

Project

Hollystown - Kilmartin SHD
Dublin 15

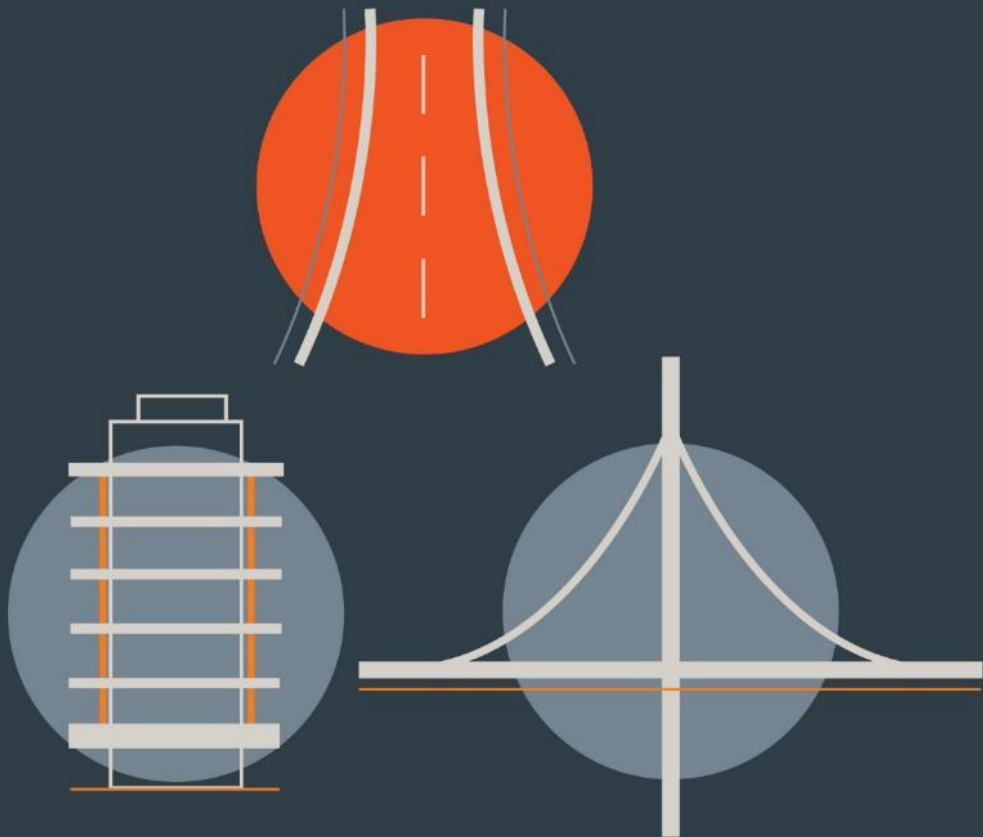
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TRAFFIC AND TRANSPORT ASSESSMENT

Client

Glenveagh Homes Limited

TRANSPORTATION



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Author: Daniel Gill

Reviewed by: Aimee Dunne

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DBFL Consulting Engineers

Dublin Office
Ormond House
Ormond Quay
Dublin 7

Tel: 01 4004000
Email: info@dbfl.ie
Web: www.dbfl.ie

Waterford Office
Suite 8b The Atrium
Maritana Gate
Canada Street Waterford

Tel: 051 309500
Email: info@dbfl.ie
Web: www.dbfl.ie

Cork Office
14 South Mall
Cork
T12 CT91

Tel: 021 2024538
Email: info@dbfl.ie
Web: www.dbfl.ie

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1.0 INTRODUCTION

1.1 BACKGROUND

- 1.1.1 DBFL Consulting Engineers (DBFL) has been commissioned by Glenveagh Homes Limited to prepare a Traffic and Transport Assessment (TTA) for a proposed mixed-use development. The proposed development relates to at a site of c. 25.3 ha at the townlands of Hollystown, Kilmartin, Hollywoodrath, Cruiserath, Yellow Walls, Powerstown, and Tyrrelstown, Dublin 15, which includes lands in the former Hollystown Golf Course and lands identified under the Kilmartin Local Area Plan 2013 (as extended). The lands are bound by the R121 and Hollywoodrath residential development to the east, the under construction Bellingsmore residential development to the south and north, the former Hollystown Golf Course to the north, Tyrrelstown Educate Together National School, St.Luke's National School and Tyrrelstown Community Centre to the west and south and the existing Tyrrelstown Local Centre to the south.
- 1.1.2 The proposed development will consist of the development of 548 no. residential units, consisting of 147 apartments/duplexes and 401 houses, ranging in height from 2 to 5 storeys and including retail/café unit, 2 no. crèches, 1 no. Montessori, 1 no. community hub, car and bicycle parking, open space, public realm and site infrastructure over a site area of c. 25.3 ha. On lands to the north of the application site (referred to as Hollystown Sites 2 & 3) the proposed development includes for 428 units consisting of 401 no. 2 and 3 storey houses and 27 no. apartments set out in 9 no. 3-storey blocks. On lands to the south of the application site and north of the Tyrrelstown Local Centre (referred to as Kilmartin Local Centre) the proposed development includes 120 no. apartment/duplex units in 4 no. blocks ranging in height from 3 to 5 storeys. The local centre includes 2 no. crèches (including 1 standalone 2 storey crèche), 1 no. Montessori, a retail/café unit, and 1 no. community hub.
- 1.1.3 The scheme also proposes a new vehicular access onto the R121 and an extension of the existing partially constructed Link Street which currently serves the Le Chéile Secondary School. A connected network of pedestrian and cyclist links are also proposed providing connections and permeability to, through and from the subject site. The subject lands are located north of Blanchardstown and are situated within the administrative area of Fingal County Council (FCC).

1.2 SCOPE

- 1.2.1 The purpose of this TTA is to quantify the existing transport environment and to detail the results of assessment work undertaken to identify the potential level of transport impact generated as a result of the proposed mixed-use development.
- 1.2.2 The scope of the assessment covers transport and sustainability issues including access, pedestrian, cyclist and public transport connections. Recommendations contained within this report are based on existing and proposed road layout plans, site visits, on site traffic observations and junction vehicle turning count data.
- 1.2.3 This TTA has been prepared in reference to the requirements of the National Roads Authority "*Traffic and Transportation Assessment Guidelines*". Reference has also been made to the "*Kilmartin Local Area Plan 2013*" and the "*Fingal Development Plan 2017 - 2023*".

1.3 METHODOLOGY

- 1.3.1 DBFL's approach to the study accords with policy and guidance both at a national and local level. Accordingly, the adopted methodology responds to best practices, current and emerging guidance, exemplified by a series of publications, all of which advocate this method of analysis. Key publications consulted include:
- '*Traffic and Transport Assessment Guidelines*' (May 2014) National Road Authority;
 - '*Traffic Management Guidelines*' Dublin Transportation Office & Department of the Environment and Local Government (May 2003);
 - '*Guidelines for Traffic Impact Assessments*' The Institution of Highways and Transportation (1994);
 - *Design Manual for Urban Roads and Streets* (DMURS) (May 2019)
 - *Kilmartin Local Area Plan 2013*;
 - *Fingal County Council County Development Plan 2017 - 2023*; and
 - *Sustainable Urban Housing: Design Standards for New Apartments* (December 2020).
- 1.3.2 Our methodology incorporated a number of key inter-related stages, including;
- **Site Audit:** A site audit was undertaken to quantify existing road network issues and identify local infrastructure characteristics, in addition to

establishing the level of accessibility to the site in terms of walking, cycling and public transport. An inventory of the local road network was also developed during this stage of the assessment.

- **Traffic Counts:** Junction traffic counts were undertaken and analysed with the objective of establishing local traffic characteristics in the immediate area of the proposed mixed use development.
- **Trip Generation:** A trip generation exercise has been carried out to establish the potential level of vehicle trips generated by the proposed residential development.
- **Trip Distribution:** Based upon both the existing traffic characteristics and the network layout in addition to the spatial / land use configuration and density of the urban structure across the catchments area of the development, a distribution exercise has been undertaken to assign site generated vehicle trips across the local road network.
- **Network Analysis:** Further to quantifying the predicted impact of vehicle movements across the local road network for the adopted optimum site access strategy, more detailed computer simulations have been undertaken to assess the operational performance of key junctions in the post development 2023, 2028 and 2038 development scenarios.

1.4 PRE-APPLICATION CONSULTATION

- 1.4.1 As part of the pre-application process, FCC Transportation Planning Division prepared two reports on the pre-application submissions for the Hollystown Sites 2 & 3 (An Bord Pleanála Ref. No. ABP-309926-21) and for the Kilmartin Local Centre (An Bord Pleanála Ref. No. ABP-309783-21). These reports identified a number of transport items to be addressed in the final submission. The following summarises the items raised within the FCC reports and how these have been addressed within the final planning application:

Hollystown Sites 2 & 3 (ABP Ref. No. ABP-309926-21)

Item 1) *The trip generation rates for the apartments would appear to be assessed using the "Flats" category from the TRICS database. The category "residential*

houses” or “residential apartments” is considered to be a more appropriate and representative criteria for a robust assessment.

The TTA has been updated to include a sensitivity test utilising the ‘House’ trip rates for the apartments and a comparison of the resulting impact on the key off-site junctions included in **Section 6.9** of this report.

Item 2) *The applicant should clarify if any discounts have been applied to the assessment and further discussion in relation to the traffic splits would be required. Due to the presence of the schools it would be useful to look at the interpeak traffic volumes.*

Details regarding the discounts applied to the non-residential elements of the subject scheme have been provided in **Section 5.3** of this report.

Item 3) *Further build-outs could be incorporated on some of the loop local streets.*

Additional build-outs have been incorporated into the roads layout where appropriate, as illustrated on DBFL Drawings:

- 1701820-DBFL-RD-SP-DR-C-1004 Site 2 Proposed Road Layout Sheet 1
- 1701820-DBFL-RD-SP-DR-C-1005 Site 2 Proposed Road Layout Sheet 2
- 1701820-DBFL-RD-SP-DR-C-1006 Site 3 Proposed Road Layout Sheet 1
- 1701820-DBFL-RD-SP-DR-C-1007 Site 3 Proposed Road Layout Sheet 2

Item 4) *A 2m cycle track (1.75 shown) and a 2m footpath should be provided and clarification and further detail of the transition between the proposed and the existing infrastructure at the tie-in point should be provided.*

The cycle tracks on both sides of The Avenue have been revised to 2.0m and additional detail regarding the transition at the tie-in point is provided in **DBFL Drawing 170182-DBFL-RD-SP-DR-C-1007**.

Item 5) *The proposed pedestrian and cycle route along the R121 are generally in accordance with the NTA Cycle Manual, however, both pedestrian and cycle priority across the proposed and existing entrances should be revisited. A revised drawing showing how the proposed cycle track would connect to the existing cycle track at the existing roundabout on the R121 and Avenue should be provided.*

The crossings over the proposed and existing entrances along the R121 have been revised to include the continuous footpath and stepped cycle track, in accordance with the approved detail for Hollystown Site 1 (Planning Reg. Ref: FW21A/0042).

Item 6) *The applicant's designers should clarify that road widths of 4.8m that have no footpath or buffer space and have perpendicular parking have sufficient space to access and egress parking spaces.*

The layout of the shared surface streets with a width of 4.8m have been reviewed, and where necessary additional depth has been added to the parking spaces. This ensures the required area is provided for manoeuvrability of vehicles into/out of spaces whilst still maintaining the desirable widths for shared surfaces as per DMURS guidance.

Item 7) *Some parking spaces are not over-looked and further consideration should be given to the layout in these areas.....The largest grouping of visitor spaces is the northwest corner of the site, which is furthest from the entrance to the scheme. It is considered that the distribution of the visitor spaces be examined further with a view to providing additional spaces in the south west and central portion of the site.*

The locations of the visitor car parking spaces have been reviewed and redistributed across the site, providing easier access to visitor spaces in the south-west and central portions of the site. The locations of these spaces are illustrated on **DBFL Drawings 170182-DBFL-RD-SP-DR-C-1004 / 1005 / 1006 / 1007** and also on Deady Gahan architects' drawing (Drg. No. 20152-P-0004B) accompanying the application.

Item 8) *....the area between the existing Bellingsmore development and the proposed site to the north requires further consideration and clarification considering the existing constraints on how pedestrian and cycle connectivity can be accommodated.*

Three pedestrian / cyclist connections between the Bellingsmore development and Site 2 are now included as part of the proposals, as discussed in detail in **Section 4.0** of this report and also shown in **DBFL Drawing 170182-DBFL-RD-SP-DR-C-1004 / 1005** and BSLA landscape architects drawings accompanying the application (Dwg. DN2005-LP-S2-3-D1 and DN2005-LP-S2-3-D2).

Item 9) *Potential future possible bus stop locations should be identified on the avenue as part of the overall layout.*

The potential future inclusion of bus stops along The Avenue is discussed in **Section 4.0** of this report.

***Item 10)** Bicycle parking should be of a high standard with parking for each unit provided in a separate secure compartment locker preferable in the building footprint. Stacking of bicycle parking can be provided as long as it is practicably accessible.*

High quality, secure cycle parking is proposed to be provided, the details of which are included in **Section 7.0** of this report.

***Item 11)** A swept path analysis for the larger refuse vehicle and the fire tender should be provided and some car parking areas where the road is 4.8m in width.*

The swept path analysis of refuse vehicles and fire tenders through key points of the site are illustrated in **DBFL Drawings 170182-DBFL-RD-SP-DR-C-1004 / 1005 / 1006 / 1007 / 1011**.

Kilmartin Local Centre (ABP Ref. No. ABP-309783-21)

***Item 1)** The applicant should clarify if any discounts were applied for the commercial elements of the scheme.*

Details regarding the discounts applied to the non-residential elements of the subject scheme have been provided in **Section 5.3** of this report.

***Item 2)** Trip generation rates are assessed using the "Flats" category from the TRICS database.....The TTA would need to be revised to provide a sensitivity test for comparison utilising the house type category*

The TTA has been updated to include a sensitivity test utilising the 'House' trip rates for the apartments and a comparison of the resulting impact on the key off-site junctions included in **Section 6.9** of this report.

***Item 3)** Junction 4 was not brought forward for further analysis but should be considered for further analysis as it exceeds the 2.5 percent FCC threshold for further analysis.*

All key off-site junctions have now been brought forward for detailed assessment and analysis as they exceed the 2.5 percent FCC threshold. The results of the analysis is presented in **Section 6.0** of this TTA.

***Item 4)** The Transportation Planning Section considers the minimum practical parking demand to be one space for units with two bedrooms or less and two*

spaces for units with three or more bedrooms.....The Transportation Planning Section is concerned that the proposed dedicated residential parking provision is on the low side and that this would result in overspill parking.

The car parking ratio for the residential activity within the Kilmartin Local Centre has been maintained at a rate of 0.9 spaces per unit. This rate is considered appropriate considering the accessibility characteristics of the subject Kilmartin Local Centre site. The rationale and justification for the proposed car parking provision is set out in **Section 7.0** of this report, along with the proposed car parking management regime which will effectively manage car parking activity and ensure overspill parking as a result of the development is avoided.

***Item 5)** The provision of EV parking and E-bike parking should be addressed in detail.*

The provision of EV charging spaces and E-bike parking is discussed in detail in **Section 4.0** and **Section 7.0** of this report.

***Item 6)** All residential bicycle parking should be provided within the building footprints to a high standard with parking for each unit provided in a separate secure compartment. Individual lockers for each unit should be provided.*

The proportion of resident (long stay) cycle parking provided within the footprint of the building has been increased in light of FCCs comments. However, there is still a portion of the resident cycle parking which will be provided within external secure cycle stores due to the space constraints of the building. This does not diminish the quality of the long stay cycle parking facilities for the residents as these will be easily accessible for cyclists, secure fob/coded access, covered and located in areas which are overlooked for passive surveillance.

***Item 7)** Ideally the creche should be located on a circulatory route with parallel set down provided to avoid the need for reverse manoeuvres.*

All childcare facilities are now located on the eastern side of the Link Street and have a shared one-way circulatory drop off zone which includes 10 no. perpendicular drop off spaces. These are wider parent and child spaces to facilitate easier movements in/out of cars for parents/caregivers and children.

It is noted that the proposed layout has been designed in accordance with the Department of Children and Youth Affairs (DCYA) 'Universal Design Guidelines for Early Learning and Care Setting: Site Location, Approach and Design' (June 2019).

Whereby the design features for access and parking/set-down areas the Universal Design Guidance states that:

- Ensure that whatever parking or set-down areas are provided do not dominate the entrance area or diminish the quality of the space for children and families as they enter and leave the setting
- Provide an adequate number of generously sized parking spaces to accommodate parents and children, baby bags and other items
- For safety reasons, reverse parking should be encouraged through the use of signage in parking areas. Reverse parking means that when children are entering or leaving the back seat of a car they will be at a greater distance from the road
- Provide adequate set-down space for people to drop-off and pick-up
- Provide at least one accessible car parking space near the main entrance
- The entrance should be clearly identifiable and reached from the parking and set-down areas via an accessible footpath.

There is no requirement under the guidelines to provide parallel spaces or parallel set-down areas.

***Item 8)** The main link street from the roundabout to the adjacent development to the south should be considered as a cycle street*

The layout of the Link Street south of the roundabout has been revised to include segregated 2.0m wide cycle tracks on both sides of the street as shown in **DBFL Drawing 170182-DBFL-RD-SP-DR-C-1011**. This is considered to represent a safer arrangement for cyclists, particularly schoolchildren, compared to a possible cycle street arrangement where cyclists would be required to mix with general traffic.

***Item 9)** There is a notable lack of street trees along the main link road*

The layout of the Link Street has been revised to include street trees where appropriate within the landscaped verge areas, as illustrated on BSLA landscape architects drawings submitted as part of the planning application documents.

***Item 10)** Details of the location and number of charging points and the details of EV charging solutions for on-street parking layouts where parking spaces are not designated or accessed directly from the unit should be provided with the main application*

Details of the proposed number and location of the EV charging points across the scheme are provided in **Section 7.0** of this TTA.

Item 11) E-bike parking locations should be identified. The facilities to provide E-bike parking should be considered for both the residential and commercial elements of the development.

Details of the proposed number and location of the E-bike parking spaces across the scheme are provided in **Section 7.0** of this TTA.

Item 12) The Transportation Planning Section would welcome further discussion in relation to the requirement of the treatment of school frontage which would emphasis the importance of the school going children accessing the school.

The layout of the Link Street adjacent the school frontages was discussed with FCC Transportation Planning. The possibility of a school street was discussed and it is considered that the layout of the Link Street and wider network has the adaptability to potentially facilitate a 'School Street' arrangement in the future if appropriate. Other considerations, particularly in relation to the impact on future bus routes would need to be reviewed prior to any possible School Street measures being introduced.

- 1.4.2 Furthermore, additional pre-application discussions were held with FCC Officers, including Niamh O'Connor (FCC Transportation Planning) and Anna Marie Meagher (Parks and Green Infrastructure Division) at an on-site meeting on Friday 24 September 2021 to discuss transportation, landscaping and drainage elements of the scheme.
- 1.4.3 A Teams meeting also took place on Thursday 14 October 2021 between DBFL Consulting Engineers and the National Transport Authority (NTA) Officers Conor O'Donovan and Tanya Yeoman to discuss future public transport infrastructure requirements and potential re-routing of bus services through the proposed Kilmartin Local Centre development.

1.5 REPORT STRUCTURE

- 1.5.1 As introduced above, this TTA seeks to clarify the potential level of influence generated by the proposed development upon the local road network and subsequently ascertain the existing and future operational performance of the local

transport system. The structure of the report responds to the various stages of this exercise including the key tasks summarised below.

- 1.5.2 **Section 2** of this report describes the existing conditions at the proposed development location and surrounding area.
- 1.5.3 The relevant transportation policies that influence the design and appraisal of the subject development proposals are highlighted within **Section 3**.
- 1.5.4 **Section 4** provides a summary of the development's proposals, describing the nature of the development, future transport proposals and their impacts on the development.
- 1.5.5 **Section 5** outlines the trip generation and distribution exercises carried out and the adopted methodology for applying growth factors to establish a baseline for the design year network traffic flows.
- 1.5.6 The potential traffic impact of the proposals assessed for the 2023 Opening Year, 2028 Interim Year and the 2038 Horizon Year are summarised within **Section 6**.
- 1.5.7 The proposed car and cycle parking provision and management regime across the scheme is outlined in the Parking Strategy in **Section 7**.
- 1.5.8 The main conclusions and recommendations derived from the analysis are summarised in **Section 8**.

2.0 RECEIVING ENVIRONMENT

2.1 LAND USE

2.1.1 The subject site is located on an undeveloped greenfield site with limited hardstanding areas that has an approximate site area of c.25.3 hectares. The site which is located within the administrative area of Fingal County Council and is zoned under 'Zoning Objectives RA – Residential Area' which is described within the Fingal Development Plan 2017 - 2023 as to "Provide for new residential communities subject to the provision of the necessary social and physical infrastructure". The lands which form the northern link towards Ratoath Road are zoned OS-Open Space to "Preserve and provide for open space and recreational amenities". The lands which form the proposed Kilmartin Local Centre are zoned LC-Local Centre to "Protect, provide for and/or improve local centre facilities".

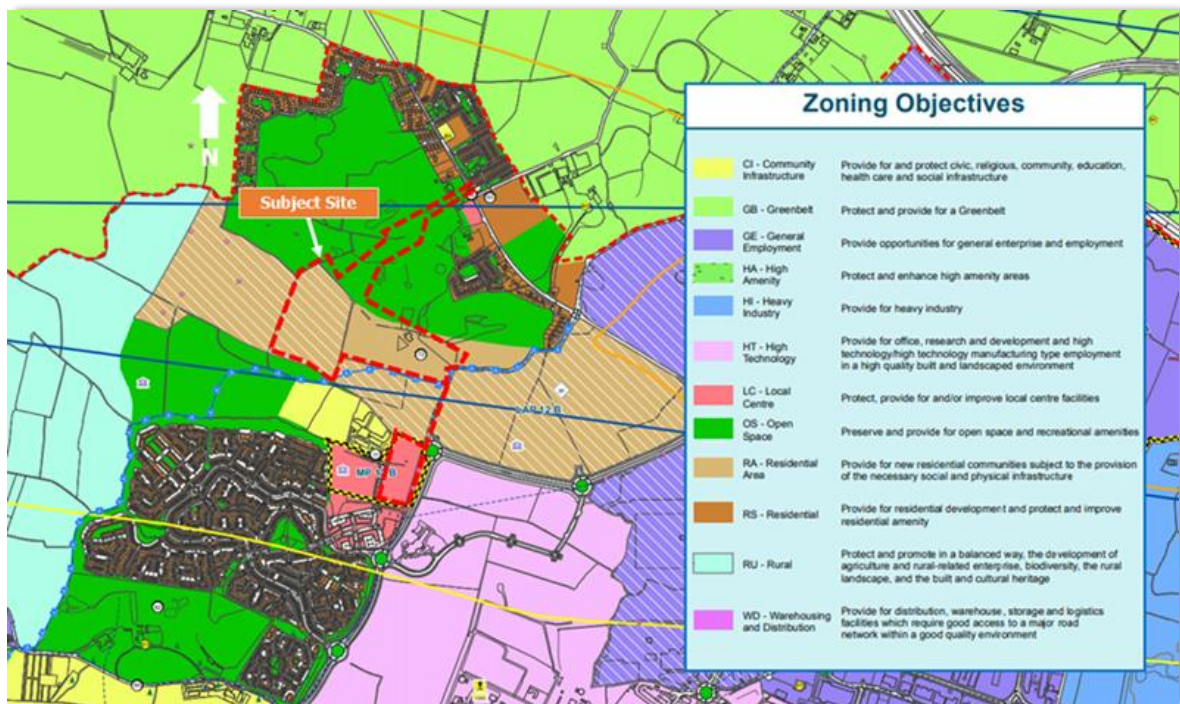


Figure 2.1: Subject Site Current Zoning Objectives
(Source: FCC Blanchardstown North Sheet No.12)

2.1.2 To the north and southwest of the site are lands zoned as OS – Open Space and to the south are CI – Community Infrastructure. The lands to the west and east are also zoned RA – Residential Area and form part of the wider Kilmartin Local Area Plan. Further south and west of the proposed Kilmartin Local Centre are the lands zone for the LC – Local Centre, which is an extension to the existing Tyrrelstown Local Centre. Southeast are lands zoned HT – High technology to provide for office, research and development and high technology.

2.2 LOCATION

- 2.2.1 The R121 regional road forms the eastern boundary of the subject site and provides links to the wider strategic road network including the M50, N2 and N3. The subject site is located to the north of the existing Tyrrelstown Local Centre and lies between the N2 Motorway (Junction 2) and the N3 Motorway (Junction 3). The site is situated approximately 750m south of Hollystown, 3.0km north of Mulhuddart and 4.3km north of Blanchardstown Centre respectively.
- 2.2.2 Connectivity is offered towards the wider Dublin area via the M50 Motorway which is situated approximately 7.0km south-east of the site. The general site location in the context of the wider network is shown in **Figure 2.2**.

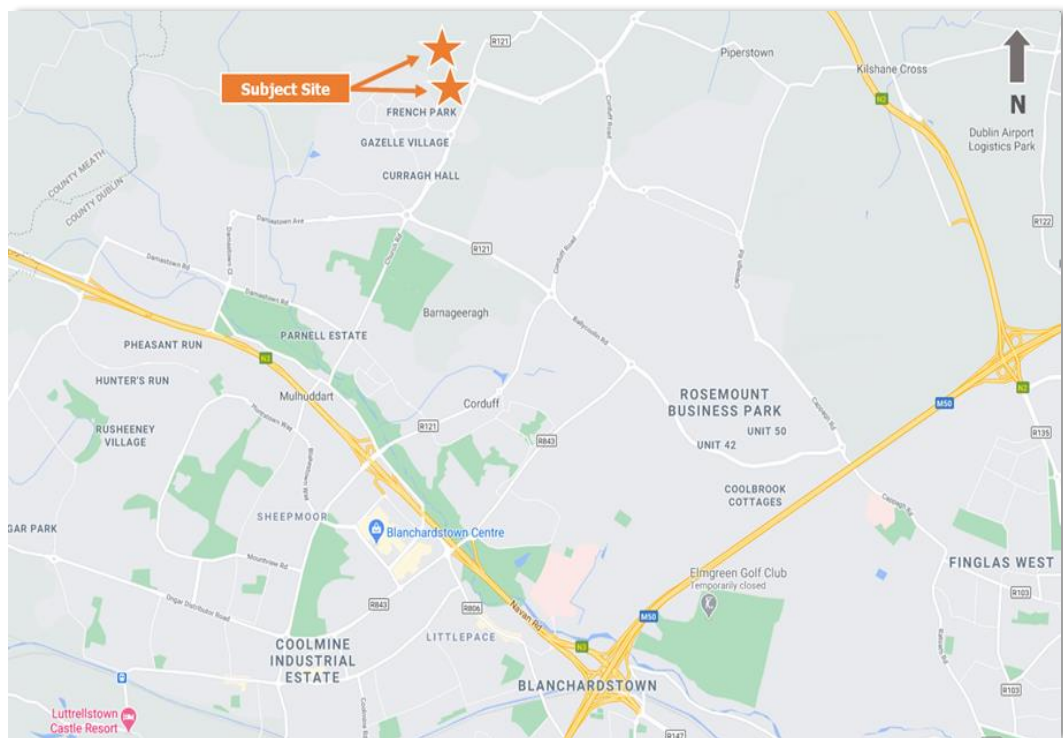


Figure 2.2: Site Location (Source: Google Maps)

- 2.2.3 The subject lands for Sites 2 & 3 are bound by the R121 to the east, open space on the former Hollystown Golf Course lands to the north, open space to the west/southwest and the Bellingsmore Residential Development, currently under construction, to the south of Site 2.
- 2.2.4 The Le Chéile Secondary School, Tyrrelstown Educate Together National School, St. Luke's National School and Tyrrelstown Community Centre are all located south of Sites 2 & 3. The subject lands can currently be accessed from the partially

constructed street, The Avenue, which at present solely serves the Le Chéile Secondary School. Site 2 can also be accessed from its frontage along the R121.

- 2.2.5 Similarly, the subject Kilmartin Local Centre lands are bound to the east by the R121, to the south is the existing Tyrrelstown local centre and to the southwest is the existing established Tyrrelstown residential area. The subject site boundary in the context of the immediate local area is highlighted in **Figure 2.3**.



Figure 2.3: Indicative Site Boundary (Source: ArcGIS)

2.3 EXISTING TRANSPORTATION INFRASTRUCTURE

Road Network

- 2.3.1 The subject site is located to the west of Hollywoodrath Road (R121) regional road. This road forms the eastern boundary of the subject site, providing links towards the M50, N2 and N3. Access to the N2 (Junction 2) is possible by travelling from the site in a northeast bound direction along the R121 and the Cherryhound-Tyrrelstown Link Road.
- 2.3.2 Travelling southwest on Church Road (R121) provides connections to Mulhuddart and Blanchardstown via the N3 as well as links to the M50. The existing road network in the vicinity of the site is shown in **Figure 2.4** below.



Figure 2.4: Existing Road Network (Source: Google Maps)

- 2.3.3 Currently, the subject site can be accessed via either the R121 at the sites' easternmost boundary, or via the partially constructed link street (The Avenue) which currently provides access to the Le Chéile Secondary School or via the partially constructed link street from the existing Tyrrelstown Local Centre which serves the national schools.
- 2.3.4 At present, the partially constructed section of The Avenue is c.315m in length and will also serve the Bellingsmore residential development which is currently under construction. The layout of the partially constructed link street, The Avenue, is shown in **Figure 2.5**. When complete it will comprise a 6.0m wide two-way carriageway, 1.7m-2.0m wide footpaths on both sides and a 2.5m wide two-way cycle track on the southern side.



Figure 2.5: View Looking West on The Avenue Towards the Subject Site

- 2.3.5 At its eastern end, The Avenue connects with the R121 and Cherryhound-Tyrrelstown Link Road via a four-arm roundabout, as shown in **Figure 2.6**. The Avenue forms the western arm of the roundabout, whilst the R121 forms the northern and southern arms and the Cherryhound-Tyrrelstown Link Road forms the eastern arm.



Figure 2.6: View Looking East on The Avenue Towards R121 Roundabout

- 2.3.6 The R121 in the immediate vicinity of the Site 2's eastern boundary is a two-way single lane carriageway as shown in **Figure 2.7** below. The posted speed limit for this section of the R121 is 50km/h and the road offers street lighting on the eastern / southern sides. The R121 extends north towards Hollystown, where it connects to a four-arm roundabout known as "The Swing" located c.530m from the proposed subject Site 2 R121 access.



Figure 2.7: View Looking West on R121 Towards Proposed Site Access

- 2.3.7 A series of speed humps are in place along the R121 between The Swing roundabout and the R121/The Avenue roundabout as shown in **Figure 2.8**.



Figure 2.8: View Looking South Along R121 From Proposed Site Access

- 2.3.8 The R121 Church Road to the east of the proposed Local Centre site is a two-way dual carriageway road, separated by a concrete median barrier as shown in **Figure 2.9** below. The posted speed limit for this section of the R121 corridor is 60km/h and the road offers street lighting on both sides. The four-arm R121 / Boulevard / Cruiserath Drive roundabout is located approximately 400m south of the subject site between Tyrrelstown Plaza and Carlton Hotel Blanchardstown.



Figure 2.9: View Looking North on R121 adjacent the Local Centre Subject Site

- 2.3.9 The Cherryhound-Tyrrelstown Link Road further east of the subject site is a two-way dual carriageway, with a concrete median barrier and subject to an 80km/h posted speed limit. The Cherryhound-Tyrrelstown Link Road provides a direct connection to the N2 which lies approximately 2.6km north-east of the subject site.

Existing Cycling and Pedestrian Facilities

- 2.3.10 In terms of existing active travel infrastructure, the site benefits from a number of cycle and pedestrian facilities that are provided in the immediate vicinity. The partially constructed link street from the Local Centre that currently serves the schools benefits from footways on both sides and a cycle track located on the western side. The roundabout at the end of this link street also benefits from zebra crossings on the southern and western arms. The current street layout for this partially constructed link street is shown in **Figure 2.10** and **Figure 2.11**.



Figure 2.10: View Looking North on the Link Street through the Local Centre Site



Figure 2.11: Existing Roundabout Crossings on the Link Street in Local Centre

- 2.3.11 Footpaths are provided on both sides of The Avenue along the frontage of the Bellingsmore development. A segregated two-way cycle track is provided on the southern side of The Avenue. Two-way cycle tracks also continue over a short section on the northern side of the Avenue on approach to the R121 roundabout. At present, there are also two uncontrolled crossings on the Hollystown Road approach to the roundabout, as indicated in **Figure 2.12**.



Figure 2.12: Existing Crossings on Hollystown Road

- 2.3.12 At present, on the southern side of the R121 in the vicinity of the proposed Site 2 access, segregated footpaths and cycle tracks are provided along the Hollywoodrath development frontage. Along the section of the R121 which forms the frontage of the Bellingsmore residential development, a new footpath has been constructed as shown in **Figure 2.13**.



Figure 2.13: Existing Pedestrian & Cyclist Facilities on the R121

- 2.3.13 These facilities provide a direct connection to the existing Toucan crossing on the R121 northern arm of the R121 / Hollystown Road / Cherryhound-Tyrrelstown Link Road roundabout **Figure 2.14**. Further south on the R121, segregated footpaths and two-way cycle tracks are provided on both sides of the road, providing links to the existing Tyrrelstown local centre.



Figure 2.14: Existing Toucan Crossing on the R121

Public Transport - Bus

- 2.3.14 There are a number of services which currently service Tyrrelstown local centre and its environs. These services offer connectivity towards destinations such as Blanchardstown, Dublin City Centre and Broombridge. Dublin Bus service number 40d currently connects Tyrrelstown with Dublin City Centre and the 40e bus route connects to Broombridge while providing further opportunities for Luas and rail connections.
- 2.3.15 Furthermore, Go-Ahead 236/a connects Damastown IBM and Blanchardstown via Tyrrelstown whilst Go-Ahead number 238 connects Tyrrelstown with Blanchardstown (Lady's Well Road). **Table 2.1** below summarises the number of aforementioned services which are available within the area and **Figure 2.15** illustrates the bus stops around the subject site.

Bus Service	Route No.	Destination	Mon - Fri	Sat	Sun
Dublin Bus	40d	Tyrrelstown – Parnell Street	15	30	50
	40e	Tyrrelstown – Broombridge	30	30 - 40	50
Go-Ahead	236/a	Damastown IBM – Blanchardstown	60	-	-
	238	Tyrrelstown – Blanchardstown (Ladywell)	60	60	60

Table 2.1: Bus Services (Frequency in Minutes)

- 2.3.16 The closest existing bus stop to the subject development site is located at on the R121 (Stop No. 7678) located directly adjacent the Local Centre site on the R121 and is served by route 40e. The aforementioned routes also serve the Bishop's Orchard Boulevard (Stop No. 1546) and Carlton Hotel Blanchardstown (Stop No.

7072 and 7073). There is also a stop (Stop No. 7559) on the R121 located approximately 450m east of Site 2.



Figure 2.15: Existing Bus Stops in Vicinity of the Subject Site (Source: Google Maps)

2.4 LOCAL AMENITIES

- 2.4.1 The proposed development site is ideally located to benefit from local amenities in the immediate area, as shown in **Figure 2.16**.

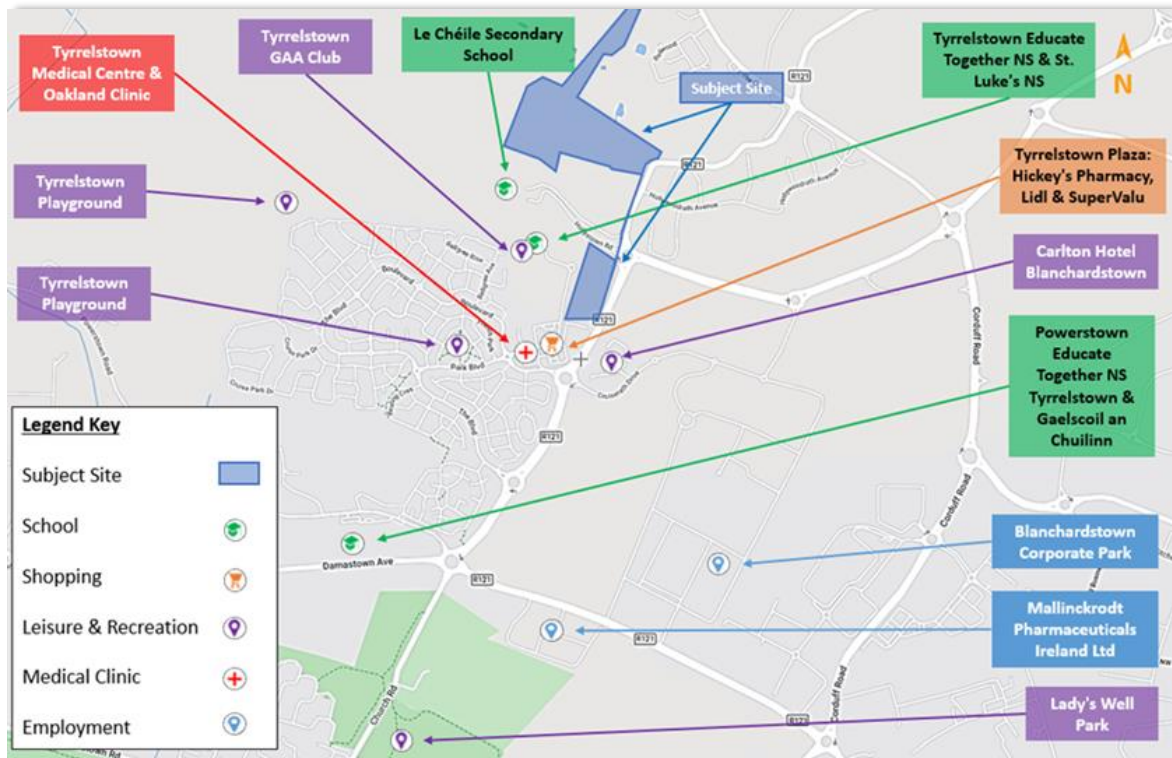


Figure 2.16: Local Amenities Surrounding Subject Development Site

2.4.2 There are a number of schools within 2.0km of the subject site including St. Luke's National School, Tyrrelstown Educate Together National School, Powerstown Educate Together NS Tyrrelstown, Gaelscoil an Chuilinn and Le Chéile Secondary School. Further Education opportunities are also available with TU Dublin's Blanchardstown Campus less than 5.0km of the site. Furthermore, the subject site benefits from good access to leisure facilities such as public parks, leisure centres and playgrounds. The subject site also has good access to Blanchardstown Shopping Centre and employment zones from the numerous Business Parks in the surrounding area (Northwest, Rosemount, Damastown).

2.5 RSA COLLISION HISTORY

- 2.5.1 The collision statistics on the Road Safety Authority (RSA) website has been reviewed in order to ascertain the safety record of the local road network over the most recent twelve-year period. This includes information for the years 2005 to 2016 inclusive and indicates basic information on all reported incidents.
- 2.5.2 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. According to the RSA website, there were 8 no. reported incidents within the immediate vicinity of the subject scheme proposals.

- 2.5.3 In reference to **Figure 2.17** and **Table 2.3** below outline the road collisions which have occurred in the vicinity of the subject site. The local road network included in this analysis is the R121, Hollystown Road and the Cherryhound-Tyrrelstown Link Road.
- 2.5.4 According to the RSA Collision Statistic Map, the majority of collisions recorded were '**minor**' in severity with between 1 to 5 casualties at any one time. The subject vehicle in all of the recorded incidents was a car and of the 8 no. incidents recorded, 4 no. incidents occurred after 2014. 75% of the incidents occurred on weekdays, while 75% of the incidents involved pedestrians and rear-end collisions.
- 2.5.5 Incident no. 1 occurred in 2014 and involved a car that had been rear ended, which resulted in five casualties. Incident no. 2 had a severity level of '**minor**' and occurred on Hollystown Road adjacent the subject site in 2008. This incident involved a single vehicle and occurred between the hours of 19:00 and 23:00. Incident no. 4, a '**serious**' collision, occurred in 2014 at the Boulevard roundabout near Tyrrelstown Plaza. The incident involved a car and a pedestrian which also occurred between the hours of 19:00 and 23:00.

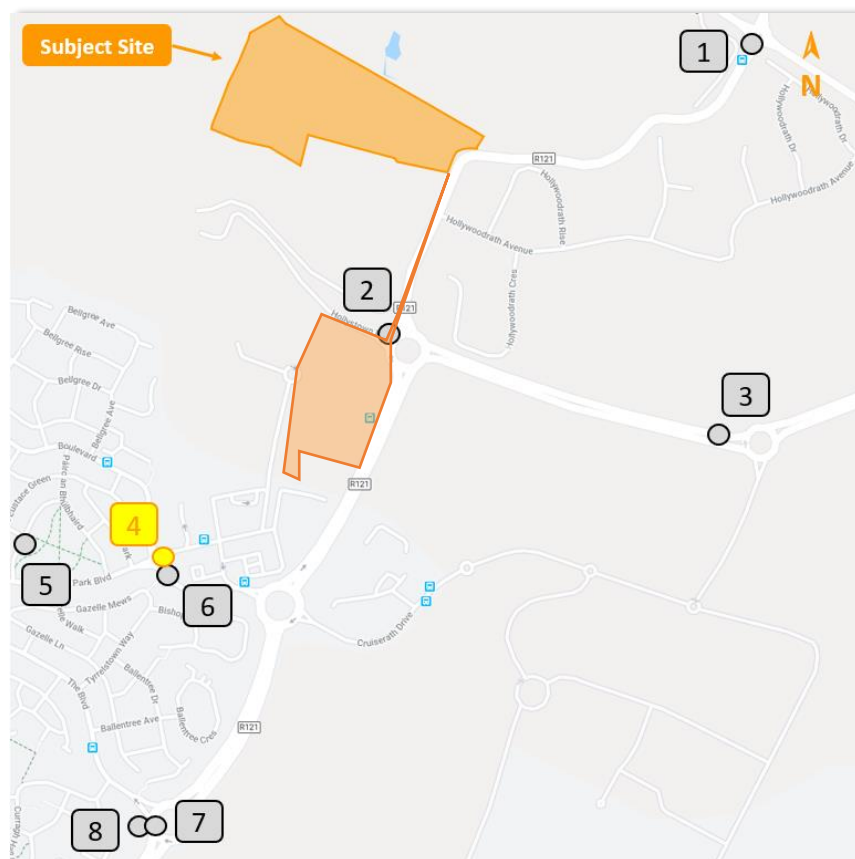


Figure 2.17: Collision Map (Source: RSA)

Incident	Severity	Year	Vehicle	Circumstances	Day of week	Time	Speed limit	Casualties
1	Minor	2014	Car	Rear end, straight	Monday	1900-2300	50 KPH	5
2	Minor	2008	Car	Single vehicle only	Sunday	1000-1600	30 KPH	1
3	Minor	2015	Car	Rear end, straight	Monday	1900-2300	60 KPH	1
4	Serious	2014	Car	Pedestrian	Sunday	1900-2300	50 KPH	1
5	Minor	2016	Car	Pedestrian	Tuesday	1600-1900	50 KPH	1
6	Minor	2010	Car	Pedestrian	Friday	1000-1600	30 KPH	1
7	Minor	2012	Car	Rear end, straight	Tuesday	1000-1600	60 KPH	3
8	Minor	2005	Car	Angle, both straight	Monday	1000-1600	60 KPH	3

Table 2.3: Collision Records (Source: RSA)

2.5.6 The review of the RSA collision data available revealed that the existing surrounding road network exhibits a good safety record. Furthermore, there are no apparent trends in collisions on the road network in the immediate vicinity of the site or existing road safety issues which could be exacerbated by the proposed residential development.

2.6 PROPOSED TRANSPORTATION INFRASTRUCTURE

Cycle Network Proposals - GDA Cycle Network Plan

2.6.1 The subject site lies within the Greater Dublin Area Cycle Network Plan Zone 4 under “*Dublin North West*” as outlined within the Greater Dublin Area Cycle Network Plan (2013). The sector covers “*Finglas and Phibsborough in the east, to the Fingal-Meath County boundary to the north and west and to the River Liffey to the south*”. **Figure 2.18** below indicates the proposed cycle routes in the vicinity of the site in accordance with the National Transport Authority’s “*Greater Dublin Area Cycle Network Plan*”.

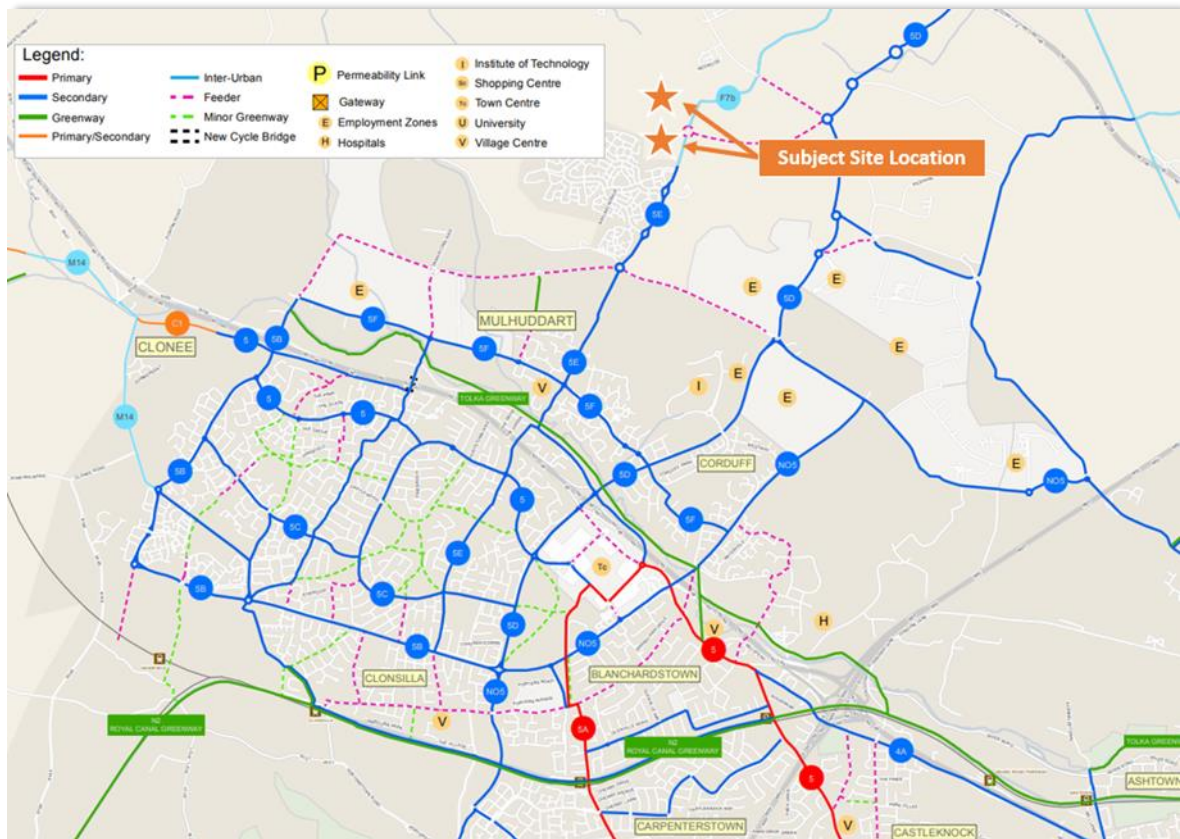


Figure 2.18: Proposed Cycle Facilities (Source: Sheet N4 GDA Cycle Network Plan)

2.6.2 New routes such as the 5E on Church Road and segregated cycleways on the Cherryhound-Tyrrelstown Link Road have been built since the publication of the GDA Cycle Network Proposals. Proposals that are yet to be constructed in the vicinity of the development site include the formation of the following key routes:

- **F7b Inter-urban Route:** This route runs along Church Road (R121) past residential units in Hollywoodrath and connects towards Tyrrelstown. This route will connect to the existing 5E Secondary Route, linking Tyrrelstown with Blanchardstown Town Centre and further towards Dublin City Centre via the No. 5 Primary Radial Route.
- **River Tolka Greenway:** This route will run from Drumcondra to Tolka Valley Park via Griffith Park and National Botanic Gardens.

Cycle Network Proposals - Kilmartin Local Area Plan

2.6.3 The western section and southern portion of the subject lands form part of the wider Kilmartin Local Area Plan (LAP) which incorporates a connected network of pedestrian and cycle routes around the subject site. As noted in the previous sections, some of these routes along the R121 and sections of the link streets have

already been constructed, providing connections to the schools, community centres and public open spaces within the wider environs of Tyrrelstown.

- 2.6.4 As illustrated below in **Figure 2.19**, indicative dedicated pedestrian and cycle routes are proposed around the edges and through the subject lands.

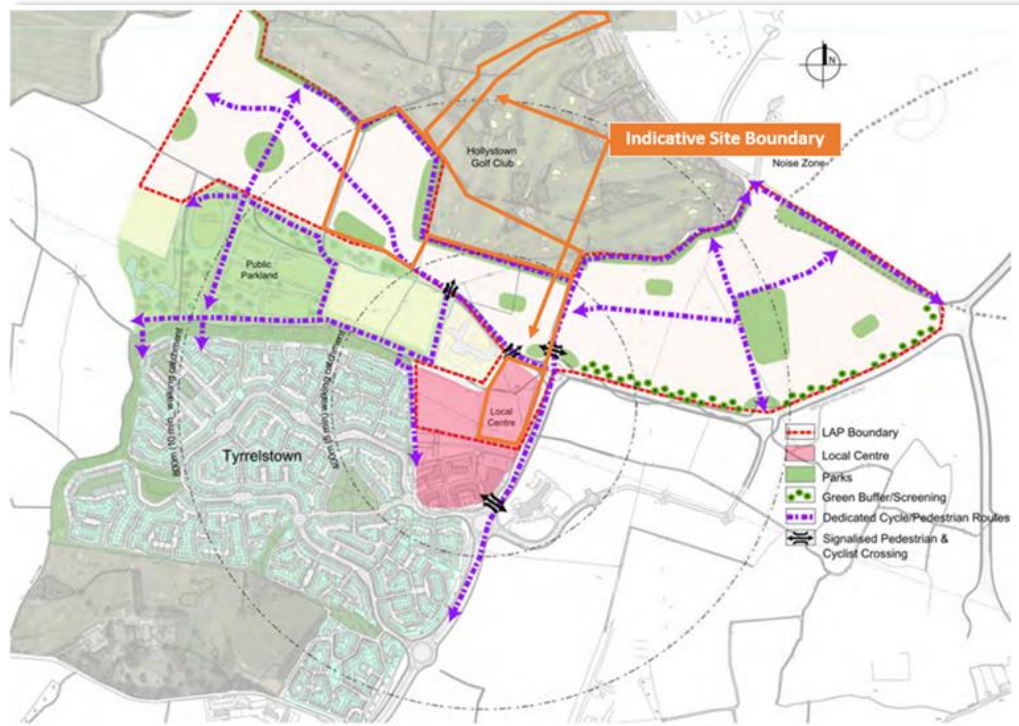


Figure 2.19: Map 8 – Indicative Pedestrian/Cycle Routes (Source: Kilmartin LAP)

Public Transport Proposals - BusConnects

- 2.6.5 *BusConnects* is an initiative launched by the NTA with the aim of overhauling the bus system in the Dublin Region. This initiative includes review of bus services, the core bus network which comprises radial, orbital and regional core bus corridors. It also includes enhancements to ticketing and fare systems as well as a transition to a new low emission vehicle fleet.
- 2.6.6 This initiative in the long-term proposes to implement a redesign of the existing bus network. The fundamental changes to the network expected would be as follows:
- Increasing the overall amount of bus services. Providing new and frequent orbital services connecting more outer parts of the city together;
 - Simplifying the bus services on the key radial into “Spines” where all buses will operate under a common letter system and buses will run very frequently and be more evenly spaced;

- Increasing the number of routes where buses will operate every 15 minutes or less all day;
- The frequent network would become a web-shaped grid, with many interchange opportunities to reach more destinations. Everywhere that two frequent routes cross, a fast interchange is possible; and
- Additional service would be provided at peak hours to limit overcrowding.

2.6.7 **Figure 2.20** below illustrates the routes of the proposed bus network in the context of the wider site.



Figure 2.20: Proposed Bus Network (Source: *BusConnects* – Revised Network 2020)

2.6.8 The subject site will benefit from Route **B3** and **L62** which will operate adjacent the subject site through the existing Tyrrelstown Local Centre and on the R121:-

- **Route B3**: This route, as part of the B-Spine, provides a connection from Tyrrelstown Town Centre to Dún Laoghaire via Dublin City Centre. This service will travel along the R121 and have a frequency of 15 minutes on weekdays and 15-20 minutes on weekends.
- **Route L62**: This route will operate from Blanchardstown to Broombridge via Tyrrelstown. The all-day service has a frequency of 30 minutes (every

15 minutes during peak times) and largely replicates Dublin Bus's existing route 40e.

Road Network Proposals

- 2.6.9 Under Section 4 (Development Strategy: Movement Strategy and Transportation Infrastructure) of the Kilmartin Local Area Plan, the strategy identifies a tiered approach to movement in Kilmartin. The partially constructed 'Avenue' is identified as extending westwards from the R121/Cherryhound-Tyrrelstown Link Road, forming the main access route towards Hollystown Site 3 as illustrated in **Figure 2.21**.

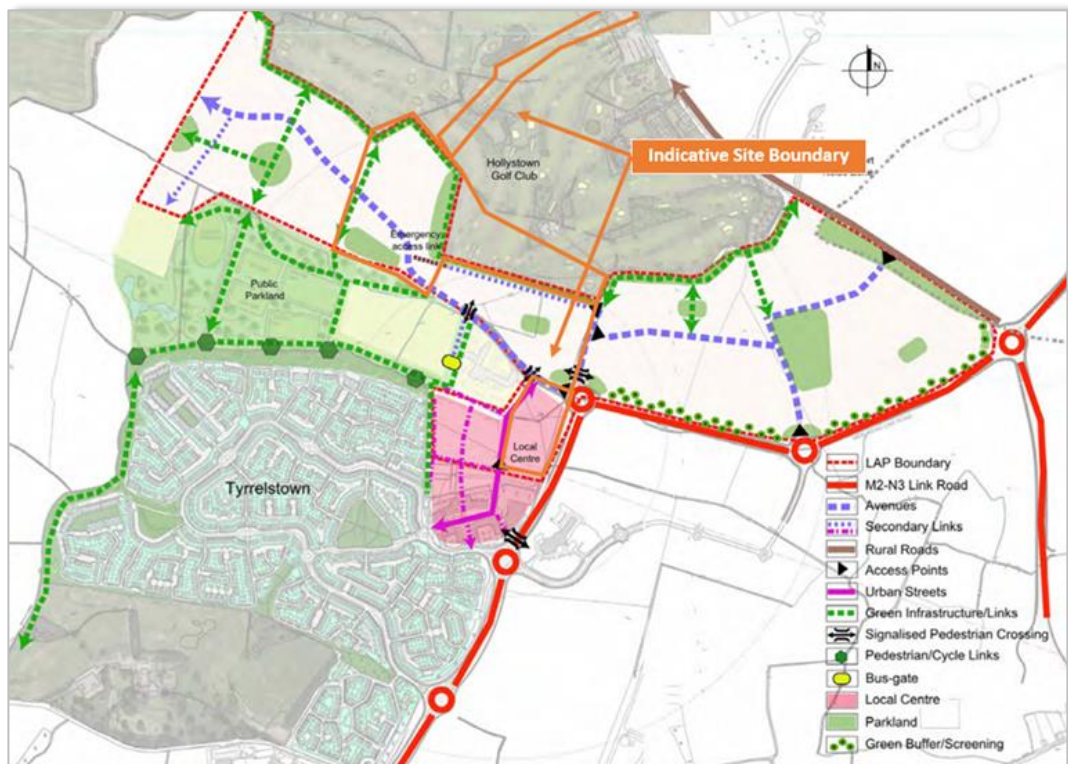


Figure 2.21: Map 7 – Roads and Access (Source: Kilmartin LAP)

- 2.6.10 An 'urban street' is also proposed that connects the 'Avenue' with the existing Tyrrelstown Plaza to the south. Currently, this street is partially constructed and serves as the access route for the Tyrrelstown Educate Together National School and St. Joseph's National School. At the time of preparing this report, the northern section of this street was under construction as can be seen in the aerial image in **Figure 2.22** (taken 30 November 2021). It is noted that this section of the Link Street was included as part of the Bellingsmore Development which is almost fully constructed (Plannign Ref: FW13A/0088).



Figure 2.22: Aerial Image of Link Street Northern Section Under Construction
(Image Taken 30 November 2021)

Summary

- 2.6.11 In summary, an expanded and upgraded cycle network will be provided as part of the GDA Cycle Network Plan. The development proposals will provide high-quality connections to this network in line with the Kilmartin LAP pedestrian/cyclist routes, including upgrades to the cycle network on the R121 as part of this application but also approved under the application for Hollystown Site 1 (Planning Reg. Ref: FW21A/0042).
- 2.6.12 High quality walking and cycling facilities are also proposed on the Link Streets through both Sites 2 and 3 and the Local Centre site, as per the Kilmartin LAP, which will provide a fully connected cycle network across the subject lands and wider locality. Construction has commenced on the Link Street northern section through the Local Centre (permitted as part of the Bellingsmore Development Planning Ref: FW13A/0088). The proposed Local Centre development includes upgrades to this Link Street, providing for high quality walking and cycling infrastructure and crossing points, as detailed further in Section 4.0.
- 2.6.13 Consequently, the delivery of these links in accordance with the Kilmartin LAP and delivery of housing is already being progressed and the subject application will provide a fully connected walking / cycling network for the benefit of existing and future residents in the wider area.

3.0 POLICY FRAMEWORK

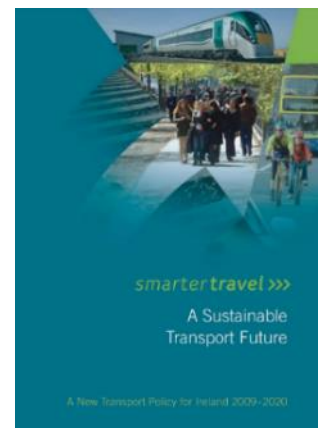
3.1 DEVELOPMENT POLICY

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

- *Smarter Travel – A Sustainable Transport Future* (2009)
- *Transport Strategy for the Greater Dublin Area 2016-2035*
- *Sustainable Urban Housing: Design Standards for New Apartments* (December 2020)
- *Fingal Development Plan 2017-2023*
- *Kilmartin Local Area Plan* (2013)

3.2 SMARTER TRAVEL – A SUSTAINABLE TRANSPORT FUTURE

3.2.1 Smarter Travel was published in 2009 by the Department of Transport which represents the national policy documentation outlining a broad vision for the future and establishes objectives and targets for transport. The document examines past trends in population and economic growth and transport concluding that these trends are unsustainable into the future.



3.2.2 Although this document outlines objectives and targets from 2009 to 2020, the goals set out will continue to play active role from 2021 onwards in order to address the continuous unsustainable nature of the current travel behaviour. The following five key goals form the basis of the Smarter Travel policy document.

- Total vehicle km travelled by car will not significantly increase;
- Work-related commuting by car will be reduced from 65% to 45%;
- 10% of all trips will be by cycling;
- The efficiency of the transport system will be significantly improved.

3.2.3 The document recognises that these are ambitious targets, and outlines a suite of 49 actions required to achieve these targets – summarised under the following four main headings:

- Actions aimed at reducing distances travelled by car and the use of fiscal measures to discourage use of the car;
- Actions aimed at ensuring that alternatives to the car are more widely available;
- Actions aimed at improving fuel efficiency of motorised travel; and
- Actions aimed at strengthening institutional arrangements to deliver the targets.

3.3 TRANSPORT STRATEGY FOR THE GREATER DUBLIN AREA 2016-2035

3.3.1 The Transport Strategy for the Greater Dublin Area 2016 – 2035 is a document compiled by the National Transport Authority which sets out the Strategic Transport Plan for the Greater Dublin Area for the period up to 2035.



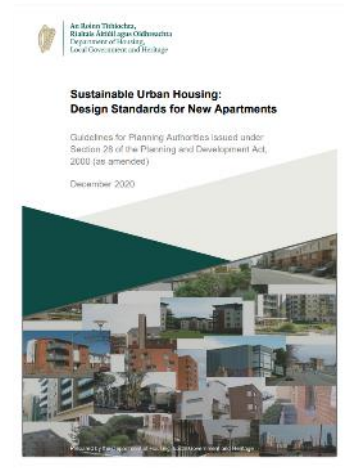
3.3.2 This document will influence transport planning across the region until 2035 and replaces 'A Platform for Change – An Integrated Transportation Strategy for the Greater Dublin Area 2000 to 2016'. It thereby underpins all transportation strategies, traffic management schemes and development plans prepared by Dublin City Council during this timeframe.

3.3.3 The Strategy sets out a clear hierarchy of transport users, commencing with the sustainable modes of travel such as walking, cycling and public transport users at the very top of the hierarchy. The Strategy adopts the general principle that these users should have their safety and convenience needs considered first and that the hierarchy is applied where a large share of travel is (or could be) made by walking, cycling and public transport.

3.3.4 In addition to guiding the development of specific Strategy measures, the NTA encourages that the "*transport user hierarchy should guide engineers, planners and urban designers on the order in which the needs of transport users should be considered in designing new developments or traffic schemes in the Greater Dublin Area.*"

3.4 SUSTAINABLE URBAN HOUSING: DESIGN STANDARDS FOR NEW APARTMENTS (DECEMBER 2020)

- 3.4.1 This guideline document was produced by the Department of Housing, Planning and Local Government (updated December 2020). The purpose of this document is to set out standards for apartment development, mainly in response to circumstances that had arisen whereby some local authority standards were at odds with national guidance.
- 3.4.2 With the demand for housing increasing, this means that there is a need for an absolute minimum of 275,000 new homes in Ireland's cities by 2040. It is therefore critical to ensure that apartment living is an increasingly attractive and desirable housing option for a range of household types and tenures.
- 3.4.3 These Guidelines apply to all housing developments that include apartments that may be made available for sale, whether for owner occupation or for individual lease. They also apply to housing developments that include apartments that are built specifically for rental purposes, whether as 'build to rent' or as 'shared accommodation'.
- 3.4.4 Cycling provides a flexible, efficient and attractive transport option for urban living and these guidelines require that this transport mode is fully integrated into the design and operation of all new apartment development schemes.
- 3.4.5 The quantum of car parking or the requirement for any such provision for apartment developments will vary, having regard to the types of location in cities and towns that may be suitable for apartment development, broadly based on proximity and accessibility criteria.
- 3.4.6 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.



3.5 FINGAL DEVELOPMENT PLAN 2017 - 2023

- 3.5.1 The Fingal Development Plan (2017 – 2023) sets out the authority's policies and objectives for the development of the County for the period 2017 to 2023. The Plan seeks to develop and improve in a sustainable manner the social, economic, cultural and environmental assets of the county.
- 3.5.2 In the context of the subject development site and the proposed scheme a number of the most relevant transport policies and objectives include;



Statement of Policy

"Promote and facilitate movement to, from, and within the County of Fingal, by integrating land use with a high quality, sustainable transport system that prioritises walking, cycling and public transport."

"Provide an appropriate level of safe road infrastructure and traffic management, in particular to support commercial and industrial activity and new development."

"Work with all relevant stakeholders to seek a reduction in greenhouse gas emissions from transport."

Movement and Infrastructure Strategy

"Objective MT01: Support National and Regional transport policies as they apply to Fingal. In particular, the Council supports the Government's commitment to the proposed new Metro North and DART expansion included in Building on Recovery: Infrastructure and Capital Investment 2016-2021. The Council also supports the implementation of sustainable transport solutions."

"Objective MT03: Implement Smarter Travel – A Sustainable Travel Future policy and work to achieve the Key Goals set out in this policy."

"Objective MT04: At locations where higher density development is being provided, encourage the development of car-free neighbourhoods, where non-motorised transport is allowed and motorised vehicles have access only for deliveries but must park outside the neighbourhood, creating a much better quality public realm with green infrastructure, public health, economic and community benefits."

Integrated Land Use and Transportation

"Objective MT05: Integrate land use with transportation by allowing higher density development along higher capacity public transport corridors."

Electric Vehicles

"Objective MT10: Facilitate the provision of electricity charging infrastructure for electric vehicles both on street and in new developments in accordance with car parking standards."

"Objective MT11: Support the growth of Electric Vehicles and EBikes, with support facilities, through a roll-out of additional electric charging points in collaboration with relevant agencies at appropriate locations."

Walking and Cycling

"Objective MT13: Promote walking and cycling as efficient, healthy, and environmentally-friendly modes of transport by securing the development of a network of direct, comfortable, convenient and safe cycle routes and footpaths, particularly in urban areas."

"Objective MT14: The Council will work in cooperation with the NTA and adjoining Local Authorities to implement the Greater Dublin Area Cycle Network Plan subject to detailed engineering design and the mitigation measures presented in the SEA and Natura Impact Statement accompanying the NTA Plan."

"Objective MT16: Promote the provision of adequate, secure and dry bicycle parking facilities and a bike rental scheme at appropriate locations, including stations and other public transport interchanges."

"Objective MT17: Improve pedestrian and cycle connectivity to schools and third level colleges and identify and minimise barriers to children walking and cycling to primary and secondary schools."

"Objective MT19: Design roads and promote the design of roads, including cycle infrastructure, in line with the Principles of Sustainable Safety in a manner consistent with the National Cycle Manual and the Design Manual for Urban Roads and Streets."

"Objective MT22: Improve pedestrian and cycle connectivity to stations and other public transport interchanges."

Public Transport

"Objective MT24: Support and advise the NTA and TII on the planning and implementation of public transport infrastructure, in particular by providing an understanding of Fingal's policies, objectives and requirements, including environmental sensitivities."

Public Transport Interchanges

"Objective MT28: Facilitate, encourage and promote high quality interchange facilities at public transport nodes throughout the County."

Bus, Quality Bus Corridors (QBC) and Bus Rapid Transit (BRT)

"Objective MT33: Facilitate and promote the enhancement of bus services through bus priority measures including bus lanes and bus gates. Support the NTA in the implementation of Bus Rapid Transit from Blanchardstown to Belfield and from Swords to Merrion Square, subject to detailed design."

"Objective MT34: Work with public transport providers and State agencies to create bus connectivity between Dublin 15 and Dublin Airport/Swords."

Roads

"Objective MT36: Maintain and protect the safety, capacity and efficiency of National roads and associated junctions in accordance with the Spatial Planning and National Roads Guidelines for Planning Authorities, DECLG, (2012), the Trans-European Networks (TEN-T) Regulations and with regard to other policy documents, as required."

"Objective MT37: Implement traffic calming on particular roads and in appropriate areas of the County, especially residential areas, to reduce vehicle speeds in the interests of road safety and residential amenity. Ensure that where appropriate, traffic calming is included as a pre-condition as part of the development of all new estates or extensions to existing estates."

Traffic Management

"Objective MT38: Maximise capacities of junctions by using traffic management measures thereby reducing congestion.

"Objective MT39: Review the results of the 30km/h Residential Speed Limit Pilot Study, with a view to rolling out a 30km/h speed limit in all residential estates."

3.6 KILMARTIN LOCAL AREA PLAN 2013

3.6.1 The *Kilmartin Local Area Plan* (2013) sets out the authority's policies and objectives for the development within the local area. This plan was adopted within the Fingal County Development Plan for the period 2017 to 2023.



3.6.2 The LAP seeks to develop and improve the local area, with a list of objectives and proposals to facilitate these improvements. In the context of the subject development site and the proposed residential scheme a number of the most relevant policies have been included below;

"Objective MS1: *Prioritise sustainable modes of transport including walking, cycling and public transport and reduce reliance on the use of private cars within Kilmartin.*"

"Objective MS2: *Ensure existing junctions and roads external to the lands are designed to maximise transportation efficiency and movement.*"

"Objective MS3: *Develop a hierarchical street network comprising a number of new street links, supporting internal permeability, with links to the surrounding environment.*"

"Objective MS5: *Facilitate a bus gate on the pedestrian/cycle connection located west of the 2 no. existing primary schools, linking the LAP lands to the Local Centre.*"

"Objective MS6: *Prepare a detailed design plan for the primary east/west main avenue streets.*"

"Objective MS7: *Ensure trip intensive commercial developments with requirements for significant carparking are concentrated to the east of the main urban street in the Local Centre.*"

"Objective C01: *Provide for an urban environment within Kilmartin where priority is given to legibility and permeability for cyclists and pedestrians, with safe, direct and easy access provided to public transport points, schools, park, local centre, existing community of Tyrrelstown and to the Greater Blanchardstown Area.*"

"Objective C03: *Encourage direct walking and cycle routes through pocket parks and open space areas to provide direct linkages between the character neighbourhoods, local centre, schools, parks and public transport."*

"Objective B01: *Facilitate and promote the development and use of an enhanced quality and integrated public transport network with bus as the primary facility to serve the existing and future residents of Kilmartin/Tyrrelstown."*

3.7 DEVELOPMENT CONTROL

Car Parking Standards

3.7.1 Reference has been made to both Table 12.8 of the Fingal County Development Plan (2017 - 2023) which outlines the 'norm' and 'maximum' car parking standards for the proposed development and Chapter 4 of the Sustainable Urban Housing: Design Standards for New Apartments Guidelines For Planning Authorities (December 2020), as published by the Department of Housing, Planning and Local Government (DHPLG).

3.7.2 Within the DHPLG standards, the location of the Hollystown Sites 2 & 3 and Kilmartin Local Centre development can be classified as an '*Intermediate Urban Location*' which according to the DHPLG standards, are defined as:-

- Sites within or close to i.e., within reasonable walking distance (i.e. up to 10 minutes or 800-1,000m) of principal town or suburban centres.
- Sites within reasonable walking distance (i.e. between 5-10 minutes or 1,000m) of high frequency (i.e. min 10 minute peak hour frequency) urban bus services.
- Sites within easy walking distance (i.e. up to 5 minutes or 400-500m) of reasonably frequent (min 15 minute peak hour frequency) urban bus services.

3.7.3 The DHPLG document states that for sites located:

"In suburban/urban locations served by public transport or close to town centres or employment areas and particularly for housing schemes with more than 45 dwellings per hectare net (18 per acre), planning authorities must consider a reduced overall car parking standard and apply an appropriate maximum car parking standard."

3.7.4 With regard to the proposed development schedule the associated car parking requirements are outlined in **Table 3.1** below.

Unit Type		No. Units / SQM	FCC Development Plan Requirements		DHPLG Parking Requirement	
			Resident	Visitor	Resident	Short Stay
Hollystown Sites 2 + 3						
House	2 Beds	97	1 - 2 spaces / unit	-		
	3+ Beds	304	2 spaces unit			
Apartment	1-Bed	27	1 space / unit	1 space / 5 units	"...must consider a reduced overall car parking standard..."	"... an appropriate number of drop off, service, visitor parking spaces ..."
Kilmartin Local Centre						
Apartment / Duplex	1-Bed	32	1 spaces / unit	1 space / 5 units	"...must consider a reduced overall car parking standard..."	"... an appropriate number of drop off, service, visitor parking spaces ..."
	2-Bed	68	1.5 spaces / unit			
	3-Bed	20	2 spaces / unit			
Cafe/Retail		154 m²	1 per 15sqm (café) / 1 per 30sqm (retail)	-	-	-
Community Hub		144.5 m²	-	-	-	-
Standalone Creche		529.6 m²	0.5 per classroom	-	-	-
Creche (Block D)		500 m²	0.5 per classroom	-	-	-
Montessori (Block D)		280.3 m²	0.5 per classroom	-	-	-

Table 3.1: Car Parking Standards

Disabled Car Parking

3.7.5 In regard to the provision of dedicated disabled car parking spaces, Section 12.10 of the Fingal Development Plan states that *"One space or more per 100 spaces should be reserved for disabled parking bays."*

Electrical Vehicle Parking

3.7.6 In regard to the provision of electric vehicle charging points, Section 12.10 of the Fingal Development Plan also states that *"One space or more per 100 spaces should be reserved for electric vehicles with charging facilities."*

Cycle Parking

3.7.7 Reference has been made to both Table 12.9 of the Fingal County Development Plan (2017-2023) and Section 4.17 of the DHPLG outlines the bicycle parking standards for the proposed residential development. With regards to the proposed development schedule, the associated cycle parking requirements are outlined in **Table 3.2** below.

Unit Type		No. Units / sqm	FCC Development Plan Requirements		DHPLG Parking Requirement	
			Long Stay	Short Stay	Long Stay	Short Stay
Hollystown Sites 2 + 3						
House	2-Beds	97	-	-		
	3+ Beds	304	-	-		
Apartment	1-Bed	27	1 space/unit	1 visitor space / 5 units	1 space per bed	1 space per 2 units
Kilmartin Local Centre						
Apartment/ Duplex	1-Bed	32	1 space/unit	1 visitor space / 5 units	1 space per bed	1 space per 2 units
	2-Bed	68	1 space/unit		1 space per bed	
	3-Bed	20	1 space/unit		1 space per bed	
Cafe/Retail		154 m²	1 per 150sqm (café) / 1 per 100sqm (retail)	-	-	-
Community Hub		144.5 m²	-	-	-	-
Standalone Creche		529.6 m²	0.5 per classroom	-	-	-
Creche at Block D		500 m²	0.5 per classroom	-	-	-
Montessori at Block D		280.3 m²	0.5 per classroom	-	-	-

Table 3.2: Cycle Parking Standards

4.0 CHARACTERISTICS OF PROPOSALS

4.1 PROPOSED DEVELOPMENT

4.1.1 The proposals shown in **Figure 4.1**, seek planning permission to construct a mixed-use development comprising 548 no. residential units (401 no. houses and 147 no. apartments) plus commercial/retail units and childcare facilities within the proposed Kilmartin Local Centre, with an overall site area of c.25.3Ha. on lands located in Hollystown, Dublin 15.

4.1.2 With reference to Deady Gahan and O'Mahony Pike Architects' drawings, as submitted with this planning application, the proposed development schedule is summarised in **Table 4.1** below.

	Unit Type		Number of Units / GFA
	Hollystown Sites 2 + 3		
Residential	Houses	2-Bed	97
		3-Bed	267
		4-Bed	37
	Apartments	1-Bed	27
	Sub-Total		428
	Kilmartin Local Centre		
	Apartments	1-Bed	32
		2-Bed	68
		3-Bed	20
	Sub-Total		120
Total		548	
	Kilmartin Local Centre		
Community Facilities, Commercial & retail	Community Hub		144.5 sqm
	Café / Retail		154 sqm
	Standalone Creche		529.6 sqm
	Creche		500 sqm
	Montessori		280.3 sqm

Table 4.1: Hollystown Sites 2 & 3 and Kilmartin Local Centre Development Schedule Summary



Figure 4.1: Hollystown Sites 2 & 3 Proposed Development Site Layout

4.1.3 Further details of the scheme proposals can be found within Deady Gahan Architects' drawings and also in DBFL Drawings **170182-DBFL-RD-SP-DR-C-1004 – 1008**, **170182-DBFL-RD-SP-DR-C-1011** and **170182-DBFL-RD-SP-DR-C-1021**.

4.2 SITE ACCESS ARRANGEMENTS

Pedestrian & Cyclist Access Arrangements

4.2.1 The proposed site layout has been designed to maximise permeability and connectivity to, through and from the site by foot and by bicycle, as indicated in **Figure 4.2** below.



Figure 4.2: Hollystown Sites 2 & 3 and Local Centre Key Pedestrian/Cyclist Links

- 4.2.2 With respect to the Hollystown Sites 2 & 3, the Primary Link Street (The Avenue) extension will incorporate segregated 2.0m wide pedestrian footpaths and 2.0m wide cycle tracks on both sides. The Secondary Link Street which connects Sites 3 and 2 and also connects to the R121 access will have 3.0m wide shared paths on both sides. The key pedestrian / cyclist facilities are indicated in **Figure 4.3**.



Figure 4.3: Hollystown Sites 2 & 3 Key Pedestrian/Cyclist Infrastructure

- 4.2.3 The proposals also include the construction of a 2.0m footpath and 2.0m cycle track and 1.0m-2.0m wide verge along the western side of the R121. A new raised Toucan facility is also proposed on the R121 to the east of the proposed Site 2 access.
- 4.2.4 These facilities are further supported by a network of high-quality, connected off-road pedestrian / cyclist routes which run along the western and northern site boundaries and the boundary between site 2 and the Bellingsmore Development currently under construction, as indicated in **Figure 4.4**.



Figure 4.4: Proposed Off Road Pedestrian/Cyclist Connections

- 4.2.5 Heading in north-easterly direction is the proposed pedestrian / cycle link which will extend out to Ratoath Road. This will comprise a wide 5.0m wide shared path which will provide an off-road connection from The Avenue, through Sites 2 & 3 out to the Ratoath Road. At its northernmost end it will link through the former golf club car park and align with the existing controlled crossing on Ratoath Road as indicated in **Figure 4.5**.
- 4.2.6 The provision of this link will provide a connection to the future proposed Dublin GAA pitches, located directly west of the link. It will also facilitate local trips to/from the Local Centre development, key services/amenities and schools by residents in the wider established residential area of Hollystown to be made either on foot or by bike.

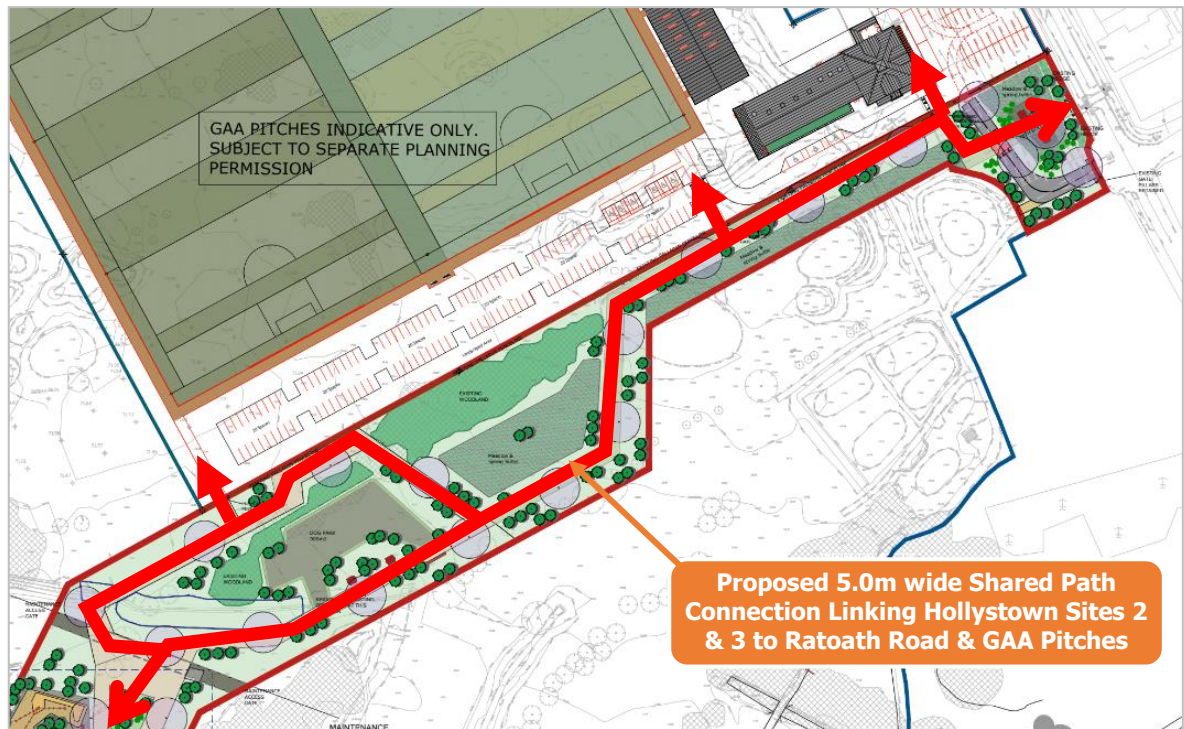


Figure 4.5: Proposed Ratoath Road Connection

- 4.2.7 With respect to the Kilmartin Local Centre Development, segregated cycle tracks (2.0m wide) and footways (2.0m wide) will be provided on both sides of the Link Street. A raised Zebra crossing will be constructed c.100m south of the roundabout. The existing roundabout that serves as an access to the schools will be upgraded to provide 4.0m wide raised zebra crossings on all three arms.
- 4.2.8 A two-way cycle track (3.0m wide) will be provided on the western side of the proposed Link Street extension (northern arm of the roundabout) whilst a 2.0m wide and 3.0m wide footway will be provided on the west and eastern sides respectively. The proposed Link Street junction on the Avenue will incorporate a Toucan crossing on the western arm and a raised uncontrolled crossing on the southern arm of the junction. The proposed pedestrian and cyclist facilities within the Kilmartin Local Centre Development are illustrated in **Figure 4.6** and **Figure 4.7**.

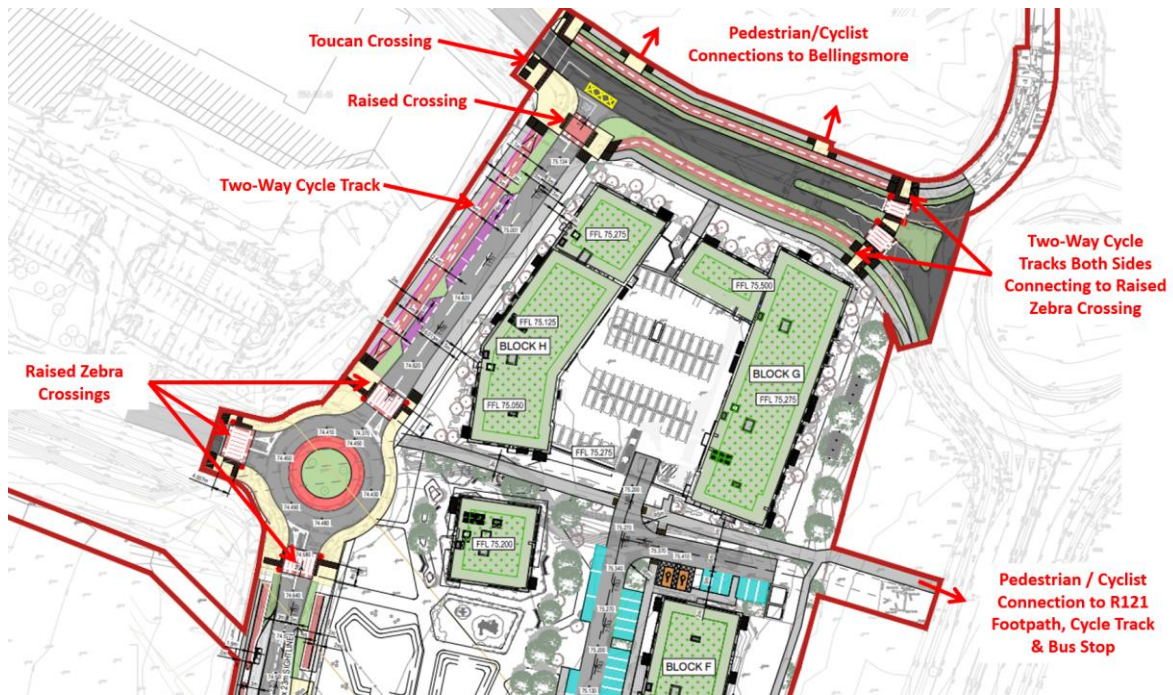


Figure 4.6: Kilmartin Local Centre Proposed Pedestrian / Cyclist Facilities (North Link Street)

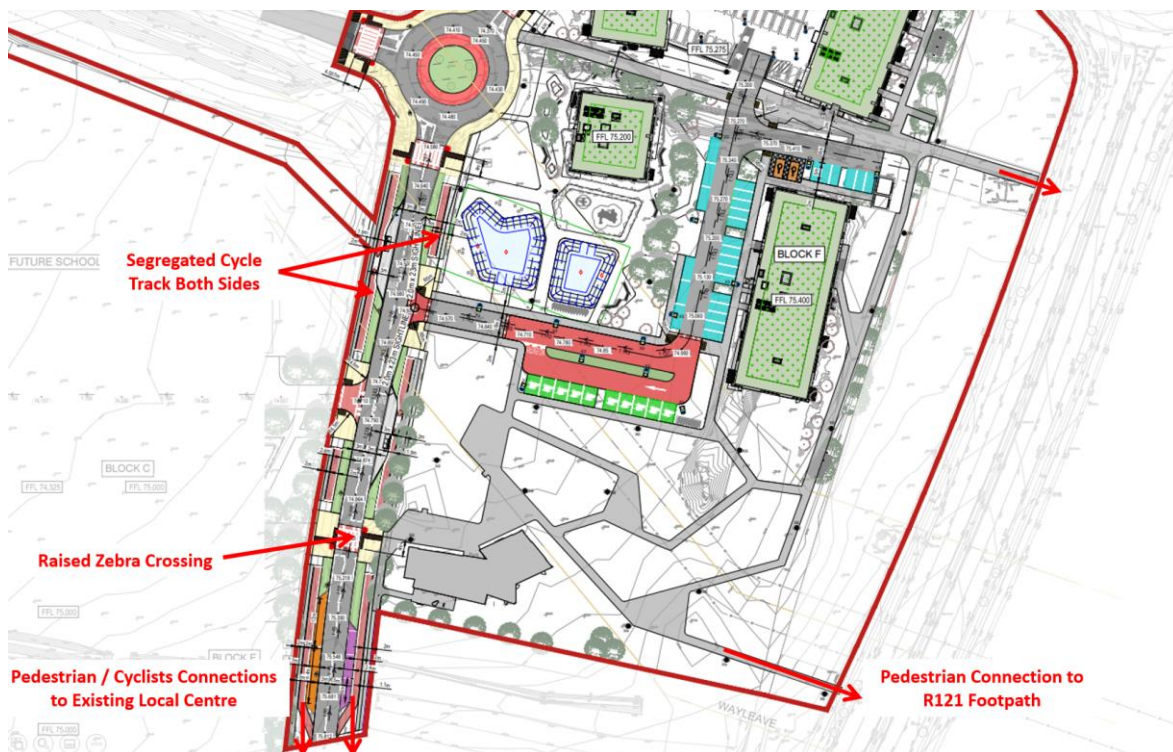


Figure 4.7: Kilmartin Local Centre Proposed Pedestrian / Cyclist Facilities (South Link Street)

Public Transport Facilities

- 4.2.9 At present, bus services travel through the existing Tyrrelstown Local Centre before continuing out onto the R121. It is proposed that once the new Link Street is constructed and connected to The Avenue, that bus services could be rerouted through the new Local Centre extension.

- 4.2.10 To facilitate the potential rerouting of services, two bus stops have been incorporated into the layout of the Link Street as indicated in **Figure 4.8** below. The proposed bus stop arrangement includes Island Bus Stops, as per the Design Guidance Booklet for BusConnects Core Bus Corridors.

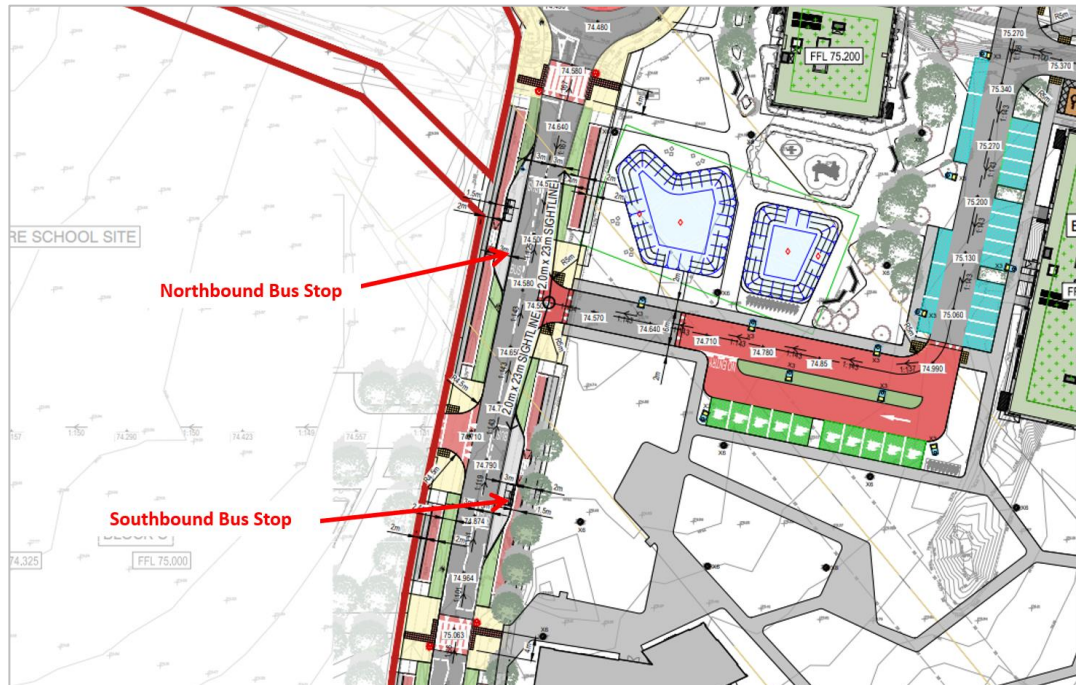


Figure 4.8: Proposed Bus Stops on Link Street

- 4.2.11 As part of the pre-application consultation with FCC it was noted that possible bus stop locations should be identified along The Avenue. Indicated in **Figure 4.9** below, are locations where there is ample space to implement eastbound/westbound bus stops in the future should they be required. The wide verges either side of The Avenue mean that bus stops can be easily accommodated wherever it is considered most appropriate.

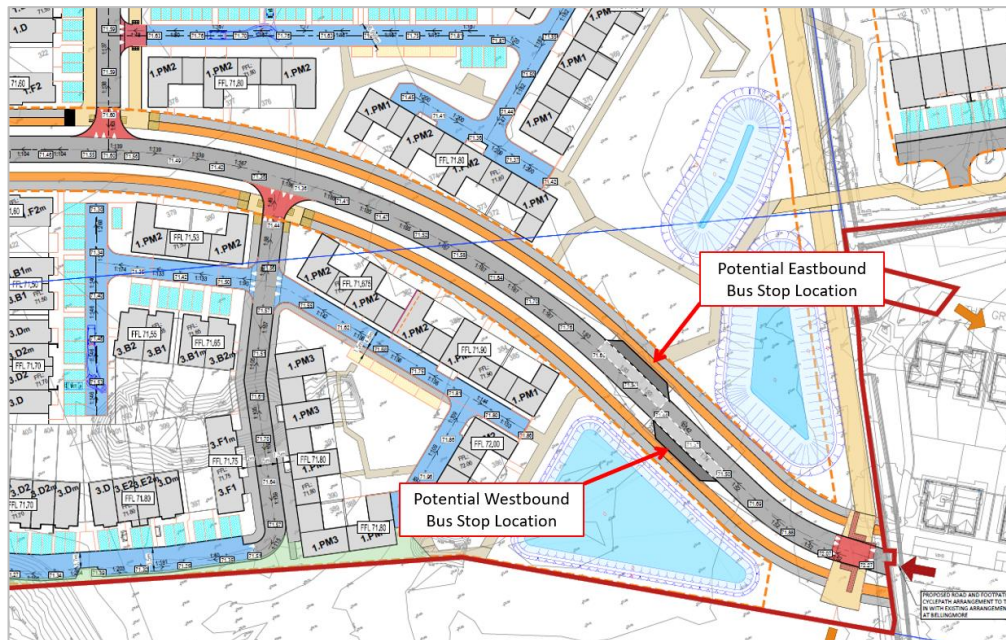


Figure 4.9: Potential Bus Stops Locations on The Avenue

- 4.2.12 The bus stops identified above have not been incorporated into site layout plans at this stage, as following discussions with the NTA, it is unclear whether or not bus routes will be diverted through the Sites 2 & 3 residential development, or if they would continue directly north on the R121. To reiterate however, there is ample space on both sides of The Avenue to accommodate bus stops in a suitable location if/when they are required.
- 4.2.13 There is also a new northbound bus stop proposed on the R121, as indicated in **Figure 4.10**. This is as per the approved planning application for Hollystown Site 1 (Planning Reg. Ref. FW21A/0042)

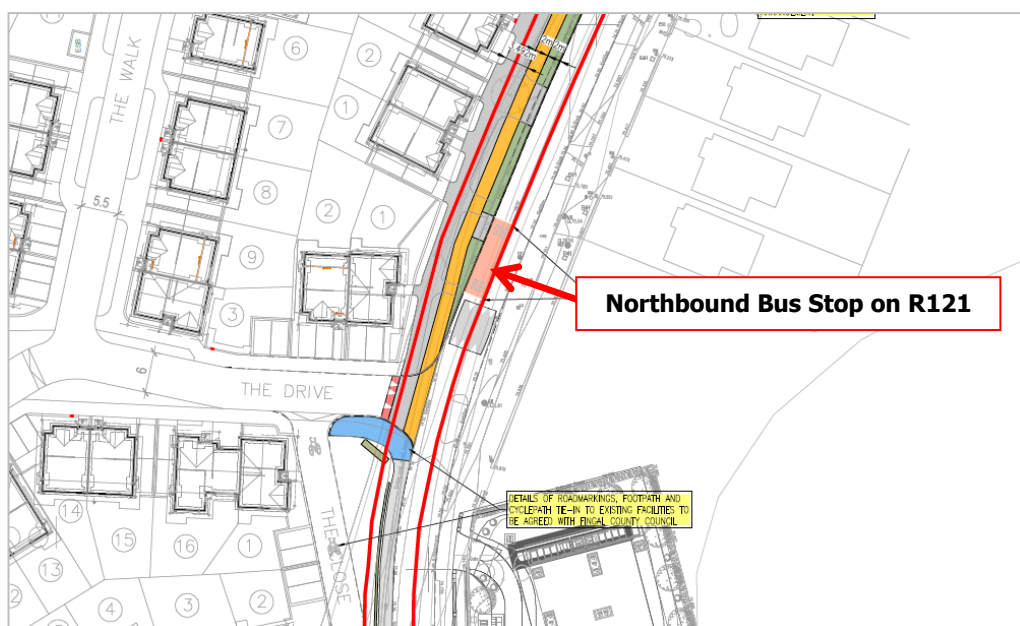


Figure 4.10: Proposed Bus Stop on R121

Vehicular Access Arrangements

- 4.2.14 There are three proposed new vehicle access points proposed to serve the subject development, as indicated in **Figure 4.11** below. A new priority controlled access junction connecting Hollystown Site 2 to the R121 will be constructed.
- 4.2.15 The second site access will be via an extension to the existing Primary Link Street (The Avenue). This primary link street is proposed to extend through Hollystown Site 3, up to the western boundary, enabling future onward connections to the westernmost LAP lands. The third site access will be via the new priority-controlled The Avenue / Link Street which will serve the Kilmartin Local Centre site.



Figure 4.11: Hollystown Sites 2 & 3 Proposed Vehicular Access Points

4.3 CAR PARKING PROVISION

4.3.1 As indicated in **Table 4.2** below, between 951 – 1,048 no. car parking spaces are required by the FCC Development Plan for the proposed quantum of residential development. By comparison, for the apartment element of the scheme the DHPLG standards state that a reduced quantum of car parking should be considered.

Unit Type		No. Units / sqm	FCC Development Plan Requirements		DHPLG Parking Requirement	
			Resident	Visitor	Resident	Short Stay
Hollystown Sites 2 + 3						
House	2-Beds	97	97 - 194	N/A		
	3+ Beds	304	608	N/A		
Apartment	1-Bed	27	27	5	"...must consider a reduced overall car parking standard..."	"... an appropriate number of drop off, service, visitor parking spaces ..."
Sub-Total			732 - 829	5	-	-
Kilmartin Local Centre						
Apartment / Duplex	1-Bed	32	32	24	"...must consider a reduced overall car parking standard..."	"... an appropriate number of drop off, service, visitor parking spaces ..."
	2-Bed	68	102			
	3-Bed	20	40			
café/Retail		154 m²	-	10	-	-
Community Hub		144.5 m²	-	-	-	-
Standalone Creche		529.6 m²	-	2	-	-
Creche (Block D)		500 m²	-	2	-	-
Montessori (Block D)		280.3 m²	-	2	-	-
Sub-Total			174	40		
Total			906 – 1,003	45	-	-
			951 – 1,048		-	

Table 4.2: FCC Development Plan and DHPLG Car Parking Requirements

4.3.2 Overall, a total of 930 no. car parking spaces will be provided at the proposed development. For the residential development, a total of 870 no. spaces will be provided for the residential units, equating to an overall car parking ratio of 1.6 spaces unit.

4.3.3 With regards to Hollystown Sites 2 & 3, a total of 792 no. car park spaces will be provided with 762 no. resident car par spaces whilst the remaining 30 no. spaces will be provided as visitor car parking spaces.

4.3.4 Whilst within the Kilmartin Local Centre development, a total of 138 no. spaces will be provided. The breakdown at this location is as follows;

- 108 no. residential spaces,
- 5 no. staff parking at the creche/Montessori,
- 10 no. set-down spaces at the creche/Montessori,
- 6 no. visitor spaces and
- 9 no. public spaces on the Link Street

4.3.5 A summary of the subject developments proposed car parking provision is summarised in **Table 4.3** below.

Unit Type		No. Units	Proposed Car Parking Ratio		Proposed Car Parking Provision	
			Resident	Visitor	Resident	Visitor
Hollystown Sites 2 + 3						
House	2-Bed	68	1 spaces / unit	1 / 4 units	68	17
	2-Bed (+study)	29	2 spaces / unit	-	58	-
	3+ Beds	264	2 spaces / unit	-	529	-
Courtyard Houses	3+ Beds	40	2 spaces / unit	1 / 5 units	80	8
Apartment	1-Bed	27	1 space / unit	1 / 5 units	27	5
Subtotal					762	30
Kilmartin Local Centre						
Apartments	1-Bed	32	0.9 spaces / unit	1 / 20 units	108	6
	2-Bed	68				
	3-Bed	20				
Café/Retail		154 m²	-	-	-	9
Standalone Creche		529.6 m²	-	-	5 no. Staff Spaces	10 set-down spaces
Creche		500 m²				
Montessori		280.3 m²				
Subtotal					113	25
Total					875	55
					930	

Table 4.3: Proposed Development Car Parking Provision

- 4.3.6 In terms of Hollystown Sites 2 & 3, a total of 792 no. car park spaces are proposed (comprising 762 resident spaces and 30 visitor spaces). Therefore, this is in accordance with the FCC Development Plan which requires between 737 – 834 no. car park spaces to be provided (comprising 732 – 829 resident spaces plus 5 visitor spaces).
- 4.3.7 In terms of the Kilmartin Local Centre, a total of 138 no. spaces are proposed. A total of 114 no. spaces are proposed for the residential (apartment) activity, comprising 108 no. resident and 6 visitor spaces. The residential car parking is

provided at a ratio of 0.9 spaces per apartment unit, a reduced quantum from the FCC requirements. This reduced provision is in accordance with the DHPLG requirement, considering the proposed developments accessibility characteristics and the guidance which states that for sites classified as an intermediate urban location “*a reduced overall car parking standard*” must be considered.

