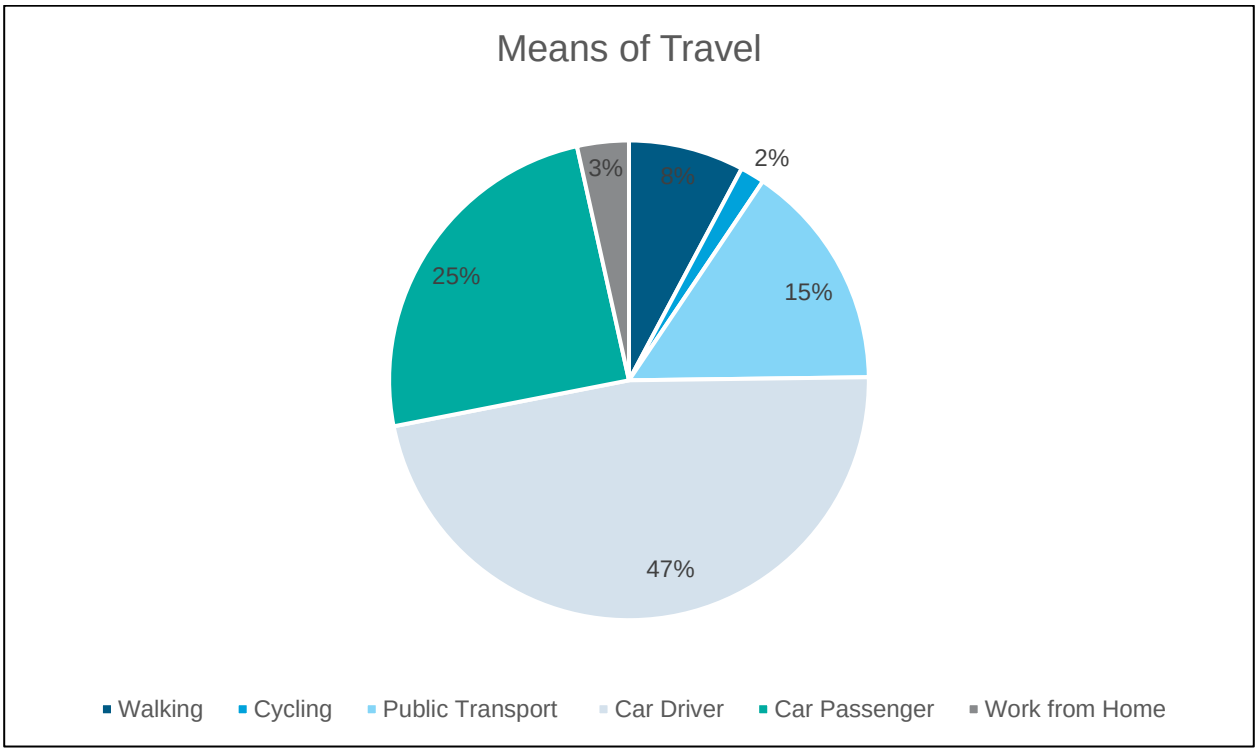


These SA's were chosen as the locations shares similar characteristics with the proposed development site as outlined below:

- Proximity To the site;
- Proximity to Public Transport; and
- Parking Characteristics.

The amalgamation of the above SAP results in the mode share shown in the Figure 9-2.

Figure 9-2 - SAP Mode Share



The proposed residential developments will deliver similar mode shares as detailed in the following section.

9.2.2. Residential Development: Vehicle Trip Generation

Based on the Mode share discussed above, the cars trips are calculated and summarised in the Table 9-4.

Table 9-4 - Vehicle trips generation: residential development

Development	AM Peak			PM Peak		
	Arrivals	Departures	Total	Arrivals	Departures	Total
Opening Year						
Apartments	0	0	**0**	0	0	**0**
Duplexes	2	5	**7**	6	3	**9**
Houses	7	25	**32**	18	9	**27**
Total	**9**	**30**	**39**	**24**	**12**	**36**
Opening Year +5 and +15						
Apartments	7	16	**23**	19	10	**29**
Duplexes	8	19	**27**	23	12	**35**
Houses	18	69	**87**	51	24	**75**
Total	**33**	**104**	**137**	**93**	**46**	**139**

9.2.3. Non-Residential Development Trip generation

As stated in the previous sections for non-residential developments vehicle trips rates were used to determine the total vehicle trips generation. Based on those trip rates total vehicle trips generating for all the developments are summarised in the Table 9-5. Non-residential developments are not proposed to be completed before Opening+5 year. Hence, no non-residential trips are included in the Opening year design scenario. In addition, as stated in the previous sections no trips are assumed for community development as they will be internal and mostly during off-peak hours.

Table 9-5 - Vehicle trips generation: non-residential development

Development	Area	AM Peak			PM Peak		
		Arrivals	Departures	Total	Arrivals	Departures	Total
Opening Year +5 and +15							
Retail	857 sq. m	30	28	**58**	52	51	**103**
Creche	439 sq. m	11	7	**18**	9	10	**18**
Medical	147 sq. m	1	0	**1**	1	1	**1**
Office	317 sq. m	7	0	**7**	0	6	**7**
Convenience stores	431 sq. m	25	23	**48**	24	26	**50**
Community	321 sq. m	0	0	**0**	0	0	**0**
Total	**2512 sq. m**	**73**	**59**	**132**	**86**	**93**	**180**

9.2.4. Internal Trips Assumption

Given the close proximity of the commercial/enterprise development to the residential development within the proposed development site, it is ideally located to facilitate a “live-work” arrangement. In order to take account of this, a 10% reduction in trips generated by the residential development has been assumed. These trips will instead be converted to sustainable walking/cycling trips between the residential and commercial areas of the masterplan area.

Since, non-residential developments are supposed to be developed by Opening+5 year scenario only (phase 2). no internal trips were assumed in Opening Year design year.

9.2.5. Total Vehicle Trip Generation: Residential + Non-Residential development

Based on the above internal trip distribution, total trip generation is summarised in Table 9-6.

Table 9-6 - Vehicle trips generation all development

Development	AM Peak		PM Peak	
	Arrivals	Departures	Arrivals	Departures
Opening Year				
Residential	9	30	24	12
Non-Residential	0	0	0	**0**
Total = 100% Residential	**9**	**30**	**24**	**12**
Opening Year + 5 and +15				
Residential	33	104	93	46
Non-Residential	73	59	86	93
Total = 90% Residential + 100% Non-Residential	**103**	**152**	**170**	**135**

9.3. Trip Distribution and Assignment

9.3.1. Trip Distribution in the modelled network

The trips from the proposed developments are assigned to the modelled network cordons on the basis of the existing traffic patterns on the local road network. The percentage trip distribution to the different model cordons is summarised in Table 9-7.

Table 9-7 – Percentage Trip Distribution

Zones	AM Peak		PM Peak	
	Arrivals	Departures	Arrivals	Departures
Enniskerry North	31%	29%	33%	19%
Enniskerry South	18%	17%	20%	41%
Glenamuck Road to M50/M11	21%	22%	32%	17%
Ballycorus Rd	12%	14%	9%	16%
R116	17%	18%	5%	8%

Based on the above trip distribution, total trips between these model cordons and proposed development site are summarised in Table 9-8.

Table 9-8 – Trip Distribution to all the model cordons

Zones	AM Peak		PM Peak	
	Arrivals	Departures	Arrivals	Departures
Opening Year				
Enniskerry North	3	9	8	3
Enniskerry South	2	5	5	2
Glenamuck Road to M50/M11	2	7	5	3
Ballycorus Rd	1	4	3	2
R116	1	5	4	2
Total	**9**	**30**	**25**	**12**
Opening Year +5 and +15				
Enniskerry North	32	45	53	40
Enniskerry South	19	26	32	23

Zones	AM Peak		PM Peak	
	Arrivals	Departures	Arrivals	Departures
Glenamuck Road to M50/M11	22	34	37	30
Ballycorus Rd	12	21	21	18
R116	18	27	29	24
Total	**103**	**153**	**170**	**135**

These trips were distributed to the different access junctions based on the destination of the journey as discussed in the following section.

9.3.2. Trip Distribution among all the access junctions

The distribution of development traffic arriving and departing between the Enniskerry Road accesses and the GDRS access has been assumed to correspond to existing traffic patterns on the local road network and allowing for redistribution of traffic directly onto the GDRS. Analysis was carried out based on the following scenarios as outlined below.

9.3.2.1. Opening Year

For Opening Year, two scenarios were considered. In the first scenario, it was assumed that the Glenamuck Development Road Scheme (GDRS) is not available and that only the two vehicle access points along Enniskerry Road (A2 and A3) are available for development traffic to access and egress the wider transport network. In the second scenario, it's assumed that GDRS is developed. In this case, two vehicle access points along Enniskerry Road (A2 and A3) along with additional access points (A1) along the GDLR are available.

In the first scenario, it is assumed that the trips will be distributed equally to both the access points (A2 and A3).

For the second scenario, the development trips were assigned to all three access points on the basis of the above percentage as shown in Table 9-9.

Table 9-9 - Traffic Distribution for Access Points: Opening Year with GDRS

Zones	A1	A2	A3
Enniskerry North	50%	25%	25%
Enniskerry South	90%	5%	5%
Glenamuck Road to M50/M11	100%	0%	0%
Ballycorus Rd	90%	5%	5%
R116	0%	50%	50%

Vehicles travelling between Enniskerry North and Access Point A1 will use new GDDR link to travel instead of travelling along Glenamuck road and Golden Ball Junction. Hence, these trips are not reflected on the Golden Ball junction. However, vehicles travelling between Access Points along Enniskerry Road (A2 and A3) and Enniskerry Road North will travel along Golden Ball Junction. All the vehicles travelling to/from M50-M11 will use Access Point A1, while all the vehicle travelling to/from R116 will be using Access Points A2&A3 along Enniskerry Road. For vehicle travelling to/from Enniskerry Road South and Ballycorus Road, 90% will use Access Point A1 while remaining will be equally distributed along Enniskerry Road (A2, A3 and A4).

Based on the above percentage, total vehicles to different model cordons are summarised in Figure 9-3 and Figure 9-4.

Figure 9-3 - Trip Distribution: Opening Year without GDRS

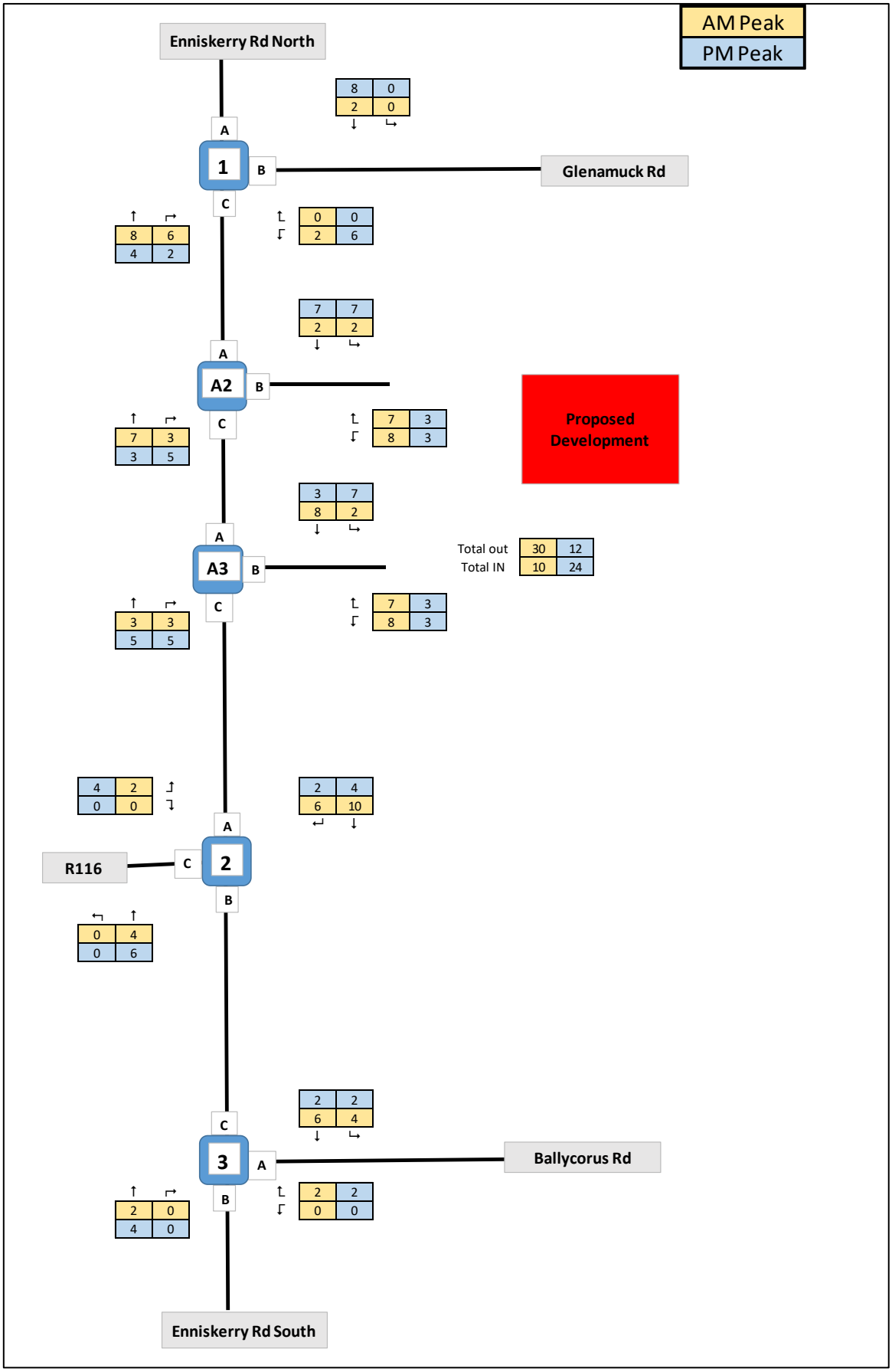
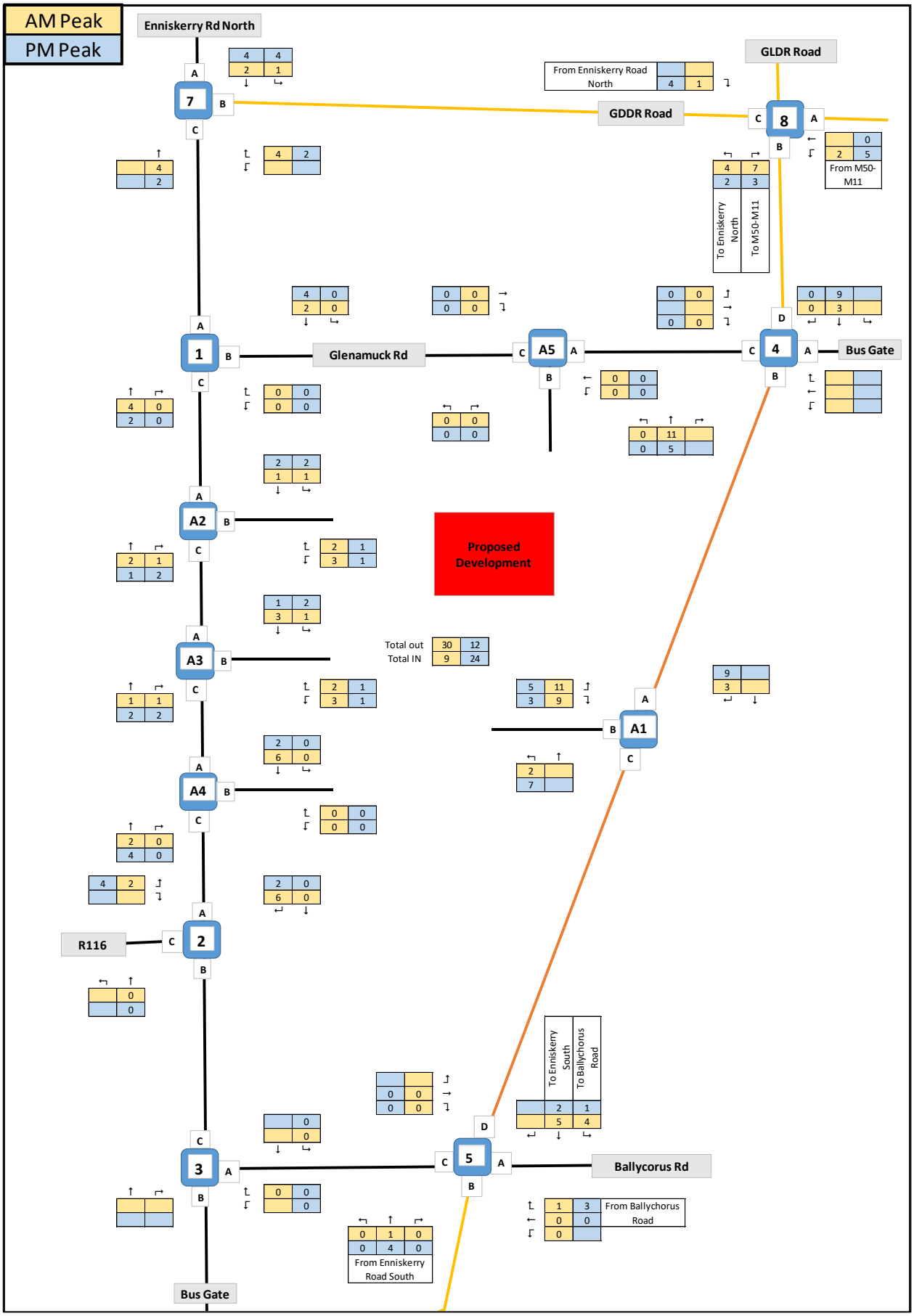


Figure 9-4 - Trip Distribution: Opening Year with GDRS



9.3.2.2. Opening Year+5 and +15

For these design years, it is assumed that GDRS is available and that all five access points from the development are also available to use for development traffic. Three access points (A1,A2 and A3) are the same as that in the previous section. In addition, one more access point south of access A2 & A3 is provided along Enniskerry Road (A4). Additional Access Pont (A5) is also provided along Glenamuck Road. The percentage of the development traffic was split based on the Percentages as shown in Table 9-10.

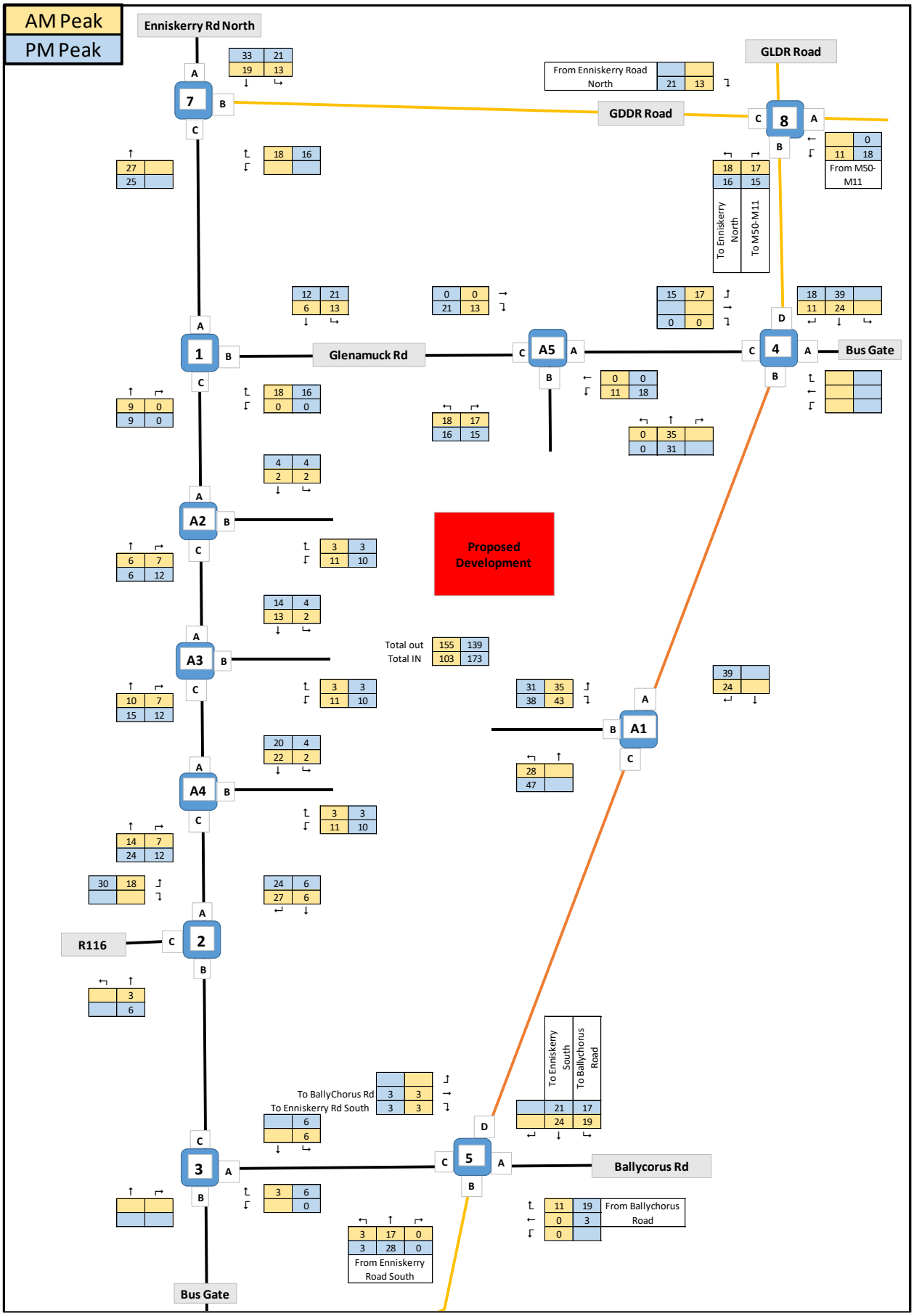
Table 9-10 - Traffic Distribution for Access Points: Opening Year+5 and +15 with GDR

Zones	A1	A2	A3	A4	A5
Enniskerry North	40%	7%	7%	7%	40%
Enniskerry South	90%	3%	3%	3%	0%
Glenamuck Road to M50/M11	50%	0%	0%	0%	50%
Ballycorus Rd	90%	3%	3%	3%	0%
R116	0%	33%	33%	33%	0%

Similar to Opening year “with GDRS” scenario, vehicles travelling between Enniskerry North and Access Point A1 will use new GDRS road to travel instead of travelling along Glenamuck road and Golden Ball Junction. Hence, these trips are not reflected on the Golden Ball junction. However, vehicles travelling between Access Points along Enniskerry Road (A2, A3 and A4) and Enniskerry Road North will travel along Golden Ball Junction. All the vehicles travelling to/from M50-M11 will use Access Point A1 and A5, while all the vehicle travelling to/from R116 will be using Access Points A2,A3 and A4 along Enniskerry Road. For vehicle travelling to/from Enniskerry Road South and Ballycorus Road, majority (90%) will use Access Point A1 while remaining will be equally distributed among access points along Enniskerry Road (A2, A3 and A4).

Based on the above percentage, the development trips assigned to all the access points are summarised in Figure 9-5 - Trip Distribution: Opening Year with GDRS.

Figure 9-5 - Trip Distribution: Opening Year with GDRS



9.4. Committed Development Trips Distribution and Assignment

For all the committed developments discussed in the previous section, trips for the peak hours were obtained from the respective planning applications. These trips are summarised in the figures below for "without GDRS" and "with GDRS". In the case of the "with GDRS" scenarios, all the trips to/from Enniskerry South and Ballycorus Road are diverted onto new roads except for Site 5: ABP30704320. Since, this development is located between Enniskerry Road/Glenamuck Road and Enniskerry Road/R116, therefore all the traffic to/from these developments going south will continue to travel through Enniskerry Road/Ballycorus Road junction.

Figure 9-6 – Committed Development Trips without GDRS

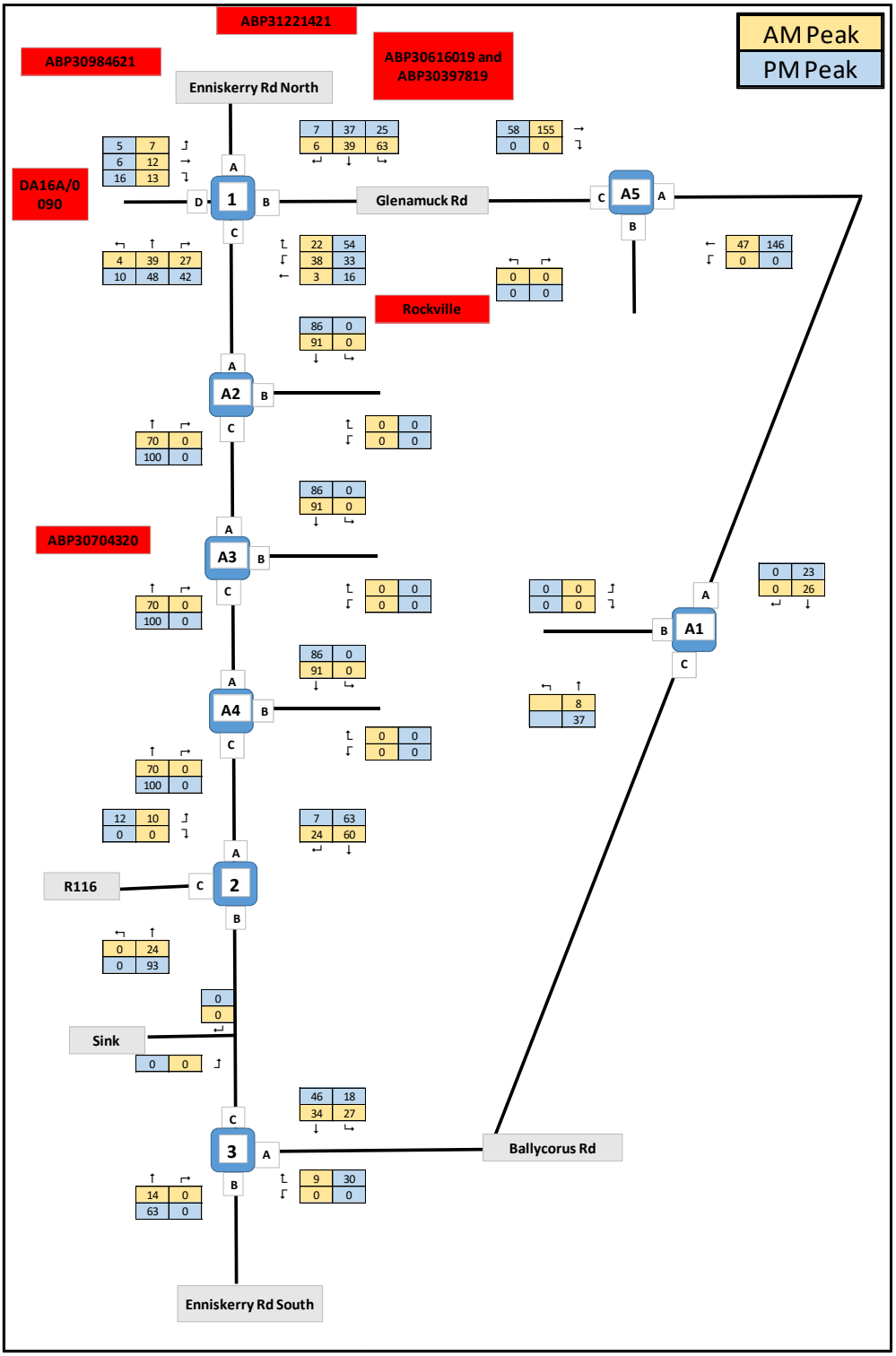
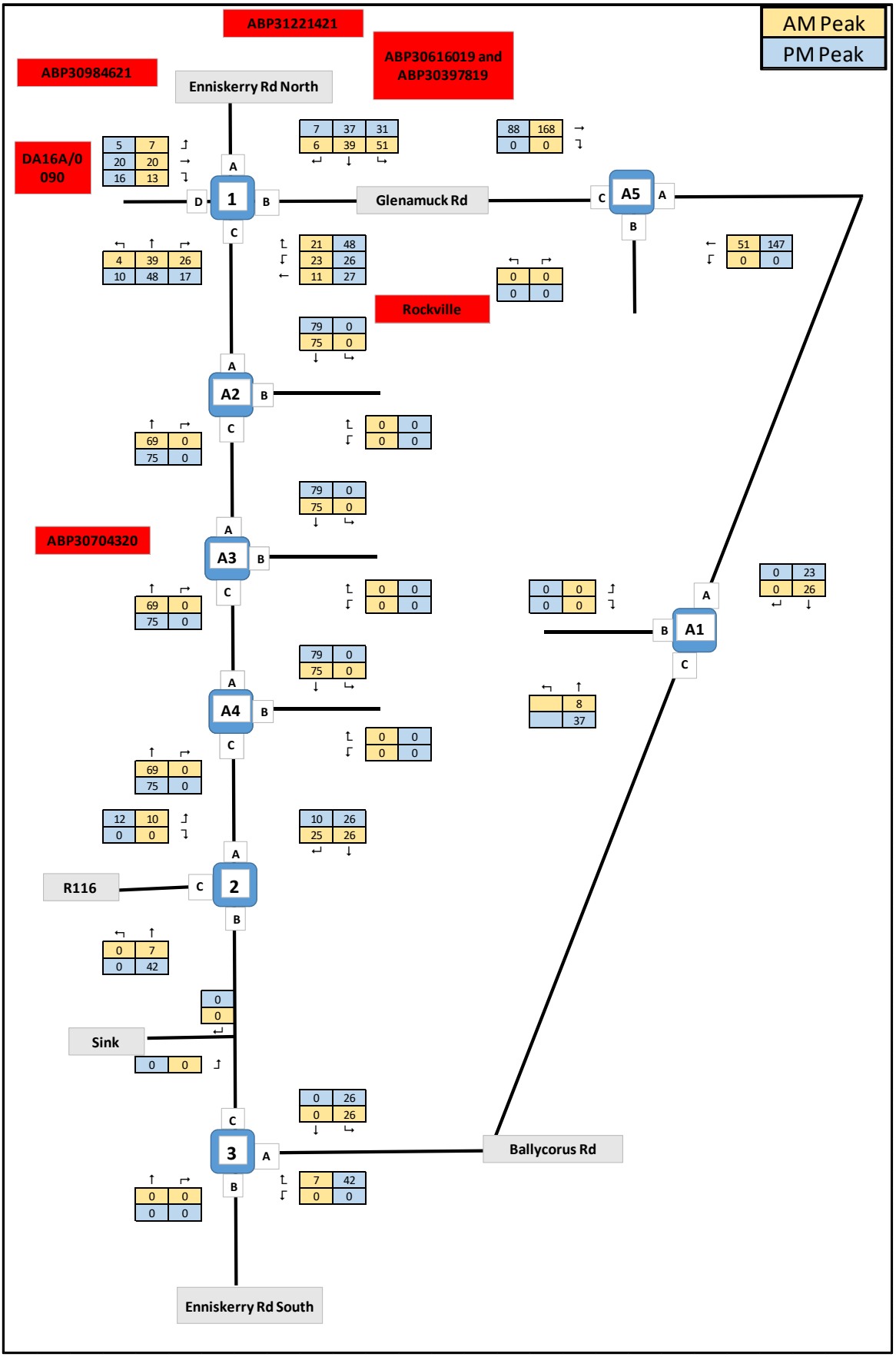


Figure 9-7 – Committed Development Trips with GDRS



10. Traffic Impact Assessment Methodology

10.1. Initial Screening Assessment Approach

An initial assessment was undertaken to quantify the additional traffic from the development that will be distributed onto the local road network and the potentially impacted junctions. In order to determine what level of increase is considered above threshold, reference is made to the TII Traffic and Transport Assessment Guidelines (May 2014). This document outlines the following thresholds:

- Traffic to and from the development exceeds 10% of the traffic flow on the adjoining road; and
- Traffic to and from the development exceeds 5% of the traffic flow on the adjoining road where congestion exists, or the location is sensitive.

Junctions which are predicted to be impacted by an increase in traffic in excess of 5%, due to development traffic, were considered for further detailed junction assessment and modelling.

The traffic increase resulting from the proposed development was compared to the base year existing traffic volumes at each junction and the percentage increases are presented in the Table 10-1. The assessment was carried out in relation to the traffic generation of the proposed Kilternan Village SHD lands.

Table 10-1 - Traffic Impact in Opening Year

Description	Period	Without GDRS			With GDRS		
		Do Nothing Traffic	With All Development Traffic	% Increase	Do Nothing Traffic	With All Development Traffic	% Increase
Enniskerry Rd / Glenamuck Rd Junction (Golden Ball Junction)	AM	1252	1544	**23%**	922	1189	**29%**
	PM	997	1315	**32%**	593	892	**50%**
Enniskerry Rd / R116 Junction	AM	978	1119	**14%**	521	597	**15%**
	PM	795	987	**24%**	260	357	**37%**
Enniskerry Rd / Ballycorus Rd Junction	AM	592	690	**17%**	212	246	**16%**
	PM	674	840	**25%**	168	236	**40%**

From the above table, it can be observed that, for all the junctions the percentage increase in traffic due to all the development trips were above 10%. Therefore, in accordance with the thresholds set out in TII's Traffic and Transport Guidelines, all the junctions were brought forward for detailed assessment with all other junctions screened out of the analysis .

In addition to the assessment of the above junctions, analysis was undertaken for all the 5 access junctions.

10.2. Detailed Assessment Approach

All the above key junctions, together with all the access junctions were modelled for all the scenarios discussed in the previous sections and are also summarised again below:

- Opening Year (2024) – Background Growth + Committed Development without GDRS
- Opening Year (2024) – Background Growth + All Development without GDRS
- Opening Year (2024) – Background Growth + Committed Development with GDRS
- Opening Year (2024) – Background Growth + All Development with GDRS
- Opening Year+5 (2029) – Background Growth + Committed Development with GDRS

- Opening Year+5 (2029) – Background Growth + All Development with GDRS
- Opening Year+15 (2039) – Background Growth + Committed Development with GDRS
- Opening Year+15 (2039) – Background Growth + All Development with GDRS

For Access Junctions, only with All development scenarios are modelled for all the design year scenarios.

The junctions were analysed individually using various transport modelling software (based on the junction type) as follows:

Table 10-2 - Junction Modelling Software Utilised

Modelling Software	Junction Type	Sites Modelled
JCT LinSig	Traffic Signals	Golden Ball Junction, Enniskerry Road/Ballycorus Road Junction
TRL Junctions 9	Priority and Roundabout	Enniskerry Road/R116 Junction and All Access Junctions

The terminology used throughout the analysis associated with each software is explained in the following sections.

JCT LinSig

- **DOS:** This is the ratio of demand flow to capacity on a link. The saturation level is normally 90%. A degree of saturation below 90% represents a junction that is operating in an efficient and stable condition. If a link has a degree of saturation of between 90% and 100% it may still be operating to an adequate standard depending on the acceptability of queuing and delay. A degree of saturation of above 100% is considered to be over-capacity.
- **Mean Maximum Queue:** The sum of the maximum queue on a link (including uniform, random and oversaturation queues) averaged over all the cycles in the modelled time period.
- **Average Delay:** The average delay for each passenger car unit (pcu) on the lane averaged over the modelled time period.
- **Practical Reserve Capacity (PRC):** A measure of how much additional traffic could pass through the junction whilst maintaining a maximum degree of saturation of 90% on all lanes. Measured as a percentage.

TRL Junctions 9

- **RFC:** This is the ratio of demand flow to capacity. The practical capacity threshold is normally approximately 0.85. An RFC below 0.85 represents a junction which is operating in an efficient and stable condition. An RFC of between 0.85 and 1 represents variable operation, and may be said to be operating adequately, if the queueing and delay are deemed acceptable. RFC values in excess of 1 represent an oversaturated condition/
- **Queue Length:** This represents the maximum of the average queue length in pcu per time segment.
- **Average Delay:** This shows the average amount of traffic delay at the junction per vehicle over the peak hour period.
- **Level of Service (LOS) –** a qualitative measure to describe the operating conditions of a road based on factors such as peed, travel time, manoeuvrability, delay and safety . LOS ranges from A to F. Where A is free flowing and F is forced or breakdown flow

In the case of the “with GDRS” scheme scenarios, the background traffic travelling from between northern and southern part of the model cordon were reassigned to use new GDDR/GLDR links. The following assumptions were taken to estimate the redistribution of traffic:

- It is assumed that the traffic travelling from Enniskerry to the southern part of the model cordon (Enniskerry South & Ballycorus Road) will split in 1:9 ratio. That means, 10% of these trips will continue to travel straight at Golden Ball Junction and then turn left at Enniskerry Road/Ballycorus Road junction going towards Enniskerry Road South and Ballycorus Road. For the remaining 90% trips, it was assumed that 50% will use new GDDR link while remaining will turn left at Golden Ball Junction onto Glenamuck road and then turn right onto the GLDR at proposed GDDR/GLDR junction. For the opposite direction, i.e., for vehicles travelling from the southern part of the model cordon (Enniskerry South and Ballycorus Road) towards Enniskerry Road North the same split at all the junctions are applied in the reverse order. 10% of the trips were assumed to be turning right from Ballycorus Road onto Enniskerry road and will continue straight at Golden Ball Junction. Remaining 90% will travel along GLDR. Out of them 50% will turn onto Glenamuck Road and then right onto

Enniskerry Road at Golden Ball Junction. The remaining 50% will use GLDR to move to Enniskerry Road North.

- For the movement between M50-M11 and southern part of the model (Enniskerry Road South and Ballycorus Road), all the vehicles will be using the GLDR link rather than travelling along Enniskerry Road and Golden Ball Junction.
- It has been assumed that all the traffic from Enniskerry North and South, Ballycorus road and Glenamuck road travelling to R116/Enniskerry road junction will remain the same. However due to bus gate installed at south of Enniskerry Road/Ballycorus Road junction, all the vehicles travelling to/from Enniskerry South was assumed to be diverted onto Ballycorus Road.

Based on the above assumptions and all the development trips discussed in the previous sections, the traffic volume at all the junctions for all the modelled scenarios are summarised in the Appendix C.

11. Traffic Impact Results

As outlined in the previous section, each junction was analysed individually using the most relevant software package for that junction type.

Data collected for comparison between scenarios included:

- Queue lengths in pcus;
- Average delays in seconds; and
- Capacity (where available).

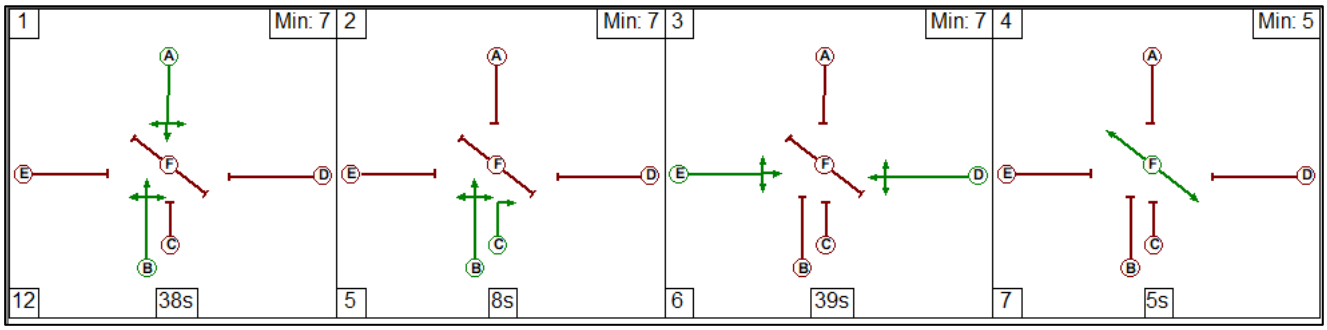
The direct output for each junction from the respective software packages are included in Appendix B and are summarised in the following sections.

11.1. Enniskerry Road / Glenamuck Road Junction (Golden Ball Junction)

The junction was modelled using LinSig for all the scenarios across all the design years.

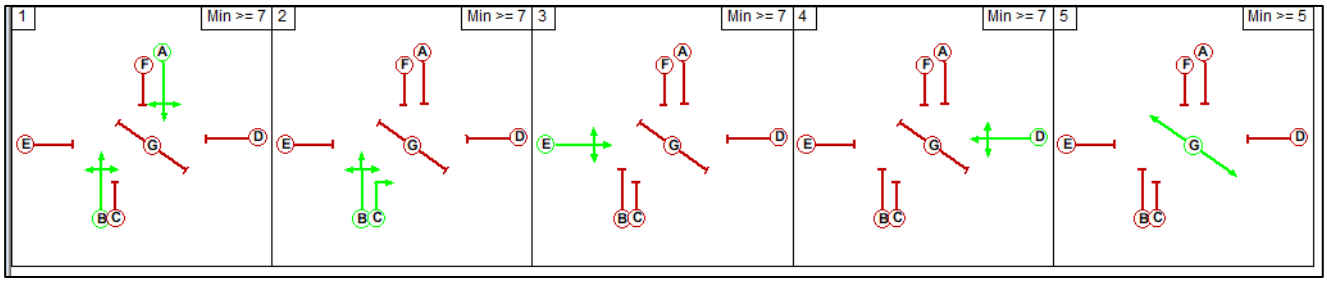
In the opening year "without GDRS" scheme, the junction was modelled as per its current layout. The stage sequence for the junction is summarised in Figure 11-1. In the first stage, both Enniskerry Road northern and southern arms were provided general green. The right turners can move into the gap when available. In the second stage, the right filter stage is provided for the southern arm with traffic from the northern arm provided red. This stage is called on demand when there are not enough gaps available for the right turners from Enniskerry Road south to move into Glenamuck Road in the first stage. As per the traffic volume, it was assumed that this stage is called every cycle for both AM and PM peak in all the scenarios. For the northern arm only 10-15 vehicles are turning right and therefore no dedicated right filter stage is required for this arm. In the third stage, both Glenamuck and Golden Pub access arm gets green. Since, traffic volume from the access arm is very low, no dedicated right filter stage was provided for any of the secondary arms. The final stage is the All Red stage in which pedestrians are provided green. Since, there are not enough pedestrian and cyclists are there in the junction. Therefore, this stage was modelled to be called once in every second cycle. The cycle time for the junction was taken as 120 seconds. Green time for the pedestrian/cyclists was based on a 5s green with an amber phase equal to the crossing width of the road divided by 1.2 m/s and a 2 s red phase before traffic regains priority.

Figure 11-1 – Stage Sequence for Golden Ball Junction without GDRS scheme



For "with GDRS" scheme scenarios, the junction was modelled on the basis of the new redesign of this junction as set out in Section 4.1. The stage sequence for the junction is shown in Figure 11-2. The first two stages are similar to "without GDRS" scheme. In the first two stage, both the Enniskerry Road northern and southern arms were provided general green in which right turners can move into the gap. In the seconds stage, the dedicated right filter is provided for the southern arm with traffic from the northern arm completely stopped. Again, no dedicated right filter stage is provided for the northern arm. In the third stage, green stage is provided to the local access road. However, since the traffic volume along this arm are less. Therefore, this stage was modelled to call once in every 4 cycles. In the fourth stage, green is provided for the Glenamuck Road. The final stage is again for the pedestrian. Similar to the previous scenario, this stage was again modelled to be called once in every alternate cycle. The cycle time was taken as 120 seconds. Green time for the pedestrian/cyclists was based on a 5s green with an amber phase equal to the crossing width of the road divided by 1.2 m/s and a 2 s red phase before traffic regains priority.

Figure 11-2 – Stage Sequence for Golden Ball Junction with GDRS scheme



The modelled results for all the scenarios are summarised in the following section.

11.1.1. Opening Year

The results for the Opening Year with and "without GDRS" schemes are shown in Table 11-1.

Table 11-1 - Enniskerry Rd / Glenamuck Rd (Golden Ball Junction) modelling results: Opening Year

Arm	With Committed Development			With All Development		
	Mean Max Queue (pcu)	Delay (s/pcu)	DOS (%)	Mean Max Queue (pcu)	Delay (s/pcu)	DOS (%)
Opening Year without GDRS – AM Peak						
Golden Pub Access	1.0 pcu	46.4 s	17.5%	1.0 pcu	46.5 s	17.6%
Glenamuck Road	19.9 pcu	119.9 s	97.6%	20.3 pcu	123.3 s	98.1%
Enniskerry Road South	25.8 pcu	94.7 s	97.1%	26.0 pcu	91.2 s	96.7%
Enniskerry Road North	25.8 pcu	81.7 s	95.2%	28.8 pcu	99.6 s	98.1%
PRC (%)	**-8.5%**			**-9.0%**		
Opening Year without GDRS – PM Peak						
Golden Pub Access	1.0 pcu	31.4 s	13.0%	1.0 pcu	32.6 s	14.0%
Glenamuck Road	15.6 pcu	49.0 s	79.1%	16.4 pcu	52.5 s	82.0%
Enniskerry Road South	13.2 pcu	57.3 s	78.8%	13.8 pcu	59.4 s	81.6%
Enniskerry Road North	14.5 pcu	52.2 s	76.4%	12.6 pcu	38.1 s	62.3%
PRC (%)	**13.7%**			**9.8%**		
Opening Year with GDRS – AM Peak						
Golden Pub Access	1.6 pcu	76.8 s	35.9%	1.6 pcu	76.8 s	35.9%
Glenamuck Road	10.6 pcu	50.1 s	67.5%	10.6 pcu	50.1 s	67.5%
Enniskerry Road South	3.4 pcu	24.8 s	36.3%	3.4 pcu	24.8 s	36.5%
Enniskerry Road North	14.6 pcu	35.6 s	68.5%	14.6 pcu	35.7 s	68.7%
PRC (%)	**31.4%**			**31.0%**		
Opening Year with GDRS – PM Peak						
Golden Pub Access	2.2 pcu	81.0 s	45.5%	2.2 pcu	81.0 s	45.5%
Glenamuck Road	9.1 pcu	38.8 s	53.1%	9.1 pcu	40.0 s	54.5%
Enniskerry Road South	2.1 pcu	22.8 s	17.4%	2.1 pcu	22.1 s	17.2%
Enniskerry Road North	9.5 pcu	36.1 s	54.2%	9.5 pcu	35.2 s	53.6%
PRC (%)	**66.0%**			**65.3%**		

From the above table, it can be observed that the junction is operating over the capacity in the scenario "without GDRS" during the morning peak. However, this is mostly due to the background growth and trips associated with the committed developments. The impact of the additional trips due to the proposed development is very small with PRC deteriorating from -8.5% in the with committed development AM Peak scenario to -9.0% in the corresponding All Development scenario (i.e., a 0.5% impact). In addition, the maximum average delay was around 2 min, which is typical for an urbanised signalised junction. For the "without GDRS" PM Peak scenario, the junction was found to be operating within the capacity for both "Committed Development" and "All Development Scenario". The impact of the proposed development trips was small with PRC for both the scenarios being observed as 13.7% and 9.8% respectively.

For the "with GDRS" scenarios, the junction was found to be operating within the capacity across all the scenarios during both AM and PM peak. The impact of the additional trips due to the proposed development is very small with PRC reducing from 31.4% in the with committed development AM Peak scenario to 31.0% in the corresponding All Development scenario (i.e. a 0.4% impact). For the PM Peak, the PRC was observed to be reduced by small amount of 0.7%, from 66.0% in "Committed Development" scenario to 65.3% in "All Development" scenario.

Overall, the junction was found to be operating over the capacity in "Without GDRS" AM Peak scenario and for all other scenarios, the junction was found to be within the capacity. The impact of the development trips was observed to be very small.

11.1.2. Opening Year+5 and Opening Year +15

The results for the both the design years are summarised in Table 11-2. In both design years, only with GRDS scheme scenarios are modelled.

Table 11-2 - Enniskerry Rd / Glenamuck Rd (Golden Ball Junction) modelling results: Opening Year+5/15

Arm	With Committed Development			With All Development		
	Mean Max Queue (pcu)	Delay (s/pcu)	DOS (%)	Mean Max Queue (pcu)	Delay (s/pcu)	DOS (%)
Opening Year + 5 with GDRS – AM Peak						
Golden Pub Access	1.6 pcu	76.8 s	35.9%	1.6 pcu	76.8 s	35.9%
Glenamuck Road	11.2 pcu	51.2 s	69.8%	12.1 pcu	53.3 s	73.5%
Enniskerry Road South	3.6 pcu	25.7 s	38.7%	3.7 pcu	26.1 s	39.9%
Enniskerry Road North	15.5 pcu	36.7 s	70.9%	16.3 pcu	37.9 s	73.5%
PRC (%)	**26.9%**			**22.5%**		
Opening Year + 5 with GDRS – PM Peak						
Golden Pub Access	2.0 pcu	79.2 s	41.7%	2.0 pcu	79.2 s	41.7%
Glenamuck Road	9.3 pcu	39.3 s	54.6%	10.2 pcu	41.3 s	58.8%
Enniskerry Road South	2.2 pcu	23.1 s	18.3%	2.4 pcu	22.8 s	19.0%
Enniskerry Road North	9.9 pcu	36.6 s	56.0%	11.0 pcu	37.0 s	59.9%
PRC (%)	**60.7%**			**50.4%**		
Opening Year + 15 with GDRS – AM Peak						
Golden Pub Access	1.6 pcu	76.8 s	35.9%	1.6 pcu	76.8 s	35.9%
Glenamuck Road	12.4 pcu	54.2 s	74.8%	13.3 pcu	56.9 s	35.9%
Enniskerry Road South	4.1 pcu	27.7 s	44.0%	4.2 pcu	28.2 s	45.3%
Enniskerry Road North	17.2 pcu	39.1 s	75.7%	18.1 pcu	40.7 s	78.3%
PRC (%)	**19.0%**			**14.7%**		
Opening Year + 15 with GDRS – PM Peak						
Golden Pub Access	2.0 pcu	79.2 s	41.7%	2.0 pcu	79.2 s	41.7%

Glenamuck Road	10.2 pcu	41.4 s	59.2%	10.9 pcu	42.3 s	61.9%
Enniskerry Road South	2.2 pcu	23.1 s	19.5%	2.4 pcu	23.5 s	20.5%
Enniskerry Road North	10.6 pcu	36.6 s	58.4%	11.9 pcu	38.2 s	63.4%
PRC (%)	**52.2%**			**41.9%**		

For the Opening+5 AM Peak scenario, the PRC reduced from 26.9% in “Committed Development” scenario to 22.5% in “All Development” scenario. The maximum increase in queue was observed to be in order of 1 pcu, while the maximum increase in the average delay was observed to be in the order of 2 seconds. The maximum DOS for both the scenarios were observed to be in order of 70% for Committed Development scenario, while 74% for All Development scenario. This suggests that the junction was found to be operating within the capacity. The small increase in delay and queue suggests that the impact of the development trips was observed to be small.

For the Opening+5 PM Peak scenario, the PRC reduced from 60.7% in “Committed Development” scenario to 50.4% in “All Development” scenario. The maximum increase in queue was observed to be in the order of 1 pcu, while the maximum increase in the average delay was observed to be in order of 2 seconds. The maximum DOS for both the scenarios were observed to be in order of 56% for Committed Development scenario, while 60% for All Development scenario. This suggests that the junction was found to be operating within the capacity. The small increase in delay and queue again suggests that the impact of the development trips was small.

For the Opening+15 AM Peak scenario, the PRC reduced from 19.0% in “Committed Development” scenario to 14.7% in “All Development” scenario. The maximum increase in queue was observed to be in the order of 1 pcu, while the maximum increase in the average delay was observed to be in order of 3 seconds. The maximum DOS for both the scenarios were observed to be in order of 76% for Committed Development scenario, while 77% for All Development scenario. This suggests that the junction was found to be operating within the capacity. The small increase in delay and queue suggests that the impact of the development trips was observed to be small.

For the Opening+15 PM Peak scenario, the PRC reduced from 52.2% in “Committed Development” scenario to 41.9% in “All Development” scenario. The maximum increase in queue was observed to be in the order of 1 pcu, while the maximum increase in the average delay was observed to be in order of 2 seconds. The maximum DOS for both the scenarios were observed to be in order of 59% for Committed Development scenario, while 63% for All Development scenario. This suggests that the junction was found to be operating within the capacity. The small increase in delay and queue again suggests that the impact of the development trips was small.

Overall, the junction was found to be operating within capacity across all approaches in all design year scenarios. The impact of the additional development trips was observed to be small for both +5 and +15 design years scenarios during both AM and PM Peak.

11.2. Enniskerry Road and R116 Junction

For all the design year scenarios, the junction was modelled in its current configuration as a priority junction as shown in Section 3.5.2. The junction has been modelled in Junction 9 (PICADY).

The modelled results are summarised in the following section.

11.2.1. Opening Year

The modelled outputs for the opening year are summarised in Table 11-3.

Table 11-3 - Enniskerry Rd / R116- Modelling results: Opening Year

Arm	With Committed Development				With All Development			
	Queue	Delay	RFC	LOS	Queue	Delay	RFC	LOS
Opening Year without GDRS – AM Peak								
R116 Left	0.4 pcu	8.41 s	0.30	A	0.4 pcu	8.47 s	0.30	A
R116 Right	0.2 pcu	15.15 s	0.17	C	0.2 pcu	15.39 s	0.17	C
Enniskerry Road North	1.3 pcu	8.22 s	0.47	A	1.4 pcu	8.48 s	0.49	A
Opening Year without GDRS – PM Peak								
R116 Left	0.1 pcu	6.86 s	0.10	A	0.1 pcu	6.86 s	0.10	A
R116 Right	0.1 pcu	12.34 s	0.12	B	0.1 pcu	12.60 s	0.12	B
Enniskerry Road North	0.5 pcu	4.95 s	0.19	A	0.5 pcu	4.96 s	0.19	A
Opening Year with GDRS – AM Peak								
R116 Left	0.4 pcu	7.28 s	0.27	A	0.4 pcu	7.31 s	0.27	A
R116 Right	0.2 pcu	11.50 s	0.13	B	0.2 pcu	11.57 s	0.13	B
Enniskerry Road North	0.6 pcu	8.23 s	0.35	A	0.6 pcu	8.38 s	0.36	A
Opening Year with GDRS – PM Peak								
R116 Left	0.1 pcu	6.20 s	0.09	A	0.1 pcu	6.18 s	0.09	A
R116 Right	0.1 pcu	9.36 s	0.09	A	0.1 pcu	9.49 s	0.09	A
Enniskerry Road North	0.2 pcu	6.37 s	0.13	A	0.2 pcu	6.40 s	0.14	A

For Opening Year AM Peak “without GDRS” scenario, the LOS was observed to be C for both Committed Development and All Development scenario. The maximum RFC was observed to be 0.47 and 0.49 respectively for both the scenarios. This suggests that the junction was found to be operating just at the capacity for both the scenarios. However, it’s mostly due to background growth and committed development. The impact of the development trips was observed to be very small with maximum increase in RFC was observed to be 0.02, while the maximum increase in average queue was observed to be 0.1 pcu and maximum increase in average delay was 0.26 second.

For Opening Year PM Peak “without GDRS” scenario, the LOS was observed to be B for both Committed Development and All Development scenario. The maximum RFC was observed to be 0.19 for both the scenarios. This suggests that the junction was found to be operating within the capacity for both the scenarios. The impact of the development trips was observed to be very no change RFC being observed, while the maximum increase in average queue was observed to be 0.1 pcu and maximum increase in average delay was 0.26 second.

For Opening Year AM Peak “with GDRS” scenario, the LOS was observed to be B for both Committed Development and All Development scenario. The maximum RFC was observed to be 0.35 and 0.36 respectively for both the scenarios. This suggests that the junction was found to be operating within the capacity for both the

scenarios. The impact of the development trips was observed to be negligible with maximum increase in RFC was observed to be 0.01, while the maximum increase in average queue was observed to be 0 pcu and maximum increase in average delay was 0.15 second

For Opening Year PM Peak "with GDRS" scenario, the LOS was observed to be A for both Committed Development and All Development scenario. The maximum RFC was observed to be 0.13 and 0.14 respectively for both the scenarios. This suggests that the junction was found to be operating within the capacity for both the scenarios. The impact of the development trips was observed to be negligible with maximum increase in RFC was observed to be 0.01, while the maximum increase in average queue was observed to be 0 pcu and maximum increase in average delay was 0.13 second.

Overall, the junction was found to be operating just at the capacity in Opening year "without GDRS" AM Peak scenario with LOS C. However, it is due to background growth and committed development trips. The impact of the proposed development trips was very small. For the remaining scenarios, the junction was operating within the capacity with the impact of the proposed development trips being negligible to very small.

11.2.2. Opening Year+5 and Opening Year+15

The modelled outputs for both the design years are summarised in Table 11-4.

Table 11-4 - Enniskerry Rd / R116- Modelling results: Opening Year+5 and +15

Arm	With Committed Development				With All Development			
	Queue	Delay	RFC	LOS	Queue	Delay	RFC	LOS
Opening Year + 5 with GDRS – AM Peak								
R116 Left	0.4 pcu	7.39 s	0.28	A	0.5 pcu	8.06 s	0.32	A
R116 Right	0.2 pcu	11.64 s	0.14	B	0.2 pcu	12.10 s	0.14	B
Enniskerry Road North	0.6 pcu	8.38 s	0.37	A	0.8 pcu	9.11 s	0.42	A
Opening Year + 5 with GDRS – PM Peak								
R116 Left	0.1 pcu	6.23 s	0.09	A	0.2 pcu	6.36 s	0.14	A
R116 Right	0.1 pcu	9.40 s	0.09	A	0.1 pcu	10.10 s	0.10	A
Enniskerry Road North	0.2 pcu	6.39 s	0.14	A	0.3 pcu	6.73 s	0.18	A
Opening Year + 15 with GDRS – AM Peak								
R116 Left	0.4 pcu	7.71 s	0.30	A	0.5 pcu	8.03 s	0.33	A
R116 Right	0.2 pcu	12.05 s	0.15	B	0.2 pcu	12.53 s	0.16	B
Enniskerry Road North	0.7 pcu	8.76 s	0.40	A	0.9 pcu	9.58 s	0.45	A
Opening Year + 15 with GDRS – PM Peak								
R116 Left	0.1 pcu	6.32 s	0.10	A	0.2 pcu	6.46 s	0.15	A
R116 Right	0.1 pcu	9.56 s	0.10	A	0.1 pcu	10.26 s	0.11	A
Enniskerry Road North	0.2 pcu	6.46 s	0.15	A	0.3 pcu	6.81 s	0.20	A

For Opening Year+5 AM Peak "with GDRS" scenario, the LOS was observed to be B for both Committed Development and All Development scenario. The maximum RFC was observed to be 0.37 and 0.42 respectively for both the scenarios. This suggests that the junction was found to be operating within the capacity for both the scenarios. The impact of the development trips was observed to be very small with maximum increase in RFC was observed to be 0.05, while the maximum increase in average queue was observed to be 0.2 pcu and maximum increase in average delay was 0.73 second.

For Opening Year+5 PM Peak “with GDRS” scenario, the LOS was observed to be A for both Committed Development and All Development scenario. The maximum RFC was observed to be 0.14 and 0.18 respectively for both the scenarios. This suggests that the junction was found to be operating within the capacity for both the scenarios. The impact of the development trips was observed to be very small with maximum increase in RFC was observed to be 0.05, while the maximum increase in average queue was observed to be 0.1 pcu and maximum increase in average delay was 0.70 second.

For Opening Year+15 AM Peak “with GDRS” scenario, the LOS was observed to be B for both Committed Development and All Development scenario. The maximum RFC was observed to be 0.40 and 0.45 respectively for both the scenarios. This suggests that the junction was found to be operating within the capacity for both the scenarios. The impact of the development trips was observed to be negligible with maximum increase in RFC was observed to be 0.05, while the maximum increase in average queue was observed to be 0.2 pcu and maximum increase in average delay was 0.82 second.

For Opening Year+15 PM Peak “with GDRS” scenario, the LOS was observed to be A for both Committed Development and All Development scenario. The maximum RFC was observed to be 0.15 and 0.20 respectively for both the scenarios. This suggests that the junction was found to be operating within the capacity for both the scenarios. The impact of the development trips was observed to be negligible with maximum increase in RFC was observed to be 0.05, while the maximum increase in average queue was observed to be 0.1 pcu and maximum increase in average delay was 0.70 second.

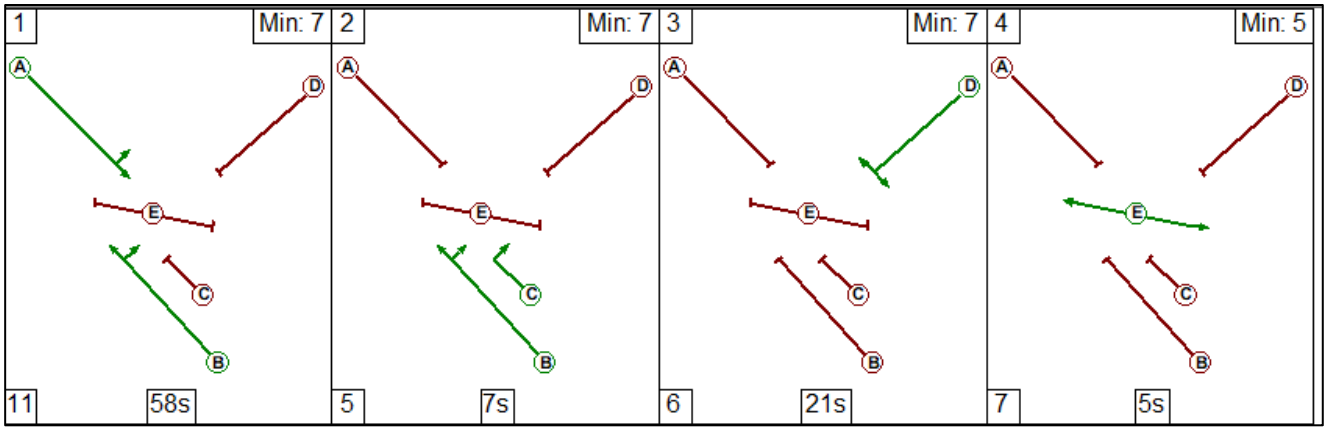
Overall, the junction was found to be operating within the capacity for all the scenarios with the impact of the proposed development trips being very small.

11.3. Enniskerry Road and Ballycorus Road Junction

The junction was only modelled for Opening Year “without GDRS” scenario. This is because, in “with GDRS” scenarios due to installation of the Bus gate at the downstream of this junction, there will be negligible vehicles will be accessing the southern arm. Therefore, the significant movement will be from Enniskerry North to Ballycorus road and from vice-versa. There is no conflict between these movements and hence, requires no modelling.

The junction was modelled using LinSig and was modelled as per its current layout as a signalised junction as shown in Section 3.5.3. The stage sequence for the junction is summarised in Figure 11-3. In the first stage, both Enniskerry Road arms are given general green with right turners being allowed to turn into the gap. The second stage is the right turning filter stage for the Enniskerry southern arm where right turners get priority, and the northern arm is provided red. This stage is called on demand if there are no sufficient gaps available for right turners in the first stage. Since, there are not many right turners at this junction, therefore, this stage is modelled to be called once in every two cycles. In the third stage, Ballycorus road is provided green. The final stage is all red stage where pedestrian/cyclists are provided green. This stage is also modelled to be called once in every two cycles. The cycle time was taken as 120 seconds. Green time for the pedestrian/cyclists was based on a 5s green with an amber phase equal to the crossing width of the road divided by 1.2 m/s and a 2 s red phase before traffic regains priority

Figure 11-3 - Stage Sequence for Enniskerry Road / Ballycorus Road Junction without GDRS scheme



The modelled outputs are shown in table below.

Table 11-5 - Enniskerry Rd / Ballycorus Rd modelling results

Arm	With Committed Development			With All Development		
	Mean Max Queue (pcu)	Delay (s/pcu)	DOS (%)	Mean Max Queue (pcu)	Delay (s/pcu)	DOS (%)
Opening Year without GDRS – AM Peak						
Enniskerry Road South	3.5 pcu	12.9 s	20.4%	3.4 pcu	12.5 s	20.4%
Enniskerry Road North	6.2 pcu	16.2 s	31.7%	6.3 pcu	15.7 s	32.1%
Ballycorus Road	4.0 pcu	43.8 s	30.6%	4.1 pcu	45.1 s	32.2%
PRC (%)	**184.2%**			**179.4%**		
Opening Year without GDRS – PM Peak						
Enniskerry Road South	3.8 pcu	10.5 s	22.2%	3.8 pcu	10.6 s	22.6%
Enniskerry Road North	8.1 pcu	13.2 s	39.6%	8.1 pcu	13.3 s	39.9%
Ballycorus Road	3.8 pcu	53.6 s	37.9%	3.9 pcu	53.7 s	38.5%
PRC (%)	**127.5%**			**125.6%**		

Across all the scenarios, the junction was found to be well within the capacity. The modelling outputs shown that in both the AM and PM peak periods this junction experiences very small changes in queue lengths, delay and degree of saturation. One of the reasons for this is that development traffic outputs are anticipated to predominately travel north in the AM towards Dublin thus largely avoiding this junction.

In the future year scenarios (+5 and +15) the operation of the GDRS results in a bus gate in place on Enniskerry Road south that results in very limited traffic heading from Enniskerry South to Enniskerry North (i.e., buses only). As a result of this reduced flow there is an opportunity to redesign this junction from a signalised junction to a priority junction with traffic heading from Enniskerry South giving way to movements to and from Ballycorus and Enniskerry Road North.

11.4. Access Junctions

All the Access junctions were modelled using TRL Junction 9 software. All the junctions were only modelled for "All Development" scenario, not for Committed Development scenario, since no vehicles will be using the access junctions for travelling to/from the proposed development in this scenario and therefore, there will be no conflict and the junction will have infinite capacity.

The results for all the junctions are summarised in the following section.

11.4.1. Development Access Junction A1

Junction A1 refers internal road / GLDR junction located to the east of the site as set out in Section 5.5. This junction is not available in the opening year "without GDRS" scenario. Therefore, modelling outputs are provided for "with GDRS" scenarios only.

Table 11-6 - Development Access Junction A1 Modelling results

Arm	AM Peak				PM Peak			
	Queue	Delay	RFC	LOS	Queue	Delay	RFC	LOS
Opening Year with GDRS								
Access Arm Left	0.0 pcu	6.28 s	0.02	A	0.0 pcu	5.85 s	0.01	A
Access Arm Right	0.0 pcu	9.65 s	0.03	A	0.0 pcu	10.37 s	0.01	A
GLDR North	0.0 pcu	5.23 s	0.01	A	0.0 pcu	4.78 s	0.02	A
Opening Year+5 with GDRS								

Access Arm Left	0.1 pcu	7.29 s	0.07	A	0.1 pcu	7.12 s	0.06	A
Access Arm Right	0.1 pcu	10.42 s	0.12	B	0.1 pcu	10.93 s	0.11	B
GLDR North	0.1 pcu	5.41 s	0.06	A	0.2 pcu	5.03 s	0.11	A
Opening Year+15 with GDRS								
Access Arm Left	0.1 pcu	7.37 s	0.07	A	0.1 pcu	7.18 s	0.06	A
Access Arm Right	0.1 pcu	10.67 s	0.12	B	0.1 pcu	11.22 s	0.12	B
GLDR North	0.1 pcu	5.36 s	0.06	A	0.2 pcu	4.95 s	0.11	A

The maximum average delay across all the design years is observed to be under 12 seconds and maximum average queue was 0.2 pcu. The maximum RFC was 0.12 across all the scenarios. The LOS was recorded as A for both peak hours during Opening Year and was observed to be B for both peak hours for both Opening+5 and Opening+15 design years scenarios. Therefore, the above results suggest that the junction will be operating within capacity for all the design years.

The modelling outputs shows that this junction will perform within acceptable parameters with negligible impact on the main flows along the GLDR. The model results indicate that the design of this junction as priority junction arrangement as opposed to a signal junction is appropriate and correct for the level demand.

11.4.2. Development Access Junction A2

Junction 2 refers internal road north/ Enniskerry Road junction located at the north-west part of the site as set out in Section 5.5. This junction is available in all the modelled scenarios ("with" and "without GDRS") across all the design years. Modelling results are shown in table below.

Table 11-7 - Development Access Junction A2 Modelling results

Arm	AM Peak				PM Peak			
	Queue	Delay	RFC	LOS	Queue	Delay	RFC	LOS
Access Arm	0.1 pcu	11.60 s	0.05	B	0.0 pcu	10.86 s	0.02	B
Enniskerry Road South	0.0 pcu	4.54 s	0.01	A	0.0 pcu	5.17 s	0.02	A
Opening Year with GDRS								
Access Arm	0.0 pcu	8.60 s	0.01	A	0.0 pcu	0.00 s	0.00	A
Enniskerry Road South	0.0 pcu	5.09 s	0.00	A	0.0 pcu	5.50 s	0.00	A
Opening Year+5 with GDRS								
Access Arm	0.0 pcu	8.19 s	0.03	A	0.0 pcu	7.55 s	0.03	A
Enniskerry Road South	0.0 pcu	5.10 s	0.02	A	0.0 pcu	5.55 s	0.03	A
Opening Year+15 with GDRS								
Access Arm	0.0 pcu	8.31 s	0.03	A	0.0 pcu	7.59 s	0.03	A
Enniskerry Road South	0.0 pcu	5.06 s	0.02	A	0.0 pcu	5.54 s	0.03	A

The LOS is B for without GLDR scenario because no additional access points along GLDR is available in this scenario. Therefore, all the vehicles will be using the access points along Enniskerry Road (A2 and A3). However, average queue, delay and RFC are small suggesting that the junction is operating within the capacity.

For "with GDRS" scenarios, the LOS was observed to be A. It is mainly because, vehicles going towards R116 will mostly be using this access point. Very few vehicles moving towards Enniskerry Road North and south may be using this junction. Most of the vehicles going north and south will be using Access Points A1 along GLDR in Opening Year. For Opening+5 and+15, most of the vehicles going north will be using Access Points A1 (along GLDR) and A5 (along Glenamuck Road), and for vehicles going south will be using A1 along GLDR.

The model results indicate that the design of this junction as priority junction arrangement (as opposed to a signal junction) is appropriate and correct.

11.4.3. Development Access Junction 3 A3

Junction 3 refers internal road / Enniskerry Road junction located centrally on the Enniskerry Road frontage as set out in Section 5.5. This junction is available in all the modelled scenarios ("with" and "without GDRS") across all the design years. Modelling results are shown in table below.

Table 11-8 - Development Access Junction A3 Modelling results

Arm	AM Peak				PM Peak			
	Queue	Delay	RFC	LOS	Queue	Delay	RFC	LOS
Opening Year without GDRS								
Access Arm	0.1 pcu	11.64 s	0.05	B	0.0 pcu	10.83 s	0.02	B
Enniskerry Road South	0.0 pcu	4.56 s	0.01	A	0.0 pcu	5.16 s	0.02	A
Opening Year with GDRS								
Access Arm	0.0 pcu	8.61 s	0.01	A	0.0 pcu	0.00 s	0.00	A
Enniskerry Road South	0.0 pcu	5.10 s	0.00	A	0.0 pcu	5.49 s	0.00	A
Opening Year+5 with GDRS								
Access Arm	0.0 pcu	8.24 s	0.03	A	0.0 pcu	7.60 s	0.03	A
Enniskerry Road South	0.0 pcu	5.10 s	0.02	A	0.0 pcu	5.59 s	0.03	A
Opening Year+15 with GDRS								
Access Arm	0.0 pcu	8.37 s	0.03	A	0.0 pcu	7.64 s	0.03	A
Enniskerry Road South	0.0 pcu	5.05 s	0.02	A	0.0 pcu	5.52 s	0.03	A

The LOS is B for without GLDR scenario because no additional access points along GLDR is available in this scenario. Therefore, all the vehicles will be using the access points along Enniskerry Road (A2 and A3). However, average queue, delay and RFC are small suggesting that the junction is operating within the capacity.

For "with GDRS" scenarios, the LOS was observed to be A. It is mainly because, vehicles going towards R116 will mostly be using this access point. Very few vehicles moving towards Enniskerry Road North and south may be using this junction. Most of the vehicles going north and south will be using Access Points A1 along GLDR in Opening Year. For Opening+5 and+15, most of the vehicles going north will be using Access Points A1 (along GLDR) and A5 (along Glenamuck Road), and for vehicles going south will be using A1 along GLDR.

The model results indicate that the design of this junction as priority junction arrangement (as opposed to a signal junction) is appropriate and correct.

11.4.4. Development Access Junction 4 A4

Junction 4 refers internal road south / Enniskerry Road junction located to the southern end of the site on the Enniskerry Road frontage as set out in Section 5.5. This junction is not available in the opening year and only becomes operational in the modelled scenarios (i.e., +5 and +15). Modelling results are shown in table below.

Table 11-9 - Development Access Junction A4 Modelling results

Arm	AM Peak				PM Peak			
	Queue	Delay	RFC	LOS	Queue	Delay	RFC	LOS
Opening Year+5 with GDRS								
Access Arm	0.0 pcu	8.29 s	0.03	A	0.0 pcu	7.63 s	0.03	A
Enniskerry Road South	0.0 pcu	5.10 s	0.02	A	0.0 pcu	5.50 s	0.03	A
Opening Year+15 with GDRS								
Access Arm	0.0 pcu	8.41 s	0.03	A	0.0 pcu	7.67 s	0.03	A
Enniskerry Road South	0.0 pcu	5.05 s	0.02	A	0.0 pcu	5.49 s	0.03	A

The junction was found to be operating within capacity for all the design years across both peak hours. It is mainly because, vehicles going towards R116 will mostly be using this access point. Very few vehicles moving towards Enniskerry Road North and south may be using this junction. Most of the vehicles going north will be using Access Points A1 (along GLDR) and A5 (along Glenamuck Road), and for vehicles going south will be using A1 along GLDR.

The model results indicate that the design of this junction as priority junction arrangement (as opposed to a signal junction) is appropriate and correct.

11.4.5. Development Access Junction 5 A5

Junction 5 refers to internal road north / Glenamuck Road junction located to the northern frontage of the site as set out in Section 5.5. This junction is not available in the opening year and only becomes operational in the modelled scenarios (i.e., +5 and +15). Modelling results are shown in table below.

Table 11-10 - Development Access Junction A5 Modelling results

Arm	AM Peak				PM Peak			
	Queue	Delay	RFC	LOS	Queue	Delay	RFC	LOS
Opening Year+5 with GDRS								
Access Arm	0.1 pcu	9.36 s	0.09	A	0.1 pcu	9.01 s	0.08	A
Glenamuck road Eastbound	0.1 pcu	4.47 s	0.04	A	0.1 pcu	5.21 s	0.06	A
Opening Year+15 with GDRS								
Access Arm	0.1 pcu	9.61 s	0.09	A	0.1 pcu	9.11 s	0.08	A
Glenamuck road Eastbound	0.1 pcu	4.41 s	0.04	A	0.1 pcu	5.18 s	0.06	A

The Junction will be used by the vehicles moving toward Enniskerry Road North and Glenamuck Road for going to/from M50-M11 motorway. Across all the scenarios, the maximum average queue was observed to be 0.1 pcu, with maximum average delay observed was under 10 seconds and maximum RFC was 0.009. The LOS was A across all the scenarios, suggesting that the junction was found to be operating well within the capacity across all the design year scenarios for both peaks.

The model results indicate that the design of this junction as priority junction arrangement (as opposed to a signal junction) is appropriate and correct.

11.5. Junction Impact Conclusion

The modelling was carried out for all the key junctions along Enniskerry Road and all the access junctions. Appropriate software was used for all these junctions based on the junction type.

For Enniskerry Road/Glenamuck Road Golden ball junction, the junction was found to be operating over the capacity during AM peak for Opening Year “without GDRS” scenarios for both committed and All Development scenarios. However, the impact of the proposed development trips was very small. In addition, the delay for both scenarios were around 1 min 50 sec, which is typical for an urban signalised junction. For “with GDRS” scheme, the vehicles were diverted into new GDDR and GLDR road. Therefore, the junction was found to be operating within the capacity across all the scenarios for both AM and PM peaks.

For Enniskerry Road/R116 junction, the LOS was observed to be C for “without GDRS” scenarios. This suggests that the junction was just at capacity. However, again the impact of the proposed development was very small. “With GDRS” scheme in place, the junction was found to be operating within capacity across all the design years for both AM and PM peak.

The Enniskerry/Ballycorus road junction was found to be operating within the capacity since very few vehicles are utilising this junction across all the scenarios.

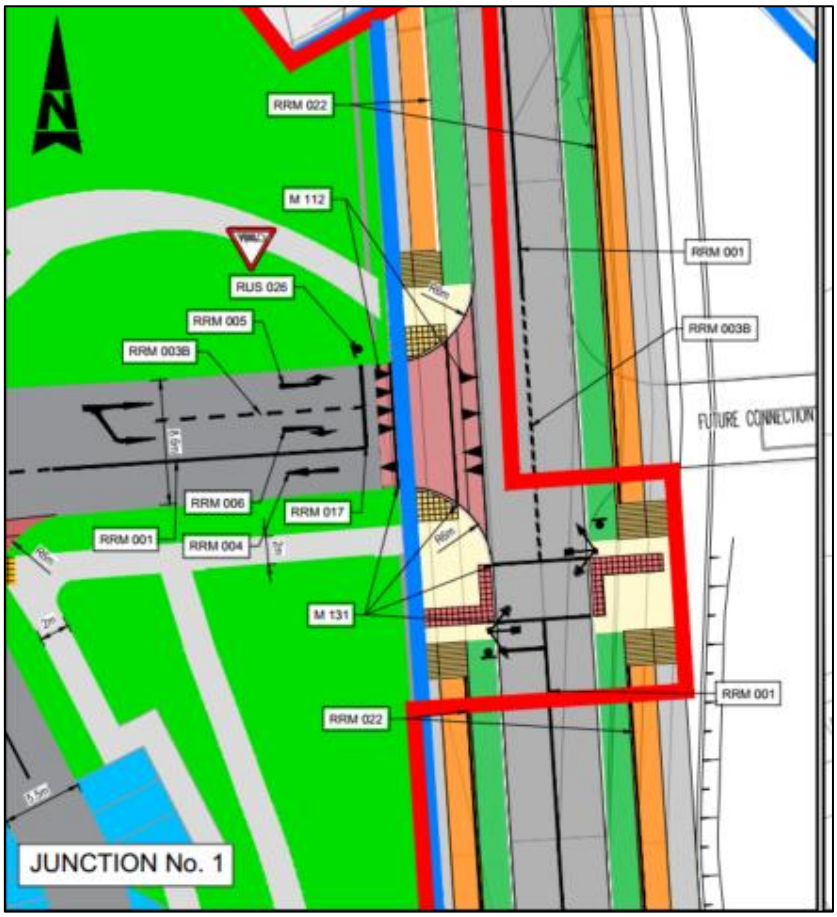
All the Access Junctions were found to be operating within capacity with minimal impact on the Enniskerry, Glenamuck and GLDR links. The model results indicate that the design for all the junctions as priority junction arrangement (as opposed to a signal junction) is appropriate and correct.

11.6. Sensitivity Analysis – Future GLDR access

In Appendix C of their letter of the 6th of January to ABP the Planning Authority (Transport Section) identified a number of issues to be addressed. Item 2 requested *“that the TIA / TTA including within this report review future development of lands to the east and whether this may require signalization of the access to the GLDR and pedestrian / cycle access”.*

The proposed access junction from the development (Access Junction 1) has been designed to be cognisant of future connection with lands to the east and has been designed so that the optimal junction configuration can be achieved that provides access to the proposed development, lands to the east and minimises any impact on the GLDR. The proposed junction layout for this planning application is shown on Figure 11-4.

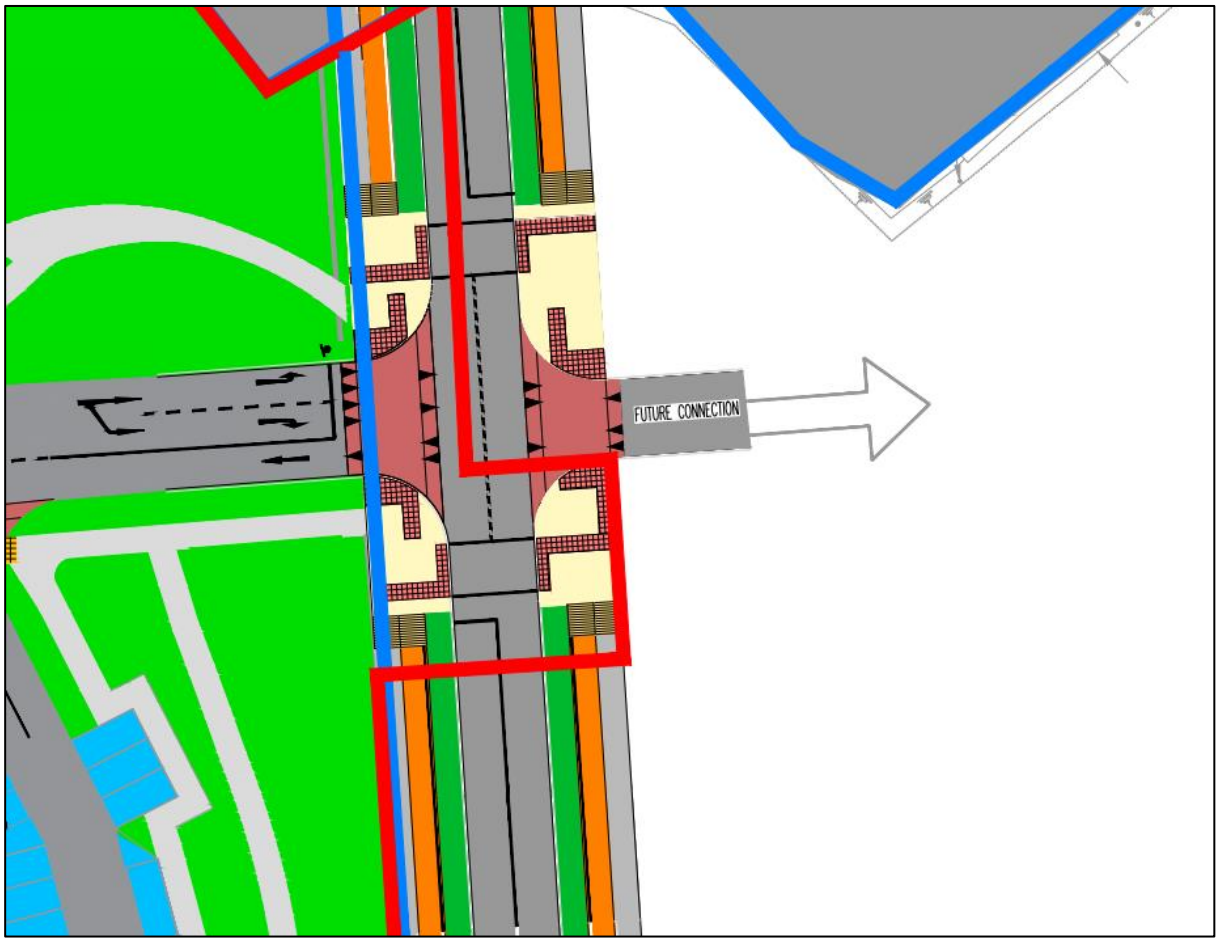
Figure 11-4 - Access Junction 1 Layout



Modelling work in Section 11.4.1 shows that this priority junction arrangement works within capacity for opening and future year scenarios.

The location and design of priority access junction 1 shown in shown in Figure 11-4 is compatible with the upgrade of this junction to a 4-arm signalised junction at a future time. A sketch of how this 4-arm junction is shown in Figure 11-5

Figure 11-5 - Potential Future Junction layout



Atkins undertook preliminary modelling for two scenarios for this future junction. They are:

1. Signal Control Junction
2. Priority Junction

The high level assessment is based on the lands to the east accommodating a total of 127 units made up of:

- Houses 39 units
- Apartments 88 units

Using the TRICs rates, mode share and distribution outlined earlier in the TTA it is anticipated that the lands to the east could result in the park vehicle trips identified in Table 11-11.

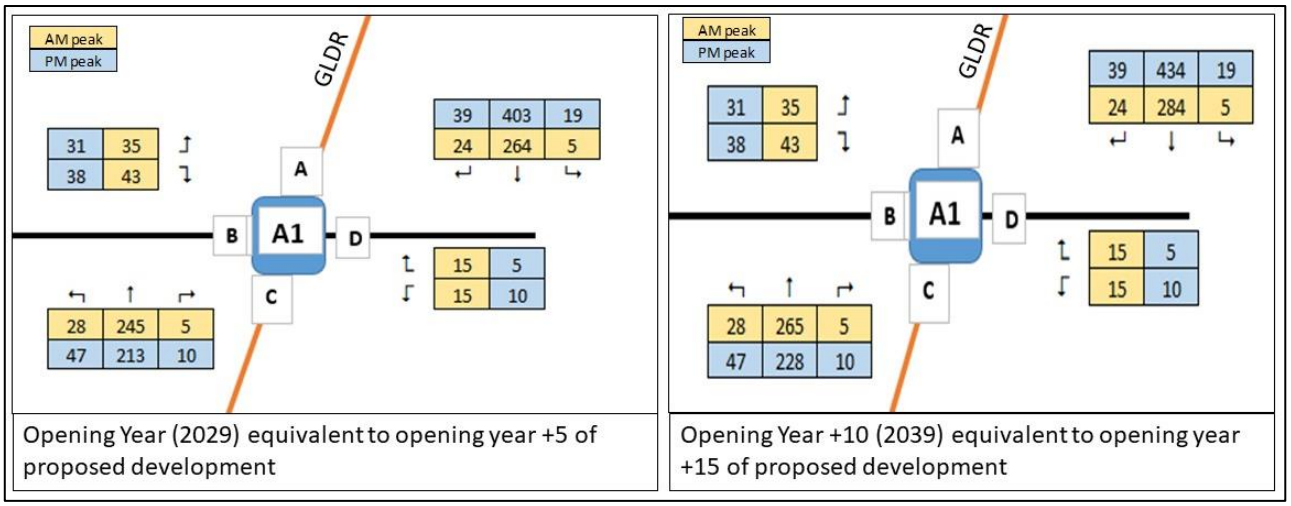
Table 11-11 – Trip Generation from residential development located on the eastern lands

Development types	No. Of Dwells	Trip Rate				Mode Share	Trip Generation			
		AM Peak		PM Peak			AM Peak		PM Peak	
		Arr	Dep	Arr	Dep		Arr	Dep	Arr	Dep
Apartments	**88**	0.141	0.341	0.412	0.212	47%	6	14	17	9
Duplexes	**39**	0.238	0.89	0.659	0.31	**47%**	4	16	12	6
Total	**127**						**10**	**30**	**29**	**15**

It is assumed that these trips will be distributed along new GLDR and GDDR links rather than Enniskerry Road. Therefore, these trips are not going to impact all the junctions along Enniskerry Road. Therefore, only Access Junction A1 are analysed for these additional trips. In addition, as the lands do not have any permission, we have assumed an opening year of 2029 coinciding with the opening year +5 scenario of the proposed development. We have also examined traffic flow at this future junction for year 2039 equivalent of opening year +15 for the proposed development.

Based on the above trip generation the trips along Access junction A1 is summarised in Figure 11-6.

Figure 11-6 – Network flows at future junction - 2029 (+5) and 2039 (+15) scenarios



Two scenarios were considered for the analysis:

- 4 arm priority junction arrangement
- 4 arm signal controlled junction with ped crossing phase along all the arms

The results for both the scenarios are summarised below.

11.6.1. 4 arm priority-junction (Cross Road Junction)

The model was analysed using TRL Junction 9 Software. The results are summarised in the Table 11-12.

Table 11-12 - Development Access Junction A1 Modelling results for Sensitivity Analysis

Arm	AM Peak				PM Peak			
	Queue	Delay	RFC	LOS	Queue	Delay	RFC	LOS
Opening Year + 5 All Development								
Western Arm	0.1 pcu	10.49 sec	0.12	B	0.1 pcu	10.98 sec	0.11	B
GLDR South	0.0 pcu	5.10 sec	0.01	A	0.0 pcu	5.41 sec	0.03	A
GLDR North	0.1 pcu	5.35 sec	0.06	A	0.2 pcu	4.94 sec	0.11	A
Eastern Arm	0.1 pcu	8.62 sec	0.07	A	0.0 pcu	8.40 sec	0.04	A
Opening Year + 15 All Development								
Western Arm	0.1 pcu	10.75 sec	0.12	B	0.1 pcu	11.30 sec	0.12	B
GLDR South	0.0 pcu	5.05 sec	0.01	A	0.0 pcu	5.39 sec	0.03	A
GLDR North	0.1 pcu	5.30 sec	0.06	A	0.3 pcu	4.86 sec	0.11	A
Eastern Arm	0.1 pcu	8.78 sec	0.07	A	0.0 pcu	8.60 sec	0.04	A

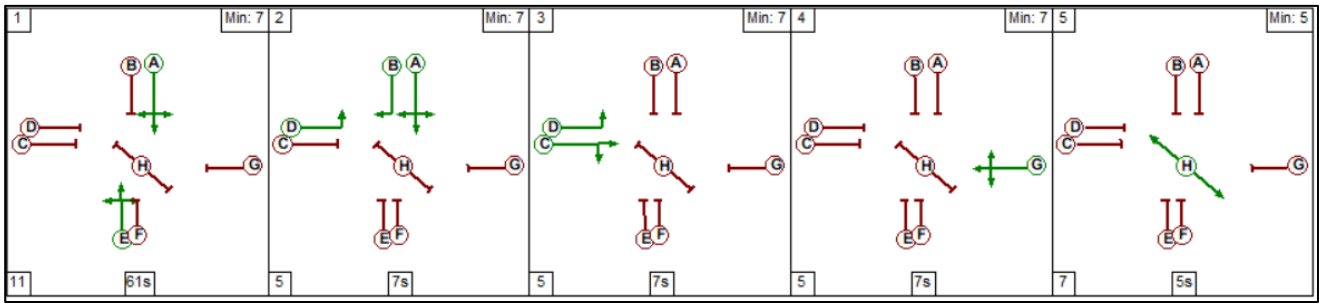
The above analysis suggest that the junction has maximum LOS B across all the scenarios. The maximum average queue experienced was 0.3 pcu, with maximum average delay under 12 seconds across all the

scenarios. The maximum RFC observed was 0.12 which suggest that junction will be operating across all the scenarios.

11.6.2. 4 arm signalised junction

The junction was analysed using LinSig. The stage diagram is shown in Figure 11-7

Figure 11-7 – Stage Sequence for Access Junction A1 sensitivity analysis



The first stage is the general green stage for both GLDR northern and southern arms, with right turners being allowed to turn into the gaps. The second stage is the right turning filter stage for the GLDR northern arm. This stage is called on demand when there are not enough gaps available for right turners from GLDR northern arm in Stage 1. This stage is modelled to be called once in every two cycles. Since, the right turners from GLDR southern arm are fewer, no separate stage is required for GLDR southern arm. In Stage 2, left turners from the western access arm are also given green as this is a non-conflicting movement. In the third and final stages, western and eastern arms get full green phases respectively. The third phase is all red phase where pedestrian and cyclists are provided green. This stage is also modelled to be called once in every two cycles. The cycle time was taken as 120 seconds.

The results for the modelling analysis are shown in Table 11-13.

Table 11-13 – 4 arm signalised Access Junction A1: Sensitivity Analysis

Arm	AM Peak			PM Peak		
	Mean Max Queue (pcu)	Delay (s/pcu)	DOS (%)	Mean Max Queue (pcu)	Delay (s/pcu)	DOS (%)
Opening Year + 5 All Development						
Western Arm	1.5 pcu	53.2 s/pcu	25.4%	1.3 pcu	52.4 s/pcu	22.4%
GLDR South	4.8 pcu	14.7 s/pcu	28.8%	4.7 pcu	16.0 s/pcu	33.3%
GLDR North	4.9 pcu	11.6 s/pcu	27.5%	8.7 pcu	14.7 s/pcu	44.0%
Eastern Arm	1.1 pcu	76.7 s/pcu	28.2%	0.6 pcu	72.8 s/pcu	14.3%
PRC (%)	**212.3%**			**104.7%**		
Opening Year + 15 All Development						
Western Arm	2.0 pcu	79.2 s	41.7%	2.0 pcu	79.2 s	41.7%
GLDR South	9.3 pcu	39.3 s	54.6%	10.2 pcu	41.3 s	58.8%
GLDR North	2.2 pcu	23.1 s	18.3%	2.4 pcu	22.8 s	19.0%
Eastern Arm	9.9 pcu	36.6 s	56.0%	11.0 pcu	37.0 s	59.9%
PRC (%)	**60.7%**			**50.4%**		

The above analysis suggest that the junction will be operating with capacity with PRC above 50% for +15 scenario and above 100% for +5 scenario. The maximum average delay was around 1min 20 sec across all the design scenarios. The maximum MMQ was 11 pcu. The DOS was in order of 25-60% suggesting that all the arms have sufficient residual capacity.

11.6.3. Summary

Based on the above analysis, it's evident that in both the layout of the junctions (cross road and signalised) there is sufficient capacity and have minimal impact on GLDR link. However, on the basis of safety consideration, it is advised to have this junction signalised.

12. Public Transport Impact

The following section outlines the potential impact on bus and Luas services respectively that constitute the main public transport provision available to the proposed development. Using a mix of TRICS data cross referenced with Census 2016 an estimate of public transport trips to and from the development has been developed and its potential impact on both existing and proposed public transport services available in the study area has been estimated

The CSO 2016 Small Area Population (SAP) mapping outlined in Section 9.2.1.1 we have established existing public transport usage for the 3 small areas adjacent to the site. The CSO SAPs for public transport trips are shown in Table 12-1

Table 12-1 - CSO 2016 SAP - Public Transport Trips

Total Trips across all 3 SAP	Work	Education	Total
Bus	7	29	36
Train, DART or Luas	24	15	39
Totals	31	44	75

According to CSO 2016 departure profile, 71% of all public transport trips take place between 07:00 to 09:00. Based on this profile an adjusted AM peak demand is shown in Table 12-2.

Table 12-2 - CSO 2016 SAP – Adjusted Public Transport Trips

Total Trips across all 3 SAP	Work	Education	Total
Bus	5	21	25
Train, DART or Luas	17	11	28
Totals	22	31	53

Based on the TRICs exercise undertaken it is anticipated that the development would result in the mode share and split for AM trips as shown in Table 12-3.

Table 12-3 - TRICs Multi-Modal Share

Mode	**Arrival**	**%Split**	**Dep**	**%split**
Tot Vehicles	78	81%	180	58%
Cyclists	2	2%	4	1%
Ped	9	9%	68	22%
PT	7	8%	57	18%
Total	96	100%	309	100%

Table 12-3 indicates that the proposed development will result in a total of 64 public transport trips during the AM period. Assuming a similar departure profile to existing trips (71% between 07:00 to 09:00) and split of bus versus Train, DART or Luas (47%:53%) results in an adjusted trips by mode as shown in Table 12-4.

Table 12-4 - Predicted Public Transport Trips from the development

Mode	Adjusted Trip Total (71%)	Adjusted Trip by Mode
Bus	45	21
Train, DART or LUAS		24

Table 12-4 predicts that the proposed development will create an additional demand for

- circa 21 seats on bus services operating in the vicinity of the site between 07:00-0900; and
- circa 24 seats on Train, DART or Luas services.

It should be noted that CSO data does not have equivalent data for PM trip distribution from residential units. The impact of this demand on buses and Luas services is outlined below.

12.1. Bus Impact

The current bus services in the vicinity of the site together with bus capacity information are detailed in Section 4.3 and consist of services outlined in Table 12-5. The bus services listed below are located within 5-minutes' walk of the proposed development with bus stops located on Enniskerry Road and Glenamuck Road. Frequency of service information has been obtained from TFI Journey Planner[8] with theoretical capacity based on a bus capacity of 95 spaces per bus.

Table 12-5 - Existing Bus Services & Capacities

Number	Start	Mon-Fri Services per day	Daily capacity	AM – Peak Services(07:00-0900)	AM Peak Total person Capacity	PM Peak (16:00 - 1800)	PM Peak Total person Capacity
63/63A	Dun Laoghaire to Kilternan	34	3230	4	380	4	380
	Kilternan to Dun Laoghaire	35	3325	5	475	4	475
44	DCU to Enniskerry	19	1805	3	285	2	190
	Enniskerry to DCU	18	1710	2	190	2	190
118	Kilternan – D'Oiler St	1	95	1	95	0	0
	D'Oiler Street to Kilternan	0	0	0	0	0	0

The above table shows that within walking distance of the proposed development there is a significant high capacity of circa 3325 daily bus sets towards Dun Laoghaire and circa 1710 daily bus seats towards DCU with corresponding bus capacity in the opposite direction.

During the AM peak it is anticipated that most demand from the proposed development would be outbound towards Dun Laoghaire and the City and during the PM peak the reverse movements. Therefore, further analysis focuses on these movements. It should be noted that there are similar bus capacity levels available in the opposite directions in the AM and PM periods.

Based on typical profile of travel the AM periods is usually the period of highest concentration of demand and therefore the assessment of impact focuses on the AM period between 0700-0900.

During the AM peak of 0700-0900 bus services have circa 380 seats capacity from Enniskerry towards Dun Laoghaire (via Ballyogan Wood Luas stop) and circa 190 seats towards DCU with a further 95 seats capacity towards D'Oiler Street. Therefore, there is a total AM bus capacity of circa 665 seats on the surrounding road network.

Based on the above analysis the capacity, demand and percentage impact are shown in Table 12-6.

Table 12-6 - Bus Impact of proposed development

	Seats	Demand	Percentage impact
Total bus capacity	665	21	3.15%

[8] https://www.transportforireland.ie/plan-a-journey/

Based on this high level impact assessment the proposed development could create an additional demand for bus seats equating to 3.15% of the current capacity. This is considered negligible, and can be easily accommodated within the current services.

To confirm bus patronage and bus capacity a survey was undertaken in Kilternan on Thursday 26th May 2022. The survey covered the AM (07:00-09:00) and PM peak periods (16:00-18:00) and looked at the number of people boarding and alighting from buses in Kilternan during this time period together with a high level assessment of the bus capacity. Bus stops surveyed are shown inFigure 12-1. The survey methodology / specification and survey results are in **Appendix E**.

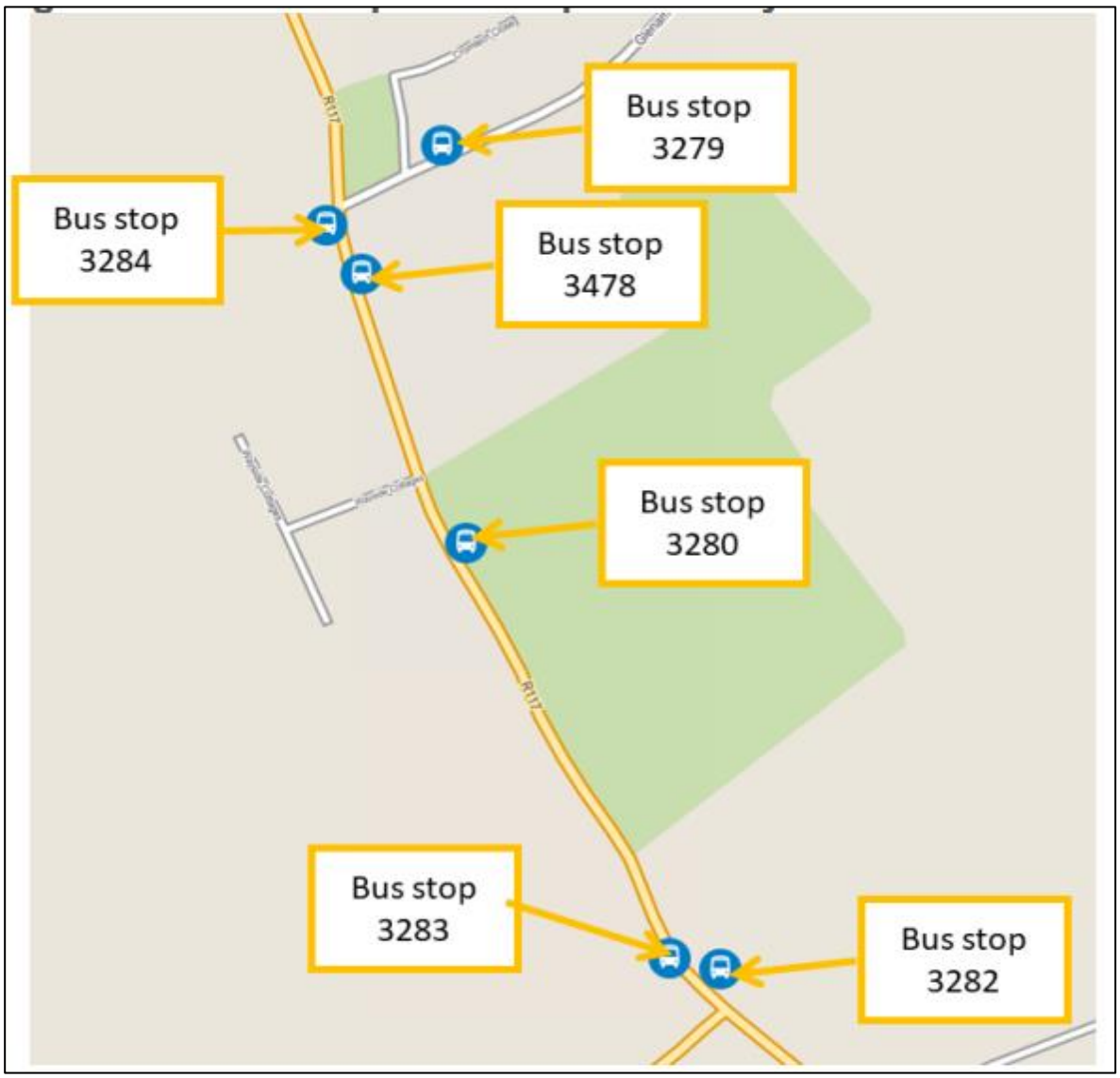


Figure 12-1 - Kilternan Bus Stops Surveyed

The bus services number, operating time, number of people alighting and boarding and observed occupancy for the AM and PM Peak are summarised in Table 12-7 and Table 12-8 respectively.

Table 12-7 - Bus patronage & Occupancy Kilternan AM Peak

Route #	Time	No. Alighting	No. Boarding	Occupancy (%)
63	07:02	0	1	5%
63	07:22	1	0	5%
63	07:25	1	5	60%
63	07:27	0	12	20%
44	07:40	3	1	10%
63	07:45	1	0	5%
118	07:47	0	2	5%
63	07:51	0	4	5%
63	08:08	0	0	5%
63	08:18	0	3	5%
44	08:26	0	0	5%
63	08:53	0	0	5%
Total		6	28	

Table 12-7 shows that during the AM peak period a total of 34 people boarded or alighted form bus services adjacent to the proposed site. In general, bus services operating at this period were observed to have a low occupancy with plenty of spare capacity.

Table 12-8 - Bus patronage & Occupancy Kilternan PM Peak

Route #	Time	No. Alighting	No. Boarding	Occupancy (%)
63	16:04	7	0	10%
44	16:08	4	0	20%
63	16:13	0	3	5%
63	16:41	1	0	5%
44	16:41	0	2	20%
63	16:45	0	0	5%
63	17:05	2	0	5%
63	17:11	0	3	5%
44	17:16	2	0	10%
44	17:59	0	0	20%
63	17:59	2	0	5%
Total		18	8	

Table 12-8 shows that during the PM peak period a total of 26 people boarded or alighted form bus services adjacent to the proposed site. In general, bus services operating at this period were observed to have a low occupancy with plenty of spare capacity. Based on the projected demand of 21 additional journey in the AM peak and current occupancy levels it is anticipated that the proposed development would not result in demand for seats that cannot be met by existing bus services in the area.

This survey confirms that the impact of the development on bus services would be negligible.

12.2. Luas Impact

Current timetabling of services from Ballyogan Wood Luas Stops was obtained from Luas's webpage[9] as shown in Table 12-9.

Table 12-9 - Ballyogan Wood Luas Stop timetable of services

Monday to Friday 07:00 - 10:00	Minimum services per hour	Average number of services per hour	Max number of services per hour
Northbound	6	9	14
Southbound	4	9	14

The Green Line currently operates the Citadis 502 type trams (55metres) with a passenger capacity of 408 spaces. Based on this capacity and frequency above the overall capacity of the Luas under min, average and max frequencies is shown in Table 12-10.

Table 12-10 - Ballyogan Wood Luas Stop capacity

Monday to Friday 07:00 - 10:00	Minimum services per hour	Average number of services per hour	Max number of services per hour
Northbound	2448	3672	5712
Southbound	1632	3672	5712

Table 12-11 - Ballyogan Wood Luas Stop capacity

Assuming a worst case scenario that in the AM period all demand is northbound, that is towards Dublin City the percentage impact is shown in Table 12-12 based on a loading of 24 seat demand identified earlier.

Table 12-12 - Ballyogan Wood Luas Stop capacity

Development Demand	% impact on Minimum	% Impact on Average capacity	% Impact on max capacity
24	0.98%	0.65%	0.42%

Based on this high level impact assessment the proposed development could create an additional demand for Luas seats ranging from 0.98% to 0.42% of current capacities. This is considered **negligible**, and we believe can be easily accommodated within the current services.

A survey of boarding and alighting and occupancy of Luas services at Ballyogan Wood Luas stop was undertaken on Thursday 26th of May to understand patronage and capacity. Counts during the AM peak (07:00- 09:00) and PM peak (16:00-18:00) were undertaken with the results shown in Table 12-13 and Table 12-14 relating to services to Cherrywood and the City respectively.

[9] https://luas.ie/ballyogan-wood.html

Table 12-13 - Luas patronage & Occupancy toward Cherrywood

Direction	Time	No. Alighting	No. Boarding	Capacity / Occupancy (%)
to Cherrywood	06:59	5	1	10
to Cherrywood	07:04	3	1	10
to Cherrywood	07:15	3	0	10
to Cherrywood	07:22	5	1	5
to Cherrywood	07:28	9	0	10
to Cherrywood	07:38	8	2	15
to Cherrywood	07:43	1	0	5
to Cherrywood	07:48	1	1	5
to Cherrywood	07:56	3	1	5
to Cherrywood	08:02	4	2	5
to Cherrywood	08:06	4	0	5
to Cherrywood	08:11	2	1	10
to Cherrywood	08:16	3	0	5
to Cherrywood	08:21	5	3	5
to Cherrywood	08:28	5	0	5
to Cherrywood	08:40	15	1	25
to Cherrywood	08:47	6	1	10
to Cherrywood	08:56	7	0	5
to Cherrywood	09:05	8	0	5
Evening				
to Cherrywood	16:09	8	1	10
to Cherrywood	16:10	11	1	10
to Cherrywood	16:15	3	1	5
to Cherrywood	16:28	15	1	10
to Cherrywood	16:39	13	1	10
to Cherrywood	16:44	0	0	5
to Cherrywood	16:53	8	1	10
to Cherrywood	17:04	17	2	10
to Cherrywood	17:16	21	8	10
to Cherrywood	17:28	26	0	35
to Cherrywood	17:34	8	0	15
to Cherrywood	17:45	16	0	20
to Cherrywood	18:07	23	1	60

Table 12-14 - Luas patronage and occupancy towards City

Direction	Time	No. Alighting	No. Boarding	Capacity-Occupancy (%)
to City	07:00	0	3	5
to City	07:09	2	3	5
to City	07:23	1	2	5
to City	07:29	0	0	5
to City	07:36	0	18	5
to City	07:45	0	3	5
to City	07:52	3	6	5
to City	08:01	3	22	10
to City	08:09	0	17	10
to City	08:14	0	11	5
to City	08:16	0	3	5
to City	08:24	0	17	10
to City	08:31	3	7	5
to City	08:32	1	2	5
to City	08:40	0	4	5
to City	08:44	0	9	5
to City	08:49	1	3	5
to City	08:59	0	3	5
Evening				
to City	16:00	1	13	20
to City	16:09	4	18	15
to City	16:17	0	14	10
to City	16:26	0	5	10
to City	16:32	2	14	15
to City	16:40	1	5	10
to City	16:53	6	13	25
to City	17:04	0	10	15
to City	17:12	1	10	30
to City	17:22	4	12	40
to City	17:32	1	14	30
to City	17:40	1	7	20
to City	17:51	3	12	40
to City	17:57	1	14	30

Both tables show that during the peak periods Luas services in both directions have spare capacity at Ballyogan Wood. Based on an additional loading of 24 spaces during the AM peak period it is anticipated that the development would not result in additional loading that would result in capacity issues for existing patronage levels.

13. Summary & Conclusions

13.1. Summary

This report details the Traffic and Transportation Assessment (TTA) associated with a planning application for the proposed development of zoned lands in Kilternan, Dublin 18. The site is bounded to the west by the Enniskerry Road (R117) and to the north by Glenamuck Road (R842). The site is located approximately 2km to the west of Junction 15 of the M50.

The proposal is for a mixed-use development that includes 383No. residential units and a neighborhood centre / commercial (2512sqm gfa) of, retail, commercial, office and community facilities. The mixed-use nature of the development and the design of the masterplan in accordance with Design Manual for Roads and Streets (DMURS) principles that will help to encourage active travel and reduce the need to drive in accordance with the "15 Minute City Principles.

There are good public transport facilities available adjacent to the site, including a number of bus services with linkages to the Luas at Ballyogan Wood stop, Carrickmines. Future public transport proposals including bus priority measures associated with the delivery of the GDRS and Bus Connects bus network improvements will provide journey time improvements to bus journey, further enhancing the attractiveness of this mode for future residents, visitors and users of the development.

The main summary and conclusions from the TTA are as follows:

- The development consists of 383No. residential units, consisting of 165No. Dwellings, 100No. Apartments and 118No. Duplexes;
- The neighbourhood centre (2512sqm) including creche (439sqm), Office (317sqm), Medical (147sqm), Retail (857sqm), retail convenience (431sqm) and community (321sqm);
- The lands are zoned for development in the Kiltiernan Glenamuck Local Area Plan (LAP) 2013;
- The masterplan design of the internal road network was undertaken in accordance with DMURS principles;
- The proposal provides for five new multi-modal access points onto the existing and proposed road network. In addition, a number of pedestrian and cyclist only access points have been provided to and from the site that provide connectivity to adjoining developments, facilities and amenities;
- The proposed development provides future residents and users with active and sustainable travel choices via the provision of existing and or improved walking, cycling and public transport (bus) infrastructure and services;
- The delivery of the GDRS will greatly improve transport connections in the Kilternan area;
- Other future transport proposals including cycle and bus infrastructure will further improve the active and sustainable travel options to and from the site;
- Car and cycle parking is provided on site for both residential and non-residential uses in line with the DLRCC Development Plan Standards and / or DHPLG Design Standards for New Apartments ;
- The level of car and cycle parking provide on-site is appropriate to the quantum of development, the mixed-use nature of that development and the local transport characteristics of the site;
- Future mode share and trip generation has been calculated for the development using CSO Small Area outputs and TRICS data in accordance with TII TTA guidelines;
- To ascertain if junction modelling is required, the peak hour trip generation has been compared to the existing traffic flows for base and future year scenarios;
- The traffic modelling accounts for two scenarios with and without the GDRS in operation. During Phase 1 tow scenarios shave been tested, a with the GRDRS in place and without GDRS. For all other phases the GDRS is available;
- Modelling shows that the Enniskerry Road / Glenamuck Road Junction operates at capacity for the AM period only in the scenario without the GDRS in place. As shown by the modelling this is largely due to background traffic with additional loading from the development only responsible for a 0.5% increase in degree of saturation. In the "with GDRS" in place the Enniskerry Road / Glenamuck Road Junction operates with spare capacity in all periods (AM , PM) and all scenarios (open, open+5, open15)

- The modelling indicates that for all other junctions, including development access junctions, operating metrics including queue length, delay and RFC are negligible and acceptable in both the AM and PM peak periods for the plus development scenarios;
- In the case of the 5No. development junctions the model results indicate that the design of these junctions as priority junctions (as opposed to a signal junction) is appropriate;
- The modelling includes an assessment of cumulative impacts from adjoining committed developments. The modelling of cumulative impacts shows that junctions operate within capacity;
- The impact of the development on exist public transport services, buses and Luas, is shown to be negligible with surveys indicating that both local bus services and Luas services from Ballyogan Wood operating with spare capacity that can accommodate additional loading associated with the development;
- As part of the planning application the development proposes to provide urban realm and improved pedestrian facilities on Enniskerry Road.

The above assessments have considered the transport implications of the proposed development in the context of national, regional, and local Policy Documents and best practice guidance include TII Guidelines and DMURS.

The proposed development is considered appropriate, and it is considered that there are no traffic or transport impacts that would preclude this development from proceeding.

Appendices

Appendix A. Trip Rates – TRICS

Filtering Summary

Land Use	05/E	HEALTH/CLINICS
Selected Trip Rate Calculation Parameter Range	60-4000 sqm GFA	
Actual Trip Rate Calculation Parameter Range	80-615 sqm GFA	
Date Range	Minimum: 01/01/14	Maximum: 26/11/19
Parking Spaces Range	All Surveys Included	
Days of the week selected	Tuesday	1
	Wednesday	1
	Thursday	1
Main Location Types selected	Edge of Town Centre	3
Population within 500m	All Surveys Included	
Population <1 Mile ranges selected	1,001 to 5,000	1
	25,001 to 50,000	2
Population <5 Mile ranges selected	125,001 to 250,000	2
	500,001 or More	1
Car Ownership <5 Mile ranges selected	0.5 or Less	1
	0.6 to 1.0	2
PTAL Rating	No PTAL Present	3

Calculation Reference: AUDIT-332901-220518-0536

TRIP RATE CALCULATION SELECTION PARAMETERS:

Land Use : 05 - HEALTH
Category : E - CLINICS
MULTI-MODAL TOTAL VEHICLES

Selected regions and areas:

04	EAST ANGLIA		
	NF	NORFOLK	1 days
08	NORTH WEST		
	MS	MERSEYSIDE	1 days
11	SCOTLAND		
	AD	ABERDEEN CITY	1 days

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

Primary Filtering selection:

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

Parameter:	Gross floor area
Actual Range:	80 to 615 (units: sqm)
Range Selected by User:	60 to 4000 (units: sqm)

Parking Spaces Range: All Surveys Included

Public Transport Provision:
Selection by: Include all surveys

Date Range: 01/01/14 to 26/11/19

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	1 days
Wednesday	1 days
Thursday	1 days

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

Selected survey types:

Manual count	3 days
Directional ATC Count	0 days

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

Selected Locations:

Edge of Town Centre	3

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

Selected Location Sub Categories:

Residential Zone	2
Built-Up Zone	1

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

Secondary Filtering selection:

Use Class:

E(e)	3 days

This data displays the number of surveys per Use Class classification within the selected set. The Use Classes Order 2005 has been used for this purpose, which can be found within the Library module of TRICS®.

Population within 500m Range:

All Surveys Included

Population within 1 mile:

1,001 to 5,000	1 days
25,001 to 50,000	2 days

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

Population within 5 miles:

125,001 to 250,000	2 days
500,001 or More	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	2 days

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

Travel Plan:

Yes	1 days
No	2 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	3 days

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

LIST OF SITES relevant to selection parameters

Site(1):	AD-05-E-01	Gross floor area:	80 sqm
Development Name:	PHYSIOTHERAPY CLINIC		
Location:	ABERDEEN		
Postcode:	AB25 2SG	No of Employees:	4
Main Location Type:	Edge of Town Centre	Survey Date:	21/11/19
Sub-Location Type:	Residential Zone	Survey Day:	Thursday
PTAL:	n/a	Parking Spaces:	
Site(2):	MS-05-E-01	Gross floor area:	615 sqm
Development Name:	COSMETIC SURGERY CLINIC		
Location:	LIVERPOOL		
Postcode:	L1 2TQ	No of Employees:	12
Main Location Type:	Edge of Town Centre	Survey Date:	28/11/18
Sub-Location Type:	Built-Up Zone	Survey Day:	Wednesday
PTAL:	n/a	Parking Spaces:	
Site(3):	NF-05-E-02	Gross floor area:	270 sqm
Development Name:	COMPLEMENTARY THERAPY		
Location:	NORWICH		
Postcode:	NR3 4AG	No of Employees:	35
Main Location Type:	Edge of Town Centre	Survey Date:	26/11/19
Sub-Location Type:	Residential Zone	Survey Day:	Tuesday
PTAL:	n/a	Parking Spaces:	

TRIP RATE for Land Use 05 - HEALTH/E - CLINICS
MULTI-MODAL TOTAL VEHICLES
Calculation factor: 100 sqm
BOLD print indicates peak (busiest) period
Total People to Total Vehicles ratio (all time periods and directions): 1.78

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	1	270	0.370	1	270	0.000	1	270	0.370
08:00 - 09:00	3	322	0.725	3	322	0.000	3	322	0.725
09:00 - 10:00	3	322	1.244	3	322	0.518	3	322	1.762
10:00 - 11:00	3	322	1.036	3	322	0.829	3	322	1.865
11:00 - 12:00	3	322	0.933	3	322	1.244	3	322	2.177
12:00 - 13:00	3	322	0.725	3	322	0.725	3	322	1.450
13:00 - 14:00	3	322	0.207	3	322	0.415	3	322	0.622
14:00 - 15:00	3	322	0.829	3	322	0.311	3	322	1.140
15:00 - 16:00	3	322	0.933	3	322	0.622	3	322	1.555
16:00 - 17:00	3	322	1.036	3	322	1.140	3	322	2.176
17:00 - 18:00	3	322	0.415	3	322	0.518	3	322	0.933
18:00 - 19:00	3	322	0.725	3	322	1.036	3	322	1.761
19:00 - 20:00	2	348	0.000	2	348	0.432	2	348	0.432
20:00 - 21:00	1	615	0.000	1	615	0.000	1	615	0.000
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			9.178			7.790			16.968

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:	80 - 615 (units: sqm)
Survey date date range:	01/01/14 - 26/11/19
Number of weekdays (Monday-Friday):	3
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 05 - HEALTH/E - CLINICS
MULTI-MODAL TAXIS
Calculation factor: 100 sqm
BOLD print indicates peak (busiest) period

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	1	270	0.000	1	270	0.000	1	270	0.000
08:00 - 09:00	3	322	0.000	3	322	0.000	3	322	0.000
09:00 - 10:00	3	322	0.104	3	322	0.104	3	322	0.208
10:00 - 11:00	3	322	0.000	3	322	0.000	3	322	0.000
11:00 - 12:00	3	322	0.104	3	322	0.104	3	322	0.208
12:00 - 13:00	3	322	0.104	3	322	0.104	3	322	0.208
13:00 - 14:00	3	322	0.000	3	322	0.000	3	322	0.000
14:00 - 15:00	3	322	0.000	3	322	0.000	3	322	0.000
15:00 - 16:00	3	322	0.104	3	322	0.104	3	322	0.208
16:00 - 17:00	3	322	0.104	3	322	0.104	3	322	0.208
17:00 - 18:00	3	322	0.000	3	322	0.000	3	322	0.000
18:00 - 19:00	3	322	0.000	3	322	0.000	3	322	0.000
19:00 - 20:00	2	348	0.000	2	348	0.000	2	348	0.000
20:00 - 21:00	1	615	0.000	1	615	0.000	1	615	0.000
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.520			0.520			1.040

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 05 - HEALTH/E - CLINICS
MULTI-MODAL CYCLISTS
Calculation factor: 100 sqm
BOLD print indicates peak (busiest) period

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	1	270	0.370	1	270	0.370	1	270	0.740
08:00 - 09:00	3	322	0.000	3	322	0.000	3	322	0.000
09:00 - 10:00	3	322	0.207	3	322	0.000	3	322	0.207
10:00 - 11:00	3	322	0.000	3	322	0.000	3	322	0.000
11:00 - 12:00	3	322	0.000	3	322	0.000	3	322	0.000
12:00 - 13:00	3	322	0.207	3	322	0.000	3	322	0.207
13:00 - 14:00	3	322	0.000	3	322	0.207	3	322	0.207
14:00 - 15:00	3	322	0.000	3	322	0.000	3	322	0.000
15:00 - 16:00	3	322	0.000	3	322	0.000	3	322	0.000
16:00 - 17:00	3	322	0.000	3	322	0.000	3	322	0.000
17:00 - 18:00	3	322	0.104	3	322	0.000	3	322	0.104
18:00 - 19:00	3	322	0.000	3	322	0.104	3	322	0.104
19:00 - 20:00	2	348	0.000	2	348	0.000	2	348	0.000
20:00 - 21:00	1	615	0.000	1	615	0.000	1	615	0.000
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.888			0.681			1.569

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 05 - HEALTH/E - CLINICS
MULTI-MODAL VEHICLE OCCUPANTS
Calculation factor: 100 sqm
BOLD print indicates peak (busiest) period

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	1	270	0.370	1	270	0.000	1	270	0.370
08:00 - 09:00	3	322	0.725	3	322	0.000	3	322	0.725
09:00 - 10:00	3	322	1.244	3	322	0.518	3	322	1.762
10:00 - 11:00	3	322	1.451	3	322	1.036	3	322	2.487
11:00 - 12:00	3	322	1.036	3	322	1.347	3	322	2.383
12:00 - 13:00	3	322	0.725	3	322	0.829	3	322	1.554
13:00 - 14:00	3	322	0.207	3	322	0.415	3	322	0.622
14:00 - 15:00	3	322	1.036	3	322	0.415	3	322	1.451
15:00 - 16:00	3	322	1.036	3	322	0.829	3	322	1.865
16:00 - 17:00	3	322	1.140	3	322	1.347	3	322	2.487
17:00 - 18:00	3	322	0.518	3	322	0.622	3	322	1.140
18:00 - 19:00	3	322	0.829	3	322	1.036	3	322	1.865
19:00 - 20:00	2	348	0.000	2	348	0.432	2	348	0.432
20:00 - 21:00	1	615	0.000	1	615	0.000	1	615	0.000
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			10.317			8.826			19.143

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 05 - HEALTH/E - CLINICS
MULTI-MODAL PEDESTRIANS
Calculation factor: 100 sqm
BOLD print indicates peak (busiest) period

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	1	270	0.000	1	270	0.000	1	270	0.000
08:00 - 09:00	3	322	0.104	3	322	0.000	3	322	0.104
09:00 - 10:00	3	322	0.725	3	322	0.104	3	322	0.829
10:00 - 11:00	3	322	0.311	3	322	0.311	3	322	0.622
11:00 - 12:00	3	322	0.415	3	322	0.518	3	322	0.933
12:00 - 13:00	3	322	0.311	3	322	0.311	3	322	0.622
13:00 - 14:00	3	322	0.518	3	322	0.311	3	322	0.829
14:00 - 15:00	3	322	0.104	3	322	0.415	3	322	0.519
15:00 - 16:00	3	322	0.104	3	322	0.104	3	322	0.208
16:00 - 17:00	3	322	0.104	3	322	0.000	3	322	0.104
17:00 - 18:00	3	322	1.036	3	322	0.000	3	322	1.036
18:00 - 19:00	3	322	0.622	3	322	1.347	3	322	1.969
19:00 - 20:00	2	348	0.000	2	348	0.144	2	348	0.144
20:00 - 21:00	1	615	0.000	1	615	0.000	1	615	0.000
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			4.354			3.565			7.919

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 05 - HEALTH/E - CLINICS
MULTI-MODAL BUS/TRAM PASSENGERS
Calculation factor: 100 sqm
BOLD print indicates peak (busiest) period

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	1	270	0.000	1	270	0.000	1	270	0.000
08:00 - 09:00	3	322	0.000	3	322	0.000	3	322	0.000
09:00 - 10:00	3	322	0.000	3	322	0.000	3	322	0.000
10:00 - 11:00	3	322	0.311	3	322	0.000	3	322	0.311
11:00 - 12:00	3	322	0.000	3	322	0.104	3	322	0.104
12:00 - 13:00	3	322	0.104	3	322	0.000	3	322	0.104
13:00 - 14:00	3	322	0.000	3	322	0.104	3	322	0.104
14:00 - 15:00	3	322	0.000	3	322	0.104	3	322	0.104
15:00 - 16:00	3	322	0.104	3	322	0.104	3	322	0.208
16:00 - 17:00	3	322	0.000	3	322	0.000	3	322	0.000
17:00 - 18:00	3	322	0.000	3	322	0.000	3	322	0.000
18:00 - 19:00	3	322	0.000	3	322	0.104	3	322	0.104
19:00 - 20:00	2	348	0.000	2	348	0.000	2	348	0.000
20:00 - 21:00	1	615	0.000	1	615	0.000	1	615	0.000
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.519			0.520			1.039

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 05 - HEALTH/E - CLINICS
MULTI-MODAL TOTAL RAIL PASSENGERS
Calculation factor: 100 sqm
BOLD print indicates peak (busiest) period

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	1	270	0.000	1	270	0.000	1	270	0.000
08:00 - 09:00	3	322	0.104	3	322	0.000	3	322	0.104
09:00 - 10:00	3	322	0.104	3	322	0.000	3	322	0.104
10:00 - 11:00	3	322	0.000	3	322	0.000	3	322	0.000
11:00 - 12:00	3	322	0.104	3	322	0.104	3	322	0.208
12:00 - 13:00	3	322	0.104	3	322	0.000	3	322	0.104
13:00 - 14:00	3	322	0.000	3	322	0.104	3	322	0.104
14:00 - 15:00	3	322	0.000	3	322	0.104	3	322	0.104
15:00 - 16:00	3	322	0.000	3	322	0.000	3	322	0.000
16:00 - 17:00	3	322	0.000	3	322	0.104	3	322	0.104
17:00 - 18:00	3	322	0.000	3	322	0.000	3	322	0.000
18:00 - 19:00	3	322	0.000	3	322	0.000	3	322	0.000
19:00 - 20:00	2	348	0.000	2	348	0.000	2	348	0.000
20:00 - 21:00	1	615	0.000	1	615	0.000	1	615	0.000
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.416			0.416			0.832

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 05 - HEALTH/E - CLINICS
MULTI-MODAL PUBLIC TRANSPORT USERS
Calculation factor: 100 sqm
BOLD print indicates peak (busiest) period

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	1	270	0.000	1	270	0.000	1	270	0.000
08:00 - 09:00	3	322	0.104	3	322	0.000	3	322	0.104
09:00 - 10:00	3	322	0.104	3	322	0.000	3	322	0.104
10:00 - 11:00	3	322	0.311	3	322	0.000	3	322	0.311
11:00 - 12:00	3	322	0.104	3	322	0.207	3	322	0.311
12:00 - 13:00	3	322	0.207	3	322	0.000	3	322	0.207
13:00 - 14:00	3	322	0.000	3	322	0.207	3	322	0.207
14:00 - 15:00	3	322	0.000	3	322	0.207	3	322	0.207
15:00 - 16:00	3	322	0.104	3	322	0.104	3	322	0.208
16:00 - 17:00	3	322	0.000	3	322	0.104	3	322	0.104
17:00 - 18:00	3	322	0.000	3	322	0.000	3	322	0.000
18:00 - 19:00	3	322	0.000	3	322	0.104	3	322	0.104
19:00 - 20:00	2	348	0.000	2	348	0.000	2	348	0.000
20:00 - 21:00	1	615	0.000	1	615	0.000	1	615	0.000
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.934			0.933			1.867

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 05 - HEALTH/E - CLINICS
MULTI-MODAL TOTAL PEOPLE
Calculation factor: 100 sqm
BOLD print indicates peak (busiest) period
Total People to Total Vehicles ratio (all time periods and directions): 1.78

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	1	270	0.741	1	270	0.370	1	270	1.111
08:00 - 09:00	3	322	0.933	3	322	0.000	3	322	0.933
09:00 - 10:00	3	322	2.280	3	322	0.622	3	322	2.902
10:00 - 11:00	3	322	2.073	3	322	1.347	3	322	3.420
11:00 - 12:00	3	322	1.554	3	322	2.073	3	322	3.627
12:00 - 13:00	3	322	1.451	3	322	1.140	3	322	2.591
13:00 - 14:00	3	322	0.725	3	322	1.140	3	322	1.865
14:00 - 15:00	3	322	1.140	3	322	1.036	3	322	2.176
15:00 - 16:00	3	322	1.244	3	322	1.036	3	322	2.280
16:00 - 17:00	3	322	1.244	3	322	1.451	3	322	2.695
17:00 - 18:00	3	322	1.658	3	322	0.622	3	322	2.280
18:00 - 19:00	3	322	1.451	3	322	2.591	3	322	4.042
19:00 - 20:00	2	348	0.000	2	348	0.576	2	348	0.576
20:00 - 21:00	1	615	0.000	1	615	0.000	1	615	0.000
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			16.494			14.004			30.498

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 05 - HEALTH/E - CLINICS
MULTI-MODAL CARS
Calculation factor: 100 sqm
BOLD print indicates peak (busiest) period

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	1	270	0.370	1	270	0.000	1	270	0.370
08:00 - 09:00	3	322	0.725	3	322	0.000	3	322	0.725
09:00 - 10:00	3	322	1.036	3	322	0.415	3	322	1.451
10:00 - 11:00	3	322	0.933	3	322	0.622	3	322	1.555
11:00 - 12:00	3	322	0.725	3	322	1.036	3	322	1.761
12:00 - 13:00	3	322	0.622	3	322	0.622	3	322	1.244
13:00 - 14:00	3	322	0.207	3	322	0.415	3	322	0.622
14:00 - 15:00	3	322	0.829	3	322	0.311	3	322	1.140
15:00 - 16:00	3	322	0.829	3	322	0.518	3	322	1.347
16:00 - 17:00	3	322	0.933	3	322	1.036	3	322	1.969
17:00 - 18:00	3	322	0.415	3	322	0.518	3	322	0.933
18:00 - 19:00	3	322	0.622	3	322	0.933	3	322	1.555
19:00 - 20:00	2	348	0.000	2	348	0.432	2	348	0.432
20:00 - 21:00	1	615	0.000	1	615	0.000	1	615	0.000
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			8.246			6.858			15.104

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 05 - HEALTH/E - CLINICS
MULTI-MODAL LGVS
Calculation factor: 100 sqm
BOLD print indicates peak (busiest) period

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	1	270	0.000	1	270	0.000	1	270	0.000
08:00 - 09:00	3	322	0.000	3	322	0.000	3	322	0.000
09:00 - 10:00	3	322	0.104	3	322	0.000	3	322	0.104
10:00 - 11:00	3	322	0.104	3	322	0.207	3	322	0.311
11:00 - 12:00	3	322	0.104	3	322	0.104	3	322	0.208
12:00 - 13:00	3	322	0.000	3	322	0.000	3	322	0.000
13:00 - 14:00	3	322	0.000	3	322	0.000	3	322	0.000
14:00 - 15:00	3	322	0.000	3	322	0.000	3	322	0.000
15:00 - 16:00	3	322	0.000	3	322	0.000	3	322	0.000
16:00 - 17:00	3	322	0.000	3	322	0.000	3	322	0.000
17:00 - 18:00	3	322	0.000	3	322	0.000	3	322	0.000
18:00 - 19:00	3	322	0.104	3	322	0.104	3	322	0.208
19:00 - 20:00	2	348	0.000	2	348	0.000	2	348	0.000
20:00 - 21:00	1	615	0.000	1	615	0.000	1	615	0.000
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.416			0.415			0.831

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 05 - HEALTH/E - CLINICS
MULTI-MODAL Servicing Vehicles
Calculation factor: 100 sqm
BOLD print indicates peak (busiest) period

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	1	270	0.000	1	270	0.000	1	270	0.000
08:00 - 09:00	3	322	0.000	3	322	0.000	3	322	0.000
09:00 - 10:00	3	322	0.000	3	322	0.000	3	322	0.000
10:00 - 11:00	3	322	0.104	3	322	0.104	3	322	0.208
11:00 - 12:00	3	322	0.207	3	322	0.207	3	322	0.414
12:00 - 13:00	3	322	0.000	3	322	0.000	3	322	0.000
13:00 - 14:00	3	322	0.000	3	322	0.000	3	322	0.000
14:00 - 15:00	3	322	0.000	3	322	0.000	3	322	0.000
15:00 - 16:00	3	322	0.000	3	322	0.000	3	322	0.000
16:00 - 17:00	3	322	0.000	3	322	0.000	3	322	0.000
17:00 - 18:00	3	322	0.000	3	322	0.000	3	322	0.000
18:00 - 19:00	3	322	0.104	3	322	0.104	3	322	0.208
19:00 - 20:00	2	348	0.000	2	348	0.000	2	348	0.000
20:00 - 21:00	1	615	0.000	1	615	0.000	1	615	0.000
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.415			0.415			0.830

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.*

Filtering Summary

Land Use	04/D	EDUCATION/NURSERY
Selected Trip Rate Calculation Parameter Range	176-2350 sqm GFA	
Actual Trip Rate Calculation Parameter Range	400-750 sqm GFA	
Date Range	Minimum: 01/01/14	Maximum: 21/05/19
Parking Spaces Range	All Surveys Included	
Days of the week selected	Tuesday	2
	Wednesday	1
Main Location Types selected	Edge of Town Centre	1
	Suburban Area (PPS6 Out of Centre)	2
Population within 500m	All Surveys Included	
Population <1 Mile ranges selected	15,001 to 20,000	2
	25,001 to 50,000	1
Population <5 Mile ranges selected	75,001 to 100,000	1
	125,001 to 250,000	2
Car Ownership <5 Mile ranges selected	0.5 or Less	1
	0.6 to 1.0	1
	1.1 to 1.5	1
PTAL Rating	No PTAL Present	3

Calculation Reference: AUDIT-332901-220518-0526

TRIP RATE CALCULATION SELECTION PARAMETERS:

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

Selected regions and areas:

04	EAST ANGLIA		
	CA	CAMBRIDGESHIRE	1 days
	SF	SUFFOLK	1 days
05	EAST MIDLANDS		
	LN	LINCOLNSHIRE	1 days

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

Primary Filtering selection:

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

Parameter: Gross floor area
Actual Range: 400 to 750 (units: sqm)
Range Selected by User: 176 to 2350 (units: sqm)

Parking Spaces Range: All Surveys Included

Public Transport Provision:
Selection by: Include all surveys

Date Range: 01/01/14 to 21/05/19

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	2 days
Wednesday	1 days

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

Selected survey types:

Manual count	3 days
Directional ATC Count	0 days

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

Selected Locations:

Edge of Town Centre	1
Suburban Area (PPS6 Out of Centre)	2

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

Selected Location Sub Categories:

Residential Zone	3

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

Secondary Filtering selection:

Use Class:

E(f)	3 days

This data displays the number of surveys per Use Class classification within the selected set. The Use Classes Order 2005 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:

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.

Population within 5 miles:

75,001 to 100,000	1 days
125,001 to 250,000	2 days

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

Car ownership within 5 miles:

0.5 or Less	1 days
0.6 to 1.0	1 days
1.1 to 1.5	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	3 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	3 days

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

LIST OF SITES relevant to selection parameters

Site(1):	CA-04-D-02	Gross floor area:	400 sqm
Development Name:	NURSERY	Number of pupils:	50
Location:	PETERBOROUGH		
Postcode:	PE1 4RA	No of Employees:	17
Main Location Type:	Suburban Area (PPS6 Out of Centre)	Survey Date:	18/10/16
Sub-Location Type:	Residential Zone	Survey Day:	Tuesday
PTAL:	n/a	Parking Spaces:	12
Site(2):	LN-04-D-01	Gross floor area:	600 sqm
Development Name:	NURSERY	Number of pupils:	49
Location:	LINCOLN		
Postcode:	LN6 8RY	No of Employees:	12
Main Location Type:	Suburban Area (PPS6 Out of Centre)	Survey Date:	31/10/17
Sub-Location Type:	Residential Zone	Survey Day:	Tuesday
PTAL:	n/a	Parking Spaces:	9
Site(3):	SF-04-D-03	Gross floor area:	750 sqm
Development Name:	NURSERY	Number of pupils:	110
Location:	LOWESTOFT		
Postcode:	NR32 2LL	No of Employees:	25
Main Location Type:	Edge of Town Centre	Survey Date:	10/12/14
Sub-Location Type:	Residential Zone	Survey Day:	Wednesday
PTAL:	n/a	Parking Spaces:	6

TRIP RATE for Land Use 04 - EDUCATION/D - NURSERY
MULTI-MODAL TOTAL VEHICLES
Calculation factor: 100 sqm
BOLD print indicates peak (busiest) period
Total People to Total Vehicles ratio (all time periods and directions): 2.11

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00	1	400	0.000	1	400	0.000	1	400	0.000
07:00 - 08:00	3	583	0.457	3	583	0.171	3	583	0.628
08:00 - 09:00	3	583	2.400	3	583	1.657	3	583	4.057
09:00 - 10:00	3	583	0.571	3	583	0.571	3	583	1.142
10:00 - 11:00	3	583	0.000	3	583	0.000	3	583	0.000
11:00 - 12:00	3	583	0.114	3	583	0.114	3	583	0.228
12:00 - 13:00	3	583	0.800	3	583	1.143	3	583	1.943
13:00 - 14:00	3	583	0.743	3	583	0.743	3	583	1.486
14:00 - 15:00	3	583	0.057	3	583	0.171	3	583	0.228
15:00 - 16:00	3	583	0.229	3	583	0.171	3	583	0.400
16:00 - 17:00	3	583	0.743	3	583	0.629	3	583	1.372
17:00 - 18:00	3	583	2.000	3	583	2.171	3	583	4.171
18:00 - 19:00	3	583	0.229	3	583	0.800	3	583	1.029
19:00 - 20:00	1	400	0.000	1	400	0.000	1	400	0.000
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			8.343			8.341			16.684

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:	400 - 750 (units: sqm)
Survey date date range:	01/01/14 - 21/05/19
Number of weekdays (Monday-Friday):	3
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: 100 sqm
BOLD print indicates peak (busiest) period

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00	1	400	0.000	1	400	0.000	1	400	0.000
07:00 - 08:00	3	583	0.057	3	583	0.057	3	583	0.114
08:00 - 09:00	3	583	0.000	3	583	0.000	3	583	0.000
09:00 - 10:00	3	583	0.000	3	583	0.000	3	583	0.000
10:00 - 11:00	3	583	0.000	3	583	0.000	3	583	0.000
11:00 - 12:00	3	583	0.000	3	583	0.000	3	583	0.000
12:00 - 13:00	3	583	0.057	3	583	0.057	3	583	0.114
13:00 - 14:00	3	583	0.000	3	583	0.000	3	583	0.000
14:00 - 15:00	3	583	0.000	3	583	0.000	3	583	0.000
15:00 - 16:00	3	583	0.000	3	583	0.000	3	583	0.000
16:00 - 17:00	3	583	0.000	3	583	0.000	3	583	0.000
17:00 - 18:00	3	583	0.000	3	583	0.000	3	583	0.000
18:00 - 19:00	3	583	0.000	3	583	0.000	3	583	0.000
19:00 - 20:00	1	400	0.000	1	400	0.000	1	400	0.000
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.114			0.114			0.228

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 OGVS
Calculation factor: 100 sqm
BOLD print indicates peak (busiest) period

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00	1	400	0.000	1	400	0.000	1	400	0.000
07:00 - 08:00	3	583	0.000	3	583	0.000	3	583	0.000
08:00 - 09:00	3	583	0.000	3	583	0.000	3	583	0.000
09:00 - 10:00	3	583	0.057	3	583	0.057	3	583	0.114
10:00 - 11:00	3	583	0.000	3	583	0.000	3	583	0.000
11:00 - 12:00	3	583	0.000	3	583	0.000	3	583	0.000
12:00 - 13:00	3	583	0.000	3	583	0.000	3	583	0.000
13:00 - 14:00	3	583	0.000	3	583	0.000	3	583	0.000
14:00 - 15:00	3	583	0.000	3	583	0.000	3	583	0.000
15:00 - 16:00	3	583	0.000	3	583	0.000	3	583	0.000
16:00 - 17:00	3	583	0.000	3	583	0.000	3	583	0.000
17:00 - 18:00	3	583	0.000	3	583	0.000	3	583	0.000
18:00 - 19:00	3	583	0.000	3	583	0.000	3	583	0.000
19:00 - 20:00	1	400	0.000	1	400	0.000	1	400	0.000
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.057			0.057			0.114

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: 100 sqm
BOLD print indicates peak (busiest) period

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00	1	400	0.000	1	400	0.000	1	400	0.000
07:00 - 08:00	3	583	0.000	3	583	0.000	3	583	0.000
08:00 - 09:00	3	583	0.057	3	583	0.057	3	583	0.114
09:00 - 10:00	3	583	0.000	3	583	0.000	3	583	0.000
10:00 - 11:00	3	583	0.000	3	583	0.000	3	583	0.000
11:00 - 12:00	3	583	0.000	3	583	0.000	3	583	0.000
12:00 - 13:00	3	583	0.057	3	583	0.000	3	583	0.057
13:00 - 14:00	3	583	0.000	3	583	0.000	3	583	0.000
14:00 - 15:00	3	583	0.000	3	583	0.000	3	583	0.000
15:00 - 16:00	3	583	0.000	3	583	0.000	3	583	0.000
16:00 - 17:00	3	583	0.000	3	583	0.000	3	583	0.000
17:00 - 18:00	3	583	0.000	3	583	0.057	3	583	0.057
18:00 - 19:00	3	583	0.000	3	583	0.000	3	583	0.000
19:00 - 20:00	1	400	0.000	1	400	0.000	1	400	0.000
20:00 - 21:00	1	400	0.000	1	400	0.000	1	400	0.000
21:00 - 22:00	1	400	0.000	1	400	0.000	1	400	0.000
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.114			0.114			0.228

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: 100 sqm
BOLD print indicates peak (busiest) period

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00	1	400	0.000	1	400	0.000	1	400	0.000
07:00 - 08:00	3	583	0.686	3	583	0.171	3	583	0.857
08:00 - 09:00	3	583	4.057	3	583	1.257	3	583	5.314
09:00 - 10:00	3	583	0.800	3	583	0.571	3	583	1.371
10:00 - 11:00	3	583	0.000	3	583	0.000	3	583	0.000
11:00 - 12:00	3	583	0.114	3	583	0.114	3	583	0.228
12:00 - 13:00	3	583	0.914	3	583	1.143	3	583	2.057
13:00 - 14:00	3	583	0.914	3	583	0.743	3	583	1.657
14:00 - 15:00	3	583	0.114	3	583	0.171	3	583	0.285
15:00 - 16:00	3	583	0.286	3	583	0.229	3	583	0.515
16:00 - 17:00	3	583	0.629	3	583	0.971	3	583	1.600
17:00 - 18:00	3	583	1.886	3	583	3.486	3	583	5.372
18:00 - 19:00	3	583	0.171	3	583	1.543	3	583	1.714
19:00 - 20:00	1	400	0.000	1	400	0.000	1	400	0.000
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			10.571			10.399			20.970

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: 100 sqm
BOLD print indicates peak (busiest) period

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00	1	400	0.000	1	400	0.000	1	400	0.000
07:00 - 08:00	3	583	0.229	3	583	0.057	3	583	0.286
08:00 - 09:00	3	583	2.343	3	583	1.029	3	583	3.372
09:00 - 10:00	3	583	0.229	3	583	0.000	3	583	0.229
10:00 - 11:00	3	583	0.057	3	583	0.057	3	583	0.114
11:00 - 12:00	3	583	0.286	3	583	0.400	3	583	0.686
12:00 - 13:00	3	583	1.771	3	583	1.371	3	583	3.142
13:00 - 14:00	3	583	0.343	3	583	0.971	3	583	1.314
14:00 - 15:00	3	583	0.057	3	583	0.057	3	583	0.114
15:00 - 16:00	3	583	0.514	3	583	0.171	3	583	0.685
16:00 - 17:00	3	583	0.114	3	583	0.971	3	583	1.085
17:00 - 18:00	3	583	0.343	3	583	1.086	3	583	1.429
18:00 - 19:00	3	583	0.000	3	583	0.057	3	583	0.057
19:00 - 20:00	1	400	0.000	1	400	0.000	1	400	0.000
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			6.286			6.227			12.513

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: 100 sqm
BOLD print indicates peak (busiest) period

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00	1	400	0.000	1	400	0.000	1	400	0.000
07:00 - 08:00	3	583	0.000	3	583	0.000	3	583	0.000
08:00 - 09:00	3	583	0.400	3	583	0.000	3	583	0.400
09:00 - 10:00	3	583	0.000	3	583	0.057	3	583	0.057
10:00 - 11:00	3	583	0.000	3	583	0.000	3	583	0.000
11:00 - 12:00	3	583	0.000	3	583	0.057	3	583	0.057
12:00 - 13:00	3	583	0.229	3	583	0.229	3	583	0.458
13:00 - 14:00	3	583	0.000	3	583	0.057	3	583	0.057
14:00 - 15:00	3	583	0.000	3	583	0.000	3	583	0.000
15:00 - 16:00	3	583	0.057	3	583	0.000	3	583	0.057
16:00 - 17:00	3	583	0.000	3	583	0.057	3	583	0.057
17:00 - 18:00	3	583	0.057	3	583	0.286	3	583	0.343
18:00 - 19:00	3	583	0.000	3	583	0.057	3	583	0.057
19:00 - 20:00	1	400	0.000	1	400	0.000	1	400	0.000
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.743			0.800			1.543

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: 100 sqm
BOLD print indicates peak (busiest) period

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00	1	400	0.000	1	400	0.000	1	400	0.000
07:00 - 08:00	3	583	0.000	3	583	0.000	3	583	0.000
08:00 - 09:00	3	583	0.400	3	583	0.000	3	583	0.400
09:00 - 10:00	3	583	0.000	3	583	0.057	3	583	0.057
10:00 - 11:00	3	583	0.000	3	583	0.000	3	583	0.000
11:00 - 12:00	3	583	0.000	3	583	0.057	3	583	0.057
12:00 - 13:00	3	583	0.229	3	583	0.229	3	583	0.458
13:00 - 14:00	3	583	0.000	3	583	0.057	3	583	0.057
14:00 - 15:00	3	583	0.000	3	583	0.000	3	583	0.000
15:00 - 16:00	3	583	0.057	3	583	0.000	3	583	0.057
16:00 - 17:00	3	583	0.000	3	583	0.057	3	583	0.057
17:00 - 18:00	3	583	0.057	3	583	0.286	3	583	0.343
18:00 - 19:00	3	583	0.000	3	583	0.057	3	583	0.057
19:00 - 20:00	1	400	0.000	1	400	0.000	1	400	0.000
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.743			0.800			1.543

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: 100 sqm
BOLD print indicates peak (busiest) period
Total People to Total Vehicles ratio (all time periods and directions): 2.11

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00	1	400	0.000	1	400	0.000	1	400	0.000
07:00 - 08:00	3	583	0.914	3	583	0.229	3	583	1.143
08:00 - 09:00	3	583	6.857	3	583	2.343	3	583	9.200
09:00 - 10:00	3	583	1.029	3	583	0.629	3	583	1.658
10:00 - 11:00	3	583	0.057	3	583	0.057	3	583	0.114
11:00 - 12:00	3	583	0.400	3	583	0.571	3	583	0.971
12:00 - 13:00	3	583	2.971	3	583	2.743	3	583	5.714
13:00 - 14:00	3	583	1.257	3	583	1.771	3	583	3.028
14:00 - 15:00	3	583	0.171	3	583	0.229	3	583	0.400
15:00 - 16:00	3	583	0.857	3	583	0.400	3	583	1.257
16:00 - 17:00	3	583	0.743	3	583	2.000	3	583	2.743
17:00 - 18:00	3	583	2.286	3	583	4.914	3	583	7.200
18:00 - 19:00	3	583	0.171	3	583	1.657	3	583	1.828
19:00 - 20:00	1	400	0.000	1	400	0.000	1	400	0.000
20:00 - 21:00	1	400	0.000	1	400	0.000	1	400	0.000
21:00 - 22:00	1	400	0.000	1	400	0.000	1	400	0.000
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			17.713			17.543			35.256

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: 100 sqm
BOLD print indicates peak (busiest) period

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00	1	400	0.000	1	400	0.000	1	400	0.000
07:00 - 08:00	3	583	0.400	3	583	0.114	3	583	0.514
08:00 - 09:00	3	583	2.343	3	583	1.600	3	583	3.943
09:00 - 10:00	3	583	0.514	3	583	0.514	3	583	1.028
10:00 - 11:00	3	583	0.000	3	583	0.000	3	583	0.000
11:00 - 12:00	3	583	0.057	3	583	0.114	3	583	0.171
12:00 - 13:00	3	583	0.743	3	583	1.086	3	583	1.829
13:00 - 14:00	3	583	0.743	3	583	0.743	3	583	1.486
14:00 - 15:00	3	583	0.057	3	583	0.171	3	583	0.228
15:00 - 16:00	3	583	0.229	3	583	0.171	3	583	0.400
16:00 - 17:00	3	583	0.686	3	583	0.571	3	583	1.257
17:00 - 18:00	3	583	2.000	3	583	2.114	3	583	4.114
18:00 - 19:00	3	583	0.229	3	583	0.800	3	583	1.029
19:00 - 20:00	1	400	0.000	1	400	0.000	1	400	0.000
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			8.001			7.998			15.999

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: 100 sqm
BOLD print indicates peak (busiest) period

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00	1	400	0.000	1	400	0.000	1	400	0.000
07:00 - 08:00	3	583	0.000	3	583	0.000	3	583	0.000
08:00 - 09:00	3	583	0.057	3	583	0.057	3	583	0.114
09:00 - 10:00	3	583	0.000	3	583	0.000	3	583	0.000
10:00 - 11:00	3	583	0.000	3	583	0.000	3	583	0.000
11:00 - 12:00	3	583	0.057	3	583	0.000	3	583	0.057
12:00 - 13:00	3	583	0.000	3	583	0.000	3	583	0.000
13:00 - 14:00	3	583	0.000	3	583	0.000	3	583	0.000
14:00 - 15:00	3	583	0.000	3	583	0.000	3	583	0.000
15:00 - 16:00	3	583	0.000	3	583	0.000	3	583	0.000
16:00 - 17:00	3	583	0.057	3	583	0.057	3	583	0.114
17:00 - 18:00	3	583	0.000	3	583	0.057	3	583	0.057
18:00 - 19:00	3	583	0.000	3	583	0.000	3	583	0.000
19:00 - 20:00	1	400	0.000	1	400	0.000	1	400	0.000
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.171			0.171			0.342

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.*

Filtering Summary

Land Use	03/C	RESIDENTIAL/FLATS PRIVATELY OWNED
Selected Trip Rate Calculation Parameter Range	6-493 DWELLS	
Actual Trip Rate Calculation Parameter Range	20-35 DWELLS	
Date Range	Minimum: 01/01/14	Maximum: 15/10/19
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	
Days of the week selected	Tuesday Wednesday	1 2
Main Location Types selected	Suburban Area (PPS6 Out of Centre) Edge of Town	1 2
Population within 500m	All Surveys Included	
Population <1 Mile ranges selected	10,001 to 15,000	3
Population <5 Mile ranges selected	5,001 to 25,000 50,001 to 75,000	1 2
Car Ownership <5 Mile ranges selected	0.6 to 1.0 1.1 to 1.5	1 2
PTAL Rating	No PTAL Present	3

Calculation Reference: AUDIT-332901-220518-0510

TRIP RATE CALCULATION SELECTION PARAMETERS:

Land Use : 03 - RESIDENTIAL
Category : C - FLATS PRIVATELY OWNED
MULTI-MODAL TOTAL VEHICLES

Selected regions and areas:

04	EAST ANGLIA		
	SF	SUFFOLK	1 days
07	YORKSHIRE & NORTH LINCOLNSHIRE		
	RI	EAST RIDING OF YORKSHIRE	1 days
09	NORTH		
	CB	CUMBRIA	1 days

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

Primary Filtering selection:

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

Parameter: No of Dwellings
Actual Range: 20 to 35 (units:)
Range Selected by User: 6 to 493 (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: 01/01/14 to 15/10/19

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	1 days
Wednesday	2 days

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

Selected survey types:

Manual count	3 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)	1
Edge of Town	2

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

Selected Location Sub Categories:

Residential Zone	2
No Sub Category	1

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

Secondary Filtering selection:

Use Class:

C3	3 days

This data displays the number of surveys per Use Class classification within the selected set. The Use Classes Order 2005 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	3 days

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

Population within 5 miles:

5,001 to 25,000	1 days
50,001 to 75,000	2 days

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

Car ownership within 5 miles:

0.6 to 1.0	1 days
1.1 to 1.5	2 days

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

Travel Plan:

No	3 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	3 days

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

LIST OF SITES relevant to selection parameters

Site(1):	CB-03-C-02	Site area:	0.56 hect
Development Name:	BLOCK OF FLATS	No of Dwellings:	35
Location:	PENRITH	Housing density:	109
Postcode:	CA11 8RH	Total Bedrooms:	70
Main Location Type:	Edge of Town	Survey Date:	11/06/14
Sub-Location Type:	No Sub Category	Survey Day:	Wednesday
PTAL:	n/a	Parking Spaces:	38
Site(2):	RI-03-C-01	Site area:	0.72 hect
Development Name:	FLATS	No of Dwellings:	20
Location:	HULL	Housing density:	167
Postcode:	HU5 5SB	Total Bedrooms:	44
Main Location Type:	Edge of Town	Survey Date:	13/05/14
Sub-Location Type:	Residential Zone	Survey Day:	Tuesday
PTAL:	n/a	Parking Spaces:	22
Site(3):	SF-03-C-03	Site area:	0.60 hect
Development Name:	BLOCKS OF FLATS	No of Dwellings:	30
Location:	BURY ST EDMUNDS	Housing density:	300
Postcode:	IP32 6BT	Total Bedrooms:	42
Main Location Type:	Suburban Area (PPS6 Out of Centre)	Survey Date:	03/12/14
Sub-Location Type:	Residential Zone	Survey Day:	Wednesday
PTAL:	n/a	Parking Spaces:	40

TRIP RATE for Land Use 03 - RESIDENTIAL/C - FLATS PRIVATELY OWNED
MULTI-MODAL TOTAL VEHICLES
Calculation factor: 1 DWELLS
BOLD print indicates peak (busiest) period
Total People to Total Vehicles ratio (all time periods and directions): 1.75

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	3	28	0.071	3	28	0.176	3	28	0.247
08:00 - 09:00	3	28	0.082	3	28	0.188	3	28	0.270
09:00 - 10:00	3	28	0.165	3	28	0.165	3	28	0.330
10:00 - 11:00	3	28	0.059	3	28	0.094	3	28	0.153
11:00 - 12:00	3	28	0.082	3	28	0.106	3	28	0.188
12:00 - 13:00	3	28	0.082	3	28	0.047	3	28	0.129
13:00 - 14:00	3	28	0.106	3	28	0.141	3	28	0.247
14:00 - 15:00	3	28	0.094	3	28	0.106	3	28	0.200
15:00 - 16:00	3	28	0.118	3	28	0.118	3	28	0.236
16:00 - 17:00	3	28	0.129	3	28	0.071	3	28	0.200
17:00 - 18:00	3	28	0.271	3	28	0.118	3	28	0.389
18:00 - 19:00	3	28	0.200	3	28	0.165	3	28	0.365
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			1.459			1.495			2.954

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:	20 - 35 (units:)
Survey date date range:	01/01/14 - 15/10/19
Number of weekdays (Monday-Friday):	3
Number of Saturdays:	0
Number of Sundays:	0
Surveys automatically removed from selection:	0
Surveys manually removed from selection:	0

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

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

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	3	28	0.000	3	28	0.000	3	28	0.000
08:00 - 09:00	3	28	0.000	3	28	0.000	3	28	0.000
09:00 - 10:00	3	28	0.012	3	28	0.012	3	28	0.024
10:00 - 11:00	3	28	0.000	3	28	0.000	3	28	0.000
11:00 - 12:00	3	28	0.012	3	28	0.012	3	28	0.024
12:00 - 13:00	3	28	0.000	3	28	0.000	3	28	0.000
13:00 - 14:00	3	28	0.000	3	28	0.000	3	28	0.000
14:00 - 15:00	3	28	0.000	3	28	0.000	3	28	0.000
15:00 - 16:00	3	28	0.000	3	28	0.000	3	28	0.000
16:00 - 17:00	3	28	0.000	3	28	0.000	3	28	0.000
17:00 - 18:00	3	28	0.000	3	28	0.000	3	28	0.000
18:00 - 19:00	3	28	0.000	3	28	0.000	3	28	0.000
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.024			0.024			0.048

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

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

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

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	3	28	0.012	3	28	0.024	3	28	0.036
08:00 - 09:00	3	28	0.000	3	28	0.000	3	28	0.000
09:00 - 10:00	3	28	0.000	3	28	0.000	3	28	0.000
10:00 - 11:00	3	28	0.000	3	28	0.000	3	28	0.000
11:00 - 12:00	3	28	0.000	3	28	0.000	3	28	0.000
12:00 - 13:00	3	28	0.000	3	28	0.000	3	28	0.000
13:00 - 14:00	3	28	0.000	3	28	0.000	3	28	0.000
14:00 - 15:00	3	28	0.012	3	28	0.012	3	28	0.024
15:00 - 16:00	3	28	0.000	3	28	0.000	3	28	0.000
16:00 - 17:00	3	28	0.000	3	28	0.000	3	28	0.000
17:00 - 18:00	3	28	0.000	3	28	0.000	3	28	0.000
18:00 - 19:00	3	28	0.000	3	28	0.000	3	28	0.000
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.024			0.036			0.060

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/C - FLATS PRIVATELY OWNED
MULTI-MODAL CYCLISTS
Calculation factor: 1 DWELLS
BOLD print indicates peak (busiest) period

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	3	28	0.012	3	28	0.000	3	28	0.012
08:00 - 09:00	3	28	0.000	3	28	0.000	3	28	0.000
09:00 - 10:00	3	28	0.000	3	28	0.012	3	28	0.012
10:00 - 11:00	3	28	0.000	3	28	0.000	3	28	0.000
11:00 - 12:00	3	28	0.000	3	28	0.012	3	28	0.012
12:00 - 13:00	3	28	0.012	3	28	0.000	3	28	0.012
13:00 - 14:00	3	28	0.000	3	28	0.024	3	28	0.024
14:00 - 15:00	3	28	0.000	3	28	0.000	3	28	0.000
15:00 - 16:00	3	28	0.000	3	28	0.000	3	28	0.000
16:00 - 17:00	3	28	0.012	3	28	0.000	3	28	0.012
17:00 - 18:00	3	28	0.012	3	28	0.000	3	28	0.012
18:00 - 19:00	3	28	0.000	3	28	0.000	3	28	0.000
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.048			0.048			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/C - FLATS PRIVATELY OWNED
MULTI-MODAL VEHICLE OCCUPANTS
Calculation factor: 1 DWELLS
BOLD print indicates peak (busiest) period

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	3	28	0.106	3	28	0.224	3	28	0.330
08:00 - 09:00	3	28	0.094	3	28	0.224	3	28	0.318
09:00 - 10:00	3	28	0.341	3	28	0.247	3	28	0.588
10:00 - 11:00	3	28	0.094	3	28	0.141	3	28	0.235
11:00 - 12:00	3	28	0.082	3	28	0.129	3	28	0.211
12:00 - 13:00	3	28	0.094	3	28	0.047	3	28	0.141
13:00 - 14:00	3	28	0.118	3	28	0.188	3	28	0.306
14:00 - 15:00	3	28	0.118	3	28	0.165	3	28	0.283
15:00 - 16:00	3	28	0.165	3	28	0.153	3	28	0.318
16:00 - 17:00	3	28	0.129	3	28	0.082	3	28	0.211
17:00 - 18:00	3	28	0.341	3	28	0.188	3	28	0.529
18:00 - 19:00	3	28	0.259	3	28	0.247	3	28	0.506
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			1.941			2.035			3.976

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/C - FLATS PRIVATELY OWNED
MULTI-MODAL PEDESTRIANS
Calculation factor: 1 DWELLS
BOLD print indicates peak (busiest) period

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	3	28	0.035	3	28	0.024	3	28	0.059
08:00 - 09:00	3	28	0.047	3	28	0.059	3	28	0.106
09:00 - 10:00	3	28	0.012	3	28	0.082	3	28	0.094
10:00 - 11:00	3	28	0.059	3	28	0.059	3	28	0.118
11:00 - 12:00	3	28	0.059	3	28	0.059	3	28	0.118
12:00 - 13:00	3	28	0.012	3	28	0.000	3	28	0.012
13:00 - 14:00	3	28	0.012	3	28	0.035	3	28	0.047
14:00 - 15:00	3	28	0.047	3	28	0.035	3	28	0.082
15:00 - 16:00	3	28	0.071	3	28	0.047	3	28	0.118
16:00 - 17:00	3	28	0.024	3	28	0.024	3	28	0.048
17:00 - 18:00	3	28	0.047	3	28	0.024	3	28	0.071
18:00 - 19:00	3	28	0.000	3	28	0.012	3	28	0.012
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.425			0.460			0.885

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/C - FLATS PRIVATELY OWNED
MULTI-MODAL BUS/TRAM PASSENGERS
Calculation factor: 1 DWELLS
BOLD print indicates peak (busiest) period

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	3	28	0.000	3	28	0.024	3	28	0.024
08:00 - 09:00	3	28	0.000	3	28	0.059	3	28	0.059
09:00 - 10:00	3	28	0.000	3	28	0.000	3	28	0.000
10:00 - 11:00	3	28	0.000	3	28	0.000	3	28	0.000
11:00 - 12:00	3	28	0.000	3	28	0.012	3	28	0.012
12:00 - 13:00	3	28	0.012	3	28	0.000	3	28	0.012
13:00 - 14:00	3	28	0.012	3	28	0.000	3	28	0.012
14:00 - 15:00	3	28	0.024	3	28	0.012	3	28	0.036
15:00 - 16:00	3	28	0.012	3	28	0.012	3	28	0.024
16:00 - 17:00	3	28	0.024	3	28	0.000	3	28	0.024
17:00 - 18:00	3	28	0.012	3	28	0.000	3	28	0.012
18:00 - 19:00	3	28	0.012	3	28	0.000	3	28	0.012
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.108			0.119			0.227

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/C - FLATS PRIVATELY OWNED
MULTI-MODAL PUBLIC TRANSPORT USERS
Calculation factor: 1 DWELLS
BOLD print indicates peak (busiest) period

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	3	28	0.000	3	28	0.024	3	28	0.024
08:00 - 09:00	3	28	0.000	3	28	0.059	3	28	0.059
09:00 - 10:00	3	28	0.000	3	28	0.000	3	28	0.000
10:00 - 11:00	3	28	0.000	3	28	0.000	3	28	0.000
11:00 - 12:00	3	28	0.000	3	28	0.012	3	28	0.012
12:00 - 13:00	3	28	0.012	3	28	0.000	3	28	0.012
13:00 - 14:00	3	28	0.012	3	28	0.000	3	28	0.012
14:00 - 15:00	3	28	0.024	3	28	0.012	3	28	0.036
15:00 - 16:00	3	28	0.012	3	28	0.012	3	28	0.024
16:00 - 17:00	3	28	0.024	3	28	0.000	3	28	0.024
17:00 - 18:00	3	28	0.012	3	28	0.000	3	28	0.012
18:00 - 19:00	3	28	0.012	3	28	0.000	3	28	0.012
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.108			0.119			0.227

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/C - FLATS PRIVATELY OWNED
MULTI-MODAL TOTAL PEOPLE
Calculation factor: 1 DWELLS
BOLD print indicates peak (busiest) period
Total People to Total Vehicles ratio (all time periods and directions): 1.75

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	3	28	0.153	3	28	0.271	3	28	0.424
08:00 - 09:00	3	28	0.141	3	28	0.341	3	28	0.482
09:00 - 10:00	3	28	0.353	3	28	0.341	3	28	0.694
10:00 - 11:00	3	28	0.153	3	28	0.200	3	28	0.353
11:00 - 12:00	3	28	0.141	3	28	0.212	3	28	0.353
12:00 - 13:00	3	28	0.129	3	28	0.047	3	28	0.176
13:00 - 14:00	3	28	0.141	3	28	0.247	3	28	0.388
14:00 - 15:00	3	28	0.188	3	28	0.212	3	28	0.400
15:00 - 16:00	3	28	0.247	3	28	0.212	3	28	0.459
16:00 - 17:00	3	28	0.188	3	28	0.106	3	28	0.294
17:00 - 18:00	3	28	0.412	3	28	0.212	3	28	0.624
18:00 - 19:00	3	28	0.271	3	28	0.259	3	28	0.530
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			2.517			2.660			5.177

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/C - FLATS PRIVATELY OWNED
MULTI-MODAL CARS
Calculation factor: 1 DWELLS
BOLD print indicates peak (busiest) period

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	3	28	0.035	3	28	0.129	3	28	0.164
08:00 - 09:00	3	28	0.071	3	28	0.153	3	28	0.224
09:00 - 10:00	3	28	0.094	3	28	0.118	3	28	0.212
10:00 - 11:00	3	28	0.059	3	28	0.082	3	28	0.141
11:00 - 12:00	3	28	0.035	3	28	0.059	3	28	0.094
12:00 - 13:00	3	28	0.071	3	28	0.035	3	28	0.106
13:00 - 14:00	3	28	0.094	3	28	0.118	3	28	0.212
14:00 - 15:00	3	28	0.082	3	28	0.094	3	28	0.176
15:00 - 16:00	3	28	0.106	3	28	0.106	3	28	0.212
16:00 - 17:00	3	28	0.129	3	28	0.071	3	28	0.200
17:00 - 18:00	3	28	0.259	3	28	0.118	3	28	0.377
18:00 - 19:00	3	28	0.176	3	28	0.153	3	28	0.329
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			1.211			1.236			2.447

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/C - FLATS PRIVATELY OWNED
MULTI-MODAL LGVS
Calculation factor: 1 DWELLS
BOLD print indicates peak (busiest) period

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	3	28	0.024	3	28	0.024	3	28	0.048
08:00 - 09:00	3	28	0.012	3	28	0.035	3	28	0.047
09:00 - 10:00	3	28	0.059	3	28	0.035	3	28	0.094
10:00 - 11:00	3	28	0.000	3	28	0.012	3	28	0.012
11:00 - 12:00	3	28	0.035	3	28	0.035	3	28	0.070
12:00 - 13:00	3	28	0.012	3	28	0.012	3	28	0.024
13:00 - 14:00	3	28	0.012	3	28	0.024	3	28	0.036
14:00 - 15:00	3	28	0.000	3	28	0.000	3	28	0.000
15:00 - 16:00	3	28	0.012	3	28	0.012	3	28	0.024
16:00 - 17:00	3	28	0.000	3	28	0.000	3	28	0.000
17:00 - 18:00	3	28	0.012	3	28	0.000	3	28	0.012
18:00 - 19:00	3	28	0.024	3	28	0.012	3	28	0.036
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.202			0.201			0.403

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.*

Filtering Summary

Land Use	03/A	RESIDENTIAL/HOUSES PRIVATELY OWNED
Selected Trip Rate Calculation Parameter Range	4-1817 DWELLS	
Actual Trip Rate Calculation Parameter Range	6-918 DWELLS	
Date Range	Minimum: 01/01/14	Maximum: 24/11/19
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	
Days of the week selected	Tuesday	9
	Wednesday	12
	Thursday	11
Main Location Types selected	Suburban Area (PPS6 Out of Centre)	9
	Edge of Town	16
	Neighbourhood Centre (PPS6 Local Centre)	7
Population within 500m	All Surveys Included	
Population <1 Mile ranges selected	1,000 or Less	2
	1,001 to 5,000	8
	5,001 to 10,000	8
	10,001 to 15,000	9
	15,001 to 20,000	5
Population <5 Mile ranges selected	5,000 or Less	4
	5,001 to 25,000	3
	25,001 to 50,000	8
	50,001 to 75,000	8
	75,001 to 100,000	9
Car Ownership <5 Mile ranges selected	0.6 to 1.0	4
	1.1 to 1.5	24
	1.6 to 2.0	4
PTAL Rating	No PTAL Present	32

Calculation Reference: AUDIT-332901-220518-0505

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		
	HC	HAMPSHIRE	2 days
	KC	KENT	3 days
	WS	WEST SUSSEX	4 days
03	SOUTH WEST		
	SM	SOMERSET	2 days
04	EAST ANGLIA		
	NF	NORFOLK	3 days
	SF	SUFFOLK	1 days
05	EAST MIDLANDS		
	LE	LEICESTERSHIRE	1 days
06	WEST MIDLANDS		
	SH	SHROPSHIRE	1 days
	ST	STAFFORDSHIRE	1 days
07	YORKSHIRE & NORTH LINCOLNSHIRE		
	NY	NORTH YORKSHIRE	1 days
08	NORTH WEST		
	CH	CHESHIRE	2 days
09	NORTH		
	DH	DURHAM	1 days
11	SCOTLAND		
	HI	HIGHLAND	1 days
12	CONNAUGHT		
	CS	SLIGO	2 days
	RO	ROSCOMMON	1 days
13	MUNSTER		
	WA	WATERFORD	1 days
14	LEINSTER		
	WX	WEXFORD	1 days
15	GREATER DUBLIN		
	DL	DUBLIN	1 days
16	ULSTER (REPUBLIC OF IRELAND)		
	DN	DONEGAL	2 days
17	ULSTER (NORTHERN IRELAND)		
	AN	ANTRIM	1 days

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

Primary Filtering selection:

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

Parameter: No of Dwellings
Actual Range: 6 to 918 (units:)
Range Selected by User: 4 to 1817 (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: 01/01/14 to 24/11/19

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	9 days
Wednesday	12 days
Thursday	11 days

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

Selected survey types:

Manual count	32 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)	9
Edge of Town	16
Neighbourhood Centre (PPS6 Local Centre)	7

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

Selected Location Sub Categories:

Residential Zone	22
Village	7
No Sub Category	3

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

Secondary Filtering selection:

Use Class:

C3	32 days

This data displays the number of surveys per Use Class classification within the selected set. The Use Classes Order 2005 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:

1,000 or Less	2 days
1,001 to 5,000	8 days
5,001 to 10,000	8 days
10,001 to 15,000	9 days
15,001 to 20,000	5 days

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

Population within 5 miles:

5,000 or Less	4 days
5,001 to 25,000	3 days
25,001 to 50,000	8 days
50,001 to 75,000	8 days
75,001 to 100,000	9 days

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

Car ownership within 5 miles:

0.6 to 1.0	4 days
1.1 to 1.5	24 days
1.6 to 2.0	4 days

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

Travel Plan:

Yes	9 days
No	23 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	32 days

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

LIST OF SITES relevant to selection parameters

Site(1):	AN-03-A-09	Site area:	9.48 hect
Development Name:	DETACHED & SEMI-DETACHED	No of Dwellings:	151
Location:	CARRICKFERGUS	Housing density:	18
Postcode:	BT38 8FW	Total Bedrooms:	459
Main Location Type:	Edge of Town	Survey Date:	12/10/16
Sub-Location Type:	No Sub Category	Survey Day:	Wednesday
PTAL:	n/a	Parking Spaces:	457
Site(2):	CH-03-A-10	Site area:	0.91 hect
Development Name:	SEMI-DETACHED & TERRACED	No of Dwellings:	40
Location:	NORTHWICH	Housing density:	50
Postcode:	CW8 4WA	Total Bedrooms:	102
Main Location Type:	Edge of Town	Survey Date:	04/06/19
Sub-Location Type:	Residential Zone	Survey Day:	Tuesday
PTAL:	n/a	Parking Spaces:	74
Site(3):	CH-03-A-11	Site area:	0.50 hect
Development Name:	TOWN HOUSES	No of Dwellings:	24
Location:	NORTHWICH	Housing density:	55
Postcode:	CW9 8RZ	Total Bedrooms:	92
Main Location Type:	Suburban Area (PPS6 Out of Centre)	Survey Date:	06/06/19
Sub-Location Type:	Residential Zone	Survey Day:	Thursday
PTAL:	n/a	Parking Spaces:	47
Site(4):	CS-03-A-03	Site area:	1.20 hect
Development Name:	MIXED HOUSES	No of Dwellings:	30
Location:	STRANDHILL	Housing density:	33
Postcode:		Total Bedrooms:	90
Main Location Type:	Neighbourhood Centre (PPS6 Local Centre)	Survey Date:	27/10/16
Sub-Location Type:	Village	Survey Day:	Thursday
PTAL:	n/a	Parking Spaces:	59
Site(5):	CS-03-A-04	Site area:	1.68 hect
Development Name:	DETACHED & SEMI-DETACHED	No of Dwellings:	63
Location:	STRANDHILL	Housing density:	42
Postcode:		Total Bedrooms:	213
Main Location Type:	Neighbourhood Centre (PPS6 Local Centre)	Survey Date:	27/10/16
Sub-Location Type:	Village	Survey Day:	Thursday
PTAL:	n/a	Parking Spaces:	196
Site(6):	DH-03-A-01	Site area:	0.90 hect
Development Name:	SEMI DETACHED	No of Dwellings:	50
Location:	BISHOP AUCKLAND	Housing density:	94
Postcode:	DL14 6RH	Total Bedrooms:	150
Main Location Type:	Suburban Area (PPS6 Out of Centre)	Survey Date:	28/03/17
Sub-Location Type:	Residential Zone	Survey Day:	Tuesday
PTAL:	n/a	Parking Spaces:	87
Site(7):	DL-03-A-10	Site area:	2.90 hect
Development Name:	SEMI DETACHED & DETACHED	No of Dwellings:	65
Location:	MALAHIDE	Housing density:	28
Postcode:	K36 P798	Total Bedrooms:	219
Main Location Type:	Edge of Town	Survey Date:	20/06/18
Sub-Location Type:	Residential Zone	Survey Day:	Wednesday
PTAL:	n/a	Parking Spaces:	213
Site(8):	DN-03-A-05	Site area:	7.24 hect
Development Name:	DETACHED/SEMI-DETACHED	No of Dwellings:	146
Location:	LETTERKENNY	Housing density:	23
Postcode:		Total Bedrooms:	472
Main Location Type:	Suburban Area (PPS6 Out of Centre)	Survey Date:	03/09/14
Sub-Location Type:	Residential Zone	Survey Day:	Wednesday
PTAL:	n/a	Parking Spaces:	309
Site(9):	DN-03-A-06	Site area:	1.02 hect
Development Name:	DETACHED HOUSING	No of Dwellings:	6
Location:	BALLYBOFEY	Housing density:	7
Postcode:		Total Bedrooms:	30
Main Location Type:	Edge of Town	Survey Date:	10/10/18
Sub-Location Type:	Residential Zone	Survey Day:	Wednesday
PTAL:	n/a	Parking Spaces:	35

LIST OF SITES relevant to selection parameters (Cont.)

Site(10):	HC-03-A-18	Site area:	1.40 hect
Development Name:	HOUSES & FLATS	No of Dwellings:	62
Location:	LIPHOOK	Housing density:	46
Postcode:	GU30 7TG	Total Bedrooms:	205
Main Location Type:	Suburban Area (PPS6 Out of Centre)	Survey Date:	29/11/16
Sub-Location Type:	Residential Zone	Survey Day:	Tuesday
PTAL:	n/a	Parking Spaces:	136
Site(11):	HC-03-A-23	Site area:	1.40 hect
Development Name:	HOUSES & FLATS	No of Dwellings:	62
Location:	LIPHOOK	Housing density:	46
Postcode:	GU30 7TG	Total Bedrooms:	205
Main Location Type:	Suburban Area (PPS6 Out of Centre)	Survey Date:	19/11/19
Sub-Location Type:	Residential Zone	Survey Day:	Tuesday
PTAL:	n/a	Parking Spaces:	136
Site(12):	HI-03-A-14	Site area:	1.48 hect
Development Name:	SEMI-DETACHED & TERRACED	No of Dwellings:	40
Location:	INVERNESS	Housing density:	36
Postcode:	IV3 8LX	Total Bedrooms:	121
Main Location Type:	Suburban Area (PPS6 Out of Centre)	Survey Date:	23/03/16
Sub-Location Type:	Residential Zone	Survey Day:	Wednesday
PTAL:	n/a	Parking Spaces:	89
Site(13):	KC-03-A-03	Site area:	1.38 hect
Development Name:	MIXED HOUSES & FLATS	No of Dwellings:	51
Location:	ASHFORD	Housing density:	66
Postcode:	TN24 0FR	Total Bedrooms:	157
Main Location Type:	Suburban Area (PPS6 Out of Centre)	Survey Date:	14/07/16
Sub-Location Type:	Residential Zone	Survey Day:	Thursday
PTAL:	n/a	Parking Spaces:	110
Site(14):	KC-03-A-07	Site area:	9.46 hect
Development Name:	MIXED HOUSES	No of Dwellings:	288
Location:	HERNE BAY	Housing density:	40
Postcode:	CT6 6HZ	Total Bedrooms:	934
Main Location Type:	Edge of Town	Survey Date:	27/09/17
Sub-Location Type:	Residential Zone	Survey Day:	Wednesday
PTAL:	n/a	Parking Spaces:	891
Site(15):	KC-03-A-08	Site area:	0.86 hect
Development Name:	MIXED HOUSES	No of Dwellings:	159
Location:	CHARING	Housing density:	418
Postcode:	TN27 0GX	Total Bedrooms:	569
Main Location Type:	Neighbourhood Centre (PPS6 Local Centre)	Survey Date:	22/05/18
Sub-Location Type:	Village	Survey Day:	Tuesday
PTAL:	n/a	Parking Spaces:	480
Site(16):	LE-03-A-02	Site area:	3.30 hect
Development Name:	DETACHED & OTHERS	No of Dwellings:	85
Location:	IBSTOCK	Housing density:	40
Postcode:	LE67 6PG	Total Bedrooms:	308
Main Location Type:	Neighbourhood Centre (PPS6 Local Centre)	Survey Date:	28/06/18
Sub-Location Type:	Village	Survey Day:	Thursday
PTAL:	n/a	Parking Spaces:	363
Site(17):	NF-03-A-03	Site area:	0.63 hect
Development Name:	DETACHED HOUSES	No of Dwellings:	10
Location:	THETFORD	Housing density:	20
Postcode:	IP24 1EY	Total Bedrooms:	40
Main Location Type:	Edge of Town	Survey Date:	16/09/15
Sub-Location Type:	Residential Zone	Survey Day:	Wednesday
PTAL:	n/a	Parking Spaces:	37
Site(18):	NF-03-A-04	Site area:	1.98 hect
Development Name:	MIXED HOUSES	No of Dwellings:	70
Location:	NORTH WALSHAM	Housing density:	40
Postcode:	NR28 0FW	Total Bedrooms:	223
Main Location Type:	Edge of Town	Survey Date:	18/09/19
Sub-Location Type:	Residential Zone	Survey Day:	Wednesday
PTAL:	n/a	Parking Spaces:	165

LIST OF SITES relevant to selection parameters (Cont.)

Site(19):	NF-03-A-05	Site area:	1.57 hect
Development Name:	MIXED HOUSES	No of Dwellings:	40
Location:	HOLT	Housing density:	26
Postcode:	NR25 6GA	Total Bedrooms:	116
Main Location Type:	Edge of Town	Survey Date:	19/09/19
Sub-Location Type:	Residential Zone	Survey Day:	Thursday
PTAL:	n/a	Parking Spaces:	100
Site(20):	NY-03-A-13	Site area:	0.30 hect
Development Name:	TERRACED HOUSES	No of Dwellings:	10
Location:	CATTERICK GARRISON	Housing density:	33
Postcode:	DL9 4SB	Total Bedrooms:	32
Main Location Type:	Suburban Area (PPS6 Out of Centre)	Survey Date:	10/05/17
Sub-Location Type:	Residential Zone	Survey Day:	Wednesday
PTAL:	n/a	Parking Spaces:	19
Site(21):	RO-03-A-03	Site area:	4.08 hect
Development Name:	DETACHED HOUSES	No of Dwellings:	23
Location:	BOYLE	Housing density:	8
Postcode:		Total Bedrooms:	96
Main Location Type:	Edge of Town	Survey Date:	25/09/14
Sub-Location Type:	No Sub Category	Survey Day:	Thursday
PTAL:	n/a	Parking Spaces:	84
Site(22):	SF-03-A-05	Site area:	1.15 hect
Development Name:	DETACHED HOUSES	No of Dwellings:	18
Location:	BURY ST EDMUNDS	Housing density:	19
Postcode:	IP33 2SN	Total Bedrooms:	78
Main Location Type:	Edge of Town	Survey Date:	09/09/15
Sub-Location Type:	Residential Zone	Survey Day:	Wednesday
PTAL:	n/a	Parking Spaces:	75
Site(23):	SH-03-A-06	Site area:	0.80 hect
Development Name:	BUNGALOWS	No of Dwellings:	16
Location:	SHREWSBURY	Housing density:	24
Postcode:	SY1 2RB	Total Bedrooms:	34
Main Location Type:	Edge of Town	Survey Date:	22/05/14
Sub-Location Type:	Residential Zone	Survey Day:	Thursday
PTAL:	n/a	Parking Spaces:	32
Site(24):	SM-03-A-02	Site area:	2.87 hect
Development Name:	MIXED HOUSES	No of Dwellings:	42
Location:	NEAR TAUNTON	Housing density:	27
Postcode:	TA3 5FG	Total Bedrooms:	160
Main Location Type:	Neighbourhood Centre (PPS6 Local Centre)	Survey Date:	25/09/18
Sub-Location Type:	Village	Survey Day:	Tuesday
PTAL:	n/a	Parking Spaces:	142
Site(25):	SM-03-A-03	Site area:	2.65 hect
Development Name:	MIXED HOUSES	No of Dwellings:	41
Location:	NEAR TAUNTON	Housing density:	42
Postcode:	TA3 5FB	Total Bedrooms:	137
Main Location Type:	Neighbourhood Centre (PPS6 Local Centre)	Survey Date:	25/09/18
Sub-Location Type:	Village	Survey Day:	Tuesday
PTAL:	n/a	Parking Spaces:	118
Site(26):	ST-03-A-07	Site area:	9.00 hect
Development Name:	DETACHED & SEMI-DETACHED	No of Dwellings:	248
Location:	STAFFORD	Housing density:	173
Postcode:	ST16 1GZ	Total Bedrooms:	821
Main Location Type:	Edge of Town	Survey Date:	22/11/17
Sub-Location Type:	Residential Zone	Survey Day:	Wednesday
PTAL:	n/a	Parking Spaces:	881
Site(27):	WA-03-A-04	Site area:	28.59 hect
Development Name:	DETACHED	No of Dwellings:	280
Location:	WATERFORD	Housing density:	12
Postcode:		Total Bedrooms:	1130
Main Location Type:	Edge of Town	Survey Date:	24/06/14
Sub-Location Type:	Residential Zone	Survey Day:	Tuesday
PTAL:	n/a	Parking Spaces:	982

LIST OF SITES relevant to selection parameters (Cont.)

Site(28):	WS-03-A-04	Site area:	5.45 hect
Development Name:	MIXED HOUSES	No of Dwellings:	151
Location:	HORSHAM	Housing density:	46
Postcode:	RH12 1EP	Total Bedrooms:	465
Main Location Type:	Edge of Town	Survey Date:	11/12/14
Sub-Location Type:	Residential Zone	Survey Day:	Thursday
PTAL:	n/a	Parking Spaces:	345
Site(29):	WS-03-A-07	Site area:	3.25 hect
Development Name:	BUNGALOWS	No of Dwellings:	57
Location:	NEAR HORSHAM	Housing density:	27
Postcode:	RH13 0TR	Total Bedrooms:	118
Main Location Type:	Neighbourhood Centre (PPS6 Local Centre)	Survey Date:	19/10/17
Sub-Location Type:	Village	Survey Day:	Thursday
PTAL:	n/a	Parking Spaces:	108
Site(30):	WS-03-A-10	Site area:	2.27 hect
Development Name:	MIXED HOUSES	No of Dwellings:	79
Location:	LITTLEHAMPTON	Housing density:	51
Postcode:	BN17 7PL	Total Bedrooms:	249
Main Location Type:	Edge of Town	Survey Date:	07/11/18
Sub-Location Type:	Residential Zone	Survey Day:	Wednesday
PTAL:	n/a	Parking Spaces:	184
Site(31):	WS-03-A-11	Site area:	50.00 hect
Development Name:	MIXED HOUSES	No of Dwellings:	918
Location:	WEST HORSHAM	Housing density:	50
Postcode:	RH12 3LN	Total Bedrooms:	2865
Main Location Type:	Edge of Town	Survey Date:	02/04/19
Sub-Location Type:	Residential Zone	Survey Day:	Tuesday
PTAL:	n/a	Parking Spaces:	1894
Site(32):	WX-03-A-01	Site area:	1.44 hect
Development Name:	SEMI-DETACHED	No of Dwellings:	34
Location:	WEXFORD	Housing density:	28
Postcode:		Total Bedrooms:	102
Main Location Type:	Suburban Area (PPS6 Out of Centre)	Survey Date:	25/09/14
Sub-Location Type:	No Sub Category	Survey Day:	Thursday
PTAL:	n/a	Parking Spaces:	47

Trip Rates for Key Periods		Trips per 1 dwells DWELLS	
Period	Inbound	Outbound	Total
0800-0900	0.159	0.432	0.591
1700-1800	0.403	0.182	0.585

TRIP RATE for Land Use 03 - RESIDENTIAL/A - HOUSES PRIVATELY OWNED
MULTI-MODAL TOTAL VEHICLES
Calculation factor: 1 DWELLS
BOLD print indicates peak (busiest) period
Total People to Total Vehicles ratio (all time periods and directions): 1.67

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	32	105	0.071	32	105	0.284	32	105	0.355
08:00 - 09:00	32	105	0.159	32	105	0.432	32	105	0.591
09:00 - 10:00	32	105	0.156	32	105	0.190	32	105	0.346
10:00 - 11:00	32	105	0.133	32	105	0.162	32	105	0.295
11:00 - 12:00	32	105	0.134	32	105	0.171	32	105	0.305
12:00 - 13:00	32	105	0.185	32	105	0.172	32	105	0.357
13:00 - 14:00	32	105	0.181	32	105	0.182	32	105	0.363
14:00 - 15:00	32	105	0.203	32	105	0.216	32	105	0.419
15:00 - 16:00	32	105	0.270	32	105	0.185	32	105	0.455
16:00 - 17:00	32	105	0.300	32	105	0.190	32	105	0.490
17:00 - 18:00	32	105	0.403	32	105	0.182	32	105	0.585
18:00 - 19:00	32	105	0.314	32	105	0.199	32	105	0.513
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			2.509			2.565			5.074

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

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

Parameter summary

Trip rate parameter range selected:	6 - 918 (units:)
Survey date date range:	01/01/14 - 24/11/19
Number of weekdays (Monday-Friday):	32
Number of Saturdays:	0
Number of Sundays:	0
Surveys automatically removed from selection:	3
Surveys manually removed from selection:	0

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

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

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	32	105	0.001	32	105	0.001	32	105	0.002
08:00 - 09:00	32	105	0.004	32	105	0.004	32	105	0.008
09:00 - 10:00	32	105	0.002	32	105	0.001	32	105	0.003
10:00 - 11:00	32	105	0.001	32	105	0.001	32	105	0.002
11:00 - 12:00	32	105	0.002	32	105	0.002	32	105	0.004
12:00 - 13:00	32	105	0.002	32	105	0.001	32	105	0.003
13:00 - 14:00	32	105	0.002	32	105	0.001	32	105	0.003
14:00 - 15:00	32	105	0.001	32	105	0.001	32	105	0.002
15:00 - 16:00	32	105	0.004	32	105	0.004	32	105	0.008
16:00 - 17:00	32	105	0.002	32	105	0.003	32	105	0.005
17:00 - 18:00	32	105	0.001	32	105	0.000	32	105	0.001
18:00 - 19:00	32	105	0.002	32	105	0.002	32	105	0.004
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.024			0.021			0.045

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

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

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

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	32	105	0.001	32	105	0.001	32	105	0.002
08:00 - 09:00	32	105	0.002	32	105	0.001	32	105	0.003
09:00 - 10:00	32	105	0.004	32	105	0.003	32	105	0.007
10:00 - 11:00	32	105	0.003	32	105	0.002	32	105	0.005
11:00 - 12:00	32	105	0.003	32	105	0.004	32	105	0.007
12:00 - 13:00	32	105	0.003	32	105	0.003	32	105	0.006
13:00 - 14:00	32	105	0.002	32	105	0.002	32	105	0.004
14:00 - 15:00	32	105	0.001	32	105	0.002	32	105	0.003
15:00 - 16:00	32	105	0.002	32	105	0.001	32	105	0.003
16:00 - 17:00	32	105	0.001	32	105	0.001	32	105	0.002
17:00 - 18:00	32	105	0.001	32	105	0.001	32	105	0.002
18:00 - 19:00	32	105	0.001	32	105	0.000	32	105	0.001
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.024			0.021			0.045

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

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

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

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	32	105	0.000	32	105	0.000	32	105	0.000
08:00 - 09:00	32	105	0.004	32	105	0.004	32	105	0.008
09:00 - 10:00	32	105	0.000	32	105	0.000	32	105	0.000
10:00 - 11:00	32	105	0.000	32	105	0.000	32	105	0.000
11:00 - 12:00	32	105	0.000	32	105	0.000	32	105	0.000
12:00 - 13:00	32	105	0.000	32	105	0.000	32	105	0.000
13:00 - 14:00	32	105	0.000	32	105	0.000	32	105	0.000
14:00 - 15:00	32	105	0.001	32	105	0.001	32	105	0.002
15:00 - 16:00	32	105	0.002	32	105	0.002	32	105	0.004
16:00 - 17:00	32	105	0.000	32	105	0.000	32	105	0.000
17:00 - 18:00	32	105	0.001	32	105	0.001	32	105	0.002
18:00 - 19:00	32	105	0.000	32	105	0.000	32	105	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			0.008			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 CYCLISTS
Calculation factor: 1 DWELLS
BOLD print indicates peak (busiest) period

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	32	105	0.002	32	105	0.005	32	105	0.007
08:00 - 09:00	32	105	0.003	32	105	0.017	32	105	0.020
09:00 - 10:00	32	105	0.001	32	105	0.004	32	105	0.005
10:00 - 11:00	32	105	0.003	32	105	0.002	32	105	0.005
11:00 - 12:00	32	105	0.002	32	105	0.002	32	105	0.004
12:00 - 13:00	32	105	0.004	32	105	0.002	32	105	0.006
13:00 - 14:00	32	105	0.002	32	105	0.001	32	105	0.003
14:00 - 15:00	32	105	0.002	32	105	0.001	32	105	0.003
15:00 - 16:00	32	105	0.008	32	105	0.002	32	105	0.010
16:00 - 17:00	32	105	0.008	32	105	0.005	32	105	0.013
17:00 - 18:00	32	105	0.009	32	105	0.007	32	105	0.016
18:00 - 19:00	32	105	0.008	32	105	0.005	32	105	0.013
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.052			0.053			0.105

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

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

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

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	32	105	0.088	32	105	0.400	32	105	0.488
08:00 - 09:00	32	105	0.197	32	105	0.709	32	105	0.906
09:00 - 10:00	32	105	0.195	32	105	0.258	32	105	0.453
10:00 - 11:00	32	105	0.167	32	105	0.218	32	105	0.385
11:00 - 12:00	32	105	0.170	32	105	0.223	32	105	0.393
12:00 - 13:00	32	105	0.237	32	105	0.224	32	105	0.461
13:00 - 14:00	32	105	0.242	32	105	0.233	32	105	0.475
14:00 - 15:00	32	105	0.283	32	105	0.273	32	105	0.556
15:00 - 16:00	32	105	0.443	32	105	0.244	32	105	0.687
16:00 - 17:00	32	105	0.461	32	105	0.274	32	105	0.735
17:00 - 18:00	32	105	0.597	32	105	0.258	32	105	0.855
18:00 - 19:00	32	105	0.457	32	105	0.294	32	105	0.751
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			3.537			3.608			7.145

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

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

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

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	32	105	0.017	32	105	0.033	32	105	0.050
08:00 - 09:00	32	105	0.038	32	105	0.131	32	105	0.169
09:00 - 10:00	32	105	0.039	32	105	0.035	32	105	0.074
10:00 - 11:00	32	105	0.028	32	105	0.035	32	105	0.063
11:00 - 12:00	32	105	0.026	32	105	0.023	32	105	0.049
12:00 - 13:00	32	105	0.028	32	105	0.023	32	105	0.051
13:00 - 14:00	32	105	0.031	32	105	0.029	32	105	0.060
14:00 - 15:00	32	105	0.040	32	105	0.034	32	105	0.074
15:00 - 16:00	32	105	0.108	32	105	0.044	32	105	0.152
16:00 - 17:00	32	105	0.057	32	105	0.029	32	105	0.086
17:00 - 18:00	32	105	0.039	32	105	0.040	32	105	0.079
18:00 - 19:00	32	105	0.047	32	105	0.049	32	105	0.096
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.498			0.505			1.003

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

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

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

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	32	105	0.002	32	105	0.015	32	105	0.017
08:00 - 09:00	32	105	0.000	32	105	0.021	32	105	0.021
09:00 - 10:00	32	105	0.002	32	105	0.009	32	105	0.011
10:00 - 11:00	32	105	0.004	32	105	0.004	32	105	0.008
11:00 - 12:00	32	105	0.003	32	105	0.004	32	105	0.007
12:00 - 13:00	32	105	0.003	32	105	0.004	32	105	0.007
13:00 - 14:00	32	105	0.002	32	105	0.002	32	105	0.004
14:00 - 15:00	32	105	0.004	32	105	0.004	32	105	0.008
15:00 - 16:00	32	105	0.018	32	105	0.007	32	105	0.025
16:00 - 17:00	32	105	0.010	32	105	0.002	32	105	0.012
17:00 - 18:00	32	105	0.007	32	105	0.003	32	105	0.010
18:00 - 19:00	32	105	0.017	32	105	0.004	32	105	0.021
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.072			0.079			0.151

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

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

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

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	32	105	0.000	32	105	0.007	32	105	0.007
08:00 - 09:00	32	105	0.000	32	105	0.010	32	105	0.010
09:00 - 10:00	32	105	0.000	32	105	0.002	32	105	0.002
10:00 - 11:00	32	105	0.000	32	105	0.000	32	105	0.000
11:00 - 12:00	32	105	0.000	32	105	0.000	32	105	0.000
12:00 - 13:00	32	105	0.001	32	105	0.000	32	105	0.001
13:00 - 14:00	32	105	0.000	32	105	0.000	32	105	0.000
14:00 - 15:00	32	105	0.001	32	105	0.000	32	105	0.001
15:00 - 16:00	32	105	0.003	32	105	0.001	32	105	0.004
16:00 - 17:00	32	105	0.004	32	105	0.000	32	105	0.004
17:00 - 18:00	32	105	0.006	32	105	0.000	32	105	0.006
18:00 - 19:00	32	105	0.008	32	105	0.001	32	105	0.009
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.023			0.021			0.044

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

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

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

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	32	105	0.000	32	105	0.000	32	105	0.000
08:00 - 09:00	32	105	0.000	32	105	0.004	32	105	0.004
09:00 - 10:00	32	105	0.000	32	105	0.000	32	105	0.000
10:00 - 11:00	32	105	0.000	32	105	0.000	32	105	0.000
11:00 - 12:00	32	105	0.000	32	105	0.000	32	105	0.000
12:00 - 13:00	32	105	0.000	32	105	0.000	32	105	0.000
13:00 - 14:00	32	105	0.000	32	105	0.000	32	105	0.000
14:00 - 15:00	32	105	0.001	32	105	0.000	32	105	0.001
15:00 - 16:00	32	105	0.003	32	105	0.001	32	105	0.004
16:00 - 17:00	32	105	0.000	32	105	0.000	32	105	0.000
17:00 - 18:00	32	105	0.001	32	105	0.001	32	105	0.002
18:00 - 19:00	32	105	0.000	32	105	0.000	32	105	0.000
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.005			0.006			0.011

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

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

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

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	32	105	0.002	32	105	0.023	32	105	0.025
08:00 - 09:00	32	105	0.000	32	105	0.034	32	105	0.034
09:00 - 10:00	32	105	0.002	32	105	0.011	32	105	0.013
10:00 - 11:00	32	105	0.004	32	105	0.004	32	105	0.008
11:00 - 12:00	32	105	0.003	32	105	0.004	32	105	0.007
12:00 - 13:00	32	105	0.003	32	105	0.004	32	105	0.007
13:00 - 14:00	32	105	0.003	32	105	0.002	32	105	0.005
14:00 - 15:00	32	105	0.007	32	105	0.004	32	105	0.011
15:00 - 16:00	32	105	0.024	32	105	0.008	32	105	0.032
16:00 - 17:00	32	105	0.015	32	105	0.002	32	105	0.017
17:00 - 18:00	32	105	0.015	32	105	0.005	32	105	0.020
18:00 - 19:00	32	105	0.026	32	105	0.006	32	105	0.032
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.104			0.107			0.211

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

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

TRIP RATE for Land Use 03 - RESIDENTIAL/A - HOUSES PRIVATELY OWNED
MULTI-MODAL TOTAL PEOPLE
Calculation factor: 1 DWELLS
BOLD print indicates peak (busiest) period
Total People to Total Vehicles ratio (all time periods and directions): 1.67

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	32	105	0.109	32	105	0.461	32	105	0.570
08:00 - 09:00	32	105	0.238	32	105	0.890	32	105	1.128
09:00 - 10:00	32	105	0.237	32	105	0.308	32	105	0.545
10:00 - 11:00	32	105	0.202	32	105	0.259	32	105	0.461
11:00 - 12:00	32	105	0.201	32	105	0.252	32	105	0.453
12:00 - 13:00	32	105	0.272	32	105	0.254	32	105	0.526
13:00 - 14:00	32	105	0.278	32	105	0.265	32	105	0.543
14:00 - 15:00	32	105	0.331	32	105	0.312	32	105	0.643
15:00 - 16:00	32	105	0.583	32	105	0.299	32	105	0.882
16:00 - 17:00	32	105	0.541	32	105	0.310	32	105	0.851
17:00 - 18:00	32	105	0.659	32	105	0.310	32	105	0.969
18:00 - 19:00	32	105	0.538	32	105	0.353	32	105	0.891
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			4.189			4.273			8.462

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

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

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

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	32	105	0.057	32	105	0.260	32	105	0.317
08:00 - 09:00	32	105	0.131	32	105	0.401	32	105	0.532
09:00 - 10:00	32	105	0.126	32	105	0.166	32	105	0.292
10:00 - 11:00	32	105	0.105	32	105	0.134	32	105	0.239
11:00 - 12:00	32	105	0.111	32	105	0.142	32	105	0.253
12:00 - 13:00	32	105	0.159	32	105	0.147	32	105	0.306
13:00 - 14:00	32	105	0.152	32	105	0.155	32	105	0.307
14:00 - 15:00	32	105	0.176	32	105	0.187	32	105	0.363
15:00 - 16:00	32	105	0.242	32	105	0.156	32	105	0.398
16:00 - 17:00	32	105	0.269	32	105	0.161	32	105	0.430
17:00 - 18:00	32	105	0.378	32	105	0.167	32	105	0.545
18:00 - 19:00	32	105	0.297	32	105	0.183	32	105	0.480
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			2.203			2.259			4.462

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

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

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

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	32	105	0.012	32	105	0.021	32	105	0.033
08:00 - 09:00	32	105	0.018	32	105	0.020	32	105	0.038
09:00 - 10:00	32	105	0.023	32	105	0.019	32	105	0.042
10:00 - 11:00	32	105	0.024	32	105	0.024	32	105	0.048
11:00 - 12:00	32	105	0.018	32	105	0.023	32	105	0.041
12:00 - 13:00	32	105	0.021	32	105	0.020	32	105	0.041
13:00 - 14:00	32	105	0.024	32	105	0.022	32	105	0.046
14:00 - 15:00	32	105	0.024	32	105	0.023	32	105	0.047
15:00 - 16:00	32	105	0.019	32	105	0.022	32	105	0.041
16:00 - 17:00	32	105	0.026	32	105	0.023	32	105	0.049
17:00 - 18:00	32	105	0.021	32	105	0.013	32	105	0.034
18:00 - 19:00	32	105	0.012	32	105	0.013	32	105	0.025
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.242			0.243			0.485

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

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

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

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	32	105	0.000	32	105	0.001	32	105	0.001
08:00 - 09:00	32	105	0.000	32	105	0.002	32	105	0.002
09:00 - 10:00	32	105	0.001	32	105	0.001	32	105	0.002
10:00 - 11:00	32	105	0.000	32	105	0.000	32	105	0.000
11:00 - 12:00	32	105	0.000	32	105	0.001	32	105	0.001
12:00 - 13:00	32	105	0.000	32	105	0.000	32	105	0.000
13:00 - 14:00	32	105	0.000	32	105	0.001	32	105	0.001
14:00 - 15:00	32	105	0.001	32	105	0.002	32	105	0.003
15:00 - 16:00	32	105	0.001	32	105	0.000	32	105	0.001
16:00 - 17:00	32	105	0.002	32	105	0.001	32	105	0.003
17:00 - 18:00	32	105	0.001	32	105	0.000	32	105	0.001
18:00 - 19:00	32	105	0.002	32	105	0.001	32	105	0.003
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.008			0.010			0.018

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.*

Filtering Summary

Land Use	02/A	EMPLOYMENT/OFFICE
Selected Trip Rate Calculation Parameter Range	178-120000 sqm GFA	
Actual Trip Rate Calculation Parameter Range	186-6186 sqm GFA	
Date Range	Minimum: 01/01/14	Maximum: 11/11/19
Parking Spaces Range	All Surveys Included	
Days of the week selected	Tuesday	2
	Wednesday	1
Main Location Types selected	Suburban Area (PPS6 Out of Centre)	1
	Edge of Town	2
Population within 500m	All Surveys Included	
Population <1 Mile ranges selected	1,001 to 5,000	1
	5,001 to 10,000	1
	25,001 to 50,000	1
Population <5 Mile ranges selected	50,001 to 75,000	1
	75,001 to 100,000	1
	125,001 to 250,000	1
Car Ownership <5 Mile ranges selected	0.6 to 1.0	3
PTAL Rating	No PTAL Present	3
Filter by Site Operations Breakdown	All Surveys Included	

Calculation Reference: AUDIT-332901-220519-0539

TRIP RATE CALCULATION SELECTION PARAMETERS:

Land Use : 02 - EMPLOYMENT
Category : A - OFFICE
MULTI-MODAL TOTAL VEHICLES

Selected regions and areas:

02	SOUTH EAST		
	ES	EAST SUSSEX	1 days
07	YORKSHIRE & NORTH LINCOLNSHIRE		
	WY	WEST YORKSHIRE	1 days
10	WALES		
	CO	CONWY	1 days

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

Primary Filtering selection:

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

Parameter: Gross floor area
Actual Range: 186 to 6186 (units: sqm)
Range Selected by User: 178 to 120000 (units: sqm)

Parking Spaces Range: All Surveys Included

Public Transport Provision:
Selection by: Include all surveys

Date Range: 01/01/14 to 11/11/19

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	2 days
Wednesday	1 days

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

Selected survey types:

Manual count	3 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)	1
Edge of Town	2

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

Selected Location Sub Categories:

Commercial Zone	1
Residential Zone	1
No Sub Category	1

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

Secondary Filtering selection:

Use Class:

Not Known	3 days

This data displays the number of surveys per Use Class classification within the selected set. The Use Classes Order 2005 has been used for this purpose, which can be found within the Library module of TRICS®.

Filter by Site Operations Breakdown:

All Surveys Included

Population within 500m Range:

All Surveys Included

Population within 1 mile:

1,001 to 5,000	1 days
5,001 to 10,000	1 days
25,001 to 50,000	1 days

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

Population within 5 miles:

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

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	1 days
No	2 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	3 days

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

LIST OF SITES relevant to selection parameters

Site(1):	CO-02-A-01	Gross floor area:	6186 sqm
Development Name:	GOVERNMENT OFFICES		
Location:	LLANDUDNO JUNCTION		
Postcode:	LL31 9RZ	No of Employees:	500
Main Location Type:	Edge of Town	Survey Date:	28/03/18
Sub-Location Type:	Commercial Zone	Survey Day:	Wednesday
PTAL:	n/a	Parking Spaces:	320
Site(2):	ES-02-A-11	Gross floor area:	186 sqm
Development Name:	HOUSING COMPANY		
Location:	HASTINGS		
Postcode:	TN34 3FD	No of Employees:	16
Main Location Type:	Suburban Area (PPS6 Out of Centre)	Survey Date:	17/11/15
Sub-Location Type:	Residential Zone	Survey Day:	Tuesday
PTAL:	n/a	Parking Spaces:	6
Site(3):	WY-02-A-05	Gross floor area:	1230 sqm
Development Name:	OFFICES		
Location:	CASTLEFORD		
Postcode:	WF10 5TG	No of Employees:	115
Main Location Type:	Edge of Town	Survey Date:	23/05/17
Sub-Location Type:	No Sub Category	Survey Day:	Tuesday
PTAL:	n/a	Parking Spaces:	47

TRIP RATE for Land Use 02 - EMPLOYMENT/A - OFFICE
MULTI-MODAL TOTAL VEHICLES
Calculation factor: 100 sqm
BOLD print indicates peak (busiest) period
Total People to Total Vehicles ratio (all time periods and directions): 2.55

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	3	2534	0.355	3	2534	0.013	3	2534	0.368
08:00 - 09:00	3	2534	2.157	3	2534	0.092	3	2534	2.249
09:00 - 10:00	3	2534	1.118	3	2534	0.132	3	2534	1.250
10:00 - 11:00	3	2534	0.618	3	2534	0.132	3	2534	0.750
11:00 - 12:00	3	2534	0.342	3	2534	0.224	3	2534	0.566
12:00 - 13:00	3	2534	0.487	3	2534	0.605	3	2534	1.092
13:00 - 14:00	3	2534	0.645	3	2534	0.408	3	2534	1.053
14:00 - 15:00	3	2534	0.250	3	2534	0.355	3	2534	0.605
15:00 - 16:00	3	2534	0.276	3	2534	0.447	3	2534	0.723
16:00 - 17:00	3	2534	0.355	3	2534	1.197	3	2534	1.552
17:00 - 18:00	3	2534	0.118	3	2534	1.947	3	2534	2.065
18:00 - 19:00	2	3186	0.047	2	3186	1.303	2	3186	1.350
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			6.768			6.855			13.623

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:	186 - 6186 (units: sqm)
Survey date date range:	01/01/14 - 11/11/19
Number of weekdays (Monday-Friday):	3
Number of Saturdays:	0
Number of Sundays:	0
Surveys automatically removed from selection:	0
Surveys manually removed from selection:	0

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

TRIP RATE for Land Use 02 - EMPLOYMENT/A - OFFICE
MULTI-MODAL TAXIS
Calculation factor: 100 sqm
BOLD print indicates peak (busiest) period

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	3	2534	0.000	3	2534	0.000	3	2534	0.000
08:00 - 09:00	3	2534	0.026	3	2534	0.013	3	2534	0.039
09:00 - 10:00	3	2534	0.026	3	2534	0.026	3	2534	0.052
10:00 - 11:00	3	2534	0.013	3	2534	0.026	3	2534	0.039
11:00 - 12:00	3	2534	0.026	3	2534	0.026	3	2534	0.052
12:00 - 13:00	3	2534	0.013	3	2534	0.013	3	2534	0.026
13:00 - 14:00	3	2534	0.013	3	2534	0.013	3	2534	0.026
14:00 - 15:00	3	2534	0.026	3	2534	0.026	3	2534	0.052
15:00 - 16:00	3	2534	0.000	3	2534	0.000	3	2534	0.000
16:00 - 17:00	3	2534	0.039	3	2534	0.026	3	2534	0.065
17:00 - 18:00	3	2534	0.039	3	2534	0.053	3	2534	0.092
18:00 - 19:00	2	3186	0.031	2	3186	0.031	2	3186	0.062
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.252			0.253			0.505

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

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

TRIP RATE for Land Use 02 - EMPLOYMENT/A - OFFICE
MULTI-MODAL OGVS
Calculation factor: 100 sqm
BOLD print indicates peak (busiest) period

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	3	2534	0.000	3	2534	0.000	3	2534	0.000
08:00 - 09:00	3	2534	0.000	3	2534	0.000	3	2534	0.000
09:00 - 10:00	3	2534	0.013	3	2534	0.000	3	2534	0.013
10:00 - 11:00	3	2534	0.000	3	2534	0.000	3	2534	0.000
11:00 - 12:00	3	2534	0.013	3	2534	0.013	3	2534	0.026
12:00 - 13:00	3	2534	0.000	3	2534	0.000	3	2534	0.000
13:00 - 14:00	3	2534	0.000	3	2534	0.013	3	2534	0.013
14:00 - 15:00	3	2534	0.000	3	2534	0.000	3	2534	0.000
15:00 - 16:00	3	2534	0.013	3	2534	0.000	3	2534	0.013
16:00 - 17:00	3	2534	0.000	3	2534	0.000	3	2534	0.000
17:00 - 18:00	3	2534	0.000	3	2534	0.013	3	2534	0.013
18:00 - 19:00	2	3186	0.000	2	3186	0.000	2	3186	0.000
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.039			0.039			0.078

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

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

TRIP RATE for Land Use 02 - EMPLOYMENT/A - OFFICE
MULTI-MODAL CYCLISTS
Calculation factor: 100 sqm
BOLD print indicates peak (busiest) period

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	3	2534	0.013	3	2534	0.000	3	2534	0.013
08:00 - 09:00	3	2534	0.237	3	2534	0.000	3	2534	0.237
09:00 - 10:00	3	2534	0.079	3	2534	0.000	3	2534	0.079
10:00 - 11:00	3	2534	0.039	3	2534	0.013	3	2534	0.052
11:00 - 12:00	3	2534	0.013	3	2534	0.000	3	2534	0.013
12:00 - 13:00	3	2534	0.000	3	2534	0.026	3	2534	0.026
13:00 - 14:00	3	2534	0.000	3	2534	0.000	3	2534	0.000
14:00 - 15:00	3	2534	0.026	3	2534	0.066	3	2534	0.092
15:00 - 16:00	3	2534	0.026	3	2534	0.026	3	2534	0.052
16:00 - 17:00	3	2534	0.026	3	2534	0.118	3	2534	0.144
17:00 - 18:00	3	2534	0.000	3	2534	0.158	3	2534	0.158
18:00 - 19:00	2	3186	0.016	2	3186	0.078	2	3186	0.094
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.475			0.485			0.960

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

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

TRIP RATE for Land Use 02 - EMPLOYMENT/A - OFFICE
MULTI-MODAL VEHICLE OCCUPANTS
Calculation factor: 100 sqm
BOLD print indicates peak (busiest) period

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	3	2534	0.381	3	2534	0.013	3	2534	0.394
08:00 - 09:00	3	2534	2.460	3	2534	0.092	3	2534	2.552
09:00 - 10:00	3	2534	1.342	3	2534	0.132	3	2534	1.474
10:00 - 11:00	3	2534	0.710	3	2534	0.171	3	2534	0.881
11:00 - 12:00	3	2534	0.487	3	2534	0.263	3	2534	0.750
12:00 - 13:00	3	2534	0.579	3	2534	0.802	3	2534	1.381
13:00 - 14:00	3	2534	0.816	3	2534	0.526	3	2534	1.342
14:00 - 15:00	3	2534	0.303	3	2534	0.421	3	2534	0.724
15:00 - 16:00	3	2534	0.316	3	2534	0.487	3	2534	0.803
16:00 - 17:00	3	2534	0.474	3	2534	1.394	3	2534	1.868
17:00 - 18:00	3	2534	0.118	3	2534	2.407	3	2534	2.525
18:00 - 19:00	2	3186	0.063	2	3186	1.507	2	3186	1.570
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			8.049			8.215			16.264

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

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

TRIP RATE for Land Use 02 - EMPLOYMENT/A - OFFICE
MULTI-MODAL PEDESTRIANS
Calculation factor: 100 sqm
BOLD print indicates peak (busiest) period

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	3	2534	0.171	3	2534	0.000	3	2534	0.171
08:00 - 09:00	3	2534	0.921	3	2534	0.000	3	2534	0.921
09:00 - 10:00	3	2534	0.684	3	2534	0.132	3	2534	0.816
10:00 - 11:00	3	2534	0.421	3	2534	0.079	3	2534	0.500
11:00 - 12:00	3	2534	0.224	3	2534	0.105	3	2534	0.329
12:00 - 13:00	3	2534	0.158	3	2534	0.829	3	2534	0.987
13:00 - 14:00	3	2534	0.487	3	2534	0.316	3	2534	0.803
14:00 - 15:00	3	2534	0.132	3	2534	0.132	3	2534	0.264
15:00 - 16:00	3	2534	0.079	3	2534	0.132	3	2534	0.211
16:00 - 17:00	3	2534	0.079	3	2534	0.250	3	2534	0.329
17:00 - 18:00	3	2534	0.039	3	2534	1.105	3	2534	1.144
18:00 - 19:00	2	3186	0.016	2	3186	0.361	2	3186	0.377
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			3.411			3.441			6.852

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

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

TRIP RATE for Land Use 02 - EMPLOYMENT/A - OFFICE
MULTI-MODAL BUS/TRAM PASSENGERS
Calculation factor: 100 sqm
BOLD print indicates peak (busiest) period

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	3	2534	0.197	3	2534	0.000	3	2534	0.197
08:00 - 09:00	3	2534	1.631	3	2534	0.000	3	2534	1.631
09:00 - 10:00	3	2534	1.158	3	2534	0.066	3	2534	1.224
10:00 - 11:00	3	2534	0.460	3	2534	0.118	3	2534	0.578
11:00 - 12:00	3	2534	0.197	3	2534	0.105	3	2534	0.302
12:00 - 13:00	3	2534	0.105	3	2534	0.539	3	2534	0.644
13:00 - 14:00	3	2534	0.460	3	2534	0.210	3	2534	0.670
14:00 - 15:00	3	2534	0.026	3	2534	0.066	3	2534	0.092
15:00 - 16:00	3	2534	0.039	3	2534	0.132	3	2534	0.171
16:00 - 17:00	3	2534	0.039	3	2534	0.381	3	2534	0.420
17:00 - 18:00	3	2534	0.000	3	2534	1.013	3	2534	1.013
18:00 - 19:00	2	3186	0.016	2	3186	0.298	2	3186	0.314
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			4.328			2.928			7.256

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

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

TRIP RATE for Land Use 02 - EMPLOYMENT/A - OFFICE
MULTI-MODAL TOTAL RAIL PASSENGERS
Calculation factor: 100 sqm
BOLD print indicates peak (busiest) period

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	3	2534	0.132	3	2534	0.000	3	2534	0.132
08:00 - 09:00	3	2534	0.802	3	2534	0.000	3	2534	0.802
09:00 - 10:00	3	2534	0.474	3	2534	0.000	3	2534	0.474
10:00 - 11:00	3	2534	0.171	3	2534	0.013	3	2534	0.184
11:00 - 12:00	3	2534	0.013	3	2534	0.013	3	2534	0.026
12:00 - 13:00	3	2534	0.000	3	2534	0.132	3	2534	0.132
13:00 - 14:00	3	2534	0.026	3	2534	0.079	3	2534	0.105
14:00 - 15:00	3	2534	0.000	3	2534	0.026	3	2534	0.026
15:00 - 16:00	3	2534	0.000	3	2534	0.092	3	2534	0.092
16:00 - 17:00	3	2534	0.000	3	2534	0.342	3	2534	0.342
17:00 - 18:00	3	2534	0.000	3	2534	0.710	3	2534	0.710
18:00 - 19:00	2	3186	0.000	2	3186	0.188	2	3186	0.188
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			1.618			1.595			3.213

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

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

TRIP RATE for Land Use 02 - EMPLOYMENT/A - OFFICE
MULTI-MODAL PUBLIC TRANSPORT USERS
Calculation factor: 100 sqm
BOLD print indicates peak (busiest) period

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	3	2534	0.329	3	2534	0.000	3	2534	0.329
08:00 - 09:00	3	2534	2.434	3	2534	0.000	3	2534	2.434
09:00 - 10:00	3	2534	1.631	3	2534	0.066	3	2534	1.697
10:00 - 11:00	3	2534	0.631	3	2534	0.132	3	2534	0.763
11:00 - 12:00	3	2534	0.210	3	2534	0.118	3	2534	0.328
12:00 - 13:00	3	2534	0.105	3	2534	0.671	3	2534	0.776
13:00 - 14:00	3	2534	0.487	3	2534	0.289	3	2534	0.776
14:00 - 15:00	3	2534	0.026	3	2534	0.092	3	2534	0.118
15:00 - 16:00	3	2534	0.039	3	2534	0.224	3	2534	0.263
16:00 - 17:00	3	2534	0.039	3	2534	0.723	3	2534	0.762
17:00 - 18:00	3	2534	0.000	3	2534	1.723	3	2534	1.723
18:00 - 19:00	2	3186	0.016	2	3186	0.487	2	3186	0.503
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			5.947			4.525			10.472

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

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

TRIP RATE for Land Use 02 - EMPLOYMENT/A - OFFICE
MULTI-MODAL TOTAL PEOPLE
Calculation factor: 100 sqm
BOLD print indicates peak (busiest) period
Total People to Total Vehicles ratio (all time periods and directions): 2.55

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	3	2534	0.895	3	2534	0.013	3	2534	0.908
08:00 - 09:00	3	2534	6.051	3	2534	0.092	3	2534	6.143
09:00 - 10:00	3	2534	3.736	3	2534	0.329	3	2534	4.065
10:00 - 11:00	3	2534	1.802	3	2534	0.395	3	2534	2.197
11:00 - 12:00	3	2534	0.934	3	2534	0.487	3	2534	1.421
12:00 - 13:00	3	2534	0.842	3	2534	2.328	3	2534	3.170
13:00 - 14:00	3	2534	1.789	3	2534	1.131	3	2534	2.920
14:00 - 15:00	3	2534	0.487	3	2534	0.710	3	2534	1.197
15:00 - 16:00	3	2534	0.460	3	2534	0.868	3	2534	1.328
16:00 - 17:00	3	2534	0.618	3	2534	2.486	3	2534	3.104
17:00 - 18:00	3	2534	0.158	3	2534	5.393	3	2534	5.551
18:00 - 19:00	2	3186	0.110	2	3186	2.433	2	3186	2.543
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			17.882			16.665			34.547

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

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

TRIP RATE for Land Use 02 - EMPLOYMENT/A - OFFICE
MULTI-MODAL CARS
Calculation factor: 100 sqm
BOLD print indicates peak (busiest) period

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	3	2534	0.342	3	2534	0.013	3	2534	0.355
08:00 - 09:00	3	2534	2.013	3	2534	0.066	3	2534	2.079
09:00 - 10:00	3	2534	0.960	3	2534	0.092	3	2534	1.052
10:00 - 11:00	3	2534	0.513	3	2534	0.105	3	2534	0.618
11:00 - 12:00	3	2534	0.237	3	2534	0.171	3	2534	0.408
12:00 - 13:00	3	2534	0.434	3	2534	0.500	3	2534	0.934
13:00 - 14:00	3	2534	0.566	3	2534	0.342	3	2534	0.908
14:00 - 15:00	3	2534	0.197	3	2534	0.303	3	2534	0.500
15:00 - 16:00	3	2534	0.210	3	2534	0.381	3	2534	0.591
16:00 - 17:00	3	2534	0.250	3	2534	1.105	3	2534	1.355
17:00 - 18:00	3	2534	0.053	3	2534	1.657	3	2534	1.710
18:00 - 19:00	2	3186	0.016	2	3186	1.161	2	3186	1.177
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			5.791			5.896			11.687

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

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

TRIP RATE for Land Use 02 - EMPLOYMENT/A - OFFICE
MULTI-MODAL LGVS
Calculation factor: 100 sqm
BOLD print indicates peak (busiest) period

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	3	2534	0.000	3	2534	0.000	3	2534	0.000
08:00 - 09:00	3	2534	0.079	3	2534	0.013	3	2534	0.092
09:00 - 10:00	3	2534	0.105	3	2534	0.013	3	2534	0.118
10:00 - 11:00	3	2534	0.066	3	2534	0.000	3	2534	0.066
11:00 - 12:00	3	2534	0.039	3	2534	0.013	3	2534	0.052
12:00 - 13:00	3	2534	0.039	3	2534	0.079	3	2534	0.118
13:00 - 14:00	3	2534	0.053	3	2534	0.026	3	2534	0.079
14:00 - 15:00	3	2534	0.026	3	2534	0.026	3	2534	0.052
15:00 - 16:00	3	2534	0.039	3	2534	0.066	3	2534	0.105
16:00 - 17:00	3	2534	0.039	3	2534	0.053	3	2534	0.092
17:00 - 18:00	3	2534	0.000	3	2534	0.092	3	2534	0.092
18:00 - 19:00	2	3186	0.000	2	3186	0.078	2	3186	0.078
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.485			0.459			0.944

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

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

TRIP RATE for Land Use 02 - EMPLOYMENT/A - OFFICE
MULTI-MODAL MOTOR CYCLES
Calculation factor: 100 sqm
BOLD print indicates peak (busiest) period

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	3	2534	0.013	3	2534	0.000	3	2534	0.013
08:00 - 09:00	3	2534	0.039	3	2534	0.000	3	2534	0.039
09:00 - 10:00	3	2534	0.013	3	2534	0.000	3	2534	0.013
10:00 - 11:00	3	2534	0.026	3	2534	0.000	3	2534	0.026
11:00 - 12:00	3	2534	0.026	3	2534	0.000	3	2534	0.026
12:00 - 13:00	3	2534	0.000	3	2534	0.013	3	2534	0.013
13:00 - 14:00	3	2534	0.013	3	2534	0.013	3	2534	0.026
14:00 - 15:00	3	2534	0.000	3	2534	0.000	3	2534	0.000
15:00 - 16:00	3	2534	0.013	3	2534	0.000	3	2534	0.013
16:00 - 17:00	3	2534	0.026	3	2534	0.013	3	2534	0.039
17:00 - 18:00	3	2534	0.026	3	2534	0.132	3	2534	0.158
18:00 - 19:00	2	3186	0.000	2	3186	0.031	2	3186	0.031
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.195			0.202			0.397

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

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

TRIP RATE for Land Use 02 - EMPLOYMENT/A - OFFICE
MULTI-MODAL Bus Passengers
Calculation factor: 100 sqm
BOLD print indicates peak (busiest) period

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	3	2534	0.026	3	2534	0.000	3	2534	0.026
08:00 - 09:00	3	2534	0.079	3	2534	0.000	3	2534	0.079
09:00 - 10:00	3	2534	0.013	3	2534	0.000	3	2534	0.013
10:00 - 11:00	3	2534	0.000	3	2534	0.000	3	2534	0.000
11:00 - 12:00	3	2534	0.000	3	2534	0.000	3	2534	0.000
12:00 - 13:00	3	2534	0.013	3	2534	0.000	3	2534	0.013
13:00 - 14:00	3	2534	0.026	3	2534	0.000	3	2534	0.026
14:00 - 15:00	3	2534	0.000	3	2534	0.026	3	2534	0.026
15:00 - 16:00	3	2534	0.000	3	2534	0.053	3	2534	0.053
16:00 - 17:00	3	2534	0.000	3	2534	0.079	3	2534	0.079
17:00 - 18:00	3	2534	0.000	3	2534	0.000	3	2534	0.000
18:00 - 19:00	2	3186	0.000	2	3186	0.000	2	3186	0.000
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.157			0.158			0.315

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.*

Filtering Summary

Land Use	01/O	RETAIL/CONVENIENCE STORE
Selected Trip Rate Calculation Parameter Range	70-1500 sqm GFA	
Actual Trip Rate Calculation Parameter Range	257-795 sqm GFA	
Date Range	Minimum: 01/01/14	Maximum: 25/09/19
Parking Spaces Range	All Surveys Included	
Days of the week selected	Monday	2
	Wednesday	1
	Thursday	3
	Friday	3
Main Location Types selected	Suburban Area (PPS6 Out of Centre)	5
	Neighbourhood Centre (PPS6 Local Centre)	4
Population within 500m	All Surveys Included	
Population <1 Mile ranges selected	5,001 to 10,000	1
	10,001 to 15,000	2
	25,001 to 50,000	5
	50,001 to 100,000	1
Population <5 Mile ranges selected	5,001 to 25,000	1
	25,001 to 50,000	1
	125,001 to 250,000	2
	250,001 to 500,000	1
	500,001 or More	4
Car Ownership <5 Mile ranges selected	0.6 to 1.0	8
	1.1 to 1.5	1
PTAL Rating	No PTAL Present	5
	1b Very poor	1
	3 Moderate	2
	5 Very Good	1

Calculation Reference: AUDIT-332901-220519-0526

TRIP RATE CALCULATION SELECTION PARAMETERS:

Land Use : 01 - RETAIL
Category : O - CONVENIENCE STORE
MULTI-MODAL TOTAL VEHICLES

Selected regions and areas:

01	GREATER LONDON		
	BT	BRENT	1 days
	EN	ENFIELD	2 days
	KI	KINGSTON	1 days
03	SOUTH WEST		
	WL	WILTSHIRE	1 days
07	YORKSHIRE & NORTH LINCOLNSHIRE		
	NY	NORTH YORKSHIRE	1 days
	WY	WEST YORKSHIRE	1 days
09	NORTH		
	TW	TYNE & WEAR	1 days
10	WALES		
	CF	CARDIFF	1 days

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

Primary Filtering selection:

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

Parameter: Gross floor area
Actual Range: 257 to 795 (units: sqm)
Range Selected by User: 70 to 1500 (units: sqm)

Parking Spaces Range: All Surveys Included

Public Transport Provision:
Selection by: Include all surveys

Date Range: 01/01/14 to 25/09/19

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

Selected survey days:

Monday	2 days
Wednesday	1 days
Thursday	3 days
Friday	3 days

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

Selected survey types:

Manual count	9 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)	5
Neighbourhood Centre (PPS6 Local 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:

Development Zone	1
Residential Zone	7
High Street	1

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

Secondary Filtering selection:

Use Class:

Not Known	1 days
E(a)	8 days

This data displays the number of surveys per Use Class classification within the selected set. The Use Classes Order 2005 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:

5,001 to 10,000	1 days
10,001 to 15,000	2 days
25,001 to 50,000	5 days
50,001 to 100,000	1 days

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

Population within 5 miles:

5,001 to 25,000	1 days
25,001 to 50,000	1 days
125,001 to 250,000	2 days
250,001 to 500,000	1 days
500,001 or More	4 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	8 days
1.1 to 1.5	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.

Petrol filling station:

Included in the survey count	0 days
Excluded from count or no filling station	9 days

This data displays the number of surveys within the selected set that include petrol filling station activity, and the number of surveys that do not.