Electrically Operated Vehicles

- 4.3.8 All resident car parking spaces in Hollystown Sites 2 & 3 will be equipped with the necessary infrastructure and ducting to facilitate electric vehicle charging points. This exceeds the FCC County Development Plans requirements of the one space or more per 100 spaces will be reserved for electric vehicles with charging facilities.
- 4.3.9 Within the Local Centre, 14 no. car park spaces within the podium car park will be provided as EV charging spaces, thereby equating to 13% of the resident parking provision and exceeding the FCC Development Plan requirements. There will be EV charging infrastructure, comprising cable ducting systems and cable trays provided to every parking space in the Kilmartin Local Centre development.
- 4.3.10 Further detail on the proposed car parking facilities and management regime is provided in the Parking Management Strategy in **Section 7.0** of this report.

4.4 BICYCLE PARKING PROVISION

4.4.1 **Table 4.4** below provides a summary of the quantum of cycle parking required under both the FCC Development Plan and DHPLG requirements.

Unit Type		No. Units	FCC Development Plan Requirements		DHPLG Parking Requirement	
			Long Stay	Short Stay	Long Stay	Short Stay
Hollystown Sites 2 + 3						
House	2-Beds	97				
	3+ Beds	304	-	-		
Apartment	1-Bed	27	27	5	27	14
Subtotal			27	5	27	14
Kilmartin Local Centre						
Apartment / Duplex	1-Bed	32	32	25	30	60
	2-Bed	68	68		140	
	3-Bed	20	20		60	
Cafe/Retail		154 m²	2	-	-	-
Community Hub		144.5 m²	-	-	-	-
Standalone Creche		529.6 m²	2	-	-	-
Creche (Block D)		500 m²	2	-	-	-
Montessori (Block D)		280.3 m²	2	-	-	-
Subtotal			128	25	230	60
Total			155	30	257	74
			185		331	

Table 4.4: FCC Development Plan & DHPLG Cycle Parking Requirements

4.4.2 An overall provision of 525 cycle parking spaces will be provided across the development, comprising 441 resident/long stay spaces and 84 visitor spaces. A breakdown of the cycle parking provision within Hollystown Sites 2 & 3 and in the Kilmartin Local Centre is provided in the following sections.

Hollystown Sites 2 & 3 Cycle Parking Provision

4.4.3 At Hollystown Sites 2 and 3, a total of 45 no. bicycle parking spaces are proposed to serve the apartments comprising 5 no. cycle spaces for each triplex unit. This exceeds the DHPLG requirements (of 41 no. spaces) and equates to a rate of 1.6 spaces per unit (apartments only). The bicycle parking for the triplex apartments will be provided for within secure covered bike parking areas within the communal space of the rear gardens as indicated in **Figure 4.10**.

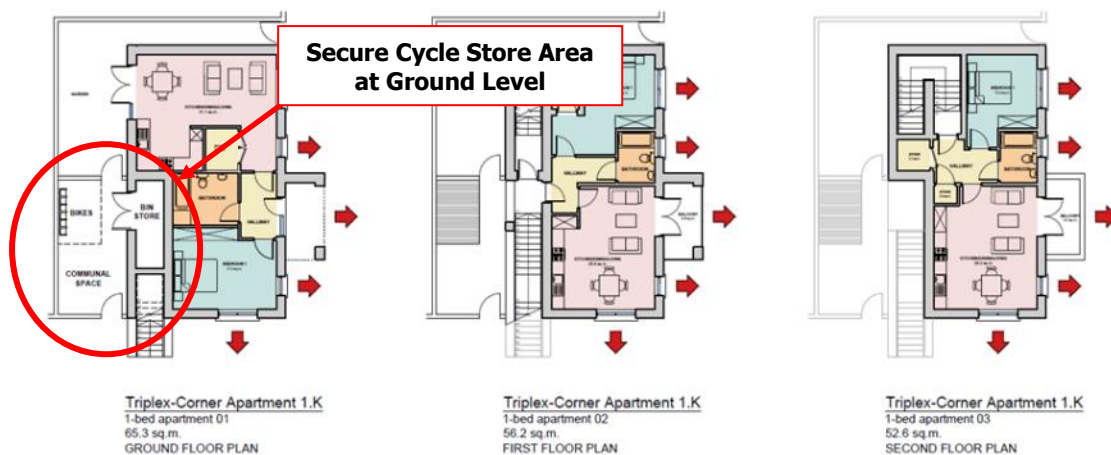


Figure 4.10: Cycle Parking for the Apartments

- 4.4.4 The Courtyard houses which incorporate carports, contain dedicated areas within the carport capable of storing two bicycles. The remaining house types will all have secure gardens areas to the rear of the properties capable of storing bicycles.
- 4.4.5 A further 9 no. covered bicycle racks have been provided across the site which will be available for the use by the local community. This in recognition of the difficulty often encountered by occupants or visitors of terraced units with regards to accessing the rear garden areas to store bicycles, which requires bringing the bicycle through the house. The racks have been located so as they are in overlooked areas enabling passive surveillance, thereby enhancing security. These bicycle racks will accommodate 20 bicycles each, thereby providing an additional 180 bicycle parking spaces across the site, as indicated in **Figure 4.11**.



Figure 4.11: Proposed Secure External Bicycle Store Locations

Kilmartin Local Centre Cycle Parking Provision

- 4.4.6 With respect to the Kilmartin Local Centre element of the application, a total of 300 no. bicycle parking spaces are proposed as part of the development comprising 230 no. long stay spaces for residents and 70 no. short stay spaces for both visitors and the non-residential activity.
- 4.4.7 Furthermore, the proposed provision of 230 long stay spaces for the residential activity at the Kilmartin Local Centre is in accordance with the DHPLG Apartment Guidelines which require 230 no. long stay spaces. The overall residential cycle parking provision for the Kilmartin Local Centre therefore equates 1 secure space provided per bedspace or a rate of 1.9 spaces per unit.
- 4.4.8 These will be provided in secure, covered cycle stores located both internally and externally. Further detail on the cycle parking provision is provided in Section 7 of this report.
- 4.4.9 In terms of the visitor/short stay cycle parking, a total of 70 no. short stay spaces are proposed. These will be provided in the form of Sheffield Stands and will be distributed across the site. The locations of the both the long stay and short cycle parking is illustrated in **Figure 4.12**.

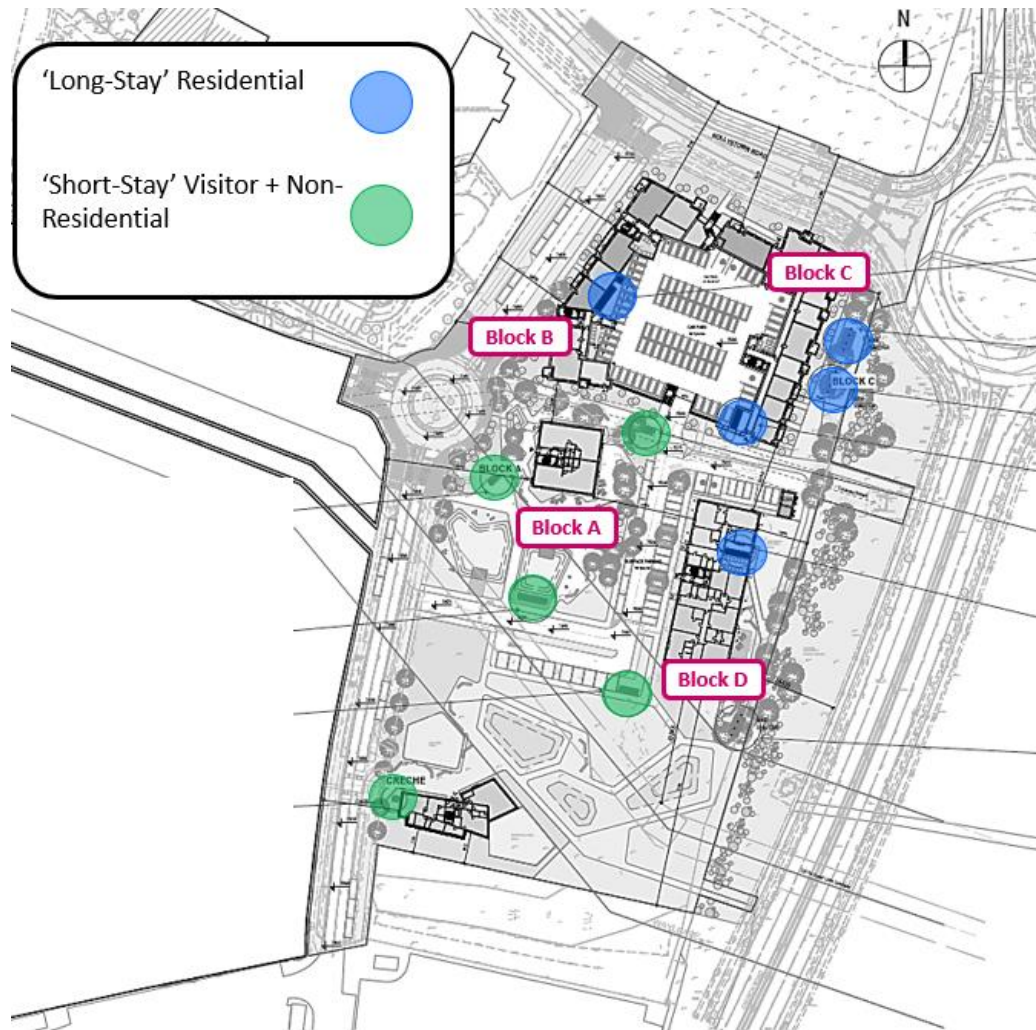


Figure 4.12: Proposed Cycle Parking Locations at Kilmartin L.C.

4.4.10 The design approach in regard to the specification of bicycle parking on-site, in the context of the sites' accessibility characteristics, is deemed to be more than adequate, particularly in relation to the apartment units, which is in accordance with the DHPLG Apartment Guideline requirements. Further detail on the proposed cycle parking facilities and management regime is provided in the Parking Management Strategy in **Section 7.0** of this report.

5.0 TRIP GENERATION AND DISTRIBUTION

5.1 INTRODUCTION

- 5.1.1 The following section outlines the predicted impact that the proposed Hollystown Sites 2 & 3 and Kilmartin Local Centre development sites could potentially generate upon the external public road network.

5.2 TRAFFIC SURVEYS

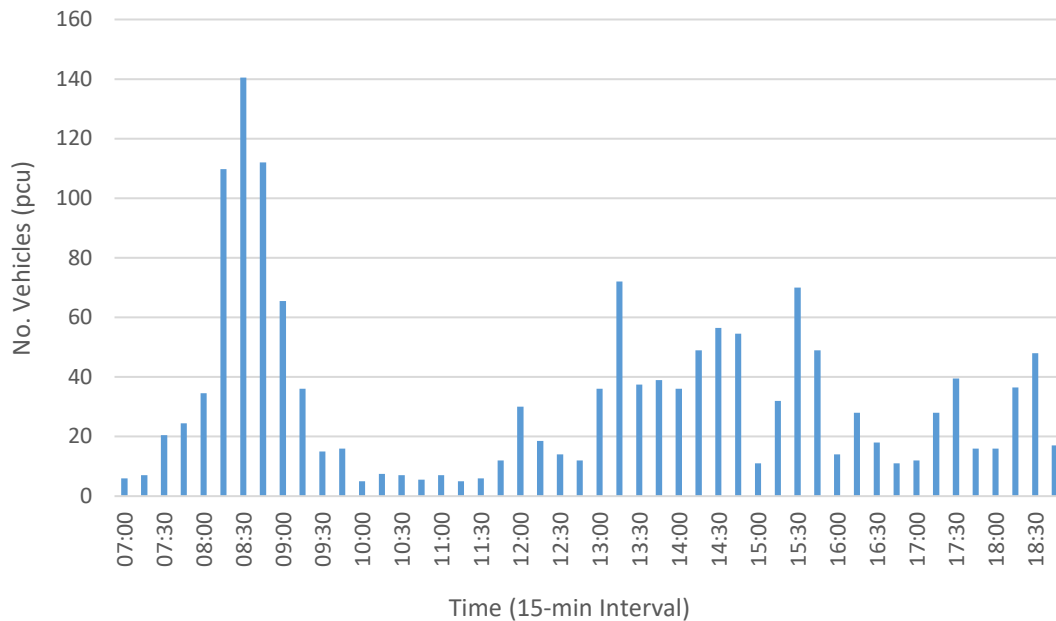
- 5.2.1 With the objective of establishing the existing up to date local road networks traffic characteristics and subsequently enable the identification of the potential impact by the residential development, traffic surveys were undertaken by the independent specialist survey firm IDASO Ltd.
- 5.2.2 Three JTCs (junction turning count) were conducted over a 12.5-hour period from 06:30 to 19:00 on Wednesday 8 May 2019 at the following key junctions;
- **JTC 1:** R121 / Cherryhound-Tyrrelstown Link Road / Hollystown Road Roundabout
 - **JTC 2:** Boulevard / R121 / Cruiserath Drive Roundabout and
 - **JTC 3:** Boulevard Roundabout (West of Tyrrelstown Town Centre).
- 5.2.3 An Automatic Traffic Count Survey (ATC) was also conducted on the existing partially constructed Link Street which currently serves the Tyrrelstown Community Centre, St. Luke's National School and Tyrrelstown Educate Together National School.
- 5.2.4 The surveys undertaken by IDASO Ltd. established that the local network's AM and PM peak hours occur between 07:45 – 08.45 and 17:00 – 18:00 respectively.
- 5.2.5 In order to analyse and assess the impact of the proposed development on the surrounding road network, a traffic generation and distribution model (MS Excel based) of the following key junctions was created as illustrated in **Figure 5.1:**



Figure 5.1: Junctions Included Within the Network Analysis

Peak Hours on Link Street

- 5.2.6 The PM peak hours recorded above differ slightly with the peak hours recorded on the existing partially constructed Link Street. This is due to the Link Street predominantly serving as the sole access for the St. Luke's National School and Tyrrelstown Educate Together National School.
- 5.2.7 The ATC results demonstrate that the AM peak hour coincides with the AM peak hour on the wider network at the off-site junctions. However, the PM peak flows on the Link Street occur at an earlier time than that of the local network's PM peak hours.
- 5.2.8 The school hours (1st to 6th class) for St. Luke's NS are from 09:00 - 14:40 (classes for infants end at 13:40) whilst Tyrrelstown Educate Together NS are from 08:40 - 14:20 (classes for infants end at 13:20). The ATC results illustrated below in **Graph 5.1** show that the interpeak traffic volumes start to increase from 13:00, peaking at 13:15 and decreasing from 15:30 onwards.



Graph 5.1: Two-Way Flows at Link Street

5.3 TRIP GENERATION – PROPOSED DEVELOPMENT

Proposed Development Trips

- 5.3.1 To estimate the potential level of vehicle trips that could be generated by the proposed residential development, reference has been made to the TRICS database. TRICS provides trip rate information for a variety of different land uses and development types, which can be applied to the subject development.
- 5.3.2 A review of trip generation factors contained within the TRICS database was carried out. TRICS data is primarily UK based, although a number of Irish sites have recently been included and the number of Irish sites continues to expand. Nevertheless, we consider that TRICS will provide a reasonable indication of traffic generation from the proposed development.
- 5.3.3 Notwithstanding the above, internal research undertaken by TRICS has shown that there is no direct evidence of trip rate variation by country or region. The use of English, Scottish or Welsh data can be equally applicable to Ireland if users take into account important site selection filtering factors such as levels of population, location type, local public transport provision, and development size and car ownership level, amongst others.
- 5.3.4 Data supplied for inclusion in TRICS undergoes a procedure of validation testing, and there is no evidence from this procedure suggesting that data from Ireland

bears any significant fundamental differences to that from the other countries included. Consequently, we consider that TRICS will provide a reasonable indication of traffic generation from the proposed development.

5.3.5 **Table 5.1** below includes the predicted trip rates for the proposed development during the morning and evening peak hour periods using data from TRICS.

TRICS Rate	AM Peak Hour (07:45-08:45)			PM Peak Hour (17:00 - 18:00)		
	Arr	Dep	Two-Way	Arr	Dep	Two-Way
Houses	0.141	0.416	0.557	0.402	0.263	0.665
Apartments	0.054	0.226	0.280	0.192	0.065	0.257
Community Hub	0.515	0.193	0.708	1.294	1.647	2.941
Creche / Montessori	4.124	2.937	7.061	3.267	4.053	7.320
Retail	5.872	5.433	11.305	7.742	8.133	15.875
Café	0.000	0.000	0.000	1.117	0.921	2.038

Table 5.1: Proposed Development Trip Rates (TRICS)

5.3.6 Based on the above trip rates, potential peak hour vehicle traffic flow has been calculated for the proposed development. It has been assumed that by the 2023 Opening Year, both the Hollystown (only 100 housing units) and the entire Kilmartin Local Centre development (120 apartment units) would be built / occupied and by 2028, whilst the entire development would be operational (i.e., 548 no. units).

5.3.7 **Table 5.2** below summarises the predicted AM and PM peak hour traffic generated by the proposed development in the 2023 Opening Year whilst **Table 5.3** illustrates the predicted trips by the entire site during the 2028 Future Design Year.

Site	Unit Type	No. Units / GFA (per 100sqm)	AM Peak Hour (07:45-08:45)			PM Peak Hour (17:00 - 18:00)		
			Arr	Dep	Two-Way	Arr	Dep	Two-Way
Kilmartin L.C.	Apartments	120	4	15	19	23	13	35
	Café / Retail ¹	1.54	1	1	2	1	1	2
	Community Hub ²	1.54	0	0	0	0	1	1
	Creche ²	9.97	10	7	17	8	10	18
	Montessori ²	2.74	3	2	5	2	3	5
Hollystown	Houses	100	14	42	56	40	26	67
Predicted Trips at Opening Year 2023			32	66	98	74	54	128

¹ Café / Retail trip rates discounted by 90%

² Crèche / Montessori / Community Hub discounted by 75%.

Table 5.2: Predicted Trips at Opening Year 2023

- 5.3.8 The non-residential land uses at the Kilmartin Local Centre site is predicted to largely serve the residential development. Therefore, it is anticipated that a proportion of the trips arriving to / departing from these land uses will already be occurring on the network. Therefore, in order to avoid the double counting of trips, DBFL has assumed that 25% of trips generated by the crèche, the Montessori and the community hub will be 'new' or 'diverted' trips, whilst the other 75% will be trips already occurring on the network within the development.
- 5.3.9 It has also been assumed that the proposed café / retail unit will generate mostly internal trips. Therefore, it has been assumed that 10% of trips generated will be 'new' whilst 90% of the trips will come from within the subject development.

Site	Unit Type	No. Units / GFA (per 100sqm)	AM Peak Hour (07:45- 08:45)			PM Peak Hour (17:00 - 18:00)		
			Arr	Dep	Two-Way	Arr	Dep	Two-Way
Kilmartin L.C.	All Unit Types (120 units + Non-residential Land Uses)		18	25	43	34	28	61
Hollystown	Houses	401	57	167	223	161	105	267
	Apartments	27	1	6	8	5	2	7
Predicted Trips at Future Design Year 2028			76	197	274	200	135	335

Table 5.3: Predicted Trips from Future Design Year 2028 Onwards

5.4 TRIP GENERATION - COMMITTED DEVELOPMENTS

Introduction

- 5.4.1 Following a review of the FCC online planning portal, DBFL have established the extent of existing third party development, as located within the area of influence of the subject Hollystown and Kilmartin sites, which currently benefit from a planning permission but have yet to be constructed/occupied. DBFL have subsequently included the following third-party development proposals as 'committed developments' within the network assessment.

Committed Development – Bellingsmore Residential Development (Ref: FW13A/0088)

- 5.4.2 The Bellingsmore residential development (FCC Ref. No. FW13A/0088) is located to the west of the R121 and forms part of the southern boundary of the subject site. The Bellingsmore development comprises 177 no. dwellings and at the time of preparing this report is largely complete and occupied. It is noted that the

Bellingsmore development is also in the ownership of the applicant (Glenveagh Homes Ltd).

- 5.4.3 The vehicle trips associated with this committed development were retrieved from the Traffic and Transport Assessment submitted as part of the development's planning application. These vehicle trips were included in the subject development's Traffic Model in order to assess the impact of the Bellingsmore development on the surrounding network in addition to the subject development's impact. **Table 5.3** below summarises the peak hour AM and PM traffic generated by the committed residential development.

Land Use	No. Units	AM Peak Hour (07:45-08:45)			PM Peak Hour (17:00 - 18:00)		
		Arr	Dep	Two-Way	Arr	Dep	Two-Way
Bellingsmore Development	177	30	80	111	78	49	127

Table 5.3: Committed Development (Ref: FW13A/0088) Traffic Generation

Committed Development – Hollywoodrath Residential Development (Ref: FW14A/0108)

- 5.4.4 To the east of the R121 is the Hollywoodrath residential development (FCC Ref. No. FW14A/0108) which comprises 143 residential dwellings. At the time of preparing this report, the Hollywoodrath residential development was largely complete and occupied with a portion of the lands to the far east still under construction.
- 5.4.5 It is noted that at the time the traffic surveys were undertaken (May 2019), the Hollywoodrath development was still under construction with a small number of houses complete and occupied. The full development trips would therefore not have been accounted for as part of the traffic surveys at that time. Consequently, to ensure a robust assessment of the potential impact of the Hollywoodrath development, the vehicle trips associated with the development were obtained for the TTA submitted as part of the developments planning application.
- 5.4.6 These vehicle trips were added to the subject developments Traffic Model in order to assess the impact of the Hollywoodrath development on the surrounding road network in addition to the subject developments impact. **Table 5.4** below summarises the peak hour AM and PM traffic generated by the committed residential development.

Land Use	No. Units	AM Peak Hour (07:45-08:45)			PM Peak Hour (17:00 - 18:00)		
		Arr	Dep	Two-Way	Arr	Dep	Two-Way
Hollywoodrath	143	20	57	77	56	34	90

Table 5.4: Committed Development (Ref: FW14A/0108) Traffic Generation

Kilmartin LAP – Educational Facilities

- 5.4.7 As per the objectives set out within the Kilmartin LAP (Section 4: Land Use Mix - Map 9), further educational facilities are proposed in addition to the existing primary and secondary schools currently in Tyrrelstown. This includes an additional primary school which is to be located on lands immediately south of the existing St. Luke's National School and Tyrrelstown Educate Together National School.
- 5.4.8 Whilst details regarding the potential size of the future primary school and number of pupils to be accommodated are not determined at this stage, for the purposes of this assessment it has been assumed that the primary school could cater for 594 pupils.
- 5.4.9 A new secondary school is also proposed under the Kilmartin LAP, which is to be located within the Hollywoodrath residential development area. Similarly, details regarding the potential size of the future secondary school and number of pupils to be accommodated are not determined at this stage. For the purposes of this assessment, it has been assumed that the secondary school could cater for 602 pupils.
- 5.4.10 In order to determine the level of traffic generated by these two potential schools, DBFL have calculated these using the TRICS database for similar types of land use and derived corresponding vehicle trips for both the AM and PM peak hours. The TRICS data is contained in **Appendix B**, whilst the predicted vehicle trip generation is detailed in **Table 5.5** below.

Land Use	No. Pupils	AM Peak Hour (07:45-08:45)			PM Peak Hour (17:00 - 18:00)		
		Arr	Dep	Two-Way	Arr	Dep	Two-Way
Primary School	594	136	98	234	17	20	37
Secondary School	602	82	56	138	16	27	43

Table 5.5: Kilmartin LAP – Educational Facilities Traffic Generation

Hollystown Site 1 – Residential Development (FW21A/0042)

- 5.4.11 To the northeast of the subject Hollystown Site 2 residential development is the recently permitted residential development, referred to as Hollystown Site 1 (Planning Reg. Ref. FW21A/0042) comprising 69 no. residential dwellings.

- 5.4.12 DBFL consider that this development will generate an impact on the local road network and have included it as a committed development to ensure a robust assessment. It is noted that the Hollystown Site 1 lands are in the ownership of the applicant (Glenveagh Homes Ltd).
- 5.4.13 DBFL have utilised the trip rates and subsequent trip generation figures for the proposed development schedule, as shown in **Table 5.6** below. These vehicle trips were added to the subject developments Traffic Model in order to assess the impact of the potential Hollystown Site 1 residential development on the surrounding road network in addition to the subject developments impact.

Land Use	No. Units	AM Peak Hour (07:45-08:45)			PM Peak Hour (17:00 - 18:00)		
		Arr	Dep	Two-Way	Arr	Dep	Two-Way
Hollystown Site 1	69	12	31	43	30	19	50

Table 5.6: Proposed Hollystown Site 1 Residential Development Potential Vehicle Trips

- 5.4.14 The location of the abovementioned committed developments and developments included within the assessment relative to the subject Hollystown Sites 2 & 3 residential development are shown in **Figure 5.2**.

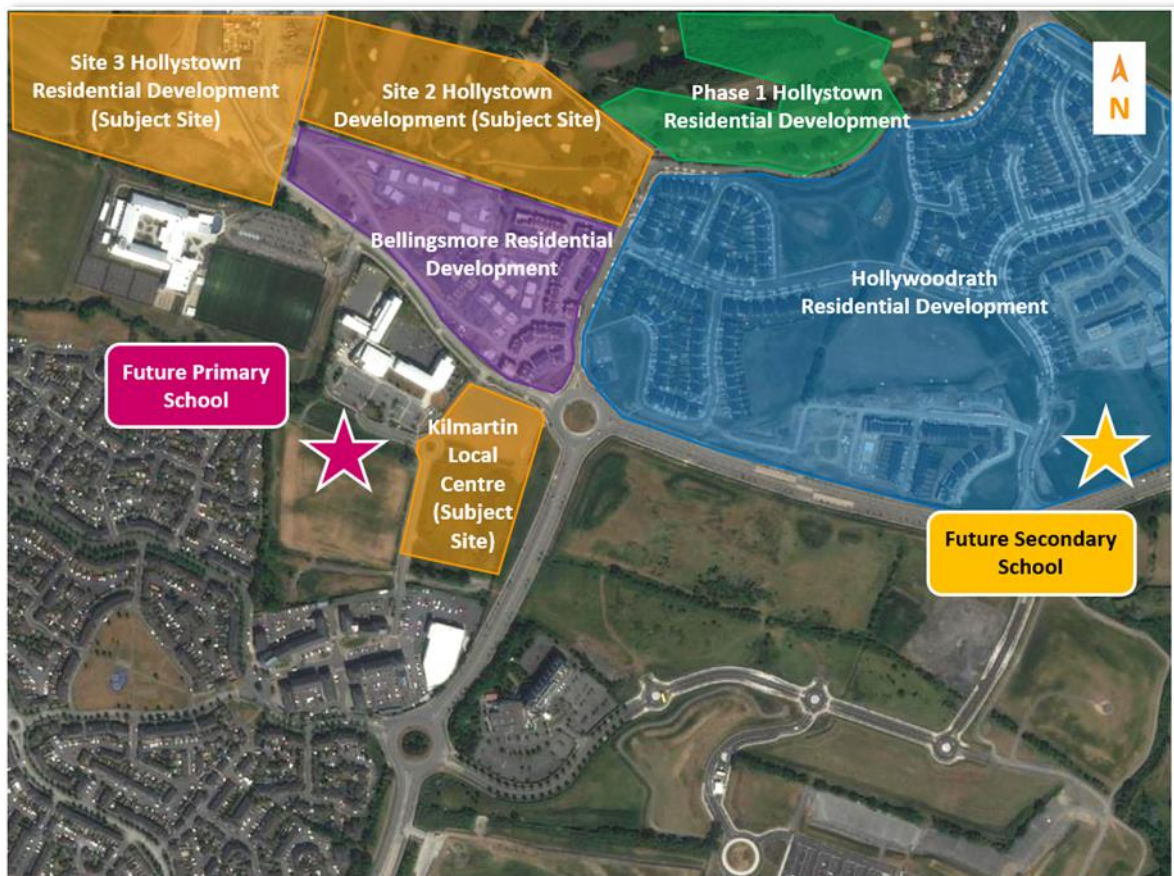


Figure 5.2: Committed Developments and Future Schools (Indicative Boundaries)

Dublin GAA Pitches Development

- 5.4.15 It is noted that at the time of preparing this report a separate planning application was being prepared for the prospective GAA Pitches located off the Ratoath Road to the north of Site 3. This is not yet a Permitted Development, but for the purposes of providing a robust assessment, consideration has been given to the potential cumulative impact arising from the operational phase of this development should it be successful in gaining planning permission. To assist with this, trip generation information was obtained for the prospective GAA Pitches development from the Traffic & Transportation Consultants (J.B. Barry Consulting Engineers) who are working on behalf of the applicant.
- 5.4.16 The recorded weekday PM peak hour on the local road network occurs between 5pm – 6pm. Based on the trip generation data obtained for the GAA pitches, a negligible number of trips are anticipated to occur during the network PM peak hour. Activity at the GAA pitches during the weekday is expected to occur from 6pm onwards with the busiest periods being between 7pm-9pm. The GAA generates a peak number of trips during 7pm-8pm (Monday – Wednesday) with total trips (arrivals & departures) in the region of 133-233 trips. Whilst on a Thursday and Friday the peak number of trips are generated slightly later between 8pm and 9pm, also with a total of 133-233 trips (arrival & departures).
- 5.4.17 It noted that these are person trips and that in reality a portion of these trips would be made by walking, cycling and coaches. An element of car sharing would also be typically expected. Therefore, the number of vehicle trips and resulting impact on the road network would be significantly less.
- 5.4.18 Consequently, the analysis carried out in the following sections still presents a robust assessment as it focuses on the two busiest periods of the day (i.e. AM and PM peak hours). Outside of these hours, traffic flows on the network would be significantly lower, resulting in the network operating with additional reserve capacity to that forecast for the peak hours.
- 5.4.19 Therefore, any potential cumulative impact arising from both the site generated traffic and GAA pitches development traffic and external road network traffic flows are anticipated to be are anticipated to be lower than that assessed for the PM peak hour given that the typical weekday activity at the GAA pitches will predominantly occur outside of the local road network peak hours.

5.5 TRIP DISTRIBUTION & ASSIGNMENT

5.5.1 The associated vehicle trips have been assigned to the surrounding road network based on the surveyed traffic movements passing the site and also on the following assumptions;

- In the Opening Year (2023), it is assumed that the entire Kilmartin Local Centre proposed mixed-use development and 100 house within the Hollystown site would be complete and occupied. This includes the new Link Street connection which will connect The Avenue to the existing Tyrrelstown Local Centre. It has also been assumed that Hollystown Site 1 be complete by 2023.
- In the Interim Year (2028) and Future Year (2038), it is assumed that all units within Sites 2 and 3 will be complete and occupied, plus all surrounding committed developments including the new primary school adjacent the Kilmartin Local Centre site and the secondary school near Hollywoodrath development.

5.5.2 The distribution of proposed development traffic as proposed by DBFL is presented in **Figure 6, 7** and **14** as included in **Appendix A** of this report. The subject development trips have been distributed to the surrounding road network based on the existing observed traffic movements.

5.6 TRAFFIC GROWTH

5.6.1 The TTA adopts an Opening Design Year of 2023, Interim Year of 2028 (+5 years) and Future Horizon Year of 2038 (+15 years) as per TII guidelines. Although traffic growth may not increase at the rates once predicted, to ensure a robust analysis of the impact of traffic upon the local road network we have adopted growth rates using the Transport Infrastructure Ireland (TII) "Travel Demand Projections".

5.6.2 Table 6.1 (Unit 5.3 – Travel Demand Projections) within the TII Project Appraisal Guidelines provides Link-Based Annual Traffic Growth Factors for the different regions within Ireland. The subject site lies within 'Dublin Metropolitan Area' with the growth factors as outlined within **Table 5.7** below:

Metropolitan Area	Low Sensitivity Growth				Central Growth				High Sensitivity Growth			
	2016-2030		2030-2040		2016-2030		2030-2040		2016-2030		2030-2040	
	LV	HV	LV	HV	LV	HV	LV	HV	LV	HV	LV	HV
Dublin	1.0146	1.028	1.0034	1.0116	1.0162	1.0295	1.0051	1.0136	1.0191	1.0328	1.0087	1.0172

Table 5.7: Link-Based Growth Rates: Annual Growth Factors
(Extract from Table 6.1 PAG Unit 5.3)

5.6.3 Applying the annual factors (Central Growth) as outlined above for the adopted Opening Year of 2023, Interim Year 2028 (+5 years) and Future Horizon Year of 2038 (+15 years), the following growth rates have been adopted to establish corresponding baseline network flows: -

- 2019 to 2023 – 1.0664 (or 6.6%);
- 2019 to 2028 – 1.1556 (or 15.6%); and
- 2019 to 2038 – 1.2293 (or 22.9%).

5.7 ASSESSMENT SCOPE

Assessment Scenarios

5.7.1 Two different traffic scenarios have been assessed, namely (a) the 'Do-Minimum' (Do-Nothing) traffic characteristics and (b) the 'Post Development' (Do-Something) traffic characteristics.

5.7.2 The 'Base' traffic scenario takes into account the potential level of traffic that could be generated by the 'committed developments' in addition to the existing flows (with TII growth rates applied) travelling across the network.

5.7.3 The proposed development traffic flows are then added to the network's 'Do Nothing' (Base + Committed Development) traffic flows to establish the new 'Post Development' traffic flows. In summary, the following scenarios have been investigated:

Do-Nothing

- A1 – 2023 Opening Year Base Flows + Committed Developments
- A2 – 2028 Interim Year Base Flows + Committed Developments
- A3 – 2038 Future Year Base Flows + Committed Developments

Do-Something

- B1 – 2023 Do-Nothing (A1) + Proposed Development Flows
- B2 – 2028 Do-Nothing (A2) + Proposed Development Flows
- B3 – 2038 Do-Nothing (A3) + Proposed Development Flows

Assessment Periods

5.7.4 The network's AM and PM peak hour flows have been identified as occurring between 07:45 to 08:45 and 17:00 to 18:00 respectively.

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

- Figure 29 – 2023 Do-Nothing (A1)
- Figure 30 – 2028 Do-Nothing (A2)
- Figure 31 – 2038 Do-Nothing (A3)
- Figure 32 – 2023 Do-Something (B1)
- Figure 33 – 2022 Do-Something (B2)
- Figure 34 – 2038 Do-Something (B3)

5.8 IMPACT OF PROPOSALS

5.8.1 The Institution of Highways and Transportation document 'Guidelines for Traffic Impact Assessments' states that the impact of a proposed development upon the local road network is considered material when the level of traffic it generates surpasses 10% and 5% on normal and congested networks, respectively.

5.8.2 When such levels of impact are generated, a more detailed assessment should be undertaken to ascertain the specific impact upon the network's operational performance. These same thresholds are reproduced in the NRA/TII document entitled Traffic and Transport Assessment Guidelines (2014). It must be noted the impact assessment within this TTA is in accordance with Fingal County Council's maximum impact threshold; that is any junctions exceeding the 2.5% threshold within the administrative area of Fingal is required to be further analysed.

5.8.3 **Table 5.8** and **Figure 5.3** below detail the percentage increase of two-way vehicle trips to/from the proposed development site that will travel through the junctions assessed in the Opening Year and Future Year scenarios. The development scenarios considered full construction and occupation of both the proposed and committed developments by 2028 Interim Year, to show how the development may impact the network across design years. Percentage impacts were calculated for the impact of the development in "Do-Nothing" Scenarios vs "Do-Something" scenarios for the corresponding years.

5.8.4 For the key off-site junctions (site accesses included), it can be seen that the proposed development would have effects on the following junctions:

- **Junction 1** – Hollystown Development Site 2 R121 Access

- **Junction 2** – Kilmartin Local Centre Link Street Access
- **Junction 3** – Schools Access Road / New Link Street Roundabout
- **Junction 4** – The Avenue / New Link Street Junction
- **Junction 5** – The Avenue / R121 / Hollywoodrath / Cherryhound Tyrrelstown Link Roundabout Junction
- **Junction 6** – Boulevard / Park Boulevard Roundabout Junction
- **Junction 7** – R121 / Boulevard / Cruiserath Drive Roundabout Junction.

Junction ID	Junction	Design Year	Percentage Impact	
			AM	PM
J1	Hollystown Sites 2 R121 Access	2023	4.35%	7.32%
		2028	15.80%	24.90%
		2038	14.98%	23.57%
J2	Kilmartin Local Centre Link Street Access	2023	9.97%	79.56%
		2028	10.71%	90.55%
		2038	10.20%	87.25%
J3	Schools Access Road / New Link Street Roundabout	2023	5.31%	38.61%
		2028	6.97%	59.73%
		2038	6.65%	57.68%
J4	The Avenue / New Link Street Junction	2023	12.14%	68.85%
		2028	25.72%	150.93%
		2038	24.58%	148.21%
J5	The Avenue / R121 / Hollywoodrath / Cherryhound Tyrrelstown Link Roundabout Junction	2023	2.92%	4.90%
		2028	7.46%	12.46%
		2038	7.07%	11.80%
J6	Boulevard / Park Boulevard Roundabout Junction	2023	2.96%	4.07%
		2028	4.16%	6.52%
		2038	3.94%	6.14%
J7	R121 / Boulevard / Cruiserath Drive Roundabout Junction	2023	2.35%	3.48%
		2028	6.26%	8.80%
		2038	5.92%	8.31%

Table 5.8: Network Impact Through Key Off Site Junctions

5.8.5 Under the Institution of Highways and Transportation document 'Guidelines for Traffic Impact Assessments', the majority of junctions (with the exception of Junction 6 and 7) surpasses 10% for normal networks. When compared to FCC's 2.5% threshold, all junctions exceed the threshold. Therefore, DBFL have conducted further analysis on all junctions and this has been assessed in the next chapter.

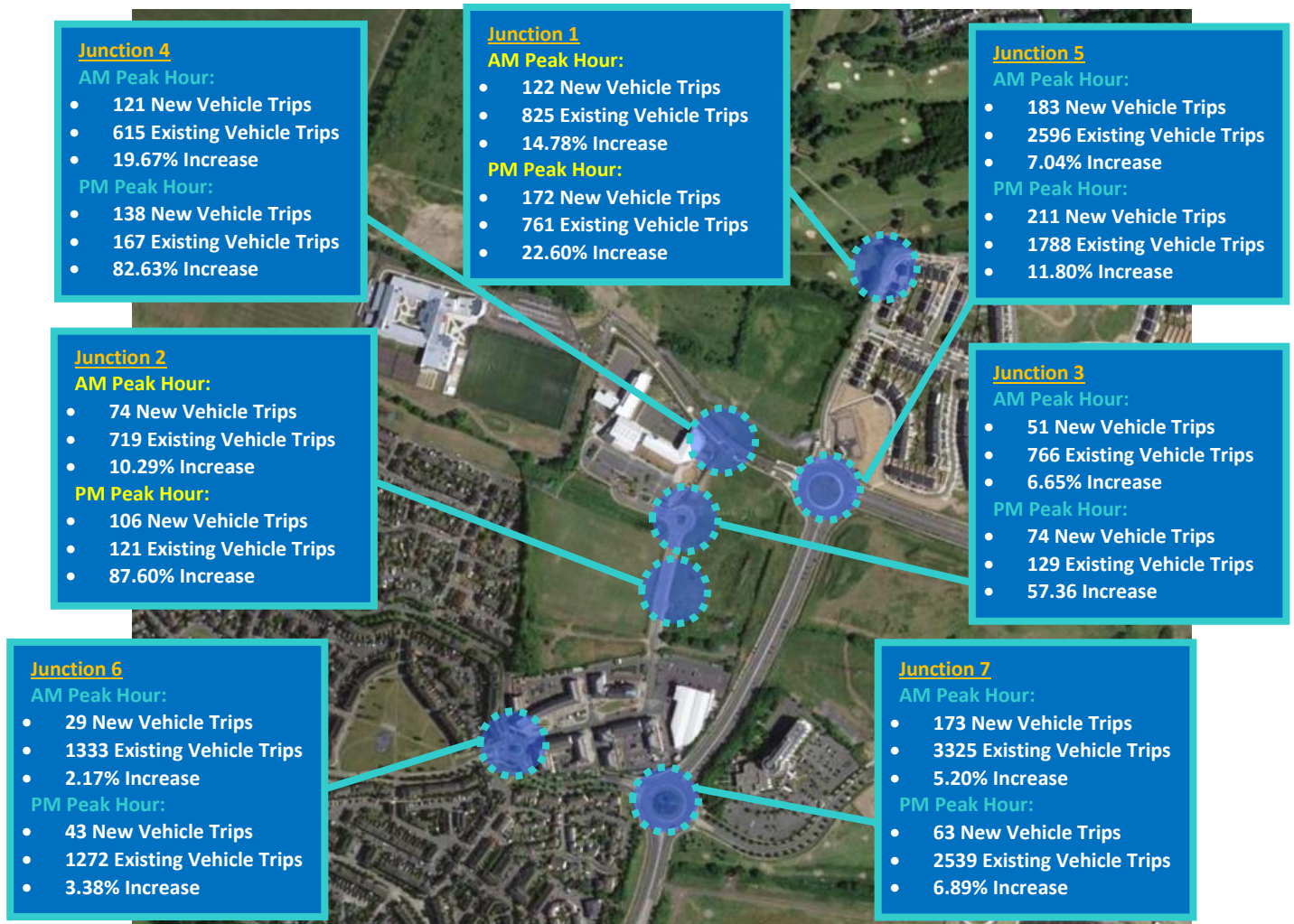


Figure 5.3: Increase in Vehicle Trips Generated at Site Access and Key Off Site Junctions (2038 Do-Something)

6.0 NETWORK ANALYSIS

6.1 INTRODUCTION

- 6.1.1 The operational assessment of the local road network has been undertaken using the Transport Research Laboratory (TRL) computer package PICADY for the priority junction and ARCADY for the roundabout junctions.
- 6.1.2 When considering priority controlled junctions and roundabout junctions, a Ratio of Flow to Capacity (RFC) of greater than 0.85 would indicate a junction to be approaching capacity, as operation above this RFC value is poor and deteriorates quickly.
- 6.1.3 For the PICADY and ARCADY analyses a 90-minute AM and PM period has been simulated, from 07:30 to 09:00 and 16:45 to 18:15, respectively. For the PICADY and ARCADY analyses traffic flows were entered using an Origin-Destination table for the peak hours.
- 6.1.4 In order to analyse and assess the impact of the proposed development on the surrounding road network, a traffic model of the junctions was analysed for the schemes Opening Year (2023), Interim Year (2028) and Future Year (2038).
- 6.1.5 At present, there is no existing site access from the proposed development site onto the R121 as well as the Local Centre's site access. Similarly, the new Link Street on Hollystown Road junction does not currently exist. Consequently, the following analysis for the "Do-Nothing" Scenario for the Junctions 1, 2, 3 and 4 has been omitted.

6.2 JUNCTION 1: HOLLYSTOWN SITE 2 R121 ACCESS

- 6.2.1 The proposed three arm priority-controlled junction for Hollystown Site 2 has been analysed for the modelling scenarios using the Junctions 9 PICADY software package. The results of the operational assessment of this junction during the weekday morning and evening peaks "Do-Something" scenarios are summarised in **Table 6.1** below respectively.
- 6.2.2 In the "Do Something" scenario, the three arms were labelled as follows within the PICADY model:

Arm A: R121 (W)

Arm B: Hollystown Site 2 Main Access (N)

Arm C: R121 (E)

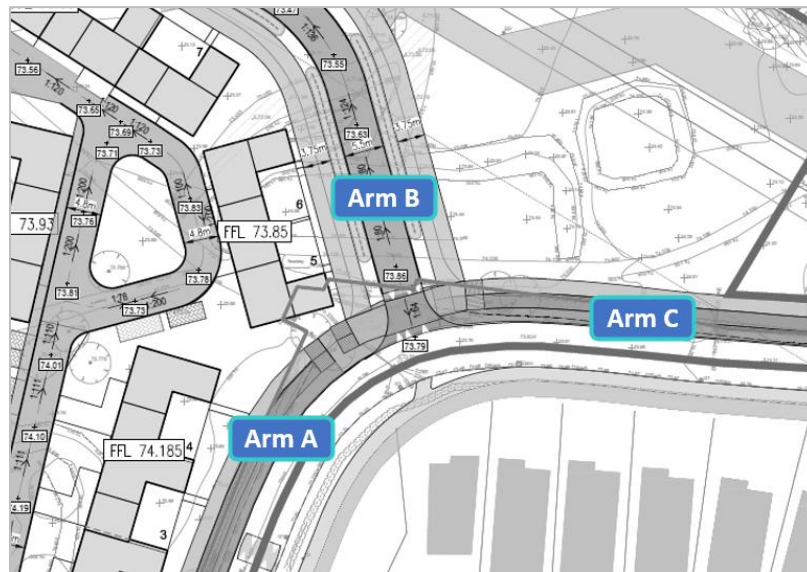


Figure 6.1: Hollystown Site 2 Main Access / R121 Priority Controlled Junction

Do Something Scenario

6.2.3 The PICADY results (**Table 6.1**) indicate that the main access will operate within capacity for both the Opening and Future design year scenarios. During the 2023 AM peak hour, the junction operates with a maximum ratio to flow capacity (RFC) value of 0.05 and no corresponding queue is recorded on Arm B. In the PM, an RFC of 0.03 and no corresponding queue on the same arm.

Year Scenario	Period	Stream	Queue (pcu)	Delay (s)	RFC
DS 2023	AM Peak	B-AC	0.0	7.75	0.05
		C-AB	0.0	6.61	0.00
	PM Peak	B-AC	0.0	8.14	0.03
		C-AB	0.0	7.52	0.01
DS 2028	AM Peak	B-AC	0.3	9.74	0.21
		C-AB	0.0	6.85	0.02
	PM Peak	B-AC	0.2	9.93	0.14
		C-AB	0.1	8.26	0.06
DS 2038	AM Peak	B-AC	0.3	9.92	0.21
		C-AB	0.0	6.88	0.02
	PM Peak	B-AC	0.2	10.22	0.14
		C-AB	0.1	8.39	0.06

Table 6.1: PICADY "Do-Something" Analysis for Hollystown Site 2 Access

6.2.4 During both the Future Design Years, a maximum RFC of 0.21 and a queue length of 0.3 is recorded in the AM peak whilst in the PM peak, a RFC of 0.14 and a queue length of 0.2 is recorded on Arm B.

Year Scenario	Period	Stream	Queue (pcu)	Delay (s)	RFC
DS 2023	AM Peak	B-AC	0.1	8.08	0.06
		C-AB	0.0	5.14	0.02
	PM Peak	B-AC	0.1	6.98	0.06
		C-AB	0.0	5.98	0.04
DS 2028	AM Peak	B-AC	0.1	8.81	0.07
		C-AB	0.0	4.91	0.03
	PM Peak	B-AC	0.1	7.12	0.06
		C-AB	0.0	5.88	0.04
DS 2038	AM Peak	B-AC	0.1	8.95	0.07
		C-AB	0.0	4.86	0.03
	PM Peak	B-AC	0.1	7.13	0.06
		C-AB	0.0	5.87	0.04

Table 6.2: PICADY “Do-Something” Analysis for Kilmartin L.C. Access

6.4 JUNCTION 3: SCHOOLS ACCESS ROAD / LINK STREET ROUNDABOUT

- 6.4.1 The Link Street roundabout at the Local Centre has been modelled for all of the scenarios using the Junctions 9 ARCADY software package. The results of the operational assessment of this junction “Do-Something” scenarios are summarised in **Table 6.3**.
- 6.4.2 In the “Do-Something” scenarios, the four arms were labelled as follows within the ARCADY model:

- Arm 1: Link Street (S)
- Arm 2: Schools Access Road (W)
- Arm 3: Link Street Extension (N)

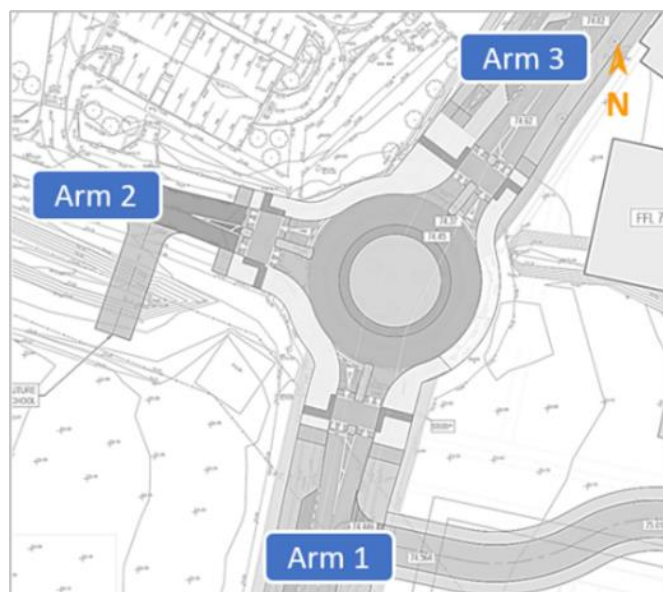


Figure 6.3: Hollywood Road / Link Street Roundabout

Do Something Scenario

- 6.4.3 The ARCADY results indicate that the Link Street Roundabout will operate within capacity for the 2023 “Do Something” AM peak hour, with a maximum RFC value of 0.37 and a corresponding queue of 0.6 pcu’s being recorded on the south arm. In the corresponding PM peak hour, a maximum RFC value of 0.07 occurs on the same arm, with a corresponding maximum queue of 0.1 pcu’s.

Year Scenario	Period	Arm	Queue (pcu)	Delay (s)	RFC
DS 2023	AM Peak	S	0.6	6.13	0.37
		W	0.3	4.04	0.21
		N	0.0	5.25	0.04
	PM Peak	S	0.1	3.88	0.07
		W	0.0	3.16	0.04
		N	0.0	4.51	0.04
DS 2028	AM Peak	S	0.8	6.73	0.46
		W	0.3	4.14	0.26
		N	0.2	5.90	0.15
	PM Peak	S	0.1	4.07	0.11
		W	0.1	3.25	0.05
		N	0.1	4.66	0.06
DS 2038	AM Peak	S	0.9	7.02	0.48
		W	0.4	4.21	0.27
		N	0.2	5.97	0.16
	PM Peak	S	0.1	4.08	0.11
		W	0.1	3.26	0.05
		N	0.1	4.67	0.06

Table 6.3: ARCADY “Do-Something” Analysis at Junction 3

- 6.4.4 For the 2028 “Do Something” AM peak, a maximum RFC value of 0.46 is observed along the south arm, with a corresponding maximum queue of 0.8 pcu’s. In the PM peak hour, a maximum RFC value of 0.11 is recorded once again on the southern arm, with a corresponding maximum queue of 0.1 pcu’s.
- 6.4.5 During the 2038 “Do-Something” AM scenario, a maximum RFC value of 0.48 is observed along the same arm, with a corresponding maximum queue of 0.11 pcu’s. In the PM peak hour, the maximum RFC and corresponding queue does not change and remains the same as the 2028 PM peak hour scenario.

6.5 JUNCTION 4: THE AVENUE / NEW LINK STREET JUNCTION

6.5.1 The results of the operational assessment of the new Link Street Junction on the Avenue during the weekday morning and evening peaks “Do-Something” scenarios have been summarised in **Table 6.4** below respectively. In the “Do-Something” scenarios, the three arms were labelled as follows within the PICADY model:

Arm A: The Avenue (E)

Arm B: Link Street Extension (S)

Arm C: The Avenue (W)

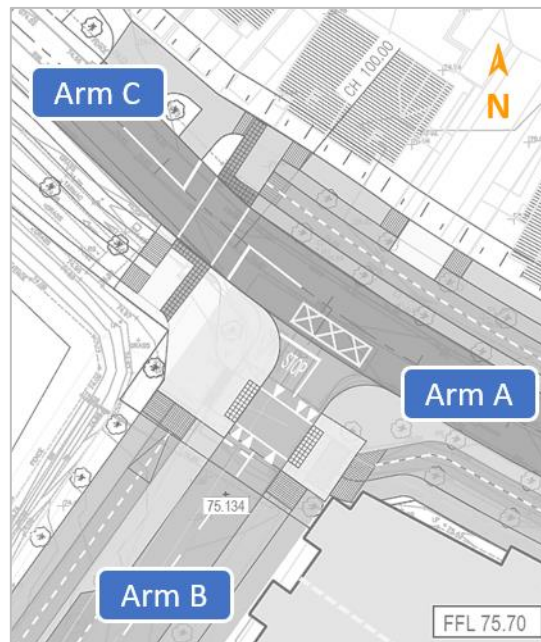


Figure 6.4: The Avenue / New Link Street Priority Controlled Junction

Do Something Scenario

6.5.2 The PICADY results indicate that the Link Street priority controlled junction on the Avenue will also operate within capacity for the 2023 “Do Something” AM peak hour, with a maximum delay of 9.69 seconds is observed on the southern arm (new Link Street extension) and a corresponding queue of 0.1 pcu’s. For the 2023 “Do Something” PM peak hour a maximum delay of 7.69 seconds occurs on the southern arm (new Link Street extension), with a corresponding maximum queue of 0.1 pcu’s.

Year Scenario	Period	Arm	Queue (pcu)	Delay (s)	LOS
DS 2023	AM Peak	E	0.0	0.01	A
		S	0.1	9.69	A
		W	0.1	0.42	A
	PM Peak	E	0.0	0.00	A
		S	0.2	7.69	A
		W	0.0	0.97	A
DS 2028	AM Peak	E	0.0	0.00	A
		S	0.2	10.25	B
		W	0.1	0.82	A
	PM Peak	E	0.0	0.00	A
		S	0.2	8.35	A
		W	0.1	1.80	A
DS 2038	AM Peak	E	0.0	0.01	A
		S	0.3	11.11	B
		W	0.1	0.80	A
	PM Peak	E	0.0	0.31	A
		S	0.3	9.19	A
		W	0.2	4.02	A

Table 6.4: PICADY “Do-Something” Analysis for Junction 4

- 6.5.3 For the 2038 “Do Something” AM peak, a maximum delay of 11.11 seconds is recorded on the southern arm (new Link Street Extension), with a corresponding maximum queue length of 0.3 pcu’s. In the PM peak hour, a maximum delay of 9.19 seconds is observed on the southern arm (new Link Street extension), with a corresponding maximum queue of 0.3 pcu’s.

6.6 JUNCTION 5: R121 / CHERRYHOUND-TYRRELSTOWN LINK ROAD / THE AVENUE ROUNDABOUT

- 6.6.1 The R121 / Cherryhound-Tyrrelstown Link Road / The Avenue Roundabout has been modelled for all of the scenarios using ARCADY. The results of the operational assessment of this junction for the “Do-Nothing” and “Do-Something” scenarios are summarised in **Table 6.5** and **6.6**.

- 6.6.2 The four arms were labelled as follows within the ARCADY model:

- Arm 1: Cherryhound-Tyrrelstown Link Road (E)
- Arm 2: R121 (S)
- Arm 3: The Avenue (W)
- Arm 4: R121 (N)



Figure 6.5: R121 / Cherryhound-Tyrrelstown Link Road / The Avenue Roundabout

Do Nothing Scenario

6.6.3 The ARCADY results (**Table 6.5**) indicates that roundabout will operate within capacity for the 2023 “Do-Nothing” AM peak hour, with a maximum RFC value of 0.65 and a corresponding queue of 1.8 pcu’s being recorded on the north arm (R121). In the corresponding PM peak hour, a maximum RFC value of 0.38 occurs on the R121 south arm, with a corresponding maximum queue of 0.6 pcu’s.

Year Scenario	Period	Arm	Queue (pcu)	Delay (s)	RFC
DN 2023	AM Peak	1	0.4	2.58	0.29
		2	0.8	2.91	0.40
		3	0.3	6.21	0.26
		4	1.8	11.48	0.65
	PM Peak	1	0.3	2.14	0.24
		2	0.6	2.62	0.38
		3	0.1	5.10	0.07
		4	0.3	4.52	0.25
DN 2028	AM Peak	1	0.5	2.87	0.34
		2	1.1	3.46	0.52
		3	0.6	7.81	0.36
		4	3.6	19.95	0.79
		1	0.4	2.23	0.26

DN 2038	PM Peak	2	0.7	2.80	0.42
		3	0.1	5.44	0.08
		4	0.4	4.83	0.29
	AM Peak	1	0.6	3.02	0.36
		2	1.2	3.70	0.55
		3	0.6	8.39	0.39
		4	5.3	28.28	0.85
	PM Peak	1	0.4	2.29	0.28
		2	0.8	2.93	0.44
		3	0.1	5.64	0.09
		4	0.4	5.01	0.31

Table 6.5: ARCADY “Do-Nothing” Analysis for Junction 5

- 6.6.4 For the 2028 “Do-Nothing” AM peak, the north arm (R121) approaches capacity with a maximum RFC value of 0.79 is observed and a corresponding maximum queue of 3.6 pcu’s. In the PM peak hour, a maximum RFC value of 0.42 is recorded once again on the south arm, with a corresponding maximum queue of 0.7 pcu’s.
- 6.6.5 During the 2038 “Do-Nothing” AM scenario, the junction is close to approaching capacity with a maximum RFC value of 0.93 being observed along the north arm and with a corresponding maximum queue of 9.3pcu’s. In the PM peak hour, the maximum RFC of 0.45 and corresponding queue of 0.8 is observed on the south arm.

Do Something Scenario

- 6.6.6 The ARCADY results (**Table 6.6**) indicate that the roundabout will operate within capacity for the 2023 “Do-Something” AM peak hour, with a maximum RFC value of 0.72 and a corresponding queue of 2.5 pcu’s being recorded on the north arm (R121). In the corresponding PM peak hour, a maximum RFC value of 0.40 occurs on the R121 south arm, with a corresponding maximum queue of 0.7 pcu’s.

Year Scenario	Period	Arm	Queue (pcu)	Delay (s)	RFC
DS 2023	AM Peak	1	0.4	2.63	0.29
		2	0.8	2.96	0.45
		3	0.4	6.60	0.30
		4	2.1	12.64	0.68
	PM Peak	1	0.3	2.17	0.25
		2	0.7	2.70	0.40

		3	0.1	5.33	0.10
		4	0.4	4.69	0.27
DS 2028	AM Peak	1	0.5	3.08	0.35
		2	1.2	3.64	0.54
		3	1	9.88	0.49
		4	7.7	39.83	0.90
	PM Peak	1	0.4	2.36	0.28
		2	0.9	3.08	0.46
		3	0.2	6.16	0.17
		4	0.6	5.48	0.36
DS 2038	AM Peak	1	0.6	3.25	0.38
		2	1.3	3.91	0.57
		3	1.1	10.89	0.53
		4	14.9	71.64	0.97
	PM Peak	1	0.4	2.42	0.30
		2	1	3.24	0.49
		3	0.2	6.44	0.18
		4	0.6	5.72	0.38

Table 6.6: ARCADY “Do-Something” Analysis for Junction 5

- 6.6.7 For the 2028 “Do-Something” AM peak, the north arm (R121) is nearly at capacity with a maximum RFC value of 0.99 observed and a corresponding maximum queue of 17.8 pcu’s. In the PM peak hour, a maximum RFC value of 0.47 is recorded on the south arm, with a corresponding maximum queue of 0.9 pcu’s.
- 6.6.8 During the 2038 “Do-Something” AM scenario, the junction is slightly over capacity with a maximum RFC value of 1.06 being observed on the north arm and with a corresponding maximum queue of 36.1 pcu’s. In the PM peak hour, the maximum RFC of 0.50 and corresponding queue of 1.00 is observed on the south arm.

6.7 JUNCTION 6: BOULEVARD / PARK BOULEVARD ROUNDABOUT

- 6.7.1 The Boulevard / Park Boulevard Roundabout, west of Tyrrelstown Plaza has been modelled for all of the scenarios using ARCADY. The results of the operational assessment of this junction for the “Do-Nothing” and “Do-Something” scenarios are summarised in **Table 6.7** and **6.8**.
- 6.7.2 The four arms were labelled as follows within the ARCADY model:

Arm 1: Tyrrelstown Plaza (E)

Arm 2: The Boulevard (S)

Arm 3: Park Boulevard (W)

Arm 4: The Boulevard (N)

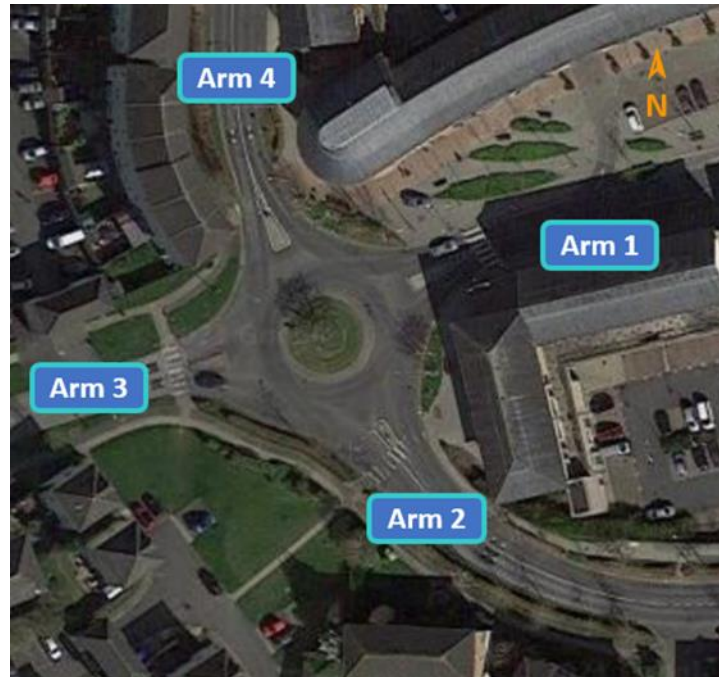


Figure 6.6: Boulevard / Park Boulevard Roundabout

Do Nothing Scenario

- 6.7.3 The ARCADY results (**Table 6.7**) indicates that roundabout will operate within capacity for the 2023 "Do-Nothing" AM peak hour, with a maximum RFC value of 0.34 and a corresponding queue of 0.5 pcu's being recorded on the southern arm (The Boulevard). In the corresponding PM peak hour, the RFC value increases to 0.47 and occurs on the same arm, with a corresponding maximum queue of 0.9 pcu's.
- 6.7.4 For the 2028 "Do-Nothing" AM peak, the southern arm once again experiences a maximum RFC value of 0.40 with a corresponding maximum queue of 0.7 pcu's. In the PM peak hour, a maximum RFC value of 0.52 is recorded on the same arm, with a corresponding maximum queue of 1.1 pcu's.
- 6.7.5 In the 2038 "Do-Nothing" AM scenario, the junction experiences with a maximum RFC value of 0.43 and a corresponding maximum queue of 0.7 pcu's. In the PM peak hour, the maximum RFC of 0.56 and corresponding queue of 1.3 is observed on the south arm.

Year Scenario	Period	Arm	Queue (pcu)	Delay (s)	RFC
DN 2023	AM Peak	1	0.1	3.97	0.11
		2	0.5	3.90	0.34
		3	0.4	5.34	0.26
		4	0.4	5.29	0.29
	PM Peak	1	0.3	4.13	0.21
		2	0.9	5.18	0.47
		3	0.2	5.09	0.15
		4	0.2	4.25	0.16
DN 2028	AM Peak	1	0.2	4.41	0.19
		2	0.7	4.42	0.40
		3	0.5	6.35	0.34
		4	0.6	6.37	0.36
	PM Peak	1	0.3	4.33	0.24
		2	1.1	5.78	0.52
		3	0.2	5.44	0.17
		4	0.2	4.48	0.18
DN 2038	AM Peak	1	0.2	4.50	0.19
		2	0.7	4.62	0.43
		3	0.6	6.73	0.37
		4	0.6	6.86	0.39
	PM Peak	1	0.3	4.44	0.25
		2	1.3	6.28	0.56
		3	0.2	5.70	0.19
		4	0.2	4.65	0.19

Table 6.7: ARCADY “Do-Nothing” Analysis for Junction 6

Do Something Scenario

- 6.7.6 The ARCADY results (**Table 6.8**) indicate that the roundabout will operate within capacity during all “Do-Something” scenarios. In 2023, the RFC on the southern arm remains the same as the Do-Nothing (0.34) and increase to 0.49 in the PM peak.
- 6.7.7 In the 2038 scenario, the same arm experiences a maximum RFC of 0.44 and a queue length of 0.8 whilst in the PM period, a RFC of 0.60 and a corresponding queue of 1.5 is observed.

Year Scenario	Period	Arm	Queue (pcu)	Delay (s)	RFC
DS 2023	AM Peak	1	0.1	4.05	0.13
		2	0.5	3.95	0.34
		3	0.4	5.39	0.26
		4	0.4	5.35	0.29
	PM Peak	1	0.3	4.23	0.22
		2	1	5.38	0.49
		3	0.2	5.19	0.15
		4	0.2	4.32	0.16
DS 2028	AM Peak	1	0.3	4.62	0.22
		2	0.7	4.53	0.42
		3	0.5	6.47	0.35
		4	0.6	6.49	0.37
	PM Peak	1	0.4	4.51	0.27
		2	1.3	6.27	0.56
		3	0.2	5.67	0.18
		4	0.2	4.64	0.18
DS 2038	AM Peak	1	0.3	4.73	0.23
		2	0.8	4.73	0.44
		3	0.6	6.85	0.37
		4	0.7	7.01	0.40
	PM Peak	1	0.4	4.63	0.28
		2	1.5	6.85	0.60
		3	0.2	5.95	0.20
		4	0.2	4.82	0.20

Table 6.8: ARCADY “Do-Something” Analysis for Junction 6

6.8 JUNCTION 7: R121 / BOULEVARD / CRUISERATH DRIVE ROUNDABOUT

6.8.1 The Boulevard / Park Boulevard Roundabout, west of Tyrrelstown Plaza has been modelled for all of the scenarios using ARCADY. The results of the operational assessment of this junction for the “Do-Nothing” and “Do-Something” scenarios are summarised in **Table 6.9** and **6.10**.

6.8.2 The four arms were labelled as follows within the ARCADY model:

Arm 1: Cruiserath Drive (E)

Arm 2: R121 (S)

Arm 3: The Boulevard (W)

Arm 4: R121 (N)

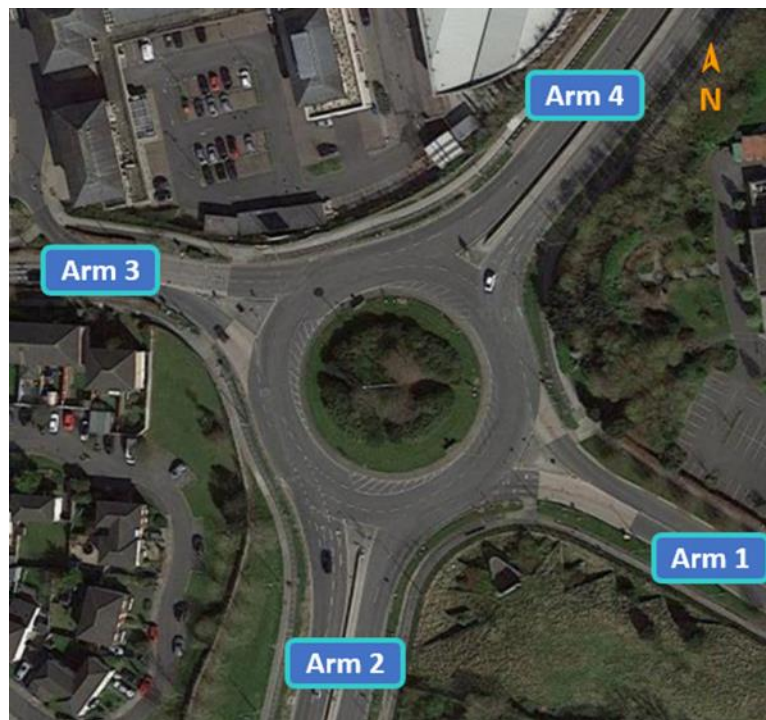


Figure 6.7: R121 / Boulevard / Cruiserath Drive Roundabout

- 6.8.3 The ARCADY results indicate that the roundabout will operate within capacity for the 2023 “Do-Nothing” AM peak hour, with a maximum RFC value of 0.60 and a corresponding queue of 1.5 pcu’s being recorded on the northern arm (R121 heading southbound). In the corresponding PM peak hour, the RFC is higher on the southern R121 arm with 0.39 and a corresponding queue of 0.6 being observed.
- 6.8.4 In 2028, the northern arm experiences a maximum RFC of 0.69 and queue length of 2.2 during the AM peak period whilst in the PM, the southern arm experiences a maximum RFC of 0.43 and queue length of 0.8.
- 6.8.5 During the 2038 AM scenario, the junction experiences with a maximum RFC value of 0.73 and a corresponding maximum queue of 2.7 pcu’s is observed on the northern arm. In the PM peak hour, the maximum RFC of 0.46 and corresponding queue of 0.9 is observed on the southern arm.

Year Scenario	Period	Arm	Queue (pcu)	Delay (s)	RFC
DN 2023	AM Peak	1	0.1	3.56	0.09
		2	0.8	2.74	0.46
		3	0.4	2.64	0.30
		4	1.5	4.46	0.60

	PM Peak	1	0.3	3.60	0.23
		2	0.6	2.57	0.39
		3	0.2	2.19	0.19
		4	0.5	2.58	0.35
DN 2028	AM Peak	1	0.1	3.96	0.11
		2	1.2	3.28	0.54
		3	0.6	3.03	0.36
		4	2.2	5.78	0.69
	PM Peak	1	0.4	3.91	0.26
		2	0.8	2.80	0.43
		3	0.3	2.30	0.21
		4	0.6	2.78	0.39
DN 2038	AM Peak	1	0.1	4.19	0.12
		2	1.4	3.55	0.58
		3	0.6	3.24	0.39
		4	2.7	6.83	0.73
	PM Peak	1	0.4	4.14	0.29
		2	0.9	2.97	0.46
		3	0.3	2.39	0.23
		4	0.7	2.91	0.41

Table 6.9: ARCADY “Do-Nothing” Analysis for Junction 7

Do Something Scenario

- 6.8.6 The ARCADY results indicate that the roundabout will operate within capacity during all “Do-Something” scenarios. In 2023, the RFC on the northern R121 arm experiences a maximum RFC of 0.62 and a queue of 1.6 during the AM peak and a RFC of 0.41 with a corresponding queue of 0.7 during the PM peak period on the southern R121 arm.
- 6.8.7 RFCs increase in the 2028 Future Design Year on both the northern and southern R121 arms, with a maximum RFC of 0.76 and a queue of 3.0 in the AM peak whilst in the PM peak hour, a RFC of 0.49.
- 6.8.8 During the 2038 AM scenario, the junction experiences with a maximum RFC value of 0.80 and a corresponding maximum queue of 4 pcu’s is observed on the northern arm. In the PM peak hour, the maximum RFC of 0.52 and corresponding queue of 1.1 is observed on the southern arm.

Year Scenario	Period	Arm	Queue (pcu)	Delay (s)	RFC
DS 2023	AM Peak	1	0.1	3.60	0.09
		2	0.9	2.78	0.47
		3	0.4	2.69	0.31
		4	1.6	4.70	0.62
	PM Peak	1	0.3	3.67	0.24
		2	0.7	2.66	0.41
		3	0.3	2.23	0.20
		4	0.6	2.63	0.36
DS 2028	AM Peak	1	0.1	4.35	0.11
		2	1.3	3.44	0.56
		3	0.6	3.19	0.38
		4	3.0	7.53	0.76
	PM Peak	1	0.4	4.14	0.28
		2	1.0	3.10	0.49
		3	0.3	2.43	0.24
		4	0.7	2.97	0.43
DS 2038	AM Peak	1	0.1	4.63	0.13
		2	1.7	3.75	0.60
		3	0.7	3.42	0.41
		4	4.0	9.40	0.80
	PM Peak	1	0.4	4.40	0.30
		2	1.1	3.31	0.52
		3	0.3	2.53	0.25
		4	0.8	3.13	0.45

Table 6.10: ARCADY “Do-Something” Analysis for Junction 7

6.9 SENSITIVITY ANALYSIS

- 6.9.1 A sensitivity analysis has carried out in response to FCC’s Opinion Report pertaining to the previous Kilmartin Local Centre application. FCC queried the use of the TRICS trips rates relating to ‘Flats’ applied to the apartment unit types. The report stated that the trip rates using the flats *“are lower than and tend to underestimate the trips generated by apartment developments”* and the assessment should *“provide a sensitivity test for comparison utilising the house type categories”*.
- 6.9.2 As a result, with the objective of providing a robust assessment, DBFL have undertaken a sensitivity test and applied the ‘House’ trip rates from TRICS to the apartment units in both the Hollystown Sites 2 & 3 and Local Centre to obtain the

potential network impacts under this scenario. **Table 6.11** illustrates the network impacts that was analysed by applying the house trip rates, compared to the network impacts presented in Chapter 5. Where the percentage increases by >10% are highlighted.

Junction ID	Junction	Design Year	Initial Analysis		Sensitivity Analysis		% Difference	
			% Impact		% Impact		AM	PM
			AM	PM	AM	PM		
J1	Hollystown Sites 2 Access on the R121	2023	4.35%	7.32%	4.42%	8.00%	0.07%	0.68%
		2028	15.80%	24.90%	16.38%	26.48%	0.58%	1.58%
		2038	14.98%	23.57%	15.53%	25.06%	0.55%	1.49%
J2	Kilmartin Local Centre Development Access	2023	9.97%	79.56%	19.26%	127.65%	9.29%	48.09%
		2028	10.71%	90.55%	17.88%	130.09%	7.17%	39.54%
		2038	10.20%	87.25%	17.02%	125.34%	6.82%	38.09%
J3	Hollywood Drive / New Link Roundabout Junction	2023	5.31%	38.61%	9.96%	62.66%	4.65%	24.05%
		2028	6.97%	59.73%	10.38%	79.02%	3.41%	19.29%
		2038	6.65%	57.68%	9.92%	76.31%	3.27%	18.63%
J4	The Avenue / New Link Junction	2023	12.14%	68.85%	17.81%	92.33%	5.67%	23.48%
		2028	25.72%	150.93%	30.74%	175.63%	5.02%	24.70%
		2038	24.58%	148.21%	29.38%	172.47%	4.80%	24.26%
J5	The Avenue / R121 / Hollywoodrath / Cherryhound Tyrrelstown Link Roundabout	2023	2.92%	4.90%	4.15%	6.46%	1.23%	1.56%
		2028	7.46%	12.46%	8.96%	14.73%	1.50%	2.27%
		2038	7.07%	11.80%	8.50%	13.96%	1.43%	2.16%
J6	Boulevard / Park Boulevard Roundabout Junction	2023	2.96%	4.07%	5.39%	6.23%	2.43%	2.16%
		2028	4.16%	6.52%	6.19%	8.62%	2.03%	2.10%
		2038	3.94%	6.14%	5.87%	8.13%	1.93%	1.99%
J7	R121 / Boulevard / Cruiserath Drive Roundabout Junction	2023	2.35%	3.48%	3.24%	4.53%	0.89%	1.05%
		2028	6.26%	8.80%	7.21%	10.06%	0.95%	1.26%
		2038	5.92%	8.31%	6.82%	9.50%	0.90%	1.19%

Table 6.11: Sensitivity Analysis Results – House Trip Rates

- 6.9.3 The house trip rates from TRICS results in slightly higher network impacts on all junctions and from the analysis conducted, with impacts exceeding 10% recorded during the PM peak at Junctions 2, 3 and 4.
- 6.9.4 Whilst the impacts increase by up to 9.29% (for e.g., at Kilmartin L.C.'s site entrance) in the AM peak during the 2023 Opening Year, the PM peak shows a greater impact increase. At the same junction, the impact increases by 48.09%.
- 6.9.5 At the Link Street roundabout (Junction 3) at the Local Centre, the difference in impact range from between 18.63% to 24.05% whilst at the proposed Link St. junction on the Avenue, the impact increases by 24.70% in the 2028 Future Design Year.
- 6.9.6 Although impacts also increase at Junctions 1, 5, 6 and 7, they can be considered minimal (i.e. <2.5%). Further analysis using PICADY and ARCADY has also been carried out to assess the Junctions 2, 3 and 4 as these junctions exceed 10%.

Junction 2: Kilmartin Local Centre Link Street Access

- 6.9.7 The PICADY results (**Table 6.13**) indicate that the Local Centre’s site access will operate within capacity when applying the house trip rates. In 2023, the junction is predicted to experience a max RFC of 0.14 in the AM peak and a queue length of 0.2 whilst a maximum RFC of 0.09 is recorded in the PM peak hours with a corresponding queue of 0.1 pcu’s being recorded on Arm B.

Year Scenario	Period	Stream	Queue (pcu)	Delay (s)	RFC
DS 2023	AM Peak	B-AC	0.2	8.87	0.14
		C-AB	0.1	5.19	0.04
	PM Peak	B-AC	0.1	7.33	0.09
		C-AB	0.1	6.18	0.06
DS 2028	AM Peak	B-AC	0.2	9.76	0.15
		C-AB	0.1	4.97	0.04
	PM Peak	B-AC	0.1	7.49	0.10
		C-AB	0.1	6.02	0.06
DS 2038	AM Peak	B-AC	0.2	9.94	0.15
		C-AB	0.1	4.92	0.04
	PM Peak	B-AC	0.1	7.5	0.10
		C-AB	0.1	6.01	0.06

Table 6.13: PICADY “Do-Something” Sensitivity Analysis for Junction 2

- 6.9.8 During both the Future Design Year scenarios, a maximum RFC of 0.15 and a corresponding queue length of 0.2 is recorded in the AM peak whilst in the PM peak, an RFC of 0.10 and a queue of 0.1 is recorded on Arm B.

Junction 3: Schools Access Road / Link Street Roundabout

- 6.9.9 **Table 6.14** indicate that the Link Street Roundabout will also operate within capacity during all design year scenarios. In 2023, a maximum RFC value of 0.39 and a corresponding queue of 0.6 pcu’s being recorded on the south arm whilst in the PM a maximum RFC value of 0.08 occurs on the same arm, with a queue of 0.1 pcu’s.

Year Scenario	Period	Arm	Queue (pcu)	Delay (s)	RFC
DS 2023	AM Peak	S	0.6	6.34	0.39
		W	0.3	4.08	0.21
		N	0.1	5.31	0.05
	PM Peak	S	0.1	3.93	0.08
		W	0.0	3.17	0.04
		N	0.1	4.60	0.05
DS 2028	AM Peak	S	0.9	6.99	0.48
		W	0.4	4.19	0.26
		N	0.2	5.98	0.16
	PM Peak	S	0.1	4.12	0.12
		W	0.1	3.27	0.05
		N	0.1	4.76	0.08
DS 2038	AM Peak	S	1.0	7.31	0.50
		W	0.4	4.27	0.27
		N	0.2	6.04	0.17
	PM Peak	S	0.1	4.13	0.13
		W	0.1	3.28	0.05
		N	0.1	4.76	0.08

Table 6.14: ARCADY “Do-Something” Sensitivity Analysis for Junction 3

- 6.9.10 In 2028, a maximum RFC value of 0.48 is once again observed along the south arm, with a corresponding maximum queue of 0.9 pcu’s. In the PM peak hour, a maximum RFC value of 0.12 is recorded on the same arm, with a corresponding maximum queue of 0.1 pcu’s.
- 6.9.11 During the 2038 AM scenario, the RFC increases to 0.50 is observed along the same arm, with a corresponding maximum queue of 1.0 pcu’s. In the PM peak hour, the maximum RFC and queue corresponds to 0.13 and 0.1, respectively.

Junction 4: The Avenue / New Link Street Junction

- 6.9.12 The PICADY results indicate that the Link Street priority controlled junction on the Avenue will also operate within capacity during all years. In the 2038 AM peak hour, a maximum delay of 11.67 seconds is recorded on the southern arm (new Link Street extension) with a corresponding queue of 0.3 pcu’s. In the PM peak, a maximum delay of 9.35 seconds occurs on the southern arm (new Link Street extension), with a corresponding maximum queue of 0.2 pcu’s.

Year Scenario	Period	Arm	Queue (pcu)	Delay (s)	LOS
DS 2023	AM Peak	E	0.0	0.01	A
		S	0.2	9.96	A
		W	0.0	0.39	A
	PM Peak	E	0.0	0.00	A
		S	0.2	7.95	A
		W	0.0	0.86	A
DS 2028	AM Peak	E	0.0	0.01	A
		S	0.4	12.32	B
		W	0.1	0.94	A
	PM Peak	E	0.0	0.00	A
		S	0.3	8.40	A
		W	0.0	1.70	A
DS 2038	AM Peak	E	0.0	0.01	A
		S	0.3	11.67	B
		W	0.1	0.86	A
	PM Peak	E	0.0	0.27	A
		S	0.2	9.35	A
		W	0.3	4.20	A

Table 6.13: PICADY “Do-Something” Sensitivity Analysis for Junction 4

6.9.13 The junction analysis has shown that the ratio to flow capacities at these junctions increase slightly compared to the initial analysis carried out when the house trip rates are applied, however all junctions continue to operate within capacity.

7.0 PARKING STRATEGY

7.1 OVERVIEW

7.1.1 This section outlines the proposed Parking Strategy for the subject Hollystown Sites 2 & 3 and Kilmartin Local Centre Development. The Parking Strategy sets out the management measures that will be deployed to allocate the use and control of parking provided at the proposed development site. The principles of the parking management strategy set out in this section, should be read in conjunction with the Mobility Management Plan (MMP).

7.2 VEHICLE PARKING

Residential Car Parking Provision

7.2.1 The development's vehicle parking proposals include the provision of a total 930 no. parking spaces, of which 870 no. spaces will be allocated for residential use only. Of these car parking spaces, 108 no. spaces will be provided at the podium level at the Kilmartin Local Centre. site. The proposed allocation of spaces is as follows: -

- 792 no. car parking spaces at Hollystown Sites 2 and 3;
 - 762 no. residential spaces and
 - 30 no. visitor spaces.
- 138 no. car parking spaces at Kilmartin Local Centre;
 - 108 no. residential spaces comprising
 - 90 spaces at podium level (incl. 4 disabled and 14 EV spaces)
 - 18 spaces at surface level (incl. 2 disabled),
 - 5 no. staff parking at the creche/Montessori,
 - 10 no. set-down spaces at the creche/Montessori,
 - 6 no. visitor spaces and
 - 9 no. public parking spaces on the Link Street

7.2.2 The proposed vehicle parking provision corresponds to an overall provision of 1.6 parking spaces per residential unit. This is considered appropriate based on

existing and proposed accessibility levels and future public transport enhancements proposed for the area.

Non-Residential Car Parking Provision

7.2.3 Within the Kilmartin Local Centre, the 9 no. on-street public parking spaces provided on either side of the new Link Street will form part of the areas to be taken in charge by FCC. Consequently, these spaces will be managed by FCCs parking enforcement system, and the spaces will be for general public use and not assigned for private use once taken in charge.

7.2.4 The 6 no. car parking spaces will be provided for use of visitors and therefore not be assigned to any individual units. A further 5 no. spaces will be provided for creche/Montessori staff, whilst there are 10 no. set down spaces for the creche/Montessori uses. These spaces will be located on the local streets and therefore not form part of the areas to be taken in charge. These spaces will be signed and marked to identify which use they are allocated to serve e.g., parent and child spaces for the Montessori/creche and standard spaces for staff parking.

Service Vehicle Parking

7.2.5 In general, the commercial element of the Kilmartin development will generate a moderate level of 'servicing' activities. By comparison, the apartment residential units are likely to generate a very small level of 'servicing' activities. The majority of these 'servicing' activities are likely to include inbound delivery and outward collections will constitute waste collections, general maintenance (indoor and outdoor), and general servicing activities.

7.3 MANAGEMENT OF ON-SITE CAR PARKING FACILITIES

7.3.1 A key component in the continued efficiency of on-site car parking is an active and enforced parking management strategy. This strategy will be managed by the management company who will be responsible for the control of the parking and access arrangements within the surface level and podium parking areas as well as the allocation of the parking spaces.

7.3.2 The Parking Management Strategy will be founded on the principle that none of the residential apartment units will be allocated a parking space as part of the initial contract for the property. A rental cost will be associated with the parking

spaces which will be at a rate specified so as to discourage the use of the private vehicle unless necessary and to encourage the uptake of more sustainable modes such as walking, cycling and public transport for which there are excellent opportunities within and directly adjacent to the development site. The parking spaces will be allocated to those paying the prescribed fee.

- 7.3.3 The apartment parking spaces will be set aside for the use of residents who may rent a space for a defined period of time. None of the residential units will be automatically allocated a parking space as part of the initial contract for the property. In order to be allocated a parking space tenants will have to apply to the management company to gain a parking permit and an assigned dedicated parking space, i.e., a tenant is not automatically allocated a parking space when they take up residency at the site.
- 7.3.4 Residents of the proposed apartment units will have the opportunity to apply to the on-site management company for both a:
- (i) Residents' car parking permit (updated weekly, fortnightly, monthly, quarterly or annually) and subsequently access to a dedicated (assigned) on-site basement car park space or
 - (ii) A visitor's car parking permit for a short period of time.
- 7.3.5 The building management team will be responsible for the day-to-day management of car parking operations. Residents who request a private car parking space will be allocated on a 'first come, first served' basis.
- 7.3.6 A charge will be applied to obtain a permit with the objective of covering the associated management costs, discouraging long term usage of the car parking space and encouraging travel by sustainable modes of travels.
- 7.3.7 This relatively short monthly rental period (which can be continued as a rolling contract) and the limited number of spaces will ensure that residents are only assigned a space when one becomes available from time to time, thereby underpinning the sustainability of the development.

7.4 BICYCLE PARKING

Residential Bicycle Parking Provision

- 7.4.1 The development's latest layout proposes a total of 525 no. cycle parking spaces comprising 441 no. residential spaces and 84 no. short-stay spaces. The breakdown of the bicycle parking is as follows:

Hollystown Sites 2 and 3

- 7.4.2 At the Hollystown Site, a total of 225 no. cycle parking spaces will be provided comprising 45 no. resident and visitor spaces for apartments plus 180 no long stay spaces for terraced units. The proposals equate to a rate of 1 space per apartment unit and terraced house. Parking for the apartments will be provided for within secure, covered areas within the communal areas of the rear gardens of the ground floor apartments.
- 7.4.3 The courtyard houses which incorporate carports, contain dedicated areas within the carport capable of storing two bicycles. The remaining house types will all have secure gardens areas to the rear of the properties capable of storing bicycles.
- 7.4.4 Nine covered bicycle racks have been provided across the site which will be available for the use by the local community. This in recognition of the difficulty often encountered by occupants or visitors of terraced units with regards to accessing the rear garden areas to store bicycles, which requires bringing the bicycle through the house.
- 7.4.5 The racks have been located so as they are in overlooked areas enabling passive surveillance, thereby enhancing security. These bicycle racks will accommodate 20 bicycles each, thereby providing an additional 180 no. bicycle parking spaces across the site. The layout of these external cycle stores are illustrated in **Figure 7.1** below and also in Deady Gahan Architects Drawing No. 20152/P/0020 accompanying the application.

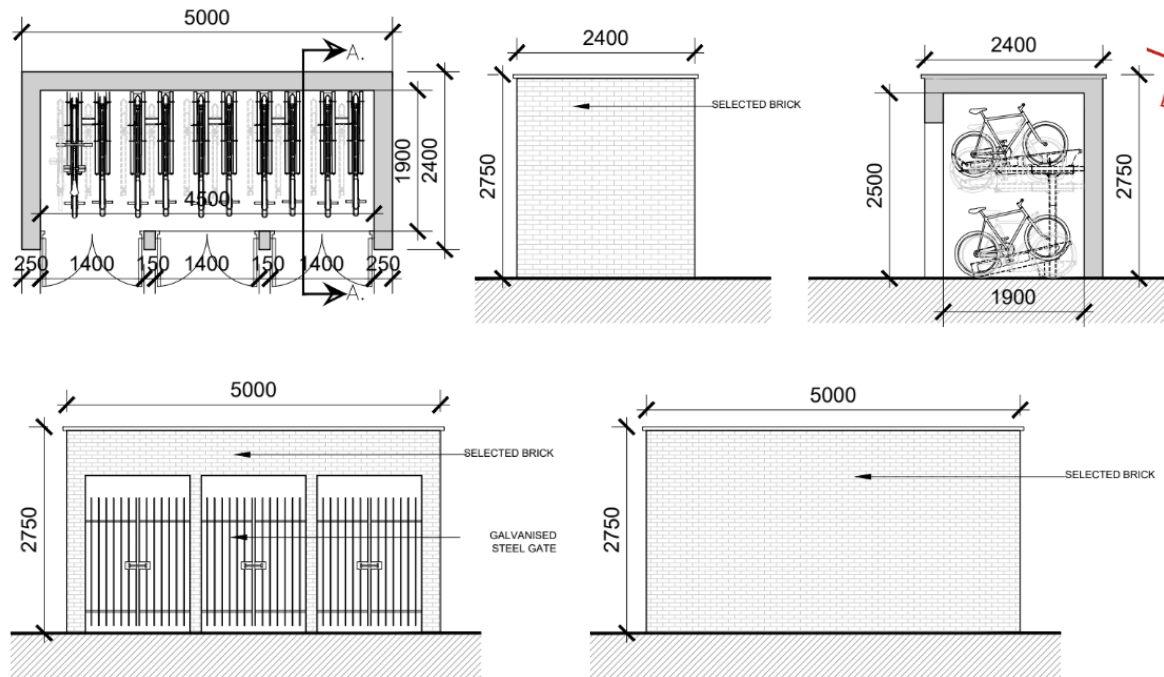


Figure 7.1: Proposed External Cycle Stores in Hollystown Sites 2 & 3

Kilmartin Local Centre

- 7.4.6 A total of 300 no. bicycle parking spaces are proposed at the Kilmartin Local Centre site comprising 230 no. long stay spaces for residents and 70 no. short stay spaces for both visitors and the non-residential activity.
- 7.4.7 In terms of long-stay parking, of the 230 no. spaces proposed 108 no. of these will be located in two secure, covered external cycle stores to the east of Block C. These proposed cycle stores, as shown in **Figure 7.2** below, will be secured requiring either a fob or keycode access.



Figure 7.2: Proposed External Cycle Stores in Kilmartin Local Centre

- 7.4.8 The remaining 122 no. secure resident cycle parking spaces will be located internally within the building and podium areas (84 no. spaces at Block C and 38 no. spaces within Block D) all of which will be in the form of two-tier racks.

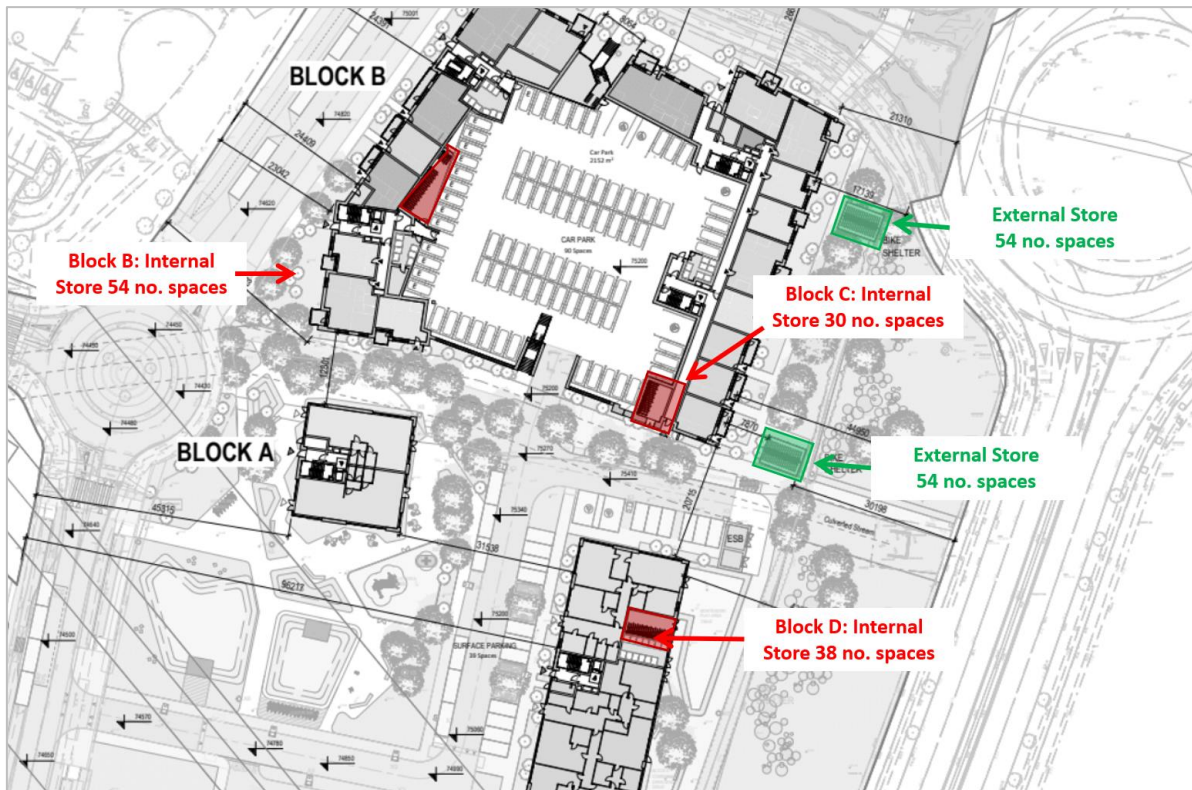


Figure 7.3: Cycle Store Locations (Internal & External) in Kilmartin Local Centre

- 7.4.9 Furthermore, the proposals also include that 10% of the long stay / resident cycle parking will be equipped with e-bike charging facilities, equating to a total of 23 no. eBike spaces. These will be distributed across the six separate long stay cycle stores. Electric cycle two-tier bike racks are proposed as shown in **Figure 7.4** and specification included in **Appendix E**.
- 7.4.10 70 no. short-stay / visitor cycle parking is to be provided for visitors, the creche / Montessori as well as the retail elements of the development. These will be provided in the form of Sheffield stands.
- 7.4.11 The proposed residential provision of 230 no. spaces at the Kilmartin Local Centre is in accordance with the DHPLG Apartment Guidelines which require 230 no. long stay spaces. The overall residential cycle parking provision for the Kilmartin Local Centre therefore equates to a rate of 1 space per bedroom.



Figure 7.4: Proposed Internal Cycle Store Locations in Kilmartin Local Centre

7.5 MANAGEMENT OF ON-SITE BICYCLE PARKING

- 7.5.1 All marketing material for the Hollystown-Kilmartin Development, in addition to the MMP's 'Welcome Pack', will publicize the availability and access arrangements to the on-site bicycle parking facilities. A management regime will be implemented by the development's management company to control the access towards the internal residential bicycle parking spaces at the podium level at the Kilmartin Local Centre site. The regime aims to actively manage the availability of bicycle parking for both residents and staff in order to sufficiently meet demand.
- 7.5.2 The management intends to promote the cycling facilities in order to raise awareness of the benefits of alternative active and more sustainable travel. A formal 'Sustainable Travel' induction package or a 'Welcome Travel Pack' will be

compiled and provided to each dwelling unit detailing the access arrangements to/from the bicycle parking area.

7.6 BICYCLE PARKING ALLOCATION

- 7.6.1 The building management team will be responsible for the day-to-day management of bicycle parking operations. All residents of the permitted residential apartment scheme will have the opportunity to obtain a key code / electronic fob to access the on-site long-stay bicycle parking spaces.
- 7.6.2 These bicycle parking spaces will be allocated one on a 'first come, first served' basis. Cyclists who would be visiting the scheme will be able to utilize the dedicated Sheffield Stands at the surface level.

8.0 SUMMARY AND CONCLUSION

8.1 OVERVIEW

- 8.1.1 DBFL Consulting Engineers (DBFL) has been commissioned by Glenveagh Homes Limited to prepare a Traffic and Transport Assessment (TTA) for a proposed mixed use development at Hollystown, Dublin 15. The proposals seek permission for the provision of 548 no. residential units (comprising 428 no. units in Hollystown Sites 2 & 3 and 120 no. units in Kilmartin Local Centre). A 144.5sqm community hub facility, 154sqm café/retail unit, two creche facilities and a Montessori are also proposed in the Kilmartin Local Centre.
- 8.1.2 The scheme also proposes a new vehicular access onto the R121 and an extension of the existing partially constructed Link Street which currently serves the Le Chéile Secondary School. A connected network of pedestrian and cyclist links are also proposed providing connections and permeability to, through and from the subject site.
- 8.1.3 The purpose of this TTA is to quantify the existing transport environment and to detail the results of assessment work undertaken to identify the potential level of transport impact generated as a result of the proposed development. Our methodology incorporated a number of key inter-related stages, including;
- Site Audit,
 - Planning File Review,
 - Policy Review,
 - Commissioning and Analysis of Traffic Surveys,
 - Trip Generation, Distribution and Assignment, and Network Impact
 - Network Analysis.
- 8.1.4 This TTA has carried out a range of assessments for an Opening Year of 2023, Interim Year of 2028 and a Future Horizon Year of 2038. This assessment assumed and accounted for complete development and occupation of all units proposed to occur by Opening Year, as this provided a conservative design assessment of network operations.
- 8.1.5 Based upon the information and analysis detailed within this TTA, it has been demonstrated that:

- The site of the proposed residential development is ideally located to maximise access to / from the site by sustainable forms of travel including walking and cycling to local amenities. There are also high-quality public transport links to Blanchardstown, Broombridge and Dublin City Centre.
- The proposals are in accordance with the land use zoned for the subject development site, which is described within the Fingal Development Plan 2017-2023 as to "*Provide for new residential communities subject to the provision of the necessary social and physical infrastructure*".
- The subject site and the access junction proposals being promoted will deliver a number of benefits for pedestrians and cyclists with a network of dedicated and shared linkages integrating with the off-site network to provide attractive, safe and convenient connections towards the Avenue, the R121 and Tyrrelstown Local Centre to the south.
- The site benefits from good accessibility to a number of bus services with interchanges being located in the local centre which is within a convenient walking distance of the subject development site (approx. 550m south of the site).
- The subject development will benefit from the enhanced accessibility levels afforded by the emerging BusConnects proposals by the NTA. Under the proposals, two new bus routes (Route B3 and Route L62) will connect Tyrrelstown with Dublin City Centre including intermediate destinations and Broombridge, respectively.
- The subject scheme proposes to provide 930 no. car parking spaces, including 870 no. spaces for residential units. Hollystown Sites 2 & 3 will have a total of 792 no. car park spaces, comprising 762 no. spaces allocated to residents and 30 no. spaces as visitor parking. The Kilmartin Local Centre will have a provision of 138 no spaces, including 108 no residential spaces, 5 no. staff creche/Montessori, 10 no. set down spaces, 6 no. visitor and 9 no. public spaces on the Link Street.
- The proposed quantum of car parking has been developed in reference to both the FCC Development Plan and to national guidance. Consequently, the

proposed provision is considered appropriate based on the accessibility characteristics of the subject site.