Travel Plan:

Yes	1 days
No	8 days

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

PTAL Rating:

No PTAL Present	5 days
1b Very poor	1 days
3 Moderate	2 days
5 Very Good	1 days

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

LIST OF SITES relevant to selection parameters

Site(1):	BT-01-O-01	Gross floor area:	310 sqm
Development Name:	TESCO EXPRESS	Retail floor area:	230 sqm
Location:	WEMBLEY		
Postcode:	HA9 0EQ	No of Employees:	18
Main Location Type:	Suburban Area (PPS6 Out of Centre)	Survey Date:	14/05/15
Sub-Location Type:	Development Zone	Survey Day:	Thursday
PTAL:	5 Very Good	Parking Spaces:	
Site(2):	CF-01-O-02	Gross floor area:	350 sqm
Development Name:	CO-OPERATIVE	Retail floor area:	300 sqm
Location:	CARDIFF		
Postcode:	CF14 6HF	No of Employees:	14
Main Location Type:	Neighbourhood Centre (PPS6 Local Centre)	Survey Date:	07/10/16
Sub-Location Type:	Residential Zone	Survey Day:	Friday
PTAL:	n/a	Parking Spaces:	
Site(3):	EN-01-O-01	Gross floor area:	375 sqm
Development Name:	CO-OPERATIVE	Retail floor area:	200 sqm
Location:	ENFIELD		
Postcode:	EN2 0JW	No of Employees:	24
Main Location Type:	Neighbourhood Centre (PPS6 Local Centre)	Survey Date:	29/06/16
Sub-Location Type:	High Street	Survey Day:	Wednesday
PTAL:	3 Moderate	Parking Spaces:	
Site(4):	EN-01-O-02	Gross floor area:	795 sqm
Development Name:	LITTLE WAITROSE	Retail floor area:	522 sqm
Location:	ENFIELD		
Postcode:	EN2 7AW	No of Employees:	12
Main Location Type:	Neighbourhood Centre (PPS6 Local Centre)	Survey Date:	09/11/17
Sub-Location Type:	Residential Zone	Survey Day:	Thursday
PTAL:	3 Moderate	Parking Spaces:	44
Site(5):	KI-01-O-01	Gross floor area:	257 sqm
Development Name:	THE CO-OPERATIVE	Retail floor area:	210 sqm
Location:	KINGSTON UPON THAMES		
Postcode:	KT2 5JG	No of Employees:	10
Main Location Type:	Suburban Area (PPS6 Out of Centre)	Survey Date:	16/11/17
Sub-Location Type:	Residential Zone	Survey Day:	Thursday
PTAL:	1b Very poor	Parking Spaces:	
Site(6):	NY-01-O-03	Gross floor area:	305 sqm
Development Name:	CO-OPERATIVE	Retail floor area:	155 sqm
Location:	NORTHALLERTON		
Postcode:	DL6 1JZ	No of Employees:	14
Main Location Type:	Suburban Area (PPS6 Out of Centre)	Survey Date:	19/09/16
Sub-Location Type:	Residential Zone	Survey Day:	Monday
PTAL:	n/a	Parking Spaces:	
Site(7):	TW-01-O-02	Gross floor area:	330 sqm
Development Name:	CO-OPERATIVE	Retail floor area:	255 sqm
Location:	SUNDERLAND		
Postcode:	SR5 3BQ	No of Employees:	19
Main Location Type:	Suburban Area (PPS6 Out of Centre)	Survey Date:	07/04/17
Sub-Location Type:	Residential Zone	Survey Day:	Friday
PTAL:	n/a	Parking Spaces:	12
Site(8):	WL-01-O-01	Gross floor area:	292 sqm
Development Name:	ONE STOP	Retail floor area:	250 sqm
Location:	SWINDON		
Postcode:	SN2 1QR	No of Employees:	10
Main Location Type:	Suburban Area (PPS6 Out of Centre)	Survey Date:	23/09/16
Sub-Location Type:	Residential Zone	Survey Day:	Friday
PTAL:	n/a	Parking Spaces:	17
Site(9):	WY-01-O-02	Gross floor area:	539 sqm
Development Name:	CO-OPERATIVE	Retail floor area:	480 sqm
Location:	WETHERBY		
Postcode:	LS22 7QS	No of Employees:	14
Main Location Type:	Neighbourhood Centre (PPS6 Local Centre)	Survey Date:	26/09/16
Sub-Location Type:	Residential Zone	Survey Day:	Monday
PTAL:	n/a	Parking Spaces:	

TRIP RATE for Land Use 01 - RETAIL/O - CONVENIENCE STORE
MULTI-MODAL TOTAL VEHICLES
Calculation factor: 100 sqm
BOLD print indicates peak (busiest) period
Total People to Total Vehicles ratio (all time periods and directions): 4.95

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00	3	398	3.099	3	398	3.099	3	398	6.198
07:00 - 08:00	9	395	4.925	9	395	4.672	9	395	9.597
08:00 - 09:00	9	395	5.826	9	395	5.404	9	395	11.230
09:00 - 10:00	9	395	4.588	9	395	4.306	9	395	8.894
10:00 - 11:00	9	395	4.194	9	395	3.659	9	395	7.853
11:00 - 12:00	9	395	3.856	9	395	4.109	9	395	7.965
12:00 - 13:00	9	395	4.306	9	395	4.447	9	395	8.753
13:00 - 14:00	9	395	3.828	9	395	3.715	9	395	7.543
14:00 - 15:00	9	395	4.785	9	395	4.982	9	395	9.767
15:00 - 16:00	9	395	5.010	9	395	4.475	9	395	9.485
16:00 - 17:00	9	395	5.066	9	395	5.235	9	395	10.301
17:00 - 18:00	9	395	5.601	9	395	6.079	9	395	11.680
18:00 - 19:00	9	395	6.614	9	395	6.417	9	395	13.031
19:00 - 20:00	9	395	5.376	9	395	5.713	9	395	11.089
20:00 - 21:00	8	408	3.036	8	408	3.220	8	408	6.256
21:00 - 22:00	8	408	1.840	8	408	2.361	8	408	4.201
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			71.950			71.893			143.843

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:	257 - 795 (units: sqm)
Survey date date range:	01/01/14 - 25/09/19
Number of weekdays (Monday-Friday):	9
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 01 - RETAIL/O - CONVENIENCE STORE
MULTI-MODAL TAXIS
Calculation factor: 100 sqm
BOLD print indicates peak (busiest) period

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00	3	398	0.000	3	398	0.000	3	398	0.000
07:00 - 08:00	9	395	0.084	9	395	0.084	9	395	0.168
08:00 - 09:00	9	395	0.028	9	395	0.028	9	395	0.056
09:00 - 10:00	9	395	0.084	9	395	0.056	9	395	0.140
10:00 - 11:00	9	395	0.056	9	395	0.084	9	395	0.140
11:00 - 12:00	9	395	0.113	9	395	0.113	9	395	0.226
12:00 - 13:00	9	395	0.084	9	395	0.084	9	395	0.168
13:00 - 14:00	9	395	0.084	9	395	0.084	9	395	0.168
14:00 - 15:00	9	395	0.141	9	395	0.141	9	395	0.282
15:00 - 16:00	9	395	0.169	9	395	0.169	9	395	0.338
16:00 - 17:00	9	395	0.141	9	395	0.141	9	395	0.282
17:00 - 18:00	9	395	0.028	9	395	0.028	9	395	0.056
18:00 - 19:00	9	395	0.113	9	395	0.113	9	395	0.226
19:00 - 20:00	9	395	0.028	9	395	0.028	9	395	0.056
20:00 - 21:00	8	408	0.092	8	408	0.092	8	408	0.184
21:00 - 22:00	8	408	0.061	8	408	0.061	8	408	0.122
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			1.306			1.306			2.612

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 01 - RETAIL/O - CONVENIENCE STORE
MULTI-MODAL OGVS
Calculation factor: 100 sqm
BOLD print indicates peak (busiest) period

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00	3	398	0.084	3	398	0.084	3	398	0.168
07:00 - 08:00	9	395	0.197	9	395	0.169	9	395	0.366
08:00 - 09:00	9	395	0.225	9	395	0.197	9	395	0.422
09:00 - 10:00	9	395	0.084	9	395	0.141	9	395	0.225
10:00 - 11:00	9	395	0.056	9	395	0.028	9	395	0.084
11:00 - 12:00	9	395	0.056	9	395	0.028	9	395	0.084
12:00 - 13:00	9	395	0.028	9	395	0.084	9	395	0.112
13:00 - 14:00	9	395	0.000	9	395	0.000	9	395	0.000
14:00 - 15:00	9	395	0.000	9	395	0.000	9	395	0.000
15:00 - 16:00	9	395	0.056	9	395	0.028	9	395	0.084
16:00 - 17:00	9	395	0.028	9	395	0.028	9	395	0.056
17:00 - 18:00	9	395	0.000	9	395	0.000	9	395	0.000
18:00 - 19:00	9	395	0.000	9	395	0.028	9	395	0.028
19:00 - 20:00	9	395	0.000	9	395	0.000	9	395	0.000
20:00 - 21:00	8	408	0.000	8	408	0.000	8	408	0.000
21:00 - 22:00	8	408	0.000	8	408	0.000	8	408	0.000
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.814			0.815			1.629

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 01 - RETAIL/O - CONVENIENCE STORE
MULTI-MODAL PSVS
Calculation factor: 100 sqm
BOLD print indicates peak (busiest) period

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00	3	398	0.000	3	398	0.000	3	398	0.000
07:00 - 08:00	9	395	0.000	9	395	0.000	9	395	0.000
08:00 - 09:00	9	395	0.000	9	395	0.000	9	395	0.000
09:00 - 10:00	9	395	0.000	9	395	0.000	9	395	0.000
10:00 - 11:00	9	395	0.000	9	395	0.000	9	395	0.000
11:00 - 12:00	9	395	0.000	9	395	0.000	9	395	0.000
12:00 - 13:00	9	395	0.000	9	395	0.000	9	395	0.000
13:00 - 14:00	9	395	0.000	9	395	0.000	9	395	0.000
14:00 - 15:00	9	395	0.028	9	395	0.028	9	395	0.056
15:00 - 16:00	9	395	0.000	9	395	0.000	9	395	0.000
16:00 - 17:00	9	395	0.000	9	395	0.000	9	395	0.000
17:00 - 18:00	9	395	0.000	9	395	0.000	9	395	0.000
18:00 - 19:00	9	395	0.000	9	395	0.000	9	395	0.000
19:00 - 20:00	9	395	0.000	9	395	0.000	9	395	0.000
20:00 - 21:00	8	408	0.000	8	408	0.000	8	408	0.000
21:00 - 22:00	8	408	0.000	8	408	0.000	8	408	0.000
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.028			0.028			0.056

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 01 - RETAIL/O - CONVENIENCE STORE
MULTI-MODAL CYCLISTS
Calculation factor: 100 sqm
BOLD print indicates peak (busiest) period

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00	3	398	0.168	3	398	0.168	3	398	0.336
07:00 - 08:00	9	395	0.310	9	395	0.310	9	395	0.620
08:00 - 09:00	9	395	0.169	9	395	0.197	9	395	0.366
09:00 - 10:00	9	395	0.113	9	395	0.084	9	395	0.197
10:00 - 11:00	9	395	0.141	9	395	0.084	9	395	0.225
11:00 - 12:00	9	395	0.338	9	395	0.281	9	395	0.619
12:00 - 13:00	9	395	0.169	9	395	0.197	9	395	0.366
13:00 - 14:00	9	395	0.253	9	395	0.281	9	395	0.534
14:00 - 15:00	9	395	0.450	9	395	0.394	9	395	0.844
15:00 - 16:00	9	395	0.338	9	395	0.422	9	395	0.760
16:00 - 17:00	9	395	0.647	9	395	0.591	9	395	1.238
17:00 - 18:00	9	395	0.647	9	395	0.535	9	395	1.182
18:00 - 19:00	9	395	0.507	9	395	0.478	9	395	0.985
19:00 - 20:00	9	395	0.422	9	395	0.281	9	395	0.703
20:00 - 21:00	8	408	0.245	8	408	0.153	8	408	0.398
21:00 - 22:00	8	408	0.184	8	408	0.399	8	408	0.583
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			5.101			4.855			9.956

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 01 - RETAIL/O - CONVENIENCE STORE
MULTI-MODAL VEHICLE OCCUPANTS
Calculation factor: 100 sqm
BOLD print indicates peak (busiest) period

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00	3	398	3.266	3	398	3.266	3	398	6.532
07:00 - 08:00	9	395	5.432	9	395	5.066	9	395	10.498
08:00 - 09:00	9	395	6.614	9	395	6.164	9	395	12.778
09:00 - 10:00	9	395	5.319	9	395	4.700	9	395	10.019
10:00 - 11:00	9	395	4.616	9	395	4.053	9	395	8.669
11:00 - 12:00	9	395	4.475	9	395	4.503	9	395	8.978
12:00 - 13:00	9	395	4.813	9	395	4.982	9	395	9.795
13:00 - 14:00	9	395	4.278	9	395	4.165	9	395	8.443
14:00 - 15:00	9	395	5.376	9	395	5.488	9	395	10.864
15:00 - 16:00	9	395	6.220	9	395	5.319	9	395	11.539
16:00 - 17:00	9	395	5.939	9	395	5.826	9	395	11.765
17:00 - 18:00	9	395	6.445	9	395	7.318	9	395	13.763
18:00 - 19:00	9	395	8.753	9	395	8.303	9	395	17.056
19:00 - 20:00	9	395	6.248	9	395	7.008	9	395	13.256
20:00 - 21:00	8	408	3.373	8	408	3.864	8	408	7.237
21:00 - 22:00	8	408	1.656	8	408	2.515	8	408	4.171
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			82.823			82.540			165.363

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 01 - RETAIL/O - CONVENIENCE STORE
MULTI-MODAL PEDESTRIANS
Calculation factor: 100 sqm
BOLD print indicates peak (busiest) period

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00	3	398	2.513	3	398	2.345	3	398	4.858
07:00 - 08:00	9	395	5.967	9	395	5.573	9	395	11.540
08:00 - 09:00	9	395	10.245	9	395	10.864	9	395	21.109
09:00 - 10:00	9	395	8.444	9	395	9.738	9	395	18.182
10:00 - 11:00	9	395	6.924	9	395	7.093	9	395	14.017
11:00 - 12:00	9	395	8.106	9	395	8.528	9	395	16.634
12:00 - 13:00	9	395	10.780	9	395	10.273	9	395	21.053
13:00 - 14:00	9	395	11.652	9	395	11.962	9	395	23.614
14:00 - 15:00	9	395	8.612	9	395	9.288	9	395	17.900
15:00 - 16:00	9	395	11.005	9	395	11.258	9	395	22.263
16:00 - 17:00	9	395	10.273	9	395	11.708	9	395	21.981
17:00 - 18:00	9	395	9.372	9	395	10.386	9	395	19.758
18:00 - 19:00	9	395	9.175	9	395	11.849	9	395	21.024
19:00 - 20:00	9	395	10.892	9	395	10.723	9	395	21.615
20:00 - 21:00	8	408	9.169	8	408	9.353	8	408	18.522
21:00 - 22:00	8	408	7.482	8	408	7.513	8	408	14.995
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			140.611			148.454			289.065

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 01 - RETAIL/O - CONVENIENCE STORE
MULTI-MODAL BUS/TRAM PASSENGERS
Calculation factor: 100 sqm
BOLD print indicates peak (busiest) period

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00	3	398	0.000	3	398	0.000	3	398	0.000
07:00 - 08:00	9	395	0.647	9	395	0.478	9	395	1.125
08:00 - 09:00	9	395	2.055	9	395	0.647	9	395	2.702
09:00 - 10:00	9	395	1.126	9	395	0.619	9	395	1.745
10:00 - 11:00	9	395	1.126	9	395	0.535	9	395	1.661
11:00 - 12:00	9	395	1.295	9	395	0.535	9	395	1.830
12:00 - 13:00	9	395	0.901	9	395	0.563	9	395	1.464
13:00 - 14:00	9	395	0.844	9	395	0.647	9	395	1.491
14:00 - 15:00	9	395	0.957	9	395	0.591	9	395	1.548
15:00 - 16:00	9	395	1.689	9	395	1.126	9	395	2.815
16:00 - 17:00	9	395	1.295	9	395	1.210	9	395	2.505
17:00 - 18:00	9	395	1.717	9	395	1.351	9	395	3.068
18:00 - 19:00	9	395	2.083	9	395	0.647	9	395	2.730
19:00 - 20:00	9	395	1.013	9	395	0.873	9	395	1.886
20:00 - 21:00	8	408	0.552	8	408	0.613	8	408	1.165
21:00 - 22:00	8	408	0.215	8	408	0.399	8	408	0.614
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			17.515			10.834			28.349

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 01 - RETAIL/O - CONVENIENCE STORE
MULTI-MODAL TOTAL RAIL PASSENGERS
Calculation factor: 100 sqm
BOLD print indicates peak (busiest) period

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00	3	398	0.000	3	398	0.000	3	398	0.000
07:00 - 08:00	9	395	0.169	9	395	0.281	9	395	0.450
08:00 - 09:00	9	395	0.422	9	395	0.929	9	395	1.351
09:00 - 10:00	9	395	0.478	9	395	0.647	9	395	1.125
10:00 - 11:00	9	395	0.225	9	395	0.197	9	395	0.422
11:00 - 12:00	9	395	0.169	9	395	0.422	9	395	0.591
12:00 - 13:00	9	395	0.197	9	395	0.310	9	395	0.507
13:00 - 14:00	9	395	0.225	9	395	0.225	9	395	0.450
14:00 - 15:00	9	395	0.197	9	395	0.253	9	395	0.450
15:00 - 16:00	9	395	0.507	9	395	0.225	9	395	0.732
16:00 - 17:00	9	395	0.957	9	395	0.478	9	395	1.435
17:00 - 18:00	9	395	1.801	9	395	0.366	9	395	2.167
18:00 - 19:00	9	395	1.829	9	395	0.281	9	395	2.110
19:00 - 20:00	9	395	0.760	9	395	0.253	9	395	1.013
20:00 - 21:00	8	408	0.521	8	408	0.276	8	408	0.797
21:00 - 22:00	8	408	0.092	8	408	0.123	8	408	0.215
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			8.549			5.266			13.815

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 01 - RETAIL/O - CONVENIENCE STORE
MULTI-MODAL COACH PASSENGERS
Calculation factor: 100 sqm
BOLD print indicates peak (busiest) period

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00	3	398	0.000	3	398	0.000	3	398	0.000
07:00 - 08:00	9	395	0.000	9	395	0.000	9	395	0.000
08:00 - 09:00	9	395	0.000	9	395	0.000	9	395	0.000
09:00 - 10:00	9	395	0.000	9	395	0.000	9	395	0.000
10:00 - 11:00	9	395	0.000	9	395	0.000	9	395	0.000
11:00 - 12:00	9	395	0.000	9	395	0.000	9	395	0.000
12:00 - 13:00	9	395	0.000	9	395	0.000	9	395	0.000
13:00 - 14:00	9	395	0.000	9	395	0.000	9	395	0.000
14:00 - 15:00	9	395	0.028	9	395	0.028	9	395	0.056
15:00 - 16:00	9	395	0.000	9	395	0.000	9	395	0.000
16:00 - 17:00	9	395	0.000	9	395	0.000	9	395	0.000
17:00 - 18:00	9	395	0.000	9	395	0.000	9	395	0.000
18:00 - 19:00	9	395	0.000	9	395	0.000	9	395	0.000
19:00 - 20:00	9	395	0.000	9	395	0.000	9	395	0.000
20:00 - 21:00	8	408	0.000	8	408	0.000	8	408	0.000
21:00 - 22:00	8	408	0.000	8	408	0.000	8	408	0.000
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.028			0.028			0.056

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 01 - RETAIL/O - CONVENIENCE STORE
MULTI-MODAL PUBLIC TRANSPORT USERS
Calculation factor: 100 sqm
BOLD print indicates peak (busiest) period

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00	3	398	0.000	3	398	0.000	3	398	0.000
07:00 - 08:00	9	395	0.816	9	395	0.760	9	395	1.576
08:00 - 09:00	9	395	2.477	9	395	1.576	9	395	4.053
09:00 - 10:00	9	395	1.604	9	395	1.267	9	395	2.871
10:00 - 11:00	9	395	1.351	9	395	0.732	9	395	2.083
11:00 - 12:00	9	395	1.464	9	395	0.957	9	395	2.421
12:00 - 13:00	9	395	1.098	9	395	0.873	9	395	1.971
13:00 - 14:00	9	395	1.070	9	395	0.873	9	395	1.943
14:00 - 15:00	9	395	1.182	9	395	0.873	9	395	2.055
15:00 - 16:00	9	395	2.195	9	395	1.351	9	395	3.546
16:00 - 17:00	9	395	2.252	9	395	1.689	9	395	3.941
17:00 - 18:00	9	395	3.518	9	395	1.717	9	395	5.235
18:00 - 19:00	9	395	3.912	9	395	0.929	9	395	4.841
19:00 - 20:00	9	395	1.773	9	395	1.126	9	395	2.899
20:00 - 21:00	8	408	1.073	8	408	0.889	8	408	1.962
21:00 - 22:00	8	408	0.307	8	408	0.521	8	408	0.828
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			26.092			16.133			42.225

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 01 - RETAIL/O - CONVENIENCE STORE
MULTI-MODAL TOTAL PEOPLE
Calculation factor: 100 sqm
BOLD print indicates peak (busiest) period
Total People to Total Vehicles ratio (all time periods and directions): 3.07

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00	3	398	5.946	3	398	5.779	3	398	11.725
07:00 - 08:00	9	395	12.525	9	395	11.708	9	395	24.233
08:00 - 09:00	9	395	19.505	9	395	18.801	9	395	38.306
09:00 - 10:00	9	395	15.480	9	395	15.789	9	395	31.269
10:00 - 11:00	9	395	13.031	9	395	11.962	9	395	24.993
11:00 - 12:00	9	395	14.382	9	395	14.270	9	395	28.652
12:00 - 13:00	9	395	16.859	9	395	16.324	9	395	33.183
13:00 - 14:00	9	395	17.253	9	395	17.281	9	395	34.534
14:00 - 15:00	9	395	15.621	9	395	16.043	9	395	31.664
15:00 - 16:00	9	395	19.758	9	395	18.351	9	395	38.109
16:00 - 17:00	9	395	19.111	9	395	19.814	9	395	38.925
17:00 - 18:00	9	395	19.983	9	395	19.955	9	395	39.938
18:00 - 19:00	9	395	22.347	9	395	21.559	9	395	43.906
19:00 - 20:00	9	395	19.336	9	395	19.139	9	395	38.475
20:00 - 21:00	8	408	13.861	8	408	14.259	8	408	28.120
21:00 - 22:00	8	408	9.629	8	408	10.948	8	408	20.577
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			254.627			251.982			506.609

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 01 - RETAIL/O - CONVENIENCE STORE
MULTI-MODAL CARS
Calculation factor: 100 sqm
BOLD print indicates peak (busiest) period

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00	3	398	2.513	3	398	2.513	3	398	5.026
07:00 - 08:00	9	395	3.659	9	395	3.462	9	395	7.121
08:00 - 09:00	9	395	4.813	9	395	4.306	9	395	9.119
09:00 - 10:00	9	395	4.081	9	395	3.856	9	395	7.937
10:00 - 11:00	9	395	3.490	9	395	3.152	9	395	6.642
11:00 - 12:00	9	395	3.434	9	395	3.518	9	395	6.952
12:00 - 13:00	9	395	3.715	9	395	3.771	9	395	7.486
13:00 - 14:00	9	395	3.209	9	395	3.124	9	395	6.333
14:00 - 15:00	9	395	4.137	9	395	4.278	9	395	8.415
15:00 - 16:00	9	395	4.391	9	395	3.940	9	395	8.331
16:00 - 17:00	9	395	4.363	9	395	4.560	9	395	8.923
17:00 - 18:00	9	395	5.010	9	395	5.404	9	395	10.414
18:00 - 19:00	9	395	6.051	9	395	5.854	9	395	11.905
19:00 - 20:00	9	395	5.066	9	395	5.432	9	395	10.498
20:00 - 21:00	8	408	2.883	8	408	3.067	8	408	5.950
21:00 - 22:00	8	408	1.533	8	408	2.055	8	408	3.588
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			62.348			62.292			124.640

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 01 - RETAIL/O - CONVENIENCE STORE
MULTI-MODAL LGVS
Calculation factor: 100 sqm
BOLD print indicates peak (busiest) period

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00	3	398	0.503	3	398	0.503	3	398	1.006
07:00 - 08:00	9	395	0.985	9	395	0.929	9	395	1.914
08:00 - 09:00	9	395	0.704	9	395	0.816	9	395	1.520
09:00 - 10:00	9	395	0.338	9	395	0.253	9	395	0.591
10:00 - 11:00	9	395	0.535	9	395	0.366	9	395	0.901
11:00 - 12:00	9	395	0.225	9	395	0.422	9	395	0.647
12:00 - 13:00	9	395	0.478	9	395	0.478	9	395	0.956
13:00 - 14:00	9	395	0.507	9	395	0.478	9	395	0.985
14:00 - 15:00	9	395	0.422	9	395	0.478	9	395	0.900
15:00 - 16:00	9	395	0.338	9	395	0.310	9	395	0.648
16:00 - 17:00	9	395	0.450	9	395	0.422	9	395	0.872
17:00 - 18:00	9	395	0.535	9	395	0.591	9	395	1.126
18:00 - 19:00	9	395	0.450	9	395	0.422	9	395	0.872
19:00 - 20:00	9	395	0.253	9	395	0.253	9	395	0.506
20:00 - 21:00	8	408	0.061	8	408	0.061	8	408	0.122
21:00 - 22:00	8	408	0.215	8	408	0.215	8	408	0.430
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			6.999			6.997			13.996

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 01 - RETAIL/O - CONVENIENCE STORE
MULTI-MODAL MOTOR CYCLES
Calculation factor: 100 sqm
BOLD print indicates peak (busiest) period

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00	3	398	0.000	3	398	0.000	3	398	0.000
07:00 - 08:00	9	395	0.000	9	395	0.028	9	395	0.028
08:00 - 09:00	9	395	0.056	9	395	0.056	9	395	0.112
09:00 - 10:00	9	395	0.000	9	395	0.000	9	395	0.000
10:00 - 11:00	9	395	0.056	9	395	0.028	9	395	0.084
11:00 - 12:00	9	395	0.028	9	395	0.028	9	395	0.056
12:00 - 13:00	9	395	0.000	9	395	0.028	9	395	0.028
13:00 - 14:00	9	395	0.028	9	395	0.028	9	395	0.056
14:00 - 15:00	9	395	0.056	9	395	0.056	9	395	0.112
15:00 - 16:00	9	395	0.056	9	395	0.028	9	395	0.084
16:00 - 17:00	9	395	0.084	9	395	0.084	9	395	0.168
17:00 - 18:00	9	395	0.028	9	395	0.056	9	395	0.084
18:00 - 19:00	9	395	0.000	9	395	0.000	9	395	0.000
19:00 - 20:00	9	395	0.028	9	395	0.028	9	395	0.056
20:00 - 21:00	8	408	0.000	8	408	0.000	8	408	0.000
21:00 - 22:00	8	408	0.031	8	408	0.031	8	408	0.062
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.451			0.479			0.930

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 01 - RETAIL/O - CONVENIENCE STORE
MULTI-MODAL Underground Passengers
Calculation factor: 100 sqm
BOLD print indicates peak (busiest) period

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00	3	398	0.000	3	398	0.000	3	398	0.000
07:00 - 08:00	9	395	0.113	9	395	0.028	9	395	0.141
08:00 - 09:00	9	395	0.225	9	395	0.169	9	395	0.394
09:00 - 10:00	9	395	0.310	9	395	0.169	9	395	0.479
10:00 - 11:00	9	395	0.084	9	395	0.000	9	395	0.084
11:00 - 12:00	9	395	0.000	9	395	0.056	9	395	0.056
12:00 - 13:00	9	395	0.000	9	395	0.000	9	395	0.000
13:00 - 14:00	9	395	0.084	9	395	0.000	9	395	0.084
14:00 - 15:00	9	395	0.000	9	395	0.028	9	395	0.028
15:00 - 16:00	9	395	0.169	9	395	0.084	9	395	0.253
16:00 - 17:00	9	395	0.141	9	395	0.084	9	395	0.225
17:00 - 18:00	9	395	0.704	9	395	0.028	9	395	0.732
18:00 - 19:00	9	395	0.816	9	395	0.056	9	395	0.872
19:00 - 20:00	9	395	0.281	9	395	0.225	9	395	0.506
20:00 - 21:00	8	408	0.153	8	408	0.215	8	408	0.368
21:00 - 22:00	8	408	0.092	8	408	0.061	8	408	0.153
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			3.172			1.203			4.375

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 01 - RETAIL/O - CONVENIENCE STORE
MULTI-MODAL Overground Passengers
Calculation factor: 100 sqm
BOLD print indicates peak (busiest) period

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00	3	398	0.000	3	398	0.000	3	398	0.000
07:00 - 08:00	9	395	0.000	9	395	0.000	9	395	0.000
08:00 - 09:00	9	395	0.000	9	395	0.056	9	395	0.056
09:00 - 10:00	9	395	0.000	9	395	0.000	9	395	0.000
10:00 - 11:00	9	395	0.000	9	395	0.000	9	395	0.000
11:00 - 12:00	9	395	0.000	9	395	0.028	9	395	0.028
12:00 - 13:00	9	395	0.000	9	395	0.000	9	395	0.000
13:00 - 14:00	9	395	0.000	9	395	0.000	9	395	0.000
14:00 - 15:00	9	395	0.028	9	395	0.000	9	395	0.028
15:00 - 16:00	9	395	0.028	9	395	0.000	9	395	0.028
16:00 - 17:00	9	395	0.000	9	395	0.000	9	395	0.000
17:00 - 18:00	9	395	0.028	9	395	0.000	9	395	0.028
18:00 - 19:00	9	395	0.000	9	395	0.000	9	395	0.000
19:00 - 20:00	9	395	0.000	9	395	0.000	9	395	0.000
20:00 - 21:00	8	408	0.000	8	408	0.000	8	408	0.000
21:00 - 22:00	8	408	0.000	8	408	0.000	8	408	0.000
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.084			0.084			0.168

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 01 - RETAIL/O - CONVENIENCE STORE
MULTI-MODAL National Rail Passengers
Calculation factor: 100 sqm
BOLD print indicates peak (busiest) period

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00	3	398	0.000	3	398	0.000	3	398	0.000
07:00 - 08:00	9	395	0.056	9	395	0.225	9	395	0.281
08:00 - 09:00	9	395	0.197	9	395	0.704	9	395	0.901
09:00 - 10:00	9	395	0.169	9	395	0.478	9	395	0.647
10:00 - 11:00	9	395	0.141	9	395	0.169	9	395	0.310
11:00 - 12:00	9	395	0.169	9	395	0.338	9	395	0.507
12:00 - 13:00	9	395	0.197	9	395	0.310	9	395	0.507
13:00 - 14:00	9	395	0.141	9	395	0.225	9	395	0.366
14:00 - 15:00	9	395	0.141	9	395	0.225	9	395	0.366
15:00 - 16:00	9	395	0.310	9	395	0.141	9	395	0.451
16:00 - 17:00	9	395	0.788	9	395	0.394	9	395	1.182
17:00 - 18:00	9	395	1.041	9	395	0.338	9	395	1.379
18:00 - 19:00	9	395	0.985	9	395	0.225	9	395	1.210
19:00 - 20:00	9	395	0.478	9	395	0.028	9	395	0.506
20:00 - 21:00	8	408	0.368	8	408	0.061	8	408	0.429
21:00 - 22:00	8	408	0.000	8	408	0.061	8	408	0.061
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			5.181			3.922			9.103

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 01 - RETAIL/O - CONVENIENCE STORE
MULTI-MODAL Bus Passengers
Calculation factor: 100 sqm
BOLD print indicates peak (busiest) period

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00	3	398	0.000	3	398	0.000	3	398	0.000
07:00 - 08:00	9	395	0.647	9	395	0.478	9	395	1.125
08:00 - 09:00	9	395	2.026	9	395	0.647	9	395	2.673
09:00 - 10:00	9	395	0.985	9	395	0.619	9	395	1.604
10:00 - 11:00	9	395	1.126	9	395	0.507	9	395	1.633
11:00 - 12:00	9	395	1.295	9	395	0.507	9	395	1.802
12:00 - 13:00	9	395	0.844	9	395	0.507	9	395	1.351
13:00 - 14:00	9	395	0.760	9	395	0.591	9	395	1.351
14:00 - 15:00	9	395	0.929	9	395	0.478	9	395	1.407
15:00 - 16:00	9	395	1.604	9	395	0.929	9	395	2.533
16:00 - 17:00	9	395	1.295	9	395	1.154	9	395	2.449
17:00 - 18:00	9	395	1.632	9	395	1.295	9	395	2.927
18:00 - 19:00	9	395	2.083	9	395	0.647	9	395	2.730
19:00 - 20:00	9	395	1.013	9	395	0.816	9	395	1.829
20:00 - 21:00	8	408	0.521	8	408	0.583	8	408	1.104
21:00 - 22:00	8	408	0.215	8	408	0.399	8	408	0.614
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			16.975			10.157			27.132

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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Filtering Summary

Land Use	01/I	RETAIL/SHOPPING CENTRE - LOCAL SHOPS
Selected Trip Rate Calculation Parameter Range	240-3394 sqm GFA	
Actual Trip Rate Calculation Parameter Range	550-1575 sqm GFA	
Date Range	Minimum: 01/01/14	Maximum: 17/09/19
Parking Spaces Range	All Surveys Included	
Days of the week selected	Tuesday	1
	Wednesday	1
	Friday	1
Main Location Types selected	Suburban Area (PPS6 Out of Centre)	1
	Edge of Town	1
	Neighbourhood Centre (PPS6 Local Centre)	1
Population within 500m	All Surveys Included	
Population <1 Mile ranges selected	10,001 to 15,000	2
	20,001 to 25,000	1
Population <5 Mile ranges selected	125,001 to 250,000	1
	250,001 to 500,000	2
Car Ownership <5 Mile ranges selected	0.6 to 1.0	2
	1.1 to 1.5	1
PTAL Rating	No PTAL Present	3

Calculation Reference: AUDIT-332901-220518-0516

TRIP RATE CALCULATION SELECTION PARAMETERS:

Land Use : 01 - RETAIL
Category : I - SHOPPING CENTRE - LOCAL SHOPS
MULTI-MODAL TOTAL VEHICLES

Selected regions and areas:

05	EAST MIDLANDS		
	LE	LEICESTERSHIRE	1 days
13	MUNSTER		
	CR	CORK	1 days
15	GREATER DUBLIN		
	DL	DUBLIN	1 days

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

Primary Filtering selection:

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

Parameter: Gross floor area
Actual Range: 550 to 1575 (units: sqm)
Range Selected by User: 240 to 3394 (units: sqm)

Parking Spaces Range: All Surveys Included

Public Transport Provision:
Selection by: Include all surveys

Date Range: 01/01/14 to 17/09/19

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	1 days
Wednesday	1 days
Friday	1 days

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

Selected survey types:

Manual count	3 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)	1
Edge of Town	1
Neighbourhood Centre (PPS6 Local Centre)	1

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	1
Retail Zone	1
No Sub Category	1

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

Secondary Filtering selection:

Use Class:

n/a	3 days

This data displays the number of surveys per Use Class classification within the selected set. The Use Classes Order 2005 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	2 days
20,001 to 25,000	1 days

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

Population within 5 miles:

125,001 to 250,000	1 days
250,001 to 500,000	2 days

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

Car ownership within 5 miles:

0.6 to 1.0	2 days
1.1 to 1.5	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.

Petrol filling station:

Included in the survey count	0 days
Excluded from count or no filling station	3 days

This data displays the number of surveys within the selected set that include petrol filling station activity, and the number of surveys that do not.

Travel Plan:

No	3 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	3 days

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

LIST OF SITES relevant to selection parameters

Site(1):	CR-01-I-01	Gross floor area:	1575 sqm
Development Name:	LOCAL SHOPS	Retail floor area:	1260 sqm
Location:	CORK		
Postcode:		No of Employees:	55
Main Location Type:	Neighbourhood Centre (PPS6 Local Centre)	Survey Date:	23/03/18
Sub-Location Type:	Retail Zone	Survey Day:	Friday
PTAL:	n/a	Parking Spaces:	67
Site(2):	DL-01-I-07	Gross floor area:	1034 sqm
Development Name:	LOCAL SHOPS	Retail floor area:	498 sqm
Location:	DUBLIN		
Postcode:		No of Employees:	39
Main Location Type:	Suburban Area (PPS6 Out of Centre)	Survey Date:	01/10/14
Sub-Location Type:	No Sub Category	Survey Day:	Wednesday
PTAL:	n/a	Parking Spaces:	23
Site(3):	LE-01-I-02	Gross floor area:	550 sqm
Development Name:	LOCAL SHOPS	Retail floor area:	300 sqm
Location:	LEICESTER		
Postcode:	LE3 6UJ	No of Employees:	31
Main Location Type:	Edge of Town	Survey Date:	28/10/14
Sub-Location Type:	Residential Zone	Survey Day:	Tuesday
PTAL:	n/a	Parking Spaces:	33

TRIP RATE for Land Use 01 - RETAIL/I - SHOPPING CENTRE - LOCAL SHOPS
MULTI-MODAL TOTAL VEHICLES
Calculation factor: 100 sqm
BOLD print indicates peak (busiest) period
Total People to Total Vehicles ratio (all time periods and directions): 1.99

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	3	1053	2.532	3	1053	2.216	3	1053	4.748
08:00 - 09:00	3	1053	3.482	3	1053	3.261	3	1053	6.743
09:00 - 10:00	3	1053	3.609	3	1053	2.722	3	1053	6.331
10:00 - 11:00	3	1053	4.907	3	1053	3.894	3	1053	8.801
11:00 - 12:00	3	1053	4.115	3	1053	4.115	3	1053	8.230
12:00 - 13:00	3	1053	7.882	3	1053	7.724	3	1053	15.606
13:00 - 14:00	3	1053	6.616	3	1053	6.679	3	1053	13.295
14:00 - 15:00	3	1053	5.381	3	1053	5.666	3	1053	11.047
15:00 - 16:00	3	1053	5.318	3	1053	5.413	3	1053	10.731
16:00 - 17:00	3	1053	5.635	3	1053	5.635	3	1053	11.270
17:00 - 18:00	3	1053	6.110	3	1053	5.920	3	1053	12.030
18:00 - 19:00	3	1053	4.558	3	1053	5.065	3	1053	9.623
19:00 - 20:00	3	1053	4.020	3	1053	4.812	3	1053	8.832
20:00 - 21:00	3	1053	2.912	3	1053	3.292	3	1053	6.204
21:00 - 22:00	3	1053	2.153	3	1053	2.596	3	1053	4.749
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			69.230			69.010			138.240

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:	550 - 1575 (units: sqm)
Survey date date range:	01/01/14 - 17/09/19
Number of weekdays (Monday-Friday):	3
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 01 - RETAIL/I - SHOPPING CENTRE - LOCAL SHOPS
MULTI-MODAL TAXIS
Calculation factor: 100 sqm
BOLD print indicates peak (busiest) period

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	3	1053	0.032	3	1053	0.032	3	1053	0.064
08:00 - 09:00	3	1053	0.032	3	1053	0.032	3	1053	0.064
09:00 - 10:00	3	1053	0.000	3	1053	0.000	3	1053	0.000
10:00 - 11:00	3	1053	0.032	3	1053	0.000	3	1053	0.032
11:00 - 12:00	3	1053	0.063	3	1053	0.095	3	1053	0.158
12:00 - 13:00	3	1053	0.127	3	1053	0.127	3	1053	0.254
13:00 - 14:00	3	1053	0.127	3	1053	0.063	3	1053	0.190
14:00 - 15:00	3	1053	0.032	3	1053	0.095	3	1053	0.127
15:00 - 16:00	3	1053	0.095	3	1053	0.032	3	1053	0.127
16:00 - 17:00	3	1053	0.032	3	1053	0.063	3	1053	0.095
17:00 - 18:00	3	1053	0.032	3	1053	0.032	3	1053	0.064
18:00 - 19:00	3	1053	0.000	3	1053	0.032	3	1053	0.032
19:00 - 20:00	3	1053	0.000	3	1053	0.000	3	1053	0.000
20:00 - 21:00	3	1053	0.032	3	1053	0.032	3	1053	0.064
21:00 - 22:00	3	1053	0.032	3	1053	0.000	3	1053	0.032
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.668			0.635			1.303

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 01 - RETAIL/I - SHOPPING CENTRE - LOCAL SHOPS
MULTI-MODAL OGVS
Calculation factor: 100 sqm
BOLD print indicates peak (busiest) period

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	3	1053	0.063	3	1053	0.095	3	1053	0.158
08:00 - 09:00	3	1053	0.095	3	1053	0.063	3	1053	0.158
09:00 - 10:00	3	1053	0.127	3	1053	0.158	3	1053	0.285
10:00 - 11:00	3	1053	0.032	3	1053	0.032	3	1053	0.064
11:00 - 12:00	3	1053	0.063	3	1053	0.063	3	1053	0.126
12:00 - 13:00	3	1053	0.127	3	1053	0.127	3	1053	0.254
13:00 - 14:00	3	1053	0.032	3	1053	0.032	3	1053	0.064
14:00 - 15:00	3	1053	0.095	3	1053	0.095	3	1053	0.190
15:00 - 16:00	3	1053	0.032	3	1053	0.032	3	1053	0.064
16:00 - 17:00	3	1053	0.063	3	1053	0.063	3	1053	0.126
17:00 - 18:00	3	1053	0.032	3	1053	0.000	3	1053	0.032
18:00 - 19:00	3	1053	0.000	3	1053	0.032	3	1053	0.032
19:00 - 20:00	3	1053	0.000	3	1053	0.000	3	1053	0.000
20:00 - 21:00	3	1053	0.000	3	1053	0.000	3	1053	0.000
21:00 - 22:00	3	1053	0.000	3	1053	0.000	3	1053	0.000
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.761			0.792			1.553

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 01 - RETAIL/I - SHOPPING CENTRE - LOCAL SHOPS
MULTI-MODAL PSVS
Calculation factor: 100 sqm
BOLD print indicates peak (busiest) period

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	3	1053	0.000	3	1053	0.000	3	1053	0.000
08:00 - 09:00	3	1053	0.032	3	1053	0.032	3	1053	0.064
09:00 - 10:00	3	1053	0.032	3	1053	0.032	3	1053	0.064
10:00 - 11:00	3	1053	0.000	3	1053	0.000	3	1053	0.000
11:00 - 12:00	3	1053	0.000	3	1053	0.000	3	1053	0.000
12:00 - 13:00	3	1053	0.000	3	1053	0.000	3	1053	0.000
13:00 - 14:00	3	1053	0.000	3	1053	0.000	3	1053	0.000
14:00 - 15:00	3	1053	0.000	3	1053	0.000	3	1053	0.000
15:00 - 16:00	3	1053	0.000	3	1053	0.000	3	1053	0.000
16:00 - 17:00	3	1053	0.000	3	1053	0.000	3	1053	0.000
17:00 - 18:00	3	1053	0.000	3	1053	0.000	3	1053	0.000
18:00 - 19:00	3	1053	0.032	3	1053	0.032	3	1053	0.064
19:00 - 20:00	3	1053	0.000	3	1053	0.000	3	1053	0.000
20:00 - 21:00	3	1053	0.000	3	1053	0.000	3	1053	0.000
21:00 - 22:00	3	1053	0.000	3	1053	0.000	3	1053	0.000
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.096			0.096			0.192

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 01 - RETAIL/I - SHOPPING CENTRE - LOCAL SHOPS
MULTI-MODAL CYCLISTS
Calculation factor: 100 sqm
BOLD print indicates peak (busiest) period

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	3	1053	0.063	3	1053	0.032	3	1053	0.095
08:00 - 09:00	3	1053	0.063	3	1053	0.063	3	1053	0.126
09:00 - 10:00	3	1053	0.095	3	1053	0.063	3	1053	0.158
10:00 - 11:00	3	1053	0.032	3	1053	0.095	3	1053	0.127
11:00 - 12:00	3	1053	0.063	3	1053	0.032	3	1053	0.095
12:00 - 13:00	3	1053	0.032	3	1053	0.063	3	1053	0.095
13:00 - 14:00	3	1053	0.127	3	1053	0.095	3	1053	0.222
14:00 - 15:00	3	1053	0.127	3	1053	0.095	3	1053	0.222
15:00 - 16:00	3	1053	0.095	3	1053	0.095	3	1053	0.190
16:00 - 17:00	3	1053	0.127	3	1053	0.127	3	1053	0.254
17:00 - 18:00	3	1053	0.095	3	1053	0.095	3	1053	0.190
18:00 - 19:00	3	1053	0.158	3	1053	0.127	3	1053	0.285
19:00 - 20:00	3	1053	0.127	3	1053	0.127	3	1053	0.254
20:00 - 21:00	3	1053	0.032	3	1053	0.032	3	1053	0.064
21:00 - 22:00	3	1053	0.032	3	1053	0.000	3	1053	0.032
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			1.268			1.141			2.409

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 01 - RETAIL/I - SHOPPING CENTRE - LOCAL SHOPS
MULTI-MODAL VEHICLE OCCUPANTS
Calculation factor: 100 sqm
BOLD print indicates peak (busiest) period

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	3	1053	3.039	3	1053	2.596	3	1053	5.635
08:00 - 09:00	3	1053	4.274	3	1053	4.210	3	1053	8.484
09:00 - 10:00	3	1053	4.274	3	1053	3.292	3	1053	7.566
10:00 - 11:00	3	1053	6.426	3	1053	4.970	3	1053	11.396
11:00 - 12:00	3	1053	5.128	3	1053	5.350	3	1053	10.478
12:00 - 13:00	3	1053	9.782	3	1053	9.497	3	1053	19.279
13:00 - 14:00	3	1053	8.864	3	1053	8.737	3	1053	17.601
14:00 - 15:00	3	1053	6.806	3	1053	7.756	3	1053	14.562
15:00 - 16:00	3	1053	6.901	3	1053	6.996	3	1053	13.897
16:00 - 17:00	3	1053	7.407	3	1053	7.566	3	1053	14.973
17:00 - 18:00	3	1053	8.674	3	1053	7.914	3	1053	16.588
18:00 - 19:00	3	1053	7.344	3	1053	7.281	3	1053	14.625
19:00 - 20:00	3	1053	6.110	3	1053	7.281	3	1053	13.391
20:00 - 21:00	3	1053	4.020	3	1053	5.002	3	1053	9.022
21:00 - 22:00	3	1053	2.627	3	1053	3.292	3	1053	5.919
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			91.676			91.740			183.416

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 01 - RETAIL/I - SHOPPING CENTRE - LOCAL SHOPS
MULTI-MODAL PEDESTRIANS
Calculation factor: 100 sqm
BOLD print indicates peak (busiest) period

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	3	1053	0.886	3	1053	1.013	3	1053	1.899
08:00 - 09:00	3	1053	1.298	3	1053	1.330	3	1053	2.628
09:00 - 10:00	3	1053	2.153	3	1053	2.089	3	1053	4.242
10:00 - 11:00	3	1053	2.279	3	1053	2.153	3	1053	4.432
11:00 - 12:00	3	1053	2.691	3	1053	2.469	3	1053	5.160
12:00 - 13:00	3	1053	5.255	3	1053	4.274	3	1053	9.529
13:00 - 14:00	3	1053	7.059	3	1053	6.838	3	1053	13.897
14:00 - 15:00	3	1053	4.020	3	1053	4.780	3	1053	8.800
15:00 - 16:00	3	1053	3.419	3	1053	3.925	3	1053	7.344
16:00 - 17:00	3	1053	3.450	3	1053	3.292	3	1053	6.742
17:00 - 18:00	3	1053	3.039	3	1053	3.355	3	1053	6.394
18:00 - 19:00	3	1053	1.994	3	1053	2.058	3	1053	4.052
19:00 - 20:00	3	1053	2.691	3	1053	2.976	3	1053	5.667
20:00 - 21:00	3	1053	1.393	3	1053	1.836	3	1053	3.229
21:00 - 22:00	3	1053	1.045	3	1053	1.298	3	1053	2.343
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			42.672			43.686			86.358

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 01 - RETAIL/I - SHOPPING CENTRE - LOCAL SHOPS
MULTI-MODAL BUS/TRAM PASSENGERS
Calculation factor: 100 sqm
BOLD print indicates peak (busiest) period

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	3	1053	0.222	3	1053	0.063	3	1053	0.285
08:00 - 09:00	3	1053	0.285	3	1053	0.032	3	1053	0.317
09:00 - 10:00	3	1053	0.095	3	1053	0.032	3	1053	0.127
10:00 - 11:00	3	1053	0.253	3	1053	0.222	3	1053	0.475
11:00 - 12:00	3	1053	0.063	3	1053	0.095	3	1053	0.158
12:00 - 13:00	3	1053	0.222	3	1053	0.158	3	1053	0.380
13:00 - 14:00	3	1053	0.348	3	1053	0.095	3	1053	0.443
14:00 - 15:00	3	1053	0.190	3	1053	0.063	3	1053	0.253
15:00 - 16:00	3	1053	0.000	3	1053	0.127	3	1053	0.127
16:00 - 17:00	3	1053	0.063	3	1053	0.127	3	1053	0.190
17:00 - 18:00	3	1053	0.000	3	1053	0.158	3	1053	0.158
18:00 - 19:00	3	1053	0.000	3	1053	0.000	3	1053	0.000
19:00 - 20:00	3	1053	0.000	3	1053	0.032	3	1053	0.032
20:00 - 21:00	3	1053	0.032	3	1053	0.000	3	1053	0.032
21:00 - 22:00	3	1053	0.127	3	1053	0.000	3	1053	0.127
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			1.900			1.204			3.104

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 01 - RETAIL/I - SHOPPING CENTRE - LOCAL SHOPS
MULTI-MODAL PUBLIC TRANSPORT USERS
Calculation factor: 100 sqm
BOLD print indicates peak (busiest) period

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	3	1053	0.222	3	1053	0.063	3	1053	0.285
08:00 - 09:00	3	1053	0.285	3	1053	0.032	3	1053	0.317
09:00 - 10:00	3	1053	0.095	3	1053	0.032	3	1053	0.127
10:00 - 11:00	3	1053	0.253	3	1053	0.222	3	1053	0.475
11:00 - 12:00	3	1053	0.063	3	1053	0.095	3	1053	0.158
12:00 - 13:00	3	1053	0.222	3	1053	0.158	3	1053	0.380
13:00 - 14:00	3	1053	0.348	3	1053	0.095	3	1053	0.443
14:00 - 15:00	3	1053	0.190	3	1053	0.063	3	1053	0.253
15:00 - 16:00	3	1053	0.000	3	1053	0.127	3	1053	0.127
16:00 - 17:00	3	1053	0.063	3	1053	0.127	3	1053	0.190
17:00 - 18:00	3	1053	0.000	3	1053	0.158	3	1053	0.158
18:00 - 19:00	3	1053	0.000	3	1053	0.000	3	1053	0.000
19:00 - 20:00	3	1053	0.000	3	1053	0.032	3	1053	0.032
20:00 - 21:00	3	1053	0.032	3	1053	0.000	3	1053	0.032
21:00 - 22:00	3	1053	0.127	3	1053	0.000	3	1053	0.127
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			1.900			1.204			3.104

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 01 - RETAIL/I - SHOPPING CENTRE - LOCAL SHOPS
MULTI-MODAL TOTAL PEOPLE
Calculation factor: 100 sqm
BOLD print indicates peak (busiest) period
Total People to Total Vehicles ratio (all time periods and directions): 1.99

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	3	1053	4.210	3	1053	3.704	3	1053	7.914
08:00 - 09:00	3	1053	5.920	3	1053	5.635	3	1053	11.555
09:00 - 10:00	3	1053	6.616	3	1053	5.476	3	1053	12.092
10:00 - 11:00	3	1053	8.990	3	1053	7.439	3	1053	16.429
11:00 - 12:00	3	1053	7.946	3	1053	7.946	3	1053	15.892
12:00 - 13:00	3	1053	15.290	3	1053	13.992	3	1053	29.282
13:00 - 14:00	3	1053	16.398	3	1053	15.764	3	1053	32.162
14:00 - 15:00	3	1053	11.143	3	1053	12.694	3	1053	23.837
15:00 - 16:00	3	1053	10.415	3	1053	11.143	3	1053	21.558
16:00 - 17:00	3	1053	11.048	3	1053	11.111	3	1053	22.159
17:00 - 18:00	3	1053	11.808	3	1053	11.523	3	1053	23.331
18:00 - 19:00	3	1053	9.497	3	1053	9.465	3	1053	18.962
19:00 - 20:00	3	1053	8.927	3	1053	10.415	3	1053	19.342
20:00 - 21:00	3	1053	5.476	3	1053	6.869	3	1053	12.345
21:00 - 22:00	3	1053	3.830	3	1053	4.590	3	1053	8.420
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			137.514			137.766			275.280

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 01 - RETAIL/I - SHOPPING CENTRE - LOCAL SHOPS
MULTI-MODAL CARS
Calculation factor: 100 sqm
BOLD print indicates peak (busiest) period

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	3	1053	2.026	3	1053	1.678	3	1053	3.704
08:00 - 09:00	3	1053	2.817	3	1053	2.691	3	1053	5.508
09:00 - 10:00	3	1053	3.134	3	1053	2.216	3	1053	5.350
10:00 - 11:00	3	1053	3.989	3	1053	2.976	3	1053	6.965
11:00 - 12:00	3	1053	3.387	3	1053	3.261	3	1053	6.648
12:00 - 13:00	3	1053	6.806	3	1053	6.774	3	1053	13.580
13:00 - 14:00	3	1053	5.793	3	1053	6.046	3	1053	11.839
14:00 - 15:00	3	1053	4.653	3	1053	4.843	3	1053	9.496
15:00 - 16:00	3	1053	4.685	3	1053	4.780	3	1053	9.465
16:00 - 17:00	3	1053	5.065	3	1053	4.938	3	1053	10.003
17:00 - 18:00	3	1053	5.666	3	1053	5.540	3	1053	11.206
18:00 - 19:00	3	1053	4.305	3	1053	4.685	3	1053	8.990
19:00 - 20:00	3	1053	3.704	3	1053	4.558	3	1053	8.262
20:00 - 21:00	3	1053	2.722	3	1053	3.071	3	1053	5.793
21:00 - 22:00	3	1053	1.994	3	1053	2.343	3	1053	4.337
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			60.746			60.400			121.146

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 01 - RETAIL/I - SHOPPING CENTRE - LOCAL SHOPS
MULTI-MODAL LGVS
Calculation factor: 100 sqm
BOLD print indicates peak (busiest) period

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	3	1053	0.380	3	1053	0.380	3	1053	0.760
08:00 - 09:00	3	1053	0.506	3	1053	0.443	3	1053	0.949
09:00 - 10:00	3	1053	0.317	3	1053	0.285	3	1053	0.602
10:00 - 11:00	3	1053	0.823	3	1053	0.855	3	1053	1.678
11:00 - 12:00	3	1053	0.601	3	1053	0.696	3	1053	1.297
12:00 - 13:00	3	1053	0.791	3	1053	0.665	3	1053	1.456
13:00 - 14:00	3	1053	0.601	3	1053	0.475	3	1053	1.076
14:00 - 15:00	3	1053	0.570	3	1053	0.601	3	1053	1.171
15:00 - 16:00	3	1053	0.506	3	1053	0.570	3	1053	1.076
16:00 - 17:00	3	1053	0.412	3	1053	0.538	3	1053	0.950
17:00 - 18:00	3	1053	0.380	3	1053	0.348	3	1053	0.728
18:00 - 19:00	3	1053	0.412	3	1053	0.253	3	1053	0.665
19:00 - 20:00	3	1053	0.317	3	1053	0.253	3	1053	0.570
20:00 - 21:00	3	1053	0.158	3	1053	0.190	3	1053	0.348
21:00 - 22:00	3	1053	0.095	3	1053	0.222	3	1053	0.317
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			6.869			6.774			13.643

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 01 - RETAIL/I - SHOPPING CENTRE - LOCAL SHOPS
MULTI-MODAL MOTOR CYCLES
Calculation factor: 100 sqm
BOLD print indicates peak (busiest) period

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	3	1053	0.032	3	1053	0.032	3	1053	0.064
08:00 - 09:00	3	1053	0.000	3	1053	0.000	3	1053	0.000
09:00 - 10:00	3	1053	0.000	3	1053	0.032	3	1053	0.032
10:00 - 11:00	3	1053	0.032	3	1053	0.032	3	1053	0.064
11:00 - 12:00	3	1053	0.000	3	1053	0.000	3	1053	0.000
12:00 - 13:00	3	1053	0.032	3	1053	0.032	3	1053	0.064
13:00 - 14:00	3	1053	0.063	3	1053	0.063	3	1053	0.126
14:00 - 15:00	3	1053	0.032	3	1053	0.032	3	1053	0.064
15:00 - 16:00	3	1053	0.000	3	1053	0.000	3	1053	0.000
16:00 - 17:00	3	1053	0.063	3	1053	0.032	3	1053	0.095
17:00 - 18:00	3	1053	0.000	3	1053	0.000	3	1053	0.000
18:00 - 19:00	3	1053	0.000	3	1053	0.032	3	1053	0.032
19:00 - 20:00	3	1053	0.000	3	1053	0.000	3	1053	0.000
20:00 - 21:00	3	1053	0.000	3	1053	0.000	3	1053	0.000
21:00 - 22:00	3	1053	0.032	3	1053	0.032	3	1053	0.064
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.286			0.319			0.605

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 B. Modelling Outputs

Junctions 9

PICADY 9 - Priority Intersection Module

Version: 9.5.1.7462

For sales and distribution information, program advice and maintenance, contact TRL:
+44 (0)1344 379777 software@trl.co.uk www.trlsoftware.co.uk

Filename: East Access Junction to new GDR Road (A1).j9
Path: U:\5158632\7 Calcs\72 Model\722 Traffic\Traffic Models Revision 1\Access Junctions
Report generation date: 25/05/2022 10:55:46

Summary of junction performance

	AM Peak				PM Peak			
	Queue (PCU)	Delay (s)	RFC	LOS	Queue (PCU)	Delay (s)	RFC	LOS
	OY with All dev with GDR							
Stream B-C	0.0	6.28	0.02	A	0.0	5.85	0.01	A
Stream B-A	0.0	9.65	0.03	A	0.0	10.37	0.01	B
Stream C-AB	0.0	5.23	0.01	A	0.0	4.78	0.02	A
	OY+5 with All dev with GDR							
Stream B-C	0.1	7.29	0.07	A	0.1	7.12	0.06	A
Stream B-A	0.1	10.42	0.12	B	0.1	10.93	0.11	B
Stream C-AB	0.1	5.41	0.06	A	0.2	5.03	0.11	A
	OY+15 with All dev with GDR							
Stream B-C	0.1	7.37	0.07	A	0.1	7.18	0.06	A
Stream B-A	0.1	10.67	0.12	B	0.1	11.22	0.12	B
Stream C-AB	0.1	5.36	0.06	A	0.2	4.95	0.11	A

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

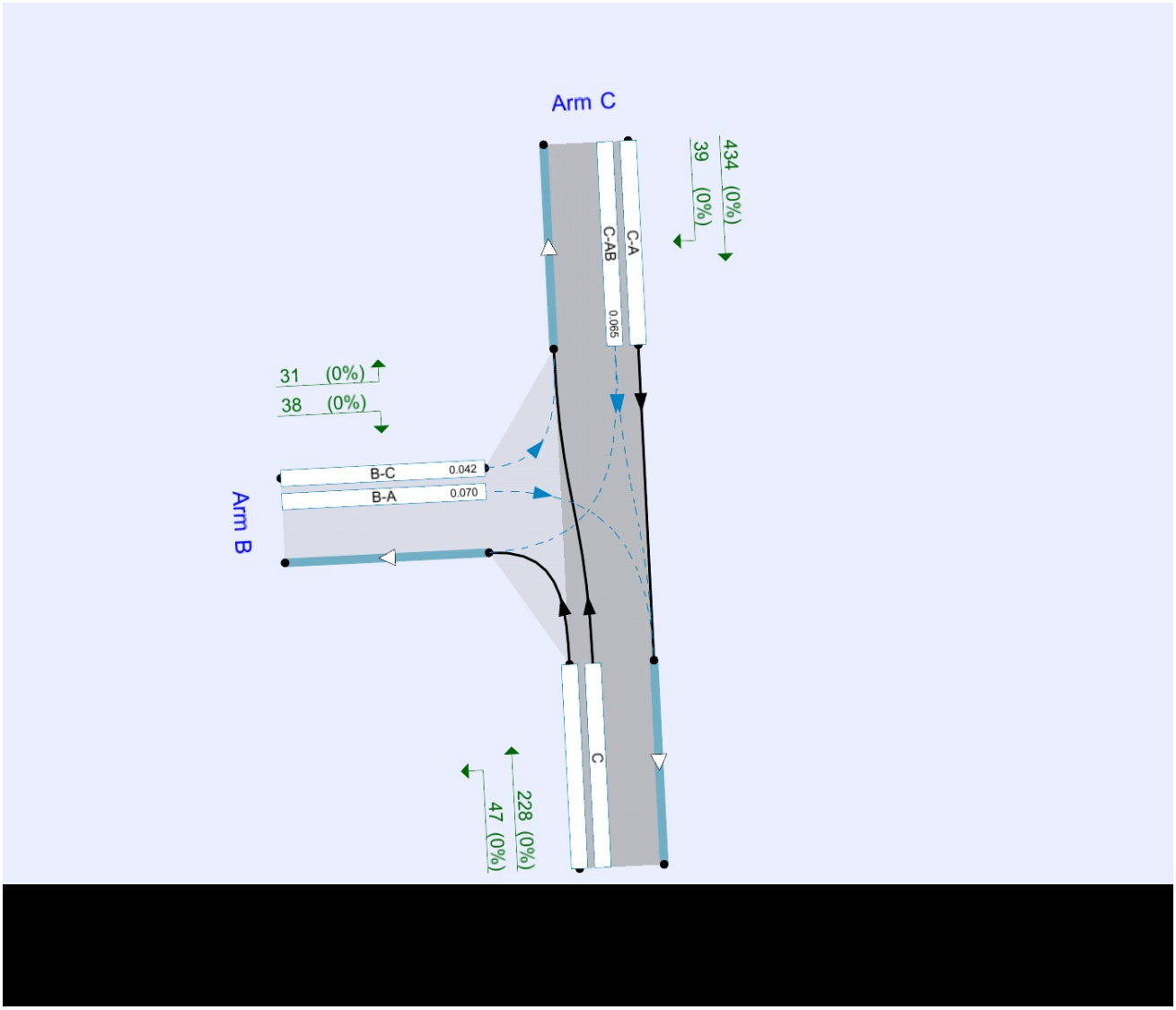
File summary

File Description

Title	
Location	
Site number	
Date	07/10/2021
Version	
Status	(new file)
Identifier	
Client	
Jobnumber	
Enumerator	ATKINSMCCARTHY\manand
Description	

Units

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



The junction diagram reflects the last run of Junctions.

Analysis Options

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

Demand Set Summary

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D1	OY with All dev with GDR	AM Peak	ONE HOUR	07:45	09:15	15	✓
D2	OY with All dev with GDR	PM Peak	ONE HOUR	16:45	18:15	15	✓
D3	OY+5 with All dev with GDR	AM Peak	ONE HOUR	07:45	09:15	15	✓
D4	OY+5 with All dev with GDR	PM Peak	ONE HOUR	16:45	18:15	15	✓
D5	OY+15 with All dev with GDR	AM Peak	ONE HOUR	07:45	09:15	15	✓
D6	OY+15 with All dev with GDR	PM Peak	ONE HOUR	16:45	18:15	15	✓

Analysis Set Details

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

OY with All dev with GDR, AM Peak

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way		0.35	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Name	Description	Arm type
A	GDR Road South		Major
B	Access Road		Minor
C	GDR Road North		Major

Major Arm Geometry

Arm	Width of carriageway (m)	Has kerbed central reserve	Has right turn bay	Visibility for right turn (m)	Blocks?	Blocking queue (PCU)
C	6.50			45.0	✓	0.00

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

Minor Arm Geometry

Arm	Minor arm type	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 plus flare	7.00	5.70	5.70	5.70	5.70	✓	3.00	20	19

Slope / Intercept / Capacity

Priority Intersection Slopes and Intercepts

Stream	Intercept (PCU/hr)	Slope for A-B	Slope for A-C	Slope for C-A	Slope for C-B
B-A	478	0.085	0.215	0.135	0.307
B-C	654	0.098	0.248	-	-
C-B	600	0.227	0.227	-	-

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

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

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

Traffic Demand

Demand Set Details

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

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		ONE HOUR	✓	238	100.000
B		ONE HOUR	✓	20	100.000
C		ONE HOUR	✓	258	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		A	B	C
From	A	0	2	236
	B	9	0	11
	C	255	3	0

Vehicle Mix

Heavy Vehicle Percentages

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

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
B-C	0.02	6.28	0.0	A	10	15
B-A	0.03	9.65	0.0	A	8	12
C-AB	0.01	5.23	0.0	A	4	6
C-A					233	349
A-B					2	3
A-C					217	325

Main Results for each time segment

07:45 - 08:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	8	2	607	0.014	8	0.0	0.0	6.012	A
B-A	7	2	413	0.016	7	0.0	0.0	8.866	A
C-AB	3	0.78	692	0.005	3	0.0	0.0	5.229	A
C-A	191	48			191				
A-B	2	0.38			2				
A-C	178	44			178				

08:00 - 08:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	10	2	598	0.017	10	0.0	0.0	6.124	A
B-A	8	2	400	0.020	8	0.0	0.0	9.180	A
C-AB	4	1.00	710	0.006	4	0.0	0.0	5.097	A
C-A	228	57			228				
A-B	2	0.45			2				
A-C	212	53			212				

08:15 - 08:30

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	12	3	585	0.021	12	0.0	0.0	6.283	A
B-A	10	2	383	0.026	10	0.0	0.0	9.654	A
C-AB	5	1	737	0.007	5	0.0	0.0	4.922	A
C-A	279	70			279				
A-B	2	0.55			2				
A-C	260	65			260				

08:30 - 08:45

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	12	3	585	0.021	12	0.0	0.0	6.284	A
B-A	10	2	383	0.026	10	0.0	0.0	9.653	A
C-AB	5	1	737	0.007	5	0.0	0.0	4.924	A
C-A	279	70			279				
A-B	2	0.55			2				
A-C	260	65			260				

08:45 - 09:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	10	2	597	0.017	10	0.0	0.0	6.129	A
B-A	8	2	400	0.020	8	0.0	0.0	9.178	A
C-AB	4	1.00	710	0.006	4	0.0	0.0	5.097	A
C-A	228	57			228				
A-B	2	0.45			2				
A-C	212	53			212				

09:00 - 09:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	8	2	607	0.014	8	0.0	0.0	6.019	A
B-A	7	2	413	0.016	7	0.0	0.0	8.863	A
C-AB	3	0.78	692	0.005	3	0.0	0.0	5.232	A
C-A	191	48			191				
A-B	2	0.38			2				
A-C	178	44			178				

OY with All dev with GDR, PM Peak

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way		0.23	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

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

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		ONE HOUR	✓	214	100.000
B		ONE HOUR	✓	8	100.000
C		ONE HOUR	✓	397	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		A	B	C
From	A	0	7	207
	B	3	0	5
	C	388	9	0

Vehicle Mix

Heavy Vehicle Percentages

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

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
B-C	0.01	5.85	0.0	A	5	7
B-A	0.01	10.37	0.0	B	3	4
C-AB	0.02	4.78	0.0	A	15	23
C-A					349	524
A-B					6	10
A-C					190	285

Main Results for each time segment

16:45 - 17:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	4	0.94	640	0.006	4	0.0	0.0	5.655	A
B-A	2	0.56	384	0.006	2	0.0	0.0	9.441	A
C-AB	11	3	764	0.014	11	0.0	0.0	4.781	A
C-A	288	72			288				
A-B	5	1			5				
A-C	156	39			156				

17:00 - 17:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	4	1	632	0.007	4	0.0	0.0	5.737	A
B-A	3	0.67	370	0.007	3	0.0	0.0	9.808	A
C-AB	14	4	797	0.018	14	0.0	0.0	4.599	A
C-A	342	86			342				
A-B	6	2			6				
A-C	186	47			186				

17:15 - 17:30

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	6	1	621	0.009	5	0.0	0.0	5.852	A
B-A	3	0.83	350	0.009	3	0.0	0.0	10.372	B
C-AB	20	5	844	0.024	20	0.0	0.0	4.370	A
C-A	417	104			417				
A-B	8	2			8				
A-C	228	57			228				

17:30 - 17:45

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	6	1	620	0.009	6	0.0	0.0	5.853	A
B-A	3	0.83	350	0.009	3	0.0	0.0	10.370	B
C-AB	20	5	844	0.024	20	0.0	0.0	4.372	A
C-A	417	104			417				
A-B	8	2			8				
A-C	228	57			228				

17:45 - 18:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	4	1	632	0.007	5	0.0	0.0	5.739	A
B-A	3	0.67	370	0.007	3	0.0	0.0	9.806	A
C-AB	14	4	797	0.018	14	0.0	0.0	4.601	A
C-A	342	86			342				
A-B	6	2			6				
A-C	186	47			186				

18:00 - 18:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	4	0.94	640	0.006	4	0.0	0.0	5.659	A
B-A	2	0.56	384	0.006	2	0.0	0.0	9.436	A
C-AB	11	3	764	0.014	11	0.0	0.0	4.781	A
C-A	288	72			288				
A-B	5	1			5				
A-C	156	39			156				

OY+5 with All dev with GDR, AM Peak

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way		1.41	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D3	OY+5 with All dev with GDR	AM Peak	ONE HOUR	07:45	09:15	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		ONE HOUR	✓	273	100.000
B		ONE HOUR	✓	78	100.000
C		ONE HOUR	✓	288	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		A	B	C
From	A	0	28	245
	B	43	0	35
	C	264	24	0

Vehicle Mix

Heavy Vehicle Percentages

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

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
B-C	0.07	7.29	0.1	A	32	48
B-A	0.12	10.42	0.1	B	39	59
C-AB	0.06	5.41	0.1	A	34	51
C-A					230	346
A-B					26	39
A-C					225	337

Main Results for each time segment

07:45 - 08:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	26	7	559	0.047	26	0.0	0.0	6.749	A
B-A	32	8	429	0.075	32	0.0	0.1	9.062	A
C-AB	25	6	691	0.037	25	0.0	0.1	5.407	A
C-A	191	48			191				
A-B	21	5			21				
A-C	184	46			184				

08:00 - 08:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	31	8	548	0.057	31	0.0	0.1	6.967	A
B-A	39	10	414	0.093	39	0.1	0.1	9.591	A
C-AB	32	8	710	0.046	32	0.1	0.1	5.316	A
C-A	226	57			226				
A-B	25	6			25				
A-C	220	55			220				

08:15 - 08:30

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	39	10	533	0.072	38	0.1	0.1	7.286	A
B-A	47	12	393	0.121	47	0.1	0.1	10.411	B
C-AB	44	11	737	0.059	44	0.1	0.1	5.200	A
C-A	273	68			273				
A-B	31	8			31				
A-C	270	67			270				

08:30 - 08:45

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	39	10	532	0.072	39	0.1	0.1	7.288	A
B-A	47	12	393	0.121	47	0.1	0.1	10.421	B
C-AB	44	11	737	0.059	44	0.1	0.1	5.201	A
C-A	273	68			273				
A-B	31	8			31				
A-C	270	67			270				

08:45 - 09:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	31	8	548	0.057	32	0.1	0.1	6.972	A
B-A	39	10	414	0.093	39	0.1	0.1	9.601	A
C-AB	33	8	710	0.046	33	0.1	0.1	5.321	A
C-A	226	57			226				
A-B	25	6			25				
A-C	220	55			220				

09:00 - 09:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	26	7	559	0.047	26	0.1	0.0	6.761	A
B-A	32	8	429	0.075	32	0.1	0.1	9.076	A
C-AB	25	6	691	0.037	26	0.1	0.1	5.412	A
C-A	191	48			191				
A-B	21	5			21				
A-C	184	46			184				

OY+5 with All dev with GDR, PM Peak

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way		1.31	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D4	OY+5 with All dev with GDR	PM Peak	ONE HOUR	16:45	18:15	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		ONE HOUR	✓	260	100.000
B		ONE HOUR	✓	69	100.000
C		ONE HOUR	✓	442	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		A	B	C
From	A	0	47	213
	B	38	0	31
	C	403	39	0

Vehicle Mix

Heavy Vehicle Percentages

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

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
B-C	0.06	7.12	0.1	A	28	43
B-A	0.11	10.93	0.1	B	35	52
C-AB	0.11	5.03	0.2	A	68	102
C-A					338	506
A-B					43	65
A-C					195	293

Main Results for each time segment

16:45 - 17:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	23	6	565	0.041	23	0.0	0.0	6.645	A
B-A	29	7	414	0.069	28	0.0	0.1	9.319	A
C-AB	49	12	765	0.064	48	0.0	0.1	5.022	A
C-A	284	71			284				
A-B	35	9			35				
A-C	160	40			160				

17:00 - 17:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	28	7	554	0.050	28	0.0	0.1	6.837	A
B-A	34	9	396	0.086	34	0.1	0.1	9.936	A
C-AB	64	16	799	0.081	64	0.1	0.1	4.902	A
C-A	333	83			333				
A-B	42	11			42				
A-C	191	48			191				

17:15 - 17:30

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	34	9	540	0.063	34	0.1	0.1	7.117	A
B-A	42	10	371	0.113	42	0.1	0.1	10.914	B
C-AB	91	23	847	0.107	90	0.1	0.2	4.764	A
C-A	396	99			396				
A-B	52	13			52				
A-C	235	59			235				

17:30 - 17:45

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	34	9	540	0.063	34	0.1	0.1	7.119	A
B-A	42	10	371	0.113	42	0.1	0.1	10.925	B
C-AB	91	23	847	0.107	91	0.2	0.2	4.768	A
C-A	396	99			396				
A-B	52	13			52				
A-C	235	59			235				

17:45 - 18:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	28	7	554	0.050	28	0.1	0.1	6.843	A
B-A	34	9	396	0.086	34	0.1	0.1	9.945	A
C-AB	65	16	799	0.081	65	0.2	0.2	4.909	A
C-A	333	83			333				
A-B	42	11			42				
A-C	191	48			191				

18:00 - 18:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	23	6	564	0.041	23	0.1	0.0	6.657	A
B-A	29	7	414	0.069	29	0.1	0.1	9.334	A
C-AB	49	12	765	0.064	49	0.2	0.1	5.031	A
C-A	284	71			284				
A-B	35	9			35				
A-C	160	40			160				

OY+15 with All dev with GDR, AM Peak

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way		1.36	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D5	OY+15 with All dev with GDR	AM Peak	ONE HOUR	07:45	09:15	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		ONE HOUR	✓	293	100.000
B		ONE HOUR	✓	78	100.000
C		ONE HOUR	✓	308	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		A	B	C
From	A	0	28	265
	B	43	0	35
	C	284	24	0

Vehicle Mix

Heavy Vehicle Percentages

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

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
B-C	0.07	7.37	0.1	A	32	48
B-A	0.12	10.67	0.1	B	39	59
C-AB	0.06	5.36	0.1	A	35	53
C-A					248	371
A-B					26	39
A-C					243	365

Main Results for each time segment

07:45 - 08:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	26	7	556	0.047	26	0.0	0.0	6.795	A
B-A	32	8	423	0.076	32	0.0	0.1	9.191	A
C-AB	26	7	698	0.037	26	0.0	0.1	5.353	A
C-A	206	51			206				
A-B	21	5			21				
A-C	200	50			200				

08:00 - 08:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	31	8	544	0.058	31	0.0	0.1	7.026	A
B-A	39	10	407	0.095	39	0.1	0.1	9.765	A
C-AB	34	8	719	0.047	33	0.1	0.1	5.256	A
C-A	243	61			243				
A-B	25	6			25				
A-C	238	60			238				

08:15 - 08:30

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	39	10	527	0.073	38	0.1	0.1	7.366	A
B-A	47	12	385	0.123	47	0.1	0.1	10.667	B
C-AB	46	11	748	0.061	45	0.1	0.1	5.127	A
C-A	294	73			294				
A-B	31	8			31				
A-C	292	73			292				

08:30 - 08:45

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	39	10	527	0.073	39	0.1	0.1	7.368	A
B-A	47	12	385	0.123	47	0.1	0.1	10.674	B
C-AB	46	11	748	0.061	46	0.1	0.1	5.130	A
C-A	294	73			294				
A-B	31	8			31				
A-C	292	73			292				

08:45 - 09:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	31	8	544	0.058	32	0.1	0.1	7.031	A
B-A	39	10	407	0.095	39	0.1	0.1	9.774	A
C-AB	34	8	719	0.047	34	0.1	0.1	5.257	A
C-A	243	61			243				
A-B	25	6			25				
A-C	238	60			238				

09:00 - 09:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	26	7	555	0.047	26	0.1	0.1	6.807	A
B-A	32	8	424	0.076	32	0.1	0.1	9.207	A
C-AB	26	7	698	0.037	26	0.1	0.1	5.357	A
C-A	206	51			206				
A-B	21	5			21				
A-C	200	50			200				

OY+15 with All dev with GDR, PM Peak

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way		1.27	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D6	OY+15 with All dev with GDR	PM Peak	ONE HOUR	16:45	18:15	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		ONE HOUR	✓	275	100.000
B		ONE HOUR	✓	69	100.000
C		ONE HOUR	✓	473	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		A	B	C
From	A	0	47	228
	B	38	0	31
	C	434	39	0

Vehicle Mix

Heavy Vehicle Percentages

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

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
B-C	0.06	7.18	0.1	A	28	43
B-A	0.12	11.22	0.1	B	35	52
C-AB	0.11	4.95	0.2	A	71	107
C-A					363	544
A-B					43	65
A-C					209	314

Main Results for each time segment

16:45 - 17:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	23	6	562	0.042	23	0.0	0.0	6.679	A
B-A	29	7	408	0.070	28	0.0	0.1	9.471	A
C-AB	51	13	779	0.065	50	0.0	0.1	4.939	A
C-A	306	76			306				
A-B	35	9			35				
A-C	172	43			172				

17:00 - 17:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	28	7	551	0.051	28	0.0	0.1	6.881	A
B-A	34	9	389	0.088	34	0.1	0.1	10.134	B
C-AB	67	17	816	0.083	67	0.1	0.2	4.811	A
C-A	358	89			358				
A-B	42	11			42				
A-C	205	51			205				

17:15 - 17:30

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	34	9	536	0.064	34	0.1	0.1	7.175	A
B-A	42	10	363	0.115	42	0.1	0.1	11.212	B
C-AB	96	24	868	0.111	96	0.2	0.2	4.664	A
C-A	425	106			425				
A-B	52	13			52				
A-C	251	63			251				

17:30 - 17:45

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	34	9	536	0.064	34	0.1	0.1	7.178	A
B-A	42	10	363	0.115	42	0.1	0.1	11.221	B
C-AB	96	24	868	0.111	96	0.2	0.2	4.670	A
C-A	425	106			425				
A-B	52	13			52				
A-C	251	63			251				

17:45 - 18:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	28	7	551	0.051	28	0.1	0.1	6.886	A
B-A	34	9	389	0.088	34	0.1	0.1	10.144	B
C-AB	68	17	816	0.083	68	0.2	0.2	4.816	A
C-A	358	89			358				
A-B	42	11			42				
A-C	205	51			205				

18:00 - 18:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	23	6	562	0.042	23	0.1	0.0	6.691	A
B-A	29	7	409	0.070	29	0.1	0.1	9.481	A
C-AB	51	13	780	0.065	51	0.2	0.1	4.948	A
C-A	305	76			305				
A-B	35	9			35				
A-C	172	43			172				

Junctions 9

PICADY 9 - Priority Intersection Module

Version: 9.5.1.7462

For sales and distribution information, program advice and maintenance, contact TRL:
+44 (0)1344 379777 software@trl.co.uk www.trlsoftware.co.uk

Filename: East Access Junction to new GDR Road (A1) Cross Road.j9
Path: U:\5158632\7 Calcs\72 Model\722 Traffic\Traffic Models Revision 1\Access Junctions
Report generation date: 01/06/2022 09:52:09

Summary of junction performance

	AM Peak				PM Peak			
	Queue (PCU)	Delay (s)	RFC	LOS	Queue (PCU)	Delay (s)	RFC	LOS
	OY+5 with All dev with GDR							
Stream B-CD	0.1	7.21	0.07	A	0.1	7.04	0.06	A
Stream B-AD	0.1	10.49	0.12	B	0.1	10.98	0.11	B
Stream A-BCD	0.0	5.10	0.01	A	0.0	5.41	0.03	A
Stream D-ABC	0.1	8.62	0.07	A	0.0	8.40	0.04	A
Stream C-ABD	0.1	5.35	0.06	A	0.2	4.94	0.11	A
	OY+15 with All dev with GDR							
Stream B-CD	0.1	7.29	0.07	A	0.1	7.10	0.06	A
Stream B-AD	0.1	10.75	0.12	B	0.1	11.30	0.12	B
Stream A-BCD	0.0	5.05	0.01	A	0.0	5.39	0.03	A
Stream D-ABC	0.1	8.78	0.07	A	0.0	8.60	0.04	A
Stream C-ABD	0.1	5.30	0.06	A	0.3	4.86	0.11	A

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

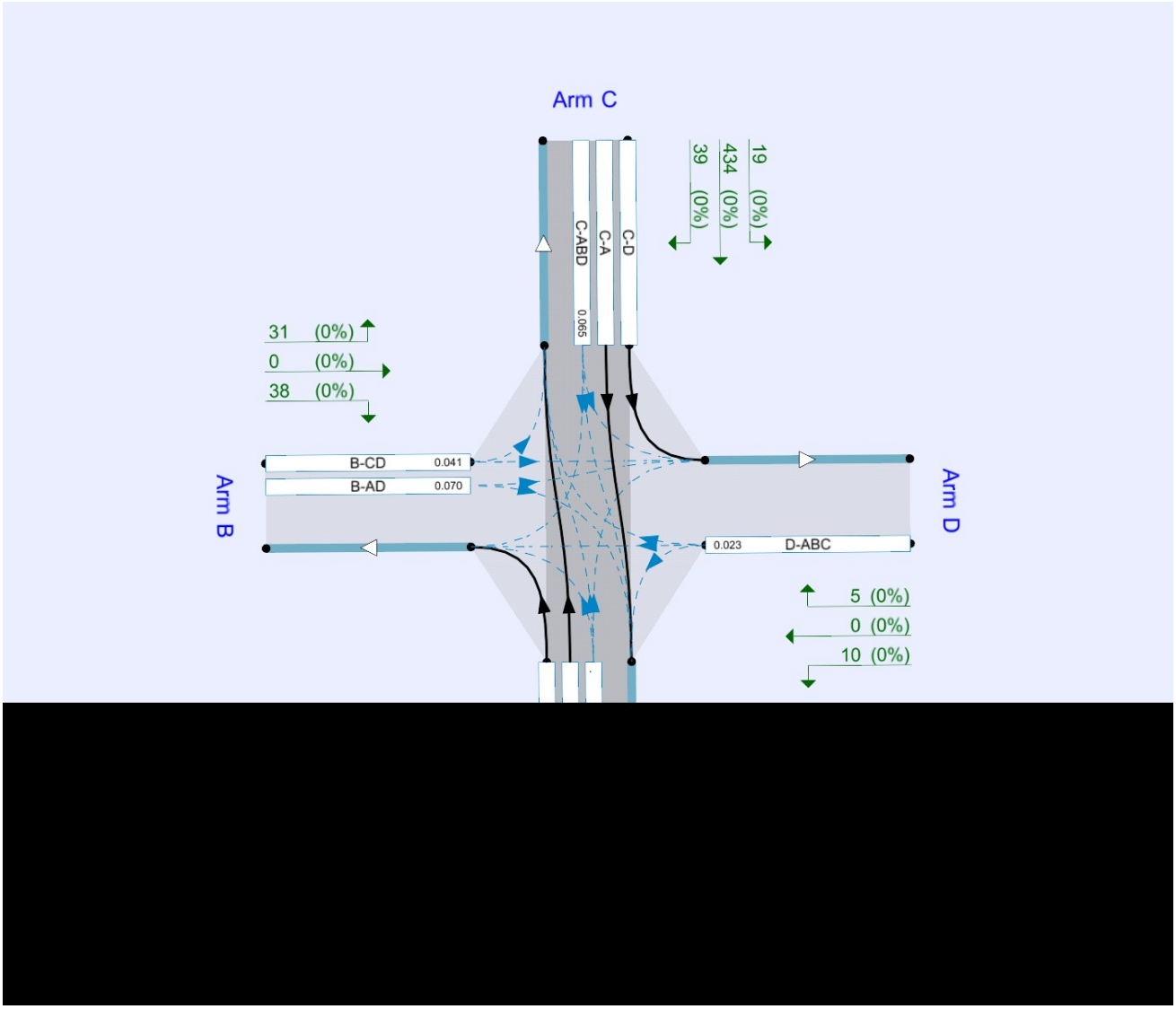
File summary

File Description

Title	
Location	
Site number	
Date	07/10/2021
Version	
Status	(new file)
Identifier	
Client	
Jobnumber	
Enumerator	ATKINSMCCARTHY\manand
Description	

Units

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



The junction diagram reflects the last run of Junctions.

Analysis Options

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

Demand Set Summary

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D3	OY+5 with All dev with GDR	AM Peak	ONE HOUR	07:45	09:15	15	✓
D4	OY+5 with All dev with GDR	PM Peak	ONE HOUR	16:45	18:15	15	✓
D5	OY+15 with All dev with GDR	AM Peak	ONE HOUR	07:45	09:15	15	✓
D6	OY+15 with All dev with GDR	PM Peak	ONE HOUR	16:45	18:15	15	✓

Analysis Set Details

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

OY+5 with All dev with GDR, AM Peak

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	Eastern	Crossroads	Two-way		1.77	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Name	Description	Arm type
A	GDR Road South		Major
B	Western Access Road		Minor
C	GDR Road North		Major
D	untitled		Minor

Major Arm Geometry

Arm	Width of carriageway (m)	Has kerbed central reserve	Has right turn bay	Visibility for right turn (m)	Blocks?	Blocking queue (PCU)
A	6.00			90.0	✓	0.00
C	6.00			60.0	✓	0.00

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

Minor Arm Geometry

Arm	Minor arm type	Lane width (m)	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 plus flare		6.00	6.00	6.00	6.00	6.00		4.00	30	30
D	One lane	3.00								30	30

Slope / Intercept / Capacity

Priority Intersection Slopes and Intercepts

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
A-D	626	-	-	-	-	-	-	0.243	0.347	0.243	-	-	-
B-A	518	0.094	0.238	0.238	-	-	-	0.150	0.340	-	0.238	0.238	0.119
B-C	623	0.096	0.241	-	-	-	-	-	-	-	-	-	-
B-D, nearside lane	487	0.089	0.224	0.224	-	-	-	0.141	0.320	0.141	-	-	-
B-D, offside lane	518	0.094	0.238	0.238	-	-	-	0.150	0.340	0.150	-	-	-
C-B	609	0.236	0.236	0.337	-	-	-	-	-	-	-	-	-
D-A	643	-	-	-	-	-	-	0.249	-	0.099	-	-	-
D-B, nearside lane	502	0.145	0.145	0.330	-	-	-	0.231	0.231	0.091	-	-	-
D-B, offside lane	502	0.145	0.145	0.330	-	-	-	0.231	0.231	0.091	-	-	-
D-C	502	-	0.145	0.330	0.116	0.231	0.231	0.231	0.231	0.091	-	-	-

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

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

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

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D3	OY+5 with All dev with GDR	AM Peak	ONE HOUR	07:45	09:15	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		ONE HOUR	✓	278	100.000
B		ONE HOUR	✓	78	100.000
C		ONE HOUR	✓	293	100.000
D		ONE HOUR	✓	30	100.000

Origin-Destination Data

Demand (PCU/hr)

		To			
		A	B	C	D
From	A	0	28	245	5
	B	43	0	35	0
	C	264	24	0	5
	D	15	0	15	0

Vehicle Mix

Heavy Vehicle Percentages

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

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
B-CD	0.07	7.21	0.1	A	32	48
B-AD	0.12	10.49	0.1	B	39	59
A-BCD	0.01	5.10	0.0	A	7	11
A-B					25	38
A-C					223	334
D-ABC	0.07	8.62	0.1	A	28	41
C-ABD	0.06	5.35	0.1	A	34	51
C-D					4	7
C-A					230	346

Main Results for each time segment

07:45 - 08:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-CD	26	7	566	0.047	26	0.0	0.0	6.671	A
B-AD	32	8	431	0.075	32	0.0	0.1	9.022	A
A-BCD	5	1	711	0.007	5	0.0	0.0	5.101	A
A-B	21	5			21				
A-C	183	46			183				
D-ABC	23	6	487	0.046	22	0.0	0.0	7.739	A
C-ABD	25	6	699	0.036	25	0.0	0.0	5.346	A
C-D	4	0.91			4				
C-A	192	48			192				

08:00 - 08:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-CD	31	8	554	0.057	31	0.0	0.1	6.889	A
B-AD	39	10	414	0.093	39	0.1	0.1	9.589	A
A-BCD	7	2	729	0.009	7	0.0	0.0	4.986	A
A-B	25	6			25				
A-C	218	55			218				
D-ABC	27	7	472	0.057	27	0.0	0.1	8.087	A
C-ABD	33	8	717	0.045	33	0.0	0.1	5.258	A
C-D	4	1			4				
C-A	226	57			226				

08:15 - 08:30

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-CD	39	10	538	0.072	38	0.1	0.1	7.209	A
B-AD	47	12	391	0.121	47	0.1	0.1	10.479	B
A-BCD	9	2	755	0.012	9	0.0	0.0	4.831	A
A-B	30	8			30				
A-C	266	67			266				
D-ABC	33	8	451	0.073	33	0.1	0.1	8.618	A
C-ABD	44	11	744	0.059	44	0.1	0.1	5.144	A
C-D	5	1			5				
C-A	273	68			273				

08:30 - 08:45

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-CD	39	10	538	0.072	39	0.1	0.1	7.211	A
B-AD	47	12	391	0.121	47	0.1	0.1	10.487	B
A-BCD	9	2	755	0.012	9	0.0	0.0	4.833	A
A-B	30	8			30				
A-C	266	67			266				
D-ABC	33	8	451	0.073	33	0.1	0.1	8.621	A
C-ABD	44	11	744	0.059	44	0.1	0.1	5.148	A
C-D	5	1			5				
C-A	273	68			273				

08:45 - 09:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-CD	31	8	554	0.057	32	0.1	0.1	6.897	A
B-AD	39	10	414	0.093	39	0.1	0.1	9.598	A
A-BCD	7	2	729	0.009	7	0.0	0.0	4.986	A
A-B	25	6			25				
A-C	218	55			218				
D-ABC	27	7	472	0.057	27	0.1	0.1	8.092	A
C-ABD	33	8	717	0.046	33	0.1	0.1	5.263	A
C-D	4	1			4				
C-A	226	57			226				

09:00 - 09:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-CD	26	7	565	0.047	26	0.1	0.0	6.681	A
B-AD	32	8	431	0.075	32	0.1	0.1	9.038	A
A-BCD	5	1	711	0.007	5	0.0	0.0	5.102	A
A-B	21	5			21				
A-C	183	46			183				
D-ABC	23	6	487	0.046	23	0.1	0.0	7.749	A
C-ABD	26	6	699	0.037	26	0.1	0.1	5.353	A
C-D	4	0.91			4				
C-A	191	48			191				

OY+5 with All dev with GDR, PM Peak

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	Eastern	Crossroads	Two-way		1.50	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D4	OY+5 with All dev with GDR	PM Peak	ONE HOUR	16:45	18:15	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		ONE HOUR	✓	270	100.000
B		ONE HOUR	✓	69	100.000
C		ONE HOUR	✓	461	100.000
D		ONE HOUR	✓	15	100.000

Origin-Destination Data

Demand (PCU/hr)

		To			
		A	B	C	D
From	A	0	47	213	10
	B	38	0	31	0
	C	403	39	0	19
	D	10	0	5	0

Vehicle Mix

Heavy Vehicle Percentages

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

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
B-CD	0.06	7.04	0.1	A	28	43
B-AD	0.11	10.98	0.1	B	35	52
A-BCD	0.03	5.41	0.0	A	14	21
A-B					42	63
A-C					191	287
D-ABC	0.04	8.40	0.0	A	14	21
C-ABD	0.11	4.94	0.2	A	70	105
C-D					16	24
C-A					337	506

Main Results for each time segment

16:45 - 17:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-CD	23	6	571	0.041	23	0.0	0.0	6.568	A
B-AD	29	7	416	0.069	28	0.0	0.1	9.271	A
A-BCD	11	3	676	0.016	11	0.0	0.0	5.410	A
A-B	35	9			35				
A-C	158	39			158				
D-ABC	11	3	492	0.023	11	0.0	0.0	7.494	A
C-ABD	50	12	779	0.064	49	0.0	0.1	4.935	A
C-D	13	3			13				
C-A	284	71			284				

17:00 - 17:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-CD	28	7	560	0.050	28	0.0	0.1	6.760	A
B-AD	34	9	397	0.086	34	0.1	0.1	9.924	A
A-BCD	14	3	688	0.020	14	0.0	0.0	5.340	A
A-B	41	10			41				
A-C	188	47			188				
D-ABC	13	3	472	0.029	13	0.0	0.0	7.848	A
C-ABD	66	16	814	0.081	66	0.1	0.2	4.815	A
C-D	16	4			16				
C-A	333	83			333				

17:15 - 17:30

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-CD	34	9	545	0.063	34	0.1	0.1	7.040	A
B-AD	42	10	370	0.113	42	0.1	0.1	10.975	B
A-BCD	19	5	705	0.026	19	0.0	0.0	5.242	A
A-B	50	13			50				
A-C	228	57			228				
D-ABC	17	4	445	0.037	16	0.0	0.0	8.399	A
C-ABD	93	23	864	0.108	93	0.2	0.2	4.676	A
C-D	19	5			19				
C-A	396	99			396				

17:30 - 17:45

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-CD	34	9	545	0.063	34	0.1	0.1	7.043	A
B-AD	42	10	370	0.113	42	0.1	0.1	10.984	B
A-BCD	19	5	705	0.026	19	0.0	0.0	5.243	A
A-B	50	13			50				
A-C	228	57			228				
D-ABC	17	4	445	0.037	17	0.0	0.0	8.401	A
C-ABD	94	23	864	0.108	93	0.2	0.2	4.680	A
C-D	19	5			19				
C-A	395	99			395				

17:45 - 18:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-CD	28	7	560	0.050	28	0.1	0.1	6.768	A
B-AD	34	9	397	0.086	34	0.1	0.1	9.935	A
A-BCD	14	3	688	0.020	14	0.0	0.0	5.342	A
A-B	41	10			41				
A-C	188	47			188				
D-ABC	13	3	472	0.029	14	0.0	0.0	7.851	A
C-ABD	66	17	814	0.081	66	0.2	0.2	4.820	A
C-D	16	4			16				
C-A	333	83			333				

18:00 - 18:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-CD	23	6	571	0.041	23	0.1	0.0	6.577	A
B-AD	29	7	416	0.069	29	0.1	0.1	9.288	A
A-BCD	11	3	676	0.016	11	0.0	0.0	5.414	A
A-B	35	9			35				
A-C	158	39			158				
D-ABC	11	3	491	0.023	11	0.0	0.0	7.501	A
C-ABD	50	12	779	0.064	50	0.2	0.1	4.942	A
C-D	13	3			13				
C-A	284	71			284				

OY+15 with All dev with GDR, AM Peak

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	Eastern	Crossroads	Two-way		1.70	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D5	OY+15 with All dev with GDR	AM Peak	ONE HOUR	07:45	09:15	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		ONE HOUR	✓	298	100.000
B		ONE HOUR	✓	78	100.000
C		ONE HOUR	✓	313	100.000
D		ONE HOUR	✓	30	100.000

Origin-Destination Data

Demand (PCU/hr)

		To			
		A	B	C	D
From	A	0	28	265	5
	B	43	0	35	0
	C	284	24	0	5
	D	15	0	15	0

Vehicle Mix

Heavy Vehicle Percentages

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

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
B-CD	0.07	7.29	0.1	A	32	48
B-AD	0.12	10.75	0.1	B	39	59
A-BCD	0.01	5.05	0.0	A	7	11
A-B					25	38
A-C					241	361
D-ABC	0.07	8.78	0.1	A	28	41
C-ABD	0.06	5.30	0.1	A	35	53
C-D					4	7
C-A					248	371

Main Results for each time segment

07:45 - 08:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-CD	26	7	562	0.047	26	0.0	0.0	6.718	A
B-AD	32	8	425	0.076	32	0.0	0.1	9.157	A
A-BCD	5	1	718	0.008	5	0.0	0.0	5.052	A
A-B	21	5			21				
A-C	198	49			198				
D-ABC	23	6	482	0.047	22	0.0	0.0	7.826	A
C-ABD	26	7	706	0.037	26	0.0	0.1	5.295	A
C-D	4	0.91			4				
C-A	206	51			206				

08:00 - 08:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-CD	31	8	549	0.057	31	0.0	0.1	6.949	A
B-AD	39	10	407	0.095	39	0.1	0.1	9.771	A
A-BCD	7	2	738	0.010	7	0.0	0.0	4.928	A
A-B	25	6			25				
A-C	236	59			236				
D-ABC	27	7	466	0.058	27	0.0	0.1	8.202	A
C-ABD	34	8	726	0.046	34	0.1	0.1	5.201	A
C-D	4	1			4				
C-A	243	61			243				

08:15 - 08:30

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-CD	39	10	532	0.072	38	0.1	0.1	7.290	A
B-AD	47	12	382	0.124	47	0.1	0.1	10.747	B
A-BCD	10	2	766	0.012	10	0.0	0.0	4.763	A
A-B	30	8			30				
A-C	288	72			288				
D-ABC	33	8	443	0.075	33	0.1	0.1	8.783	A
C-ABD	46	11	755	0.061	46	0.1	0.1	5.078	A
C-D	5	1			5				
C-A	294	73			294				

08:30 - 08:45

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-CD	39	10	532	0.072	39	0.1	0.1	7.292	A
B-AD	47	12	382	0.124	47	0.1	0.1	10.754	B
A-BCD	10	2	766	0.012	10	0.0	0.0	4.765	A
A-B	30	8			30				
A-C	288	72			288				
D-ABC	33	8	443	0.075	33	0.1	0.1	8.785	A
C-ABD	46	11	755	0.061	46	0.1	0.1	5.080	A
C-D	5	1			5				
C-A	294	73			294				

08:45 - 09:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-CD	31	8	549	0.057	32	0.1	0.1	6.954	A
B-AD	39	10	407	0.095	39	0.1	0.1	9.780	A
A-BCD	7	2	738	0.010	7	0.0	0.0	4.931	A
A-B	25	6			25				
A-C	236	59			236				
D-ABC	27	7	466	0.058	27	0.1	0.1	8.208	A
C-ABD	34	8	726	0.046	34	0.1	0.1	5.204	A
C-D	4	1			4				
C-A	243	61			243				

09:00 - 09:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-CD	26	7	561	0.047	26	0.1	0.0	6.730	A
B-AD	32	8	425	0.076	32	0.1	0.1	9.173	A
A-BCD	5	1	718	0.008	5	0.0	0.0	5.055	A
A-B	21	5			21				
A-C	198	49			198				
D-ABC	23	6	482	0.047	23	0.1	0.0	7.838	A
C-ABD	26	7	706	0.037	26	0.1	0.1	5.301	A
C-D	4	0.91			4				
C-A	206	51			206				

OY+15 with All dev with GDR, PM Peak

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	Eastern	Crossroads	Two-way		1.46	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D6	OY+15 with All dev with GDR	PM Peak	ONE HOUR	16:45	18:15	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		ONE HOUR	✓	285	100.000
B		ONE HOUR	✓	69	100.000
C		ONE HOUR	✓	492	100.000
D		ONE HOUR	✓	15	100.000

Origin-Destination Data

Demand (PCU/hr)

		To			
		A	B	C	D
From	A	0	47	228	10
	B	38	0	31	0
	C	434	39	0	19
	D	10	0	5	0

Vehicle Mix

Heavy Vehicle Percentages

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

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
B-CD	0.06	7.10	0.1	A	28	43
B-AD	0.12	11.30	0.1	B	35	52
A-BCD	0.03	5.39	0.0	A	15	22
A-B					42	63
A-C					205	307
D-ABC	0.04	8.60	0.0	A	14	21
C-ABD	0.11	4.86	0.3	A	73	110
C-D					16	24
C-A					362	544

Main Results for each time segment

16:45 - 17:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-CD	23	6	568	0.041	23	0.0	0.0	6.602	A
B-AD	29	7	410	0.070	28	0.0	0.1	9.422	A
A-BCD	11	3	679	0.016	11	0.0	0.0	5.388	A
A-B	35	9			35				
A-C	169	42			169				
D-ABC	11	3	485	0.023	11	0.0	0.0	7.597	A
C-ABD	52	13	793	0.065	51	0.0	0.1	4.855	A
C-D	13	3			13				
C-A	306	76			306				

17:00 - 17:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-CD	28	7	557	0.050	28	0.0	0.1	6.804	A
B-AD	34	9	389	0.088	34	0.1	0.1	10.131	B
A-BCD	14	4	692	0.020	14	0.0	0.0	5.313	A
A-B	41	10			41				
A-C	201	50			201				
D-ABC	13	3	464	0.029	13	0.0	0.0	7.988	A
C-ABD	69	17	831	0.083	69	0.1	0.2	4.729	A
C-D	16	4			16				
C-A	358	89			358				

17:15 - 17:30

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-CD	34	9	541	0.063	34	0.1	0.1	7.100	A
B-AD	42	10	361	0.116	42	0.1	0.1	11.286	B
A-BCD	19	5	710	0.027	19	0.0	0.0	5.208	A
A-B	50	13			50				
A-C	244	61			244				
D-ABC	17	4	435	0.038	16	0.0	0.0	8.600	A
C-ABD	99	25	885	0.112	99	0.2	0.2	4.583	A
C-D	19	5			19				
C-A	424	106			424				

17:30 - 17:45

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-CD	34	9	541	0.063	34	0.1	0.1	7.102	A
B-AD	42	10	361	0.116	42	0.1	0.1	11.295	B
A-BCD	19	5	710	0.027	19	0.0	0.0	5.211	A
A-B	50	13			50				
A-C	244	61			244				
D-ABC	17	4	435	0.038	17	0.0	0.0	8.602	A
C-ABD	99	25	885	0.112	99	0.2	0.3	4.588	A
C-D	19	5			19				
C-A	424	106			424				

17:45 - 18:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-CD	28	7	557	0.050	28	0.1	0.1	6.810	A
B-AD	34	9	389	0.088	34	0.1	0.1	10.144	B
A-BCD	14	4	691	0.020	14	0.0	0.0	5.315	A
A-B	41	10			41				
A-C	201	50			201				
D-ABC	13	3	464	0.029	14	0.0	0.0	7.992	A
C-ABD	69	17	831	0.083	70	0.3	0.2	4.733	A
C-D	16	4			16				
C-A	357	89			357				

18:00 - 18:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-CD	23	6	568	0.041	23	0.1	0.0	6.612	A
B-AD	29	7	410	0.070	29	0.1	0.1	9.439	A
A-BCD	11	3	679	0.016	11	0.0	0.0	5.393	A
A-B	35	9			35				
A-C	169	42			169				
D-ABC	11	3	485	0.023	11	0.0	0.0	7.604	A
C-ABD	52	13	793	0.065	52	0.2	0.1	4.864	A
C-D	13	3			13				
C-A	305	76			305				

Junctions 9

PICADY 9 - Priority Intersection Module

Version: 9.5.1.7462

Filename: Enniskerry Road Access Junction (A2).j9
Path: U:\5158632\7 Calcs\72 Model\722 Traffic\Traffic Models Revision 1\Access Junctions
Report generation date: 01/06/2022 12:50:37

Summary of junction performance

	AM Peak				PM Peak			
	Queue (PCU)	Delay (s)	RFC	LOS	Queue (PCU)	Delay (s)	RFC	LOS
	OY All Development without GDR							
Stream B-AC	0.1	11.60	0.05	B	0.0	10.86	0.02	B
Stream C-AB	0.0	4.54	0.01	A	0.0	5.17	0.02	A
	OY All Development with GDR							
Stream B-AC	0.0	8.60	0.01	A	0.0	0.00	0.00	A
Stream C-AB	0.0	5.09	0.00	A	0.0	5.50	0.00	A
	OY+5 All Development with GDR							
Stream B-AC	0.0	8.19	0.03	A	0.0	7.55	0.03	A
Stream C-AB	0.0	5.10	0.02	A	0.0	5.55	0.03	A
	OY+15 All Development with GDR							
Stream B-AC	0.0	8.31	0.03	A	0.0	7.59	0.03	A
Stream C-AB	0.0	5.06	0.02	A	0.0	5.54	0.03	A

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

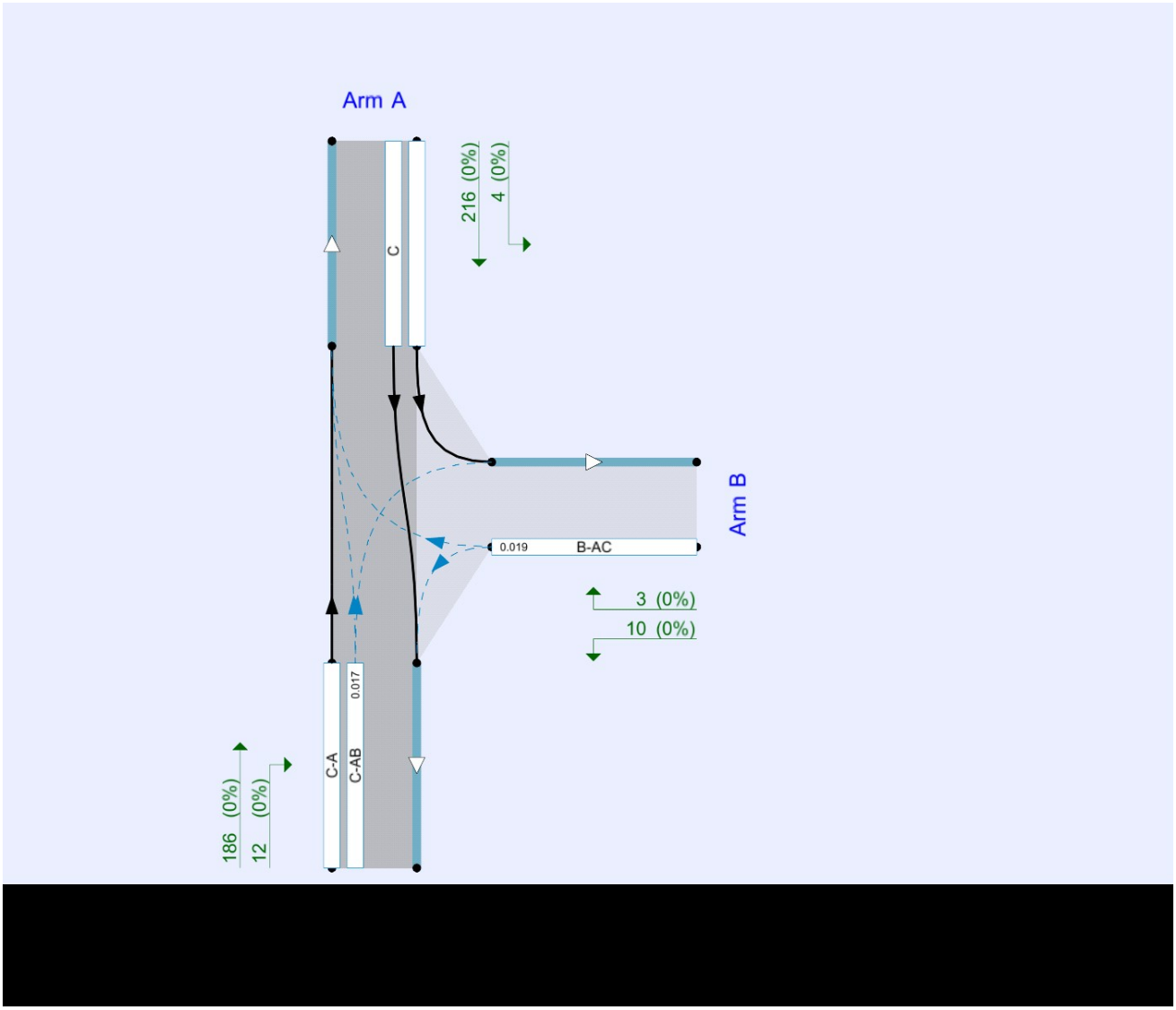
File summary

File Description

Title	
Location	
Site number	
Date	07/10/2021
Version	
Status	(new file)
Identifier	
Client	
Jobnumber	
Enumerator	ATKINSMCCARTHY\manand
Description	

Units

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



The junction diagram reflects the last run of Junctions.

Analysis Options

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

Analysis Set Details

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

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D8	OY+15 All Development with GDR	PM Peak	ONE HOUR	16:45	18:15	15	✓

OY+15 All Development with GDR, PM Peak

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way		0.44	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Name	Description	Arm type
A	Enniskerry Road North		Major
B	Access Road		Minor
C	Enniskerry Road South		Major

Major Arm Geometry

Arm	Width of carriageway (m)	Has kerbed central reserve	Has right turn bay	Visibility for right turn (m)	Blocks?	Blocking queue (PCU)
C	6.50			50.0	✓	0.00

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

Minor Arm Geometry

Arm	Minor arm type	Lane width (m)	Visibility to left (m)	Visibility to right (m)
B	One lane	2.25	22	20

Slope / Intercept / Capacity

Priority Intersection Slopes and Intercepts

Stream	Intercept (PCU/hr)	Slope for A-B	Slope for A-C	Slope for C-A	Slope for C-B
B-A	457	0.082	0.206	0.130	0.294
B-C	589	0.088	0.223	-	-
C-B	603	0.229	0.229	-	-

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

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

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

Traffic Demand

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		ONE HOUR	✓	220	100.000
B		ONE HOUR	✓	13	100.000
C		ONE HOUR	✓	198	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		A	B	C
From	A	0	4	216
	B	3	0	10
	C	186	12	0

Vehicle Mix

Heavy Vehicle Percentages

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

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
B-AC	0.03	7.59	0.0	A	12	18
C-AB	0.03	5.54	0.0	A	15	22
C-A					167	250
A-B					4	6
A-C					198	297

Main Results for each time segment

16:45 - 17:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	10	2	509	0.019	10	0.0	0.0	7.215	A
C-AB	11	3	661	0.017	11	0.0	0.0	5.541	A
C-A	138	34			138				
A-B	3	0.75			3				
A-C	163	41			163				

17:00 - 17:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	12	3	500	0.023	12	0.0	0.0	7.369	A
C-AB	14	4	673	0.021	14	0.0	0.0	5.465	A
C-A	164	41			164				
A-B	4	0.90			4				
A-C	194	49			194				

17:15 - 17:30

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	14	4	488	0.029	14	0.0	0.0	7.595	A
C-AB	19	5	690	0.027	19	0.0	0.0	5.363	A
C-A	199	50			199				
A-B	4	1			4				
A-C	238	59			238				

17:30 - 17:45

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	14	4	488	0.029	14	0.0	0.0	7.595	A
C-AB	19	5	690	0.027	19	0.0	0.0	5.364	A
C-A	199	50			199				
A-B	4	1			4				
A-C	238	59			238				

17:45 - 18:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	12	3	500	0.023	12	0.0	0.0	7.373	A
C-AB	14	4	673	0.021	14	0.0	0.0	5.468	A
C-A	164	41			164				
A-B	4	0.90			4				
A-C	194	49			194				

18:00 - 18:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	10	2	509	0.019	10	0.0	0.0	7.215	A
C-AB	11	3	661	0.017	12	0.0	0.0	5.542	A
C-A	138	34			138				
A-B	3	0.75			3				
A-C	163	41			163				

Junctions 9

PICADY 9 - Priority Intersection Module

Filename: Enniskerry Road Access Junction (A3).j9
Path: U:\5158632\7 Calcs\72 Model\722 Traffic\Traffic Models Revision 1\Access Junctions
Report generation date: 01/06/2022 13:10:13

Summary of junction performance

	AM Peak				PM Peak			
	Queue (PCU)	Delay (s)	RFC	LOS	Queue (PCU)	Delay (s)	RFC	LOS
	OY All Development without GDR							
Stream B-AC	0.1	11.64	0.05	B	0.0	10.83	0.02	B
Stream C-AB	0.0	4.56	0.01	A	0.0	5.16	0.02	A
	OY All Development with GDR							
Stream B-AC	0.0	8.61	0.01	A	0.0	0.00	0.00	A
Stream C-AB	0.0	5.10	0.00	A	0.0	5.49	0.00	A
	OY+5 All Development with GDR							
Stream B-AC	0.0	8.24	0.03	A	0.0	7.60	0.03	A
Stream C-AB	0.0	5.10	0.02	A	0.0	5.53	0.03	A
	OY+15 All Development with GDR							
Stream B-AC	0.0	8.37	0.03	A	0.0	7.64	0.03	A
Stream C-AB	0.0	5.05	0.02	A	0.0	5.52	0.03	A

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

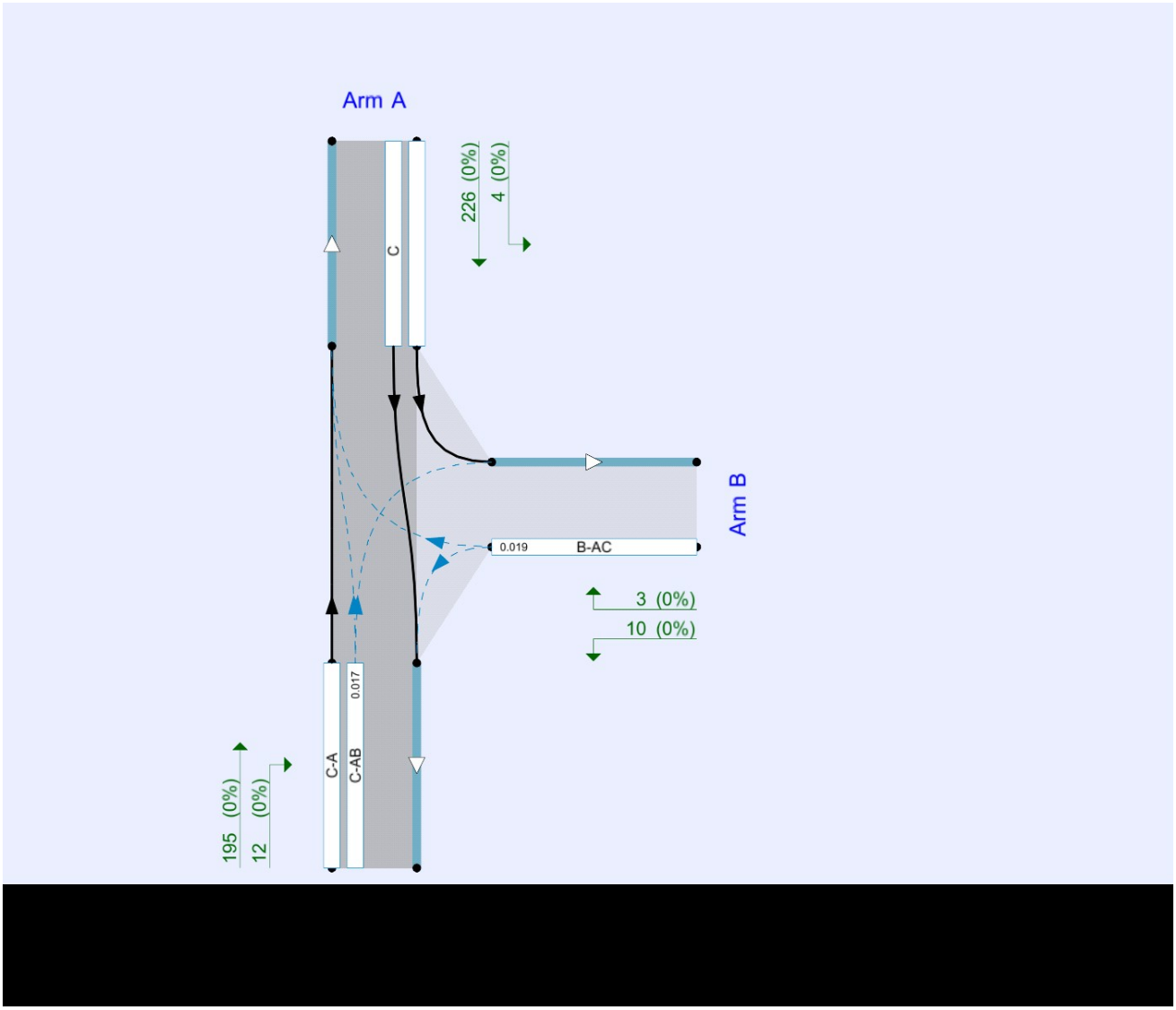
File summary

File Description

Title	
Location	
Site number	
Date	07/10/2021
Version	
Status	(new file)
Identifier	
Client	
Jobnumber	
Enumerator	ATKINSMCCARTHY\manand
Description	

Units

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



The junction diagram reflects the last run of Junctions.