- The proposed development provides a total of 525 no. cycle parking spaces comprising 441 no. long term and 84 no. short stay cycle parking spaces. The residential cycle parking has been provided in accordance with the DHPLG Apartment Guideline requirements.
- A junction impact analysis was undertaken and has demonstrated that due to the proposals, all junctions will exceed the FCC's 2.5% threshold impact during the 2038 Future Design Year scenario. Consequently, additional performance analysis was conducted on all junctions. **Figure 8.1** details the total amount of two-way vehicle trips that will pass through the key off-site junctions in the assessment year of 2038 and the resulting percentage increase in traffic flows as a result of the traffic generated by the proposed development.



Figure 8.1: Increase in Vehicle Trips Generated at Site Access and Key Off Site Junctions (2038 Do-Something)

- An operational assessment of the junctions was undertaken using the Junction computer package ARCADY and PICADY. Under the 'Do-Something' Scenario, the result of the analysis showed that:

In the 2023 Opening Year:

- **Junction 1:** Maximum Ratio to Flow Capacity (RFC) of 5% (AM) and 3% (PM) on the Main Access arm of Hollystown Site 2.
- **Junction 2:** Maximum RFC of 6% during both the AM and PM peak on the Kilmartin L.C.'s site entrance.
- **Junction 3:** Maximum RFC of 37% (AM) and 7% (PM) on the southern arm of the Hollywood Drive Roundabout (with the proposed northern arm in place).
- **Junction 4:** Maximum Delay of 9.69 seconds (AM) and 7.69 seconds (PM) at the southern arm of the Link Street junction.
- **Junction 5:** Maximum RFC of 68% (AM) on the northern R121 arm and 40% (PM) on the southern R121 arm.
- **Junction 6:** Maximum RFC of 34% (AM) and 49% (PM) on the Boulevard arm.
- **Junction 7:** Maximum RFC of 62% (AM) on the northern R121 arm and 41% (PM) on the southern R121 arm.

In the 2038 Future Design Year:

- **Junction 1:** Maximum RFC of 21% (AM) and 14% (PM) on the Main Access arm of Hollystown Site 2.
- **Junction 2:** Maximum RFC of 7% (AM) and 6% (PM) on the Kilmartin L.C.'s site entrance.
- **Junction 3:** Maximum RFC of 48% (AM) and 11% (PM) on the southern arm of the Hollywood Drive Roundabout (with the proposed northern arm in place).
- **Junction 4:** Maximum Delay of 11.11 seconds (AM) and 9.19 seconds (PM) at the southern arm of the Link Street junction.

- **Junction 5:** Maximum RFC of 97% (AM) on the northern R121 arm and 49% (PM) on the southern R121 arm.
- **Junction 6:** Maximum RFC of 44% (AM) and 60% (PM) on the Boulevard arm.
- **Junction 7:** Maximum RFC of 80% (AM) on the northern R121 arm and 52% (PM) on the southern R121 arm.
- All of the results for this analysis show all junctions operates within capacity in the Opening 2023 Year. At the 2038 Future Design Year, the majority of junctions once again operate within capacity with Junction 5 close to approaching capacity.

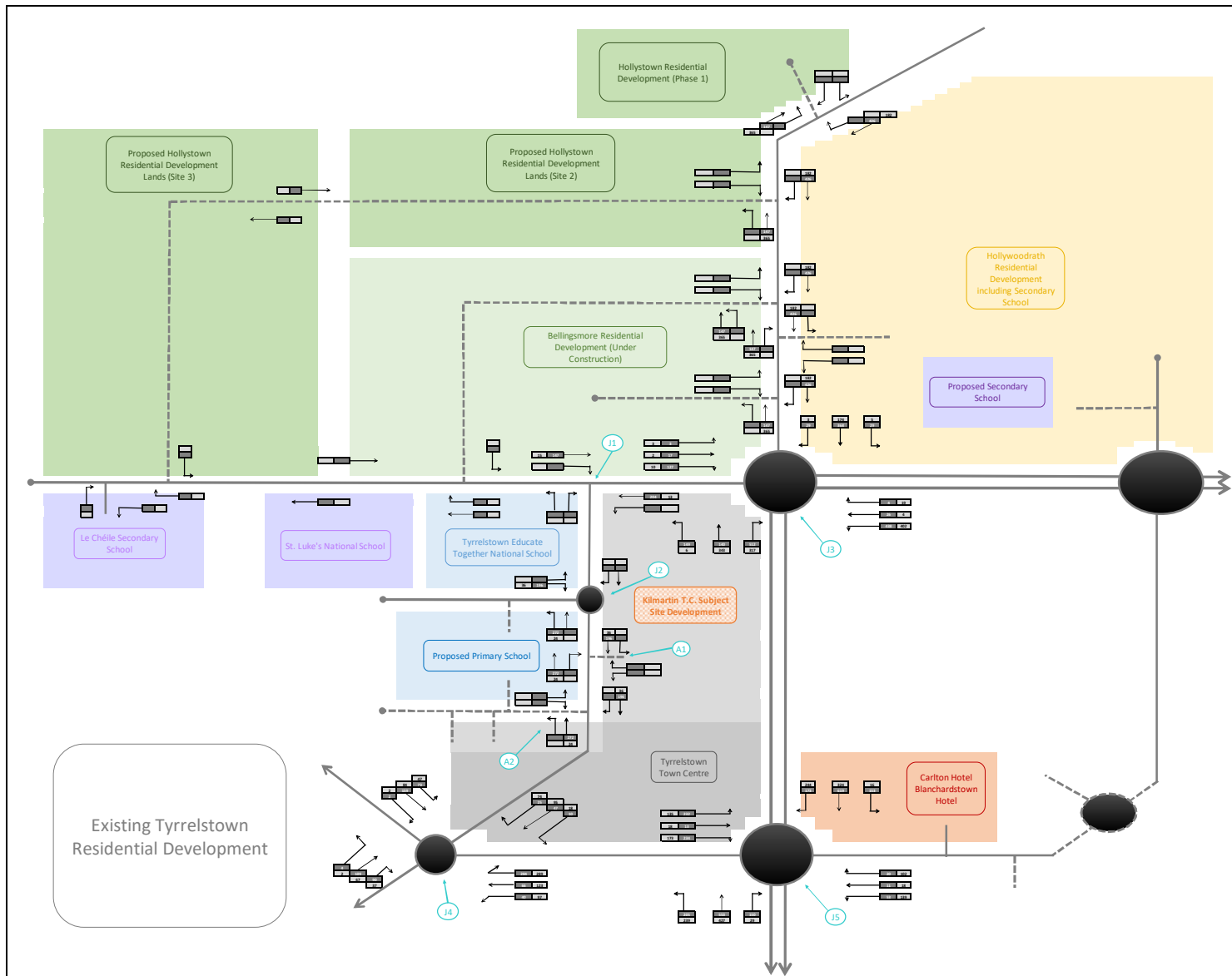
8.2 CONCLUSIONS

- 8.2.1 In conclusion, DBFL believes that the opportunity is available, in terms of transport and traffic, for the local authority to consider favourably the proposed residential development on the subject site.
- 8.2.2 It is concluded that there are no traffic or transportation related reasons that should prevent the granting of planning permission for the Hollystown Sites 2 & 3 and the Kilmartin Local Centre Mixed-Use Development.

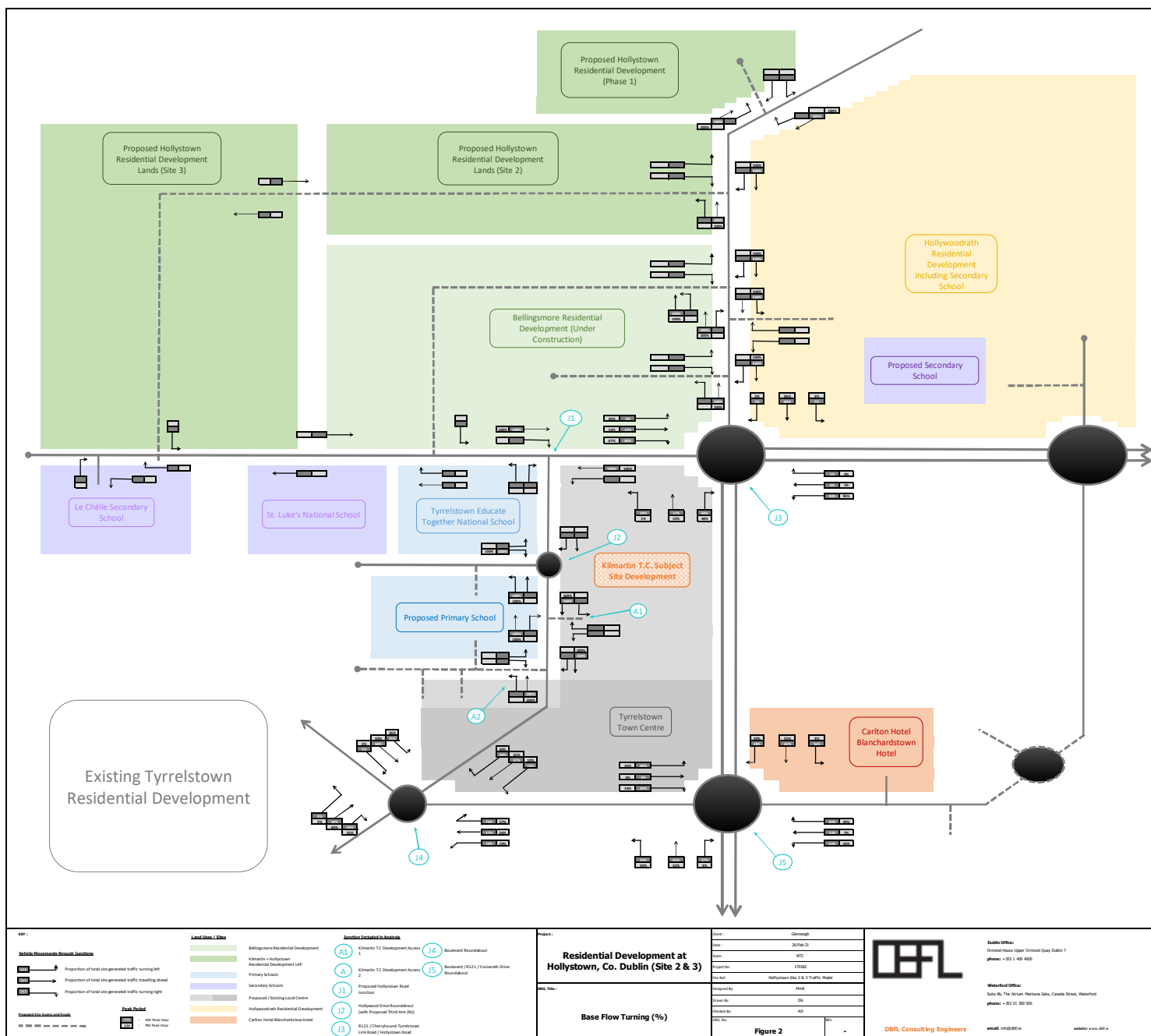
APPENDICES

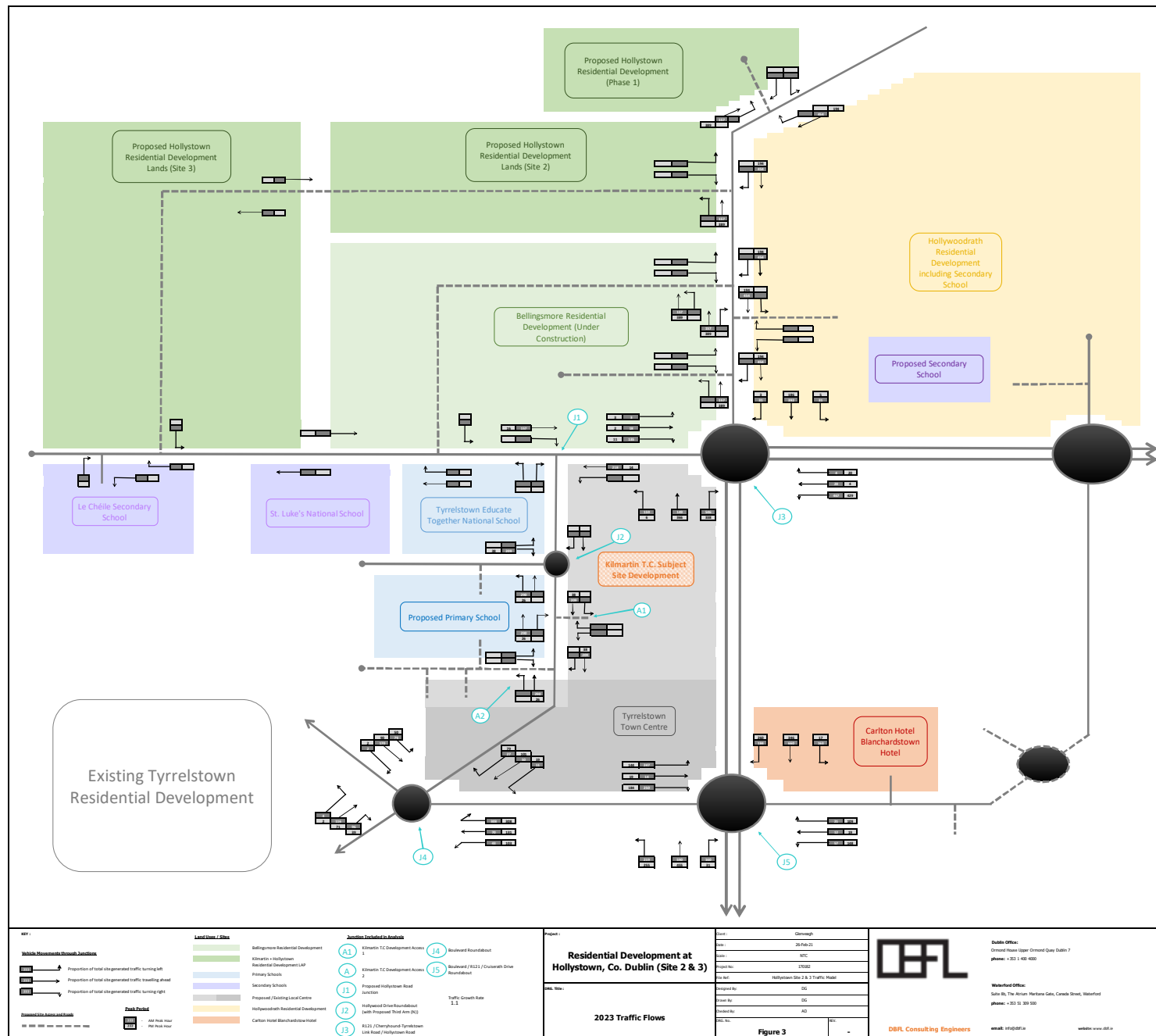
APPENDIX A

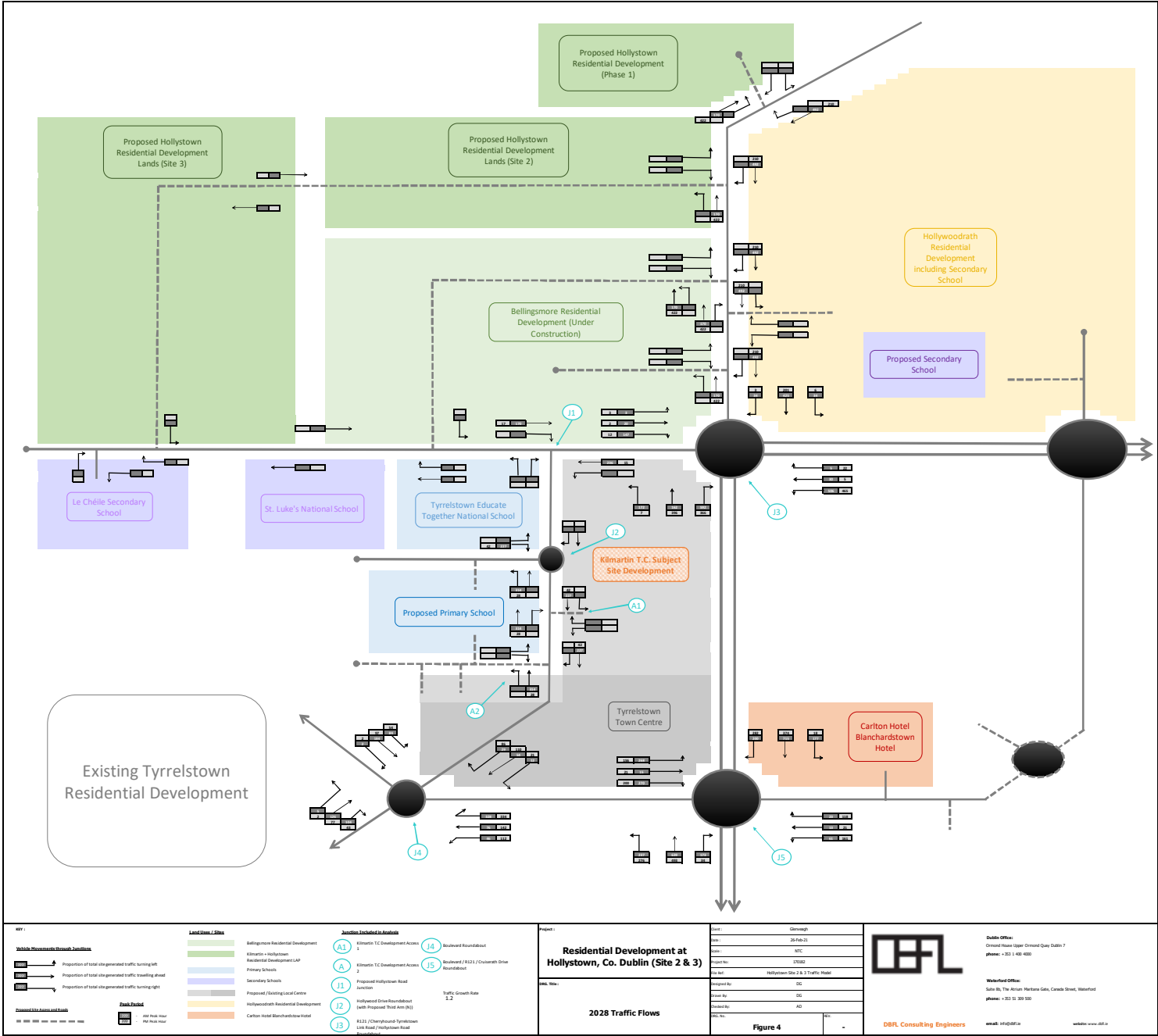
Traffic Flow Diagrams

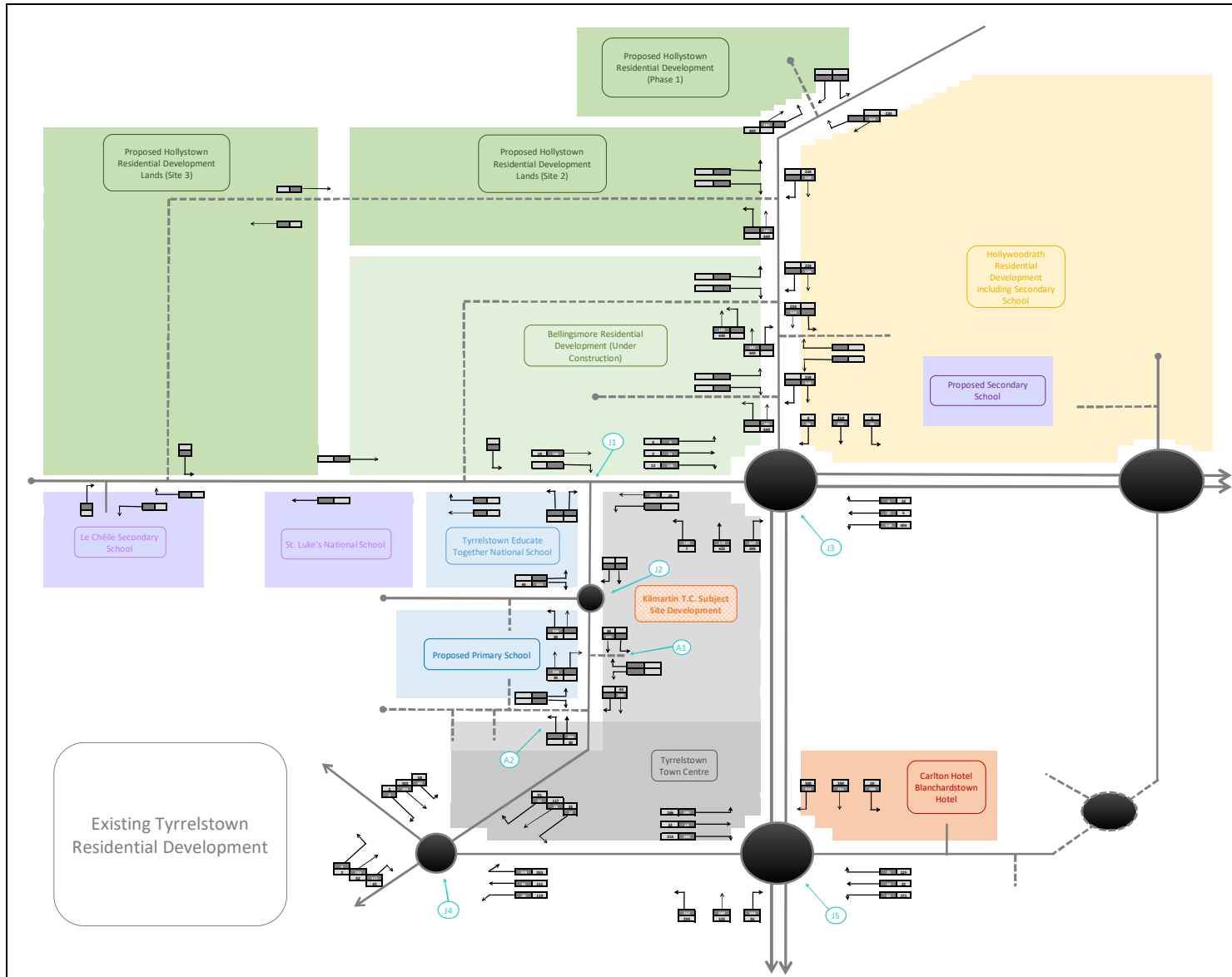


REV: Vehicle Movement Through Junction: Proposed / Existing Local Centre: Land Use / Site: Junctions Included in Analysis:	Project 1: Residential Development at Hollystown, Co. Dublin (Site 2 & 3) Base Traffic Flows (2019)	Table 1: Summary Data <table border="1"> <tr> <th>Item</th> <th>Value</th> </tr> <tr> <td>Site</td> <td>Clonsilla</td> </tr> <tr> <td>Date</td> <td>20-Feb-22</td> </tr> <tr> <td>Client</td> <td>WPC</td> </tr> <tr> <td>Project No.</td> <td>02000</td> </tr> <tr> <td>Site No.</td> <td>Hollystown (Site 2 & 3) Traffic Model</td> </tr> <tr> <td>Prepared By</td> <td>DB</td> </tr> <tr> <td>Drawn By</td> <td>DB</td> </tr> <tr> <td>Checked By</td> <td>AD</td> </tr> <tr> <td>Rev. No.</td> <td>01</td> </tr> </table> Figure 1	Item	Value	Site	Clonsilla	Date	20-Feb-22	Client	WPC	Project No.	02000	Site No.	Hollystown (Site 2 & 3) Traffic Model	Prepared By	DB	Drawn By	DB	Checked By	AD	Rev. No.	01	DBFL Consulting Engineers Dublin Office: Ground House Upper Crossmolina Quay Dublin 7 phone: +353 1 402 4000 Waterford Office: Sally Bn, The Arkway, Hacketts Gate, Canals Street, Waterford phone: +353 51 303 300 email: info@dbfl.ie website: www.dbfl.ie
Item	Value																						
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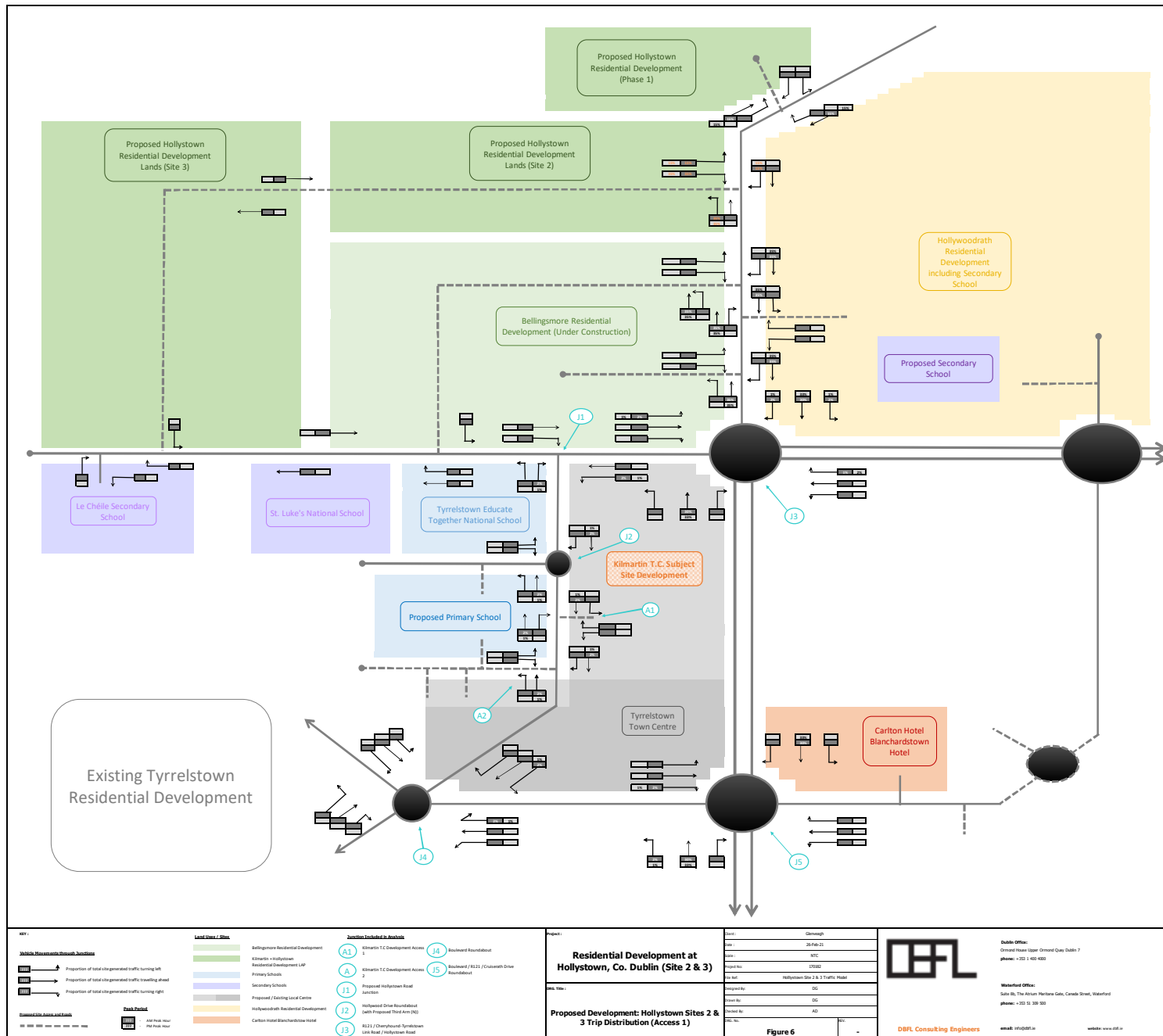


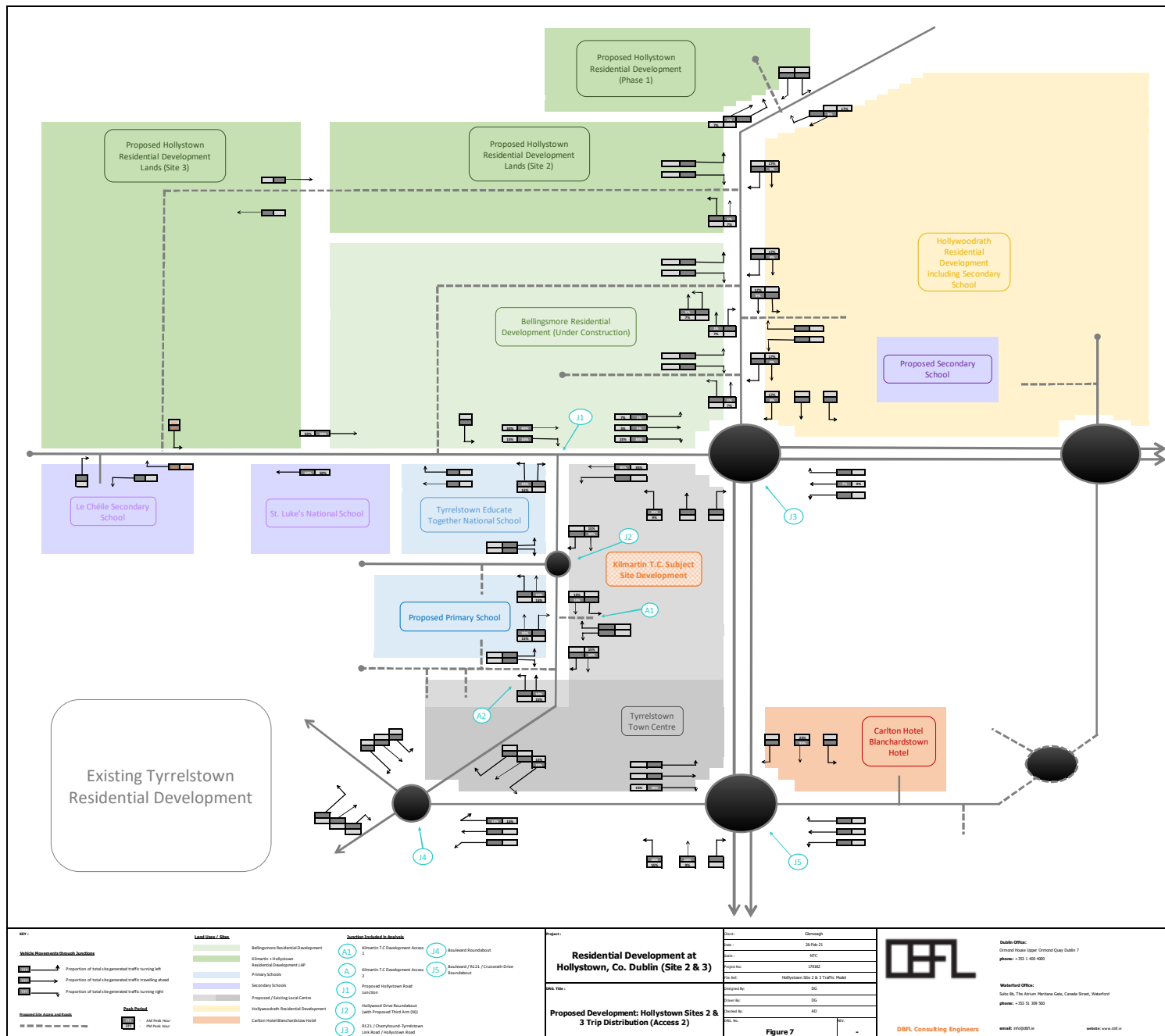


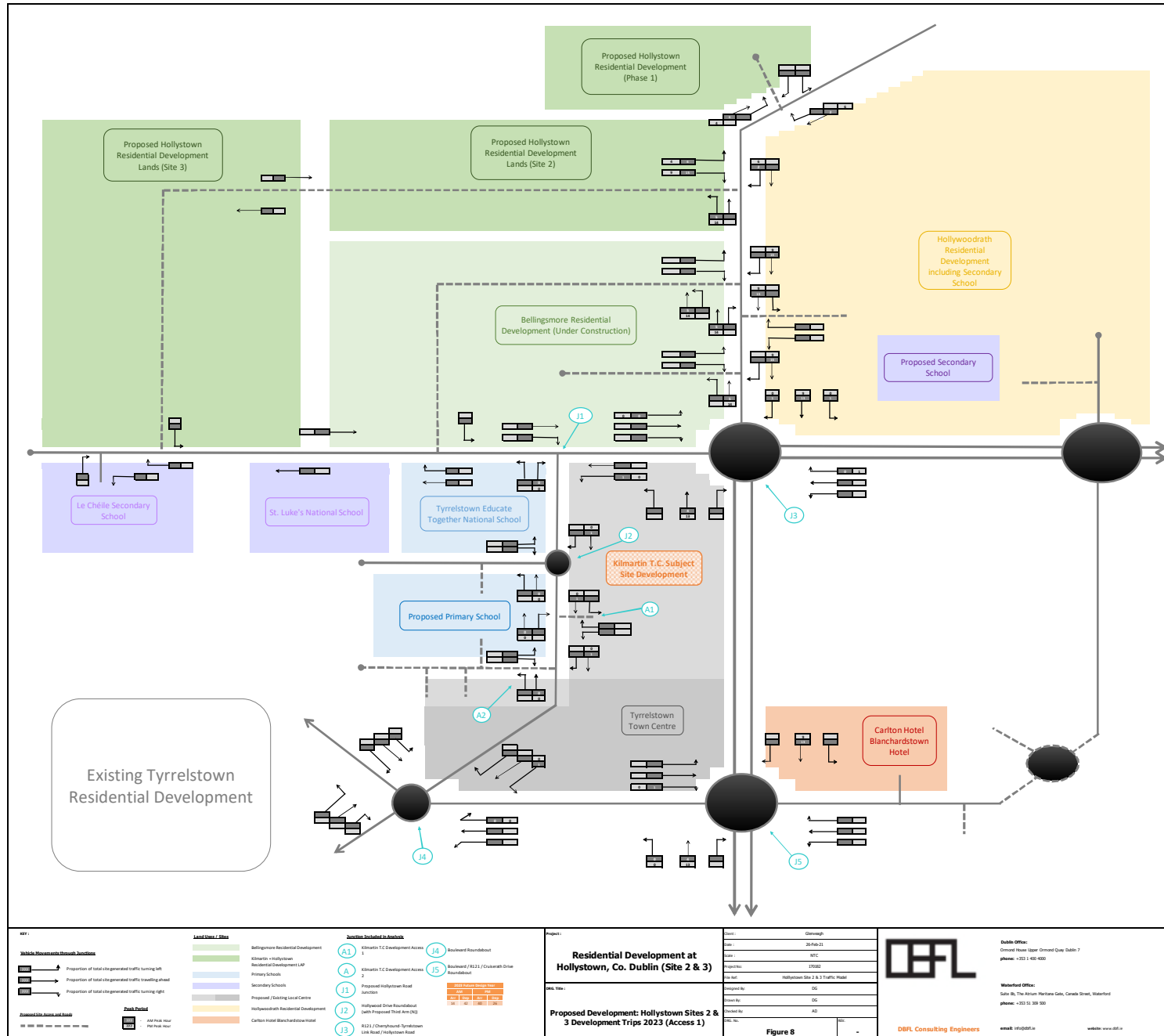


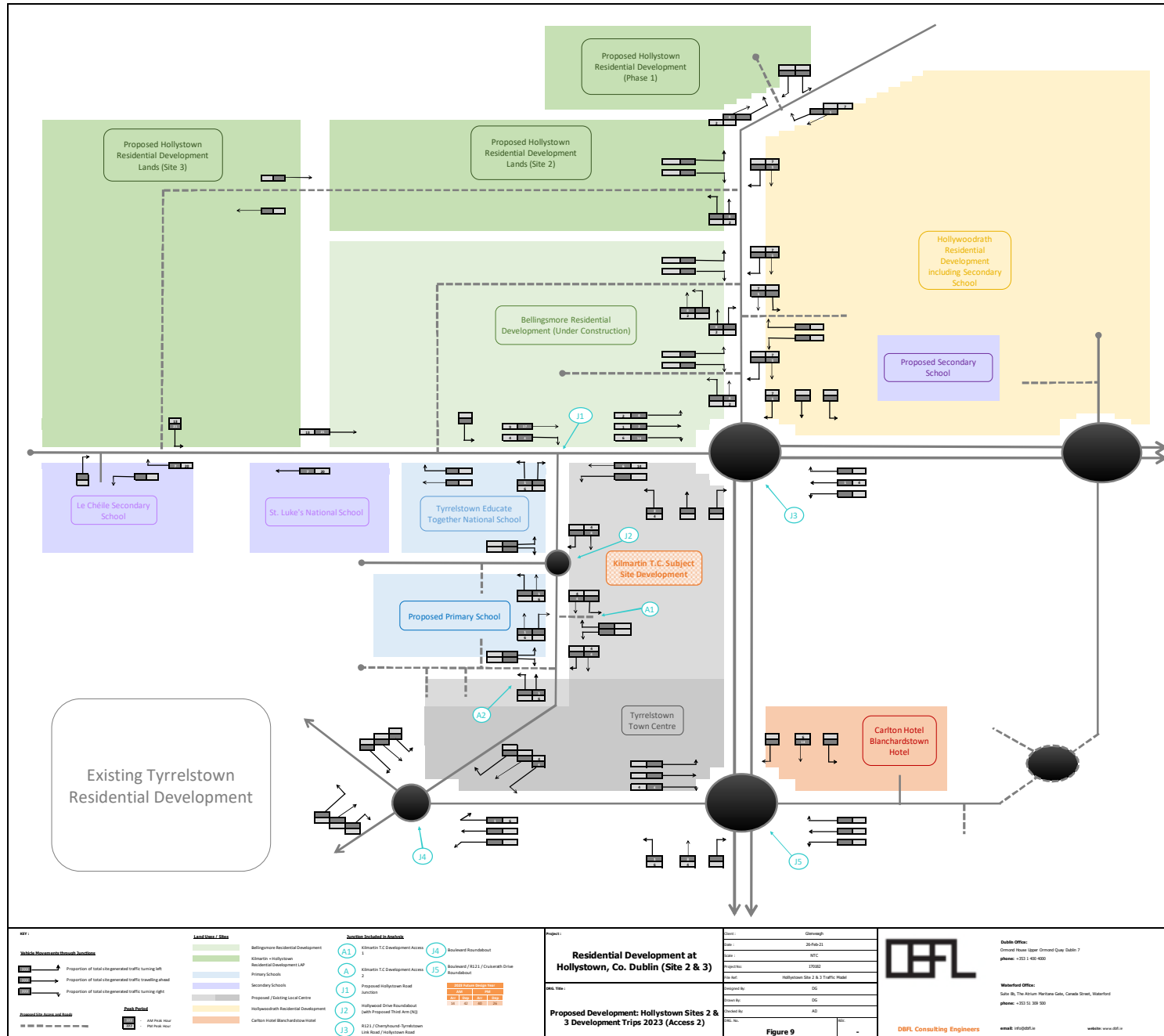


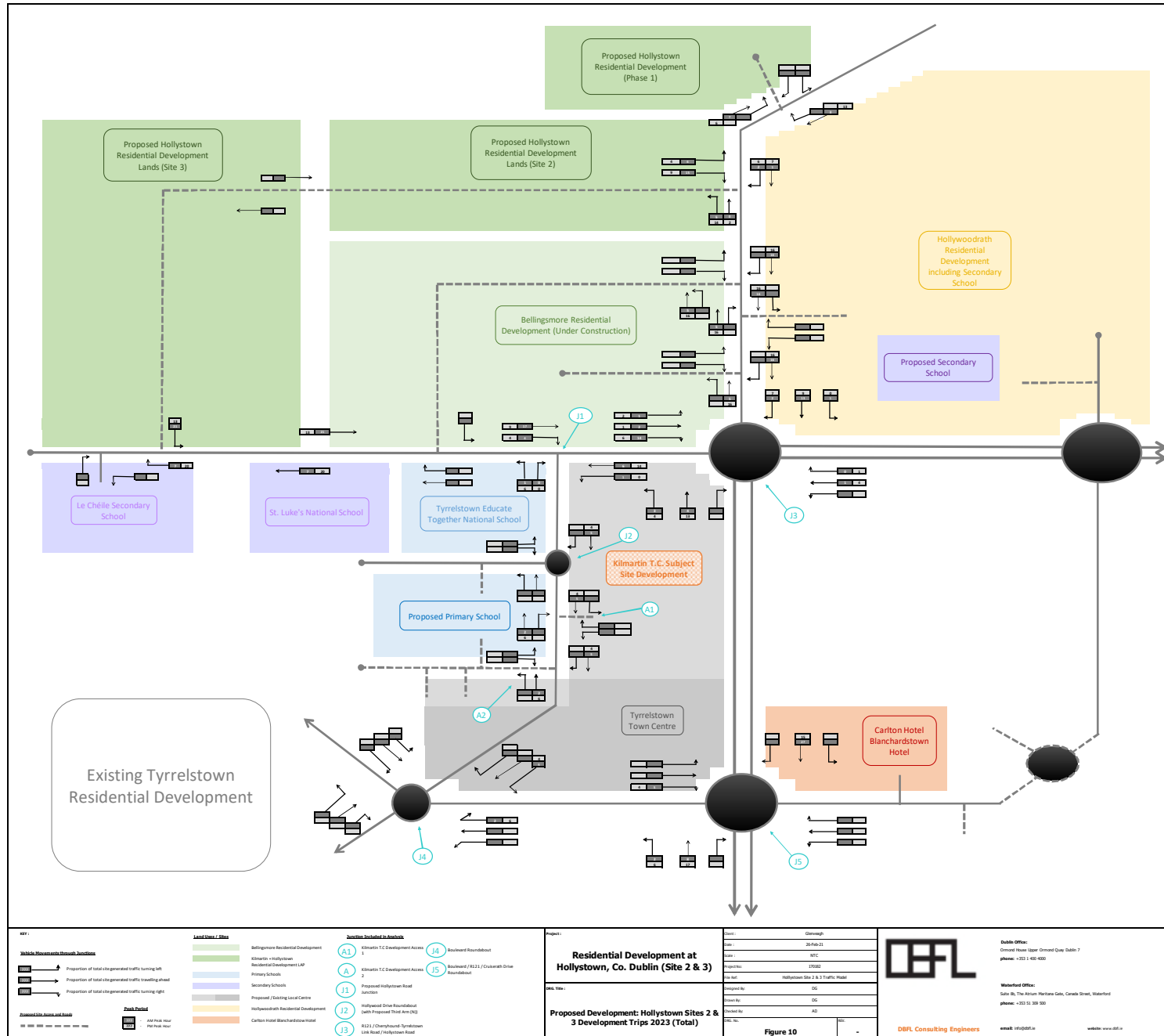
KEY Vehicle Movements through Junctions Proposition of total site generated traffic turning left Proposition of total site generated traffic travelling ahead Proposition of total site generated traffic turning right Peak Period AM Peak Hour PM Peak Hour Land Use / Site Bellingsmore Residential Development Kilmarin + Hollywood Residential Development LAP Primary Schools Secondary Schools Proposed / Existing Local Centre Hollywoodrath Residential Development Carlton Hotel Blanchardstown Hotel	Junctions Detailed in Analysis A1 Kilmarin T.C. Development Access 1 A2 Kilmarin T.C. Development Access 2 J11 Proposed Hollystown Road Junction J12 Hollywoodrath Drive Roundabout (with Proposed Road Arm (N)) J13 R123 / Cherrylands / Tyrrelstown Link Road / Hollywoodrath Road J4 Boulevard Roundabout J5 Boulevard / R123 / Clonsilla Drive Roundabout Traffic Growth Rate 1.2	Project : Residential Development at Hollystown, Co. Dublin (Site 2 & 3) Site Name : 2038 Traffic Flows Client : Orla Group Site: 20/06/20 Scale: 1:500 Project No.: 270802 Site Address: Hollystown Site 2 & 3 Traffic Model Designed By: DB Drawn By: DB Produced By: AD Rev. No.: 01	Figure 5 DBR Consulting Engineers Dublin Office: Ormond House Upper Ormond Quay Dublin 7 phone: + 353 1 402 4000 Waterford Office: Suite 40, The Avenue, Parkside Gate, Canalside Street, Waterford phone: + 353 51 309 500 email: info@dbre.ie website: www.dbre.ie