Analysis Options

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

Analysis Set Details

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

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D8	OY+15 All Development with GDR	PM Peak	ONE HOUR	16:45	18:15	15	✓

OY+15 All Development with GDR, PM Peak

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way		0.42	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Name	Description	Arm type
A	Enniskerry Road North		Major
B	Access Road		Minor
C	Enniskerry Road South		Major

Major Arm Geometry

Arm	Width of carriageway (m)	Has kerbed central reserve	Has right turn bay	Visibility for right turn (m)	Blocks?	Blocking queue (PCU)
C	6.50			50.0	✓	0.00

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

Minor Arm Geometry

Arm	Minor arm type	Lane width (m)	Visibility to left (m)	Visibility to right (m)
B	One lane	2.25	22	20

Slope / Intercept / Capacity

Priority Intersection Slopes and Intercepts

Stream	Intercept (PCU/hr)	Slope for A-B	Slope for A-C	Slope for C-A	Slope for C-B
B-A	457	0.082	0.206	0.130	0.294
B-C	589	0.088	0.223	-	-
C-B	603	0.229	0.229	-	-

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

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

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

Traffic Demand

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		ONE HOUR	✓	230	100.000
B		ONE HOUR	✓	13	100.000
C		ONE HOUR	✓	207	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		A	B	C
From	A	0	4	226
	B	3	0	10
	C	195	12	0

Vehicle Mix

Heavy Vehicle Percentages

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

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
B-AC	0.03	7.64	0.0	A	12	18
C-AB	0.03	5.52	0.0	A	15	23
C-A					175	262
A-B					4	6
A-C					207	311

Main Results for each time segment

16:45 - 17:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	10	2	507	0.019	10	0.0	0.0	7.244	A
C-AB	12	3	664	0.017	12	0.0	0.0	5.516	A
C-A	144	36			144				
A-B	3	0.75			3				
A-C	170	43			170				

17:00 - 17:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	12	3	498	0.023	12	0.0	0.0	7.405	A
C-AB	15	4	677	0.022	15	0.0	0.0	5.436	A
C-A	172	43			172				
A-B	4	0.90			4				
A-C	203	51			203				

17:15 - 17:30

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	14	4	485	0.029	14	0.0	0.0	7.642	A
C-AB	19	5	695	0.028	19	0.0	0.0	5.329	A
C-A	209	52			209				
A-B	4	1			4				
A-C	249	62			249				

17:30 - 17:45

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	14	4	485	0.029	14	0.0	0.0	7.642	A
C-AB	19	5	695	0.028	19	0.0	0.0	5.329	A
C-A	209	52			209				
A-B	4	1			4				
A-C	249	62			249				

17:45 - 18:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	12	3	498	0.023	12	0.0	0.0	7.406	A
C-AB	15	4	677	0.022	15	0.0	0.0	5.439	A
C-A	171	43			171				
A-B	4	0.90			4				
A-C	203	51			203				

18:00 - 18:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	10	2	507	0.019	10	0.0	0.0	7.244	A
C-AB	12	3	664	0.017	12	0.0	0.0	5.519	A
C-A	144	36			144				
A-B	3	0.75			3				
A-C	170	43			170				

Junctions 9

PICADY 9 - Priority Intersection Module

Filename: Enniskerry Road Access Junction (A4).j9
Path: U:\5158632\7 Calcs\72 Model\722 Traffic\Traffic Models Revision 1\Access Junctions
Report generation date: 01/06/2022 13:13:43

Summary of junction performance

	AM Peak				PM Peak			
	Queue (PCU)	Delay (s)	RFC	LOS	Queue (PCU)	Delay (s)	RFC	LOS
	OY+5+Dev+GDR							
Stream B-AC	0.0	8.29	0.03	A	0.0	7.63	0.03	A
Stream C-AB	0.0	5.10	0.02	A	0.0	5.50	0.03	A
	OY+15+Dev+GDR							
Stream B-AC	0.0	8.41	0.03	A	0.0	7.67	0.03	A
Stream C-AB	0.0	5.05	0.02	A	0.0	5.49	0.03	A

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

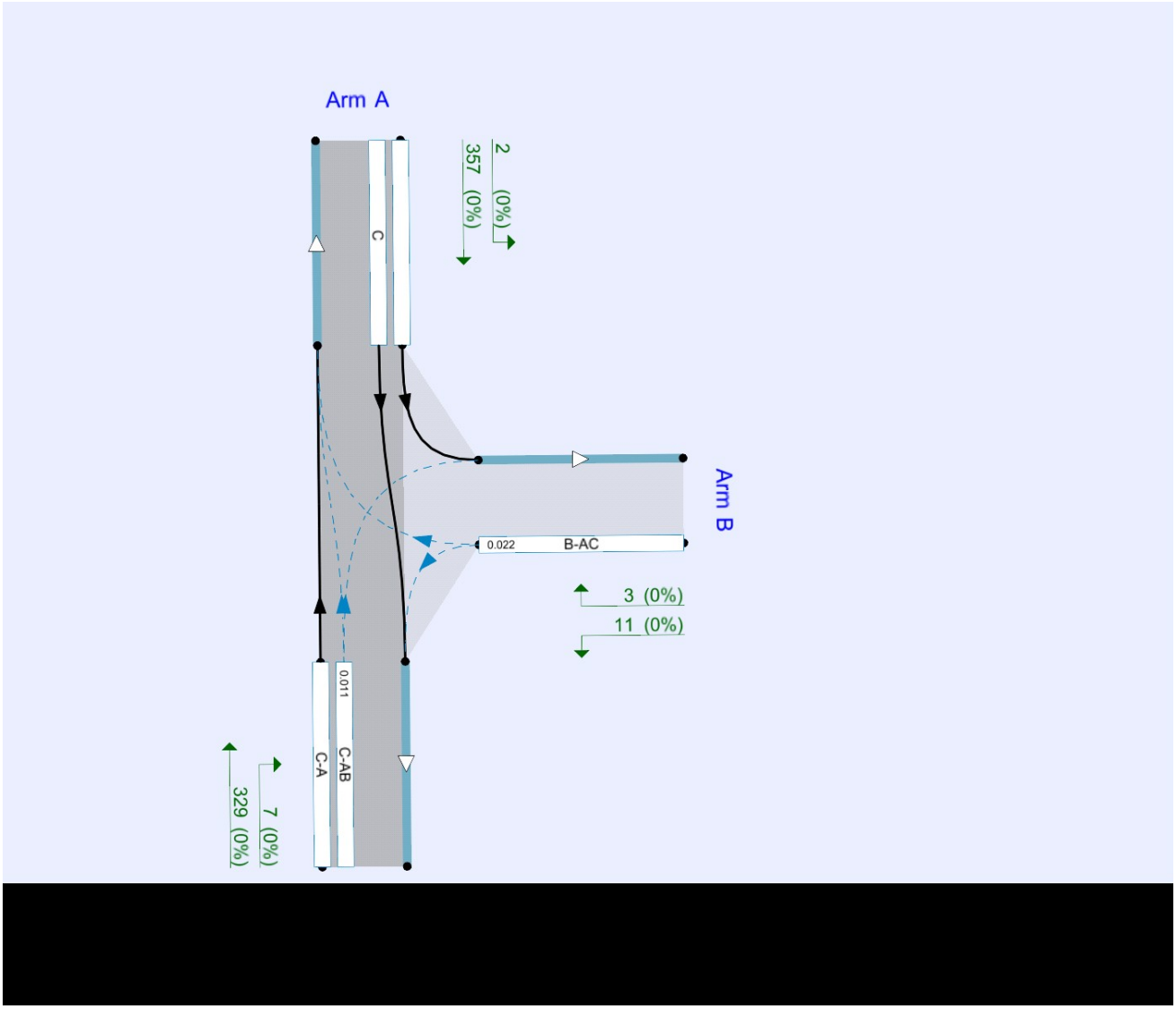
File summary

File Description

Title	
Location	
Site number	
Date	07/10/2021
Version	
Status	(new file)
Identifier	
Client	
Jobnumber	
Enumerator	ATKINSMCCARTHY\manand
Description	

Units

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



The junction diagram reflects the last run of Junctions.

Analysis Options

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

Analysis Set Details

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

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D1	OY+5+Dev+GDR	AM Peak	ONE HOUR	07:45	09:15	15	✓

OY+5+Dev+GDR, AM Peak

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way		0.25	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Name	Description	Arm type
A	Enniskerry Road North		Major
B	Access Road		Minor
C	Enniskerry Road South		Major

Major Arm Geometry

Arm	Width of carriageway (m)	Has kerbed central reserve	Has right turn bay	Visibility for right turn (m)	Blocks?	Blocking queue (PCU)
C	6.50			50.0	✓	0.00

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

Minor Arm Geometry

Arm	Minor arm type	Lane width (m)	Visibility to left (m)	Visibility to right (m)
B	One lane	2.25	22	20

Slope / Intercept / Capacity

Priority Intersection Slopes and Intercepts

Stream	Intercept (PCU/hr)	Slope for A-B	Slope for A-C	Slope for C-A	Slope for C-B
B-A	457	0.082	0.206	0.130	0.294
B-C	589	0.088	0.223	-	-
C-B	603	0.229	0.229	-	-

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

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

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

Traffic Demand

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		ONE HOUR	✓	359	100.000
B		ONE HOUR	✓	14	100.000
C		ONE HOUR	✓	336	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		A	B	C
From	A	0	2	357
	B	3	0	11
	C	329	7	0

Vehicle Mix

Heavy Vehicle Percentages

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

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
B-AC	0.03	8.29	0.0	A	13	19
C-AB	0.02	5.10	0.0	A	11	17
C-A					297	446
A-B					2	3
A-C					328	491

Main Results for each time segment

07:45 - 08:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	11	3	484	0.022	10	0.0	0.0	7.610	A
C-AB	8	2	714	0.011	8	0.0	0.0	5.098	A
C-A	245	61			245				
A-B	2	0.38			2				
A-C	269	67			269				

08:00 - 08:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	13	3	469	0.027	13	0.0	0.0	7.880	A
C-AB	11	3	738	0.014	11	0.0	0.0	4.950	A
C-A	292	73			292				
A-B	2	0.45			2				
A-C	321	80			321				

08:15 - 08:30

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	15	4	450	0.034	15	0.0	0.0	8.290	A
C-AB	15	4	772	0.019	15	0.0	0.0	4.756	A
C-A	355	89			355				
A-B	2	0.55			2				
A-C	393	98			393				

08:30 - 08:45

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	15	4	450	0.034	15	0.0	0.0	8.290	A
C-AB	15	4	772	0.019	15	0.0	0.0	4.758	A
C-A	355	89			355				
A-B	2	0.55			2				
A-C	393	98			393				

08:45 - 09:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	13	3	469	0.027	13	0.0	0.0	7.883	A
C-AB	11	3	738	0.014	11	0.0	0.0	4.952	A
C-A	292	73			292				
A-B	2	0.45			2				
A-C	321	80			321				

09:00 - 09:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	11	3	484	0.022	11	0.0	0.0	7.611	A
C-AB	8	2	714	0.011	8	0.0	0.0	5.098	A
C-A	245	61			245				
A-B	2	0.38			2				
A-C	269	67			269				

Junctions 9

PICADY 9 - Priority Intersection Module

Filename: Glenmauck Road Access Junction (A5).j9
Path: U:\5158632\7 Calcs\72 Model\722 Traffic\Traffic Models Revision 1\Access Junctions
Report generation date: 25/05/2022 10:46:30

Summary of junction performance

	AM Peak				PM Peak			
	Queue (PCU)	Delay (s)	RFC	LOS	Queue (PCU)	Delay (s)	RFC	LOS
	OY+5+Dev+GDR							
Stream B-AC	0.1	9.36	0.09	A	0.1	9.01	0.08	A
Stream C-AB	0.1	4.47	0.04	A	0.1	5.21	0.06	A
	OY+15+Dev+GDR							
Stream B-AC	0.1	9.61	0.09	A	0.1	9.11	0.08	A
Stream C-AB	0.1	4.41	0.04	A	0.1	5.18	0.06	A

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

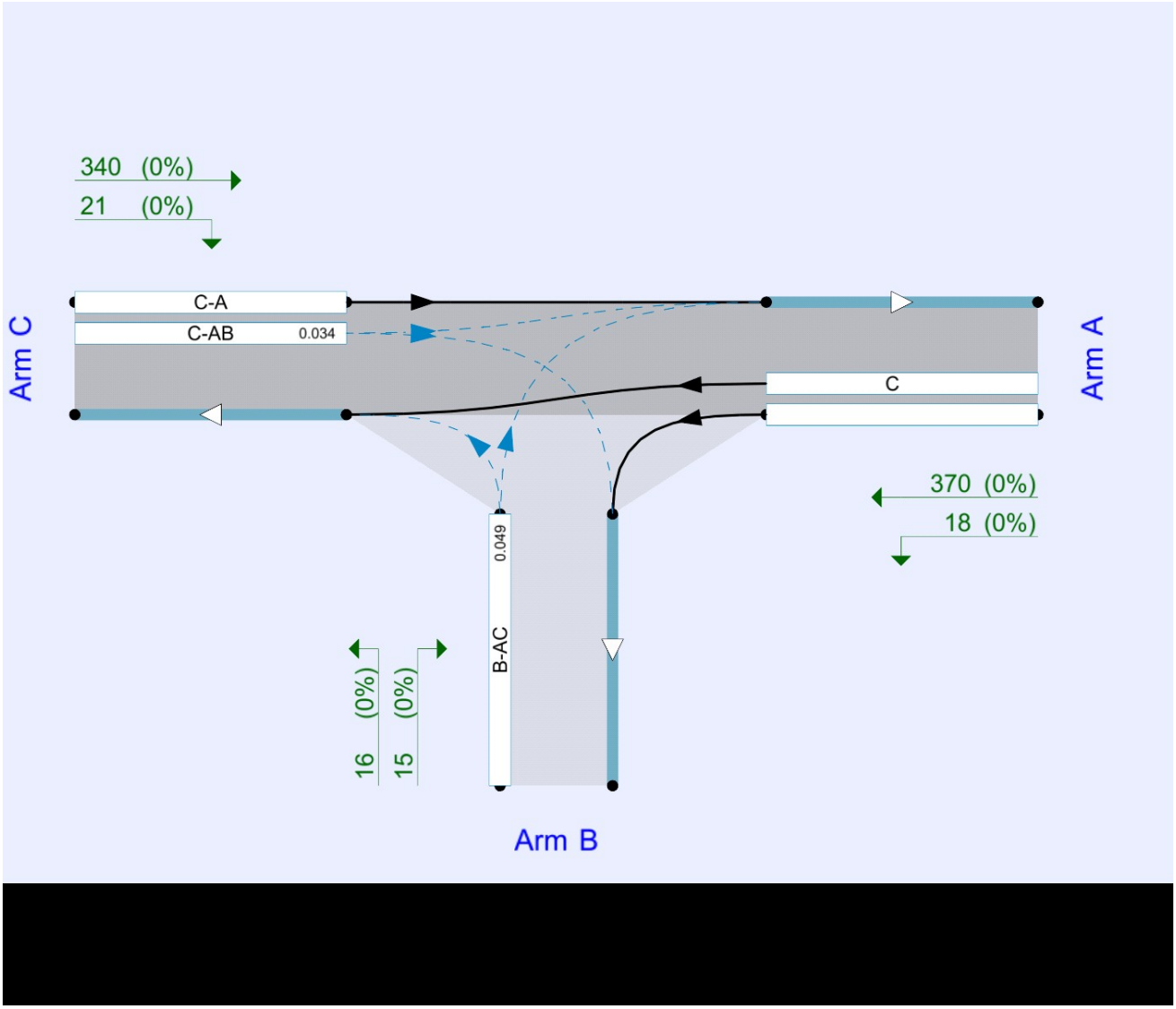
File summary

File Description

Title	
Location	
Site number	
Date	07/10/2021
Version	
Status	(new file)
Identifier	
Client	
Jobnumber	
Enumerator	ATKINSMCCARTHY\manand
Description	

Units

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



The junction diagram reflects the last run of Junctions.

Analysis Options

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

Analysis Set Details

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

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D2	OY+5+Dev+GDR	PM Peak	ONE HOUR	16:45	18:15	15	✓

OY+5+Dev+GDR, PM Peak

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way		0.61	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Name	Description	Arm type
A	Glenamuck Road East		Major
B	Access Road		Minor
C	Glenamuck Road West		Major

Major Arm Geometry

Arm	Width of carriageway (m)	Has kerbed central reserve	Has right turn bay	Visibility for right turn (m)	Blocks?	Blocking queue (PCU)
C	6.50			50.0	✓	0.00

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

Minor Arm Geometry

Arm	Minor arm type	Lane width (m)	Visibility to left (m)	Visibility to right (m)
B	One lane	3.30	22	20

Slope / Intercept / Capacity

Priority Intersection Slopes and Intercepts

Stream	Intercept (PCU/hr)	Slope for A-B	Slope for A-C	Slope for C-A	Slope for C-B
B-A	509	0.091	0.229	0.144	0.328
B-C	656	0.098	0.249	-	-
C-B	603	0.229	0.229	-	-

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

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

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

Traffic Demand

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		ONE HOUR	✓	388	100.000
B		ONE HOUR	✓	31	100.000
C		ONE HOUR	✓	361	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		A	B	C
From	A	0	18	370
	B	15	0	16
	C	340	21	0

Vehicle Mix

Heavy Vehicle Percentages

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

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
B-AC	0.08	9.01	0.1	A	28	43
C-AB	0.06	5.21	0.1	A	34	51
C-A					297	446
A-B					17	25
A-C					340	509

Main Results for each time segment

16:45 - 17:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	23	6	480	0.049	23	0.0	0.1	7.884	A
C-AB	25	6	716	0.034	24	0.0	0.0	5.205	A
C-A	247	62			247				
A-B	14	3			14				
A-C	279	70			279				

17:00 - 17:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	28	7	460	0.061	28	0.1	0.1	8.322	A
C-AB	32	8	740	0.044	32	0.0	0.1	5.088	A
C-A	292	73			292				
A-B	16	4			16				
A-C	333	83			333				

17:15 - 17:30

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	34	9	433	0.079	34	0.1	0.1	9.011	A
C-AB	45	11	775	0.058	45	0.1	0.1	4.933	A
C-A	353	88			353				
A-B	20	5			20				
A-C	407	102			407				

17:30 - 17:45

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	34	9	433	0.079	34	0.1	0.1	9.014	A
C-AB	45	11	775	0.058	45	0.1	0.1	4.937	A
C-A	353	88			353				
A-B	20	5			20				
A-C	407	102			407				

17:45 - 18:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	28	7	460	0.061	28	0.1	0.1	8.327	A
C-AB	32	8	740	0.044	32	0.1	0.1	5.090	A
C-A	292	73			292				
A-B	16	4			16				
A-C	333	83			333				

18:00 - 18:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	23	6	479	0.049	23	0.1	0.1	7.895	A
C-AB	25	6	716	0.034	25	0.1	0.0	5.211	A
C-A	247	62			247				
A-B	14	3			14				
A-C	279	70			279				

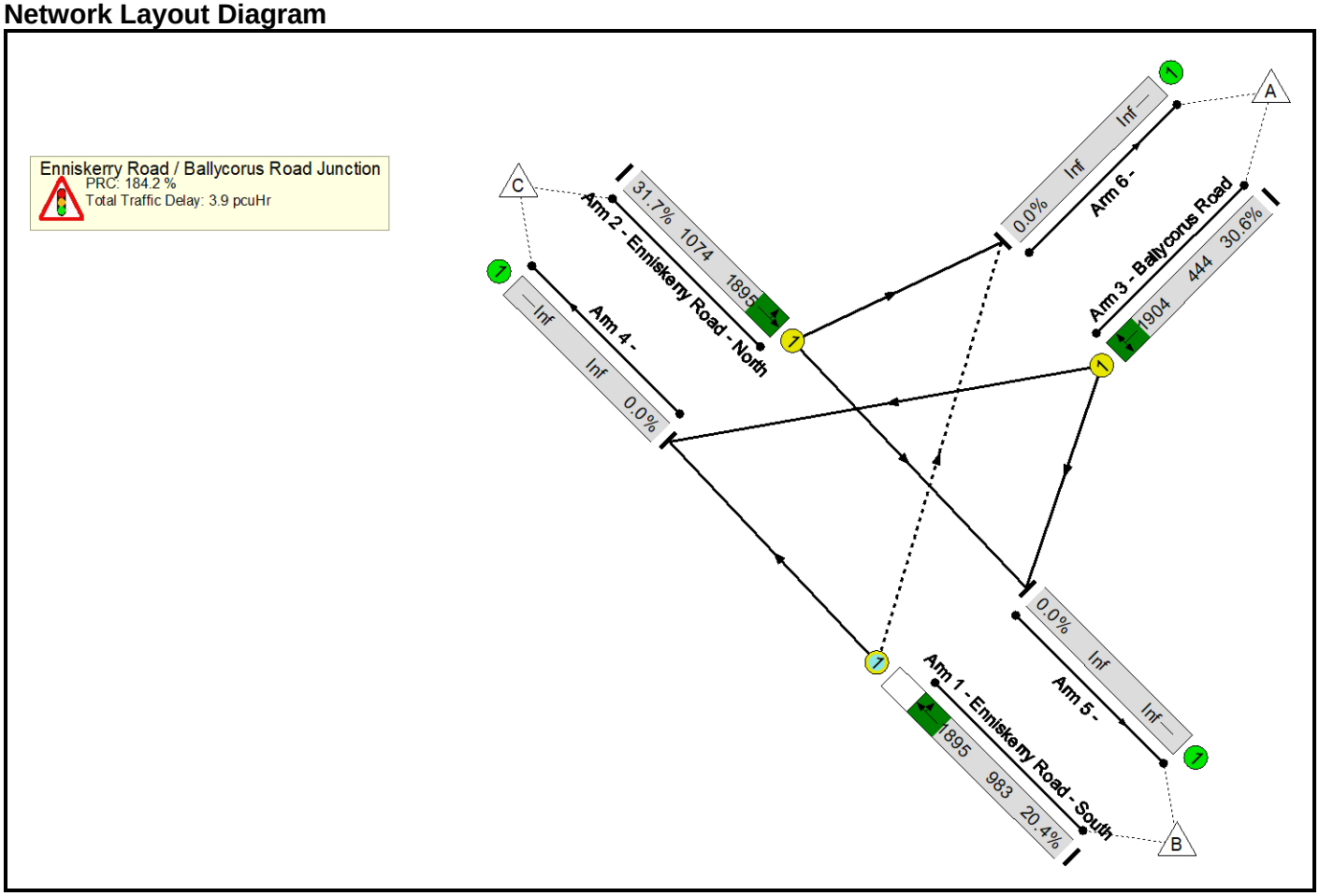
Basic Results Summary

User and Project Details

Project:	**Kiltiernan Village Lands**
Title:	
Location:	
Additional detail:	
File name:	Enniskerry Ballycourus Road Junction.lsg3x
Author:	
Company:	
Address:	

Scenario 1: 'OY AM with comm dev without GDR' (FG1: 'OY with comm dev AM Peak', Plan 2: 'With Ped')

Network Layout Diagram



Basic Results Summary

Network Results

Item	Lane Description	Lane Type	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Mean Max Queue (pcu)
Network	**-**	**-**	**-**		**-**	**-**	**-**	**-**	**-**	**-**	**31.7%**	**16**	**1**	**0**	**3.9**	**-**	**-**
Enniskerry Road / Ballycorus Road Junction	**-**	**-**	**-**		**-**	**-**	**-**	**-**	**-**	**-**	**31.7%**	**16**	**1**	**0**	**3.9**	**-**	**-**
1/1	Enniskerry Road - South Ahead Right	O	B	C	1	71	7	200	1895	983	20.4%	16	1	0	0.7	12.9	3.5
2/1	Enniskerry Road - North Ahead Left	U	A		1	59	-	340	1895	1074	31.7%	-	-	-	1.5	16.2	6.2
3/1	Ballycorus Road Right Left	U	D		1	20	-	136	1904	444	30.6%	-	-	-	1.7	43.8	4.0

C1

PRC for Signalled Lanes (%): 184.2
PRC Over All Lanes (%): 184.2

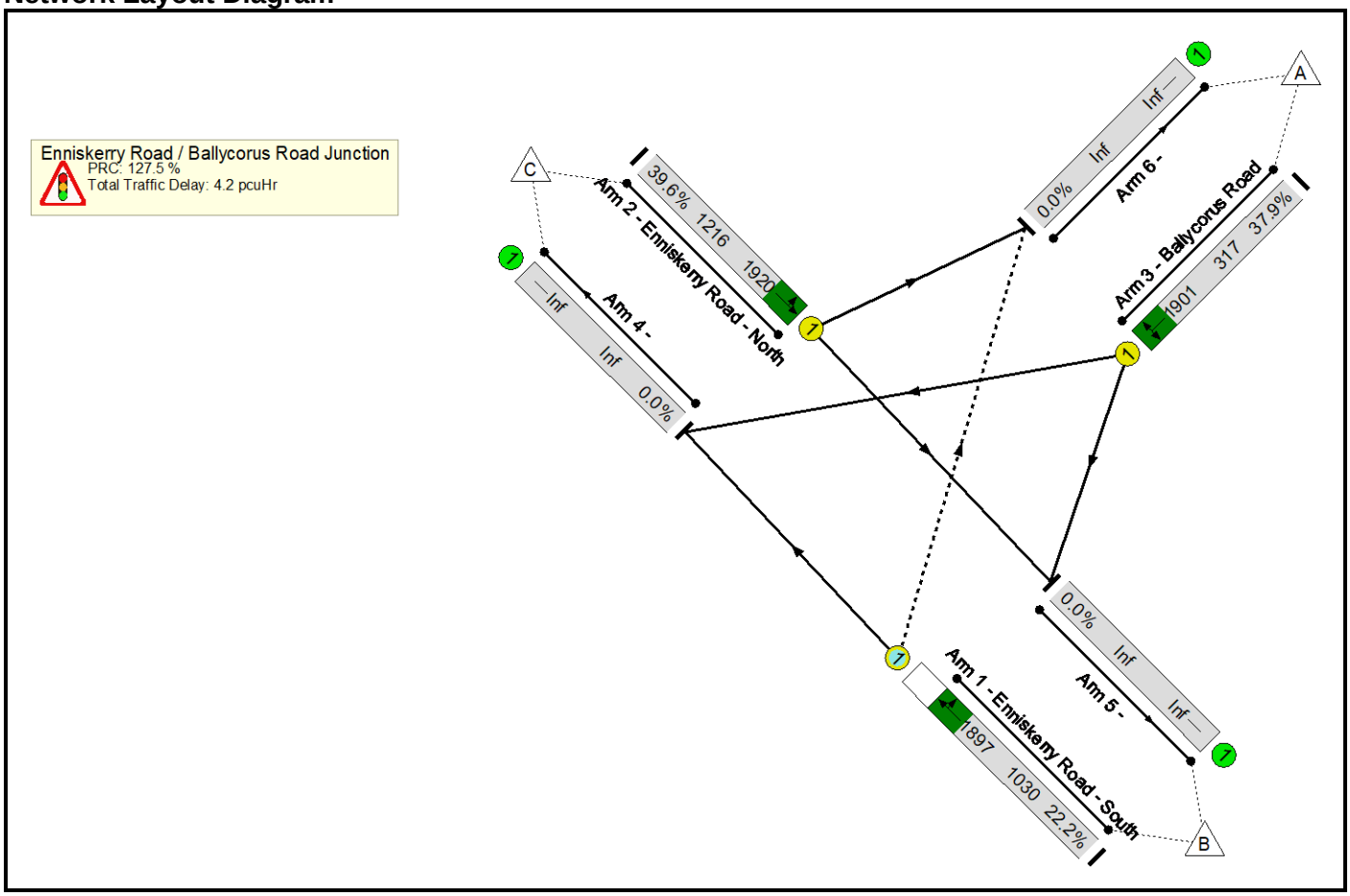
Total Delay for Signalled Lanes (pcuHr): 3.90
Total Delay Over All Lanes(pcuHr): 3.90

Cycle Time (s): 120

Basic Results Summary

Scenario 2: 'OY PM with comm dev without GDR' (FG2: 'OY with comm dev PM Peak', Plan 2: 'With Ped')

Network Layout Diagram



Basic Results Summary

Network Results

Item	Lane Description	Lane Type	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Mean Max Queue (pcu)
Network	**-**	**-**	**-**		**-**	**-**	**-**	**-**	**-**	**-**	**39.6%**	**17**	**1**	**0**	**4.2**	**-**	**-**
Enniskerry Road / Ballycorus Road Junction	**-**	**-**	**-**		**-**	**-**	**-**	**-**	**-**	**-**	**39.6%**	**17**	**1**	**0**	**4.2**	**-**	**-**
1/1	Enniskerry Road - South Ahead Right	O	B	C	1	79	7	229	1897	1030	22.2%	17	1	0	0.7	10.5	3.8
2/1	Enniskerry Road - North Ahead Left	U	A		1	67	-	481	1920	1216	39.6%	-	-	-	1.8	13.2	8.1
3/1	Ballycorus Road Right Left	U	D		1	12	-	120	1901	317	37.9%	-	-	-	1.8	53.6	3.8

C1

PRC for Signalled Lanes (%): 127.5
PRC Over All Lanes (%): 127.5

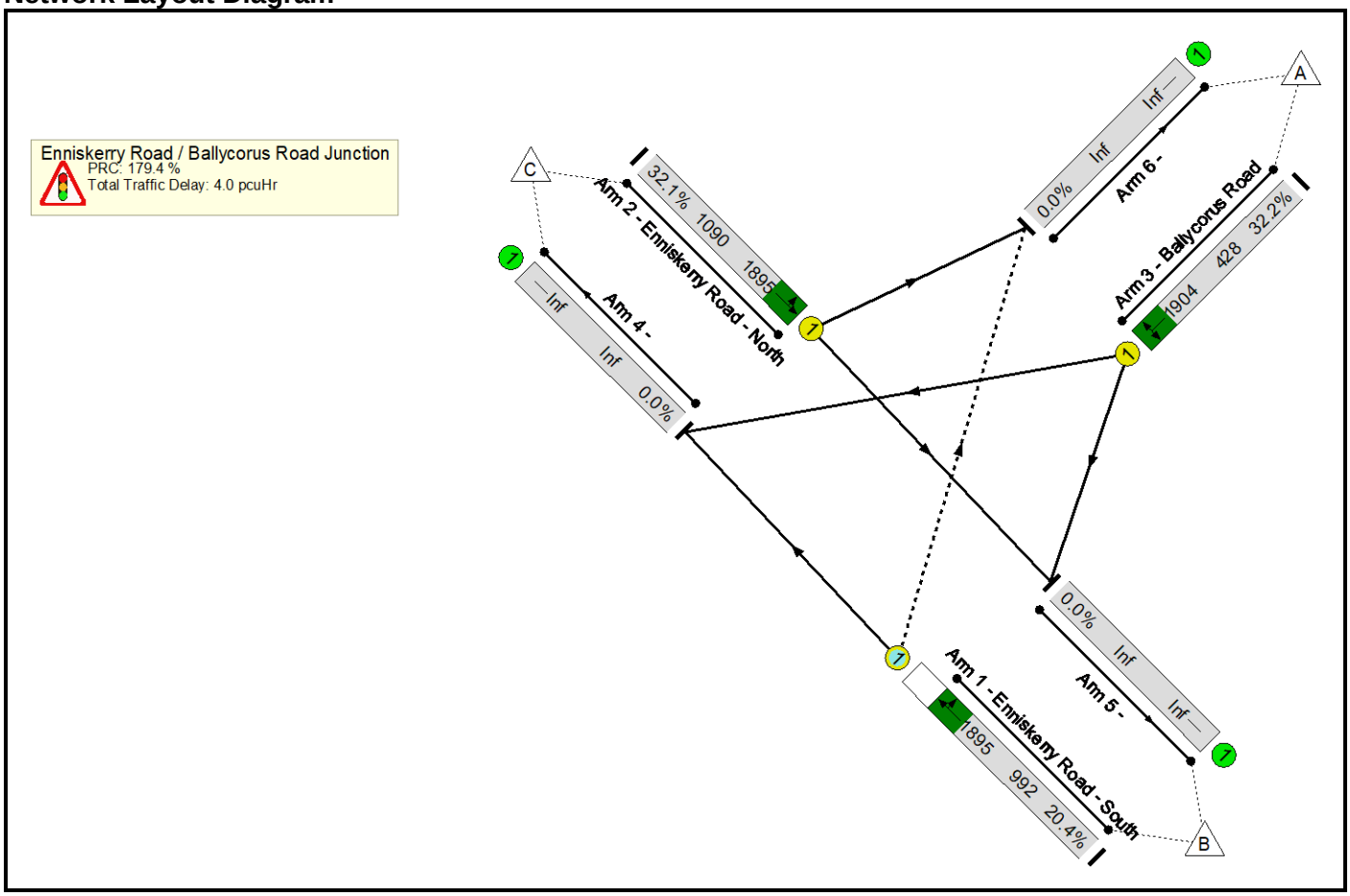
Total Delay for Signalled Lanes (pcuHr): 4.22
Total Delay Over All Lanes(pcuHr): 4.22

Cycle Time (s): 120

Basic Results Summary

Scenario 3: 'OY AM with All dev without GDR' (FG3: 'OY with All dev AM Peak', Plan 2: 'With Ped')

Network Layout Diagram



Basic Results Summary

Network Results

Item	Lane Description	Lane Type	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Mean Max Queue (pcu)
Network	**-**	**-**	**-**		**-**	**-**	**-**	**-**	**-**	**-**	**32.2%**	**16**	**1**	**0**	**4.0**	**-**	**-**
Enniskerry Road / Ballycorus Road Junction	**-**	**-**	**-**		**-**	**-**	**-**	**-**	**-**	**-**	**32.2%**	**16**	**1**	**0**	**4.0**	**-**	**-**
1/1	Enniskerry Road - South Ahead Right	O	B	C	1	72	7	202	1895	992	20.4%	16	1	0	0.7	12.5	3.4
2/1	Enniskerry Road - North Ahead Left	U	A		1	60	-	350	1895	1090	32.1%	-	-	-	1.5	15.7	6.3
3/1	Ballycorus Road Right Left	U	D		1	19	-	138	1904	428	32.2%	-	-	-	1.7	45.1	4.1

C1

PRC for Signalled Lanes (%): 179.4
PRC Over All Lanes (%): 179.4

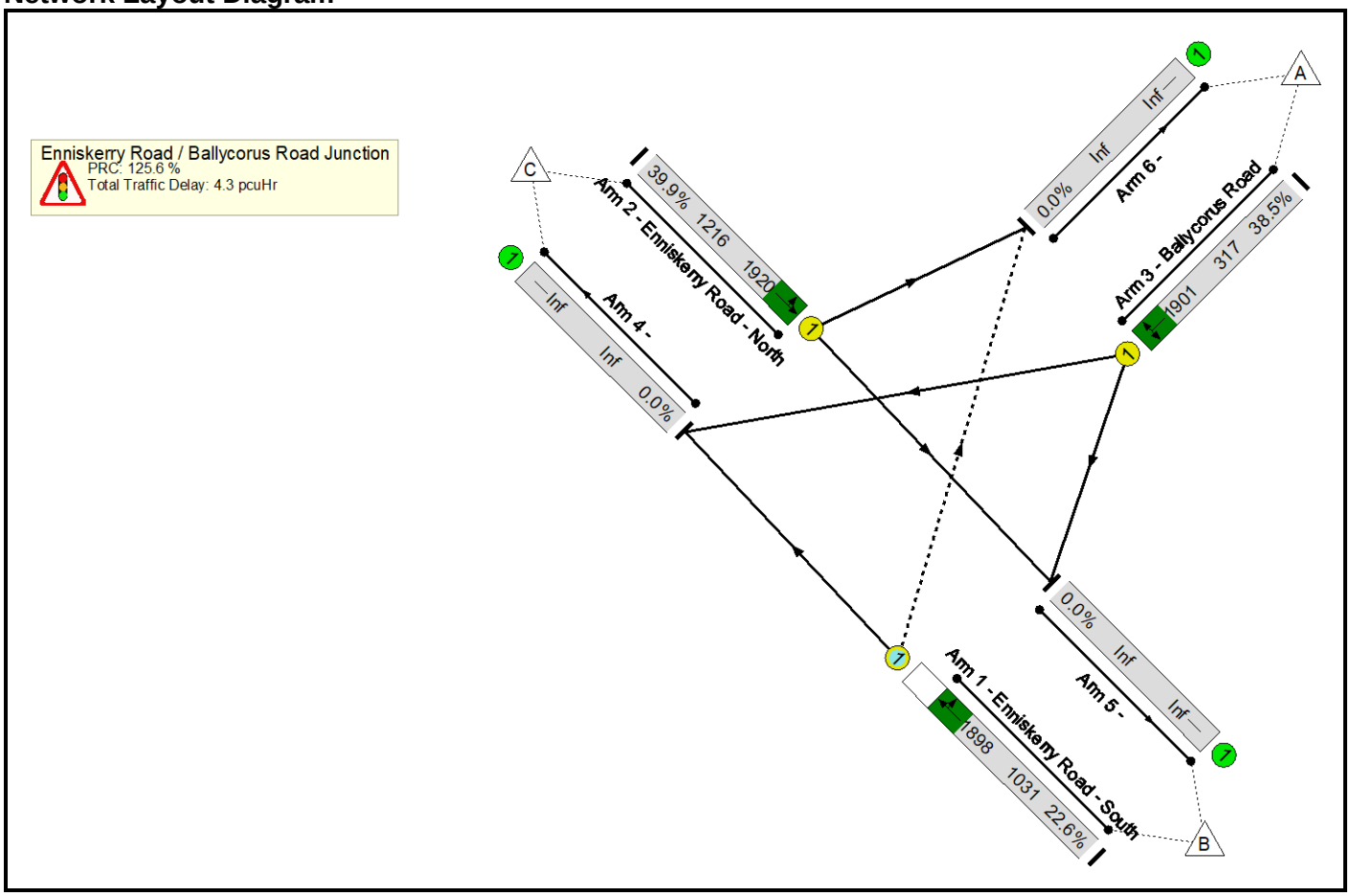
Total Delay for Signalled Lanes (pcuHr): 3.96
Total Delay Over All Lanes(pcuHr): 3.96

Cycle Time (s): 120

Basic Results Summary

Scenario 4: 'OY PM with All dev without GDR' (FG4: 'OY with All dev PM Peak', Plan 2: 'With Ped')

Network Layout Diagram



Basic Results Summary

Network Results

Item	Lane Description	Lane Type	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Mean Max Queue (pcu)
Network	**-**	**-**	**-**		**-**	**-**	**-**	**-**	**-**	**-**	**39.9%**	**17**	**1**	**0**	**4.3**	**-**	**-**
Enniskerry Road / Ballycorus Road Junction	**-**	**-**	**-**		**-**	**-**	**-**	**-**	**-**	**-**	**39.9%**	**17**	**1**	**0**	**4.3**	**-**	**-**
1/1	Enniskerry Road - South Ahead Right	O	B	C	1	79	7	233	1898	1031	22.6%	17	1	0	0.7	10.6	3.8
2/1	Enniskerry Road - North Ahead Left	U	A		1	67	-	485	1920	1216	39.9%	-	-	-	1.8	13.3	8.1
3/1	Ballycorus Road Right Left	U	D		1	12	-	122	1901	317	38.5%	-	-	-	1.8	53.7	3.9

C1 PRC for Signalled Lanes (%): 125.6 Total Delay for Signalled Lanes (pcuHr): 4.29 Cycle Time (s): 120

PRC Over All Lanes (%): 125.6 Total Delay Over All Lanes(pcuHr): 4.29

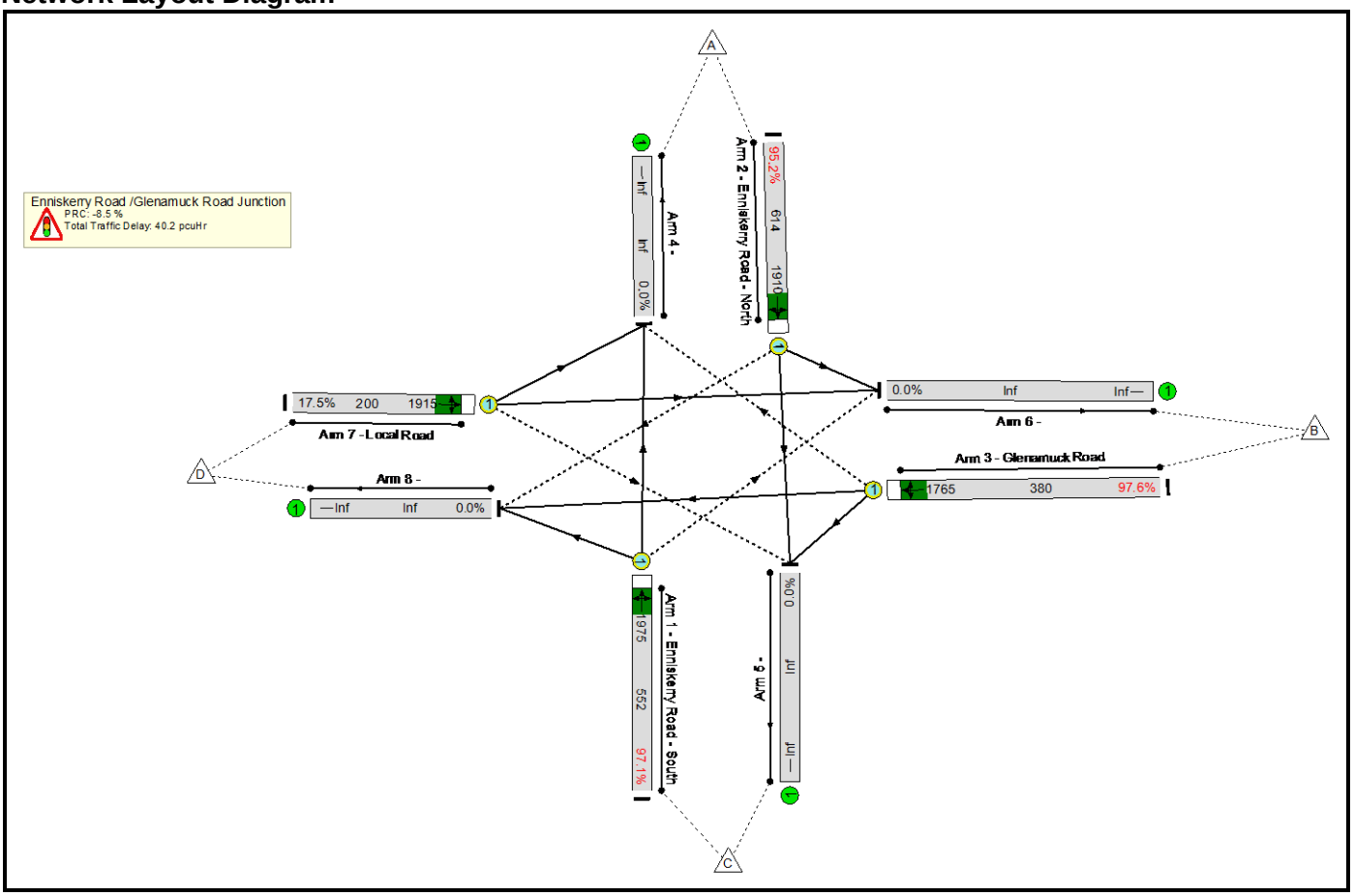
Basic Results Summary

User and Project Details

Project:	**Kiltiernan Village Lands**
Title:	
Location:	
Additional detail:	
File name:	Enniskerry Glenamuck Road Junction existing condition.lsg3x
Author:	
Company:	
Address:	

Scenario 1: 'OY AM Comm Dev' (FG1: 'OY AM with committed development', Plan 2: 'With Ped')

Network Layout Diagram



Network Results

Item	Lane Description	Lane Type	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Mean Max Queue (pcu)
Network	-	-	-		-	-	-	-	-	-	**97.6%**	**161**	**213**	**10**	**40.2**	-	-
Enniskerry Road /Glenamuck Road Junction	-	-	-		-	-	-	-	-	-	**97.6%**	**161**	**213**	**10**	**40.2**	-	-
1/1	Enniskerry Road - South Ahead Right Left	O	B	C	1	66	28	536	1975	552	97.1%	12	213	2	14.1	94.7	25.8
2/1	Enniskerry Road - North Ahead Left Right	O	A		1	33	-	585	1910	614	95.2%	9	0	0	13.3	81.7	25.8
3/1	Glenamuck Road Right Left Ahead	O	D		1	24	-	371	1765	380	97.6%	126	0	8	12.4	119.9	19.9
7/1	Local Road Left Right Ahead	O	E		1	24	-	35	1915	200	17.5%	14	0	0	0.5	46.4	1.0

C1

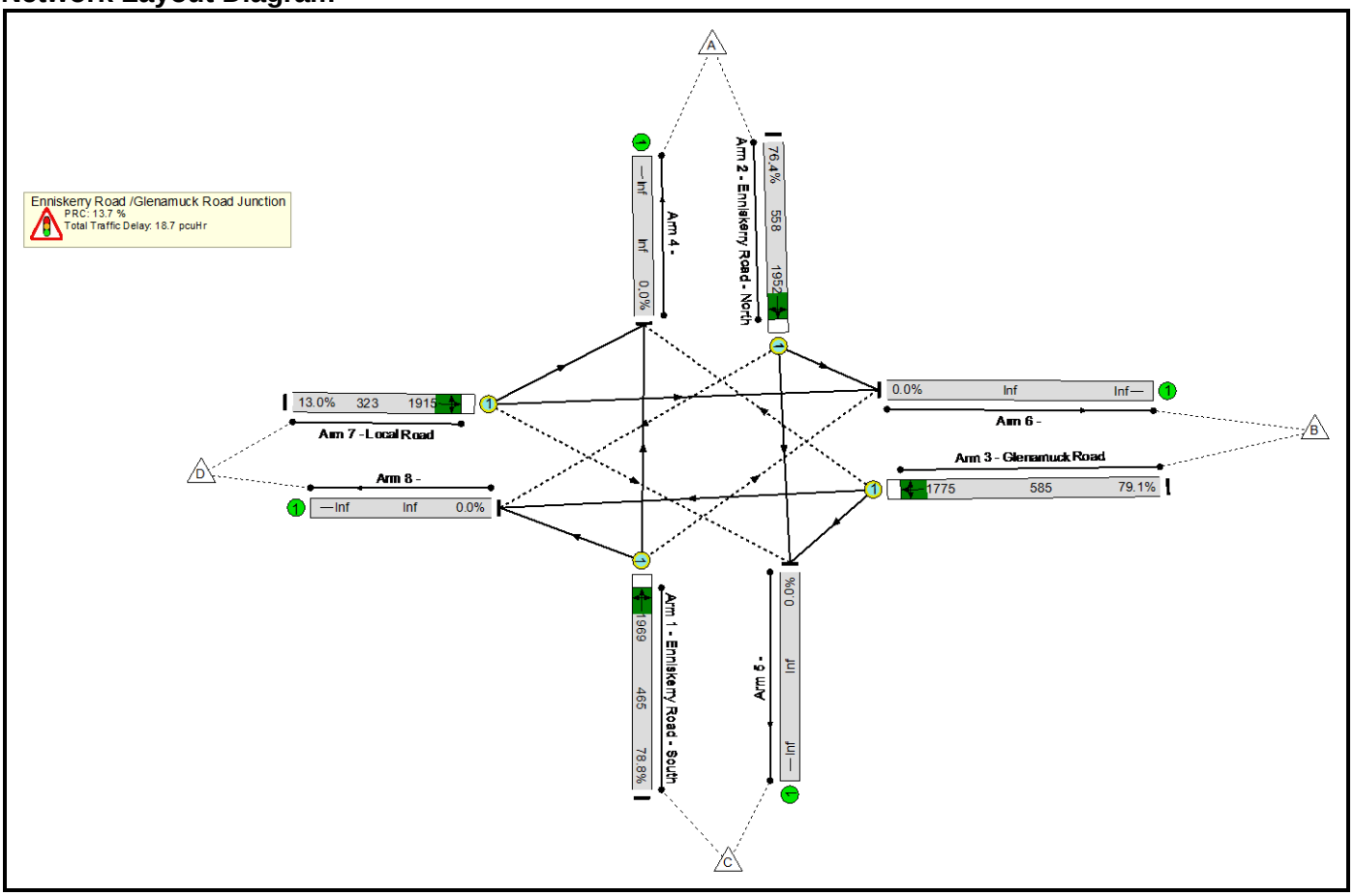
PRC for Signalled Lanes (%): -8.5
PRC Over All Lanes (%): -8.5

Total Delay for Signalled Lanes (pcuHr): 40.18
Total Delay Over All Lanes(pcuHr): 40.18

Cycle Time (s): 120

Scenario 2: 'OY PM Comm Dev' (FG2: 'OY PM with committed development', Plan 2: 'With Ped')

Network Layout Diagram



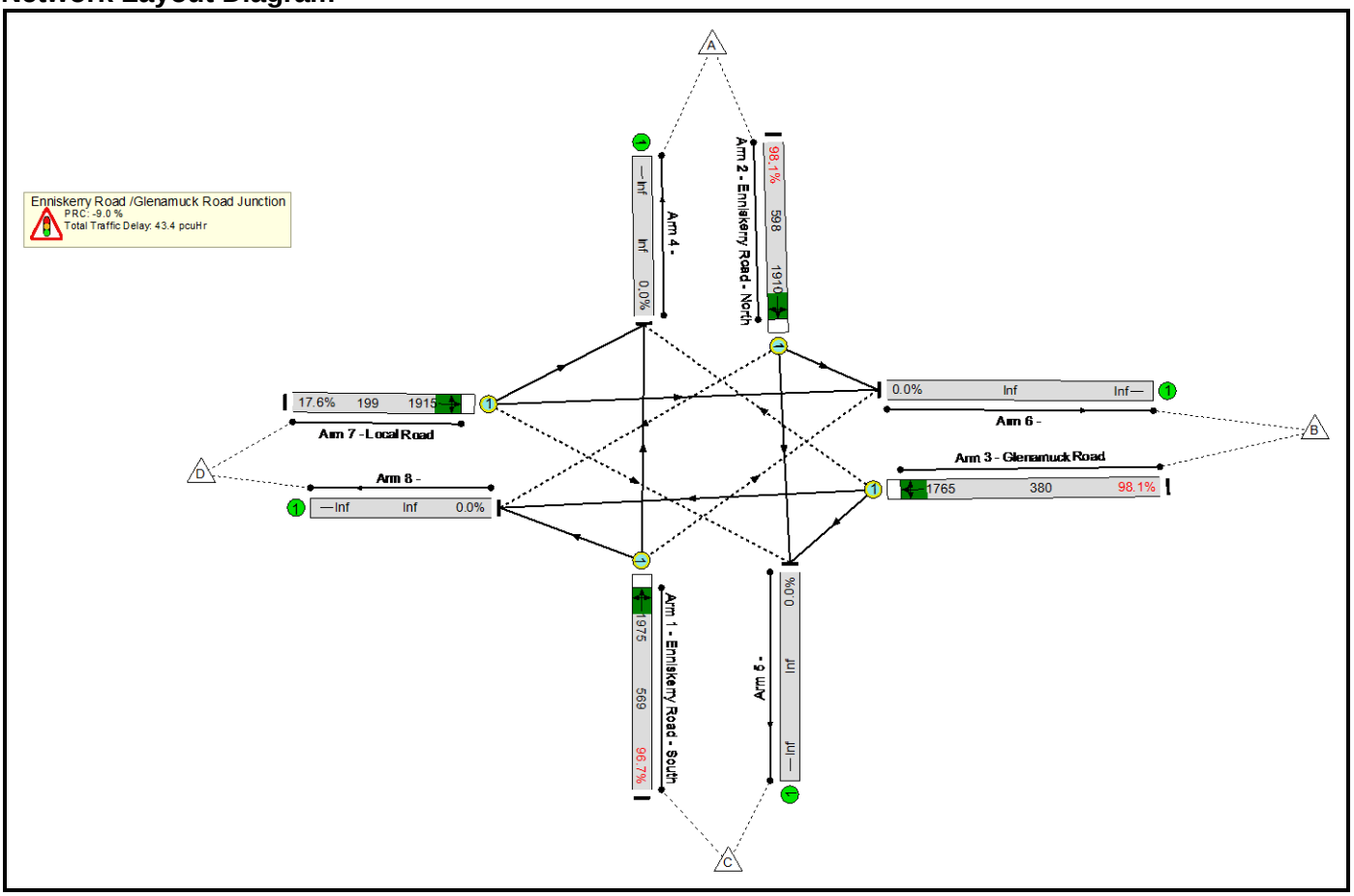
Network Results

Item	Lane Description	Lane Type	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Mean Max Queue (pcu)
Network	-	-	-		-	-	-	-	-	-	**79.1%**	**248**	**117**	**3**	**18.7**	-	-
Enniskerry Road /Glenamuck Road Junction	-	-	-		-	-	-	-	-	-	**79.1%**	**248**	**117**	**3**	**18.7**	-	-
1/1	Enniskerry Road - South Ahead Right Left	O	B	C	1	51	17	366	1969	465	78.8%	49	117	1	5.8	57.3	13.2
2/1	Enniskerry Road - North Ahead Left Right	O	A		1	29	-	426	1952	558	76.4%	11	0	0	6.2	52.2	14.5
3/1	Glenamuck Road Right Left Ahead	O	D		1	39	-	463	1775	585	79.1%	170	0	1	6.3	49.0	15.6
7/1	Local Road Left Right Ahead	O	E		1	39	-	42	1915	323	13.0%	19	0	0	0.4	31.4	1.0

C1 PRC for Signalled Lanes (%): 13.7 Total Delay for Signalled Lanes (pcuHr): 18.67 Cycle Time (s): 120
PRC Over All Lanes (%): 13.7 Total Delay Over All Lanes(pcuHr): 18.67

Scenario 3: 'OY AM All Dev' (FG3: 'OY AM with All development', Plan 2: 'With Ped')

Network Layout Diagram



Network Results

Item	Lane Description	Lane Type	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Mean Max Queue (pcu)
Network	-	-	-		-	-	-	-	-	-	**98.1%**	**160**	**219**	**11**	**43.4**	-	-
Enniskerry Road /Glenamuck Road Junction	-	-	-		-	-	-	-	-	-	**98.1%**	**160**	**219**	**11**	**43.4**	-	-
1/1	Enniskerry Road - South Ahead Right Left	O	B	C	1	66	29	550	1975	569	96.7%	12	219	2	13.9	91.2	26.0
2/1	Enniskerry Road - North Ahead Left Right	O	A		1	32	-	587	1910	598	98.1%	9	0	0	16.2	99.6	28.8
3/1	Glenamuck Road Right Left Ahead	O	D		1	24	-	373	1765	380	98.1%	126	0	8	12.8	123.3	20.3
7/1	Local Road Left Right Ahead	O	E		1	24	-	35	1915	199	17.6%	14	0	0	0.5	46.5	1.0

C1

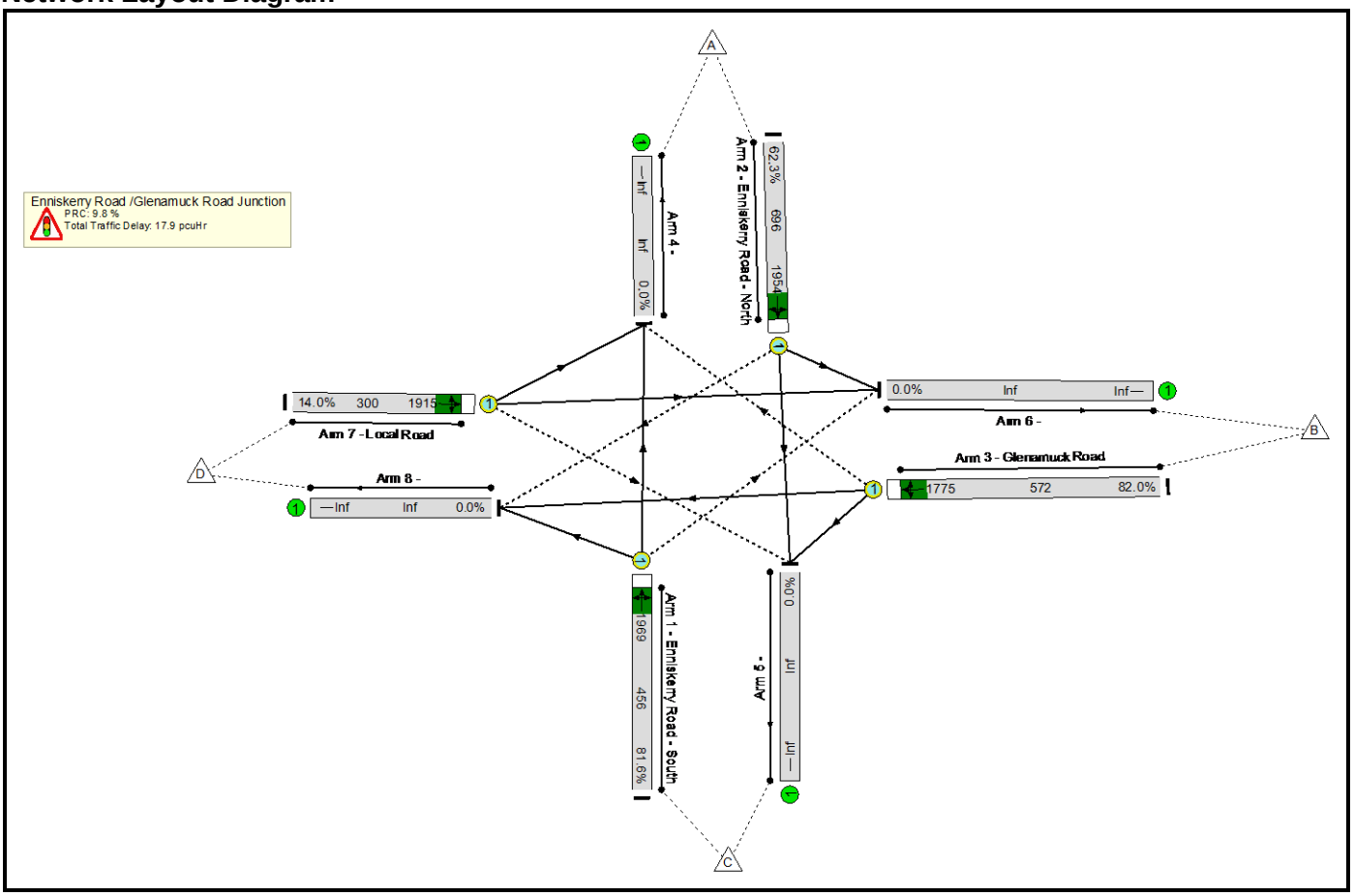
PRC for Signalled Lanes (%): -9.0
PRC Over All Lanes (%): -9.0

Total Delay for Signalled Lanes (pcuHr): 43.40
Total Delay Over All Lanes(pcuHr): 43.40

Cycle Time (s): 120

Scenario 4: 'OY PM All Dev' (FG4: 'OY PM with All development', Plan 2: 'With Ped')

Network Layout Diagram



Network Results

Item	Lane Description	Lane Type	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Mean Max Queue (pcu)
Network	-	-	-		-	-	-	-	-	-	**82.0%**	**303**	**64**	**3**	**17.9**	-	-
Enniskerry Road /Glenamuck Road Junction	-	-	-		-	-	-	-	-	-	**82.0%**	**303**	**64**	**3**	**17.9**	-	-
1/1	Enniskerry Road - South Ahead Right Left	O	B	C	1	52	9	372	1969	456	81.6%	104	64	1	6.1	59.4	13.8
2/1	Enniskerry Road - North Ahead Left Right	O	A		1	38	-	434	1954	696	62.3%	11	0	0	4.6	38.1	12.6
3/1	Glenamuck Road Right Left Ahead	O	D		1	38	-	469	1775	572	82.0%	170	0	1	6.8	52.5	16.4
7/1	Local Road Left Right Ahead	O	E		1	38	-	42	1915	300	14.0%	19	0	0	0.4	32.6	1.0

C1 PRC for Signalled Lanes (%): 9.8 Total Delay for Signalled Lanes (pcuHr): 17.94 Cycle Time (s): 120
PRC Over All Lanes (%): 9.8 Total Delay Over All Lanes(pcuHr): 17.94

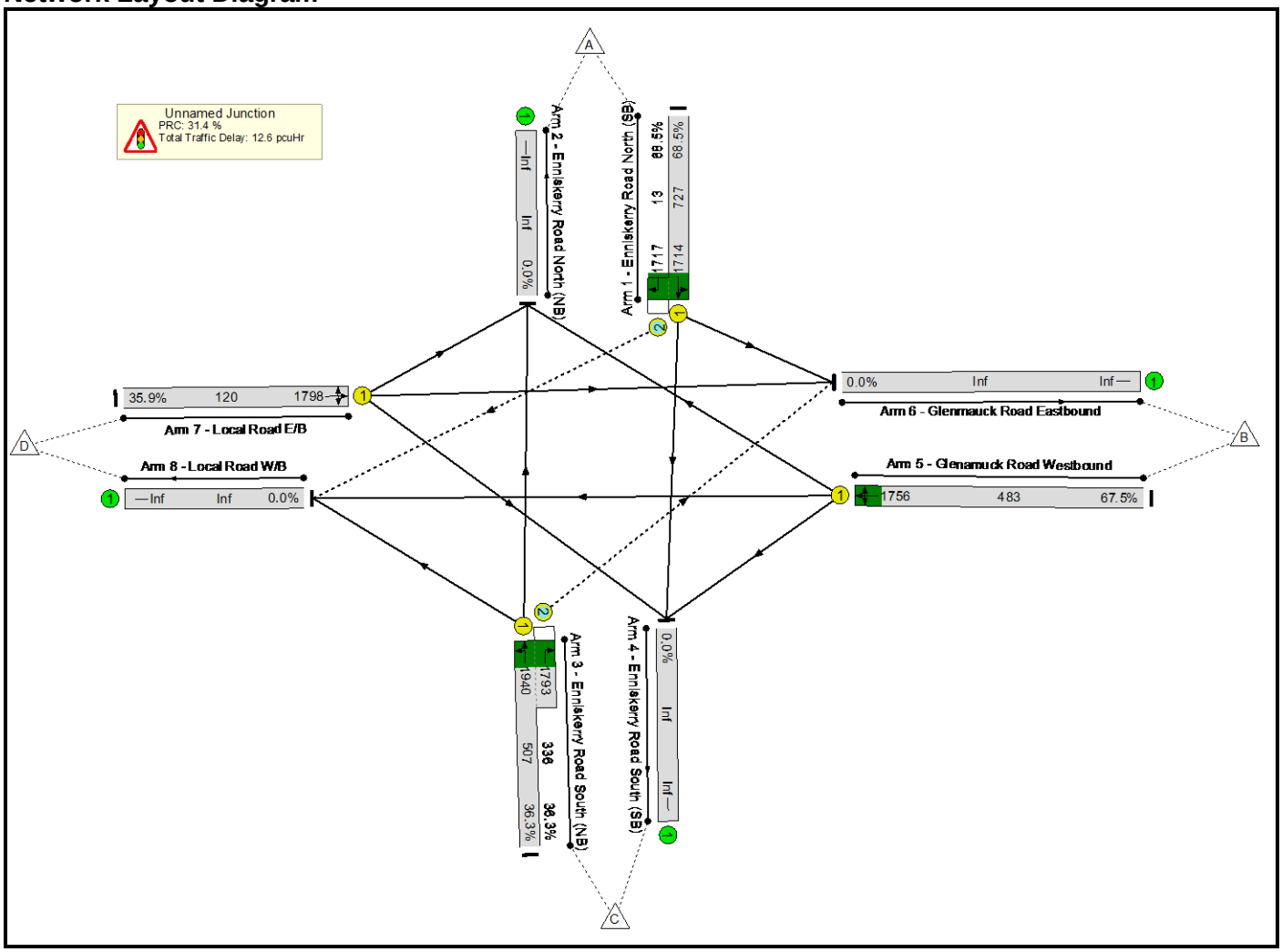
Basic Results Summary

User and Project Details

Project:	
Title:	
Location:	
Additional detail:	
File name:	Enniskerry Glenamuck Road Junction with GDR schem.lsg3x
Author:	
Company:	
Address:	

Scenario 1: 'OY AM with committed development' (FG1: 'OY with committed development AM Peak', Plan 1: 'With Ped')

Network Layout Diagram



Basic Results Summary

Created 12:41:16 01/06/2022

Enniskerry Glenamuck Road Junction with GDR schem.lsg3x

Network Results

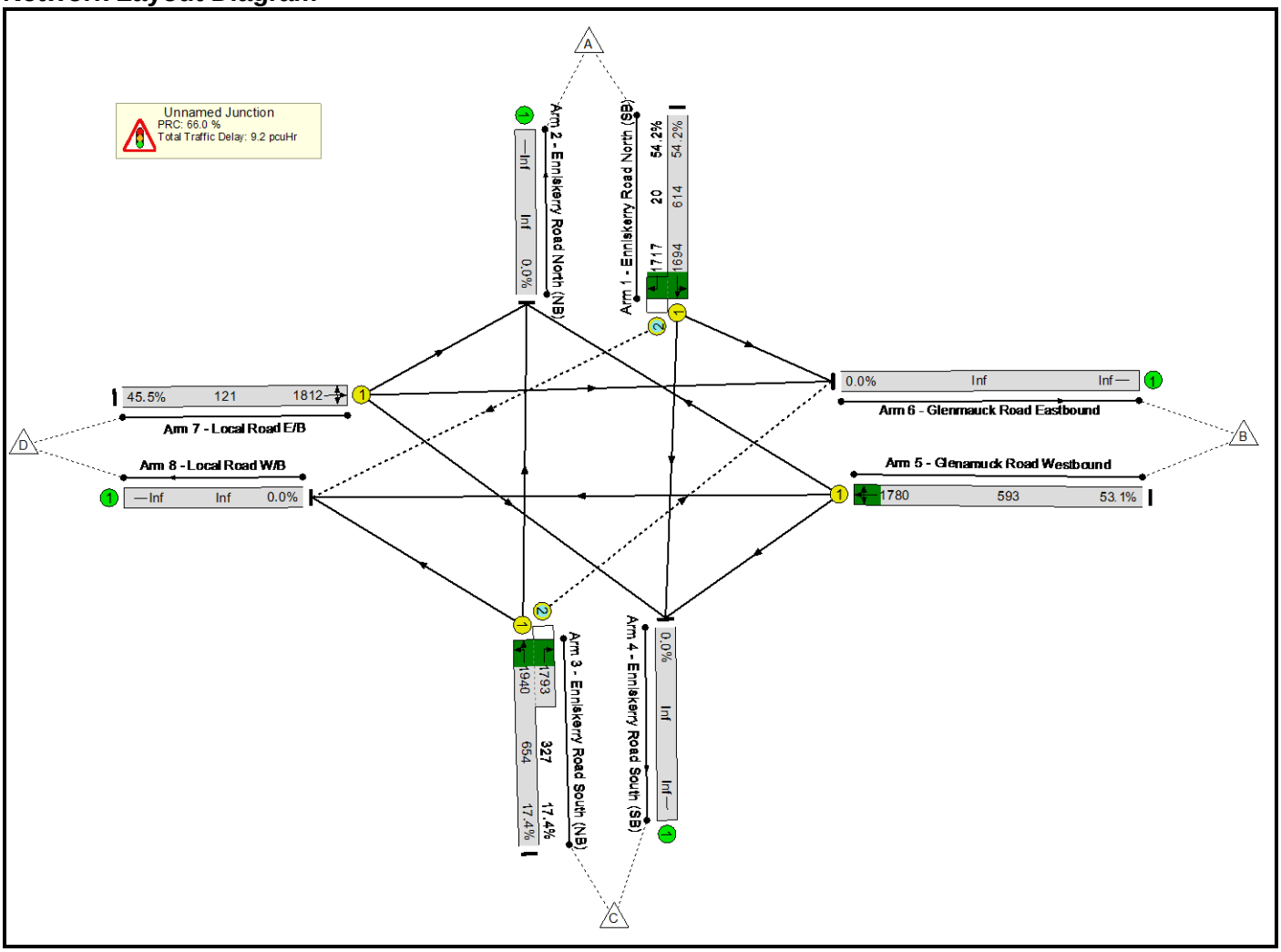
Item	Lane Description	Lane Type	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Mean Max Queue (pcu)
Network	-	-	-		-	-	-	-	-	-	**68.5%**	**117**	**13**	**1**	**12.6**	-	-
Unnamed Junction	-	-	-		-	-	-	-	-	-	**68.5%**	**117**	**13**	**1**	**12.6**	-	-
1/1+1/2	Enniskerry Road North (SB) Ahead Left Right	U+O	A	F	1	44	0	507	1714:1717	727+13	68.5 : 68.5%	9	0	0	5.0	35.6	14.6
3/1+3/2	Enniskerry Road South (NB) Ahead Right Left	U+O	B	C	1	56	7	306	1940:1793	507+336	36.3 : 36.3%	108	13	1	2.1	24.8	3.4
5/1	Glenamuck Road Westbound Right Left Ahead	U	D		1	23	-	326	1756	483	67.5%	-	-	-	4.5	50.1	10.6
7/1	Local Road E/B Left Right Ahead	U	E		1	7	-	43	1798	120	35.9%	-	-	-	0.9	76.8	1.6

C1 PRC for Signalled Lanes (%): 31.4 Total Delay for Signalled Lanes (pcuHr): 12.57 Cycle Time (s): 120

PRC Over All Lanes (%): 31.4 Total Delay Over All Lanes(pcuHr): 12.57

Scenario 2: 'OY PM with committed development' (FG2: 'OY with committed development PM Peak', Plan 1: 'With Ped')

Network Layout Diagram



Basic Results Summary

Created 12:41:16 01/06/2022

Enniskerry Glenamuck Road Junction with GDR schem.lsg3x

Network Results

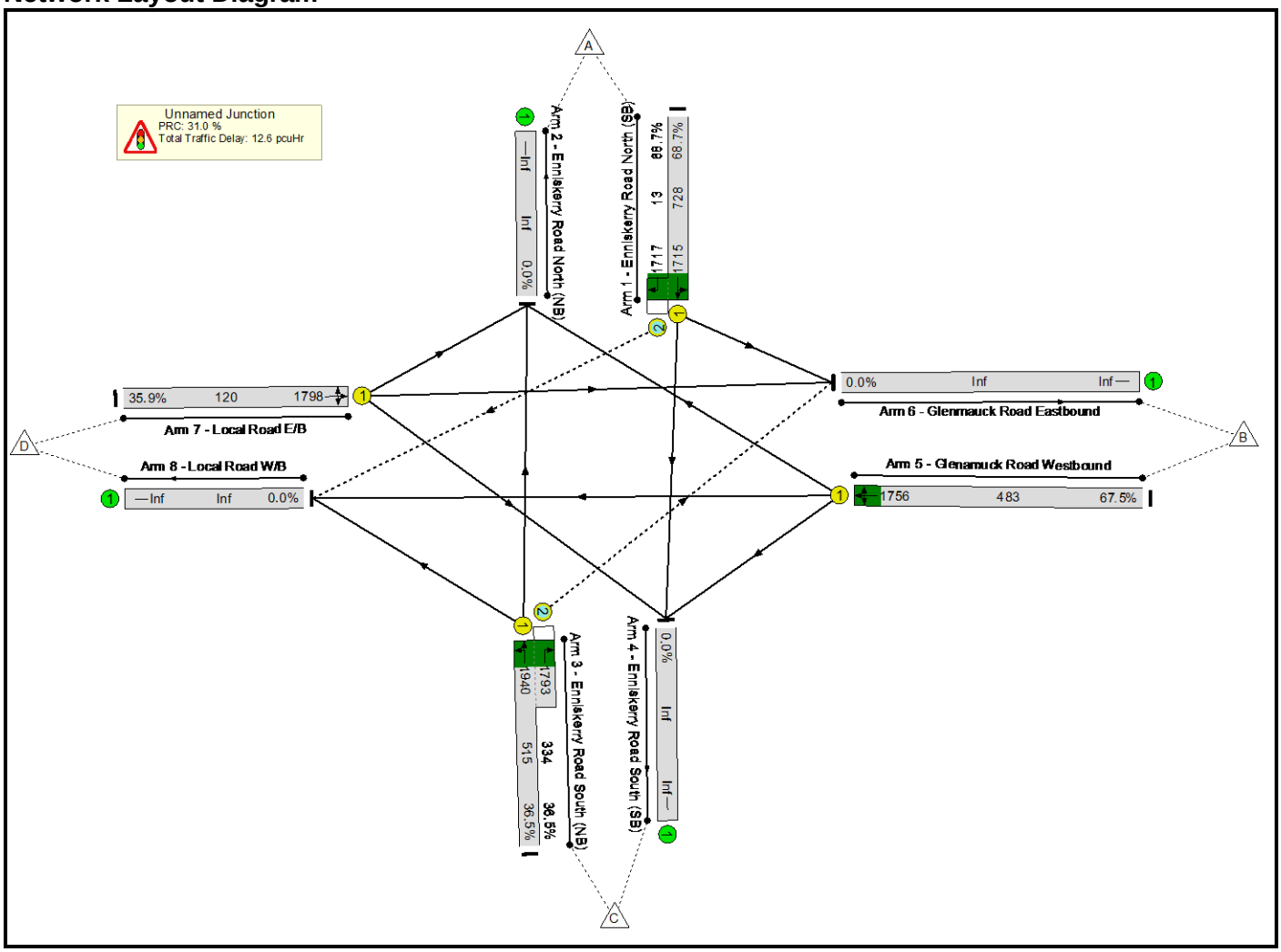
Item	Lane Description	Lane Type	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Mean Max Queue (pcu)
Network	-	-	-		-	-	-	-	-	-	**54.2%**	**61**	**6**	**0**	**9.2**	-	-
Unnamed Junction	-	-	-		-	-	-	-	-	-	**54.2%**	**61**	**6**	**0**	**9.2**	-	-
1/1+1/2	Enniskerry Road North (SB) Ahead Left Right	U+O	A	F	1	37	0	344	1694:1717	614+20	54.2 : 54.2%	11	0	0	3.5	36.1	9.5
3/1+3/2	Enniskerry Road South (NB) Ahead Right Left	U+O	B	C	1	49	7	171	1940:1793	654+327	17.4 : 17.4%	50	6	0	1.1	22.8	2.1
5/1	Glenamuck Road Westbound Right Left Ahead	U	D		1	30	-	315	1780	593	53.1%	-	-	-	3.4	38.8	9.1
7/1	Local Road E/B Left Right Ahead	U	E		1	7	-	55	1812	121	45.5%	-	-	-	1.2	81.0	2.2

C1 PRC for Signalled Lanes (%): 66.0 Total Delay for Signalled Lanes (pcuHr): 9.17 Cycle Time (s): 120

PRC Over All Lanes (%): 66.0 Total Delay Over All Lanes(pcuHr): 9.17

Scenario 3: 'OY AM with All development' (FG3: 'OY with All development AM Peak', Plan 1: 'With Ped')

Network Layout Diagram



Basic Results Summary

Created 12:41:16 01/06/2022

Enniskerry Glenamuck Road Junction with GDR schem.lsg3x

Network Results

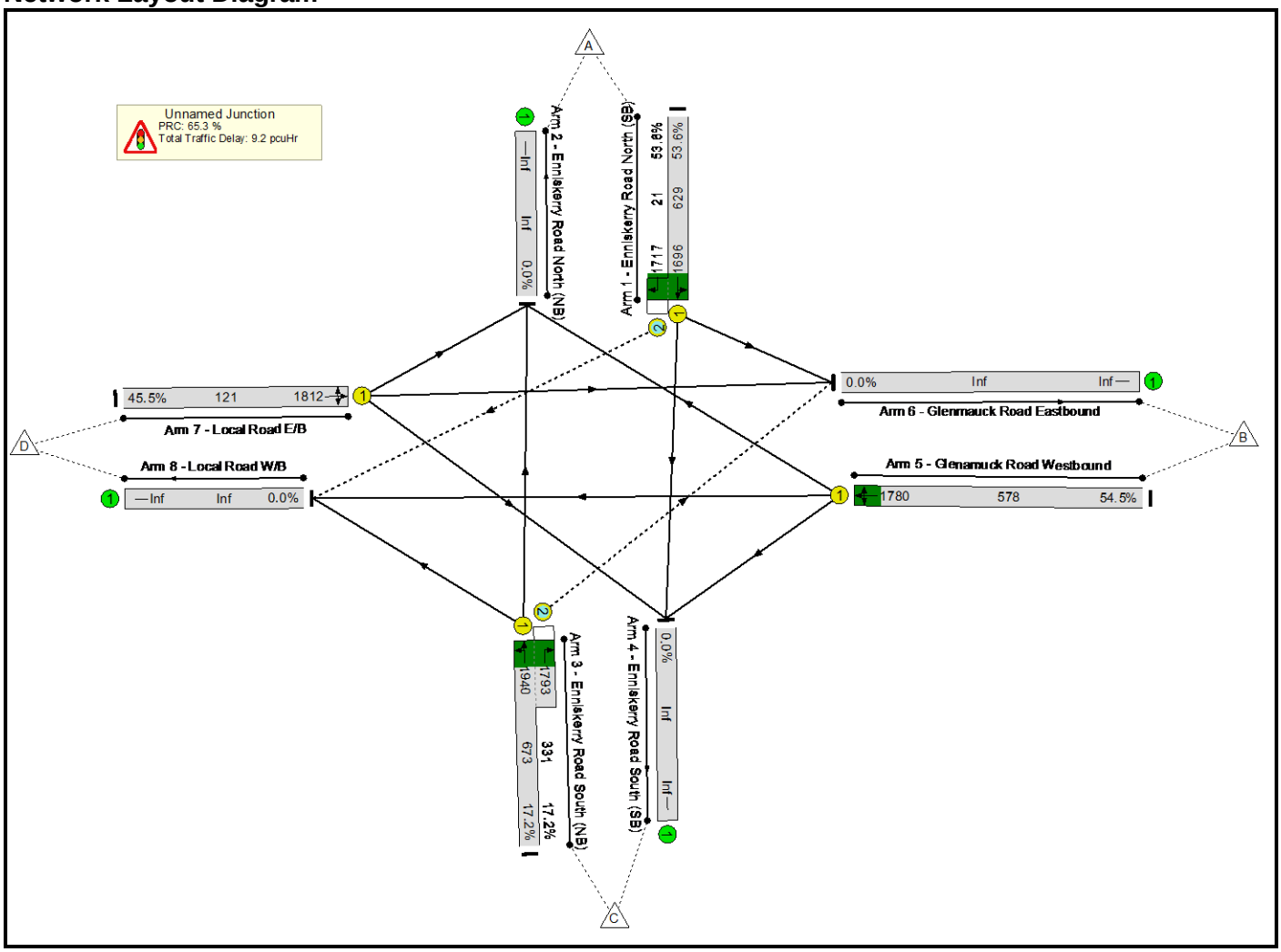
Item	Lane Description	Lane Type	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Mean Max Queue (pcu)
Network	-	-	-		-	-	-	-	-	-	**68.7%**	**117**	**13**	**1**	**12.6**	-	-
Unnamed Junction	-	-	-		-	-	-	-	-	-	**68.7%**	**117**	**13**	**1**	**12.6**	-	-
1/1+1/2	Enniskerry Road North (SB) Ahead Left Right	U+O	A	F	1	44	0	509	1715:1717	728+13	68.7 : 68.7%	9	0	0	5.0	35.7	14.6
3/1+3/2	Enniskerry Road South (NB) Ahead Right Left	U+O	B	C	1	56	7	310	1940:1793	515+334	36.5 : 36.5%	108	13	1	2.1	24.8	3.4
5/1	Glenamuck Road Westbound Right Left Ahead	U	D		1	23	-	326	1756	483	67.5%	-	-	-	4.5	50.1	10.6
7/1	Local Road E/B Left Right Ahead	U	E		1	7	-	43	1798	120	35.9%	-	-	-	0.9	76.8	1.6

C1 PRC for Signalled Lanes (%): 31.0 Total Delay for Signalled Lanes (pcuHr): 12.63 Cycle Time (s): 120

PRC Over All Lanes (%): 31.0 Total Delay Over All Lanes(pcuHr): 12.63

Enniskerry Glenamuck Road Junction with GDR schem.lsg3x
Scenario 4: 'OY PM with All development' (FG4: 'OY with All development PM Peak', Plan 1: 'With Ped')

Network Layout Diagram



Basic Results Summary

Created 12:41:16 01/06/2022

Enniskerry Glenamuck Road Junction with GDR schem.lsg3x

Network Results

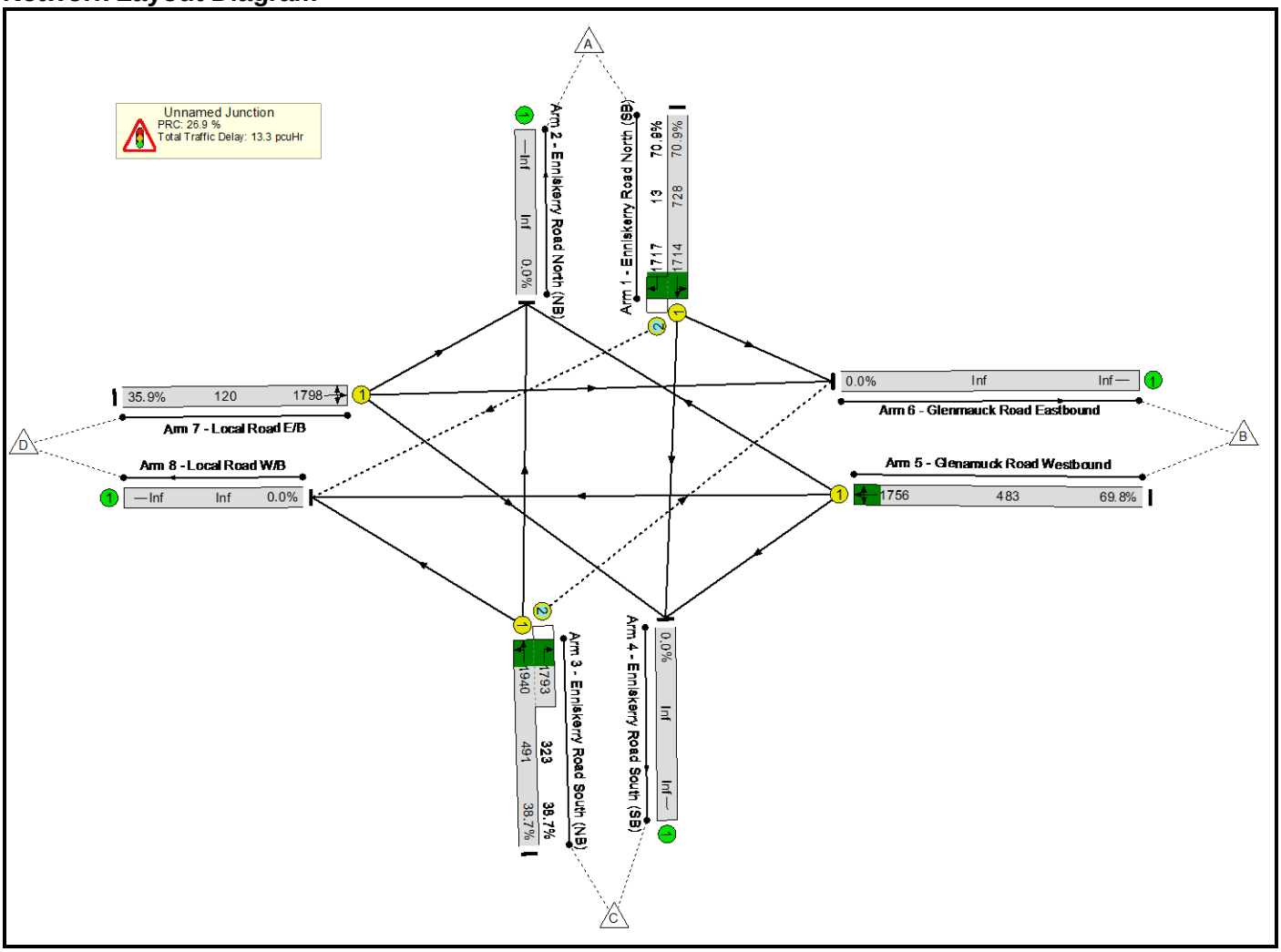
Item	Lane Description	Lane Type	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Mean Max Queue (pcu)
Network	-	-	-		-	-	-	-	-	-	**54.5%**	**61**	**6**	**0**	**9.2**	-	-
Unnamed Junction	-	-	-		-	-	-	-	-	-	**54.5%**	**61**	**6**	**0**	**9.2**	-	-
1/1+1/2	Enniskerry Road North (SB) Ahead Left Right	U+O	A	F	1	38	0	348	1696:1717	629+21	53.6 : 53.6%	11	0	0	3.4	35.2	9.5
3/1+3/2	Enniskerry Road South (NB) Ahead Right Left	U+O	B	C	1	50	7	173	1940:1793	673+331	17.2 : 17.2%	50	6	0	1.1	22.1	2.1
5/1	Glenamuck Road Westbound Right Left Ahead	U	D		1	29	-	315	1780	578	54.5%	-	-	-	3.5	40.0	9.2
7/1	Local Road E/B Left Right Ahead	U	E		1	7	-	55	1812	121	45.5%	-	-	-	1.2	81.0	2.2

C1 PRC for Signalled Lanes (%): 65.3 Total Delay for Signalled Lanes (pcuHr): 9.21 Cycle Time (s): 120

PRC Over All Lanes (%): 65.3 Total Delay Over All Lanes(pcuHr): 9.21

Scenario 5: 'OY+5 AM with committed development' (FG5: 'OY+5 with committed development AM Peak', Plan 1: 'With Ped')

Network Layout Diagram



Basic Results Summary

Created 12:41:16 01/06/2022

Enniskerry Glenamuck Road Junction with GDR schem.lsg3x

Network Results

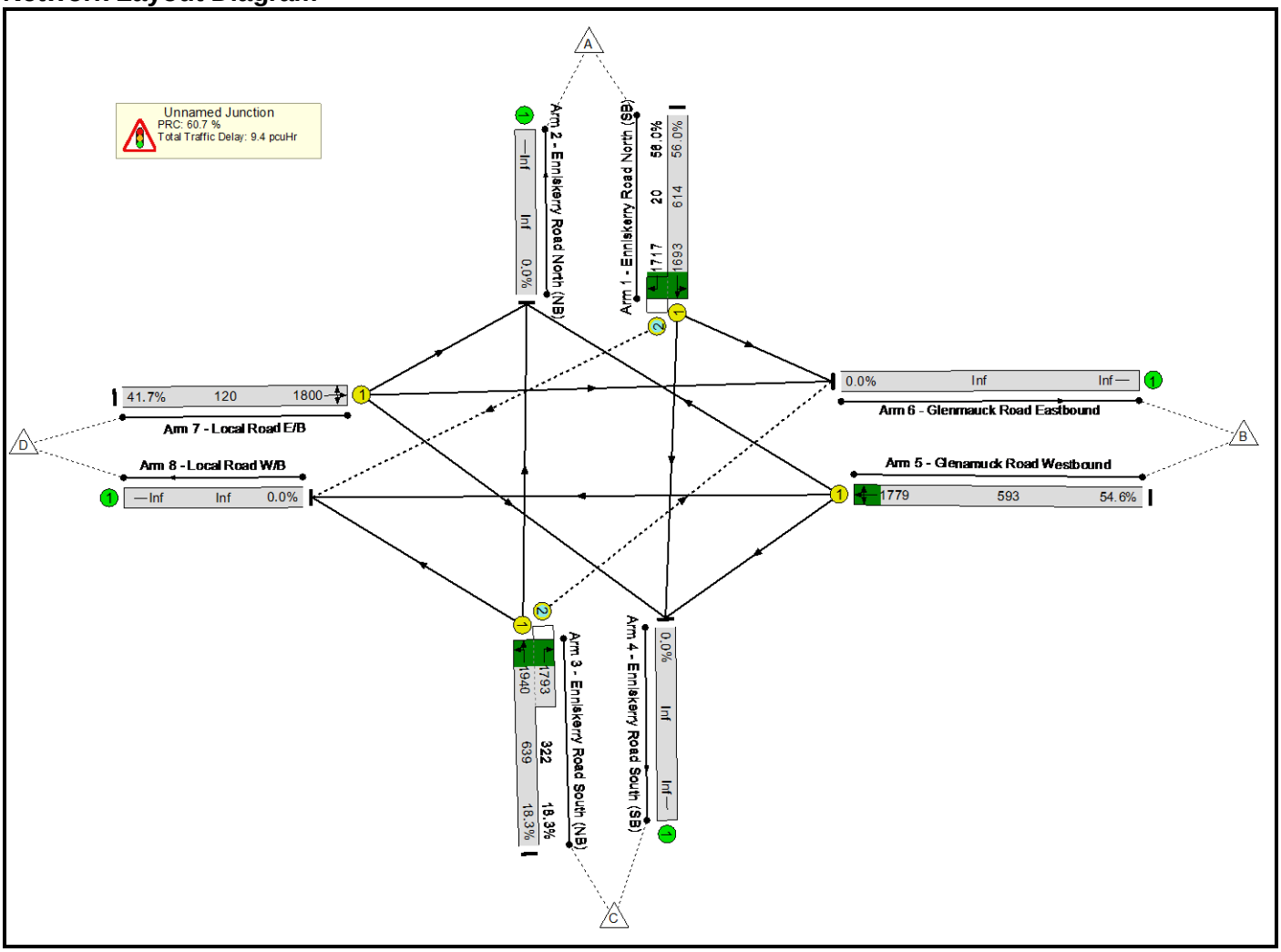
Item	Lane Description	Lane Type	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Mean Max Queue (pcu)
Network	-	-	-		-	-	-	-	-	-	**70.9%**	**119**	**14**	**1**	**13.3**	-	-
Unnamed Junction	-	-	-		-	-	-	-	-	-	**70.9%**	**119**	**14**	**1**	**13.3**	-	-
1/1+1/2	Enniskerry Road North (SB) Ahead Left Right	U+O	A	F	1	44	0	525	1714:1717	728+13	70.9 : 70.9%	9	0	0	5.3	36.7	15.5
3/1+3/2	Enniskerry Road South (NB) Ahead Right Left	U+O	B	C	1	56	7	315	1940:1793	491+323	38.7 : 38.7%	110	14	1	2.2	25.7	3.6
5/1	Glenamuck Road Westbound Right Left Ahead	U	D		1	23	-	337	1756	483	69.8%	-	-	-	4.8	51.2	11.2
7/1	Local Road E/B Left Right Ahead	U	E		1	7	-	43	1798	120	35.9%	-	-	-	0.9	76.8	1.6

C1 PRC for Signalled Lanes (%): 26.9 Total Delay for Signalled Lanes (pcuHr): 13.30 Cycle Time (s): 120

PRC Over All Lanes (%): 26.9 Total Delay Over All Lanes(pcuHr): 13.30

Scenario 6: 'OY+5 PM with committed development' (FG6: 'OY+5 with committed development PM Peak', Plan 1: 'With Ped')

Network Layout Diagram



Basic Results Summary

Created 12:41:16 01/06/2022

Enniskerry Glenamuck Road Junction with GDR schem.lsg3x

Network Results

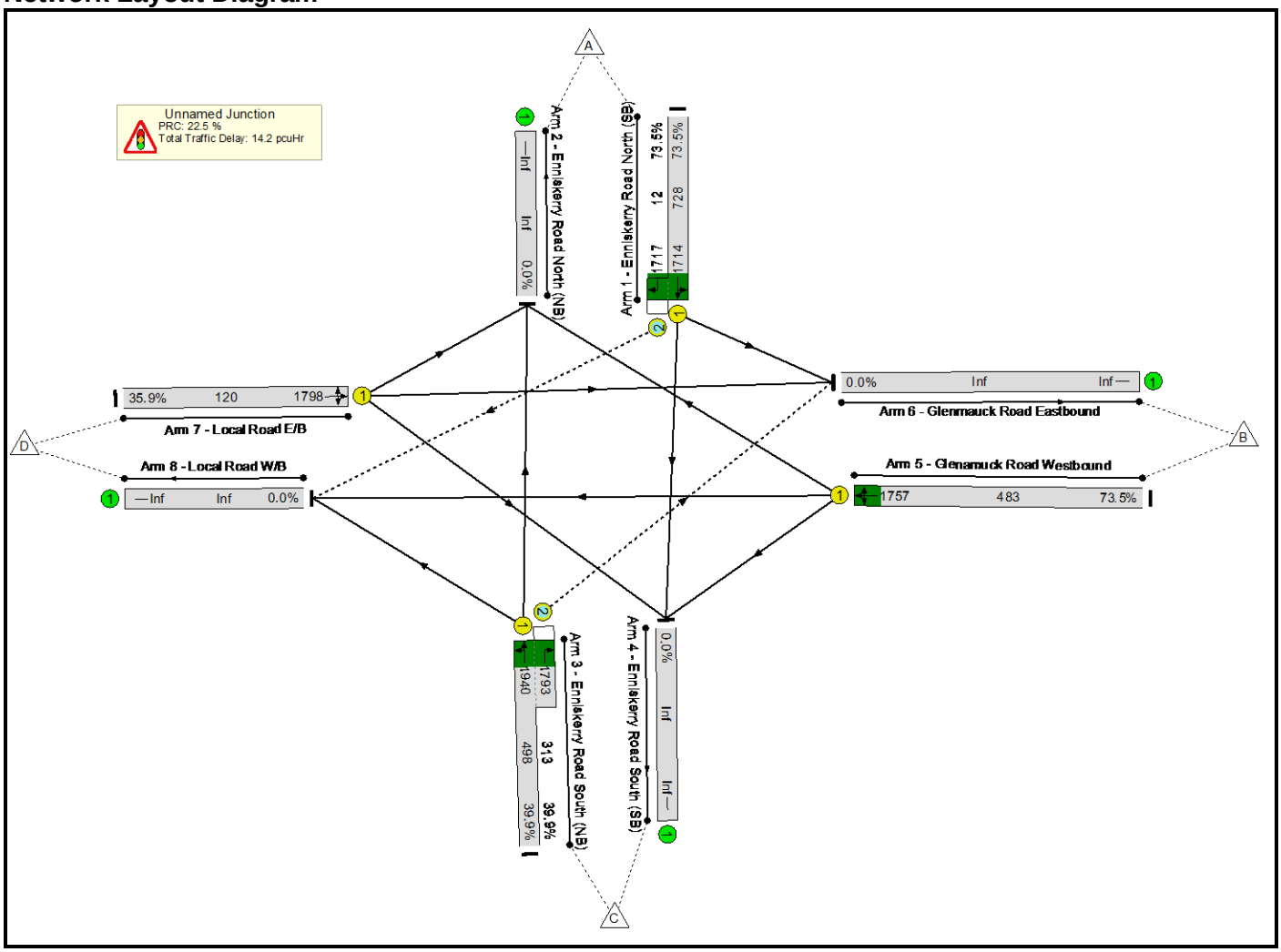
Item	Lane Description	Lane Type	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Mean Max Queue (pcu)
Network	-	-	-		-	-	-	-	-	-	**56.0%**	**63**	**6**	**0**	**9.4**	-	-
Unnamed Junction	-	-	-		-	-	-	-	-	-	**56.0%**	**63**	**6**	**0**	**9.4**	-	-
1/1+1/2	Enniskerry Road North (SB) Ahead Left Right	U+O	A	F	1	37	0	355	1693:1717	614+20	56.0 : 56.0%	11	0	0	3.6	36.6	9.9
3/1+3/2	Enniskerry Road South (NB) Ahead Right Left	U+O	B	C	1	49	7	176	1940:1793	639+322	18.3 : 18.3%	52	6	0	1.1	23.1	2.2
5/1	Glenamuck Road Westbound Right Left Ahead	U	D		1	30	-	324	1779	593	54.6%	-	-	-	3.5	39.3	9.3
7/1	Local Road E/B Left Right Ahead	U	E		1	7	-	50	1800	120	41.7%	-	-	-	1.1	79.2	2.0

C1 PRC for Signalled Lanes (%): 60.7 Total Delay for Signalled Lanes (pcuHr): 9.38 Cycle Time (s): 120

PRC Over All Lanes (%): 60.7 Total Delay Over All Lanes(pcuHr): 9.38

Scenario 7: 'OY+5 AM with All development' (FG7: 'OY+5 with All development AM peak', Plan 1: 'With Ped')

Network Layout Diagram



Basic Results Summary

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Enniskerry Glenamuck Road Junction with GDR schem.lsg3x

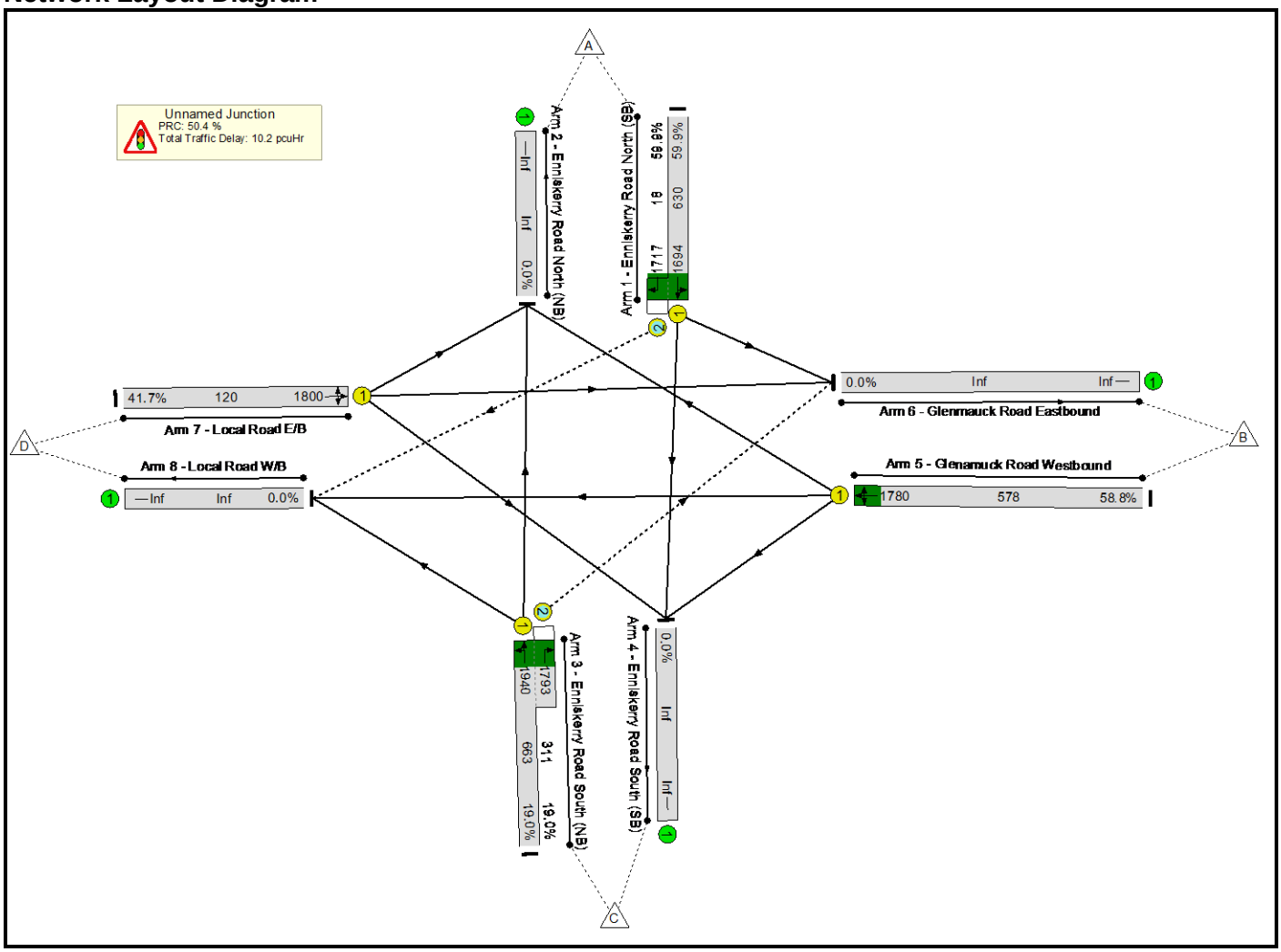
Network Results

Item	Lane Description	Lane Type	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Mean Max Queue (pcu)
Network	-	-	-		-	-	-	-	-	-	**73.5%**	**119**	**14**	**1**	**14.2**	-	-
Unnamed Junction	-	-	-		-	-	-	-	-	-	**73.5%**	**119**	**14**	**1**	**14.2**	-	-
1/1+1/2	Enniskerry Road North (SB) Ahead Left Right	U+O	A	F	1	44	0	544	1714:1717	728+12	73.5 : 73.5%	9	0	0	5.7	37.9	16.3
3/1+3/2	Enniskerry Road South (NB) Ahead Right Left	U+O	B	C	1	56	7	324	1940:1793	498+313	39.9 : 39.9%	110	14	1	2.3	26.1	3.7
5/1	Glenamuck Road Westbound Right Left Ahead	U	D		1	23	-	355	1757	483	73.5%	-	-	-	5.3	53.3	12.1
7/1	Local Road E/B Left Right Ahead	U	E		1	7	-	43	1798	120	35.9%	-	-	-	0.9	76.8	1.6

C1 PRC for Signalled Lanes (%): 22.5 Total Delay for Signalled Lanes (pcuHr): 14.25 Cycle Time (s): 120

PRC Over All Lanes (%): 22.5 Total Delay Over All Lanes(pcuHr): 14.25

Enniskerry Glenamuck Road Junction with GDR schem.lsg3x
Scenario 8: 'OY+5 PM with All development' (FG8: 'OY+5 with All development PM Peak', Plan 1: 'With Ped')
Network Layout Diagram



Basic Results Summary

Created 12:41:16 01/06/2022

Enniskerry Glenamuck Road Junction with GDR schem.lsg3x

Network Results

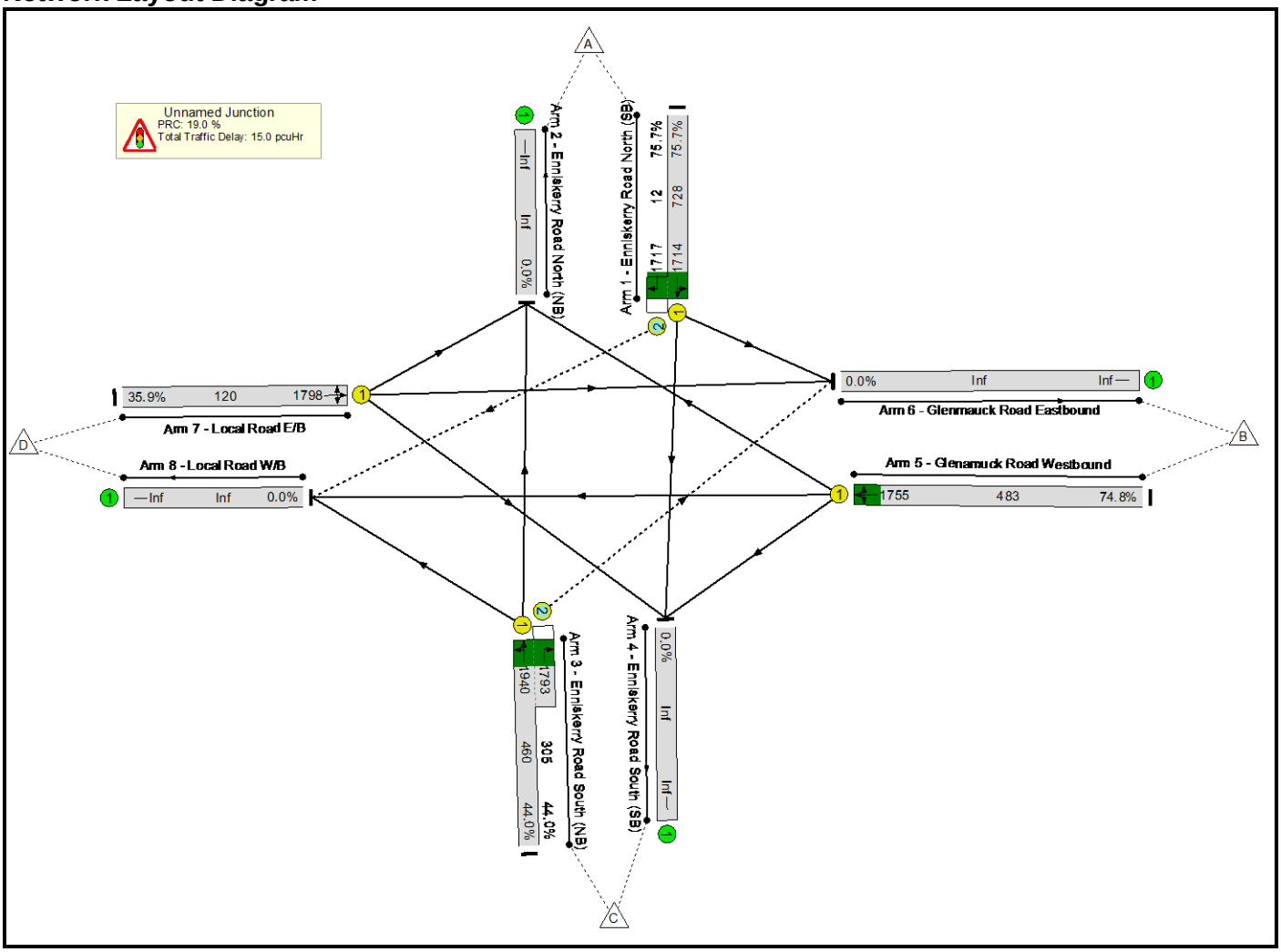
Item	Lane Description	Lane Type	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Mean Max Queue (pcu)
Network	-	-	-		-	-	-	-	-	-	**59.9%**	**63**	**6**	**0**	**10.2**	-	-
Unnamed Junction	-	-	-		-	-	-	-	-	-	**59.9%**	**63**	**6**	**0**	**10.2**	-	-
1/1+1/2	Enniskerry Road North (SB) Ahead Left Right	U+O	A	F	1	38	0	388	1694:1717	630+18	59.9 : 59.9%	11	0	0	4.0	37.0	11.0
3/1+3/2	Enniskerry Road South (NB) Ahead Right Left	U+O	B	C	1	50	7	185	1940:1793	663+311	19.0 : 19.0%	52	6	0	1.2	22.8	2.4
5/1	Glenamuck Road Westbound Right Left Ahead	U	D		1	29	-	340	1780	578	58.8%	-	-	-	3.9	41.3	10.2
7/1	Local Road E/B Left Right Ahead	U	E		1	7	-	50	1800	120	41.7%	-	-	-	1.1	79.2	2.0

C1 PRC for Signalled Lanes (%): 50.4 Total Delay for Signalled Lanes (pcuHr): 10.17 Cycle Time (s): 120

PRC Over All Lanes (%): 50.4 Total Delay Over All Lanes(pcuHr): 10.17

Scenario 9: 'OY+15 AM with committed development' (FG9: 'OY+15 with committed development AM peak', Plan 1: 'With Ped')

Network Layout Diagram



Basic Results Summary

Created 12:41:16 01/06/2022

Enniskerry Glenamuck Road Junction with GDR schem.lsg3x

Network Results

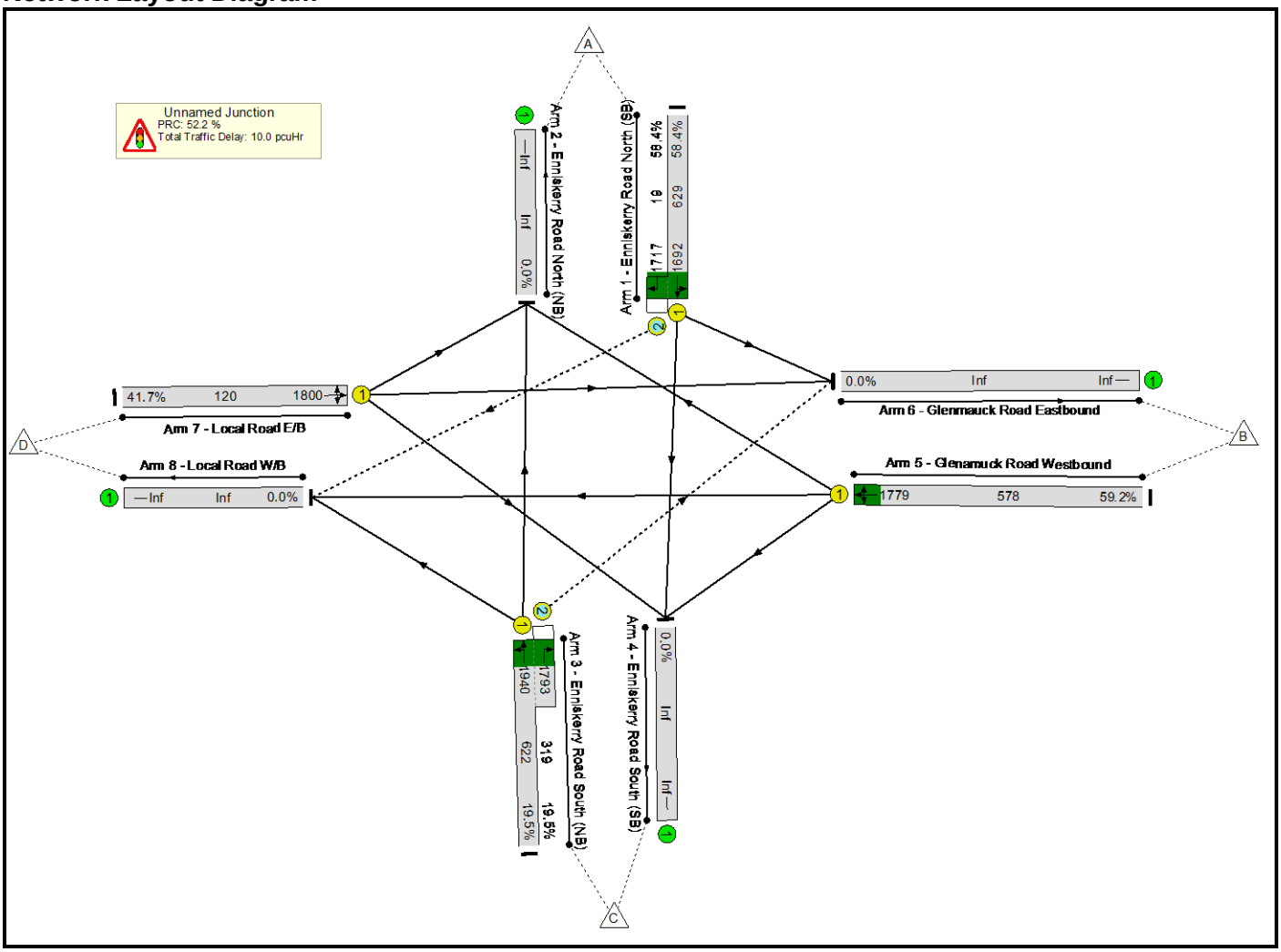
Item	Lane Description	Lane Type	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Mean Max Queue (pcu)
Network	-	-	-		-	-	-	-	-	-	**75.7%**	**127**	**15**	**1**	**15.0**	-	-
Unnamed Junction	-	-	-		-	-	-	-	-	-	**75.7%**	**127**	**15**	**1**	**15.0**	-	-
1/1+1/2	Enniskerry Road North (SB) Ahead Left Right	U+O	A	F	1	44	0	560	1714:1717	728+12	75.7 : 75.7%	9	0	0	6.1	39.1	17.2
3/1+3/2	Enniskerry Road South (NB) Ahead Right Left	U+O	B	C	1	56	7	336	1940:1793	460+305	44.0 : 44.0%	118	15	1	2.6	27.7	4.1
5/1	Glenamuck Road Westbound Right Left Ahead	U	D		1	23	-	361	1755	483	74.8%	-	-	-	5.4	54.2	12.4
7/1	Local Road E/B Left Right Ahead	U	E		1	7	-	43	1798	120	35.9%	-	-	-	0.9	76.8	1.6

C1 PRC for Signalled Lanes (%): 19.0 Total Delay for Signalled Lanes (pcuHr): 15.01 Cycle Time (s): 120

PRC Over All Lanes (%): 19.0 Total Delay Over All Lanes(pcuHr): 15.01

Scenario 10: 'OY+15 PM with committed development' (FG10: 'OY+15 with committed development PM Peak', Plan 1: 'With Ped')

Network Layout Diagram



Basic Results Summary

Created 12:41:16 01/06/2022

Enniskerry Glenamuck Road Junction with GDR schem.lsg3x

Network Results

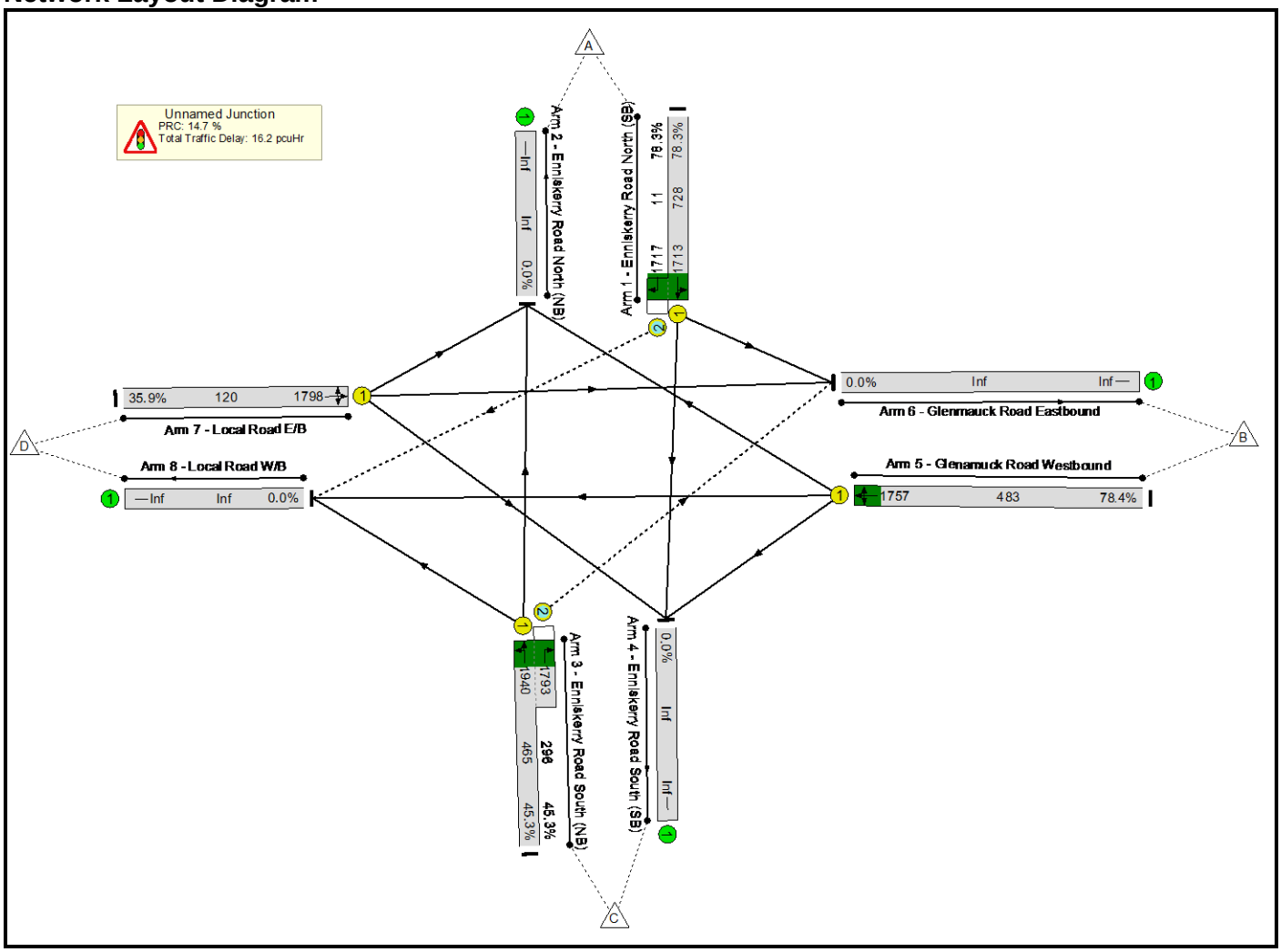
Item	Lane Description	Lane Type	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Mean Max Queue (pcu)
Network	-	-	-		-	-	-	-	-	-	**59.2%**	**66**	**7**	**1**	**10.0**	-	-
Unnamed Junction	-	-	-		-	-	-	-	-	-	**59.2%**	**66**	**7**	**1**	**10.0**	-	-
1/1+1/2	Enniskerry Road North (SB) Ahead Left Right	U+O	A	F	1	38	0	378	1692:1717	629+19	58.4 : 58.4%	11	0	0	3.8	36.6	10.6
3/1+3/2	Enniskerry Road South (NB) Ahead Right Left	U+O	B	C	1	50	7	183	1940:1793	622+319	19.5 : 19.5%	55	7	1	1.2	23.1	2.2
5/1	Glenamuck Road Westbound Right Left Ahead	U	D		1	29	-	342	1779	578	59.2%	-	-	-	3.9	41.4	10.2
7/1	Local Road E/B Left Right Ahead	U	E		1	7	-	50	1800	120	41.7%	-	-	-	1.1	79.2	2.0

C1 PRC for Signalled Lanes (%): 52.2 Total Delay for Signalled Lanes (pcuHr): 10.05 Cycle Time (s): 120

PRC Over All Lanes (%): 52.2 Total Delay Over All Lanes(pcuHr): 10.05

Scenario 11: 'OY+15 AM with All development' (FG11: 'OY+15 with All development AM Peak', Plan 1: 'With Ped')

Network Layout Diagram



Basic Results Summary

Created 12:41:17 01/06/2022

Enniskerry Glenamuck Road Junction with GDR schem.lsg3x

Network Results

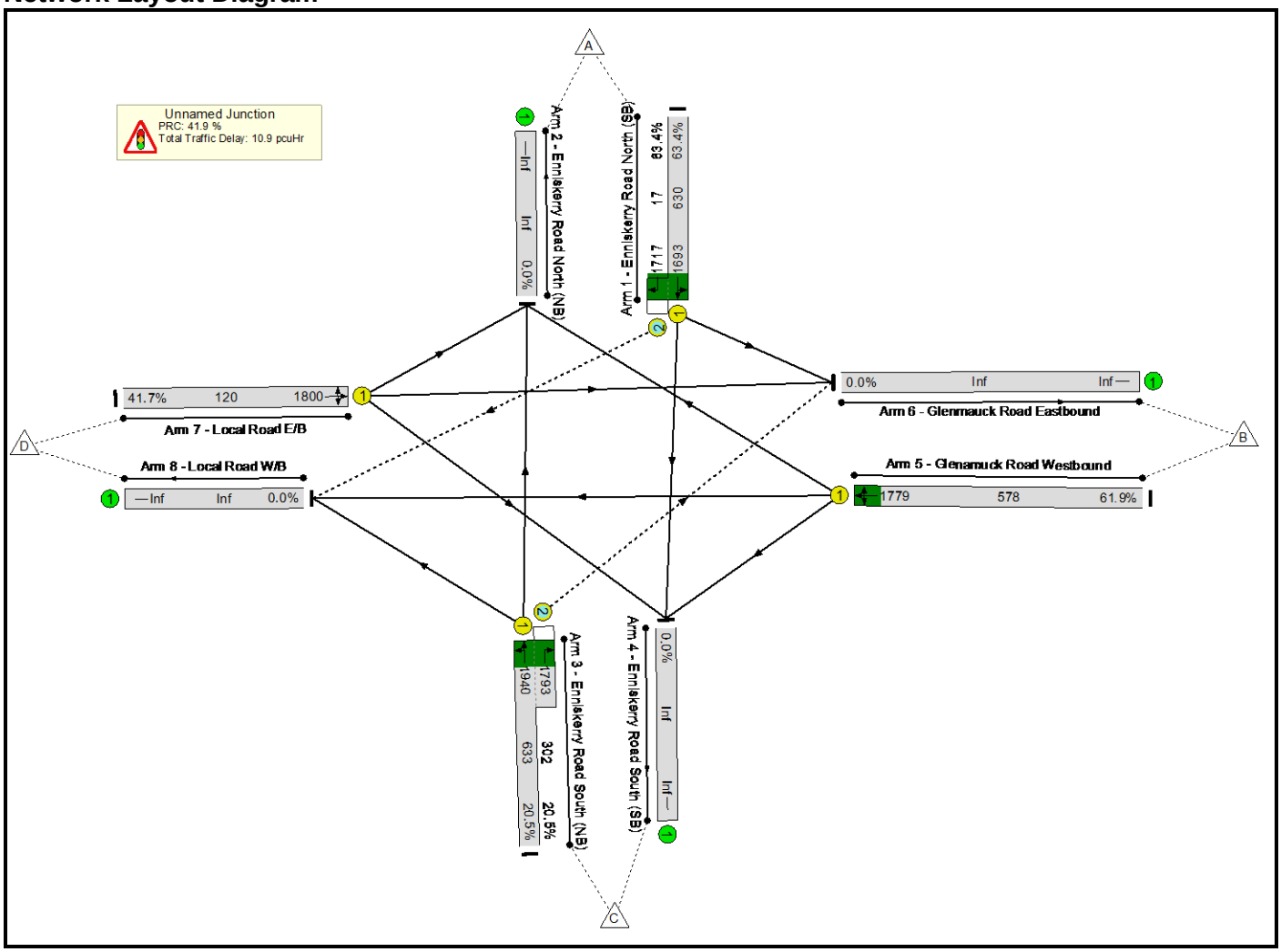
Item	Lane Description	Lane Type	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Mean Max Queue (pcu)
Network	-	-	-		-	-	-	-	-	-	**78.4%**	**121**	**21**	**1**	**16.2**	-	-
Unnamed Junction	-	-	-		-	-	-	-	-	-	**78.4%**	**121**	**21**	**1**	**16.2**	-	-
1/1+1/2	Enniskerry Road North (SB) Ahead Left Right	U+O	A	F	1	44	0	579	1713:1717	728+11	78.3 : 78.3%	9	0	0	6.5	40.7	18.1
3/1+3/2	Enniskerry Road South (NB) Ahead Right Left	U+O	B	C	1	56	7	345	1940:1793	465+296	45.3 : 45.3%	112	21	1	2.7	28.2	4.2
5/1	Glenamuck Road Westbound Right Left Ahead	U	D		1	23	-	379	1757	483	78.4%	-	-	-	6.0	56.9	13.3
7/1	Local Road E/B Left Right Ahead	U	E		1	7	-	43	1798	120	35.9%	-	-	-	0.9	76.8	1.6

C1 PRC for Signalled Lanes (%): 14.7 Total Delay for Signalled Lanes (pcuHr): 16.16 Cycle Time (s): 120

PRC Over All Lanes (%): 14.7 Total Delay Over All Lanes(pcuHr): 16.16

Scenario 12: 'OY+15 PM with All development' (FG12: 'OY+15 with All development PM Peak', Plan 1: 'With Ped')

Network Layout Diagram



Basic Results Summary

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Enniskerry Glenamuck Road Junction with GDR schem.lsg3x

Network Results

Item	Lane Description	Lane Type	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Mean Max Queue (pcu)
Network	-	-	-		-	-	-	-	-	-	**63.4%**	**66**	**7**	**1**	**10.9**	-	-
Unnamed Junction	-	-	-		-	-	-	-	-	-	**63.4%**	**66**	**7**	**1**	**10.9**	-	-
1/1+1/2	Enniskerry Road North (SB) Ahead Left Right	U+O	A	F	1	38	0	411	1693:1717	630+17	63.4 : 63.4%	11	0	0	4.4	38.2	11.9
3/1+3/2	Enniskerry Road South (NB) Ahead Right Left	U+O	B	C	1	50	7	192	1940:1793	633+302	20.5 : 20.5%	55	7	1	1.3	23.5	2.4
5/1	Glenamuck Road Westbound Right Left Ahead	U	D		1	29	-	358	1779	578	61.9%	-	-	-	4.2	42.3	10.9
7/1	Local Road E/B Left Right Ahead	U	E		1	7	-	50	1800	120	41.7%	-	-	-	1.1	79.2	2.0

C1 PRC for Signalled Lanes (%): 41.9 Total Delay for Signalled Lanes (pcuHr): 10.93 Cycle Time (s): 120

PRC Over All Lanes (%): 41.9 Total Delay Over All Lanes(pcuHr): 10.93

Junctions 9

PICADY 9 - Priority Intersection Module

Filename: Enniskery Rd R116 Junction.j9
Path: U:\5158632\7 Calcs\72 Model\722 Traffic\Traffic Models Revision 1\Access Junctions
Report generation date: 01/06/2022 13:04:07

Summary of junction performance

	AM Peak				PM Peak			
	Queue (PCU)	Delay (s)	RFC	LOS	Queue (PCU)	Delay (s)	RFC	LOS
	Opening Year with comm dev							
Stream B-C	0.4	8.41	0.30	A	0.1	6.86	0.10	A
Stream B-A	0.2	15.15	0.17	C	0.1	12.34	0.12	B
Stream C-AB	1.3	8.22	0.47	A	0.5	4.95	0.19	A
	Opening Year with All dev							
Stream B-C	0.4	8.47	0.30	A	0.1	6.86	0.10	A
Stream B-A	0.2	15.39	0.17	C	0.1	12.60	0.12	B
Stream C-AB	1.4	8.48	0.49	A	0.5	4.96	0.19	A
	Opening Year with comm dev with GDR							
Stream B-C	0.4	7.28	0.27	A	0.1	6.20	0.09	A
Stream B-A	0.2	11.50	0.13	B	0.1	9.36	0.09	A
Stream C-AB	0.6	8.23	0.35	A	0.2	6.37	0.13	A
	Opening Year with All dev with GDR							
Stream B-C	0.4	7.31	0.27	A	0.1	6.18	0.09	A
Stream B-A	0.2	11.57	0.13	B	0.1	9.49	0.09	A
Stream C-AB	0.6	8.38	0.36	A	0.2	6.40	0.14	A
	Opening Year+5 with comm dev with GDR							
Stream B-C	0.4	7.39	0.28	A	0.1	6.23	0.09	A
Stream B-A	0.2	11.64	0.14	B	0.1	9.40	0.09	A
Stream C-AB	0.6	8.38	0.37	A	0.2	6.39	0.14	A
	Opening Year+5 with All dev with GDR							
Stream B-C	0.5	8.06	0.32	A	0.2	6.36	0.14	A
Stream B-A	0.2	12.10	0.14	B	0.1	10.10	0.10	B
Stream C-AB	0.8	9.11	0.42	A	0.3	6.73	0.18	A
	Opening Year+15 with comm dev with GDR							
Stream B-C	0.4	7.71	0.30	A	0.1	6.32	0.10	A
Stream B-A	0.2	12.05	0.15	B	0.1	9.56	0.10	A
Stream C-AB	0.7	8.76	0.40	A	0.2	6.46	0.15	A
	Opening Year+15 with All dev with GDR							
Stream B-C	0.5	8.03	0.33	A	0.2	6.46	0.15	A
Stream B-A	0.2	12.53	0.16	B	0.1	10.26	0.11	B
Stream C-AB	0.9	9.58	0.45	A	0.3	6.81	0.20	A

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

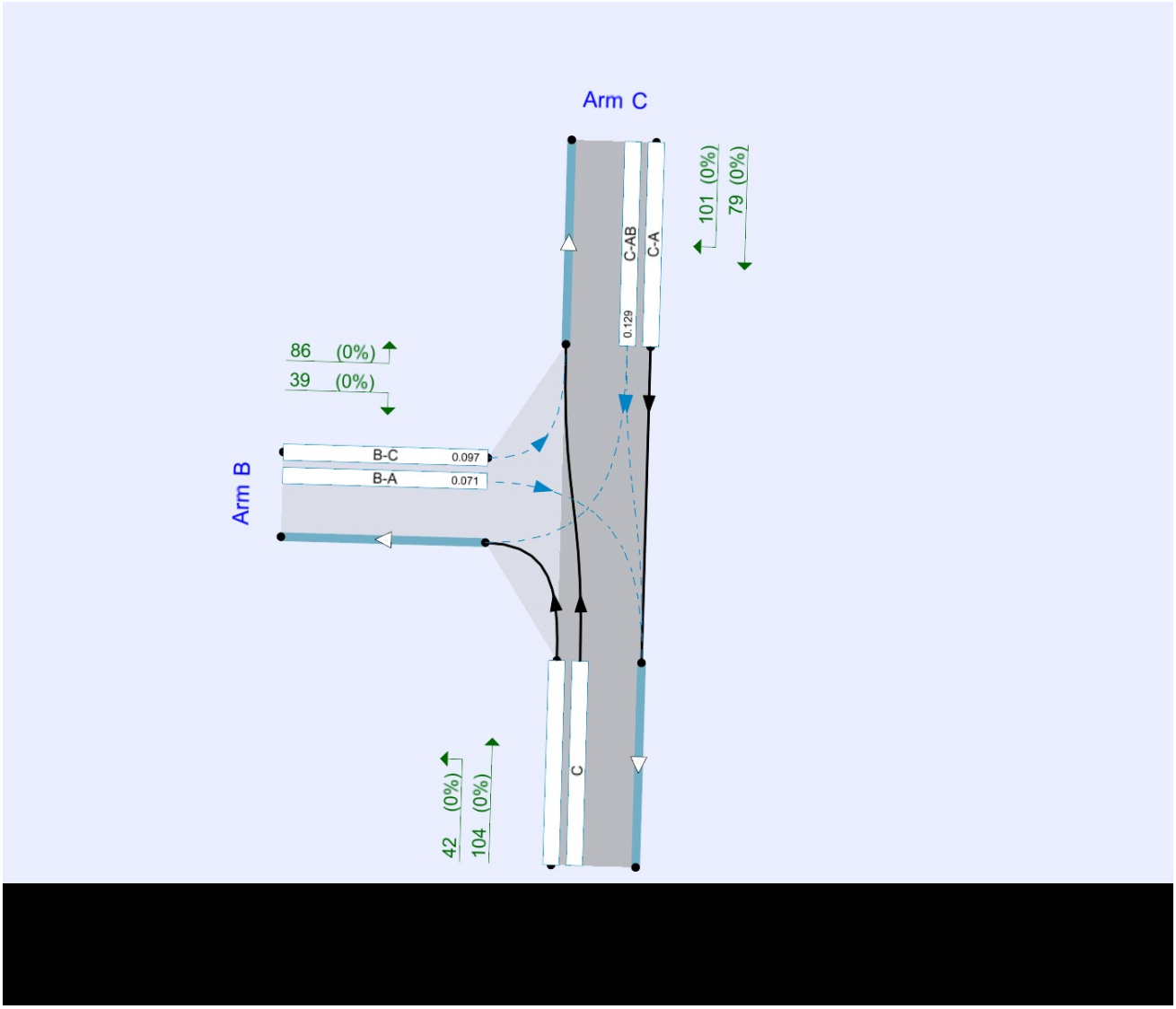
File summary

File Description

Title	
Location	
Site number	
Date	07/10/2021
Version	
Status	(new file)
Identifier	
Client	
Jobnumber	
Enumerator	ATKINSMCCARTHY\manand
Description	

Units

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



The junction diagram reflects the last run of Junctions.

Analysis Options

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

Analysis Set Details

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

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D16	Opening Year+15 with All dev with GDR	PM Peak	ONE HOUR	16:45	18:15	15	✓

Opening Year+15 with All dev with GDR, PM Peak

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way		3.84	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Name	Description	Arm type
A	Enniskerry Road South		Major
B	R116		Minor
C	Enniskerry Road North		Major

Major Arm Geometry

Arm	Width of carriageway (m)	Has kerbed central reserve	Has right turn bay	Visibility for right turn (m)	Blocks?	Blocking queue (PCU)
C	10.00			100.0	✓	0.00

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

Minor Arm Geometry

Arm	Minor arm type	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 plus flare	8.16	5.14	4.71	3.80	3.00	✓	2.00	29	27

Slope / Intercept / Capacity

Priority Intersection Slopes and Intercepts

Stream	Intercept (PCU/hr)	Slope for A-B	Slope for A-C	Slope for C-A	Slope for C-B
B-A	454	0.068	0.173	0.109	0.247
B-C	700	0.089	0.224	-	-
C-B	632	0.202	0.202	-	-

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

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

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

Traffic Demand

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		ONE HOUR	✓	146	100.000
B		ONE HOUR	✓	125	100.000
C		ONE HOUR	✓	180	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		A	B	C
From	A	0	42	104
	B	39	0	86
	C	79	101	0

Vehicle Mix

Heavy Vehicle Percentages

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

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
B-C	0.15	6.46	0.2	A	79	118
B-A	0.11	10.26	0.1	B	36	54
C-AB	0.20	6.81	0.3	A	105	157
C-A					60	91
A-B					39	58
A-C					95	143

Main Results for each time segment

16:45 - 17:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	65	16	668	0.097	64	0.0	0.1	5.961	A
B-A	29	7	413	0.071	29	0.0	0.1	9.379	A
C-AB	84	21	649	0.129	83	0.0	0.2	6.359	A
C-A	52	13			52				
A-B	32	8			32				
A-C	78	20			78				

17:00 - 17:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	77	19	661	0.117	77	0.1	0.1	6.165	A
B-A	35	9	405	0.087	35	0.1	0.1	9.728	A
C-AB	102	25	653	0.156	102	0.2	0.2	6.541	A
C-A	60	15			60				
A-B	38	9			38				
A-C	93	23			93				

17:15 - 17:30

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	95	24	652	0.145	95	0.1	0.2	6.457	A
B-A	43	11	394	0.109	43	0.1	0.1	10.253	B
C-AB	128	32	657	0.195	128	0.2	0.3	6.803	A
C-A	70	17			70				
A-B	46	12			46				
A-C	115	29			115				

17:30 - 17:45

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	95	24	652	0.145	95	0.2	0.2	6.460	A
B-A	43	11	394	0.109	43	0.1	0.1	10.260	B
C-AB	128	32	657	0.195	128	0.3	0.3	6.811	A
C-A	70	17			70				
A-B	46	12			46				
A-C	115	29			115				

17:45 - 18:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	77	19	661	0.117	77	0.2	0.1	6.170	A
B-A	35	9	405	0.087	35	0.1	0.1	9.739	A
C-AB	102	26	653	0.156	102	0.3	0.2	6.552	A
C-A	60	15			60				
A-B	38	9			38				
A-C	93	23			93				

18:00 - 18:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	65	16	668	0.097	65	0.1	0.1	5.973	A
B-A	29	7	413	0.071	29	0.1	0.1	9.392	A
C-AB	84	21	649	0.129	84	0.2	0.2	6.379	A
C-A	52	13			52				
A-B	32	8			32				
A-C	78	20			78				

Appendix C. Traffic Diagram

Figure C-1 - Traffic Volume for Opening Year with committed development (without GDRS)

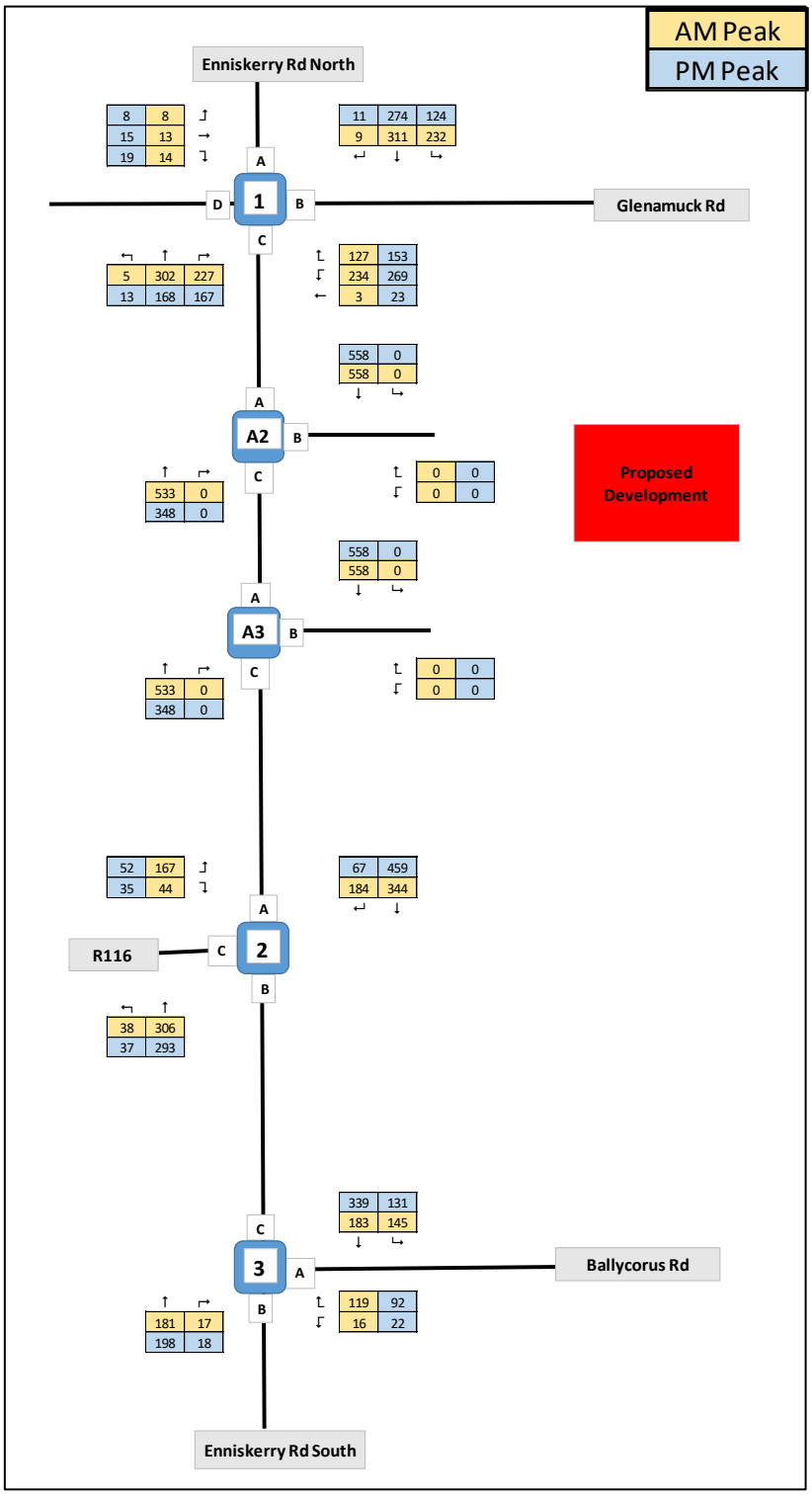


Figure C-2 - Traffic Volume for Opening Year with All development (without GDRS)

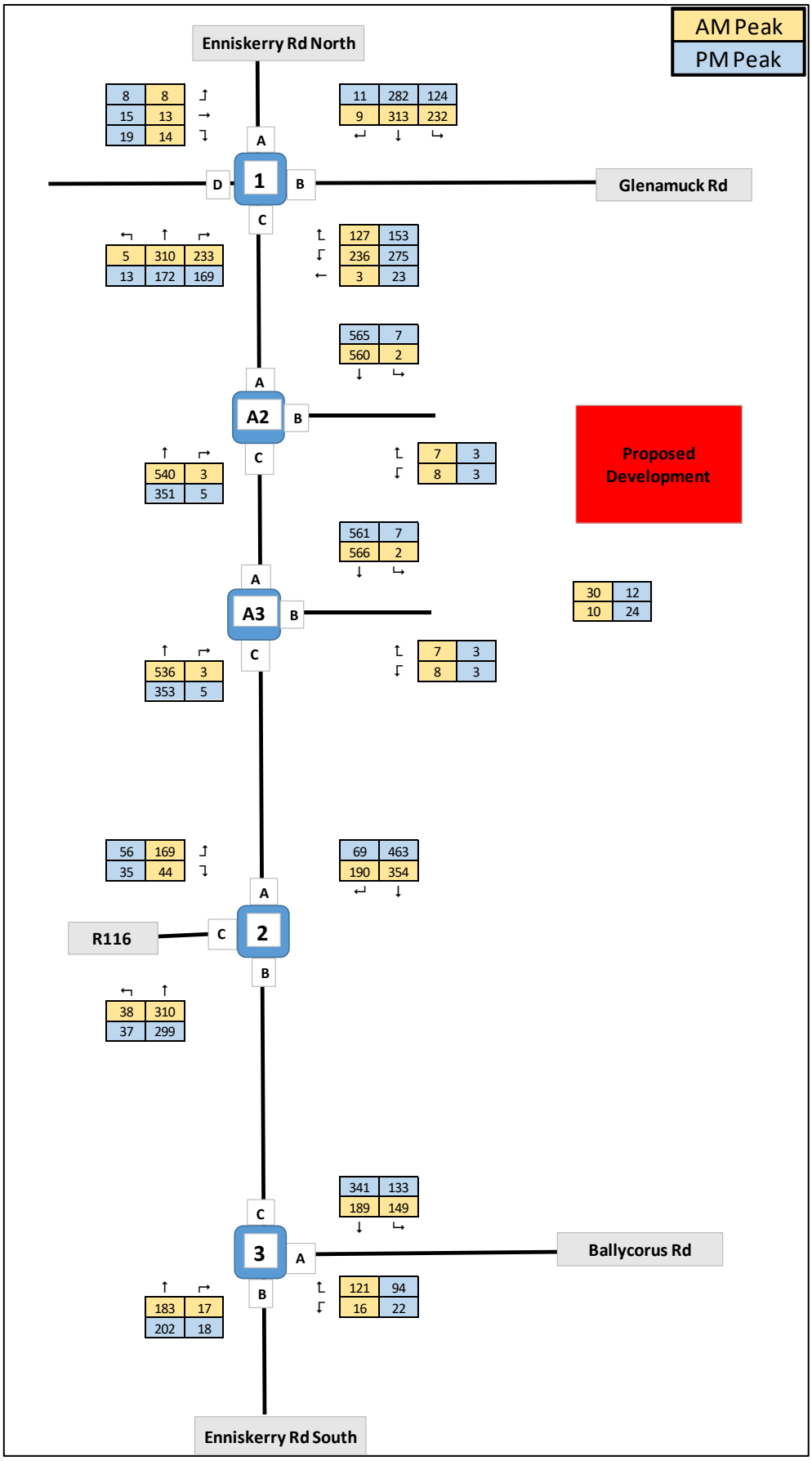


Figure C-3 - Traffic Volume for Opening Year with committed development (with GDRS)

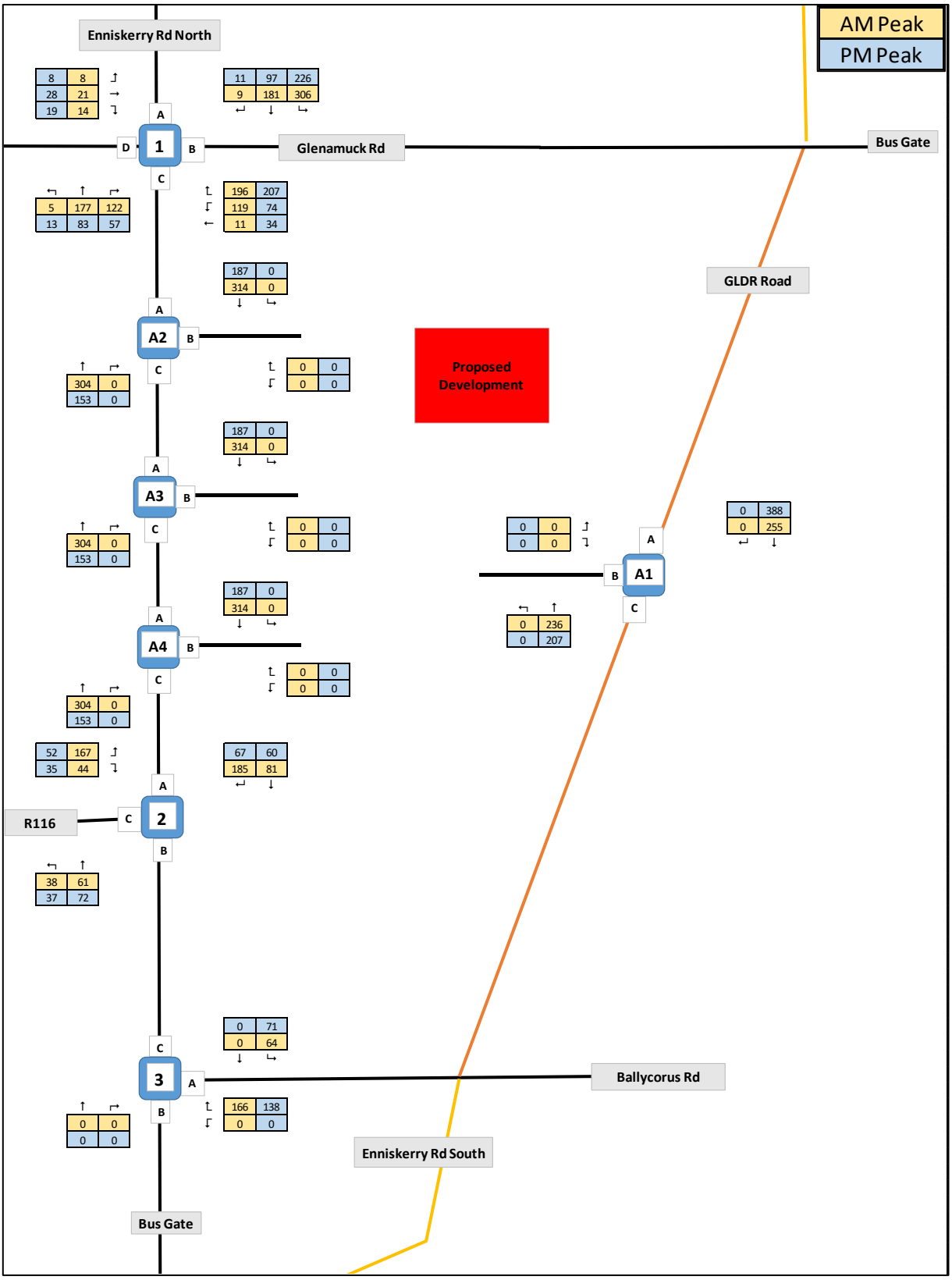


Figure C-4 - Traffic Volume for Opening Year with All development (with GDRS)

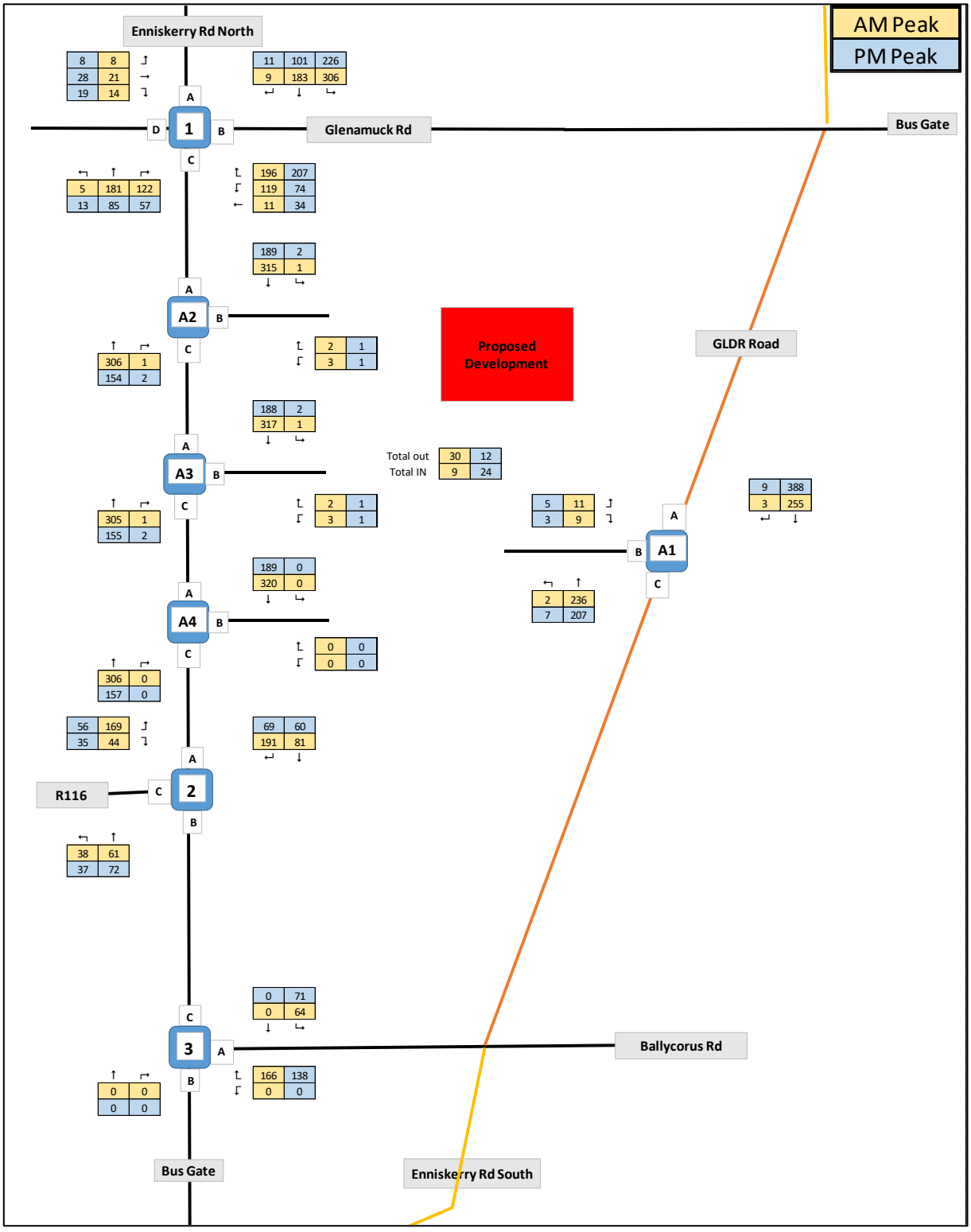


Figure C-5 - Traffic Volume for Opening Year+5 with committed development (with GDRS)

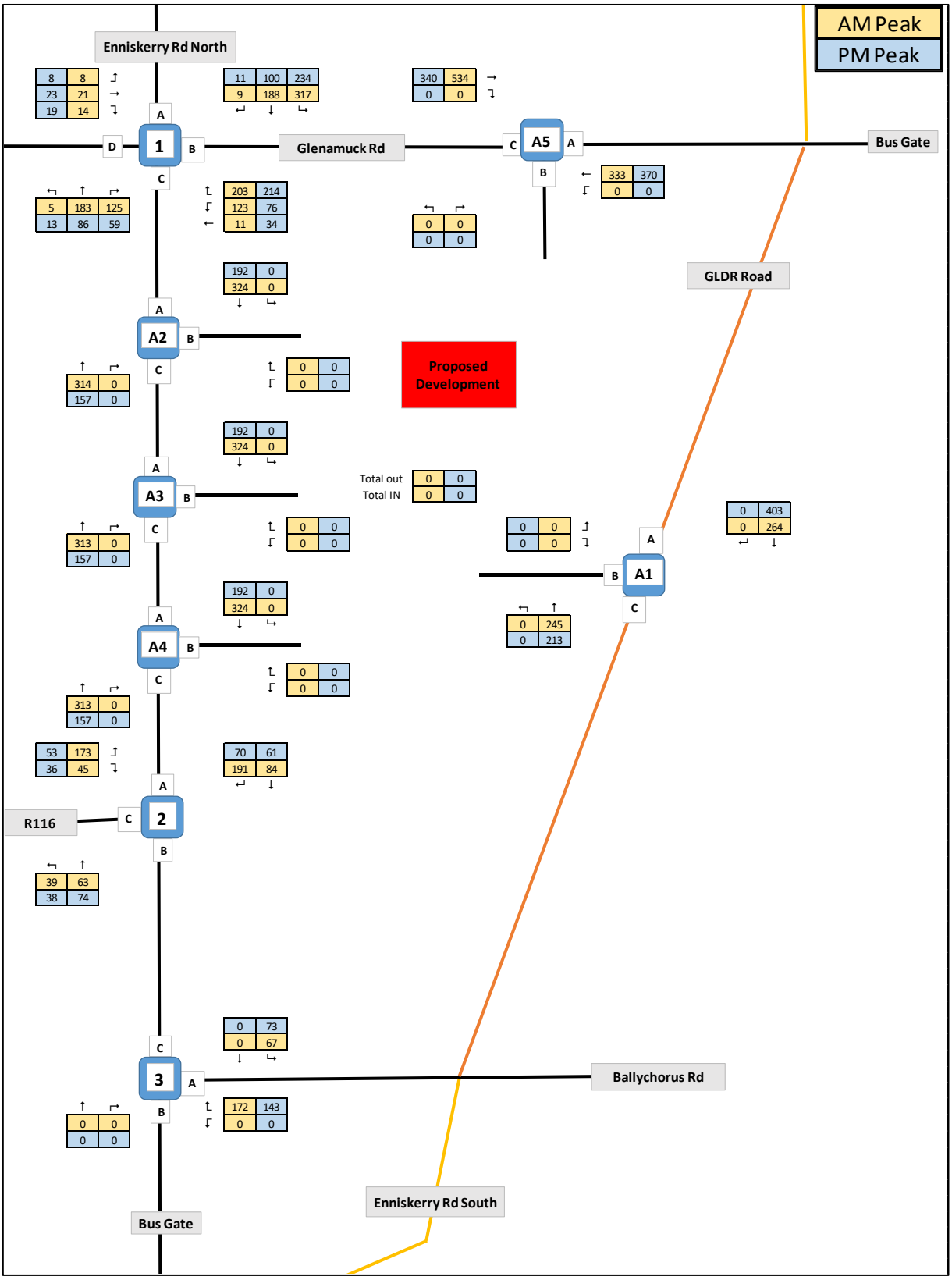


Figure C-6 - Traffic Volume for Opening Year+5 with All development (with GDRS)

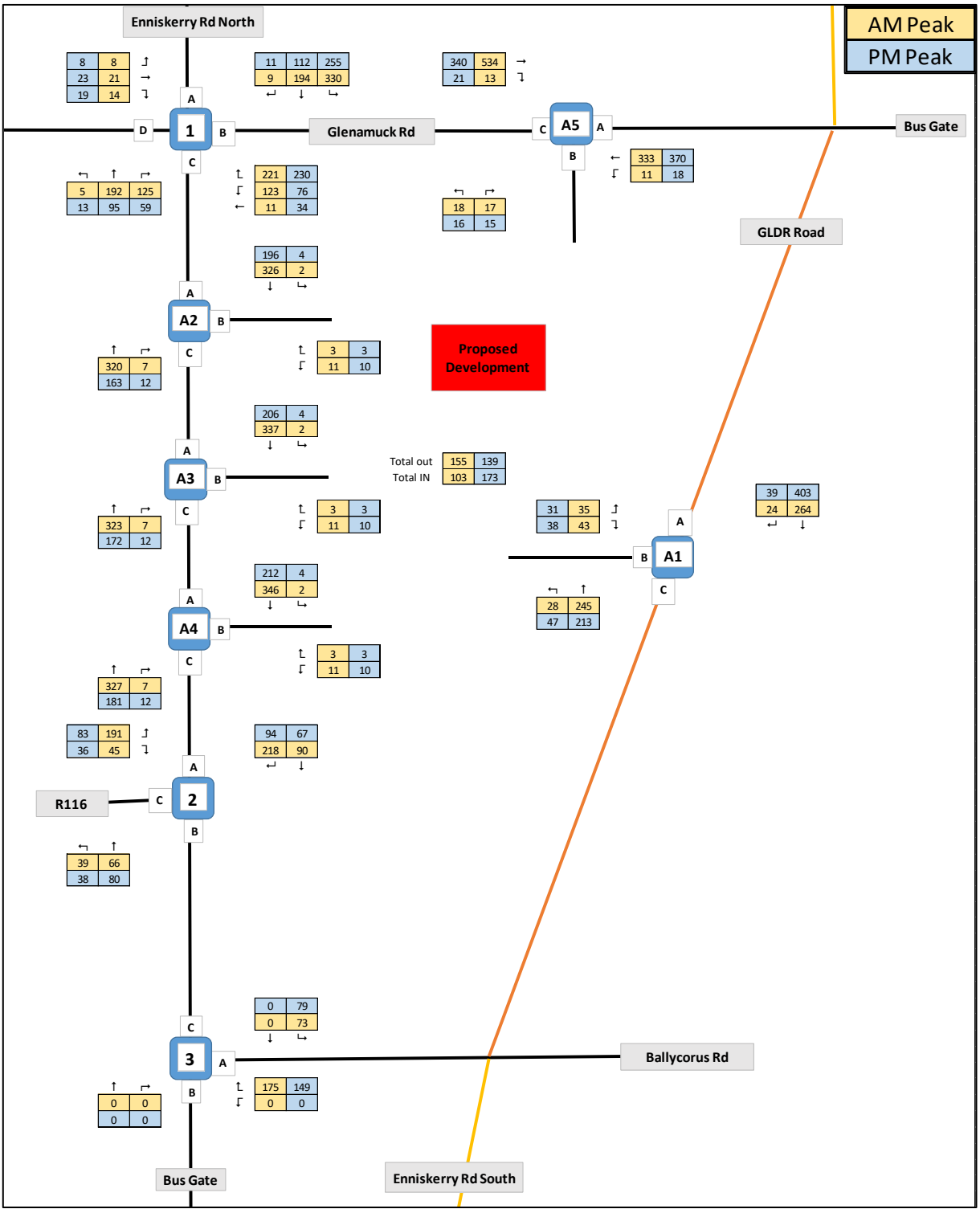


Figure C-7 - Traffic Volume for Opening Year+15 with committed development (with GDRS)

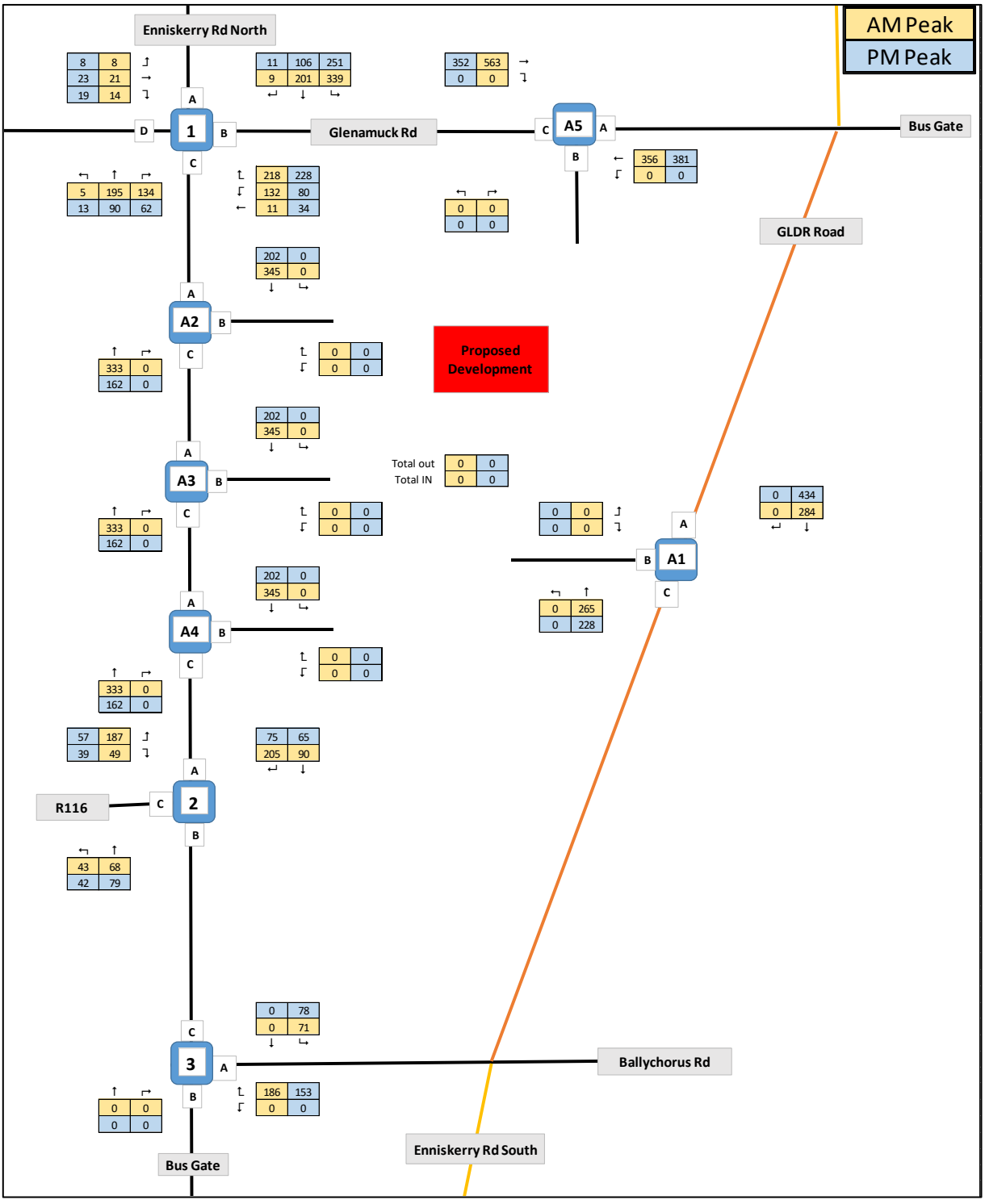
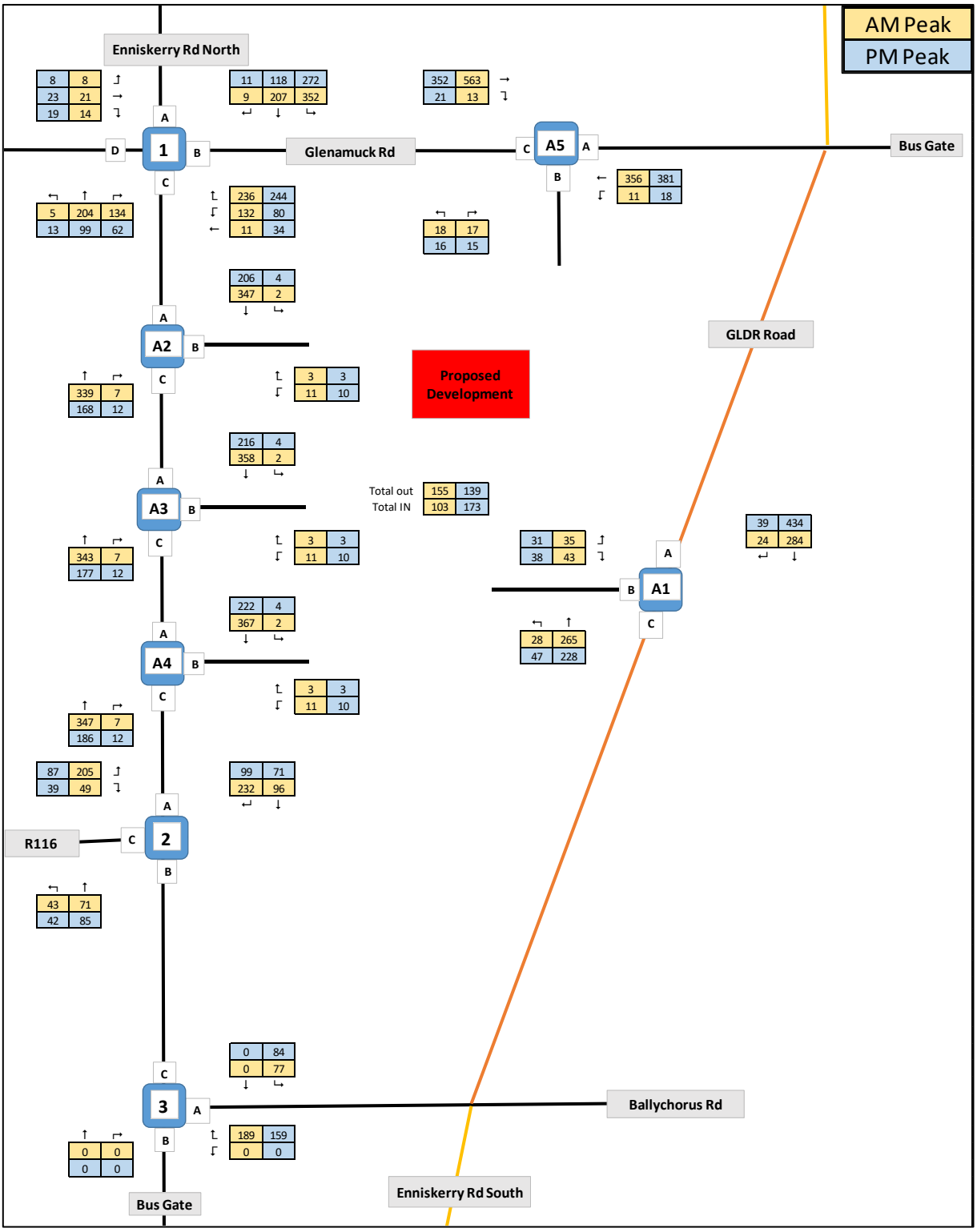


Figure C-8 - Traffic Volume for Opening Year+15 with All development (with GDRS)

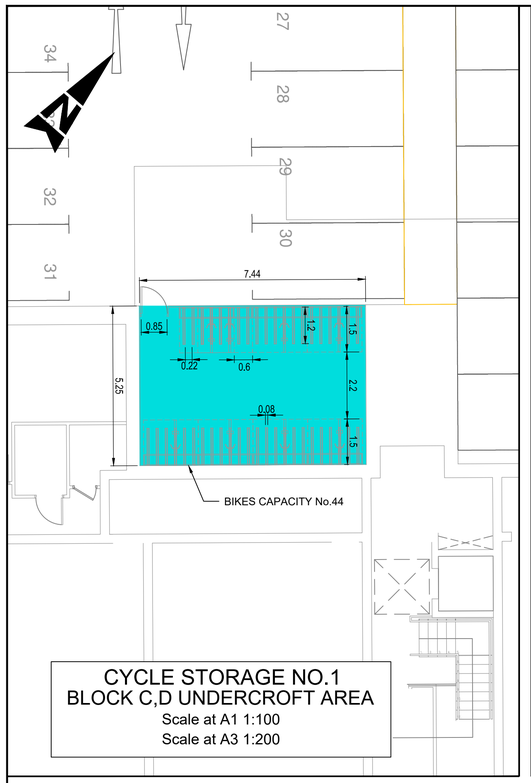


Appendix D. Cycle Facilities

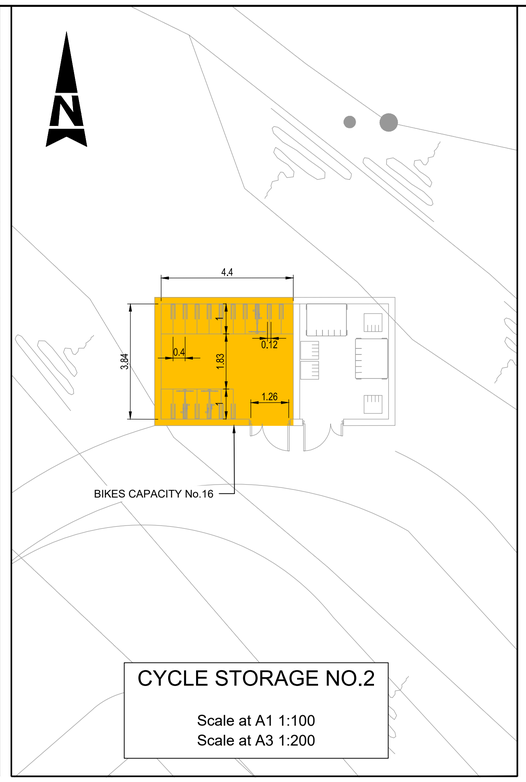
DO NOT SCALE

A1

100 0 10

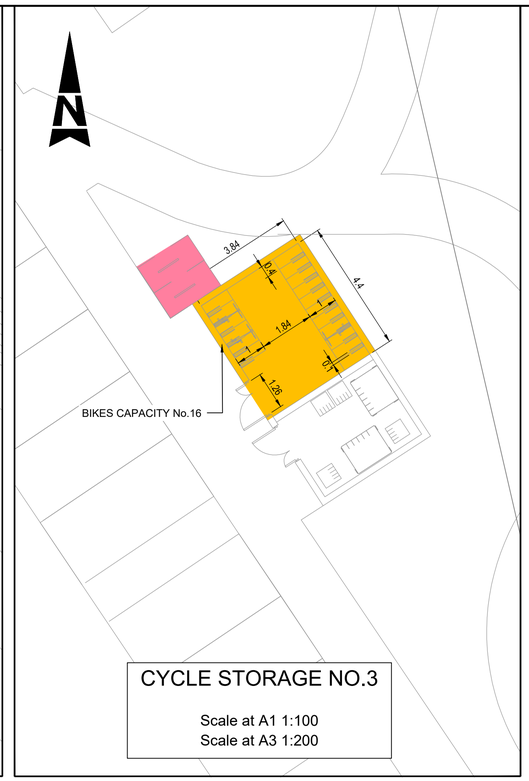


CYCLE STORAGE NO.1
BLOCK C,D UNDERCROFT AREA
Scale at A1 1:100
Scale at A3 1:200



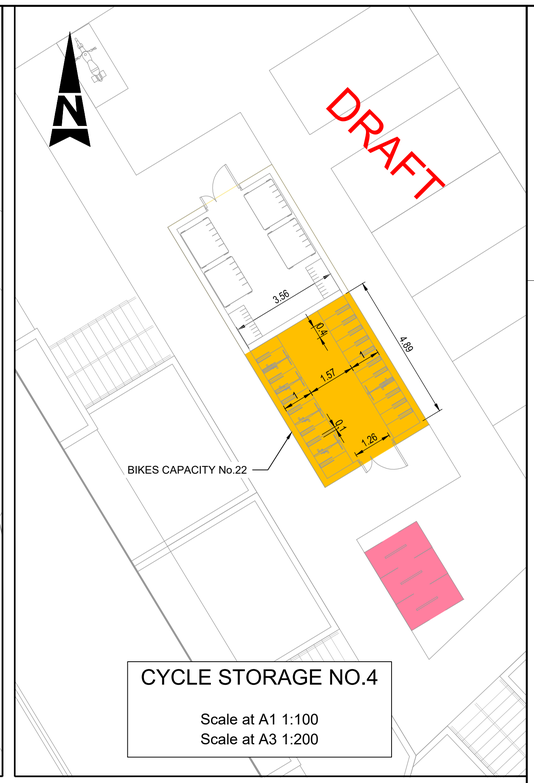
CYCLE STORAGE NO.2

Scale at A1 1:100
Scale at A3 1:200



CYCLE STORAGE NO.3

Scale at A1 1:100
Scale at A3 1:200



CYCLE STORAGE NO.4

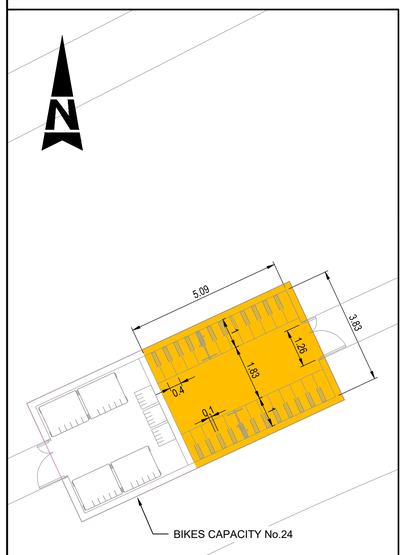
Scale at A1 1:100
Scale at A3 1:200

GENERAL NOTES

1. ALL DIMENSIONS ARE IN MILLIMETRES UNLESS NOTED OTHERWISE
2. ONLY WRITTEN DIMENSIONS SHALL BE USED. NO DIMENSIONS SHALL BE SCALED FROM THE DRAWINGS
3. ALL LEVELS ARE IN METRES AND ARE TO MALIN HEAD DATUM
4. ALL COORDINATES ARE IN METRES AND ARE TO IRISH TRANSVERSE MERCATOR
5. DRAWINGS ARE TO BE READ IN CONJUNCTION WITH THE SPECIFICATION

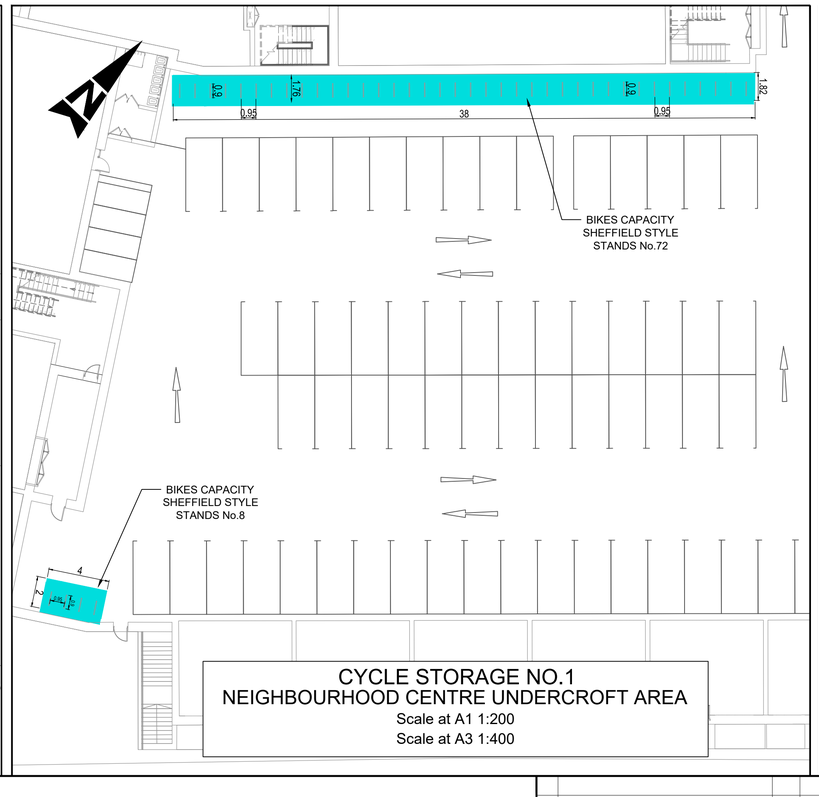
LEGEND:

- CYCLE STORAGE
- CYCLE STORAGE UNDERCROFT
- SHEFFIELD STAND CYCLE PARKING

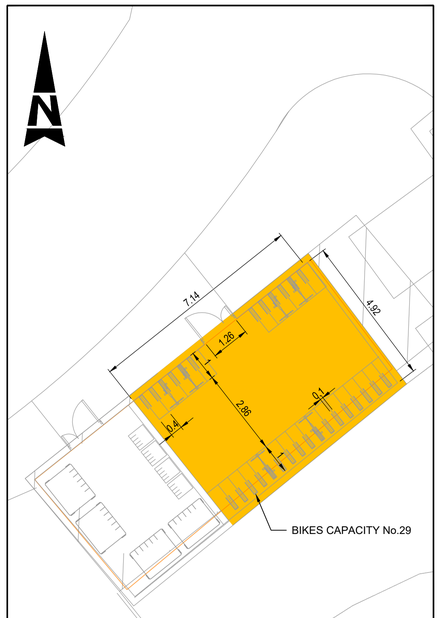


CYCLE STORAGE NO.5

Scale at A1 1:100
Scale at A3 1:200

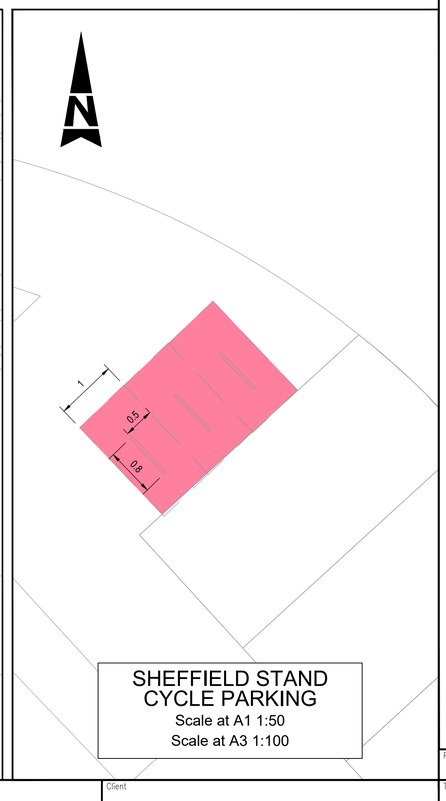


CYCLE STORAGE NO.1
NEIGHBOURHOOD CENTRE UNDERCROFT AREA
Scale at A1 1:200
Scale at A3 1:400



CYCLE STORAGE NO.7

Scale at A1 1:100
Scale at A3 1:200



SHEFFIELD STAND
CYCLE PARKING
Scale at A1 1:50
Scale at A3 1:100

Risk Level	X	
		Atkins Base Line - Low Risk
		Atkins Sensitive - Medium Risk
		Atkins Private - High Risk
		Client Critical - Already Marked

Rev	Description	By	Date	Chk'd	Rev'd	Auth
0	PLANNING	YC	10.06.22	PF	PF	KB

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Client: LISCOVE LIMITED

Project: LANDS AT WAYSIDE KILTERNAN DUBLIN 18

Purpose: PLANNING

Title: KILTERNAN VILLAGE SHD
CYCLE STORAGE

Original Scale	Drawn	Checked	Reviewed	Authorised
AS SHOWN	YC Date 10.06.22	PF Date 10.06.22	PF Date 10.06.22	KB Date 10.06.22

Status	Drawing Number	Rev
P	5158632 / HTR / DR / 02 / 0128	0

File: 5158632_HTR_DR_02_0128.dwg
Date: Jun 15, 2022 - 5:43pm Plotted by: ycamacho

U:\5158632\6 Dwgs-Graphics\61 AutoCad\5158632_HTR_DR_02_0129.dwg

Appendix E. Public Transport Survey Specification

Technical Note – Survey Specification

Project:	Kilternan Village SHD - Lands at Wayside, Kilternan Dublin 18		
Subject:	Survey Specification		
Author:	Peter Foley		
Date:	09/05/2022	Project No.:	5158632
Atkins No.:	5158632DG0032		
Distribution:		Representing:	

Document history

Revision	Purpose description	Originated	Checked	Reviewed	Authorised	Date
Rev 1.0	For Information	PF	PF	NV	PF	10/05/2022

Client signoff

Client	Liscove Ltd
Project	Kilternan Village SHD - Lands at Wayside, Kilternan Dublin 18
Project No.	5158632
Client signature / date	

1. Introduction

We require public transport usage surveys, for both bus and Luas, to be undertaken over 2 weekdays at Kilternan, Dublin 18. It is proposed that the surveys be undertaken at the Ballyogan Wood Luas stop as well as several bus stops in support of a Strategic Housing Development (SHD) Planning Application to An Bord Pleanála. The surveys seek to ascertain the number of passengers boarding and alighting during AM and PM peak periods. Further details of the survey requirements are outlined below.

The surveys are to be undertaken only on the dates and durations specified in each section. Surveys should be undertaken **outside of school holiday periods, and Bank Holiday weeks unless otherwise advised.**

The survey of bus and Luas usage at the sites identified **below should occur on the same days to ensure a representative data is obtained.**

Surveys **should not** be conducted in the event of major road works or a rail/bus strike or any other major incident which would serve to affect traffic conditions. In the event that abnormal traffic conditions are generated by incidents such as ad-hoc road works, local traffic diversions, accidents or adverse weather conditions, ATKINS should be **immediately** informed to evaluate whether the traffic survey should continue.

2. Traffic Survey Requirements

2.1. Bus Survey Specification

The bus services to be surveyed are shown in Table 2-1 and in Figure 2-1 below. The location for the closest junction is shown below:

Geolocations - 53.239344, -6.196208 (Golden Ball Junction – Enniskerry Road / Glenamuck Road Junction)

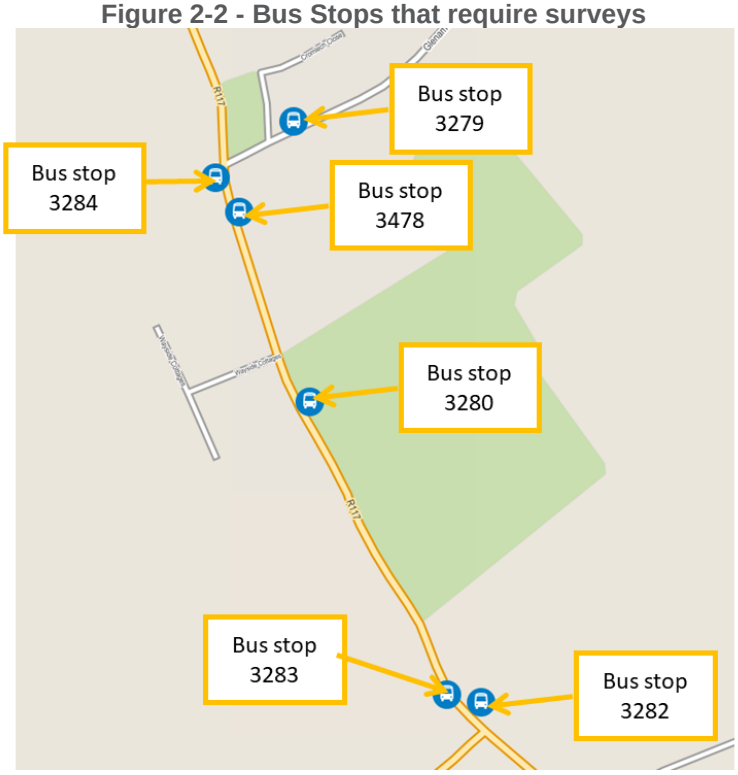
Table 2-1 - Bus Services operating in Kilternan area

Route			Services Per Day		
Number	**Start**	**Destination**	**Mon-Fri**	**Sat**	**Sun**
63/63A	Dun Laoghaire	Kilternan	34	34	30
	Kilternan	Dun Laoghaire	35	34	30
44	DCU	Enniskerry	19	16	14
	Enniskerry	DCU	18	17	15
118	Kilternan	D'Oiler Street	1	0	0
	D'Oiler Street	Kilternan	0	0	0

Figure 2-1 - Bus routes and stop in Kilternan area

The proposed boarding and slighting surveys on Enniskerry Road and Glenamuck Road are shown in Figure 2-2 below.

Figure 2-2 - Bus Stops that require surveys



Surveys should be undertaken on Tuesday, Wednesday or Thursday to capture boarding and alighting during the following time frames.

- AM 07h00 to 09h00; and
- PM 16h00 to 18h00.

The surveyor should ensure that the following data is captured

- Bus Number;
- Time;
- Number of people boarding the bus at the stop;
- Number of people alighting the bus at the stop; and
- High level visual estimate of capacity of bus (i.e. 10%, 20% , 30% full).

Data is to be presented in an appropriate format (excel) that captures the details listed above.

Further details of the bus services can be found on the following website:
https://www.transportforireland.ie/plan-a-journey/

2.2. Luas Survey Specification

Boarding and alighting data is also required at the Ballyogan Wood Luas stop as shown in Figure 2-3. The location of this stop is as follows:

Geo location 53.255141, -6.184784

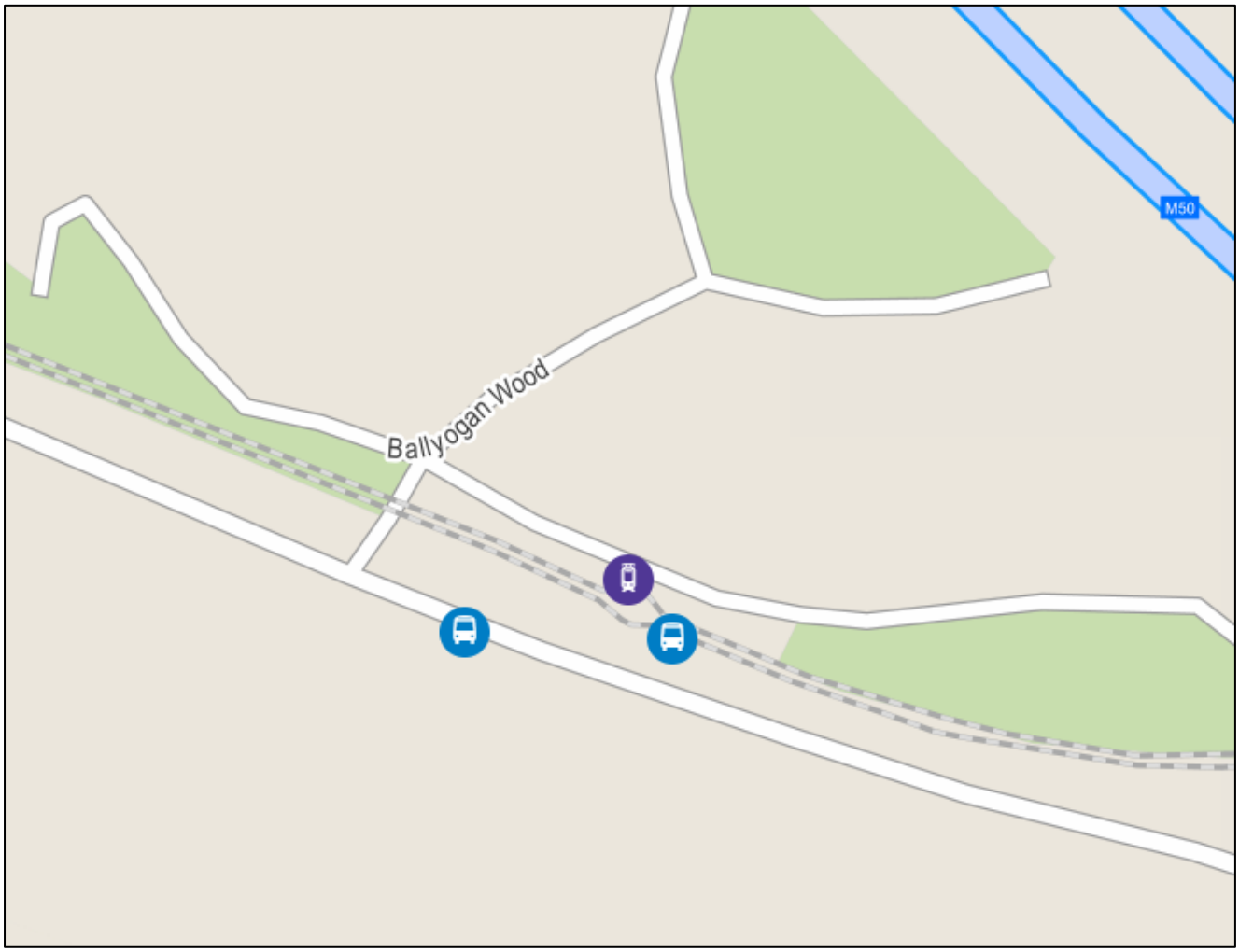
Surveys should be undertaken on Tuesday, Wednesday or Thursday to capture boarding and alighting during the following time frames.

- AM 07h00 to 09h00; and
- PM 16h00 to 18h00.

This survey should take place on same day as the bus surveys to ensure data is representative.
The surveyor should ensure that the following data is captured:

- Luas Direction (toward City or towards Cherrywood);
- Time of service;
- Number of people boarding the Luas service;
- Number of people alighting from the Luas service; and
- High level visual estimate of capacity of Luas (i.e. 10%, 20% ,30% etc full).

Figure 2-3 - Ballyogan Wood Luas Stop



3. Fee proposal

Fee proposals are requested for the above scope of surveys and are to be returned by email to Peter.Foley@atkinsglobal.com by Wednesday 18th of May 2022 before 13h00.

Queries in relation to this request for proposals must be issued to the above email address no later than 13h00 on Friday 13th May 2022.

It is advised to visit the location of the surveys in order to inform their scope of work and fee proposal.

Results must be returned within 10 working days of completion of the survey and presented in excel format.

Appendix A. Survey Results

Atkins staff undertook a survey of Bus and Luas loading / unloading and capacities in line with above specification on Thursday 26th May 2022.

The surveys took place between 07:00 and 09:00 covering the AM peak period and again between 16:00 to 18:00 covering the PM peak period. Three surveyors were located in Kilternan to capture bus loading / unloading and a high level estimate of capacity of bus services. Two surveyors were station at Ballyogan Wood Luas Stop to capture loading / unloading and a high level estimate of capacity of services.

During the AM peak survey period of the 26th May the weather was rainy. During the PM peak survey, the weather was fine. Survey results are shown for Luas and Bus services below.

A.1. Luas Survey Results

Surveys Results -Ballyogan Wood to Cherrywood

Direction	Time	No. Alighting	No. Boarding	Capacity (%)
AM Peak Result				
to Cherrywood	06:59	5	1	10
to Cherrywood	07:04	3	1	10
to Cherrywood	07:15	3	0	10
to Cherrywood	07:22	5	1	5
to Cherrywood	07:28	9	0	10
to Cherrywood	07:38	8	2	15
to Cherrywood	07:43	1	0	5
to Cherrywood	07:48	1	1	5
to Cherrywood	07:56	3	1	5
to Cherrywood	08:02	4	2	5
to Cherrywood	08:06	4	0	5
to Cherrywood	08:11	2	1	10
to Cherrywood	08:16	3	0	5
to Cherrywood	08:21	5	3	5
to Cherrywood	08:28	5	0	5
to Cherrywood	08:40	15	1	25
to Cherrywood	08:47	6	1	10
to Cherrywood	08:56	7	0	5
to Cherrywood	09:05	8	0	5
PM Peak Results				
to Cherrywood	16:09	8	1	10
to Cherrywood	16:10	11	1	10
to Cherrywood	16:15	3	1	5
to Cherrywood	16:28	15	1	10
to Cherrywood	16:39	13	1	10
to Cherrywood	16:44	0	0	5
to Cherrywood	16:53	8	1	10
to Cherrywood	17:04	17	2	10
to Cherrywood	17:16	21	8	10
to Cherrywood	17:28	26	0	35
to Cherrywood	17:34	8	0	15
to Cherrywood	17:45	16	0	20
to Cherrywood	18:07	23	1	60

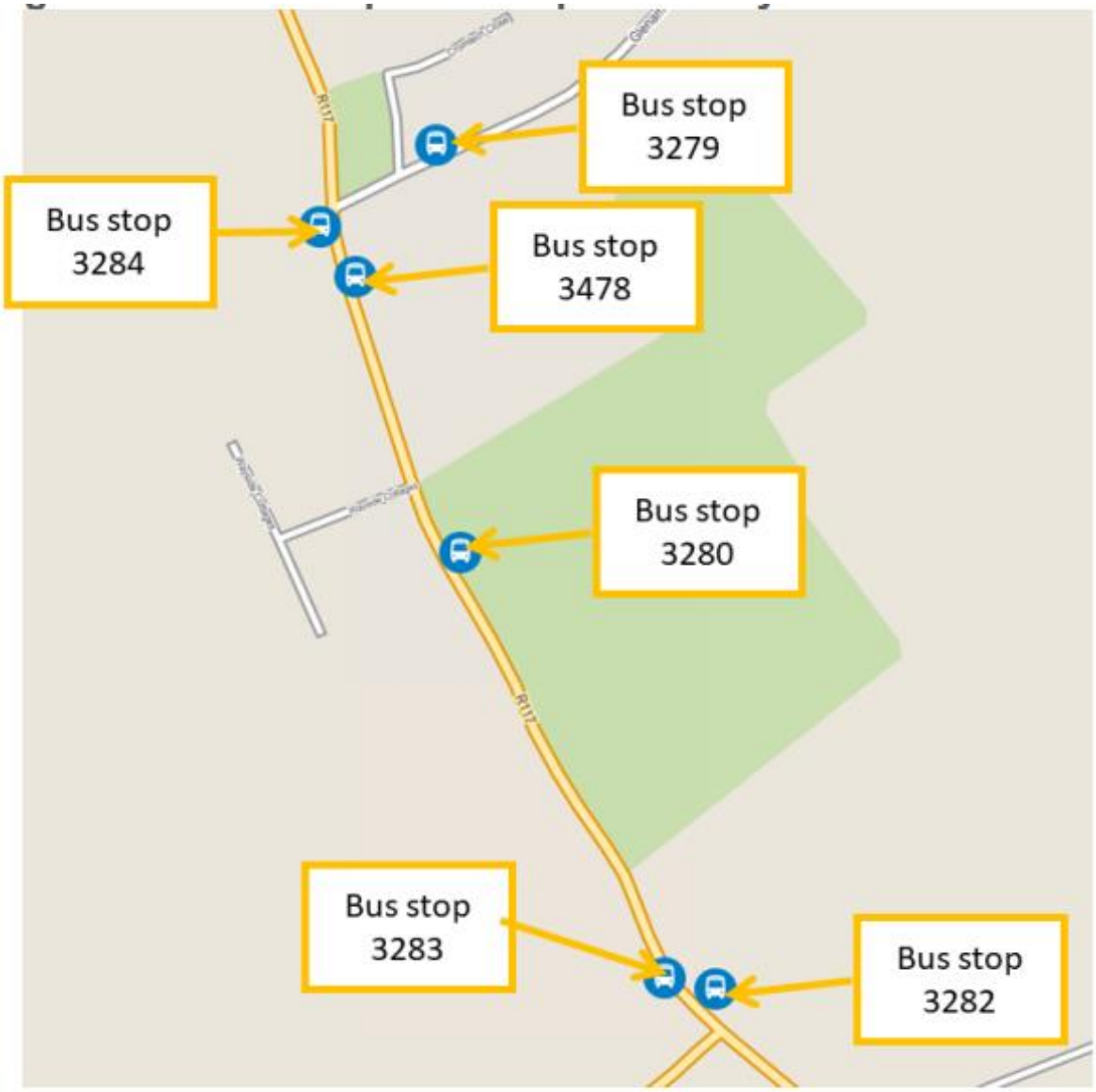
Survey Results – Ballyogan Wood to City

Direction	Time	No. Alighting	No. Boarding	Capacity (%)
AM Peak Result				
to City	07:00	0	3	5
to City	07:09	2	3	5
to City	07:23	1	2	5
to City	07:29	0	0	5
to City	07:36	0	18	5
to City	07:45	0	3	5
to City	07:52	3	6	5
to City	08:01	3	22	10
to City	08:09	0	17	10
to City	08:14	0	11	5
to City	08:16	0	3	5
to City	08:24	0	17	10
to City	08:31	3	7	5
to City	08:32	1	2	5
to City	08:40	0	4	5
to City	08:44	0	9	5
to City	08:49	1	3	5
to City	08:59	0	3	5
PM Peak Results				
to City	16:00	1	13	20
to City	16:09	4	18	15
to City	16:17	0	14	10
to City	16:26	0	5	10
to City	16:32	2	14	15
to City	16:40	1	5	10
to City	16:53	6	13	25
to City	17:04	0	10	15
to City	17:12	1	10	30
to City	17:22	4	12	40
to City	17:32	1	14	30
to City	17:40	1	7	20
to City	17:51	3	12	40
to City	17:57	1	14	30

A.2. Bus Survey Results

Image below shows the location of bus stops in Kilternan in the survey area.

- Bus stops 3279, 3278 and 3284 were captured in Golden Ball Results set out below.
- Bus Stop 3280 refers to survey results captured at Kilternan Cottage
- Bus Stop 3282 and 3283 refers to survey results captured at Circle K.



Golden Ball – Results

Stop #	Route #	Time	No. Alighting	No. Boarding	Capacity (%)
3284	63	07:02	0	0	5
3279	63	07:22	1	0	5
3284	63	07:25	1	5	60
3284	63	07:27	0	4	20
3478	44	07:40	2	0	10
3279	63	07:45	0	0	5
3284	118	07:47	0	2	5
3284	63	07:51	0	3	5
3279	63	08:08	0	0	0
3284	63	08:18	0	2	5
3284	44	08:26	0	0	5
3478	63	08:53	0	0	0

Stop #	Route #	Time	No. Alighting	No. Boarding	Capacity (%)
3279	63	16:04	3	0	10
3478	44	16:08	4	0	20
3284	63	16:13	0	3	5
3279	63	16:41	1	0	5
3284	44	16:41	0	1	20
3284	63	16:45	0	0	5
3279	63	17:05	2	0	5
3284	63	17:11	0	1	5
3478	44	17:16	1	0	10
3284	44	17:59	0	0	20
3279	63	17:59	2	0	0

Wayside Cottage – Survey Results

Stop #	Route #	Time	No. Alighting	No. Boarding	Capacity (%)
3280	44	07:41	0	0	10

Stop #	Route #	Time	No. Alighting	No. Boarding	Capacity (%)
3282	44	16:08	0	0	5
3282	44	17:17	0	0	5

Circle K – Survey Results

Stop #	Route #	Time	No. Alighting	No. Boarding	Capacity (%)
3283	63	07:00	0	1	5
3283	63	07:25	0	8	10
3282	44	07:42	1	1	10
3282	63	07:46	1	0	5
3283	118	07:45	0	0	0
3283	63	07:50	0	1	5
3283	63	08:17	0	1	5
3283	44	08:26	0	0	5
3282	63	09:00	0	0	0

Stop #	Route #	Time	No. Alighting	No. Boarding	Capacity (%)
3282	63	16:05	4	0	0
3282	44	16:10	0	0	5
3283	63	16:12	0	0	0
3282	63	16:42	0	0	5
3283	44	16:40	0	1	20
3283	63	16:44	0	0	5
3282	63	17:06	0	0	0
3283	63	17:10	0	2	5
3282	44	17:18	1	0	5
3283	44	17:59	0	0	20
3283	63	18:00	0	0	0

Appendix F. ABP Opinion & DLR Response

ATKINS

Member of the SNC-Lavalin Group

Kilternan Village SHD

Lands at Wayside, Kilternan Dublin 18

Traffic and Transport Response to ABP & DLR Opinion

Liscove Limited

Summer 2022

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This document has 39 pages including the cover.

Document history

Revision	Purpose description	Originated	Checked	Reviewed	Authorised	Date
Rev 1.0	External Review	PF	PF	KB	PF	01/06/2022
Rev 1.0	For Planning	PF	PF	KB	KB	10/06/2022
Rev 1.0	For Planning	PF	PF	KB	KB	15/06/2022

Client signoff

Client	Liscove Limited
Project	Lands at Wayside, Kilternan Dublin 18
Job number	5158632
Client signature / date	

Contents

Tables

Figures

1. Introduction

Following a pre-application consultation process with An Bord Pleanála (ABP) in early 2022 (case Reference ABP-312007) the Bord having regard to the consultation and the submission of the Planning Authority (PA) (Dun Laoghaire Rathdown County Council) were of the opinion that the documents submitted with the request to enter into consultation constitute a reasonable basis for an application for strategic housing development.

In their letter dated March 2022 ABP notified the Applicant that pursuant to article 285(5)(b) of the Planning and Development (Strategic Housing Development) Regulation 2017, in addition to the requirements as specified in articles 297 and 298 of the Planning and Development (Strategic Housing Development) Regulation 2017, that detailed submission in relation to 13 items were required for the SHD planning application.

This document outlines Atkins formal Traffic and Transport response to the relevant items of said ABP letter.

This document should be read in conjunction with Atkins and other design team documents submitted by the Applicant in support of SHD planning application. Atkins formal submission documents include:

- Traffic and Transport Assessment,
- EIAR Chapter 12 Material Assets Traffic and Transport;
- Mobility Management Plan;
- Quality Audit including stage 1 Road Safety Audit;
- Outline Construction Management Plan; and
- Atkins Roads & Traffic Drawing.

2. ABP Items

In their letter of March 2022 ABP requested the following relevant items to this formal response

- Item 3 - A detailed statement demonstrating how the proposed development ties in with the wider development strategy for the landholding and the overall Kiltiernan Area, with regard to a phasing strategy; and
- Item 10 – A response to matters raised within the PA Opinion submitted to ABP on the 6th of January 2022.

2.1. Atkins response

Below is Atkins response to the ABP items above.

2.1.1. Item 3: Phasing Strategy

The masterplan lands will be delivered in 5 phases over a period of 5 years from April 2023 to April 2028 as shown in Table 2-1 and phasing diagram Figure 2-1.

Table 2-1 - Proposed Phasing Strategy

Phase	Residential Units (No.)	Neighbourhood Centre including retail and community (sqm)	Duration Months	Start	End
Phase 1	91		18	Apr- 23	Sep -24
Phase 2 & 2a	126	2191	24	Apr -24	Mar -26
Phase 3	59		12	Aug -25	Jul-26
Phase 4	97		18	Feb-26	Apr-28
Phase 5	10	321	8	Sep 27	Apr -28
Total	383	2512	80		

Figure 2-1 - Outline Phasing Strategy

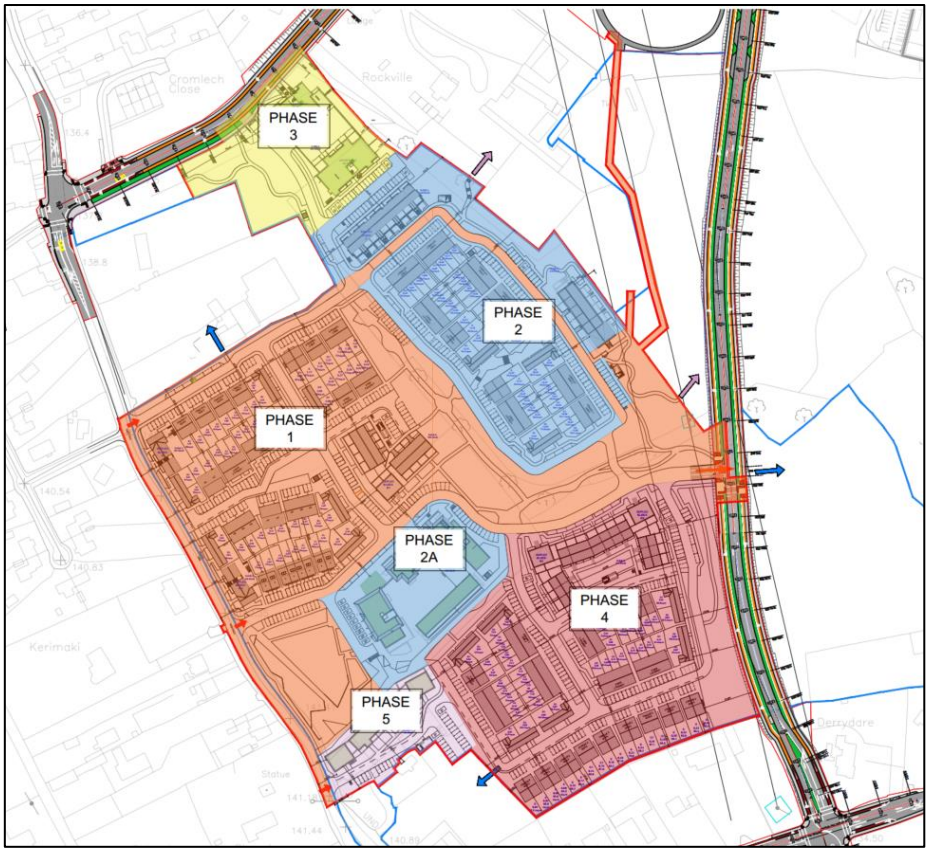


Table 2-2 identifies the associated works to be delivered with the phased approach to development.

Table 2-2 - Associated works by Phase

Phase	Units	Associated Works
Phase 1	91	Main Public Open Space.
		Central Green Way Link
		Dingle Way
		Offsite drainage through southern lands
		Main Spin Road to GLDR (make connection in this phase if GLDR Operational otherwise connection made in Phase 2).
Phase 2	73	Associated site development works
		Connection to GLDR if not completed in Phase 1.
Phase 2a	53	Neighbourhood Centre & Associated site development works.
Phase 3	59	Associated site development works
		Public Open Space .
Phase 4	97	Associated site development works
		Public Open Space (under power lines).
Phase 5	10	Associated site development works associated with all phases 5 uses

The Glenamuck District Road Scheme (GDRS) is made up of the Glenamuck District Distributor Road (GDDR) and the Glenamuck Link Distributor Road (GLDR).

The Glenamuck District Distributor Road (GDDR) connects from the Enniskerry Road adjacent to De La Salle Palmerstown Rugby Club to a tie in at the Glenamuck Road East/Golf Lane Roundabout. The Glenamuck Link

Distributor Road (GLDR) connects from the approximate midpoint of the GDDR to the Enniskerry Road south of Kiltiernan and will connect the new distributor road with the existing Glenamuck Road, Ballycorus Road and Barnaslingan Lane providing an alternative to the Enniskerry Road for north-south travel.

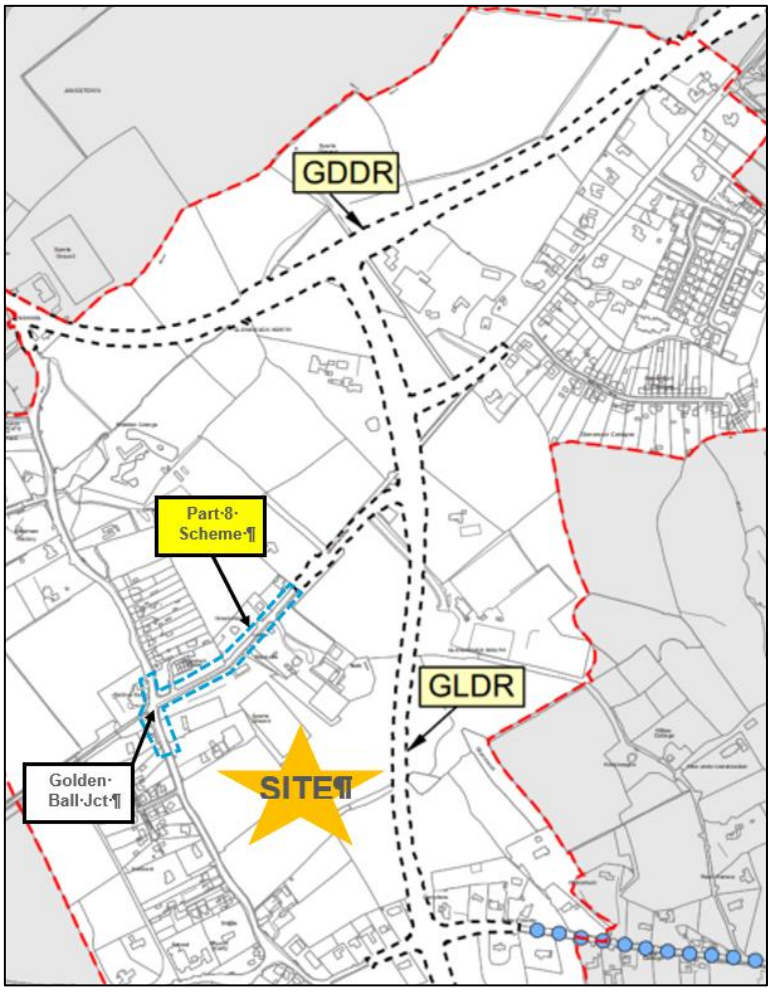
In addition to the GDRS there is a Part 8 permission for the upgrade of the Enniskerry Road / Glenamuck Road Junction. The upgrade of the Enniskerry Road / Glenamuck Road Junction Upgrade Scheme was approved by Dún Laoghaire-Rathdown County Council under Part 8 (DLRCC Ref - PC/IC/01/17) of the Planning and Development Regulations[1].

The approved Part 8 scheme incorporates the following:

- Glenamuck Road approach to junction: provision of left and right turning lanes;
- Enniskerry Road - southern approach to junction – provision of new right turning lane;
- Improved pedestrian crossings incorporated within signalised junction including new crossings on the northern and western sides of Enniskerry Road;
- Cycle lanes / cycle tracks on Glenamuck Road;
- General upgrading of the junction to provide improved pedestrian and cycle facilities;
- Removal of the pinch-point on Glenamuck Road adjacent to Cromlech Close; and
- Upgraded public lighting.

The location and alignment of the GDRS and Part 8 Scheme is shown in Figure 2-2.

Figure 2-2 - GDRS and Part 8 Scheme location and alignment



[1] https://www.pleanala.ie/anbordpleanala/media/abp/cases/orders/300/d300731.pdf

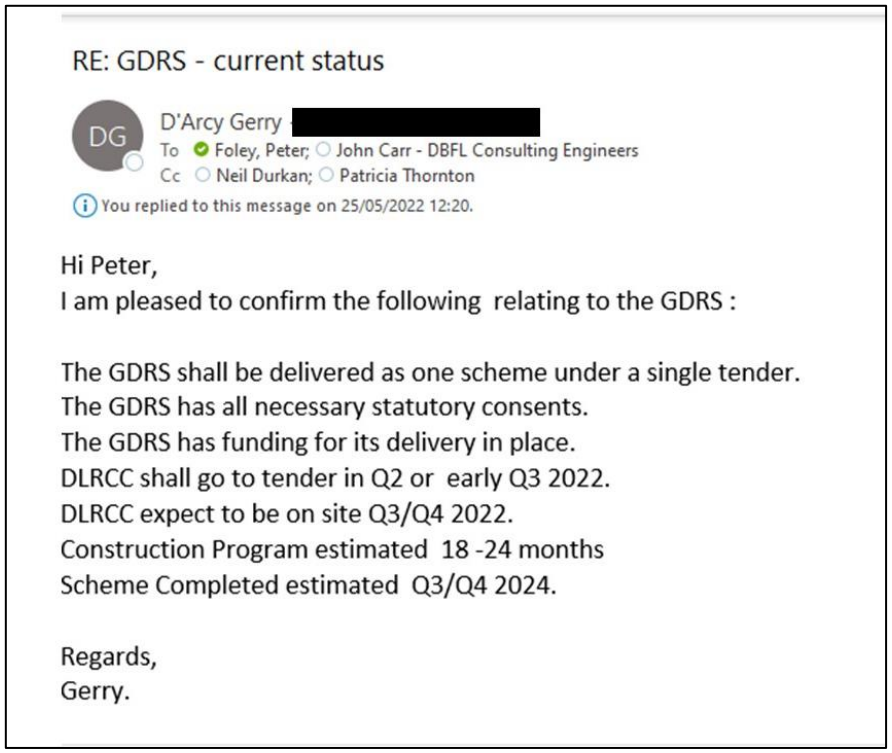
Based on correspondence with Gerry D'Arcy DLRCC Roads and Transportation in February 2022 and confirmed again in May 2022 the status of the GDRS is:

- DLRCC intends to deliver the GDRS and Part 8 scheme as one scheme under a single tender;
- The scheme(s) have all necessary Statutory Consents;
- The scheme(s) have funding;
- DLRCOCO are anticipating going out to Tender for Construction in Q2 2022;
- DLRCOCO expect to be on site Q3-Q4 2022;
- Programme 18 to 21 Months; and
- Scheme Complete circa Q3 -Q4 2024.

Gerry D'Arcy confirmed the scheme would be delivered in one Phase. Based on knowledge of the area and construction impacts DLRCC expects that the first part to be delivered would be the GDDR so that traffic could avoid Kilternan Village and Enniskerry Road and Glenamuck Road and that following that the GLDR would be constructed. However, he noted that this would need to be agreed with the Contractor upon appointment.

Extract of correspondence is shown in Figure 2-3

Figure 2-3 - Correspondence with DLRCC on GDRS & Part 8 Scheme



RE: GDRS - current status

DG D'Arcy Gerry [redacted]
To Foley, Peter; John Carr - DBFL Consulting Engineers
Cc Neil Durkan; Patricia Thornton
You replied to this message on 25/05/2022 12:20.

Hi Peter,
I am pleased to confirm the following relating to the GDRS :

The GDRS shall be delivered as one scheme under a single tender.
The GDRS has all necessary statutory consents.
The GDRS has funding for its delivery in place.
DLRCC shall go to tender in Q2 or early Q3 2022.
DLRCC expect to be on site Q3/Q4 2022.
Construction Program estimated 18 -24 months
Scheme Completed estimated Q3/Q4 2024.

Regards,
Gerry.

As noted in Table 2-2 the strategy is to develop a connect up to the GLDR during phase 1 if the GLDR is available. Based on our understanding of the GDRS programme and our construction programme it is feasible this connection can be made in Phase1. If the GLDR is not available, we will build up to the boundary to provide connection from the lands to the GLDR as soon as possible in Phase 2. This will optimise connectivity of the land to the wider area.

Chapter 10 of the *Kilternan LAP* sets out a phasing strategy for the delivery of housing in Kilternan, which represents an interim proposal to accommodate development in advance of the delivery of the Glenamuck District Roads Scheme (GDRS), which includes the Glenamuck District Distributor Road (GDDR) and Glenamuck Link Distributor Road (GLDR). The interim proposal set out by the *Kilternan LAP* is that 700 No. dwellings could be accommodated on the existing road network (noted as Phase 1), which is broken down into the following sub-phases:

Phase 1 (a) to comprise c. 350 dwelling units:

A. GLENAMUCK ROAD UPPER/NORTH PORTION (c. 200 dwelling units)

This area encompasses the lands designated as 'medium-higher density residential' at the northern section of Glenamuck Road (referred to as Phase 1 (a)(A) where relevant in this document).

B. NODE AT JUNCTION OF ENNISKERRY AND GLENAMUCK ROADS (c. 150 dwelling units)

This area includes the lands designated as 'medium density residential' to the east of the Enniskerry Road. Any proposed developments must include the improvement of Glenamuck Road (referred to as Phase 1 (a)(B) where relevant in this document).

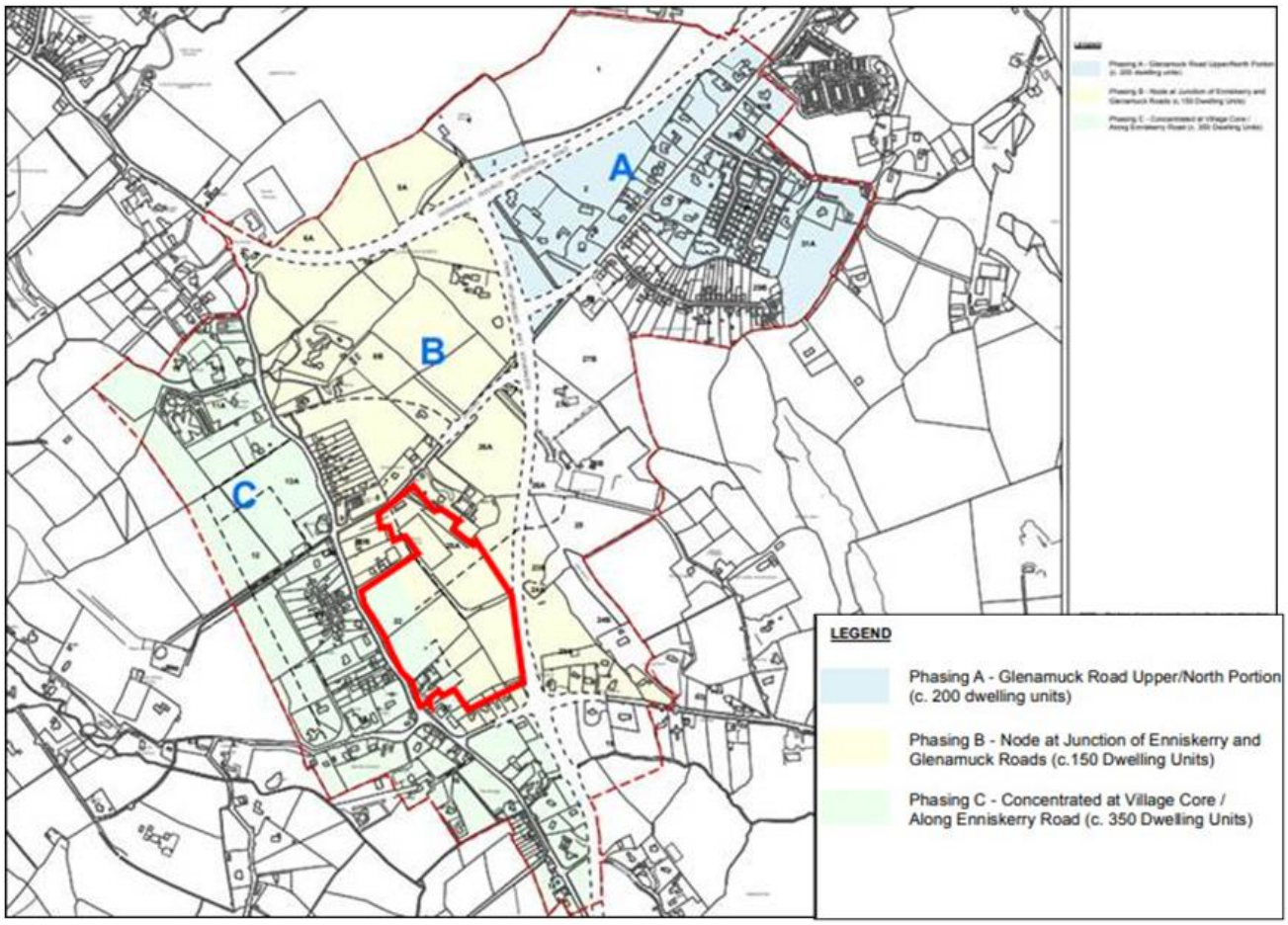
Phase 1 (b) to comprise c. 350 dwelling units:

C. CONCENTRATED AT VILLAGE CORE / ALONG ENNISKERRY ROAD

These lands include the lands zoned as 'Neighbourhood Centre' and 'Residential' along the Enniskerry Road. Development is dependent on the delivery of the Traffic Calming Scheme and must include the improvement of the Enniskerry Road through the 'Village Core' (referred to as Phase 1 (b)(C) where relevant in this document).

Figure 2-4 is an extract from the Kilternan LAP that shows the proposed phasing strategy with the proposed site identified.

Figure 2-4 - Kilternan LAP Phasing Map with Developable Site Outlined indicatively in Red

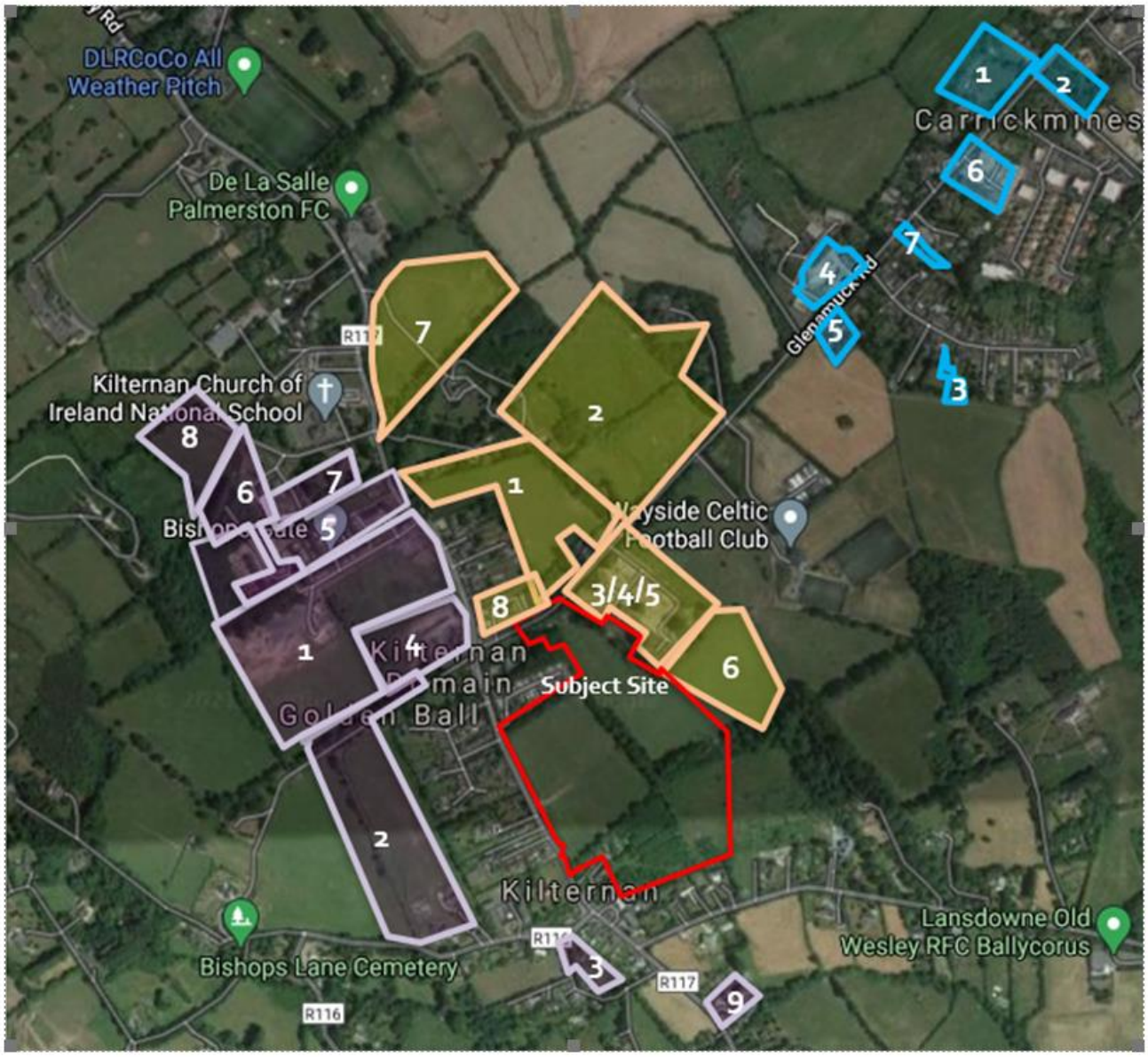


As shown in Figure 2-4 the subject site is located within both Phase 1 (a)(B) and Phase 1 (b)(C) on the Phasing Map (B and C on the map above). As detailed in the table accompanying Figure 8.6 below, planning permission has been granted for 657 No. dwellings within Phase 1 (a)(B) and for 565 No. dwellings within Phase 1 (b)(C) to date, which is a total of 1,222 No. dwellings. In addition, some 148 No. dwellings have been granted permission in Phase 1 (a)(A) with permission pending for 3 No. additional dwellings.

In total, there are 1,370 No. dwellings granted permission in the 3 No. Phases and an additional 3 No. units pending a decision. If permission is granted for the subject development of 383 No. units, this will bring the total to 1,753 No. dwellings (plus 3 No. dwellings pending) if the Board is minded to grant planning permission. The

location of these permission is shown in **Figure 2-5** and details of the applications are set out in Section 5.1.2 Table 5.4 of the TTA.

Figure 2-5 - Planning Applications in Kilternan Village in the vicinity of the site



Note – red line is indicative only

Out of 1,370No. units granted permission, some 1,136No. residential units have either commenced or completed construction at the time of writing this report (133 No. in Phase 1 (a)(A), 456 No. in Phase 1 (a)(B) and 547 No. in Phase 1 (b)(C)).

However, as the GDRS is projected to begin construction in Q3/Q4 2022 and estimated to be completed by Q3/Q4 2024, this lines up with the estimated opening of Phase 1 of the subject development (Q3 2024). Therefore, the proposed development will not give rise to any planning difficulties as the infrastructure is soon to be constructed.

In their assessment of the Enniskerry Road SHD (ABP Reg. Ref. ABP-309846-19), which was granted permission on 15th July 2021, the following was stated in An Bord Pleanála's Order in relation to phasing:

> *'The Board considered that the* ***proposed development is, apart from the phasing parameters of the Kilternan-Glenamuck Local Area Plan 2013, as extended to 2023, broadly compliant with the Dún Laoghaire-Rathdown County Development Plan 2016-2022 and the Kilternan- Glenamuck Local Area Plan 2013, as extended to 2023, and would, therefore, be in accordance with the proper planning and sustainable development of the area.***

The Board considered that, while a grant of permission for the proposed Strategic Housing Development would not materially contravene a zoning objective of the Development Plan, ***it would materially contravene the Local Area Plan with respect to the programme and phasing of development. The Board considers that, having regard to the provisions of section 37(2) of the Planning and Development Act, 2000, as amended, a grant of permission in material contravention of the Local Area Plan would be justified for the following reasons and considerations****:*

In relation to section 37 (2)(b)(i) of the Planning and Development Act 2000, as amended, the proposed development is in accordance with the definition of Strategic Housing Development, as set out in section 3 of the Planning and Development (Housing) and Residential Tenancies Act 2016, as amended, and complies with the Government's policy to increase the delivery of housing as set out in Rebuilding Ireland Action Plan for Housing and Homelessness 2016.

In relation to section 37 (2)(b)(iii) of the Planning and Development Act 2000, as amended, the proposed development is in accordance with national policy as set out in the Project Ireland 2040 National Planning Framework, specifically, National Policy Objective 3(b) which seeks to deliver at least 50% of all new homes targeted in the five cities and suburbs of Dublin, Cork, Limerick, Galway and Waterford, within their existing built up footprints. The proposed development would also supply 94 number high quality apartment units in compliance with the Sustainable Urban Housing: Design Standards for New Apartments, Guidelines for Planning Authorities issued by the Department of Housing, Planning and Local Government in December 2020.

In relation to section 37 (2)(b)(iv) of the Planning and Development Act 2000, as amended, the Board has previously granted planning permission for residential schemes in the immediate vicinity of the subject site, including 197 number residential units (An Bord Pleanála Reference Number ABP-306160-19) and 203 number residential units (An Bord Pleanála Reference Number ABP-307043-20). The proposed development will reflect the pattern of these permitted developments.

Furthermore, the Bord considered that, subject to compliance with the conditions set out below, the proposed development would constitute an acceptable quantum and density of development in this location, would not seriously injure the residential or visual amenities of the area, would be acceptable in terms of urban design, height, density and quantum of development and would be acceptable in terms of pedestrian and traffic safety. The proposed development would, therefore, be in accordance with the proper planning and sustainable development of the area.' [Our Emphasis]

In their assessment of the Shaldon Grange SHD (ABP Reg. Ref. ABP-312214-21), which was very recently granted permission on 11th April 2022 (130 No. units), the following was stated in An Bord Pleanála Inspector's Report in relation to phasing:

*'To conclude****, I do not have undue concerns in relation to traffic or transportation issues****. As dealt with above, in the previous section on phasing, I am satisfied that the proposed development can be accommodated on the existing road network until such time as the GDDRS is completed and operational****. I note that the Transport Division of the planning authority recommend refusal of permission in relation to phasing/prematurity (this matter is dealt with above), however as stated elsewhere within my assessment,* ***it appears that works to begin construction of the GDDRS are imminent and that the timelines in relation to the construction of this proposed development and the roads scheme would be similar'****.* [Our Emphasis]

The An Bord Pleanála Order stated the following:

*'****The Board considered that a grant of permission could material contravene section 10 of the Kilternan-Glenamuck Local Area Plan 2013 in relation to phasing, which applies to the site, would be justified*** *in accordance with sections 37(2)(b)(i),(iii) and (iv) of the Planning and Development Act 2000, as amended having regard to:*

The ***proposed development is considered to be of strategic or national importance*** *by reason of its potential to contribute to the achievement of the Government's Policy to increase delivery of housing set out in the Rebuilding Ireland Action Plan for Housing and Homelessness 2016, and to facilitate residential development in an urban centre close to public transport and centres of employment.*

It is considered that permission for the proposal should be granted ***having regard to Government policies as set out in the Eastern and Midland Regional Assembly Regional Spatial and Economic Strategy 2019-2031*** *which includes the Metropolitan Area Strategic Plan which identifies strategic residential and employment corridors.*

It is considered that permission for the proposal should be granted ***having regard to the Project Ireland 2040 National Planning Framework,*** *National Policy Objective 3b which seeks to 'deliver at least half (50%) of all new homes that are targeted in the five Cities and suburbs of Dublin, Cork, Limerick, Galway and Waterford, within their existing built-up footprints'.*

It is considered that ***permission for the proposal should be granted having regard to the pattern of development and permissions in the vicinity since the adoption of the Kilternan-Glenamuck Local Area Plan 2013****.*

In accordance with section 37(2)(b)(i)(iii) and (iv) of the Planning and Development Act 2000, as amended, was satisfied for the reasons and considerations set out in the decision.' [Our Emphasis]

Therefore, having regard to this recent grant of permission and the earlier precedents which were considered in assessing this more recent application, it is clear that a material contravention of the phasing of development in Kilternan has been accepted and the same parameters pertain to the subject lands.

As further set out in Section 8.2 of the TTA for opening year assessment (2024) two scenarios have been modelled at "with GDRS" and "without GDRS" scenario to understand the impact of the phase1 development traffic on the road network. As outlined in Section 11.1 of the TTA it is shown that Enniskerry / Glenamuck Road Junction experiences minor increases in capacity versus the baseline without development in the AM peak period but operates within capacity in the PM peak. For further details see Section 11.1.

In addition, the delivery of the GDRS will facilitate a significant reduction in traffic flows (see TTA Section 5.5) along Enniskerry Road frontage that will allow for urban realm improvements that in conjunction with the delivery of the Neighbourhood Centre in Phase 2a will facilitate the delivery of LAP policies

- MT06 - To establish the appropriate functions of Enniskerry Road in terms of minimising through movements while accommodating locally generated movements (car, pedestrian, and cycle) from future developments, and also potential future movements associated with the planned neighbourhood centre facility
- MT07 - To introduce appropriate traffic calming measures and to divert through traffic away from the future LAP civic node in order to address issues such as safety, noise and air pollution, and the potentially negative severance of the component parts of the LAP area.