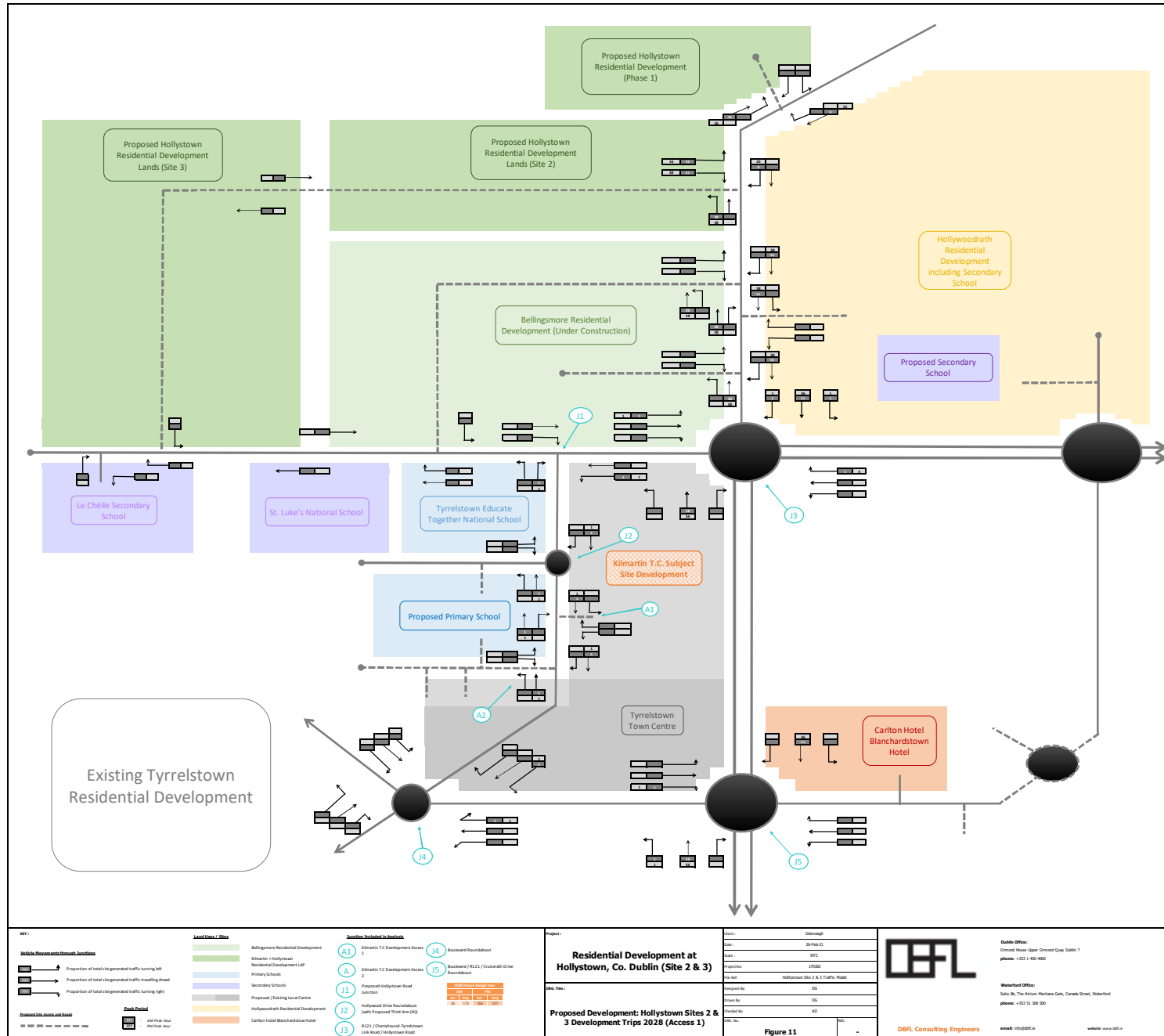


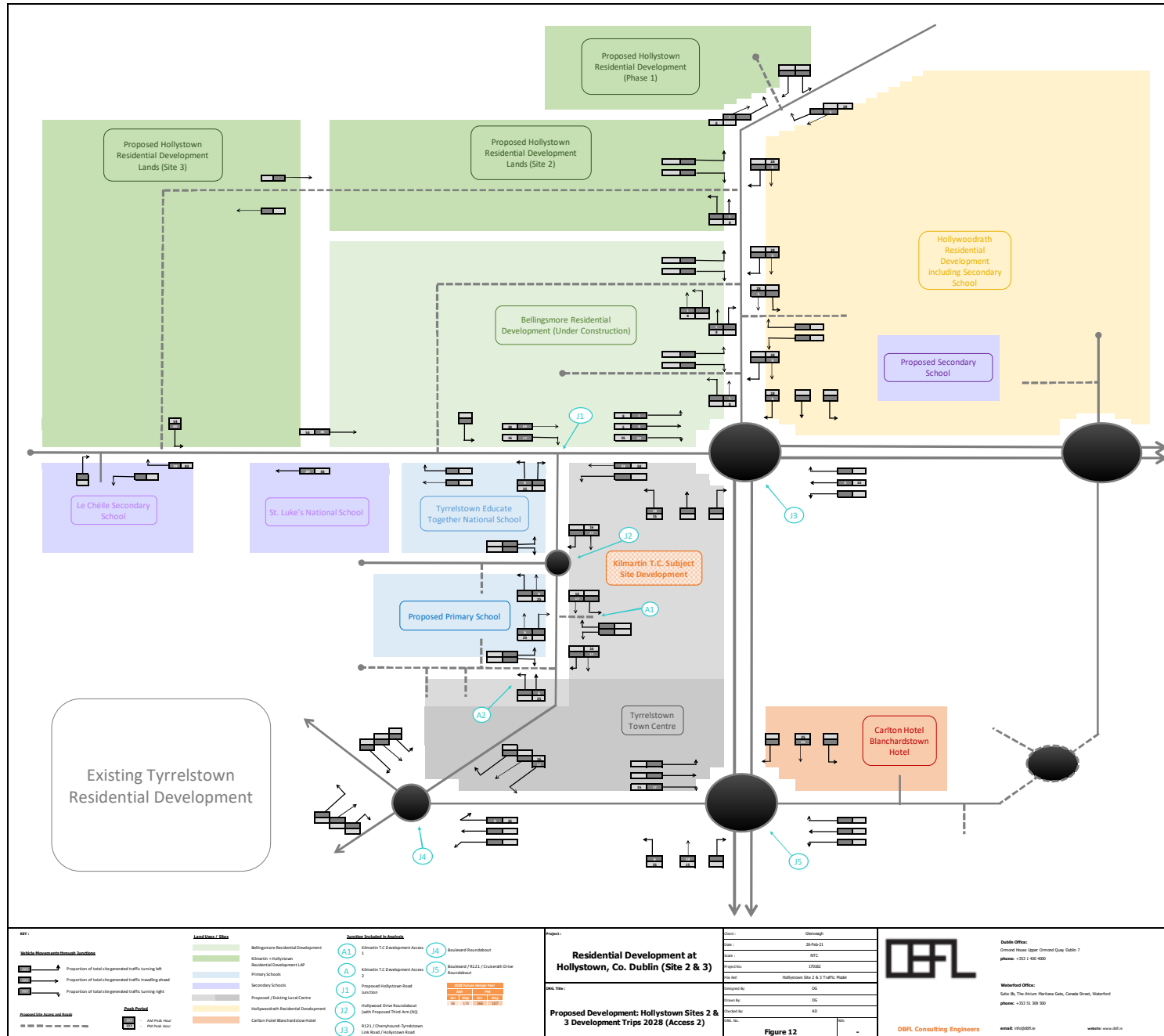


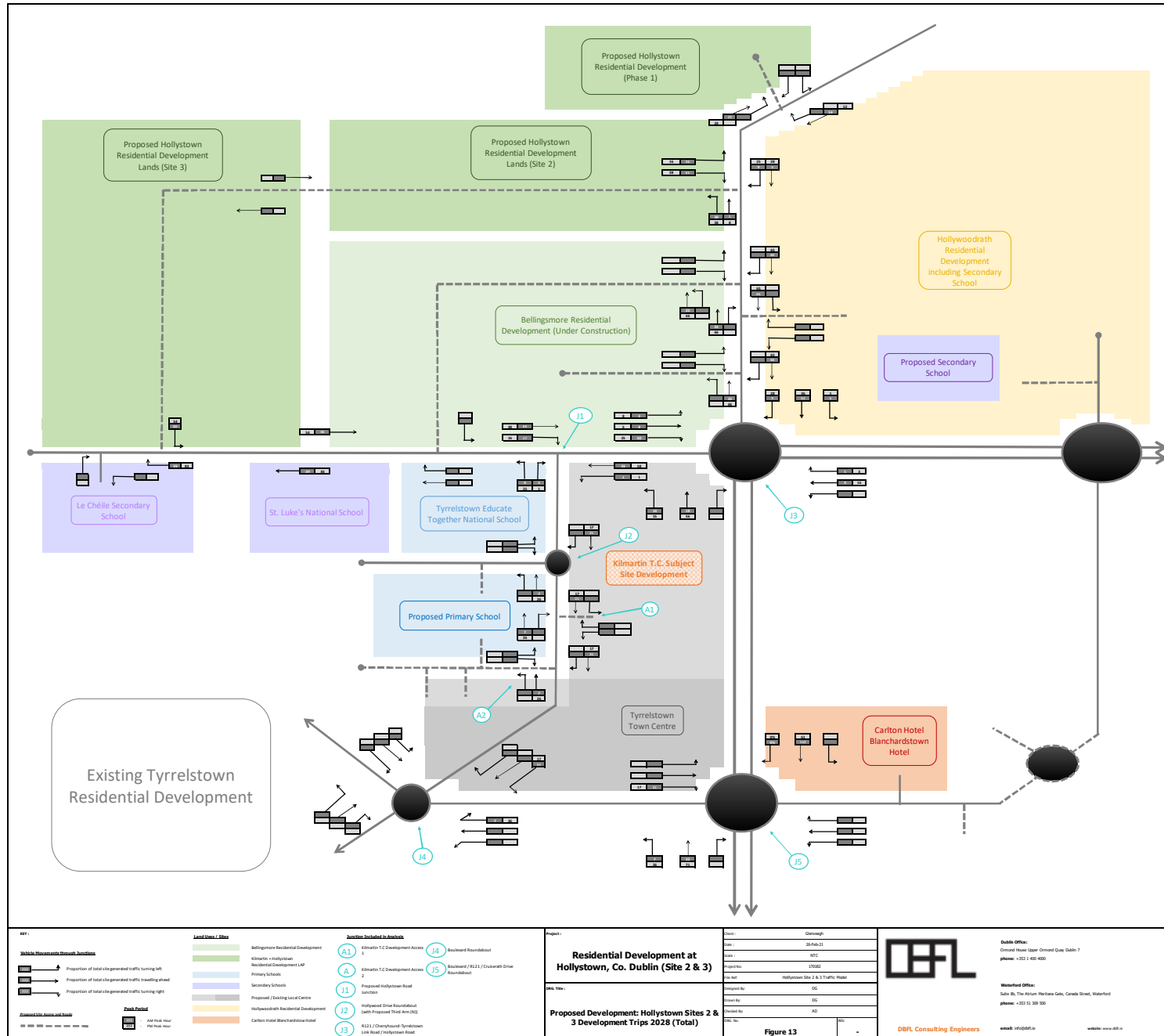


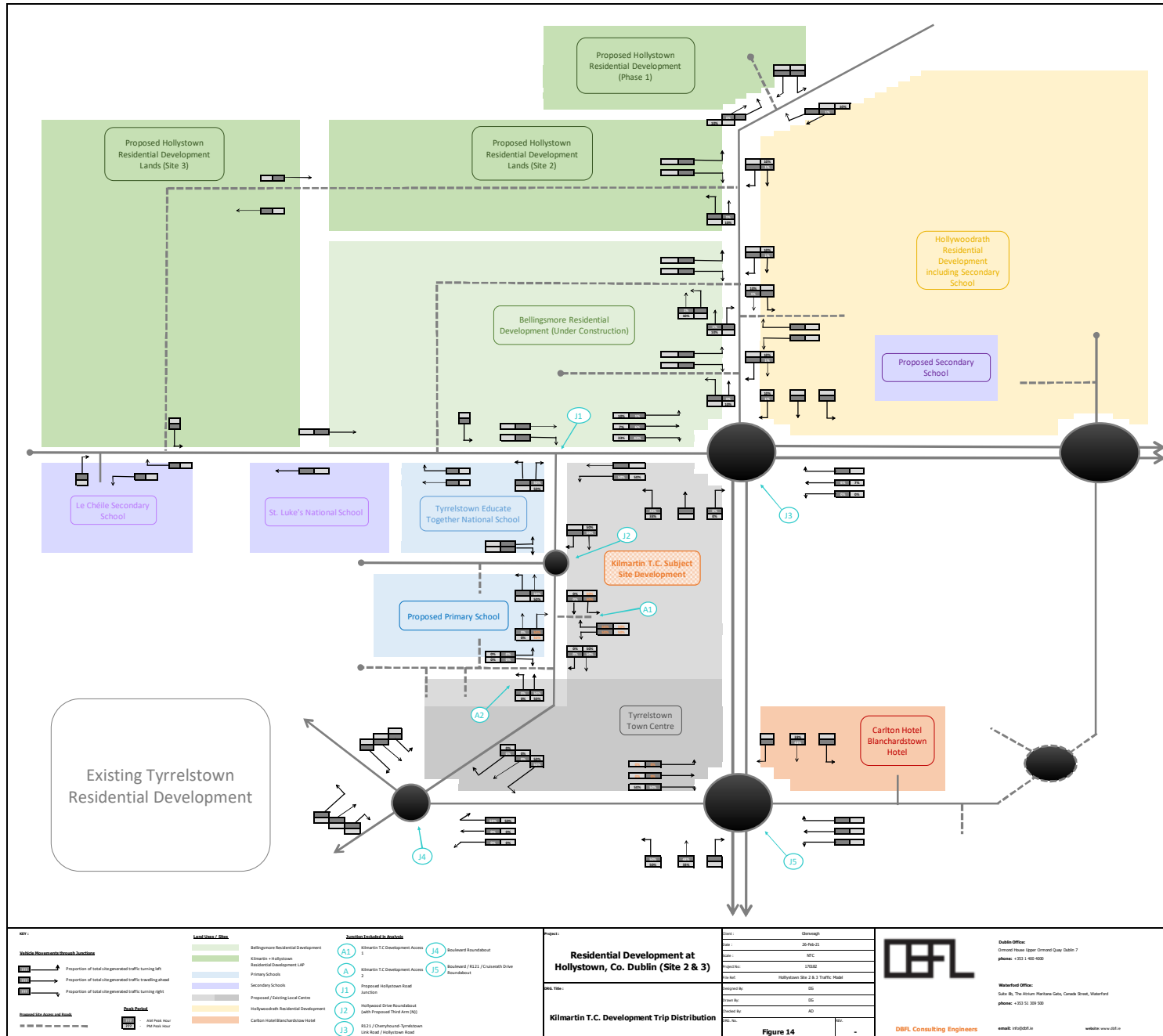


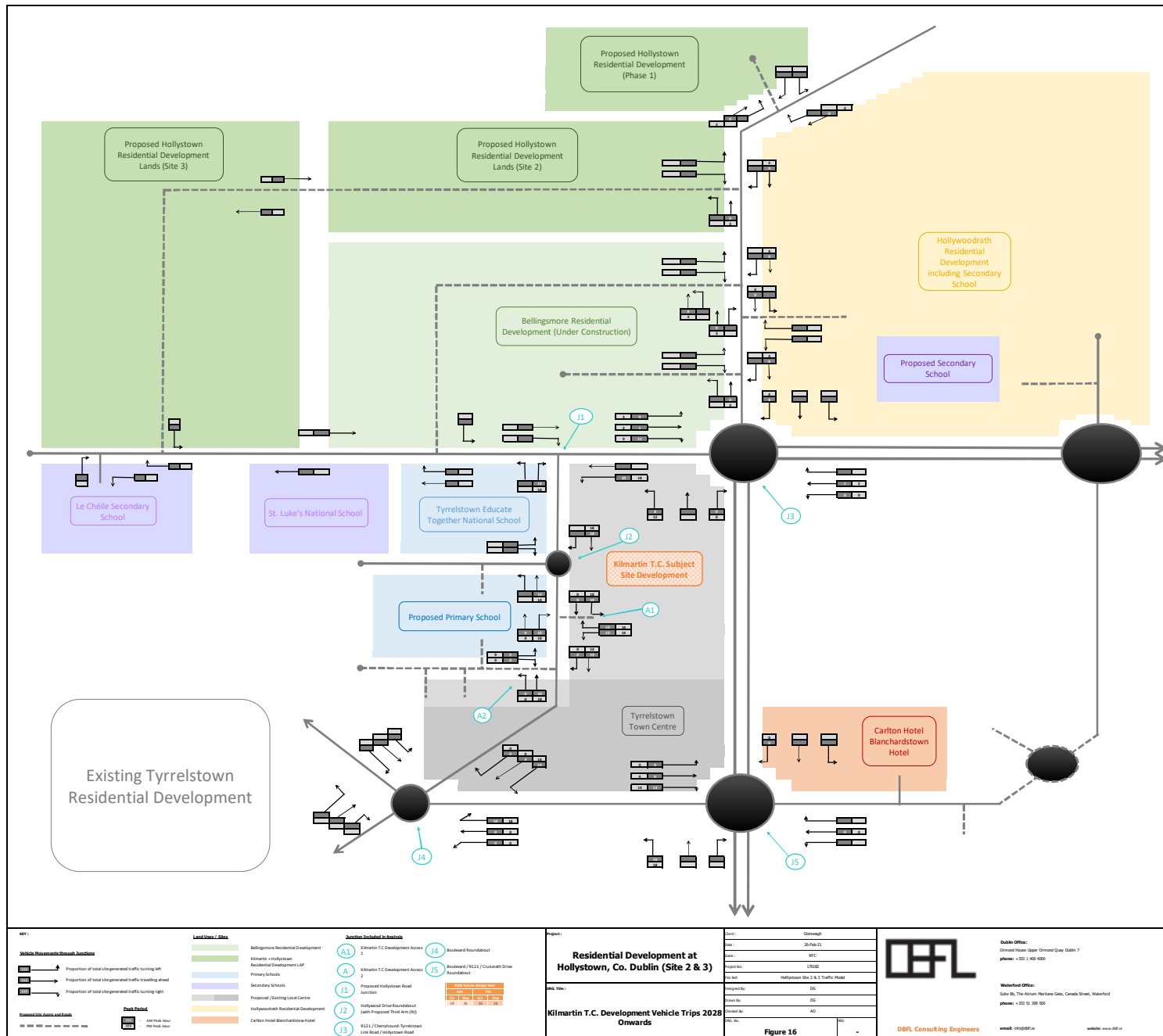


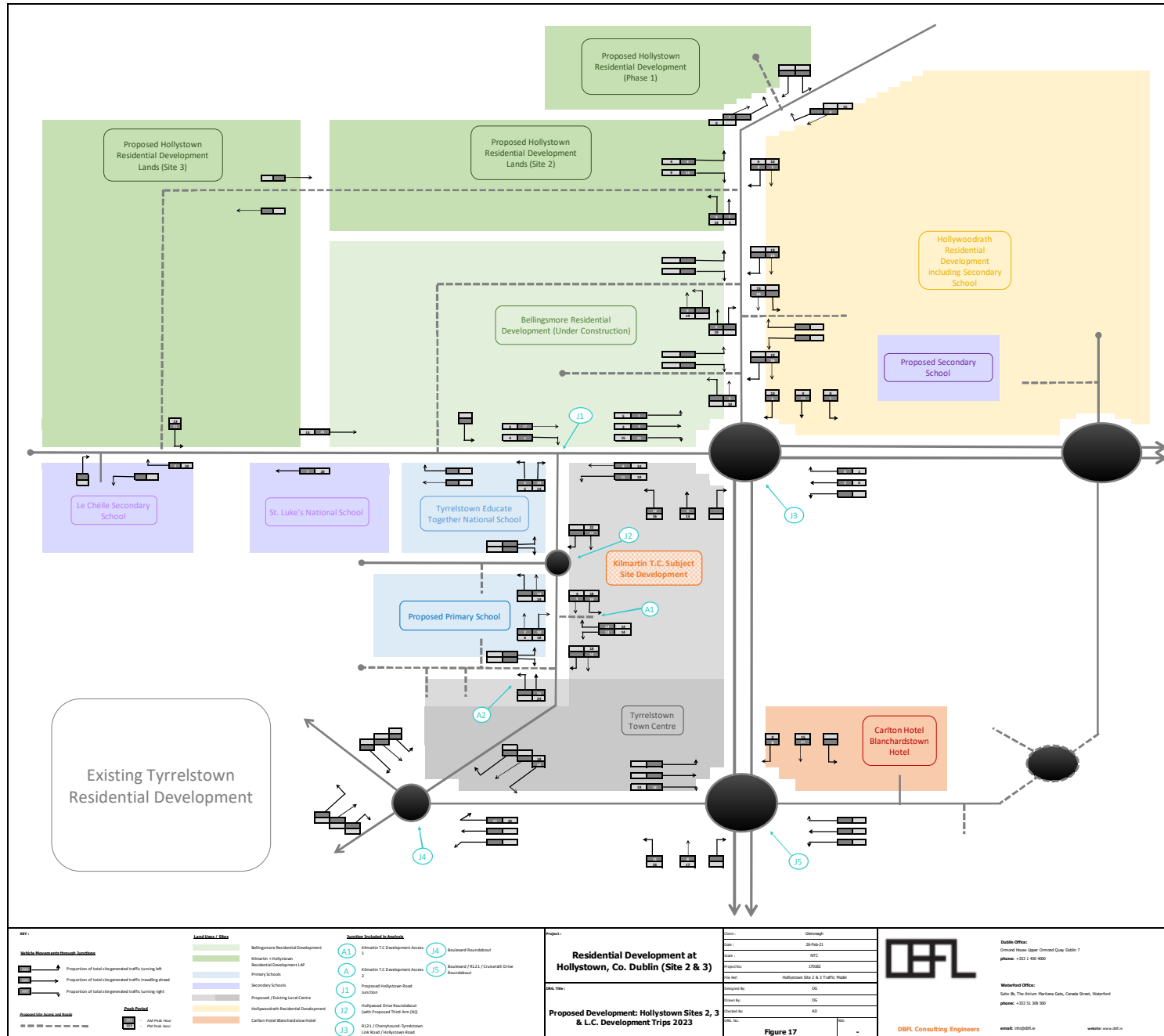


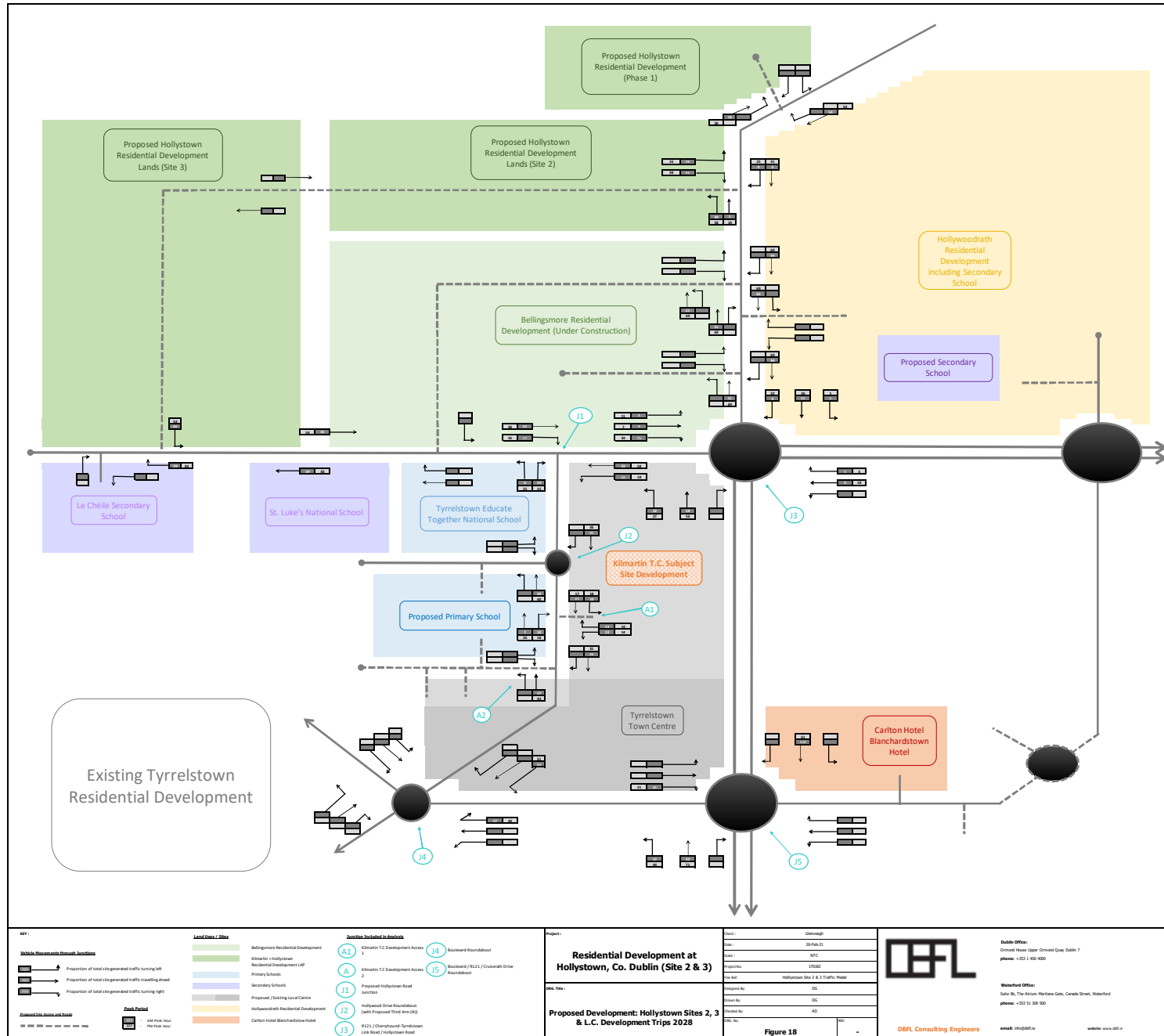


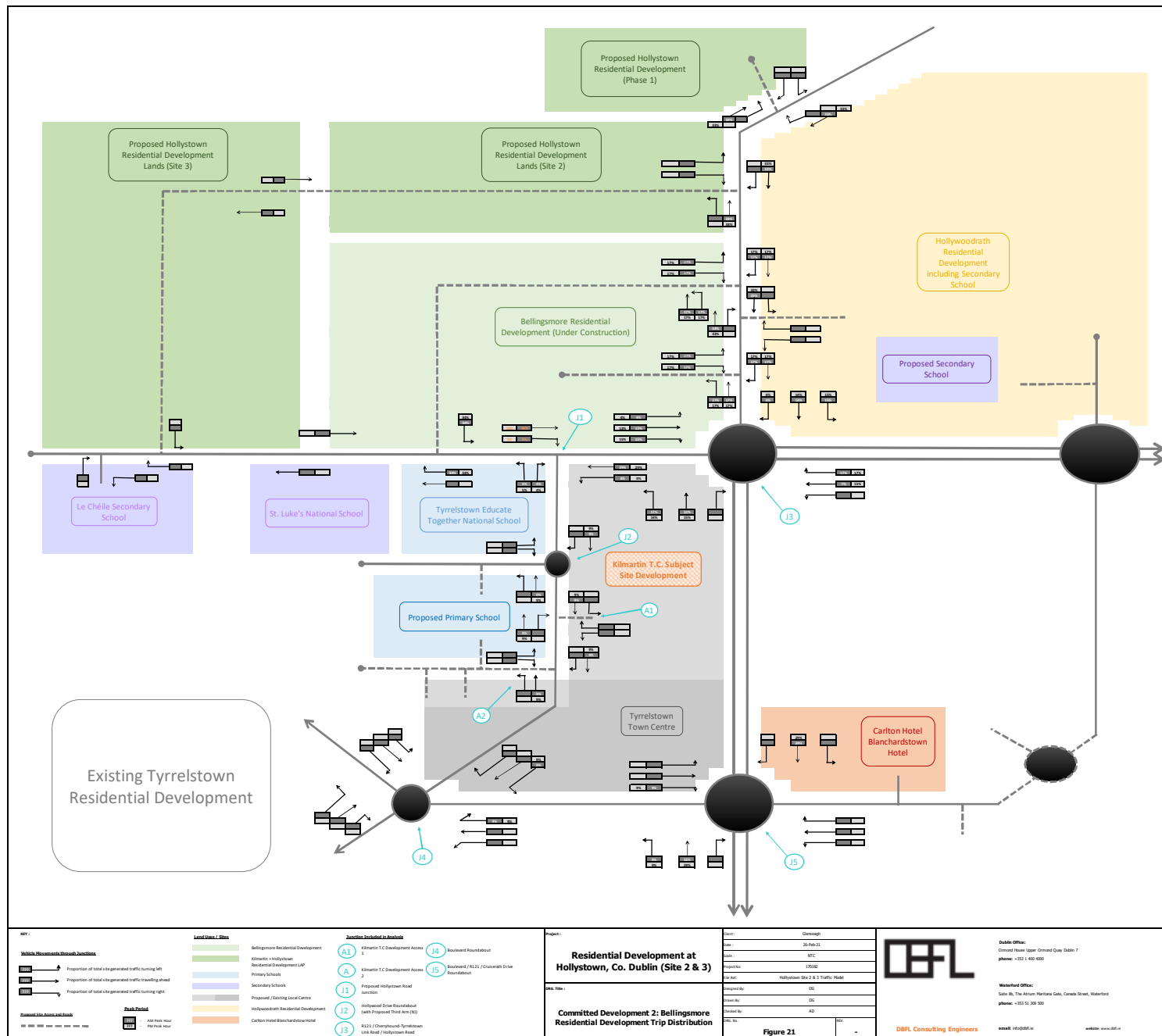


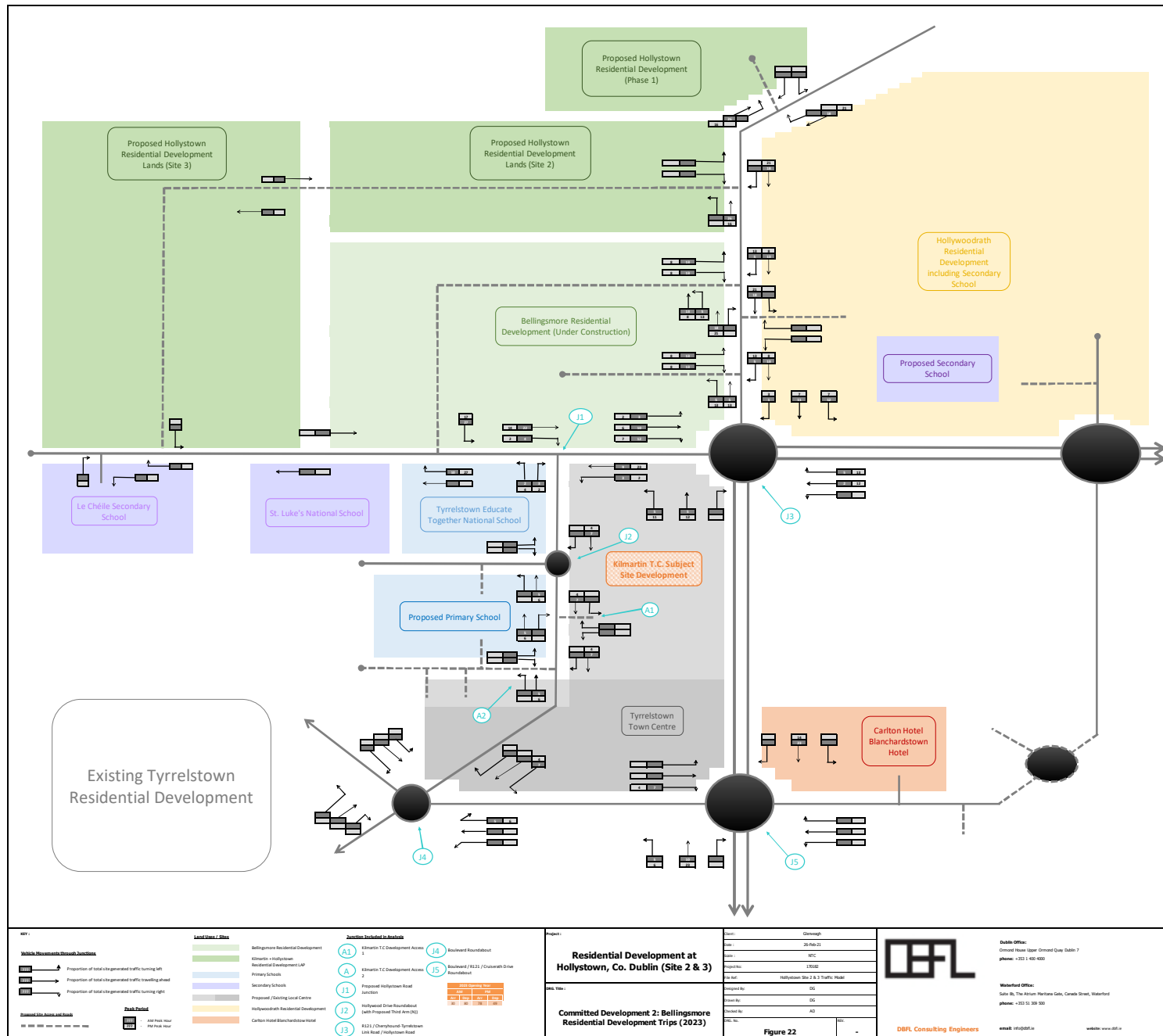


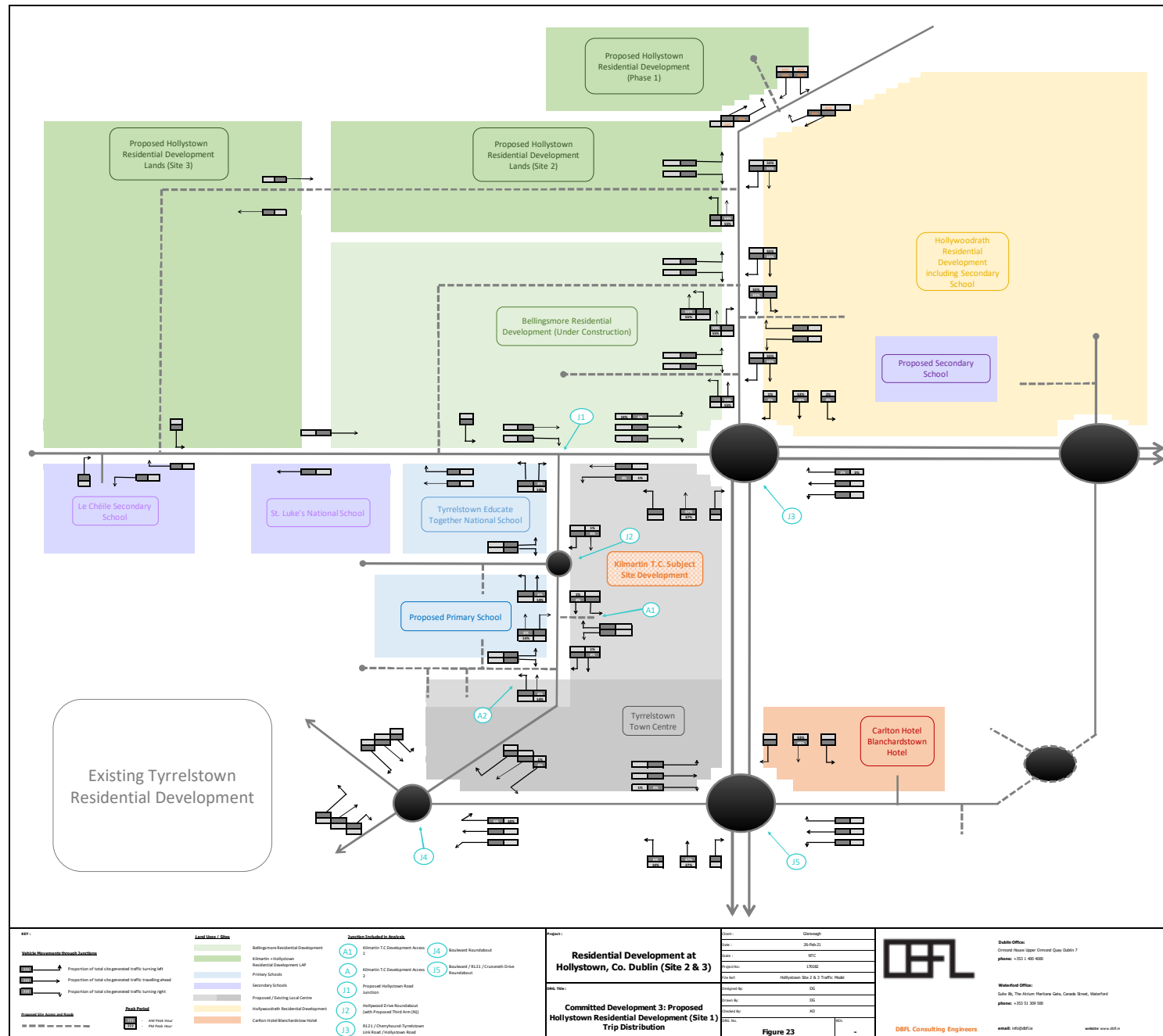


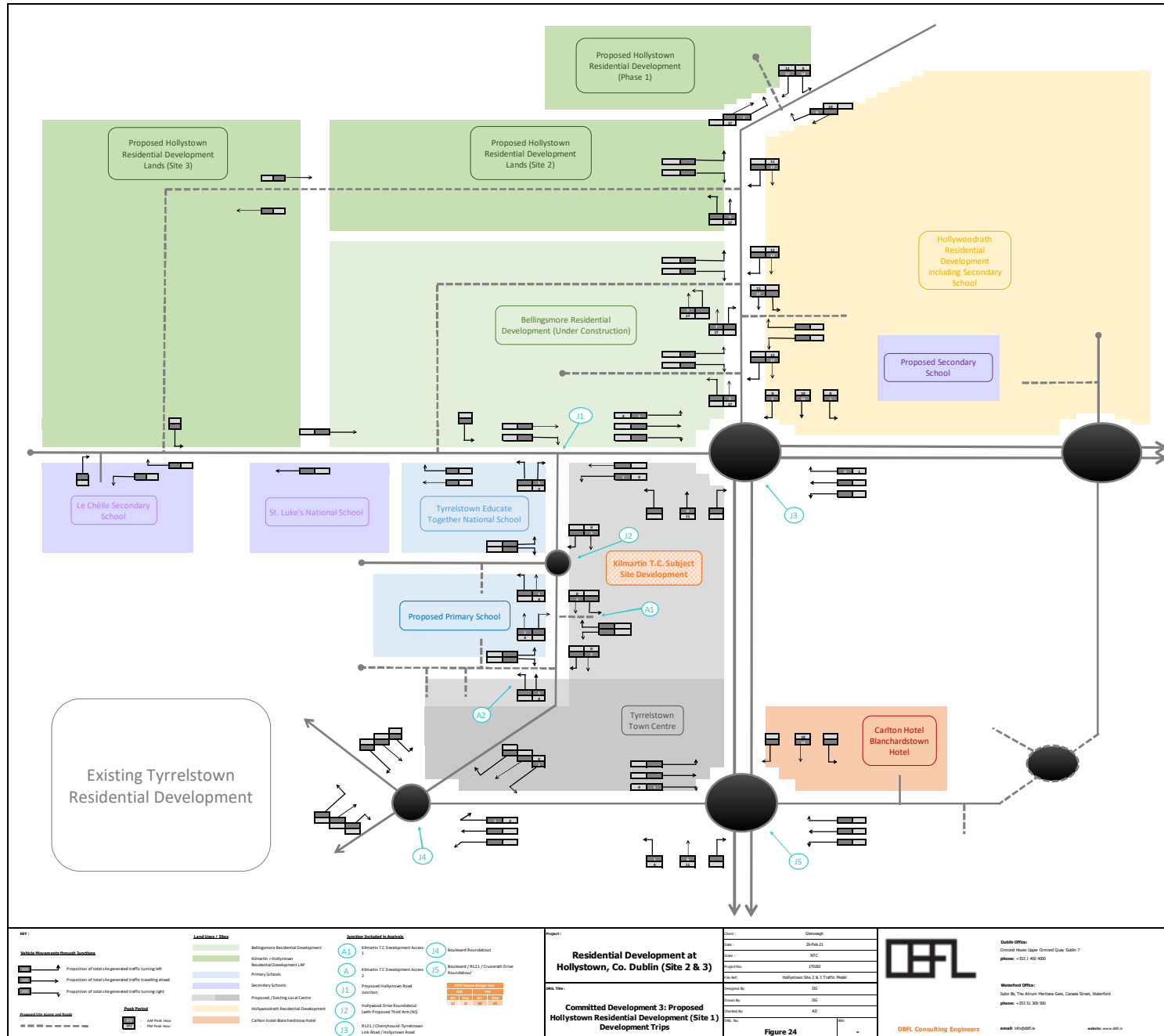


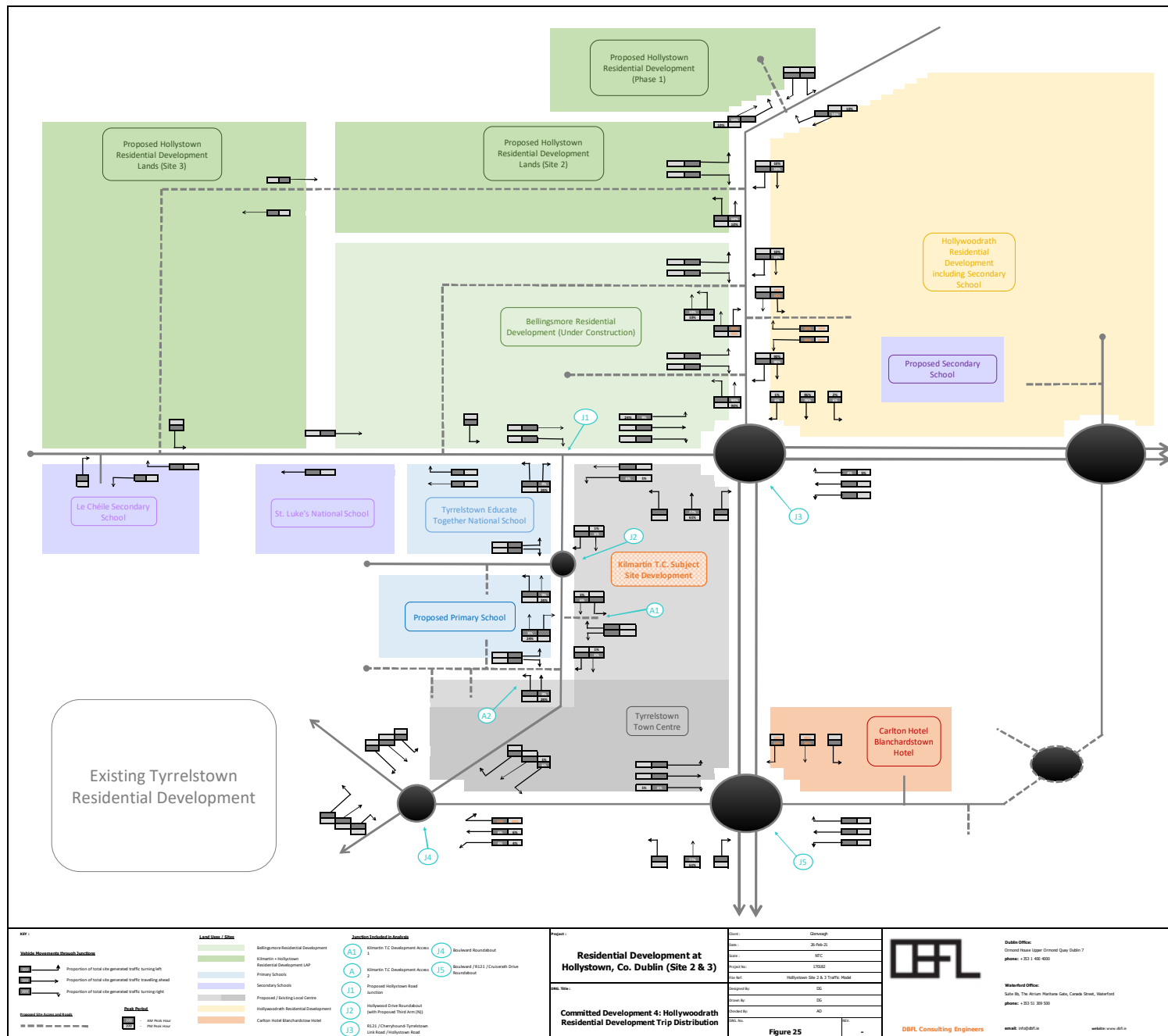


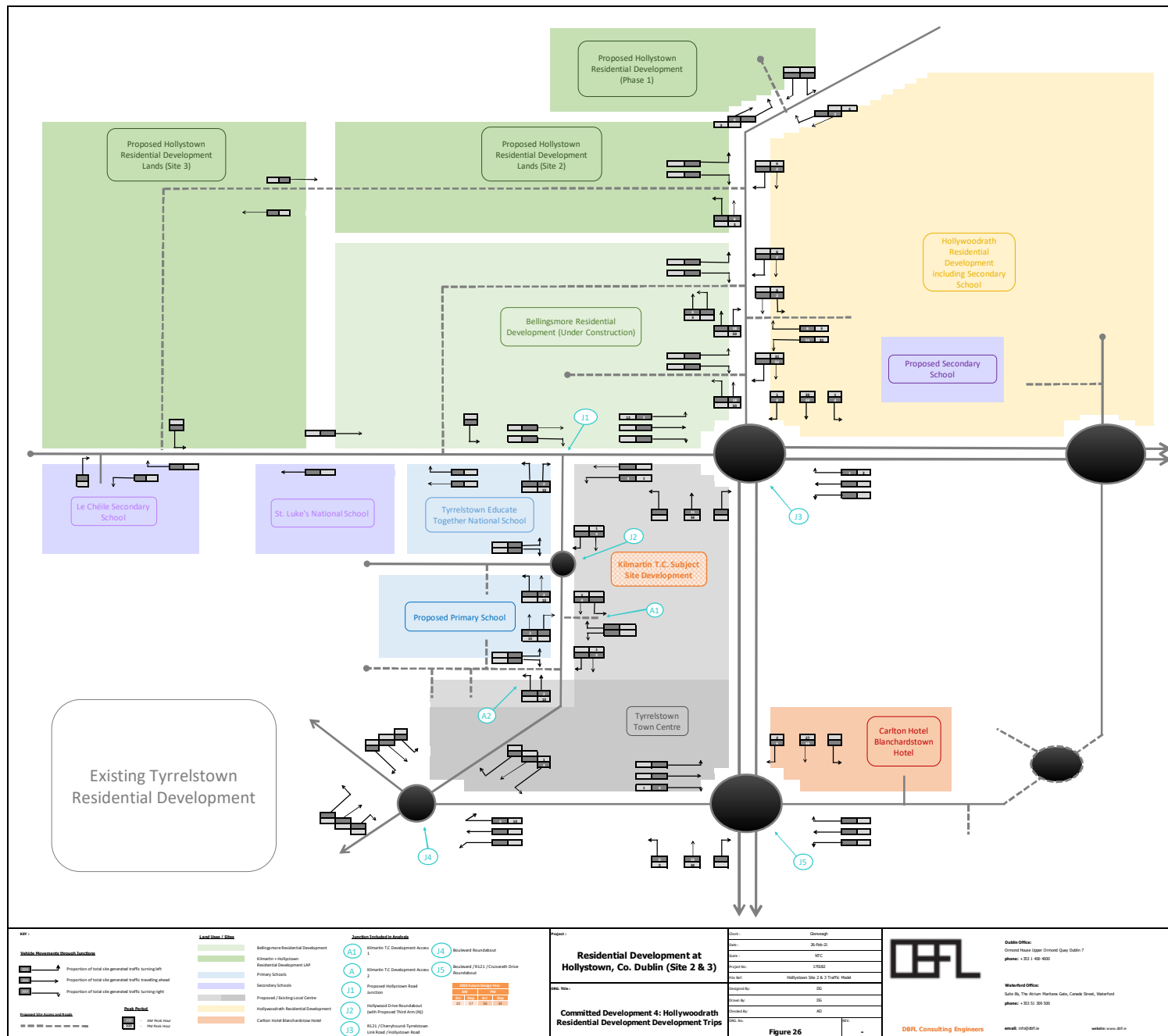


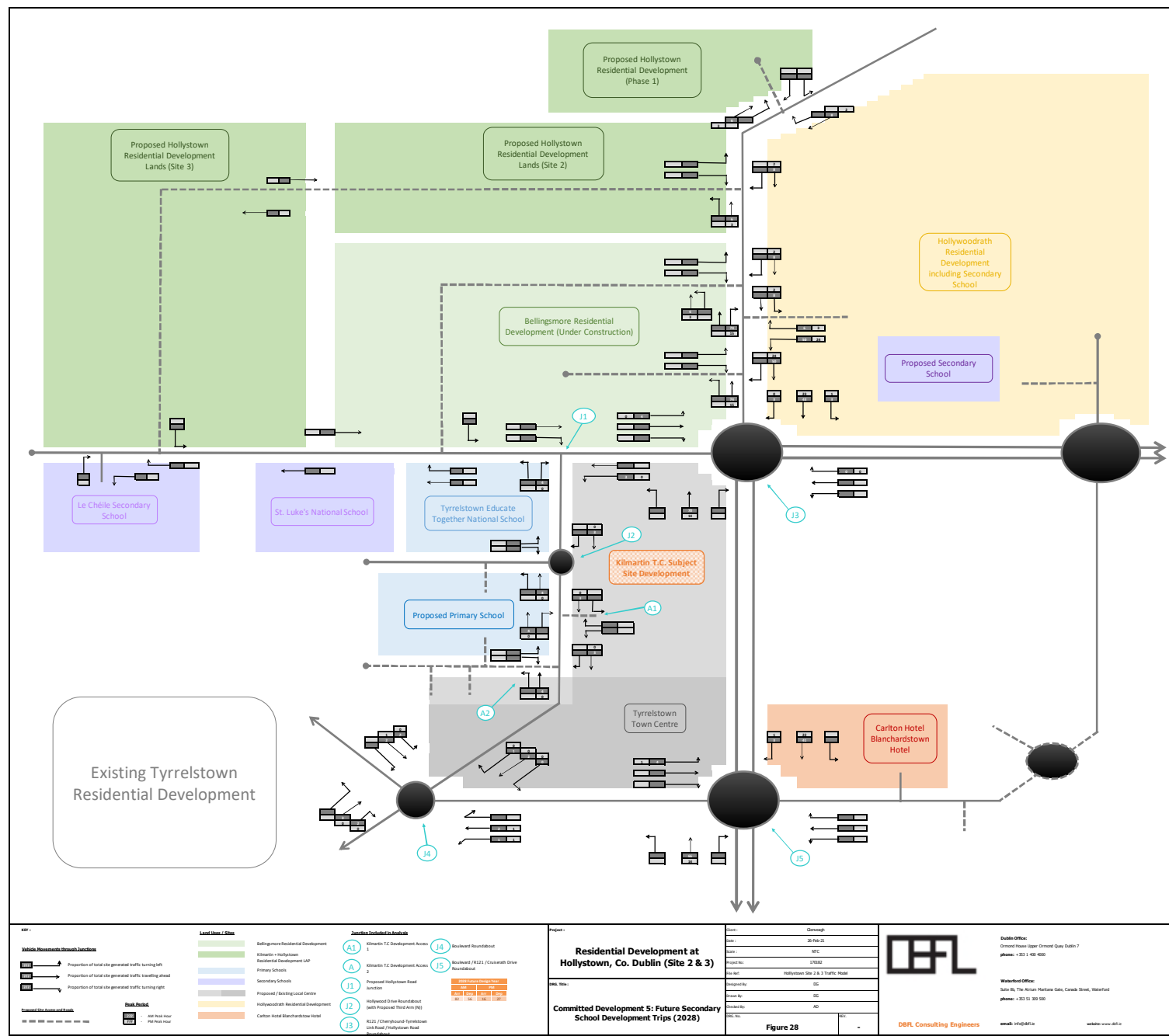


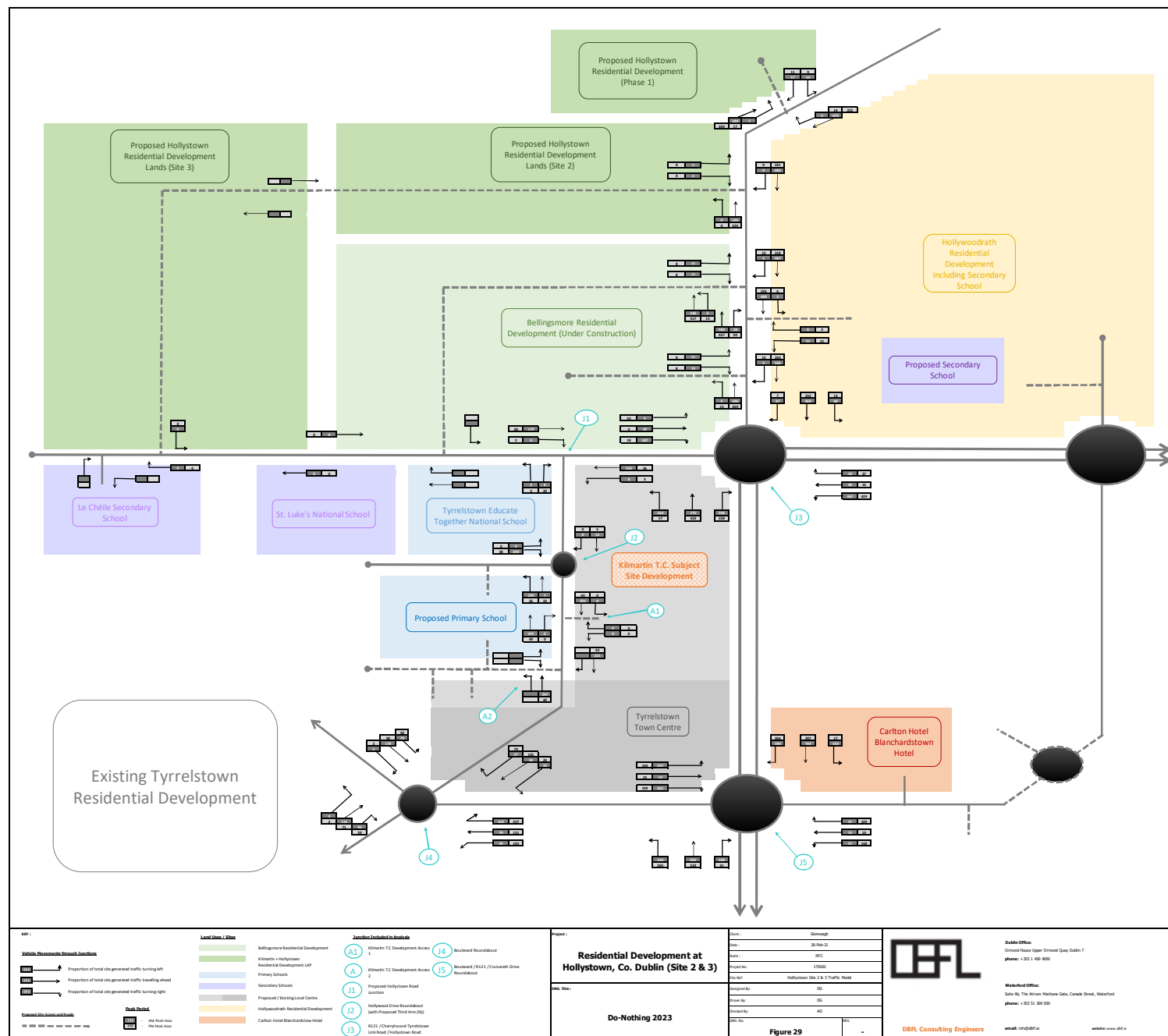


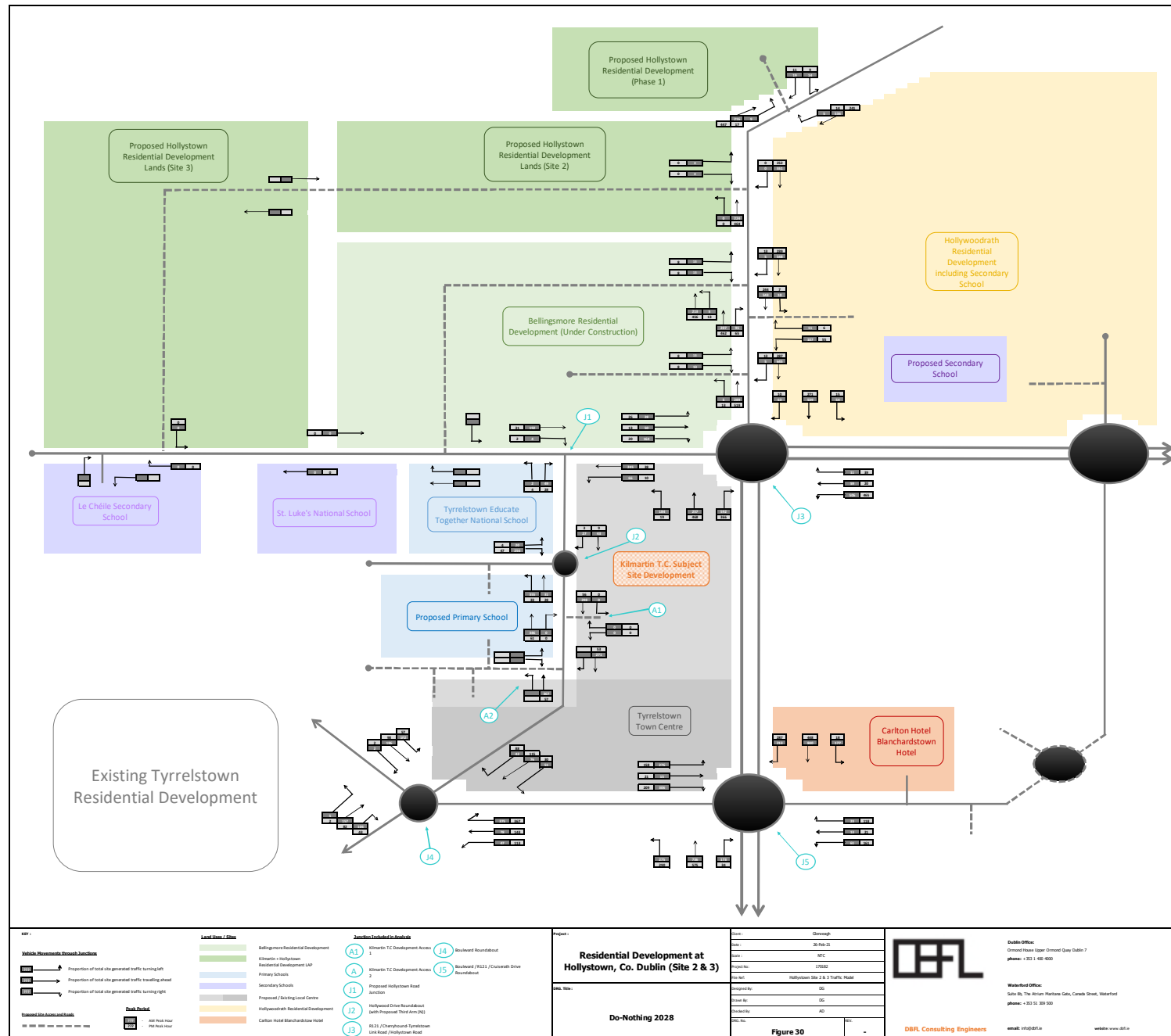


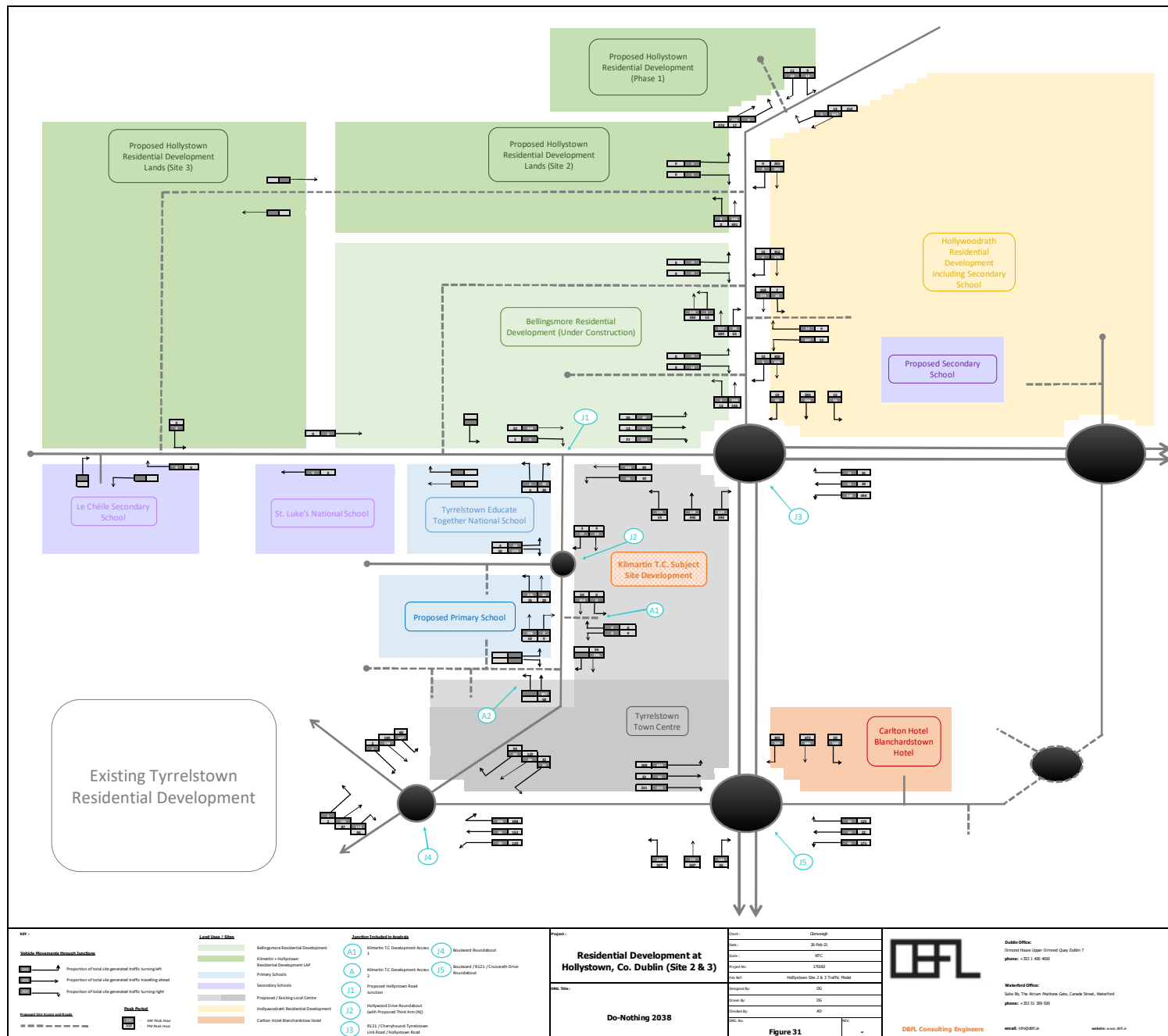


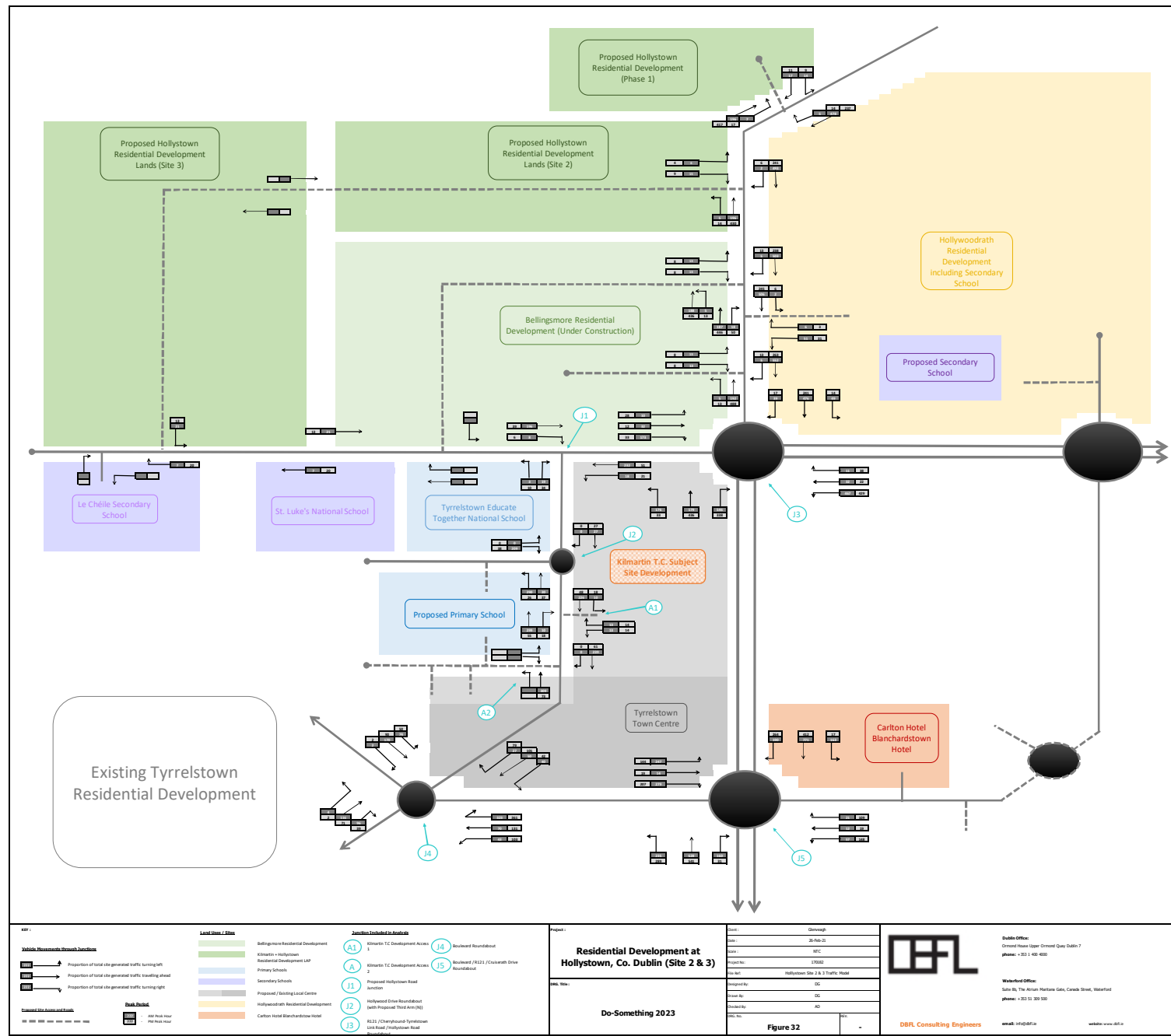


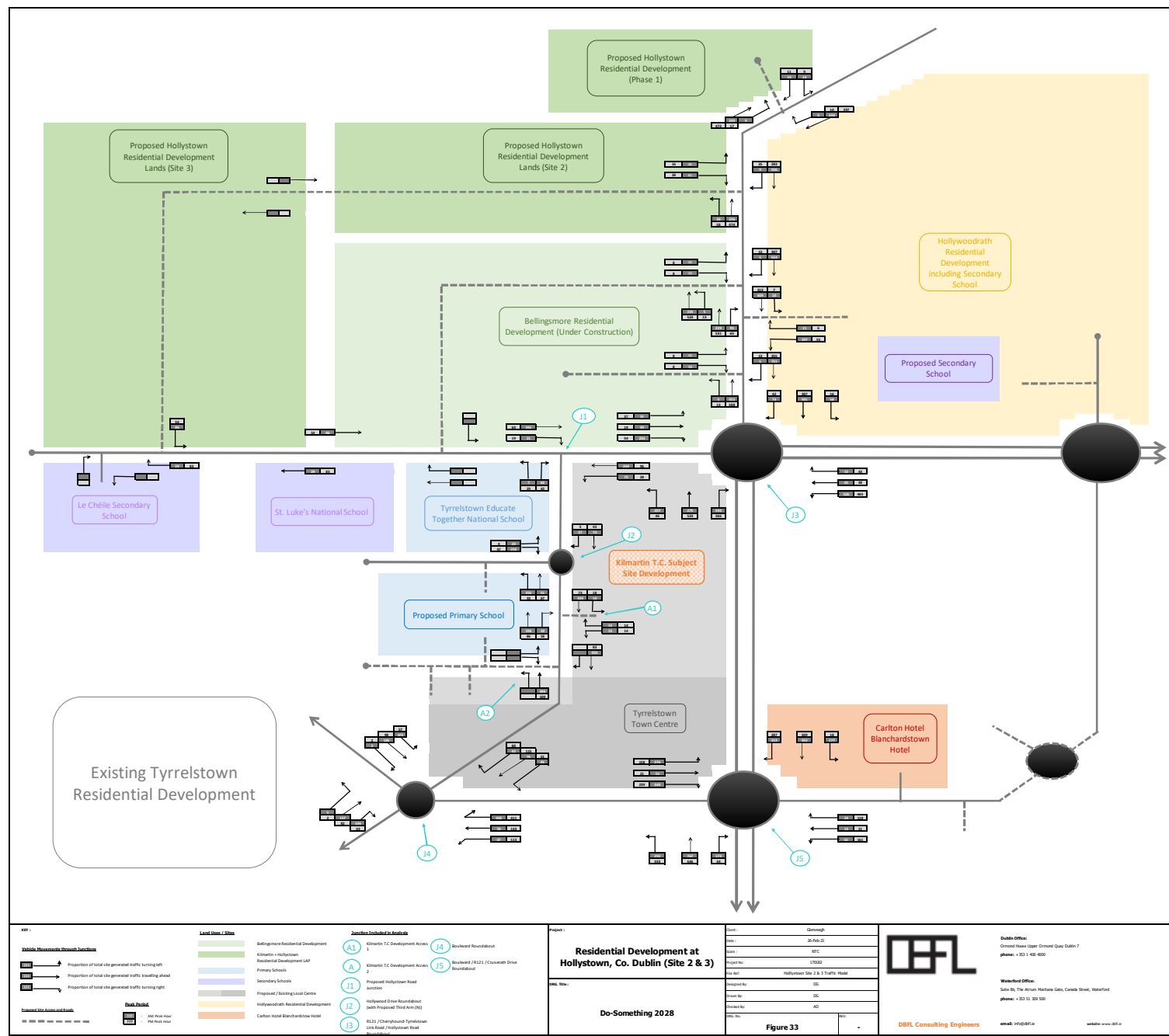


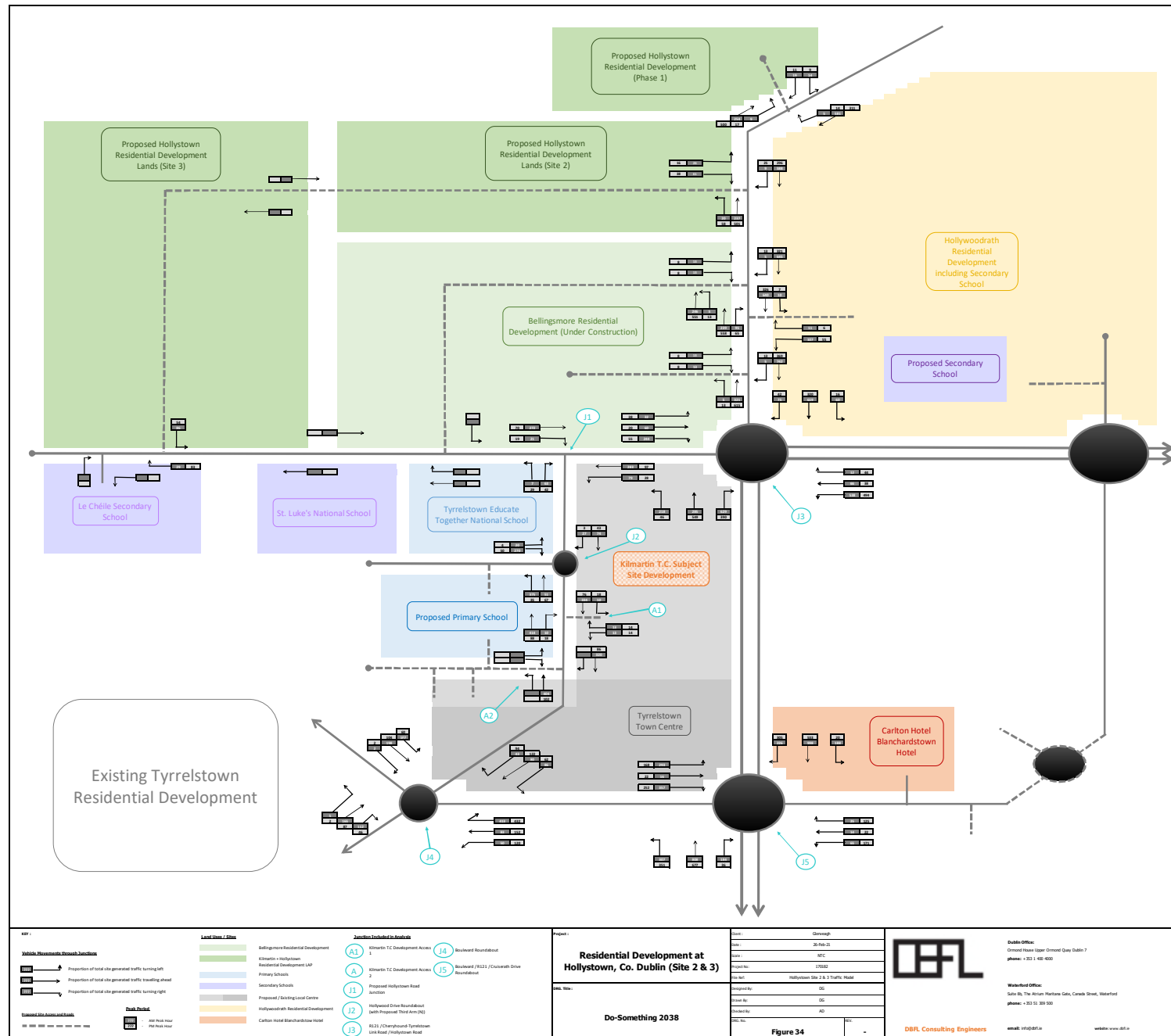












APPENDIX B

TRICS Database Output

TRIP RATE CALCULATION SELECTION PARAMETERS:

Land Use : 03 - RESIDENTIAL
Category : C - FLATS PRIVATELY OWNED

TOTAL VEHICLES

Selected regions and areas:

12 CONNAUGHT	
GA GALWAY	1 days
13 MUNSTER	
WA WATERFORD	1 days
14 LEINSTER	
LU LOUTH	3 days
15 GREATER DUBLIN	
DL DUBLIN	6 days
16 ULSTER (REPUBLIC OF IRELAND)	
MG MONAGHAN	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 140 (units:)
Range Selected by User: 18 to 372 (units:)

Parking Spaces Range: All Surveys Included

Parking Spaces per Dwelling Range: All Surveys Included

Bedrooms per Dwelling Range: All Surveys Included

Percentage of dwellings privately owned: All Surveys Included

Public Transport Provision:

Selection by: Include all surveys

Date Range: 01/01/12 to 22/11/16

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
Tuesday	6 days
Wednesday	1 days
Thursday	2 days
Friday	1 days

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

Selected survey types:

Manual count	12 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 undertaken using machines.

Selected Locations:

Edge of Town Centre	4
Suburban Area (PPS6 Out of Centre)	6
Neighbourhood Centre (PPS6 Local Centre)	2

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

Selected Location Sub Categories:

Residential Zone	9
Built-Up Zone	1
No Sub Category	2

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

Secondary Filtering selection:

Use Class:

C3 12 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	
<u>Population within 1 mile:</u>	
1,001 to 5,000	1 days
5,001 to 10,000	3 days
15,001 to 20,000	2 days
20,001 to 25,000	1 days
25,001 to 50,000	5 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	3 days
50,001 to 75,000	2 days
250,001 to 500,000	1 days
500,001 or More	5 days

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

Car ownership within 5 miles:

0.6 to 1.0	3 days
1.1 to 1.5	9 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 12 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 12 days

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

LIST OF SITES relevant to selection parameters

1	DL-03-C-11	BLOCK OF FLATS	DUBLIN
	WYCKHAM WAY		
	DUBLIN		
	DUNDRUM		
	Neighbourhood Centre (PPS6 Local Centre)		
	Residential Zone		
	Total No of Dwellings:	96	
	Survey date: TUESDAY	10/09/13	Survey Type: MANUAL
2	DL-03-C-12	BLOCK OF FLATS	DUBLIN
	BOOTERSTOWN AVENUE		
	DUBLIN		
	Suburban Area (PPS6 Out of Centre)		
	Residential Zone		
	Total No of Dwellings:	47	
	Survey date: TUESDAY	10/09/13	Survey Type: MANUAL
3	DL-03-C-13	BLOCK OF FLATS	DUBLIN
	SANDYFORD ROAD		
	DUBLIN		
	Neighbourhood Centre (PPS6 Local Centre)		
	Built-Up Zone		
	Total No of Dwellings:	52	
	Survey date: TUESDAY	10/09/13	Survey Type: MANUAL
4	DL-03-C-14	BLOCKS OF FLATS	DUBLIN
	BALLINTREE ROAD		
	DUBLIN		
	DUNDRUM		
	Suburban Area (PPS6 Out of Centre)		
	Residential Zone		
	Total No of Dwellings:	140	
	Survey date: TUESDAY	10/09/13	Survey Type: MANUAL
5	DL-03-C-15	BLOCKS OF FLATS	DUBLIN
	MONKSTOWN ROAD		
	DUBLIN		
	MONKSTOWN		
	Suburban Area (PPS6 Out of Centre)		
	Residential Zone		
	Total No of Dwellings:	20	
	Survey date: WEDNESDAY	01/10/14	Survey Type: MANUAL
6	DL-03-C-16	BLOCKS OF FLATS	DUBLIN
	BOTANIC AVENUE		
	DUBLIN		
	DRUMCONDRA		
	Suburban Area (PPS6 Out of Centre)		
	Residential Zone		
	Total No of Dwellings:	31	
	Survey date: TUESDAY	22/11/16	Survey Type: MANUAL
7	GA-03-C-01	FLATS	GALWAY
	BALLYLOUGHANE ROAD		
	GALWAY		
	Suburban Area (PPS6 Out of Centre)		
	No Sub Category		
	Total No of Dwellings:	34	
	Survey date: THURSDAY	31/10/13	Survey Type: MANUAL
8	LU-03-C-01	BLOCKS OF FLATS	LOUTH
	DONORE ROAD		
	DROGHEDA		
	Edge of Town Centre		
	Residential Zone		
	Total No of Dwellings:	52	
	Survey date: THURSDAY	12/09/13	Survey Type: MANUAL

LIST OF SITES relevant to selection parameters (Cont.)

9	LU-03-C-02	BLOCK OF FLATS	LOUTH
	NICHOLAS STREET		
	DUNDALK		
	Edge of Town Centre		
	Residential Zone		
	Total No of Dwellings:	33	
	Survey date: MONDAY	16/09/13	Survey Type: MANUAL
10	LU-03-C-03	BLOCK OF FLATS	LOUTH
	NICHOLAS STREET		
	DUNDALK		
	Edge of Town Centre		
	Residential Zone		
	Total No of Dwellings:	20	
	Survey date: MONDAY	16/09/13	Survey Type: MANUAL
11	MG-03-C-01	BLOCK OF FLATS	MONAGHAN
	MALL ROAD		
	MONAGHAN		
	Edge of Town Centre		
	No Sub Category		
	Total No of Dwellings:	28	
	Survey date: FRIDAY	06/09/13	Survey Type: MANUAL
12	WA-03-C-01	BLOCKS OF FLATS	WATERFORD
	UPPER YELLOW ROAD		
	WATERFORD		
	Suburban Area (PPS6 Out of Centre)		
	Residential Zone		
	Total No of Dwellings:	51	
	Survey date: TUESDAY	12/05/15	Survey Type: MANUAL

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

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

TOTAL VEHICLES

Calculation factor: 1 DWELLS

BOLD print indicates peak (busiest) period

Time Range	ARRIVALS			DEPARTURES			TOTALS		
	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	12	50	0.046	12	50	0.214	12	50	0.260
08:00 - 09:00	12	50	0.056	12	50	0.230	12	50	0.286
09:00 - 10:00	12	50	0.056	12	50	0.104	12	50	0.160
10:00 - 11:00	12	50	0.023	12	50	0.063	12	50	0.086
11:00 - 12:00	12	50	0.051	12	50	0.061	12	50	0.112
12:00 - 13:00	12	50	0.071	12	50	0.091	12	50	0.162
13:00 - 14:00	12	50	0.078	12	50	0.060	12	50	0.138
14:00 - 15:00	12	50	0.096	12	50	0.060	12	50	0.156
15:00 - 16:00	12	50	0.091	12	50	0.065	12	50	0.156
16:00 - 17:00	12	50	0.101	12	50	0.073	12	50	0.174
17:00 - 18:00	12	50	0.192	12	50	0.065	12	50	0.257
18:00 - 19:00	12	50	0.222	12	50	0.091	12	50	0.313
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			1.083			1.177			2.260

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

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

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Parameter summary

Trip rate parameter range selected:	20 - 140 (units:)
Survey date date range:	01/01/12 - 22/11/16
Number of weekdays (Monday-Friday):	12
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.

Calculation Reference: AUDIT-638801-211022-1031

TRIP RATE CALCULATION SELECTION PARAMETERS:

Land Use : 06 - HOTEL, FOOD & DRINK

Category : B - RESTAURANTS

TOTAL VEHICLES

Selected regions and areas:

12	CONNAUGHT	
	GA GALWAY	1 days
	RO ROSCOMMON	1 days
14	LEINSTER	
	LU LOUTH	2 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:	736 to 2200 (units: sqm)
Range Selected by User:	330 to 2200 (units: sqm)

Parking Spaces Range: All Surveys Included

Public Transport Provision:

Selection by: Include all surveys

Date Range: 01/01/13 to 27/05/19

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:

Monday	1 days
Wednesday	1 days
Friday	2 days

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

Selected survey types:

Manual count	4 days
Directional ATC Count	0 days

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

Selected Locations:

Town Centre	1
Edge of Town	1
Neighbourhood Centre (PPS6 Local Centre)	1
Free Standing (PPS6 Out of Town)	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:

Built-Up Zone	1
Village	1
Out of Town	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:
E(b) 4 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:
1,000 or Less 2 days
1,001 to 5,000 1 days
15,001 to 20,000 1 days

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

Population within 5 miles:
5,000 or Less 1 days
5,001 to 25,000 1 days
25,001 to 50,000 1 days
75,001 to 100,000 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 2 days
1.1 to 1.5 1 days
2.1 to 2.5 1 days

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

Travel Plan:
No 4 days

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

PTAL Rating:
No PTAL Present 4 days

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

LIST OF SITES relevant to selection parameters

1	GA-06-B-01	PIZZA RESTAURANT	GALWAY
	MIDDLE STREET GALWAY		
	Town Centre Built-Up Zone		
	Total Gross floor area:	1300 sqm	
	Survey date: MONDAY	27/05/19	Survey Type: MANUAL
2	LU-06-B-01	RESTAURANT	LOUTH
	CARLINGFORD ROAD R173 NEAR DUNDALK		
	Free Standing (PPS6 Out of Town) Out of Town		
	Total Gross floor area:	865 sqm	
	Survey date: WEDNESDAY	25/09/13	Survey Type: MANUAL
3	LU-06-B-02	RESTAURANT	LOUTH
	DONORE ROAD DROGHEDA LAGAVOOREN Edge of Town No Sub Category		
	Total Gross floor area:	2200 sqm	
	Survey date: FRIDAY	19/06/15	Survey Type: MANUAL
4	RO-06-B-01	IRISH RESTAURANT	ROSCOMMON
	MAIN STREET TULSK		
	Neighbourhood Centre (PPS6 Local Centre) Village		
	Total Gross floor area:	736 sqm	
	Survey date: FRIDAY	27/04/18	Survey Type: MANUAL

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

TRIP RATE for Land Use 06 - HOTEL, FOOD & DRINK/B - RESTAURANTS
TOTAL VEHICLES
Calculation factor: 100 sqm
BOLD print indicates peak (busiest) period

Time Range	ARRIVALS			DEPARTURES			TOTALS		
	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	865	0.000	1	865	0.000	1	865	0.000
08:00 - 09:00	1	865	0.000	1	865	0.000	1	865	0.000
09:00 - 10:00	1	865	0.809	1	865	0.000	1	865	0.809
10:00 - 11:00	2	1533	0.685	2	1533	0.261	2	1533	0.946
11:00 - 12:00	4	1275	0.784	4	1275	0.647	4	1275	1.431
12:00 - 13:00	4	1275	1.274	4	1275	1.176	4	1275	2.450
13:00 - 14:00	4	1275	1.568	4	1275	1.431	4	1275	2.999
14:00 - 15:00	4	1275	0.980	4	1275	1.117	4	1275	2.097
15:00 - 16:00	4	1275	0.804	4	1275	0.941	4	1275	1.745
16:00 - 17:00	4	1275	0.921	4	1275	0.706	4	1275	1.627
17:00 - 18:00	4	1275	1.117	4	1275	0.921	4	1275	2.038
18:00 - 19:00	4	1275	1.549	4	1275	1.431	4	1275	2.980
19:00 - 20:00	4	1275	1.274	4	1275	1.157	4	1275	2.431
20:00 - 21:00	4	1275	0.823	4	1275	1.039	4	1275	1.862
21:00 - 22:00	4	1275	0.333	4	1275	0.941	4	1275	1.274
22:00 - 23:00	3	1412	0.283	3	1412	0.425	3	1412	0.708
23:00 - 24:00	2	1468	0.136	2	1468	0.170	2	1468	0.306
Total Rates:		13.340			12.363			25.703	

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

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

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Parameter summary

Trip rate parameter range selected: 736 - 2200 (units: sqm)
 Survey date date range: 01/01/13 - 27/05/19
 Number of weekdays (Monday-Friday): 4
 Number of Saturdays: 0
 Number of Sundays: 0
 Surveys automatically removed from selection: 0
 Surveys manually removed from selection: 0

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

Calculation Reference: AUDIT-638801-201106-1150

TRIP RATE CALCULATION SELECTION PARAMETERS:

Land Use : 04 - EDUCATION
 Category : A - PRIMARY
TOTAL VEHICLES

Selected regions and areas:

12 CONNAUGHT
 CS SLIGO 1 days
 GA GALWAY 1 days
 RO ROSCOMMON 1 days
 13 MUNSTER
 LI LIMERICK 2 days
 TI TIPPERARY 1 days
 14 LEINSTER
 LU LOUTH 1 days
 16 ULSTER (REPUBLIC OF IRELAND)
 MG MONAGHAN 1 days

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

Primary Filtering selection:

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

Parameter: Number of pupils
 Actual Range: 82 to 503 (units:)
 Range Selected by User: 82 to 600 (units:)

Parking Spaces Range: All Surveys Included

Public Transport Provision:

Selection by: Include all surveys

Date Range: 01/01/12 to 27/10/16

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:

Wednesday 1 days
 Thursday 7 days

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

Selected survey types:

Manual count 8 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 6
 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 4
 Built-Up Zone 1
 Village 1
 No Sub Category 2

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

Secondary Filtering selection:

Use Class:
D1 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:
1,000 or Less 1 days
1,001 to 5,000 3 days
5,001 to 10,000 1 days
10,001 to 15,000 1 days
15,001 to 20,000 2 days

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

Population within 5 miles:

5,000 or Less 2 days
5,001 to 25,000 1 days
25,001 to 50,000 1 days
75,001 to 100,000 3 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:

1.1 to 1.5 8 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 7 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 8 days

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

LIST OF SITES relevant to selection parameters

1	CS-04-A-02	PRIMARY SCHOOL	SLIGO
	PEARSE ROAD SLIGO		
	Edge of Town Centre Built-Up Zone Total Number of pupils:	503	
	Survey date: THURSDAY	27/10/16	Survey Type: MANUAL
2	GA-04-A-01	PRIMARY SCHOOL	GALWAY
	SALTHILL ROAD LOWER GALWAY		
	Edge of Town Centre Residential Zone Total Number of pupils:	249	
	Survey date: THURSDAY	11/10/12	Survey Type: MANUAL
3	LI-04-A-02	PRIMARY SCHOOL	LIMERICK
	SHELBORNE ROAD LIMERICK		
	Edge of Town Centre Residential Zone Total Number of pupils:	180	
	Survey date: THURSDAY	07/11/13	Survey Type: MANUAL
4	LI-04-A-03	PRIMARY SCHOOL	LIMERICK
	DUBLIN ROAD LIMERICK QUARRY HILL Edge of Town Centre Residential Zone Total Number of pupils:	225	
	Survey date: THURSDAY	07/11/13	Survey Type: MANUAL
5	LU-04-A-01	PRIMARY SCHOOL	LOUTH
	UNION STREET DUNDALK		
	Edge of Town Centre No Sub Category Total Number of pupils:	324	
	Survey date: THURSDAY	12/09/13	Survey Type: MANUAL
6	MG-04-A-01	PRIMARY SCHOOL	MONAGHAN
	CLONES ROAD MONAGHAN		
	Edge of Town Centre No Sub Category Total Number of pupils:	304	
	Survey date: WEDNESDAY	25/09/13	Survey Type: MANUAL
7	RO-04-A-01	PRIMARY SCHOOL	ROSCOMMON
	WARREN ROAD BOYLE		
	Edge of Town Residential Zone Total Number of pupils:	82	
	Survey date: THURSDAY	25/09/14	Survey Type: MANUAL
8	TI-04-A-01	PRIMARY SCHOOL	TIPPERARY
	OLD ROAD NEAR NENAGH SILVERMINES Neighbourhood Centre (PPS6 Local Centre) Village Total Number of pupils:	84	
	Survey date: THURSDAY	26/05/16	Survey Type: MANUAL

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

TRIP RATE for Land Use 04 - EDUCATION/A - PRIMARY

TOTAL VEHICLES

Calculation factor: 1 PUPILS

BOLD print indicates peak (busiest) period

Time Range	ARRIVALS			DEPARTURES			TOTALS		
	No. Days	Ave. PUPILS	Trip Rate	No. Days	Ave. PUPILS	Trip Rate	No. Days	Ave. PUPILS	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	8	244	0.016	8	244	0.004	8	244	0.020
08:00 - 09:00	8	244	0.179	8	244	0.097	8	244	0.276
09:00 - 10:00	8	244	0.060	8	244	0.074	8	244	0.134
10:00 - 11:00	8	244	0.010	8	244	0.013	8	244	0.023
11:00 - 12:00	8	244	0.005	8	244	0.003	8	244	0.008
12:00 - 13:00	8	244	0.008	8	244	0.009	8	244	0.017
13:00 - 14:00	8	244	0.032	8	244	0.035	8	244	0.067
14:00 - 15:00	8	244	0.075	8	244	0.062	8	244	0.137
15:00 - 16:00	8	244	0.049	8	244	0.097	8	244	0.146
16:00 - 17:00	8	244	0.014	8	244	0.036	8	244	0.050
17:00 - 18:00	8	244	0.029	8	244	0.033	8	244	0.062
18:00 - 19:00	8	244	0.006	8	244	0.019	8	244	0.025
19:00 - 20:00	1	324	0.000	1	324	0.003	1	324	0.003
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.483			0.485			0.968

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.

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Parameter summary

Trip rate parameter range selected:	82 - 503 (units:)
Survey date date range:	01/01/12 - 27/10/16
Number of weekdays (Monday-Friday):	8
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.

Calculation Reference: AUDIT-638801-201106-1103

TRIP RATE CALCULATION SELECTION PARAMETERS:

Land Use : 04 - EDUCATION

Category : B - SECONDARY

TOTAL VEHICLES

Selected regions and areas:

12	CONNAUGHT	
	RO ROSCOMMON	1 days
13	MUNSTER	
	CL CLARE	1 days
	TI TIPPERARY	1 days
14	LEINSTER	
	KK KILKENNY	1 days
16	ULSTER (REPUBLIC OF IRELAND)	
	DN DONEGAL	1 days

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

Primary Filtering selection:

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

Parameter:	Number of pupils
Actual Range:	265 to 400 (units:)
Range Selected by User:	213 to 600 (units:)

Parking Spaces Range: All Surveys Included

Public Transport Provision:

Selection by: Include all surveys

Date Range: 01/01/12 to 10/10/18

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	2 days
Thursday	1 days

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

Selected survey types:

Manual count	5 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	2
Edge of Town	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
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:
D1 5 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 3 days
5,001 to 10,000 2 days

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

Population within 5 miles:
5,000 or Less 1 days
5,001 to 25,000 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 2 days
1.1 to 1.5 2 days
1.6 to 2.0 1 days

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

Travel Plan:
No 5 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

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

LIST OF SITES relevant to selection parameters

1	CL-04-B-01	SECONDARY SCHOOL	CLARE
	HARMONY ROW ENNIS		
	Edge of Town Centre No Sub Category Total Number of pupils:	380	
	Survey date: WEDNESDAY	06/11/13	Survey Type: MANUAL
2	DN-04-B-02	SECONDARY SCHOOL	DONEGAL
	CARNAMUGGAGH LOWER LETTERKENNY KNOCKNAMONA Edge of Town Residential Zone Total Number of pupils:	275	
	Survey date: WEDNESDAY	10/10/18	Survey Type: MANUAL
3	KK-04-B-02	SECONDARY SCHOOL	KILKENNY
	LADY'S WELL STREET THOMASTOWN		
	Edge of Town Centre No Sub Category Total Number of pupils:	265	
	Survey date: THURSDAY	26/10/17	Survey Type: MANUAL
4	RO-04-B-01	SECONDARY SCHOOL	ROSCOMMON
	ST THERESA'S ROAD ROSCOMMON		
	Edge of Town Residential Zone Total Number of pupils:	272	
	Survey date: TUESDAY	23/09/14	Survey Type: MANUAL
5	TI-04-B-01	SECONDARY SCHOOL	TIPPERARY
	CASTLEMEADOWS THURLES GORTATAGGART Edge of Town No Sub Category Total Number of pupils:	400	
	Survey date: TUESDAY	21/11/17	Survey Type: MANUAL

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

TRIP RATE for Land Use 04 - EDUCATION/B - SECONDARY

TOTAL VEHICLES

Calculation factor: 1 PUPILS

BOLD print indicates peak (busiest) period

Time Range	ARRIVALS			DEPARTURES			TOTALS		
	No. Days	Ave. PUPILS	Trip Rate	No. Days	Ave. PUPILS	Trip Rate	No. Days	Ave. PUPILS	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	5	318	0.023	5	318	0.003	5	318	0.026
08:00 - 09:00	5	318	0.357	5	318	0.246	5	318	0.603
09:00 - 10:00	5	318	0.073	5	318	0.075	5	318	0.148
10:00 - 11:00	5	318	0.017	5	318	0.016	5	318	0.033
11:00 - 12:00	5	318	0.016	5	318	0.014	5	318	0.030
12:00 - 13:00	5	318	0.018	5	318	0.031	5	318	0.049
13:00 - 14:00	5	318	0.028	5	318	0.036	5	318	0.064
14:00 - 15:00	5	318	0.046	5	318	0.026	5	318	0.072
15:00 - 16:00	5	318	0.155	5	318	0.109	5	318	0.264
16:00 - 17:00	5	318	0.068	5	318	0.191	5	318	0.259
17:00 - 18:00	5	318	0.054	5	318	0.090	5	318	0.144
18:00 - 19:00	5	318	0.006	5	318	0.016	5	318	0.022
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.861			0.853			1.714

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

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

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Parameter summary

Trip rate parameter range selected:	265 - 400 (units:)
Survey date date range:	01/01/12 - 10/10/18
Number of weekdays (Monday-Friday):	5
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.

Calculation Reference: AUDIT-638801-201109-1134

TRIP RATE CALCULATION SELECTION PARAMETERS:

Land Use : 04 - EDUCATION

Category : D - NURSERY

TOTAL VEHICLES

Selected regions and areas:

04	EAST ANGLIA	
	CA CAMBRIDGESHIRE	1 days
05	EAST MIDLANDS	
	NR NORTHAMPTONSHIRE	1 days
06	WEST MIDLANDS	
	SH SHROPSHIRE	1 days
	WK WARWICKSHIRE	1 days
08	NORTH WEST	
	CH CHESHIRE	1 days
09	NORTH	
	TV TEES VALLEY	1 days
10	WALES	
	BG BRIDGEND	1 days
11	SCOTLAND	
	DU DUNDEE CITY	1 days
	SR STIRLING	1 days
12	CONNAUGHT	
	RO ROSCOMMON	1 days

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

Primary Filtering selection:

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

Parameter:	Gross floor area
Actual Range:	150 to 500 (units: sqm)
Range Selected by User:	150 to 500 (units: sqm)

Parking Spaces Range: All Surveys Included

Public Transport Provision:

Selection by: Include all surveys

Date Range: 01/01/12 to 12/07/18

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	4 days
Tuesday	1 days
Wednesday	2 days
Friday	3 days

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

Selected survey types:

Manual count	10 days
Directional ATC Count	0 days

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

Selected Locations:

Edge of Town Centre	2
Suburban Area (PPS6 Out of Centre)	3
Edge of Town	5

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

Selected Location Sub Categories:

Industrial Zone	1
Residential Zone	7
No Sub Category	2

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

Secondary Filtering selection:

Use Class:
D1 10 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 2 days
 5,001 to 10,000 2 days
 10,001 to 15,000 1 days
 15,001 to 20,000 1 days
 20,001 to 25,000 1 days
 25,001 to 50,000 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 1 days
 75,001 to 100,000 6 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:

0.6 to 1.0 2 days
 1.1 to 1.5 8 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 10 days

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

PTAL Rating:

No PTAL Present 10 days

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

LIST OF SITES relevant to selection parameters

1	BG-04-D-01	NURSERY	BRIDGEND
	GEORGE STREET		
	BRIDGEND		
	BRIDGEND IND. ESTATE		
	Edge of Town		
	Industrial Zone		
	Total Gross floor area:	210 sqm	
	Survey date: MONDAY	13/10/14	Survey Type: MANUAL
2	CA-04-D-02	NURSERY	CAMBRIDGESHIRE
	EASTFIELD ROAD		
	PETERBOROUGH		
	Suburban Area (PPS6 Out of Centre)		
	Residential Zone		
	Total Gross floor area:	400 sqm	
	Survey date: TUESDAY	18/10/16	Survey Type: MANUAL
3	CH-04-D-01	NURSERY	CHESHIRE
	CHESTER ROAD		
	MACCLESFIELD		
	Edge of Town Centre		
	No Sub Category		
	Total Gross floor area:	500 sqm	
	Survey date: MONDAY	24/11/14	Survey Type: MANUAL
4	DU-04-D-01	NURSERY	DUNDEE CITY
	LONGTOWN TERRACE		
	DUNDEE		
	Suburban Area (PPS6 Out of Centre)		
	Residential Zone		
	Total Gross floor area:	325 sqm	
	Survey date: MONDAY	24/04/17	Survey Type: MANUAL
5	NR-04-D-02	NURSERY	NORTHAMPTONSHIRE
	PARK AVENUE		
	KETTERING		
	Suburban Area (PPS6 Out of Centre)		
	Residential Zone		
	Total Gross floor area:	182 sqm	
	Survey date: WEDNESDAY	26/09/12	Survey Type: MANUAL
6	RO-04-D-01	NURSERY	ROSCOMMON
	PARK VIEW		
	ROSCOMMON		
	CRUBY HILL		
	Edge of Town		
	Residential Zone		
	Total Gross floor area:	500 sqm	
	Survey date: FRIDAY	26/09/14	Survey Type: MANUAL
7	SH-04-D-01	NURSERY	SHROPSHIRE
	OLD COLEHAM		
	SHREWSBURY		
	Edge of Town Centre		
	Residential Zone		
	Total Gross floor area:	326 sqm	
	Survey date: WEDNESDAY	28/05/14	Survey Type: MANUAL
8	SR-04-D-01	NURSERY	STIRLING
	HENDERSON STREET		
	STIRLING		
	BRIDGE OF ALLAN		
	Edge of Town		
	No Sub Category		
	Total Gross floor area:	250 sqm	
	Survey date: MONDAY	16/06/14	Survey Type: MANUAL
9	TV-04-D-01	NURSERY	TEES VALLEY
	COTSWOLD DRIVE		
	REDCAR		
	Edge of Town		
	Residential Zone		
	Total Gross floor area:	150 sqm	
	Survey date: FRIDAY	19/05/17	Survey Type: MANUAL

LIST OF SITES relevant to selection parameters (Cont.)

10 WK-04-D-01 NURSERY WARWICKSHIRE
THE RIDGEWAY
STRATFORD UPON AVON

Edge of Town
Residential Zone
Total Gross floor area: 340 sqm
Survey date: FRIDAY 29/06/18 Survey Type: MANUAL

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

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

TOTAL VEHICLES

Calculation factor: 100 sqm

BOLD print indicates peak (busiest) period

Time Range	ARRIVALS			DEPARTURES			TOTALS		
	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	10	318	1.885	10	318	0.817	10	318	2.702
08:00 - 09:00	10	318	4.870	10	318	3.644	10	318	8.514
09:00 - 10:00	10	318	2.074	10	318	2.105	10	318	4.179
10:00 - 11:00	10	318	0.943	10	318	0.754	10	318	1.697
11:00 - 12:00	10	318	0.943	10	318	0.691	10	318	1.634
12:00 - 13:00	10	318	1.508	10	318	2.011	10	318	3.519
13:00 - 14:00	10	318	1.037	10	318	1.320	10	318	2.357
14:00 - 15:00	10	318	1.100	10	318	1.005	10	318	2.105
15:00 - 16:00	10	318	0.943	10	318	1.288	10	318	2.231
16:00 - 17:00	10	318	1.791	10	318	2.042	10	318	3.833
17:00 - 18:00	10	318	3.267	10	318	4.053	10	318	7.320
18:00 - 19:00	9	337	0.099	9	337	0.791	9	337	0.890
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:	20.460			20.521			40.981		

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

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

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Parameter summary

Trip rate parameter range selected:	150 - 500 (units: sqm)
Survey date date range:	01/01/12 - 12/07/18
Number of weekdays (Monday-Friday):	10
Number of Saturdays:	0
Number of Sundays:	0
Surveys automatically removed from selection:	0
Surveys manually removed from selection:	0

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

Calculation Reference: AUDIT-638801-210225-0257

TRIP RATE CALCULATION SELECTION PARAMETERS:

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

TOTAL VEHICLES

Selected regions and areas:

12 CONNAUGHT	
GA GALWAY	1 days
LT LEITRIM	2 days
RO ROSCOMMON	2 days
13 MUNSTER	
WA WATERFORD	1 days
14 LEINSTER	
CC CARLOW	1 days
WC WICKLOW	2 days
WX WEXFORD	1 days
16 ULSTER (REPUBLIC OF IRELAND)	
CV CAVAN	2 days
DN DONEGAL	5 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 280 (units:)
 Range Selected by User: 4 to 290 (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: 01/01/12 to 29/05/19

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:

Monday	6 days
Tuesday	2 days
Wednesday	4 days
Thursday	2 days
Friday	3 days

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

Selected survey types:

Manual count	17 days
Directional ATC Count	0 days

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

Selected Locations:

Edge of Town Centre	4
Suburban Area (PPS6 Out of Centre)	4
Edge of Town	9

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	12
No Sub Category	5

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,

Secondary Filtering selection:

Use Class:

C3 17 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	
<u>Population within 1 mile:</u>	
1,001 to 5,000	7 days
5,001 to 10,000	5 days
10,001 to 15,000	4 days
15,001 to 20,000	1 days

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

Population within 5 miles:

5,000 or Less	2 days
5,001 to 25,000	12 days
25,001 to 50,000	2 days
50,001 to 75,000	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	6 days
1.1 to 1.5	10 days
1.6 to 2.0	1 days

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

Travel Plan:

No 17 days

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

PTAL Rating:

No PTAL Present 17 days

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

LIST OF SITES relevant to selection parameters (Cont.)

10	LT-03-A-01 ARD NA SI CARRICK-ON-SHANNON ATTIRORY Suburban Area (PPS6 Out of Centre) Residential Zone Total No of Dwellings: 90 Survey date: FRIDAY 24/04/15	SEMI-DETACHED & DETACHED	LEITRIM
11	LT-03-A-02 ARD ÁLAINN CARRICK-ON-SHANNON GALLOW'S HILL Edge of Town Centre Residential Zone Total No of Dwellings: 10 Survey date: MONDAY 22/05/17	BUNGALOWS	LEITRIM
12	RO-03-A-03 N61 BOYLE GREATMEADOW Edge of Town No Sub Category Total No of Dwellings: 23 Survey date: THURSDAY 25/09/14	DETACHED HOUSES	ROSCOMMON
13	RO-03-A-04 EAGLE COURT ROSCOMMON ARDNANAGH Suburban Area (PPS6 Out of Centre) Residential Zone Total No of Dwellings: 39 Survey date: FRIDAY 26/09/14	SEMI DET. & BUNGALOWS	ROSCOMMON
14	WA-03-A-04 MAYPARK LANE WATERFORD Edge of Town Residential Zone Total No of Dwellings: 280 Survey date: TUESDAY 24/06/14	DETACHED	WATERFORD
15	WC-03-A-01 STATION ROAD WICKLOW CORPORATION MURRAGH Edge of Town No Sub Category Total No of Dwellings: 50 Survey date: MONDAY 28/05/18	DETACHED HOUSES	WICKLOW
16	WC-03-A-02 MARLTON ROAD WICKLOW FRIARSHILL Edge of Town Centre Residential Zone Total No of Dwellings: 45 Survey date: MONDAY 28/05/18	DETACHED HOUSES	WICKLOW
17	WX-03-A-01 CLONARD ROAD WEXFORD Suburban Area (PPS6 Out of Centre) No Sub Category Total No of Dwellings: 34 Survey date: THURSDAY 25/09/14	SEMI-DETACHED	WEXFORD

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

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

TOTAL VEHICLES

Calculation factor: 1 DWELLS

BOLD print indicates peak (busiest) period

Time Range	ARRIVALS			DEPARTURES			TOTALS		
	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	17	60	0.046	17	60	0.179	17	60	0.225
08:00 - 09:00	17	60	0.173	17	60	0.495	17	60	0.668
09:00 - 10:00	17	60	0.235	17	60	0.263	17	60	0.498
10:00 - 11:00	17	60	0.166	17	60	0.199	17	60	0.365
11:00 - 12:00	17	60	0.169	17	60	0.210	17	60	0.379
12:00 - 13:00	17	60	0.251	17	60	0.237	17	60	0.488
13:00 - 14:00	17	60	0.269	17	60	0.274	17	60	0.543
14:00 - 15:00	17	60	0.304	17	60	0.314	17	60	0.618
15:00 - 16:00	17	60	0.364	17	60	0.256	17	60	0.620
16:00 - 17:00	17	60	0.340	17	60	0.231	17	60	0.571
17:00 - 18:00	17	60	0.402	17	60	0.263	17	60	0.665
18:00 - 19:00	17	60	0.327	17	60	0.266	17	60	0.593
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			3.046			3.187			6.233

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

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

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Parameter summary

Trip rate parameter range selected:	6 - 280 (units:)
Survey date date range:	01/01/12 - 29/05/19
Number of weekdays (Monday-Friday):	17
Number of Saturdays:	0
Number of Sundays:	0
Surveys automatically removed from selection:	2
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 CALCULATION SELECTION PARAMETERS:

Land Use : 01 - RETAIL
Category : 0 - CONVENIENCE STORE

TOTAL VEHICLES

Selected regions and areas:

04	EAST ANGLIA	
CA	CAMBRIDGESHIRE	1 days
NF	NORFOLK	1 days
07	YORKSHIRE & NORTH LINCOLNSHIRE	
NY	NORTH YORKSHIRE	2 days
SY	SOUTH YORKSHIRE	1 days
WY	WEST YORKSHIRE	1 days
09	NORTH	
DH	DURHAM	1 days
TW	TYNE & WEAR	1 days
11	SCOTLAND	
AD	ABERDEEN CITY	1 days
GC	GLASGOW CITY	1 days
13	MUNSTER	
TI	TIPPERARY	1 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:	Gross floor area
Actual Range:	220 to 1450 (units: sqm)
Range Selected by User:	96 to 1500 (units: sqm)

Parking Spaces Range: All Surveys Included

Public Transport Provision:

Selection by: Include all surveys

Date Range: 01/01/12 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	4 days
Tuesday	1 days
Wednesday	1 days
Thursday	1 days
Friday	5 days

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

Selected survey types:

Manual count	12 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:

Town Centre	3
Edge of Town Centre	1
Suburban Area (PPS6 Out of Centre)	5
Edge of Town	1
Neighbourhood Centre (PPS6 Local Centre)	2

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

Selected Location Sub Categories:

Residential Zone	7
Built-Up Zone	3
High Street	2

This data displays the number of surveys per location sub-category within the selected set. The location sub-categories consist of Commercial Zone, Industrial Zone, Development Zone, Residential Zone, Retail Zone, Built-Up Zone, Village,

Secondary Filtering selection:

Use Class:
A1 12 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
5,001 to 10,000 4 days
10,001 to 15,000 2 days
15,001 to 20,000 4 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:
5,001 to 25,000 2 days
25,001 to 50,000 1 days
75,001 to 100,000 3 days
100,001 to 125,000 2 days
125,001 to 250,000 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 7 days
1.1 to 1.5 4 days
1.6 to 2.0 1 days

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

Petrol filling station:
Included in the survey count 0 days
Excluded from count or no filling station 12 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 11 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 12 days

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

LIST OF SITES relevant to selection parameters

1	AD-01-O-01	TESCO EXPRESS	ABERDEEN CITY
	VICTORIA STREET		
	ABERDEEN		
	DYCE		
	Suburban Area (PPS6 Out of Centre)		
	Built-Up Zone		
	Total Gross floor area:	400 sqm	
	Survey date: FRIDAY	18/05/12	Survey Type: MANUAL
2	AN-01-O-01	SPAR	ANTRIM
	QUEENSWAY		
	LISBURN		
	LAMBEG		
	Edge of Town		
	Residential Zone		
	Total Gross floor area:	400 sqm	
	Survey date: THURSDAY	14/03/19	Survey Type: MANUAL
3	CA-01-O-02	LITTLE WAITROSE	CAMBRIDGESHIRE
	FITZROY STREET		
	CAMBRIDGE		
	Town Centre		
	Built-Up Zone		
	Total Gross floor area:	1056 sqm	
	Survey date: FRIDAY	12/07/13	Survey Type: MANUAL
4	DH-01-O-01	SAINSBURY'S LOCAL	DURHAM
	132 STATION LANE		
	HARTLEPOOL		
	SEATON CAREW		
	Suburban Area (PPS6 Out of Centre)		
	Residential Zone		
	Total Gross floor area:	469 sqm	
	Survey date: MONDAY	26/11/12	Survey Type: MANUAL
5	GC-01-O-01	SAINSBURY'S CENTRAL	GLASGOW CITY
	BUCHANAN STREET		
	GLASGOW		
	Town Centre		
	Built-Up Zone		
	Total Gross floor area:	1450 sqm	
	Survey date: WEDNESDAY	25/06/14	Survey Type: MANUAL
6	NF-01-O-01	TESCO EXPRESS	NORFOLK
	DEREHAM ROAD		
	NORWICH		
	Suburban Area (PPS6 Out of Centre)		
	Residential Zone		
	Total Gross floor area:	298 sqm	
	Survey date: FRIDAY	26/10/12	Survey Type: MANUAL
7	NY-01-O-02	SAINSBURY'S LOCAL	NORTH YORKSHIRE
	COLD BATH ROAD		
	HARROGATE		
	Edge of Town Centre		
	Residential Zone		
	Total Gross floor area:	220 sqm	
	Survey date: MONDAY	10/12/12	Survey Type: MANUAL
8	NY-01-O-03	CO-OPERATIVE	NORTH YORKSHIRE
	FOREST ROAD		
	NORTHALLERTON		
	Suburban Area (PPS6 Out of Centre)		
	Residential Zone		
	Total Gross floor area:	305 sqm	
	Survey date: MONDAY	19/09/16	Survey Type: MANUAL

LIST OF SITES relevant to selection parameters (Cont.)

9	SY-01-O-02	SAINSBURY'S LOCAL	SOUTH YORKSHIRE
	ECCLESALL ROAD SHEFFIELD		
	Neighbourhood Centre (PPS6 Local Centre) High Street Total Gross floor area:	306 sqm	
	Survey date: FRIDAY	14/12/12	Survey Type: MANUAL
10	TI-01-O-01	COSTCUTTER	TIPPERARY
	FRIAR STREET THURLES		
	Town Centre High Street Total Gross floor area:	375 sqm	
	Survey date: TUESDAY	11/12/12	Survey Type: MANUAL
11	TW-01-O-02	CO-OPERATIVE	TYNE & WEAR
	ETHEL TERRACE SUNDERLAND CASTLETOWN Suburban Area (PPS6 Out of Centre) Residential Zone Total Gross floor area:	330 sqm	
	Survey date: FRIDAY	07/04/17	Survey Type: MANUAL
12	WY-01-O-02	CO-OPERATIVE	WEST YORKSHIRE
	AINSTY ROAD WETHERBY		
	Neighbourhood Centre (PPS6 Local Centre) Residential Zone Total Gross floor area:	539 sqm	
	Survey date: MONDAY	26/09/16	Survey Type: MANUAL

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

TRIP RATE for Land Use 01 - RETAIL/O - CONVENIENCE STORE

TOTAL VEHICLES

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

Time Range	ARRIVALS			DEPARTURES			TOTALS		
	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	1	400	0.500	1	400	0.000	1	400	0.500
06:00 - 07:00	4	386	4.734	4	386	3.826	4	386	8.560
07:00 - 08:00	12	512	5.042	12	512	4.359	12	512	9.401
08:00 - 09:00	12	512	6.148	12	512	5.791	12	512	11.939
09:00 - 10:00	12	512	5.937	12	512	5.416	12	512	11.353
10:00 - 11:00	12	512	5.433	12	512	5.270	12	512	10.703
11:00 - 12:00	12	512	5.921	12	512	5.807	12	512	11.728
12:00 - 13:00	12	512	7.970	12	512	7.694	12	512	15.664
13:00 - 14:00	12	512	6.766	12	512	6.409	12	512	13.175
14:00 - 15:00	12	512	7.043	12	512	6.864	12	512	13.907
15:00 - 16:00	12	512	7.043	12	512	7.075	12	512	14.118
16:00 - 17:00	12	512	7.319	12	512	6.929	12	512	14.248
17:00 - 18:00	12	512	7.742	12	512	8.133	12	512	15.875
18:00 - 19:00	12	512	6.653	12	512	7.759	12	512	14.412
19:00 - 20:00	12	512	4.912	12	512	5.107	12	512	10.019
20:00 - 21:00	11	525	2.927	11	525	3.967	11	525	6.894
21:00 - 22:00	11	525	2.165	11	525	2.494	11	525	4.659
22:00 - 23:00	2	435	1.381	2	435	1.841	2	435	3.222
23:00 - 24:00	1	400	0.000	1	400	0.250	1	400	0.250
Total Rates:			95.636			94.991			190.627

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

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

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Parameter summary

Trip rate parameter range selected:	220 - 1450 (units: sqm)
Survey date range:	01/01/12 - 25/09/19
Number of weekdays (Monday-Friday):	12
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.

APPENDIX C

PICADY Output Files

Junctions 9	
PICADY 9 - Priority Intersection Module	
Version: 9.0.0.4211 [] © Copyright TRL Limited, 2021	
For sales and distribution information, program advice and maintenance, contact TRL: Tel: +44 (0)1344 770758 email: software@trl.co.uk Web: http://www.trlsoftware.co.uk	
The users of this computer program for the solution of an engineering problem are in no way relieved of their responsibility for the correctness of the solution	

Filename: Hollystown Site 2 Main Access.j9
 Path: G:\2017\p170182\calcs\picady\October 2021 Update
 Report generation date: 26/10/2021 12:45:59

»Do-Something - 2023, AM
 »Do-Something - 2023, PM
 »Do-Something - 2028, AM
 »Do-Something - 2028, PM
 »Do-Something - 2038, AM
 »Do-Something - 2038, PM

Summary of junction performance

	AM				PM			
	Queue (PCU)	Delay (s)	RFC	LOS	Queue (PCU)	Delay (s)	RFC	LOS
Do-Something - 2023								
Stream B-AC	0.0	7.75	0.05	A	0.0	8.14	0.03	A
Stream C-AB	0.0	6.61	0.00	A	0.0	7.52	0.01	A
Stream C-A								
Stream A-B								
Stream A-C								
Do-Something - 2028								
Stream B-AC	0.3	9.74	0.21	A	0.2	9.93	0.14	A
Stream C-AB	0.0	6.85	0.02	A	0.1	8.26	0.06	A
Stream C-A								
Stream A-B								
Stream A-C								
Do-Something - 2038								
Stream B-AC	0.3	9.98	0.21	A	0.2	10.22	0.14	B
Stream C-AB	0.0	6.88	0.02	A	0.1	8.39	0.06	A
Stream C-A								
Stream A-B								
Stream A-C								

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

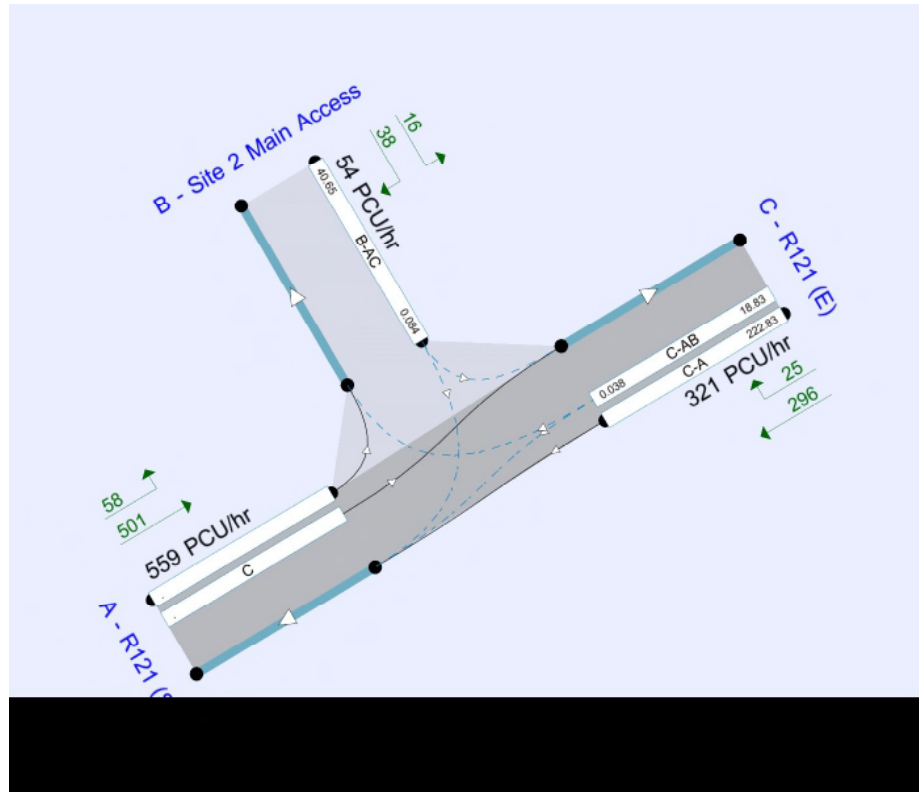
File summary

File Description

Title	Hollystown-Kilmartin
Location	Hollystown, Dublin 15
Site number	
Date	26/10/2021
Version	
Status	Proposed
Identifier	
Client	Glenveagh
Jobnumber	170182
Enumerator	HEADOFFICE*GILD
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

Scenario name	Time Period name	Traffic profile type	Model start time (HH:mm)	Model finish time (HH:mm)	Time segment length (min)	Run automatically
2023	AM	ONE HOUR	07:30	09:00	15	✓
2023	PM	ONE HOUR	16:45	18:15	15	✓
2028	AM	ONE HOUR	07:30	09:00	15	✓
2028	PM	ONE HOUR	16:45	18:15	15	✓
2038	AM	ONE HOUR	07:30	09:00	15	✓
2038	PM	ONE HOUR	16:45	18:15	15	✓

Do-Something - 2023, AM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

ID	Name	Include in report	Use specific Demand Set (s)	Specific Demand Set(s)	Network flow scaling factor (%)	Network capacity scaling factor (%)
A1	Do-Something	✓	✓	D1,D2,D3,D4,D5,D6	100.000	100.000

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
1 - Hollystown Site 2 Main Access	Hollystown Site 2 Main Access	T-Junction	Two-way	0.25	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Name	Description	Arm type
A	R121 (S)		Major
B	Site 2 Main Access		Minor
C	R121 (E)		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 - R121 (E)	6.00			42.0	✓	2.00

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

Minor Arm Geometry

Arm	Minor arm type	Lane width (m)	Visibility to left (m)	Visibility to right (m)
B - Site 2 Main Access	One lane	2.75	90	200

Slope / Intercept / Capacity

Priority Intersection Slopes and Intercepts

Junction	Stream	Intercept (PCU/hr)	Slope for A-B	Slope for A-C	Slope for C-A	Slope for C-B
1	B-A	593.131	0.108	0.273	0.172	0.390
1	B-C	731.075	0.112	0.283	-	-
1	C-B	598.286	0.232	0.232	-	-

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	Model start time (HH:mm)	Model finish time (HH:mm)	Time segment length (min)	Run automatically
D1	2023	AM	ONE HOUR	07:30	09:00	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 - R121 (S)		ONE HOUR	✓	201.00	100.000
B - Site 2 Main Access		ONE HOUR	✓	21.00	100.000
C - R121 (E)		ONE HOUR	✓	495.00	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		A - R121 (S)	B - Site 2 Main Access	C - R121 (E)
From	A - R121 (S)	0.000	5.000	196.000
	B - Site 2 Main Access	15.000	0.000	6.000
	C - R121 (E)	493.000	2.000	0.000

Proportions

		To		
		A - R121 (S)	B - Site 2 Main Access	C - R121 (E)
From	A - R121 (S)	0.00	0.02	0.98
	B - Site 2 Main Access	0.71	0.00	0.29
	C - R121 (E)	1.00	0.00	0.00

Vehicle Mix

Heavy Vehicle proportion

		To		
		A - R121 (S)	B - Site 2 Main Access	C - R121 (E)
From	A - R121 (S)	0	0	0
	B - Site 2 Main Access	0	0	0
	C - R121 (E)	0	0	0

Average PCU Per Veh

		To		
		A - R121 (S)	B - Site 2 Main Access	C - R121 (E)
From	A - R121 (S)	1.000	1.000	1.000
	B - Site 2 Main Access	1.000	1.000	1.000
	C - R121 (E)	1.000	1.000	1.000

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	0.05	7.75	0.0	A	19.27	28.90
C-AB	0.00	6.61	0.0	A	1.84	2.75
C-A					452.39	678.58
A-B					4.59	6.88
A-C					179.85	269.78

Main Results for each time segment

Main results: (07:30-07:45)

Stream	Total Demand (PCU/hr)	Junction demand (PCU/hr)	Junction Arrivals (PCU)	Bypass demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
B-AC	15.81	15.81	3.95	0.00	532.42	0.030	15.69	0.0	0.0	6.964	A
C-AB	1.51	1.51	0.38	0.00	563.21	0.003	1.50	0.0	0.0	6.408	A
C-A	371.16	371.16	92.79	0.00			371.16				
A-B	3.76	3.76	0.94	0.00			3.76				
A-C	147.56	147.56	36.89	0.00			147.56				

Main results: (07:45-08:00)

Stream	Total Demand (PCU/hr)	Junction demand (PCU/hr)	Junction Arrivals (PCU)	Bypass demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
B-AC	18.88	18.88	4.72	0.00	513.61	0.037	18.85	0.0	0.0	7.275	A
C-AB	1.80	1.80	0.45	0.00	556.40	0.003	1.80	0.0	0.0	6.490	A
C-A	443.20	443.20	110.80	0.00			443.20				
A-B	4.49	4.49	1.12	0.00			4.49				
A-C	176.20	176.20	44.05	0.00			176.20				

Main results: (08:00-08:15)

Stream	Total Demand (PCU/hr)	Junction demand (PCU/hr)	Junction Arrivals (PCU)	Bypass demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
B-AC	23.12	23.12	5.78	0.00	487.31	0.047	23.08	0.0	0.0	7.753	A
C-AB	2.20	2.20	0.55	0.00	546.99	0.004	2.20	0.0	0.0	6.607	A
C-A	542.80	542.80	135.70	0.00			542.80				
A-B	5.51	5.51	1.38	0.00			5.51				
A-C	215.80	215.80	53.95	0.00			215.80				

Main results: (08:15-08:30)

Stream	Total Demand (PCU/hr)	Junction demand (PCU/hr)	Junction Arrivals (PCU)	Bypass demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
B-AC	23.12	23.12	5.78	0.00	487.31	0.047	23.12	0.0	0.0	7.755	A
C-AB	2.20	2.20	0.55	0.00	546.99	0.004	2.20	0.0	0.0	6.607	A
C-A	542.80	542.80	135.70	0.00			542.80				
A-B	5.51	5.51	1.38	0.00			5.51				
A-C	215.80	215.80	53.95	0.00			215.80				

Main results: (08:30-08:45)

Stream	Total Demand (PCU/hr)	Junction demand (PCU/hr)	Junction Arrivals (PCU)	Bypass demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
B-AC	18.88	18.88	4.72	0.00	513.60	0.037	18.92	0.0	0.0	7.277	A
C-AB	1.80	1.80	0.45	0.00	556.40	0.003	1.80	0.0	0.0	6.492	A
C-A	443.20	443.20	110.80	0.00			443.20				
A-B	4.49	4.49	1.12	0.00			4.49				
A-C	176.20	176.20	44.05	0.00			176.20				

Main results: (08:45-09:00)

Stream	Total Demand (PCU/hr)	Junction demand (PCU/hr)	Junction Arrivals (PCU)	Bypass demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
B-AC	15.81	15.81	3.95	0.00	532.42	0.030	15.84	0.0	0.0	6.971	A
C-AB	1.51	1.51	0.38	0.00	563.21	0.003	1.51	0.0	0.0	6.408	A
C-A	371.16	371.16	92.79	0.00			371.16				
A-B	3.76	3.76	0.94	0.00			3.76				
A-C	147.56	147.56	36.89	0.00			147.56				

Do-Something - 2023, PM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

ID	Name	Include in report	Use specific Demand Set (s)	Specific Demand Set(s)	Network flow scaling factor (%)	Network capacity scaling factor (%)
A1	Do-Something	✓	✓	D1,D2,D3,D4,D5,D6	100.000	100.000

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
1 - Hollystown Site 2 Main Access	Hollystown Site 2 Main Access	T-Junction	Two-way	0.21	A

Junction Network Options

[same as above]

Arms

Arms

[same as above]

Major Arm Geometry

[same as above]

Minor Arm Geometry

[same as above]

Slope / Intercept / Capacity

[same as above]

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Model start time (HH:mm)	Model finish time (HH:mm)	Time segment length (min)	Run automatically
D2	2023	PM	ONE HOUR	16:45	18:15	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A - R121 (S)		ONE HOUR	✓	444.00	100.000
B - Site 2 Main Access		ONE HOUR	✓	13.00	100.000
C - R121 (E)		ONE HOUR	✓	247.00	100.000

Origin-Destination Data

Demand (PCU/hr)

	To			
		A - R121 (S)	B - Site 2 Main Access	C - R121 (E)
	From			
	A - R121 (S)	0.000	14.000	430.000
	B - Site 2 Main Access	9.000	0.000	4.000
	C - R121 (E)	241.000	6.000	0.000

Proportions

	To			
		A - R121 (S)	B - Site 2 Main Access	C - R121 (E)
	From			
	A - R121 (S)	0.00	0.03	0.97
	B - Site 2 Main Access	0.69	0.00	0.31
	C - R121 (E)	0.98	0.02	0.00

Vehicle Mix

Heavy Vehicle proportion

	To			
		A - R121 (S)	B - Site 2 Main Access	C - R121 (E)
	From			
	A - R121 (S)	0	0	0
	B - Site 2 Main Access	0	0	0
	C - R121 (E)	0	0	0

Average PCU Per Veh

	To			
		A - R121 (S)	B - Site 2 Main Access	C - R121 (E)
	From			
	A - R121 (S)	1.000	1.000	1.000
	B - Site 2 Main Access	1.000	1.000	1.000
	C - R121 (E)	1.000	1.000	1.000

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	8.14	0.0	A	11.93	17.89
C-AB	0.01	7.52	0.0	A	5.51	8.26
C-A					221.15	331.72
A-B					12.85	19.27
A-C					394.58	591.86

Main Results for each time segment

Main results: (16:45-17:00)

Stream	Total Demand (PCU/hr)	Junction demand (PCU/hr)	Junction Arrivals (PCU)	Bypass demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
B-AC	9.79	9.79	2.45	0.00	512.02	0.019	9.71	0.0	0.0	7.167	A
C-AB	4.52	4.52	1.13	0.00	520.81	0.009	4.48	0.0	0.0	6.971	A
C-A	181.44	181.44	45.36	0.00			181.44				
A-B	10.54	10.54	2.63	0.00			10.54				
A-C	323.73	323.73	80.93	0.00			323.73				

Main results: (17:00-17:15)

Stream	Total Demand (PCU/hr)	Junction demand (PCU/hr)	Junction Arrivals (PCU)	Bypass demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
B-AC	11.69	11.69	2.92	0.00	488.92	0.024	11.67	0.0	0.0	7.542	A
C-AB	5.39	5.39	1.35	0.00	505.79	0.011	5.39	0.0	0.0	7.193	A
C-A	216.65	216.65	54.16	0.00			216.65				
A-B	12.59	12.59	3.15	0.00			12.59				
A-C	386.56	386.56	96.64	0.00			386.56				

Main results: (17:15-17:30)

Stream	Total Demand (PCU/hr)	Junction demand (PCU/hr)	Junction Arrivals (PCU)	Bypass demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
B-AC	14.31	14.31	3.58	0.00	456.81	0.031	14.28	0.0	0.0	8.135	A
C-AB	6.61	6.61	1.65	0.00	485.02	0.014	6.59	0.0	0.0	7.523	A
C-A	265.35	265.35	66.34	0.00			265.35				
A-B	15.41	15.41	3.85	0.00			15.41				
A-C	473.44	473.44	118.36	0.00			473.44				

Main results: (17:30-17:45)

Stream	Total Demand (PCU/hr)	Junction demand (PCU/hr)	Junction Arrivals (PCU)	Bypass demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
B-AC	14.31	14.31	3.58	0.00	456.80	0.031	14.31	0.0	0.0	8.135	A
C-AB	6.61	6.61	1.65	0.00	485.02	0.014	6.61	0.0	0.0	7.523	A
C-A	265.35	265.35	66.34	0.00			265.35				
A-B	15.41	15.41	3.85	0.00			15.41				
A-C	473.44	473.44	118.36	0.00			473.44				

Main results: (17:45-18:00)

Stream	Total Demand (PCU/hr)	Junction demand (PCU/hr)	Junction Arrivals (PCU)	Bypass demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
B-AC	11.69	11.69	2.92	0.00	488.91	0.024	11.72	0.0	0.0	7.546	A
C-AB	5.39	5.39	1.35	0.00	505.79	0.011	5.41	0.0	0.0	7.193	A
C-A	216.65	216.65	54.16	0.00			216.65				
A-B	12.59	12.59	3.15	0.00			12.59				
A-C	386.56	386.56	96.64	0.00			386.56				

Main results: (18:00-18:15)

Stream	Total Demand (PCU/hr)	Junction demand (PCU/hr)	Junction Arrivals (PCU)	Bypass demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
B-AC	9.79	9.79	2.45	0.00	512.01	0.019	9.81	0.0	0.0	7.167	A
C-AB	4.52	4.52	1.13	0.00	520.81	0.009	4.53	0.0	0.0	6.974	A
C-A	181.44	181.44	45.36	0.00			181.44				
A-B	10.54	10.54	2.63	0.00			10.54				
A-C	323.73	323.73	80.93	0.00			323.73				

Do-Something - 2028, AM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

ID	Name	Include in report	Use specific Demand Set (s)	Specific Demand Set(s)	Network flow scaling factor (%)	Network capacity scaling factor (%)
A1	Do-Something	✓	✓	D1,D2,D3,D4,D5,D6	100.000	100.000

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
1 - Hollystown Site 2 Main Access	Hollystown Site 2 Main Access	T-Junction	Two-way	1.01	A

Junction Network Options

[same as above]

Arms

Arms

[same as above]

Major Arm Geometry

[same as above]

Minor Arm Geometry

[same as above]

Slope / Intercept / Capacity

[same as above]

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Model start time (HH:mm)	Model finish time (HH:mm)	Time segment length (min)	Run automatically
D3	2028	AM	ONE HOUR	07:30	09:00	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 - R121 (S)		ONE HOUR	✓	246.00	100.000
B - Site 2 Main Access		ONE HOUR	✓	87.00	100.000
C - R121 (E)		ONE HOUR	✓	565.00	100.000

Origin-Destination Data

Demand (PCU/hr)

	To			
		A - R121 (S)	B - Site 2 Main Access	C - R121 (E)
	From			
	A - R121 (S)	0.000	20.000	226.000
	B - Site 2 Main Access	61.000	0.000	26.000
	C - R121 (E)	556.000	9.000	0.000

Proportions

	To			
		A - R121 (S)	B - Site 2 Main Access	C - R121 (E)
	From			
	A - R121 (S)	0.00	0.08	0.92
	B - Site 2 Main Access	0.70	0.00	0.30
	C - R121 (E)	0.98	0.02	0.00

Vehicle Mix

Heavy Vehicle proportion

	To			
		A - R121 (S)	B - Site 2 Main Access	C - R121 (E)
	From			
	A - R121 (S)	0	0	0
	B - Site 2 Main Access	0	0	0
	C - R121 (E)	0	0	0

Average PCU Per Veh

	To			
		A - R121 (S)	B - Site 2 Main Access	C - R121 (E)
	From			
	A - R121 (S)	1.000	1.000	1.000
	B - Site 2 Main Access	1.000	1.000	1.000
	C - R121 (E)	1.000	1.000	1.000

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	0.21	9.74	0.3	A	79.83	119.75
C-AB	0.02	6.85	0.0	A	8.26	12.39
C-A					510.19	765.29
A-B					18.35	27.53
A-C					207.38	311.07

Main Results for each time segment

Main results: (07:30-07:45)

Stream	Total Demand (PCU/hr)	Junction demand (PCU/hr)	Junction Arrivals (PCU)	Bypass demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
B-AC	65.50	65.50	16.37	0.00	518.41	0.126	64.93	0.0	0.1	7.929	A
C-AB	6.78	6.78	1.69	0.00	555.42	0.012	6.73	0.0	0.0	6.560	A
C-A	418.59	418.59	104.65	0.00			418.59				
A-B	15.06	15.06	3.76	0.00			15.06				
A-C	170.14	170.14	42.54	0.00			170.14				

Main results: (07:45-08:00)

Stream	Total Demand (PCU/hr)	Junction demand (PCU/hr)	Junction Arrivals (PCU)	Bypass demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
B-AC	78.21	78.21	19.55	0.00	496.34	0.158	78.04	0.1	0.2	8.602	A
C-AB	8.09	8.09	2.02	0.00	547.13	0.015	8.08	0.0	0.0	6.677	A
C-A	499.83	499.83	124.96	0.00			499.83				
A-B	17.98	17.98	4.49	0.00			17.98				
A-C	203.17	203.17	50.79	0.00			203.17				

Main results: (08:00-08:15)

Stream	Total Demand (PCU/hr)	Junction demand (PCU/hr)	Junction Arrivals (PCU)	Bypass demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
B-AC	95.79	95.79	23.95	0.00	465.40	0.206	95.51	0.2	0.3	9.732	A
C-AB	9.91	9.91	2.48	0.00	535.71	0.019	9.90	0.0	0.0	6.845	A
C-A	612.16	612.16	153.04	0.00			612.16				
A-B	22.02	22.02	5.51	0.00			22.02				
A-C	248.83	248.83	62.21	0.00			248.83				

Main results: (08:15-08:30)

Stream	Total Demand (PCU/hr)	Junction demand (PCU/hr)	Junction Arrivals (PCU)	Bypass demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
B-AC	95.79	95.79	23.95	0.00	465.39	0.206	95.78	0.3	0.3	9.739	A
C-AB	9.91	9.91	2.48	0.00	535.71	0.019	9.91	0.0	0.0	6.845	A
C-A	612.16	612.16	153.04	0.00			612.16				
A-B	22.02	22.02	5.51	0.00			22.02				
A-C	248.83	248.83	62.21	0.00			248.83				

Main results: (08:30-08:45)

Stream	Total Demand (PCU/hr)	Junction demand (PCU/hr)	Junction Arrivals (PCU)	Bypass demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
B-AC	78.21	78.21	19.55	0.00	496.33	0.158	78.48	0.3	0.2	8.621	A
C-AB	8.09	8.09	2.02	0.00	547.13	0.015	8.11	0.0	0.0	6.680	A
C-A	499.83	499.83	124.96	0.00			499.83				
A-B	17.98	17.98	4.49	0.00			17.98				
A-C	203.17	203.17	50.79	0.00			203.17				

Main results: (08:45-09:00)

Stream	Total Demand (PCU/hr)	Junction demand (PCU/hr)	Junction Arrivals (PCU)	Bypass demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
B-AC	65.50	65.50	16.37	0.00	518.39	0.126	65.67	0.2	0.1	7.954	A
C-AB	6.78	6.78	1.69	0.00	555.42	0.012	6.79	0.0	0.0	6.561	A
C-A	418.59	418.59	104.65	0.00			418.59				
A-B	15.06	15.06	3.76	0.00			15.06				
A-C	170.14	170.14	42.54	0.00			170.14				

Do-Something - 2028, PM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

ID	Name	Include in report	Use specific Demand Set (s)	Specific Demand Set(s)	Network flow scaling factor (%)	Network capacity scaling factor (%)
A1	Do-Something	✓	✓	D1,D2,D3,D4,D5,D6	100.000	100.000

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
1 - Hollystown Site 2 Main Access	Hollystown Site 2 Main Access	T-Junction	Two-way	0.83	A

Junction Network Options

[same as above]

Arms

Arms

[same as above]

Major Arm Geometry

[same as above]

Minor Arm Geometry

[same as above]

Slope / Intercept / Capacity

[same as above]

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Model start time (HH:mm)	Model finish time (HH:mm)	Time segment length (min)	Run automatically
D4	2028	PM	ONE HOUR	16:45	18:15	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A - R121 (S)		ONE HOUR	✓	532.00	100.000
B - Site 2 Main Access		ONE HOUR	✓	54.00	100.000
C - R121 (E)		ONE HOUR	✓	308.00	100.000

Origin-Destination Data

Demand (PCU/hr)

	To			
		A - R121 (S)	B - Site 2 Main Access	C - R121 (E)
	From			
	A - R121 (S)	0.000	58.000	474.000
	B - Site 2 Main Access	38.000	0.000	16.000
	C - R121 (E)	283.000	25.000	0.000

Proportions

	To			
		A - R121 (S)	B - Site 2 Main Access	C - R121 (E)
	From			
	A - R121 (S)	0.00	0.11	0.89
	B - Site 2 Main Access	0.70	0.00	0.30
	C - R121 (E)	0.92	0.08	0.00

Vehicle Mix

Heavy Vehicle proportion

	To			
		A - R121 (S)	B - Site 2 Main Access	C - R121 (E)
	From			
	A - R121 (S)	0	0	0
	B - Site 2 Main Access	0	0	0
	C - R121 (E)	0	0	0

Average PCU Per Veh

	To			
		A - R121 (S)	B - Site 2 Main Access	C - R121 (E)
	From			
	A - R121 (S)	1.000	1.000	1.000
	B - Site 2 Main Access	1.000	1.000	1.000
	C - R121 (E)	1.000	1.000	1.000

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	0.14	9.93	0.2	A	49.55	74.33
C-AB	0.06	8.26	0.1	A	22.97	34.46
C-A					259.65	389.48
A-B					53.22	79.83
A-C					434.95	652.43

Main Results for each time segment

Main results: (16:45-17:00)

Stream	Total Demand (PCU/hr)	Junction demand (PCU/hr)	Junction Arrivals (PCU)	Bypass demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
B-AC	40.65	40.65	10.16	0.00	488.24	0.083	40.29	0.0	0.1	8.030	A
C-AB	18.83	18.83	4.71	0.00	505.74	0.037	18.68	0.0	0.0	7.389	A
C-A	213.05	213.05	53.26	0.00			213.05				
A-B	43.67	43.67	10.92	0.00			43.67				
A-C	356.85	356.85	89.21	0.00			356.85				

Main results: (17:00-17:15)

Stream	Total Demand (PCU/hr)	Junction demand (PCU/hr)	Junction Arrivals (PCU)	Bypass demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
B-AC	48.54	48.54	12.14	0.00	460.58	0.105	48.44	0.1	0.1	8.733	A
C-AB	22.50	22.50	5.62	0.00	487.96	0.046	22.46	0.0	0.0	7.733	A
C-A	254.39	254.39	63.60	0.00			254.39				
A-B	52.14	52.14	13.04	0.00			52.14				
A-C	426.12	426.12	106.53	0.00			426.12				

Main results: (17:15-17:30)

Stream	Total Demand (PCU/hr)	Junction demand (PCU/hr)	Junction Arrivals (PCU)	Bypass demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
B-AC	59.46	59.46	14.86	0.00	422.09	0.141	59.27	0.1	0.2	9.917	A
C-AB	27.59	27.59	6.90	0.00	463.61	0.060	27.53	0.0	0.1	8.254	A
C-A	311.52	311.52	77.88	0.00			311.52				
A-B	63.86	63.86	15.96	0.00			63.86				
A-C	521.88	521.88	130.47	0.00			521.88				

Main results: (17:30-17:45)

Stream	Total Demand (PCU/hr)	Junction demand (PCU/hr)	Junction Arrivals (PCU)	Bypass demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
B-AC	59.46	59.46	14.86	0.00	422.07	0.141	59.45	0.2	0.2	9.927	A
C-AB	27.59	27.59	6.90	0.00	463.61	0.060	27.59	0.1	0.1	8.256	A
C-A	311.52	311.52	77.88	0.00			311.52				
A-B	63.86	63.86	15.96	0.00			63.86				
A-C	521.88	521.88	130.47	0.00			521.88				

Main results: (17:45-18:00)

Stream	Total Demand (PCU/hr)	Junction demand (PCU/hr)	Junction Arrivals (PCU)	Bypass demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
B-AC	48.54	48.54	12.14	0.00	460.55	0.105	48.72	0.2	0.1	8.746	A
C-AB	22.50	22.50	5.62	0.00	487.96	0.046	22.56	0.1	0.0	7.735	A
C-A	254.39	254.39	63.60	0.00			254.39				
A-B	52.14	52.14	13.04	0.00			52.14				
A-C	426.12	426.12	106.53	0.00			426.12				

Main results: (18:00-18:15)

Stream	Total Demand (PCU/hr)	Junction demand (PCU/hr)	Junction Arrivals (PCU)	Bypass demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
B-AC	40.65	40.65	10.16	0.00	488.18	0.083	40.76	0.1	0.1	8.048	A
C-AB	18.83	18.83	4.71	0.00	505.74	0.037	18.87	0.0	0.0	7.396	A
C-A	213.05	213.05	53.26	0.00			213.05				
A-B	43.67	43.67	10.92	0.00			43.67				
A-C	356.85	356.85	89.21	0.00			356.85				

Do-Something - 2038, AM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

ID	Name	Include in report	Use specific Demand Set (s)	Specific Demand Set(s)	Network flow scaling factor (%)	Network capacity scaling factor (%)
A1	Do-Something	✓	✓	D1,D2,D3,D4,D5,D6	100.000	100.000

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
1 - Hollystown Site 2 Main Access	Hollystown Site 2 Main Access	T-Junction	Two-way	0.99	A

Junction Network Options

[same as above]

Arms

Arms

[same as above]

Major Arm Geometry

[same as above]

Minor Arm Geometry

[same as above]

Slope / Intercept / Capacity

[same as above]

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Model start time (HH:mm)	Model finish time (HH:mm)	Time segment length (min)	Run automatically
D5	2038	AM	ONE HOUR	07:30	09:00	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 - R121 (S)		ONE HOUR	✓	257.00	100.000
B - Site 2 Main Access		ONE HOUR	✓	87.00	100.000
C - R121 (E)		ONE HOUR	✓	597.00	100.000

Origin-Destination Data

Demand (PCU/hr)

	To			
		A - R121 (S)	B - Site 2 Main Access	C - R121 (E)
	From			
	A - R121 (S)	0.000	20.000	237.000
	B - Site 2 Main Access	61.000	0.000	26.000
	C - R121 (E)	588.000	9.000	0.000

Proportions

	To			
		A - R121 (S)	B - Site 2 Main Access	C - R121 (E)
	From			
	A - R121 (S)	0.00	0.08	0.92
	B - Site 2 Main Access	0.70	0.00	0.30
	C - R121 (E)	0.98	0.02	0.00

Vehicle Mix

Heavy Vehicle proportion

	To			
		A - R121 (S)	B - Site 2 Main Access	C - R121 (E)
	From			
	A - R121 (S)	0	0	0
	B - Site 2 Main Access	0	0	0
	C - R121 (E)	0	0	0

Average PCU Per Veh

	To			
		A - R121 (S)	B - Site 2 Main Access	C - R121 (E)
	From			
	A - R121 (S)	1.000	1.000	1.000
	B - Site 2 Main Access	1.000	1.000	1.000
	C - R121 (E)	1.000	1.000	1.000

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	0.21	9.98	0.3	A	79.83	119.75
C-AB	0.02	6.88	0.0	A	8.26	12.39
C-A					539.56	809.34
A-B					18.35	27.53
A-C					217.48	326.21

Main Results for each time segment

Main results: (07:30-07:45)

Stream	Total Demand (PCU/hr)	Junction demand (PCU/hr)	Junction Arrivals (PCU)	Bypass demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
B-AC	65.50	65.50	16.37	0.00	512.55	0.128	64.92	0.0	0.1	8.032	A
C-AB	6.78	6.78	1.69	0.00	553.50	0.012	6.73	0.0	0.0	6.583	A
C-A	442.68	442.68	110.67	0.00			442.68				
A-B	15.06	15.06	3.76	0.00			15.06				
A-C	178.43	178.43	44.61	0.00			178.43				

Main results: (07:45-08:00)

Stream	Total Demand (PCU/hr)	Junction demand (PCU/hr)	Junction Arrivals (PCU)	Bypass demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
B-AC	78.21	78.21	19.55	0.00	489.25	0.160	78.04	0.1	0.2	8.751	A
C-AB	8.09	8.09	2.02	0.00	544.85	0.015	8.08	0.0	0.0	6.706	A
C-A	528.60	528.60	132.15	0.00			528.60				
A-B	17.98	17.98	4.49	0.00			17.98				
A-C	213.06	213.06	53.26	0.00			213.06				

Main results: (08:00-08:15)

Stream	Total Demand (PCU/hr)	Junction demand (PCU/hr)	Junction Arrivals (PCU)	Bypass demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
B-AC	95.79	95.79	23.95	0.00	456.56	0.210	95.49	0.2	0.3	9.962	A
C-AB	9.91	9.91	2.48	0.00	532.92	0.019	9.90	0.0	0.0	6.882	A
C-A	647.40	647.40	161.85	0.00			647.40				
A-B	22.02	22.02	5.51	0.00			22.02				
A-C	260.94	260.94	65.24	0.00			260.94				

Main results: (08:15-08:30)

Stream	Total Demand (PCU/hr)	Junction demand (PCU/hr)	Junction Arrivals (PCU)	Bypass demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
B-AC	95.79	95.79	23.95	0.00	456.55	0.210	95.78	0.3	0.3	9.978	A
C-AB	9.91	9.91	2.48	0.00	532.92	0.019	9.91	0.0	0.0	6.882	A
C-A	647.40	647.40	161.85	0.00			647.40				
A-B	22.02	22.02	5.51	0.00			22.02				
A-C	260.94	260.94	65.24	0.00			260.94				

Main results: (08:30-08:45)

Stream	Total Demand (PCU/hr)	Junction demand (PCU/hr)	Junction Arrivals (PCU)	Bypass demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
B-AC	78.21	78.21	19.55	0.00	489.24	0.160	78.50	0.3	0.2	8.770	A
C-AB	8.09	8.09	2.02	0.00	544.85	0.015	8.11	0.0	0.0	6.709	A
C-A	528.60	528.60	132.15	0.00			528.60				
A-B	17.98	17.98	4.49	0.00			17.98				
A-C	213.06	213.06	53.26	0.00			213.06				

Main results: (08:45-09:00)

Stream	Total Demand (PCU/hr)	Junction demand (PCU/hr)	Junction Arrivals (PCU)	Bypass demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
B-AC	65.50	65.50	16.37	0.00	512.53	0.128	65.68	0.2	0.1	8.059	A
C-AB	6.78	6.78	1.69	0.00	553.50	0.012	6.79	0.0	0.0	6.586	A
C-A	442.68	442.68	110.67	0.00			442.68				
A-B	15.06	15.06	3.76	0.00			15.06				
A-C	178.43	178.43	44.61	0.00			178.43				

Do-Something - 2038, PM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

ID	Name	Include in report	Use specific Demand Set (s)	Specific Demand Set(s)	Network flow scaling factor (%)	Network capacity scaling factor (%)
A1	Do-Something	✓	✓	D1,D2,D3,D4,D5,D6	100.000	100.000

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
1 - Hollystown Site 2 Main Access	Hollystown Site 2 Main Access	T-Junction	Two-way	0.82	A

Junction Network Options

[same as above]

Arms

Arms

[same as above]

Major Arm Geometry

[same as above]

Minor Arm Geometry

[same as above]

Slope / Intercept / Capacity

[same as above]

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Model start time (HH:mm)	Model finish time (HH:mm)	Time segment length (min)	Run automatically
D6	2038	PM	ONE HOUR	16:45	18:15	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A - R121 (S)		ONE HOUR	✓	559.00	100.000
B - Site 2 Main Access		ONE HOUR	✓	54.00	100.000
C - R121 (E)		ONE HOUR	✓	321.00	100.000

Origin-Destination Data

Demand (PCU/hr)

	To			
		A - R121 (S)	B - Site 2 Main Access	C - R121 (E)
	From	A - R121 (S)	0.000	58.000
		B - Site 2 Main Access	38.000	0.000
		C - R121 (E)	296.000	25.000

Proportions

	To			
		A - R121 (S)	B - Site 2 Main Access	C - R121 (E)
	From	A - R121 (S)	0.00	0.10
		B - Site 2 Main Access	0.70	0.00
		C - R121 (E)	0.92	0.08

Vehicle Mix

Heavy Vehicle proportion

	To			
		A - R121 (S)	B - Site 2 Main Access	C - R121 (E)
	From	A - R121 (S)	0	0
		B - Site 2 Main Access	0	0
		C - R121 (E)	0	0

Average PCU Per Veh

	To			
		A - R121 (S)	B - Site 2 Main Access	C - R121 (E)
	From	A - R121 (S)	1.000	1.000
		B - Site 2 Main Access	1.000	1.000
		C - R121 (E)	1.000	1.000

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	0.14	10.22	0.2	B	49.55	74.33
C-AB	0.06	8.39	0.1	A	22.98	34.47
C-A					271.58	407.37
A-B					53.22	79.83
A-C					459.73	689.59

Main Results for each time segment

Main results: (16:45-17:00)

Stream	Total Demand (PCU/hr)	Junction demand (PCU/hr)	Junction Arrivals (PCU)	Bypass demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
B-AC	40.65	40.65	10.16	0.00	481.12	0.085	40.29	0.0	0.1	8.160	A
C-AB	18.83	18.83	4.71	0.00	501.05	0.038	18.68	0.0	0.0	7.461	A
C-A	222.83	222.83	55.71	0.00			222.83				
A-B	43.67	43.67	10.92	0.00			43.67				
A-C	377.18	377.18	94.29	0.00			377.18				

Main results: (17:00-17:15)

Stream	Total Demand (PCU/hr)	Junction demand (PCU/hr)	Junction Arrivals (PCU)	Bypass demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
B-AC	48.54	48.54	12.14	0.00	452.04	0.107	48.43	0.1	0.1	8.918	A
C-AB	22.50	22.50	5.63	0.00	482.37	0.047	22.46	0.0	0.0	7.827	A
C-A	266.07	266.07	66.52	0.00			266.07				
A-B	52.14	52.14	13.04	0.00			52.14				
A-C	450.39	450.39	112.60	0.00			450.39				

Main results: (17:15-17:30)

Stream	Total Demand (PCU/hr)	Junction demand (PCU/hr)	Junction Arrivals (PCU)	Bypass demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
B-AC	59.46	59.46	14.86	0.00	411.53	0.144	59.26	0.1	0.2	10.214	B
C-AB	27.60	27.60	6.90	0.00	456.80	0.060	27.54	0.0	0.1	8.385	A
C-A	325.83	325.83	81.46	0.00			325.83				
A-B	63.86	63.86	15.96	0.00			63.86				
A-C	551.61	551.61	137.90	0.00			551.61				

Main results: (17:30-17:45)

Stream	Total Demand (PCU/hr)	Junction demand (PCU/hr)	Junction Arrivals (PCU)	Bypass demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
B-AC	59.46	59.46	14.86	0.00	411.50	0.144	59.45	0.2	0.2	10.225	B
C-AB	27.60	27.60	6.90	0.00	456.80	0.060	27.60	0.1	0.1	8.387	A
C-A	325.83	325.83	81.46	0.00			325.83				
A-B	63.86	63.86	15.96	0.00			63.86				
A-C	551.61	551.61	137.90	0.00			551.61				

Main results: (17:45-18:00)