2.1.2. Item 3: Connectivity

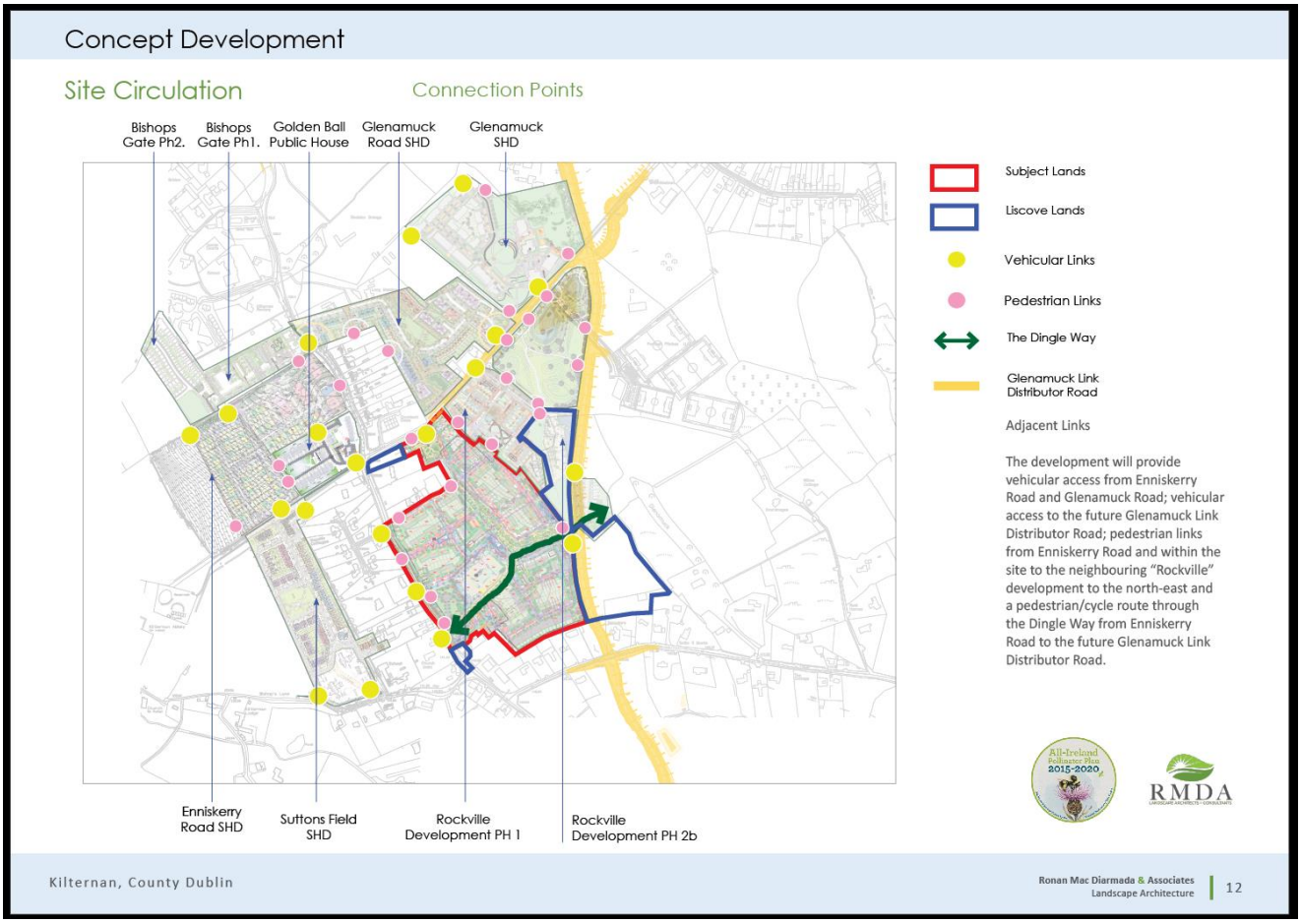
The proposed development incorporates a high level of permeability connectivity through the development site. This incorporates multiple routes for pedestrian and cyclists to connect through the site between Enniskerry Road, Glenamuck Road and the forthcoming Glenamuck District Roads Scheme.

Along its boundary with the existing residential development to the northeast the development provides pedestrian and cycle linkages to create enhanced permeability and movement into and through that existing development Further future connectivity points are indicated into the as yet undeveloped lands to the north of the site, lands that front onto Enniskerry Road

Sitting in the heart of the LAP and with the provision of neighbourhood facilities the development maximises opportunities for connectivity for pedestrians and cyclists from the wider LAP area into the neighbourhood facilities. The proposed development also facilitates for an appropriate level of vehicular connectivity through the site between Enniskerry Road, Glenamuck Road and the forthcoming Glenamuck District Roads Scheme

The plan presented in Figure 2-5 below illustrates the high level of permeability through the proposed site and also wider connectivity points within the LAP area, in the context of the GDRS. This plan clearly illustrates how the proposed development will greatly enhance connectivity with the LAP.

Figure 2-6 - Wider Connections



2.1.3. Item 10

The PA opinion items are details in Section 3 and Section 4 below along with Atkins response where relevant.

3. PA Opinion Matters

In their letter of the 6th of January to ABP the Planning Authority identified 13 key issues. The relevant ones to this response are set out below along with Atkins response

3.1. Item (ii) – Phasing Strategy of the Kilternan LAP

Section 106 of the Kiltiernan Glenamuck Local Area Plan (LAP) provides for the development of up to 700 housing units on an upgraded road network in advance of the construction of the Glenamuck District Distributor Road Scheme (GDDR) roads. This is described as Phase1 of the Interim Proposal to accommodate development. The planning Authority notes that extant planning permission exist for c.733 units currently within the LAP are, which restricts any further development permissions from issuing in line with the adopted phasing strategy. (Note: the Planning Authority can provide a full list of all extant permissions should the application progress to Stage 3 of SHD process).

The subject site adjoins the proposed Glenamuck District Distributor Road (GDDR) (also referred to as the Glenamuck District Rod Scheme (GDRS) with the Transport Report) to the east.

Contrary to what is argued by the Applicant in the documentation submitted, construction of the GDDR/ GDRS is not due to commence in Q1 2022. At the time of writing this report, the preparation of the tender documents is underway with construction expected to commence on Q2-Q3 of 2022. However, a number of capital projects have already been delayed and there is no certainty at this point in time that the scheme will proceed in accordance with the aforementioned timeframe.

In summary, the Planning Authority's position at this juncture is to deem an application for residential development on the subject lands premature pending the commencement of construction of the GDDR/ GDRS given that there is no space capacity in the existing road network to accommodate further movements generated from new residential units

In addition to the above, the Planning Authority notes that should the application progress, the delivery of the 'indicative proposed access road' (also referred to as the Glenamuck District Link Road (GLDR) to connect the development lands to Glenamuck Road to the north and to the GDDR/ GDRS to the east should be prioritised and delivery of same required as part of Phase 1 of the project.

3.1.1. Atkins Response

Based on correspondence with Gerry D'Arcy DLRCC Roads and Transportation in February 2022 and confirmed again in May 2022 (see Appendix G of TTA) the status of the GDRS is:

- DLRCC intends to deliver the GDRS and Part 8 scheme as one scheme under a single tender;
- The scheme(s) have all necessary Statutory Consents;
- The scheme(s) have funding;
- DLRCOCO are anticipating going out to Tender for Construction in Q2 2022;
- DLRCOCO expect to be on site Q3-Q4 2022;
- Programme 18 to 21 Months; and
- Scheme Complete circa Q3 -Q4 2024.

As outlined in Phasing Plan shown in Table 2-1 and Associated works Table 2-2 it is envisioned that subject to grant of permission that Phase1 development of 91 residential units would be delivered to coincide with the opening of the GDRS. Our Phase 1 works include providing a linkage to GLDR in the east to facilitate access and egress if available. If this connection is not available, we intend to build up to boundary to allow connection early in Phase 2.

The traffic modelling undertaken in Section 11 of the TTA submitted in support of this application contains two scenarios for Phase1 lands, both 'with' and 'without' the GDRS available. In the latter option development traffic would travel through the Golden Ball Junction Enniskerry Rd / Glenamuck Rd junction (Golden ball) to access / egress the site. The modelling results showed that in the AM there is a modest increase in degree of saturation (DOS), (0.5%) due to the development and in the PM the junction operates well within capacity. The full modelled results are shown in Table 11.1 of the TTA, and a summary is shown in Table 3-1

Table 3-1 - Enniskerry Rd / Glenamuck Rd Jct - Opening Year Results without the GDRS

Arm	With Committed Development			With All Development		
	Mean Max Queue (pcu)	Delay (s/pcu)	DOS (%)	Mean Max Queue (pcu)	Delay (s/pcu)	DOS (%)
Opening Year without GDRS – AM Peak						
Golden Pub Access	1.0 pcu	47.0 s	18.2%	1.0 pcu	47.1 s	18.4%
Glenamuck Road	18.1 pcu	106.6 s	95.5%	18.5 pcu	109.3 s	96.0%
Enniskerry Road South	22.7 pcu	75.5 s	93.5%	24.9 pcu	85.7 s	95.8%
Enniskerry Road North	17.3 pcu	41.0 s	74.7%	18.1 pcu	44.6 s	78.2%
PRC (%)	**-6.1%**			**-6.6%**		
Opening Year without GDRS – PM Peak						
Golden Pub Access	1.0 pcu	31.5 s	13.2%	1.0 pcu	31.7 s	13.6%
Glenamuck Road	14.5 pcu	46.3 s	75.6%	14.8 pcu	46.9 s	76.6%
Enniskerry Road South	12.2 pcu	53.1 s	75.6%	12.5 pcu	54.6 s	76.3%
Enniskerry Road North	11.6 pcu	37.0 s	58.8%	12.9 pcu	43.9 s	67.3%
PRC (%)	**19.0%**			**17.6%**		

From the above table, it can be observed that the junction is operating over the capacity in the without GDRS links during the morning peak. However, this is mostly due to the background growth and trips associated with the committed developments. The impact of the additional trips due to the proposed development is very small with Practical Reserve Capacity[2] (PRC) deteriorating from -6.1% in with committed development AM Peak scenario to -6.6% in the corresponding All Development scenario (i.e., a 0.5% impact from the proposed development). In addition, the maximum average delay was around 1min 50 sec (109.3 seconds) which is typical for an urbanised signalised junction. For the without GDRS PM Peak scenario, the junction was found to be operating within the capacity for both “Committed Development” and “All Development Scenario”. The impact of the proposed development trips was small with PRC for both the scenarios being observed as 19% and 17.6% respectively.

The modelling results would suggest that there is minor impact in the AM peak and that at other times the Enniskerry Rd / Glenamuck Rd junction (Golden ball) works within capacity. This would not be untypical of most urban signal controlled junctions and would indicate there is sufficient capacity in the road network to accommodate the development.

3.2. Item (iv) – Layout

It appears the layout generally follows the design principles of the Local Area Plan. The Applicant should provide as part of any future application a statement demonstrating that the principles established in the Kiltiernan Neighbourhood Framework Plan have been followed. The interface with Enniskerry Road and how the proposed contributes to creating an attractive street scape is of particular importance.

Any future connections with adjoining lands shall be built up to the boundary with no ransom strips and should be given to the Council for taking in charge. That should be clear as part of any future application.

The relationship between the Neighbourhood Centre and the ‘Village Green’ public open space is deemed to be a key aspect. The Applicant should consider the removal of car parking spaces and vehicular traffic in between both elements to improve the relationship between them.

[2] PRC - A measure of how much additional traffic could pass through the junction whilst maintaining a maximum degree of saturation of 90% on all lanes. Measured as a percentage

3.2.1. Atkins Response

Table 3-2 below is a list of relevant Kiltiernan LAP Policies and Framework Plan issues and our response to same

Table 3-2 - LAP Policies and Framework Plan issues and Response

Policy Reference	Policy Description	Development Approach
MT01 – To reduce the need for travel by private car within the LAP by:	Facilitating appropriate frequencies and routings of bus services to address increased population levels, including good linkages to Ballyogan Wood Luas stop on the Luas Green Line, Providing and/or facilitating the development of an interlinked cycle and pedestrian network that would connect the LAP to the wider locality, Maximise pedestrian catchment of bus services operating on Enniskerry and Glenamuck Roads, Encouraging mixed use development to optimise internal trips and make accessibility by non-car modes more viable/desirable, requiring Commercial/Retail uses to operate Mobility Management Plans to provide incentives to reduce dependence on travel by car. To reduce the need for travel by private car within the LAP and to acknowledge the amenity and health benefits of off-road recreational cycling by providing both on-road and complementary off-road cycling facilities within the Plan area	The development is located within walking distance of bus stops on Enniskerry Road and Glenamuck Road that provide onward connections to Luas services at Ballyogan Wood The delivery of the GDRS with its enhanced bus priority measures (see Section 4.1 of TTA) will provide enhanced connectivity and reliability of services. The masterplan layout has been informed by external developments, connections, amenities, and facilities in mind in order to meet desire lines and promote walking and cycling. The proposal is a mixed use development including a neighbourhood centre that will reduce the need to travel particularly by car. The development provides for off road walking and cycling facilities particularly through the provision of the Dingle Way. A Mobility Management Plan is submitted in support of the planning application
MT02 Walking & Cycling	To promote maximum accessibility through routes of optimised connectivity and permeability for walking, cycling and public transport while establishing safe infrastructure for all vulnerable road users	The development layout has been designed in accordance with DMURS principles with low traffic volumes and speeds to encourage walking and cycling. The layout is highly permeable with a coherent legible network of streets that meets desire lines and provides both internal and external connectivity.
MT03 Cycle Parking	It is an objective of the Plan that all new residential and commercial development schemes must include adequate provisions for safe and secure cycle parking facilities at appropriate locations in accordance with County Development Plan standards	The development will provide secure, sheltered, and accessible cycling facilities for all land uses in accordance with DLRCC cycle parking standards. See Section 6.4 of TTA for details
MT04	To establish the function, shape, and usage of the strategic road network generally within the LAP area	The layout of the development and the location of its access points reflects the form and function of the road hierarchy.

Policy Reference	Policy Description	Development Approach
MT05	To establish the future function of Glenamuck Road in terms of providing local access (including car, bus, pedestrian, and cycle) to the wider strategic road network	The development provides for connections and linkages to and from the Glenamuck Road.
MT06	To establish the appropriate functions of Enniskerry Road in terms of minimising through movements while accommodating locally generated movements (car, pedestrian, and cycle) from future developments, and also potential future movements associated with the planned neighbourhood centre facility	The scheme proposes improvements to the urban realm on Enniskerry road that will improve the pedestrian and cyclist experience. See Section 5.5 of TTA for further details. The development provides an active frontage onto Enniskerry Road that will provide active and passive surveillance.
MT07	To introduce appropriate traffic calming measures and to divert through traffic away from the future LAP civic node in order to address issues such as safety, noise and air pollution, and the potentially negative severance of the component parts of the LAP area.	The proposed Enniskerry Road treatment includes the provision for reducing vehicle dominance and reallocation of spaces to walking and cycling and can be delivered in conjunction with the GDRS to provide traffic calming and enhanced environmental improvements.
MT08	In acknowledgement that some car usage is inevitable, to stipulate maximum car parking provision for differing development types on a demand management basis with appropriate restrictions on on-street parking in order not to undermine that objective.	The level of car parking proposed is balanced to reflect the site characteristics and ensure that sustainable and active travel is not undermined. On street car parking will be managed to ensure overspill car parking does not adversely impact on the urban realm and road safety.
MT09	To have regard to the EU Ambient Air Quality Directive, the EU Ozone Directive, the EU guidance documents Greening Transport (EU 2008) and A Sustainable Future for Transport (EU 2009) and the National Transport Strategy Smarter Travel: A Sustainable Transport Future (DTTS 2009) to develop strategies which better reflect the real costs that transport volumes and emissions impose onto society, environment, and economic efficiency.	The development has regard to EU Ambient Air Quality Directive, the EU Ozone Directive, the EU guidance documents Greening Transport (EU 2008) and A Sustainable Future for Transport (EU 2009) and the National Transport Strategy Smarter Travel: A Sustainable Transport Future (DTTS 2009) The development accords with principles of National Transport Strategy Smarter Travel: A Sustainable Transport Future (DTTS 2009) and its update the National Sustainable Mobility Plan visa vie sustainable transport and measures to reduce adverse impacts on air quality through transport. The development facilitates the provision of electric charging facilities for cars.

Policy Reference	Policy Description	Development Approach
Framework Plan issue – Permeability	A successful place is easy to get to and move through. Places should connect to their surroundings. A successful place gives people the maximum amount of choice of how to make a journey and takes into account all forms of movement (foot, cycle, public transport and car).	Layout is very permeable with short blocks and an extensive pedestrian and cycle network providing opportunities for movement through the masterplan lands.
Framework Plan issue – Vitality	Places that are vibrant, active, safe, comfortable, and varied are said to have vitality. Places are more active when they have windows and doors connected to the street. Inactive edges are blank walls, badly placed entrances, tunnels, places where you don't feel safe, which are not overlooked. Places feel safer with buildings overlooking them.	Mixed use nature of development will provide activity throughout the day. Streets are well defined by buildings, overlooked and well-lit creating a safe environment.
Framework Plan issue – Variety / Diversity	A successful place also offers a mix of activities to the widest range of possible users	The development provides a mix of residential, commercial, retail, office and community that provides variety and diversity.
Framework Plan issue – Legibility	A successful and 'legible' development is a place that has a clear image and is easy to understand	The layout is designed along a traditional approach with street hierarchy with character areas that will help with legibility and wayfinding. Streets are linked in a network with no cul de sac type uses to aid movement.
Framework Plan issue – Road Layout Shared Spaces	One of the legacies of residential layout design in the recent past has been that design considerations have often been dominated by provision for motor vehicles. A key challenge of urban design is to successfully promote the other functions of streets including providing a 'sense of place', facilitating social interaction, and encouraging walking and cycling.	There is clear road and movement hierarchy that creates quieter streets and shared streets at appropriate locations that will facilitate and encourage movement by all cohorts and ages. Shared Street provision is incorporated to facilitate interactions. Other area such as village green, play areas and pocket parks add to the sense of community shared places within the development and community facilities.

Full details of the Enniskerry Road treatment and interface are set out in Section 5.5 of the TTA. As discussed above the delivery of the GDRS results in a significant reduction of traffic travelling along Enniskerry Road. Average Annual Daily Traffic (AADT) will be reduced from circa 12,100 PCU to circa 4950 PCU a 61.9% reduction in traffic flows as shown in Table 3-3 and Figure 3-1.

Table 3-3 - Pre & Post GDRS AADT at Enniskerry Rd

Road	Base AADT	Post GDRS AADT	Reduction
Enniskerry Road	12,100	4950	61.9%

Figure 3-1 - Enniskerry Road AADT

This reduction in traffic flow will facilitate a revised treatment along Enniskerry Road fronting the site.

Existing Condition on Enniskerry Road fronting the development is:

- Typically, the carriageway is 8.5 metre wide with one lane in each direction;
- Footpath on development side (eastern) varies from circa 1.8 to 2m; and
- On the western side of Enniskerry Rd the footpath width is varies from 1.2 to 2m.

The proposal is to narrow the carriageway down to 6.5m, i.e., a 3.25m running lane in each direction allowing for continued use by bus services. The remaining former carriageway (i.e., 2m) would be reallocated for other road user with the introduction of a widen pedestrian and landscaped feature on the eastern side of the road adjoining and complimenting the proposed landscape and pedestrian environment within the development. Given the reduction in traffic flow the proposal is to cater for cyclist on the carriageway. This approach accords with National Cycle Manual design for lower traffic roads.

The outline design approach is shown in Figure 3-2. Further details are provided on the Landscape Architects RMDA drawings (ref 1609-Rev-I- Kilternan_ Enniskerry Road Sections).

Figure 3-2 - Proposed Enniskerry Road Treatment

3.3. Item (xi) – Phasing

The phasing strategy proposed is noted. The Applicant should consider revisiting the strategy with a view to deliver the Neighbourhood Centre in Phase 1 as well as delivering pedestrian and cycle connections to Glenamuck Road and to the GLDR; including associated taking in charge wayleave agreements. The reason behind this lies in that the Neighbourhood Centre would provide services that are key not only for the future residents of the proposed development but also for the wider community in Kiltiernan. These services should be accessible by active transport means as a priority of Phase1.

3.3.1. Atkins Response

Please refer to Atkins response set out above Section 3.1.1 visa vie connections to the GLDR. For rationale regarding delivery of Neighbourhood Centre in Phase 1 refer to the applicant's planning consultants and Architects responses.

3.4. Item (xii) – Transportation

The ratio of car parking proposed for the residential component is considered acceptable having regard to the location and size of the site and distance to high quality public transport.

The Applicant and the Board are referred to the accompanying report from the Transport Section in particular around alterations to the red line boundary required to include upgrade works to the road network. Discussion referring to these matters is outlined under Section ii 'Phasing Strategy of the Kiltiernan LAP' herein. Furthermore, the Planning Authority would advise that detail of any/all potential linkages to the Rockville development shall be provided and linked to which development phase.

All areas to be taken in charge by the Council should be built in accordance with DLR's Taking in Charge policy.

3.4.1. Atkins Response

Atkins response to Transport Sections points is dealt with in Section 4.

4. PA – Transport Report Appendix C

Appendix C of the PA's opinion is a traffic and transport report from Sean Keane, Senior Executive Engineer, Transport Planning Section. Within that report there are sixteen (16) general recommendations. They are listed below along with Atkins response where relevant.

4.1. General Recommendation 1

General Recommendation 1 States

The applicant is requested to deliver the GLDR access within Phase 1 of development as per construction phasing plan MCORM PL09. This shall be demonstrated through the Construction Management Plan and revised drawing and details where required.

4.1.1. GR 1 Response

Please refer to Atkins response set out above Section 3.1.1 visa vie strategy to connect to the GLDR.

4.2. General Recommendation 2

General Recommendation 2 States

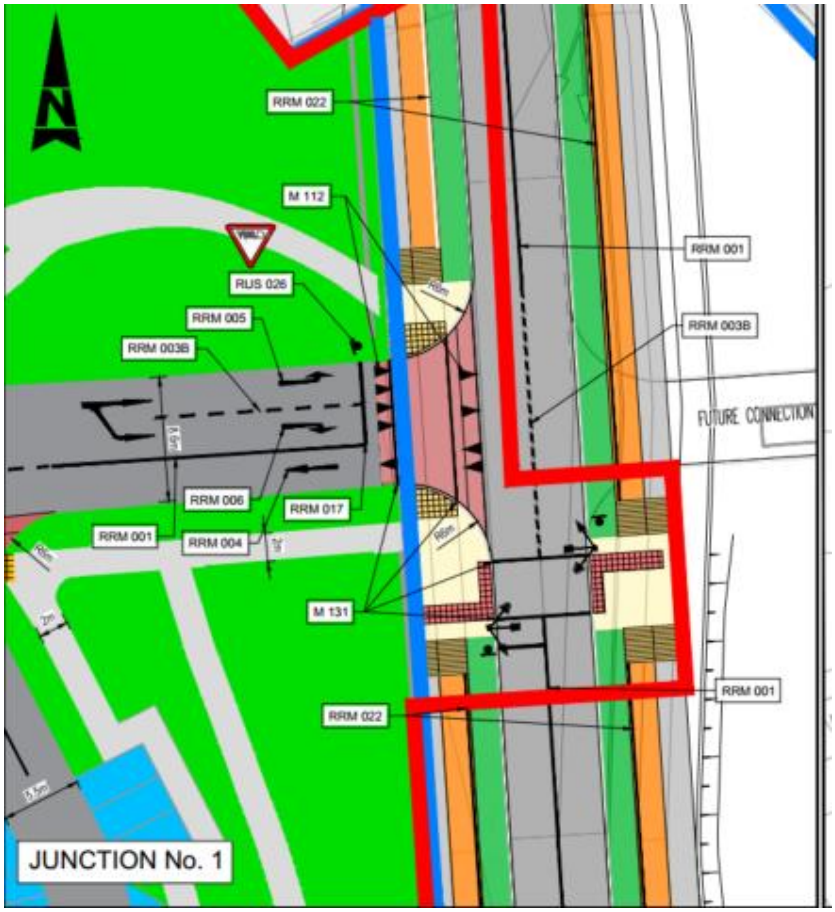
The applicant is requested to liaise with the GDRS project Engineer and capital project leads to agree junction design and principles for access to the GLDR and for access to the adjoining lands to the east of the site. It is also requested that the TIA / TTA including within this report review future development of lands to the east and whether this may require signalization of the access to the GLDR and pedestrian / cycle access.

4.2.1. GR 2 Response

Throughout the masterplanning process the Applicant and their design team has been engaged with the GDRS Project Engineer (John Carr DBFL) and DLR Engineers Adrian Thompson (before retirement) and more recently Gerry D'Arcy (refer to Appendix G of TTA)

The proposed access junction from the development (Access Junction 1) has been designed to be cognisant of future connection with lands to the east and has been designed so that the optimal junction configuration can be achieved that provides access to the proposed development, lands to the east and minimises any impact on the GLDR. The proposed junction layout for this planning application is shown on Figure 4-1.

Figure 4-1 - Access Junction 1 Layout



The junction arrangement is a priority junction with one-lane in and two lanes out, consisting of left turn lane and a right turn slip with 4PCU capacity. Modelling work carried out at this junction indicates that this junction works.

Modelling work carried out for this development and contained in the TTA Section 11 shows that this arrangement works within capacity for opening and all future year scenarios. The TTA model outputs are shown in Table 4-1.

The terminology used in Table 4-1 is:

- **RFC:** This is the ratio of demand flow to capacity. The practical capacity threshold is normally approximately 0.85. An RFC below 0.85 represents a junction which is operating in an efficient and stable condition. An RFC of between 0.85 and 1 represents variable operation, and may be said to be operating adequately, if the queueing and delay are deemed acceptable. RFC values in excess of 1 represent an oversaturated condition/
- **Queue Length:** This represents the maximum of the average queue length in pcu per time segment.
- **Average Delay:** This shows the average amount of traffic delay at the junction per vehicle over the peak hour period.
- **Level of Service (LOS) –** a qualitative measure to describe the operating conditions of a road based on factors such as peed, travel time, manoeuvrability, delay and safety . LOS ranges from A to F. Where A is free flowing, and F is forced or breakdown flow

Table 4-1 - Access Junction 1 onto GLDR - Model Results

Arm	AM Peak				PM Peak			
	Queue	Delay	RFC	LOS	Queue	Delay	RFC	LOS
Opening Year with GDRS								
Access Arm Left	0.0 pcu	6.28 s	0.02	A	0.0 pcu	5.85 s	0.01	A

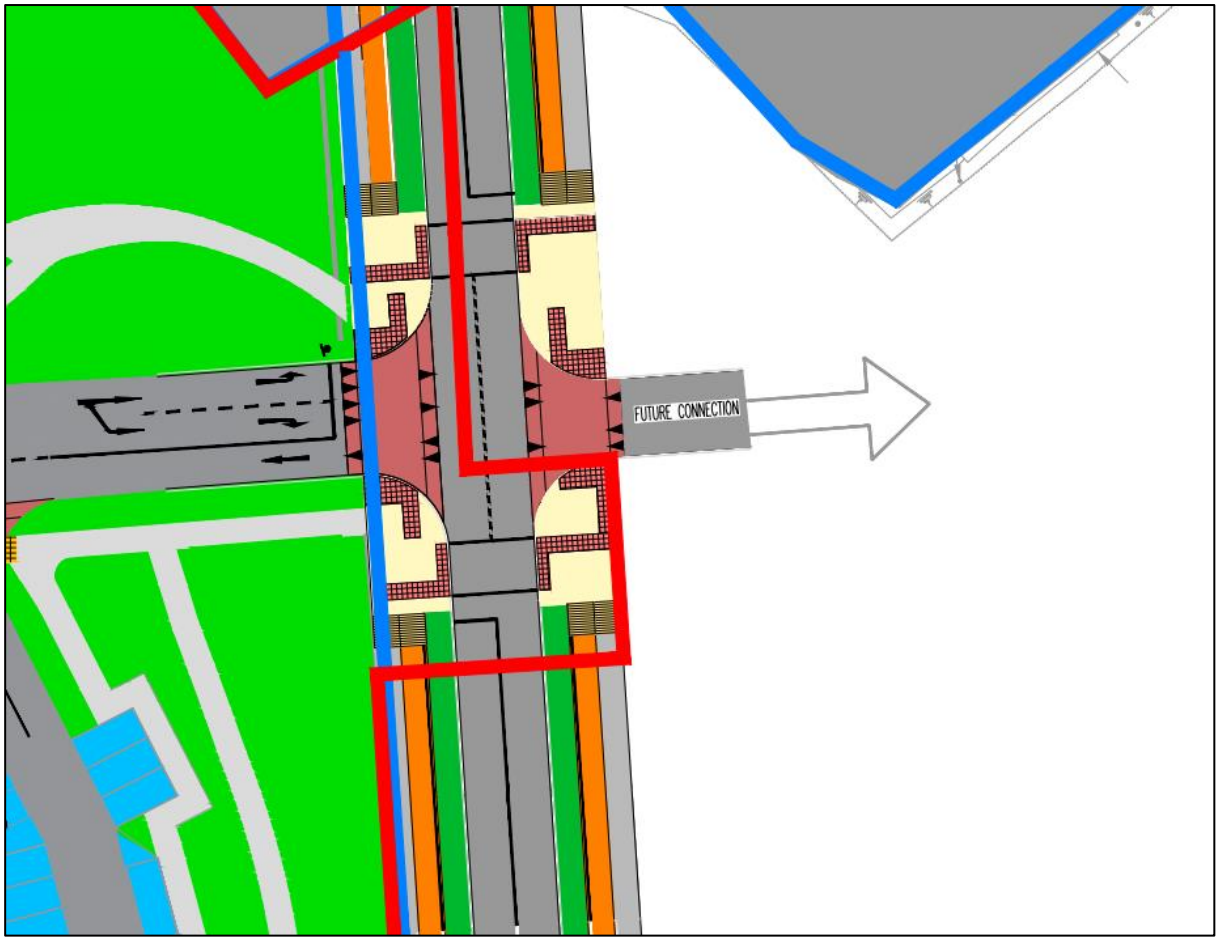
Access Arm Right	0.0 pcu	9.65 s	0.03	A	0.0 pcu	10.37 s	0.01	A
GLDR North	0.0 pcu	5.23 s	0.01	A	0.0 pcu	4.78 s	0.02	A
Opening Year+5 with GDRS								
Access Arm Left	0.1 pcu	7.29 s	0.07	A	0.1 pcu	7.12 s	0.06	A
Access Arm Right	0.1 pcu	10.42 s	0.12	B	0.1 pcu	10.93 s	0.11	B
GLDR North	0.1 pcu	5.41 s	0.06	A	0.2 pcu	5.03 s	0.11	A
Opening Year+15 with GDRS								
Access Arm Left	0.1 pcu	7.37 s	0.07	A	0.1 pcu	7.18 s	0.06	A
Access Arm Right	0.1 pcu	10.67 s	0.12	B	0.1 pcu	11.22 s	0.12	B
GLDR North	0.1 pcu	5.36 s	0.06	A	0.2 pcu	4.95 s	0.11	A

The maximum average delay across all the design years is observed to be under 12 seconds and maximum average queue was 0.2 pcu. The maximum RFC was 0.12 across all the scenarios. The LOS was recorded as A for both peak hours during Opening Year and was observed to be B for both peak hours for both Opening+5 and Opening+15 design years scenarios. Therefore, the above results suggest that the junction will be operating within capacity for all the design years.

The modelling outputs shows that this junction will perform within acceptable parameters with negligible impact on the main flows along the GLDR. The model results indicate that the design of this junction as priority junction arrangement as opposed to a signal junction is appropriate and correct for the level demand.

The location and design of priority access junction 1 shown as shown in Figure 4-1 is compatible with the upgrade of this junction to a 4-arm signalised junction at a future time. A sketch of how this 4-arm junction is shown in Figure 4-2.

Figure 4-2 - Future Junction layout



Atkins undertook preliminary modelling for two scenarios for this future junction. They are:

1. Signal Control Junction
2. Priority Junction

The high level assessment is based on the lands to the east accommodating a total of 127 units made up of:

- Houses 39 units
- Apartments 88 units

Using the TRICs rates identified in section 9 of the TTA it is anticipated that the lands to the east could result in the peak vehicle trips identified in Table 4-2.

Table 4-2 - Lands to East Vehicle Trip Rate

Use	Period	Arrive	Depart
House	AM	4	16
	PM	12	6
Apartments	AM	6	14
	PM	17	9
Total	AM	10	30
	PM	29	15

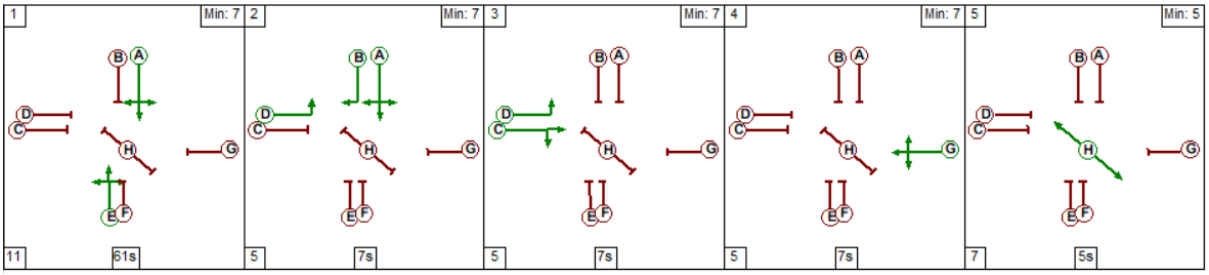
As no permission exists for this development, we have assumed an opening year of 2029 coinciding with the Open year +5 scenario of the proposed development. Using traffic flows on the network for this period the east

lands traffic has been distributed onto the road network and the two junction options modelled to understand their impact.

Signal Control Junction

For the signal controlled junction, the signal staging diagram in Figure 4-3 has been used. In this option Stage 2 – Right filter stage of Northern arm and Stage 5: Pedestrian Stage are called once in every two cycles. Cycle time is taken as 120 sec.

Figure 4-3 - Signal Staging Diagram

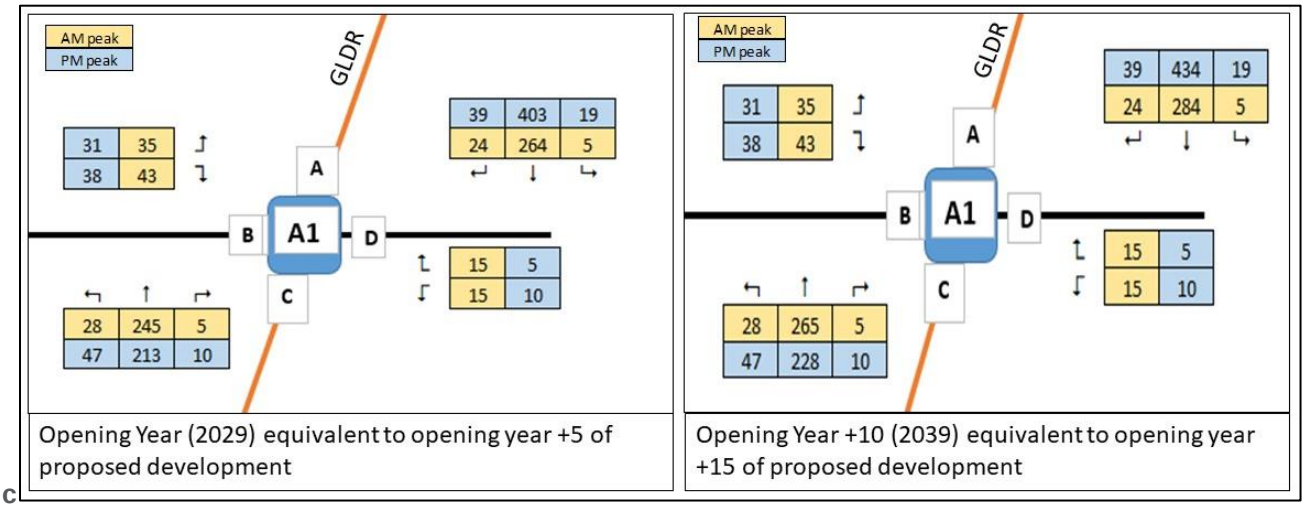


Flow Diagram

Opening Year (2029) traffic flows (equivalent to opening year +5 of the proposed development) and Opening Year +10 (equivalent to opening year +15 of proposed development) are shown in Figure 4-4. For reference the arms are

- Arm A & C – GLDR north and south
- Arm B – Western Arm - proposed development
- Arm D – Eastern Arm - future development

Figure 4-4 - Network Traffic Flows at the future junction



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Based on the above the model result are shown in Table 4-3.

Table 4-3 - Signalised Junction Results

Movements	AM peak			PM peak		
	MMQ	Delay	DOS	MMQ	Delay	DOS
2029 (OY+5) All Development						
Western Arm	1.5 pcu	53.2 s/pcu	25.4%	1.3 pcu	52.4 s/pcu	22.4%
GLDR South	4.8 pcu	14.7 s/pcu	28.8%	4.7 pcu	16.0 s/pcu	33.3%
GLDR North	4.9 pcu	11.6 s/pcu	27.5%	8.7 pcu	14.7 s/pcu	44.0%
Eastern Arm	1.1 pcu	76.7 s/pcu	28.2%	0.6 pcu	72.8 s/pcu	14.3%
PRC		212.3%		104.7%		
OY+15 All Development						
Western Arm	1.5 pcu	53.2 s/pcu	25.4%	1.3 pcu	52.4 s/pcu	22.4%
GLDR South	5.2 pcu	15.1 s/pcu	31.3%	5.1 pcu	16.5 s/pcu	36.2%
GLDR North	5.4 pcu	12.2 s/pcu	29.9%	9.5 pcu	15.4 s/pcu	47.3%
Eastern Arm	1.1 pcu	76.7 s/pcu	28.2%	0.6 pcu	72.8 s/pcu	14.3%
PRC		187.2%			104.7%	

The results show that all arms of the junction perform within standard metrics, with Degree of Saturation (DOS), queue length and delays for both the future opening year (assumed to be 2029) and +15 year horizon year. The modelling results indicate that a traffic signal control junction at this location would provide a good degree of control while not adversely impacting on network flows.

Uncontrolled Priority Junction

Using the traffic flows identified above a modelling exercise was undertaken for an uncontrolled 4-arm cross road as shown in Figure 4-2 - Future Junction layout. The junction was modelled using Junction 8 software and the results are shown in Table 4-4.

Table 4-4 - Uncontrolled Priority cross road junction results

Movements	AM peak				PM peak			
	Queue	Delay	RFC	LOS	MMQ	Delay	DOS	LOS
OY+5 All Development								
Western Arm	0.1 pcu	10.49 sec	0.12	B	0.1 pcu	10.98 sec	0.11	B
GLDR South	0.0 pcu	5.10 sec	0.01	A	0.0 pcu	5.41 sec	0.03	A
GLDR North	0.1 pcu	5.35 sec	0.06	A	0.2 pcu	4.94 sec	0.11	A
Eastern Arm	0.1 pcu	8.62 sec	0.07	A	0.0 pcu	8.40 sec	0.04	A
OY+15 All Development								
Western Arm	0.1 pcu	10.75 sec	0.12	B	0.1 pcu	11.30 sec	0.12	B
GLDR South	0.0 pcu	5.05 sec	0.01	A	0.0 pcu	5.39 sec	0.03	A
GLDR North	0.1 pcu	5.30 sec	0.06	A	0.3 pcu	4.86 sec	0.11	A
Eastern Arm	0.1 pcu	8.78 sec	0.07	A	0.0 pcu	8.60 sec	0.04	A

The results in Table 4-4 show that junction metrics for an uncontrolled junction work at this location.

Summary of Options

The junction arranged proposed for the development has been designed so as to facilitate a future junction redesign that incorporates a 4-arm junction under signal control or a 4-1rm uncontrolled priority cross junction design.

A modelling exercise has been undertaken on both design options to understand how they work. Both modelled options, signal, and priority junction control, are shown to work from a modelling perspective.

As might be expected the mainline flows (GLDR north and south) are less impacted in the uncontrolled junction scenario versus the signal controlled option as they continue to have priority through the junction.

Crossroad junctions are convenient for pedestrians as they minimise diversions from desire line and create more permeable and legible street networks. However, they increase the risk of vehicle conflict versus staggered and or controlled junctions.

Upon masterplanning the future development on lands to the east the optimal junction location, design and control will be developed and agreed with the relevant authority(s). The current junction layout has been designed to accommodate future modifications if required.

4.3. General Recommendation 3

GR 3 States:

The Applicant is requested to undertake a detail Quality Audit (Which shall include a Road Safety Audit, Street Design Audit (2019), Access Audit, Cycle Audit, and a Walking Audit) to demonstrate that appropriate consideration has been given to all relevant aspects of the development in accordance with the Design manual for Urban Roads & Streets (DMURS). The independent Audit Team shall be approved by the Planning Authority (Transport Planning Section) and all measures recommended by the auditor shall be undertaken unless the Planning Authority approves any departure in writing. A feedback report should also be submitted providing a response to each of the items.

4.3.1. GR 3 Response

A Quality Audit incorporating a Stage 1 Roads Safety Audit, Street Design Audit and Cycle, Walking Audit and Access Audit has been prepared (Atkins Ref 5158632DG0037) and is incorporated in the planning application material submitted with this application. The Audit was undertaken in accordance with relevant guidance and best practice documents. Issues raised by the Audit Team are addressed in the feedback response and where appropriate revisions provide to the design are incorporated at the appropriate design stage.

The Audit Team is independent from the Design Team as set out in Section 6.0 Advice Note 4 of DMURS that outlines who can undertake and Quality Audit. See relevant extract below from Advice Note 4 DMURS.

6.0 Who should carry out a Quality Audit?

The *Quality Audit Report* should be carried out by the Design Team. The Design Team may however feel as though the process may benefit from having an independent appraisal or be carried out by person(s) with a broad skill set. The final *Quality Audit* should be signed off by the Project Manager.

The personal required to carry out individual audits will vary. The *DMURS Street Design Audit*, or other Specialty Audits may be a carried out by the Design Team or persons(s) acting on their behalf. Some audits may require input from outside of the Design Team, such as the Road Safety Audits which is required to be completed by a certified auditor[8]. Further personal may also be needed where a particular expertise is not within the resource base of the Design Team.

General Recommendation 4

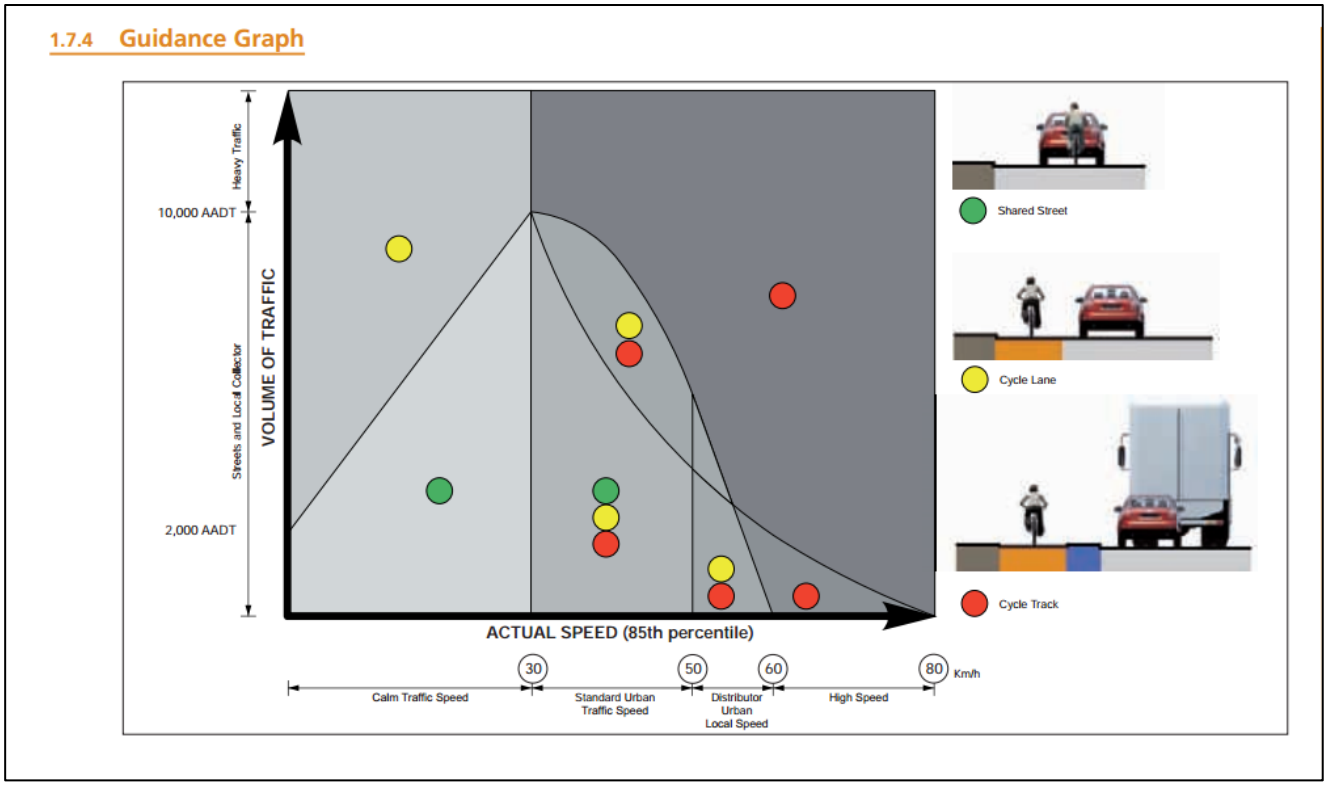
GR 4 States

The applicant is requested to submit full details demonstrating provision of setback for shared footpath cyclist route along the Enniskerry Road Frontage of the proposed development site taking into consideration DMURS section 4.3.1 recommendations on footway widths and level of use and minimum width of 3m when shared with cyclists.

4.3.2. GR 4 Response

As outlined in our response to Item 3.3 the significantly reduced traffic volumes travelling along Enniskerry Road with the GDRS in place provides an opportunity to create a calmer street environment that feeds into the aspiration that this becomes a village street. Tying into this vision we are proposing to provide shared on street cycle provision. This approach is in line with National Cycle Manual (NCM) approach as outlined in section 1.74 of the NCM that in low traffic streets with low design speeds the provision of shared street provision is appropriate as shown in extract below

Figure 4-5 - NCM - Cycle Provision Guidance



As stated in NCM note 1 A of the NCM (Section 1.7.4 page 19)

"Choose the type of facility you would like to have (e.g., mixed streets), and then reduce the speeds and volumes of traffic to an appropriate level. ***This approach is appropriate when the designer's intention is to emphasise an informal, calmed, relaxed town or village centre****, or perhaps where the road is so narrow that there is no possibility of dedicating space to cycling"* (highlighted section our emphasis)

As stated in NCM Note 6 – Critical Threshold – 10,00 AADT and 5,500 AADT

"In reviewing the graph, the threshold of 10,000 AADT is important. At 30km/h actual traffic speed, this represents the maximum level of traffic flow at which mixed cycling is likely to be the most appropriate choice. 10,000 AADT is roughly equivalent to 1000 PCUs in the peak hour, or 666 PCUs inbound in the morning peak hour.

At ***50km/h actual speed (the standard urban speed limit) the maximum traffic flow is 5,500 AADT if mixed cycling is preferred****. This is equivalent to 360 PCUs inbound in the peak hour – a relatively low volume of traffic".*

As noted in response (3.2.1) the AADT along Enniskerry with the GDRS in place is 4950 AADT as shown in Figure 4-6.

This is below the highlighted AADT for 50km/h environments. We would also recommend that the design speed along this section should be reduced to 30KM/h to create a more pleasant, safer environment that creates and urban village street environment. This would further reinforce a shared cycle street provision.

This approach accords with DMURS visa vie the promotion of self-regulating streets and provision of appropriate walking and cycling infrastructure in low traffic low speed environments.

Figure 4-6 - Enniskerry Road AADT

4.4. General Recommendation 5

GR 5 States

The Applicant is requested to provide full dimensioned details of location and area of all cycle parking area demonstrating required cycle provision correctly designed in accordance with the Dun Laoghaire Rathdown County Council – Standards for Cycle Parking and associated Cycling facilities for New Developments (January 2018). The applicant shall ensure adequate space to access all proposed bicycle spaces.

4.4.1. GR 5 Response

All cycle spaces accord with design standards. As noted in Section 6.6.6 of the TTA a cycle audit of facilities has been undertaken. For convenience the audit is shown in Table 4-5. Details of cycle parking numbers are set out in Section 6.6 of the TTA.

Table 4-5 - Development Cycle Audit

DLR Cycle Parking Assessment Criteria	Response
Is the number of cycle parking spaces and footprint adequate and is there suitable provision for parking of outsized formats (cargo bikes etc)?	Yes. Cycle parking numbers, both long stay and short stay for residential and non-residential uses accords with DLR Cycle Parking standards as shown in Section 6.6 of TTA. The development proposes a range of cycle parking including double stacked cycle parking for apartment duplex units, sheffield style stands and spaces for oversized cycle such as cargo bikes. Sheffield stands are widely distributed across the development , particularly at high density destinations such as apartments / duplexes, neighbourhood centre where demand is anticipated.

DLR Cycle Parking Assessment Criteria	Response
Is the location of cycle parking convenient, appropriate, and secure with adequate provision for covered parking?	Yes. Cycle parking for different uses is located in the most appropriate location for that use to ensure its usability and optimal functionality. The apartment cycle parking is covered with the undercroft areas. There are numerous dedicated covered cycle storage facilities for duplex units adjacent to their buildings.
Is the cycle parking area accessible in terms of dedicated access routes with ramps and/or kerb dishing where required?	Yes – cycle parking areas are accessible with gradients with tolerances
Do the internal cycle access routes connect well with off-site cycle facilities – existing and proposed?	Yes. Cycle provision links with proposed cycle network provide as part of the GRDS via direct connection onto segregated cycle facilities on the GLDR. Also connects with Part 8 Glenamuck / Enniskerry Rd Junction scheme. Proposal will also connect to shared cycle provision on Enniskerry road via an improved urban realm with reduced vehicle throughput.
Is there adequate and appropriately designed and integrated provision for ancillary cycling and pedestrian facilities including showers, locker / changing rooms, and drying areas?	Yes – residential uses have access to changing and showering facilities.
For short-term cycle parking (e.g., for customers or visitors), cycle parking is required at ground level. This should be located within 25 metres of the destination in an area of good passive surveillance. Weather protected covered facilities should be considered where appropriate. Consideration should be given to using green roofs in the design of standalone cycle parking shelters. Appropriate cycle parking signage may also be required to direct cyclists to the end destination.	Yes, short term non-residential cycle parking is provided at ground floor level and is located within 25m of destination. For example, neighbourhood centre cycle parking provision is located within 25m of access. Visitor cycle parking to apartments and duplexes also adjacent the main access to those buildings.
For long-term cycle parking (e.g., for more than 3 hours for residents, staff, students), secure covered cycle parking is a requirement. This should be conveniently located within 50 metres of the destination and located near building access points where possible.	Yes, long term cycle parking is covered and located within 50m of destination.
In all cases it is a requirement to provide showers, changing facilities, lockers and clothes drying facilities, for use by staff that walk or cycle to work. CCTV cameras or passive surveillance of car parks and cycle parks may be required for personal safety and security considerations.	Yes – contained with residential units. CCTV of car parking can be provided if required.
All cycle facilities in multi-storey car parks shall be at ground floor level and completely segregated from vehicular traffic. Cyclists should also have designated entry and exit routes at the car park and with minimum headroom of 2.4 metres to facilitate access by cyclists.	Development does not provide multi-storey car parks within. Cycle parking is provided in undercroft facilities. These are low traffic low speed environments with good lighting that are suitable for shared provision. Head height clearance of 2.4m is maintained in these undercroft situations.

DLR Cycle Parking Assessment Criteria	Response
Within larger new developments cycle routes shall link to the existing cycle network where possible and maintain a high degree of permeability through developments. Cycle Audits may be required in such developments.	Cycle permeability is provided across the masterplan lands. Cycle provision links to existing and proposed external cycle infrastructure. Design of cycle network accords with NTA Cycle Manual. DMURS Quality Audit including Cycle Audit has been undertaken as part of the development. Cycle measures identified will be included in the scheme.

Further details of cycle parking facilities can be seen Architects drawings (Ref MCORM PL601 – Parking Allocation and Atkins Drawings 5158632/HTR/DR/02/0128 Cycle Storage Location Plan and 5158632/HTR/DR/02/0129 Cycle Storage facilities.

4.5. General Recommendation 6

GR 6 States

The applicant is requested to submit detailed drawings showing which car parking spaces including visitor parking (surface and basement level) within the proposed development are to be designated for the relevant housing/ apartment units, creche, medical, community and village centre uses. The Applicant should note that the car parking spaces for residential units must be allocated / sold off with the units and not sold separately or let to avoid non take up by residents who would then park elsewhere on the adjoining roads where it will create a nuisance as well as undermining the demand management measure of parking constraint. The applicant shall give an undertaking in this respect in writing. The layout should ensure that car parking spaces are overlooked by the units they serve. For example, house types D1 and D2 appear to not meet this requirement

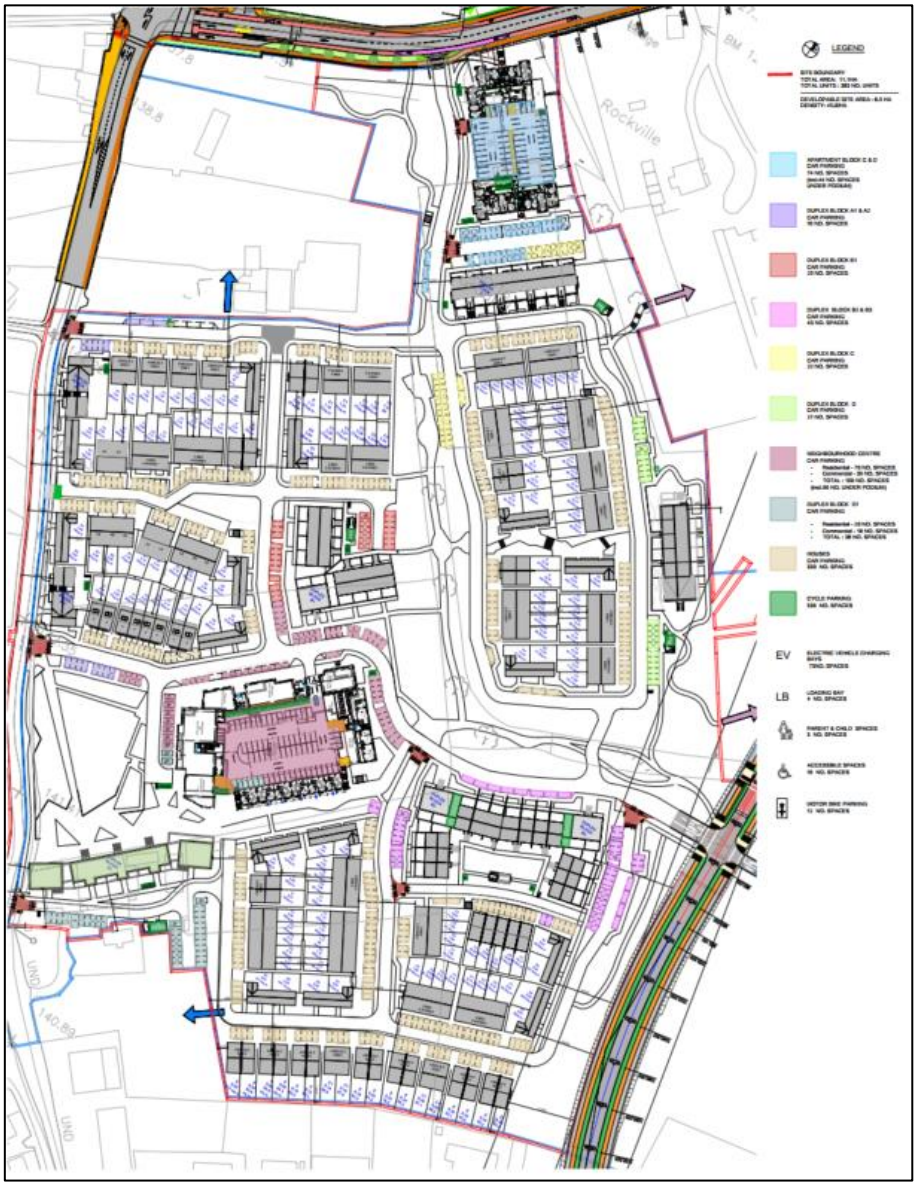
4.5.1. GR 6 Response

Car parking spaces and their allocation to various land use is detail on the Architects drawing (Ref MCORM PL601 – Parking Allocation), an extract of which is shown in Figure 4-7. As detailed on this drawing, car parking spaces for the various uses are cleared designated. The number of car parking spaces for the Neighbourhood Centre / Commercial accords with the DRLCC Standards with 57No. spaces provided as detailed in Table 6.6 of the TTA. These spaces are not designated to individual uses but will act as a communal pool of car parking to create greater flexibility and given different peak times uses for the diverse range of uses as recommend in best practice design guidance

The applicant confirmed an undertaking in writing that car parking spaces would not be sold off separately. All car parking spaces will either be sold or assigned to the residential units or retained by the OMC which will have ultimate responsibility for managing the carparking on behalf of the residents.

All car parking spaces are overlooked by development and or located in areas that are overlook by active and passive surveillance creating a safe environment including types D1 and D2.

Figure 4-7 - Development - Car parking Allocation



4.6. General Recommendation 7

GR 7 States

The Applicant shall show how they can prevent parking vehicles at the car parking spaces overriding the proposed pedestrian walkways (e.g., wheel stopers)

4.6.1. GR 7 Response

The development is providing adequate levels of car parking throughout the development in accordance with DLRCC and or Department of Housing Planning and Local Government (DHPLG) for New Apartments guidance. The level of car parking proposed is adequate for the scale of and location of the development and so as not to undermine sustainable travel objectives. Control of car parking can be accomplished through the use of parking controls with appropriate traffic regulation orders that prohibit illegal and or dangerous parking as occurs elsewhere in the County and other urban areas were considered appropriate. The regulations can cover the issue of wheel stopers.

4.7. General Recommendation 8

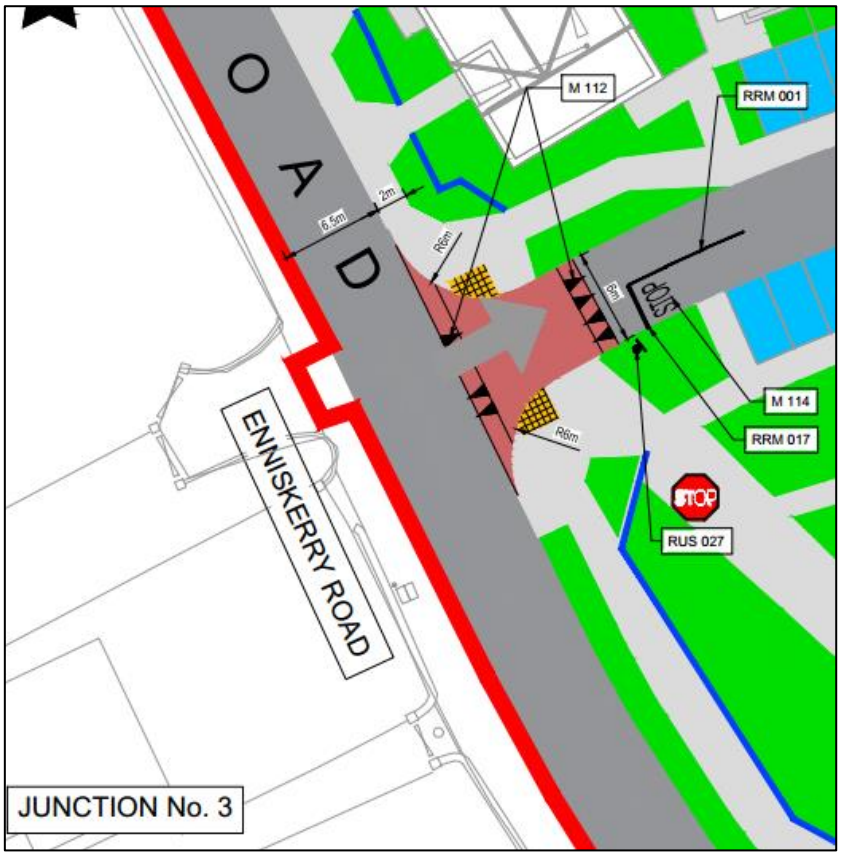
GR 8 states:

The Applicant shall submit details showing the provision of STOP line markings at the back of existing footpath the new vehicular entrances. This is in order to maintain pedestrian priority in front of this proposed residential development.

4.7.1. GR 8 Response

The design of junctions including the provision of stop line markings has been incorporated at all junctions to provide pedestrian priority. One example is shown in Figure 4-8 relating to an access onto Enniskerry Road at junction 3. Further details are provided in Atkins drawings submitted in support of this application.

Figure 4-8 - Access Junction 3 general arrangement



4.8. General Recommendation 9

GR 9 States:

The applicant shall submit a detailed plan and elevation drawing of the proposed required ramp entry treatment for pedestrian priority at the vehicular entrances to the proposed residential development on Glenamuck Road, Enniskerry Road and Future GLDR in accordance with the guidance and standards set out in Chapter 4.2.6 of the "Design Manual for Urban Roads and Streets " (2013) / the "Traffic Management Guidelines Manual (2003)". The Tactile paving either side of the ramp shall be sown as buff colour as per the following documents "Guidance on the use of tactile paving surfaces – DETR(UK)"

4.8.1. GR 9 Response

All access entrances 1 to 5 are designed a raised entry treatment. Please refer to Atkins Drawing 5158632/HTR/DR/02/0105 Junction layout 1 of 3 for details. The design of these junctions / access accords with relevant best practice and guidance including:

Chapter 4.2.6 of the "Design Manual for Urban Roads and Streets " (2013) / the "Traffic Management Guidelines Manual (2003)". The Tactile paving either side of the ramp shall be sown as buff colour as per the following documents "Guidance on the use of tactile paving surfaces – DETR(UK)"

4.9. General Recommendation 10

GR 10 States:

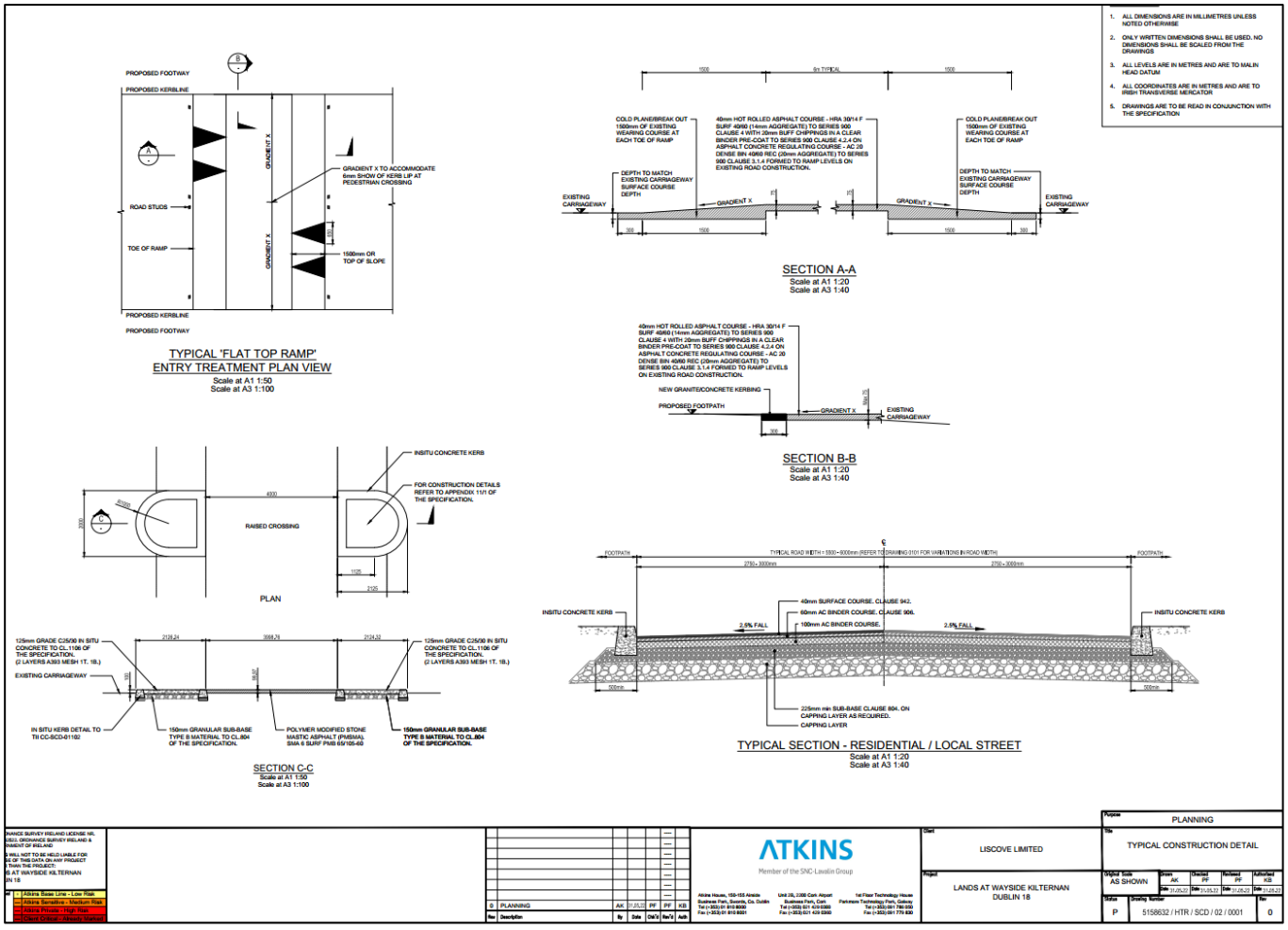
The applicant shall show on drawings all development works (i.e., internal access road, internal footpath, street lighting etc.) to be designed to meet Dun Laoghaire Rathdown County Councils "Taking In Charge Policy Document (April 2016)" and "Taking in Charge Procedure Document" and all to the satisfaction of the Planning Authority. For taking in charge standard to meet a 40 year design life a minimum of 200mm dept of flexible road surfacing is required for a carriageway construction within all shared private and public spaces. The following minimum road construction surfacing depths are required:

- *40mm Clause 942, surface course*
- *60mm Clause 906, binder course*
- *100mm, base course macadam*
- *Minimum 150mm Clause 804*

4.9.1. GR 10 Response

Drawing 5158632/HTR/SCD/02/001 shows the minimum road construction details is achieved. An extract of this drawings is shown in Figure 4-9. All the above minimum road construction depths are achieved.

Figure 4-9 - Typical Construction Details



4.10. General Recommendation 11

GR 11 States:

The applicant is requested to present a clear permeability and access drawing that will demonstrate all access that will be delivered by this site whether cycling walking or vehicular access and at what stage of the development. This drawing shall demonstrate all access route for Taking in Charge up to the site boundary to prevent ransom strips. The applicant is requested to demonstrate that agreements are in place with adjacent landowners that demonstrate that these connections are deliverable now and not "potential future connections" as not on MCORM taking in charge drawing.

4.10.1. GR 11 Response

Please refer to response 2.1.1 Phasing Strategy that provides details of when clear permeability access points will be delivered.

Please refer to the Architect's Taking in Charge Drawing (PL600) that demonstrates connection and access points up to the site boundary.

4.11. General Recommendation 12

GR 12 States:

The applicant shall show that all the underground services are situated under impermeable paving type with the required insitu concrete kerb restraints at either side of the said impermeable pavement

4.11.1. GR 12 Response

All underground services are situated under impermeable paving type with the required in situ concrete kerb restraints etc as detailed in the landscape architect's drawings 2104/16 and 2104/17.

4.12. General Recommendation 13

GR 13 States:

The applicant is requested to submit Taking in Charge Drawings taking into consideration ensuring facilitation of rights of way and all potential future permeability connections to adjoining development sites compatible with an agreed Masterplan and Kiltiernan Glenamuck LAP.

4.12.1. GR 13 response

Please refer to the Architect's Taking in Charge Drawing (PL600) that demonstrates rights of way and all potential future permeability connections.

4.13. General Recommendation 14

GR 14 States:

The Applicant is requested to submit full details demonstrating how the potential for feasible fully connected road link/s and accessible permeability links to adjoining development land can be facilitated by the proposed development. Dimensioned plan and elevation detail shall be provided including interface levels, cross sections, and boundary treatment at proposed / future potential permeability connection locations.

4.13.1. GR 14 Response

The details requested in this item are contained in drawings across a number of the Applicants Design team including Atkins, MCORM (Architects), RMDA (Landscape Architect), Roger Mullarkey & Associates Consulting Engineers.

4.14. General Recommendation 15

GR 15 States:

The Applicant shall submit a detailed Construction Management Plan to the Planning Authority (Transport Planning Section) including measures dealing with:

- *Traffic management plan including construction vehicular access to site in particular to avoid conflict between construction activities and traffic on Glenamuck Road and Enniskerry Road.*
- *How it will be intended to avoid conflict between construction activities and pedestrian movements on Glenamuck Road and Enniskerry Road during construction works*
- *Where it is intended to provide for site staff car parking during construction in that is not acceptable to have long term parking in the nearby residential areas.*
- *Proposed measures to minimise / eliminate nuisance caused by noise and dust, proposed working hours and measures to minimise/ prevent transfer of dirt to the public road with associated measures to clean the public roads / gully's etc in the vicinity of the site and continuing replacement of roads line markings resulting therefrom*

4.14.1. GR 15 Response

An outline Construction Management Plan (CMP) (Atkins ref 5158632DG0028) is submitted in support of this application and covers the above points. It should be noted that the CMP is in outline only and measures identified preliminary. A final CMP will be produced once a contractor has been secured and their specific construction operations know and understood and liaison with DLRCC Roads undertaken regarding traffic management requirements that may be required subject to any other construction activity ongoing in the area at that time.

4.15. General Recommendation 16

GR 16 States:

The Applicant is requested to submit a Travel Plan for all occupants of the proposed development in accordance with requirements of the County Development Plan 2016-2022 Section 8.2.4.3. As per Section 8.2.4.3 a Travel plan is required to be development to ensure that it is an integral part of the development. At Planning Application stage commitments by the Applicant on behalf of future owner/occupiers are recommended.

4.15.1. GR 16 Response

An outline Mobility Management Plan[3] (Atkins Ref 5158632DG0026) is submitted in support of this application that accords with best practice guidance including the recently adopted Dun Laoghaire-Rathdown Development Plan 2022-2028.

5. Summary

This report provides the Applicants relevant response to the traffic and transport issues raised in ABP opinion. This including relevant response to traffic and transport issues raised in the PA opinion including those of the DLR Roads and Traffic Section.

[3] Also known as a Travel Plan

Peter Foley
WS Atkins Ireland Limited
Unit 2B
2200 Cork Airport Business Park
Cork
T12 R279

<contact info>

Appendix G. Correspondence with DLRCC on GDRS

RE: GDRS - current status

D'Arcy Gerry [redacted]
To Foley, Peter; John Carr - DBFL Consulting Engineers
Cc Neil Durkan; Patricia Thornton

You replied to this message on 25/05/2022 12:20.

Hi Peter,
I am pleased to confirm the following relating to the GDRS :

The GDRS shall be delivered as one scheme under a single tender.
The GDRS has all necessary statutory consents.
The GDRS has funding for its delivery in place.
DLRCC shall go to tender in Q2 or early Q3 2022.
DLRCC expect to be on site Q3/Q4 2022.
Construction Program estimated 18 -24 months
Scheme Completed estimated Q3/Q4 2024.

Regards,
Gerry.

From: Foley, Peter [redacted]
Sent: Wednesday 25 May 2022 11:43
To: D'Arcy Gerry [redacted]; John Carr - DBFL Consulting Engineers [redacted]
Cc: Neil Durkan [redacted]; Patricia Thornton [redacted]
Subject: GDRS - current status
Importance: High

Hi Gerry and John,

As you are aware we are submitting a planning application to ABP for a SHD application for lands at Wayside Kilternan Dublin 18.

Can you update us visa vie the status of the GDRS and Glenamuck / Enniskerry Jct Part 8 scheme.

Information of the status of the above scheme is vital for this planning submission.

In correspondence in February with Neil you stated:

- DLRCC intends to deliver the GDRS and Part 8 scheme as one scheme under a single tender.
- The scheme(s) have all necessary Statutory Consents
- The scheme(s) have funding
- DLRCOCO are anticipating going out to Tender for Construction in Q2 2022
- DLRCOCO expect to be on site Q3-Q4 2022
- Programme 18 to 21 Months
- Scheme Complete circa Q3 -Q4 2024

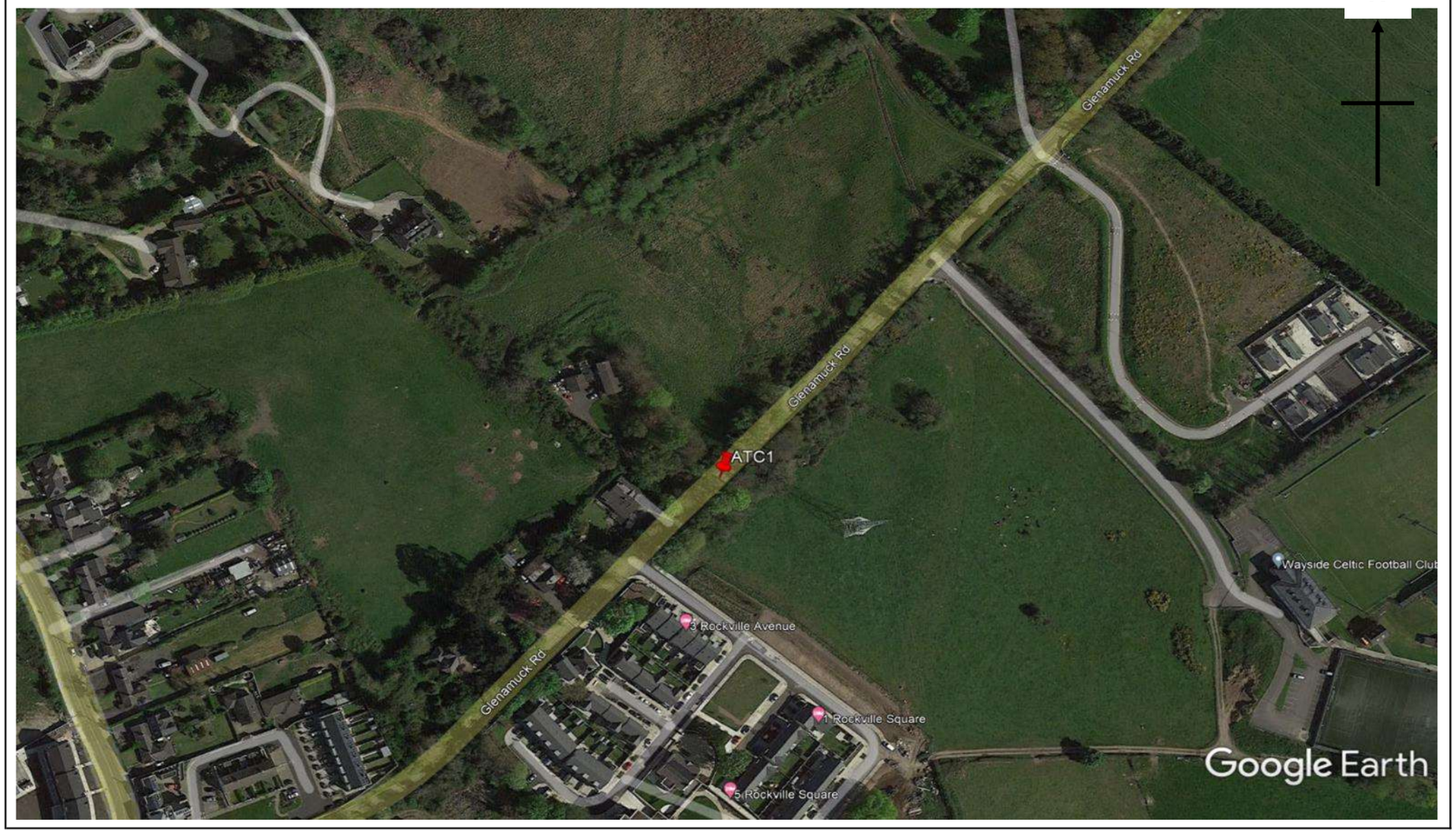
I'd really appreciate if you can provide an update to the above.

Any question please contact me to discuss.

Many thanks as always,

Peter Foley *MSc, HDip, BSc*
Transport Planning Specialist
Europe (Atkins Ireland)
Traffic and Transportation

Appendix H. Traffic Survey


N
Glenamuck Rd
Glenamuck Rd
ATC1
Glenamuck Rd
Wayside Celtic Football Club
3 Rockville Avenue
1 Rockville Square
5 Rockville Square
Google Earth

Site No.	Location.	Direction.	Speed Limit - PSL (km/h)	Start Date.	End Date.	Total Vehicles.	5 Day Ave.	7 Day Ave.	No. > Speed Limit.	%. > Speed Limit.	No. > Speed Limit1 (+5km/h).	%. > Speed Limit1 (+5km/h).	No. > Speed Limit1 (+10km/h).	%. > Speed Limit1 (+10km/h).	Mean Speed	85%ile Speed
1	Glenamuck Rd, 50 metres North of Rockville Ave access	Eastbound	50	10 November 2021		3967	3967	3967	2718	68.5	1749	44.1	916	23.1	53.9	62.7
		Westbound	50	10 November 2021		4040	4040	4040	2307	57.1	1343	0.0	654	16.2	51.0	60.6
		Eastbound / Westbound	50	10 November 2021		8007	8007	8007	5025	62.8	3092	38.6	1570	19.6	52.5	61.6

Site 1
Location Glenamuck Rd, 50 metres North of Rockville Ave access
Direction Eastbound
10 November 2021

12241 / Kilternan 1
November 2021 Glenamuck Rd, 50 metres North of Rockville Ave access
Automatic Traffic Count Eastbound
10 November 2021

12241 / Kilternan
November 2021
Automatic Traffic Count

| Time | Total | Classification | | | | | | | | | | | | JPSL | JPSL% | JSL1 | JSL1% | JSL2 | JSL2% | Mean | Vpp | Speed Bins (km/h) | | | | | | | | | | | |

| | | |

Site 1
Location Glenamuck Rd, 50 metres North of Rockville Ave access
Direction Eastbound

12241 / Kilternan
November 2021
Automatic Traffic Count

1
Glenamuck Rd, 50 metres North of Rockville Ave access
Eastbound

12241 / Kilternan
November 2021
Automatic Traffic Count

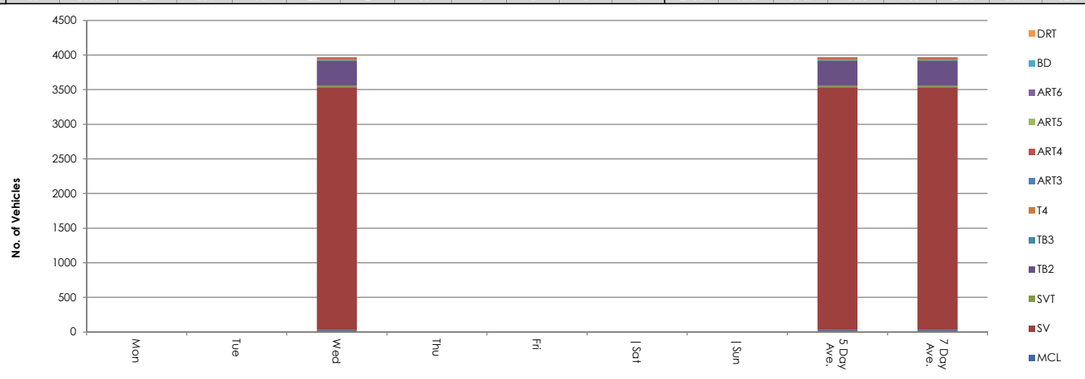
Virtual Day (1)

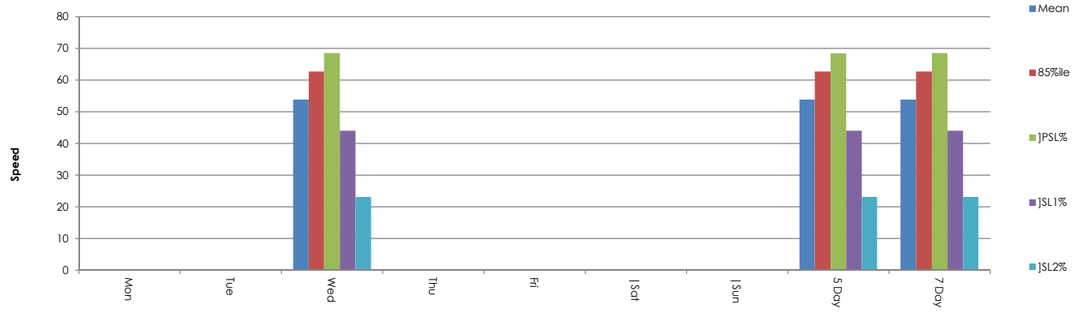
Time	Total	Classification												]PSL 50	]PSL% 50	]SL1 55 +5kph	]SL1% 55 +5kph	]SL2 60 +10kph	]SL2% 60 +10kph	Mean	Vpp 85	Speed Bins (km/h)																											
		1 MCL	2 SV	3 SVT	4 TB2	5 TB3	6 T4	7 ART3	8 ART4	9 ART5	10 ART6	11 BD	12 DRT									0 - 5	5 - 10	10 - 15	15 - 20	20 - 25	25 - 30	30 - 35	35 - 40	40 - 45	45 - 50	50 - 55	55 - 60	60 - 65	65 - 70	70 - 75	75 - 80	80 - 85	85 - 90	90 - 95	95 - 100	100 - 105	105 - 110	110 - 115	115 - 120	120 - 125	125 - 130	130 - 135	135 - 140
0000	9	0	7	0	2	0	0	0	0	0	0	0	0	8	88.9	7	77.8	4	44.4	60.6	-	0	0	0	0	0	0	0	0	1	0	1	3	1	2	0	0	1	0	0	0	0	0	0	0	0	0	0	0
0100	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0.0	0	0.0	0	0.0	28.5	-	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
0200	2	0	2	0	0	0	0	0	0	0	0	0	0	2	100.0	1	50.0	1	50.0	57.7	-	0	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0300	3	0	2	0	1	0	0	0	0	0	0	0	0	3	100.0	3	100.0	3	100.0	75.1	-	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	0	1	0	0	0	0	0	0	0	0	0	0
0400	3	0	3	0	0	0	0	0	0	0	0	0	0	2	66.7	2	66.7	2	66.7	61.9	-	0	0	0	0	0	0	0	0	0	1	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0
0500	21	0	18	0	3	0	0	0	0	0	0	0	0	20	95.2	16	76.2	15	71.4	65.7	75.5	0	0	0	0	0	0	0	0	0	1	4	1	5	2	5	2	0	0	1	0	0	0	0	0	0	0	0	0
0600	79	1	60	0	16	0	0	0	0	2	0	0	0	71	89.9	59	74.7	42	53.2	60.7	69.9	0	0	0	0	0	0	0	0	2	1	5	12	17	16	15	9	1	1	0	0	0	0	0	0	0	0	0	0
0700	250	4	206	0	31	2	3	1	2	1	0	0	0	182	72.8	129	51.6	77	30.8	55.6	65.3	0	0	0	0	0	1	3	4	9	20	31	53	52	37	21	9	5	1	2	2	0	0	0	0	0	0	0	0
0800	**411**	**0**	**378**	**2**	**24**	**2**	**2**	**0**	**2**	**0**	**1**	**0**	**0**	**268**	**65.2**	**164**	**39.9**	**79**	**19.2**	**52.9**	**60.9**	**0**	**0**	**0**	**0**	**0**	**0**	**17**	**15**	**25**	**86**	**104**	**85**	**51**	**18**	**7**	**3**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
0900	262	0	232	2	24	1	1	0	1	0	1	0	0	190	72.5	124	47.3	65	24.8	53.9	63.6	0	0	0	1	0	4	7	9	23	28	66	59	33	24	4	3	1	0	0	0	0	0	0	0	0	0	0	0
1000	202	2	165	3	28	2	2	0	0	0	0	0	0	147	72.8	102	50.5	47	23.3	54.6	62.9	0	0	0	0	0	2	5	4	11	33	45	55	29	12	3	3	0	0	0	0	0	0	0	0	0	0	0	0
1100	198	0	172	2	19	0	3	0	2	0	0	0	0	132	66.7	87	43.9	55	27.8	53.7	62.7	0	0	0	0	2	2	1	9	18	34	45	32	31	15	7	0	1	1	0	0	0	0	0	0	0	0	0	0
1200	284	0	249	2	26	0	3	0	1	0	3	0	0	185	65.1	117	41.2	60	21.1	53	62.3	0	0	0	0	3	5	2	10	28	51	68	57	40	8	10	0	2	0	0	0	0	0	0	0	0	0	0	0
1300	280	5	240	3	30	0	2	0	0	0	0	0	0	195	69.6	120	42.9	54	19.3	54	61.1	0	0	0	0	0	0	1	5	20	59	75	66	32	11	8	2	1	0	0	0	0	0	0	0	0	0	0	0
1400	**331**	**3**	**289**	**2**	**33**	**1**	**3**	**0**	**0**	**0**	**0**	**0**	**0**	**205**	**61.9**	**111**	**33.5**	**50**	**15.1**	**51.4**	**60.4**	**0**	**0**	**2**	**1**	**0**	**8**	**7**	**20**	**32**	**56**	**94**	**61**	**24**	**20**	**3**	**3**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
1500	284	3	246	2	30	0	3	0	0	0	0	0	0	202	71.1	134	47.2	74	26.1	54.3	63.5	0	0	0	0	1	0	8	14	21	38	68	60	39	24	8	3	0	0	0	0	0	0	0	0	0	0	0	0
1600	282	2	254	0	24	1	0	0	0	1	0	0	0	194	68.8	121	42.9	54	19.2	53.7	61.5	0	0	0	0	1	0	4	4	23	56	73	67	34	14	4	1	1	0	0	0	0	0	0	0	0	0	0	0
1700	230	3	208	1	18	0	0	0	0	0	0	0	0	134	58.3	82	35.7	39	17.0	52.6	60.9	0	0	0	0	0	1	6	4	22	63	52	43	21	11	5	2	0	0	0	0	0	0	0	0	0	0	0	0
1800	245	1	225	1	17	0	0	0	1	0	0	0	0	161	65.7	98	40.0	49	20.0	53.4	62.7	0	0	0	0	0	0	1	15	29	39	63	49	25	15	7	1	1	0	0	0	0	0	0	0	0	0	0	0
1900	232	1	216	0	13	1	0	1	0	0	0	0	0	146	62.9	86	37.1	37	16.0	52.9	60.2	0	0	0	0	0	0	1	3	27	55	60	49	25	8	3	1	0	0	0	0	0	0	0	0	0	0	0	0
2000	177	3	169	0	5	0	0	0	0	0	0	0	0	118	66.7	68	38.4	33	18.6	53.3	61.5	0	1	0	0	0	1	2	4	9	42	50	35	19	11	3	0	0	0	0	0	0	0	0	0	0	0	0	0
2100	104	1	96	0	6	0	0	0	1	0	0	0	0	87	83.7	65	62.5	39	37.5	57.5	65.3	0	0	0	0	0	3	1	0	1	12	22	26	19	10	7	1	1	1	0	0	0	0	0	0	0	0	0	0
2200	64	0	57	0	7	0	0	0	0	0	0	0	0	54	84.4	43	67.2	29	45.3	59	69.4	0	0	0	0	0	0	1	0	4	5	11	14	13	9	4	1	2	0	0	0	0	0	0	0	0	0	0	0
2300	13	1	11	0	1	0	0	0	0	0	0	0	0	12	92.3	10	76.9	8	61.5	60.1	69.9	0	0	0	0	0	0	0	0	1	0	2	2	5	1	2	0	0	0	0	0	0	0	0	0	0	0	0	0
07-19	**3259**	**23**	**2864**	**20**	**304**	**9**	**22**	**1**	**9**	**2**	**5**	**0**	**0**	**2195**	**67.4**	**1389**	**42.6**	**703**	**21.6**	**53.5**	**62.3**	**0**	**0**	**2**	**2**	**8**	**25**	**63**	**118**	**272**	**574**	**806**	**686**	**396**	**193**	**75**	**26**	**8**	**3**	**2**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
06-22	**3851**	**29**	**3405**	**20**	**344**	**10**	**22**	**2**	**10**	**4**	**5**	**0**	**0**	**2617**	**68.0**	**1667**	**43.3**	**854**	**22.2**	**53.7**	**62.5**	**0**	**1**	**2**	**2**	**8**	**29**	**67**	**127**	**310**	**688**	**950**	**813**	**475**	**237**	**97**	**29**	**10**	**4**	**2**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
06-00	**3928**	**30**	**3473**	**20**	**352**	**10**	**22**	**2**	**10**	**4**	**5**	**0**	**0**	**2683**	**68.3**	**1720**	**43.8**	**891**	**22.7**	**53.8**	**62.6**	**0**	**1**	**2**	**2**	**8**	**29**	**68**	**127**	**315**	**693**	**963**	**829**	**493**	**247**	**103**	**30**	**12**	**4**	**2**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
00-00	**3967**	**30**	**3505**	**20**	**359**	**10**	**22**	**2**	**10**	**4**	**5**	**0**	**0**	**2718**	**68.5**	**1749**	**44.1**	**916**	**23.1**	**53.9**	**62.7**	**0**	**1**	**2**	**2**	**8**	**30**	**68**	**127**	**316**	**695**	**969**	**833**	**501**	**252**	**109**	**33**	**13**	**5**	**3**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**

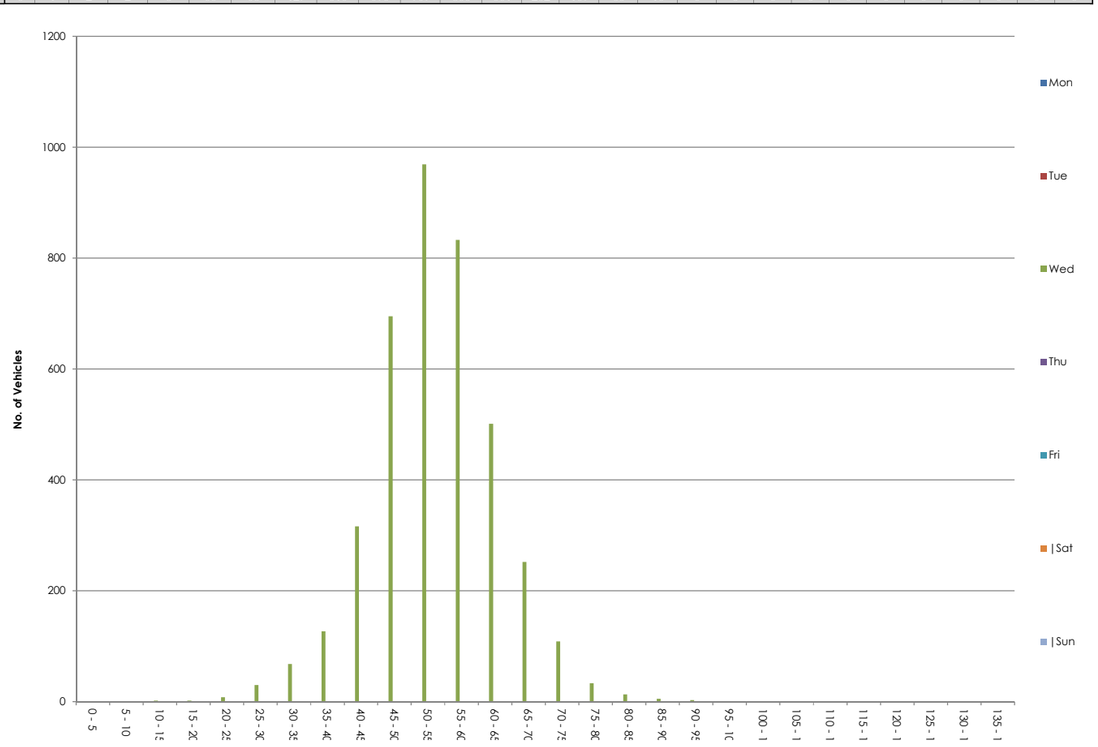
Virtual Week (1)

Time	Total	Classification												]PSL 50	]PSL% 50	]SL1 55 +5kph	]SL1% 55 +5kph	]SL2 60 +10kph	]SL2% 60 +10kph	Mean	Vpp 85	Speed Bins (km/h)																											
		1 MCL	2 SV	3 SVT	4 TB2	5 TB3	6 T4	7 ART3	8 ART4	9 ART5	10 ART6	11 BD	12 DRT									0 - 5	5 - 10	10 - 15	15 - 20	20 - 25	25 - 30	30 - 35	35 - 40	40 - 45	45 - 50	50 - 55	55 - 60	60 - 65	65 - 70	70 - 75	75 - 80	80 - 85	85 - 90	90 - 95	95 - 100	100 - 105	105 - 110	110 - 115	115 - 120	120 - 125	125 - 130	130 - 135	135 - 140
Mon	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0	0	0.0	0	0.0	-	-	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Tue	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0	0	0.0	0	0.0	-	-	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Wed	3967	30	3505	20	359	10	22	2	10	4	5	0	0	2718	68.5	1749	44.1	916	23.1	53.9	62.7	0	1	2	2	8	30	68	127	316	695	969	833	501	252	109	33	13	5	3	0	0	0	0	0	0	0	0	0	0
Thu	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0	0	0.0	0	0.0	-	-	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Fri	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0	0	0.0	0	0.0	-	-	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
]Sat	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0	0	0.0	0	0.0	-	-	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
]Sun	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0	0	0.0	0	0.0	-	-	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5 Day Ave.	**3967**	**30**	**3505**	**20**	**359**	**10**	**22**	**2**	**10**	**4**	**5**	**0**	**0**	**2718**	**68.5**	**1749**	**44.1**	**916**	**23.1**	**53.9**	**62.7**	**0**	**1**	**2**	**2**	**8**	**30**	**68**	**127**	**316**	**695**	**969**	**833**	**501**	**252**	**109**	**33**	**13**	**5**	**3**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
7 Day Ave.	**3967**	**30**	**3505**	**20**	**359**	**10**	**22**	**2**	**10**	**4**	**5**	**0**	**0**	**2718**	**68.5**	**1749**	**44.1**	**916**	**23.1**	**53.9**	**62.7**	**0**	**1**	**2**	**2**	**8**	**30**	**68**	**127**	**316**	**695**	**969**	**833**	**501**	**252**	**109**	**33**	**13**	**5**	**3**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
--	**3967**	**30**	**3505**	**20**	**359**	**10**	**22**	**2**	**10**	**4**	**5**	**0**	**0**	**2718**	**68.5**	**1749**	**44.1**	**916**	**23.1**	**53.9**	**62.7**	**0**	**1**	**2**	**2**	**8**	**30**	**68**	**127**	**316**	**695**	**969**	**833**	**501**	**252**	**109**	**33**	**13**	**5**	**3**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**

Summary Graphs







Site	1
Location	Glenamuck Rd, 50 metres North of Rockville Ave access
Direction	Eastbound

12241 / Kilternan
November 2021
Automatic Traffic Count
1
Glenamuck Rd, 50 metres North of Rockville Ave access
Eastbound

12241 / Kilternan
November 2021
Automatic Traffic Count

Site 1
Location Glenamuck Rd, 50 metres North of Rockville Ave access
Direction Westbound
10 November 2021

12241 / Kilternan
November 2021
Automatic Traffic Count

1
Glenamuck Rd, 50 metres North of Rockville Ave access
Westbound
10 November 2021

12241 / Kilternan
November 2021
Automatic Traffic Count

| Time | Total | Classification | | | | | | | | | | | | JPSL | JPSL% | JSL1 | JSL1% | JSL2 | JSL2% | Mean | Vpp | Speed Bins (km/h) | | | | | | | | | | | |

| | | |

Site 1
Location Glenamuck Rd, 50 metres North of Rockville Ave access
Direction Westbound

12241 / Kilternan
November 2021
Automatic Traffic Count

1
Glenamuck Rd, 50 metres North of Rockville Ave access
Westbound

12241 / Kilternan
November 2021
Automatic Traffic Count

Virtual Day (1)

Time	Total	Classification												JPSL	JPSL%	JSL1	JSL1%	JSL2	JSL2%	Mean	Vpp
		1 MCL	2 SV	3 SVT	4 TB2	5 TB3	6 T4	7 ART3	8 ART4	9 ART5	10 ART6	11 BD	12 DRT	50	50	55 +5kph	55 +5kph	60 +10kph	60 +10kph		85
0000	11	0	10	0	1	0	0	0	0	0	0	0	0	7	63.6	6	54.6	1	9.1	51.4	60.1
0100	2	0	2	0	0	0	0	0	0	0	0	0	0	2	100.0	2	100.0	2	100.0	64.3	-
0200	2	0	1	0	1	0	0	0	0	0	0	0	0	2	100.0	1	50.0	0	0.0	54.5	-
0300	4	0	3	0	1	0	0	0	0	0	0	0	0	4	100.0	2	50.0	2	50.0	59.9	-
0400	4	0	4	0	0	0	0	0	0	0	0	0	0	4	100.0	4	100.0	4	100.0	70	-
0500	5	0	3	0	2	0	0	0	0	0	0	0	0	4	80.0	3	60.0	3	60.0	63.2	-
0600	40	0	28	0	10	2	0	0	0	0	0	0	0	32	80.0	26	65.0	17	42.5	59.6	72.8
0700	203	3	150	3	40	0	5	0	1	1	0	0	0	111	54.7	84	41.4	46	22.7	49.3	62.6
0800	**296**	**3**	**267**	**2**	**18**	**2**	**2**	**0**	**1**	**0**	**1**	**0**	**0**	**169**	**57.1**	**104**	**35.1**	**47**	**15.9**	**49.9**	**60.5**
0900	210	3	177	1	25	1	3	0	0	0	0	0	0	132	62.9	72	34.3	42	20.0	51.2	61.3
1000	202	1	159	1	37	0	4	0	0	0	0	0	0	151	74.8	95	47.0	44	21.8	53.9	62.8
1100	216	3	173	1	30	1	5	0	1	0	2	0	0	122	56.5	77	35.7	34	15.7	50.7	60
1200	252	2	217	1	27	0	1	0	3	0	1	0	0	136	54.0	91	36.1	48	19.1	50.2	61.7
1300	326	1	291	1	26	2	4	0	1	0	0	0	0	171	52.5	76	23.3	26	8.0	50	57.9
1400	290	0	253	4	19	1	9	0	4	0	0	0	0	120	41.4	79	27.2	37	12.8	47	58.9
1500	295	3	260	1	29	1	0	0	0	1	0	0	0	192	65.1	114	38.6	56	19.0	53.1	61.8
1600	333	2	291	0	38	1	0	1	0	0	0	0	0	170	51.1	96	28.8	44	13.2	50.7	59.9
1700	**348**	**3**	**318**	**2**	**22**	**3**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**192**	**55.2**	**112**	**32.2**	**54**	**15.5**	**51.5**	**60.2**
1800	311	3	284	3	20	0	0	1	0	0	0	0	0	147	47.3	60	19.3	19	6.1	48.9	56.1
1900	317	1	301	1	13	0	1	0	0	0	0	0	0	193	60.9	88	27.8	44	13.9	51.7	59.2
2000	190	0	178	2	10	0	0	0	0	0	0	0	0	118	62.1	68	35.8	37	19.5	53.1	61.5
2100	109	1	100	0	7	0	0	0	1	0	0	0	0	70	64.2	43	39.5	24	22.0	52.9	62.8
2200	55	0	49	0	6	0	0	0	0	0	0	0	0	41	74.6	29	52.7	16	29.1	56.2	66.3
2300	19	0	18	0	1	0	0	0	0	0	0	0	0	17	89.5	11	57.9	7	36.8	60.2	74.4
07-19	**3282**	**27**	**2840**	**20**	**331**	**12**	**33**	**2**	**11**	**2**	**4**	**0**	**0**	**1813**	**55.2**	**1060**	**32.3**	**497**	**15.1**	**50.5**	**60**
06-22	**3938**	**29**	**3447**	**23**	**371**	**14**	**34**	**2**	**12**	**2**	**4**	**0**	**0**	**2226**	**56.5**	**1285**	**32.6**	**619**	**15.7**	**50.9**	**60.3**
06-00	**4012**	**29**	**3514**	**23**	**378**	**14**	**34**	**2**	**12**	**2**	**4**	**0**	**0**	**2284**	**56.9**	**1325**	**33.0**	**642**	**16.0**	**51**	**60.5**
00-00	**4040**	**29**	**3537**	**23**	**383**	**14**	**34**	**2**	**12**	**2**	**4**	**0**	**0**	**2307**	**57.1**	**1343**	**33.2**	**654**	**16.2**	**51**	**60.6**

Virtual Day (1)

Time	Speed Bins (km/h)																																								
	0 - 5	5 - 10	10 - 15	15 - 20	20 - 25	25 - 30	30 - 35	35 - 40	40 - 45	45 - 50	50 - 55	55 - 60	60 - 65	65 - 70	70 - 75	75 - 80	80 - 85	85 - 90	90 - 95	95 - 100	100 - 105	105 - 110	110 - 115	115 - 120	120 - 125	125 - 130	130 - 135	135 - 140
0000	0	0	0	0	1	0	0	0	0	3	1	5	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0100	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0200	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0300	0	0	0	0	0	0	0	0	0	0	2	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0400	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	2	0	0	0	0	0	0	0	0	0	0	0	0
0500	0	0	0	0	0	0	0	0	1	0	1	0	1	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0
0600	0	0	0	0	0	0	0	2	1	5	6	9	4	3	8	1	1	0	0	0	0	0	0	0	0	0	0	0
0700	0	0	1	8	11	9	0	12	17	34	27	38	35	8	0	1	2	0	0	0	0	0	0	0	0	0	0	0
0800	**0**	**1**	**4**	**3**	**11**	**4**	**8**	**11**	**25**	**60**	**65**	**57**	**31**	**9**	**4**	**2**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
0900	0	0	5	3	2	3	2	7	22	34	60	30	27	8	4	0	3	0	0	0	0	0	0	0	0	0	0	0
1000	0	0	1	1	2	2	4	6	14	21	56	51	25	12	3	1	1	0	1	0	1	0	0	0	0	0	0	0
1100	0	0	0	2	3	3	4	13	30	39	45	43	24	5	5	0	0	0	0	0	0	0	0	0	0	0	0	0
1200	0	0	1	2	1	5	20	14	34	39	45	43	27	15	5	1	0	0	0	0	0	0	0	0	0	0	0	0
1300	0	0	1	1	0	2	8	16	56	71	95	50	13	9	1	1	1	0	1	0	0	0	0	0	0	0	0	0
1400	0	0	6	5	7	11	7	26	55	53	41	42	28	7	0	1	1	0	0	0	0	0	0	0	0	0	0	0
1500	0	0	1	2	1	1	1	7	30	60	78	58	30	16	8	1	1	0	0	0	0	0	0	0	0	0	0	0
1600	0	0	0	2	0	5	8	16	47	85	74	52	24	11	7	2	0	0	0	0	0	0	0	0	0	0	0	0
1700	**0**	**0**	**1**	**0**	**0**	**3**	**2**	**12**	**55**	**83**	**80**	**58**	**37**	**11**	**6**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
1800	0	0	0	0	0	11	12	13	40	88	87	41	11	6	1	0	0	1	0	0	0	0	0	0	0	0	0	0
1900	0	0	0	0	0	1	7	10	40	66	105	44	28	9	5	2	0	0	0	0	0	0	0	0	0	0	0	0
2000	0	0	0	0	0	0	5	6	13	48	50	31	22	4	8	1	1	1	0	0	0	0	0	0	0	0	0	0
2100	0	0	0	0	0	2	3	3	16	15	27	19	14	6	2	1	1	0	0	0	0	0	0	0	0	0	0	0
2200	0	0	0	0	0	0	2	0	0	12	12	13	7	6	1	1	1	0	0	0	0	0	0	0	0	0	0	0
2300	0	0	0	0	0	0	0	0	0	2	6	4	2	1	2	1	0	1	0	0	0	0	0	0	0	0	0	0
07-19	**0**	**1**	**21**	**29**	**38**	**59**	**76**	**153**	**425**	**667**	**753**	**563**	**312**	**117**	**44**	**10**	**9**	**2**	**2**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
06-22	**0**	**1**	**21**	**29**	**38**	**62**	**91**	**174**	**495**	**801**	**941**	**666**	**380**	**139**	**67**	**15**	**12**	**3**	**2**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
06-00	**0**	**1**	**21**	**29**	**38**	**62**	**93**	**174**	**495**	**815**	**959**	**683**	**389**	**146**	**70**	**17**	**13**	**4**	**2**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
00-00	**0**	**1**	**21**	**29**	**39**	**62**	**93**	**174**	**496**	**818**	**964**	**689**	**393**	**151**	**70**	**19**	**13**	**5**	**2**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**

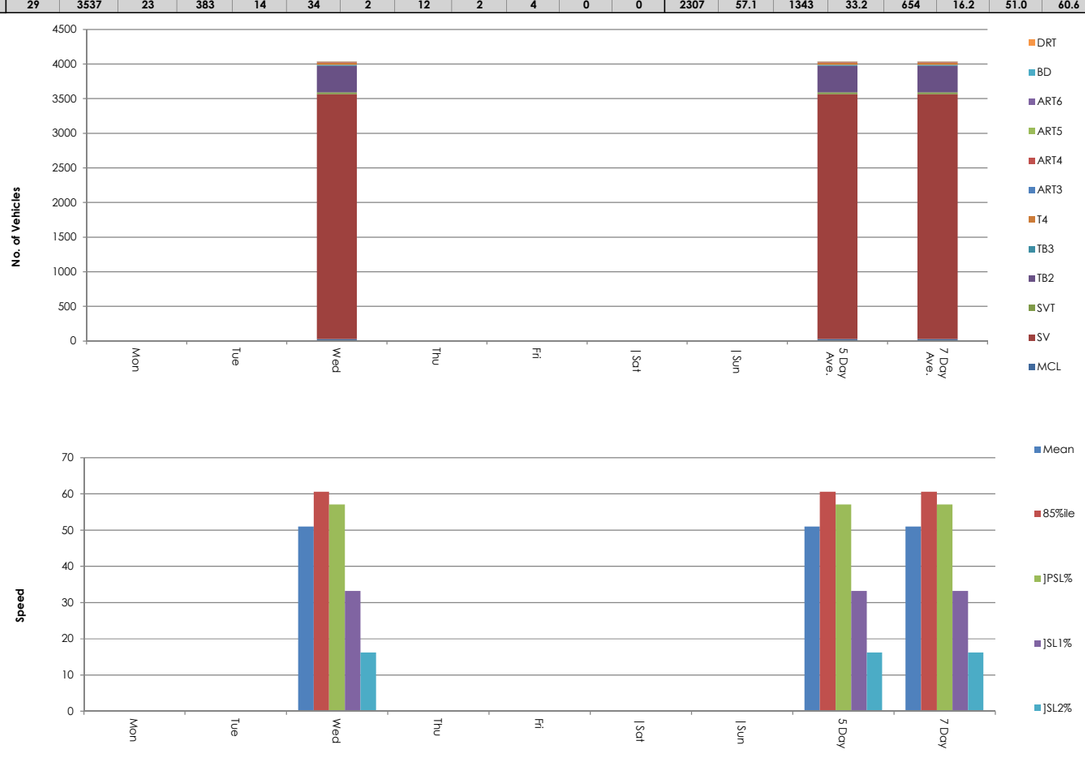
Virtual Week (1)

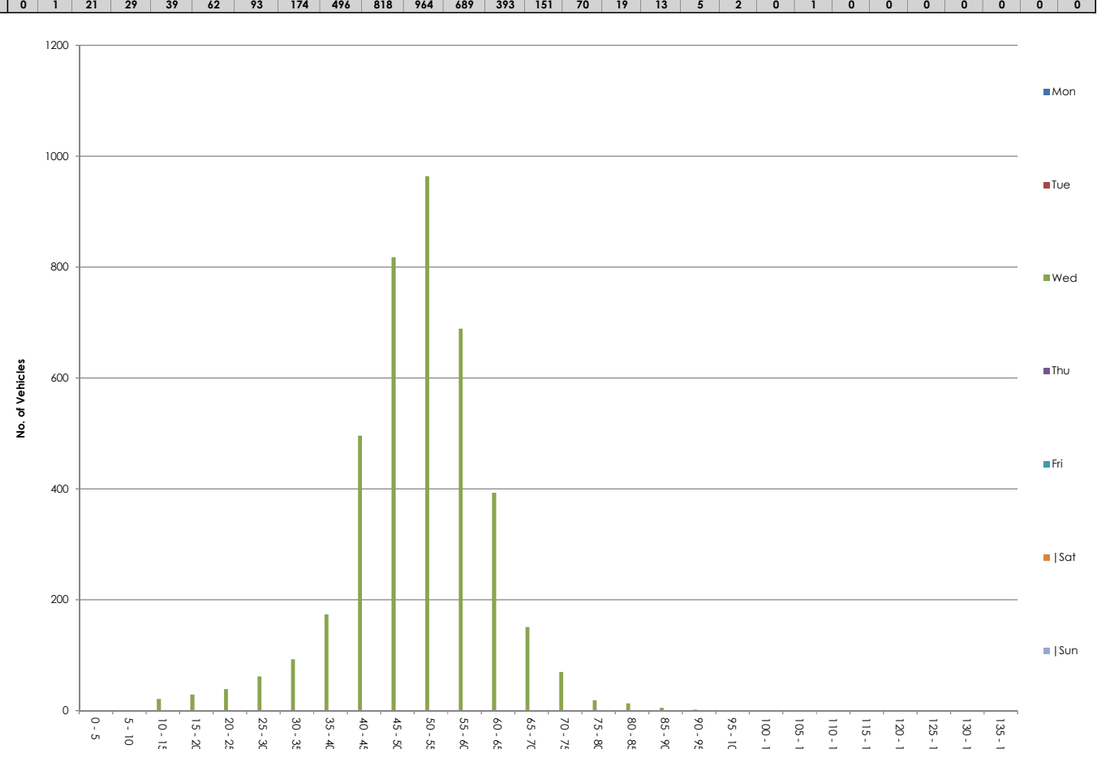
Time	Total	Classification												JPSL	JPSL%	JSL1	JSL1%	JSL2	JSL2%	Mean	Vpp
		1 MCL	2 SV	3 SVT	4 TB2	5 TB3	6 T4	7 ART3	8 ART4	9 ART5	10 ART6	11 BD	12 DRT	50	50	55 +5kph	55 +5kph	60 +10kph	60 +10kph		85
Mon	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0	0	0.0	0	0.0	-	-
Tue	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0	0	0.0	0	0.0	-	-
Wed	4040	29	3537	23	383	14	34	2	12	2	4	0	0	2307	57.1	1343	33.2	654	16.2	51	60.6
Thu	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0	0	0.0	0	0.0	-	-
Fri	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0	0	0.0	0	0.0	-	-
JSat	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0	0	0.0	0	0.0	-	-
JSun	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0	0	0.0	0	0.0	-	-
5 Day Ave.	**4040**	**29**	**3537**	**23**	**383**	**14**	**34**	**2**	**12**	**2**	**4**	**0**	**0**	**2307**	**57.1**	**1343**	**33.2**	**654**	**16.2**	**51.0**	**60.6**
7 Day Ave.	**4040**	**29**	**3537**	**23**	**383**	**14**	**34**	**2**	**12**	**2**	**4**	**0**	**0**	**2307**	**57.1**	**1343**	**33.2**	**654**	**16.2**	**51.0**	**60.6**
--	**4040**	**29**	**3537**	**23**	**383**	**14**	**34**	**2**	**12**	**2**	**4**	**0**	**0**	**2307**	**57.1**	**1343**	**33.2**	**654**	**16.2**	**51.0**	**60.6**

Virtual Week (1)

Time	Speed Bins (km/h)																																							
	0 - 5	5 - 10	10 - 15	15 - 20	20 - 25	25 - 30	30 - 35	35 - 40	40 - 45	45 - 50	50 - 55	55 - 60	60 - 65	65 - 70	70 - 75	75 - 80	80 - 85	85 - 90	90 - 95	95 - 100	100 - 105	105 - 110	110 - 115	115 - 120	120 - 125	125 - 130	130 - 135	135 - 140
Mon	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Tue	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Wed	0	1	21	29	39	62	93	174	496	818	964	689	393	151	70	19	13	5	2	0	1	0	0	0	0	0	0	0
Thu	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Fri	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
JSat	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
JSun	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5 Day Ave.	**0**	**1**	**21**	**29**	**39**	**62**	**93**	**174**	**496**	**818**	**964**	**689**	**393**	**151**	**70**	**19**	**13**	**5**	**2**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
7 Day Ave.	**0**	**1**	**21**	**29**	**39**	**62**	**93**	**174**	**496**	**818**	**964**	**689**	**393**	**151**	**70**	**19**	**13**	**5**	**2**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
--	**0**	**1**	**21**	**29**	**39**	**62**	**93**	**174**	**496**	**818**	**964**	**689**	**393**	**151**	**70**	**19**	**13**	**5**	**2**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**

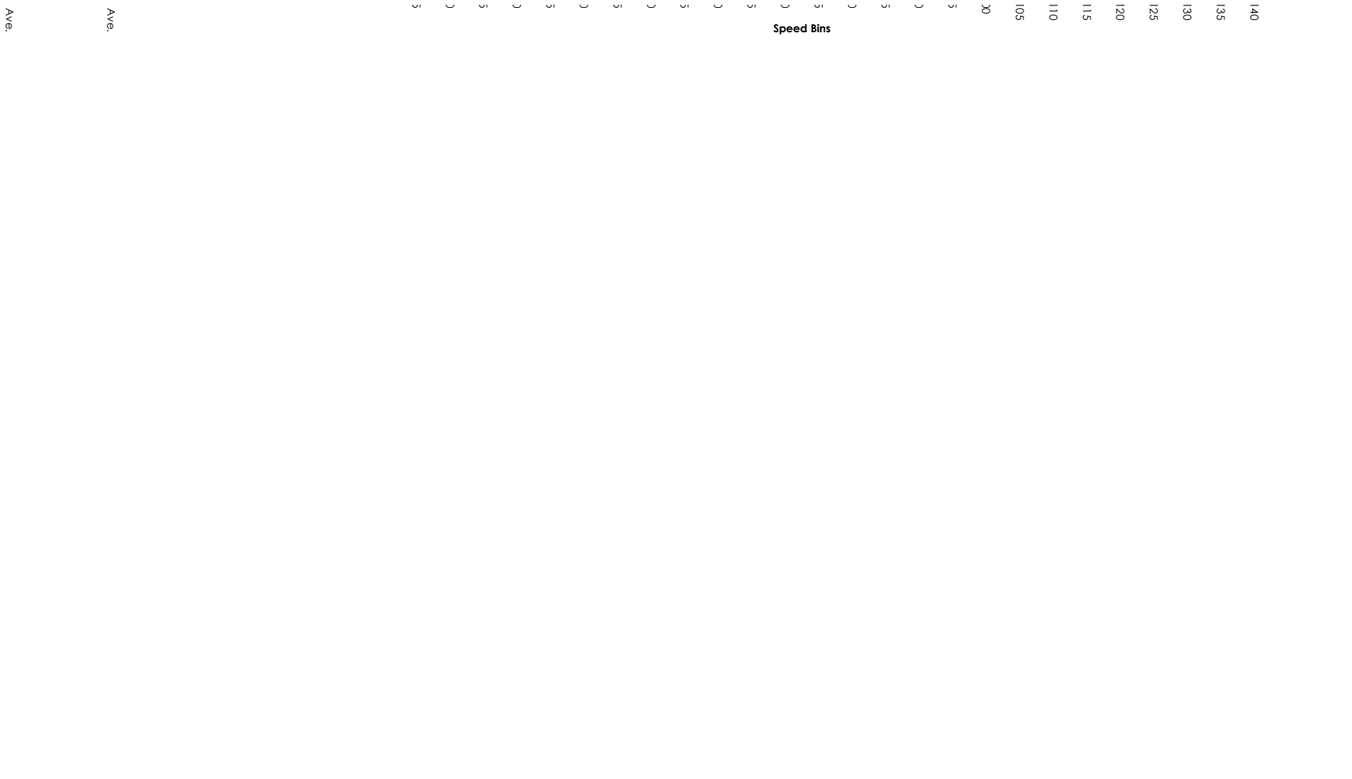
Summary Graphs





Site	1
Location	Glenamuck Rd, 50 metres North of Rockville Ave access
Direction	Westbound

12241 / Kilternan
November 2021
Automatic Traffic Count
1
Glenamuck Rd, 50 metres North of Rockville Ave access
Westbound



12241 / Kilternan
November 2021
Automatic Traffic Count

Site 1
Location Glenamuck Rd, 50 metres North of Rockville Ave access
Direction Eastbound / Westbound
10 November 2021

12241 / Kilternan 1
November 2021 Glenamuck Rd, 50 metres North of Rockville Ave access
Automatic Traffic Count Eastbound / Westbound
10 November 2021

12241 / Kilternan
November 2021
Automatic Traffic Count

| Time | Total | Classification | | | | | | | | | | | | JPSL | JPSL% | JSL1 | JSL1% | JSL2 | JSL2% | Mean | Vpp | Speed Bins (km/h) | | | | | | | | | | | |

| | | |

Site 1
Location Glenamuck Rd, 50 metres North of Rockville Ave access
Direction Eastbound / Westbound

12241 / Kilternan
November 2021
Automatic Traffic Count

1
Glenamuck Rd, 50 metres North of Rockville Ave access
Eastbound / Westbound

12241 / Kilternan
November 2021
Automatic Traffic Count

Virtual Day (1)

Time	Total	Classification												JPSL	JPSL%	JSL1	JSL1%	JSL2	JSL2%	Mean	Vpp
		1 MCL	2 SV	3 SVT	4 TB2	5 TB3	6 T4	7 ART3	8 ART4	9 ART5	10 ART6	11 BD	12 DRT	50	50	55 +5kph	55 +5kph	60 +10kph	60 +10kph		85
0000	20	0	17	0	3	0	0	0	0	0	0	0	0	15	75.0	13	65.0	5	25.0	55.6	66.1
0100	3	0	2	0	1	0	0	0	0	0	0	0	0	2	66.7	2	66.7	2	66.7	52.4	-
0200	4	0	3	0	1	0	0	0	0	0	0	0	0	4	100.0	2	50.0	1	25.0	56.1	-
0300	7	0	5	0	2	0	0	0	0	0	0	0	0	7	100.0	5	71.4	5	71.4	66.4	-
0400	7	0	7	0	0	0	0	0	0	0	0	0	0	6	85.7	6	85.7	6	85.7	66.5	-
0500	26	0	21	0	5	0	0	0	0	0	0	0	0	24	92.3	19	73.1	18	69.2	65.2	75.7
0600	119	1	88	0	26	2	0	0	0	2	0	0	0	103	86.6	85	71.4	59	49.6	60.3	71.1
0700	453	7	356	3	71	2	8	1	3	2	0	0	0	293	64.7	213	47.0	123	27.2	52.8	63.7
0800	**707**	**3**	**645**	**4**	**42**	**4**	**4**	**0**	**3**	**0**	**2**	**0**	**0**	**437**	**61.8**	**268**	**37.9**	**126**	**17.8**	**51.6**	**60.7**
0900	472	3	409	3	49	2	4	0	1	0	1	0	0	322	68.2	196	41.5	107	22.7	52.7	62.3
1000	404	3	324	4	65	2	6	0	0	0	0	0	0	298	73.8	197	48.8	91	22.5	54.3	62.8
1100	414	3	345	3	49	1	8	0	3	0	2	0	0	254	61.4	164	39.6	89	21.5	52.1	61.4
1200	536	2	466	3	53	0	4	0	4	0	4	0	0	321	59.9	208	38.8	108	20.2	51.7	62.1
1300	606	6	531	4	56	2	6	0	1	0	0	0	0	366	60.4	196	32.3	80	13.2	51.9	59.3
1400	**621**	**3**	**542**	**6**	**52**	**2**	**12**	**0**	**4**	**0**	**0**	**0**	**0**	**325**	**52.3**	**190**	**30.6**	**87**	**14.0**	**49.4**	**59.8**
1500	579	6	506	3	59	1	3	0	0	1	0	0	0	394	68.1	248	42.8	130	22.5	53.6	63
1600	615	4	545	0	62	2	0	1	0	1	0	0	0	364	59.2	217	35.3	98	15.9	52	60.3
1700	578	6	526	3	40	3	0	0	0	0	0	0	0	326	56.4	194	33.6	93	16.1	51.9	60.3
1800	556	4	509	4	37	0	0	1	1	0	0	0	0	308	55.4	158	28.4	68	12.2	50.9	58.7
1900	549	2	517	1	26	1	1	1	0	0	0	0	0	339	61.8	174	31.7	81	14.8	52.2	60
2000	367	3	347	2	15	0	0	0	0	0	0	0	0	236	64.3	136	37.1	70	19.1	53.2	61.5
2100	213	2	196	0	13	0	0	0	2	0	0	0	0	157	73.7	108	50.7	63	29.6	55.1	64.9
2200	119	0	106	0	13	0	0	0	0	0	0	0	0	95	79.8	72	60.5	45	37.8	57.7	67.3
2300	32	1	29	0	2	0	0	0	0	0	0	0	0	29	90.6	21	65.6	15	46.9	60.2	71.7
07-19	**6541**	**50**	**5704**	**40**	**635**	**21**	**55**	**3**	**20**	**4**	**9**	**0**	**0**	**4008**	**61.3**	**2449**	**37.4**	**1200**	**18.4**	**52**	**61.1**
06-22	**7789**	**58**	**6852**	**43**	**715**	**24**	**56**	**4**	**22**	**6**	**9**	**0**	**0**	**4843**	**62.2**	**2952**	**37.9**	**1473**	**18.9**	**52.3**	**61.3**
06-00	**7940**	**59**	**6987**	**43**	**730**	**24**	**56**	**4**	**22**	**6**	**9**	**0**	**0**	**4967**	**62.6**	**3045**	**38.4**	**1533**	**19.3**	**52.4**	**61.5**
00-00	**8007**	**59**	**7042**	**43**	**742**	**24**	**56**	**4**	**22**	**6**	**9**	**0**	**0**	**5025**	**62.8**	**3092**	**38.6**	**1570**	**19.6**	**52.5**	**61.6**

Virtual Day (1)

Time	Speed Bins (km/h)																																										
	0 - 5	5 - 10	10 - 15	15 - 20	20 - 25	25 - 30	30 - 35	35 - 40	40 - 45	45 - 50	50 - 55	55 - 60	60 - 65	65 - 70	70 - 75	75 - 80	80 - 85	85 - 90	90 - 95	95 - 100	100 - 105	105 - 110	110 - 115	115 - 120	120 - 125	125 - 130	130 - 135	135 - 140
0000	0	0	0	0	1	0	0	0	1	3	2	8	2	2	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
0100	0	0	0	0	0	0	1	0	0	0	0	0	1	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
0200	0	0	0	0	0	0	0	0	0	0	2	1	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
0300	0	0	0	0	0	0	0	0	0	0	2	0	1	2	0	1	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
0400	0	0	0	0	0	0	0	0	0	1	0	0	1	2	1	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
0500	0	0	0	0	0	0	0	0	0	1	1	5	1	6	3	5	2	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0600	0	0	0	0	0	0	0	4	2	10	18	26	20	18	17	2	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
0700	0	0	1	8	12	12	4	21	37	65	80	90	72	29	9	6	3	2	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0800	**0**	**1**	**4**	**3**	**11**	**4**	**25**	**26**	**50**	**146**	**169**	**142**	**82**	**27**	**11**	**5**	**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**
0900	0	0	5	4	2	7	9	16	45	62	126	89	60	32	8	3	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
1000	0	0	1	1	2	4	9	10	25	54	101	106	54	24	6	4	1	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1100	0	0	0	2	5	5	5	22	48	73	90	75	55	20	12	0	1	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
1200	0	0	1	2	4	10	22	24	62	90	113	100	67	23	15	1	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
1300	0	0	1	1	0	2	9	21	76	130	170	116	45	20	9	3	2	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
1400	**0**	**0**	**8**	**6**	**7**	**19**	**14**	**46**	**87**	**109**	**135**	**103**	**52**	**27**	**3**	**4**	**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**
1500	0	0	1	2	2	1	9	21	51	98	146	118	69	40	16	4	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
1600	0	0	0	2	1	5	12	20	70	141	147	119	58	25	11	3	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
1700	0	0	1	0	0	4	8	16	77	146	132	101	58	22	11	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
1800	0	0	0	0	0	11	13	28	69	127	150	90	36	21	8	1	1	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
1900	0	0	0	0	0	1	8	13	67	121	165	93	53	17	8	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
2000	0	1	0	0	0	1	7	10	22	90	100	66	41	15	11	1	1	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
2100	0	0	0	0	0	5	4	3	17	27	49	45	33	16	9	2	2	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
2200	0	0	0	0	0	0	3	0	4	17	23	27	20	15	5	2	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
2300	0	0	0	0	0	0	0	0	1	2	8	6	7	2	4	1	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
07-19	**0**	**1**	**23**	**31**	**46**	**84**	**139**	**271**	**697**	**1241**	**1559**	**1249**	**708**	**310**	**119**	**36**	**17**	**5**	**4**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
06-22	**0**	**2**	**23**	**31**	**46**	**91**	**158**	**301**	**805**	**1489**	**1891**	**1479**	**855**	**376**	**164**	**44**	**22**	**7**	**4**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
06-00	**0**	**2**	**23**	**31**	**46**	**91**	**161**	**301**	**810**	**1508**	**1922**	**1512**	**882**	**393**	**173**	**47**	**25**	**8**	**4**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
00-00	**0**	**2**	**23**	**31**	**47**	**92**	**161**	**301**	**812**	**1513**	**1933**	**1522**	**894**	**403**	**179**	**52**	**26**	**10**	**5**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**

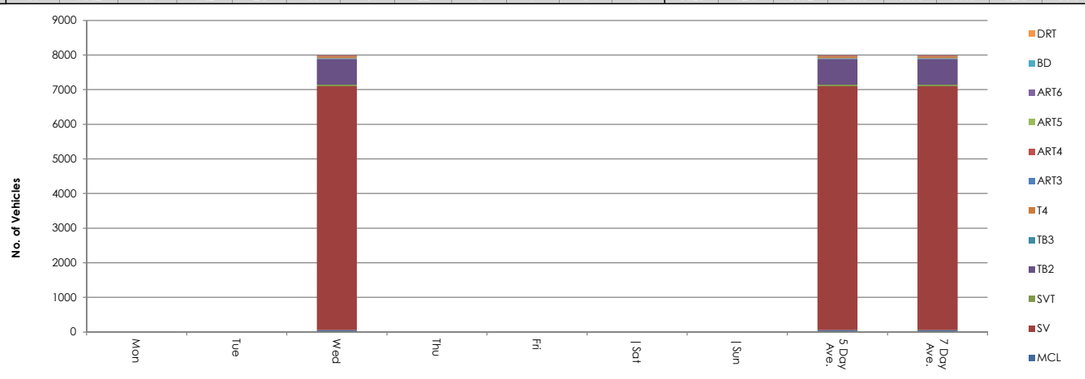
Virtual Week (1)

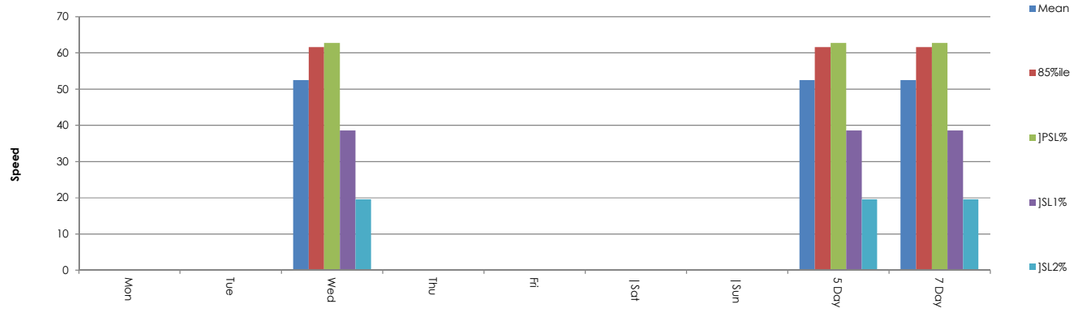
Time	Total	Classification												JPSL	JPSL%	JSL1	JSL1%	JSL2	JSL2%	Mean	Vpp
		1 MCL	2 SV	3 SVT	4 TB2	5 TB3	6 T4	7 ART3	8 ART4	9 ART5	10 ART6	11 BD	12 DRT	50	50	55 +5kph	55 +5kph	60 +10kph	60 +10kph		85
Mon	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0	0	0.0	0	0.0	-	-
Tue	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0	0	0.0	0	0.0	-	-
Wed	8007	59	7042	43	742	24	56	4	22	6	9	0	0	5025	62.8	3092	38.6	1570	19.6	52.5	61.6
Thu	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0	0	0.0	0	0.0	-	-
Fri	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0	0	0.0	0	0.0	-	-
JSat	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0	0	0.0	0	0.0	-	-
JSun	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0	0	0.0	0	0.0	-	-
5 Day Ave.	**8007**	**59**	**7042**	**43**	**742**	**24**	**56**	**4**	**22**	**6**	**9**	**0**	**0**	**5025**	**62.8**	**3092**	**38.6**	**1570**	**19.6**	**52.5**	**61.6**
7 Day Ave.	**8007**	**59**	**7042**	**43**	**742**	**24**	**56**	**4**	**22**	**6**	**9**	**0**	**0**	**5025**	**62.8**	**3092**	**38.6**	**1570**	**19.6**	**52.5**	**61.6**
--	**8007**	**59**	**7042**	**43**	**742**	**24**	**56**	**4**	**22**	**6**	**9**	**0**	**0**	**5025**	**62.8**	**3092**	**38.6**	**1570**	**19.6**	**52.5**	**61.6**

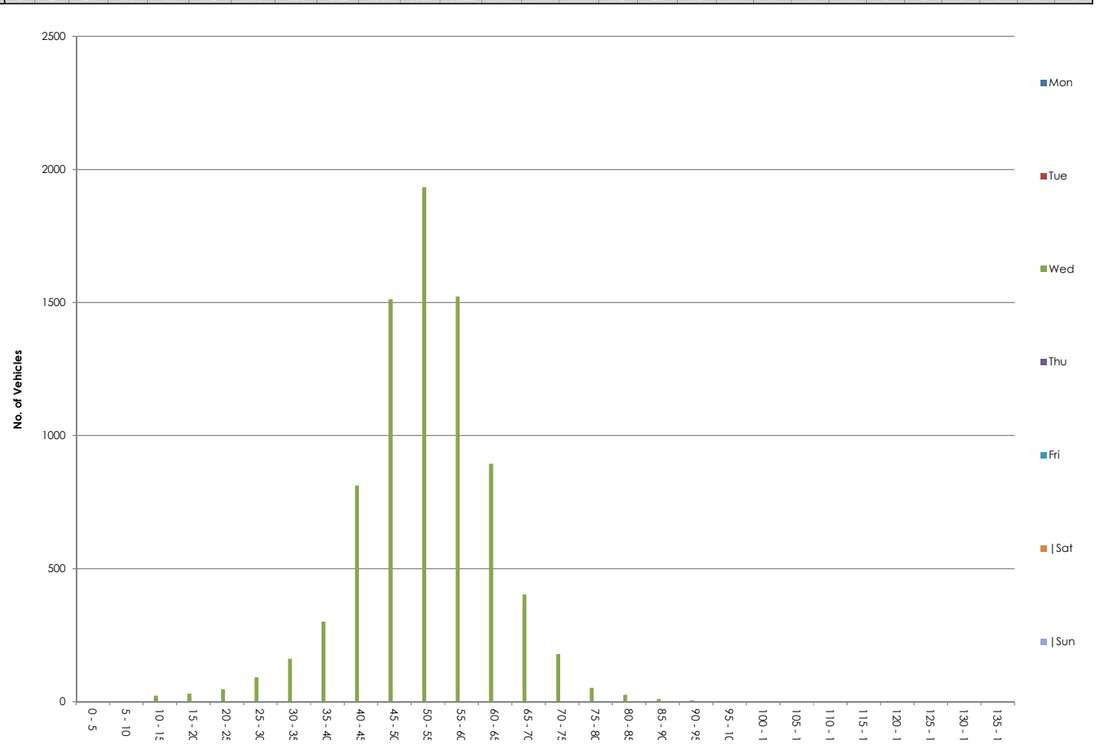
Virtual Week (1)

Time	Speed Bins (km/h)																																									
	0 - 5	5 - 10	10 - 15	15 - 20	20 - 25	25 - 30	30 - 35	35 - 40	40 - 45	45 - 50	50 - 55	55 - 60	60 - 65	65 - 70	70 - 75	75 - 80	80 - 85	85 - 90	90 - 95	95 - 100	100 - 105	105 - 110	110 - 115	115 - 120	120 - 125	125 - 130	130 - 135	135 - 140
Mon	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Tue	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Wed	0	2	23	31	47	92	161	301	812	1513	1933	1522	894	403	179	52	26	10	5	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Thu	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Fri	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
JSat	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
JSun	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5 Day Ave.	**0**	**2**	**23**	**31**	**47**	**92**	**161**	**301**	**812**	**1513**	**1933**	**1522**	**894**	**403**	**179**	**52**	**26**	**10**	**5**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
7 Day Ave.	**0**	**2**	**23**	**31**	**47**	**92**	**161**	**301**	**812**	**1513**	**1933**	**1522**	**894**	**403**	**179**	**52**	**26**	**10**	**5**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
--	**0**	**2**	**23**	**31**	**47**	**92**	**161**	**301**	**812**	**1513**	**1933**	**1522**	**894**	**403**	**179**	**52**	**26**	**10**	**5**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**

Summary Graphs







Site	1
Location	Glenamuck Rd, 50 metres North of Rockville Ave access
Direction	Eastbound / Westbound

12241 / Kilternan
November 2021
Automatic Traffic Count

12241 / Kilternan
November 2021
Automatic Traffic Count


N
ATC2
Ballycorus Rd
Granby Motor Sport
Google Earth

Site No.	Location.	Direction.	Speed Limit - PSL (km/h)	Start Date.	End Date.	Total Vehicles.	5 Day Ave.	7 Day Ave.	No. > Speed Limit.	%. > Speed Limit.	No. > Speed Limit1 (+5km/h).	%. > Speed Limit1 (+5km/h).	No. > Speed Limit1 (+10km/h).	%. > Speed Limit1 (+10km/h).	Mean Speed	85%ile Speed
2	Ballycorus Rd, 120 metres West of Granby Motor Sport mechanics	Eastbound	50	10 November 2021		1468	1468	1468	1268	86.4	1089	74.2	809	55.1	61.0	71.4
		Westbound	50	10 November 2021		1334	1334	1334	1068	80.1	852	0.0	601	45.1	57.5	68.6
		Eastbound / Westbound	50	10 November 2021		2802	2802	2802	2336	83.4	1941	69.3	1410	50.3	59.4	70.6

Site 2
Location Ballycorus Rd, 120 metres West of Granby Motor Sport mechanics
Direction Eastbound
10 November 2021

12241 / Kilternan 2
November 2021 Ballycorus Rd, 120 metres West of Granby Motor Sport mechanics
Automatic Traffic Count Eastbound
10 November 2021

12241 / Kilternan
November 2021
Automatic Traffic Count

| Time | Total | Classification | | | | | | | | | | | | JPSL | JPSL% | JSL1 | JSL1% | JSL2 | JSL2% | Mean | Vpp | Speed Bins (km/h) | | | | | | | | | | | |

Site	2														**12241 / Kilternan**	2																											**12241 / Kilternan**
Location	Ballycorus Rd, 120 metres West of Granby Motor Sport mechanics														**November 2021**	Ballycorus Rd, 120 metres West of Granby Motor Sport mechanics																											**November 2021**
Direction	Eastbound														**Automatic Traffic Count**	Eastbound																											**Automatic Traffic Count**
06-00	**1460**	**56**	**1262**	**8**	**111**	**4**	**18**	**1**	**0**	**0**	**0**	**0**	**0**	**1260**	**86.3**	**1083**	**74.2**	**805**	**55.1**	**61**	**71.4**	**0**	**0**	**1**	**1**	**8**	**11**	**10**	**24**	**42**	**103**	**177**	**278**	**317**	**208**	**151**	**79**	**25**	**13**	**6**	**3**	**3**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
00-00	**1468**	**56**	**1269**	**8**	**112**	**4**	**18**	**1**	**0**	**0**	**0**	**0**	**0**	**1268**	**86.4**	**1089**	**74.2**	**809**	**55.1**	**61**	**71.4**	**0**	**0**	**1**	**1**	**8**	**11**	**10**	**24**	**42**	**103**	**179**	**280**	**318**	**208**	**151**	**80**	**25**	**14**	**6**	**3**	**3**	**0**	**0**	**1**	**0**	**0**	**0**	**0**

Site 2
Location Ballycorus Rd, 120 metres West of Granby Motor Sport mechanics
Direction Eastbound

12241 / Kilternan 2
November 2021 Ballycorus Rd, 120 metres West of Granby Motor Sport mechanics
Automatic Traffic Count Eastbound

12241 / Kilternan
November 2021
Automatic Traffic Count

Virtual Day (1)

| Time | Total | Classification | | | | | | | | | | | | JPSL | JPSL% | JSL1 | JSL1% | JSL2 | JSL2% | Mean | Vpp | Speed Bins (km/h) | | | | | | | | | | | |

Site 2
Location Ballycorus Rd, 120 metres West of Granby Motor Sport mechanics
Direction Eastbound

12241 / Kilternan
November 2021
Automatic Traffic Count

12241 / Kilternan
November 2021
Automatic Traffic Count

Site 2
Location Ballycorus Rd, 120 metres West of Granby Motor Sport mechanics
Direction Westbound
10 November 2021

12241 / Kilternan 2
November 2021 Ballycorus Rd, 120 metres West of Granby Motor Sport mechanics
Automatic Traffic Count Westbound
10 November 2021

12241 / Kilternan
November 2021
Automatic Traffic Count

| Time | Total | Classification | | | | | | | | | | | | JPSL | JPSL% | JSL1 | JSL1% | JSL2 | JSL2% | Mean | Vpp | Speed Bins (km/h) | | | | | | | | | | | |

Site 2 **12241 / Kilternan** 2 **12241 / Kilternan**
Location Ballycorus Rd, 120 metres West of Granby Motor Sport mechanics **November 2021** Ballycorus Rd, 120 metres West of Granby Motor Sport mechanics **November 2021**
Direction Westbound **Automatic Traffic Count** Westbound **Automatic Traffic Count**

| | | |

Site 2
Location Ballycorus Rd, 120 metres West of Granby Motor Sport mechanics
Direction Westbound

12241 / Kilternan
November 2021
Automatic Traffic Count

2
Ballycorus Rd, 120 metres West of Granby Motor Sport mechanics
Westbound

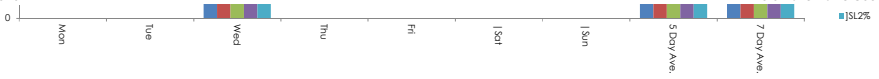
12241 / Kilternan
November 2021
Automatic Traffic Count

Virtual Day (1)

| Time | Total | Classification | | | | | | | | | | | | JPSL | JPSL% | JSL1 | JSL1% | JSL2 | JSL2% | Mean | Vpp | Speed Bins (km/h) | | | | | | | | | | | |

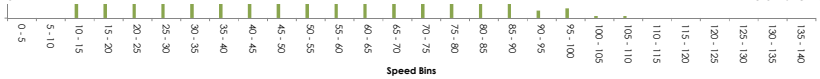
Site 2
Location Ballycorus Rd, 120 metres West of Granby Motor Sport mechanics
Direction Westbound

12241 / Kilternan
November 2021
Automatic Traffic Count



Site 2
Location Ballycorus Rd, 120 metres West of Granby Motor Sport mechanics
Direction Westbound

12241 / Kilternan
November 2021
Automatic Traffic Count



Site 2
Location Ballycorus Rd, 120 metres West of Granby Motor Sport mechanics
Direction Eastbound / Westbound
10 November 2021

12241 / Kilternan 2
November 2021 Ballycorus Rd, 120 metres West of Granby Motor Sport mechanics
Automatic Traffic Count Eastbound / Westbound
10 November 2021

12241 / Kilternan
November 2021
Automatic Traffic Count

| Time | Total | Classification | | | | | | | | | | | | JPSL | JPSL% | JSL1 | JSL1% | JSL2 | JSL2% | Mean | Vpp | Speed Bins (km/h) | | | | | | | | | | | |

Site 2 **12241 / Kilternan** 2 **12241 / Kilternan**
Location Ballycorus Rd, 120 metres West of Granby Motor Sport mechanics **November 2021** Ballycorus Rd, 120 metres West of Granby Motor Sport mechanics **November 2021**
Direction Eastbound / Westbound **Automatic Traffic Count** Eastbound / Westbound **Automatic Traffic Count**

| | | |

Site 2
Location Ballycorus Rd, 120 metres West of Granby Motor Sport mechanics
Direction Eastbound / Westbound

12241 / Kilternan
November 2021
Automatic Traffic Count

2
Ballycorus Rd, 120 metres West of Granby Motor Sport mechanics
Eastbound / Westbound

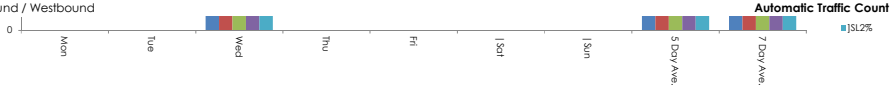
12241 / Kilternan
November 2021
Automatic Traffic Count

Virtual Day (1)

| Time | Total | Classification | | | | | | | | | | | | JPSL 50 | JPSL% 50 | JSL1 55 +5kph | JSL1% 55 +5kph | JSL2 60 +10kph | JSL2% 60 +10kph | Mean | Vpp 85 | Speed Bins (km/h) | | | | | | | | | | | |

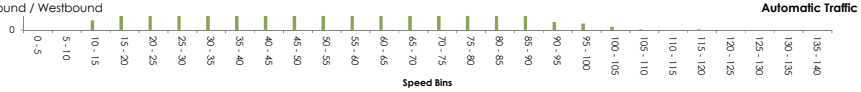
Site 2
Location Ballycorus Rd, 120 metres West of Granby Motor Sport mechanics
Direction Eastbound / Westbound

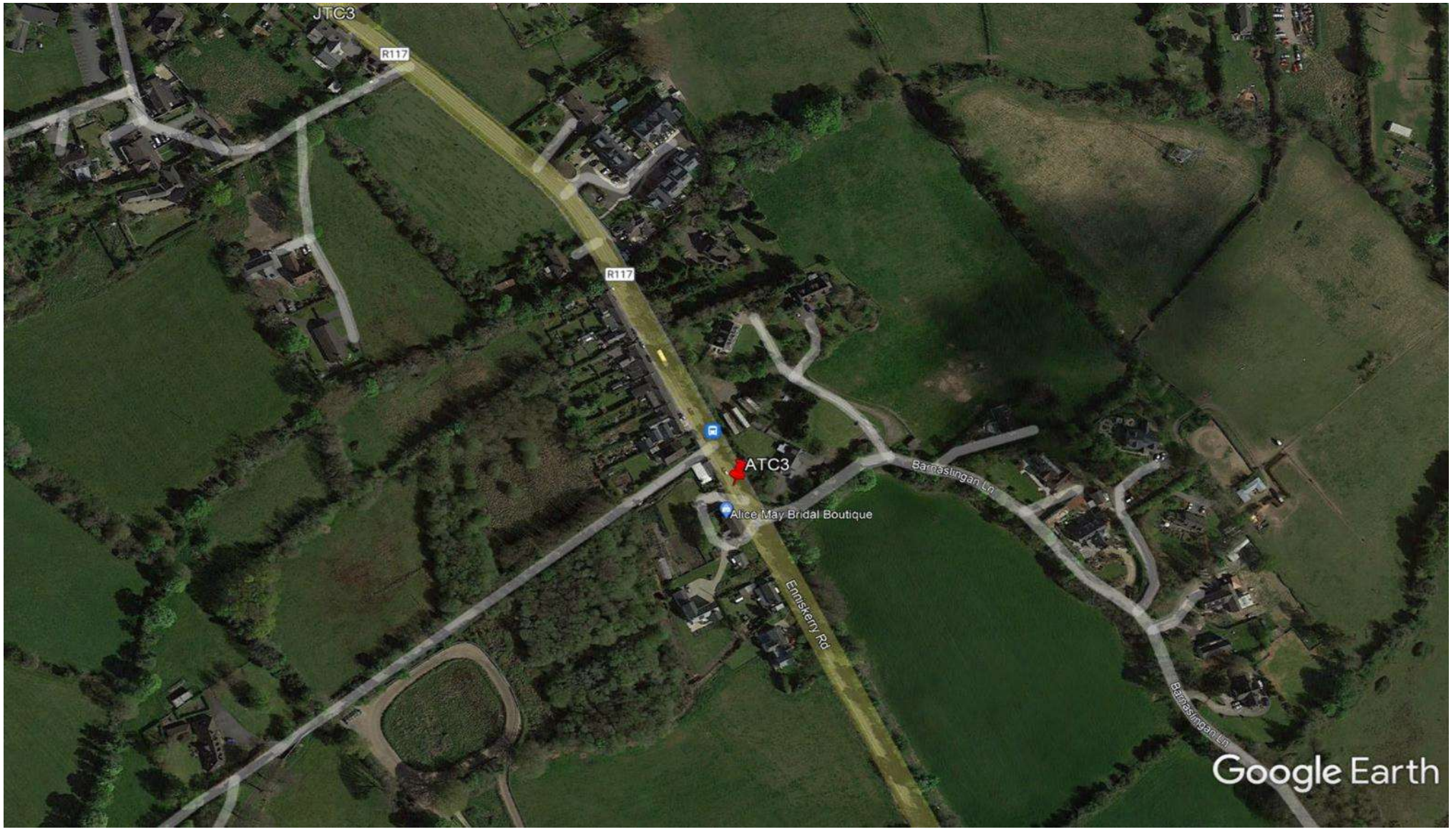
12241 / Kilternan
November 2021
Automatic Traffic Count



Site 2
Location Ballycorus Rd, 120 metres West of Granby Motor Sport mechanics
Direction Eastbound / Westbound

12241 / Kilternan
November 2021
Automatic Traffic Count




N
JTC3
R117
R117
ATC3
Alice May Bridal Boutique
Barnaslingan Ln
Enniskerry Rd
Barnaslingan Ln
Google Earth

Site No.	Location.	Direction.	Speed Limit - PSL (km/h)	Start Date.	End Date.	Total Vehicles.	5 Day Ave.	7 Day Ave.	No. > Speed Limit.	%. > Speed Limit.	No. > Speed Limit1 (+5km/h).	%. > Speed Limit1 (+5km/h).	No. > Speed Limit1 (+10km/h).	%. > Speed Limit1 (+10km/h).	Mean Speed	85%ile Speed
3	Enniskerry Rd, 20 metres North of Barnaslingan Ln access	Northbound	50	10 November 2021		2279	2279	2279	1670	73.3	1291	56.7	849	37.3	55.7	68.9
		Southbound	50	10 November 2021		2792	2792	2792	1935	69.3	1379	0.0	814	29.2	53.6	65.3
		Northbound / Southbound	50	10 November 2021		5071	5071	5071	3605	71.1	2670	52.7	1663	32.8	54.5	67.0

Site 3
Location Enniskerry Rd, 20 metres North of Barnaslingan Ln access
Direction Northbound
10 November 2021

12241 / Kilternan 3
November 2021 Enniskerry Rd, 20 metres North of Barnaslingan Ln access
Automatic Traffic Count Northbound
10 November 2021

12241 / Kilternan
November 2021
Automatic Traffic Count

| Time | Total | Classification | | | | | | | | | | | | JPSL | JPSL% | JSL1 | JSL1% | JSL2 | JSL2% | Mean | Vpp | Speed Bins (km/h) | | | | | | | | | | | |

| Site | 3 | | |

Site 3
Location Enniskerry Rd, 20 metres North of Barnaslingan Ln access
Direction Northbound

12241 / Kilternan 3
November 2021 Enniskerry Rd, 20 metres North of Barnaslingan Ln access
Automatic Traffic Count Northbound

12241 / Kilternan
November 2021
Automatic Traffic Count

Virtual Day (1)

| Time | Total | Classification | | | | | | | | | | | |]PSL 50 |]PSL% 50 |]SL1 55 +5kph |]SL1% 55 +5kph |]SL2 60 +10kph |]SL2% 60 +10kph | Mean | Vpp 85 | Speed Bins (km/h) | | | | | | | | | | | |

Site	3
Location	Enniskerry Rd, 20 metres North of Barnaslingan Ln access
Direction	Northbound

12241 / Kilternan
November 2021
Automatic Traffic Count

Ave.

Ave.

5 10 15 20 25 30 35 40 45 50 55 60 65 70 75 80 85 90 95 100 105 110 115 120 125 130 135 140

Speed Bins

Site 3
Location Enniskerry Rd, 20 metres North of Barnaslingan Ln access
Direction Southbound
10 November 2021

12241 / Kilternan 3
November 2021 Enniskerry Rd, 20 metres North of Barnaslingan Ln access
Automatic Traffic Count Southbound
10 November 2021

12241 / Kilternan
November 2021
Automatic Traffic Count

| Time | Total | Classification | | | | | | | | | | | | JPSL | JPSL% | JSL1 | JSL1% | JSL2 | JSL2% | Mean | Vpp | Speed Bins (km/h) | | | | | | | | | | | |

| | | |

Site 3
Location Enniskerry Rd, 20 metres North of Barnaslingan Ln access
Direction Southbound

12241 / Kilternan 3
November 2021 Enniskerry Rd, 20 metres North of Barnaslingan Ln access
Automatic Traffic Count Southbound

12241 / Kilternan
November 2021
Automatic Traffic Count

Virtual Day (1)

Time	Total	Classification												JPSL	JPSL%	JSL1	JSL1%	JSL2	JSL2%	Mean	Vpp
		1 MCL	2 SV	3 SVT	4 TB2	5 TB3	6 T4	7 ART3	8 ART4	9 ART5	10 ART6	11 BD	12 DRT	50	50	55 +5kph	55 +5kph	60 +10kph	60 +10kph		85
0000	9	2	6	0	1	0	0	0	0	0	0	0	0	7	77.8	7	77.8	6	66.7	60.2	-
0100	3	0	3	0	0	0	0	0	0	0	0	0	0	3	100.0	2	66.7	1	33.3	62.1	-
0200	2	0	2	0	0	0	0	0	0	0	0	0	0	2	100.0	2	100.0	1	50.0	58.8	-
0300	2	0	1	0	1	0	0	0	0	0	0	0	0	1	50.0	1	50.0	1	50.0	45.5	-
0400	3	0	3	0	0	0	0	0	0	0	0	0	0	2	66.7	2	66.7	2	66.7	54.2	-
0500	3	0	2	0	1	0	0	0	0	0	0	0	0	3	100.0	2	66.7	2	66.7	74.6	-
0600	22	1	15	0	5	1	0	0	0	0	0	0	0	21	95.5	18	81.8	16	72.7	64.6	76.8
0700	124	4	98	0	20	1	1	0	0	0	0	0	0	103	83.1	83	66.9	59	47.6	59.1	70
0800	161	3	140	1	14	0	2	0	1	0	0	0	0	123	76.4	90	55.9	55	34.2	54.7	64.9
0900	172	2	154	0	12	3	1	0	0	0	0	0	0	111	64.5	72	41.9	37	21.5	52.3	64.1
1000	174	9	141	0	22	0	2	0	0	0	0	0	0	107	61.5	65	37.4	39	22.4	50.6	63
1100	**183**	**7**	**157**	**0**	**17**	**1**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**123**	**67.2**	**80**	**43.7**	**49**	**26.8**	**52.4**	**62.9**
1200	169	11	144	2	10	0	0	0	1	1	0	0	0	111	65.7	80	47.3	45	26.6	51	65.2
1300	207	7	181	3	16	0	0	0	0	0	0	0	0	119	57.5	81	39.1	56	27.1	51.3	63.9
1400	196	6	174	1	10	2	2	1	0	0	0	0	0	132	67.4	93	47.5	51	26.0	53	64.3
1500	221	5	201	2	11	0	0	0	2	0	0	0	0	142	64.3	82	37.1	41	18.6	50.6	62.1
1600	293	3	254	4	29	2	1	0	0	0	0	0	0	192	65.5	142	48.5	76	25.9	53.1	63
1700	**297**	**8**	**258**	**1**	**27**	**1**	**0**	**1**	**1**	**0**	**0**	**0**	**0**	**221**	**74.4**	**161**	**54.2**	**83**	**28.0**	**55.3**	**66**
1800	171	6	156	0	7	0	1	1	0	0	0	0	0	126	73.7	90	52.6	50	29.2	54.7	66.7
1900	182	2	176	0	4	0	0	0	0	0	0	0	0	121	66.5	93	51.1	60	33.0	53	64.8
2000	90	1	87	0	2	0	0	0	0	0	0	0	0	78	86.7	57	63.3	38	42.2	57.8	67.7
2100	60	3	55	0	2	0	0	0	0	0	0	0	0	50	83.3	44	73.3	24	40.0	58.8	69.6
2200	38	1	35	0	2	0	0	0	0	0	0	0	0	27	71.1	23	60.5	18	47.4	58.1	82.8
2300	10	0	9	0	1	0	0	0	0	0	0	0	0	10	100.0	9	90.0	4	40.0	62.3	-
07-19	**2368**	**71**	**2058**	**14**	**195**	**10**	**11**	**3**	**5**	**1**	**0**	**0**	**0**	**1610**	**68.0**	**1119**	**47.3**	**641**	**27.1**	**53.1**	**64.6**
06-22	**2722**	**78**	**2391**	**14**	**208**	**11**	**11**	**3**	**5**	**1**	**0**	**0**	**0**	**1880**	**69.1**	**1331**	**48.9**	**779**	**28.6**	**53.5**	**65**
06-00	**2770**	**79**	**2435**	**14**	**211**	**11**	**11**	**3**	**5**	**1**	**0**	**0**	**0**	**1917**	**69.2**	**1363**	**49.2**	**801**	**28.9**	**53.5**	**65.1**
00-00	**2792**	**81**	**2452**	**14**	**214**	**11**	**11**	**3**	**5**	**1**	**0**	**0**	**0**	**1935**	**69.3**	**1379**	**49.4**	**814**	**29.2**	**53.6**	**65.3**

| Time | Speed Bins (km/h) | | | | | | | | | | | |

Site	3
Location	Enniskerry Rd, 20 metres North of Barnaslingan Ln access
Direction	Southbound


Ave.
5
0
5
0
5
0

Site 3
Location Enniskerry Rd, 20 metres North of Barnaslingan Ln access
Direction Northbound / Southbound
10 November 2021

12241 / Kilternan 3
November 2021 Enniskerry Rd, 20 metres North of Barnaslingan Ln access
Automatic Traffic Count Northbound / Southbound
10 November 2021

12241 / Kilternan
November 2021
Automatic Traffic Count

| Time | Total | Classification | | | | | | | | | | | | JPSL | JPSL% | JSL1 | JSL1% | JSL2 | JSL2% | Mean | Vpp | Speed Bins (km/h) | | | | | | | | | | | |

| | | |

Site 3
Location Enniskerry Rd, 20 metres North of Barnaslingan Ln access
Direction Northbound / Southbound

12241 / Kilternan 3
November 2021 Enniskerry Rd, 20 metres North of Barnaslingan Ln access
Automatic Traffic Count Northbound / Southbound

12241 / Kilternan
November 2021
Automatic Traffic Count

Virtual Day (1)

| Time | Total | Classification | | | | | | | | | | | |]PSL |]PSL% |]SL1 |]SL1% |]SL2 |]SL2% | Mean | Vpp | Speed Bins (km/h) | | | | | | | | | | | |

Site	3
Location	Enniskerry Rd, 20 metres North of Barnaslingan Ln access
Direction	Northbound / Southbound

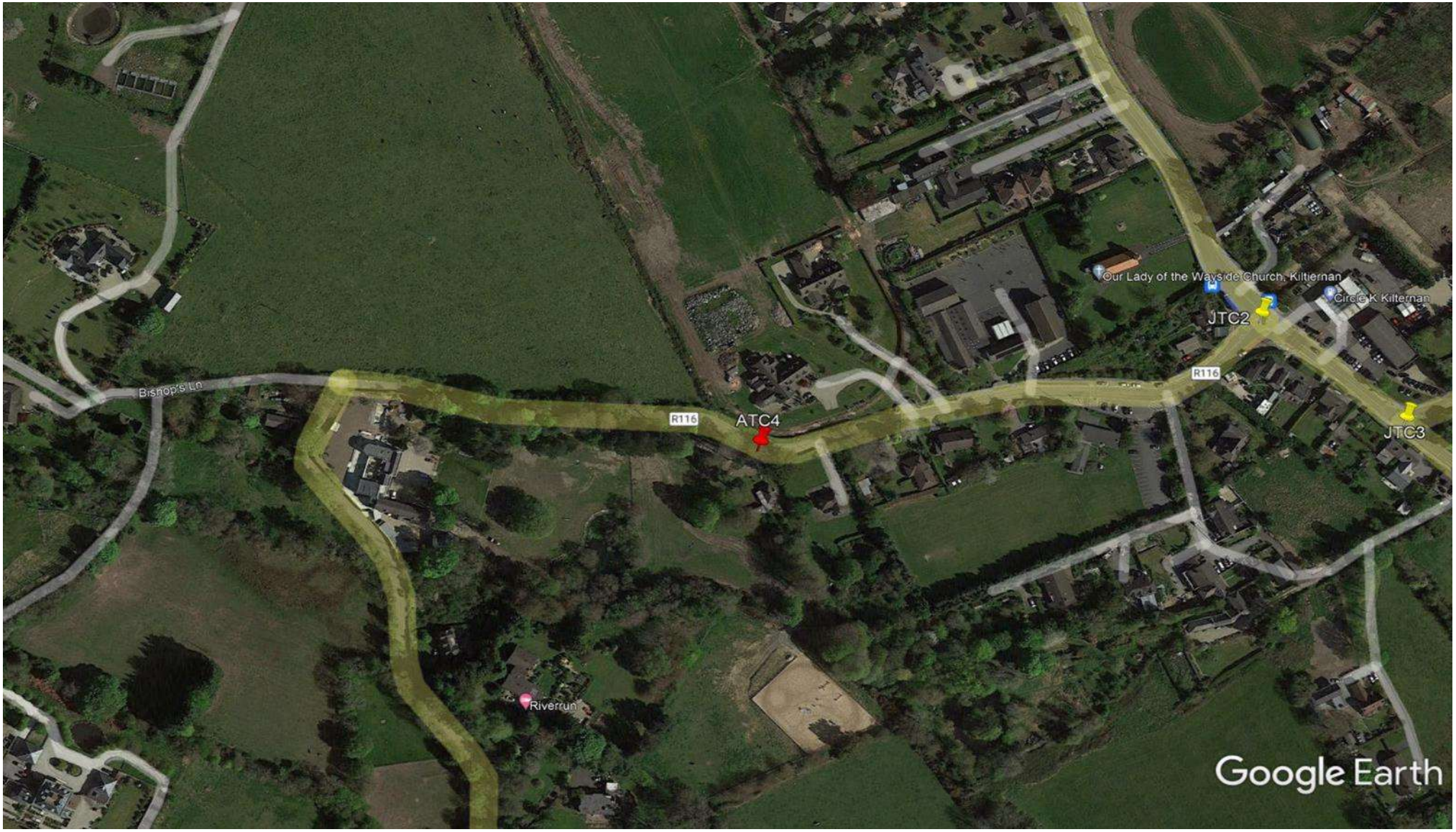
12241 / Kilternan
November 2021
Automatic Traffic Count

Ave.

Ave.

Speed Bins

5 10 15 20 25 30 35 40 45 50 55 60 65 70 75 80 85 90 95 100 105 110 115 120 125 130 135 140


N
Our Lady of the Wayside Church, Kilternan
Circle K Kilternan
JTC2
R116
Bishop's Ln
R116
ATC4
JTC3
Riverrun
Google Earth

Site No.	Location.	Direction.	Speed Limit - PSL (km/h)	Start Date.	End Date.	Total Vehicles.	5 Day Ave.	7 Day Ave.	No. > Speed Limit.	%. > Speed Limit.	No. > Speed Limit1 (+5km/h).	%. > Speed Limit1 (+5km/h).	No. > Speed Limit1 (+10km/h).	%. > Speed Limit1 (+10km/h).	Mean Speed	85%ile Speed
4	R116, 150 metres West of Our Lady of the Wayside NS entrance	Eastbound	50	10 November 2021		934	934	934	0	0.0	0	0.0	0	0.0	31.8	36.3
		Westbound	50	10 November 2021		859	859	859	0	0.0	0	0.0	0	0.0	30.0	34.4
		Eastbound / Westbound	50	10 November 2021		1793	1793	1793	0	0.0	0	0.0	0	0.0	31.0	35.5

Site 4
Location R116, 150 metres West of Our Lady of the Wayside NS entrance
Direction Eastbound
10 November 2021

12241 / Kilternan 4
November 2021 R116, 150 metres West of Our Lady of the Wayside NS entrance
Automatic Traffic Count Eastbound
10 November 2021

12241 / Kilternan
November 2021
Automatic Traffic Count

| Time | Total | Classification | | | | | | | | | | | | JPSL | JPSL% | JSL1 | JSL1% | JSL2 | JSL2% | Mean | Vpp | Speed Bins (km/h) | | | | | | | | | | | |

Site 4 — **12241 / Kilternan** — **12241 / Kilternan**
Location R116, 150 metres West of Our Lady of the Wayside NS entrance — **November 2021** — **November 2021**
Direction Eastbound — **Automatic Traffic Count** — **Automatic Traffic Count**

| | | |

Site 4
Location R116, 150 metres West of Our Lady of the Wayside NS entrance
Direction Eastbound

12241 / Kilternan 4
November 2021 R116, 150 metres West of Our Lady of the Wayside NS entrance
Automatic Traffic Count Eastbound

12241 / Kilternan
November 2021
Automatic Traffic Count

Virtual Day (1)

| Time | Total | Classification | | | | | | | | | | | |]PSL 50 |]PSL% 50 |]SL1 55 +5kph |]SL1% 55 +5kph |]SL2 60 +10kph |]SL2% 60 +10kph | Mean | Vpp 85 | Speed Bins (km/h) | | | | | | | | | | | |

Site 4
Location R116, 150 metres West of Our Lady of the Wayside NS entrance
Direction Eastbound

12241 / Kilternan 4
November 2021 R116, 150 metres West of Our Lady of the Wayside NS entrance
Automatic Traffic Count Eastbound

12241 / Kilternan
November 2021
Automatic Traffic Count

Site 4
Location R116, 150 metres West of Our Lady of the Wayside NS entrance
Direction Westbound
10 November 2021

12241 / Kilternan 4
November 2021 R116, 150 metres West of Our Lady of the Wayside NS entrance
Automatic Traffic Count Westbound
10 November 2021

12241 / Kilternan
November 2021
Automatic Traffic Count

| Time | Total | Classification | | | | | | | | | | | |]PSL |]PSL% |]SL1 |]SL1% |]SL2 |]SL2% | Mean | Vpp | Speed Bins (km/h) | | | | | | | | | | | |

Site 4
Location R116, 150 metres West of Our Lady of the Wayside NS entrance
Direction Westbound

12241 / Kilternan 4
November 2021 R116, 150 metres West of Our Lady of the Wayside NS entrance
Automatic Traffic Count Westbound

12241 / Kilternan
November 2021
Automatic Traffic Count

| | | |

Site 4
Location R116, 150 metres West of Our Lady of the Wayside NS entrance
Direction Westbound

12241 / Kilternan 4
November 2021 R116, 150 metres West of Our Lady of the Wayside NS entrance
Automatic Traffic Count Westbound

12241 / Kilternan
November 2021
Automatic Traffic Count

Virtual Day (1)

| Time | Total | Classification | | | | | | | | | | | |]PSL 50 |]PSL% 50 |]SL1 55 +5kph |]SL1% 55 +5kph |]SL2 60 +10kph |]SL2% 60 +10kph | Mean | Vpp 85 | Speed Bins (km/h) | | | | | | | | | | | |

Site 4
Location R116, 150 metres West of Our Lady of the Wayside NS entrance
Direction Westbound

12241 / Kilternan 4
November 2021 R116, 150 metres West of Our Lady of the Wayside NS entrance
Automatic Traffic Count Westbound

12241 / Kilternan
November 2021
Automatic Traffic Count

Ave.


Ave.
5
0
5
0
5
0

Site 4
Location R116, 150 metres West of Our Lady of the Wayside NS entrance
Direction Eastbound / Westbound
10 November 2021

12241 / Kilternan 4
November 2021 R116, 150 metres West of Our Lady of the Wayside NS entrance
Automatic Traffic Count Eastbound / Westbound
10 November 2021

12241 / Kilternan
November 2021
Automatic Traffic Count

| Time | Total | Classification | | | | | | | | | | | |]PSL 50 |]PSL% 50 |]SL1 55 +5kph |]SL1% 55 +5kph |]SL2 60 +10kph |]SL2% 60 +10kph | Mean | Vpp 85 | Speed Bins (km/h) | | | | | | | | | | | |

| | | |

Site 4
Location R116, 150 metres West of Our Lady of the Wayside NS entrance
Direction Eastbound / Westbound

12241 / Kilternan 4
November 2021 R116, 150 metres West of Our Lady of the Wayside NS entrance
Automatic Traffic Count Eastbound / Westbound

12241 / Kilternan
November 2021
Automatic Traffic Count

Virtual Day (1)

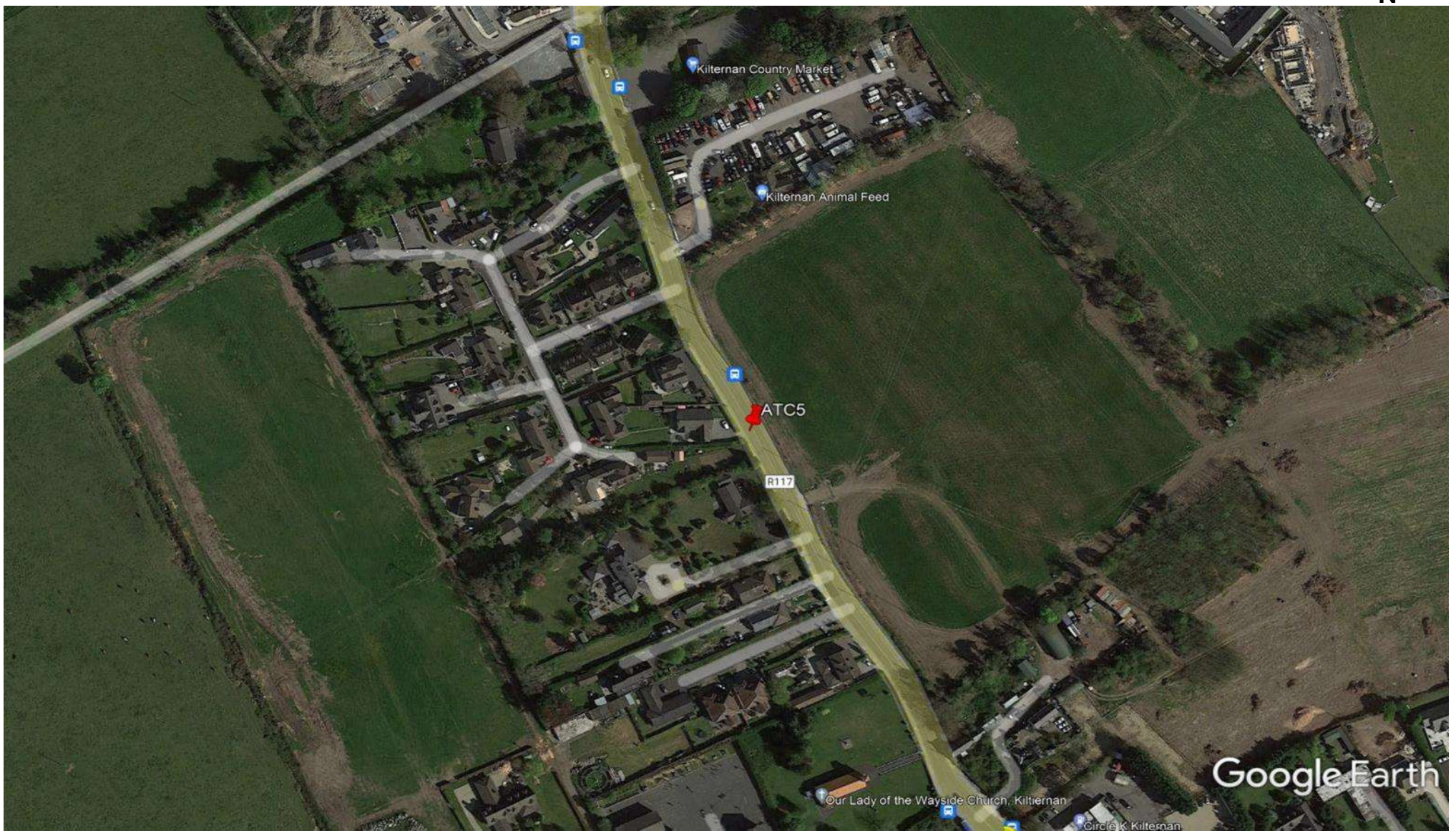
Virtual Day (1)

| Time | Total | Classification | | | | | | | | | | | |]PSL 50 |]PSL% 50 |]SL1 55 +5kph |]SL1% 55 +5kph |]SL2 60 +10kph |]SL2% 60 +10kph | Mean | Vpp 85 | Speed Bins (km/h) | | | | | | | | | | | |

Site 4
Location R116, 150 metres West of Our Lady of the Wayside NS entrance
Direction Eastbound / Westbound

12241 / Kilternan 4
November 2021 R116, 150 metres West of Our Lady of the Wayside NS entrance
Automatic Traffic Count Eastbound / Westbound

12241 / Kilternan
November 2021
Automatic Traffic Count


N
Kilternan Country Market
Kilternan Animal Feed
ATC5
R117
Our Lady of the Wayside Church, Kilternan
Circle K Kilternan
Google Earth

Site No.	Location.	Direction.	Speed Limit - PSL (km/h)	Start Date.	End Date.	Total Vehicles.	5 Day Ave.	7 Day Ave.	No. > Speed Limit.	%. > Speed Limit.	No. > Speed Limit1 (+5km/h).	%. > Speed Limit1 (+5km/h).	No. > Speed Limit1 (+10km/h).	%. > Speed Limit1 (+10km/h).	Mean Speed	85%ile Speed
5	R117, 230 metres South of Golden Ball statue, JTC Site 1	Northbound	50	10 November 2021		4328	4328	4328	1970	45.5	940	21.7	369	8.5	48.7	56.9
		Southbound	50	10 November 2021		4997	4997	4997	1801	36.0	707	0.0	223	4.5	47.8	54.7
		Northbound / Southbound	50	10 November 2021		9325	9325	9325	3771	40.4	1647	17.7	592	6.3	48.3	55.9

Site 5
Location R117, 230 metres South of Golden Ball statue, JTC Site 1
Direction Northbound
10 November 2021

12241 / Kilternan 5
November 2021 R117, 230 metres South of Golden Ball statue, JTC Site 1
Automatic Traffic Count Northbound
10 November 2021

12241 / Kilternan
November 2021
Automatic Traffic Count

| Time | Total | Classification | | | | | | | | | | | |]PSL |]PSL% |]SL1 |]SL1% |]SL2 |]SL2% | Mean | Vpp | Speed Bins (km/h) | | | | | | | | | | | |

Site 5 **12241 / Kilternan** 5 **12241 / Kilternan**
Location R117, 230 metres South of Golden Ball statue, JTC Site 1 **November 2021** R117, 230 metres South of Golden Ball statue, JTC Site 1 **November 2021**
Direction Northbound **Automatic Traffic Count** Northbound **Automatic Traffic Count**

| | | |

Site 5
Location R117, 230 metres South of Golden Ball statue, JTC Site 1
Direction Northbound

12241 / Kilternan 5
November 2021 R117, 230 metres South of Golden Ball statue, JTC Site 1
Automatic Traffic Count Northbound

12241 / Kilternan
November 2021
Automatic Traffic Count

Virtual Day (1)

| Time | Total | Classification | | | | | | | | | | | |]PSL 50 |]PSL% 50 |]SL1 55 +5kph |]SL1% 55 +5kph |]SL2 60 +10kph |]SL2% 60 +10kph | Mean | Vpp 85 | Speed Bins (km/h) | | | | | | | | | | | |

Site	5
Location	R117, 230 metres South of Golden Ball statue, JTC Site 1
Direction	Northbound

12241 / Kilternan
November 2021
Automatic Traffic Count

Ave.

Ave.

Speed Bins

5 10 15 20 25 30 35 40 45 50 55 60 65 70 75 80 85 90 95 100 105 110 115 120 125 130 135 140

Site 5
Location R117, 230 metres South of Golden Ball statue, JTC Site 1
Direction Southbound
10 November 2021

12241 / Kilternan 5
November 2021 R117, 230 metres South of Golden Ball statue, JTC Site 1
Automatic Traffic Count Southbound
10 November 2021

12241 / Kilternan
November 2021
Automatic Traffic Count

| Time | Total | Classification | | | | | | | | | | | |]PSL |]PSL% |]SL1 |]SL1% |]SL2 |]SL2% | Mean | Vpp | Speed Bins (km/h) | | | | | | | | | | | |

Site 5 **12241 / Kilternan** 5 **12241 / Kilternan**
Location R117, 230 metres South of Golden Ball statue, JTC Site 1 **November 2021** R117, 230 metres South of Golden Ball statue, JTC Site 1 **November 2021**
Direction Southbound **Automatic Traffic Count** Southbound **Automatic Traffic Count**

| | | |

Site 5
Location R117, 230 metres South of Golden Ball statue, JTC Site 1
Direction Southbound

12241 / Kilternan 5
November 2021 R117, 230 metres South of Golden Ball statue, JTC Site 1
Automatic Traffic Count Southbound

12241 / Kilternan
November 2021
Automatic Traffic Count

Virtual Day (1)

| Time | Total | Classification | | | | | | | | | | | | JPSL | JPSL% | JSL1 | JSL1% | JSL2 | JSL2% | Mean | Vpp | Speed Bins (km/h) | | | | | | | | | | | |

Site	5
Location	R117, 230 metres South of Golden Ball statue, JTC Site 1
Direction	Southbound

12241 / Kilternan
November 2021
Automatic Traffic Count

Ave.

Ave.

Speed Bins

Site 5
Location R117, 230 metres South of Golden Ball statue, JTC Site 1
Direction Northbound / Southbound
10 November 2021

12241 / Kilternan 5
November 2021 R117, 230 metres South of Golden Ball statue, JTC Site 1
Automatic Traffic Count Northbound / Southbound
10 November 2021

12241 / Kilternan
November 2021
Automatic Traffic Count

| Time | Total | Classification | | | | | | | | | | | | JPSL | JPSL% | JSL1 | JSL1% | JSL2 | JSL2% | Mean | Vpp | Speed Bins (km/h) | | | | | | | | | | | |

Site 5 **12241 / Kilternan** 5 **12241 / Kilternan**

Location R117, 230 metres South of Golden Ball statue, JTC Site 1 **November 2021** R117, 230 metres South of Golden Ball statue, JTC Site 1 **November 2021**

Direction Northbound / Southbound **Automatic Traffic Count** Northbound / Southbound **Automatic Traffic Count**

| | | |

Site 5
Location R117, 230 metres South of Golden Ball statue, JTC Site 1
Direction Northbound / Southbound

12241 / Kilternan 5
November 2021 R117, 230 metres South of Golden Ball statue, JTC Site 1
Automatic Traffic Count Northbound / Southbound

12241 / Kilternan
November 2021
Automatic Traffic Count

Virtual Day (1)

Time	Total	Classification												JPSL	JPSL%	JSL1	JSL1%	JSL2	JSL2%	Mean	Vpp
		1 MCL	2 SV	3 SVT	4 TB2	5 TB3	6 T4	7 ART3	8 ART4	9 ART5	10 ART6	11 BD	12 DRT	50	50	55 +5kph	55 +5kph	60 +10kph	60 +10kph		85
0000	27	2	21	0	4	0	0	0	0	0	0	0	0	24	88.9	15	55.6	9	33.3	57.5	67.8
0100	8	0	8	0	0	0	0	0	0	0	0	0	0	5	62.5	3	37.5	2	25.0	49.1	-
0200	5	0	5	0	0	0	0	0	0	0	0	0	0	3	60.0	3	60.0	1	20.0	52.9	-
0300	7	0	5	0	2	0	0	0	0	0	0	0	0	6	85.7	4	57.1	1	14.3	58.3	-
0400	6	0	6	0	0	0	0	0	0	0	0	0	0	4	66.7	1	16.7	1	16.7	53.4	-
0500	23	0	17	0	6	0	0	0	0	0	0	0	0	18	78.3	14	60.9	10	43.5	59.2	72.2
0600	111	5	86	0	18	1	0	1	0	0	0	0	0	83	74.8	60	54.1	39	35.1	56	65.2
0700	476	13	395	3	48	3	5	5	4	0	0	0	0	280	58.8	150	31.5	65	13.7	51.1	59.3
0800	**906**	**9**	**849**	**4**	**29**	**4**	**6**	**1**	**2**	**0**	**2**	**0**	**0**	**236**	**26.1**	**100**	**11.0**	**31**	**3.4**	**44.8**	**53.5**
0900	562	10	499	8	37	1	5	1	0	0	1	0	0	255	45.4	133	23.7	41	7.3	49.6	56.9
1000	508	21	424	5	49	2	5	0	1	1	0	0	0	252	49.6	120	23.6	45	8.9	49.7	57.4
1100	546	17	470	4	48	0	4	0	0	1	2	0	0	249	45.6	97	17.8	40	7.3	48.8	55.8
1200	614	20	524	8	50	3	6	0	1	1	1	0	0	218	35.5	93	15.2	28	4.6	47.7	55.1
1300	745	13	665	9	47	1	7	1	1	1	0	0	0	208	27.9	71	9.5	15	2.0	45.7	53.4
1400	**794**	**11**	**723**	**7**	**46**	**2**	**5**	**0**	**0**	**0**	**0**	**0**	**0**	**193**	**24.3**	**55**	**6.9**	**16**	**2.0**	**43.9**	**51.7**
1500	697	8	639	4	39	3	2	1	1	0	0	0	0	301	43.2	112	16.1	36	5.2	49.2	55.4
1600	761	13	688	8	48	0	0	1	1	1	0	0	0	254	33.4	99	13.0	34	4.5	48	54.5
1700	703	13	641	4	39	5	0	0	1	0	0	0	0	308	43.8	126	17.9	35	5.0	49	55.9
1800	597	11	557	3	20	1	4	1	0	0	0	0	0	216	36.2	82	13.7	30	5.0	47.7	54.6
1900	505	5	482	2	11	4	0	1	0	0	0	0	0	213	42.2	89	17.6	25	5.0	49	55.6
2000	317	4	305	1	7	0	0	0	0	0	0	0	0	184	58.0	73	23.0	27	8.5	51.4	57.1
2100	217	5	196	1	12	1	0	0	2	0	0	0	0	134	61.8	63	29.0	24	11.1	52.2	58.6
2200	153	1	141	0	10	1	0	0	0	0	0	0	0	101	66.0	64	41.8	28	18.3	53.9	61.6
2300	37	0	32	0	4	1	0	0	0	0	0	0	0	26	70.3	20	54.1	9	24.3	58.3	69.2
07-19	**7909**	**159**	**7074**	**67**	**500**	**25**	**49**	**11**	**12**	**5**	**7**	**0**	**0**	**2970**	**37.6**	**1238**	**15.7**	**416**	**5.3**	**47.6**	**55.3**
06-22	**9059**	**178**	**8143**	**71**	**548**	**31**	**49**	**13**	**14**	**5**	**7**	**0**	**0**	**3584**	**39.6**	**1523**	**16.8**	**531**	**5.9**	**48**	**55.6**
06-00	**9249**	**179**	**8316**	**71**	**562**	**33**	**49**	**13**	**14**	**5**	**7**	**0**	**0**	**3711**	**40.1**	**1607**	**17.4**	**568**	**6.1**	**48.2**	**55.8**
00-00	**9325**	**181**	**8378**	**71**	**574**	**33**	**49**	**13**	**14**	**5**	**7**	**0**	**0**	**3771**	**40.4**	**1647**	**17.7**	**592**	**6.3**	**48.3**	**55.9**

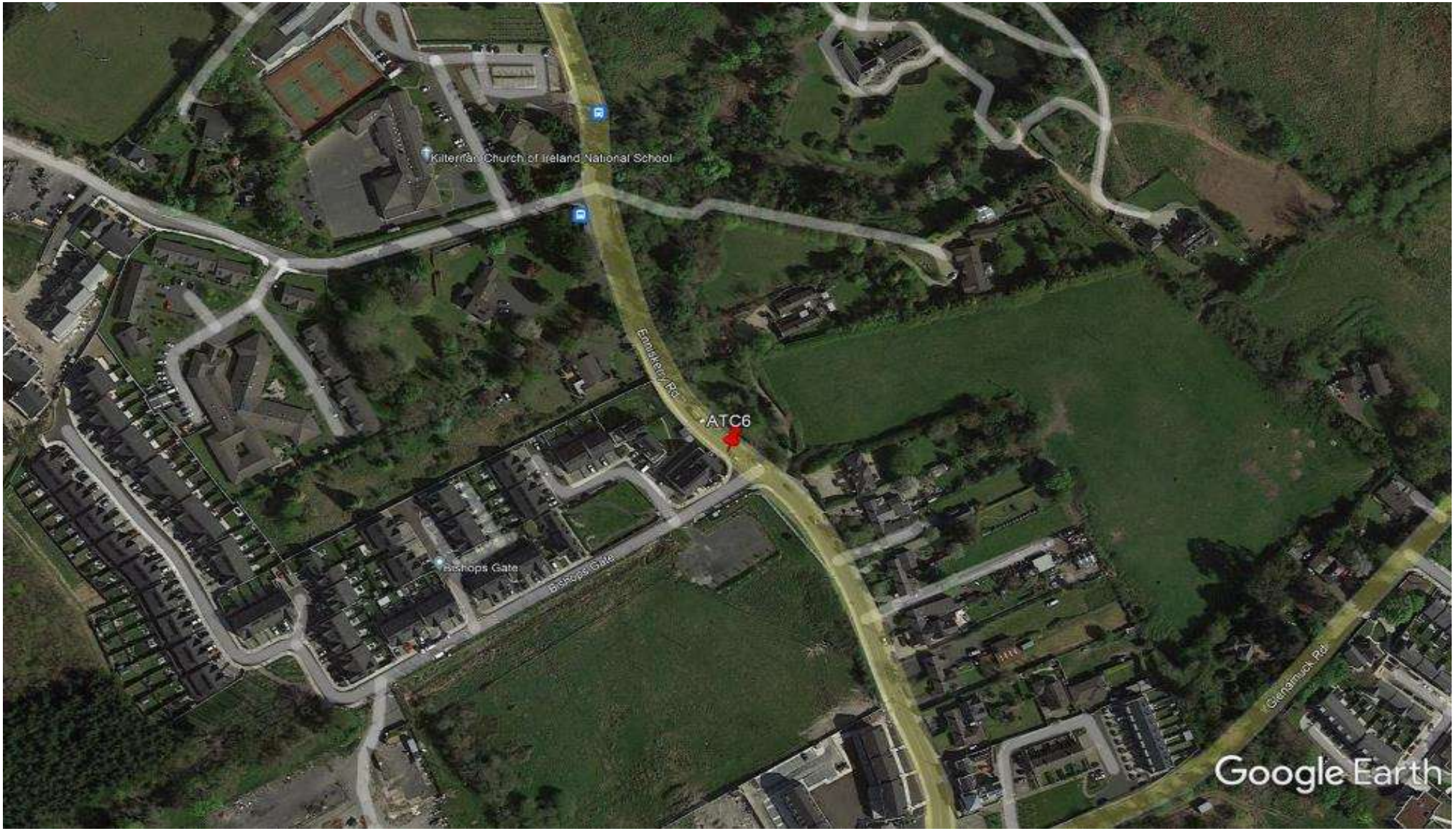
Virtual Day (1)

| Time | Speed Bins (km/h) | | | | | | | | | | | |

Site	5
Location	R117, 230 metres South of Golden Ball statue, JTC Site 1
Direction	Northbound / Southbound

5
R117, 230 metres South of Golden Ball statue, JTC Site 1
Northbound / Southbound

12241 / Kilternan
November 2021
Automatic Traffic Count


N
Kilternan Church of Ireland National School
Enniskerry Rd
ATC6
Bishops Gate
Bishops Gate
Glenamuck Rd
Google Earth

Site No.	Location.	Direction.	Speed Limit - PSL (km/h)	Start Date.	End Date.	Total Vehicles.	5 Day Ave.	7 Day Ave.	No. > Speed Limit.	%. > Speed Limit.	No. > Speed Limit1 (+5km/h).	%. > Speed Limit1 (+5km/h).	No. > Speed Limit1 (+10km/h).	%. > Speed Limit1 (+10km/h).	Mean Speed	85%ile Speed
6	R117, 15 metres North of Bishops Gate access	Northbound	50	10 November 2021		3793	3793	3793	879	23.2	272	7.2	70	1.8	45.8	52.1
		Southbound	50	10 November 2021		4242	4242	4242	691	16.3	192	0.0	53	1.2	42.6	50.4
		Northbound / Southbound	50	10 November 2021		8035	8035	8035	1570	19.5	464	5.8	123	1.5	44.1	51.3

Site 6
Location R117, 15 metres North of Bishops Gate access
Direction Northbound
10 November 2021

12241 / Kilternan 6
November 2021 R117, 15 metres North of Bishops Gate access
Automatic Traffic Count Northbound
10 November 2021

12241 / Kilternan
November 2021
Automatic Traffic Count

| Time | Total | Classification | | | | | | | | | | | |]PSL |]PSL% |]SL1 |]SL1% |]SL2 |]SL2% | Mean | Vpp | Speed Bins (km/h) | | | | | | | | | | | |

Site 6
Location R117, 15 metres North of Bishops Gate access
Direction Northbound

12241 / Kilternan 6
November 2021 R117, 15 metres North of Bishops Gate access
Automatic Traffic Count Northbound

12241 / Kilternan
November 2021
Automatic Traffic Count

| | | |

Site 6
Location R117, 15 metres North of Bishops Gate access
Direction Northbound

12241 / Kilternan 6
November 2021 R117, 15 metres North of Bishops Gate access
Automatic Traffic Count Northbound

12241 / Kilternan
November 2021
Automatic Traffic Count

Virtual Day (1)

| Time | Total | Classification | | | | | | | | | | | | JPSL | JPSL% | JSL1 | JSL1% | JSL2 | JSL2% | Mean | Vpp | Speed Bins (km/h) | | | | | | | | | | | |

Site	6
Location	R117, 15 metres North of Bishops Gate access
Direction	Northbound

12241 / Kilternan
November 2021
Automatic Traffic Count

Ave.

Ave.

Speed Bins

5 10 15 20 25 30 35 40 45 50 55 60 65 70 75 80 85 90 95 100 105 110 115 120 125 130 135 140

Site 6
Location R117, 15 metres North of Bishops Gate access
Direction Southbound
10 November 2021

12241 / Kilternan 6
November 2021 R117, 15 metres North of Bishops Gate access
Automatic Traffic Count Southbound
10 November 2021

12241 / Kilternan
November 2021
Automatic Traffic Count

| Time | Total | Classification | | | | | | | | | | | | JPSL | JPSL% | JSL1 | JSL1% | JSL2 | JSL2% | Mean | Vpp | Speed Bins (km/h) | | | | | | | | | | | |

Site 6 **12241 / Kilternan** 6 **12241 / Kilternan**
Location R117, 15 metres North of Bishops Gate access **November 2021** R117, 15 metres North of Bishops Gate access **November 2021**
Direction Southbound **Automatic Traffic Count** Southbound **Automatic Traffic Count**

| | | |

Site 6
Location R117, 15 metres North of Bishops Gate access
Direction Southbound

12241 / Kilternan 6
November 2021 R117, 15 metres North of Bishops Gate access
Automatic Traffic Count Southbound

12241 / Kilternan
November 2021
Automatic Traffic Count

Virtual Day (1)

| Time | Total | Classification | | | | | | | | | | | |]PSL 50 |]PSL% 50 |]SL1 55 +5kph |]SL1% 55 +5kph |]SL2 60 +10kph |]SL2% 60 +10kph | Mean | Vpp 85 | Speed Bins (km/h) | | | | | | | | | | | |

Site 6
Location R117, 15 metres North of Bishops Gate access
Direction Southbound

12241 / Kilternan 6
November 2021 R117, 15 metres North of Bishops Gate access
Automatic Traffic Count Southbound

12241 / Kilternan
November 2021
Automatic Traffic Count

Ave.	5	10	15	20	25	30	35	40	45	50	55	60	65	70	75	80	85	90	95	100	105	110	115	120	125	130	135	140
Ave.																												

Speed Bins

Site 6
Location R117, 15 metres North of Bishops Gate access
Direction Northbound / Southbound
10 November 2021

12241 / Kilternan 6
November 2021 R117, 15 metres North of Bishops Gate access
Automatic Traffic Count Northbound / Southbound
10 November 2021

12241 / Kilternan
November 2021
Automatic Traffic Count

| Time | Total | Classification | | | | | | | | | | | | JPSL | JPSL% | JSL1 | JSL1% | JSL2 | JSL2% | Mean | Vpp | Speed Bins (km/h) | | | | | | | | | | | |

| | | |

Site 6
Location R117, 15 metres North of Bishops Gate access
Direction Northbound / Southbound

12241 / Kilternan 6
November 2021 R117, 15 metres North of Bishops Gate access
Automatic Traffic Count Northbound / Southbound

12241 / Kilternan
November 2021
Automatic Traffic Count

Virtual Day (1)

| Time | Total | Classification | | | | | | | | | | | | JPSL | JPSL% | JSL1 | JSL1% | JSL2 | JSL2% | Mean | Vpp | Speed Bins (km/h) | | | | | | | | | | | |

Site	6
Location	R117, 15 metres North of Bishops Gate access
Direction	Northbound / Southbound

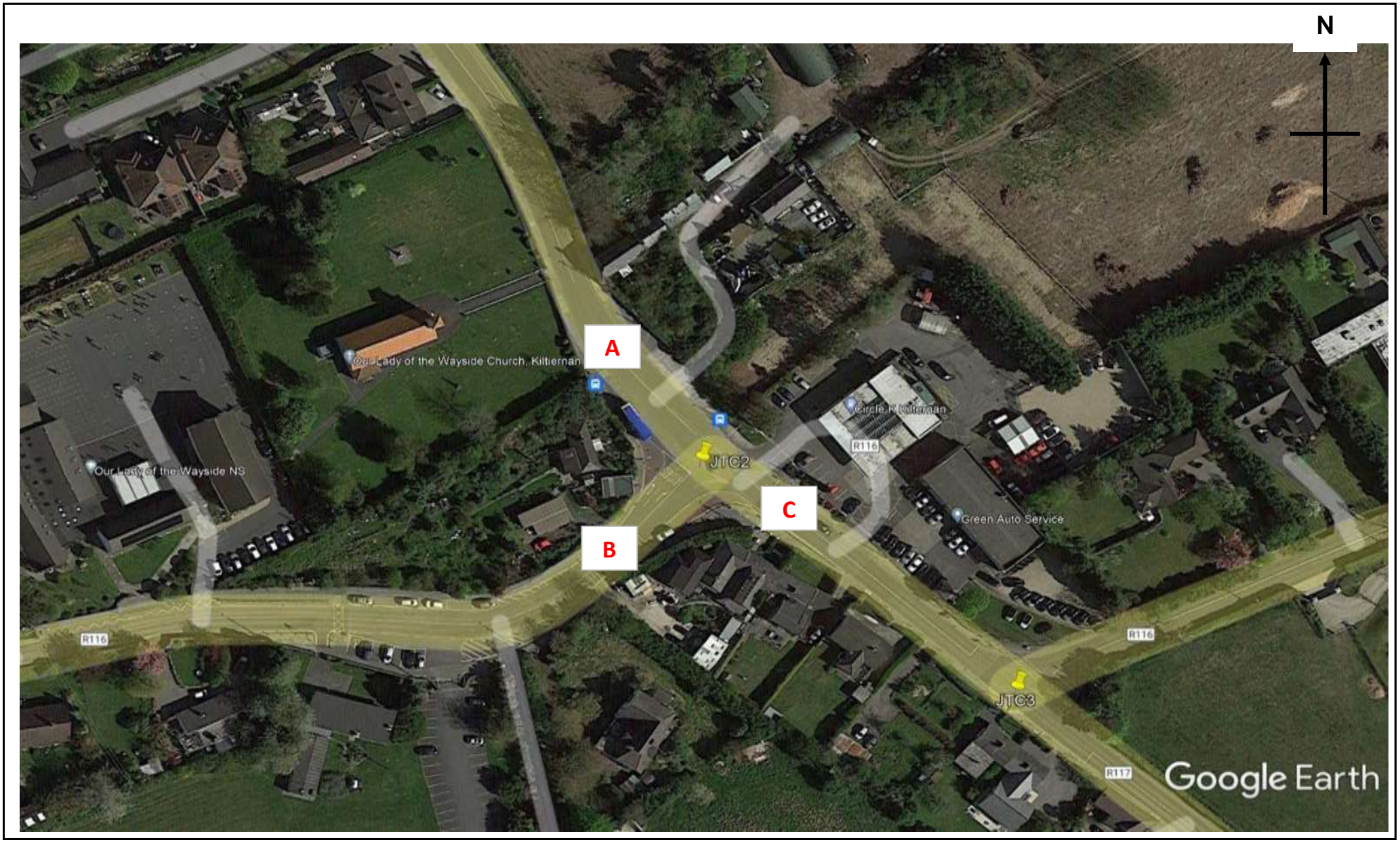
12241 / Kilternan
November 2021
Automatic Traffic Count

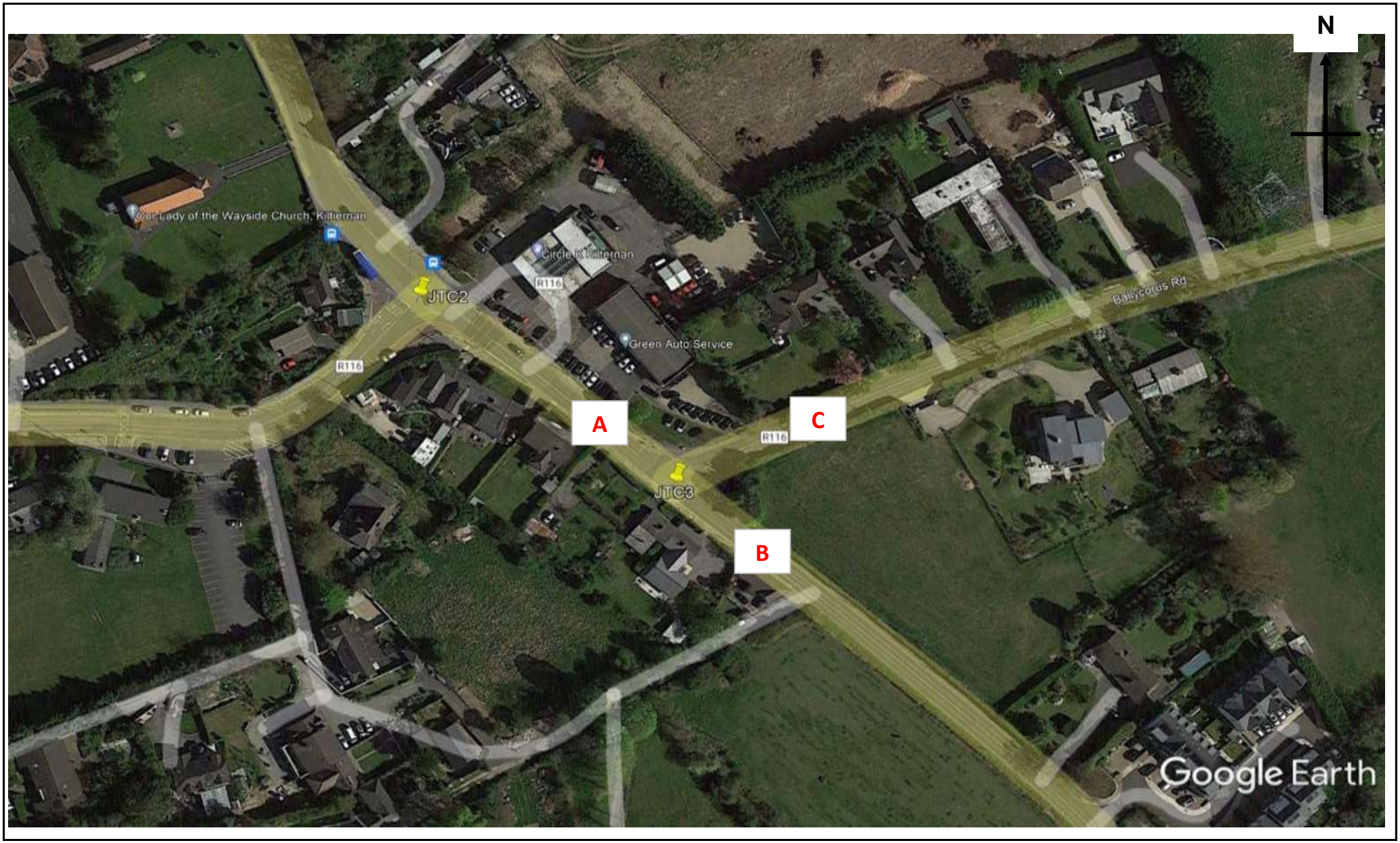
Ave.

Ave.

Speed Bins


N
A
B
C
D
JTC1
R117
Glenamuck Rd
Kilternan Country Market
Kilternan Animal Feed
Old Wayside Pitch, Gold
Google Earth


N
A
B
C
Our Lady of the Wayside Church, Kiltiernan
Our Lady of the Wayside NS
Circle K Kiltiernan
Green Auto Service
JTC2
JTC3
R116
R116
R116
R117
Google Earth


N
Our Lady of the Wayside Church, Kilternan
Circle K Kilternan
JTC2
R116
Green Auto Service
Ballycorus Rd
A
C
R116
JTC3
B
Google Earth

Site No. 1
Location Enniskerry Rd(N) / Parking Access / Enniskerry Rd(S) / Glenamuck Rd
Date 2021-11-10

Time	A to D - Enniskerry Rd(N) to Glenamuck Rd							Veh. Total	PCU. Total	A to C - Enniskerry Rd(N) to Enniskerry Rd(S)							Veh. Total	PCU. Total
	CAR	LGV	OGV1	OGV2	PSV	M/C	P/C			CAR	LGV	OGV1	OGV2	PSV	M/C	P/C		
07:00	7	1	0	0	0	0	1	9	8.2	3	3	0	0	1	0	0	7	8
07:15	9	1	0	0	0	0	0	10	10	15	0	0	0	2	0	1	18	19.2
07:30	19	1	0	1	2	0	1	24	26.5	20	2	2	0	3	0	1	28	31.2
07:45	29	2	0	1	0	0	0	32	33.3	21	4	0	0	0	1	0	26	25.4
Hour	64	5	0	2	2	0	2	75	78	59	9	2	0	6	1	2	79	83.8
08:00	44	3	0	0	0	0	0	47	47	47	2	0	0	0	0	2	51	49.4
08:15	50	1	0	0	0	0	0	51	51	55	5	0	0	0	1	0	61	60.4
08:30	45	3	1	1	0	0	0	50	51.8	106	5	1	0	0	0	1	113	112.7
08:45	31	4	1	0	0	0	0	36	36.5	47	4	1	0	0	0	3	55	53.1
Hour	170	11	2	1	0	0	0	184	186.3	255	16	2	0	0	1	6	280	275.6
09:00	33	0	1	0	0	0	0	34	34.5	30	2	0	0	1	0	2	35	34.4
09:15	17	0	0	1	0	0	0	18	19.3	37	3	0	0	0	0	1	41	40.2
09:30	23	1	0	0	0	0	0	24	24	32	5	1	0	0	0	1	39	38.7
09:45	20	0	0	0	0	0	0	20	20	35	3	1	0	0	0	4	43	40.3
Hour	93	1	1	1	0	0	0	96	97.8	134	13	2	0	1	0	8	158	153.6
10:00	18	3	0	0	0	0	0	21	21	28	1	0	0	1	1	6	37	32.6
10:15	17	1	0	0	0	0	1	19	18.2	36	5	2	1	0	0	3	47	46.9
10:30	8	2	1	1	0	0	0	12	13.8	24	6	0	0	0	2	4	36	31.6
10:45	16	5	0	0	0	0	0	21	21	25	4	2	0	0	0	0	31	32
Hour	59	11	1	1	0	0	1	73	74	113	16	4	1	1	3	13	151	143.1
11:00	16	0	0	0	0	0	0	16	16	32	2	1	0	1	2	1	39	38.5
11:15	16	2	1	0	0	0	0	19	19.5	29	5	0	0	0	0	1	35	34.2
11:30	20	1	0	0	0	0	0	21	21	36	5	1	0	0	0	1	43	42.7
11:45	18	2	0	0	0	0	0	20	20	33	3	3	0	0	0	1	40	40.7
Hour	70	5	1	0	0	0	0	76	76.5	130	15	5	0	1	2	4	157	156.1
12:00	24	3	0	0	0	0	0	27	27	30	0	1	0	1	0	1	33	33.7
12:15	19	5	0	0	0	0	0	24	24	31	7	2	0	0	0	6	46	42.2
12:30	29	3	0	0	0	0	0	32	32	30	6	0	0	0	0	4	40	36.8
12:45	24	4	0	0	0	0	0	28	28	37	3	2	1	1	1	0	45	47.7
Hour	96	15	0	0	0	0	0	111	111	128	16	5	1	2	1	11	164	160.4
13:00	27	5	0	0	0	0	0	32	32	30	3	1	0	1	0	1	36	36.7
13:15	29	3	0	0	0	0	0	32	32	51	4	0	0	1	0	2	58	57.4
13:30	18	1	0	1	0	0	0	20	21.3	50	2	2	0	2	0	3	59	59.6
13:45	30	4	0	0	0	0	0	34	34	45	1	2	0	0	0	0	48	49
Hour	104	13	0	1	0	0	0	118	119.3	176	10	5	0	4	0	6	201	202.7
14:00	31	3	1	0	0	0	0	35	35.5	47	10	1	0	1	0	3	62	61.1
14:15	35	1	0	0	1	0	0	37	38	82	3	1	0	0	0	0	86	86.5
14:30	34	6	0	1	1	0	0	42	44.3	44	1	0	0	2	0	1	48	49.2
14:45	23	1	0	0	0	0	0	24	24	31	1	0	0	0	0	1	33	32.2
Hour	123	11	1	1	2	0	0	138	141.8	204	15	2	0	3	0	5	229	229
15:00	24	1	0	0	1	0	0	26	27	36	0	0	0	1	1	1	39	38.6
15:15	19	2	1	0	0	0	1	23	22.7	27	4	2	0	1	0	0	34	36
15:30	36	4	0	0	1	0	1	42	42.2	38	4	0	0	0	0	1	43	42.2
15:45	20	2	0	1	0	0	0	23	24.3	41	5	0	1	0	0	1	48	48.5
Hour	99	9	1	1	2	0	2	114	116.2	142	13	2	1	2	1	3	164	165.3
16:00	19	5	0	0	0	0	0	24	24	42	10	0	0	2	0	3	57	56.6
16:15	25	2	0	0	0	0	1	28	27.2	51	15	0	0	1	0	0	67	68
16:30	39	2	0	0	0	0	0	41	41	50	10	1	0	0	0	1	62	61.7
16:45	19	3	1	0	0	0	0	23	23.5	48	8	2	1	0	2	1	62	62.3
Hour	102	12	1	0	0	0	1	116	115.7	191	43	3	1	3	2	5	248	248.6
17:00	23	0	0	0	0	0	0	23	23	57	13	0	0	0	0	2	72	70.4
17:15	19	1	0	0	0	0	0	20	20	62	4	1	0	2	1	0	70	71.9
17:30	30	1	0	0	0	0	0	31	31	47	4	0	0	0	3	0	54	52.2
17:45	24	4	1	0	0	0	0	29	29.5	42	4	0	0	0	0	2	48	46.4
Hour	96	6	1	0	0	0	0	103	103.5	208	25	1	0	2	4	4	244	240.9
18:00	25	2	0	0	0	0	0	27	27	39	5	0	0	1	0	2	47	46.4
18:15	23	1	2	0	1	0	0	27	29	38	2	0	0	0	0	0	40	40
18:30	24	6	0	0	0	0	0	30	30	38	1	1	0	0	0	1	41	40.7
18:45	30	0	0	0	0	0	0	30	30	54	1	0	0	0	0	3	58	55.6
Hour	102	9	2	0	1	0	0	114	116	169	9	1	0	1	0	6	186	182.7
Total	1178	108	11	8	7	0	6	1318	1336.1	1909	200	34	4	26	15	73	2261	2241.8

12241 / Kilternan
November 2021
Junction Turning Count

Site No. 1
Location Enniskerry Rd(N) / Parking Access / Enniskerry Rd(S) / Glenamuck Rd
Date 2021-11-10

Time	A to B - Enniskerry Rd(N) to Parking Access							Veh. Total	PCU. Total	B to A - Parking Access to Enniskerry Rd(N)							Veh. Total	PCU. Total
	CAR	LGV	OGV1	OGV2	PSV	M/C	P/C			CAR	LGV	OGV1	OGV2	PSV	M/C	P/C		
07:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:15	0	0	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	1	1	0	0	0	0	0	2	2
07:45	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	2	2
Hour	0	0	0	0	0	0	0	0	0	3	1	0	0	0	0	0	4	4
08:00	1	0	0	0	0	0	0	1	1	1	0	0	0	0	0	0	1	1
08:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:45	0	0	1	0	0	0	0	1	1.5	0	0	0	0	0	0	0	0	0
Hour	1	0	1	0	0	0	0	2	2.5	1	0	0	0	0	0	0	1	1
09:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
09:15	1	0	0	0	0	0	0	1	1	0	0	1	0	0	0	0	1	1.5
09:30	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
Hour	1	0	0	0	0	0	0	1	1	0	0	1	0	0	0	0	1	1.5
10:00	0	0	1	0	0	0	0	1	1.5	0	0	0	0	0	0	0	0	0
10:15	1	0	0	0	0	0	0	1	1	1	0	0	0	0	0	0	1	1
10:30	0	0	1	0	0	0	0	1	1.5	0	0	0	0	0	0	0	0	0
10:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Hour	1	0	2	0	0	0	0	3	4	1	0	0	0	0	0	0	1	1
11:00	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	1	0	0	0	0	0	0	1	1
11:30	2	0	0	0	0	0	0	2	2	0	0	0	0	0	0	0	0	0
11:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Hour	2	0	0	0	0	0	0	2	2	1	0	0	0	0	0	0	1	1
12:00	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1	1
12:15	0	1	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0
12:30	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	2	2
12:45	1	0	0	0	0	0	0	1	1	1	1	0	0	0	0	0	2	2
Hour	1	1	0	0	0	0	0	2	2	4	1	0	0	0	0	0	5	5
13:00	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1	1
13:15	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	2	2
13:30	2	0	0	0	0	0	0	2	2	0	0	0	0	0	0	0	0	0
13:45	2	0	0	0	0	0	0	2	2	0	0	0	0	0	0	0	0	0
Hour	4	0	0	0	0	0	0	4	4	3	0	0	0	0	0	0	3	3
14:00	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	2	2
14:15	0	0	0	0	0	0	0	0	0	3	0	0	0	0	0	0	3	3
14:30	1	0	0	0	0	0	0	1	1	1	0	0	0	0	0	0	1	1
14:45	2	0	0	0	0	0	0	2	2	1	0	0	0	0	0	0	1	1
Hour	3	0	0	0	0	0	0	3	3	7	0	0	0	0	0	0	7	7
15:00	1	0	0	0	0	0	0	1	1	1	0	0	0	0	0	0	1	1
15:15	0	1	0	0	0	0	0	1	1	1	0	0	0	0	0	0	1	1
15:30	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1	1
15:45	1	0	0	0	0	0	0	1	1	2	0	0	0	0	0	0	2	2
Hour	2	1	0	0	0	0	0	3	3	5	0	0	0	0	0	0	5	5
16:00	2	0	0	0	0	0	0	2	2	2	0	0	0	0	0	0	2	2
16:15	1	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0
16:30	1	0	0	0	0	0	0	1	1	1	0	0	0	0	0	0	1	1
16:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Hour	4	0	0	0	0	0	0	4	4	3	0	0	0	0	0	0	3	3
17:00	2	0	0	0	0	0	0	2	2	1	0	0	0	0	0	0	1	1
17:15	1	0	0	0	0	0	0	1	1	1	0	0	0	0	0	0	1	1
17:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
17:45	1	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0
Hour	4	0	0	0	0	0	0	4	4	2	0	0	0	0	0	0	2	2
18:00	2	0	0	0	0	0	0	2	2	1	0	0	0	0	0	0	1	1
18:15	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	2	2
18:30	1	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0
18:45	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	1
Hour	3	0	0	0	0	0	0	3	3	3	1	0	0	0	0	0	4	4
Total	26	2	3	0	0	0	0	31	32.5	33	3	1	0	0	0	0	37	37.5

12241 / Kilternan
November 2021
Junction Turning Count

Site No. 1
Location Enniskerry Rd(N) / Pc
Date 2021-11-10

Time	B to D - Parking Access to			
	CAR	LGV	OGV1	OGV2
07:00	0	0	0	0
07:15	0	0	0	0
07:30	0	0	0	0
07:45	0	0	0	0
Hour	0	0	0	0
08:00	0	0	0	0
08:15	0	0	0	0
08:30	1	0	0	0
08:45	0	0	0	0
Hour	1	0	0	0
09:00	0	0	0	0
09:15	0	0	0	0
09:30	0	1	0	0
09:45	0	0	0	0
Hour	0	1	0	0
10:00	0	0	0	0
10:15	1	0	0	0
10:30	1	0	1	0
10:45	0	0	0	0
Hour	2	0	1	0
11:00	0	0	0	0
11:15	1	0	0	0
11:30	1	0	0	0
11:45	2	0	0	0
Hour	4	0	0	0
12:00	1	0	0	0
12:15	0	1	0	0
12:30	0	0	0	0
12:45	1	0	0	0
Hour	2	1	0	0
13:00	0	1	0	0
13:15	0	0	0	0
13:30	0	0	0	0
13:45	1	0	0	0
Hour	1	1	0	0
14:00	2	0	0	0
14:15	2	0	0	0
14:30	1	0	0	0
14:45	1	0	0	0
Hour	6	0	0	0
15:00	2	0	0	0
15:15	1	0	0	0
15:30	0	0	0	0
15:45	0	0	0	0
Hour	3	0	0	0
16:00	3	0	0	0
16:15	1	0	0	0
16:30	0	0	0	0
16:45	2	1	1	0
Hour	6	1	1	0
17:00	0	0	0	0
17:15	1	0	0	0
17:30	2	0	0	0
17:45	0	0	0	0
Hour	3	0	0	0
18:00	1	0	0	0
18:15	1	0	0	0
18:30	0	0	0	0
18:45	2	0	0	0
Hour	4	0	0	0
Total	32	4	2	0

Site No. 1
Location Enniskerry Rd(N) / Parking Access / Enniskerry Rd(S) / Glenamuck Rd
Date 2021-11-10

Glenamuck Rd			Veh.	PCU.	B to C - Parking Access to Enniskerry Rd(S)							Veh.	PCU.	Time	C to B - Enniskerry Rd(S) to Parking Access							Veh.	PCU.	C to A - Enniskerry Rd(S) to Enniskerry Rd(N)							Veh.	PCU.	Time	C to D - Enniskerry Rd(S) to Glenamuck Rd							Veh.	PCU.
PSV	M/C	P/C	Total	Total	CAR	LGV	OGV1	OGV2	PSV	M/C	P/C	Total	Total		CAR	LGV	OGV1	OGV2	PSV	M/C	P/C	Total	Total	CAR	LGV	OGV1	OGV2	PSV	M/C	P/C	Total	Total		CAR	LGV	OGV1	OGV2	PSV	M/C	P/C	Total	Total
0	0	0	0	0	0	0	0	0	0	0	0	0	0	07:00	0	0	0	0	0	0	0	0	0	9	3	1	0	0	0	0	13	13.5	07:00	32	5	3	0	2	2	0	44	46.3
0	0	0	0	0	1	0	0	0	0	0	0	1	1	07:15	1	1	0	0	0	0	0	2	2	16	6	0	0	4	2	1	29	31	07:15	25	9	3	0	1	0	0	38	40.5
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	22	7	1	0	1	0	1	32	32.7	07:30	37	7	2	0	2	0	0	48	51
0	0	0	0	0	0	0	0	0	0	0	0	0	0	07:45	0	0	0	0	0	0	0	0	0	40	3	2	0	3	0	5	53	53	07:45	43	4	0	2	1	1	2	53	54.4
0	0	0	0	0	1	0	0	0	0	0	0	1	1	Hour	1	1	0	0	0	0	0	2	2	87	19	4	0	8	2	7	127	130.2	Hour	137	25	8	2	6	3	2	183	192.2
0	0	0	0	0	0	0	0	0	0	0	0	0	0	08:00	0	0	0	0	0	0	0	0	0	31	3	3	0	0	0	3	40	39.1	08:00	41	4	0	1	0	0	0	46	47.3
0	0	0	0	0	1	0	0	0	0	0	0	1	1	08:15	1	0	0	0	0	0	0	1	1	49	6	1	0	1	0	0	57	58.5	08:15	51	3	0	0	0	0	0	54	54
0	0	0	1	1	0	0	0	0	0	0	0	0	0	08:30	0	0	0	0	0	0	0	0	0	67	4	1	0	0	0	0	72	72.5	08:30	33	6	0	2	1	0	0	42	45.6
0	0	0	0	0	0	0	0	0	0	0	0	0	0	08:45	0	0	0	0	0	0	0	0	0	83	3	1	0	0	1	2	90	88.3	08:45	41	5	1	0	0	0	0	47	47.5
0	0	0	1	1	1	0	0	0	0	0	0	1	1	Hour	1	0	0	0	0	0	0	1	1	230	16	6	0	1	1	5	259	258.4	Hour	166	18	1	3	1	0	0	189	194.4
0	0	0	0	0	0	0	0	0	0	0	0	0	0	09:00	0	0	0	0	0	0	0	0	0	32	4	1	0	0	3	2	42	39.1	09:00	28	4	1	1	1	0	0	35	37.8
0	0	0	0	0	0	0	0	0	0	0	0	0	0	09:15	0	0	0	0	0	0	0	0	0	34	5	1	0	0	0	0	40	40.5	09:15	35	5	1	1	0	0	0	42	43.8
0	0	0	1	1	0	0	0	0	0	0	0	0	0	09:30	0	0	0	0	0	0	0	0	0	29	1	0	0	1	0	1	32	32.2	09:30	29	2	2	1	1	0	0	35	38.3
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	26	2	1	0	0	0	1	30	29.7	09:45	25	4	2	1	0	0	0	32	34.3
0	0	0	1	1	0	0	0	0	0	0	0	0	0	Hour	0	0	0	0	0	0	0	0	0	121	12	3	0	1	3	4	144	141.5	Hour	117	15	6	4	2	0	0	144	154.2
0	0	0	0	0	0	0	1	0	0	0	0	1	1.5	10:00	0	0	0	0	0	0	0	0	0	22	3	2	0	0	0	4	31	28.8	10:00	24	0	3	0	1	0	0	28	30.5
0	0	0	1	1	0	0	0	0	0	0	0	0	0	10:15	0	0	0	0	0	0	0	0	0	21	2	3	0	0	0	8	34	29.1	10:15	25	4	2	0	0	0	0	31	32
0	0	0	2	2.5	0	1	0	0	0	0	0	1	1	10:30	0	0	0	0	0	0	0	0	0	26	2	1	0	1	0	7	37	32.9	10:30	23	6	1	0	1	1	0	32	32.9
0	0	0	0	0	0	0	0	0	0	0	0	0	0	10:45	0	0	0	0	0	0	0	0	0	23	3	2	0	0	0	12	40	31.4	10:45	29	2	1	0	0	0	0	32	32.5
0	0	0	3	3.5	0	1	1	0	0	0	0	2	2.5	Hour	0	0	0	0	0	0	0	0	0	92	10	8	0	1	0	31	142	122.2	Hour	101	12	7	0	2	1	0	123	127.9
0	0	0	0	0	0	0	0	0	0	0	0	0	0	11:00	0	0	0	0	0	0	0	0	0	22	1	3	0	0	1	1	28	28.1	11:00	21	2	2	0	1	0	0	26	28
0	0	0	1	1	0	0	0	0	0	0	0	0	0	11:15	2	0	0	0	0	0	0	2	2	25	4	2	1	1	0	3	36	36.9	11:15	22	1	1	2	1	0	0	27	31.1
0	0	0	1	1	1	0	0	0	0	0	0	1	1	11:30	0	0	0	0	0	0	0	0	0	35	2	1	0	1	0	3	42	41.1	11:30	23	5	1	0	1	0	0	30	31.5
0	0	0	2	2	0	0	0	0	0	0	0	0	0	11:45	0	1	0	0	0	0	0	1	1	29	2	0	0	0	0	4	35	31.8	11:45	27	3	1	0	0	0	0	31	31.5
0	0	0	4	4	1	0	0	0	0	0	0	1	1	Hour	2	1	0	0	0	0	0	3	3	111	9	6	1	2	1	11	141	137.9	Hour	93	11	5	2	3	0	0	114	122.1
0	0	0	1	1	0	0	0	0	0	0	0	0	0	12:00	0	0	0	0	0	0	0	0	0	32	3	1	0	0	0	1	37	36.7	12:00	29	6	2	1	1	0	0	39	42.3
0	0	0	1	1	0	0	0	0	0	0	0	0	0	12:15	0	0	0	0	0	0	0	0	0	32	3	0	0	0	0	2	37	35.4	12:15	26	3	0	1	0	0	0	30	31.3
0	0	0	0	0	0	0	0	0	0	0	0	0	0	12:30	2	0	0	0	0	0	0	2	2	24	5	2	0	1	0	3	35	34.6	12:30	31	4	0	3	1	0	0	39	43.9
0	0	0	1	1	0	0	0	0	0	0	0	0	0	12:45	0	0	0	0	0	0	0	0	0	36	4	1	0	0	0	0	41	41.5	12:45	33	5	3	2	0	0	0	43	47.1
0	0	0	3	3	0	0	0	0	0	0	0	0	0	Hour	2	0	0	0	0	0	0	2	2	124	15	4	0	1	0	6	150	148.2	Hour	119	18	5	7	2	0	0	151	164.6
0	0	0	1	1	0	0	0	0	0	0	0	0	0	13:00	3	0	0	0	0	0	0	3	3	52	5	0	0	0	0	4	61	57.8	13:00	32	6	1	0	1	0	3	43	42.1
0	0	0	0	0	0	0	0	0	0	0	0	0	0	13:15	1	0	0	0	0	0	0	1	1	22	2	0	0	0	0	1	25	24.2	13:15	35	2	2	0	0	0	0	39	40
0	0	0	0	0	0	0	0	0	0	0	0	0	0	13:30	0	0	0	0	0	0	0	0	0	42	2	2	0	3	0	5	54	54	13:30	34	6	1	3	1	0	1	46	50.6
0	0	0	1	1	1	0	0	0	0	0	0	2	2	13:45	2	0	0	0	0	0	0	2	2	43	1	0	0	0	0	1	45	44.2	13:45	32	3	2	0	0	0	1	38	38.2
0	0	0	2	2	1	1	0	0	0	0	0	2	2	Hour	6	0	0	0	0	0	0	6	6	159	10	2	0	3	0	11	185	180.2	Hour	133	17	6	3	2	0	5	166	170.9
0	0	0	2	2	0	0	0	0	0	0	0	0	0	14:00	0	0	0	0	0	0	0	0	0	30	0	1	0	1	0	1	33	33.7	14:00	25	3	3	0	2	0	0	33	36.5
0	0	0	2	2	1	0	0	0	0	0	0	1	1	14:15	1	0	0	0	0	0	0	1	1	32	3	1	0	0	0	5	41	37.5	14:15	26	4	4	0	0	0	1	35	36.2
0	0	0	1	1	2	0	0	0	0	0	0	2	2	14:30	2	0	0	0	0	0	0	2	2	88	0	1	0	0	2	3	94	90.9	14:30	48	5	1	0	1	0	0	55	56.5
0	0	0	1	1	3	0	0	0	0	0	0	3	3	14:45	2	0	0	0	0	0	0	2	2	38	2	0	1	0	0	1	42	42.5	14:45	37	4	1	1	0	0	0	43	44.8
0	0	0	6	6	6	0	0	0	0	0	0	6	6	Hour	5	0	0	0	0	0	0	5	5	188	5	3	1	1	2	10	210	204.6	Hour	136	16	9	1	3	0	1	166	174
0	0	0	2	2	0	0	0	0	0	0	0	0	0	15:00	3	0	0	0	0	0	0	3	3	53	4	1	0	1	0	3	62	61.1	15:00	45	6	2	3	1	0	0	57	62.9
0	0	0	1	1	0	0	0	0	0	0	0	0	0	15:15	0	0	0	0	0	0	0	0	0	42	1	1	0	0	0	1	45	44.7	15:15	35	4	0	0	0	0	0	39	39
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	39	5	0	0	2	1	1	48	48.6	15:30	25	7	1	0	1	0	0	34	35.5
0	0	0	0	0	0	0	0	0	0	0	0	0	0	15:45	1	0	0	0	0	0	0	1	1	39	6	0	0	0	1	1	47	45.6	15:45	28	3	0	0	0	0	0	31	31
0	0	0	3	3	0	0	0	0	0	0	0	0	0	Hour	4	0	0	0	0	0	0	4	4	173	16	2	0	3	2	6	202	200	Hour	133	20	3	3	2	0	0	161	168.4
0	0	0	3	3	0	0	0	0	0	0	0	0	0	16:00	3	0	0	0	0	0	0	3	3	39	1	0	0	0	2	2	44	41.2	16:00	38	5	1	0	1	1	0	46	46.9
0	0	0	1	1	0	0	0	0	0	0	0	0	0	16:15	0	0	0	0	0	0	0	0	0	42	9	0	1	0	0	1	53	53.5	16:15	29	6	1	0	0	0	0	36	36.5
0	0	0	0	0	2	0	0	0	0	0	0	2	2	16:30	0	0	0	0	0	0	0	0	0	42	3	0	0	1	2	0	48	47.8	16:30	34	2	1	0	1	0	0	38	39.5
0	0	0	4	4.5	1	0	0	0	0	0	0	1	1	16:45	0	0	0	0	0	0	0	0	0	43	3	0	0	0	0	1	47	46.2	16:45	25	3	1	0	0	0	0	29	29.5
0	0	0	8	8.5	3	0	0	0	0	0	0	3	3	Hour	3	0	0	0	0	0	0	3	3	166	16	0	1	1	4	4	192	188.7	Hour	126	16	4	0	2	1	0	149	152.4
0	0	0	0	0	0	0	0	0	0	0	0	0	0	17:00	1	0	0	0	0	0	0	1	1	35	2	0	0	0	1	0	38	37.4	17:00	28	4	0	0	1	1	1	35	34.6
0	0	0	1	1	0	0	0	0	0	0	0	1	1	17:15	0	0	0	0	0	0	0	0	0	35	2	0	0	0	0	0	37	37	17:15	30	5	0	0	0	0	0	35	35
0	0	0	2	2	0	0	0	0	0	0	0	0	0	17:30	0	0	0	0	0	0	0	0	0	30	3	0	0	1	0	2	36	35.4	17:30	20	5	0	0	1	0	0	26	27
0	0	0	0	0	0	0	0	0	0	0	0	0	0	17:45	3	1	0	0	0	0	0	4	4	24	1	0	0	0	1	0	26	25.4	17:45	24	1	0	0	0	0	0	25	25
0	0	0	3	3	1	0	0	0	0	0	0	1	1	Hour	4	1	0	0	0	0	0	5	5	124	8	0	0	1	2	2	137	135.2	Hour	102	15	0	0	2	1	1	121	121.6
0	0	0	1	1	1	0	0	0	0	0	0	1	1	18:00	0	0	0	0	0	0	0	0	0	22	1	1	0	0	0	0	24	24.5	18:00	27	2	0	0	1	0	0	30	31
0	0	0	1	1	0	0	0	0	0	0	0	0	0	18:15	0	0	0	0	0	0	0	0	0	35	3	0	0	0	0	0	38	38	18:15	18	2	0	0	0	0	0	20	20
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	27	1	0	0	0	1	0	29	28.4	18:30	36	1	1	0	0	0	0	38	38.5
0	0	0	2	2	0	0	0	0	0	0	0	0	0	18:45	0	0	0	0	0	0	0	0	0	32	0	0	0	1	1	0	34	34.4	18:45	31	1	2	0	0	0	0	34	35
0	0	0	4	4	1	0	0	0	0	0	0	1	1	Hour	0	0	0	0	0	0	0	0	0	116	5	1	0	1	2	0	125	125.3	Hour	112	6	3	0	1	0	0	122	124.5
0	0	0	38	39	15	2	1	0	0	0	0	18	18.5	Total	28	3	0	0	0	0	0	31	31	1691	141	39	3	24	19	97	2014	1972.4	Total	1475	189	57	25	28	6	9	1789	1867.2

12241 / Kilternan
November 2021
Junction Turning Count

Site No. 1
Location Enniskerry Rd(N) / Parking Access / Enniskerry Rd(S) / G
Date 2021-11-10

12241 / Kilternan
November 2021
Junction Turning Count

lenamuck Rd

Site No. 1
Location Enniskerry Rd(N) / Parking Access / Enniskerry Rd(S) / Glenamuck Rd
Date 2021-11-10

Site No. 1
Location Enniskerry Rd(N) / Parking Access / Enniskerry Rd(S) / Glenamuck Rd
Date 2021-11-10