Stream	Total Demand (PCU/hr)	Junction demand (PCU/hr)	Junction Arrivals (PCU)	Bypass demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
B-AC	48.54	48.54	12.14	0.00	452.00	0.107	48.73	0.2	0.1	8.932	A
C-AB	22.50	22.50	5.63	0.00	482.37	0.047	22.56	0.1	0.0	7.831	A
C-A	266.07	266.07	66.52	0.00			266.07				
A-B	52.14	52.14	13.04	0.00			52.14				
A-C	450.39	450.39	112.60	0.00			450.39				

Main results: (18:00-18:15)

Stream	Total Demand (PCU/hr)	Junction demand (PCU/hr)	Junction Arrivals (PCU)	Bypass demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
B-AC	40.65	40.65	10.16	0.00	481.06	0.085	40.77	0.1	0.1	8.178	A
C-AB	18.83	18.83	4.71	0.00	501.05	0.038	18.87	0.0	0.0	7.465	A
C-A	222.83	222.83	55.71	0.00			222.83				
A-B	43.67	43.67	10.92	0.00			43.67				
A-C	377.18	377.18	94.29	0.00			377.18				

Junctions 9
PICADY 9 - Priority Intersection Module
Version: 9.0.0.4211 [] © Copyright TRL Limited, 2021
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Filename: Kilmartin Local Centre Development Access 1.j9

Path: G:\2017\p170182\calcs\picady\October 2021 Update

Report generation date: 26/10/2021 13:08:42

»Do-Something - DS 2023, AM
 »Do-Something - DS 2023, PM
 »Do-Something - DS 2028, AM
 »Do-Something - DS 2028, PM
 »Do-Something - DS 2038, AM
 »Do-Something - DS 2038, PM

Summary of junction performance

	AM				PM			
	Queue (PCU)	Delay (s)	RFC	LOS	Queue (PCU)	Delay (s)	RFC	LOS
Do-Something - DS 2023								
Stream B-AC	0.1	8.08	0.06	A	0.1	6.98	0.06	A
Stream C-AB	0.0	5.14	0.02	A	0.0	5.98	0.04	A
Stream C-A								
Stream A-B								
Stream A-C								
Do-Something - DS 2028								
Stream B-AC	0.1	8.81	0.07	A	0.1	7.12	0.06	A
Stream C-AB	0.0	4.91	0.03	A	0.0	5.88	0.04	A
Stream C-A								
Stream A-B								
Stream A-C								
Do-Something - DS 2038								
Stream B-AC	0.1	8.95	0.07	A	0.1	7.13	0.06	A
Stream C-AB	0.0	4.86	0.03	A	0.0	5.87	0.04	A
Stream C-A								
Stream A-B								
Stream A-C								

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

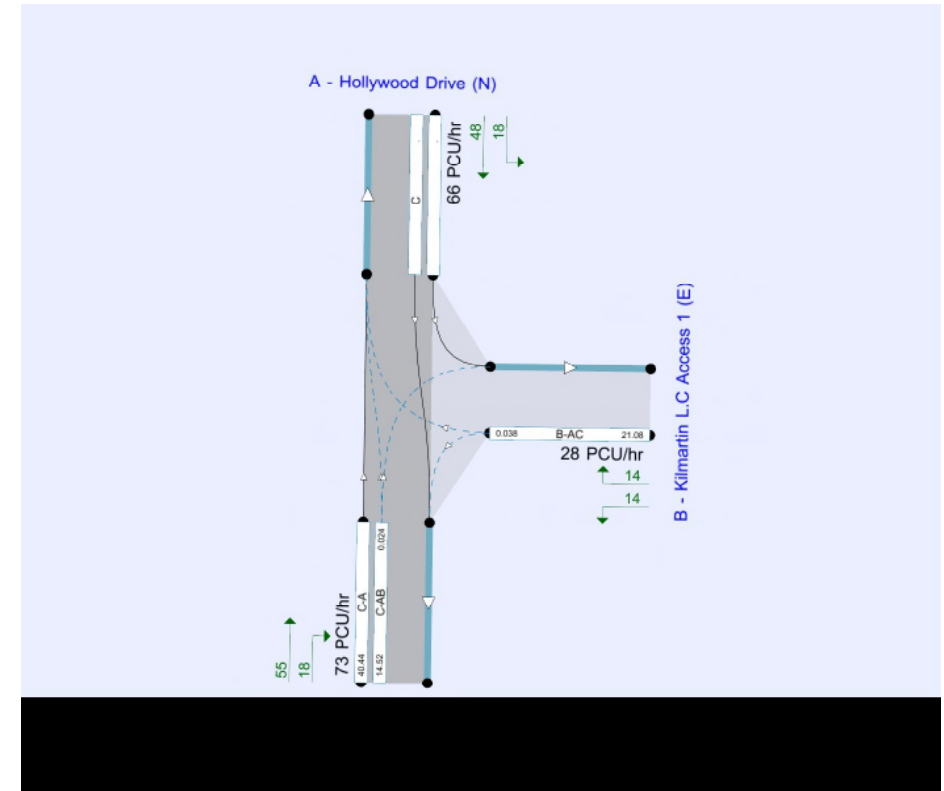
File summary

File Description

Title	Hollystown-Kilmartin
Location	Hollystown, Dublin 15
Site number	
Date	26/10/2021
Version	
Status	Proposed
Identifier	
Client	Glenveagh
Jobnumber	170182
Enumerator	HEADOFFICE"glld
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

Scenario name	Time Period name	Traffic profile type	Model start time (HH:mm)	Model finish time (HH:mm)	Time segment length (min)	Run automatically
DS 2023	AM	ONE HOUR	07:30	09:00	15	✓
DS 2023	PM	ONE HOUR	16:45	18:15	15	✓
DS 2028	AM	ONE HOUR	07:30	09:00	15	✓
DS 2028	PM	ONE HOUR	16:45	18:15	15	✓
DS 2038	AM	ONE HOUR	07:30	09:00	15	✓
DS 2038	PM	ONE HOUR	16:45	18:15	15	✓

Do-Something - DS 2023, AM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

ID	Name	Include in report	Network flow scaling factor (%)	Network capacity scaling factor (%)
A1	Do-Something	✓	100.000	100.000

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
1 - Kilmartin L.C. East Access	Kilmartin L.C. East Access	T-Junction	Two-way	0.51	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Name	Description	Arm type
A	Hollywood Drive (N)		Major
B	Kilmartin L.C Access 1 (E)		Minor
C	Hollywood Drive (S)		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 - Hollywood Drive (S)	6.00			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	Lane width (m)	Visibility to left (m)	Visibility to right (m)
B - Kilmartin L.C Access 1 (E)	One lane	3.00	50	36

Slope / Intercept / Capacity

Priority Intersection Slopes and Intercepts

Junction	Stream	Intercept (PCU/hr)	Slope for A-B	Slope for A-C	Slope for C-A	Slope for C-B
1	B-A	511.534	0.093	0.236	0.148	0.336
1	B-C	646.600	0.099	0.251	-	-
1	C-B	600.023	0.232	0.232	-	-

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	Traffic profile type	Model start time (HH:mm)	Model finish time (HH:mm)	Time segment length (min)	Run automatically
D1	DS 2023	AM	ONE HOUR	07:30	09:00	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 - Hollywood Drive (N)		ONE HOUR	✓	236.00	100.000
B - Kilmartin L.C Access 1 (E)		ONE HOUR	✓	26.00	100.000
C - Hollywood Drive (S)		ONE HOUR	✓	309.00	100.000

Origin-Destination Data

Demand (PCU/hr)

	To			
		A - Hollywood Drive (N)	B - Kilmartin L.C Access 1 (E)	C - Hollywood Drive (S)
From	A - Hollywood Drive (N)	0.000	10.000	226.000
	B - Kilmartin L.C Access 1 (E)	13.000	0.000	13.000
	C - Hollywood Drive (S)	299.000	10.000	0.000

Proportions

	To			
		A - Hollywood Drive (N)	B - Kilmartin L.C Access 1 (E)	C - Hollywood Drive (S)
From	A - Hollywood Drive (N)	0.00	0.04	0.96
	B - Kilmartin L.C Access 1 (E)	0.50	0.00	0.50
	C - Hollywood Drive (S)	0.97	0.03	0.00

Vehicle Mix

Heavy Vehicle proportion

From	To			
		A - Hollywood Drive (N)	B - Kilmartin L.C Access 1 (E)	C - Hollywood Drive (S)
	A - Hollywood Drive (N)	0	0	0
	B - Kilmartin L.C Access 1 (E)	0	0	0
	C - Hollywood Drive (S)	0	0	0

Average PCU Per Veh

From	To			
		A - Hollywood Drive (N)	B - Kilmartin L.C Access 1 (E)	C - Hollywood Drive (S)
	A - Hollywood Drive (N)	1.000	1.000	1.000
	B - Kilmartin L.C Access 1 (E)	1.000	1.000	1.000
	C - Hollywood Drive (S)	1.000	1.000	1.000

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	0.06	8.08	0.1	A	23.86	35.79
C-AB	0.02	5.14	0.0	A	14.36	21.54
C-A					269.18	403.78
A-B					9.18	13.76
A-C					207.38	311.07

Main Results for each time segment

Main results: (07:30-07:45)

Stream	Total Demand (PCU/hr)	Junction demand (PCU/hr)	Junction Arrivals (PCU)	Bypass demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
B-AC	19.57	19.57	4.89	0.00	505.40	0.039	19.41	0.0	0.0	7.406	A
C-AB	10.79	10.79	2.70	0.00	711.82	0.015	10.72	0.0	0.0	5.134	A
C-A	221.84	221.84	55.46	0.00			221.84				
A-B	7.53	7.53	1.88	0.00			7.53				
A-C	170.14	170.14	42.54	0.00			170.14				

Main results: (07:45-08:00)

Stream	Total Demand (PCU/hr)	Junction demand (PCU/hr)	Junction Arrivals (PCU)	Bypass demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
B-AC	23.37	23.37	5.84	0.00	492.34	0.047	23.34	0.0	0.0	7.675	A
C-AB	13.79	13.79	3.45	0.00	733.72	0.019	13.77	0.0	0.0	5.000	A
C-A	263.99	263.99	66.00	0.00			263.99				
A-B	8.99	8.99	2.25	0.00			8.99				
A-C	203.17	203.17	50.79	0.00			203.17				

Main results: (08:00-08:15)

Stream	Total Demand (PCU/hr)	Junction demand (PCU/hr)	Junction Arrivals (PCU)	Bypass demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
B-AC	28.63	28.63	7.16	0.00	474.11	0.060	28.57	0.0	0.1	8.079	A
C-AB	18.47	18.47	4.62	0.00	763.81	0.024	18.44	0.0	0.0	4.829	A
C-A	321.74	321.74	80.44	0.00			321.74				
A-B	11.01	11.01	2.75	0.00			11.01				
A-C	248.83	248.83	62.21	0.00			248.83				

Main results: (08:15-08:30)

Stream	Total Demand (PCU/hr)	Junction demand (PCU/hr)	Junction Arrivals (PCU)	Bypass demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
B-AC	28.63	28.63	7.16	0.00	474.10	0.060	28.63	0.1	0.1	8.080	A
C-AB	18.48	18.48	4.62	0.00	763.82	0.024	18.48	0.0	0.0	4.829	A
C-A	321.73	321.73	80.43	0.00			321.73				
A-B	11.01	11.01	2.75	0.00			11.01				
A-C	248.83	248.83	62.21	0.00			248.83				

Main results: (08:30-08:45)

Stream	Total Demand (PCU/hr)	Junction demand (PCU/hr)	Junction Arrivals (PCU)	Bypass demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
B-AC	23.37	23.37	5.84	0.00	492.33	0.047	23.43	0.1	0.1	7.680	A
C-AB	13.80	13.80	3.45	0.00	733.74	0.019	13.83	0.0	0.0	5.002	A
C-A	263.98	263.98	66.00	0.00			263.98				
A-B	8.99	8.99	2.25	0.00			8.99				
A-C	203.17	203.17	50.79	0.00			203.17				

Main results: (08:45-09:00)

Stream	Total Demand (PCU/hr)	Junction demand (PCU/hr)	Junction Arrivals (PCU)	Bypass demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
B-AC	19.57	19.57	4.89	0.00	505.39	0.039	19.61	0.1	0.0	7.413	A
C-AB	10.82	10.82	2.70	0.00	711.84	0.015	10.84	0.0	0.0	5.137	A
C-A	221.81	221.81	55.45	0.00			221.81				
A-B	7.53	7.53	1.88	0.00			7.53				
A-C	170.14	170.14	42.54	0.00			170.14				

Do-Something - DS 2023, PM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

ID	Name	Include in report	Network flow scaling factor (%)	Network capacity scaling factor (%)
A1	Do-Something	✓	100.000	100.000

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
1 - Kilmartin L.C. East Access	Kilmartin L.C. East Access	T-Junction	Two-way	1.87	A

Junction Network Options

[same as above]

Arms

Arms

[same as above]

Major Arm Geometry

[same as above]

Minor Arm Geometry

[same as above]

Slope / Intercept / Capacity

[same as above]

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Model start time (HH:mm)	Model finish time (HH:mm)	Time segment length (min)	Run automatically
D2	DS 2023	PM	ONE-HOUR	16:45	18:15	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A - Hollywood Drive (N)		ONE-HOUR	✓	66.00	100.000
B - Kilmartin L.C Access 1 (E)		ONE-HOUR	✓	28.00	100.000
C - Hollywood Drive (S)		ONE-HOUR	✓	73.00	100.000

Origin-Destination Data

Demand (PCU/hr)

	To			
		A - Hollywood Drive (N)	B - Kilmartin L.C Access 1 (E)	C - Hollywood Drive (S)
From	A - Hollywood Drive (N)	0.000	18.000	48.000
	B - Kilmartin L.C Access 1 (E)	14.000	0.000	14.000
	C - Hollywood Drive (S)	55.000	18.000	0.000

Proportions

	To			
		A - Hollywood Drive (N)	B - Kilmartin L.C Access 1 (E)	C - Hollywood Drive (S)
From	A - Hollywood Drive (N)	0.00	0.27	0.73
	B - Kilmartin L.C Access 1 (E)	0.50	0.00	0.50
	C - Hollywood Drive (S)	0.75	0.25	0.00

Vehicle Mix

Heavy Vehicle proportion

	To			
		A - Hollywood Drive (N)	B - Kilmartin L.C Access 1 (E)	C - Hollywood Drive (S)
From	A - Hollywood Drive (N)	0	0	0
	B - Kilmartin L.C Access 1 (E)	0	0	0
	C - Hollywood Drive (S)	0	0	0

Average PCU Per Veh

	To			
		A - Hollywood Drive (N)	B - Kilmartin L.C Access 1 (E)	C - Hollywood Drive (S)
From	A - Hollywood Drive (N)	1.000	1.000	1.000
	B - Kilmartin L.C Access 1 (E)	1.000	1.000	1.000
	C - Hollywood Drive (S)	1.000	1.000	1.000

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	0.06	6.98	0.1	A	25.69	38.54
C-AB	0.04	5.98	0.0	A	18.01	27.02
C-A					48.97	73.46
A-B					16.52	24.78
A-C					44.05	66.07

Main Results for each time segment

Main results: (16:45-17:00)

Stream	Total Demand (PCU/hr)	Junction demand (PCU/hr)	Junction Arrivals (PCU)	Bypass demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
B-AC	21.08	21.08	5.27	0.00	554.29	0.038	20.92	0.0	0.0	6.748	A
C-AB	14.52	14.52	3.63	0.00	616.33	0.024	14.41	0.0	0.0	5.981	A
C-A	40.44	40.44	10.11	0.00			40.44				
A-B	13.55	13.55	3.39	0.00			13.55				
A-C	36.14	36.14	9.03	0.00			36.14				

Main results: (17:00-17:15)

Stream	Total Demand (PCU/hr)	Junction demand (PCU/hr)	Junction Arrivals (PCU)	Bypass demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
B-AC	25.17	25.17	6.29	0.00	550.97	0.046	25.14	0.0	0.0	6.845	A
C-AB	17.58	17.58	4.39	0.00	619.55	0.028	17.55	0.0	0.0	5.979	A
C-A	48.05	48.05	12.01	0.00			48.05				
A-B	16.18	16.18	4.05	0.00			16.18				
A-C	43.15	43.15	10.79	0.00			43.15				

Main results: (17:15-17:30)

Stream	Total Demand (PCU/hr)	Junction demand (PCU/hr)	Junction Arrivals (PCU)	Bypass demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
B-AC	30.83	30.83	7.71	0.00	546.39	0.056	30.78	0.0	0.1	6.981	A
C-AB	21.93	21.93	5.48	0.00	624.03	0.035	21.90	0.0	0.0	5.978	A
C-A	58.44	58.44	14.61	0.00			58.44				
A-B	19.82	19.82	4.95	0.00			19.82				
A-C	52.85	52.85	13.21	0.00			52.85				

Main results: (17:30-17:45)

Stream	Total Demand (PCU/hr)	Junction demand (PCU/hr)	Junction Arrivals (PCU)	Bypass demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
B-AC	30.83	30.83	7.71	0.00	546.38	0.056	30.83	0.1	0.1	6.981	A
C-AB	21.94	21.94	5.48	0.00	624.03	0.035	21.94	0.0	0.0	5.981	A
C-A	58.44	58.44	14.61	0.00			58.44				
A-B	19.82	19.82	4.95	0.00			19.82				
A-C	52.85	52.85	13.21	0.00			52.85				

Main results: (17:45-18:00)

Stream	Total Demand (PCU/hr)	Junction demand (PCU/hr)	Junction Arrivals (PCU)	Bypass demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
B-AC	25.17	25.17	6.29	0.00	550.96	0.046	25.22	0.1	0.0	6.849	A
C-AB	17.58	17.58	4.40	0.00	619.56	0.028	17.62	0.0	0.0	5.983	A
C-A	48.04	48.04	12.01	0.00			48.04				
A-B	16.18	16.18	4.05	0.00			16.18				
A-C	43.15	43.15	10.79	0.00			43.15				

Main results: (18:00-18:15)

Stream	Total Demand (PCU/hr)	Junction demand (PCU/hr)	Junction Arrivals (PCU)	Bypass demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
B-AC	21.08	21.08	5.27	0.00	554.26	0.038	21.11	0.0	0.0	6.751	A
C-AB	14.53	14.53	3.63	0.00	616.33	0.024	14.55	0.0	0.0	5.982	A
C-A	40.43	40.43	10.11	0.00			40.43				
A-B	13.55	13.55	3.39	0.00			13.55				
A-C	36.14	36.14	9.03	0.00			36.14				

Do-Something - DS 2028, AM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

ID	Name	Include in report	Network flow scaling factor (%)	Network capacity scaling factor (%)
A1	Do-Something	✓	100.000	100.000

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
1 - Kilmartin L.C. East Access	Kilmartin L.C. East Access	T-Junction	Two-way	0.42	A

Junction Network Options

[same as above]

Arms

Arms

[same as above]

Major Arm Geometry

[same as above]

Minor Arm Geometry

[same as above]

Slope / Intercept / Capacity

[same as above]

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Model start time (HH:mm)	Model finish time (HH:mm)	Time segment length (min)	Run automatically
D3	DS 2028	AM	ONE-HOUR	07:30	09:00	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 - Hollywood Drive (N)		ONE-HOUR	✓	330.00	100.000
B - Kilmartin L.C Access 1 (E)		ONE-HOUR	✓	26.00	100.000
C - Hollywood Drive (S)		ONE-HOUR	✓	404.00	100.000

Origin-Destination Data

Demand (PCU/hr)

	To			
		A - Hollywood Drive (N)	B - Kilmartin L.C Access 1 (E)	C - Hollywood Drive (S)
From	A - Hollywood Drive (N)	0.000	10.000	320.000
	B - Kilmartin L.C Access 1 (E)	13.000	0.000	13.000
	C - Hollywood Drive (S)	394.000	10.000	0.000

Proportions

	To			
		A - Hollywood Drive (N)	B - Kilmartin L.C Access 1 (E)	C - Hollywood Drive (S)
From	A - Hollywood Drive (N)	0.00	0.03	0.97
	B - Kilmartin L.C Access 1 (E)	0.50	0.00	0.50
	C - Hollywood Drive (S)	0.98	0.02	0.00

Vehicle Mix

Heavy Vehicle proportion

	To			
		A - Hollywood Drive (N)	B - Kilmartin L.C Access 1 (E)	C - Hollywood Drive (S)
From	A - Hollywood Drive (N)	0	0	0
	B - Kilmartin L.C Access 1 (E)	0	0	0
	C - Hollywood Drive (S)	0	0	0

Average PCU Per Veh

	To			
		A - Hollywood Drive (N)	B - Kilmartin L.C Access 1 (E)	C - Hollywood Drive (S)
From	A - Hollywood Drive (N)	1.000	1.000	1.000
	B - Kilmartin L.C Access 1 (E)	1.000	1.000	1.000
	C - Hollywood Drive (S)	1.000	1.000	1.000

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	0.07	8.81	0.1	A	23.86	35.79
C-AB	0.03	4.91	0.0	A	16.44	24.66
C-A					354.28	531.41
A-B					9.18	13.76
A-C					293.64	440.46

Main Results for each time segment

Main results: (07:30-07:45)

Stream	Total Demand (PCU/hr)	Junction demand (PCU/hr)	Junction Arrivals (PCU)	Bypass demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
B-AC	19.57	19.57	4.89	0.00	480.63	0.041	19.41	0.0	0.0	7.803	A
C-AB	12.04	12.04	3.01	0.00	744.81	0.016	11.97	0.0	0.0	4.912	A
C-A	292.11	292.11	73.03	0.00			292.11				
A-B	7.53	7.53	1.88	0.00			7.53				
A-C	240.91	240.91	60.23	0.00			240.91				

Main results: (07:45-08:00)

Stream	Total Demand (PCU/hr)	Junction demand (PCU/hr)	Junction Arrivals (PCU)	Bypass demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
B-AC	23.37	23.37	5.84	0.00	462.50	0.051	23.33	0.0	0.1	8.196	A
C-AB	15.69	15.69	3.92	0.00	772.95	0.020	15.67	0.0	0.0	4.753	A
C-A	347.49	347.49	86.87	0.00			347.49				
A-B	8.99	8.99	2.25	0.00			8.99				
A-C	287.67	287.67	71.92	0.00			287.67				

Main results: (08:00-08:15)

Stream	Total Demand (PCU/hr)	Junction demand (PCU/hr)	Junction Arrivals (PCU)	Bypass demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
B-AC	28.63	28.63	7.16	0.00	437.07	0.066	28.56	0.1	0.1	8.811	A
C-AB	21.55	21.55	5.39	0.00	811.29	0.027	21.52	0.0	0.0	4.558	A
C-A	423.26	423.26	105.81	0.00			423.26				
A-B	11.01	11.01	2.75	0.00			11.01				
A-C	352.33	352.33	88.08	0.00			352.33				

Main results: (08:15-08:30)

Stream	Total Demand (PCU/hr)	Junction demand (PCU/hr)	Junction Arrivals (PCU)	Bypass demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
B-AC	28.63	28.63	7.16	0.00	437.07	0.066	28.63	0.1	0.1	8.813	A
C-AB	21.57	21.57	5.39	0.00	811.31	0.027	21.57	0.0	0.0	4.560	A
C-A	423.25	423.25	105.81	0.00			423.25				
A-B	11.01	11.01	2.75	0.00			11.01				
A-C	352.33	352.33	88.08	0.00			352.33				

Main results: (08:30-08:45)

Stream	Total Demand (PCU/hr)	Junction demand (PCU/hr)	Junction Arrivals (PCU)	Bypass demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
B-AC	23.37	23.37	5.84	0.00	462.49	0.051	23.44	0.1	0.1	8.200	A
C-AB	15.71	15.71	3.93	0.00	772.97	0.020	15.75	0.0	0.0	4.754	A
C-A	347.48	347.48	86.87	0.00			347.48				
A-B	8.99	8.99	2.25	0.00			8.99				
A-C	287.67	287.67	71.92	0.00			287.67				

Main results: (08:45-09:00)

Stream	Total Demand (PCU/hr)	Junction demand (PCU/hr)	Junction Arrivals (PCU)	Bypass demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
B-AC	19.57	19.57	4.89	0.00	480.61	0.041	19.62	0.1	0.0	7.809	A
C-AB	12.08	12.08	3.02	0.00	744.83	0.016	12.10	0.0	0.0	4.914	A
C-A	292.07	292.07	73.02	0.00			292.07				
A-B	7.53	7.53	1.88	0.00			7.53				
A-C	240.91	240.91	60.23	0.00			240.91				

Do-Something - DS 2028, PM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

ID	Name	Include in report	Network flow scaling factor (%)	Network capacity scaling factor (%)
A1	Do-Something	✓	100.000	100.000

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
1 - Kilmartin L.C. East Access	Kilmartin L.C. East Access	T-Junction	Two-way	1.44	A

Junction Network Options

[same as above]

Arms

Arms

[same as above]

Major Arm Geometry

[same as above]

Minor Arm Geometry

[same as above]

Slope / Intercept / Capacity

[same as above]

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Model start time (HH:mm)	Model finish time (HH:mm)	Time segment length (min)	Run automatically
D4	DS 2028	PM	ONE-HOUR	16:45	18:15	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A - Hollywood Drive (N)		ONE-HOUR	✓	91.00	100.000
B - Kilmartin L.C Access 1 (E)		ONE-HOUR	✓	28.00	100.000
C - Hollywood Drive (S)		ONE-HOUR	✓	104.00	100.000

Origin-Destination Data

Demand (PCU/hr)

	To			
		A - Hollywood Drive (N)	B - Kilmartin L.C Access 1 (E)	C - Hollywood Drive (S)
From	A - Hollywood Drive (N)	0.000	18.000	73.000
	B - Kilmartin L.C Access 1 (E)	14.000	0.000	14.000
	C - Hollywood Drive (S)	86.000	18.000	0.000

Proportions

	To			
		A - Hollywood Drive (N)	B - Kilmartin L.C Access 1 (E)	C - Hollywood Drive (S)
From	A - Hollywood Drive (N)	0.00	0.20	0.80
	B - Kilmartin L.C Access 1 (E)	0.50	0.00	0.50
	C - Hollywood Drive (S)	0.83	0.17	0.00

Vehicle Mix

Heavy Vehicle proportion

	To			
		A - Hollywood Drive (N)	B - Kilmartin L.C Access 1 (E)	C - Hollywood Drive (S)
From	A - Hollywood Drive (N)	0	0	0
	B - Kilmartin L.C Access 1 (E)	0	0	0
	C - Hollywood Drive (S)	0	0	0

Average PCU Per Veh

	To			
		A - Hollywood Drive (N)	B - Kilmartin L.C Access 1 (E)	C - Hollywood Drive (S)
From	A - Hollywood Drive (N)	1.000	1.000	1.000
	B - Kilmartin L.C Access 1 (E)	1.000	1.000	1.000
	C - Hollywood Drive (S)	1.000	1.000	1.000

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	0.06	7.12	0.1	A	25.69	38.54
C-AB	0.04	5.88	0.0	A	18.91	28.36
C-A					76.53	114.79
A-B					16.52	24.78
A-C					66.99	100.48

Main Results for each time segment

Main results: (16:45-17:00)

Stream	Total Demand (PCU/hr)	Junction demand (PCU/hr)	Junction Arrivals (PCU)	Bypass demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
B-AC	21.08	21.08	5.27	0.00	547.47	0.039	20.92	0.0	0.0	6.835	A
C-AB	15.09	15.09	3.77	0.00	627.78	0.024	14.97	0.0	0.0	5.875	A
C-A	63.21	63.21	15.80	0.00			63.21				
A-B	13.55	13.55	3.39	0.00			13.55				
A-C	54.96	54.96	13.74	0.00			54.96				

Main results: (17:00-17:15)

Stream	Total Demand (PCU/hr)	Junction demand (PCU/hr)	Junction Arrivals (PCU)	Bypass demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
B-AC	25.17	25.17	6.29	0.00	542.80	0.046	25.14	0.0	0.0	6.953	A
C-AB	18.41	18.41	4.60	0.00	633.28	0.029	18.38	0.0	0.0	5.854	A
C-A	75.08	75.08	18.77	0.00			75.08				
A-B	16.18	16.18	4.05	0.00			16.18				
A-C	65.63	65.63	16.41	0.00			65.63				

Main results: (17:15-17:30)

Stream	Total Demand (PCU/hr)	Junction demand (PCU/hr)	Junction Arrivals (PCU)	Bypass demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
B-AC	30.83	30.83	7.71	0.00	536.36	0.057	30.78	0.0	0.1	7.120	A
C-AB	23.20	23.20	5.80	0.00	640.92	0.036	23.16	0.0	0.0	5.827	A
C-A	91.30	91.30	22.83	0.00			91.30				
A-B	19.82	19.82	4.95	0.00			19.82				
A-C	80.37	80.37	20.09	0.00			80.37				

Main results: (17:30-17:45)

Stream	Total Demand (PCU/hr)	Junction demand (PCU/hr)	Junction Arrivals (PCU)	Bypass demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
B-AC	30.83	30.83	7.71	0.00	536.35	0.057	30.83	0.1	0.1	7.120	A
C-AB	23.21	23.21	5.80	0.00	640.93	0.036	23.21	0.0	0.0	5.830	A
C-A	91.30	91.30	22.82	0.00			91.30				
A-B	19.82	19.82	4.95	0.00			19.82				
A-C	80.37	80.37	20.09	0.00			80.37				

Main results: (17:45-18:00)

Stream	Total Demand (PCU/hr)	Junction demand (PCU/hr)	Junction Arrivals (PCU)	Bypass demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
B-AC	25.17	25.17	6.29	0.00	542.79	0.046	25.22	0.1	0.0	6.958	A
C-AB	18.42	18.42	4.60	0.00	633.29	0.029	18.46	0.0	0.0	5.855	A
C-A	75.08	75.08	18.77	0.00			75.08				
A-B	16.18	16.18	4.05	0.00			16.18				
A-C	65.63	65.63	16.41	0.00			65.63				

Main results: (18:00-18:15)

Stream	Total Demand (PCU/hr)	Junction demand (PCU/hr)	Junction Arrivals (PCU)	Bypass demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
B-AC	21.08	21.08	5.27	0.00	547.44	0.039	21.11	0.0	0.0	6.842	A
C-AB	15.10	15.10	3.78	0.00	627.79	0.024	15.14	0.0	0.0	5.876	A
C-A	63.19	63.19	15.80	0.00			63.19				
A-B	13.55	13.55	3.39	0.00			13.55				
A-C	54.96	54.96	13.74	0.00			54.96				

Do-Something - DS 2038, AM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

ID	Name	Include in report	Network flow scaling factor (%)	Network capacity scaling factor (%)
A1	Do-Something	✓	100.000	100.000

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
1 - Kilmartin L.C. East Access	Kilmartin L.C. East Access	T-Junction	Two-way	0.41	A

Junction Network Options

[same as above]

Arms

Arms

[same as above]

Major Arm Geometry

[same as above]

Minor Arm Geometry

[same as above]

Slope / Intercept / Capacity

[same as above]

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Model start time (HH:mm)	Model finish time (HH:mm)	Time segment length (min)	Run automatically
D5	DS 2038	AM	ONE-HOUR	07:30	09:00	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 - Hollywood Drive (N)		ONE-HOUR	✓	344.00	100.000
B - Kilmartin L.C Access 1 (E)		ONE-HOUR	✓	26.00	100.000
C - Hollywood Drive (S)		ONE-HOUR	✓	424.00	100.000

Origin-Destination Data

Demand (PCU/hr)

	To			
		A - Hollywood Drive (N)	B - Kilmartin L.C Access 1 (E)	C - Hollywood Drive (S)
From	A - Hollywood Drive (N)	0.000	10.000	334.000
	B - Kilmartin L.C Access 1 (E)	13.000	0.000	13.000
	C - Hollywood Drive (S)	414.000	10.000	0.000

Proportions

	To			
		A - Hollywood Drive (N)	B - Kilmartin L.C Access 1 (E)	C - Hollywood Drive (S)
From	A - Hollywood Drive (N)	0.00	0.03	0.97
	B - Kilmartin L.C Access 1 (E)	0.50	0.00	0.50
	C - Hollywood Drive (S)	0.98	0.02	0.00

Vehicle Mix

Heavy Vehicle proportion

	To			
		A - Hollywood Drive (N)	B - Kilmartin L.C Access 1 (E)	C - Hollywood Drive (S)
From	A - Hollywood Drive (N)	0	0	0
	B - Kilmartin L.C Access 1 (E)	0	0	0
	C - Hollywood Drive (S)	0	0	0

Average PCU Per Veh

	To			
		A - Hollywood Drive (N)	B - Kilmartin L.C Access 1 (E)	C - Hollywood Drive (S)
From	A - Hollywood Drive (N)	1.000	1.000	1.000
	B - Kilmartin L.C Access 1 (E)	1.000	1.000	1.000
	C - Hollywood Drive (S)	1.000	1.000	1.000

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	0.07	8.95	0.1	A	23.86	35.79
C-AB	0.03	4.86	0.0	A	16.89	25.33
C-A					372.18	558.27
A-B					9.18	13.76
A-C					306.48	459.73

Main Results for each time segment

Main results: (07:30-07:45)

Stream	Total Demand (PCU/hr)	Junction demand (PCU/hr)	Junction Arrivals (PCU)	Bypass demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
B-AC	19.57	19.57	4.89	0.00	476.46	0.041	19.40	0.0	0.0	7.874	A
C-AB	12.31	12.31	3.08	0.00	752.59	0.016	12.24	0.0	0.0	4.862	A
C-A	306.90	306.90	76.72	0.00			306.90				
A-B	7.53	7.53	1.88	0.00			7.53				
A-C	251.45	251.45	62.86	0.00			251.45				

Main results: (07:45-08:00)

Stream	Total Demand (PCU/hr)	Junction demand (PCU/hr)	Junction Arrivals (PCU)	Bypass demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
B-AC	23.37	23.37	5.84	0.00	457.45	0.051	23.33	0.0	0.1	8.291	A
C-AB	16.10	16.10	4.03	0.00	782.13	0.021	16.08	0.0	0.0	4.699	A
C-A	365.07	365.07	91.27	0.00			365.07				
A-B	8.99	8.99	2.25	0.00			8.99				
A-C	300.26	300.26	75.06	0.00			300.26				

Main results: (08:00-08:15)

Stream	Total Demand (PCU/hr)	Junction demand (PCU/hr)	Junction Arrivals (PCU)	Bypass demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
B-AC	28.63	28.63	7.16	0.00	430.78	0.066	28.56	0.1	0.1	8.949	A
C-AB	22.22	22.22	5.55	0.00	822.29	0.027	22.18	0.0	0.0	4.499	A
C-A	444.62	444.62	111.15	0.00			444.62				
A-B	11.01	11.01	2.75	0.00			11.01				
A-C	367.74	367.74	91.94	0.00			367.74				

Main results: (08:15-08:30)

Stream	Total Demand (PCU/hr)	Junction demand (PCU/hr)	Junction Arrivals (PCU)	Bypass demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
B-AC	28.63	28.63	7.16	0.00	430.77	0.066	28.63	0.1	0.1	8.951	A
C-AB	22.23	22.23	5.56	0.00	822.31	0.027	22.23	0.0	0.0	4.501	A
C-A	444.60	444.60	111.15	0.00			444.60				
A-B	11.01	11.01	2.75	0.00			11.01				
A-C	367.74	367.74	91.94	0.00			367.74				

Main results: (08:30-08:45)

Stream	Total Demand (PCU/hr)	Junction demand (PCU/hr)	Junction Arrivals (PCU)	Bypass demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
B-AC	23.37	23.37	5.84	0.00	457.44	0.051	23.44	0.1	0.1	8.297	A
C-AB	16.12	16.12	4.03	0.00	782.15	0.021	16.16	0.0	0.0	4.701	A
C-A	365.05	365.05	91.26	0.00			365.05				
A-B	8.99	8.99	2.25	0.00			8.99				
A-C	300.26	300.26	75.06	0.00			300.26				

Main results: (08:45-09:00)

Stream	Total Demand (PCU/hr)	Junction demand (PCU/hr)	Junction Arrivals (PCU)	Bypass demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
B-AC	19.57	19.57	4.89	0.00	476.44	0.041	19.62	0.1	0.0	7.881	A
C-AB	12.35	12.35	3.09	0.00	752.61	0.016	12.37	0.0	0.0	4.865	A
C-A	306.86	306.86	76.72	0.00			306.86				
A-B	7.53	7.53	1.88	0.00			7.53				
A-C	251.45	251.45	62.86	0.00			251.45				

Do-Something - DS 2038, PM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

ID	Name	Include in report	Network flow scaling factor (%)	Network capacity scaling factor (%)
A1	Do-Something	✓	100.000	100.000

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
1 - Kilmartin L.C. East Access	Kilmartin L.C. East Access	T-Junction	Two-way	1.41	A

Junction Network Options

[same as above]

Arms

Arms

[same as above]

Major Arm Geometry

[same as above]

Minor Arm Geometry

[same as above]

Slope / Intercept / Capacity

[same as above]

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Model start time (HH:mm)	Model finish time (HH:mm)	Time segment length (min)	Run automatically
D6	DS 2038	PM	ONE-HOUR	16:45	18:15	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A - Hollywood Drive (N)		ONE-HOUR	✓	94.00	100.000
B - Kilmartin L.C Access 1 (E)		ONE-HOUR	✓	28.00	100.000
C - Hollywood Drive (S)		ONE-HOUR	✓	106.00	100.000

Origin-Destination Data

Demand (PCU/hr)

	To			
		A - Hollywood Drive (N)	B - Kilmartin L.C Access 1 (E)	C - Hollywood Drive (S)
From	A - Hollywood Drive (N)	0.000	18.000	76.000
	B - Kilmartin L.C Access 1 (E)	14.000	0.000	14.000
	C - Hollywood Drive (S)	88.000	18.000	0.000

Proportions

	To			
		A - Hollywood Drive (N)	B - Kilmartin L.C Access 1 (E)	C - Hollywood Drive (S)
From	A - Hollywood Drive (N)	0.00	0.19	0.81
	B - Kilmartin L.C Access 1 (E)	0.50	0.00	0.50
	C - Hollywood Drive (S)	0.83	0.17	0.00

Vehicle Mix

Heavy Vehicle proportion

	To			
		A - Hollywood Drive (N)	B - Kilmartin L.C Access 1 (E)	C - Hollywood Drive (S)
From	A - Hollywood Drive (N)	0	0	0
	B - Kilmartin L.C Access 1 (E)	0	0	0
	C - Hollywood Drive (S)	0	0	0

Average PCU Per Veh

	To			
		A - Hollywood Drive (N)	B - Kilmartin L.C Access 1 (E)	C - Hollywood Drive (S)
From	A - Hollywood Drive (N)	1.000	1.000	1.000
	B - Kilmartin L.C Access 1 (E)	1.000	1.000	1.000
	C - Hollywood Drive (S)	1.000	1.000	1.000

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	0.06	7.13	0.1	A	25.69	38.54
C-AB	0.04	5.87	0.0	A	18.97	28.45
C-A					78.30	117.45
A-B					16.52	24.78
A-C					69.74	104.61

Main Results for each time segment

Main results: (16:45-17:00)

Stream	Total Demand (PCU/hr)	Junction demand (PCU/hr)	Junction Arrivals (PCU)	Bypass demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
B-AC	21.08	21.08	5.27	0.00	546.77	0.039	20.92	0.0	0.0	6.844	A
C-AB	15.13	15.13	3.78	0.00	628.28	0.024	15.01	0.0	0.0	5.870	A
C-A	64.68	64.68	16.17	0.00			64.68				
A-B	13.55	13.55	3.39	0.00			13.55				
A-C	57.22	57.22	14.30	0.00			57.22				

Main results: (17:00-17:15)

Stream	Total Demand (PCU/hr)	Junction demand (PCU/hr)	Junction Arrivals (PCU)	Bypass demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
B-AC	25.17	25.17	6.29	0.00	541.97	0.046	25.14	0.0	0.0	6.965	A
C-AB	18.47	18.47	4.62	0.00	633.89	0.029	18.43	0.0	0.0	5.848	A
C-A	76.83	76.83	19.21	0.00			76.83				
A-B	16.18	16.18	4.05	0.00			16.18				
A-C	68.32	68.32	17.08	0.00			68.32				

Main results: (17:15-17:30)

Stream	Total Demand (PCU/hr)	Junction demand (PCU/hr)	Junction Arrivals (PCU)	Bypass demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
B-AC	30.83	30.83	7.71	0.00	535.33	0.058	30.78	0.0	0.1	7.134	A
C-AB	23.29	23.29	5.82	0.00	641.68	0.036	23.25	0.0	0.0	5.820	A
C-A	93.42	93.42	23.35	0.00			93.42				
A-B	19.82	19.82	4.95	0.00			19.82				
A-C	83.68	83.68	20.92	0.00			83.68				

Main results: (17:30-17:45)

Stream	Total Demand (PCU/hr)	Junction demand (PCU/hr)	Junction Arrivals (PCU)	Bypass demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
B-AC	30.83	30.83	7.71	0.00	535.32	0.058	30.83	0.1	0.1	7.134	A
C-AB	23.30	23.30	5.82	0.00	641.69	0.036	23.30	0.0	0.0	5.824	A
C-A	93.41	93.41	23.35	0.00			93.41				
A-B	19.82	19.82	4.95	0.00			19.82				
A-C	83.68	83.68	20.92	0.00			83.68				

Main results: (17:45-18:00)

Stream	Total Demand (PCU/hr)	Junction demand (PCU/hr)	Junction Arrivals (PCU)	Bypass demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
B-AC	25.17	25.17	6.29	0.00	541.95	0.046	25.22	0.1	0.0	6.966	A
C-AB	18.47	18.47	4.62	0.00	633.90	0.029	18.52	0.0	0.0	5.850	A
C-A	76.82	76.82	19.20	0.00			76.82				
A-B	16.18	16.18	4.05	0.00			16.18				
A-C	68.32	68.32	17.08	0.00			68.32				

Main results: (18:00-18:15)

Stream	Total Demand (PCU/hr)	Junction demand (PCU/hr)	Junction Arrivals (PCU)	Bypass demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
B-AC	21.08	21.08	5.27	0.00	546.74	0.039	21.11	0.0	0.0	6.851	A
C-AB	15.14	15.14	3.79	0.00	628.30	0.024	15.17	0.0	0.0	5.873	A
C-A	64.66	64.66	16.17	0.00			64.66				
A-B	13.55	13.55	3.39	0.00			13.55				
A-C	57.22	57.22	14.30	0.00			57.22				

Junctions 9			
PICADY 9 - Priority Intersection Module			
Version: 9.0.0.4211 [] © Copyright TRL Limited, 2021			
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Filename: Kilmartin Local Centre Development Access 1 (SA).j9

Path: G:\2017\p170182\calcs\picady\October 2021 Update\Sensitivity Analysis

Report generation date: 09/11/2021 11:56:28

»Do-Something SA - DS 2023, AM
 »Do-Something SA - DS 2023, PM
 »Do-Something SA - DS 2028, AM
 »Do-Something SA - DS 2028, PM
 »Do-Something SA - DS 2038, AM
 »Do-Something SA - DS 2038, PM

Summary of junction performance

	AM				PM			
	Queue (PCU)	Delay (s)	RFC	LOS	Queue (PCU)	Delay (s)	RFC	LOS
Do-Something SA - DS 2023								
Stream B-AC	0.2	8.87	0.14	A	0.1	7.33	0.09	A
Stream C-AB	0.1	5.19	0.04	A	0.1	6.18	0.06	A
Stream C-A								
Stream A-B								
Stream A-C								
Do-Something SA - DS 2028								
Stream B-AC	0.2	9.76	0.15	A	0.1	7.49	0.10	A
Stream C-AB	0.1	4.97	0.04	A	0.1	6.02	0.06	A
Stream C-A								
Stream A-B								
Stream A-C								
Do-Something SA - DS 2038								
Stream B-AC	0.2	9.94	0.15	A	0.1	7.50	0.10	A
Stream C-AB	0.1	4.92	0.04	A	0.1	6.01	0.06	A
Stream C-A								
Stream A-B								
Stream A-C								

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

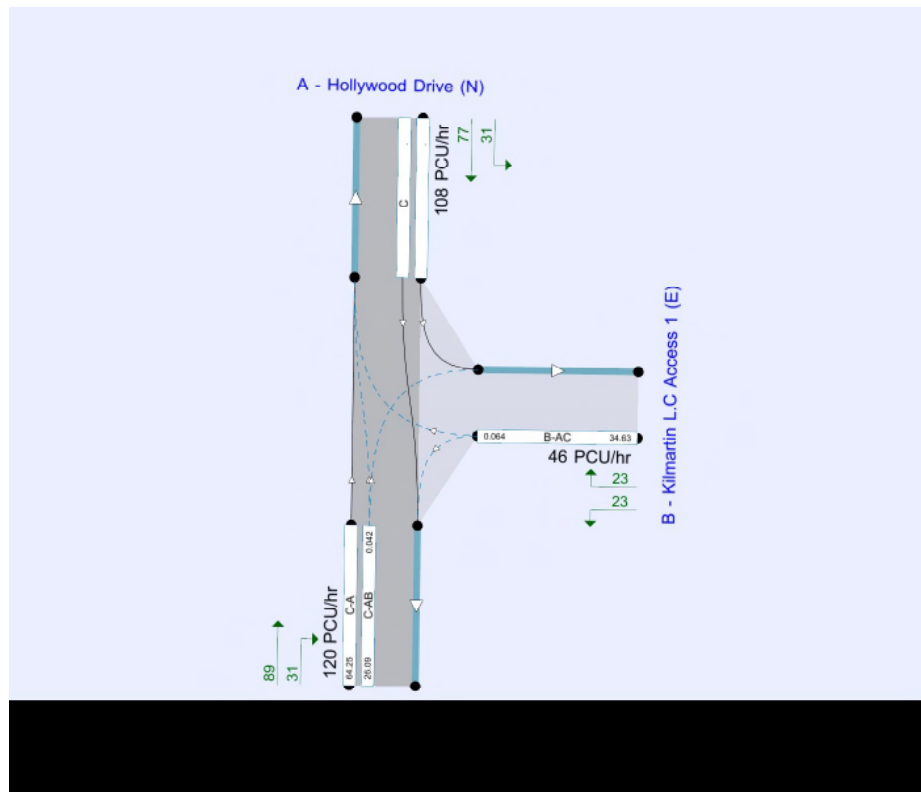
File summary

File Description

Title	Hollystown-Kilmartin
Location	Hollystown, Dublin 15
Site number	
Date	26/10/2021
Version	
Status	Proposed
Identifier	
Client	Glenveagh
Jobnumber	170182
Enumerator	HEADOFFICE\gilld
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

Scenario name	Time Period name	Traffic profile type	Model start time (HH:mm)	Model finish time (HH:mm)	Time segment length (min)	Run automatically
DS 2023	AM	ONE HOUR	07:30	09:00	15	✓
DS 2023	PM	ONE HOUR	16:45	18:15	15	✓
DS 2028	AM	ONE HOUR	07:30	09:00	15	✓
DS 2028	PM	ONE HOUR	16:45	18:15	15	✓
DS 2038	AM	ONE HOUR	07:30	09:00	15	✓
DS 2038	PM	ONE HOUR	16:45	18:15	15	✓

Do-Something SA - DS 2023, AM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

ID	Name	Include in report	Network flow scaling factor (%)	Network capacity scaling factor (%)
A1	Do-Something SA	✓	100.000	100.000

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
1 - Kilmartin L.C. East Access	Kilmartin L.C. East Access	T-Junction	Two-way	1.07	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Name	Description	Arm type
A	Hollywood Drive (N)		Major
B	Kilmartin L.C Access 1 (E)		Minor
C	Hollywood Drive (S)		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 - Hollywood Drive (S)	6.00			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	Lane width (m)	Visibility to left (m)	Visibility to right (m)
B - Kilmartin L.C Access 1 (E)	One lane	3.00	50	36

Slope / Intercept / Capacity

Priority Intersection Slopes and Intercepts

Junction	Stream	Intercept (PCU/hr)	Slope for A-B	Slope for A-C	Slope for C-A	Slope for C-B
1	B-A	511.534	0.093	0.236	0.148	0.336
1	B-C	646.600	0.099	0.251	-	-
1	C-B	600.023	0.232	0.232	-	-

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	Traffic profile type	Model start time (HH:mm)	Model finish time (HH:mm)	Time segment length (min)	Run automatically
D1	DS 2023	AM	ONE HOUR	07:30	09:00	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 - Hollywood Drive (N)		ONE HOUR	✓	242.00	100.000
B - Kilmartin L.C Access 1 (E)		ONE HOUR	✓	60.00	100.000
C - Hollywood Drive (S)		ONE HOUR	✓	315.00	100.000

Origin-Destination Data

Demand (PCU/hr)

From	To			
		A - Hollywood Drive (N)	B - Kilmartin L.C Access 1 (E)	C - Hollywood Drive (S)
	A - Hollywood Drive (N)	0.000	16.000	226.000
	B - Kilmartin L.C Access 1 (E)	30.000	0.000	30.000
	C - Hollywood Drive (S)	299.000	16.000	0.000

Proportions

From	To			
		A - Hollywood Drive (N)	B - Kilmartin L.C Access 1 (E)	C - Hollywood Drive (S)
	A - Hollywood Drive (N)	0.00	0.07	0.93
	B - Kilmartin L.C Access 1 (E)	0.50	0.00	0.50
	C - Hollywood Drive (S)	0.95	0.05	0.00

Vehicle Mix

Heavy Vehicle proportion

From	To			
		A - Hollywood Drive (N)	B - Kilmartin L.C Access 1 (E)	C - Hollywood Drive (S)
	A - Hollywood Drive (N)	0	0	0
	B - Kilmartin L.C Access 1 (E)	0	0	0
	C - Hollywood Drive (S)	0	0	0

Average PCU Per Veh

From	To			
		A - Hollywood Drive (N)	B - Kilmartin L.C Access 1 (E)	C - Hollywood Drive (S)
	A - Hollywood Drive (N)	1.000	1.000	1.000
	B - Kilmartin L.C Access 1 (E)	1.000	1.000	1.000
	C - Hollywood Drive (S)	1.000	1.000	1.000

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	0.14	8.87	0.2	A	55.06	82.59
C-AB	0.04	5.19	0.1	A	23.00	34.50
C-A					266.05	399.07
A-B					14.68	22.02
A-C					207.38	311.07

Main Results for each time segment

Main results: (07:30-07:45)

Stream	Total Demand (PCU/hr)	Junction demand (PCU/hr)	Junction Arrivals (PCU)	Bypass demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
B-AC	45.17	45.17	11.29	0.00	503.94	0.090	44.78	0.0	0.1	7.834	A
C-AB	17.28	17.28	4.32	0.00	710.90	0.024	17.16	0.0	0.0	5.189	A
C-A	219.87	219.87	54.97	0.00			219.87				
A-B	12.05	12.05	3.01	0.00			12.05				
A-C	170.14	170.14	42.54	0.00			170.14				

Main results: (07:45-08:00)

Stream	Total Demand (PCU/hr)	Junction demand (PCU/hr)	Junction Arrivals (PCU)	Bypass demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
B-AC	53.94	53.94	13.48	0.00	490.55	0.110	53.84	0.1	0.1	8.241	A
C-AB	22.09	22.09	5.52	0.00	732.66	0.030	22.05	0.0	0.0	5.065	A
C-A	261.09	261.09	65.27	0.00			261.09				
A-B	14.38	14.38	3.60	0.00			14.38				
A-C	203.17	203.17	50.79	0.00			203.17				

Main results: (08:00-08:15)

Stream	Total Demand (PCU/hr)	Junction demand (PCU/hr)	Junction Arrivals (PCU)	Bypass demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
B-AC	66.06	66.06	16.52	0.00	471.87	0.140	65.91	0.1	0.2	8.868	A
C-AB	29.60	29.60	7.40	0.00	762.56	0.039	29.54	0.0	0.1	4.911	A
C-A	317.22	317.22	79.31	0.00			317.22				
A-B	17.62	17.62	4.40	0.00			17.62				
A-C	248.83	248.83	62.21	0.00			248.83				

Main results: (08:15-08:30)

Stream	Total Demand (PCU/hr)	Junction demand (PCU/hr)	Junction Arrivals (PCU)	Bypass demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
B-AC	66.06	66.06	16.52	0.00	471.86	0.140	66.06	0.2	0.2	8.870	A
C-AB	29.62	29.62	7.40	0.00	762.58	0.039	29.62	0.1	0.1	4.911	A
C-A	317.20	317.20	79.30	0.00			317.20				
A-B	17.62	17.62	4.40	0.00			17.62				
A-C	248.83	248.83	62.21	0.00			248.83				

Main results: (08:30-08:45)

Stream	Total Demand (PCU/hr)	Junction demand (PCU/hr)	Junction Arrivals (PCU)	Bypass demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
B-AC	53.94	53.94	13.48	0.00	490.53	0.110	54.09	0.2	0.1	8.252	A
C-AB	22.11	22.11	5.53	0.00	732.70	0.030	22.17	0.1	0.0	5.069	A
C-A	261.07	261.07	65.27	0.00			261.07				
A-B	14.38	14.38	3.60	0.00			14.38				
A-C	203.17	203.17	50.79	0.00			203.17				

Main results: (08:45-09:00)

Stream	Total Demand (PCU/hr)	Junction demand (PCU/hr)	Junction Arrivals (PCU)	Bypass demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
B-AC	45.17	45.17	11.29	0.00	503.91	0.090	45.27	0.1	0.1	7.850	A
C-AB	17.32	17.32	4.33	0.00	710.94	0.024	17.36	0.0	0.0	5.192	A
C-A	219.83	219.83	54.96	0.00			219.83				
A-B	12.05	12.05	3.01	0.00			12.05				
A-C	170.14	170.14	42.54	0.00			170.14				

Do-Something SA - DS 2023, PM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

ID	Name	Include in report	Network flow scaling factor (%)	Network capacity scaling factor (%)
A1	Do-Something SA	✓	100.000	100.000

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
1 - Kilmartin L.C. East Access	Kilmartin L.C. East Access	T-Junction	Two-way	2.59	A

Junction Network Options

[same as above]

Arms

Arms

[same as above]

Major Arm Geometry

[same as above]

Minor Arm Geometry

[same as above]

Slope / Intercept / Capacity

[same as above]

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Model start time (HH:mm)	Model finish time (HH:mm)	Time segment length (min)	Run automatically
D2	DS 2023	PM	ONE HOUR	16:45	18:15	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A - Hollywood Drive (N)		ONE HOUR	✓	79.00	100.000
B - Kilmartin L.C Access 1 (E)		ONE HOUR	✓	46.00	100.000
C - Hollywood Drive (S)		ONE HOUR	✓	86.00	100.000

Origin-Destination Data

Demand (PCU/hr)

From	To			
		A - Hollywood Drive (N)	B - Kilmartin L.C Access 1 (E)	C - Hollywood Drive (S)
	A - Hollywood Drive (N)	0.000	31.000	48.000
	B - Kilmartin L.C Access 1 (E)	23.000	0.000	23.000
	C - Hollywood Drive (S)	55.000	31.000	0.000

Proportions

From	To			
		A - Hollywood Drive (N)	B - Kilmartin L.C Access 1 (E)	C - Hollywood Drive (S)
	A - Hollywood Drive (N)	0.00	0.39	0.61
	B - Kilmartin L.C Access 1 (E)	0.50	0.00	0.50
	C - Hollywood Drive (S)	0.64	0.36	0.00

Vehicle Mix

Heavy Vehicle proportion

From	To			
		A - Hollywood Drive (N)	B - Kilmartin L.C Access 1 (E)	C - Hollywood Drive (S)
	A - Hollywood Drive (N)	0	0	0
	B - Kilmartin L.C Access 1 (E)	0	0	0
	C - Hollywood Drive (S)	0	0	0

Average PCU Per Veh

From	To			
		A - Hollywood Drive (N)	B - Kilmartin L.C Access 1 (E)	C - Hollywood Drive (S)
	A - Hollywood Drive (N)	1.000	1.000	1.000
	B - Kilmartin L.C Access 1 (E)	1.000	1.000	1.000
	C - Hollywood Drive (S)	1.000	1.000	1.000

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	0.09	7.33	0.1	A	42.21	63.32
C-AB	0.06	6.18	0.1	A	31.04	46.56
C-A					47.88	71.82
A-B					28.45	42.67
A-C					44.05	66.07

Main Results for each time segment

Main results: (16:45-17:00)

Stream	Total Demand (PCU/hr)	Junction demand (PCU/hr)	Junction Arrivals (PCU)	Bypass demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
B-AC	34.63	34.63	8.66	0.00	551.24	0.063	34.37	0.0	0.1	6.962	A
C-AB	25.01	25.01	6.25	0.00	614.10	0.041	24.82	0.0	0.0	6.108	A
C-A	39.73	39.73	9.93	0.00			39.73				
A-B	23.34	23.34	5.83	0.00			23.34				
A-C	36.14	36.14	9.03	0.00			36.14				

Main results: (17:00-17:15)

Stream	Total Demand (PCU/hr)	Junction demand (PCU/hr)	Junction Arrivals (PCU)	Bypass demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
B-AC	41.35	41.35	10.34	0.00	547.29	0.076	41.29	0.1	0.1	7.114	A
C-AB	30.29	30.29	7.57	0.00	616.91	0.049	30.24	0.0	0.1	6.136	A
C-A	47.02	47.02	11.76	0.00			47.02				
A-B	27.87	27.87	6.97	0.00			27.87				
A-C	43.15	43.15	10.79	0.00			43.15				

Main results: (17:15-17:30)

Stream	Total Demand (PCU/hr)	Junction demand (PCU/hr)	Junction Arrivals (PCU)	Bypass demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
B-AC	50.65	50.65	12.66	0.00	541.87	0.093	50.56	0.1	0.1	7.327	A
C-AB	37.80	37.80	9.45	0.00	620.82	0.061	37.73	0.1	0.1	6.174	A
C-A	56.89	56.89	14.22	0.00			56.89				
A-B	34.13	34.13	8.53	0.00			34.13				
A-C	52.85	52.85	13.21	0.00			52.85				

Main results: (17:30-17:45)

Stream	Total Demand (PCU/hr)	Junction demand (PCU/hr)	Junction Arrivals (PCU)	Bypass demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
B-AC	50.65	50.65	12.66	0.00	541.85	0.093	50.65	0.1	0.1	7.327	A
C-AB	37.80	37.80	9.45	0.00	620.83	0.061	37.80	0.1	0.1	6.177	A
C-A	56.88	56.88	14.22	0.00			56.88				
A-B	34.13	34.13	8.53	0.00			34.13				
A-C	52.85	52.85	13.21	0.00			52.85				

Main results: (17:45-18:00)

Stream	Total Demand (PCU/hr)	Junction demand (PCU/hr)	Junction Arrivals (PCU)	Bypass demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
B-AC	41.35	41.35	10.34	0.00	547.27	0.076	41.43	0.1	0.1	7.119	A
C-AB	30.30	30.30	7.57	0.00	616.92	0.049	30.36	0.1	0.1	6.137	A
C-A	47.02	47.02	11.75	0.00			47.02				
A-B	27.87	27.87	6.97	0.00			27.87				
A-C	43.15	43.15	10.79	0.00			43.15				

Main results: (18:00-18:15)

Stream	Total Demand (PCU/hr)	Junction demand (PCU/hr)	Junction Arrivals (PCU)	Bypass demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
B-AC	34.63	34.63	8.66	0.00	551.19	0.063	34.69	0.1	0.1	6.972	A
C-AB	25.03	25.03	6.26	0.00	614.12	0.041	25.07	0.1	0.0	6.114	A
C-A	39.72	39.72	9.93	0.00			39.72				
A-B	23.34	23.34	5.83	0.00			23.34				
A-C	36.14	36.14	9.03	0.00			36.14				

Do-Something SA - DS 2028, AM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

ID	Name	Include in report	Network flow scaling factor (%)	Network capacity scaling factor (%)
A1	Do-Something SA	✓	100.000	100.000

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
1 - Kilmartin L.C. East Access	Kilmartin L.C. East Access	T-Junction	Two-way	0.90	A

Junction Network Options

[same as above]

Arms

Arms

[same as above]

Major Arm Geometry

[same as above]

Minor Arm Geometry

[same as above]

Slope / Intercept / Capacity

[same as above]

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Model start time (HH:mm)	Model finish time (HH:mm)	Time segment length (min)	Run automatically
D3	DS 2028	AM	ONE HOUR	07:30	09:00	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 - Hollywood Drive (N)		ONE HOUR	✓	336.00	100.000
B - Kilmartin L.C Access 1 (E)		ONE HOUR	✓	60.00	100.000
C - Hollywood Drive (S)		ONE HOUR	✓	410.00	100.000

Origin-Destination Data

Demand (PCU/hr)

From	To			
		A - Hollywood Drive (N)	B - Kilmartin L.C Access 1 (E)	C - Hollywood Drive (S)
	A - Hollywood Drive (N)	0.000	16.000	320.000
	B - Kilmartin L.C Access 1 (E)	30.000	0.000	30.000
	C - Hollywood Drive (S)	394.000	16.000	0.000

Proportions

From	To			
		A - Hollywood Drive (N)	B - Kilmartin L.C Access 1 (E)	C - Hollywood Drive (S)
	A - Hollywood Drive (N)	0.00	0.05	0.95
	B - Kilmartin L.C Access 1 (E)	0.50	0.00	0.50
	C - Hollywood Drive (S)	0.96	0.04	0.00

Vehicle Mix

Heavy Vehicle proportion

From	To			
		A - Hollywood Drive (N)	B - Kilmartin L.C Access 1 (E)	C - Hollywood Drive (S)
	A - Hollywood Drive (N)	0	0	0
	B - Kilmartin L.C Access 1 (E)	0	0	0
	C - Hollywood Drive (S)	0	0	0

Average PCU Per Veh

From	To			
		A - Hollywood Drive (N)	B - Kilmartin L.C Access 1 (E)	C - Hollywood Drive (S)
	A - Hollywood Drive (N)	1.000	1.000	1.000
	B - Kilmartin L.C Access 1 (E)	1.000	1.000	1.000
	C - Hollywood Drive (S)	1.000	1.000	1.000

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	0.15	9.76	0.2	A	55.06	82.59
C-AB	0.04	4.97	0.1	A	26.34	39.52
C-A					349.88	524.82
A-B					14.68	22.02
A-C					293.64	440.46

Main Results for each time segment

Main results: (07:30-07:45)

Stream	Total Demand (PCU/hr)	Junction demand (PCU/hr)	Junction Arrivals (PCU)	Bypass demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
B-AC	45.17	45.17	11.29	0.00	479.13	0.094	44.76	0.0	0.1	8.280	A
C-AB	19.29	19.29	4.82	0.00	743.93	0.026	19.16	0.0	0.0	4.967	A
C-A	289.38	289.38	72.35	0.00			289.38				
A-B	12.05	12.05	3.01	0.00			12.05				
A-C	240.91	240.91	60.23	0.00			240.91				

Main results: (07:45-08:00)

Stream	Total Demand (PCU/hr)	Junction demand (PCU/hr)	Junction Arrivals (PCU)	Bypass demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
B-AC	53.94	53.94	13.48	0.00	460.66	0.117	53.83	0.1	0.1	8.847	A
C-AB	25.14	25.14	6.29	0.00	771.94	0.033	25.10	0.0	0.0	4.820	A
C-A	343.44	343.44	85.86	0.00			343.44				
A-B	14.38	14.38	3.60	0.00			14.38				
A-C	287.67	287.67	71.92	0.00			287.67				

Main results: (08:00-08:15)

Stream	Total Demand (PCU/hr)	Junction demand (PCU/hr)	Junction Arrivals (PCU)	Bypass demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
B-AC	66.06	66.06	16.52	0.00	434.76	0.152	65.88	0.1	0.2	9.754	A
C-AB	34.55	34.55	8.64	0.00	810.13	0.043	34.48	0.0	0.1	4.641	A
C-A	416.87	416.87	104.22	0.00			416.87				
A-B	17.62	17.62	4.40	0.00			17.62				
A-C	352.33	352.33	88.08	0.00			352.33				

Main results: (08:15-08:30)

Stream	Total Demand (PCU/hr)	Junction demand (PCU/hr)	Junction Arrivals (PCU)	Bypass demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
B-AC	66.06	66.06	16.52	0.00	434.74	0.152	66.06	0.2	0.2	9.764	A
C-AB	34.57	34.57	8.64	0.00	810.16	0.043	34.57	0.1	0.1	4.643	A
C-A	416.84	416.84	104.21	0.00			416.84				
A-B	17.62	17.62	4.40	0.00			17.62				
A-C	352.33	352.33	88.08	0.00			352.33				

Main results: (08:30-08:45)

Stream	Total Demand (PCU/hr)	Junction demand (PCU/hr)	Junction Arrivals (PCU)	Bypass demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
B-AC	53.94	53.94	13.48	0.00	460.64	0.117	54.11	0.2	0.1	8.859	A
C-AB	25.17	25.17	6.29	0.00	771.99	0.033	25.24	0.1	0.0	4.823	A
C-A	343.41	343.41	85.85	0.00			343.41				
A-B	14.38	14.38	3.60	0.00			14.38				
A-C	287.67	287.67	71.92	0.00			287.67				

Main results: (08:45-09:00)

Stream	Total Demand (PCU/hr)	Junction demand (PCU/hr)	Junction Arrivals (PCU)	Bypass demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
B-AC	45.17	45.17	11.29	0.00	479.10	0.094	45.29	0.1	0.1	8.300	A
C-AB	19.35	19.35	4.84	0.00	743.98	0.026	19.39	0.0	0.0	4.968	A
C-A	289.32	289.32	72.33	0.00			289.32				
A-B	12.05	12.05	3.01	0.00			12.05				
A-C	240.91	240.91	60.23	0.00			240.91				

Do-Something SA - DS 2028, PM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

ID	Name	Include in report	Network flow scaling factor (%)	Network capacity scaling factor (%)
A1	Do-Something SA	✓	100.000	100.000

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
1 - Kilmartin L.C. East Access	Kilmartin L.C. East Access	T-Junction	Two-way	2.08	A

Junction Network Options

[same as above]

Arms

Arms

[same as above]

Major Arm Geometry

[same as above]

Minor Arm Geometry

[same as above]

Slope / Intercept / Capacity

[same as above]

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Model start time (HH:mm)	Model finish time (HH:mm)	Time segment length (min)	Run automatically
D4	DS 2028	PM	ONE HOUR	16:45	18:15	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A - Hollywood Drive (N)		ONE HOUR	✓	105.00	100.000
B - Kilmartin L.C Access 1 (E)		ONE HOUR	✓	46.00	100.000
C - Hollywood Drive (S)		ONE HOUR	✓	118.00	100.000

Origin-Destination Data

Demand (PCU/hr)

From	To			
		A - Hollywood Drive (N)	B - Kilmartin L.C Access 1 (E)	C - Hollywood Drive (S)
	A - Hollywood Drive (N)	0.000	31.000	74.000
	B - Kilmartin L.C Access 1 (E)	23.000	0.000	23.000
	C - Hollywood Drive (S)	87.000	31.000	0.000

Proportions

From	To			
		A - Hollywood Drive (N)	B - Kilmartin L.C Access 1 (E)	C - Hollywood Drive (S)
	A - Hollywood Drive (N)	0.00	0.30	0.70
	B - Kilmartin L.C Access 1 (E)	0.50	0.00	0.50
	C - Hollywood Drive (S)	0.74	0.26	0.00

Vehicle Mix

Heavy Vehicle proportion

From	To			
		A - Hollywood Drive (N)	B - Kilmartin L.C Access 1 (E)	C - Hollywood Drive (S)
	A - Hollywood Drive (N)	0	0	0
	B - Kilmartin L.C Access 1 (E)	0	0	0
	C - Hollywood Drive (S)	0	0	0

Average PCU Per Veh

From	To			
		A - Hollywood Drive (N)	B - Kilmartin L.C Access 1 (E)	C - Hollywood Drive (S)
	A - Hollywood Drive (N)	1.000	1.000	1.000
	B - Kilmartin L.C Access 1 (E)	1.000	1.000	1.000
	C - Hollywood Drive (S)	1.000	1.000	1.000

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	0.10	7.49	0.1	A	42.21	63.32
C-AB	0.06	6.02	0.1	A	32.63	48.95
C-A					75.65	113.47
A-B					28.45	42.67
A-C					67.90	101.86

Main Results for each time segment

Main results: (16:45-17:00)

Stream	Total Demand (PCU/hr)	Junction demand (PCU/hr)	Junction Arrivals (PCU)	Bypass demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
B-AC	34.63	34.63	8.66	0.00	544.14	0.064	34.36	0.0	0.1	7.059	A
C-AB	26.03	26.03	6.51	0.00	625.92	0.042	25.82	0.0	0.1	5.998	A
C-A	62.81	62.81	15.70	0.00			62.81				
A-B	23.34	23.34	5.83	0.00			23.34				
A-C	55.71	55.71	13.93	0.00			55.71				

Main results: (17:00-17:15)

Stream	Total Demand (PCU/hr)	Junction demand (PCU/hr)	Junction Arrivals (PCU)	Bypass demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
B-AC	41.35	41.35	10.34	0.00	538.79	0.077	41.29	0.1	0.1	7.236	A
C-AB	31.77	31.77	7.94	0.00	631.09	0.050	31.72	0.1	0.1	6.006	A
C-A	74.31	74.31	18.58	0.00			74.31				
A-B	27.87	27.87	6.97	0.00			27.87				
A-C	66.52	66.52	16.63	0.00			66.52				

Main results: (17:15-17:30)

Stream	Total Demand (PCU/hr)	Junction demand (PCU/hr)	Junction Arrivals (PCU)	Bypass demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
B-AC	50.65	50.65	12.66	0.00	531.41	0.095	50.56	0.1	0.1	7.487	A
C-AB	40.07	40.07	10.02	0.00	638.28	0.063	40.00	0.1	0.1	6.017	A
C-A	89.85	89.85	22.46	0.00			89.85				
A-B	34.13	34.13	8.53	0.00			34.13				
A-C	81.48	81.48	20.37	0.00			81.48				

Main results: (17:30-17:45)

Stream	Total Demand (PCU/hr)	Junction demand (PCU/hr)	Junction Arrivals (PCU)	Bypass demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
B-AC	50.65	50.65	12.66	0.00	531.40	0.095	50.65	0.1	0.1	7.487	A
C-AB	40.08	40.08	10.02	0.00	638.29	0.063	40.08	0.1	0.1	6.018	A
C-A	89.84	89.84	22.46	0.00			89.84				
A-B	34.13	34.13	8.53	0.00			34.13				
A-C	81.48	81.48	20.37	0.00			81.48				

Main results: (17:45-18:00)

Stream	Total Demand (PCU/hr)	Junction demand (PCU/hr)	Junction Arrivals (PCU)	Bypass demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
B-AC	41.35	41.35	10.34	0.00	538.77	0.077	41.44	0.1	0.1	7.241	A
C-AB	31.78	31.78	7.95	0.00	631.11	0.050	31.86	0.1	0.1	6.008	A
C-A	74.29	74.29	18.57	0.00			74.29				
A-B	27.87	27.87	6.97	0.00			27.87				
A-C	66.52	66.52	16.63	0.00			66.52				

Main results: (18:00-18:15)

Stream	Total Demand (PCU/hr)	Junction demand (PCU/hr)	Junction Arrivals (PCU)	Bypass demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
B-AC	34.63	34.63	8.66	0.00	544.09	0.064	34.69	0.1	0.1	7.067	A
C-AB	26.06	26.06	6.51	0.00	625.94	0.042	26.11	0.1	0.1	6.004	A
C-A	62.78	62.78	15.70	0.00			62.78				
A-B	23.34	23.34	5.83	0.00			23.34				
A-C	55.71	55.71	13.93	0.00			55.71				

Do-Something SA - DS 2038, AM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

ID	Name	Include in report	Network flow scaling factor (%)	Network capacity scaling factor (%)
A1	Do-Something SA	✓	100.000	100.000

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
1 - Kilmartin L.C. East Access	Kilmartin L.C. East Access	T-Junction	Two-way	0.88	A

Junction Network Options

[same as above]

Arms

Arms

[same as above]

Major Arm Geometry

[same as above]

Minor Arm Geometry

[same as above]

Slope / Intercept / Capacity

[same as above]

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Model start time (HH:mm)	Model finish time (HH:mm)	Time segment length (min)	Run automatically
DS	DS 2038	AM	ONE HOUR	07:30	09:00	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 - Hollywood Drive (N)		ONE HOUR	✓	351.00	100.000
B - Kilmartin L.C Access 1 (E)		ONE HOUR	✓	60.00	100.000
C - Hollywood Drive (S)		ONE HOUR	✓	430.00	100.000

Origin-Destination Data

Demand (PCU/hr)

From	To			
		A - Hollywood Drive (N)	B - Kilmartin L.C Access 1 (E)	C - Hollywood Drive (S)
	A - Hollywood Drive (N)	0.000	16.000	335.000
	B - Kilmartin L.C Access 1 (E)	30.000	0.000	30.000
	C - Hollywood Drive (S)	414.000	16.000	0.000

Proportions

From	To			
		A - Hollywood Drive (N)	B - Kilmartin L.C Access 1 (E)	C - Hollywood Drive (S)
	A - Hollywood Drive (N)	0.00	0.05	0.95
	B - Kilmartin L.C Access 1 (E)	0.50	0.00	0.50
	C - Hollywood Drive (S)	0.96	0.04	0.00

Vehicle Mix

Heavy Vehicle proportion

From	To			
		A - Hollywood Drive (N)	B - Kilmartin L.C Access 1 (E)	C - Hollywood Drive (S)
	A - Hollywood Drive (N)	0	0	0
	B - Kilmartin L.C Access 1 (E)	0	0	0
	C - Hollywood Drive (S)	0	0	0

Average PCU Per Veh

From	To			
		A - Hollywood Drive (N)	B - Kilmartin L.C Access 1 (E)	C - Hollywood Drive (S)
	A - Hollywood Drive (N)	1.000	1.000	1.000
	B - Kilmartin L.C Access 1 (E)	1.000	1.000	1.000
	C - Hollywood Drive (S)	1.000	1.000	1.000

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	0.15	9.94	0.2	A	55.06	82.59
C-AB	0.04	4.92	0.1	A	27.07	40.60
C-A					367.51	551.26
A-B					14.68	22.02
A-C					307.40	461.10

Main Results for each time segment

Main results: (07:30-07:45)

Stream	Total Demand (PCU/hr)	Junction demand (PCU/hr)	Junction Arrivals (PCU)	Bypass demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
B-AC	45.17	45.17	11.29	0.00	474.76	0.095	44.75	0.0	0.1	8.365	A
C-AB	19.72	19.72	4.93	0.00	751.57	0.026	19.59	0.0	0.0	4.918	A
C-A	304.01	304.01	76.00	0.00			304.01				
A-B	12.05	12.05	3.01	0.00			12.05				
A-C	252.21	252.21	63.05	0.00			252.21				

Main results: (07:45-08:00)

Stream	Total Demand (PCU/hr)	Junction demand (PCU/hr)	Junction Arrivals (PCU)	Bypass demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
B-AC	53.94	53.94	13.48	0.00	455.38	0.118	53.82	0.1	0.1	8.962	A
C-AB	25.80	25.80	6.45	0.00	780.97	0.033	25.76	0.0	0.0	4.766	A
C-A	360.76	360.76	90.19	0.00			360.76				
A-B	14.38	14.38	3.60	0.00			14.38				
A-C	301.16	301.16	75.29	0.00			301.16				

Main results: (08:00-08:15)

Stream	Total Demand (PCU/hr)	Junction demand (PCU/hr)	Junction Arrivals (PCU)	Bypass demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
B-AC	66.06	66.06	16.52	0.00	428.16	0.154	65.87	0.1	0.2	9.931	A
C-AB	35.62	35.62	8.91	0.00	820.96	0.043	35.55	0.0	0.1	4.583	A
C-A	437.82	437.82	109.45	0.00			437.82				
A-B	17.62	17.62	4.40	0.00			17.62				
A-C	368.84	368.84	92.21	0.00			368.84				

Main results: (08:15-08:30)

Stream	Total Demand (PCU/hr)	Junction demand (PCU/hr)	Junction Arrivals (PCU)	Bypass demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
B-AC	66.06	66.06	16.52	0.00	428.15	0.154	66.06	0.2	0.2	9.941	A
C-AB	35.65	35.65	8.91	0.00	820.99	0.043	35.65	0.1	0.1	4.586	A
C-A	437.79	437.79	109.45	0.00			437.79				
A-B	17.62	17.62	4.40	0.00			17.62				
A-C	368.84	368.84	92.21	0.00			368.84				

Main results: (08:30-08:45)

Stream	Total Demand (PCU/hr)	Junction demand (PCU/hr)	Junction Arrivals (PCU)	Bypass demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
B-AC	53.94	53.94	13.48	0.00	455.36	0.118	54.12	0.2	0.1	8.977	A
C-AB	25.84	25.84	6.46	0.00	781.02	0.033	25.91	0.1	0.0	4.768	A
C-A	360.72	360.72	90.18	0.00			360.72				
A-B	14.38	14.38	3.60	0.00			14.38				
A-C	301.16	301.16	75.29	0.00			301.16				

Main results: (08:45-09:00)

Stream	Total Demand (PCU/hr)	Junction demand (PCU/hr)	Junction Arrivals (PCU)	Bypass demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
B-AC	45.17	45.17	11.29	0.00	474.73	0.095	45.29	0.1	0.1	8.385	A
C-AB	19.78	19.78	4.95	0.00	751.62	0.026	19.83	0.0	0.0	4.919	A
C-A	303.94	303.94	75.99	0.00			303.94				
A-B	12.05	12.05	3.01	0.00			12.05				
A-C	252.21	252.21	63.05	0.00			252.21				

Do-Something SA - DS 2038, PM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

ID	Name	Include in report	Network flow scaling factor (%)	Network capacity scaling factor (%)
A1	Do-Something SA	✓	100.000	100.000

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
1 - Kilmartin L.C. East Access	Kilmartin L.C. East Access	T-Junction	Two-way	2.04	A

Junction Network Options

[same as above]

Arms

Arms

[same as above]

Major Arm Geometry

[same as above]

Minor Arm Geometry

[same as above]

Slope / Intercept / Capacity

[same as above]

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Model start time (HH:mm)	Model finish time (HH:mm)	Time segment length (min)	Run automatically
D6	DS 2038	PM	ONE HOUR	16:45	18:15	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A - Hollywood Drive (N)		ONE HOUR	✓	108.00	100.000
B - Kilmartin L.C Access 1 (E)		ONE HOUR	✓	46.00	100.000
C - Hollywood Drive (S)		ONE HOUR	✓	120.00	100.000

Origin-Destination Data

Demand (PCU/hr)

From	To			
		A - Hollywood Drive (N)	B - Kilmartin L.C Access 1 (E)	C - Hollywood Drive (S)
	A - Hollywood Drive (N)	0.000	31.000	77.000
	B - Kilmartin L.C Access 1 (E)	23.000	0.000	23.000
	C - Hollywood Drive (S)	89.000	31.000	0.000

Proportions

From	To			
		A - Hollywood Drive (N)	B - Kilmartin L.C Access 1 (E)	C - Hollywood Drive (S)
	A - Hollywood Drive (N)	0.00	0.29	0.71
	B - Kilmartin L.C Access 1 (E)	0.50	0.00	0.50
	C - Hollywood Drive (S)	0.74	0.26	0.00

Vehicle Mix

Heavy Vehicle proportion

From	To			
		A - Hollywood Drive (N)	B - Kilmartin L.C Access 1 (E)	C - Hollywood Drive (S)
	A - Hollywood Drive (N)	0	0	0
	B - Kilmartin L.C Access 1 (E)	0	0	0
	C - Hollywood Drive (S)	0	0	0

Average PCU Per Veh

From	To			
		A - Hollywood Drive (N)	B - Kilmartin L.C Access 1 (E)	C - Hollywood Drive (S)
	A - Hollywood Drive (N)	1.000	1.000	1.000
	B - Kilmartin L.C Access 1 (E)	1.000	1.000	1.000
	C - Hollywood Drive (S)	1.000	1.000	1.000

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	0.10	7.50	0.1	A	42.21	63.32
C-AB	0.06	6.01	0.1	A	32.74	49.10
C-A					77.38	116.07
A-B					28.45	42.67
A-C					70.66	105.98

Main Results for each time segment

Main results: (16:45-17:00)

Stream	Total Demand (PCU/hr)	Junction demand (PCU/hr)	Junction Arrivals (PCU)	Bypass demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
B-AC	34.63	34.63	8.66	0.00	543.44	0.064	34.36	0.0	0.1	7.068	A
C-AB	26.09	26.09	6.52	0.00	626.43	0.042	25.89	0.0	0.1	5.993	A
C-A	64.25	64.25	16.06	0.00			64.25				
A-B	23.34	23.34	5.83	0.00			23.34				
A-C	57.97	57.97	14.49	0.00			57.97				

Main results: (17:00-17:15)

Stream	Total Demand (PCU/hr)	Junction demand (PCU/hr)	Junction Arrivals (PCU)	Bypass demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
B-AC	41.35	41.35	10.34	0.00	537.96	0.077	41.29	0.1	0.1	7.248	A
C-AB	31.87	31.87	7.97	0.00	631.71	0.050	31.82	0.1	0.1	6.000	A
C-A	76.01	76.01	19.00	0.00			76.01				
A-B	27.87	27.87	6.97	0.00			27.87				
A-C	69.22	69.22	17.31	0.00			69.22				

Main results: (17:15-17:30)

Stream	Total Demand (PCU/hr)	Junction demand (PCU/hr)	Junction Arrivals (PCU)	Bypass demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
B-AC	50.65	50.65	12.66	0.00	530.39	0.095	50.56	0.1	0.1	7.503	A
C-AB	40.22	40.22	10.05	0.00	639.04	0.063	40.14	0.1	0.1	6.011	A
C-A	91.90	91.90	22.98	0.00			91.90				
A-B	34.13	34.13	8.53	0.00			34.13				
A-C	84.78	84.78	21.19	0.00			84.78				

Main results: (17:30-17:45)

Stream	Total Demand (PCU/hr)	Junction demand (PCU/hr)	Junction Arrivals (PCU)	Bypass demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
B-AC	50.65	50.65	12.66	0.00	530.37	0.095	50.65	0.1	0.1	7.503	A
C-AB	40.23	40.23	10.06	0.00	639.06	0.063	40.23	0.1	0.1	6.014	A
C-A	91.89	91.89	22.97	0.00			91.89				
A-B	34.13	34.13	8.53	0.00			34.13				
A-C	84.78	84.78	21.19	0.00			84.78				

Main results: (17:45-18:00)

Stream	Total Demand (PCU/hr)	Junction demand (PCU/hr)	Junction Arrivals (PCU)	Bypass demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
B-AC	41.35	41.35	10.34	0.00	537.93	0.077	41.44	0.1	0.1	7.251	A
C-AB	31.88	31.88	7.97	0.00	631.73	0.050	31.95	0.1	0.1	6.003	A
C-A	76.00	76.00	19.00	0.00			76.00				
A-B	27.87	27.87	6.97	0.00			27.87				
A-C	69.22	69.22	17.31	0.00			69.22				

Main results: (18:00-18:15)

Stream	Total Demand (PCU/hr)	Junction demand (PCU/hr)	Junction Arrivals (PCU)	Bypass demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
B-AC	34.63	34.63	8.66	0.00	543.39	0.064	34.69	0.1	0.1	7.076	A
C-AB	26.12	26.12	6.53	0.00	626.45	0.042	26.17	0.1	0.1	6.000	A
C-A	64.22	64.22	16.06	0.00			64.22				
A-B	23.34	23.34	5.83	0.00			23.34				
A-C	57.97	57.97	14.49	0.00			57.97				

Junctions 9											
PICADY 9 - Priority Intersection Module											
Version: 9.0.0.4211 [] © Copyright TRL Limited, 2021											
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Filename: New Link St - The Avenue (SA).j9

Path: G:\2017\p170182\calcs\picady\October 2021 Update\Sensitivity Analysis

Report generation date: 09/11/2021 12:19:34

»Do-Something - DS 2023, AM
 »Do-Something - DS 2023, PM
 »Do-Something - DS 2028, AM
 »Do-Something - DS 2028, PM
 »Do-Something - DS 2038, AM
 »Do-Something - DS 2038, PM

Summary of junction performance

	AM				PM			
	Queue (PCU)	Delay (s)	RFC	LOS	Queue (PCU)	Delay (s)	RFC	LOS
Do-Something [Lane Simulation] - DS 2023								
A - The Avenue (E)	0.0	0.01		A	0.0	0.00		A
B - New Link St. (S)	0.2	9.96		A	0.2	7.95		A
C - The Avenue (W)	0.0	0.39		A	0.0	0.86		A
Do-Something [Lane Simulation] - DS 2028								
A - The Avenue (E)	0.0	0.01		A	0.0	0.00		A
B - New Link St. (S)	0.4	12.32		B	0.3	8.40		A
C - The Avenue (W)	0.1	0.94		A	0.0	1.70		A
Do-Something [Lane Simulation] - DS 2038								
A - The Avenue (E)	0.0	0.01		A	0.0	0.27		A
B - New Link St. (S)	0.3	11.67		B	0.2	9.35		A
C - The Avenue (W)	0.1	0.86		A	0.3	4.20		A

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

Values shown are the highest values encountered over all time segments. Delay is the maximum value of average delay per arriving vehicle. Arm and junction delays are averages for all movements, including movements with zero delay.

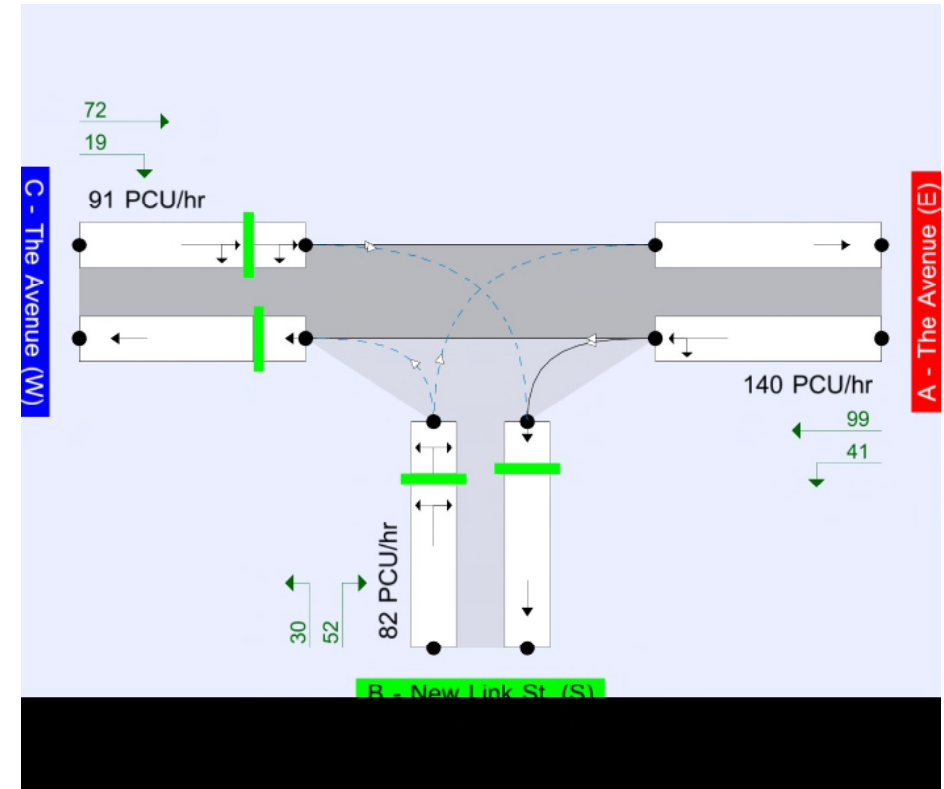
File summary

File Description

Title	Hollystown-Kilmartin
Location	Hollystown, Dublin 15
Site number	
Date	26/10/2021
Version	
Status	Proposed
Identifier	
Client	Glenveagh
Jobnumber	170182
Enumerator	HEADOFFICE"gild
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

Lane Simulation options

Stop criteria (%)	Stop criteria time (s)	Stop criteria number of trials	Random seed	Results refresh speed (s)	Individual vehicle animation number of trials	Use crossings quick response	Last run random seed	Last run number of trials	Last run time taken (s)
1.00	100000	100000	-1	3	1	✓	823871715	101	1.78

Demand Set Summary

Scenario name	Time Period name	Traffic profile type	Model start time (HH:mm)	Model finish time (HH:mm)	Time segment length (min)	Run automatically
DS 2023	AM	ONE HOUR	07:30	09:00	15	✓
DS 2023	PM	ONE HOUR	16:45	18:15	15	✓
DS 2028	AM	ONE HOUR	07:30	09:00	15	✓
DS 2028	PM	ONE HOUR	16:45	18:15	15	✓
DS 2038	AM	ONE HOUR	07:30	09:00	15	✓
DS 2038	PM	ONE HOUR	16:45	18:15	15	✓

Do-Something - DS 2023, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Lane Simulation	A1 - Do-Something [Lane Simulation]	This analysis set uses Lane Simulation mode. This is provided as an investigative tool and the user should apply judgement when interpreting the results.
Warning	Pedestrian Crossing	C - The Avenue (W) - Pedestrian crossing	Pedestrian crossing uses default flow of 0. Is this correct?

Analysis Set Details

ID	Name	Use Lane Simulation	Include in report	Use specific Demand Set(s)	Specific Demand Set(s)	Network flow scaling factor (%)	Network capacity scaling factor (%)
A1	Do-Something	✓	✓	✓	D1,D2,D3,D4,D5,D6	100.000	100.000

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
1 - New Link St. / The Avenue Junction	New Link St. / The Avenue Junction	T-Junction	Two-way	0.92	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Name	Description	Arm type
A	The Avenue (E)		Major
B	New Link St. (S)		Minor
C	The Avenue (W)		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 - The Avenue (W)	6.00			71.0	✓	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 - New Link St. (S)	One lane	3.00	65	61

Pedestrian Crossings

Arm	Crossing type	Average pedestrian flow (Ped/hr)
A - The Avenue (E)	None	
B - New Link St. (S)	Zebra	200.00
C - The Avenue (W)	Pelican	0.00

Zebra Crossings

Arm	Space between crossing and junction entry (Left) (PCU)	Vehicles queueing on exit (Zebra) (PCU)	Central Refuge	Crossing data type	Crossing length (m)	Crossing time (s)
B - New Link St. (S)	1.00	1.00		Distance	6.00	4.29

Pelican/Puffin Crossings

Arm	Space between crossing and junction entry (Signalised) (PCU)	Vehicles queueing on exit (Signalised) (PCU)	Amber time preceding red (s)	Amber time regarded as green (s)	Time from traffic red start to green man start (s)	Time period green man shown (s)	Clearance Period (s)	Traffic minimum green (s)
C - The Avenue (W)	1.00	1.00	3.00	2.90	1.00	8.00	6.00	7.00

Slope / Intercept / Capacity

Priority Intersection Slopes and Intercepts

Junction	Stream	Intercept (PCU/hr)	Slope for A-B	Slope for A-C	Slope for C-A	Slope for C-B
1	B-A	529.002	0.096	0.244	0.153	0.348
1	B-C	662.338	0.102	0.257	-	-
1	C-B	615.080	0.238	0.238	-	-

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.

Lanes

Arm	Lane level	Lane	Destination arms	Has limited storage	Storage (PCU)
A - The Avenue (E)	1 [Give-way line]	1	B,C		Infinity
B - New Link St. (S)	1 [Give-way line]	1	A,C	✓	1.00
	2	1	(A,C)		Infinity
C - The Avenue (W)	1 [Give-way line]	1	A,B	✓	1.00
	2	1	(A,B)		Infinity

Lane Movements

Junction	Arm	Lane Level	Lane	Arm		
1 - New Link St. / The Avenue Junction	A - The Avenue (E)	1 [Give-way line]	1	?	?	?
				✓		✓
	B - New Link St. (S)	1 [Give-way line]	1	✓		✓
		2	1	✓		✓
	C - The Avenue (W)	1 [Give-way line]	1	✓	✓	
		2	1	✓	✓	

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Model start time (HH:mm)	Model finish time (HH:mm)	Time segment length (min)	Run automatically
D1	DS 2023	AM	ONE HOUR	07:30	09:00	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 - The Avenue (E)		ONE HOUR	✓	257.00	100.000
B - New Link St. (S)		ONE HOUR	✓	39.00	100.000
C - The Avenue (W)		ONE HOUR	✓	204.00	100.000

Demand overview (Pedestrians)

Arm	Profile type	Average pedestrian flow (Ped/hr)
A - The Avenue (E)		
B - New Link St. (S)	Global	200.00
C - The Avenue (W)	Global	0.00

Origin-Destination Data

Demand (PCU/hr)

	To			
		A - The Avenue (E)	B - New Link St. (S)	C - The Avenue (W)
From	A - The Avenue (E)	0.000	25.000	232.000
	B - New Link St. (S)	36.000	0.000	3.000
	C - The Avenue (W)	196.000	8.000	0.000

Proportions

	To			
		A - The Avenue (E)	B - New Link St. (S)	C - The Avenue (W)
From	A - The Avenue (E)	0.00	0.10	0.90
	B - New Link St. (S)	0.92	0.00	0.08
	C - The Avenue (W)	0.96	0.04	0.00

Vehicle Mix

Heavy Vehicle proportion

	To			
		A - The Avenue (E)	B - New Link St. (S)	C - The Avenue (W)
	A - The Avenue (E)	0	0	0
	B - New Link St. (S)	0	0	0
	C - The Avenue (W)	0	0	0

Average PCU Per Veh

	To			
		A - The Avenue (E)	B - New Link St. (S)	C - The Avenue (W)
	A - The Avenue (E)	1.000	1.000	1.000
	B - New Link St. (S)	1.000	1.000	1.000
	C - The Avenue (W)	1.000	1.000	1.000

Results

Results Summary for whole modelled period

Arm	Max delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
A - The Avenue (E)	0.01	0.0	A	234.91	352.37
B - New Link St. (S)	9.96	0.2	A	34.57	51.86
C - The Avenue (W)	0.39	0.0	A	187.78	281.67

Main Results for each time segment

Main results: (07:30-07:45)

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Pedestrian demand (Ped/hr)	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
A - The Avenue (E)	192.24	48.06		192.24	170.61	0.0	0.0	0.008	A
B - New Link St. (S)	29.23	7.31	150.57	30.06	24.83	0.0	0.0	8.274	A
C - The Avenue (W)	150.18	37.54	0.00	150.06	176.91	0.0	0.0	0.361	A

Main results: (07:45-08:00)

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Pedestrian demand (Ped/hr)	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
A - The Avenue (E)	235.13	58.78		235.13	203.29	0.0	0.0	0.001	A
B - New Link St. (S)	29.23	7.31	179.80	30.53	34.34	0.0	0.0	8.988	A
C - The Avenue (W)	182.26	45.56	0.00	182.38	210.30	0.0	0.0	0.328	A

Main results: (08:00-08:15)

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Pedestrian demand (Ped/hr)	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
A - The Avenue (E)	267.80	66.95		267.80	257.11	0.0	0.0	0.000	A
B - New Link St. (S)	42.42	10.60	220.20	42.65	35.64	0.0	0.1	9.964	A
C - The Avenue (W)	228.12	57.03	0.00	227.76	245.47	0.0	0.0	0.387	A

Main results: (08:15-08:30)

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Pedestrian demand (Ped/hr)	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
A - The Avenue (E)	292.40	73.10		292.40	256.04	0.0	0.0	0.000	A
B - New Link St. (S)	44.08	11.02	220.20	42.53	37.43	0.1	0.2	9.743	A
C - The Avenue (W)	226.34	56.58	0.00	226.10	267.56	0.0	0.0	0.389	A

Main results: (08:30-08:45)

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Pedestrian demand (Ped/hr)	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
A - The Avenue (E)	231.45	57.86		231.45	212.08	0.0	0.0	0.000	A
B - New Link St. (S)	34.57	8.64	179.80	33.98	30.06	0.2	0.1	8.688	A
C - The Avenue (W)	186.65	46.66	0.00	186.89	209.94	0.0	0.0	0.292	A

Main results: (08:45-09:00)

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Pedestrian demand (Ped/hr)	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
A - The Avenue (E)	190.46	47.61		190.46	172.99	0.0	0.0	0.000	A
B - New Link St. (S)	27.92	6.98	150.57	27.33	22.57	0.1	0.1	8.494	A
C - The Avenue (W)	153.15	38.29	0.00	153.27	175.49	0.0	0.0	0.304	A

Lane Results

Lane Level notation: Lane Level 1 is always closest to the junction.

Lanes: Main Results for each time segment

Main results: (07:30-07:45)

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Pedestrian demand (Ped/hr)	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
A - The Avenue (E)	Entry	1	1	B,C	192.24		192.24	0.0	0.0	0.008	A
	Exit	1	1		170.61		170.61	0.0	0.0	0.000	A
B - New Link St. (S)	Entry	1	1	A,C	29.23		30.06	0.0	0.0	7.546	A
		2	1	(A,C)	29.23	150.57	29.23	0.0	0.0	0.722	A
	Exit	1	1		24.83	150.57	24.83	0.0	0.0	0.217	A
		2	1		24.83		24.83	0.0	0.0	0.000	A
C - The Avenue (W)	Entry	1	1	A,B	150.18		150.06	0.0	0.0	0.268	A
		2	1	(A,B)	150.18	0.00	150.18	0.0	0.0	0.093	A
	Exit	1	1		176.91	0.00	176.91	0.0	0.0	0.044	A
		2	1		176.91		176.91	0.0	0.0	0.000	A

Main results: (07:45-08:00)

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Pedestrian demand (Ped/hr)	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
A - The Avenue (E)	Entry	1	1	B,C	235.13		235.13	0.0	0.0	0.001	A
	Exit	1	1		203.29		203.29	0.0	0.0	0.000	A
B - New Link St. (S)	Entry	1	1	A,C	29.47		30.53	0.0	0.0	8.050	A
		2	1	(A,C)	29.23	179.80	29.47	0.0	0.0	0.942	A
	Exit	1	1		34.46	179.80	34.34	0.0	0.0	0.289	A
		2	1		34.34		34.34	0.0	0.0	0.000	A
C - The Avenue (W)	Entry	1	1	A,B	182.26		182.38	0.0	0.0	0.262	A
		2	1	(A,B)	182.26	0.00	182.26	0.0	0.0	0.066	A
	Exit	1	1		210.30	0.00	210.30	0.0	0.0	0.000	A
		2	1		210.30		210.30	0.0	0.0	0.000	A

Main results: (08:00-08:15)

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Pedestrian demand (Ped/hr)	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
A - The Avenue (E)	Entry	1	1	B,C	267.80		267.80	0.0	0.0	0.000	A
	Exit	1	1		257.11		257.11	0.0	0.0	0.000	A
B - New Link St. (S)	Entry	1	1	A,C	42.30		42.65	0.0	0.1	8.397	A
		2	1	(A,C)	42.42	220.20	42.30	0.0	0.0	1.556	A
	Exit	1	1		35.64	220.20	35.64	0.0	0.0	0.306	A
		2	1		35.64		35.64	0.0	0.0	0.000	A
C - The Avenue (W)	Entry	1	1	A,B	228.12		227.76	0.0	0.0	0.258	A
		2	1	(A,B)	228.12	0.00	228.12	0.0	0.0	0.129	A
	Exit	1	1		245.47	0.00	245.47	0.0	0.0	0.000	A
		2	1		245.47		245.47	0.0	0.0	0.000	A

Main results: (08:15-08:30)

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Pedestrian demand (Ped/hr)	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
A - The Avenue (E)	Entry	1	1	B,C	292.40		292.40	0.0	0.0	0.000	A
	Exit	1	1		256.04		256.04	0.0	0.0	0.000	A
B - New Link St. (S)	Entry	1	1	A,C	43.60		42.53	0.1	0.2	8.515	A
		2	1	(A,C)	44.08	220.20	43.60	0.0	0.0	1.242	A
	Exit	1	1		37.43	220.20	37.43	0.0	0.0	0.324	A
		2	1		37.43		37.43	0.0	0.0	0.000	A
C - The Avenue (W)	Entry	1	1	A,B	226.22		226.10	0.0	0.0	0.267	A
		2	1	(A,B)	226.34	0.00	226.22	0.0	0.0	0.122	A
	Exit	1	1		267.56	0.00	267.56	0.0	0.0	0.000	A
		2	1		267.56		267.56	0.0	0.0	0.000	A

Main results: (08:30-08:45)

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Pedestrian demand (Ped/hr)	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
A - The Avenue (E)	Entry	1	1	B,C	231.45		231.45	0.0	0.0	0.000	A
	Exit	1	1		212.08		212.08	0.0	0.0	0.000	A
B - New Link St. (S)	Entry	1	1	A,C	34.34		33.98	0.2	0.1	7.912	A
		2	1	(A,C)	34.57	179.80	34.34	0.0	0.0	0.778	A
	Exit	1	1		30.30	179.80	30.06	0.0	0.0	0.233	A
		2	1		30.06		30.06	0.0	0.0	0.000	A
C - The Avenue (W)	Entry	1	1	A,B	186.65		186.89	0.0	0.0	0.230	A
		2	1	(A,B)	186.65	0.00	186.65	0.0	0.0	0.062	A
	Exit	1	1		209.94	0.00	209.94	0.0	0.0	0.000	A
		2	1		209.94		209.94	0.0	0.0	0.000	A

Main results: (08:45-09:00)

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Pedestrian demand (Ped/hr)	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
A - The Avenue (E)	Entry	1	1	B,C	190.46		190.46	0.0	0.0	0.000	A
	Exit	1	1		172.99		172.99	0.0	0.0	0.000	A
B - New Link St. (S)	Entry	1	1	A,C	27.92		27.33	0.1	0.1	7.676	A
		2	1	(A,C)	27.92	150.57	27.92	0.0	0.0	0.823	A
	Exit	1	1		22.57	150.57	22.57	0.0	0.0	0.187	A
		2	1		22.57		22.57	0.0	0.0	0.000	A
C - The Avenue (W)	Entry	1	1	A,B	153.15		153.27	0.0	0.0	0.252	A
		2	1	(A,B)	153.15	0.00	153.15	0.0	0.0	0.051	A
	Exit	1	1		175.49	0.00	175.49	0.0	0.0	0.000	A
		2	1		175.49		175.49	0.0	0.0	0.000	A

Do-Something - DS 2023, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Lane Simulation	A1 - Do-Something [Lane Simulation]	This analysis set uses Lane Simulation mode. This is provided as an investigative tool and the user should apply judgement when interpreting the results.
Warning	Pedestrian Crossing	B - New Link St. (S) - Pedestrian crossing	Pedestrian crossing uses default flow of 0. Is this correct?
Warning	Pedestrian Crossing	C - The Avenue (W) - Pedestrian crossing	Pedestrian crossing uses default flow of 0. Is this correct?

Analysis Set Details

ID	Name	Use Lane Simulation	Include in report	Use specific Demand Set(s)	Specific Demand Set (s)	Network flow scaling factor (%)	Network capacity scaling factor (%)
A1	Do-Something	✓	✓	✓	D1,D2,D3,D4,D5,D6	100.000	100.000

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
1 - New Link St. / The Avenue Junction	New Link St. / The Avenue Junction	T-Junction	Two-way	2.49	A

Junction Network Options

[same as above]

Arms

Arms

[same as above]

Major Arm Geometry

[same as above]

Minor Arm Geometry

[same as above]

Pedestrian Crossings

Arm	Crossing type	Average pedestrian flow (Ped/hr)
A - The Avenue (E)	None	
B - New Link St. (S)	Zebra	0.00
C - The Avenue (W)	Pelican	0.00

Zebra Crossings

Arm	Space between crossing and junction entry (Left) (PCU)	Vehicles queueing on exit (Zebra) (PCU)	Central Refuge	Crossing data type	Crossing length (m)	Crossing time (s)
B - New Link St. (S)	1.00	1.00		Distance	6.00	4.29

Pelican/Puffin Crossings

Arm	Space between crossing and junction entry (Signalised) (PCU)	Vehicles queueing on exit (Signalised) (PCU)	Amber time preceding red (s)	Amber time regarded as green (s)	Time from traffic red start to green man start (s)	Time period green man shown (s)	Clearance Period (s)	Traffic minimum green (s)
C - The Avenue (W)	1.00	1.00	3.00	2.90	1.00	8.00	6.00	7.00

Slope / Intercept / Capacity

[same as above]

Lanes

[same as above]

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Model start time (HH:mm)	Model finish time (HH:mm)	Time segment length (min)	Run automatically
D2	DS 2023	PM	ONE HOUR	16:45	18:15	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A - The Avenue (E)		ONE HOUR	✓	84.00	100.000
B - New Link St. (S)		ONE HOUR	✓	53.00	100.000
C - The Avenue (W)		ONE HOUR	✓	45.00	100.000

Demand overview (Pedestrians)

Arm	Profile type	Average pedestrian flow (Ped/hr)
A - The Avenue (E)		
B - New Link St. (S)	Global	0.00
C - The Avenue (W)	Global	0.00

Origin-Destination Data

Demand (PCU/hr)

From	To			
		A - The Avenue (E)	B - New Link St. (S)	C - The Avenue (W)
	A - The Avenue (E)	0.000	33.000	51.000
	B - New Link St. (S)	43.000	0.000	10.000
	C - The Avenue (W)	39.000	6.000	0.000

Proportions

From	To			
		A - The Avenue (E)	B - New Link St. (S)	C - The Avenue (W)
	A - The Avenue (E)	0.00	0.39	0.61
	B - New Link St. (S)	0.81	0.00	0.19
	C - The Avenue (W)	0.87	0.13	0.00

Main results: (17:00-17:15)

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Pedestrian demand (Ped/hr)	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
A - The Avenue (E)	74.38	18.59		74.38	79.49	0.0	0.0	0.000	A
B - New Link St. (S)	46.57	11.64	0.00	46.81	32.79	0.1	0.1	7.300	A
C - The Avenue (W)	46.10	11.52	0.00	46.10	55.01	0.0	0.0	0.807	A

Main results: (17:15-17:30)

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Pedestrian demand (Ped/hr)	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
A - The Avenue (E)	95.88	23.97		95.88	84.00	0.0	0.0	0.000	A
B - New Link St. (S)	55.25	13.81	0.00	54.30	42.06	0.1	0.2	7.874	A
C - The Avenue (W)	45.74	11.44	0.00	45.62	69.74	0.0	0.0	0.837	A

Main results: (17:30-17:45)

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Pedestrian demand (Ped/hr)	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
A - The Avenue (E)	93.74	23.44		93.74	91.01	0.0	0.0	0.000	A
B - New Link St. (S)	57.39	14.35	0.00	57.03	43.84	0.2	0.2	7.946	A
C - The Avenue (W)	50.85	12.71	0.00	51.09	67.01	0.0	0.0	0.834	A

Main results: (17:45-18:00)

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Pedestrian demand (Ped/hr)	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
A - The Avenue (E)	72.12	18.03		72.12	71.05	0.0	0.0	0.000	A
B - New Link St. (S)	46.34	11.58	0.00	46.81	33.62	0.2	0.1	7.932	A
C - The Avenue (W)	37.19	9.30	0.00	36.95	51.21	0.0	0.0	0.693	A

Main results: (18:00-18:15)

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Pedestrian demand (Ped/hr)	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
A - The Avenue (E)	65.58	16.40		65.58	54.77	0.0	0.0	0.000	A
B - New Link St. (S)	37.31	9.33	0.00	36.59	30.30	0.1	0.1	7.187	A
C - The Avenue (W)	29.82	7.46	0.00	29.82	46.93	0.0	0.0	0.793	A

Vehicle Mix

Heavy Vehicle proportion

From	To			
		A - The Avenue (E)	B - New Link St. (S)	C - The Avenue (W)
	A - The Avenue (E)	0	0	0
	B - New Link St. (S)	0	0	0
	C - The Avenue (W)	0	0	0

Average PCU Per Veh

From	To			
		A - The Avenue (E)	B - New Link St. (S)	C - The Avenue (W)
	A - The Avenue (E)	1.000	1.000	1.000
	B - New Link St. (S)	1.000	1.000	1.000
	C - The Avenue (W)	1.000	1.000	1.000

Results

Results Summary for whole modelled period

Arm	Max delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
A - The Avenue (E)	0.00	0.0	A	77.74	116.61
B - New Link St. (S)	7.95	0.2	A	47.62	71.44
C - The Avenue (W)	0.86	0.0	A	40.61	60.92

Main Results for each time segment

Main results: (16:45-17:00)

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Pedestrian demand (Ped/hr)	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
A - The Avenue (E)	64.75	16.19		64.75	64.28	0.0	0.0	0.002	A
B - New Link St. (S)	42.89	10.72	0.00	42.65	28.99	0.0	0.1	7.401	A
C - The Avenue (W)	33.98	8.50	0.00	33.86	48.00	0.0	0.0	0.860	A

Lane Results

Lane Level notation: Lane Level 1 is always closest to the junction.

Lanes: Main Results for each time segment

Main results: (16:45-17:00)

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Pedestrian demand (Ped/hr)	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
A - The Avenue (E)	Entry	1	1	B,C	64.75		64.75	0.0	0.0	0.002	A
	Exit	1	1		64.28		64.28	0.0	0.0	0.000	A
B - New Link St. (S)	Entry	1	1	A,C	42.89		42.65	0.0	0.1	6.631	A
		2	1	(A,C)	42.89	0.00	42.89	0.0	0.0	0.770	A
	Exit	1	1		28.99	0.00	28.99	0.0	0.0	0.000	A
		2	1		28.99		28.99	0.0	0.0	0.000	A
C - The Avenue (W)	Entry	1	1	A,B	33.98		33.86	0.0	0.0	0.789	A
		2	1	(A,B)	33.98	0.00	33.98	0.0	0.0	0.071	A
	Exit	1	1		48.00	0.00	48.00	0.0	0.0	0.075	A
		2	1		48.00		48.00	0.0	0.0	0.000	A

Main results: (17:00-17:15)

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Pedestrian demand (Ped/hr)	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
A - The Avenue (E)	Entry	1	1	B,C	74.38		74.38	0.0	0.0	0.000	A
	Exit	1	1		79.49		79.49	0.0	0.0	0.000	A
B - New Link St. (S)	Entry	1	1	A,C	46.69		46.81	0.1	0.1	6.747	A
		2	1	(A,C)	46.57	0.00	46.69	0.0	0.0	0.558	A
	Exit	1	1		32.79	0.00	32.79	0.0	0.0	0.000	A
		2	1		32.79		32.79	0.0	0.0	0.000	A
C - The Avenue (W)	Entry	1	1	A,B	46.10		46.10	0.0	0.0	0.748	A
		2	1	(A,B)	46.10	0.00	46.10	0.0	0.0	0.059	A
	Exit	1	1		55.01	0.00	55.01	0.0	0.0	0.000	A
		2	1		55.01		55.01	0.0	0.0	0.000	A

Main results: (17:15-17:30)

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Pedestrian demand (Ped/hr)	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
A - The Avenue (E)	Entry	1	1	B,C	95.88		95.88	0.0	0.0	0.000	A
	Exit	1	1		84.00		84.00	0.0	0.0	0.000	A
B - New Link St. (S)	Entry	1	1	A,C	55.13		54.30	0.1	0.1	7.010	A
		2	1	(A,C)	55.25	0.00	55.13	0.0	0.0	0.851	A
	Exit	1	1		42.06	0.00	42.06	0.0	0.0	0.000	A
		2	1		42.06		42.06	0.0	0.0	0.000	A
C - The Avenue (W)	Entry	1	1	A,B	45.74		45.62	0.0	0.0	0.766	A
		2	1	(A,B)	45.74	0.00	45.74	0.0	0.0	0.072	A
	Exit	1	1		69.74	0.00	69.74	0.0	0.0	0.000	A
		2	1		69.74		69.74	0.0	0.0	0.000	A

Main results: (17:30-17:45)

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Pedestrian demand (Ped/hr)	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
A - The Avenue (E)	Entry	1	1	B,C	93.74		93.74	0.0	0.0	0.000	A
	Exit	1	1		91.01		91.01	0.0	0.0	0.000	A
B - New Link St. (S)	Entry	1	1	A,C	57.50		57.03	0.1	0.2	6.961	A
		2	1	(A,C)	57.39	0.00	57.50	0.0	0.0	0.988	A
	Exit	1	1		43.84	0.00	43.84	0.0	0.0	0.000	A
		2	1		43.84		43.84	0.0	0.0	0.000	A
C - The Avenue (W)	Entry	1	1	A,B	50.85		51.09	0.0	0.0	0.766	A
		2	1	(A,B)	50.85	0.00	50.85	0.0	0.0	0.069	A
	Exit	1	1		67.01	0.00	67.01	0.0	0.0	0.000	A
		2	1		67.01		67.01	0.0	0.0	0.000	A

Main results: (17:45-18:00)

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Pedestrian demand (Ped/hr)	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
A - The Avenue (E)	Entry	1	1	B,C	72.12		72.12	0.0	0.0	0.000	A
	Exit	1	1		71.05		71.05	0.0	0.0	0.000	A
B - New Link St. (S)	Entry	1	1	A,C	46.34		46.81	0.2	0.1	7.153	A
		2	1	(A,C)	46.34	0.00	46.34	0.0	0.0	0.783	A
	Exit	1	1		33.62	0.00	33.62	0.0	0.0	0.000	A
		2	1		33.62		33.62	0.0	0.0	0.000	A
C - The Avenue (W)	Entry	1	1	A,B	37.19		36.95	0.0	0.0	0.676	A
		2	1	(A,B)	37.19	0.00	37.19	0.0	0.0	0.017	A
	Exit	1	1		51.21	0.00	51.21	0.0	0.0	0.000	A
		2	1		51.21		51.21	0.0	0.0	0.000	A

Main results: (18:00-18:15)

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Pedestrian demand (Ped/hr)	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
A - The Avenue (E)	Entry	1	1	B,C	65.58		65.58	0.0	0.0	0.000	A
	Exit	1	1		54.77		54.77	0.0	0.0	0.000	A
B - New Link St. (S)	Entry	1	1	A,C	37.43		36.59	0.1	0.1	6.730	A
		2	1	(A,C)	37.31	0.00	37.43	0.0	0.0	0.454	A
	Exit	1	1		30.30	0.00	30.30	0.0	0.0	0.000	A
		2	1		30.30		30.30	0.0	0.0	0.000	A
C - The Avenue (W)	Entry	1	1	A,B	29.82		29.82	0.0	0.0	0.749	A
		2	1	(A,B)	29.82	0.00	29.82	0.0	0.0	0.045	A
	Exit	1	1		46.93	0.00	46.93	0.0	0.0	0.000	A
		2	1		46.93		46.93	0.0	0.0	0.000	A

Do-Something - DS 2028, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Lane Simulation	A1 - Do-Something [Lane Simulation]	This analysis set uses Lane Simulation mode. This is provided as an investigative tool and the user should apply judgement when interpreting the results.
Warning	Pedestrian Crossing	B - New Link St. (S) - Pedestrian crossing	Pedestrian crossing uses default flow of 0. Is this correct?
Warning	Pedestrian Crossing	C - The Avenue (W) - Pedestrian crossing	Pedestrian crossing uses default flow of 0. Is this correct?

Analysis Set Details

ID	Name	Use Lane Simulation	Include in report	Use specific Demand Set(s)	Specific Demand Set (s)	Network flow scaling factor (%)	Network capacity scaling factor (%)
A1	Do-Something	✓	✓	✓	D1,D2,D3,D4,D5,D6	100.000	100.000

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
1 - New Link St. / The Avenue Junction	New Link St. / The Avenue Junction	T-Junction	Two-way	1.88	A

Junction Network Options

[same as above]

Arms

Arms

[same as above]

Major Arm Geometry

[same as above]

Minor Arm Geometry

[same as above]

Pedestrian Crossings

Arm	Crossing type	Average pedestrian flow (Ped/hr)
A - The Avenue (E)	None	
B - New Link St. (S)	Zebra	0.00
C - The Avenue (W)	Pelican	0.00

Zebra Crossings

Arm	Space between crossing and junction entry (Left) (PCU)	Vehicles queueing on exit (Zebra) (PCU)	Central Refuge	Crossing data type	Crossing length (m)	Crossing time (s)
B - New Link St. (S)	1.00	1.00		Distance	6.00	4.29

Pelican/Puffin Crossings

Arm	Space between crossing and junction entry (Signalised) (PCU)	Vehicles queueing on exit (Signalised) (PCU)	Amber time preceding red (s)	Amber time regarded as green (s)	Time from traffic red start to green man start (s)	Time period green man shown (s)	Clearance Period (s)	Traffic minimum green (s)
C - The Avenue (W)	1.00	1.00	3.00	2.90	1.00	8.00	6.00	7.00

Slope / Intercept / Capacity

[same as above]

Lanes

[same as above]

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Model start time (HH:mm)	Model finish time (HH:mm)	Time segment length (min)	Run automatically
D3	DS 2028	AM	ONE HOUR	07:30	09:00	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 - The Avenue (E)		ONE HOUR	✓	355.00	100.000
B - New Link St. (S)		ONE HOUR	✓	89.00	100.000
C - The Avenue (W)		ONE HOUR	✓	286.00	100.000

Demand overview (Pedestrians)

Arm	Profile type	Average pedestrian flow (Ped/hr)
A - The Avenue (E)		
B - New Link St. (S)	Global	0.00
C - The Avenue (W)	Global	0.00

Origin-Destination Data

Demand (PCU/hr)

From	To			
		A - The Avenue (E)	B - New Link St. (S)	C - The Avenue (W)
	A - The Avenue (E)	0.000	86.000	269.000
	B - New Link St. (S)	81.000	0.000	8.000
	C - The Avenue (W)	264.000	22.000	0.000

Proportions

From	To			
		A - The Avenue (E)	B - New Link St. (S)	C - The Avenue (W)
	A - The Avenue (E)	0.00	0.24	0.76
	B - New Link St. (S)	0.91	0.00	0.09
	C - The Avenue (W)	0.92	0.08	0.00

Main results: (07:45-08:00)

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Pedestrian demand (Ped/hr)	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
A - The Avenue (E)	312.00	78.00		312.00	309.50	0.0	0.0	0.000	A
B - New Link St. (S)	80.55	20.14	0.00	81.86	101.70	0.2	0.2	9.880	A
C - The Avenue (W)	256.16	64.04	0.00	256.51	239.17	0.1	0.0	0.661	A

Main results: (08:00-08:15)

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Pedestrian demand (Ped/hr)	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
A - The Avenue (E)	400.87	100.22		400.87	372.00	0.0	0.0	0.000	A
B - New Link St. (S)	95.41	23.85	0.00	93.86	122.85	0.2	0.4	12.324	B
C - The Avenue (W)	310.22	77.55	0.00	310.22	310.10	0.0	0.1	0.935	A

Main results: (08:15-08:30)

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Pedestrian demand (Ped/hr)	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
A - The Avenue (E)	405.03	101.26		405.03	376.16	0.0	0.0	0.000	A
B - New Link St. (S)	96.24	24.06	0.00	96.83	123.45	0.4	0.3	11.179	B
C - The Avenue (W)	311.29	77.82	0.00	310.93	313.19	0.1	0.1	0.719	A

Main results: (08:30-08:45)

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Pedestrian demand (Ped/hr)	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
A - The Avenue (E)	319.25	79.81		319.25	315.80	0.0	0.0	0.000	A
B - New Link St. (S)	83.41	20.85	0.00	82.93	99.21	0.3	0.3	11.068	B
C - The Avenue (W)	259.60	64.90	0.00	260.08	247.25	0.1	0.0	0.811	A

Main results: (08:45-09:00)

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Pedestrian demand (Ped/hr)	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
A - The Avenue (E)	266.14	66.53		266.14	251.64	0.0	0.0	0.000	A
B - New Link St. (S)	66.89	16.72	0.00	66.65	81.27	0.3	0.2	9.681	A
C - The Avenue (W)	210.77	52.69	0.00	209.82	209.70	0.0	0.1	0.908	A

Vehicle Mix

Heavy Vehicle proportion

From	To			
		A - The Avenue (E)	B - New Link St. (S)	C - The Avenue (W)
	A - The Avenue (E)	0	0	0
	B - New Link St. (S)	0	0	0
	C - The Avenue (W)	0	0	0

Average PCU Per Veh

From	To			
		A - The Avenue (E)	B - New Link St. (S)	C - The Avenue (W)
	A - The Avenue (E)	1.000	1.000	1.000
	B - New Link St. (S)	1.000	1.000	1.000
	C - The Avenue (W)	1.000	1.000	1.000

Results

Results Summary for whole modelled period

Arm	Max delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
A - The Avenue (E)	0.01	0.0	A	325.84	488.76
B - New Link St. (S)	12.32	0.4	B	81.84	122.76
C - The Avenue (W)	0.94	0.1	A	259.82	389.73

Main Results for each time segment

Main results: (07:30-07:45)

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Pedestrian demand (Ped/hr)	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
A - The Avenue (E)	251.76	62.94		251.76	258.65	0.0	0.0	0.009	A
B - New Link St. (S)	68.55	17.14	0.00	68.79	74.85	0.0	0.2	9.228	A
C - The Avenue (W)	210.89	52.72	0.00	210.18	197.23	0.0	0.1	0.826	A

Lane Results

Lane Level notation: Lane Level 1 is always closest to the junction.

Lanes: Main Results for each time segment

Main results: (07:30-07:45)

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Pedestrian demand (Ped/hr)	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
A - The Avenue (E)	Entry	1	1	B,C	251.76		251.76	0.0	0.0	0.009	A
	Exit	1	1		258.65		258.65	0.0	0.0	0.000	A
B - New Link St. (S)	Entry	1	1	A,C	68.44		68.79	0.0	0.1	7.796	A
		2	1	(A,C)	68.55	0.00	68.44	0.0	0.0	1.429	A
	Exit	1	1		74.85	0.00	74.85	0.0	0.0	0.000	A
		2	1		74.85		74.85	0.0	0.0	0.000	A
C - The Avenue (W)	Entry	1	1	A,B	210.65		210.18	0.0	0.0	0.482	A
		2	1	(A,B)	210.89	0.00	210.65	0.0	0.0	0.344	A
	Exit	1	1		197.23	0.00	197.23	0.0	0.0	0.048	A
		2	1		197.23		197.23	0.0	0.0	0.000	A

Main results: (07:45-08:00)

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Pedestrian demand (Ped/hr)	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
A - The Avenue (E)	Entry	1	1	B,C	312.00		312.00	0.0	0.0	0.000	A
	Exit	1	1		309.50		309.50	0.0	0.0	0.000	A
B - New Link St. (S)	Entry	1	1	A,C	81.15		81.86	0.1	0.2	7.981	A
		2	1	(A,C)	80.55	0.00	81.15	0.0	0.0	1.908	A
	Exit	1	1		101.70	0.00	101.70	0.0	0.0	0.000	A
		2	1		101.70		101.70	0.0	0.0	0.000	A
C - The Avenue (W)	Entry	1	1	A,B	256.28		256.51	0.0	0.0	0.467	A
		2	1	(A,B)	256.16	0.00	256.28	0.0	0.0	0.195	A
	Exit	1	1		239.17	0.00	239.17	0.0	0.0	0.000	A
		2	1		239.17		239.17	0.0	0.0	0.000	A

Main results: (08:00-08:15)

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Pedestrian demand (Ped/hr)	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
A - The Avenue (E)	Entry	1	1	B,C	400.87		400.87	0.0	0.0	0.000	A
	Exit	1	1		372.00		372.00	0.0	0.0	0.000	A
B - New Link St. (S)	Entry	1	1	A,C	95.17		93.86	0.2	0.3	9.009	A
		2	1	(A,C)	95.41	0.00	95.17	0.0	0.1	3.318	A
	Exit	1	1		122.85	0.00	122.85	0.0	0.0	0.000	A
		2	1		122.85		122.85	0.0	0.0	0.000	A
C - The Avenue (W)	Entry	1	1	A,B	310.46		310.22	0.0	0.1	0.556	A
		2	1	(A,B)	310.22	0.00	310.46	0.0	0.0	0.379	A
	Exit	1	1		310.10	0.00	310.10	0.0	0.0	0.000	A
		2	1		310.10		310.10	0.0	0.0	0.000	A

Main results: (08:15-08:30)

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Pedestrian demand (Ped/hr)	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
A - The Avenue (E)	Entry	1	1	B,C	405.03		405.03	0.0	0.0	0.000	A
	Exit	1	1		376.16		376.16	0.0	0.0	0.000	A
B - New Link St. (S)	Entry	1	1	A,C	96.48		96.83	0.3	0.2	8.496	A
		2	1	(A,C)	96.24	0.00	96.48	0.1	0.1	2.682	A
	Exit	1	1		123.45	0.00	123.45	0.0	0.0	0.000	A
		2	1		123.45		123.45	0.0	0.0	0.000	A
C - The Avenue (W)	Entry	1	1	A,B	311.29		310.93	0.1	0.1	0.480	A
		2	1	(A,B)	311.29	0.00	311.29	0.0	0.0	0.239	A
	Exit	1	1		313.19	0.00	313.19	0.0	0.0	0.000	A
		2	1		313.19		313.19	0.0	0.0	0.000	A

Main results: (08:30-08:45)

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Pedestrian demand (Ped/hr)	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
A - The Avenue (E)	Entry	1	1	B,C	319.25		319.25	0.0	0.0	0.000	A
	Exit	1	1		315.80		315.80	0.0	0.0	0.000	A
B - New Link St. (S)	Entry	1	1	A,C	82.81		82.93	0.2	0.2	8.718	A
		2	1	(A,C)	83.41	0.00	82.81	0.1	0.1	2.324	A
	Exit	1	1		99.21	0.00	99.21	0.0	0.0	0.000	A
		2	1		99.21		99.21	0.0	0.0	0.000	A
C - The Avenue (W)	Entry	1	1	A,B	259.60		260.08	0.1	0.0	0.545	A
		2	1	(A,B)	259.60	0.00	259.60	0.0	0.0	0.266	A
	Exit	1	1		247.25	0.00	247.25	0.0	0.0	0.000	A
		2	1		247.25		247.25	0.0	0.0	0.000	A

Main results: (08:45-09:00)

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Pedestrian demand (Ped/hr)	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
A - The Avenue (E)	Entry	1	1	B,C	266.14		266.14	0.0	0.0	0.000	A
	Exit	1	1		251.64		251.64	0.0	0.0	0.000	A
B - New Link St. (S)	Entry	1	1	A,C	66.89		66.65	0.2	0.1	8.178	A
		2	1	(A,C)	66.89	0.00	66.89	0.1	0.0	1.523	A
	Exit	1	1		81.27	0.00	81.27	0.0	0.0	0.000	A
		2	1		81.27		81.27	0.0	0.0	0.000	A
C - The Avenue (W)	Entry	1	1	A,B	210.30		209.82	0.0	0.0	0.567	A
		2	1	(A,B)	210.77	0.00	210.30	0.0	0.0	0.341	A
	Exit	1	1		209.70	0.00	209.70	0.0	0.0	0.000	A
		2	1		209.70		209.70	0.0	0.0	0.000	A

Do-Something - DS 2028, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Lane Simulation	A1 - Do-Something [Lane Simulation]	This analysis set uses Lane Simulation mode. This is provided as an investigative tool and the user should apply judgement when interpreting the results.
Warning	Pedestrian Crossing	B - New Link St. (S) - Pedestrian crossing	Pedestrian crossing uses default flow of 0. Is this correct?
Warning	Pedestrian Crossing	C - The Avenue (W) - Pedestrian crossing	Pedestrian crossing uses default flow of 0. Is this correct?

Analysis Set Details

ID	Name	Use Lane Simulation	Include in report	Use specific Demand Set(s)	Specific Demand Set (s)	Network flow scaling factor (%)	Network capacity scaling factor (%)
A1	Do-Something	✓	✓	✓	D1,D2,D3,D4,D5,D6	100.000	100.000

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
1 - New Link St. / The Avenue Junction	New Link St. / The Avenue Junction	T-Junction	Two-way	2.72	A

Junction Network Options

[same as above]

Arms

Arms

[same as above]

Major Arm Geometry

[same as above]

Minor Arm Geometry

[same as above]

Pedestrian Crossings

Arm	Crossing type	Average pedestrian flow (Ped/hr)
A - The Avenue (E)	None	
B - New Link St. (S)	Zebra	0.00
C - The Avenue (W)	Pelican	0.00

Zebra Crossings

Arm	Space between crossing and junction entry (Left) (PCU)	Vehicles queueing on exit (Zebra) (PCU)	Central Refuge	Crossing data type	Crossing length (m)	Crossing time (s)
B - New Link St. (S)	1.00	1.00		Distance	6.00	4.29

Pelican/Puffin Crossings

Arm	Space between crossing and junction entry (Signalised) (PCU)	Vehicles queueing on exit (Signalised) (PCU)	Amber time preceding red (s)	Amber time regarded as green (s)	Time from traffic red start to green man start (s)	Time period green man shown (s)	Clearance Period (s)	Traffic minimum green (s)
C - The Avenue (W)	1.00	1.00	3.00	2.90	1.00	8.00	6.00	7.00

Slope / Intercept / Capacity

[same as above]

Lanes

[same as above]

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Model start time (HH:mm)	Model finish time (HH:mm)	Time segment length (min)	Run automatically
D4	DS 2028	PM	ONE HOUR	16:45	18:15	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A - The Avenue (E)		ONE HOUR	✓	139.00	100.000
B - New Link St. (S)		ONE HOUR	✓	82.00	100.000
C - The Avenue (W)		ONE HOUR	✓	89.00	100.000

Demand overview (Pedestrians)

Arm	Profile type	Average pedestrian flow (Ped/hr)
A - The Avenue (E)		
B - New Link St. (S)	Global	0.00
C - The Avenue (W)	Global	0.00

Origin-Destination Data

Demand (PCU/hr)

From	To			
		A - The Avenue (E)	B - New Link St. (S)	C - The Avenue (W)
	A - The Avenue (E)	0.000	41.000	98.000
	B - New Link St. (S)	52.000	0.000	30.000
	C - The Avenue (W)	70.000	19.000	0.000

Proportions

From	To			
		A - The Avenue (E)	B - New Link St. (S)	C - The Avenue (W)
	A - The Avenue (E)	0.00	0.29	0.71
	B - New Link St. (S)	0.63	0.00	0.37
	C - The Avenue (W)	0.79	0.21	0.00

Main results: (17:00-17:15)

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Pedestrian demand (Ped/hr)	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
A - The Avenue (E)	128.08	32.02		128.08	109.43	0.0	0.0	0.000	A
B - New Link St. (S)	76.04	19.01	0.00	74.73	58.34	0.2	0.2	7.890	A
C - The Avenue (W)	83.17	20.79	0.00	82.93	117.98	0.0	0.0	1.695	A

Main results: (17:15-17:30)

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Pedestrian demand (Ped/hr)	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
A - The Avenue (E)	152.79	38.20		152.79	127.25	0.0	0.0	0.000	A
B - New Link St. (S)	89.23	22.31	0.00	87.68	65.94	0.2	0.3	8.206	A
C - The Avenue (W)	91.37	22.84	0.00	92.32	139.60	0.0	0.0	1.685	A

Main results: (17:30-17:45)

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Pedestrian demand (Ped/hr)	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
A - The Avenue (E)	149.23	37.31		149.23	126.65	0.0	0.0	0.000	A
B - New Link St. (S)	86.14	21.53	0.00	86.50	64.75	0.3	0.2	8.397	A
C - The Avenue (W)	97.90	24.48	0.00	97.78	142.10	0.0	0.0	1.656	A

Main results: (17:45-18:00)

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Pedestrian demand (Ped/hr)	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
A - The Avenue (E)	132.59	33.15		132.59	115.25	0.0	0.0	0.000	A
B - New Link St. (S)	79.49	19.87	0.00	78.30	59.41	0.2	0.2	8.262	A
C - The Avenue (W)	82.46	20.61	0.00	82.46	118.69	0.0	0.0	1.553	A

Main results: (18:00-18:15)

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Pedestrian demand (Ped/hr)	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
A - The Avenue (E)	99.80	24.95		99.80	89.94	0.0	0.0	0.000	A
B - New Link St. (S)	62.14	15.53	0.00	61.31	43.72	0.2	0.2	7.415	A
C - The Avenue (W)	68.44	17.11	0.00	68.55	96.00	0.0	0.0	1.403	A

Vehicle Mix

Heavy Vehicle proportion

From	To			
		A - The Avenue (E)	B - New Link St. (S)	C - The Avenue (W)
	A - The Avenue (E)	0	0	0
	B - New Link St. (S)	0	0	0
	C - The Avenue (W)	0	0	0

Average PCU Per Veh

From	To			
		A - The Avenue (E)	B - New Link St. (S)	C - The Avenue (W)
	A - The Avenue (E)	1.000	1.000	1.000
	B - New Link St. (S)	1.000	1.000	1.000
	C - The Avenue (W)	1.000	1.000	1.000

Results

Results Summary for whole modelled period

Arm	Max delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
A - The Avenue (E)	0.00	0.0	A	128.51	192.77
B - New Link St. (S)	8.40	0.3	A	76.06	114.09
C - The Avenue (W)	1.70	0.0	A	80.63	120.95

Main Results for each time segment

Main results: (16:45-17:00)

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Pedestrian demand (Ped/hr)	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
A - The Avenue (E)	108.59	27.15		108.59	89.11	0.0	0.0	0.002	A
B - New Link St. (S)	63.33	15.83	0.00	62.97	44.91	0.0	0.2	7.890	A
C - The Avenue (W)	60.48	15.12	0.00	60.95	98.50	0.0	0.0	1.672	A

Lane Results

Lane Level notation: Lane Level 1 is always closest to the junction.

Lanes: Main Results for each time segment

Main results: (16:45-17:00)

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Pedestrian demand (Ped/hr)	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
A - The Avenue (E)	Entry	1	1	B,C	108.59		108.59	0.0	0.0	0.002	A
	Exit	1	1		89.11		89.11	0.0	0.0	0.000	A
B - New Link St. (S)	Entry	1	1	A,C	63.45		62.97	0.0	0.1	6.849	A
		2	1	(A,C)	63.33	0.00	63.45	0.0	0.0	1.047	A
	Exit	1	1		44.91	0.00	44.91	0.0	0.0	0.000	A
		2	1		44.91		44.91	0.0	0.0	0.000	A
C - The Avenue (W)	Entry	1	1	A,B	60.48		60.95	0.0	0.0	1.414	A
		2	1	(A,B)	60.48	0.00	60.48	0.0	0.0	0.258	A
	Exit	1	1		98.50	0.00	98.50	0.0	0.0	0.057	A
		2	1		98.50		98.50	0.0	0.0	0.000	A

Main results: (17:00-17:15)

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Pedestrian demand (Ped/hr)	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
A - The Avenue (E)	Entry	1	1	B,C	128.08		128.08	0.0	0.0	0.000	A
	Exit	1	1		109.43		109.43	0.0	0.0	0.000	A
B - New Link St. (S)	Entry	1	1	A,C	75.45		74.73	0.1	0.2	6.752	A
		2	1	(A,C)	76.04	0.00	75.45	0.0	0.1	1.138	A
	Exit	1	1		58.34	0.00	58.34	0.0	0.0	0.000	A
		2	1		58.34		58.34	0.0	0.0	0.000	A
C - The Avenue (W)	Entry	1	1	A,B	83.05		82.93	0.0	0.0	1.451	A
		2	1	(A,B)	83.17	0.00	83.05	0.0	0.0	0.245	A
	Exit	1	1		117.98	0.00	117.98	0.0	0.0	0.000	A
		2	1		117.98		117.98	0.0	0.0	0.000	A

Main results: (17:15-17:30)

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Pedestrian demand (Ped/hr)	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
A - The Avenue (E)	Entry	1	1	B,C	152.79		152.79	0.0	0.0	0.000	A
	Exit	1	1		127.25		127.25	0.0	0.0	0.000	A
B - New Link St. (S)	Entry	1	1	A,C	89.11		87.68	0.2	0.2	6.681	A
		2	1	(A,C)	89.23	0.00	89.11	0.1	0.0	1.525	A
	Exit	1	1		65.94	0.00	65.94	0.0	0.0	0.000	A
		2	1		65.94		65.94	0.0	0.0	0.000	A
C - The Avenue (W)	Entry	1	1	A,B	91.84		92.32	0.0	0.0	1.418	A
		2	1	(A,B)	91.37	0.00	91.84	0.0	0.0	0.266	A
	Exit	1	1		139.60	0.00	139.60	0.0	0.0	0.000	A
		2	1		139.60		139.60	0.0	0.0	0.000	A

Main results: (17:30-17:45)

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Pedestrian demand (Ped/hr)	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
A - The Avenue (E)	Entry	1	1	B,C	149.23		149.23	0.0	0.0	0.000	A
	Exit	1	1		126.65		126.65	0.0	0.0	0.000	A
B - New Link St. (S)	Entry	1	1	A,C	86.73		86.50	0.2	0.2	6.894	A
		2	1	(A,C)	86.14	0.00	86.73	0.0	0.0	1.494	A
	Exit	1	1		64.75	0.00	64.75	0.0	0.0	0.000	A
		2	1		64.75		64.75	0.0	0.0	0.000	A
C - The Avenue (W)	Entry	1	1	A,B	97.78		97.78	0.0	0.0	1.423	A
		2	1	(A,B)	97.90	0.00	97.78	0.0	0.0	0.233	A
	Exit	1	1		142.10	0.00	142.10	0.0	0.0	0.000	A
		2	1		142.10		142.10	0.0	0.0	0.000	A

Main results: (17:45-18:00)

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Pedestrian demand (Ped/hr)	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
A - The Avenue (E)	Entry	1	1	B,C	132.59		132.59	0.0	0.0	0.000	A
	Exit	1	1		115.25		115.25	0.0	0.0	0.000	A
B - New Link St. (S)	Entry	1	1	A,C	79.13		78.30	0.2	0.2	7.118	A
		2	1	(A,C)	79.49	0.00	79.13	0.0	0.0	1.160	A
	Exit	1	1		59.41	0.00	59.41	0.0	0.0	0.000	A
		2	1		59.41		59.41	0.0	0.0	0.000	A
C - The Avenue (W)	Entry	1	1	A,B	82.46		82.46	0.0	0.0	1.339	A
		2	1	(A,B)	82.46	0.00	82.46	0.0	0.0	0.213	A
	Exit	1	1		118.69	0.00	118.69	0.0	0.0	0.000	A
		2	1		118.69		118.69	0.0	0.0	0.000	A

Main results: (18:00-18:15)

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Pedestrian demand (Ped/hr)	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
A - The Avenue (E)	Entry	1	1	B,C	99.80		99.80	0.0	0.0	0.000	A
	Exit	1	1		89.94		89.94	0.0	0.0	0.000	A
B - New Link St. (S)	Entry	1	1	A,C	62.02		61.31	0.2	0.1	6.601	A
		2	1	(A,C)	62.14	0.00	62.02	0.0	0.0	0.806	A
	Exit	1	1		43.72	0.00	43.72	0.0	0.0	0.000	A
		2	1		43.72		43.72	0.0	0.0	0.000	A
C - The Avenue (W)	Entry	1	1	A,B	68.44		68.55	0.0	0.0	1.266	A
		2	1	(A,B)	68.44	0.00	68.44	0.0	0.0	0.137	A
	Exit	1	1		96.00	0.00	96.00	0.0	0.0	0.000	A
		2	1		96.00		96.00	0.0	0.0	0.000	A

Do-Something - DS 2038, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Lane Simulation	A1 - Do-Something [Lane Simulation]	This analysis set uses Lane Simulation mode. This is provided as an investigative tool and the user should apply judgement when interpreting the results.
Warning	Pedestrian Crossing	B - New Link St. (S) - Pedestrian crossing	Pedestrian crossing uses default flow of 0. Is this correct?
Warning	Pedestrian Crossing	C - The Avenue (W) - Pedestrian crossing	Pedestrian crossing uses default flow of 0. Is this correct?

Analysis Set Details

ID	Name	Use Lane Simulation	Include in report	Use specific Demand Set(s)	Specific Demand Set (s)	Network flow scaling factor (%)	Network capacity scaling factor (%)
A1	Do-Something	✓	✓	✓	D1,D2,D3,D4,D5,D6	100.000	100.000

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
1 - New Link St. / The Avenue Junction	New Link St. / The Avenue Junction	T-Junction	Two-way	1.71	A

Junction Network Options

[same as above]

Arms

Arms

[same as above]

Major Arm Geometry

[same as above]

Minor Arm Geometry

[same as above]

Pedestrian Crossings

Arm	Crossing type	Average pedestrian flow (Ped/hr)
A - The Avenue (E)	None	
B - New Link St. (S)	Zebra	0.00
C - The Avenue (W)	Pelican	0.00

Zebra Crossings

Arm	Space between crossing and junction entry (Left) (PCU)	Vehicles queueing on exit (Zebra) (PCU)	Central Refuge	Crossing data type	Crossing length (m)	Crossing time (s)
B - New Link St. (S)	1.00	1.00		Distance	6.00	4.29

Pelican/Puffin Crossings

Arm	Space between crossing and junction entry (Signalised) (PCU)	Vehicles queueing on exit (Signalised) (PCU)	Amber time preceding red (s)	Amber time regarded as green (s)	Time from traffic red start to green man start (s)	Time period green man shown (s)	Clearance Period (s)	Traffic minimum green (s)
C - The Avenue (W)	1.00	1.00	3.00	2.90	1.00	8.00	6.00	7.00

Slope / Intercept / Capacity

[same as above]

Lanes

[same as above]

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Model start time (HH:mm)	Model finish time (HH:mm)	Time segment length (min)	Run automatically
D5	DS 2038	AM	ONE HOUR	07:30	09:00	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 - The Avenue (E)		ONE HOUR	✓	370.00	100.000
B - New Link St. (S)		ONE HOUR	✓	89.00	100.000
C - The Avenue (W)		ONE HOUR	✓	296.00	100.000

Demand overview (Pedestrians)

Arm	Profile type	Average pedestrian flow (Ped/hr)
A - The Avenue (E)		
B - New Link St. (S)	Global	0.00
C - The Avenue (W)	Global	0.00

Origin-Destination Data

Demand (PCU/hr)

From	To			
		A - The Avenue (E)	B - New Link St. (S)	C - The Avenue (W)
	A - The Avenue (E)	0.000	86.000	284.000
	B - New Link St. (S)	81.000	0.000	8.000
	C - The Avenue (W)	274.000	22.000	0.000

Proportions

From	To			
		A - The Avenue (E)	B - New Link St. (S)	C - The Avenue (W)
	A - The Avenue (E)	0.00	0.23	0.77
	B - New Link St. (S)	0.91	0.00	0.09
	C - The Avenue (W)	0.93	0.07	0.00

Main results: (07:45-08:00)

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Pedestrian demand (Ped/hr)	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
A - The Avenue (E)	338.85	84.71		338.85	324.95	0.0	0.0	0.000	A
B - New Link St. (S)	78.30	19.57	0.00	79.49	98.02	0.2	0.2	10.810	B
C - The Avenue (W)	270.53	67.63	0.00	269.82	265.19	0.0	0.1	0.718	A

Main results: (08:00-08:15)

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Pedestrian demand (Ped/hr)	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
A - The Avenue (E)	417.39	104.35		417.39	381.15	0.0	0.0	0.000	A
B - New Link St. (S)	91.72	22.93	0.00	92.55	123.45	0.2	0.3	11.263	B
C - The Avenue (W)	320.32	80.08	0.00	320.79	326.14	0.1	0.0	0.850	A

Main results: (08:15-08:30)

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Pedestrian demand (Ped/hr)	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
A - The Avenue (E)	404.44	101.11		404.44	393.03	0.0	0.0	0.000	A
B - New Link St. (S)	99.09	24.77	0.00	98.26	118.57	0.3	0.3	11.670	B
C - The Avenue (W)	326.26	81.56	0.00	327.09	318.18	0.0	0.1	0.836	A

Main results: (08:30-08:45)

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Pedestrian demand (Ped/hr)	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
A - The Avenue (E)	335.05	83.76		335.05	322.81	0.0	0.0	0.000	A
B - New Link St. (S)	83.88	20.97	0.00	83.29	96.95	0.3	0.2	10.538	B
C - The Avenue (W)	267.80	66.95	0.00	267.21	265.78	0.1	0.1	0.865	A

Main results: (08:45-09:00)

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Pedestrian demand (Ped/hr)	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
A - The Avenue (E)	270.65	67.66		270.65	264.95	0.0	0.0	0.000	A
B - New Link St. (S)	64.51	16.13	0.00	64.51	74.97	0.2	0.2	9.650	A
C - The Avenue (W)	222.42	55.60	0.00	221.82	217.07	0.1	0.1	0.682	A

Vehicle Mix

Heavy Vehicle proportion

From	To			
		A - The Avenue (E)	B - New Link St. (S)	C - The Avenue (W)
	A - The Avenue (E)	0	0	0
	B - New Link St. (S)	0	0	0
	C - The Avenue (W)	0	0	0

Average PCU Per Veh

From	To			
		A - The Avenue (E)	B - New Link St. (S)	C - The Avenue (W)
	A - The Avenue (E)	1.000	1.000	1.000
	B - New Link St. (S)	1.000	1.000	1.000
	C - The Avenue (W)	1.000	1.000	1.000

Results

Results Summary for whole modelled period

Arm	Max delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
A - The Avenue (E)	0.01	0.0	A	340.00	510.00
B - New Link St. (S)	11.67	0.3	B	81.15	121.72
C - The Avenue (W)	0.86	0.1	A	271.56	407.35

Main Results for each time segment

Main results: (07:30-07:45)

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Pedestrian demand (Ped/hr)	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
A - The Avenue (E)	273.62	68.41		273.62	269.23	0.0	0.0	0.011	A
B - New Link St. (S)	69.39	17.35	0.00	68.55	84.83	0.0	0.2	8.758	A
C - The Avenue (W)	222.06	55.51	0.00	222.65	210.77	0.0	0.0	0.629	A

Lane Results

Lane Level notation: Lane Level 1 is always closest to the junction.

Lanes: Main Results for each time segment

Main results: (07:30-07:45)

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Pedestrian demand (Ped/hr)	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
A - The Avenue (E)	Entry	1	1	B,C	273.62		273.62	0.0	0.0	0.011	A
	Exit	1	1		269.23		269.23	0.0	0.0	0.000	A
B - New Link St. (S)	Entry	1	1	A,C	69.27		68.55	0.0	0.2	7.660	A
		2	1	(A,C)	69.39	0.00	69.27	0.0	0.0	1.105	A
	Exit	1	1		84.83	0.00	84.83	0.0	0.0	0.000	A
		2	1		84.83		84.83	0.0	0.0	0.000	A
C - The Avenue (W)	Entry	1	1	A,B	222.30		222.65	0.0	0.0	0.438	A
		2	1	(A,B)	222.06	0.00	222.30	0.0	0.0	0.191	A
	Exit	1	1		210.77	0.00	210.77	0.0	0.0	0.043	A
		2	1		210.77		210.77	0.0	0.0	0.000	A

Main results: (07:45-08:00)

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Pedestrian demand (Ped/hr)	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
A - The Avenue (E)	Entry	1	1	B,C	338.85		338.85	0.0	0.0	0.000	A
	Exit	1	1		324.95		324.95	0.0	0.0	0.000	A
B - New Link St. (S)	Entry	1	1	A,C	78.77		79.49	0.2	0.1	8.657	A
		2	1	(A,C)	78.30	0.00	78.77	0.0	0.0	2.153	A
	Exit	1	1		98.02	0.00	98.02	0.0	0.0	0.000	A
		2	1		98.02		98.02	0.0	0.0	0.000	A
C - The Avenue (W)	Entry	1	1	A,B	270.30		269.82	0.0	0.0	0.459	A
		2	1	(A,B)	270.53	0.00	270.30	0.0	0.0	0.259	A
	Exit	1	1		265.19	0.00	265.19	0.0	0.0	0.000	A
		2	1		265.19		265.19	0.0	0.0	0.000	A

Main results: (08:00-08:15)

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Pedestrian demand (Ped/hr)	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
A - The Avenue (E)	Entry	1	1	B,C	417.39		417.39	0.0	0.0	0.000	A
	Exit	1	1		381.15		381.15	0.0	0.0	0.000	A
B - New Link St. (S)	Entry	1	1	A,C	92.32		92.55	0.1	0.3	8.773	A
		2	1	(A,C)	91.72	0.00	92.32	0.0	0.0	2.477	A
	Exit	1	1		123.45	0.00	123.45	0.0	0.0	0.000	A
		2	1		123.45		123.45	0.0	0.0	0.000	A
C - The Avenue (W)	Entry	1	1	A,B	320.44		320.79	0.0	0.0	0.506	A
		2	1	(A,B)	320.32	0.00	320.44	0.0	0.0	0.345	A
	Exit	1	1		326.14	0.00	326.14	0.0	0.0	0.000	A
		2	1		326.14		326.14	0.0	0.0	0.000	A

Main results: (08:15-08:30)

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Pedestrian demand (Ped/hr)	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
A - The Avenue (E)	Entry	1	1	B,C	404.44		404.44	0.0	0.0	0.000	A
	Exit	1	1		393.03		393.03	0.0	0.0	0.000	A
B - New Link St. (S)	Entry	1	1	A,C	98.97		98.26	0.3	0.3	8.662	A
		2	1	(A,C)	99.09	0.00	98.97	0.0	0.1	3.030	A
	Exit	1	1		118.57	0.00	118.57	0.0	0.0	0.000	A
		2	1		118.57		118.57	0.0	0.0	0.000	A
C - The Avenue (W)	Entry	1	1	A,B	326.85		327.09	0.0	0.0	0.519	A
		2	1	(A,B)	326.26	0.00	326.85	0.0	0.0	0.317	A
	Exit	1	1		318.18	0.00	318.18	0.0	0.0	0.000	A
		2	1		318.18		318.18	0.0	0.0	0.000	A

Main results: (08:30-08:45)

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Pedestrian demand (Ped/hr)	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
A - The Avenue (E)	Entry	1	1	B,C	335.05		335.05	0.0	0.0	0.000	A
	Exit	1	1		322.81		322.81	0.0	0.0	0.000	A
B - New Link St. (S)	Entry	1	1	A,C	84.00		83.29	0.3	0.2	8.535	A
		2	1	(A,C)	83.88	0.00	84.00	0.1	0.0	1.987	A
	Exit	1	1		96.95	0.00	96.95	0.0	0.0	0.000	A
		2	1		96.95		96.95	0.0	0.0	0.000	A
C - The Avenue (W)	Entry	1	1	A,B	267.45		267.21	0.0	0.1	0.576	A
		2	1	(A,B)	267.80	0.00	267.45	0.0	0.0	0.289	A
	Exit	1	1		265.78	0.00	265.78	0.0	0.0	0.000	A
		2	1		265.78		265.78	0.0	0.0	0.000	A

Main results: (08:45-09:00)

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Pedestrian demand (Ped/hr)	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
A - The Avenue (E)	Entry	1	1	B,C	270.65		270.65	0.0	0.0	0.000	A
	Exit	1	1		264.95		264.95	0.0	0.0	0.000	A
B - New Link St. (S)	Entry	1	1	A,C	64.16		64.51	0.2	0.1	8.067	A
		2	1	(A,C)	64.51	0.00	64.16	0.0	0.1	1.594	A
	Exit	1	1		74.97	0.00	74.97	0.0	0.0	0.000	A
		2	1		74.97		74.97	0.0	0.0	0.000	A
C - The Avenue (W)	Entry	1	1	A,B	222.18		221.82	0.1	0.0	0.503	A
		2	1	(A,B)	222.42	0.00	222.18	0.0	0.0	0.179	A
	Exit	1	1		217.07	0.00	217.07	0.0	0.0	0.000	A
		2	1		217.07		217.07	0.0	0.0	0.000	A

Do-Something - DS 2038, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Lane Simulation	A1 - Do-Something [Lane Simulation]	This analysis set uses Lane Simulation mode. This is provided as an investigative tool and the user should apply judgement when interpreting the results.

Analysis Set Details

ID	Name	Use Lane Simulation	Include in report	Use specific Demand Set(s)	Specific Demand Set (s)	Network flow scaling factor (%)	Network capacity scaling factor (%)
A1	Do-Something	✓	✓	✓	D1,D2,D3,D4,D5,D6	100.000	100.000

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
1 - New Link St. / The Avenue Junction	New Link St. / The Avenue Junction	T-Junction	Two-way	3.80	A

Junction Network Options

[same as above]

Arms

Arms

[same as above]

Major Arm Geometry

[same as above]

Minor Arm Geometry

[same as above]

Pedestrian Crossings

Arm	Crossing type	Average pedestrian flow (Ped/hr)
A - The Avenue (E)	None	
B - New Link St. (S)	Zebra	200.00
C - The Avenue (W)	Pelican	200.00

Zebra Crossings

Arm	Space between crossing and junction entry (Left) (PCU)	Vehicles queueing on exit (Zebra) (PCU)	Central Refuge	Crossing data type	Crossing length (m)	Crossing time (s)
B - New Link St. (S)	1.00	1.00		Distance	6.00	4.29

Pelican/Puffin Crossings

Arm	Space between crossing and junction entry (Signalised) (PCU)	Vehicles queueing on exit (Signalised) (PCU)	Amber time preceding red (s)	Amber time regarded as green (s)	Time from traffic red start to green man start (s)	Time period green man shown (s)	Clearance Period (s)	Traffic minimum green (s)
C - The Avenue (W)	1.00	1.00	3.00	2.90	1.00	8.00	6.00	7.00

Slope / Intercept / Capacity

[same as above]

Lanes

[same as above]

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Model start time (HH:mm)	Model finish time (HH:mm)	Time segment length (min)	Run automatically
D6	DS 2038	PM	ONE HOUR	16:45	18:15	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A - The Avenue (E)		ONE HOUR	✓	140.00	100.000
B - New Link St. (S)		ONE HOUR	✓	82.00	100.000
C - The Avenue (W)		ONE HOUR	✓	91.00	100.000

Demand overview (Pedestrians)

Arm	Profile type	Average pedestrian flow (Ped/hr)
A - The Avenue (E)		
B - New Link St. (S)	Global	200.00
C - The Avenue (W)	Global	200.00

Origin-Destination Data

Demand (PCU/hr)

From	To			
		A - The Avenue (E)	B - New Link St. (S)	C - The Avenue (W)
	A - The Avenue (E)	0.000	41.000	99.000
	B - New Link St. (S)	52.000	0.000	30.000
	C - The Avenue (W)	72.000	19.000	0.000

Proportions

From	To			
		A - The Avenue (E)	B - New Link St. (S)	C - The Avenue (W)
	A - The Avenue (E)	0.00	0.29	0.71
	B - New Link St. (S)	0.63	0.00	0.37
	C - The Avenue (W)	0.79	0.21	0.00

Main results: (17:00-17:15)

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Pedestrian demand (Ped/hr)	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
A - The Avenue (E)	122.50	30.62		122.50	108.83	0.0	0.0	0.150	A
B - New Link St. (S)	72.59	18.15	179.80	72.12	54.06	0.1	0.2	8.007	A
C - The Avenue (W)	80.79	20.20	179.80	80.55	112.51	0.1	0.1	3.367	A

Main results: (17:15-17:30)

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Pedestrian demand (Ped/hr)	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
A - The Avenue (E)	157.43	39.36		157.07	131.52	0.0	0.0	0.273	A
B - New Link St. (S)	84.24	21.06	220.20	84.71	67.01	0.2	0.2	9.349	A
C - The Avenue (W)	102.06	25.51	220.20	100.28	142.93	0.1	0.3	4.068	A

Main results: (17:30-17:45)

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Pedestrian demand (Ped/hr)	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
A - The Avenue (E)	147.21	36.80		147.21	131.17	0.0	0.0	0.264	A
B - New Link St. (S)	89.35	22.34	220.20	89.47	67.37	0.2	0.2	8.784	A
C - The Avenue (W)	100.28	25.07	220.20	100.63	139.01	0.3	0.1	4.203	A

Main results: (17:45-18:00)

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Pedestrian demand (Ped/hr)	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
A - The Avenue (E)	122.73	30.68		122.85	108.95	0.0	0.0	0.185	A
B - New Link St. (S)	77.47	19.37	179.80	77.94	51.92	0.2	0.2	8.897	A
C - The Avenue (W)	77.23	19.31	179.80	76.75	116.79	0.1	0.1	4.082	A

Main results: (18:00-18:15)

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Pedestrian demand (Ped/hr)	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
A - The Avenue (E)	109.54	27.39		109.54	94.81	0.0	0.0	0.140	A
B - New Link St. (S)	61.90	15.48	150.57	61.90	47.76	0.2	0.1	7.924	A
C - The Avenue (W)	68.44	17.11	150.57	68.67	98.02	0.1	0.0	3.221	A

Vehicle Mix

Heavy Vehicle proportion

From	To			
		A - The Avenue (E)	B - New Link St. (S)	C - The Avenue (W)
	A - The Avenue (E)	0	0	0
	B - New Link St. (S)	0	0	0
	C - The Avenue (W)	0	0	0

Average PCU Per Veh

From	To			
		A - The Avenue (E)	B - New Link St. (S)	C - The Avenue (W)
	A - The Avenue (E)	1.000	1.000	1.000
	B - New Link St. (S)	1.000	1.000	1.000
	C - The Avenue (W)	1.000	1.000	1.000

Results

Results Summary for whole modelled period

Arm	Max delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
A - The Avenue (E)	0.27	0.0	A	127.58	191.38
B - New Link St. (S)	9.35	0.2	A	75.21	112.81
C - The Avenue (W)	4.20	0.3	A	83.11	124.66

Main Results for each time segment

Main results: (16:45-17:00)

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Pedestrian demand (Ped/hr)	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
A - The Avenue (E)	106.10	26.52		106.10	97.19	0.0	0.0	0.131	A
B - New Link St. (S)	65.70	16.43	150.57	65.94	45.62	0.0	0.1	7.532	A
C - The Avenue (W)	69.86	17.47	150.57	70.22	99.09	0.0	0.1	3.066	A

Lane Results

Lane Level notation: Lane Level 1 is always closest to the junction.

Lanes: Main Results for each time segment

Main results: (16:45-17:00)

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Pedestrian demand (Ped/hr)	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
A - The Avenue (E)	Entry	1	1	B,C	106.10		106.10	0.0	0.0	0.131	A
	Exit	1	1		97.19		97.19	0.0	0.0	0.000	A
B - New Link St. (S)	Entry	1	1	A,C	65.58		65.94	0.0	0.1	6.414	A
		2	1	(A,C)	65.70	150.57	65.58	0.0	0.0	1.111	A
	Exit	1	1		45.74		45.62	0.0	0.0	0.170	A
		2	1		45.62		45.62	0.0	0.0	0.000	A
C - The Avenue (W)	Entry	1	1	A,B	69.74		70.22	0.0	0.0	1.081	A
		2	1	(A,B)	69.86	150.57	69.74	0.0	0.0	1.986	A
	Exit	1	1		99.33		99.09	0.0	0.0	1.530	A
		2	1		99.09		99.09	0.0	0.0	0.000	A

Main results: (17:00-17:15)

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Pedestrian demand (Ped/hr)	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
A - The Avenue (E)	Entry	1	1	B,C	122.50		122.50	0.0	0.0	0.150	A
	Exit	1	1		108.83		108.83	0.0	0.0	0.000	A
B - New Link St. (S)	Entry	1	1	A,C	72.71		72.12	0.1	0.2	6.618	A
		2	1	(A,C)	72.59	179.80	72.71	0.0	0.0	1.391	A
	Exit	1	1		54.06		54.06	0.0	0.0	0.236	A
		2	1		54.06		54.06	0.0	0.0	0.000	A
C - The Avenue (W)	Entry	1	1	A,B	80.55		80.55	0.0	0.0	1.281	A
		2	1	(A,B)	80.79	179.80	80.55	0.0	0.0	2.085	A
	Exit	1	1		112.28		112.51	0.0	0.1	1.719	A
		2	1		112.51		112.51	0.0	0.0	0.000	A

Main results: (17:15-17:30)

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Pedestrian demand (Ped/hr)	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
A - The Avenue (E)	Entry	1	1	B,C	157.43		157.07	0.0	0.0	0.273	A
	Exit	1	1		131.52		131.52	0.0	0.0	0.000	A
B - New Link St. (S)	Entry	1	1	A,C	83.76		84.71	0.2	0.1	7.272	A
		2	1	(A,C)	84.24	220.20	83.76	0.0	0.1	2.081	A
	Exit	1	1		66.89		67.01	0.0	0.0	0.264	A
		2	1		67.01		67.01	0.0	0.0	0.000	A
C - The Avenue (W)	Entry	1	1	A,B	100.63		100.28	0.0	0.1	1.267	A
		2	1	(A,B)	102.06	220.20	100.63	0.0	0.2	2.806	A
	Exit	1	1		143.64		142.93	0.1	0.1	1.937	A
		2	1		142.93		142.93	0.0	0.0	0.000	A

Main results: (17:30-17:45)

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Pedestrian demand (Ped/hr)	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
A - The Avenue (E)	Entry	1	1	B,C	147.21		147.21	0.0	0.0	0.264	A
	Exit	1	1		131.17		131.17	0.0	0.0	0.000	A
B - New Link St. (S)	Entry	1	1	A,C	89.11		89.47	0.1	0.1	7.011	A
		2	1	(A,C)	89.35	220.20	89.11	0.1	0.0	1.770	A
	Exit	1	1		67.37		67.37	0.0	0.0	0.304	A
		2	1		67.37		67.37	0.0	0.0	0.000	A
C - The Avenue (W)	Entry	1	1	A,B	100.51		100.63	0.1	0.0	1.453	A
		2	1	(A,B)	100.28	220.20	100.51	0.2	0.1	2.746	A
	Exit	1	1		138.77		139.01	0.1	0.1	1.867	A
		2	1		139.01		139.01	0.0	0.0	0.000	A

Main results: (17:45-18:00)

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Pedestrian demand (Ped/hr)	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
A - The Avenue (E)	Entry	1	1	B,C	122.73		122.85	0.0	0.0	0.185	A
	Exit	1	1		108.95		108.95	0.0	0.0	0.000	A
B - New Link St. (S)	Entry	1	1	A,C	77.82		77.94	0.1	0.1	7.244	A
		2	1	(A,C)	77.47	179.80	77.82	0.0	0.0	1.652	A
	Exit	1	1		51.92		51.92	0.0	0.0	0.218	A
		2	1		51.92		51.92	0.0	0.0	0.000	A
C - The Avenue (W)	Entry	1	1	A,B	76.75		76.75	0.0	0.1	1.551	A
		2	1	(A,B)	77.23	179.80	76.75	0.1	0.0	2.527	A
	Exit	1	1		116.67		116.79	0.1	0.0	1.740	A
		2	1		116.79		116.79	0.0	0.0	0.000	A

Main results: (18:00-18:15)

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Pedestrian demand (Ped/hr)	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
A - The Avenue (E)	Entry	1	1	B,C	109.54		109.54	0.0	0.0	0.140	A
	Exit	1	1		94.81		94.81	0.0	0.0	0.000	A
B - New Link St. (S)	Entry	1	1	A,C	61.90		61.90	0.1	0.1	6.810	A
		2	1	(A,C)	61.90	150.57	61.90	0.0	0.0	1.116	A
	Exit	1	1		47.76		47.76	0.0	0.0	0.193	A
		2	1		47.76		47.76	0.0	0.0	0.000	A
C - The Avenue (W)	Entry	1	1	A,B	68.91		68.67	0.1	0.0	1.325	A
		2	1	(A,B)	68.44	150.57	68.91	0.0	0.0	1.900	A
	Exit	1	1		97.54		98.02	0.0	0.0	1.585	A
		2	1		98.02		98.02	0.0	0.0	0.000	A



Junctions 9	
PICADY 9 - Priority Intersection Module	
Version: 9.0.0.4211 [] © Copyright TRL Limited, 2021	
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Filename: New Link St - The Avenue.j9

Path: G:\2017\p170182\calcs\picady\October 2021 Update

Report generation date: 26/10/2021 14:13:51

»Do-Something - DS 2023, AM
 »Do-Something - DS 2023, PM
 »Do-Something - DS 2028, AM
 »Do-Something - DS 2028, PM
 »Do-Something - DS 2038, AM
 »Do-Something - DS 2038, PM

Summary of junction performance

	AM				PM			
	Queue (PCU)	Delay (s)	RFC	LOS	Queue (PCU)	Delay (s)	RFC	LOS
Do-Something [Lane Simulation] - DS 2023								
A - The Avenue (E)	0.0	0.01		A	0.0	0.00		A
B - New Link St. (S)	0.1	9.69		A	0.2	7.69		A
C - The Avenue (W)	0.1	0.42		A	0.0	0.97		A
Do-Something [Lane Simulation] - DS 2028								
A - The Avenue (E)	0.0	0.00		A	0.0	0.00		A
B - New Link St. (S)	0.2	10.25		B	0.2	8.35		A
C - The Avenue (W)	0.1	0.82		A	0.1	1.80		A
Do-Something [Lane Simulation] - DS 2038								
A - The Avenue (E)	0.0	0.01		A	0.0	0.31		A
B - New Link St. (S)	0.3	11.11		B	0.3	9.19		A
C - The Avenue (W)	0.1	0.80		A	0.2	4.02		A

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

Values shown are the highest values encountered over all time segments. Delay is the maximum value of average delay per arriving vehicle. Arm and junction delays are averages for all movements, including movements with zero delay.

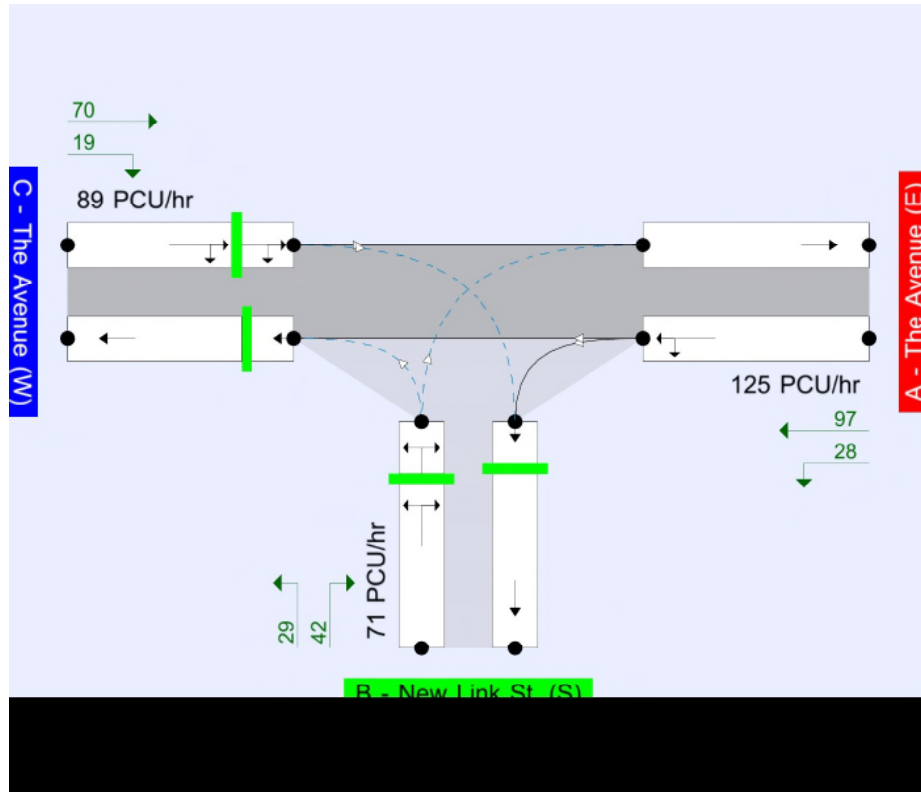
File summary

File Description

Title	Hollystown-Kilmartin
Location	Hollystown, Dublin 15
Site number	
Date	26/10/2021
Version	
Status	Proposed
Identifier	
Client	Glenveagh
Jobnumber	170182
Enumerator	HEADOFFICE\gild
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

Lane Simulation options

Stop criteria (%)	Stop criteria time (s)	Stop criteria number of trials	Random seed	Results refresh speed (s)	Individual vehicle animation number of trials	Use crossings quick response	Last run random seed	Last run number of trials	Last run time taken (s)
1.00	100000	100000	-1	3	1	✓	1538163863	44	0.79

Demand Set Summary

Scenario name	Time Period name	Traffic profile type	Model start time (HH:mm)	Model finish time (HH:mm)	Time segment length (min)	Run automatically
DS 2023	AM	ONE HOUR	07:30	09:00	15	✓
DS 2023	PM	ONE HOUR	16:45	18:15	15	✓
DS 2028	AM	ONE HOUR	07:30	09:00	15	✓
DS 2028	PM	ONE HOUR	16:45	18:15	15	✓
DS 2038	AM	ONE HOUR	07:30	09:00	15	✓
DS 2038	PM	ONE HOUR	16:45	18:15	15	✓

Do-Something - DS 2023, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Lane Simulation	A1 - Do-Something [Lane Simulation]	This analysis set uses Lane Simulation mode. This is provided as an investigative tool and the user should apply judgement when interpreting the results.
Warning	Pedestrian Crossing	C - The Avenue (W) - Pedestrian crossing	Pedestrian crossing uses default flow of 0. Is this correct?

Analysis Set Details

ID	Name	Use Lane Simulation	Include in report	Use specific Demand Set(s)	Specific Demand Set(s)	Network flow scaling factor (%)	Network capacity scaling factor (%)
A1	Do-Something	✓	✓	✓	D1,D2,D3,D4,D5,D6	100.000	100.000

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
1 - New Link St. / The Avenue Junction	New Link St. / The Avenue Junction	T-Junction	Two-way	0.63	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Name	Description	Arm type
A	The Avenue (E)		Major
B	New Link St. (S)		Minor
C	The Avenue (W)		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 - The Avenue (W)	6.00			71.0	✓	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 - New Link St. (S)	One lane	3.00	65	61

Pedestrian Crossings

Arm	Crossing type	Average pedestrian flow (Ped/hr)
A - The Avenue (E)	None	
B - New Link St. (S)	Zebra	200.00
C - The Avenue (W)	Pelican	0.00

Zebra Crossings

Arm	Space between crossing and junction entry (Left) (PCU)	Vehicles queueing on exit (Zebra) (PCU)	Central Refuge	Crossing data type	Crossing length (m)	Crossing time (s)
B - New Link St. (S)	1.00	1.00		Distance	6.00	4.29

Pelican/Puffin Crossings

Arm	Space between crossing and junction entry (Signalised) (PCU)	Vehicles queueing on exit (Signalised) (PCU)	Amber time preceding red (s)	Amber time regarded as green (s)	Time from traffic red start to green man start (s)	Time period green man shown (s)	Clearance Period (s)	Traffic minimum green (s)
C - The Avenue (W)	1.00	1.00	3.00	2.90	1.00	8.00	6.00	7.00

Slope / Intercept / Capacity

Priority Intersection Slopes and Intercepts

Junction	Stream	Intercept (PCU/hr)	Slope for A-B	Slope for A-C	Slope for C-A	Slope for C-B
1	B-A	529.002	0.096	0.244	0.153	0.348
1	B-C	662.338	0.102	0.257	-	-
1	C-B	615.080	0.238	0.238	-	-

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.

Lanes

Arm	Lane level	Lane	Destination arms	Has limited storage	Storage (PCU)
A - The Avenue (E)	1 [Give-way line]	1	B,C		Infinity
B - New Link St. (S)	1 [Give-way line]	1	A,C	✓	1.00
	2	1	(A,C)		Infinity
C - The Avenue (W)	1 [Give-way line]	1	A,B	✓	1.00
	2	1	(A,B)		Infinity

Lane Movements

Junction	Arm	Lane Level	Lane	Arm		
1 - New Link St. / The Avenue Junction	A - The Avenue (E)	1 [Give-way line]	1	?	?	?
	B - New Link St. (S)	1 [Give-way line]	1	✓		✓
		2	1	✓		✓
	C - The Avenue (W)	1 [Give-way line]	1	✓	✓	
		2	1	✓	✓	

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Model start time (HH:mm)	Model finish time (HH:mm)	Time segment length (min)	Run automatically
D1	DS 2023	AM	ONE-HOUR	07:30	09:00	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 - The Avenue (E)		ONE-HOUR	✓	250.00	100.000
B - New Link St. (S)		ONE-HOUR	✓	22.00	100.000
C - The Avenue (W)		ONE-HOUR	✓	204.00	100.000

Demand overview (Pedestrians)

Arm	Profile type	Average pedestrian flow (Ped/hr)
A - The Avenue (E)		
B - New Link St. (S)	Global	200.00
C - The Avenue (W)	Global	0.00

Origin-Destination Data

Demand (PCU/hr)

From	To			
		A - The Avenue (E)	B - New Link St. (S)	C - The Avenue (W)
	A - The Avenue (E)	0.000	18.000	232.000
	B - New Link St. (S)	19.000	0.000	3.000
	C - The Avenue (W)	196.000	8.000	0.000

Proportions

From	To			
		A - The Avenue (E)	B - New Link St. (S)	C - The Avenue (W)
	A - The Avenue (E)	0.00	0.07	0.93
	B - New Link St. (S)	0.86	0.00	0.14
	C - The Avenue (W)	0.96	0.04	0.00

Vehicle Mix

Heavy Vehicle proportion

From	To			
		A - The Avenue (E)	B - New Link St. (S)	C - The Avenue (W)
	A - The Avenue (E)	0	0	0
	B - New Link St. (S)	0	0	0
	C - The Avenue (W)	0	0	0

Average PCU Per Veh

From	To			
		A - The Avenue (E)	B - New Link St. (S)	C - The Avenue (W)
	A - The Avenue (E)	1.000	1.000	1.000
	B - New Link St. (S)	1.000	1.000	1.000
	C - The Avenue (W)	1.000	1.000	1.000

Results

Results Summary for whole modelled period

Arm	Max delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
A - The Avenue (E)	0.01	0.0	A	225.23	337.84
B - New Link St. (S)	9.69	0.1	A	19.86	29.80
C - The Avenue (W)	0.42	0.1	A	187.73	281.59

Main Results for each time segment

Main results: (07:30-07:45)

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Pedestrian demand (Ped/hr)	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
A - The Avenue (E)	178.91	44.73		178.91	156.82	0.0	0.0	0.009	A
B - New Link St. (S)	20.73	5.18	150.57	20.45	19.36	0.0	0.1	7.734	A
C - The Avenue (W)	146.45	36.61	0.00	146.45	169.64	0.0	0.0	0.387	A

Main results: (07:45-08:00)

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Pedestrian demand (Ped/hr)	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
A - The Avenue (E)	224.45	56.11		224.45	191.73	0.0	0.0	0.000	A
B - New Link St. (S)	18.55	4.64	179.80	18.27	22.64	0.1	0.0	9.690	A
C - The Avenue (W)	183.55	45.89	0.00	183.27	211.64	0.0	0.0	0.353	A

Main results: (08:00-08:15)

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Pedestrian demand (Ped/hr)	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
A - The Avenue (E)	281.45	70.36		281.45	247.09	0.0	0.0	0.000	A
B - New Link St. (S)	23.18	5.80	220.20	23.18	28.64	0.0	0.0	8.970	A
C - The Avenue (W)	232.36	58.09	0.00	232.36	261.00	0.0	0.0	0.410	A

Main results: (08:15-08:30)

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Pedestrian demand (Ped/hr)	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
A - The Avenue (E)	278.18	69.55		278.18	234.82	0.0	0.0	0.000	A
B - New Link St. (S)	20.45	5.11	220.20	20.73	33.27	0.0	0.1	8.293	A
C - The Avenue (W)	228.27	57.07	0.00	226.91	257.73	0.0	0.1	0.417	A

Main results: (08:30-08:45)

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Pedestrian demand (Ped/hr)	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
A - The Avenue (E)	220.91	55.23		220.91	195.82	0.0	0.0	0.000	A
B - New Link St. (S)	20.45	5.11	179.80	21.27	20.18	0.1	0.0	7.944	A
C - The Avenue (W)	182.18	45.55	0.00	182.45	208.64	0.1	0.0	0.240	A

Main results: (08:45-09:00)

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Pedestrian demand (Ped/hr)	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
A - The Avenue (E)	167.45	41.86		167.45	163.36	0.0	0.0	0.001	A
B - New Link St. (S)	15.82	3.95	150.57	15.82	13.91	0.0	0.0	8.123	A
C - The Avenue (W)	153.55	38.39	0.00	153.27	159.27	0.0	0.0	0.277	A

Lane Results

Lane Level notation: Lane Level 1 is always closest to the junction.

Lanes: Main Results for each time segment

Main results: (07:30-07:45)

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Pedestrian demand (Ped/hr)	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
A - The Avenue (E)	Entry	1	1	B,C	178.91		178.91	0.0	0.0	0.009	A
	Exit	1	1		156.82		156.82	0.0	0.0	0.000	A
B - New Link St. (S)	Entry	1	1	A,C	20.45		20.45	0.0	0.0	7.117	A
		2	1	(A,C)	20.73	150.57	20.45	0.0	0.0	0.593	A
	Exit	1	1		19.36	150.57	19.36	0.0	0.0	0.143	A
		2	1		19.36		19.36	0.0	0.0	0.000	A
C - The Avenue (W)	Entry	1	1	A,B	146.45		146.45	0.0	0.0	0.259	A
		2	1	(A,B)	146.45	0.00	146.45	0.0	0.0	0.128	A
	Exit	1	1		169.64	0.00	169.64	0.0	0.0	0.033	A
		2	1		169.64		169.64	0.0	0.0	0.000	A

Main results: (07:45-08:00)

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Pedestrian demand (Ped/hr)	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
A - The Avenue (E)	Entry	1	1	B,C	224.45		224.45	0.0	0.0	0.000	A
	Exit	1	1		191.73		191.73	0.0	0.0	0.000	A
B - New Link St. (S)	Entry	1	1	A,C	18.27		18.27	0.0	0.0	8.971	A
		2	1	(A,C)	18.55	179.80	18.27	0.0	0.0	0.692	A
	Exit	1	1		22.64	179.80	22.64	0.0	0.0	0.235	A
		2	1		22.64		22.64	0.0	0.0	0.000	A
C - The Avenue (W)	Entry	1	1	A,B	183.55		183.27	0.0	0.0	0.261	A
		2	1	(A,B)	183.55	0.00	183.55	0.0	0.0	0.092	A
	Exit	1	1		211.64	0.00	211.64	0.0	0.0	0.000	A
		2	1		211.64		211.64	0.0	0.0	0.000	A

Main results: (08:00-08:15)

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Pedestrian demand (Ped/hr)	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
A - The Avenue (E)	Entry	1	1	B,C	281.45		281.45	0.0	0.0	0.000	A
	Exit	1	1		247.09		247.09	0.0	0.0	0.000	A
B - New Link St. (S)	Entry	1	1	A,C	23.18		23.18	0.0	0.0	8.144	A
		2	1	(A,C)	23.18	220.20	23.18	0.0	0.0	0.866	A
	Exit	1	1		28.91	220.20	28.64	0.0	0.0	0.374	A
		2	1		28.64		28.64	0.0	0.0	0.000	A
C - The Avenue (W)	Entry	1	1	A,B	232.36		232.36	0.0	0.0	0.268	A
		2	1	(A,B)	232.36	0.00	232.36	0.0	0.0	0.142	A
	Exit	1	1		261.00	0.00	261.00	0.0	0.0	0.000	A
		2	1		261.00		261.00	0.0	0.0	0.000	A

Main results: (08:15-08:30)

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Pedestrian demand (Ped/hr)	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
A - The Avenue (E)	Entry	1	1	B,C	278.18		278.18	0.0	0.0	0.000	A
	Exit	1	1		234.82		234.82	0.0	0.0	0.000	A
B - New Link St. (S)	Entry	1	1	A,C	20.45		20.73	0.0	0.1	7.514	A
		2	1	(A,C)	20.45	220.20	20.45	0.0	0.0	0.779	A
	Exit	1	1		33.27	220.20	33.27	0.0	0.0	0.235	A
		2	1		33.27		33.27	0.0	0.0	0.000	A
C - The Avenue (W)	Entry	1	1	A,B	227.45		226.91	0.0	0.0	0.308	A
		2	1	(A,B)	228.27	0.00	227.45	0.0	0.1	0.109	A
	Exit	1	1		257.73	0.00	257.73	0.0	0.0	0.000	A
		2	1		257.73		257.73	0.0	0.0	0.000	A

Main results: (08:30-08:45)

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Pedestrian demand (Ped/hr)	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
A - The Avenue (E)	Entry	1	1	B,C	220.91		220.91	0.0	0.0	0.000	A
	Exit	1	1		195.82		195.82	0.0	0.0	0.000	A
B - New Link St. (S)	Entry	1	1	A,C	20.45		21.27	0.1	0.0	7.436	A
		2	1	(A,C)	20.45	179.80	20.45	0.0	0.0	0.508	A
	Exit	1	1		20.18	179.80	20.18	0.0	0.0	0.250	A
		2	1		20.18		20.18	0.0	0.0	0.000	A
C - The Avenue (W)	Entry	1	1	A,B	182.18		182.45	0.0	0.0	0.189	A
		2	1	(A,B)	182.18	0.00	182.18	0.1	0.0	0.051	A
	Exit	1	1		208.64	0.00	208.64	0.0	0.0	0.000	A
		2	1		208.64		208.64	0.0	0.0	0.000	A

Main results: (08:45-09:00)

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Pedestrian demand (Ped/hr)	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
A - The Avenue (E)	Entry	1	1	B,C	167.45		167.45	0.0	0.0	0.001	A
	Exit	1	1		163.36		163.36	0.0	0.0	0.000	A
B - New Link St. (S)	Entry	1	1	A,C	15.82		15.82	0.0	0.0	7.830	A
		2	1	(A,C)	15.82	150.57	15.82	0.0	0.0	0.290	A
	Exit	1	1		13.91	150.57	13.91	0.0	0.0	0.161	A
		2	1		13.91		13.91	0.0	0.0	0.000	A
C - The Avenue (W)	Entry	1	1	A,B	153.55		153.27	0.0	0.0	0.233	A
		2	1	(A,B)	153.55	0.00	153.55	0.0	0.0	0.044	A
	Exit	1	1		159.27	0.00	159.27	0.0	0.0	0.000	A
		2	1		159.27		159.27	0.0	0.0	0.000	A

Do-Something - DS 2023, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Lane Simulation	A1 - Do-Something [Lane Simulation]	This analysis set uses Lane Simulation mode. This is provided as an investigative tool and the user should apply judgement when interpreting the results.
Warning	Pedestrian Crossing	B - New Link St. (S) - Pedestrian crossing	Pedestrian crossing uses default flow of 0. Is this correct?
Warning	Pedestrian Crossing	C - The Avenue (W) - Pedestrian crossing	Pedestrian crossing uses default flow of 0. Is this correct?

Analysis Set Details

ID	Name	Use Lane Simulation	Include in report	Use specific Demand Set(s)	Specific Demand Set (s)	Network flow scaling factor (%)	Network capacity scaling factor (%)
A1	Do-Something	✓	✓	✓	D1,D2,D3,D4,D5,D6	100.000	100.000

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
1 - New Link St. / The Avenue Junction	New Link St. / The Avenue Junction	T-Junction	Two-way	2.39	A

Junction Network Options

[same as above]

Arms

Arms

[same as above]

Major Arm Geometry

[same as above]

Minor Arm Geometry

[same as above]

Pedestrian Crossings

Arm	Crossing type	Average pedestrian flow (Ped/hr)
A - The Avenue (E)	None	
B - New Link St. (S)	Zebra	0.00
C - The Avenue (W)	Pelican	0.00

Zebra Crossings

Arm	Space between crossing and junction entry (Left) (PCU)	Vehicles queueing on exit (Zebra) (PCU)	Central Refuge	Crossing data type	Crossing length (m)	Crossing time (s)
B - New Link St. (S)	1.00	1.00		Distance	6.00	4.29

Pelican/Puffin Crossings

Arm	Space between crossing and junction entry (Signalised) (PCU)	Vehicles queueing on exit (Signalised) (PCU)	Amber time preceding red (s)	Amber time regarded as green (s)	Time from traffic red start to green man start (s)	Time period green man shown (s)	Clearance Period (s)	Traffic minimum green (s)
C - The Avenue (W)	1.00	1.00	3.00	2.90	1.00	8.00	6.00	7.00

Slope / Intercept / Capacity

[same as above]

Lanes

[same as above]

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Model start time (HH:mm)	Model finish time (HH:mm)	Time segment length (min)	Run automatically
D2	DS 2023	PM	ONE-HOUR	16:45	18:15	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A - The Avenue (E)		ONE-HOUR	✓	72.00	100.000
B - New Link St. (S)		ONE-HOUR	✓	44.00	100.000
C - The Avenue (W)		ONE-HOUR	✓	45.00	100.000

Demand overview (Pedestrians)

Arm	Profile type	Average pedestrian flow (Ped/hr)
A - The Avenue (E)		
B - New Link St. (S)	Global	0.00
C - The Avenue (W)	Global	0.00

Origin-Destination Data

Demand (PCU/hr)

	To			
		A - The Avenue (E)	B - New Link St. (S)	C - The Avenue (W)
From	A - The Avenue (E)	0.000	21.000	51.000
	B - New Link St. (S)	34.000	0.000	10.000
	C - The Avenue (W)	39.000	6.000	0.000

Proportions

	To			
		A - The Avenue (E)	B - New Link St. (S)	C - The Avenue (W)
From	A - The Avenue (E)	0.00	0.29	0.71
	B - New Link St. (S)	0.77	0.00	0.23
	C - The Avenue (W)	0.87	0.13	0.00

Vehicle Mix

Heavy Vehicle proportion

	To			
		A - The Avenue (E)	B - New Link St. (S)	C - The Avenue (W)
From	A - The Avenue (E)	0	0	0
	B - New Link St. (S)	0	0	0
	C - The Avenue (W)	0	0	0

Average PCU Per Veh

	To			
		A - The Avenue (E)	B - New Link St. (S)	C - The Avenue (W)
From	A - The Avenue (E)	1.000	1.000	1.000
	B - New Link St. (S)	1.000	1.000	1.000
	C - The Avenue (W)	1.000	1.000	1.000

Results

Results Summary for whole modelled period

Arm	Max delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
A - The Avenue (E)	0.00	0.0	A	64.93	97.40
B - New Link St. (S)	7.69	0.2	A	40.42	60.62
C - The Avenue (W)	0.97	0.0	A	41.72	62.58

Main Results for each time segment

Main results: (16:45-17:00)

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Pedestrian demand (Ped/hr)	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
A - The Avenue (E)	52.51	13.13		52.51	54.65	0.0	0.0	0.000	A
B - New Link St. (S)	32.55	8.14	0.00	31.60	20.32	0.0	0.1	7.398	A
C - The Avenue (W)	34.34	8.58	0.00	34.22	43.37	0.0	0.0	0.762	A

Main results: (17:00-17:15)

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Pedestrian demand (Ped/hr)	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
A - The Avenue (E)	60.71	15.18		60.71	68.44	0.0	0.0	0.000	A
B - New Link St. (S)	39.09	9.77	0.00	39.45	24.00	0.1	0.1	7.694	A
C - The Avenue (W)	45.15	11.29	0.00	45.03	52.75	0.0	0.0	0.972	A

Main results: (17:15-17:30)

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Pedestrian demand (Ped/hr)	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
A - The Avenue (E)	81.86	20.47		81.86	81.50	0.0	0.0	0.000	A
B - New Link St. (S)	49.54	12.39	0.00	48.83	29.23	0.1	0.2	7.451	A
C - The Avenue (W)	49.31	12.33	0.00	49.54	69.50	0.0	0.0	0.819	A

Main results: (17:30-17:45)

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Pedestrian demand (Ped/hr)	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
A - The Avenue (E)	75.68	18.92		75.68	74.38	0.0	0.0	0.000	A
B - New Link St. (S)	47.88	11.97	0.00	48.00	30.18	0.2	0.1	7.476	A
C - The Avenue (W)	45.03	11.26	0.00	45.15	64.28	0.0	0.0	0.963	A

Main results: (17:45-18:00)

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Pedestrian demand (Ped/hr)	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
A - The Avenue (E)	65.94	16.49		65.94	66.77	0.0	0.0	0.000	A
B - New Link St. (S)	37.90	9.48	0.00	37.66	26.85	0.1	0.1	7.437	A
C - The Avenue (W)	42.42	10.60	0.00	42.53	52.51	0.0	0.0	0.838	A

Main results: (18:00-18:15)

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Pedestrian demand (Ped/hr)	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
A - The Avenue (E)	52.87	13.22		52.87	55.01	0.0	0.0	0.000	A
B - New Link St. (S)	35.52	8.88	0.00	36.24	21.27	0.1	0.0	6.771	A
C - The Avenue (W)	34.10	8.52	0.00	34.10	46.93	0.0	0.0	0.798	A

Lane Results

Lane Level notation: Lane Level 1 is always closest to the junction.

Lanes: Main Results for each time segment

Main results: (16:45-17:00)

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Pedestrian demand (Ped/hr)	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
A - The Avenue (E)	Entry	1	1	B,C	52.51		52.51	0.0	0.0	0.000	A
	Exit	1	1		54.65		54.65	0.0	0.0	0.000	A
B - New Link St. (S)	Entry	1	1	A,C	32.44		31.60	0.0	0.1	7.001	A
		2	1	(A,C)	32.55	0.00	32.44	0.0	0.0	0.378	A
	Exit	1	1		20.32	0.00	20.32	0.0	0.0	0.000	A
		2	1		20.32		20.32	0.0	0.0	0.000	A
C - The Avenue (W)	Entry	1	1	A,B	34.34		34.22	0.0	0.0	0.699	A
		2	1	(A,B)	34.34	0.00	34.34	0.0	0.0	0.063	A
	Exit	1	1		43.37	0.00	43.37	0.0	0.0	0.048	A
		2	1		43.37		43.37	0.0	0.0	0.000	A

Main results: (17:00-17:15)

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Pedestrian demand (Ped/hr)	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
A - The Avenue (E)	Entry	1	1	B,C	60.71		60.71	0.0	0.0	0.000	A
	Exit	1	1		68.44		68.44	0.0	0.0	0.000	A
B - New Link St. (S)	Entry	1	1	A,C	39.45		39.45	0.1	0.1	7.074	A
		2	1	(A,C)	39.09	0.00	39.45	0.0	0.0	0.636	A
	Exit	1	1		24.00	0.00	24.00	0.0	0.0	0.000	A
		2	1		24.00		24.00	0.0	0.0	0.000	A
C - The Avenue (W)	Entry	1	1	A,B	45.15		45.03	0.0	0.0	0.938	A
		2	1	(A,B)	45.15	0.00	45.15	0.0	0.0	0.034	A
	Exit	1	1		52.75	0.00	52.75	0.0	0.0	0.000	A
		2	1		52.75		52.75	0.0	0.0	0.000	A

Main results: (17:15-17:30)

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Pedestrian demand (Ped/hr)	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
A - The Avenue (E)	Entry	1	1	B,C	81.86		81.86	0.0	0.0	0.000	A
	Exit	1	1		81.50		81.50	0.0	0.0	0.000	A
B - New Link St. (S)	Entry	1	1	A,C	49.19		48.83	0.1	0.1	6.824	A
		2	1	(A,C)	49.54	0.00	49.19	0.0	0.0	0.620	A
	Exit	1	1		29.23	0.00	29.23	0.0	0.0	0.000	A
		2	1		29.23		29.23	0.0	0.0	0.000	A
C - The Avenue (W)	Entry	1	1	A,B	49.43		49.54	0.0	0.0	0.763	A
		2	1	(A,B)	49.31	0.00	49.43	0.0	0.0	0.056	A
	Exit	1	1		69.50	0.00	69.50	0.0	0.0	0.000	A
		2	1		69.50		69.50	0.0	0.0	0.000	A

Main results: (17:30-17:45)

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Pedestrian demand (Ped/hr)	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
A - The Avenue (E)	Entry	1	1	B,C	75.68		75.68	0.0	0.0	0.000	A
	Exit	1	1		74.38		74.38	0.0	0.0	0.000	A
B - New Link St. (S)	Entry	1	1	A,C	47.88		48.00	0.1	0.1	6.659	A
		2	1	(A,C)	47.88	0.00	47.88	0.0	0.0	0.825	A
	Exit	1	1		30.18	0.00	30.18	0.0	0.0	0.000	A
		2	1		30.18		30.18	0.0	0.0	0.000	A
C - The Avenue (W)	Entry	1	1	A,B	45.03		45.15	0.0	0.0	0.911	A
		2	1	(A,B)	45.03	0.00	45.03	0.0	0.0	0.052	A
	Exit	1	1		64.28	0.00	64.28	0.0	0.0	0.000	A
		2	1		64.28		64.28	0.0	0.0	0.000	A

Main results: (17:45-18:00)

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Pedestrian demand (Ped/hr)	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
A - The Avenue (E)	Entry	1	1	B,C	65.94		65.94	0.0	0.0	0.000	A
	Exit	1	1		66.77		66.77	0.0	0.0	0.000	A
B - New Link St. (S)	Entry	1	1	A,C	37.90		37.66	0.1	0.1	6.912	A
		2	1	(A,C)	37.90	0.00	37.90	0.0	0.0	0.525	A
	Exit	1	1		26.85	0.00	26.85	0.0	0.0	0.000	A
		2	1		26.85		26.85	0.0	0.0	0.000	A
C - The Avenue (W)	Entry	1	1	A,B	42.42		42.53	0.0	0.0	0.804	A
		2	1	(A,B)	42.42	0.00	42.42	0.0	0.0	0.034	A
	Exit	1	1		52.51	0.00	52.51	0.0	0.0	0.000	A
		2	1		52.51		52.51	0.0	0.0	0.000	A

Main results: (18:00-18:15)

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Pedestrian demand (Ped/hr)	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
A - The Avenue (E)	Entry	1	1	B,C	52.87		52.87	0.0	0.0	0.000	A
	Exit	1	1		55.01		55.01	0.0	0.0	0.000	A
B - New Link St. (S)	Entry	1	1	A,C	35.52		36.24	0.1	0.0	6.281	A
		2	1	(A,C)	35.52	0.00	35.52	0.0	0.0	0.489	A
	Exit	1	1		21.27	0.00	21.27	0.0	0.0	0.000	A
		2	1		21.27		21.27	0.0	0.0	0.000	A
C - The Avenue (W)	Entry	1	1	A,B	34.10		34.10	0.0	0.0	0.770	A
		2	1	(A,B)	34.10	0.00	34.10	0.0	0.0	0.028	A
	Exit	1	1		46.93	0.00	46.93	0.0	0.0	0.000	A
		2	1		46.93		46.93	0.0	0.0	0.000	A

Do-Something - DS 2028, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Lane Simulation	A1 - Do-Something [Lane Simulation]	This analysis set uses Lane Simulation mode. This is provided as an investigative tool and the user should apply judgement when interpreting the results.
Warning	Pedestrian Crossing	B - New Link St. (S) - Pedestrian crossing	Pedestrian crossing uses default flow of 0. Is this correct?
Warning	Pedestrian Crossing	C - The Avenue (W) - Pedestrian crossing	Pedestrian crossing uses default flow of 0. Is this correct?