D to C - Glenamuck Rd to Enniskerry Rd(S)							Veh.	PCU.	Time	D to B - Glenamuck Rd to Parking Access							Veh.	PCU.	D to A - Glenamuck Rd to Enniskerry Rd(N)							Veh.	PCU.	Time	To Arm A - Enniskerry Rd(N)							Veh.	PCU.	From Arm A - Enniskerry Rd(				
CAR	LGV	OGV1	OGV2	PSV	M/C	P/C	Total	Total		CAR	LGV	OGV1	OGV2	PSV	M/C	P/C	Total	Total	CAR	LGV	OGV1	OGV2	PSV	M/C	P/C	Total	Total		CAR	LGV	OGV1	OGV2	PSV	M/C	P/C	Total	Total	CAR	LGV	OGV1	OGV2	PSV
13	9	1	0	0	0	1	24	23.7	07:00	0	0	0	0	0	0	0	0	0	5	5	1	0	1	0	0	12	13.5	07:00	14	8	2	0	1	0	0	25	27	10	4	0	0	1
18	12	1	0	2	1	0	34	35.9	07:15	0	0	0	0	0	0	0	0	0	6	0	0	1	1	0	0	8	10.3	07:15	22	6	0	1	5	2	1	37	41.3	24	1	0	0	2
22	7	2	1	0	1	0	33	34.7	07:30	0	0	0	0	0	0	0	0	0	20	4	0	1	0	0	1	26	26.5	07:30	43	12	1	1	1	0	2	60	61.2	39	3	2	1	5
22	12	0	1	1	0	0	36	38.3	07:45	1	0	0	0	0	0	0	1	1	11	5	0	0	0	0	0	16	16	07:45	53	8	2	0	3	0	5	71	71	50	6	0	1	0
75	40	4	2	3	2	1	127	132.6	Hour	1	0	0	0	0	0	0	1	1	42	14	1	2	2	0	1	62	66.3	Hour	132	34	5	2	10	2	8	193	200.5	123	14	2	2	8
33	9	0	1	1	1	0	45	46.7	08:00	0	0	0	0	0	0	0	0	0	11	2	0	0	1	0	0	14	15	08:00	43	5	3	0	1	0	3	55	55.1	92	5	0	0	0
29	5	2	1	0	0	0	37	39.3	08:15	0	0	0	0	0	0	0	0	0	34	0	1	1	0	0	0	36	37.8	08:15	83	6	2	1	1	0	0	93	96.3	105	6	0	0	0
44	6	0	1	0	0	0	51	52.3	08:30	0	0	0	0	0	0	0	0	0	32	0	0	0	1	0	0	33	34	08:30	99	4	1	0	1	0	0	105	106.5	151	8	2	1	0
41	7	2	0	1	0	0	51	53	08:45	0	0	0	0	0	0	0	0	0	22	1	0	0	0	0	1	24	23.2	08:45	105	4	1	0	0	1	3	114	111.5	78	8	3	0	0
147	27	4	3	2	1	0	184	191.3	Hour	0	0	0	0	0	0	0	0	0	99	3	1	1	2	0	1	107	110	Hour	330	19	7	1	3	1	6	367	369.4	426	27	5	1	0
27	4	1	0	2	0	1	35	36.7	09:00	0	1	0	0	0	0	0	1	1	18	2	0	1	0	0	0	21	22.3	09:00	50	6	1	1	0	3	2	63	61.4	63	2	1	0	1
23	3	0	1	1	0	0	28	30.3	09:15	0	0	0	0	0	0	0	0	0	19	1	1	0	0	0	0	21	21.5	09:15	53	6	3	0	0	0	0	62	63.5	55	3	0	1	0
21	5	1	1	1	0	0	29	31.8	09:30	0	0	0	0	0	0	0	0	0	10	1	0	0	0	0	0	11	11	09:30	39	2	0	0	1	0	1	43	43.2	55	6	1	0	0
20	9	3	1	1	0	1	35	38	09:45	1	0	0	0	0	0	0	1	1	18	1	0	0	0	0	0	19	19	09:45	44	3	1	0	0	0	1	49	48.7	55	3	1	0	0
91	21	5	3	5	0	2	127	136.8	Hour	1	1	0	0	0	0	0	2	2	65	5	1	1	0	0	0	72	73.8	Hour	186	17	5	1	1	3	4	217	216.8	228	14	3	1	1
16	5	0	0	0	0	0	21	21	10:00	0	0	0	0	0	0	0	0	0	14	5	0	0	0	0	1	20	19.2	10:00	36	8	2	0	0	0	5	51	48	46	4	1	0	1
27	5	0	0	1	1	0	34	34.4	10:15	1	1	0	0	0	0	0	2	2	13	3	0	1	0	0	0	17	18.3	10:15	35	5	3	1	0	0	8	52	48.4	54	6	2	1	0
26	5	1	0	0	0	0	32	32.5	10:30	0	0	0	0	0	0	0	0	0	16	0	0	0	1	0	0	17	18	10:30	42	2	1	0	2	0	7	54	50.9	32	8	2	1	0
22	7	5	2	1	0	1	38	43.3	10:45	0	0	0	0	0	0	0	0	0	16	2	1	0	0	0	0	19	19.5	10:45	39	5	3	0	0	0	12	59	50.9	41	9	2	0	0
91	22	6	2	2	1	1	125	131.2	Hour	1	1	0	0	0	0	0	2	2	59	10	1	1	1	0	1	73	75	Hour	152	20	9	1	2	0	32	216	198.2	173	27	7	2	1
30	6	3	0	1	0	0	40	42.5	11:00	0	0	0	0	0	0	0	0	0	8	1	0	0	0	0	0	9	9	11:00	30	2	3	0	0	1	1	37	37.1	48	2	1	0	1
22	6	1	1	1	1	1	33	34.4	11:15	2	0	0	0	0	0	0	2	2	18	5	0	0	0	0	0	23	23	11:15	44	9	2	1	1	0	3	60	60.9	45	7	1	0	0
27	0	1	2	0	1	1	32	33.7	11:30	3	0	0	0	0	0	0	3	3	13	1	1	0	0	0	1	16	15.7	11:30	48	3	2	0	1	0	4	58	56.8	58	6	1	0	0
17	8	0	2	0	0	1	28	29.8	11:45	0	0	0	0	0	0	0	0	0	10	6	0	0	0	0	0	16	16	11:45	39	8	0	0	0	0	4	51	47.8	51	5	3	0	0
96	20	5	5	2	2	3	133	140.4	Hour	5	0	0	0	0	0	0	5	5	49	13	1	0	0	0	1	64	63.7	Hour	161	22	7	1	2	1	12	206	202.6	202	20	6	0	1
34	3	0	1	1	0	1	40	41.5	12:00	1	0	0	0	0	0	0	1	1	14	1	0	0	0	0	0	15	15	12:00	47	4	1	0	0	0	1	53	52.7	54	3	1	0	1
38	6	4	0	1	0	0	49	52	12:15	0	0	0	0	0	0	0	0	0	21	2	0	0	0	0	0	23	23	12:15	53	5	0	0	0	0	2	60	58.4	50	13	2	0	0
33	3	0	1	0	0	0	37	38.3	12:30	1	0	0	0	0	0	0	1	1	11	3	1	0	0	0	2	17	15.9	12:30	37	8	3	0	1	0	5	54	52.5	59	9	0	0	0
27	5	2	1	0	0	0	35	37.3	12:45	2	0	0	0	0	0	0	2	2	27	1	1	1	1	0	0	31	33.8	12:45	64	6	2	1	1	0	0	74	77.3	62	7	2	1	1
132	17	6	3	2	0	1	161	169.1	Hour	4	0	0	0	0	0	0	4	4	73	7	2	1	1	0	2	86	87.7	Hour	201	23	6	1	2	0	8	241	240.9	225	32	5	1	2
36	5	2	3	2	0	1	49	55.1	13:00	0	0	0	0	0	0	0	0	0	22	2	0	0	0	0	0	24	24	13:00	75	7	0	0	0	0	4	86	82.8	57	8	1	0	1
41	5	1	0	0	0	0	47	47.5	13:15	1	0	0	0	0	0	0	1	1	15	2	0	1	0	0	0	18	19.3	13:15	39	4	0	1	0	0	1	45	45.5	80	7	0	0	1
38	9	4	0	1	0	0	52	55	13:30	0	0	0	0	0	0	0	0	0	22	2	0	0	0	0	0	24	24	13:30	64	4	2	0	3	0	5	78	78	70	3	2	1	2
42	7	1	0	1	0	0	51	52.5	13:45	1	0	0	0	0	0	0	1	1	38	1	0	0	0	0	0	39	39	13:45	81	2	0	0	0	0	1	84	83.2	77	5	2	0	0
157	26	8	3	4	0	1	199	210.1	Hour	2	0	0	0	0	0	0	2	2	97	7	0	1	0	0	0	105	106.3	Hour	259	17	2	1	3	0	11	293	289.5	284	23	5	1	4
42	8	1	4	0	0	0	55	60.7	14:00	0	0	0	0	0	0	0	0	0	36	2	0	0	0	0	0	38	38	14:00	68	2	1	0	1	0	1	73	73.7	78	13	2	0	1
52	3	1	0	0	0	0	56	56.5	14:15	0	0	0	0	0	0	0	0	0	20	2	0	0	0	0	0	22	22	14:15	55	5	1	0	0	0	5	66	62.5	117	4	1	0	1
25	5	1	0	1	0	0	32	33.5	14:30	0	0	0	0	0	0	0	0	0	18	3	1	1	0	0	0	23	24.8	14:30	107	3	2	1	0	2	3	118	116.7	79	7	0	1	3
36	6	0	0	0	0	0	42	42	14:45	1	0	0	0	0	0	0	1	1	33	4	1	0	0	0	0	38	38.5	14:45	72	6	1	1	0	0	1	81	82	56	2	0	0	0
155	22	3	4	1	0	0	185	192.7	Hour	1	0	0	0	0	0	0	1	1	107	11	2	1	0	0	0	121	123.3	Hour	302	16	5	2	1	2	10	338	334.9	330	26	3	1	5
40	2	0	0	1	1	0	44	44.4	15:00	0	0	0	0	0	0	0	0	0	22	1	0	0	0	0	0	23	23	15:00	76	5	1	0	1	0	3	86	85.1	61	1	0	0	2
50	7	1	0	0	0	0	58	58.5	15:15	1	0	0	0	0	0	0	1	1	11	1	0	0	0	0	0	12	12	15:15	54	2	1	0	0	0	1	58	57.7	46	7	3	0	1
35	8	1	1	1	0	0	46	48.8	15:30	2	0	0	0	0	0	0	2	2	14	0	0	0	0	0	0	14	14	15:30	54	5	0	0	2	1	1	63	63.6	74	8	0	0	1
49	3	1	0	0	0	0	53	53.5	15:45	3	0	0	0	0	0	0	3	3	23	7	0	0	0	0	0	30	30	15:45	64	13	0	0	0	1	1	79	77.6	62	7	0	2	0
174	20	3	1	2	1	0	201	205.2	Hour	6	0	0	0	0	0	0	6	6	70	9	0	0	0	0	0	79	79	Hour	248	25	2	0	3	2	6	286	284	243	23	3	2	4
20	8	2	0	1	1	0	32	33.4	16:00	0	0	0	0	0	0	0	0	0	28	0	0	0	1	0	0	29	30	16:00	69	1	0	0	1	2	2	75	73.2	63	15	0	0	2
49	11	2	0	1	0	0	63	65	16:15	2	0	1	0	0	0	0	3	3.5	33	4	0	0	0	0	0	37	37	16:15	75	13	0	1	0	0	1	90	90.5	77	17	0	0	1
45	5	1	0	1	0	0	52	53.5	16:30	1	0	0	0	0	0	0	1	1	15	2	3	0	0	0	0	20	21.5	16:30	58	5	3	0	1	2	0	69	70.3	90	12	1	0	0
45	5	0	0	0	0	0	50	50	16:45	2	0	0	0	0	0	0	2	2	27	2	0	0	0	0	0	29	29	16:45	70	5	0	0	0	0	1	76	75.2	67	11	3	1	0
159	29	5	0	3	1	0	197	201.9	Hour	5	0	1	0	0	0	0	6	6.5	103	8	3	0	1	0	0	115	117.5	Hour	272	24	3	1	2	4	4	310	309.2	297	55	4	1	3
53	6	2	0	1	1	1	64	64.6	17:00	2	0	0	0	0	0	0	2	2	26	2	0	0	0	0	0	28	28	17:00	62	4	0	0	0	1	0	67	66.4	82	13	0	0	0
54	4	2	2	0	0	0	62	65.6	17:15	1	0	0	0	0	0	0	1	1	20	2	0	0	0	0	0	22	22	17:15	56	4	0	0	0	0	0	60	60	82	5	1	0	2
45	3	0	0	0	0	0	48	48	17:30	0	0	0	0	0	0	0	0	0	35	2	0	0	0	0	0	37	37	17:30	65	5	0	0	1	0	2	73	72.4	77	5	0	0	0
47	5	0	0	0	1	0	53	52.4	17:45	0	0	0	0	0	0	0	0	0	24	3	0	0	0	0	0	27	27	17:45	48	4	0	0	0	1	0	53	52.4	67	8	1	0	0
199	18	4	2	1	2	1	227	230.6	Hour	3	0	0	0	0	0	0	3	3	105	9	0	0	0	0	0	114	114	Hour	231	17	0	0	1	2	2	253	251.2	308	31	2	0	2
31	5	0	0	1	1	0	38	38.4	18:00	0	0	0	0	0	0	0	0	0	28	2	0	0	1	0	0	31	32	18:00	51	3	1	0	1	0	0	56	57.5	66	7	0	0	1
44	6	0	0	0	0	0	50	50	18:15	0	0	0	0	0	0	0	0	0	23	1	1	0	1	0	0	26	27.5	18:15	60	4	1	0	1	0	0	66	67.5	61	3	2	0	1
43	1	0	0	1	0	0	45	46	18:30	1	0	0	0	0	0	0	1	1	30	1	0	0	0	1	0	32	31.4	18:30	57	2	0	0	0	2	0	61	59.8	63	7	1	0	0
32	3	3	1	2	1	0	42	46.2	18:45	1	0	0	0	0	0	0	1	1	40	0	0	0	0	0	0	40	40	18:45	72	1	0	0	1	1	0	75	75.4	84	1	0	0	0
150	15	3	1	4	2	0	175	180.6	Hour	2	0	0	0	0	0	0	2	2	121	4	1	0	2	1	0	129	130.9	Hour	240	10	2	0	3	3	0	258	260.2	274	18	3	0	2
1626	277	56	29	31	12	10	2041	2122.5	Total	31	2	1	0	0	0	0	34	34.5	990	100	13	8	9	1	6	1127	1147.5	Total	2714	244	53	11	33	20	103	3178	3157.4	3113	310	48	12	33

Site No. 1
Location Enniskerry Rd(N) / Parking Access / Enniskerry Rd(S) / Glenamuck Rd
Date 2021-11-10

N)		Veh.	PCU.	Time	To Arm B - Parking Access							Veh.	PCU.	From Arm B - Parking Access							Veh.	PCU.	Time	To Arm C - Enniskerry Rd(S)							Veh.	PCU.	From Arm C - Enniskerry Rd(S)							Veh.	PCU.	Time
M/C	P/C	Total	Total		CAR	LGV	OGV1	OGV2	PSV	M/C	P/C	Total	Total	CAR	LGV	OGV1	OGV2	PSV	M/C	P/C	Total	Total		CAR	LGV	OGV1	OGV2	PSV	M/C	P/C	Total	Total	CAR	LGV	OGV1	OGV2	PSV	M/C	P/C	Total	Total	
0	1	16	16.2	07:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	07:00	16	12	1	0	1	0	1	31	31.7	41	8	4	0	2	2	0	57	59.8	07:00
0	1	28	29.2	07:15	1	1	0	0	0	0	0	2	2	1	0	0	0	0	0	0	1	1	07:15	34	12	1	0	4	1	1	53	56.1	42	16	3	0	5	2	1	69	73.5	07:15
0	2	52	57.7	07:30	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	2	2	07:30	42	9	4	1	3	1	1	61	65.9	59	14	3	0	3	0	1	80	83.7	07:30
1	0	58	58.7	07:45	1	0	0	0	0	0	0	1	1	2	0	0	0	0	0	0	2	2	07:45	43	16	0	1	1	1	0	62	63.7	83	7	2	2	4	1	7	106	107.4	07:45
1	4	154	161.8	Hour	2	1	0	0	0	0	0	3	3	4	1	0	0	0	0	0	5	5	Hour	135	49	6	2	9	3	3	207	217.4	225	45	12	2	14	5	9	312	324.4	Hour
0	2	99	97.4	08:00	1	0	0	0	0	0	0	1	1	1	0	0	0	0	0	0	1	1	08:00	80	11	0	1	1	1	2	96	96.1	72	7	3	1	0	0	3	86	86.4	08:00
1	0	112	111.4	08:15	1	0	0	0	0	0	0	1	1	1	0	0	0	0	0	0	1	1	08:15	85	10	2	1	0	1	0	99	100.7	101	9	1	0	1	0	0	112	113.5	08:15
0	1	163	164.5	08:30	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1	1	08:30	150	11	1	1	0	0	1	164	165	100	10	1	2	1	0	0	114	118.1	08:30
0	3	92	91.1	08:45	0	0	1	0	0	0	0	1	1.5	0	0	0	0	0	0	0	0	0	08:45	88	11	3	0	1	0	3	106	106.1	124	8	2	0	0	1	2	137	135.8	08:45
1	6	466	464.4	Hour	2	0	1	0	0	0	0	3	3.5	3	0	0	0	0	0	0	3	3	Hour	403	43	6	3	2	2	6	465	467.9	397	34	7	3	2	1	5	449	453.8	Hour
0	2	69	68.9	09:00	0	1	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	09:00	57	6	1	0	3	0	3	70	71.1	60	8	2	1	1	3	2	77	76.9	09:00
0	1	60	60.5	09:15	1	0	0	0	0	0	0	1	1	0	0	1	0	0	0	0	1	1.5	09:15	60	6	0	1	1	0	1	69	70.5	69	10	2	1	0	0	0	82	84.3	09:15
0	1	63	62.7	09:30	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1	1	09:30	53	10	2	1	1	0	1	68	70.5	58	3	2	1	2	0	1	67	70.5	09:30
0	4	63	60.3	09:45	1	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	09:45	55	12	4	1	1	0	5	78	78.3	51	6	3	1	0	0	1	62	64	09:45
0	8	255	252.4	Hour	2	1	0	0	0	0	0	3	3	0	1	1	0	0	0	0	2	2.5	Hour	225	34	7	3	6	0	10	285	290.4	238	27	9	4	3	3	4	288	295.7	Hour
1	6	59	55.1	10:00	0	0	1	0	0	0	0	1	1.5	0	0	1	0	0	0	0	1	1.5	10:00	44	6	1	0	1	1	6	59	55.1	46	3	5	0	1	0	4	59	59.3	10:00
0	4	67	66.1	10:15	2	1	0	0	0	0	0	3	3	2	0	0	0	0	0	0	2	2	10:15	63	10	2	1	1	1	3	81	81.3	46	6	5	0	0	0	8	65	61.1	10:15
2	4	49	46.9	10:30	0	0	1	0	0	0	0	1	1.5	1	1	1	0	0	0	0	3	3.5	10:30	50	12	1	0	0	2	4	69	65.1	49	8	2	0	2	1	7	69	65.8	10:30
0	0	52	53	10:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	10:45	47	11	7	2	1	0	1	69	75.3	52	5	3	0	0	0	12	72	63.9	10:45
3	14	227	221.1	Hour	2	1	2	0	0	0	0	5	6	3	1	2	0	0	0	0	6	7	Hour	204	39	11	3	3	4	14	278	276.8	193	22	15	0	3	1	31	265	250.1	Hour
2	1	55	54.5	11:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	11:00	62	8	4	0	2	2	1	79	81	43	3	5	0	1	1	1	54	56.1	11:00
0	1	54	53.7	11:15	4	0	0	0	0	0	0	4	4	2	0	0	0	0	0	0	2	2	11:15	51	11	1	1	1	1	2	68	68.6	49	5	3	3	2	0	3	65	70	11:15
0	1	66	65.7	11:30	5	0	0	0	0	0	0	5	5	2	0	0	0	0	0	0	2	2	11:30	64	5	2	2	0	1	2	76	77.4	58	7	2	0	2	0	3	72	72.6	11:30
0	1	60	60.7	11:45	0	1	0	0	0	0	0	1	1	2	0	0	0	0	0	0	2	2	11:45	50	11	3	2	0	0	2	68	70.5	56	6	1	0	0	0	4	67	64.3	11:45
2	4	235	234.6	Hour	9	1	0	0	0	0	0	10	10	6	0	0	0	0	0	0	6	6	Hour	227	35	10	5	3	4	7	291	297.5	206	21	11	3	5	1	11	258	263	Hour
0	1	60	60.7	12:00	1	0	0	0	0	0	0	1	1	2	0	0	0	0	0	0	2	2	12:00	64	3	1	1	2	0	2	73	75.2	61	9	3	1	1	0	1	76	79	12:00
0	6	71	67.2	12:15	0	1	0	0	0	0	0	1	1	0	1	0	0	0	0	0	1	1	12:15	69	13	6	0	1	0	6	95	94.2	58	6	0	1	0	0	2	67	66.7	12:15
0	4	72	68.8	12:30	3	0	0	0	0	0	0	3	3	2	0	0	0	0	0	0	2	2	12:30	63	9	0	1	0	0	4	77	75.1	57	9	2	3	2	0	3	76	80.5	12:30
1	0	74	76.7	12:45	3	0	0	0	0	0	0	3	3	2	1	0	0	0	0	0	3	3	12:45	64	8	4	2	1	1	0	80	85	69	9	4	2	0	0	0	84	88.6	12:45
1	11	277	273.4	Hour	7	1	0	0	0	0	0	8	8	6	2	0	0	0	0	0	8	8	Hour	260	33	11	4	4	1	12	325	329.5	245	33	9	7	3	0	6	303	314.8	Hour
0	1	68	68.7	13:00	3	0	0	0	0	0	0	3	3	1	1	0	0	0	0	0	2	2	13:00	66	8	3	3	3	0	2	85	91.8	87	11	1	0	1	0	7	107	102.9	13:00
0	2	90	89.4	13:15	2	0	0	0	0	0	0	2	2	2	0	0	0	0	0	0	2	2	13:15	92	9	1	0	1	0	2	105	104.9	58	4	2	0	0	0	1	65	65.2	13:15
0	3	81	82.9	13:30	2	0	0	0	0	0	0	2	2	0	0	0	0	0	0	0	0	0	13:30	88	11	6	0	3	0	3	111	114.6	76	8	3	3	4	0	6	100	104.6	13:30
0	0	84	85	13:45	5	0	0	0	0	0	0	5	5	2	1	0	0	0	0	0	3	3	13:45	88	9	3	0	1	0	0	101	103.5	77	4	2	0	0	0	2	85	84.4	13:45
0	6	323	326	Hour	12	0	0	0	0	0	0	12	12	5	2	0	0	0	0	0	7	7	Hour	334	37	13	3	8	0	7	402	414.8	298	27	8	3	5	0	16	357	357.1	Hour
0	3	97	96.6	14:00	0	0	0	0	0	0	0	0	0	4	0	0	0	0	0	0	4	4	14:00	89	18	2	4	1	0	3	117	121.8	55	3	4	0	3	0	1	66	70.2	14:00
0	0	123	124.5	14:15	1	0	0	0	0	0	0	1	1	6	0	0	0	0	0	0	6	6	14:15	135	6	2	0	0	0	0	143	144	59	7	5	0	0	0	6	77	74.7	14:15
0	1	91	94.5	14:30	3	0	0	0	0	0	0	3	3	4	0	0	0	0	0	0	4	4	14:30	71	6	1	0	3	0	1	82	84.7	138	5	2	0	1	2	3	151	149.4	14:30
0	1	59	58.2	14:45	5	0	0	0	0	0	0	5	5	5	0	0	0	0	0	0	5	5	14:45	70	7	0	0	0	0	1	78	77.2	77	6	1	2	0	0	1	87	89.3	14:45
0	5	370	373.8	Hour	9	0	0	0	0	0	0	9	9	19	0	0	0	0	0	0	19	19	Hour	365	37	5	4	4	0	5	420	427.7	329	21	12	2	4	2	11	381	383.6	Hour
1	1	66	66.6	15:00	4	0	0	0	0	0	0	4	4	3	0	0	0	0	0	0	3	3	15:00	76	2	0	0	2	2	1	83	83	101	10	3	3	2	0	3	122	127	15:00
0	1	58	59.7	15:15	1	1	0	0	0	0	0	2	2	2	0	0	0	0	0	0	2	2	15:15	77	11	3	0	1	0	0	92	94.5	77	5	1	0	0	0	1	84	83.7	15:15
0	2	85	84.4	15:30	2	0	0	0	0	0	0	2	2	1	0	0	0	0	0	0	1	1	15:30	73	12	1	1	1	0	1	89	91	64	12	1	0	3	1	1	82	84.1	15:30
0	1	72	73.8	15:45	5	0	0	0	0	0	0	5	5	2	0	0	0	0	0	0	2	2	15:45	90	8	1	1	0	0	1	101	102	68	9	0	0	0	1	1	79	77.6	15:45
1	5	281	284.5	Hour	12	1	0	0	0	0	0	13	13	8	0	0	0	0	0	0	8	8	Hour	316	33	5	2	4	2	3	365	370.5	310	36	5	3	5	2	6	367	372.4	Hour
0	3	83	82.6	16:00	5	0	0	0	0	0	0	5	5	5	0	0	0	0	0	0	5	5	16:00	62	18	2	0	3	1	3	89	90	80	6	1	0	1	3	2	93	91.1	16:00
0	1	96	96.2	16:15	3	0	1	0	0	0	0	4	4.5	1	0	0	0	0	0	0	1	1	16:15	100	26	2	0	2	0	0	130	133	71	15	1	1	0	0	1	89	90	16:15
0	1	104	103.7	16:30	2	0	0	0	0	0	0	2	2	3	0	0	0	0	0	0	3	3	16:30	97	15	2	0	1	0	1	116	117.2	76	5	1	0	2	2	0	86	87.3	16:30
2	1	85	85.8	16:45	2	0	0	0	0	0	0	2	2	3	1	1	0	0	0	0	5	5.5	16:45	94	13	2	1	0	2	1	113	113.3	68	6	1	0	0	0	1	76	75.7	16:45
2	6	368	368.3	Hour	12	0	1	0	0	0	0	13	13.5	12	1	1	0	0	0	0	14	14.5	Hour	353	72	8	1	6	3	5	448	453.5	295	32	4	1	3	5	4	344	344.1	Hour
0	2	97	95.4	17:00	5	0	0	0	0	0	0	5	5	1	0	0	0	0	0	0	1	1	17:00	110	19	2	0	1	1	3	136	135	64	6	0	0	1	2	1	74	73	17:00
1	0	91	92.9	17:15	2	0	0	0	0	0	0	2	2	3	0	0	0	0	0	0	3	3	17:15	117	8	3	2	2	1	0	133	138.5	65	7	0	0	0	0	0	72	72	17:15
3	0	85	83.2	17:30	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	2	2	17:30	92	7	0	0	0	3	0	102	100.2	50	8	0	0	2	0	2	62	62.4	17:30
0	2	78	76.9	17:45	4	1	0	0	0	0	0	5	5	0	0	0	0	0	0	0	0	0	17:45	89	9	0	0	0	1	2	101	98.8	51	3	0	0	0	1	0	55	54.4	17:45
4	4	351	348.4	Hour	11	1	0	0	0	0	0	12	12	6	0	0	0	0	0	0	6	6	Hour	408	43	5	2	3	6	5	472	472.5	230	24	0	0	3	3	3	263	261.8	Hour
0	2	76	75.4	18:00	2	0	0	0	0	0	0	2	2	3	0	0	0	0	0	0	3	3	18:00	71	10	0	0	2	1	2	86	85.8	49	3	1	0	1	0	0	54	55.5	18:00
0	0	69	69	18:15	0	0	0	0	0	0	0	0	0	3	0	0	0	0	0	0	3	3	18:15	82	8	0	0	0	0	0	90	90	53	5	0	0	0	0	0	58	58	18:15
0	1	72	71.7	18:30	2	0	0	0	0	0	0	2	2	0	0	0	0	0	0	0	0	0	18:30	81	2	1	0	1	0	1	86	86.7	63	2	1	0	0	1	0	67	66.9	18:30
0	3	88	85.6	18:45	1	0	0	0	0	0	0	1	1	2	1	0	0	0	0	0	3	3	18:45	86	4	3	1	2	1	3	100	101.8	63	1	2	0	1	1	0	68	69.4	18:45
0	6	303	301.7	Hour	5	0	0	0	0	0	0	5	5	8	1	0	0	0	0	0	9	9	Hour	320	24	4	1	5	2	6	362	364.3	228	11	4	0	2	2	0	247	249.8	Hour
15	79	3610	3610.4	Total	85	7	4	0	0	0	0	96	98	80	9	4	0	0	0	0	93	95	Total	3550	479	91	33	57	27	83	4320	4382.8	3194	333	96	28	52	25	106	3834	3870.6	Total

). 1
on Enniskerry Rd(N) / Parking Access / Enniskerry Rd(S) / Glenamuck Rd
2021-11-10

To Arm D - Glenamuck Rd							Veh. Total	PCU. Total	From Arm D - Glenamuck Rd							Veh. Total	PCU. Total
CAR	LGV	OGV1	OGV2	PSV	M/C	P/C			CAR	LGV	OGV1	OGV2	PSV	M/C	P/C		
39	6	3	0	2	2	1	53	54.5	18	14	2	0	1	0	1	36	37.2
34	10	3	0	1	0	0	48	50.5	24	12	1	1	3	1	0	42	46.2
56	8	2	1	4	0	1	72	77.5	42	11	2	2	0	1	1	59	61.2
72	6	0	3	1	1	2	85	87.7	34	17	0	1	1	0	0	53	55.3
201	30	8	4	8	3	4	258	270.2	118	54	5	4	5	2	2	190	199.9
85	7	0	1	0	0	0	93	94.3	44	11	0	1	2	1	0	59	61.7
101	4	0	0	0	0	0	105	105	63	5	3	2	0	0	0	73	77.1
79	9	1	3	1	0	0	93	98.4	76	6	0	1	1	0	0	84	86.3
72	9	2	0	0	0	0	83	84	63	8	2	0	1	0	1	75	76.2
337	29	3	4	1	0	0	374	381.7	246	30	5	4	4	1	1	291	301.3
61	4	2	1	1	0	0	69	72.3	45	7	1	1	2	0	1	57	60
52	5	1	2	0	0	0	60	63.1	42	4	1	1	1	0	0	49	51.8
52	4	2	1	1	0	0	60	63.3	31	6	1	1	1	0	0	40	42.8
45	4	2	1	0	0	0	52	54.3	39	10	3	1	1	0	1	55	58
210	17	7	5	2	0	0	241	253	157	27	6	4	5	0	2	201	212.6
42	3	3	0	1	0	0	49	51.5	30	10	0	0	0	0	1	41	40.2
43	5	2	0	0	0	1	51	51.2	41	9	0	1	1	1	0	53	54.7
32	8	3	1	1	1	0	46	49.2	42	5	1	0	1	0	0	49	50.5
45	7	1	0	0	0	0	53	53.5	38	9	6	2	1	0	1	57	62.8
162	23	9	1	2	1	1	199	205.4	151	33	7	3	3	1	2	200	208.2
37	2	2	0	1	0	0	42	44	38	7	3	0	1	0	0	49	51.5
39	3	2	2	1	0	0	47	51.6	42	11	1	1	1	1	1	58	59.4
44	6	1	0	1	0	0	52	53.5	43	1	2	2	0	1	2	51	52.4
47	5	1	0	0	0	0	53	53.5	27	14	0	2	0	0	1	44	45.8
167	16	6	2	3	0	0	194	202.6	150	33	6	5	2	2	4	202	209.1
54	9	2	1	1	0	0	67	70.3	49	4	0	1	1	0	1	56	57.5
45	9	0	1	0	0	0	55	56.3	59	8	4	0	1	0	0	72	75
60	7	0	3	1	0	0	71	75.9	45	6	1	1	0	0	2	55	55.2
58	9	3	2	0	0	0	72	76.1	56	6	3	2	1	0	0	68	73.1
217	34	5	7	2	0	0	265	278.6	209	24	8	4	3	0	3	251	260.8
59	12	1	0	1	0	3	76	75.1	58	7	2	3	2	0	1	73	79.1
64	5	2	0	0	0	0	71	72	57	7	1	1	0	0	0	66	67.8
52	7	1	4	1	0	1	66	71.9	60	11	4	0	1	0	0	76	79
63	7	2	0	0	0	1	73	73.2	81	8	1	0	1	0	0	91	92.5
238	31	6	4	2	0	5	286	292.2	256	33	8	4	4	0	1	306	318.4
58	6	4	0	2	0	0	70	74	78	10	1	4	0	0	0	93	98.7
63	5	4	0	1	0	1	74	76.2	72	5	1	0	0	0	0	78	78.5
83	11	1	1	2	0	0	98	101.8	43	8	2	1	1	0	0	55	58.3
61	5	1	1	0	0	0	68	69.8	70	10	1	0	0	0	0	81	81.5
265	27	10	2	5	0	1	310	321.8	263	33	5	5	1	0	0	307	317
71	7	2	3	2	0	0	85	91.9	62	3	0	0	1	1	0	67	67.4
55	6	1	0	0	0	1	63	62.7	62	8	1	0	0	0	0	71	71.5
61	11	1	0	2	0	1	76	77.7	51	8	1	1	1	0	0	62	64.8
48	5	0	1	0	0	0	54	55.3	75	10	1	0	0	0	0	86	86.5
235	29	4	4	4	0	2	278	287.6	250	29	3	1	2	1	0	286	290.2
60	10	1	0	1	1	0	73	73.9	48	8	2	0	2	1	0	61	63.4
55	8	1	0	0	0	1	65	64.7	84	15	3	0	1	0	0	103	105.5
73	4	1	0	1	0	0	79	80.5	61	7	4	0	1	0	0	73	76
46	7	3	0	0	0	0	56	57.5	74	7	0	0	0	0	0	81	81
234	29	6	0	2	1	1	273	276.6	267	37	9	0	4	1	0	318	325.9
51	4	0	0	1	1	1	58	57.6	81	8	2	0	1	1	1	94	94.6
50	6	0	0	0	0	0	56	56	75	6	2	2	0	0	0	85	88.6
52	6	0	0	1	0	0	59	60	80	5	0	0	0	0	0	85	85
48	5	1	0	0	0	0	54	54.5	71	8	0	0	0	1	0	80	79.4
201	21	1	0	2	1	1	227	228.1	307	27	4	2	1	2	1	344	347.6
53	4	0	0	1	0	0	58	59	59	7	0	0	2	1	0	69	70.4
42	3	2	0	1	0	0	48	50	67	7	1	0	1	0	0	76	77.5
60	7	1	0	0	0	0	68	68.5	74	2	0	0	1	1	0	78	78.4
63	1	2	0	0	0	0	66	67	73	3	3	1	2	1	0	83	87.2
218	15	5	0	2	0	0	240	244.5	273	19	4	1	6	3	0	306	313.5
2685	301	70	33	35	6	15	3145	3242.3	2647	379	70	37	40	13	16	3202	3304.5

Site No. 2
Location Enniskerry Rd(N) / R116 / Enniskerry Rd(SE)
Date 2021-11-10

Time	A to C - Enniskerry Rd(N) to Enniskerry Rd(SE)							Veh. Total	PCU. Total	A to B - Enniskerry Rd(N) to R116							Veh. Total	PCU. Total
	CAR	LGV	OGV1	OGV2	PSV	M/C	P/C			CAR	LGV	OGV1	OGV2	PSV	M/C	P/C		
07:00	15	8	1	0	1	0	1	26	26.7	0	0	0	0	0	0	0	0	0
07:15	32	10	3	0	0	1	1	47	47.1	5	2	0	0	1	0	0	8	9
07:30	25	5	2	1	0	1	1	35	35.9	7	0	1	0	0	0	0	8	8.5
07:45	32	10	0	1	0	1	0	44	44.7	9	2	0	0	0	0	0	11	11
Hour	104	33	6	2	1	3	3	152	154.4	21	4	1	0	1	0	0	27	28.5
08:00	60	6	0	0	0	1	2	69	66.8	19	3	0	1	1	0	0	24	26.3
08:15	59	5	1	0	0	0	0	65	65.5	20	2	0	1	0	1	0	24	24.7
08:30	63	6	1	1	0	0	1	72	73	72	1	1	0	0	0	2	76	74.9
08:45	68	10	2	0	1	0	4	85	83.8	27	2	0	0	0	0	0	29	29
Hour	250	27	4	1	1	1	7	291	289.1	138	8	1	2	1	1	2	153	154.9
09:00	48	4	0	0	2	0	3	57	56.6	10	1	0	0	0	0	0	11	11
09:15	48	9	0	0	0	0	1	58	57.2	12	0	0	1	0	0	0	13	14.3
09:30	51	8	2	1	0	0	0	62	64.3	4	1	0	0	1	0	1	7	7.2
09:45	46	9	3	1	0	0	2	61	62.2	6	3	1	0	0	0	3	13	11.1
Hour	193	30	5	2	2	0	6	238	240.3	32	5	1	1	1	0	4	44	43.6
10:00	44	6	1	0	1	1	7	60	55.3	3	0	1	0	0	0	0	4	4.5
10:15	50	11	1	0	0	0	3	65	63.1	6	0	1	1	0	1	0	9	10.2
10:30	44	9	1	0	0	1	3	58	55.5	6	1	0	0	0	1	0	8	7.4
10:45	43	7	8	2	0	0	1	61	66.8	7	3	0	0	0	0	1	11	10.2
Hour	181	33	11	2	1	2	14	244	240.7	22	4	2	1	0	2	1	32	32.3
11:00	49	4	5	0	1	2	1	62	63.5	8	2	0	0	1	0	0	11	12
11:15	49	8	2	0	0	1	1	61	60.6	3	3	0	1	0	0	0	7	8.3
11:30	61	3	1	1	0	0	1	67	68	6	0	0	1	0	1	0	8	8.7
11:45	42	8	4	2	0	0	2	58	61	6	2	0	0	0	0	0	8	8
Hour	201	23	12	3	1	3	5	248	253.1	23	7	0	2	1	1	0	34	37
12:00	54	2	1	1	1	0	2	61	62.2	7	2	0	0	0	0	0	9	9
12:15	57	11	6	0	0	0	5	79	78	13	1	0	0	0	0	0	14	14
12:30	48	11	0	0	0	0	5	64	60	14	0	0	0	0	0	1	15	14.2
12:45	51	7	3	2	0	0	1	64	67.3	11	1	0	0	0	0	0	13	14
Hour	210	31	10	3	1	0	13	268	267.5	45	4	0	0	1	0	1	51	51.2
13:00	50	7	4	3	2	0	0	66	73.9	21	0	0	0	1	0	2	24	23.4
13:15	57	6	1	0	0	0	1	65	64.7	18	1	0	0	0	0	1	20	19.2
13:30	76	7	4	0	2	0	3	92	93.6	4	2	1	0	0	0	0	7	7.5
13:45	78	9	3	0	0	0	0	90	91.5	10	0	0	0	0	0	0	10	10
Hour	261	29	12	3	4	0	4	313	323.7	53	3	1	0	1	0	3	61	60.1
14:00	61	11	3	4	1	0	2	82	88.1	25	4	0	0	0	0	0	29	29
14:15	78	4	1	0	0	0	1	84	83.7	39	2	0	0	0	0	0	41	41
14:30	52	5	1	0	0	0	1	59	58.7	19	1	0	0	2	0	0	22	24
14:45	54	6	0	0	0	0	1	61	60.2	19	1	0	0	0	0	1	21	20.2
Hour	245	26	5	4	1	0	5	286	290.7	102	8	0	0	2	0	1	113	114.2
15:00	58	2	0	0	1	2	1	64	63	10	0	0	0	0	0	0	10	10
15:15	59	10	3	0	0	0	0	72	73.5	10	1	0	0	1	0	0	12	13
15:30	60	11	0	0	0	0	0	71	71	13	0	0	1	0	0	0	14	15.3
15:45	70	11	3	0	0	0	2	86	85.9	15	0	0	0	0	0	0	15	15
Hour	247	34	6	0	1	2	3	293	293.4	48	1	0	1	1	0	0	51	53.3
16:00	52	16	2	1	1	0	2	74	75.7	11	0	0	0	0	1	0	12	11.4
16:15	79	22	2	0	1	0	1	105	106.2	13	1	0	0	1	0	0	15	16
16:30	90	13	2	0	0	0	2	107	106.4	11	4	0	0	0	0	0	15	15
16:45	84	13	2	1	0	2	1	103	103.3	11	0	0	0	0	0	1	12	11.2
Hour	305	64	8	2	2	2	6	389	391.6	46	5	0	0	1	1	1	54	53.6
17:00	108	15	1	0	0	1	4	129	125.7	7	2	0	0	0	0	0	9	9
17:15	97	7	2	1	2	0	0	109	113.3	10	1	1	0	0	0	0	12	12.5
17:30	75	7	1	0	0	3	1	87	84.9	12	2	0	1	0	0	0	15	16.3
17:45	66	8	0	0	0	1	2	77	74.8	18	2	0	0	0	0	0	20	20
Hour	346	37	4	1	2	5	7	402	398.7	47	7	1	1	0	0	0	56	57.8
18:00	66	6	0	0	0	1	2	75	72.8	12	1	0	0	0	0	0	13	13
18:15	62	5	1	0	0	0	0	68	68.5	17	3	0	0	0	0	0	20	20
18:30	65	2	1	0	0	0	0	68	68.5	19	0	0	0	0	0	1	20	19.2
18:45	64	1	3	1	1	1	4	75	75	18	1	0	0	0	0	0	19	19
Hour	257	14	5	1	1	2	6	286	284.8	66	5	0	0	0	0	1	72	71.2
Total	2800	381	88	24	18	20	79	3410	3428	643	61	7	8	10	5	14	748	757.7

12241 / Kilternan
November 2021
Junction Turning Count

Site No. 2
Location Enniskerry Rd(N) / R116 / Enniskerry Rd(SE)
Date 2021-11-10

Time	B to A - R116 to Enniskerry Rd(N)							Veh. Total	PCU. Total	B to C - R116 to Enniskerry Rd(SE)							Veh. Total	PCU. Total
	CAR	LGV	OGV1	OGV2	PSV	M/C	P/C			CAR	LGV	OGV1	OGV2	PSV	M/C	P/C		
07:00	6	2	0	0	0	0	0	8	8	2	1	1	0	0	0	0	4	4.5
07:15	7	3	0	0	0	0	0	10	10	3	0	0	0	0	0	0	3	3
07:30	15	0	1	0	0	0	0	16	16.5	4	0	0	0	0	0	1	5	4.2
07:45	22	0	1	1	1	0	0	25	27.8	2	0	1	0	0	0	0	3	3.5
Hour	50	5	2	1	1	0	0	59	62.3	11	1	2	0	0	0	1	15	15.2
08:00	16	1	1	0	0	0	0	18	18.5	3	1	0	0	0	0	0	4	4
08:15	19	0	0	0	0	0	0	19	19	13	0	0	1	0	0	0	14	15.3
08:30	58	1	0	1	0	0	0	60	61.3	9	1	0	0	0	0	0	10	10
08:45	49	2	0	0	1	0	1	53	53.2	10	0	2	0	0	0	1	13	13.2
Hour	142	4	1	1	1	0	1	150	152	35	2	2	1	0	0	1	41	42.5
09:00	18	3	0	1	0	0	0	22	23.3	7	1	1	0	0	0	0	9	9.5
09:15	19	0	0	0	0	0	0	19	19	8	1	0	0	0	0	0	9	9
09:30	16	1	0	1	0	0	0	18	19.3	6	0	0	0	0	0	0	6	6
09:45	13	0	0	1	0	0	2	16	15.7	3	3	0	0	0	0	0	6	6
Hour	66	4	0	3	0	0	2	75	77.3	24	5	1	0	0	0	0	30	30.5
10:00	10	0	1	0	0	0	0	11	11.5	4	2	0	0	0	0	0	6	6
10:15	13	0	0	0	0	0	0	13	13	4	1	0	0	0	0	0	5	5
10:30	5	1	0	0	0	1	0	7	6.4	2	1	0	0	0	0	0	3	3
10:45	6	3	0	0	0	0	1	10	9.2	4	0	0	0	0	0	0	4	4
Hour	34	4	1	0	0	1	1	41	40.1	14	4	0	0	0	0	0	18	18
11:00	6	0	0	0	0	0	0	6	6	2	1	1	0	0	0	0	4	4.5
11:15	11	0	0	1	1	0	0	13	15.3	6	3	0	0	0	0	1	10	9.2
11:30	7	2	0	0	0	0	2	11	9.4	6	0	0	0	0	0	1	7	6.2
11:45	9	2	1	0	0	0	0	12	12.5	5	1	0	0	0	1	0	7	6.4
Hour	33	4	1	1	1	0	2	42	43.2	19	5	1	0	0	1	2	28	26.3
12:00	10	1	0	1	0	0	0	12	13.3	0	0	0	0	0	0	0	0	0
12:15	9	2	0	1	0	0	0	12	13.3	0	3	0	0	0	0	0	3	3
12:30	4	3	0	0	0	0	0	7	7	4	1	1	0	0	0	1	7	6.7
12:45	9	1	0	0	0	0	0	10	10	4	0	0	0	0	0	0	4	4
Hour	32	7	0	2	0	0	0	41	43.6	8	4	1	0	0	0	1	14	13.7
13:00	15	1	0	0	1	0	1	18	18.2	3	2	1	0	0	0	0	6	6.5
13:15	18	0	2	0	0	0	0	20	21	4	0	0	0	1	0	2	7	6.4
13:30	27	0	0	0	0	0	1	28	27.2	8	0	1	0	0	0	0	9	9.5
13:45	13	0	1	0	0	0	1	15	14.7	3	2	0	0	0	0	0	5	5
Hour	73	1	3	0	1	0	3	81	81.1	18	4	2	0	1	0	2	27	27.4
14:00	8	2	1	0	1	0	0	12	13.5	2	1	0	0	1	0	0	4	5
14:15	10	2	1	0	0	0	1	14	13.7	5	2	0	0	0	0	0	7	7
14:30	73	2	1	0	1	0	1	78	78.7	8	0	0	0	0	0	0	8	8
14:45	10	0	0	0	0	0	0	10	10	6	0	0	0	0	0	0	6	6
Hour	101	6	3	0	2	0	2	114	115.9	21	3	0	0	1	0	0	25	26
15:00	27	2	1	0	1	0	0	31	32.5	8	0	0	0	0	0	0	8	8
15:15	17	1	0	0	0	0	0	18	18	7	1	0	0	1	0	0	9	10
15:30	5	1	0	0	0	0	0	6	6	7	0	0	0	0	0	0	7	7
15:45	10	2	0	0	0	0	0	12	12	5	2	0	0	0	0	0	7	7
Hour	59	6	1	0	1	0	0	67	68.5	27	3	0	0	1	0	0	31	32
16:00	7	3	1	0	0	0	0	11	11.5	5	3	0	0	0	1	0	9	8.4
16:15	11	1	0	0	0	0	0	12	12	9	0	0	0	0	0	0	9	9
16:30	12	0	0	0	0	0	0	12	12	11	0	0	0	1	0	0	12	13
16:45	8	1	0	0	0	0	0	9	9	4	0	0	0	0	0	0	4	4
Hour	38	5	1	0	0	0	0	44	44.5	29	3	0	0	1	1	0	34	34.4
17:00	5	2	0	0	0	0	0	7	7	8	1	0	0	0	0	0	9	9
17:15	12	5	0	0	0	0	0	17	17	8	1	0	0	0	0	0	9	9
17:30	5	0	0	0	0	0	1	6	5.2	5	2	0	0	0	0	0	7	7
17:45	5	2	1	0	0	0	0	8	8.5	7	2	0	0	0	0	1	10	9.2
Hour	27	9	1	0	0	0	1	38	37.7	28	6	0	0	0	0	1	35	34.2
18:00	7	0	0	0	0	0	0	7	7	2	1	0	0	0	0	0	3	3
18:15	8	1	0	0	0	0	0	9	9	4	0	0	0	0	0	0	4	4
18:30	14	1	0	0	0	0	1	16	15.2	3	0	0	0	0	0	1	4	3.2
18:45	8	0	0	0	0	0	0	8	8	2	0	1	0	0	0	0	3	3.5
Hour	37	2	0	0	0	0	1	40	39.2	11	1	1	0	0	0	1	14	13.7
Total	692	57	14	8	7	1	13	792	805.4	245	41	10	1	4	2	9	312	313.9

12241 / Kilternan
November 2021
Junction Turning Count

Site No. 2
Location Enniskerry Rd(N) / R1
Date 2021-11-10

Time	C to B - Enniskerry Rd			
	CAR	LGV	OGV1	OGV2
07:00	0	2	0	0
07:15	3	0	0	0
07:30	3	2	0	0
07:45	5	1	0	1
Hour	11	5	0	1
08:00	8	2	0	0
08:15	5	0	0	0
08:30	14	0	0	0
08:45	7	1	0	0
Hour	34	3	0	0
09:00	5	0	0	1
09:15	7	1	0	0
09:30	3	0	1	0
09:45	5	4	0	0
Hour	20	5	1	1
10:00	6	0	1	0
10:15	9	1	0	0
10:30	3	0	0	0
10:45	4	0	0	0
Hour	22	1	1	0
11:00	2	1	0	0
11:15	4	2	0	0
11:30	4	2	0	0
11:45	6	2	0	0
Hour	16	7	0	0
12:00	7	0	1	0
12:15	7	0	0	0
12:30	2	3	1	0
12:45	3	0	0	0
Hour	19	3	2	0
13:00	1	1	0	0
13:15	5	1	1	0
13:30	7	1	0	0
13:45	10	0	0	0
Hour	23	3	1	0
14:00	6	0	1	0
14:15	5	1	0	0
14:30	6	1	3	0
14:45	5	1	0	0
Hour	22	3	4	0
15:00	2	1	0	0
15:15	4	0	0	0
15:30	6	4	0	0
15:45	4	1	0	0
Hour	16	6	0	0
16:00	2	1	0	0
16:15	4	2	0	0
16:30	5	1	0	0
16:45	7	2	0	0
Hour	18	6	0	0
17:00	11	4	0	0
17:15	8	0	0	0
17:30	8	0	0	0
17:45	4	1	0	0
Hour	31	5	0	0
18:00	7	0	0	0
18:15	3	1	0	0
18:30	6	1	0	0
18:45	8	0	0	0
Hour	24	2	0	0
Total	256	49	9	2

16 / Enniskerry Rd(SE)

Site No. 2
Location Enniskerry Rd(N) / R116 / Enniskerry Rd(SE)
Date 2021-11-10

(SE) to R116			Veh.	PCU.	C to A - Enniskerry Rd(SE) to Enniskerry Rd(N)							Veh.	PCU.	Time	To Arm A - Enniskerry Rd(N)							Veh.	PCU.
PSV	M/C	P/C	Total	Total	CAR	LGV	OGV1	OGV2	PSV	M/C	P/C	Total	Total		CAR	LGV	OGV1	OGV2	PSV	M/C	P/C	Total	Total
0	0	0	2	2	23	5	2	0	0	0	0	30	31	07:00	29	7	2	0	0	0	0	38	39
0	0	0	3	3	34	12	2	0	2	1	2	53	53.8	07:15	41	15	2	0	2	1	2	63	63.8
0	0	0	5	5	38	12	4	0	2	2	0	58	60.8	07:30	53	12	5	0	2	2	0	74	77.3
0	0	0	7	8.3	55	9	2	1	0	0	4	71	70.1	07:45	77	9	3	2	1	0	4	96	97.9
0	0	0	17	18.3	150	38	10	1	4	3	6	212	215.7	Hour	200	43	12	2	5	3	6	271	278
0	0	0	10	10	59	5	2	2	0	0	3	71	72.2	08:00	75	6	3	2	0	0	3	89	90.7
0	0	0	5	5	70	7	3	0	1	1	2	84	84.3	08:15	89	7	3	0	1	1	2	103	103.3
0	0	0	14	14	53	5	1	0	0	0	0	59	59.5	08:30	111	6	1	1	0	0	0	119	120.8
0	0	0	8	8	52	9	1	0	0	1	0	63	62.9	08:45	101	11	1	0	1	1	1	116	116.1
0	0	0	37	37	234	26	7	2	1	2	5	277	278.9	Hour	376	30	8	3	2	2	6	427	430.9
0	0	1	7	7.5	46	8	0	1	0	3	1	59	57.7	09:00	64	11	0	2	0	3	1	81	81
0	0	0	8	8	62	8	1	0	0	0	0	71	71.5	09:15	81	8	1	0	0	0	0	90	90.5
0	0	0	4	4.5	35	3	1	0	1	0	1	41	41.7	09:30	51	4	1	1	1	0	1	59	61
0	0	0	9	9	35	6	4	0	0	0	1	46	47.2	09:45	48	6	4	1	0	0	3	62	62.9
0	0	1	28	29	178	25	6	1	1	3	3	217	218.1	Hour	244	29	6	4	1	3	5	292	295.4
0	1	1	9	8.1	38	2	2	0	0	0	3	45	43.6	10:00	48	2	3	0	0	0	3	56	55.1
0	0	0	10	10	41	5	4	0	1	0	11	62	56.2	10:15	54	5	4	0	1	0	11	75	69.2
0	0	1	4	3.2	43	6	3	0	1	0	11	64	57.7	10:30	48	7	3	0	1	1	11	71	64.1
0	1	0	5	4.4	43	3	2	0	0	0	7	55	50.4	10:45	49	6	2	0	0	0	8	65	59.6
0	2	2	28	25.7	165	16	11	0	2	0	32	226	207.9	Hour	199	20	12	0	2	1	33	267	248
0	0	0	3	3	34	2	6	0	0	1	1	44	45.6	11:00	40	2	6	0	0	1	1	50	51.6
0	0	0	6	6	35	5	4	2	1	0	3	50	53.2	11:15	46	5	4	3	2	0	3	63	68.5
0	0	0	6	6	57	5	1	0	1	0	0	64	65.5	11:30	64	7	1	0	1	0	2	75	74.9
0	0	0	8	8	45	5	1	0	0	0	3	54	52.1	11:45	54	7	2	0	0	0	3	66	64.6
0	0	0	23	23	171	17	12	2	2	1	7	212	216.4	Hour	204	21	13	3	3	1	9	254	259.6
0	0	1	9	8.7	53	6	3	0	0	2	2	66	64.7	12:00	63	7	3	1	0	2	2	78	78
0	0	0	7	7	42	5	0	0	0	0	1	48	47.2	12:15	51	7	0	1	0	0	1	60	60.5
0	0	0	6	6.5	54	7	2	3	1	0	3	70	73.5	12:30	58	10	2	3	1	0	3	77	80.5
0	0	1	4	3.2	55	7	4	2	0	0	2	70	73	12:45	64	8	4	2	0	0	2	80	83
0	0	2	26	25.4	204	25	9	5	1	2	8	254	258.4	Hour	236	32	9	7	1	2	8	295	302
0	0	0	2	2	70	11	1	0	0	0	5	87	83.5	13:00	85	12	1	0	1	0	6	105	101.7
0	0	2	9	7.9	41	6	0	0	0	0	1	48	47.2	13:15	59	6	2	0	0	0	1	68	68.2
0	0	0	8	8	48	7	2	3	1	0	5	66	67.9	13:30	75	7	2	3	1	0	6	94	95.1
0	0	0	10	10	60	4	1	0	0	0	2	67	65.9	13:45	73	4	2	0	0	0	3	82	80.6
0	0	2	29	27.9	219	28	4	3	1	0	13	268	264.5	Hour	292	29	7	3	2	0	16	349	345.6
0	0	0	7	7.5	45	2	2	0	1	0	0	50	52	14:00	53	4	3	0	2	0	0	62	65.5
0	0	0	6	6	50	5	4	0	0	0	5	64	62	14:15	60	7	5	0	0	0	6	78	75.7
0	0	2	12	11.9	61	4	1	1	1	0	3	71	71.4	14:30	134	6	2	1	2	0	4	149	150.1
0	0	0	6	6	58	6	1	2	0	0	1	68	70.3	14:45	68	6	1	2	0	0	1	78	80.3
0	0	2	31	31.4	214	17	8	3	2	0	9	253	255.7	Hour	315	23	11	3	4	0	11	367	371.6
0	0	0	3	3	69	6	2	2	0	0	3	82	83.2	15:00	96	8	3	2	1	0	3	113	115.7
0	0	0	4	4	56	6	1	0	0	0	1	64	63.7	15:15	73	7	1	0	0	0	1	82	81.7
0	0	0	10	10	56	9	1	0	2	1	1	70	71.1	15:30	61	10	1	0	2	1	1	76	77.1
0	1	0	6	5.4	53	7	0	0	0	1	2	63	60.8	15:45	63	9	0	0	0	1	2	75	72.8
0	1	0	23	22.4	234	28	4	2	2	2	7	279	278.8	Hour	293	34	5	2	3	2	7	346	347.3
0	0	0	3	3	71	3	0	0	0	3	0	77	75.2	16:00	78	6	1	0	0	3	0	88	86.7
0	1	0	7	6.4	57	14	1	1	0	2	1	76	75.8	16:15	68	15	1	1	0	2	1	88	87.8
0	0	0	6	6	61	7	2	0	1	0	0	71	73	16:30	73	7	2	0	1	0	0	83	85
0	0	0	9	9	58	6	1	0	0	0	1	66	65.7	16:45	66	7	1	0	0	0	1	75	74.7
0	1	0	25	24.4	247	30	4	1	1	5	2	290	289.7	Hour	285	35	5	1	1	5	2	334	334.2
0	0	0	15	15	57	5	0	0	0	2	1	65	63	17:00	62	7	0	0	0	2	1	72	70
0	0	0	8	8	51	4	0	0	0	0	0	55	55	17:15	63	9	0	0	0	0	0	72	72
0	0	0	8	8	45	10	0	0	1	0	1	57	57.2	17:30	50	10	0	0	1	0	2	63	62.4
0	0	0	5	5	37	2	0	0	0	0	0	39	39	17:45	42	4	1	0	0	0	0	47	47.5
0	0	0	36	36	190	21	0	0	1	2	2	216	214.2	Hour	217	30	1	0	1	2	3	254	251.9
0	0	0	7	7	36	3	1	0	0	0	0	40	40.5	18:00	43	3	1	0	0	0	0	47	47.5
0	0	1	5	4.2	42	6	0	0	0	0	0	48	48	18:15	50	7	0	0	0	0	0	57	57
0	0	0	7	7	46	1	0	0	0	0	0	47	47	18:30	60	2	0	0	0	0	1	63	62.2
0	0	0	8	8	51	2	2	0	1	1	1	58	58.6	18:45	59	2	2	0	1	1	1	66	66.6
0	0	1	27	26.2	175	12	3	0	1	1	1	193	194.1	Hour	212	14	3	0	1	1	2	233	233.3
0	4	10	330	326.7	2381	283	78	20	19	21	95	2897	2892.4	Total	3073	340	92	28	26	22	108	3689	3697.8

12241 / Kilternan
November 2021
Junction Turning Count

Site No. 2
Location Enniskerry Rd(N) / R116 / Enniskerry Rd(SE)
Date 2021-11-10

From Arm A - Enniskerry Rd(N)							Veh.	PCU.	Time	To Arm B - R116							Veh.	PCU.
CAR	LGV	OGV1	OGV2	PSV	M/C	P/C	Total	Total		CAR	LGV	OGV1	OGV2	PSV	M/C	P/C	Total	Total
15	8	1	0	1	0	1	26	26.7	07:00	0	2	0	0	0	0	0	2	2
37	12	3	0	1	1	1	55	56.1	07:15	8	2	0	0	1	0	0	11	12
32	5	3	1	0	1	1	43	44.4	07:30	10	2	1	0	0	0	0	13	13.5
41	12	0	1	0	1	0	55	55.7	07:45	14	3	0	1	0	0	0	18	19.3
125	37	7	2	2	3	3	179	182.9	Hour	32	9	1	1	1	0	0	44	46.8
79	9	0	1	1	1	2	93	93.1	08:00	27	5	0	1	1	0	0	34	36.3
79	7	1	1	0	1	0	89	90.2	08:15	25	2	0	1	0	1	0	29	29.7
135	7	2	1	0	0	3	148	147.9	08:30	86	1	1	0	0	0	2	90	88.9
95	12	2	0	1	0	4	114	112.8	08:45	34	3	0	0	0	0	0	37	37
388	35	5	3	2	2	9	444	444	Hour	172	11	1	2	1	1	2	190	191.9
58	5	0	0	2	0	3	68	67.6	09:00	15	1	0	1	0	0	1	18	18.5
60	9	0	1	0	0	1	71	71.5	09:15	19	1	0	1	0	0	0	21	22.3
55	9	2	1	1	0	1	69	71.5	09:30	7	1	1	0	1	0	1	11	11.7
52	12	4	1	0	0	5	74	73.3	09:45	11	7	1	0	0	0	3	22	20.1
225	35	6	3	3	0	10	282	283.9	Hour	52	10	2	2	1	0	5	72	72.6
47	6	2	0	1	1	7	64	59.8	10:00	9	0	2	0	0	1	1	13	12.6
56	11	2	1	0	1	3	74	73.3	10:15	15	1	1	1	0	1	0	19	20.2
50	10	1	0	0	2	3	66	62.9	10:30	9	1	0	0	0	1	1	12	10.6
50	10	8	2	0	0	2	72	77	10:45	11	3	0	0	0	1	1	16	14.6
203	37	13	3	1	4	15	276	273	Hour	44	5	3	1	0	4	3	60	58
57	6	5	0	2	2	1	73	75.5	11:00	10	3	0	0	1	0	0	14	15
52	11	2	1	0	1	1	68	68.9	11:15	7	5	0	1	0	0	0	13	14.3
67	3	1	2	0	1	1	75	76.7	11:30	10	2	0	1	0	1	0	14	14.7
48	10	4	2	0	0	2	66	69	11:45	12	4	0	0	0	0	0	16	16
224	30	12	5	2	4	5	282	290.1	Hour	39	14	0	2	1	1	0	57	60
61	4	1	1	1	0	2	70	71.2	12:00	14	2	1	0	0	0	1	18	17.7
70	12	6	0	0	0	5	93	92	12:15	20	1	0	0	0	0	0	21	21
62	11	0	0	0	0	6	79	74.2	12:30	16	3	1	0	0	0	1	21	20.7
62	8	3	2	1	0	1	77	81.3	12:45	14	1	0	0	1	0	1	17	17.2
255	35	10	3	2	0	14	319	318.7	Hour	64	7	2	0	1	0	3	77	76.6
71	7	4	3	3	0	2	90	97.3	13:00	22	1	0	0	1	0	2	26	25.4
75	7	1	0	0	0	2	85	83.9	13:15	23	2	1	0	0	0	3	29	27.1
80	9	5	0	2	0	3	99	101.1	13:30	11	3	1	0	0	0	0	15	15.5
88	9	3	0	0	0	0	100	101.5	13:45	20	0	0	0	0	0	0	20	20
314	32	13	3	5	0	7	374	383.8	Hour	76	6	2	0	1	0	5	90	88
86	15	3	4	1	0	2	111	117.1	14:00	31	4	1	0	0	0	0	36	36.5
117	6	1	0	0	0	1	125	124.7	14:15	44	3	0	0	0	0	0	47	47
71	6	1	0	2	0	1	81	82.7	14:30	25	2	3	0	2	0	2	34	35.9
73	7	0	0	0	0	2	82	80.4	14:45	24	2	0	0	0	0	1	27	26.2
347	34	5	4	3	0	6	399	404.9	Hour	124	11	4	0	2	0	3	144	145.6
68	2	0	0	1	2	1	74	73	15:00	12	1	0	0	0	0	0	13	13
69	11	3	0	1	0	0	84	86.5	15:15	14	1	0	0	1	0	0	16	17
73	11	0	1	0	0	0	85	86.3	15:30	19	4	0	1	0	0	0	24	25.3
85	11	3	0	0	0	2	101	100.9	15:45	19	1	0	0	0	1	0	21	20.4
295	35	6	1	2	2	3	344	346.7	Hour	64	7	0	1	1	1	0	74	75.7
63	16	2	1	1	1	2	86	87.1	16:00	13	1	0	0	0	1	0	15	14.4
92	23	2	0	2	0	1	120	122.2	16:15	17	3	0	0	1	1	0	22	22.4
101	17	2	0	0	0	2	122	121.4	16:30	16	5	0	0	0	0	0	21	21
95	13	2	1	0	2	2	115	114.5	16:45	18	2	0	0	0	0	1	21	20.2
351	69	8	2	3	3	7	443	445.2	Hour	64	11	0	0	1	2	1	79	78
115	17	1	0	0	1	4	138	134.7	17:00	18	6	0	0	0	0	0	24	24
107	8	3	1	2	0	0	121	125.8	17:15	18	1	1	0	0	0	0	20	20.5
87	9	1	1	0	3	1	102	101.2	17:30	20	2	0	1	0	0	0	23	24.3
84	10	0	0	0	1	2	97	94.8	17:45	22	3	0	0	0	0	0	25	25
393	44	5	2	2	5	7	458	456.5	Hour	78	12	1	1	0	0	0	92	93.8
78	7	0	0	0	1	2	88	85.8	18:00	19	1	0	0	0	0	0	20	20
79	8	1	0	0	0	0	88	88.5	18:15	20	4	0	0	0	0	1	25	24.2
84	2	1	0	0	0	1	88	87.7	18:30	25	1	0	0	0	0	1	27	26.2
82	2	3	1	1	1	4	94	94	18:45	26	1	0	0	0	0	0	27	27
323	19	5	1	1	2	7	358	356	Hour	90	7	0	0	0	0	2	99	97.4
3443	442	95	32	28	25	93	4158	4185.7	Total	899	110	16	10	10	9	24	1078	1084.4

12241 / Kilternan
November 2021
Junction Turning Count

Site No. 2
Location Enniskerry Rd(N) / R116 / Enniskerry Rd(SE)
Date 2021-11-10

From Arm B - R116							Veh.	PCU.	Time	To Arm C - Enniskerry Rd(SE)							Veh.	PCU.	From Arm C - Enniskerry Rd(SE)							Veh.	PCU.
CAR	LGV	OGV1	OGV2	PSV	M/C	P/C	Total	Total		CAR	LGV	OGV1	OGV2	PSV	M/C	P/C	Total	Total	CAR	LGV	OGV1	OGV2	PSV	M/C	P/C	Total	Total
8	3	1	0	0	0	0	12	12.5	07:00	17	9	2	0	1	0	1	30	31.2	23	7	2	0	0	0	0	32	33
10	3	0	0	0	0	0	13	13	07:15	35	10	3	0	0	1	1	50	50.1	37	12	2	0	2	1	2	56	56.8
19	0	1	0	0	0	1	21	20.7	07:30	29	5	2	1	0	1	2	40	40.1	41	14	4	0	2	2	0	63	65.8
24	0	2	1	1	0	0	28	31.3	07:45	34	10	1	1	0	1	0	47	48.2	60	10	2	2	0	0	4	78	78.4
61	6	4	1	1	0	1	74	77.5	Hour	115	34	8	2	1	3	4	167	169.6	161	43	10	2	4	3	6	229	234
19	2	1	0	0	0	0	22	22.5	08:00	63	7	0	0	0	1	2	73	70.8	67	7	2	2	0	0	3	81	82.2
32	0	0	1	0	0	0	33	34.3	08:15	72	5	1	1	0	0	0	79	80.8	75	7	3	0	1	1	2	89	89.3
67	2	0	1	0	0	0	70	71.3	08:30	72	7	1	1	0	0	1	82	83	67	5	1	0	0	0	0	73	73.5
59	2	2	0	1	0	2	66	66.4	08:45	78	10	4	0	1	0	5	98	97	59	10	1	0	0	1	0	71	70.9
177	6	3	2	1	0	2	191	194.5	Hour	285	29	6	2	1	1	8	332	331.6	268	29	7	2	1	2	5	314	315.9
25	4	1	1	0	0	0	31	32.8	09:00	55	5	1	0	2	0	3	66	66.1	51	8	0	2	0	3	2	66	65.2
27	1	0	0	0	0	0	28	28	09:15	56	10	0	0	0	0	1	67	66.2	69	9	1	0	0	0	0	79	79.5
22	1	0	1	0	0	0	24	25.3	09:30	57	8	2	1	0	0	0	68	70.3	38	3	2	0	1	0	1	45	46.2
16	3	0	1	0	0	2	22	21.7	09:45	49	12	3	1	0	0	2	67	68.2	40	10	4	0	0	0	1	55	56.2
90	9	1	3	0	0	2	105	107.8	Hour	217	35	6	2	2	0	6	268	270.8	198	30	7	2	1	3	4	245	247.1
14	2	1	0	0	0	0	17	17.5	10:00	48	8	1	0	1	1	7	66	61.3	44	2	3	0	0	1	4	54	51.7
17	1	0	0	0	0	0	18	18	10:15	54	12	1	0	0	0	3	70	68.1	50	6	4	0	1	0	11	72	66.2
7	2	0	0	0	1	0	10	9.4	10:30	46	10	1	0	0	1	3	61	58.5	46	6	3	0	1	0	12	68	60.9
10	3	0	0	0	0	1	14	13.2	10:45	47	7	8	2	0	0	1	65	70.8	47	3	2	0	0	1	7	60	54.8
48	8	1	0	0	1	1	59	58.1	Hour	195	37	11	2	1	2	14	262	258.7	187	17	12	0	2	2	34	254	233.6
8	1	1	0	0	0	0	10	10.5	11:00	51	5	6	0	1	2	1	66	68	36	3	6	0	0	1	1	47	48.6
17	3	0	1	1	0	1	23	24.5	11:15	55	11	2	0	0	1	2	71	69.8	39	7	4	2	1	0	3	56	59.2
13	2	0	0	0	0	3	18	15.6	11:30	67	3	1	1	0	0	2	74	74.2	61	7	1	0	1	0	0	70	71.5
14	3	1	0	0	1	0	19	18.9	11:45	47	9	4	2	0	1	2	65	67.4	51	7	1	0	0	0	3	62	60.1
52	9	2	1	1	1	4	70	69.5	Hour	220	28	13	3	1	4	7	276	279.4	187	24	12	2	2	1	7	235	239.4
10	1	0	1	0	0	0	12	13.3	12:00	54	2	1	1	1	0	2	61	62.2	60	6	4	0	0	2	3	75	73.4
9	5	0	1	0	0	0	15	16.3	12:15	57	14	6	0	0	0	5	82	81	49	5	0	0	0	0	1	55	54.2
8	4	1	0	0	0	1	14	13.7	12:30	52	12	1	0	0	0	6	71	66.7	56	10	3	3	1	0	3	76	80
13	1	0	0	0	0	0	14	14	12:45	55	7	3	2	0	0	1	68	71.3	58	7	4	2	0	0	3	74	76.2
40	11	1	2	0	0	1	55	57.3	Hour	218	35	11	3	1	0	14	282	281.2	223	28	11	5	1	2	10	280	283.8
18	3	1	0	1	0	1	24	24.7	13:00	53	9	5	3	2	0	0	72	80.4	71	12	1	0	0	0	5	89	85.5
22	0	2	0	1	0	2	27	27.4	13:15	61	6	1	0	1	0	3	72	71.1	46	7	1	0	0	0	3	57	55.1
35	0	1	0	0	0	1	37	36.7	13:30	84	7	5	0	2	0	3	101	103.1	55	8	2	3	1	0	5	74	75.9
16	2	1	0	0	0	1	20	19.7	13:45	81	11	3	0	0	0	0	95	96.5	70	4	1	0	0	0	2	77	75.9
91	5	5	0	2	0	5	108	108.5	Hour	279	33	14	3	5	0	6	340	351.1	242	31	5	3	1	0	15	297	292.4
10	3	1	0	2	0	0	16	18.5	14:00	63	12	3	4	2	0	2	86	93.1	51	2	3	0	1	0	0	57	59.5
15	4	1	0	0	0	1	21	20.7	14:15	83	6	1	0	0	0	1	91	90.7	55	6	4	0	0	0	5	70	68
81	2	1	0	1	0	1	86	86.7	14:30	60	5	1	0	0	0	1	67	66.7	67	5	4	1	1	0	5	83	83.3
16	0	0	0	0	0	0	16	16	14:45	60	6	0	0	0	0	1	67	66.2	63	7	1	2	0	0	1	74	76.3
122	9	3	0	3	0	2	139	141.9	Hour	266	29	5	4	2	0	5	311	316.7	236	20	12	3	2	0	11	284	287.1
35	2	1	0	1	0	0	39	40.5	15:00	66	2	0	0	1	2	1	72	71	71	7	2	2	0	0	3	85	86.2
24	2	0	0	1	0	0	27	28	15:15	66	11	3	0	1	0	0	81	83.5	60	6	1	0	0	0	1	68	67.7
12	1	0	0	0	0	0	13	13	15:30	67	11	0	0	0	0	0	78	78	62	13	1	0	2	1	1	80	81.1
15	4	0	0	0	0	0	19	19	15:45	75	13	3	0	0	0	2	93	92.9	57	8	0	0	0	2	2	69	66.2
86	9	1	0	2	0	0	98	100.5	Hour	274	37	6	0	2	2	3	324	325.4	250	34	4	2	2	3	7	302	301.2
12	6	1	0	0	1	0	20	19.9	16:00	57	19	2	1	1	1	2	83	84.1	73	4	0	0	0	3	0	80	78.2
20	1	0	0	0	0	0	21	21	16:15	88	22	2	0	1	0	1	114	115.2	61	16	1	1	0	3	1	83	82.2
23	0	0	0	1	0	0	24	25	16:30	101	13	2	0	1	0	2	119	119.4	66	8	2	0	1	0	0	77	79
12	1	0	0	0	0	0	13	13	16:45	88	13	2	1	0	2	1	107	107.3	65	8	1	0	0	0	1	75	74.7
67	8	1	0	1	1	0	78	78.9	Hour	334	67	8	2	3	3	6	423	426	265	36	4	1	1	6	2	315	314.1
13	3	0	0	0	0	0	16	16	17:00	116	16	1	0	0	1	4	138	134.7	68	9	0	0	0	2	1	80	78
20	6	0	0	0	0	0	26	26	17:15	105	8	2	1	2	0	0	118	122.3	59	4	0	0	0	0	0	63	63
10	2	0	0	0	0	1	13	12.2	17:30	80	9	1	0	0	3	1	94	91.9	53	10	0	0	1	0	1	65	65.2
12	4	1	0	0	0	1	18	17.7	17:45	73	10	0	0	0	1	3	87	84	41	3	0	0	0	0	0	44	44
55	15	1	0	0	0	2	73	71.9	Hour	374	43	4	1	2	5	8	437	432.9	221	26	0	0	1	2	2	252	250.2
9	1	0	0	0	0	0	10	10	18:00	68	7	0	0	0	1	2	78	75.8	43	3	1	0	0	0	0	47	47.5
12	1	0	0	0	0	0	13	13	18:15	66	5	1	0	0	0	0	72	72.5	45	7	0	0	0	0	1	53	52.2
17	1	0	0	0	0	2	20	18.4	18:30	68	2	1	0	0	0	1	72	71.7	52	2	0	0	0	0	0	54	54
10	0	1	0	0	0	0	11	11.5	18:45	66	1	4	1	1	1	4	78	78.5	59	2	2	0	1	1	1	66	66.6
48	3	1	0	0	0	2	54	52.9	Hour	268	15	6	1	1	2	7	300	298.5	199	14	3	0	1	1	2	220	220.3
937	98	24	9	11	3	22	1104	1119.3	Total	3045	422	98	25	22	22	88	3722	3741.9	2637	332	87	22	19	25	105	3227	3219.1

Site No. 3
Location Enniskerry Rd(NW) / Enniskerry Rd(SE) / Ballycorus Rd
Date 2021-11-10

Time	A to C - Enniskerry Rd(NW) to Ballycorus Rd							Veh. Total	PCU. Total	A to B - Enniskerry Rd(NW) to Enniskerry Rd(SE)							Veh. Total	PCU. Total
	CAR	LGV	OGV1	OGV2	PSV	M/C	P/C			CAR	LGV	OGV1	OGV2	PSV	M/C	P/C		
07:00	3	3	1	0	0	0	1	8	7.7	13	6	1	0	1	0	0	21	22.5
07:15	5	1	1	0	0	0	1	8	7.7	29	6	1	0	0	1	0	37	36.9
07:30	11	1	1	0	0	0	1	14	13.7	21	3	2	1	0	1	1	29	29.9
07:45	13	5	0	1	0	0	0	19	20.3	21	3	1	0	0	1	0	26	25.9
Hour	32	10	3	1	0	0	3	49	49.4	84	18	5	1	1	3	1	113	115.2
08:00	25	1	0	0	0	1	1	28	26.6	26	6	0	0	0	0	1	33	32.2
08:15	30	2	1	0	0	0	0	33	33.5	35	2	0	1	0	0	0	38	39.3
08:30	24	2	0	1	0	0	0	27	28.3	30	4	1	0	0	0	1	36	35.7
08:45	23	4	2	0	1	0	0	30	32	36	5	2	0	0	0	5	48	45
Hour	102	9	3	1	1	1	1	118	120.4	127	17	3	1	0	0	7	155	152.2
09:00	13	0	0	0	0	0	2	15	13.4	38	5	1	0	2	0	1	47	48.7
09:15	12	4	0	0	0	0	0	16	16	38	5	0	0	0	0	1	44	43.2
09:30	13	5	0	1	0	0	0	19	20.3	37	1	2	0	1	0	0	41	43
09:45	8	3	0	1	0	0	2	14	13.7	32	6	2	0	0	0	0	40	41
Hour	46	12	0	2	0	0	4	64	63.4	145	17	5	0	3	0	2	172	175.9
10:00	9	2	1	0	0	0	0	12	12.5	34	6	0	0	1	1	5	47	43.4
10:15	12	3	0	0	0	0	0	15	15	39	7	1	0	0	0	5	52	48.5
10:30	12	5	0	0	0	0	0	17	17	30	3	1	0	0	0	3	37	35.1
10:45	16	4	2	2	0	0	0	24	27.6	27	4	6	0	0	0	1	38	40.2
Hour	49	14	3	2	0	0	0	68	72.1	130	20	8	0	1	1	14	174	167.2
11:00	12	2	2	0	0	2	0	18	17.8	30	3	4	0	1	0	1	39	41.2
11:15	17	3	1	0	0	0	1	22	21.7	30	6	1	0	0	1	0	38	37.9
11:30	13	2	0	1	0	0	1	17	17.5	44	2	1	0	0	0	1	48	47.7
11:45	17	2	3	1	0	0	1	24	26	29	6	1	1	0	1	2	40	39.6
Hour	59	9	6	2	0	2	3	81	83	133	17	7	1	1	2	4	165	166.4
12:00	16	0	0	1	0	0	1	18	18.5	36	3	1	0	1	0	1	42	42.7
12:15	25	8	1	0	0	0	0	34	34.5	25	4	5	0	0	0	5	39	37.5
12:30	17	5	0	0	0	0	4	26	22.8	33	5	1	0	0	0	2	41	39.9
12:45	19	2	1	0	0	0	0	22	22.5	31	2	2	2	0	1	0	38	41
Hour	77	15	2	1	0	0	5	100	98.3	125	14	9	2	1	1	8	160	161.1
13:00	15	3	0	3	0	0	0	21	24.9	30	6	5	0	1	0	0	42	45.5
13:15	15	2	1	0	0	0	1	19	18.7	38	3	0	0	1	0	2	44	43.4
13:30	22	5	5	0	1	0	0	33	36.5	47	1	0	0	1	0	3	52	50.6
13:45	21	2	0	0	0	0	0	23	23	49	8	3	0	0	0	0	60	61.5
Hour	73	12	6	3	1	0	1	96	103.1	164	18	8	0	3	0	5	198	201
14:00	15	5	0	3	1	0	0	24	28.9	36	7	3	1	1	0	2	50	52.2
14:15	23	2	0	0	0	0	0	25	25	45	3	1	0	0	0	1	50	49.7
14:30	15	3	0	0	0	0	0	18	18	43	1	1	0	0	0	1	46	45.7
14:45	19	3	0	0	0	0	0	22	22	38	2	0	0	0	0	1	41	40.2
Hour	72	13	0	3	1	0	0	89	93.9	162	13	5	1	1	0	5	187	187.8
15:00	12	0	0	0	0	0	0	12	12	43	2	0	0	1	2	1	49	48
15:15	20	1	0	0	0	0	0	21	21	34	9	2	0	1	0	0	46	48
15:30	21	2	0	0	0	0	0	23	23	46	6	0	0	0	0	0	52	52
15:45	26	2	0	0	0	0	1	29	28.2	41	7	3	0	0	0	1	52	52.7
Hour	79	5	0	0	0	0	1	85	84.2	164	24	5	0	2	2	2	199	200.7
16:00	22	5	1	0	0	0	1	29	28.7	36	13	1	1	1	0	1	53	55
16:15	22	2	0	0	0	0	0	24	24	58	17	2	0	1	0	1	79	80.2
16:30	27	2	0	0	1	0	0	30	31	66	12	2	0	0	0	2	82	81.4
16:45	19	5	1	0	0	2	0	27	26.3	64	8	1	1	0	0	1	75	76
Hour	90	14	2	0	1	2	1	110	110	224	50	6	2	2	0	5	289	292.6
17:00	24	3	0	0	0	0	2	29	27.4	83	12	1	0	0	1	1	98	97.1
17:15	29	2	0	0	0	0	0	31	31	73	6	2	1	2	0	0	84	88.3
17:30	25	3	0	0	0	0	0	28	28	47	6	1	0	0	3	1	58	55.9
17:45	24	3	0	0	0	1	0	28	27.4	45	7	0	0	0	0	3	55	52.6
Hour	102	11	0	0	0	1	2	116	113.8	248	31	4	1	2	4	5	295	293.9
18:00	23	0	0	0	0	0	2	25	23.4	36	6	0	0	0	1	0	43	42.4
18:15	14	1	0	0	0	0	0	15	15	45	3	1	0	0	0	0	49	49.5
18:30	15	0	1	0	0	0	1	17	16.7	40	2	0	0	0	0	0	42	42
18:45	24	0	1	0	0	0	0	25	25.5	27	1	3	1	1	1	3	37	37.8
Hour	76	1	2	0	0	0	3	82	80.6	148	12	4	1	1	2	3	171	171.7
Total	857	125	27	15	4	6	24	1058	1072.2	1854	251	69	10	18	15	61	2278	2285.7

Time	B to A - Enniskerry Rd(SE) to Enniskerry Rd(NW)							Veh. Total	PCU. Total
	CAR	LGV	OGV1	OGV2	PSV	M/C	P/C		
07:00	17	3	2	0	0	0	0	22	23
07:15	23	8	1	0	2	0	0	34	36.5
07:30	33	8	3	0	1	2	0	47	48.3
07:45	44	4	2	2	0	0	3	55	56.2
Hour	117	23	8	2	3	2	3	158	164
08:00	43	5	2	1	0	0	2	53	53.7
08:15	35	3	3	0	1	1	2	45	45.3
08:30	34	2	1	0	0	0	0	37	37.5
08:45	20	8	0	0	0	1	0	29	28.4
Hour	132	18	6	1	1	2	4	164	164.9
09:00	30	4	0	1	0	0	0	35	36.3
09:15	39	9	1	0	1	0	0	50	51.5
09:30	20	1	0	0	1	0	1	23	23.2
09:45	21	3	2	0	0	0	1	27	27.2
Hour	110	17	3	1	2	0	2	135	138.2
10:00	23	0	3	0	0	1	3	30	28.5
10:15	37	0	0	0	1	0	11	49	41.2
10:30	30	1	3	0	1	0	4	39	38.3
10:45	31	2	1	0	0	1	4	39	35.7
Hour	121	3	7	0	2	2	22	157	143.7
11:00	15	4	6	0	0	0	1	26	28.2
11:15	22	5	3	0	0	0	3	33	32.1
11:30	38	4	0	0	1	0	0	43	44
11:45	28	5	0	0	0	0	1	34	33.2
Hour	103	18	9	0	1	0	5	136	137.5
12:00	38	3	4	0	0	2	1	48	48
12:15	23	3	0	1	0	0	1	28	28.5
12:30	41	2	2	1	1	0	2	49	50.7
12:45	32	3	2	0	0	0	1	38	38.2
Hour	134	11	8	2	1	2	5	163	165.4
13:00	39	5	0	0	0	0	3	47	44.6
13:15	29	4	0	0	0	0	2	35	33.4
13:30	30	5	2	0	1	0	2	40	40.4
13:45	43	2	0	0	0	0	2	47	45.4
Hour	141	16	2	0	1	0	9	169	163.8
14:00	31	0	2	0	1	0	0	34	36
14:15	25	2	4	0	0	0	4	35	33.8
14:30	31	3	2	1	1	0	3	41	41.9
14:45	30	3	1	1	0	0	1	36	37
Hour	117	8	9	2	2	0	8	146	148.7
15:00	39	4	1	0	0	0	3	47	45.1
15:15	35	7	0	0	0	0	1	43	42.2
15:30	34	8	0	0	1	0	0	43	44
15:45	40	2	0	0	0	2	1	45	43
Hour	148	21	1	0	1	2	5	178	174.3
16:00	42	3	0	0	0	1	0	46	45.4
16:15	38	7	0	1	0	2	1	49	48.3
16:30	42	6	0	0	1	0	0	49	50
16:45	46	4	1	0	0	0	1	52	51.7
Hour	168	20	1	1	1	3	2	196	195.4
17:00	40	5	0	0	0	2	1	48	46
17:15	34	2	0	0	0	0	0	36	36
17:30	29	6	0	0	1	0	0	36	37
17:45	24	1	0	0	0	0	0	25	25
Hour	127	14	0	0	1	2	1	145	144
18:00	26	2	1	0	0	0	0	29	29.5
18:15	24	1	0	0	0	0	0	25	25
18:30	25	0	0	0	0	0	0	25	25
18:45	36	1	2	0	1	0	0	40	42
Hour	111	4	3	0	1	0	0	119	121.5
Total	1529	173	57	9	17	15	66	1866	1861.4

Time	B to C - Enniskerry Rd(SE) to Ballycorus Rd							Veh. Total	PCU. Total
	CAR	LGV	OGV1	OGV2	PSV	M/C	P/C		
07:00	1	0	0	0	0	0	0	1	1
07:15	3	1	0	0	0	0	0	4	4
07:30	2	0	0	0	0	0	0	2	2
07:45	7	0	0	0	0	0	0	7	7
Hour	13	1	0	0	0	0	0	14	14
08:00	4	0	0	0	0	0	0	4	4
08:15	3	1	2	0	0	0	0	6	7
08:30	4	1	0	0	0	0	0	5	5
08:45	1	0	0	0	0	0	0	1	1
Hour	12	2	2	0	0	0	0	16	17
09:00	3	0	0	0	0	1	0	4	3.4
09:15	3	1	1	0	0	0	0	5	5.5
09:30	2	0	0	0	0	0	0	2	2
09:45	4	1	0	0	0	0	0	5	5
Hour	12	2	1	0	0	1	0	16	15.9
10:00	4	0	1	0	0	0	0	5	5.5
10:15	0	1	0	0	0	0	0	1	1
10:30	2	0	0	0	0	0	1	3	2.2
10:45	4	0	0	0	0	0	1	5	4.2
Hour	10	1	1	0	0	0	2	14	12.9
11:00	4	1	2	0	0	0	1	8	8.2
11:15	3	2	0	0	0	1	0	6	5.4
11:30	2	1	0	0	0	0	0	3	3
11:45	0	0	0	1	0	0	1	2	2.5
Hour	9	4	2	1	0	1	2	19	19.1
12:00	6	0	0	0	0	0	0	6	6
12:15	8	0	1	0	0	0	2	11	9.9
12:30	4	2	0	0	0	0	0	6	6
12:45	6	1	0	0	0	1	1	9	7.6
Hour	24	3	1	0	0	1	3	32	29.5
13:00	2	0	2	0	0	1	0	5	5.4
13:15	4	0	0	0	0	0	1	5	4.2
13:30	3	0	0	0	0	0	1	4	3.2
13:45	5	0	0	0	0	0	0	5	5
Hour	14	0	2	0	0	1	2	19	17.8
14:00	6	0	0	0	0	0	2	8	6.4
14:15	2	1	0	0	0	0	0	3	3
14:30	3	1	0	0	0	0	2	6	4.4
14:45	4	0	0	0	0	0	0	4	4
Hour	15	2	0	0	0	0	4	21	17.8
15:00	2	0	0	0	0	1	1	4	2.6
15:15	6	1	0	0	0	3	0	10	8.2
15:30	4	1	0	0	0	0	0	5	5
15:45	9	0	0	0	0	0	0	9	9
Hour	21	2	0	0	0	4	1	28	24.8
16:00	6	2	0	0	0	0	0	8	8
16:15	3	1	1	0	0	0	0	5	5.5
16:30	3	0	0	0	0	0	0	3	3
16:45	4	0	0	0	0	0	0	4	4
Hour	16	3	1	0	0	0	0	20	20.5
17:00	1	0	0	0	0	0	0	1	1
17:15	4	0	0	0	0	0	0	4	4
17:30	7	2	0	0	0	0	0	9	9
17:45	4	0	0	0	0	0	0	4	4
Hour	16	2	0	0	0	0	0	18	18
18:00	3	0	0	0	0	0	0	3	3
18:15	3	1	0	0	0	0	0	4	4
18:30	3	1	1	0	0	0	0	5	5.5
18:45	4	1	0	0	0	0	0	5	5
Hour	13	3	1	0	0	0	0	17	17.5
Total	175	25	11	1	0	8	14	234	224.8

Time	C to B - Ballycorus Rd to E			
	CAR	LGV	OGV1	OGV2
07:00	0	0	0	0
07:15	1	1	2	0
07:30	1	0	1	0
07:45	2	0	0	0
Hour	4	1	3	0
08:00	1	0	0	0
08:15	4	1	0	0
08:30	6	0	1	0
08:45	2	0	0	0
Hour	13	1	1	0
09:00	5	1	1	0
09:15	4	0	0	0
09:30	2	0	0	0
09:45	2	0	1	0
Hour	13	1	2	0
10:00	0	0	0	0
10:15	2	1	0	0
10:30	1	0	0	0
10:45	5	2	0	0
Hour	8	3	0	0
11:00	3	0	0	0
11:15	3	3	0	0
11:30	4	0	1	0
11:45	4	1	0	0
Hour	14	4	1	0
12:00	2	1	0	0
12:15	3	0	0	0
12:30	2	0	0	0
12:45	5	0	1	0
Hour	12	1	1	0
13:00	4	1	0	0
13:15	0	0	0	0
13:30	4	0	0	0
13:45	0	0	1	0
Hour	8	1	1	0
14:00	3	2	0	0
14:15	2	1	0	0
14:30	4	0	0	0
14:45	7	0	0	0
Hour	16	3	0	0
15:00	3	2	1	0
15:15	6	0	0	0
15:30	7	0	0	0
15:45	4	0	0	0
Hour	20	2	1	0
16:00	4	1	0	0
16:15	4	2	0	0
16:30	2	0	1	0
16:45	9	0	0	0
Hour	19	3	1	0
17:00	3	1	1	0
17:15	6	0	1	0
17:30	3	1	0	0
17:45	4	0	0	0
Hour	16	2	2	0
18:00	5	0	0	0
18:15	1	0	0	0
18:30	2	0	0	0
18:45	1	0	0	0
Hour	9	0	0	0
Total	152	22	13	0

12241 / Kilternan
November 2021
Junction Turning Count

Site No. 3
Location Enniskerry Rd(NW) / Enniskerry Rd(SE) / Ballycorus Rd
Date 2021-11-10

Enniskerry Rd(SE) / Ballycorus Rd

Enniskerry Rd(SE)			Veh.	PCU.	C to A - Ballycorus Rd to Enniskerry Rd(NW)							Veh.	PCU.	Time	To Arm A - Enniskerry Rd(NW)							Veh.	PCU.	From Arm A - Enniskerry Rd(NW)							Veh.	PCU.	Time	To Arm B - Enniskerry Rd(SE)							Veh.	PCU.
PSV	M/C	P/C	Total	Total	CAR	LGV	OGV1	OGV2	PSV	M/C	P/C	Total	Total		CAR	LGV	OGV1	OGV2	PSV	M/C	P/C	Total	Total	CAR	LGV	OGV1	OGV2	PSV	M/C	P/C	Total	Total		CAR	LGV	OGV1	OGV2	PSV	M/C	P/C	Total	Total
0	0	0	0	0	5	4	1	0	0	0	0	10	10.5	07:00	22	7	3	0	0	0	0	32	33.5	16	9	2	0	1	0	1	29	30.2	07:00	13	6	1	0	1	0	0	21	22.5
0	0	0	4	5	10	1	1	0	0	1	2	15	13.3	07:15	33	9	2	0	2	1	2	49	49.8	34	7	2	0	0	1	1	45	44.6	07:15	30	7	3	0	0	1	0	41	41.9
0	0	0	2	2.5	9	2	0	0	1	0	1	13	13.2	07:30	42	10	3	0	2	2	1	60	61.5	32	4	3	1	0	1	2	43	43.6	07:30	22	3	3	1	0	1	1	31	32.4
0	0	0	2	2	17	4	0	0	0	0	1	22	21.2	07:45	61	8	2	2	0	0	4	77	77.4	34	8	1	1	0	1	0	45	46.2	07:45	23	3	1	0	0	1	0	28	27.9
0	0	0	8	9.5	41	11	2	0	1	1	4	60	58.2	Hour	158	34	10	2	4	3	7	218	222.2	116	28	8	2	1	3	4	162	164.6	Hour	88	19	8	1	1	3	1	121	124.7
0	0	0	1	1	17	3	0	1	0	0	1	22	22.5	08:00	60	8	2	2	0	0	3	75	76.2	51	7	0	0	0	1	2	61	58.8	08:00	27	6	0	0	0	0	1	34	33.2
0	0	0	5	5	30	3	0	0	0	0	0	33	33	08:15	65	6	3	0	1	1	2	78	78.3	65	4	1	1	0	0	0	71	72.8	08:15	39	3	0	1	0	0	0	43	44.3
0	0	0	7	7.5	21	3	0	0	0	0	0	24	24	08:30	55	5	1	0	0	0	0	61	61.5	54	6	1	1	0	0	1	63	64	08:30	36	4	2	0	0	0	1	43	43.2
0	0	0	2	2	26	1	1	0	0	0	0	28	28.5	08:45	46	9	1	0	0	1	0	57	56.9	59	9	4	0	1	0	5	78	77	08:45	38	5	2	0	0	0	5	50	47
0	0	0	15	15.5	94	10	1	1	0	0	1	107	108	Hour	226	28	7	2	1	2	5	271	272.9	229	26	6	2	1	1	8	273	272.6	Hour	140	18	4	1	0	0	7	170	167.7
0	0	0	7	7.5	15	2	0	1	0	3	2	23	20.9	09:00	45	6	0	2	0	3	2	58	57.2	51	5	1	0	2	0	3	62	62.1	09:00	43	6	2	0	2	0	1	54	56.2
0	0	0	4	4	17	1	0	0	0	0	0	18	18	09:15	56	10	1	0	1	0	0	68	69.5	50	9	0	0	0	0	1	60	59.2	09:15	42	5	0	0	0	0	1	48	47.2
0	0	0	2	2	12	2	2	0	0	0	0	16	17	09:30	32	3	2	0	1	0	1	39	40.2	50	6	2	1	1	0	0	60	63.3	09:30	39	1	2	0	1	0	0	43	45
0	0	0	3	3.5	13	4	2	0	0	0	0	19	20	09:45	34	7	4	0	0	0	1	46	47.2	40	9	2	1	0	0	2	54	54.7	09:45	34	6	3	0	0	0	0	43	44.5
0	0	0	16	17	57	9	4	1	0	3	2	76	75.9	Hour	167	26	7	2	2	3	4	211	214.1	191	29	5	2	3	0	6	236	239.3	Hour	158	18	7	0	3	0	2	188	192.9
0	0	0	0	0	14	1	1	0	0	0	1	17	16.7	10:00	37	1	4	0	0	1	4	47	45.2	43	8	1	0	1	1	5	59	55.9	10:00	34	6	0	0	1	1	5	47	43.4
0	0	1	4	3.2	11	5	3	0	0	0	0	19	20.5	10:15	48	5	3	0	1	0	11	68	61.7	51	10	1	0	0	0	5	67	63.5	10:15	41	8	1	0	0	0	6	56	51.7
0	0	0	1	1	12	3	0	0	0	0	7	22	16.4	10:30	42	4	3	0	1	0	11	61	54.7	42	8	1	0	0	0	3	54	52.1	10:30	31	3	1	0	0	0	3	38	36.1
0	0	0	7	7	11	0	1	0	0	0	3	15	13.1	10:45	42	2	2	0	0	1	7	54	48.8	43	8	8	2	0	0	1	62	67.8	10:45	32	6	6	0	0	0	1	45	47.2
0	0	1	12	11.2	48	9	5	0	0	0	11	73	66.7	Hour	169	12	12	0	2	2	33	230	210.4	179	34	11	2	1	1	14	242	239.3	Hour	138	23	8	0	1	1	15	186	178.4
0	0	1	4	3.2	17	0	0	0	0	1	0	18	17.4	11:00	32	4	6	0	0	1	1	44	45.6	42	5	6	0	1	2	1	57	59	11:00	33	3	4	0	1	0	2	43	44.4
0	1	0	7	6.4	6	0	1	2	1	0	0	10	14.1	11:15	28	5	4	2	1	0	3	43	46.2	47	9	2	0	0	1	1	60	59.6	11:15	33	9	1	0	0	2	0	45	44.3
0	0	0	5	5.5	14	3	1	0	0	0	0	18	18.5	11:30	52	7	1	0	1	0	0	61	62.5	57	4	1	1	0	0	2	65	65.2	11:30	48	2	2	0	0	0	1	53	53.2
0	0	0	5	5	22	2	1	0	0	0	2	27	25.9	11:45	50	7	1	0	0	0	3	61	59.1	46	8	4	2	0	1	3	64	65.6	11:45	33	7	1	1	0	1	2	45	44.6
0	1	1	21	20.1	59	5	3	2	1	1	2	73	75.9	Hour	162	23	12	2	2	1	7	209	213.4	192	26	13	3	1	4	7	246	249.4	Hour	147	21	8	1	1	3	5	186	186.5
0	0	0	3	3	17	3	0	0	0	0	2	22	20.4	12:00	55	6	4	0	0	2	3	70	68.4	52	3	1	1	1	0	2	60	61.2	12:00	38	4	1	0	1	0	1	45	45.7
0	0	0	3	3	19	4	1	0	0	0	0	24	24.5	12:15	42	7	1	1	0	0	1	52	53	50	12	6	0	0	0	5	73	72	12:15	28	4	5	0	0	0	5	42	40.5
0	0	0	2	2	12	5	1	1	0	0	1	20	21	12:30	53	7	3	2	1	0	3	69	71.7	50	10	1	0	0	0	6	67	62.7	12:30	35	5	1	0	0	0	2	43	41.9
0	0	4	10	7.3	18	6	1	2	0	0	1	28	30.3	12:45	50	9	3	2	0	0	2	66	68.5	50	4	3	2	0	1	0	60	63.5	12:45	36	2	3	2	0	1	4	48	48.3
0	0	4	18	15.3	66	18	3	3	0	0	4	94	96.2	Hour	200	29	11	5	1	2	9	257	261.6	202	29	11	3	1	1	13	260	259.4	Hour	137	15	10	2	1	1	12	178	176.4
0	0	0	5	5	17	4	1	0	0	0	2	24	22.9	13:00	56	9	1	0	0	0	5	71	67.5	45	9	5	3	1	0	0	63	70.4	13:00	34	7	5	0	1	0	0	47	50.5
0	0	0	0	0	13	2	1	0	0	0	1	17	16.7	13:15	42	6	1	0	0	0	3	52	50.1	53	5	1	0	1	0	3	63	62.1	13:15	38	3	0	0	1	0	2	44	43.4
0	0	0	4	4	16	1	0	3	0	0	3	23	24.5	13:30	46	6	2	3	1	0	5	63	64.9	69	6	5	0	2	0	3	85	87.1	13:30	51	1	0	0	1	0	3	56	54.6
0	0	0	1	1.5	17	2	1	0	0	0	0	20	20.5	13:45	60	4	1	0	0	0	2	67	65.9	70	10	3	0	0	0	0	83	84.5	13:45	49	8	4	0	0	0	0	61	63
0	0	0	10	10.5	63	9	3	3	0	0	6	84	84.6	Hour	204	25	5	3	1	0	15	253	248.4	237	30	14	3	4	0	6	294	304.1	Hour	172	19	9	0	3	0	5	208	211.5
0	2	0	7	5.8	15	2	1	0	0	0	0	18	18.5	14:00	46	2	3	0	1	0	0	52	54.5	51	12	3	4	2	0	2	74	81.1	14:00	39	9	3	1	1	2	2	57	58
0	0	1	4	3.2	21	3	0	0	0	0	1	25	24.2	14:15	46	5	4	0	0	0	5	60	58	68	5	1	0	0	0	1	75	74.7	14:15	47	4	1	0	0	0	2	54	52.9
0	0	0	4	4	20	2	2	0	0	0	2	26	25.4	14:30	51	5	4	1	1	0	5	67	67.3	58	4	1	0	0	0	1	64	63.7	14:30	47	1	1	0	0	0	1	50	49.7
0	0	0	7	7	25	3	0	1	0	0	0	29	30.3	14:45	55	6	1	2	0	0	1	65	67.3	57	5	0	0	0	0	1	63	62.2	14:45	45	2	0	0	0	0	1	48	47.2
0	2	1	22	20	81	10	3	1	0	0	3	98	98.4	Hour	198	18	12	3	2	0	11	244	247.1	234	26	5	4	2	0	5	276	281.7	Hour	178	16	5	1	1	2	6	209	207.8
0	0	0	6	6.5	25	3	1	2	0	0	0	31	34.1	15:00	64	7	2	2	0	0	3	78	79.2	55	2	0	0	1	2	1	61	60	15:00	46	4	1	0	1	2	1	55	54.5
0	0	0	6	6	16	1	1	0	0	0	0	18	18.5	15:15	51	8	1	0	0	0	1	61	60.7	54	10	2	0	1	0	0	67	69	15:15	40	9	2	0	1	0	0	52	54
0	0	0	7	7	20	3	0	0	1	1	1	26	25.6	15:30	54	11	0	0	2	1	1	69	69.6	67	8	0	0	0	0	0	75	75	15:30	53	6	0	0	0	0	0	59	59
0	0	0	4	4	12	5	0	0	0	0	1	18	17.2	15:45	52	7	0	0	0	2	2	63	60.2	67	9	3	0	0	0	2	81	80.9	15:45	45	7	3	0	0	0	1	56	56.7
0	0	0	23	23.5	73	12	2	2	1	1	2	93	95.4	Hour	221	33	3	2	2	3	7	271	269.7	243	29	5	0	2	2	3	284	284.9	Hour	184	26	6	0	2	2	2	222	224.2
0	0	0	5	5	23	3	0	0	0	1	0	27	26.4	16:00	65	6	0	0	0	2	0	73	71.8	58	18	2	1	1	0	2	82	83.7	16:00	40	14	1	1	1	0	1	58	60
0	0	0	6	6	17	7	1	0	0	1	0	26	25.9	16:15	55	14	1	1	0	3	1	75	74.2	80	19	2	0	1	0	1	103	104.2	16:15	62	19	2	0	1	0	1	85	86.2
0	0	0	3	3.5	21	2	2	0	0	0	0	25	26	16:30	63	8	2	0	1	0	0	74	76	93	14	2	0	1	0	2	112	112.4	16:30	68	12	3	0	0	0	2	85	84.9
0	0	0	9	9	12	3	0	0	0	0	0	15	15	16:45	58	7	1	0	0	0	1	67	66.7	83	13	2	1	0	2	1	102	102.3	16:45	73	8	1	1	0	0	1	84	85
0	0	0	23	23.5	73	15	3	0	0	2	0	93	93.3	Hour	241	35	4	1	1	5	2	289	288.7	314	64	8	2	3	2	6	399	402.6	Hour	243	53	7	2	2	0	5	312	316.1
0	0	0	5	5.5	19	3	0	0	0	0	0	22	22	17:00	59	8	0	0	0	2	1	70	68	107	15	1	0	0	1	3	127	124.5	17:00	86	13	2	0	0	1	1	103	102.6
0	0	0	7	7.5	14	1	0	0	0	0	0	15	15	17:15	48	3	0	0	0	0	0	51	51	102	8	2	1	2	0	0	115	119.3	17:15	79	6	3	1	2	0	0	91	95.8
0	0	0	4	4	15	2	0	0	0	0	1	18	17.2	17:30	44	8	0	0	0	1	0	54	54.2	72	9	1	0	0	3	1	86	83.9	17:30	50	7	1	0	0	3	1	62	59.9
0	0	0	4	4	11	2	0	0	0	0	0	13	13	17:45	35	3	0	0	0	0	0	38	38	69	10	0	0	0	1	3	83	80	17:45	49	7	0	0	0	0	3	59	56.6
0	0	0	20	21	59	8	0	0	0	0	1	68	67.2	Hour	186	22	0	0	1	2	2	213	211.2	350	42	4	1	2	5	7	411	407.7	Hour	264	33	6	1	2	4	5	315	314.9
0	0	0	5	5	10	1	0	0	0	0	0	11	11	18:00	36	3	1	0	0	0	0	40	40.5	59	6	0	0	0	1	2	68	65.8	18:00	41	6	0	0	0	1	0	48	47.4
0	1	0	2	1.4	11	3	0	0	0	0	1	15	14.2	18:15	35	4	0	0	0	0	1	40	39.2	59	4	1	0	0	0	0	64	64.5	18:15	46	3	1	0	0	1	0	51	50.9
0	0	0	2	2	18	1	0	0	0	0	0	19	19	18:30	43	1	0	0	0	0	0	44	44	55	2	1	0	0	0	1	59	58.7	18:30	42	2	0	0	0	0	0	44	44
0	0	0	1	1	13	1	0	0	0	1	0	15	14.4	18:45	49	2	2	0	1	1	0	55	56.4	51	1	4	1	1	1	3	62	63.3	18:45	28	1	3	1	1	1	3	38	38.8
0	1	0	10	9.4	52	6	0	0	0	1	1	60	58.6	Hour	163	10	3	0	1	1	1	179	180.1	224	13	6	1	1	2	6	253	252.3	Hour	157	12	4	1	1	3	3	181	181.1
0	4	7	198	196.5	766	122	29	13	3	9	37	979	978.4	Total	2295	295	86	22	20	24	103	2845	2839.8	2711	376	96	25	22	21	85	3336	3357.9	Total	2006	273	82	10	18	19	68	2476	2482.2

12241 / Kilternan
November 2021
Junction Turning Count

Site No. 3
Location Enniskerry Rd(NW) / Enniskerry Rd(SE) / Ballycorus Rd
Date 2021-11-10

12241 / Kilternan
November 2021
Junction Turning Count

Site No. 3
Location Enniskerry Rd(NW) / Enniskerry Rd(SE) / Ballycorus Rd
Date 2021-11-10

From Arm B - Enniskerry Rd(SE)							Veh.	PCU.	Time	To Arm C - Ballycorus Rd							Veh.	PCU.	From Arm C - Ballycorus Rd							Veh.	PCU.
CAR	LGV	OGV1	OGV2	PSV	M/C	P/C	Total	Total		CAR	LGV	OGV1	OGV2	PSV	M/C	P/C	Total	Total	CAR	LGV	OGV1	OGV2	PSV	M/C	P/C	Total	Total
18	3	2	0	0	0	0	23	24	07:00	4	3	1	0	0	0	1	9	8.7	5	4	1	0	0	0	0	10	10.5
26	9	1	0	2	0	0	38	40.5	07:15	8	2	1	0	0	0	1	12	11.7	11	2	3	0	0	1	2	19	18.3
35	8	3	0	1	2	0	49	50.3	07:30	13	1	1	0	0	0	1	16	15.7	10	2	1	0	1	0	1	15	15.7
51	4	2	2	0	0	3	62	63.2	07:45	20	5	0	1	0	0	0	26	27.3	19	4	0	0	0	0	1	24	23.2
130	24	8	2	3	2	3	172	178	Hour	45	11	3	1	0	0	3	63	63.4	45	12	5	0	1	1	4	68	67.7
47	5	2	1	0	0	2	57	57.7	08:00	29	1	0	0	0	1	1	32	30.6	18	3	0	1	0	0	1	23	23.5
38	4	5	0	1	1	2	51	52.3	08:15	33	3	3	0	0	0	0	39	40.5	34	4	0	0	0	0	0	38	38
38	3	1	0	0	0	0	42	42.5	08:30	28	3	0	1	0	0	0	32	33.3	27	3	1	0	0	0	0	31	31.5
21	8	0	0	0	1	0	30	29.4	08:45	24	4	2	0	1	0	0	31	33	28	1	1	0	0	0	0	30	30.5
144	20	8	1	1	2	4	180	181.9	Hour	114	11	5	1	1	1	1	134	137.4	107	11	2	1	0	0	1	122	123.5
33	4	0	1	0	1	0	39	39.7	09:00	16	0	0	0	0	1	2	19	16.8	20	3	1	1	0	3	2	30	28.4
42	10	2	0	1	0	0	55	57	09:15	15	5	1	0	0	0	0	21	21.5	21	1	0	0	0	0	0	22	22
22	1	0	0	1	0	1	25	25.2	09:30	15	5	0	1	0	0	0	21	22.3	14	2	2	0	0	0	0	18	19
25	4	2	0	0	0	1	32	32.2	09:45	12	4	0	1	0	0	2	19	18.7	15	4	3	0	0	0	0	22	23.5
122	19	4	1	2	1	2	151	154.1	Hour	58	14	1	2	0	1	4	80	79.3	70	10	6	1	0	3	2	92	92.9
27	0	4	0	0	1	3	35	34	10:00	13	2	2	0	0	0	0	17	18	14	1	1	0	0	0	1	17	16.7
37	1	0	0	1	0	11	50	42.2	10:15	12	4	0	0	0	0	0	16	16	13	6	3	0	0	0	1	23	23.7
32	1	3	0	1	0	5	42	40.5	10:30	14	5	0	0	0	0	1	20	19.2	13	3	0	0	0	0	7	23	17.4
35	2	1	0	0	1	5	44	39.9	10:45	20	4	2	2	0	0	1	29	31.8	16	2	1	0	0	0	3	22	20.1
131	4	8	0	2	2	24	171	156.6	Hour	59	15	4	2	0	0	2	82	85	56	12	5	0	0	0	12	85	77.9
19	5	8	0	0	0	2	34	36.4	11:00	16	3	4	0	0	2	1	26	26	20	0	0	0	0	1	1	22	20.6
25	7	3	0	0	1	3	39	37.5	11:15	20	5	1	0	0	1	1	28	27.1	9	3	1	2	1	1	0	17	20.5
40	5	0	0	1	0	0	46	47	11:30	15	3	0	1	0	0	1	20	20.5	18	3	2	0	0	0	0	23	24
28	5	0	1	0	0	2	36	35.7	11:45	17	2	3	2	0	0	2	26	28.5	26	3	1	0	0	0	2	32	30.9
112	22	11	1	1	1	7	155	156.6	Hour	68	13	8	3	0	3	5	100	102.1	73	9	4	2	1	2	3	94	96
44	3	4	0	0	2	1	54	54	12:00	22	0	0	1	0	0	1	24	24.5	19	4	0	0	0	0	2	25	23.4
31	3	1	1	0	0	3	39	38.4	12:15	33	8	2	0	0	0	2	45	44.4	22	4	1	0	0	0	0	27	27.5
45	4	2	1	1	0	2	55	56.7	12:30	21	7	0	0	0	0	4	32	28.8	14	5	1	1	0	0	1	22	23
38	4	2	0	0	1	2	47	45.8	12:45	25	3	1	0	0	1	1	31	30.1	23	6	2	2	0	0	5	38	37.6
158	14	9	2	1	3	8	195	194.9	Hour	101	18	3	1	0	1	8	132	127.8	78	19	4	3	0	0	8	112	111.5
41	5	2	0	0	1	3	52	50	13:00	17	3	2	3	0	1	0	26	30.3	21	5	1	0	0	0	2	29	27.9
33	4	0	0	0	0	3	40	37.6	13:15	19	2	1	0	0	0	2	24	22.9	13	2	1	0	0	0	1	17	16.7
33	5	2	0	1	0	3	44	43.6	13:30	25	5	5	0	1	0	1	37	39.7	20	1	0	3	0	0	3	27	28.5
48	2	0	0	0	0	2	52	50.4	13:45	26	2	0	0	0	0	0	28	28	17	2	2	0	0	0	0	21	22
155	16	4	0	1	1	11	188	181.6	Hour	87	12	8	3	1	1	3	115	120.9	71	10	4	3	0	0	6	94	95.1
37	0	2	0	1	0	2	42	42.4	14:00	21	5	0	3	1	0	2	32	35.3	18	4	1	0	0	2	0	25	24.3
27	3	4	0	0	0	4	38	36.8	14:15	25	3	0	0	0	0	0	28	28	23	4	0	0	0	0	2	29	27.4
34	4	2	1	1	0	5	47	46.3	14:30	18	4	0	0	0	0	2	24	22.4	24	2	2	0	0	0	2	30	29.4
34	3	1	1	0	0	1	40	41	14:45	23	3	0	0	0	0	0	26	26	32	3	0	1	0	0	0	36	37.3
132	10	9	2	2	0	12	167	166.5	Hour	87	15	0	3	1	0	4	110	111.7	97	13	3	1	0	2	4	120	118.4
41	4	1	0	0	1	4	51	47.7	15:00	14	0	0	0	0	1	1	16	14.6	28	5	2	2	0	0	0	37	40.6
41	8	0	0	0	3	1	53	50.4	15:15	26	2	0	0	0	3	0	31	29.2	22	1	1	0	0	0	0	24	24.5
38	9	0	0	1	0	0	48	49	15:30	25	3	0	0	0	0	0	28	28	27	3	0	0	1	1	1	33	32.6
49	2	0	0	0	2	1	54	52	15:45	35	2	0	0	0	0	1	38	37.2	16	5	0	0	0	0	1	22	21.2
169	23	1	0	1	6	6	206	199.1	Hour	100	7	0	0	0	4	2	113	109	93	14	3	2	1	1	2	116	118.9
48	5	0	0	0	1	0	54	53.4	16:00	28	7	1	0	0	0	1	37	36.7	27	4	0	0	0	1	0	32	31.4
41	8	1	1	0	2	1	54	53.8	16:15	25	3	1	0	0	0	0	29	29.5	21	9	1	0	0	1	0	32	31.9
45	6	0	0	1	0	0	52	53	16:30	30	2	0	0	1	0	0	33	34	23	2	3	0	0	0	0	28	29.5
50	4	1	0	0	0	1	56	55.7	16:45	23	5	1	0	0	2	0	31	30.3	21	3	0	0	0	0	0	24	24
184	23	2	1	1	3	2	216	215.9	Hour	106	17	3	0	1	2	1	130	130.5	92	18	4	0	0	2	0	116	116.8
41	5	0	0	0	2	1	49	47	17:00	25	3	0	0	0	0	2	30	28.4	22	4	1	0	0	0	0	27	27.5
38	2	0	0	0	0	0	40	40	17:15	33	2	0	0	0	0	0	35	35	20	1	1	0	0	0	0	22	22.5
36	8	0	0	1	0	0	45	46	17:30	32	5	0	0	0	0	0	37	37	18	3	0	0	0	0	1	22	21.2
28	1	0	0	0	0	0	29	29	17:45	28	3	0	0	0	1	0	32	31.4	15	2	0	0	0	0	0	17	17
143	16	0	0	1	2	1	163	162	Hour	118	13	0	0	0	1	2	134	131.8	75	10	2	0	0	0	1	88	88.2
29	2	1	0	0	0	0	32	32.5	18:00	26	0	0	0	0	0	2	28	26.4	15	1	0	0	0	0	0	16	16
27	2	0	0	0	0	0	29	29	18:15	17	2	0	0	0	0	0	19	19	12	3	0	0	0	1	1	17	15.6
28	1	1	0	0	0	0	30	30.5	18:30	18	1	2	0	0	0	1	22	22.2	20	1	0	0	0	0	0	21	21
40	2	2	0	1	0	0	45	47	18:45	28	1	1	0	0	0	0	30	30.5	14	1	0	0	0	1	0	16	15.4
124	7	4	0	1	0	0	136	139	Hour	89	4	3	0	0	0	3	99	98.1	61	6	0	0	0	2	1	70	68
1704	198	68	10	17	23	80	2100	2086.2	Total	1032	150	38	16	4	14	38	1292	1297	918	144	42	13	3	13	44	1177	1174.9

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