Analysis Set Details

ID	Name	Use Lane Simulation	Include in report	Use specific Demand Set(s)	Specific Demand Set (s)	Network flow scaling factor (%)	Network capacity scaling factor (%)
A1	Do-Something	✓	✓	✓	D1,D2,D3,D4,D5,D6	100.000	100.000

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
1 - New Link St. / The Avenue Junction	New Link St. / The Avenue Junction	T-Junction	Two-way	1.38	A

Junction Network Options

[same as above]

Arms

Arms

[same as above]

Major Arm Geometry

[same as above]

Minor Arm Geometry

[same as above]

Pedestrian Crossings

Arm	Crossing type	Average pedestrian flow (Ped/hr)
A - The Avenue (E)	None	
B - New Link St. (S)	Zebra	0.00
C - The Avenue (W)	Pelican	0.00

Zebra Crossings

Arm	Space between crossing and junction entry (Left) (PCU)	Vehicles queueing on exit (Zebra) (PCU)	Central Refuge	Crossing data type	Crossing length (m)	Crossing time (s)
B - New Link St. (S)	1.00	1.00		Distance	6.00	4.29

Pelican/Puffin Crossings

Arm	Space between crossing and junction entry (Signalised) (PCU)	Vehicles queueing on exit (Signalised) (PCU)	Amber time preceding red (s)	Amber time regarded as green (s)	Time from traffic red start to green man start (s)	Time period green man shown (s)	Clearance Period (s)	Traffic minimum green (s)
C - The Avenue (W)	1.00	1.00	3.00	2.90	1.00	8.00	6.00	7.00

Slope / Intercept / Capacity

[same as above]

Lanes

[same as above]

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Model start time (HH:mm)	Model finish time (HH:mm)	Time segment length (min)	Run automatically
D3	DS 2028	AM	ONE-HOUR	07:30	09:00	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 - The Avenue (E)		ONE-HOUR	✓	347.00	100.000
B - New Link St. (S)		ONE-HOUR	✓	70.00	100.000
C - The Avenue (W)		ONE-HOUR	✓	282.00	100.000

Demand overview (Pedestrians)

Arm	Profile type	Average pedestrian flow (Ped/hr)
A - The Avenue (E)		
B - New Link St. (S)	Global	0.00
C - The Avenue (W)	Global	0.00

Origin-Destination Data

Demand (PCU/hr)

	To			
		A - The Avenue (E)	B - New Link St. (S)	C - The Avenue (W)
From	A - The Avenue (E)	0.000	79.000	268.000
	B - New Link St. (S)	63.000	0.000	7.000
	C - The Avenue (W)	261.000	21.000	0.000

Proportions

	To			
		A - The Avenue (E)	B - New Link St. (S)	C - The Avenue (W)
From	A - The Avenue (E)	0.00	0.23	0.77
	B - New Link St. (S)	0.90	0.00	0.10
	C - The Avenue (W)	0.93	0.07	0.00

Vehicle Mix

Heavy Vehicle proportion

	To			
		A - The Avenue (E)	B - New Link St. (S)	C - The Avenue (W)
From	A - The Avenue (E)	0	0	0
	B - New Link St. (S)	0	0	0
	C - The Avenue (W)	0	0	0

Average PCU Per Veh

	To			
		A - The Avenue (E)	B - New Link St. (S)	C - The Avenue (W)
From	A - The Avenue (E)	1.000	1.000	1.000
	B - New Link St. (S)	1.000	1.000	1.000
	C - The Avenue (W)	1.000	1.000	1.000

Results

Results Summary for whole modelled period

Arm	Max delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
A - The Avenue (E)	0.00	0.0	A	314.50	471.74
B - New Link St. (S)	10.25	0.2	B	64.67	97.01
C - The Avenue (W)	0.82	0.1	A	257.60	386.41

Main Results for each time segment

Main results: (07:30-07:45)

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Pedestrian demand (Ped/hr)	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
A - The Avenue (E)	256.63	64.16		256.63	243.33	0.0	0.0	0.004	A
B - New Link St. (S)	58.81	14.70	0.00	58.93	76.40	0.0	0.1	8.472	A
C - The Avenue (W)	207.56	51.89	0.00	207.68	203.52	0.0	0.0	0.785	A

Main results: (07:45-08:00)

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Pedestrian demand (Ped/hr)	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
A - The Avenue (E)	313.31	78.33		313.31	273.86	0.0	0.0	0.000	A
B - New Link St. (S)	62.38	15.59	0.00	62.14	87.92	0.1	0.2	9.381	A
C - The Avenue (W)	237.62	59.41	0.00	236.67	250.34	0.0	0.1	0.745	A

Main results: (08:00-08:15)

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Pedestrian demand (Ped/hr)	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
A - The Avenue (E)	373.90	93.48		373.90	368.79	0.0	0.0	0.000	A
B - New Link St. (S)	77.35	19.34	0.00	78.30	113.82	0.2	0.2	10.248	B
C - The Avenue (W)	321.15	80.29	0.00	321.03	290.61	0.1	0.1	0.824	A

Main results: (08:15-08:30)

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Pedestrian demand (Ped/hr)	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
A - The Avenue (E)	367.60	91.90		367.60	348.12	0.0	0.0	0.000	A
B - New Link St. (S)	73.54	18.39	0.00	72.24	102.89	0.2	0.2	10.182	B
C - The Avenue (W)	305.47	76.37	0.00	306.06	294.89	0.1	0.0	0.748	A

Main results: (08:30-08:45)

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Pedestrian demand (Ped/hr)	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
A - The Avenue (E)	314.50	78.62		314.50	295.01	0.0	0.0	0.000	A
B - New Link St. (S)	62.02	15.50	0.00	61.43	93.74	0.2	0.2	9.652	A
C - The Avenue (W)	259.37	64.84	0.00	260.08	247.25	0.0	0.0	0.731	A

Main results: (08:45-09:00)

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Pedestrian demand (Ped/hr)	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
A - The Avenue (E)	261.03	65.26		261.03	244.40	0.0	0.0	0.000	A
B - New Link St. (S)	53.94	13.49	0.00	53.82	83.41	0.2	0.1	8.813	A
C - The Avenue (W)	214.46	53.61	0.00	215.52	202.57	0.0	0.0	0.708	A

Lane Results

Lane Level notation: Lane Level 1 is always closest to the junction.

Lanes: Main Results for each time segment

Main results: (07:30-07:45)

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Pedestrian demand (Ped/hr)	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
A - The Avenue (E)	Entry	1	1	B,C	256.63		256.63	0.0	0.0	0.004	A
	Exit	1	1		243.33		243.33	0.0	0.0	0.000	A
B - New Link St. (S)	Entry	1	1	A,C	58.69		58.93	0.0	0.1	7.670	A
		2	1	(A,C)	58.81	0.00	58.69	0.0	0.0	0.792	A
	Exit	1	1		76.40	0.00	76.40	0.0	0.0	0.000	A
		2	1		76.40		76.40	0.0	0.0	0.000	A
C - The Avenue (W)	Entry	1	1	A,B	207.56		207.68	0.0	0.0	0.505	A
		2	1	(A,B)	207.56	0.00	207.56	0.0	0.0	0.280	A
	Exit	1	1		203.52	0.00	203.52	0.0	0.0	0.038	A
		2	1		203.52		203.52	0.0	0.0	0.000	A

Main results: (07:45-08:00)

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Pedestrian demand (Ped/hr)	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
A - The Avenue (E)	Entry	1	1	B,C	313.31		313.31	0.0	0.0	0.000	A
	Exit	1	1		273.86		273.86	0.0	0.0	0.000	A
B - New Link St. (S)	Entry	1	1	A,C	62.50		62.14	0.1	0.2	8.081	A
		2	1	(A,C)	62.38	0.00	62.50	0.0	0.0	1.303	A
	Exit	1	1		87.92	0.00	87.92	0.0	0.0	0.000	A
		2	1		87.92		87.92	0.0	0.0	0.000	A
C - The Avenue (W)	Entry	1	1	A,B	237.03		236.67	0.0	0.1	0.526	A
		2	1	(A,B)	237.62	0.00	237.03	0.0	0.1	0.220	A
	Exit	1	1		250.34	0.00	250.34	0.0	0.0	0.000	A
		2	1		250.34		250.34	0.0	0.0	0.000	A

Main results: (08:00-08:15)

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Pedestrian demand (Ped/hr)	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
A - The Avenue (E)	Entry	1	1	B,C	373.90		373.90	0.0	0.0	0.000	A
	Exit	1	1		368.79		368.79	0.0	0.0	0.000	A
B - New Link St. (S)	Entry	1	1	A,C	78.06		78.30	0.2	0.1	8.639	A
		2	1	(A,C)	77.35	0.00	78.06	0.0	0.0	1.623	A
	Exit	1	1		113.82	0.00	113.82	0.0	0.0	0.000	A
		2	1		113.82		113.82	0.0	0.0	0.000	A
C - The Avenue (W)	Entry	1	1	A,B	321.15		321.03	0.1	0.0	0.493	A
		2	1	(A,B)	321.15	0.00	321.15	0.1	0.0	0.330	A
	Exit	1	1		290.61	0.00	290.61	0.0	0.0	0.000	A
		2	1		290.61		290.61	0.0	0.0	0.000	A

Main results: (08:15-08:30)

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Pedestrian demand (Ped/hr)	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
A - The Avenue (E)	Entry	1	1	B,C	367.60		367.60	0.0	0.0	0.000	A
	Exit	1	1		348.12		348.12	0.0	0.0	0.000	A
B - New Link St. (S)	Entry	1	1	A,C	73.54		72.24	0.1	0.2	8.528	A
		2	1	(A,C)	73.54	0.00	73.54	0.0	0.0	1.646	A
	Exit	1	1		102.89	0.00	102.89	0.0	0.0	0.000	A
		2	1		102.89		102.89	0.0	0.0	0.000	A
C - The Avenue (W)	Entry	1	1	A,B	305.94		306.06	0.0	0.0	0.466	A
		2	1	(A,B)	305.47	0.00	305.94	0.0	0.0	0.283	A
	Exit	1	1		294.89	0.00	294.89	0.0	0.0	0.000	A
		2	1		294.89		294.89	0.0	0.0	0.000	A

Main results: (08:30-08:45)

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Pedestrian demand (Ped/hr)	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
A - The Avenue (E)	Entry	1	1	B,C	314.50		314.50	0.0	0.0	0.000	A
	Exit	1	1		295.01		295.01	0.0	0.0	0.000	A
B - New Link St. (S)	Entry	1	1	A,C	61.66		61.43	0.2	0.1	8.155	A
		2	1	(A,C)	62.02	0.00	61.66	0.0	0.0	1.482	A
	Exit	1	1		93.74	0.00	93.74	0.0	0.0	0.000	A
		2	1		93.74		93.74	0.0	0.0	0.000	A
C - The Avenue (W)	Entry	1	1	A,B	259.60		260.08	0.0	0.0	0.502	A
		2	1	(A,B)	259.37	0.00	259.60	0.0	0.0	0.229	A
	Exit	1	1		247.25	0.00	247.25	0.0	0.0	0.000	A
		2	1		247.25		247.25	0.0	0.0	0.000	A

Main results: (08:45-09:00)

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Pedestrian demand (Ped/hr)	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
A - The Avenue (E)	Entry	1	1	B,C	261.03		261.03	0.0	0.0	0.000	A
	Exit	1	1		244.40		244.40	0.0	0.0	0.000	A
B - New Link St. (S)	Entry	1	1	A,C	53.94		53.82	0.1	0.1	7.847	A
		2	1	(A,C)	53.94	0.00	53.94	0.0	0.0	0.980	A
	Exit	1	1		83.41	0.00	83.41	0.0	0.0	0.000	A
		2	1		83.41		83.41	0.0	0.0	0.000	A
C - The Avenue (W)	Entry	1	1	A,B	215.05		215.52	0.0	0.0	0.544	A
		2	1	(A,B)	214.46	0.00	215.05	0.0	0.0	0.164	A
	Exit	1	1		202.57	0.00	202.57	0.0	0.0	0.000	A
		2	1		202.57		202.57	0.0	0.0	0.000	A

Do-Something - DS 2028, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Lane Simulation	A1 - Do-Something [Lane Simulation]	This analysis set uses Lane Simulation mode. This is provided as an investigative tool and the user should apply judgement when interpreting the results.
Warning	Pedestrian Crossing	B - New Link St. (S) - Pedestrian crossing	Pedestrian crossing uses default flow of 0. Is this correct?
Warning	Pedestrian Crossing	C - The Avenue (W) - Pedestrian crossing	Pedestrian crossing uses default flow of 0. Is this correct?

Analysis Set Details

ID	Name	Use Lane Simulation	Include in report	Use specific Demand Set(s)	Specific Demand Set(s)	Network flow scaling factor (%)	Network capacity scaling factor (%)
A1	Do-Something	✓	✓	✓	D1,D2,D3,D4,D5,D6	100.000	100.000

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
1 - New Link St. / The Avenue Junction	New Link St. / The Avenue Junction	T-Junction	Two-way	2.64	A

Junction Network Options

[same as above]

Arms

Arms

[same as above]

Major Arm Geometry

[same as above]

Minor Arm Geometry

[same as above]

Pedestrian Crossings

Arm	Crossing type	Average pedestrian flow (Ped/hr)
A - The Avenue (E)	None	
B - New Link St. (S)	Zebra	0.00
C - The Avenue (W)	Pelican	0.00

Zebra Crossings

Arm	Space between crossing and junction entry (Left) (PCU)	Vehicles queueing on exit (Zebra) (PCU)	Central Refuge	Crossing data type	Crossing length (m)	Crossing time (s)
B - New Link St. (S)	1.00	1.00		Distance	6.00	4.29

Pelican/Puffin Crossings

Arm	Space between crossing and junction entry (Signalised) (PCU)	Vehicles queueing on exit (Signalised) (PCU)	Amber time preceding red (s)	Amber time regarded as green (s)	Time from traffic red start to green man start (s)	Time period green man shown (s)	Clearance Period (s)	Traffic minimum green (s)
C - The Avenue (W)	1.00	1.00	3.00	2.90	1.00	8.00	6.00	7.00

Slope / Intercept / Capacity

[same as above]

Lanes

[same as above]

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Model start time (HH:mm)	Model finish time (HH:mm)	Time segment length (min)	Run automatically
D4	DS 2028	PM	ONE-HOUR	16:45	18:15	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A - The Avenue (E)		ONE-HOUR	✓	124.00	100.000
B - New Link St. (S)		ONE-HOUR	✓	71.00	100.000
C - The Avenue (W)		ONE-HOUR	✓	88.00	100.000

Demand overview (Pedestrians)

Arm	Profile type	Average pedestrian flow (Ped/hr)
A - The Avenue (E)		
B - New Link St. (S)	Global	0.00
C - The Avenue (W)	Global	0.00

Origin-Destination Data

Demand (PCU/hr)

	To			
		A - The Avenue (E)	B - New Link St. (S)	C - The Avenue (W)
From	A - The Avenue (E)	0.000	28.000	96.000
	B - New Link St. (S)	42.000	0.000	29.000
	C - The Avenue (W)	69.000	19.000	0.000

Proportions

	To			
		A - The Avenue (E)	B - New Link St. (S)	C - The Avenue (W)
From	A - The Avenue (E)	0.00	0.23	0.77
	B - New Link St. (S)	0.59	0.00	0.41
	C - The Avenue (W)	0.78	0.22	0.00

Vehicle Mix

Heavy Vehicle proportion

	To			
		A - The Avenue (E)	B - New Link St. (S)	C - The Avenue (W)
From	A - The Avenue (E)	0	0	0
	B - New Link St. (S)	0	0	0
	C - The Avenue (W)	0	0	0

Average PCU Per Veh

	To			
		A - The Avenue (E)	B - New Link St. (S)	C - The Avenue (W)
From	A - The Avenue (E)	1.000	1.000	1.000
	B - New Link St. (S)	1.000	1.000	1.000
	C - The Avenue (W)	1.000	1.000	1.000

Results

Results Summary for whole modelled period

Arm	Max delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
A - The Avenue (E)	0.00	0.0	A	113.25	169.87
B - New Link St. (S)	8.35	0.2	A	64.12	96.18
C - The Avenue (W)	1.80	0.1	A	79.86	119.79

Main Results for each time segment

Main results: (16:45-17:00)

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Pedestrian demand (Ped/hr)	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
A - The Avenue (E)	95.05	23.76		95.05	84.71	0.0	0.0	0.004	A
B - New Link St. (S)	54.06	13.51	0.00	55.25	36.71	0.0	0.1	7.131	A
C - The Avenue (W)	63.92	15.98	0.00	64.04	92.91	0.0	0.0	1.476	A

Main results: (17:00-17:15)

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Pedestrian demand (Ped/hr)	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
A - The Avenue (E)	114.42	28.60		114.42	101.82	0.0	0.0	0.000	A
B - New Link St. (S)	61.43	15.36	0.00	61.90	44.55	0.1	0.1	7.939	A
C - The Avenue (W)	81.50	20.38	0.00	81.27	111.21	0.0	0.0	1.508	A

Main results: (17:15-17:30)

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Pedestrian demand (Ped/hr)	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
A - The Avenue (E)	134.85	33.71		134.85	126.77	0.0	0.0	0.000	A
B - New Link St. (S)	76.51	19.13	0.00	76.40	50.02	0.1	0.2	8.353	A
C - The Avenue (W)	100.75	25.19	0.00	100.99	135.45	0.0	0.0	1.804	A

Main results: (17:30-17:45)

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Pedestrian demand (Ped/hr)	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
A - The Avenue (E)	131.17	32.79		131.17	120.48	0.0	0.0	0.000	A
B - New Link St. (S)	73.43	18.36	0.00	74.61	50.73	0.2	0.1	7.912	A
C - The Avenue (W)	95.41	23.85	0.00	94.69	129.27	0.0	0.1	1.458	A

Main results: (17:45-18:00)

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Pedestrian demand (Ped/hr)	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
A - The Avenue (E)	110.97	27.74		110.97	92.67	0.0	0.0	0.000	A
B - New Link St. (S)	61.54	15.39	0.00	60.83	40.28	0.1	0.2	7.506	A
C - The Avenue (W)	71.52	17.88	0.00	71.41	110.26	0.1	0.0	1.410	A

Main results: (18:00-18:15)

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Pedestrian demand (Ped/hr)	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
A - The Avenue (E)	93.03	23.26		93.03	87.21	0.0	0.0	0.000	A
B - New Link St. (S)	57.74	14.44	0.00	57.62	33.50	0.2	0.1	6.908	A
C - The Avenue (W)	66.06	16.51	0.00	66.18	96.12	0.0	0.0	1.215	A

Lane Results

Lane Level notation: Lane Level 1 is always closest to the junction.

Lanes: Main Results for each time segment

Main results: (16:45-17:00)

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Pedestrian demand (Ped/hr)	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
A - The Avenue (E)	Entry	1	1	B,C	95.05		95.05	0.0	0.0	0.004	A
	Exit	1	1		84.71		84.71	0.0	0.0	0.000	A
B - New Link St. (S)	Entry	1	1	A,C	54.30		55.25	0.0	0.1	6.613	A
		2	1	(A,C)	54.06	0.00	54.30	0.0	0.0	0.518	A
	Exit	1	1		36.71	0.00	36.71	0.0	0.0	0.000	A
		2	1		36.71		36.71	0.0	0.0	0.000	A
C - The Avenue (W)	Entry	1	1	A,B	63.92		64.04	0.0	0.0	1.232	A
		2	1	(A,B)	63.92	0.00	63.92	0.0	0.0	0.244	A
	Exit	1	1		92.91	0.00	92.91	0.0	0.0	0.056	A
		2	1		92.91		92.91	0.0	0.0	0.000	A

Main results: (17:00-17:15)

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Pedestrian demand (Ped/hr)	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
A - The Avenue (E)	Entry	1	1	B,C	114.42		114.42	0.0	0.0	0.000	A
	Exit	1	1		101.82		101.82	0.0	0.0	0.000	A
B - New Link St. (S)	Entry	1	1	A,C	61.19		61.90	0.1	0.1	6.982	A
		2	1	(A,C)	61.43	0.00	61.19	0.0	0.0	0.947	A
	Exit	1	1		44.55	0.00	44.55	0.0	0.0	0.000	A
		2	1		44.55		44.55	0.0	0.0	0.000	A
C - The Avenue (W)	Entry	1	1	A,B	81.50		81.27	0.0	0.0	1.349	A
		2	1	(A,B)	81.50	0.00	81.50	0.0	0.0	0.159	A
	Exit	1	1		111.21	0.00	111.21	0.0	0.0	0.000	A
		2	1		111.21		111.21	0.0	0.0	0.000	A

Main results: (17:15-17:30)

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Pedestrian demand (Ped/hr)	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
A - The Avenue (E)	Entry	1	1	B,C	134.85		134.85	0.0	0.0	0.000	A
	Exit	1	1		126.77		126.77	0.0	0.0	0.000	A
B - New Link St. (S)	Entry	1	1	A,C	76.51		76.40	0.1	0.2	7.108	A
		2	1	(A,C)	76.51	0.00	76.51	0.0	0.0	1.248	A
	Exit	1	1		50.02	0.00	50.02	0.0	0.0	0.000	A
		2	1		50.02		50.02	0.0	0.0	0.000	A
C - The Avenue (W)	Entry	1	1	A,B	101.23		100.99	0.0	0.0	1.451	A
		2	1	(A,B)	100.75	0.00	101.23	0.0	0.0	0.353	A
	Exit	1	1		135.45	0.00	135.45	0.0	0.0	0.000	A
		2	1		135.45		135.45	0.0	0.0	0.000	A

Main results: (17:30-17:45)

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Pedestrian demand (Ped/hr)	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
A - The Avenue (E)	Entry	1	1	B,C	131.17		131.17	0.0	0.0	0.000	A
	Exit	1	1		120.48		120.48	0.0	0.0	0.000	A
B - New Link St. (S)	Entry	1	1	A,C	73.90		74.61	0.2	0.1	6.762	A
		2	1	(A,C)	73.43	0.00	73.90	0.0	0.0	1.155	A
	Exit	1	1		50.73	0.00	50.73	0.0	0.0	0.000	A
		2	1		50.73		50.73	0.0	0.0	0.000	A
C - The Avenue (W)	Entry	1	1	A,B	95.17		94.69	0.0	0.1	1.250	A
		2	1	(A,B)	95.41	0.00	95.17	0.0	0.0	0.204	A
	Exit	1	1		129.27	0.00	129.27	0.0	0.0	0.000	A
		2	1		129.27		129.27	0.0	0.0	0.000	A

Main results: (17:45-18:00)

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Pedestrian demand (Ped/hr)	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
A - The Avenue (E)	Entry	1	1	B,C	110.97		110.97	0.0	0.0	0.000	A
	Exit	1	1		92.67		92.67	0.0	0.0	0.000	A
B - New Link St. (S)	Entry	1	1	A,C	61.19		60.83	0.1	0.1	6.756	A
		2	1	(A,C)	61.54	0.00	61.19	0.0	0.0	0.748	A
	Exit	1	1		40.28	0.00	40.28	0.0	0.0	0.000	A
		2	1		40.28		40.28	0.0	0.0	0.000	A
C - The Avenue (W)	Entry	1	1	A,B	71.64		71.41	0.1	0.0	1.223	A
		2	1	(A,B)	71.52	0.00	71.64	0.0	0.0	0.192	A
	Exit	1	1		110.26	0.00	110.26	0.0	0.0	0.000	A
		2	1		110.26		110.26	0.0	0.0	0.000	A

Main results: (18:00-18:15)

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Pedestrian demand (Ped/hr)	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
A - The Avenue (E)	Entry	1	1	B,C	93.03		93.03	0.0	0.0	0.000	A
	Exit	1	1		87.21		87.21	0.0	0.0	0.000	A
B - New Link St. (S)	Entry	1	1	A,C	57.86		57.62	0.1	0.1	6.339	A
		2	1	(A,C)	57.74	0.00	57.86	0.0	0.0	0.575	A
	Exit	1	1		33.50	0.00	33.50	0.0	0.0	0.000	A
		2	1		33.50		33.50	0.0	0.0	0.000	A
C - The Avenue (W)	Entry	1	1	A,B	66.30		66.18	0.0	0.0	1.079	A
		2	1	(A,B)	66.06	0.00	66.30	0.0	0.0	0.136	A
	Exit	1	1		96.12	0.00	96.12	0.0	0.0	0.000	A
		2	1		96.12		96.12	0.0	0.0	0.000	A

Do-Something - DS 2038, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Lane Simulation	A1 - Do-Something [Lane Simulation]	This analysis set uses Lane Simulation mode. This is provided as an investigative tool and the user should apply judgement when interpreting the results.
Warning	Pedestrian Crossing	B - New Link St. (S) - Pedestrian crossing	Pedestrian crossing uses default flow of 0. Is this correct?
Warning	Pedestrian Crossing	C - The Avenue (W) - Pedestrian crossing	Pedestrian crossing uses default flow of 0. Is this correct?

Analysis Set Details

ID	Name	Use Lane Simulation	Include in report	Use specific Demand Set(s)	Specific Demand Set (s)	Network flow scaling factor (%)	Network capacity scaling factor (%)
A1	Do-Something	✓	✓	✓	D1,D2,D3,D4,D5,D6	100.000	100.000

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
1 - New Link St. / The Avenue Junction	New Link St. / The Avenue Junction	T-Junction	Two-way	1.41	A

Junction Network Options

[same as above]

Arms

Arms

[same as above]

Major Arm Geometry

[same as above]

Minor Arm Geometry

[same as above]

Pedestrian Crossings

Arm	Crossing type	Average pedestrian flow (Ped/hr)
A - The Avenue (E)	None	
B - New Link St. (S)	Zebra	0.00
C - The Avenue (W)	Pelican	0.00

Zebra Crossings

Arm	Space between crossing and junction entry (Left) (PCU)	Vehicles queueing on exit (Zebra) (PCU)	Central Refuge	Crossing data type	Crossing length (m)	Crossing time (s)
B - New Link St. (S)	1.00	1.00		Distance	6.00	4.29

Pelican/Puffin Crossings

Arm	Space between crossing and junction entry (Signalised) (PCU)	Vehicles queueing on exit (Signalised) (PCU)	Amber time preceding red (s)	Amber time regarded as green (s)	Time from traffic red start to green man start (s)	Time period green man shown (s)	Clearance Period (s)	Traffic minimum green (s)
C - The Avenue (W)	1.00	1.00	3.00	2.90	1.00	8.00	6.00	7.00

Slope / Intercept / Capacity

[same as above]

Lanes

[same as above]

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Model start time (HH:mm)	Model finish time (HH:mm)	Time segment length (min)	Run automatically
D5	DS 2038	AM	ONE-HOUR	07:30	09:00	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 - The Avenue (E)		ONE-HOUR	✓	362.00	100.000
B - New Link St. (S)		ONE-HOUR	✓	70.00	100.000
C - The Avenue (W)		ONE-HOUR	✓	293.00	100.000

Demand overview (Pedestrians)

Arm	Profile type	Average pedestrian flow (Ped/hr)
A - The Avenue (E)		
B - New Link St. (S)	Global	0.00
C - The Avenue (W)	Global	0.00

Origin-Destination Data

Demand (PCU/hr)

	To			
		A - The Avenue (E)	B - New Link St. (S)	C - The Avenue (W)
From	A - The Avenue (E)	0.000	79.000	283.000
	B - New Link St. (S)	63.000	0.000	7.000
	C - The Avenue (W)	272.000	21.000	0.000

Proportions

	To			
		A - The Avenue (E)	B - New Link St. (S)	C - The Avenue (W)
From	A - The Avenue (E)	0.00	0.22	0.78
	B - New Link St. (S)	0.90	0.00	0.10
	C - The Avenue (W)	0.93	0.07	0.00

Vehicle Mix

Heavy Vehicle proportion

	To			
		A - The Avenue (E)	B - New Link St. (S)	C - The Avenue (W)
From	A - The Avenue (E)	0	0	0
	B - New Link St. (S)	0	0	0
	C - The Avenue (W)	0	0	0

Average PCU Per Veh

	To			
		A - The Avenue (E)	B - New Link St. (S)	C - The Avenue (W)
From	A - The Avenue (E)	1.000	1.000	1.000
	B - New Link St. (S)	1.000	1.000	1.000
	C - The Avenue (W)	1.000	1.000	1.000

Results

Results Summary for whole modelled period

Arm	Max delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
A - The Avenue (E)	0.01	0.0	A	328.53	492.80
B - New Link St. (S)	11.11	0.3	B	64.22	96.33
C - The Avenue (W)	0.80	0.1	A	270.06	405.09

Main Results for each time segment

Main results: (07:30-07:45)

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Pedestrian demand (Ped/hr)	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
A - The Avenue (E)	275.17	68.79		275.17	249.03	0.0	0.0	0.010	A
B - New Link St. (S)	52.63	13.16	0.00	52.51	76.99	0.0	0.1	9.706	A
C - The Avenue (W)	216.36	54.09	0.00	216.59	218.26	0.0	0.0	0.740	A

Main results: (07:45-08:00)

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Pedestrian demand (Ped/hr)	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
A - The Avenue (E)	319.84	79.96		319.84	300.24	0.0	0.0	0.000	A
B - New Link St. (S)	64.51	16.13	0.00	63.92	92.91	0.1	0.2	10.051	B
C - The Avenue (W)	264.00	66.00	0.00	264.12	254.73	0.0	0.0	0.802	A

Main results: (08:00-08:15)

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Pedestrian demand (Ped/hr)	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
A - The Avenue (E)	385.54	96.39		385.54	373.54	0.0	0.0	0.000	A
B - New Link St. (S)	77.94	19.49	0.00	79.13	111.80	0.2	0.3	11.105	B
C - The Avenue (W)	331.01	82.75	0.00	329.94	309.27	0.0	0.1	0.743	A

Main results: (08:15-08:30)

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Pedestrian demand (Ped/hr)	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
A - The Avenue (E)	394.93	98.73		394.93	374.50	0.0	0.0	0.000	A
B - New Link St. (S)	73.19	18.30	0.00	74.61	112.63	0.3	0.1	11.003	B
C - The Avenue (W)	327.33	81.83	0.00	328.04	310.46	0.1	0.1	0.794	A

Main results: (08:30-08:45)

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Pedestrian demand (Ped/hr)	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
A - The Avenue (E)	327.21	81.80		327.21	298.10	0.0	0.0	0.000	A
B - New Link St. (S)	66.53	16.63	0.00	66.89	92.08	0.1	0.2	10.196	B
C - The Avenue (W)	257.58	64.40	0.00	257.94	261.86	0.1	0.0	0.731	A

Main results: (08:45-09:00)

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Pedestrian demand (Ped/hr)	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
A - The Avenue (E)	268.51	67.13		268.51	250.93	0.0	0.0	0.000	A
B - New Link St. (S)	50.50	12.62	0.00	50.02	78.53	0.2	0.2	8.929	A
C - The Avenue (W)	224.08	56.02	0.00	223.96	213.03	0.0	0.0	0.635	A

Lane Results

Lane Level notation: Lane Level 1 is always closest to the junction.

Lanes: Main Results for each time segment

Main results: (07:30-07:45)

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Pedestrian demand (Ped/hr)	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
A - The Avenue (E)	Entry	1	1	B,C	275.17		275.17	0.0	0.0	0.010	A
	Exit	1	1		249.03		249.03	0.0	0.0	0.000	A
B - New Link St. (S)	Entry	1	1	A,C	52.63		52.51	0.0	0.1	8.435	A
		2	1	(A,C)	52.63	0.00	52.63	0.0	0.0	1.272	A
	Exit	1	1		76.99	0.00	76.99	0.0	0.0	0.000	A
		2	1		76.99		76.99	0.0	0.0	0.000	A
C - The Avenue (W)	Entry	1	1	A,B	216.36		216.59	0.0	0.0	0.480	A
		2	1	(A,B)	216.36	0.00	216.36	0.0	0.0	0.260	A
	Exit	1	1		218.26	0.00	218.26	0.0	0.0	0.040	A
		2	1		218.26		218.26	0.0	0.0	0.000	A

Main results: (07:45-08:00)

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Pedestrian demand (Ped/hr)	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
A - The Avenue (E)	Entry	1	1	B,C	319.84		319.84	0.0	0.0	0.000	A
	Exit	1	1		300.24		300.24	0.0	0.0	0.000	A
B - New Link St. (S)	Entry	1	1	A,C	64.75		63.92	0.1	0.2	8.580	A
		2	1	(A,C)	64.51	0.00	64.75	0.0	0.0	1.471	A
	Exit	1	1		92.91	0.00	92.91	0.0	0.0	0.000	A
		2	1		92.91		92.91	0.0	0.0	0.000	A
C - The Avenue (W)	Entry	1	1	A,B	264.00		264.12	0.0	0.0	0.509	A
		2	1	(A,B)	264.00	0.00	264.00	0.0	0.0	0.293	A
	Exit	1	1		254.73	0.00	254.73	0.0	0.0	0.000	A
		2	1		254.73		254.73	0.0	0.0	0.000	A

Main results: (08:00-08:15)

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Pedestrian demand (Ped/hr)	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
A - The Avenue (E)	Entry	1	1	B,C	385.54		385.54	0.0	0.0	0.000	A
	Exit	1	1		373.54		373.54	0.0	0.0	0.000	A
B - New Link St. (S)	Entry	1	1	A,C	78.06		79.13	0.2	0.2	8.918	A
		2	1	(A,C)	77.94	0.00	78.06	0.0	0.1	2.185	A
	Exit	1	1		111.80	0.00	111.80	0.0	0.0	0.000	A
		2	1		111.80		111.80	0.0	0.0	0.000	A
C - The Avenue (W)	Entry	1	1	A,B	330.42		329.94	0.0	0.0	0.462	A
		2	1	(A,B)	331.01	0.00	330.42	0.0	0.0	0.281	A
	Exit	1	1		309.27	0.00	309.27	0.0	0.0	0.000	A
		2	1		309.27		309.27	0.0	0.0	0.000	A

Main results: (08:15-08:30)

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Pedestrian demand (Ped/hr)	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
A - The Avenue (E)	Entry	1	1	B,C	394.93		394.93	0.0	0.0	0.000	A
	Exit	1	1		374.50		374.50	0.0	0.0	0.000	A
B - New Link St. (S)	Entry	1	1	A,C	73.54		74.61	0.2	0.1	8.945	A
		2	1	(A,C)	73.19	0.00	73.54	0.1	0.0	2.068	A
	Exit	1	1		112.63	0.00	112.63	0.0	0.0	0.000	A
		2	1		112.63		112.63	0.0	0.0	0.000	A
C - The Avenue (W)	Entry	1	1	A,B	327.56		328.04	0.0	0.0	0.493	A
		2	1	(A,B)	327.33	0.00	327.56	0.0	0.0	0.301	A
	Exit	1	1		310.46	0.00	310.46	0.0	0.0	0.000	A
		2	1		310.46		310.46	0.0	0.0	0.000	A

Main results: (08:30-08:45)

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Pedestrian demand (Ped/hr)	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
A - The Avenue (E)	Entry	1	1	B,C	327.21		327.21	0.0	0.0	0.000	A
	Exit	1	1		298.10		298.10	0.0	0.0	0.000	A
B - New Link St. (S)	Entry	1	1	A,C	66.42		66.89	0.1	0.2	8.465	A
		2	1	(A,C)	66.53	0.00	66.42	0.0	0.0	1.727	A
	Exit	1	1		92.08	0.00	92.08	0.0	0.0	0.000	A
		2	1		92.08		92.08	0.0	0.0	0.000	A
C - The Avenue (W)	Entry	1	1	A,B	257.70		257.94	0.0	0.0	0.494	A
		2	1	(A,B)	257.58	0.00	257.70	0.0	0.0	0.237	A
	Exit	1	1		261.86	0.00	261.86	0.0	0.0	0.000	A
		2	1		261.86		261.86	0.0	0.0	0.000	A

Main results: (08:45-09:00)

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Pedestrian demand (Ped/hr)	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
A - The Avenue (E)	Entry	1	1	B,C	268.51		268.51	0.0	0.0	0.000	A
	Exit	1	1		250.93		250.93	0.0	0.0	0.000	A
B - New Link St. (S)	Entry	1	1	A,C	50.50		50.02	0.2	0.1	7.913	A
		2	1	(A,C)	50.50	0.00	50.50	0.0	0.0	1.008	A
	Exit	1	1		78.53	0.00	78.53	0.0	0.0	0.000	A
		2	1		78.53		78.53	0.0	0.0	0.000	A
C - The Avenue (W)	Entry	1	1	A,B	223.96		223.96	0.0	0.0	0.454	A
		2	1	(A,B)	224.08	0.00	223.96	0.0	0.0	0.180	A
	Exit	1	1		213.03	0.00	213.03	0.0	0.0	0.000	A
		2	1		213.03		213.03	0.0	0.0	0.000	A

Do-Something - DS 2038, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Lane Simulation	A1 - Do-Something [Lane Simulation]	This analysis set uses Lane Simulation mode. This is provided as an investigative tool and the user should apply judgement when interpreting the results.

Analysis Set Details

ID	Name	Use Lane Simulation	Include in report	Use specific Demand Set(s)	Specific Demand Set (s)	Network flow scaling factor (%)	Network capacity scaling factor (%)
A1	Do-Something	✓	✓	✓	D1,D2,D3,D4,D5,D6	100.000	100.000

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
1 - New Link St. / The Avenue Junction	New Link St. / The Avenue Junction	T-Junction	Two-way	3.66	A

Junction Network Options

[same as above]

Arms

Arms

[same as above]

Major Arm Geometry

[same as above]

Minor Arm Geometry

[same as above]

Pedestrian Crossings

Arm	Crossing type	Average pedestrian flow (Ped/hr)
A - The Avenue (E)	None	
B - New Link St. (S)	Zebra	200.00
C - The Avenue (W)	Pelican	200.00

Zebra Crossings

Arm	Space between crossing and junction entry (Left) (PCU)	Vehicles queueing on exit (Zebra) (PCU)	Central Refuge	Crossing data type	Crossing length (m)	Crossing time (s)
B - New Link St. (S)	1.00	1.00		Distance	6.00	4.29

Pelican/Puffin Crossings

Arm	Space between crossing and junction entry (Signalised) (PCU)	Vehicles queueing on exit (Signalised) (PCU)	Amber time preceding red (s)	Amber time regarded as green (s)	Time from traffic red start to green man start (s)	Time period green man shown (s)	Clearance Period (s)	Traffic minimum green (s)
C - The Avenue (W)	1.00	1.00	3.00	2.90	1.00	8.00	6.00	7.00

Slope / Intercept / Capacity

[same as above]

Lanes

[same as above]

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Model start time (HH:mm)	Model finish time (HH:mm)	Time segment length (min)	Run automatically
D6	DS 2038	PM	ONE HOUR	16:45	18:15	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A - The Avenue (E)		ONE HOUR	✓	125.00	100.000
B - New Link St. (S)		ONE HOUR	✓	71.00	100.000
C - The Avenue (W)		ONE HOUR	✓	89.00	100.000

Demand overview (Pedestrians)

Arm	Profile type	Average pedestrian flow (Ped/hr)
A - The Avenue (E)		
B - New Link St. (S)	Global	200.00
C - The Avenue (W)	Global	200.00

Origin-Destination Data

Demand (PCU/hr)

	To			
		A - The Avenue (E)	B - New Link St. (S)	C - The Avenue (W)
	From			
	A - The Avenue (E)	0.000	28.000	97.000
	B - New Link St. (S)	42.000	0.000	29.000
	C - The Avenue (W)	70.000	19.000	0.000

Proportions

	To			
		A - The Avenue (E)	B - New Link St. (S)	C - The Avenue (W)
	From			
	A - The Avenue (E)	0.00	0.22	0.78
	B - New Link St. (S)	0.59	0.00	0.41
	C - The Avenue (W)	0.79	0.21	0.00

Vehicle Mix

Heavy Vehicle proportion

	To			
		A - The Avenue (E)	B - New Link St. (S)	C - The Avenue (W)
	From			
	A - The Avenue (E)	0	0	0
	B - New Link St. (S)	0	0	0
	C - The Avenue (W)	0	0	0

Average PCU Per Veh

	To			
		A - The Avenue (E)	B - New Link St. (S)	C - The Avenue (W)
	From			
	A - The Avenue (E)	1.000	1.000	1.000
	B - New Link St. (S)	1.000	1.000	1.000
	C - The Avenue (W)	1.000	1.000	1.000

Results

Results Summary for whole modelled period

Arm	Max delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
A - The Avenue (E)	0.31	0.0	A	114.48	171.71
B - New Link St. (S)	9.19	0.3	A	64.08	96.12
C - The Avenue (W)	4.02	0.2	A	80.65	120.98

Main Results for each time segment

Main results: (16:45-17:00)

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Pedestrian demand (Ped/hr)	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
A - The Avenue (E)	94.10	23.52		94.10	81.03	0.0	0.0	0.142	A
B - New Link St. (S)	49.31	12.33	150.57	48.83	32.67	0.0	0.1	7.797	A
C - The Avenue (W)	65.35	16.34	150.57	65.11	94.34	0.0	0.0	3.279	A

Main results: (17:00-17:15)

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Pedestrian demand (Ped/hr)	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
A - The Avenue (E)	111.45	27.86		111.45	97.31	0.0	0.0	0.220	A
B - New Link St. (S)	60.71	15.18	179.80	60.12	41.70	0.1	0.2	7.986	A
C - The Avenue (W)	81.74	20.44	179.80	81.62	114.42	0.0	0.1	3.488	A

Main results: (17:15-17:30)

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Pedestrian demand (Ped/hr)	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
A - The Avenue (E)	131.64	32.91		131.64	122.97	0.0	0.0	0.312	A
B - New Link St. (S)	74.73	18.68	220.20	73.78	50.02	0.2	0.3	8.232	A
C - The Avenue (W)	101.35	25.34	220.20	101.11	133.54	0.1	0.2	3.979	A

Main results: (17:30-17:45)

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Pedestrian demand (Ped/hr)	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
A - The Avenue (E)	134.02	33.50		134.14	124.87	0.0	0.0	0.314	A
B - New Link St. (S)	80.91	20.23	220.20	80.55	50.61	0.3	0.2	9.194	A
C - The Avenue (W)	97.54	24.39	220.20	96.95	135.56	0.2	0.2	4.022	A

Main results: (17:45-18:00)

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Pedestrian demand (Ped/hr)	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
A - The Avenue (E)	110.85	27.71		110.97	101.11	0.0	0.0	0.196	A
B - New Link St. (S)	67.25	16.81	179.80	66.89	39.80	0.2	0.1	8.386	A
C - The Avenue (W)	75.68	18.92	179.80	75.68	112.87	0.2	0.1	3.776	A

Main results: (18:00-18:15)

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Pedestrian demand (Ped/hr)	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
A - The Avenue (E)	104.79	26.20		104.79	78.65	0.0	0.0	0.182	A
B - New Link St. (S)	51.56	12.89	150.57	51.56	33.86	0.1	0.1	7.221	A
C - The Avenue (W)	62.26	15.56	150.57	62.02	105.62	0.1	0.1	3.104	A

Lane Results

Lane Level notation: Lane Level 1 is always closest to the junction.

Lanes: Main Results for each time segment

Main results: (16:45-17:00)

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Pedestrian demand (Ped/hr)	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
A - The Avenue (E)	Entry	1	1	B,C	94.10		94.10	0.0	0.0	0.142	A
	Exit	1	1		81.03		81.03	0.0	0.0	0.000	A
B - New Link St. (S)	Entry	1	1	A,C	49.07		48.83	0.0	0.1	6.821	A
		2	1	(A,C)	49.31	150.57	49.07	0.0	0.0	0.974	A
	Exit	1	1		32.67	150.57	32.67	0.0	0.0	0.222	A
		2	1		32.67		32.67	0.0	0.0	0.000	A
C - The Avenue (W)	Entry	1	1	A,B	65.35		65.11	0.0	0.0	1.345	A
		2	1	(A,B)	65.35	150.57	65.35	0.0	0.0	1.937	A
	Exit	1	1		94.34	150.57	94.34	0.0	0.0	1.435	A
		2	1		94.34		94.34	0.0	0.0	0.000	A

Main results: (17:00-17:15)

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Pedestrian demand (Ped/hr)	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
A - The Avenue (E)	Entry	1	1	B,C	111.45		111.45	0.0	0.0	0.220	A
	Exit	1	1		97.31		97.31	0.0	0.0	0.000	A
B - New Link St. (S)	Entry	1	1	A,C	60.71		60.12	0.1	0.2	6.886	A
		2	1	(A,C)	60.71	179.80	60.71	0.0	0.0	1.102	A
	Exit	1	1		41.70	179.80	41.70	0.0	0.0	0.267	A
		2	1		41.70		41.70	0.0	0.0	0.000	A
C - The Avenue (W)	Entry	1	1	A,B	81.74		81.62	0.0	0.0	1.344	A
		2	1	(A,B)	81.74	179.80	81.74	0.0	0.1	2.146	A
	Exit	1	1		114.18	179.80	114.42	0.0	0.0	1.668	A
		2	1		114.42		114.42	0.0	0.0	0.000	A

Main results: (17:15-17:30)

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Pedestrian demand (Ped/hr)	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
A - The Avenue (E)	Entry	1	1	B,C	131.64		131.64	0.0	0.0	0.312	A
	Exit	1	1		122.97		122.97	0.0	0.0	0.000	A
B - New Link St. (S)	Entry	1	1	A,C	74.61		73.78	0.2	0.2	6.987	A
		2	1	(A,C)	74.73	220.20	74.61	0.0	0.0	1.248	A
	Exit	1	1		49.90	220.20	50.02	0.0	0.0	0.290	A
		2	1		50.02		50.02	0.0	0.0	0.000	A
C - The Avenue (W)	Entry	1	1	A,B	100.75		101.11	0.0	0.0	1.324	A
		2	1	(A,B)	101.35	220.20	100.75	0.1	0.1	2.658	A
	Exit	1	1		133.66	220.20	133.54	0.0	0.1	1.969	A
		2	1		133.54		133.54	0.0	0.0	0.000	A

Main results: (17:30-17:45)

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Pedestrian demand (Ped/hr)	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
A - The Avenue (E)	Entry	1	1	B,C	134.02		134.14	0.0	0.0	0.314	A
	Exit	1	1		124.87		124.87	0.0	0.0	0.000	A
B - New Link St. (S)	Entry	1	1	A,C	80.44		80.55	0.2	0.1	7.215	A
		2	1	(A,C)	80.91	220.20	80.44	0.0	0.1	1.979	A
	Exit	1	1		50.61	220.20	50.61	0.0	0.0	0.235	A
		2	1		50.61		50.61	0.0	0.0	0.000	A
C - The Avenue (W)	Entry	1	1	A,B	97.43		96.95	0.0	0.0	1.228	A
		2	1	(A,B)	97.54	220.20	97.43	0.1	0.1	2.792	A
	Exit	1	1		136.16	220.20	135.56	0.1	0.1	1.991	A
		2	1		135.56		135.56	0.0	0.0	0.000	A

Main results: (17:45-18:00)

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Pedestrian demand (Ped/hr)	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
A - The Avenue (E)	Entry	1	1	B,C	110.85		110.97	0.0	0.0	0.196	A
	Exit	1	1		101.11		101.11	0.0	0.0	0.000	A
B - New Link St. (S)	Entry	1	1	A,C	67.13		66.89	0.1	0.1	7.029	A
		2	1	(A,C)	67.25	179.80	67.13	0.1	0.0	1.350	A
	Exit	1	1		39.80	179.80	39.80	0.0	0.0	0.221	A
		2	1		39.80		39.80	0.0	0.0	0.000	A
C - The Avenue (W)	Entry	1	1	A,B	76.16		75.68	0.0	0.1	1.402	A
		2	1	(A,B)	75.68	179.80	76.16	0.1	0.0	2.369	A
	Exit	1	1		112.63	179.80	112.87	0.1	0.1	1.798	A
		2	1		112.87		112.87	0.0	0.0	0.000	A

Main results: (18:00-18:15)

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Pedestrian demand (Ped/hr)	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
A - The Avenue (E)	Entry	1	1	B,C	104.79		104.79	0.0	0.0	0.182	A
	Exit	1	1		78.65		78.65	0.0	0.0	0.000	A
B - New Link St. (S)	Entry	1	1	A,C	51.68		51.56	0.1	0.1	6.491	A
		2	1	(A,C)	51.56	150.57	51.68	0.0	0.0	0.735	A
	Exit	1	1		33.86	150.57	33.86	0.0	0.0	0.196	A
		2	1		33.86		33.86	0.0	0.0	0.000	A
C - The Avenue (W)	Entry	1	1	A,B	62.38		62.02	0.1	0.0	1.221	A
		2	1	(A,B)	62.26	150.57	62.38	0.0	0.0	1.883	A
	Exit	1	1		105.86	150.57	105.62	0.1	0.1	1.572	A
		2	1		105.62		105.62	0.0	0.0	0.000	A

APPENDIX D

ARCADY Output Files

Junctions 9
ARCADY 9 - Roundabout Module
Version: 9.0.0.4211 [] © Copyright TRL Limited, 2021
For sales and distribution information, program advice and maintenance, contact TRL: Tel: +44 (0)1344 770758 email: software@trl.co.uk Web: http://www.trlsoftware.co.uk
The users of this computer program for the solution of an engineering problem are in no way relieved of their responsibility for the correctness of the solution

Filename: Boulevard - Park Boulevard Roundabout.j9
Path: G:\2017\p170182\calcs\arcady\October 2021 Update
Report generation date: 02/11/2021 10:39:07

»Do-Nothing - DN 2023, AM
 »Do-Nothing - DN 2023, PM
 »Do-Nothing - DN 2028, AM
 »Do-Nothing - DN 2028, PM
 »Do-Nothing - DN 2038, AM
 »Do-Nothing - DN 2038, PM
 »Do-Something - DS 2023, AM
 »Do-Something - DS 2023, PM
 »Do-Something - DS 2028, AM
 »Do-Something - DS 2028, PM
 »Do-Something - DS 2038, AM
 »Do-Something - DS 2038, PM

Junctions 9
ARCADY 9 - Roundabout Module
Version: 9.0.0.4211 [] © Copyright TRL Limited, 2021
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The users of this computer program for the solution of an engineering problem are in no way relieved of their responsibility for the correctness of the solution

Filename: Hollywood Drive Roundabout (Do-Something SA).j9
Path: G:\2017\p170182\calcs\arcady\October 2021 Update\Sensitivity Analysis
Report generation date: 09/11/2021 11:31:33

»Do-Something SA - DS 2023, AM
 »Do-Something SA - DS 2023, PM
 »Do-Something SA - DS 2028, AM
 »Do-Something SA - DS 2028, PM
 »Do-Something SA - DS 2038, AM
 »Do-Something SA - DS 2038, PM

Summary of junction performance

	AM				PM			
	Queue (PCU)	Delay (s)	RFC	LOS	Queue (PCU)	Delay (s)	RFC	LOS
Do-Something SA - DS 2023								
1 - Hollywood Drive (S)	0.6	6.34	0.39	A	0.1	3.93	0.08	A
2 - Hollywood Drive (W)	0.3	4.08	0.21	A	0.0	3.17	0.04	A
3 - Hollywood Drive (N) - New Link	0.1	5.31	0.05	A	0.1	4.60	0.05	A
Do-Something SA - DS 2028								
1 - Hollywood Drive (S)	0.9	6.99	0.48	A	0.1	4.12	0.12	A
2 - Hollywood Drive (W)	0.4	4.19	0.26	A	0.1	3.27	0.05	A
3 - Hollywood Drive (N) - New Link	0.2	5.98	0.16	A	0.1	4.76	0.08	A
Do-Something SA - DS 2038								
1 - Hollywood Drive (S)	1.0	7.31	0.50	A	0.1	4.13	0.13	A
2 - Hollywood Drive (W)	0.4	4.27	0.27	A	0.1	3.28	0.05	A
3 - Hollywood Drive (N) - New Link	0.2	6.04	0.17	A	0.1	4.76	0.08	A

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

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

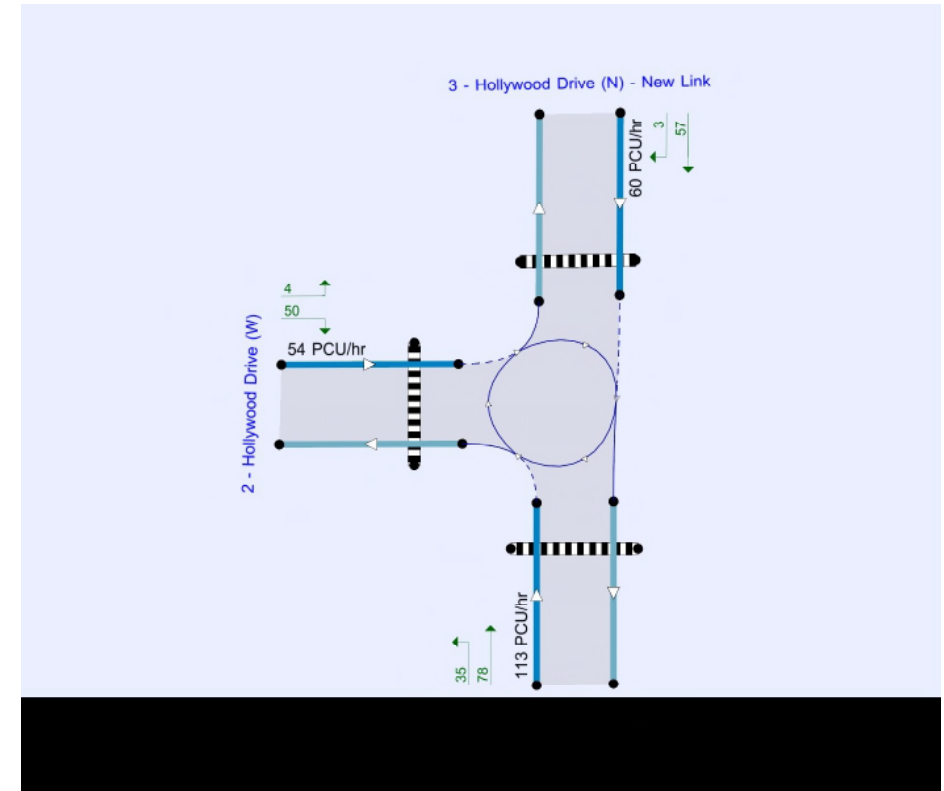
File summary

File Description

Title	Hollystown-Kilmartin
Location	Hollystown, Dublin 15
Site number	
Date	26/10/2021
Version	
Status	Existing w/ Proposed Link
Identifier	
Client	Glenveagh
Jobnumber	170182
Enumerator	HEADOFFICE"gid
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

Scenario name	Time Period name	Traffic profile type	Model start time (HH:mm)	Model finish time (HH:mm)	Time segment length (min)	Run automatically
DS 2023	AM	ONE HOUR	07:30	09:00	15	✓
DS 2023	PM	ONE HOUR	16:45	18:15	15	✓
DS 2028	AM	ONE HOUR	07:30	09:00	15	✓
DS 2028	PM	ONE HOUR	16:45	18:15	15	✓
DS 2038	AM	ONE HOUR	07:30	09:00	15	✓
DS 2038	PM	ONE HOUR	16:45	18:15	15	✓

Do-Something SA - DS 2023, AM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

ID	Name	Include in report	Use specific Demand Set (s)	Specific Demand Set (s)	Network flow scaling factor (%)	Network capacity scaling factor (%)
A1	Do-Something SA	✓	✓	D1,D2,D3,D4,D5,D6	100.000	100.000

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (s)	Junction LOS
1 - Hollywood Drive Roundabout w/ New Link	Hollywood Drive Roundabout w/ New Link	Standard Roundabout	1,2,3	5.45	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Name	Description
1	Hollywood Drive (S)	
2	Hollywood Drive (W)	
3	Hollywood Drive (N) - New Link	

Capacity Options

Arm	Minimum capacity (PCU/hr)	Maximum capacity (PCU/hr)	Assume flat start profile	Initial queue (PCU)
1 - Hollywood Drive (S)	0.00	99999.00		0.00
2 - Hollywood Drive (W)	0.00	99999.00		0.00
3 - Hollywood Drive (N) - New Link	0.00	99999.00		0.00

Roundabout Geometry

Arm	V - Approach road half-width (m)	E - Entry width (m)	I' - Effective flare length (m)	R - Entry radius (m)	D - Inscribed circle diameter (m)	PHI - Conflict (entry) angle (deg)	Exit only
1 - Hollywood Drive (S)	3.00	3.90	1.0	9.6	27.6	9.5	
2 - Hollywood Drive (W)	3.00	4.30	9.9	9.3	27.6	9.0	
3 - Hollywood Drive (N) - New Link	3.00	3.90	1.0	9.6	27.6	54.0	

Pedestrian Crossings

Arm	Crossing type	Average pedestrian flow (Ped/hr)
1 - Hollywood Drive (S)	Zebra	200.00
2 - Hollywood Drive (W)	Zebra	200.00
3 - Hollywood Drive (N) - New Link	Zebra	200.00

Zebra Crossings

Arm	Space between crossing and junction entry (Zebra) (PCU)	Vehicles queueing on exit (Zebra) (PCU)	Central Refuge	Crossing data type	Crossing length (m)	Crossing time (s)
1 - Hollywood Drive (S)	1.00	1.00		Distance	7.40	5.29
2 - Hollywood Drive (W)	1.00	1.00		Distance	8.10	5.79
3 - Hollywood Drive (N) - New Link	1.00	1.00		Distance	7.40	5.29

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Arm	Final slope	Final intercept (PCU/hr)
1 - Hollywood Drive (S)	0.521	997.067
2 - Hollywood Drive (W)	0.563	1205.111
3 - Hollywood Drive (N) - New Link	0.442	845.851

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

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Model start time (HH:mm)	Model finish time (HH:mm)	Time segment length (min)	Run automatically
D1	DS 2023	AM	ONE HOUR	07:30	09:00	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 (%)
1 - Hollywood Drive (S)		ONE HOUR	✓	328.00	100.000
2 - Hollywood Drive (W)		ONE HOUR	✓	209.00	100.000
3 - Hollywood Drive (N) - New Link		ONE HOUR	✓	33.00	100.000

Demand overview (Pedestrians)

Arm	Profile type	Average pedestrian flow (Ped/hr)
1 - Hollywood Drive (S)	Global	200.00
2 - Hollywood Drive (W)	Global	200.00
3 - Hollywood Drive (N) - New Link	Global	200.00

Origin-Destination Data

Demand (PCU/hr)

	To			
		1 - Hollywood Drive (S)	2 - Hollywood Drive (W)	3 - Hollywood Drive (N) - New Link
From	1 - Hollywood Drive (S)	0.000	290.000	38.000
	2 - Hollywood Drive (W)	209.000	0.000	0.000
	3 - Hollywood Drive (N) - New Link	33.000	0.000	0.000

Proportions

	To			
		1 - Hollywood Drive (S)	2 - Hollywood Drive (W)	3 - Hollywood Drive (N) - New Link
From	1 - Hollywood Drive (S)	0.00	0.88	0.12
	2 - Hollywood Drive (W)	1.00	0.00	0.00
	3 - Hollywood Drive (N) - New Link	1.00	0.00	0.00

Vehicle Mix

Heavy Vehicle proportion

	To			
		1 - Hollywood Drive (S)	2 - Hollywood Drive (W)	3 - Hollywood Drive (N) - New Link
From	1 - Hollywood Drive (S)	0	0	0
	2 - Hollywood Drive (W)	0	0	0
	3 - Hollywood Drive (N) - New Link	0	0	0

Average PCU Per Veh

	To			
		1 - Hollywood Drive (S)	2 - Hollywood Drive (W)	3 - Hollywood Drive (N) - New Link
From	1 - Hollywood Drive (S)	1.000	1.000	1.000
	2 - Hollywood Drive (W)	1.000	1.000	1.000
	3 - Hollywood Drive (N) - New Link	1.000	1.000	1.000

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
1 - Hollywood Drive (S)	0.39	6.34	0.6	A	300.98	451.47
2 - Hollywood Drive (W)	0.21	4.08	0.3	A	191.78	287.67
3 - Hollywood Drive (N) - New Link	0.05	5.31	0.1	A	30.28	45.42

Main Results for each time segment

Main results: (07:30-07:45)

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
1 - Hollywood Drive (S)	246.94	61.73	0.00	150.57	964.44	0.256	245.57	181.43	0.0	0.3	4.999	A
2 - Hollywood Drive (W)	157.35	39.34	28.45	150.57	1151.25	0.137	156.72	217.12	0.0	0.2	3.618	A
3 - Hollywood Drive (N) - New Link	24.84	6.21	156.72	150.57	761.18	0.033	24.71	28.45	0.0	0.0	4.888	A

Main results: (07:45-08:00)

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
1 - Hollywood Drive (S)	294.87	73.72	0.00	179.80	950.92	0.310	294.45	217.36	0.3	0.4	5.480	A
2 - Hollywood Drive (W)	187.89	46.97	34.11	179.80	1135.45	0.165	187.73	260.34	0.2	0.2	3.798	A
3 - Hollywood Drive (N) - New Link	29.67	7.42	187.73	179.80	741.77	0.040	29.63	34.11	0.0	0.0	5.054	A

Main results: (08:00-08:15)

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
1 - Hollywood Drive (S)	361.13	90.28	0.00	220.20	928.89	0.389	360.40	266.15	0.4	0.6	6.325	A
2 - Hollywood Drive (W)	230.11	57.53	41.75	220.20	1112.49	0.207	229.87	318.65	0.2	0.3	4.077	A
3 - Hollywood Drive (N) - New Link	36.33	9.08	229.87	220.20	714.23	0.051	36.29	41.75	0.0	0.1	5.310	A

Main results: (08:15-08:30)

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
1 - Hollywood Drive (S)	361.13	90.28	0.00	220.20	928.76	0.389	361.12	266.44	0.6	0.6	6.341	A
2 - Hollywood Drive (W)	230.11	57.53	41.84	220.20	1112.45	0.207	230.11	319.28	0.3	0.3	4.079	A
3 - Hollywood Drive (N) - New Link	36.33	9.08	230.11	220.20	714.09	0.051	36.33	41.84	0.1	0.1	5.311	A

Main results: (08:30-08:45)

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
1 - Hollywood Drive (S)	294.87	73.72	0.00	179.80	950.76	0.310	295.58	217.84	0.6	0.5	5.500	A
2 - Hollywood Drive (W)	187.89	46.97	34.24	179.80	1135.39	0.165	188.13	261.34	0.3	0.2	3.803	A
3 - Hollywood Drive (N) - New Link	29.67	7.42	188.13	179.80	741.57	0.040	29.71	34.24	0.1	0.0	5.057	A

Main results: (08:45-09:00)

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Pedestrian demand (Pedi/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
1 - Hollywood Drive (S)	246.94	61.73	0.00	150.57	964.25	0.256	247.36	182.38	0.5	0.3	5.026	A
2 - Hollywood Drive (W)	157.35	39.34	28.66	150.57	1151.14	0.137	157.51	218.70	0.2	0.2	3.625	A
3 - Hollywood Drive (N) - New Link	24.84	6.21	157.51	150.57	760.79	0.033	24.88	28.66	0.0	0.0	4.893	A

Do-Something SA - DS 2023, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Pedestrian Crossing	1 - Hollywood Drive (S) - Pedestrian crossing	Pedestrian crossing uses default flow of 0. Is this correct?
Warning	Pedestrian Crossing	2 - Hollywood Drive (W) - Pedestrian crossing	Pedestrian crossing uses default flow of 0. Is this correct?
Warning	Pedestrian Crossing	3 - Hollywood Drive (N) - New Link - Pedestrian crossing	Pedestrian crossing uses default flow of 0. Is this correct?

Analysis Set Details

ID	Name	Include in report	Use specific Demand Set (s)	Specific Demand Set (s)	Network flow scaling factor (%)	Network capacity scaling factor (%)
A1	Do-Something SA	✓	✓	D1,D2,D3,D4,D5,D6	100.000	100.000

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (s)	Junction LOS
1 - Hollywood Drive Roundabout w/ New Link	Hollywood Drive Roundabout w/ New Link	Standard Roundabout	1,2,3	3.91	A

Junction Network Options

[same as above]

Arms

Arms

[same as above]

Capacity Options

[same as above]

Roundabout Geometry

[same as above]

Pedestrian Crossings

Arm	Crossing type	Average pedestrian flow (Ped/hr)
1 - Hollywood Drive (S)	Zebra	0.00
2 - Hollywood Drive (W)	Zebra	0.00
3 - Hollywood Drive (N) - New Link	Zebra	0.00

Zebra Crossings

Arm	Space between crossing and junction entry (Zebra) (PCU)	Vehicles queueing on exit (Zebra) (PCU)	Central Refuge	Crossing data type	Crossing length (m)	Crossing time (s)
1 - Hollywood Drive (S)	1.00	1.00		Distance	7.40	5.29
2 - Hollywood Drive (W)	1.00	1.00		Distance	8.10	5.79
3 - Hollywood Drive (N) - New Link	1.00	1.00		Distance	7.40	5.29

Slope / Intercept / Capacity

[same as above]

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Model start time (HH:mm)	Model finish time (HH:mm)	Time segment length (min)	Run automatically
D2	DS 2023	PM	ONE HOUR	16:45	18:15	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1 - Hollywood Drive (S)		ONE HOUR	✓	73.00	100.000
2 - Hollywood Drive (W)		ONE HOUR	✓	38.00	100.000
3 - Hollywood Drive (N) - New Link		ONE HOUR	✓	40.00	100.000

Demand overview (Pedestrians)

Arm	Profile type	Average pedestrian flow (Ped/hr)
1 - Hollywood Drive (S)	Global	0.00
2 - Hollywood Drive (W)	Global	0.00
3 - Hollywood Drive (N) - New Link	Global	0.00

Origin-Destination Data

Demand (PCU/hr)

	To			
		1 - Hollywood Drive (S)	2 - Hollywood Drive (W)	3 - Hollywood Drive (N) - New Link
	From			
	1 - Hollywood Drive (S)	0.000	26.000	47.000
	2 - Hollywood Drive (W)	38.000	0.000	0.000
	3 - Hollywood Drive (N) - New Link	40.000	0.000	0.000

Proportions

	To			
		1 - Hollywood Drive (S)	2 - Hollywood Drive (W)	3 - Hollywood Drive (N) - New Link
	From			
	1 - Hollywood Drive (S)	0.00	0.36	0.64
	2 - Hollywood Drive (W)	1.00	0.00	0.00
	3 - Hollywood Drive (N) - New Link	1.00	0.00	0.00

Vehicle Mix

Heavy Vehicle proportion

	To			
		1 - Hollywood Drive (S)	2 - Hollywood Drive (W)	3 - Hollywood Drive (N) - New Link
	From			
	1 - Hollywood Drive (S)	0	0	0
	2 - Hollywood Drive (W)	0	0	0
	3 - Hollywood Drive (N) - New Link	0	0	0

Average PCU Per Veh

	To			
		1 - Hollywood Drive (S)	2 - Hollywood Drive (W)	3 - Hollywood Drive (N) - New Link
	From			
	1 - Hollywood Drive (S)	1.000	1.000	1.000
	2 - Hollywood Drive (W)	1.000	1.000	1.000
	3 - Hollywood Drive (N) - New Link	1.000	1.000	1.000

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
1 - Hollywood Drive (S)	0.08	3.93	0.1	A	66.99	100.48
2 - Hollywood Drive (W)	0.04	3.17	0.0	A	34.87	52.30
3 - Hollywood Drive (N) - New Link	0.05	4.60	0.1	A	36.70	55.06

Main Results for each time segment

Main results: (16:45-17:00)

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
1 - Hollywood Drive (S)	54.96	13.74	0.00	0.00	997.07	0.055	54.73	58.47	0.0	0.1	3.820	A
2 - Hollywood Drive (W)	28.61	7.15	35.23	0.00	1185.26	0.024	28.51	19.49	0.0	0.0	3.111	A
3 - Hollywood Drive (N) - New Link	30.11	7.53	28.51	0.00	833.24	0.036	29.96	35.23	0.0	0.0	4.482	A

Main results: (17:00-17:15)

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
1 - Hollywood Drive (S)	65.63	16.41	0.00	0.00	997.07	0.066	65.58	70.07	0.1	0.1	3.864	A
2 - Hollywood Drive (W)	34.16	8.54	42.22	0.00	1181.32	0.029	34.14	23.36	0.0	0.0	3.137	A
3 - Hollywood Drive (N) - New Link	35.96	8.99	34.14	0.00	830.75	0.043	35.93	42.22	0.0	0.0	4.529	A

Main results: (17:15-17:30)

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
1 - Hollywood Drive (S)	80.37	20.09	0.00	0.00	997.07	0.081	80.31	85.81	0.1	0.1	3.926	A
2 - Hollywood Drive (W)	41.84	10.46	51.70	0.00	1175.98	0.036	41.81	28.60	0.0	0.0	3.173	A
3 - Hollywood Drive (N) - New Link	44.04	11.01	41.81	0.00	827.36	0.053	44.00	51.70	0.0	0.1	4.595	A

Main results: (17:30-17:45)

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
1 - Hollywood Drive (S)	80.37	20.09	0.00	0.00	997.07	0.081	80.37	85.88	0.1	0.1	3.926	A
2 - Hollywood Drive (W)	41.84	10.46	51.75	0.00	1175.95	0.036	41.84	28.63	0.0	0.0	3.173	A
3 - Hollywood Drive (N) - New Link	44.04	11.01	41.84	0.00	827.35	0.053	44.04	51.75	0.1	0.1	4.595	A

Main results: (17:45-18:00)

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
1 - Hollywood Drive (S)	65.63	16.41	0.00	0.00	997.07	0.066	65.69	70.19	0.1	0.1	3.866	A
2 - Hollywood Drive (W)	34.16	8.54	42.30	0.00	1181.28	0.029	34.19	23.40	0.0	0.0	3.137	A
3 - Hollywood Drive (N) - New Link	35.96	8.99	34.19	0.00	830.73	0.043	36.00	42.30	0.1	0.0	4.529	A

Main results: (18:00-18:15)

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
1 - Hollywood Drive (S)	54.96	13.74	0.00	0.00	997.07	0.055	55.01	58.77	0.1	0.1	3.820	A
2 - Hollywood Drive (W)	28.61	7.15	35.42	0.00	1185.16	0.024	28.63	19.59	0.0	0.0	3.112	A
3 - Hollywood Drive (N) - New Link	30.11	7.53	28.63	0.00	833.19	0.036	30.15	35.42	0.0	0.0	4.482	A

Do-Something SA - DS 2028, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Pedestrian Crossing	1 - Hollywood Drive (S) - Pedestrian crossing	Pedestrian crossing uses default flow of 0. Is this correct?
Warning	Pedestrian Crossing	2 - Hollywood Drive (W) - Pedestrian crossing	Pedestrian crossing uses default flow of 0. Is this correct?
Warning	Pedestrian Crossing	3 - Hollywood Drive (N) - New Link - Pedestrian crossing	Pedestrian crossing uses default flow of 0. Is this correct?

Analysis Set Details

ID	Name	Include in report	Use specific Demand Set (s)	Specific Demand Set (s)	Network flow scaling factor (%)	Network capacity scaling factor (%)
A1	Do-Something SA	✓	✓	D1,D2,D3,D4,D5,D6	100.000	100.000

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (s)	Junction LOS
1 - Hollywood Drive Roundabout w/ New Link	Hollywood Drive Roundabout w/ New Link	Standard Roundabout	1,2,3	5.90	A

Junction Network Options

[same as above]

Arms

Arms

[same as above]

Capacity Options

[same as above]

Roundabout Geometry

[same as above]

Pedestrian Crossings

Arm	Crossing type	Average pedestrian flow (Ped/hr)
1 - Hollywood Drive (S)	Zebra	0.00
2 - Hollywood Drive (W)	Zebra	0.00
3 - Hollywood Drive (N) - New Link	Zebra	0.00

Zebra Crossings

Arm	Space between crossing and junction entry (Zebra) (PCU)	Vehicles queueing on exit (Zebra) (PCU)	Central Refuge	Crossing data type	Crossing length (m)	Crossing time (s)
1 - Hollywood Drive (S)	1.00	1.00		Distance	7.40	5.29
2 - Hollywood Drive (W)	1.00	1.00		Distance	8.10	5.79
3 - Hollywood Drive (N) - New Link	1.00	1.00		Distance	7.40	5.29

Slope / Intercept / Capacity

[same as above]

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Model start time (HH:mm)	Model finish time (HH:mm)	Time segment length (min)	Run automatically
D3	DS 2028	AM	ONE HOUR	07:30	09:00	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 (%)
1 - Hollywood Drive (S)		ONE HOUR	✓	424.00	100.000
2 - Hollywood Drive (W)		ONE HOUR	✓	276.00	100.000
3 - Hollywood Drive (N) - New Link		ONE HOUR	✓	108.00	100.000

Demand overview (Pedestrians)

Arm	Profile type	Average pedestrian flow (Ped/hr)
1 - Hollywood Drive (S)	Global	0.00
2 - Hollywood Drive (W)	Global	0.00
3 - Hollywood Drive (N) - New Link	Global	0.00

Origin-Destination Data

Demand (PCU/hr)

From	To			
		1 - Hollywood Drive (S)	2 - Hollywood Drive (W)	3 - Hollywood Drive (N) - New Link
	1 - Hollywood Drive (S)	0.000	355.000	69.000
	2 - Hollywood Drive (W)	256.000	0.000	20.000
	3 - Hollywood Drive (N) - New Link	81.000	27.000	0.000

Proportions

From	To			
		1 - Hollywood Drive (S)	2 - Hollywood Drive (W)	3 - Hollywood Drive (N) - New Link
	1 - Hollywood Drive (S)	0.00	0.84	0.16
	2 - Hollywood Drive (W)	0.93	0.00	0.07
	3 - Hollywood Drive (N) - New Link	0.75	0.25	0.00

Vehicle Mix

Heavy Vehicle proportion

From	To			
		1 - Hollywood Drive (S)	2 - Hollywood Drive (W)	3 - Hollywood Drive (N) - New Link
	1 - Hollywood Drive (S)	0	0	0
	2 - Hollywood Drive (W)	0	0	0
	3 - Hollywood Drive (N) - New Link	0	0	0

Average PCU Per Veh

From	To			
		1 - Hollywood Drive (S)	2 - Hollywood Drive (W)	3 - Hollywood Drive (N) - New Link
	1 - Hollywood Drive (S)	1.000	1.000	1.000
	2 - Hollywood Drive (W)	1.000	1.000	1.000
	3 - Hollywood Drive (N) - New Link	1.000	1.000	1.000

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
1 - Hollywood Drive (S)	0.48	6.99	0.9	A	389.07	583.60
2 - Hollywood Drive (W)	0.26	4.19	0.4	A	253.26	379.89
3 - Hollywood Drive (N) - New Link	0.16	5.98	0.2	A	99.10	148.65

Main Results for each time segment

Main results: (07:30-07:45)

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
1 - Hollywood Drive (S)	319.21	79.80	20.21	0.00	986.53	0.324	317.31	252.56	0.0	0.5	5.364	A
2 - Hollywood Drive (W)	207.79	51.95	51.64	0.00	1176.01	0.177	206.93	285.88	0.0	0.2	3.711	A
3 - Hollywood Drive (N) - New Link	81.31	20.33	191.94	0.00	760.95	0.107	80.83	66.63	0.0	0.1	5.290	A

Main results: (07:45-08:00)

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
1 - Hollywood Drive (S)	381.17	95.29	24.24	0.00	984.43	0.387	380.56	302.66	0.5	0.6	5.955	A
2 - Hollywood Drive (W)	248.12	62.03	61.93	0.00	1170.22	0.212	247.90	342.87	0.2	0.3	3.902	A
3 - Hollywood Drive (N) - New Link	97.09	24.27	229.94	0.00	744.15	0.130	96.97	79.90	0.1	0.1	5.563	A

Main results: (08:00-08:15)

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
1 - Hollywood Drive (S)	466.83	116.71	29.68	0.00	981.59	0.476	465.76	370.59	0.6	0.9	6.965	A
2 - Hollywood Drive (W)	303.88	75.97	75.80	0.00	1162.40	0.261	303.55	419.64	0.3	0.4	4.188	A
3 - Hollywood Drive (N) - New Link	118.91	29.73	281.55	0.00	721.32	0.165	118.72	97.79	0.1	0.2	5.973	A

Main results: (08:15-08:30)

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Pedestrian demand (Pedi/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
1 - Hollywood Drive (S)	466.83	116.71	29.73	0.00	981.57	0.476	466.81	371.04	0.9	0.9	6.993	A
2 - Hollywood Drive (W)	303.88	75.97	75.97	0.00	1162.31	0.261	303.88	420.57	0.4	0.4	4.193	A
3 - Hollywood Drive (N) - New Link	118.91	29.73	281.86	0.00	721.18	0.165	118.91	97.99	0.2	0.2	5.976	A

Main results: (08:30-08:45)

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Pedestrian demand (Pedi/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
1 - Hollywood Drive (S)	381.17	95.29	24.32	0.00	984.39	0.387	382.21	303.40	0.9	0.6	5.988	A
2 - Hollywood Drive (W)	248.12	62.03	62.20	0.00	1170.06	0.212	248.45	344.33	0.4	0.3	3.908	A
3 - Hollywood Drive (N) - New Link	97.09	24.27	230.44	0.00	743.92	0.131	97.27	80.20	0.2	0.2	5.568	A

Main results: (08:45-09:00)

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Pedestrian demand (Pedi/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
1 - Hollywood Drive (S)	319.21	79.80	20.36	0.00	986.45	0.324	319.83	254.01	0.6	0.5	5.407	A
2 - Hollywood Drive (W)	207.79	51.95	52.05	0.00	1175.78	0.177	208.01	288.14	0.3	0.2	3.719	A
3 - Hollywood Drive (N) - New Link	81.31	20.33	192.93	0.00	760.51	0.107	81.43	67.12	0.2	0.1	5.301	A

Do-Something SA - DS 2028, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Pedestrian Crossing	1 - Hollywood Drive (S) - Pedestrian crossing	Pedestrian crossing uses default flow of 0. Is this correct?
Warning	Pedestrian Crossing	2 - Hollywood Drive (W) - Pedestrian crossing	Pedestrian crossing uses default flow of 0. Is this correct?
Warning	Pedestrian Crossing	3 - Hollywood Drive (N) - New Link - Pedestrian crossing	Pedestrian crossing uses default flow of 0. Is this correct?

Analysis Set Details

ID	Name	Include in report	Use specific Demand Set (s)	Specific Demand Set (s)	Network flow scaling factor (%)	Network capacity scaling factor (%)
A1	Do-Something SA	✓	✓	D1,D2,D3,D4,D5,D6	100.000	100.000

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (s)	Junction LOS
1 - Hollywood Drive Roundabout w/ New Link	Hollywood Drive Roundabout w/ New Link	Standard Roundabout	1,2,3	4.10	A

Junction Network Options

[same as above]

Arms

Arms

[same as above]

Capacity Options

[same as above]

Roundabout Geometry

[same as above]

Pedestrian Crossings

Arm	Crossing type	Average pedestrian flow (Ped/hr)
1 - Hollywood Drive (S)	Zebra	0.00
2 - Hollywood Drive (W)	Zebra	0.00
3 - Hollywood Drive (N) - New Link	Zebra	0.00

Zebra Crossings

Arm	Space between crossing and junction entry (Zebra) (PCU)	Vehicles queueing on exit (Zebra) (PCU)	Central Refuge	Crossing data type	Crossing length (m)	Crossing time (s)
1 - Hollywood Drive (S)	1.00	1.00		Distance	7.40	5.29
2 - Hollywood Drive (W)	1.00	1.00		Distance	8.10	5.79
3 - Hollywood Drive (N) - New Link	1.00	1.00		Distance	7.40	5.29

Slope / Intercept / Capacity

[same as above]

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Model start time (HH:mm)	Model finish time (HH:mm)	Time segment length (min)	Run automatically
D4	DS 2028	PM	ONE HOUR	16:45	18:15	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1 - Hollywood Drive (S)		ONE HOUR	✓	111.00	100.000
2 - Hollywood Drive (W)		ONE HOUR	✓	51.00	100.000
3 - Hollywood Drive (N) - New Link		ONE HOUR	✓	60.00	100.000

Demand overview (Pedestrians)

Arm	Profile type	Average pedestrian flow (Ped/hr)
1 - Hollywood Drive (S)	Global	0.00
2 - Hollywood Drive (W)	Global	0.00
3 - Hollywood Drive (N) - New Link	Global	0.00

Origin-Destination Data

Demand (PCU/hr)

	To			
		1 - Hollywood Drive (S)	2 - Hollywood Drive (W)	3 - Hollywood Drive (N) - New Link
	From			
	1 - Hollywood Drive (S)	0.000	33.000	78.000
	2 - Hollywood Drive (W)	47.000	0.000	4.000
	3 - Hollywood Drive (N) - New Link	57.000	3.000	0.000

Proportions

	To			
		1 - Hollywood Drive (S)	2 - Hollywood Drive (W)	3 - Hollywood Drive (N) - New Link
	From			
	1 - Hollywood Drive (S)	0.00	0.30	0.70
	2 - Hollywood Drive (W)	0.92	0.00	0.08
	3 - Hollywood Drive (N) - New Link	0.95	0.05	0.00

Vehicle Mix

Heavy Vehicle proportion

	To			
		1 - Hollywood Drive (S)	2 - Hollywood Drive (W)	3 - Hollywood Drive (N) - New Link
	From			
	1 - Hollywood Drive (S)	0	0	0
	2 - Hollywood Drive (W)	0	0	0
	3 - Hollywood Drive (N) - New Link	0	0	0

Average PCU Per Veh

	To			
		1 - Hollywood Drive (S)	2 - Hollywood Drive (W)	3 - Hollywood Drive (N) - New Link
	From			
	1 - Hollywood Drive (S)	1.000	1.000	1.000
	2 - Hollywood Drive (W)	1.000	1.000	1.000
	3 - Hollywood Drive (N) - New Link	1.000	1.000	1.000

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
1 - Hollywood Drive (S)	0.12	4.12	0.1	A	101.86	152.78
2 - Hollywood Drive (W)	0.05	3.27	0.1	A	46.80	70.20
3 - Hollywood Drive (N) - New Link	0.08	4.76	0.1	A	55.06	82.59

Main Results for each time segment

Main results: (16:45-17:00)

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
1 - Hollywood Drive (S)	83.57	20.89	2.25	0.00	995.90	0.084	83.20	77.95	0.0	0.1	3.941	A
2 - Hollywood Drive (W)	38.40	9.60	58.47	0.00	1172.17	0.033	38.26	26.98	0.0	0.0	3.174	A
3 - Hollywood Drive (N) - New Link	45.17	11.29	35.26	0.00	830.26	0.054	44.94	61.47	0.0	0.1	4.583	A

Main results: (17:00-17:15)

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
1 - Hollywood Drive (S)	99.79	24.95	2.69	0.00	995.66	0.100	99.71	93.42	0.1	0.1	4.018	A
2 - Hollywood Drive (W)	45.85	11.46	70.07	0.00	1165.63	0.039	45.82	32.34	0.0	0.0	3.214	A
3 - Hollywood Drive (N) - New Link	53.94	13.48	42.23	0.00	827.17	0.065	53.89	73.66	0.1	0.1	4.655	A

Main results: (17:15-17:30)

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
1 - Hollywood Drive (S)	122.21	30.55	3.30	0.00	995.35	0.123	122.10	114.40	0.1	0.1	4.122	A
2 - Hollywood Drive (W)	56.15	14.04	85.80	0.00	1156.77	0.049	56.11	39.60	0.0	0.1	3.270	A
3 - Hollywood Drive (N) - New Link	66.06	16.52	51.71	0.00	822.98	0.080	65.99	90.20	0.1	0.1	4.755	A

Main results: (17:30-17:45)

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
1 - Hollywood Drive (S)	122.21	30.55	3.30	0.00	995.35	0.123	122.21	114.50	0.1	0.1	4.122	A
2 - Hollywood Drive (W)	56.15	14.04	85.88	0.00	1156.72	0.049	56.15	39.64	0.1	0.1	3.270	A
3 - Hollywood Drive (N) - New Link	66.06	16.52	51.75	0.00	822.96	0.080	66.06	90.28	0.1	0.1	4.755	A

Main results: (17:45-18:00)

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
1 - Hollywood Drive (S)	99.79	24.95	2.70	0.00	995.66	0.100	99.90	93.59	0.1	0.1	4.019	A
2 - Hollywood Drive (W)	45.85	11.46	70.20	0.00	1165.56	0.039	45.89	32.40	0.1	0.0	3.217	A
3 - Hollywood Drive (N) - New Link	53.94	13.48	42.29	0.00	827.15	0.065	54.01	73.80	0.1	0.1	4.658	A

Main results: (18:00-18:15)

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
1 - Hollywood Drive (S)	83.57	20.89	2.26	0.00	995.89	0.084	83.65	78.37	0.1	0.1	3.946	A
2 - Hollywood Drive (W)	38.40	9.60	58.78	0.00	1171.99	0.033	38.42	27.13	0.0	0.0	3.177	A
3 - Hollywood Drive (N) - New Link	45.17	11.29	35.41	0.00	830.19	0.054	45.22	61.79	0.1	0.1	4.586	A

Do-Something SA - DS 2038, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Pedestrian Crossing	1 - Hollywood Drive (S) - Pedestrian crossing	Pedestrian crossing uses default flow of 0. Is this correct?
Warning	Pedestrian Crossing	2 - Hollywood Drive (W) - Pedestrian crossing	Pedestrian crossing uses default flow of 0. Is this correct?
Warning	Pedestrian Crossing	3 - Hollywood Drive (N) - New Link - Pedestrian crossing	Pedestrian crossing uses default flow of 0. Is this correct?

Analysis Set Details

ID	Name	Include in report	Use specific Demand Set (s)	Specific Demand Set (s)	Network flow scaling factor (%)	Network capacity scaling factor (%)
A1	Do-Something SA	✓	✓	D1,D2,D3,D4,D5,D6	100.000	100.000

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (s)	Junction LOS
1 - Hollywood Drive Roundabout w/ New Link	Hollywood Drive Roundabout w/ New Link	Standard Roundabout	1,2,3	6.10	A

Junction Network Options

[same as above]

Arms

Arms

[same as above]

Capacity Options

[same as above]

Roundabout Geometry

[same as above]

Pedestrian Crossings

Arm	Crossing type	Average pedestrian flow (Ped/hr)
1 - Hollywood Drive (S)	Zebra	0.00
2 - Hollywood Drive (W)	Zebra	0.00
3 - Hollywood Drive (N) - New Link	Zebra	0.00

Zebra Crossings

Arm	Space between crossing and junction entry (Zebra) (PCU)	Vehicles queueing on exit (Zebra) (PCU)	Central Refuge	Crossing data type	Crossing length (m)	Crossing time (s)
1 - Hollywood Drive (S)	1.00	1.00		Distance	7.40	5.29
2 - Hollywood Drive (W)	1.00	1.00		Distance	8.10	5.79
3 - Hollywood Drive (N) - New Link	1.00	1.00		Distance	7.40	5.29

Slope / Intercept / Capacity

[same as above]

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Model start time (HH:mm)	Model finish time (HH:mm)	Time segment length (min)	Run automatically
D5	DS 2038	AM	ONE HOUR	07:30	09:00	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 (%)
1 - Hollywood Drive (S)		ONE HOUR	✓	444.00	100.000
2 - Hollywood Drive (W)		ONE HOUR	✓	290.00	100.000
3 - Hollywood Drive (N) - New Link		ONE HOUR	✓	108.00	100.000

Demand overview (Pedestrians)

Arm	Profile type	Average pedestrian flow (Ped/hr)
1 - Hollywood Drive (S)	Global	0.00
2 - Hollywood Drive (W)	Global	0.00
3 - Hollywood Drive (N) - New Link	Global	0.00

Origin-Destination Data

Demand (PCU/hr)

From	To			
		1 - Hollywood Drive (S)	2 - Hollywood Drive (W)	3 - Hollywood Drive (N) - New Link
1 - Hollywood Drive (S)		0.000	375.000	69.000
2 - Hollywood Drive (W)		270.000	0.000	20.000
3 - Hollywood Drive (N) - New Link		81.000	27.000	0.000

Proportions

From	To			
		1 - Hollywood Drive (S)	2 - Hollywood Drive (W)	3 - Hollywood Drive (N) - New Link
1 - Hollywood Drive (S)		0.00	0.84	0.16
2 - Hollywood Drive (W)		0.93	0.00	0.07
3 - Hollywood Drive (N) - New Link		0.75	0.25	0.00

Vehicle Mix

Heavy Vehicle proportion

From	To			
		1 - Hollywood Drive (S)	2 - Hollywood Drive (W)	3 - Hollywood Drive (N) - New Link
1 - Hollywood Drive (S)		0	0	0
2 - Hollywood Drive (W)		0	0	0
3 - Hollywood Drive (N) - New Link		0	0	0

Average PCU Per Veh

From	To			
		1 - Hollywood Drive (S)	2 - Hollywood Drive (W)	3 - Hollywood Drive (N) - New Link
1 - Hollywood Drive (S)		1.000	1.000	1.000
2 - Hollywood Drive (W)		1.000	1.000	1.000
3 - Hollywood Drive (N) - New Link		1.000	1.000	1.000

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
1 - Hollywood Drive (S)	0.50	7.31	1.0	A	407.42	611.13
2 - Hollywood Drive (W)	0.27	4.27	0.4	A	266.11	399.16
3 - Hollywood Drive (N) - New Link	0.17	6.04	0.2	A	99.10	148.65

Main Results for each time segment

Main results: (07:30-07:45)

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
1 - Hollywood Drive (S)	334.27	83.57	20.21	0.00	986.53	0.339	332.24	263.05	0.0	0.5	5.486	A
2 - Hollywood Drive (W)	218.33	54.58	51.63	0.00	1176.02	0.186	217.42	300.81	0.0	0.2	3.752	A
3 - Hollywood Drive (N) - New Link	81.31	20.33	202.43	0.00	756.31	0.108	80.83	66.63	0.0	0.1	5.326	A

Main results: (07:45-08:00)

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
1 - Hollywood Drive (S)	399.15	99.79	24.24	0.00	984.43	0.405	398.48	315.23	0.5	0.7	6.138	A
2 - Hollywood Drive (W)	260.70	65.18	61.93	0.00	1170.22	0.223	260.47	360.80	0.2	0.3	3.956	A
3 - Hollywood Drive (N) - New Link	97.09	24.27	242.51	0.00	738.59	0.131	96.97	79.89	0.1	0.2	5.611	A

Main results: (08:00-08:15)

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
1 - Hollywood Drive (S)	488.85	122.21	29.68	0.00	981.59	0.498	487.64	385.98	0.7	1.0	7.270	A
2 - Hollywood Drive (W)	319.30	79.82	75.78	0.00	1162.41	0.275	318.93	441.54	0.3	0.4	4.266	A
3 - Hollywood Drive (N) - New Link	118.91	29.73	296.94	0.00	714.51	0.166	118.72	97.78	0.2	0.2	6.041	A

Main results: (08:15-08:30)

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
1 - Hollywood Drive (S)	488.85	122.21	29.73	0.00	981.57	0.498	488.82	386.45	1.0	1.0	7.305	A
2 - Hollywood Drive (W)	319.30	79.82	75.97	0.00	1162.31	0.275	319.29	442.58	0.4	0.4	4.270	A
3 - Hollywood Drive (N) - New Link	118.91	29.73	297.27	0.00	714.36	0.166	118.91	97.99	0.2	0.2	6.045	A

Main results: (08:30-08:45)

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
1 - Hollywood Drive (S)	399.15	99.79	24.32	0.00	984.39	0.405	400.33	316.01	1.0	0.7	6.177	A
2 - Hollywood Drive (W)	260.70	65.18	62.21	0.00	1170.06	0.223	261.06	362.43	0.4	0.3	3.963	A
3 - Hollywood Drive (N) - New Link	97.09	24.27	243.06	0.00	738.34	0.132	97.28	80.22	0.2	0.2	5.618	A

Main results: (08:45-09:00)

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
1 - Hollywood Drive (S)	334.27	83.57	20.36	0.00	986.45	0.339	334.96	264.56	0.7	0.5	5.531	A
2 - Hollywood Drive (W)	218.33	54.58	52.05	0.00	1175.78	0.186	218.56	303.26	0.3	0.2	3.763	A
3 - Hollywood Drive (N) - New Link	81.31	20.33	203.49	0.00	755.84	0.108	81.43	67.13	0.2	0.1	5.340	A

Do-Something SA - DS 2038, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Pedestrian Crossing	1 - Hollywood Drive (S) - Pedestrian crossing	Pedestrian crossing uses default flow of 0. Is this correct?
Warning	Pedestrian Crossing	2 - Hollywood Drive (W) - Pedestrian crossing	Pedestrian crossing uses default flow of 0. Is this correct?
Warning	Pedestrian Crossing	3 - Hollywood Drive (N) - New Link - Pedestrian crossing	Pedestrian crossing uses default flow of 0. Is this correct?

Analysis Set Details

ID	Name	Include in report	Use specific Demand Set (s)	Specific Demand Set (s)	Network flow scaling factor (%)	Network capacity scaling factor (%)
A1	Do-Something SA	✓	✓	D1,D2,D3,D4,D5,D6	100.000	100.000

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (s)	Junction LOS
1 - Hollywood Drive Roundabout w/ New Link	Hollywood Drive Roundabout w/ New Link	Standard Roundabout	1,2,3	4.10	A

Junction Network Options

[same as above]

Arms

Arms

[same as above]

Capacity Options

[same as above]

Roundabout Geometry

[same as above]

Pedestrian Crossings

Arm	Crossing type	Average pedestrian flow (Ped/hr)
1 - Hollywood Drive (S)	Zebra	0.00
2 - Hollywood Drive (W)	Zebra	0.00
3 - Hollywood Drive (N) - New Link	Zebra	0.00

Zebra Crossings

Arm	Space between crossing and junction entry (Zebra) (PCU)	Vehicles queueing on exit (Zebra) (PCU)	Central Refuge	Crossing data type	Crossing length (m)	Crossing time (s)
1 - Hollywood Drive (S)	1.00	1.00		Distance	7.40	5.29
2 - Hollywood Drive (W)	1.00	1.00		Distance	8.10	5.79
3 - Hollywood Drive (N) - New Link	1.00	1.00		Distance	7.40	5.29

Slope / Intercept / Capacity

[same as above]

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Model start time (HH:mm)	Model finish time (HH:mm)	Time segment length (min)	Run automatically
D6	DS 2038	PM	ONE HOUR	16:45	18:15	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1 - Hollywood Drive (S)		ONE HOUR	✓	113.00	100.000
2 - Hollywood Drive (W)		ONE HOUR	✓	54.00	100.000
3 - Hollywood Drive (N) - New Link		ONE HOUR	✓	60.00	100.000

Demand overview (Pedestrians)

Arm	Profile type	Average pedestrian flow (Ped/hr)
1 - Hollywood Drive (S)	Global	0.00
2 - Hollywood Drive (W)	Global	0.00
3 - Hollywood Drive (N) - New Link	Global	0.00

Origin-Destination Data

Demand (PCU/hr)

	To			
		1 - Hollywood Drive (S)	2 - Hollywood Drive (W)	3 - Hollywood Drive (N) - New Link
	From			
	1 - Hollywood Drive (S)	0.000	35.000	78.000
	2 - Hollywood Drive (W)	50.000	0.000	4.000
	3 - Hollywood Drive (N) - New Link	57.000	3.000	0.000

Proportions

	To			
		1 - Hollywood Drive (S)	2 - Hollywood Drive (W)	3 - Hollywood Drive (N) - New Link
	From			
	1 - Hollywood Drive (S)	0.00	0.31	0.69
	2 - Hollywood Drive (W)	0.93	0.00	0.07
	3 - Hollywood Drive (N) - New Link	0.95	0.05	0.00

Vehicle Mix

Heavy Vehicle proportion

	To			
		1 - Hollywood Drive (S)	2 - Hollywood Drive (W)	3 - Hollywood Drive (N) - New Link
	From			
	1 - Hollywood Drive (S)	0	0	0
	2 - Hollywood Drive (W)	0	0	0
	3 - Hollywood Drive (N) - New Link	0	0	0

Average PCU Per Veh

	To			
		1 - Hollywood Drive (S)	2 - Hollywood Drive (W)	3 - Hollywood Drive (N) - New Link
	From			
	1 - Hollywood Drive (S)	1.000	1.000	1.000
	2 - Hollywood Drive (W)	1.000	1.000	1.000
	3 - Hollywood Drive (N) - New Link	1.000	1.000	1.000

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
1 - Hollywood Drive (S)	0.13	4.13	0.1	A	103.69	155.54
2 - Hollywood Drive (W)	0.05	3.28	0.1	A	49.55	74.33
3 - Hollywood Drive (N) - New Link	0.08	4.76	0.1	A	55.06	82.59

Main Results for each time segment

Main results: (16:45-17:00)

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
1 - Hollywood Drive (S)	85.07	21.27	2.25	0.00	995.90	0.085	84.70	80.20	0.0	0.1	3.949	A
2 - Hollywood Drive (W)	40.65	10.16	58.47	0.00	1172.17	0.035	40.51	28.48	0.0	0.0	3.180	A
3 - Hollywood Drive (N) - New Link	45.17	11.29	37.51	0.00	829.26	0.054	44.94	61.47	0.0	0.1	4.589	A

Main results: (17:00-17:15)

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
1 - Hollywood Drive (S)	101.58	25.40	2.69	0.00	995.66	0.102	101.50	96.12	0.1	0.1	4.026	A
2 - Hollywood Drive (W)	48.54	12.14	70.06	0.00	1165.63	0.042	48.51	34.13	0.0	0.0	3.221	A
3 - Hollywood Drive (N) - New Link	53.94	13.48	44.92	0.00	825.98	0.065	53.89	73.66	0.1	0.1	4.662	A

Main results: (17:15-17:30)

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
1 - Hollywood Drive (S)	124.42	31.10	3.30	0.00	995.35	0.125	124.30	117.70	0.1	0.1	4.133	A
2 - Hollywood Drive (W)	59.46	14.86	85.80	0.00	1156.77	0.051	59.41	41.80	0.0	0.1	3.279	A
3 - Hollywood Drive (N) - New Link	66.06	16.52	55.01	0.00	821.52	0.080	65.99	90.20	0.1	0.1	4.764	A

Main results: (17:30-17:45)

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
1 - Hollywood Drive (S)	124.42	31.10	3.30	0.00	995.35	0.125	124.41	117.81	0.1	0.1	4.133	A
2 - Hollywood Drive (W)	59.46	14.86	85.88	0.00	1156.72	0.051	59.45	41.84	0.1	0.1	3.280	A
3 - Hollywood Drive (N) - New Link	66.06	16.52	55.05	0.00	821.50	0.080	66.06	90.28	0.1	0.1	4.765	A

Main results: (17:45-18:00)

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
1 - Hollywood Drive (S)	101.58	25.40	2.70	0.00	995.66	0.102	101.70	96.29	0.1	0.1	4.028	A
2 - Hollywood Drive (W)	48.54	12.14	70.20	0.00	1165.56	0.042	48.59	34.20	0.1	0.0	3.222	A
3 - Hollywood Drive (N) - New Link	53.94	13.48	44.99	0.00	825.95	0.065	54.01	73.80	0.1	0.1	4.665	A

Main results: (18:00-18:15)

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
1 - Hollywood Drive (S)	85.07	21.27	2.26	0.00	995.89	0.085	85.15	80.63	0.1	0.1	3.954	A
2 - Hollywood Drive (W)	40.65	10.16	58.78	0.00	1171.99	0.035	40.68	28.64	0.0	0.0	3.181	A
3 - Hollywood Drive (N) - New Link	45.17	11.29	37.67	0.00	829.19	0.054	45.22	61.79	0.1	0.1	4.591	A

Junctions 9			
ARCADY 9 - Roundabout Module			
Version: 9.0.0.4211 [] © Copyright TRL Limited, 2021			
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Filename: Hollywood Drive Roundabout (Do-Something).j9

Path: G:\2017\p170182\calcs\arcady\October 2021 Update

Report generation date: 26/10/2021 15:04:27

»Do-Something - DS 2023, AM
 »Do-Something - DS 2023, PM
 »Do-Something - DS 2028, AM
 »Do-Something - DS 2028, PM
 »Do-Something - DS 2038, AM
 »Do-Something - DS 2038, PM

Summary of junction performance

	AM				PM			
	Queue (PCU)	Delay (s)	RFC	LOS	Queue (PCU)	Delay (s)	RFC	LOS
Do-Something - DS 2023								
1 - Hollywood Drive (S)	0.6	6.13	0.37	A	0.1	3.88	0.07	A
2 - Hollywood Drive (W)	0.3	4.04	0.21	A	0.0	3.16	0.04	A
3 - Hollywood Drive (N) - New Link	0.0	5.25	0.04	A	0.0	4.51	0.04	A
Do-Something - DS 2028								
1 - Hollywood Drive (S)	0.8	6.73	0.46	A	0.1	4.07	0.11	A
2 - Hollywood Drive (W)	0.3	4.14	0.26	A	0.1	3.25	0.05	A
3 - Hollywood Drive (N) - New Link	0.2	5.90	0.15	A	0.1	4.66	0.06	A
Do-Something - DS 2038								
1 - Hollywood Drive (S)	0.9	7.02	0.48	A	0.1	4.08	0.11	A
2 - Hollywood Drive (W)	0.4	4.21	0.27	A	0.1	3.26	0.05	A
3 - Hollywood Drive (N) - New Link	0.2	5.97	0.16	A	0.1	4.67	0.06	A

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

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

File summary

File Description

Title	Hollystown-Kilmartin
Location	Hollystown, Dublin 15
Site number	
Date	26/10/2021
Version	
Status	Existing w/ Proposed Link
Identifier	
Client	Glenveagh
Jobnumber	170182
Enumerator	HEADOFFICE\gild
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

Do-Something - DS 2023, AM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

ID	Name	Include in report	Use specific Demand Set (s)	Specific Demand Set(s)	Network flow scaling factor (%)	Network capacity scaling factor (%)
A1	Do-Something	✓	✓	D1,D2,D3,D4,D5,D6	100.000	100.000

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (s)	Junction LOS
1 - Hollywood Drive Roundabout w/ New Link	Hollywood Drive Roundabout w/ New Link	Standard Roundabout	1,2,3	5.28	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Arms

Arms

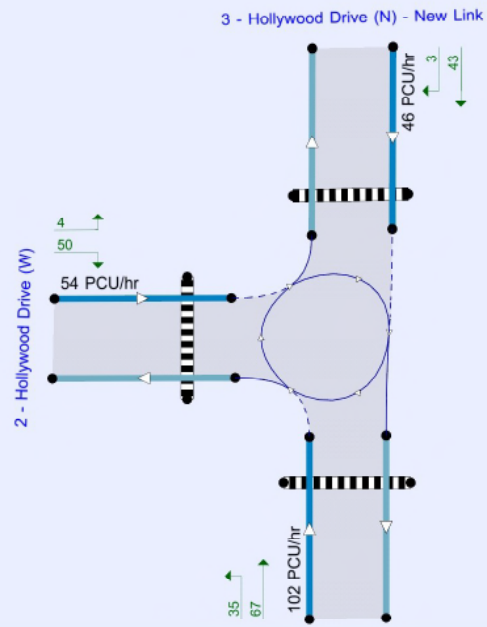
Arm	Name	Description
1	Hollywood Drive (S)	
2	Hollywood Drive (W)	
3	Hollywood Drive (N) - New Link	

Capacity Options

Arm	Minimum capacity (PCU/hr)	Maximum capacity (PCU/hr)	Assume flat start profile	Initial queue (PCU)
1 - Hollywood Drive (S)	0.00	99999.00		0.00
2 - Hollywood Drive (W)	0.00	99999.00		0.00
3 - Hollywood Drive (N) - New Link	0.00	99999.00		0.00

Roundabout Geometry

Arm	V - Approach road half-width (m)	E - Entry width (m)	I' - Effective flare length (m)	R - Entry radius (m)	D - Inscribed circle diameter (m)	PHI - Conflict (entry) angle (deg)	Exit only
1 - Hollywood Drive (S)	3.00	3.90	1.0	9.6	27.6	9.5	
2 - Hollywood Drive (W)	3.00	4.30	9.9	9.3	27.6	9.0	
3 - Hollywood Drive (N) - New Link	3.00	3.90	1.0	9.6	27.6	54.0	



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

Scenario name	Time Period name	Traffic profile type	Model start time (HH:mm)	Model finish time (HH:mm)	Time segment length (min)	Run automatically
DS 2023	AM	ONE HOUR	07:30	09:00	15	✓
DS 2023	PM	ONE HOUR	16:45	18:15	15	✓
DS 2028	AM	ONE HOUR	07:30	09:00	15	✓
DS 2028	PM	ONE HOUR	16:45	18:15	15	✓
DS 2038	AM	ONE HOUR	07:30	09:00	15	✓
DS 2038	PM	ONE HOUR	16:45	18:15	15	✓

Pedestrian Crossings

Arm	Crossing type	Average pedestrian flow (Ped/hr)
1 - Hollywood Drive (S)	Zebra	200.00
2 - Hollywood Drive (W)	Zebra	200.00
3 - Hollywood Drive (N) - New Link	Zebra	200.00

Zebra Crossings

Arm	Space between crossing and junction entry (Zebra) (PCU)	Vehicles queueing on exit (Zebra) (PCU)	Central Refuge	Crossing data type	Crossing length (m)	Crossing time (s)
1 - Hollywood Drive (S)	1.00	1.00		Distance	7.40	5.29
2 - Hollywood Drive (W)	1.00	1.00		Distance	8.10	5.79
3 - Hollywood Drive (N) - New Link	1.00	1.00		Distance	7.40	5.29

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Arm	Final slope	Final intercept (PCU/hr)
1 - Hollywood Drive (S)	0.521	997.067
2 - Hollywood Drive (W)	0.563	1205.111
3 - Hollywood Drive (N) - New Link	0.442	845.851

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

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Model start time (HH:mm)	Model finish time (HH:mm)	Time segment length (min)	Run automatically
D1	DS 2023	AM	ONE HOUR	07:30	09:00	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 (%)
1 - Hollywood Drive (S)		ONE HOUR	✓	310.00	100.000
2 - Hollywood Drive (W)		ONE HOUR	✓	209.00	100.000
3 - Hollywood Drive (N) - New Link		ONE HOUR	✓	27.00	100.000

Demand overview (Pedestrians)

Arm	Profile type	Average pedestrian flow (Ped/hr)
1 - Hollywood Drive (S)	Global	200.00
2 - Hollywood Drive (W)	Global	200.00
3 - Hollywood Drive (N) - New Link	Global	200.00

Origin-Destination Data

Demand (PCU/hr)

	To			
		1 - Hollywood Drive (S)	2 - Hollywood Drive (W)	3 - Hollywood Drive (N) - New Link
From	1 - Hollywood Drive (S)	0.000	290.000	20.000
	2 - Hollywood Drive (W)	209.000	0.000	0.000
	3 - Hollywood Drive (N) - New Link	27.000	0.000	0.000

Proportions

	To			
		1 - Hollywood Drive (S)	2 - Hollywood Drive (W)	3 - Hollywood Drive (N) - New Link
From	1 - Hollywood Drive (S)	0.00	0.94	0.06
	2 - Hollywood Drive (W)	1.00	0.00	0.00
	3 - Hollywood Drive (N) - New Link	1.00	0.00	0.00

Vehicle Mix

Heavy Vehicle proportion

	To			
		1 - Hollywood Drive (S)	2 - Hollywood Drive (W)	3 - Hollywood Drive (N) - New Link
From	1 - Hollywood Drive (S)	0	0	0
	2 - Hollywood Drive (W)	0	0	0
	3 - Hollywood Drive (N) - New Link	0	0	0

Average PCU Per Veh

	To			
		1 - Hollywood Drive (S)	2 - Hollywood Drive (W)	3 - Hollywood Drive (N) - New Link
From	1 - Hollywood Drive (S)	1.000	1.000	1.000
	2 - Hollywood Drive (W)	1.000	1.000	1.000
	3 - Hollywood Drive (N) - New Link	1.000	1.000	1.000

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
1 - Hollywood Drive (S)	0.37	6.13	0.6	A	284.46	426.69
2 - Hollywood Drive (W)	0.21	4.04	0.3	A	191.78	287.67
3 - Hollywood Drive (N) - New Link	0.04	5.25	0.0	A	24.78	37.16

Main Results for each time segment

Main results: (07:30-07:45)

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
1 - Hollywood Drive (S)	233.38	58.35	0.00	150.57	964.44	0.242	232.12	176.94	0.0	0.3	4.908	A
2 - Hollywood Drive (W)	157.35	39.34	14.98	150.57	1158.28	0.136	156.72	217.14	0.0	0.2	3.592	A
3 - Hollywood Drive (N) - New Link	20.33	5.08	156.72	150.57	761.47	0.027	20.22	14.98	0.0	0.0	4.856	A

Main results: (07:45-08:00)

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
1 - Hollywood Drive (S)	278.68	69.67	0.00	179.80	950.91	0.293	278.31	211.98	0.3	0.4	5.350	A
2 - Hollywood Drive (W)	187.89	46.97	17.96	179.80	1143.65	0.164	187.73	260.35	0.2	0.2	3.765	A
3 - Hollywood Drive (N) - New Link	24.27	6.07	187.73	179.80	742.20	0.033	24.25	17.96	0.0	0.0	5.013	A

Main results: (08:00-08:15)

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
1 - Hollywood Drive (S)	341.32	85.33	0.00	220.20	928.88	0.367	340.66	259.56	0.4	0.6	6.114	A
2 - Hollywood Drive (W)	230.11	57.53	21.98	220.20	1122.13	0.205	229.87	318.68	0.2	0.3	4.033	A
3 - Hollywood Drive (N) - New Link	29.73	7.43	229.87	220.20	714.92	0.042	29.69	21.98	0.0	0.0	5.253	A

Main results: (08:15-08:30)

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
1 - Hollywood Drive (S)	341.32	85.33	0.00	220.20	928.76	0.368	341.30	259.84	0.6	0.6	6.127	A
2 - Hollywood Drive (W)	230.11	57.53	22.02	220.20	1122.11	0.205	230.11	319.28	0.3	0.3	4.035	A
3 - Hollywood Drive (N) - New Link	29.73	7.43	230.11	220.20	714.79	0.042	29.73	22.02	0.0	0.0	5.254	A

Main results: (08:30-08:45)

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
1 - Hollywood Drive (S)	278.68	69.67	0.00	179.80	950.77	0.293	279.32	212.43	0.6	0.4	5.368	A
2 - Hollywood Drive (W)	187.89	46.97	18.02	179.80	1143.62	0.164	188.13	261.30	0.3	0.2	3.767	A
3 - Hollywood Drive (N) - New Link	24.27	6.07	188.13	179.80	742.00	0.033	24.31	18.02	0.0	0.0	5.015	A

Main results: (08:45-09:00)

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
1 - Hollywood Drive (S)	233.38	58.35	0.00	150.57	964.25	0.242	233.77	177.86	0.4	0.3	4.930	A
2 - Hollywood Drive (W)	157.35	39.34	15.08	150.57	1158.22	0.136	157.50	218.69	0.2	0.2	3.597	A
3 - Hollywood Drive (N) - New Link	20.33	5.08	157.50	150.57	761.08	0.027	20.35	15.08	0.0	0.0	4.859	A

Do-Something - DS 2023, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Pedestrian Crossing	1 - Hollywood Drive (S) - Pedestrian crossing	Pedestrian crossing uses default flow of 0. Is this correct?
Warning	Pedestrian Crossing	2 - Hollywood Drive (W) - Pedestrian crossing	Pedestrian crossing uses default flow of 0. Is this correct?
Warning	Pedestrian Crossing	3 - Hollywood Drive (N) - New Link - Pedestrian crossing	Pedestrian crossing uses default flow of 0. Is this correct?

Analysis Set Details

ID	Name	Include in report	Use specific Demand Set (s)	Specific Demand Set(s)	Network flow scaling factor (%)	Network capacity scaling factor (%)
A1	Do-Something	✓	✓	D1,D2,D3,D4,D5,D6	100.000	100.000

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (s)	Junction LOS
1 - Hollywood Drive Roundabout w/ New Link	Hollywood Drive Roundabout w/ New Link	Standard Roundabout	1,2,3	3.80	A

Junction Network Options

[same as above]

Arms

Arms

[same as above]

Capacity Options

[same as above]

Roundabout Geometry

[same as above]

Pedestrian Crossings

Arm	Crossing type	Average pedestrian flow (Ped/hr)
1 - Hollywood Drive (S)	Zebra	0.00
2 - Hollywood Drive (W)	Zebra	0.00
3 - Hollywood Drive (N) - New Link	Zebra	0.00

Zebra Crossings

Arm	Space between crossing and junction entry (Zebra) (PCU)	Vehicles queueing on exit (Zebra) (PCU)	Central Refuge	Crossing data type	Crossing length (m)	Crossing time (s)
1 - Hollywood Drive (S)	1.00	1.00		Distance	7.40	5.29
2 - Hollywood Drive (W)	1.00	1.00		Distance	8.10	5.79
3 - Hollywood Drive (N) - New Link	1.00	1.00		Distance	7.40	5.29

Slope / Intercept / Capacity

[same as above]

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Model start time (HH:mm)	Model finish time (HH:mm)	Time segment length (min)	Run automatically
D2	DS 2023	PM	ONE HOUR	16:45	18:15	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1 - Hollywood Drive (S)		ONE HOUR	✓	63.00	100.000
2 - Hollywood Drive (W)		ONE HOUR	✓	38.00	100.000
3 - Hollywood Drive (N) - New Link		ONE HOUR	✓	27.00	100.000

Demand overview (Pedestrians)

Arm	Profile type	Average pedestrian flow (Ped/hr)
1 - Hollywood Drive (S)	Global	0.00
2 - Hollywood Drive (W)	Global	0.00
3 - Hollywood Drive (N) - New Link	Global	0.00

Origin-Destination Data

Demand (PCU/hr)

From	To			
		1 - Hollywood Drive (S)	2 - Hollywood Drive (W)	3 - Hollywood Drive (N) - New Link
	1 - Hollywood Drive (S)	0.000	26.000	37.000
	2 - Hollywood Drive (W)	38.000	0.000	0.000
	3 - Hollywood Drive (N) - New Link	27.000	0.000	0.000

Proportions

From	To			
		1 - Hollywood Drive (S)	2 - Hollywood Drive (W)	3 - Hollywood Drive (N) - New Link
	1 - Hollywood Drive (S)	0.00	0.41	0.59
	2 - Hollywood Drive (W)	1.00	0.00	0.00
	3 - Hollywood Drive (N) - New Link	1.00	0.00	0.00

Vehicle Mix

Heavy Vehicle proportion

From	To			
		1 - Hollywood Drive (S)	2 - Hollywood Drive (W)	3 - Hollywood Drive (N) - New Link
	1 - Hollywood Drive (S)	0	0	0
	2 - Hollywood Drive (W)	0	0	0
	3 - Hollywood Drive (N) - New Link	0	0	0

Average PCU Per Veh

From	To			
		1 - Hollywood Drive (S)	2 - Hollywood Drive (W)	3 - Hollywood Drive (N) - New Link
	1 - Hollywood Drive (S)	1.000	1.000	1.000
	2 - Hollywood Drive (W)	1.000	1.000	1.000
	3 - Hollywood Drive (N) - New Link	1.000	1.000	1.000

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
1 - Hollywood Drive (S)	0.07	3.88	0.1	A	57.81	86.71
2 - Hollywood Drive (W)	0.04	3.16	0.0	A	34.87	52.30
3 - Hollywood Drive (N) - New Link	0.04	4.51	0.0	A	24.78	37.16

Main Results for each time segment

Main results: (16:45-17:00)

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
1 - Hollywood Drive (S)	47.43	11.86	0.00	0.00	997.07	0.048	47.23	48.74	0.0	0.0	3.789	A
2 - Hollywood Drive (W)	28.61	7.15	27.74	0.00	1189.48	0.024	28.51	19.49	0.0	0.0	3.100	A
3 - Hollywood Drive (N) - New Link	20.33	5.08	28.51	0.00	833.24	0.024	20.23	27.74	0.0	0.0	4.428	A

Main results: (17:00-17:15)

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
1 - Hollywood Drive (S)	56.64	14.16	0.00	0.00	997.07	0.057	56.59	58.39	0.0	0.1	3.827	A
2 - Hollywood Drive (W)	34.16	8.54	33.24	0.00	1186.38	0.029	34.14	23.36	0.0	0.0	3.123	A
3 - Hollywood Drive (N) - New Link	24.27	6.07	34.14	0.00	830.75	0.029	24.25	33.24	0.0	0.0	4.463	A

Main results: (17:15-17:30)

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
1 - Hollywood Drive (S)	69.36	17.34	0.00	0.00	997.07	0.070	69.31	71.51	0.1	0.1	3.880	A
2 - Hollywood Drive (W)	41.84	10.46	40.70	0.00	1182.18	0.035	41.81	28.60	0.0	0.0	3.156	A
3 - Hollywood Drive (N) - New Link	29.73	7.43	41.81	0.00	827.36	0.036	29.70	40.70	0.0	0.0	4.512	A

Main results: (17:30-17:45)

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Pedestrian demand (Pedi/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
1 - Hollywood Drive (S)	69.36	17.34	0.00	0.00	997.07	0.070	69.36	71.57	0.1	0.1	3.880	A
2 - Hollywood Drive (W)	41.84	10.46	40.74	0.00	1182.16	0.035	41.84	28.63	0.0	0.0	3.156	A
3 - Hollywood Drive (N) - New Link	29.73	7.43	41.84	0.00	827.35	0.036	29.73	40.74	0.0	0.0	4.513	A

Main results: (17:45-18:00)

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Pedestrian demand (Pedi/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
1 - Hollywood Drive (S)	56.64	14.16	0.00	0.00	997.07	0.057	56.69	58.49	0.1	0.1	3.827	A
2 - Hollywood Drive (W)	34.16	8.54	33.30	0.00	1186.35	0.029	34.19	23.40	0.0	0.0	3.123	A
3 - Hollywood Drive (N) - New Link	24.27	6.07	34.19	0.00	830.73	0.029	24.30	33.30	0.0	0.0	4.465	A

Main results: (18:00-18:15)

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Pedestrian demand (Pedi/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
1 - Hollywood Drive (S)	47.43	11.86	0.00	0.00	997.07	0.048	47.47	48.98	0.1	0.1	3.790	A
2 - Hollywood Drive (W)	28.61	7.15	27.88	0.00	1189.40	0.024	28.63	19.59	0.0	0.0	3.100	A
3 - Hollywood Drive (N) - New Link	20.33	5.08	28.63	0.00	833.19	0.024	20.35	27.88	0.0	0.0	4.428	A

Do-Something - DS 2028, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Pedestrian Crossing	1 - Hollywood Drive (S) - Pedestrian crossing	Pedestrian crossing uses default flow of 0. Is this correct?
Warning	Pedestrian Crossing	2 - Hollywood Drive (W) - Pedestrian crossing	Pedestrian crossing uses default flow of 0. Is this correct?
Warning	Pedestrian Crossing	3 - Hollywood Drive (N) - New Link - Pedestrian crossing	Pedestrian crossing uses default flow of 0. Is this correct?

Analysis Set Details

ID	Name	Include in report	Use specific Demand Set (s)	Specific Demand Set(s)	Network flow scaling factor (%)	Network capacity scaling factor (%)
A1	Do-Something	✓	✓	D1,D2,D3,D4,D5,D6	100.000	100.000

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (s)	Junction LOS
1 - Hollywood Drive Roundabout w/ New Link	Hollywood Drive Roundabout w/ New Link	Standard Roundabout	1,2,3	5.71	A

Junction Network Options

[same as above]

Arms

Arms

[same as above]

Capacity Options

[same as above]

Roundabout Geometry

[same as above]

Pedestrian Crossings

Arm	Crossing type	Average pedestrian flow (Ped/hr)
1 - Hollywood Drive (S)	Zebra	0.00
2 - Hollywood Drive (W)	Zebra	0.00
3 - Hollywood Drive (N) - New Link	Zebra	0.00

Zebra Crossings

Arm	Space between crossing and junction entry (Zebra) (PCU)	Vehicles queueing on exit (Zebra) (PCU)	Central Refuge	Crossing data type	Crossing length (m)	Crossing time (s)
1 - Hollywood Drive (S)	1.00	1.00		Distance	7.40	5.29
2 - Hollywood Drive (W)	1.00	1.00		Distance	8.10	5.79
3 - Hollywood Drive (N) - New Link	1.00	1.00		Distance	7.40	5.29

Slope / Intercept / Capacity

[same as above]

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Model start time (HH:mm)	Model finish time (HH:mm)	Time segment length (min)	Run automatically
D3	DS 2028	AM	ONE HOUR	07:30	09:00	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 (%)
1 - Hollywood Drive (S)		ONE HOUR	✓	406.00	100.000
2 - Hollywood Drive (W)		ONE HOUR	✓	276.00	100.000
3 - Hollywood Drive (N) - New Link		ONE HOUR	✓	101.00	100.000

Demand overview (Pedestrians)

Arm	Profile type	Average pedestrian flow (Ped/hr)
1 - Hollywood Drive (S)	Global	0.00
2 - Hollywood Drive (W)	Global	0.00
3 - Hollywood Drive (N) - New Link	Global	0.00

Origin-Destination Data

Demand (PCU/hr)

	To			
		1 - Hollywood Drive (S)	2 - Hollywood Drive (W)	3 - Hollywood Drive (N) - New Link
	From			
	1 - Hollywood Drive (S)	0.000	355.000	51.000
	2 - Hollywood Drive (W)	256.000	0.000	20.000
	3 - Hollywood Drive (N) - New Link	74.000	27.000	0.000

Proportions

	To			
		1 - Hollywood Drive (S)	2 - Hollywood Drive (W)	3 - Hollywood Drive (N) - New Link
	From			
	1 - Hollywood Drive (S)	0.00	0.87	0.13
	2 - Hollywood Drive (W)	0.93	0.00	0.07
	3 - Hollywood Drive (N) - New Link	0.73	0.27	0.00

Vehicle Mix

Heavy Vehicle proportion

	To			
		1 - Hollywood Drive (S)	2 - Hollywood Drive (W)	3 - Hollywood Drive (N) - New Link
	From			
	1 - Hollywood Drive (S)	0	0	0
	2 - Hollywood Drive (W)	0	0	0
	3 - Hollywood Drive (N) - New Link	0	0	0

Average PCU Per Veh

	To			
		1 - Hollywood Drive (S)	2 - Hollywood Drive (W)	3 - Hollywood Drive (N) - New Link
	From			
	1 - Hollywood Drive (S)	1.000	1.000	1.000
	2 - Hollywood Drive (W)	1.000	1.000	1.000
	3 - Hollywood Drive (N) - New Link	1.000	1.000	1.000

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
1 - Hollywood Drive (S)	0.46	6.73	0.8	A	372.55	558.83
2 - Hollywood Drive (W)	0.26	4.14	0.3	A	253.26	379.89
3 - Hollywood Drive (N) - New Link	0.15	5.90	0.2	A	92.68	139.02

Main Results for each time segment

Main results: (07:30-07:45)

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
1 - Hollywood Drive (S)	305.66	76.41	20.21	0.00	986.53	0.310	303.88	247.33	0.0	0.4	5.259	A
2 - Hollywood Drive (W)	207.79	51.95	38.17	0.00	1183.60	0.176	206.94	285.91	0.0	0.2	3.682	A
3 - Hollywood Drive (N) - New Link	76.04	19.01	191.94	0.00	760.95	0.100	75.60	53.17	0.0	0.1	5.249	A

Main results: (07:45-08:00)

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
1 - Hollywood Drive (S)	364.99	91.25	24.24	0.00	984.43	0.371	364.43	296.38	0.4	0.6	5.801	A
2 - Hollywood Drive (W)	248.12	62.03	45.78	0.00	1179.32	0.210	247.91	342.90	0.2	0.3	3.864	A
3 - Hollywood Drive (N) - New Link	90.80	22.70	229.94	0.00	744.14	0.122	90.69	63.74	0.1	0.1	5.509	A

Main results: (08:00-08:15)

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
1 - Hollywood Drive (S)	447.01	111.75	29.68	0.00	981.59	0.455	446.05	362.91	0.6	0.8	6.709	A
2 - Hollywood Drive (W)	303.88	75.97	56.03	0.00	1173.54	0.259	303.55	419.70	0.3	0.3	4.138	A
3 - Hollywood Drive (N) - New Link	111.20	27.80	281.56	0.00	721.31	0.154	111.03	78.03	0.1	0.2	5.897	A

Main results: (08:15-08:30)

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
1 - Hollywood Drive (S)	447.01	111.75	29.73	0.00	981.57	0.455	446.99	363.33	0.8	0.8	6.733	A
2 - Hollywood Drive (W)	303.88	75.97	56.15	0.00	1173.47	0.259	303.88	420.57	0.3	0.3	4.139	A
3 - Hollywood Drive (N) - New Link	111.20	27.80	281.86	0.00	721.18	0.154	111.20	78.17	0.2	0.2	5.901	A

Main results: (08:30-08:45)

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
1 - Hollywood Drive (S)	364.99	91.25	24.32	0.00	984.39	0.371	365.93	297.08	0.8	0.6	5.831	A
2 - Hollywood Drive (W)	248.12	62.03	45.97	0.00	1179.21	0.210	248.44	344.28	0.3	0.3	3.868	A
3 - Hollywood Drive (N) - New Link	90.80	22.70	230.44	0.00	743.92	0.122	90.96	63.97	0.2	0.1	5.516	A

Main results: (08:45-09:00)

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
1 - Hollywood Drive (S)	305.66	76.41	20.36	0.00	986.45	0.310	306.23	248.72	0.6	0.5	5.296	A
2 - Hollywood Drive (W)	207.79	51.95	38.47	0.00	1183.44	0.176	208.00	288.12	0.3	0.2	3.693	A
3 - Hollywood Drive (N) - New Link	76.04	19.01	192.93	0.00	760.51	0.100	76.15	53.54	0.1	0.1	5.262	A

Do-Something - DS 2028, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Pedestrian Crossing	1 - Hollywood Drive (S) - Pedestrian crossing	Pedestrian crossing uses default flow of 0. Is this correct?
Warning	Pedestrian Crossing	2 - Hollywood Drive (W) - Pedestrian crossing	Pedestrian crossing uses default flow of 0. Is this correct?
Warning	Pedestrian Crossing	3 - Hollywood Drive (N) - New Link - Pedestrian crossing	Pedestrian crossing uses default flow of 0. Is this correct?

Analysis Set Details

ID	Name	Include in report	Use specific Demand Set (s)	Specific Demand Set(s)	Network flow scaling factor (%)	Network capacity scaling factor (%)
A1	Do-Something	✓	✓	D1,D2,D3,D4,D5,D6	100.000	100.000

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (s)	Junction LOS
1 - Hollywood Drive Roundabout w/ New Link	Hollywood Drive Roundabout w/ New Link	Standard Roundabout	1,2,3	3.99	A

Junction Network Options

[same as above]

Arms

Arms

[same as above]

Capacity Options

[same as above]

Roundabout Geometry

[same as above]

Pedestrian Crossings

Arm	Crossing type	Average pedestrian flow (Ped/hr)
1 - Hollywood Drive (S)	Zebra	0.00
2 - Hollywood Drive (W)	Zebra	0.00
3 - Hollywood Drive (N) - New Link	Zebra	0.00

Zebra Crossings

Arm	Space between crossing and junction entry (Zebra) (PCU)	Vehicles queueing on exit (Zebra) (PCU)	Central Refuge	Crossing data type	Crossing length (m)	Crossing time (s)
1 - Hollywood Drive (S)	1.00	1.00		Distance	7.40	5.29
2 - Hollywood Drive (W)	1.00	1.00		Distance	8.10	5.79
3 - Hollywood Drive (N) - New Link	1.00	1.00		Distance	7.40	5.29

Slope / Intercept / Capacity

[same as above]

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Model start time (HH:mm)	Model finish time (HH:mm)	Time segment length (min)	Run automatically
D4	DS 2028	PM	ONE HOUR	16:45	18:15	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1 - Hollywood Drive (S)		ONE HOUR	✓	100.00	100.000
2 - Hollywood Drive (W)		ONE HOUR	✓	51.00	100.000
3 - Hollywood Drive (N) - New Link		ONE HOUR	✓	46.00	100.000

Demand overview (Pedestrians)

Arm	Profile type	Average pedestrian flow (Ped/hr)
1 - Hollywood Drive (S)	Global	0.00
2 - Hollywood Drive (W)	Global	0.00
3 - Hollywood Drive (N) - New Link	Global	0.00

Origin-Destination Data

Demand (PCU/hr)

From	To			
		1 - Hollywood Drive (S)	2 - Hollywood Drive (W)	3 - Hollywood Drive (N) - New Link
1 - Hollywood Drive (S)		0.000	33.000	67.000
2 - Hollywood Drive (W)		47.000	0.000	4.000
3 - Hollywood Drive (N) - New Link		43.000	3.000	0.000

Proportions

From	To			
		1 - Hollywood Drive (S)	2 - Hollywood Drive (W)	3 - Hollywood Drive (N) - New Link
1 - Hollywood Drive (S)		0.00	0.33	0.67
2 - Hollywood Drive (W)		0.92	0.00	0.08
3 - Hollywood Drive (N) - New Link		0.93	0.07	0.00

Vehicle Mix

Heavy Vehicle proportion

From	To			
		1 - Hollywood Drive (S)	2 - Hollywood Drive (W)	3 - Hollywood Drive (N) - New Link
1 - Hollywood Drive (S)		0	0	0
2 - Hollywood Drive (W)		0	0	0
3 - Hollywood Drive (N) - New Link		0	0	0

Average PCU Per Veh

From	To			
		1 - Hollywood Drive (S)	2 - Hollywood Drive (W)	3 - Hollywood Drive (N) - New Link
1 - Hollywood Drive (S)		1.000	1.000	1.000
2 - Hollywood Drive (W)		1.000	1.000	1.000
3 - Hollywood Drive (N) - New Link		1.000	1.000	1.000

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
1 - Hollywood Drive (S)	0.11	4.07	0.1	A	91.76	137.64
2 - Hollywood Drive (W)	0.05	3.25	0.1	A	46.80	70.20
3 - Hollywood Drive (N) - New Link	0.06	4.66	0.1	A	42.21	63.32

Main Results for each time segment

Main results: (16:45-17:00)

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
1 - Hollywood Drive (S)	75.29	18.82	2.25	0.00	995.90	0.076	74.96	67.47	0.0	0.1	3.908	A
2 - Hollywood Drive (W)	38.40	9.60	50.22	0.00	1176.81	0.033	38.26	26.98	0.0	0.0	3.161	A
3 - Hollywood Drive (N) - New Link	34.63	8.66	35.26	0.00	830.25	0.042	34.46	53.22	0.0	0.0	4.522	A

Main results: (17:00-17:15)

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
1 - Hollywood Drive (S)	89.90	22.47	2.69	0.00	995.66	0.090	89.83	80.85	0.1	0.1	3.974	A
2 - Hollywood Drive (W)	45.85	11.46	60.19	0.00	1171.20	0.039	45.82	32.34	0.0	0.0	3.198	A
3 - Hollywood Drive (N) - New Link	41.35	10.34	42.23	0.00	827.17	0.050	41.32	63.78	0.0	0.1	4.580	A

Main results: (17:15-17:30)

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
1 - Hollywood Drive (S)	110.10	27.53	3.30	0.00	995.35	0.111	110.00	99.01	0.1	0.1	4.066	A
2 - Hollywood Drive (W)	56.15	14.04	73.70	0.00	1163.58	0.048	56.11	39.60	0.0	0.1	3.250	A
3 - Hollywood Drive (N) - New Link	50.65	12.66	51.71	0.00	822.98	0.062	50.60	78.10	0.1	0.1	4.660	A

Main results: (17:30-17:45)

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
1 - Hollywood Drive (S)	110.10	27.53	3.30	0.00	995.35	0.111	110.10	99.09	0.1	0.1	4.066	A
2 - Hollywood Drive (W)	56.15	14.04	73.77	0.00	1163.55	0.048	56.15	39.64	0.1	0.1	3.250	A
3 - Hollywood Drive (N) - New Link	50.65	12.66	51.75	0.00	822.96	0.062	50.65	78.17	0.1	0.1	4.660	A

Main results: (17:45-18:00)

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
1 - Hollywood Drive (S)	89.90	22.47	2.70	0.00	995.66	0.090	90.00	80.99	0.1	0.1	3.976	A
2 - Hollywood Drive (W)	45.85	11.46	60.30	0.00	1171.14	0.039	45.89	32.40	0.1	0.0	3.198	A
3 - Hollywood Drive (N) - New Link	41.35	10.34	42.29	0.00	827.15	0.050	41.40	63.90	0.1	0.1	4.581	A

Main results: (18:00-18:15)

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
1 - Hollywood Drive (S)	75.29	18.82	2.26	0.00	995.89	0.076	75.36	67.82	0.1	0.1	3.912	A
2 - Hollywood Drive (W)	38.40	9.60	50.49	0.00	1176.66	0.033	38.42	27.13	0.0	0.0	3.164	A
3 - Hollywood Drive (N) - New Link	34.63	8.66	35.41	0.00	830.19	0.042	34.67	53.50	0.1	0.0	4.525	A

Do-Something - DS 2038, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Pedestrian Crossing	1 - Hollywood Drive (S) - Pedestrian crossing	Pedestrian crossing uses default flow of 0. Is this correct?
Warning	Pedestrian Crossing	2 - Hollywood Drive (W) - Pedestrian crossing	Pedestrian crossing uses default flow of 0. Is this correct?
Warning	Pedestrian Crossing	3 - Hollywood Drive (N) - New Link - Pedestrian crossing	Pedestrian crossing uses default flow of 0. Is this correct?

Analysis Set Details

ID	Name	Include in report	Use specific Demand Set (s)	Specific Demand Set(s)	Network flow scaling factor (%)	Network capacity scaling factor (%)
A1	Do-Something	✓	✓	D1,D2,D3,D4,D5,D6	100.000	100.000

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (s)	Junction LOS
1 - Hollywood Drive Roundabout w/ New Link	Hollywood Drive Roundabout w/ New Link	Standard Roundabout	1,2,3	5.90	A

Junction Network Options

[same as above]

Arms

Arms

[same as above]

Capacity Options

[same as above]

Roundabout Geometry

[same as above]

Pedestrian Crossings

Arm	Crossing type	Average pedestrian flow (Ped/hr)
1 - Hollywood Drive (S)	Zebra	0.00
2 - Hollywood Drive (W)	Zebra	0.00
3 - Hollywood Drive (N) - New Link	Zebra	0.00

Zebra Crossings

Arm	Space between crossing and junction entry (Zebra) (PCU)	Vehicles queueing on exit (Zebra) (PCU)	Central Refuge	Crossing data type	Crossing length (m)	Crossing time (s)
1 - Hollywood Drive (S)	1.00	1.00		Distance	7.40	5.29
2 - Hollywood Drive (W)	1.00	1.00		Distance	8.10	5.79
3 - Hollywood Drive (N) - New Link	1.00	1.00		Distance	7.40	5.29

Slope / Intercept / Capacity

[same as above]

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Model start time (HH:mm)	Model finish time (HH:mm)	Time segment length (min)	Run automatically
DS	DS 2038	AM	ONE HOUR	07:30	09:00	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 (%)
1 - Hollywood Drive (S)		ONE HOUR	✓	426.00	100.000
2 - Hollywood Drive (W)		ONE HOUR	✓	290.00	100.000
3 - Hollywood Drive (N) - New Link		ONE HOUR	✓	101.00	100.000

Demand overview (Pedestrians)

Arm	Profile type	Average pedestrian flow (Ped/hr)
1 - Hollywood Drive (S)	Global	0.00
2 - Hollywood Drive (W)	Global	0.00
3 - Hollywood Drive (N) - New Link	Global	0.00

Origin-Destination Data

Demand (PCU/hr)

	To			
		1 - Hollywood Drive (S)	2 - Hollywood Drive (W)	3 - Hollywood Drive (N) - New Link
	From			
	1 - Hollywood Drive (S)	0.000	375.000	51.000
	2 - Hollywood Drive (W)	270.000	0.000	20.000
	3 - Hollywood Drive (N) - New Link	74.000	27.000	0.000

Proportions

	To			
		1 - Hollywood Drive (S)	2 - Hollywood Drive (W)	3 - Hollywood Drive (N) - New Link
	From			
	1 - Hollywood Drive (S)	0.00	0.88	0.12
	2 - Hollywood Drive (W)	0.93	0.00	0.07
	3 - Hollywood Drive (N) - New Link	0.73	0.27	0.00

Vehicle Mix

Heavy Vehicle proportion

	To			
		1 - Hollywood Drive (S)	2 - Hollywood Drive (W)	3 - Hollywood Drive (N) - New Link
	From			
	1 - Hollywood Drive (S)	0	0	0
	2 - Hollywood Drive (W)	0	0	0
	3 - Hollywood Drive (N) - New Link	0	0	0

Average PCU Per Veh

	To			
		1 - Hollywood Drive (S)	2 - Hollywood Drive (W)	3 - Hollywood Drive (N) - New Link
	From			
	1 - Hollywood Drive (S)	1.000	1.000	1.000
	2 - Hollywood Drive (W)	1.000	1.000	1.000
	3 - Hollywood Drive (N) - New Link	1.000	1.000	1.000

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
1 - Hollywood Drive (S)	0.48	7.02	0.9	A	390.91	586.36
2 - Hollywood Drive (W)	0.27	4.21	0.4	A	266.11	399.16
3 - Hollywood Drive (N) - New Link	0.16	5.97	0.2	A	92.68	139.02

Main Results for each time segment

Main results: (07:30-07:45)

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
1 - Hollywood Drive (S)	320.72	80.18	20.21	0.00	986.53	0.325	318.81	257.82	0.0	0.5	5.376	A
2 - Hollywood Drive (W)	218.33	54.58	38.17	0.00	1183.61	0.184	217.43	300.85	0.0	0.2	3.722	A
3 - Hollywood Drive (N) - New Link	76.04	19.01	202.43	0.00	756.31	0.101	75.59	53.16	0.0	0.1	5.285	A

Main results: (07:45-08:00)

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
1 - Hollywood Drive (S)	382.97	95.74	24.24	0.00	984.43	0.389	382.35	308.95	0.5	0.6	5.973	A
2 - Hollywood Drive (W)	260.70	65.18	45.77	0.00	1179.32	0.221	260.48	360.82	0.2	0.3	3.917	A
3 - Hollywood Drive (N) - New Link	90.80	22.70	242.51	0.00	738.58	0.123	90.68	63.74	0.1	0.1	5.556	A

Main results: (08:00-08:15)

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
1 - Hollywood Drive (S)	469.03	117.26	29.68	0.00	981.59	0.478	467.95	378.29	0.6	0.9	6.992	A
2 - Hollywood Drive (W)	319.30	79.82	56.02	0.00	1173.54	0.272	318.94	441.61	0.3	0.4	4.210	A
3 - Hollywood Drive (N) - New Link	111.20	27.80	296.94	0.00	714.51	0.156	111.03	78.02	0.1	0.2	5.964	A

Main results: (08:15-08:30)

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
1 - Hollywood Drive (S)	469.03	117.26	29.73	0.00	981.57	0.478	469.01	378.74	0.9	0.9	7.023	A
2 - Hollywood Drive (W)	319.30	79.82	56.15	0.00	1173.47	0.272	319.29	442.59	0.4	0.4	4.214	A
3 - Hollywood Drive (N) - New Link	111.20	27.80	297.27	0.00	714.36	0.156	111.20	78.17	0.2	0.2	5.967	A

Main results: (08:30-08:45)

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
1 - Hollywood Drive (S)	382.97	95.74	24.32	0.00	984.39	0.389	384.03	309.70	0.9	0.6	6.008	A
2 - Hollywood Drive (W)	260.70	65.18	45.97	0.00	1179.21	0.221	261.05	362.37	0.4	0.3	3.922	A
3 - Hollywood Drive (N) - New Link	90.80	22.70	243.05	0.00	738.35	0.123	90.97	63.98	0.2	0.1	5.561	A

Main results: (08:45-09:00)

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
1 - Hollywood Drive (S)	320.72	80.18	20.36	0.00	986.45	0.325	321.35	259.28	0.6	0.5	5.419	A
2 - Hollywood Drive (W)	218.33	54.58	38.47	0.00	1183.43	0.184	218.56	303.23	0.3	0.2	3.731	A
3 - Hollywood Drive (N) - New Link	76.04	19.01	203.49	0.00	755.85	0.101	76.15	53.54	0.1	0.1	5.296	A

Do-Something - DS 2038, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Pedestrian Crossing	1 - Hollywood Drive (S) - Pedestrian crossing	Pedestrian crossing uses default flow of 0. Is this correct?
Warning	Pedestrian Crossing	2 - Hollywood Drive (W) - Pedestrian crossing	Pedestrian crossing uses default flow of 0. Is this correct?
Warning	Pedestrian Crossing	3 - Hollywood Drive (N) - New Link - Pedestrian crossing	Pedestrian crossing uses default flow of 0. Is this correct?

Analysis Set Details

ID	Name	Include in report	Use specific Demand Set (s)	Specific Demand Set(s)	Network flow scaling factor (%)	Network capacity scaling factor (%)
A1	Do-Something	✓	✓	D1,D2,D3,D4,D5,D6	100.000	100.000

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (s)	Junction LOS
1 - Hollywood Drive Roundabout w/ New Link	Hollywood Drive Roundabout w/ New Link	Standard Roundabout	1,2,3	3.99	A

Junction Network Options

[same as above]

Arms

Arms

[same as above]

Capacity Options

[same as above]

Roundabout Geometry

[same as above]

Pedestrian Crossings

Arm	Crossing type	Average pedestrian flow (Ped/hr)
1 - Hollywood Drive (S)	Zebra	0.00
2 - Hollywood Drive (W)	Zebra	0.00
3 - Hollywood Drive (N) - New Link	Zebra	0.00

Zebra Crossings

Arm	Space between crossing and junction entry (Zebra) (PCU)	Vehicles queueing on exit (Zebra) (PCU)	Central Refuge	Crossing data type	Crossing length (m)	Crossing time (s)
1 - Hollywood Drive (S)	1.00	1.00		Distance	7.40	5.29
2 - Hollywood Drive (W)	1.00	1.00		Distance	8.10	5.79
3 - Hollywood Drive (N) - New Link	1.00	1.00		Distance	7.40	5.29

Slope / Intercept / Capacity

[same as above]

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Model start time (HH:mm)	Model finish time (HH:mm)	Time segment length (min)	Run automatically
D6	DS 2038	PM	ONE HOUR	16:45	18:15	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1 - Hollywood Drive (S)		ONE HOUR	✓	102.00	100.000
2 - Hollywood Drive (W)		ONE HOUR	✓	54.00	100.000
3 - Hollywood Drive (N) - New Link		ONE HOUR	✓	46.00	100.000

Demand overview (Pedestrians)

Arm	Profile type	Average pedestrian flow (Ped/hr)
1 - Hollywood Drive (S)	Global	0.00
2 - Hollywood Drive (W)	Global	0.00
3 - Hollywood Drive (N) - New Link	Global	0.00

Origin-Destination Data

Demand (PCU/hr)

From	To			
		1 - Hollywood Drive (S)	2 - Hollywood Drive (W)	3 - Hollywood Drive (N) - New Link
	1 - Hollywood Drive (S)	0.000	35.000	67.000
	2 - Hollywood Drive (W)	50.000	0.000	4.000
	3 - Hollywood Drive (N) - New Link	43.000	3.000	0.000

Proportions

From	To			
		1 - Hollywood Drive (S)	2 - Hollywood Drive (W)	3 - Hollywood Drive (N) - New Link
	1 - Hollywood Drive (S)	0.00	0.34	0.66
	2 - Hollywood Drive (W)	0.93	0.00	0.07
	3 - Hollywood Drive (N) - New Link	0.93	0.07	0.00

Vehicle Mix

Heavy Vehicle proportion

From	To			
		1 - Hollywood Drive (S)	2 - Hollywood Drive (W)	3 - Hollywood Drive (N) - New Link
	1 - Hollywood Drive (S)	0	0	0
	2 - Hollywood Drive (W)	0	0	0
	3 - Hollywood Drive (N) - New Link	0	0	0

Average PCU Per Veh

From	To			
		1 - Hollywood Drive (S)	2 - Hollywood Drive (W)	3 - Hollywood Drive (N) - New Link
	1 - Hollywood Drive (S)	1.000	1.000	1.000
	2 - Hollywood Drive (W)	1.000	1.000	1.000
	3 - Hollywood Drive (N) - New Link	1.000	1.000	1.000

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
1 - Hollywood Drive (S)	0.11	4.08	0.1	A	93.60	140.40
2 - Hollywood Drive (W)	0.05	3.26	0.1	A	49.55	74.33
3 - Hollywood Drive (N) - New Link	0.06	4.67	0.1	A	42.21	63.32

Main Results for each time segment

Main results: (16:45-17:00)

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
1 - Hollywood Drive (S)	76.79	19.20	2.25	0.00	995.90	0.077	76.46	69.72	0.0	0.1	3.915	A
2 - Hollywood Drive (W)	40.65	10.16	50.22	0.00	1176.81	0.035	40.51	28.48	0.0	0.0	3.167	A
3 - Hollywood Drive (N) - New Link	34.63	8.66	37.51	0.00	829.26	0.042	34.46	53.22	0.0	0.0	4.528	A

Main results: (17:00-17:15)

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
1 - Hollywood Drive (S)	91.70	22.92	2.69	0.00	995.66	0.092	91.62	83.54	0.1	0.1	3.982	A
2 - Hollywood Drive (W)	48.54	12.14	60.18	0.00	1171.20	0.041	48.52	34.13	0.0	0.0	3.205	A
3 - Hollywood Drive (N) - New Link	41.35	10.34	44.92	0.00	825.98	0.050	41.32	63.78	0.0	0.1	4.587	A

Main results: (17:15-17:30)

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
1 - Hollywood Drive (S)	112.30	28.08	3.30	0.00	995.35	0.113	112.20	102.31	0.1	0.1	4.076	A
2 - Hollywood Drive (W)	59.46	14.86	73.70	0.00	1163.58	0.051	59.41	41.80	0.0	0.1	3.259	A
3 - Hollywood Drive (N) - New Link	50.65	12.66	55.01	0.00	821.52	0.062	50.60	78.10	0.1	0.1	4.669	A

Main results: (17:30-17:45)

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Pedestrian demand (Pedi/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
1 - Hollywood Drive (S)	112.30	28.08	3.30	0.00	995.35	0.113	112.30	102.39	0.1	0.1	4.076	A
2 - Hollywood Drive (W)	59.46	14.86	73.77	0.00	1163.55	0.051	59.45	41.84	0.1	0.1	3.259	A
3 - Hollywood Drive (N) - New Link	50.65	12.66	55.05	0.00	821.50	0.062	50.65	78.17	0.1	0.1	4.669	A

Main results: (17:45-18:00)

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Pedestrian demand (Pedi/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
1 - Hollywood Drive (S)	91.70	22.92	2.70	0.00	995.66	0.092	91.80	83.69	0.1	0.1	3.983	A
2 - Hollywood Drive (W)	48.54	12.14	60.30	0.00	1171.14	0.041	48.59	34.20	0.1	0.0	3.206	A
3 - Hollywood Drive (N) - New Link	41.35	10.34	44.99	0.00	825.95	0.050	41.40	63.90	0.1	0.1	4.590	A

Main results: (18:00-18:15)

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Pedestrian demand (Pedi/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
1 - Hollywood Drive (S)	76.79	19.20	2.26	0.00	995.89	0.077	76.86	70.08	0.1	0.1	3.918	A
2 - Hollywood Drive (W)	40.65	10.16	50.49	0.00	1176.66	0.035	40.68	28.64	0.0	0.0	3.168	A
3 - Hollywood Drive (N) - New Link	34.63	8.66	37.67	0.00	829.19	0.042	34.67	53.50	0.1	0.0	4.530	A

Junctions 9**ARCADY 9 - Roundabout Module**

Version: 9.0.0.4211 []

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Filename: R121 - Boulevard - Cruiserath Drive Roundabout.j9

Path: G:\2017\p170182\calcs\arcady\October 2021 Update

Report generation date: 02/11/2021 11:16:12

»Do-Nothing - DN 2023, AM
 »Do-Nothing - DN 2023, PM
 »Do-Nothing - DN 2028, AM
 »Do-Nothing - DN 2028, PM
 »Do-Nothing - DN 2038, AM
 »Do-Nothing - DN 2038, PM
 »Do-Something - DS 2023, AM
 »Do-Something - DS 2023, PM
 »Do-Something - DS 2028, AM
 »Do-Something - DS 2028, PM
 »Do-Something - DS 2038, AM
 »Do-Something - DS 2038, PM

Summary of junction performance

	AM				PM			
	Queue (PCU)	Delay (s)	RFC	LOS	Queue (PCU)	Delay (s)	RFC	LOS
Do-Nothing - DN 2023								
1 - Cruiserath Drive (E)	0.1	3.56	0.09	A	0.3	3.60	0.23	A
2 - R121 (S)	0.8	2.74	0.46	A	0.6	2.57	0.39	A
3 - The Boulevard (W)	0.4	2.64	0.30	A	0.2	2.19	0.19	A
4 - R121 (N)	1.5	4.46	0.60	A	0.5	2.58	0.35	A
Do-Nothing - DN 2028								
1 - Cruiserath Drive (E)	0.1	3.96	0.11	A	0.4	3.91	0.26	A
2 - R121 (S)	1.2	3.28	0.54	A	0.8	2.80	0.43	A
3 - The Boulevard (W)	0.6	3.03	0.36	A	0.3	2.30	0.21	A
4 - R121 (N)	2.2	5.78	0.69	A	0.6	2.78	0.39	A
Do-Nothing - DN 2038								
1 - Cruiserath Drive (E)	0.1	4.19	0.12	A	0.4	4.14	0.29	A
2 - R121 (S)	1.4	3.55	0.58	A	0.9	2.97	0.46	A
3 - The Boulevard (W)	0.6	3.24	0.39	A	0.3	2.39	0.23	A
4 - R121 (N)	2.7	6.83	0.73	A	0.7	2.91	0.41	A

	AM				PM			
	Queue (PCU)	Delay (s)	RFC	LOS	Queue (PCU)	Delay (s)	RFC	LOS
Do-Something - DS 2023								
1 - Cruiserath Drive (E)	0.1	3.66	0.09	A	0.3	3.67	0.24	A
2 - R121 (S)	0.9	2.78	0.47	A	0.7	2.66	0.41	A
3 - The Boulevard (W)	0.4	2.69	0.31	A	0.3	2.23	0.20	A
4 - R121 (N)	1.6	4.70	0.62	A	0.6	2.63	0.36	A
Do-Something - DS 2028								
1 - Cruiserath Drive (E)	0.1	4.35	0.11	A	0.4	4.14	0.28	A
2 - R121 (S)	1.3	3.44	0.56	A	1.0	3.10	0.49	A
3 - The Boulevard (W)	0.6	3.19	0.38	A	0.3	2.43	0.24	A
4 - R121 (N)	3.0	7.53	0.76	A	0.7	2.97	0.43	A
Do-Something - DS 2038								
1 - Cruiserath Drive (E)	0.1	4.63	0.13	A	0.4	4.40	0.30	A
2 - R121 (S)	1.5	3.75	0.60	A	1.1	3.31	0.52	A
3 - The Boulevard (W)	0.7	3.42	0.41	A	0.3	2.53	0.25	A
4 - R121 (N)	4.0	9.40	0.80	A	0.8	3.13	0.45	A

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

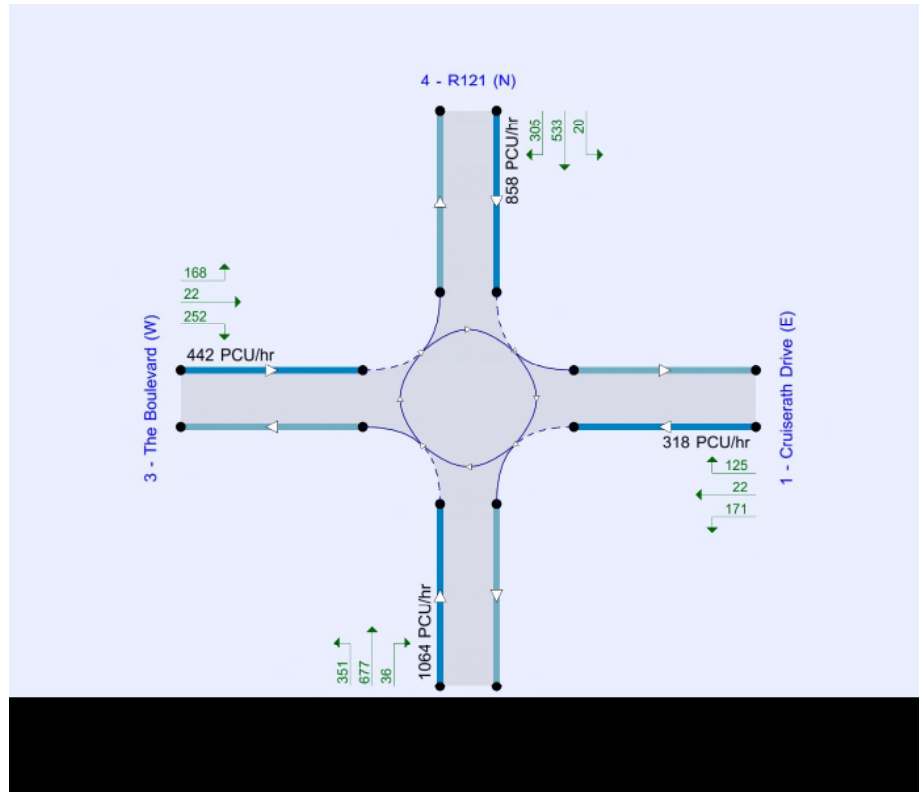
File summary

File Description

Title	Hollystown-Kilmartin
Location	Hollystown, Dublin 15
Site number	
Date	02/11/2021
Version	
Status	Existing
Identifier	
Client	Glenveagh Homes Limited
Jobnumber	170182
Enumerator	HEADOFFICE\GILD
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

Scenario name	Time Period name	Traffic profile type	Model start time (HH:mm)	Model finish time (HH:mm)	Time segment length (min)	Run automatically
DN 2023	AM	ONE HOUR	08:00	09:30	15	✓
DN 2023	PM	ONE HOUR	17:00	18:30	15	✓
DN 2028	AM	ONE HOUR	08:00	09:30	15	✓
DN 2028	PM	ONE HOUR	17:00	18:30	15	✓
DN 2038	AM	ONE HOUR	08:00	09:30	15	✓
DN 2038	PM	ONE HOUR	17:00	18:30	15	✓
DS 2023	AM	ONE HOUR	08:00	09:30	15	✓
DS 2023	PM	ONE HOUR	17:00	18:30	15	✓
DS 2028	AM	ONE HOUR	08:00	09:30	15	✓
DS 2028	PM	ONE HOUR	17:00	18:30	15	✓
DS 2038	AM	ONE HOUR	08:00	09:30	15	✓
DS 2038	PM	ONE HOUR	17:00	18:30	15	✓

Do-Nothing - DN 2023, AM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

ID	Name	Include in report	Use specific Demand Set (s)	Specific Demand Set (s)	Network flow scaling factor (%)	Network capacity scaling factor (%)
A1	Do-Nothing	✓	✓	D1,D2,D3,D4,D5,D6	100.000	100.000

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (s)	Junction LOS
1 - R121 - Boulevard -Cruiserath Drive Roundabout	R121 - Boulevard -Cruiserath Drive Roundabout	Standard Roundabout	1,2,3,4	3.44	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Name	Description
1	Cruiserath Drive (E)	
2	R121 (S)	
3	The Boulevard (W)	
4	R121 (N)	

Capacity Options

Arm	Minimum capacity (PCU/hr)	Maximum capacity (PCU/hr)	Assume flat start profile	Initial queue (PCU)
1 - Cruiserath Drive (E)	0.00	99999.00		0.00
2 - R121 (S)	0.00	99999.00		0.00
3 - The Boulevard (W)	0.00	99999.00		0.00
4 - R121 (N)	0.00	99999.00		0.00

Roundabout Geometry

Arm	V - Approach road half-width (m)	E - Entry width (m)	I' - Effective flare length (m)	R - Entry radius (m)	D - Inscribed circle diameter (m)	PHI - Conflict (entry) angle (deg)	Exit only
1 - Cruiserath Drive (E)	5.20	6.50	13.1	27.0	69.0	48.0	
2 - R121 (S)	7.00	10.20	12.8	35.0	69.0	45.0	
3 - The Boulevard (W)	7.00	8.70	12.1	45.0	69.0	35.0	
4 - R121 (N)	7.00	10.30	6.0	26.0	69.0	55.0	

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Arm	Final slope	Final intercept (PCU/hr)
1 - Cruiserath Drive (E)	0.511	1781.242
2 - R121 (S)	0.642	2576.970
3 - The Boulevard (W)	0.639	2500.652
4 - R121 (N)	0.586	2295.881

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

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Model start time (HH:mm)	Model finish time (HH:mm)	Time segment length (min)	Run automatically
D1	DN 2023	AM	ONE HOUR	08:00	09:30	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 (%)
1 - Cruiserath Drive (E)		ONE HOUR	✓	90.00	100.000
2 - R121 (S)		ONE HOUR	✓	1005.00	100.000
3 - The Boulevard (W)		ONE HOUR	✓	522.00	100.000
4 - R121 (N)		ONE HOUR	✓	1097.00	100.000

Origin-Destination Data

Demand (PCU/hr)

		To			
		1 - Cruiserath Drive (E)	2 - R121 (S)	3 - The Boulevard (W)	4 - R121 (N)
From	1 - Cruiserath Drive (E)	0.000	57.000	12.000	21.000
	2 - R121 (S)	160.000	0.000	224.000	621.000
	3 - The Boulevard (W)	14.000	261.000	0.000	247.000
	4 - R121 (N)	163.000	744.000	190.000	0.000

Proportions

		To			
		1 - Cruiserath Drive (E)	2 - R121 (S)	3 - The Boulevard (W)	4 - R121 (N)
From	1 - Cruiserath Drive (E)	0.00	0.63	0.13	0.23
	2 - R121 (S)	0.16	0.00	0.22	0.62
	3 - The Boulevard (W)	0.03	0.50	0.00	0.47
	4 - R121 (N)	0.15	0.68	0.17	0.00

Vehicle Mix

Heavy Vehicle proportion

		To			
		1 - Cruiserath Drive (E)	2 - R121 (S)	3 - The Boulevard (W)	4 - R121 (N)
From	1 - Cruiserath Drive (E)	0	0	0	0
	2 - R121 (S)	0	0	0	0
	3 - The Boulevard (W)	0	0	0	0
	4 - R121 (N)	0	0	0	0

Average PCU Per Veh

		To			
		1 - Cruiserath Drive (E)	2 - R121 (S)	3 - The Boulevard (W)	4 - R121 (N)
From	1 - Cruiserath Drive (E)	1.000	1.000	1.000	1.000
	2 - R121 (S)	1.000	1.000	1.000	1.000
	3 - The Boulevard (W)	1.000	1.000	1.000	1.000
	4 - R121 (N)	1.000	1.000	1.000	1.000

Detailed Demand Data

Demand for each time segment

Time Segment	Arm	Demand (PCU/hr)	Demand in PCU (PCU/hr)
08:00-08:15	1 - Cruiserath Drive (E)	67.76	67.76
	2 - R121 (S)	756.62	756.62
	3 - The Boulevard (W)	392.99	392.99
	4 - R121 (N)	825.88	825.88
08:15-08:30	1 - Cruiserath Drive (E)	80.91	80.91
	2 - R121 (S)	903.47	903.47
	3 - The Boulevard (W)	469.27	469.27
	4 - R121 (N)	986.18	986.18
08:30-08:45	1 - Cruiserath Drive (E)	99.09	99.09
	2 - R121 (S)	1106.53	1106.53
	3 - The Boulevard (W)	574.73	574.73
	4 - R121 (N)	1207.82	1207.82
08:45-09:00	1 - Cruiserath Drive (E)	99.09	99.09
	2 - R121 (S)	1106.53	1106.53
	3 - The Boulevard (W)	574.73	574.73
	4 - R121 (N)	1207.82	1207.82
09:00-09:15	1 - Cruiserath Drive (E)	80.91	80.91
	2 - R121 (S)	903.47	903.47
	3 - The Boulevard (W)	469.27	469.27
	4 - R121 (N)	986.18	986.18
09:15-09:30	1 - Cruiserath Drive (E)	67.76	67.76
	2 - R121 (S)	756.62	756.62
	3 - The Boulevard (W)	392.99	392.99
	4 - R121 (N)	825.88	825.88

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
1 - Cruiserath Drive (E)	0.09	3.56	0.1	A	82.59	123.88
2 - R121 (S)	0.46	2.74	0.8	A	922.21	1383.31
3 - The Boulevard (W)	0.30	2.64	0.4	A	479.00	718.49
4 - R121 (N)	0.60	4.46	1.5	A	1006.63	1509.94

Main Results for each time segment

Main results: (08:00-08:15)

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
1 - Cruiserath Drive (E)	67.76	16.94	897.01	1322.89	0.051	67.54	253.02	0.0	0.1	2.867	A
2 - R121 (S)	756.62	189.15	167.36	2469.57	0.306	754.86	797.19	0.0	0.4	2.098	A
3 - The Boulevard (W)	392.99	98.25	602.37	2115.48	0.186	392.08	319.85	0.0	0.2	2.088	A
4 - R121 (N)	825.88	206.47	326.73	2104.27	0.392	823.31	667.72	0.0	0.6	2.804	A

Main results: (08:15-08:30)

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
1 - Cruiserath Drive (E)	80.91	20.23	1073.24	1232.85	0.066	80.84	302.70	0.1	0.1	3.124	A
2 - R121 (S)	903.47	225.87	200.27	2448.46	0.369	902.91	953.82	0.4	0.6	2.329	A
3 - The Boulevard (W)	469.27	117.32	720.52	2039.93	0.230	468.99	382.65	0.2	0.3	2.291	A
4 - R121 (N)	986.18	246.55	390.82	2066.69	0.477	985.13	798.69	0.6	0.9	3.325	A

Main results: (08:30-08:45)

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
1 - Cruiserath Drive (E)	99.09	24.77	1313.53	1110.07	0.089	98.98	370.53	0.1	0.1	3.560	A
2 - R121 (S)	1106.53	276.63	245.09	2419.69	0.457	1105.50	1167.42	0.6	0.8	2.735	A
3 - The Boulevard (W)	574.73	143.68	882.20	1936.55	0.297	574.24	468.40	0.3	0.4	2.643	A
4 - R121 (N)	1207.82	301.95	478.52	2015.25	0.599	1205.53	977.92	0.9	1.5	4.433	A

Main results: (08:45-09:00)

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
1 - Cruiserath Drive (E)	99.09	24.77	1315.69	1108.97	0.089	99.09	371.04	0.1	0.1	3.563	A
2 - R121 (S)	1106.53	276.63	245.52	2419.42	0.457	1106.52	1169.26	0.8	0.8	2.741	A
3 - The Boulevard (W)	574.73	143.68	883.01	1936.03	0.297	574.73	469.03	0.4	0.4	2.644	A
4 - R121 (N)	1207.82	301.95	478.94	2015.01	0.599	1207.78	978.80	1.5	1.5	4.459	A

Main results: (09:00-09:15)

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
1 - Cruiserath Drive (E)	80.91	20.23	1076.46	1231.21	0.066	81.02	303.47	0.1	0.1	3.129	A
2 - R121 (S)	903.47	225.87	200.91	2448.05	0.369	904.49	956.57	0.8	0.6	2.335	A
3 - The Boulevard (W)	469.27	117.32	721.79	2039.12	0.230	469.75	383.60	0.4	0.3	2.296	A
4 - R121 (N)	986.18	246.55	391.47	2066.30	0.477	988.45	800.07	1.5	0.9	3.348	A

Main results: (09:15-09:30)

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
1 - Cruiserath Drive (E)	67.76	16.94	900.72	1321.00	0.051	67.82	253.97	0.1	0.1	2.872	A
2 - R121 (S)	756.62	189.15	168.10	2469.10	0.306	757.19	800.44	0.6	0.4	2.104	A
3 - The Boulevard (W)	392.99	98.25	604.25	2114.28	0.186	393.27	321.04	0.3	0.2	2.091	A
4 - R121 (N)	825.88	206.47	327.73	2103.68	0.393	826.96	669.79	0.9	0.6	2.821	A

Do-Nothing - DN 2023, PM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

ID	Name	Include in report	Use specific Demand Set (s)	Specific Demand Set (s)	Network flow scaling factor (%)	Network capacity scaling factor (%)
A1	Do-Nothing	✓	✓	D1,D2,D3,D4,D5,D6	100.000	100.000

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (s)	Junction LOS
1 - R121 - Boulevard -Cruiserath Drive Roundabout	R121 - Boulevard -Cruiserath Drive Roundabout	Standard Roundabout	1,2,3,4	2.65	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Name	Description
1	Cruiserath Drive (E)	
2	R121 (S)	
3	The Boulevard (W)	
4	R121 (N)	

Capacity Options

Arm	Minimum capacity (PCU/hr)	Maximum capacity (PCU/hr)	Assume flat start profile	Initial queue (PCU)
1 - Cruiserath Drive (E)	0.00	99999.00		0.00
2 - R121 (S)	0.00	99999.00		0.00
3 - The Boulevard (W)	0.00	99999.00		0.00
4 - R121 (N)	0.00	99999.00		0.00

Roundabout Geometry

Arm	V - Approach road half-width (m)	E - Entry width (m)	I' - Effective flare length (m)	R - Entry radius (m)	D - Inscribed circle diameter (m)	PHI - Conflict (entry) angle (deg)	Exit only
1 - Cruiserath Drive (E)	5.20	6.50	13.1	27.0	69.0	48.0	
2 - R121 (S)	7.00	10.20	12.8	35.0	69.0	45.0	
3 - The Boulevard (W)	7.00	8.70	12.1	45.0	69.0	35.0	
4 - R121 (N)	7.00	10.30	6.0	26.0	69.0	55.0	

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Arm	Final slope	Final intercept (PCU/hr)
1 - Cruiserath Drive (E)	0.511	1781.242
2 - R121 (S)	0.642	2576.970
3 - The Boulevard (W)	0.639	2500.652
4 - R121 (N)	0.586	2295.881

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

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Model start time (HH:mm)	Model finish time (HH:mm)	Time segment length (min)	Run automatically
D2	DN 2023	PM	ONE HOUR	17:00	18:30	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 (%)
1 - Cruiserath Drive (E)		ONE HOUR	✓	276.00	100.000
2 - R121 (S)		ONE HOUR	✓	819.00	100.000
3 - The Boulevard (W)		ONE HOUR	✓	353.00	100.000
4 - R121 (N)		ONE HOUR	✓	678.00	100.000

Origin-Destination Data

Demand (PCU/hr)

		To			
		1 - Cruiserath Drive (E)	2 - R121 (S)	3 - The Boulevard (W)	4 - R121 (N)
From	1 - Cruiserath Drive (E)	0.000	148.000	19.000	109.000
	2 - R121 (S)	31.000	0.000	265.000	523.000
	3 - The Boulevard (W)	19.000	190.000	0.000	144.000
	4 - R121 (N)	17.000	397.000	264.000	0.000

Proportions

		To			
		1 - Cruiserath Drive (E)	2 - R121 (S)	3 - The Boulevard (W)	4 - R121 (N)
From	1 - Cruiserath Drive (E)	0.00	0.54	0.07	0.39
	2 - R121 (S)	0.04	0.00	0.32	0.64
	3 - The Boulevard (W)	0.05	0.54	0.00	0.41
	4 - R121 (N)	0.03	0.59	0.39	0.00

Detailed Demand Data

Demand for each time segment

Time Segment	Arm	Demand (PCU/hr)	Demand in PCU (PCU/hr)
17:00-17:15	1 - Cruiserath Drive (E)	207.79	207.79
	2 - R121 (S)	616.59	616.59
	3 - The Boulevard (W)	265.76	265.76
	4 - R121 (N)	510.43	510.43
17:15-17:30	1 - Cruiserath Drive (E)	248.12	248.12
	2 - R121 (S)	736.26	736.26
	3 - The Boulevard (W)	317.34	317.34
	4 - R121 (N)	609.51	609.51
17:30-17:45	1 - Cruiserath Drive (E)	303.88	303.88
	2 - R121 (S)	901.74	901.74
	3 - The Boulevard (W)	388.66	388.66
	4 - R121 (N)	746.49	746.49
17:45-18:00	1 - Cruiserath Drive (E)	303.88	303.88
	2 - R121 (S)	901.74	901.74
	3 - The Boulevard (W)	388.66	388.66
	4 - R121 (N)	746.49	746.49
18:00-18:15	1 - Cruiserath Drive (E)	248.12	248.12
	2 - R121 (S)	736.26	736.26
	3 - The Boulevard (W)	317.34	317.34
	4 - R121 (N)	609.51	609.51
18:15-18:30	1 - Cruiserath Drive (E)	207.79	207.79
	2 - R121 (S)	616.59	616.59
	3 - The Boulevard (W)	265.76	265.76
	4 - R121 (N)	510.43	510.43

Vehicle Mix

Heavy Vehicle proportion

		To			
		1 - Cruiserath Drive (E)	2 - R121 (S)	3 - The Boulevard (W)	4 - R121 (N)
From	1 - Cruiserath Drive (E)	0	0	0	0
	2 - R121 (S)	0	0	0	0
	3 - The Boulevard (W)	0	0	0	0
	4 - R121 (N)	0	0	0	0

Average PCU Per Veh

		To			
		1 - Cruiserath Drive (E)	2 - R121 (S)	3 - The Boulevard (W)	4 - R121 (N)
From	1 - Cruiserath Drive (E)	1.000	1.000	1.000	1.000
	2 - R121 (S)	1.000	1.000	1.000	1.000
	3 - The Boulevard (W)	1.000	1.000	1.000	1.000
	4 - R121 (N)	1.000	1.000	1.000	1.000

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
1 - Cruiserath Drive (E)	0.23	3.60	0.3	A	253.26	379.89
2 - R121 (S)	0.39	2.57	0.6	A	751.53	1127.29
3 - The Boulevard (W)	0.19	2.19	0.2	A	323.92	485.88
4 - R121 (N)	0.35	2.58	0.5	A	622.14	933.22

Main Results for each time segment

Main results: (17:00-17:15)

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
1 - Cruiserath Drive (E)	207.79	51.95	639.20	1454.63	0.143	207.12	50.33	0.0	0.2	2.884	A
2 - R121 (S)	616.59	154.15	294.34	2388.09	0.258	615.20	551.98	0.0	0.3	2.031	A
3 - The Boulevard (W)	265.76	66.44	497.94	2182.25	0.122	265.20	411.60	0.0	0.1	1.877	A
4 - R121 (N)	510.43	127.61	180.30	2190.14	0.233	509.22	582.84	0.0	0.3	2.141	A

Main results: (17:15-17:30)

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
1 - Cruiserath Drive (E)	248.12	62.03	764.61	1390.55	0.178	247.92	60.20	0.2	0.2	3.150	A
2 - R121 (S)	736.26	184.07	352.17	2350.98	0.313	735.83	660.36	0.3	0.5	2.229	A
3 - The Boulevard (W)	317.34	79.33	595.65	2119.77	0.150	317.19	492.35	0.1	0.2	1.997	A
4 - R121 (N)	609.51	152.38	215.65	2169.41	0.281	609.16	697.19	0.3	0.4	2.307	A

Main results: (17:30-17:45)

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
1 - Cruiserath Drive (E)	303.88	75.97	936.28	1302.83	0.233	303.54	73.71	0.2	0.3	3.602	A
2 - R121 (S)	901.74	225.43	431.22	2300.25	0.392	900.99	808.60	0.5	0.6	2.571	A
3 - The Boulevard (W)	388.66	97.17	729.33	2034.29	0.191	388.42	602.87	0.2	0.2	2.187	A
4 - R121 (N)	746.49	186.62	264.07	2141.01	0.349	745.92	853.68	0.4	0.5	2.579	A

Main results: (17:45-18:00)

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
1 - Cruiserath Drive (E)	303.88	75.97	936.96	1302.48	0.233	303.88	73.77	0.3	0.3	3.604	A
2 - R121 (S)	901.74	225.43	431.60	2300.01	0.392	901.73	809.24	0.6	0.6	2.574	A
3 - The Boulevard (W)	388.66	97.17	729.97	2033.89	0.191	388.66	603.36	0.2	0.2	2.187	A
4 - R121 (N)	746.49	186.62	264.24	2140.91	0.349	746.49	854.39	0.5	0.5	2.581	A

Main results: (18:00-18:15)

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
1 - Cruiserath Drive (E)	248.12	62.03	765.71	1389.99	0.179	248.46	60.29	0.3	0.2	3.156	A
2 - R121 (S)	736.26	184.07	352.78	2350.59	0.313	737.01	661.39	0.6	0.5	2.233	A
3 - The Boulevard (W)	317.34	79.33	596.66	2119.13	0.150	317.58	493.13	0.2	0.2	1.999	A
4 - R121 (N)	609.51	152.38	215.92	2169.25	0.281	610.08	698.31	0.5	0.4	2.309	A

Main results: (18:15-18:30)

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
1 - Cruiserath Drive (E)	207.79	51.95	641.10	1453.66	0.143	207.99	50.47	0.2	0.2	2.892	A
2 - R121 (S)	616.59	154.15	295.35	2387.44	0.258	617.02	553.74	0.5	0.3	2.035	A
3 - The Boulevard (W)	265.76	66.44	499.51	2181.25	0.122	265.91	412.85	0.2	0.1	1.881	A
4 - R121 (N)	510.43	127.61	180.79	2189.86	0.233	510.78	584.63	0.4	0.3	2.144	A

Do-Nothing - DN 2028, AM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

ID	Name	Include in report	Use specific Demand Set (s)	Specific Demand Set (s)	Network flow scaling factor (%)	Network capacity scaling factor (%)
A1	Do-Nothing	✓	✓	D1,D2,D3,D4,D5,D6	100.000	100.000

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (s)	Junction LOS
1 - R121 - Boulevard -Cruiserath Drive Roundabout	R121 - Boulevard -Cruiserath Drive Roundabout	Standard Roundabout	1,2,3,4	4.24	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Name	Description
1	Cruiserath Drive (E)	
2	R121 (S)	
3	The Boulevard (W)	
4	R121 (N)	

Capacity Options

Arm	Minimum capacity (PCU/hr)	Maximum capacity (PCU/hr)	Assume flat start profile	Initial queue (PCU)
1 - Cruiserath Drive (E)	0.00	99999.00		0.00
2 - R121 (S)	0.00	99999.00		0.00
3 - The Boulevard (W)	0.00	99999.00		0.00
4 - R121 (N)	0.00	99999.00		0.00

Roundabout Geometry

Arm	V - Approach road half-width (m)	E - Entry width (m)	I' - Effective flare length (m)	R - Entry radius (m)	D - Inscribed circle diameter (m)	PHI - Conflict (entry) angle (deg)	Exit only
1 - Cruiserath Drive (E)	5.20	6.50	13.1	27.0	69.0	48.0	
2 - R121 (S)	7.00	10.20	12.8	35.0	69.0	45.0	
3 - The Boulevard (W)	7.00	8.70	12.1	45.0	69.0	35.0	
4 - R121 (N)	7.00	10.30	6.0	26.0	69.0	55.0	

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Arm	Final slope	Final intercept (PCU/hr)
1 - Cruiserath Drive (E)	0.511	1781.242
2 - R121 (S)	0.642	2576.970
3 - The Boulevard (W)	0.639	2500.652
4 - R121 (N)	0.586	2295.881

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

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Model start time (HH:mm)	Model finish time (HH:mm)	Time segment length (min)	Run automatically
D3	DN 2028	AM	ONE HOUR	08:00	09:30	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 (%)
1 - Cruiserath Drive (E)		ONE HOUR	✓	97.00	100.000
2 - R121 (S)		ONE HOUR	✓	1184.00	100.000
3 - The Boulevard (W)		ONE HOUR	✓	597.00	100.000
4 - R121 (N)		ONE HOUR	✓	1230.00	100.000

Origin-Destination Data

Demand (PCU/hr)

		To			
		1 - Cruiserath Drive (E)	2 - R121 (S)	3 - The Boulevard (W)	4 - R121 (N)
From	1 - Cruiserath Drive (E)	0.000	61.000	13.000	23.000
	2 - R121 (S)	173.000	0.000	275.000	736.000
	3 - The Boulevard (W)	15.000	306.000	0.000	276.000
	4 - R121 (N)	177.000	840.000	213.000	0.000

Proportions

		To			
		1 - Cruiserath Drive (E)	2 - R121 (S)	3 - The Boulevard (W)	4 - R121 (N)
From	1 - Cruiserath Drive (E)	0.00	0.63	0.13	0.24
	2 - R121 (S)	0.15	0.00	0.23	0.62
	3 - The Boulevard (W)	0.03	0.51	0.00	0.46
	4 - R121 (N)	0.14	0.68	0.17	0.00

Vehicle Mix

Heavy Vehicle proportion

		To			
		1 - Cruiserath Drive (E)	2 - R121 (S)	3 - The Boulevard (W)	4 - R121 (N)
From	1 - Cruiserath Drive (E)	0	0	0	0
	2 - R121 (S)	0	0	0	0
	3 - The Boulevard (W)	0	0	0	0
	4 - R121 (N)	0	0	0	0

Average PCU Per Veh

		To			
		1 - Cruiserath Drive (E)	2 - R121 (S)	3 - The Boulevard (W)	4 - R121 (N)
From	1 - Cruiserath Drive (E)	1.000	1.000	1.000	1.000
	2 - R121 (S)	1.000	1.000	1.000	1.000
	3 - The Boulevard (W)	1.000	1.000	1.000	1.000
	4 - R121 (N)	1.000	1.000	1.000	1.000

Detailed Demand Data

Demand for each time segment

Time Segment	Arm	Demand (PCU/hr)	Demand in PCU (PCU/hr)
08:00-08:15	1 - Cruiserath Drive (E)	73.03	73.03
	2 - R121 (S)	891.38	891.38
	3 - The Boulevard (W)	449.45	449.45
	4 - R121 (N)	926.01	926.01
08:15-08:30	1 - Cruiserath Drive (E)	87.20	87.20
	2 - R121 (S)	1064.39	1064.39
	3 - The Boulevard (W)	536.69	536.69
	4 - R121 (N)	1105.74	1105.74
08:30-08:45	1 - Cruiserath Drive (E)	106.80	106.80
	2 - R121 (S)	1303.61	1303.61
	3 - The Boulevard (W)	657.31	657.31
	4 - R121 (N)	1354.26	1354.26
08:45-09:00	1 - Cruiserath Drive (E)	106.80	106.80
	2 - R121 (S)	1303.61	1303.61
	3 - The Boulevard (W)	657.31	657.31
	4 - R121 (N)	1354.26	1354.26
09:00-09:15	1 - Cruiserath Drive (E)	87.20	87.20
	2 - R121 (S)	1064.39	1064.39
	3 - The Boulevard (W)	536.69	536.69
	4 - R121 (N)	1105.74	1105.74
09:15-09:30	1 - Cruiserath Drive (E)	73.03	73.03
	2 - R121 (S)	891.38	891.38
	3 - The Boulevard (W)	449.45	449.45
	4 - R121 (N)	926.01	926.01

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
1 - Cruiserath Drive (E)	0.11	3.96	0.1	A	89.01	133.51
2 - R121 (S)	0.54	3.28	1.2	A	1086.46	1629.69
3 - The Boulevard (W)	0.36	3.03	0.6	A	547.82	821.73
4 - R121 (N)	0.69	5.78	2.2	A	1128.67	1693.00

Main Results for each time segment

Main results: (08:00-08:15)

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
1 - Cruiserath Drive (E)	73.03	18.26	1019.82	1260.15	0.058	72.78	273.97	0.0	0.1	3.031	A
2 - R121 (S)	891.38	222.84	186.82	2457.09	0.363	889.11	905.78	0.0	0.6	2.293	A
3 - The Boulevard (W)	449.45	112.36	699.86	2053.14	0.219	448.34	376.07	0.0	0.3	2.242	A
4 - R121 (N)	926.01	231.50	370.98	2078.32	0.446	922.81	777.22	0.0	0.8	3.106	A

Main results: (08:15-08:30)

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
1 - Cruiserath Drive (E)	87.20	21.80	1220.22	1157.75	0.075	87.12	327.78	0.1	0.1	3.361	A
2 - R121 (S)	1064.39	266.10	223.55	2433.51	0.437	1063.57	1083.79	0.6	0.8	2.626	A
3 - The Boulevard (W)	536.69	134.17	837.20	1965.32	0.273	536.31	449.92	0.3	0.4	2.519	A
4 - R121 (N)	1105.74	276.44	443.77	2035.63	0.543	1104.23	929.74	0.8	1.2	3.859	A

Main results: (08:30-08:45)

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
1 - Cruiserath Drive (E)	106.80	26.70	1492.66	1018.54	0.105	106.66	401.07	0.1	0.1	3.948	A
2 - R121 (S)	1303.61	325.90	273.44	2401.50	0.543	1301.99	1325.88	0.8	1.2	3.270	A
3 - The Boulevard (W)	657.31	164.33	1024.87	1845.32	0.356	656.60	550.56	0.4	0.6	3.027	A
4 - R121 (N)	1354.26	338.56	543.29	1977.27	0.685	1350.44	1138.19	1.2	2.1	5.707	A

Main results: (08:45-09:00)

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
1 - Cruiserath Drive (E)	106.80	26.70	1496.21	1016.72	0.105	106.80	401.86	0.1	0.1	3.956	A
2 - R121 (S)	1303.61	325.90	274.14	2401.05	0.543	1303.59	1328.87	1.2	1.2	3.279	A
3 - The Boulevard (W)	657.31	164.33	1026.14	1844.51	0.356	657.30	551.59	0.6	0.6	3.031	A
4 - R121 (N)	1354.26	338.56	543.90	1976.91	0.685	1354.17	1139.54	2.1	2.2	5.778	A

Main results: (09:00-09:15)

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
1 - Cruiserath Drive (E)	87.20	21.80	1225.33	1155.13	0.075	87.34	328.93	0.1	0.1	3.373	A
2 - R121 (S)	1064.39	266.10	224.56	2432.87	0.438	1066.00	1088.12	1.2	0.8	2.636	A
3 - The Boulevard (W)	536.69	134.17	839.11	1964.10	0.273	537.39	451.44	0.6	0.4	2.526	A
4 - R121 (N)	1105.74	276.44	444.71	2035.08	0.543	1109.55	931.80	2.2	1.2	3.906	A

Main results: (09:15-09:30)

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
1 - Cruiserath Drive (E)	73.03	18.26	1024.66	1257.67	0.058	73.11	275.15	0.1	0.1	3.040	A
2 - R121 (S)	891.38	222.84	187.76	2456.48	0.363	892.22	910.01	0.8	0.6	2.304	A
3 - The Boulevard (W)	449.45	112.36	702.32	2051.57	0.219	449.84	377.66	0.4	0.3	2.249	A
4 - R121 (N)	926.01	231.50	372.24	2077.58	0.446	927.58	779.92	1.2	0.8	3.133	A

Do-Nothing - DN 2028, PM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

ID	Name	Include in report	Use specific Demand Set (s)	Specific Demand Set (s)	Network flow scaling factor (%)	Network capacity scaling factor (%)
A1	Do-Nothing	✓	✓	D1,D2,D3,D4,D5,D6	100.000	100.000

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (s)	Junction LOS
1 - R121 - Boulevard -Cruiserath Drive Roundabout	R121 - Boulevard -Cruiserath Drive Roundabout	Standard Roundabout	1,2,3,4	2.85	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Name	Description
1	Cruiserath Drive (E)	
2	R121 (S)	
3	The Boulevard (W)	
4	R121 (N)	

Capacity Options

Arm	Minimum capacity (PCU/hr)	Maximum capacity (PCU/hr)	Assume flat start profile	Initial queue (PCU)
1 - Cruiserath Drive (E)	0.00	99999.00		0.00
2 - R121 (S)	0.00	99999.00		0.00
3 - The Boulevard (W)	0.00	99999.00		0.00
4 - R121 (N)	0.00	99999.00		0.00

Roundabout Geometry

Arm	V - Approach road half-width (m)	E - Entry width (m)	I' - Effective flare length (m)	R - Entry radius (m)	D - Inscribed circle diameter (m)	PHI - Conflict (entry) angle (deg)	Exit only
1 - Cruiserath Drive (E)	5.20	6.50	13.1	27.0	69.0	48.0	
2 - R121 (S)	7.00	10.20	12.8	35.0	69.0	45.0	
3 - The Boulevard (W)	7.00	8.70	12.1	45.0	69.0	35.0	
4 - R121 (N)	7.00	10.30	6.0	26.0	69.0	55.0	

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Arm	Final slope	Final intercept (PCU/hr)
1 - Cruiserath Drive (E)	0.511	1781.242
2 - R121 (S)	0.642	2576.970
3 - The Boulevard (W)	0.639	2500.652
4 - R121 (N)	0.586	2295.881

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

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Model start time (HH:mm)	Model finish time (HH:mm)	Time segment length (min)	Run automatically
D4	DN 2028	PM	ONE HOUR	17:00	18:30	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 (%)
1 - Cruiserath Drive (E)		ONE HOUR	✓	300.00	100.000
2 - R121 (S)		ONE HOUR	✓	899.00	100.000
3 - The Boulevard (W)		ONE HOUR	✓	388.00	100.000
4 - R121 (N)		ONE HOUR	✓	753.00	100.000

Origin-Destination Data

Demand (PCU/hr)

		To			
		1 - Cruiserath Drive (E)	2 - R121 (S)	3 - The Boulevard (W)	4 - R121 (N)
From	1 - Cruiserath Drive (E)	0.000	161.000	21.000	118.000
	2 - R121 (S)	34.000	0.000	290.000	575.000
	3 - The Boulevard (W)	21.000	209.000	0.000	158.000
	4 - R121 (N)	18.000	448.000	287.000	0.000

Proportions

		To			
		1 - Cruiserath Drive (E)	2 - R121 (S)	3 - The Boulevard (W)	4 - R121 (N)
From	1 - Cruiserath Drive (E)	0.00	0.54	0.07	0.39
	2 - R121 (S)	0.04	0.00	0.32	0.64
	3 - The Boulevard (W)	0.05	0.54	0.00	0.41
	4 - R121 (N)	0.02	0.59	0.38	0.00

Detailed Demand Data

Demand for each time segment

Time Segment	Arm	Demand (PCU/hr)	Demand in PCU (PCU/hr)
17:00-17:15	1 - Cruiserath Drive (E)	225.86	225.86
	2 - R121 (S)	676.81	676.81
	3 - The Boulevard (W)	292.11	292.11
	4 - R121 (N)	566.90	566.90
17:15-17:30	1 - Cruiserath Drive (E)	269.69	269.69
	2 - R121 (S)	808.18	808.18
	3 - The Boulevard (W)	348.80	348.80
	4 - R121 (N)	676.93	676.93
17:30-17:45	1 - Cruiserath Drive (E)	330.31	330.31
	2 - R121 (S)	989.82	989.82
	3 - The Boulevard (W)	427.20	427.20
	4 - R121 (N)	829.07	829.07
17:45-18:00	1 - Cruiserath Drive (E)	330.31	330.31
	2 - R121 (S)	989.82	989.82
	3 - The Boulevard (W)	427.20	427.20
	4 - R121 (N)	829.07	829.07
18:00-18:15	1 - Cruiserath Drive (E)	269.69	269.69
	2 - R121 (S)	808.18	808.18
	3 - The Boulevard (W)	348.80	348.80
	4 - R121 (N)	676.93	676.93
18:15-18:30	1 - Cruiserath Drive (E)	225.86	225.86
	2 - R121 (S)	676.81	676.81
	3 - The Boulevard (W)	292.11	292.11
	4 - R121 (N)	566.90	566.90

Vehicle Mix

Heavy Vehicle proportion

		To			
		1 - Cruiserath Drive (E)	2 - R121 (S)	3 - The Boulevard (W)	4 - R121 (N)
From	1 - Cruiserath Drive (E)	0	0	0	0
	2 - R121 (S)	0	0	0	0
	3 - The Boulevard (W)	0	0	0	0
	4 - R121 (N)	0	0	0	0

Average PCU Per Veh

		To			
		1 - Cruiserath Drive (E)	2 - R121 (S)	3 - The Boulevard (W)	4 - R121 (N)
From	1 - Cruiserath Drive (E)	1.000	1.000	1.000	1.000
	2 - R121 (S)	1.000	1.000	1.000	1.000
	3 - The Boulevard (W)	1.000	1.000	1.000	1.000
	4 - R121 (N)	1.000	1.000	1.000	1.000

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
1 - Cruiserath Drive (E)	0.26	3.91	0.4	A	275.29	412.93
2 - R121 (S)	0.43	2.80	0.8	A	824.94	1237.41
3 - The Boulevard (W)	0.21	2.30	0.3	A	356.04	534.05
4 - R121 (N)	0.39	2.78	0.6	A	690.97	1036.45

Main Results for each time segment

Main results: (17:00-17:15)

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
1 - Cruiserath Drive (E)	225.86	56.46	708.99	1418.97	0.159	225.10	54.83	0.0	0.2	3.014	A
2 - R121 (S)	676.81	169.20	319.83	2371.73	0.285	675.22	614.26	0.0	0.4	2.120	A
3 - The Boulevard (W)	292.11	73.03	545.95	2151.56	0.136	291.48	449.11	0.0	0.2	1.935	A
4 - R121 (N)	566.90	141.72	198.32	2179.58	0.260	565.50	639.11	0.0	0.4	2.228	A

Main results: (17:15-17:30)

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
1 - Cruiserath Drive (E)	269.69	67.42	848.13	1347.87	0.200	269.45	65.59	0.2	0.2	3.338	A
2 - R121 (S)	808.18	202.05	382.69	2331.39	0.347	807.66	734.89	0.4	0.5	2.363	A
3 - The Boulevard (W)	348.80	87.20	653.11	2083.03	0.167	348.63	537.24	0.2	0.2	2.075	A
4 - R121 (N)	676.93	169.23	237.21	2156.77	0.314	676.51	764.53	0.4	0.5	2.432	A

Main results: (17:30-17:45)

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
1 - Cruiserath Drive (E)	330.31	82.58	1038.50	1250.60	0.264	329.87	80.31	0.2	0.4	3.908	A
2 - R121 (S)	989.82	247.45	468.56	2276.29	0.435	988.87	899.82	0.5	0.8	2.795	A
3 - The Boulevard (W)	427.20	106.80	799.63	1989.34	0.215	426.91	657.80	0.2	0.3	2.304	A
4 - R121 (N)	829.07	207.27	290.46	2125.54	0.390	828.35	936.08	0.5	0.6	2.774	A

Main results: (17:45-18:00)

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
1 - Cruiserath Drive (E)	330.31	82.58	1039.36	1250.16	0.264	330.30	80.37	0.4	0.4	3.913	A
2 - R121 (S)	989.82	247.45	469.03	2275.99	0.435	989.81	900.63	0.8	0.8	2.798	A
3 - The Boulevard (W)	427.20	106.80	800.43	1988.83	0.215	427.19	658.40	0.3	0.3	2.304	A
4 - R121 (N)	829.07	207.27	290.67	2125.42	0.390	829.06	936.96	0.6	0.6	2.776	A

Main results: (18:00-18:15)

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
1 - Cruiserath Drive (E)	269.69	67.42	849.49	1347.18	0.200	270.12	65.69	0.4	0.3	3.342	A
2 - R121 (S)	808.18	202.05	383.44	2330.92	0.347	809.12	736.17	0.8	0.5	2.366	A
3 - The Boulevard (W)	348.80	87.20	654.36	2082.23	0.168	349.09	538.19	0.3	0.2	2.078	A
4 - R121 (N)	676.93	169.23	237.54	2156.58	0.314	677.65	765.92	0.6	0.5	2.434	A

Main results: (18:15-18:30)

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
1 - Cruiserath Drive (E)	225.86	56.46	711.20	1417.84	0.159	226.10	55.00	0.3	0.2	3.020	A
2 - R121 (S)	676.81	169.20	320.99	2370.99	0.285	677.34	616.31	0.5	0.4	2.127	A
3 - The Boulevard (W)	292.11	73.03	547.78	2150.39	0.136	292.28	450.56	0.2	0.2	1.937	A
4 - R121 (N)	566.90	141.72	198.88	2179.25	0.260	567.32	641.18	0.5	0.4	2.235	A

Do-Nothing - DN 2038, AM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

ID	Name	Include in report	Use specific Demand Set (s)	Specific Demand Set (s)	Network flow scaling factor (%)	Network capacity scaling factor (%)
A1	Do-Nothing	✓	✓	D1,D2,D3,D4,D5,D6	100.000	100.000

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (s)	Junction LOS
1 - R121 - Boulevard -Cruiserath Drive Roundabout	R121 - Boulevard -Cruiserath Drive Roundabout	Standard Roundabout	1,2,3,4	4.81	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Name	Description
1	Cruiserath Drive (E)	
2	R121 (S)	
3	The Boulevard (W)	
4	R121 (N)	

Capacity Options

Arm	Minimum capacity (PCU/hr)	Maximum capacity (PCU/hr)	Assume flat start profile	Initial queue (PCU)
1 - Cruiserath Drive (E)	0.00	99999.00		0.00
2 - R121 (S)	0.00	99999.00		0.00
3 - The Boulevard (W)	0.00	99999.00		0.00
4 - R121 (N)	0.00	99999.00		0.00

Roundabout Geometry

Arm	V - Approach road half-width (m)	E - Entry width (m)	I' - Effective flare length (m)	R - Entry radius (m)	D - Inscribed circle diameter (m)	PHI - Conflict (entry) angle (deg)	Exit only
1 - Cruiserath Drive (E)	5.20	6.50	13.1	27.0	69.0	48.0	
2 - R121 (S)	7.00	10.20	12.8	35.0	69.0	45.0	
3 - The Boulevard (W)	7.00	8.70	12.1	45.0	69.0	35.0	
4 - R121 (N)	7.00	10.30	6.0	26.0	69.0	55.0	

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Arm	Final slope	Final intercept (PCU/hr)
1 - Cruiserath Drive (E)	0.511	1781.242
2 - R121 (S)	0.642	2576.970
3 - The Boulevard (W)	0.639	2500.652
4 - R121 (N)	0.586	2295.881

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

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Model start time (HH:mm)	Model finish time (HH:mm)	Time segment length (min)	Run automatically
D5	DN 2038	AM	ONE HOUR	08:00	09:30	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 (%)
1 - Cruiserath Drive (E)		ONE HOUR	✓	104.00	100.000
2 - R121 (S)		ONE HOUR	✓	1251.00	100.000
3 - The Boulevard (W)		ONE HOUR	✓	632.00	100.000
4 - R121 (N)		ONE HOUR	✓	1300.00	100.000

Origin-Destination Data

Demand (PCU/hr)

		To			
		1 - Cruiserath Drive (E)	2 - R121 (S)	3 - The Boulevard (W)	4 - R121 (N)
From	1 - Cruiserath Drive (E)	0.000	65.000	14.000	25.000
	2 - R121 (S)	184.000	0.000	290.000	777.000
	3 - The Boulevard (W)	16.000	323.000	0.000	293.000
	4 - R121 (N)	188.000	886.000	226.000	0.000

Proportions

		To			
		1 - Cruiserath Drive (E)	2 - R121 (S)	3 - The Boulevard (W)	4 - R121 (N)
From	1 - Cruiserath Drive (E)	0.00	0.63	0.13	0.24
	2 - R121 (S)	0.15	0.00	0.23	0.62
	3 - The Boulevard (W)	0.03	0.51	0.00	0.46
	4 - R121 (N)	0.14	0.68	0.17	0.00

Vehicle Mix

Heavy Vehicle proportion

		To			
		1 - Cruiserath Drive (E)	2 - R121 (S)	3 - The Boulevard (W)	4 - R121 (N)
From	1 - Cruiserath Drive (E)	0	0	0	0
	2 - R121 (S)	0	0	0	0
	3 - The Boulevard (W)	0	0	0	0
	4 - R121 (N)	0	0	0	0

Average PCU Per Veh

		To			
		1 - Cruiserath Drive (E)	2 - R121 (S)	3 - The Boulevard (W)	4 - R121 (N)
From	1 - Cruiserath Drive (E)	1.000	1.000	1.000	1.000
	2 - R121 (S)	1.000	1.000	1.000	1.000
	3 - The Boulevard (W)	1.000	1.000	1.000	1.000
	4 - R121 (N)	1.000	1.000	1.000	1.000

Detailed Demand Data

Demand for each time segment

Time Segment	Arm	Demand (PCU/hr)	Demand in PCU (PCU/hr)
08:00-08:15	1 - Cruiserath Drive (E)	78.30	78.30
	2 - R121 (S)	941.82	941.82
	3 - The Boulevard (W)	475.80	475.80
	4 - R121 (N)	978.71	978.71
08:15-08:30	1 - Cruiserath Drive (E)	93.49	93.49
	2 - R121 (S)	1124.62	1124.62
	3 - The Boulevard (W)	568.16	568.16
	4 - R121 (N)	1168.67	1168.67
08:30-08:45	1 - Cruiserath Drive (E)	114.51	114.51
	2 - R121 (S)	1377.38	1377.38
	3 - The Boulevard (W)	695.84	695.84
	4 - R121 (N)	1431.33	1431.33
08:45-09:00	1 - Cruiserath Drive (E)	114.51	114.51
	2 - R121 (S)	1377.38	1377.38
	3 - The Boulevard (W)	695.84	695.84
	4 - R121 (N)	1431.33	1431.33
09:00-09:15	1 - Cruiserath Drive (E)	93.49	93.49
	2 - R121 (S)	1124.62	1124.62
	3 - The Boulevard (W)	568.16	568.16
	4 - R121 (N)	1168.67	1168.67
09:15-09:30	1 - Cruiserath Drive (E)	78.30	78.30
	2 - R121 (S)	941.82	941.82
	3 - The Boulevard (W)	475.80	475.80
	4 - R121 (N)	978.71	978.71

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
1 - Cruiserath Drive (E)	0.12	4.19	0.1	A	95.43	143.15
2 - R121 (S)	0.58	3.55	1.4	A	1147.94	1721.91
3 - The Boulevard (W)	0.39	3.24	0.6	A	579.93	869.90
4 - R121 (N)	0.73	6.83	2.7	A	1192.90	1789.35

Main Results for each time segment

Main results: (08:00-08:15)

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
1 - Cruiserath Drive (E)	78.30	19.57	1076.66	1231.10	0.064	78.03	291.19	0.0	0.1	3.122	A
2 - R121 (S)	941.82	235.45	198.78	2449.41	0.385	939.33	955.90	0.0	0.6	2.380	A
3 - The Boulevard (W)	475.80	118.95	740.34	2027.26	0.235	474.58	397.78	0.0	0.3	2.315	A
4 - R121 (N)	978.71	244.68	392.72	2065.57	0.474	975.13	822.20	0.0	0.9	3.290	A

Main results: (08:15-08:30)

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
1 - Cruiserath Drive (E)	93.49	23.37	1288.23	1123.00	0.083	93.40	348.38	0.1	0.1	3.495	A
2 - R121 (S)	1124.62	281.16	237.87	2424.32	0.464	1123.67	1143.76	0.6	0.9	2.767	A
3 - The Boulevard (W)	568.16	142.04	885.64	1934.35	0.294	567.72	475.90	0.3	0.4	2.634	A
4 - R121 (N)	1168.67	292.17	469.79	2020.37	0.578	1166.82	983.57	0.9	1.4	4.208	A

Main results: (08:30-08:45)

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
1 - Cruiserath Drive (E)	114.51	28.63	1575.14	976.39	0.117	114.34	426.14	0.1	0.1	4.176	A
2 - R121 (S)	1377.38	344.34	290.81	2390.35	0.576	1375.43	1398.67	0.9	1.3	3.541	A
3 - The Boulevard (W)	695.84	173.96	1084.07	1807.47	0.385	695.01	582.17	0.4	0.6	3.235	A
4 - R121 (N)	1431.33	357.83	575.10	1958.61	0.731	1426.19	1203.98	1.4	2.6	6.698	A

Main results: (08:45-09:00)

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
1 - Cruiserath Drive (E)	114.51	28.63	1579.84	973.99	0.118	114.50	427.17	0.1	0.1	4.188	A
2 - R121 (S)	1377.38	344.34	291.74	2389.75	0.576	1377.35	1402.60	1.3	1.4	3.555	A
3 - The Boulevard (W)	695.84	173.96	1085.59	1806.50	0.385	695.84	583.51	0.6	0.6	3.240	A
4 - R121 (N)	1431.33	357.83	575.83	1958.19	0.731	1431.18	1205.60	2.6	2.7	6.826	A

Main results: (09:00-09:15)

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
1 - Cruiserath Drive (E)	93.49	23.37	1294.87	1119.60	0.084	93.66	349.86	0.1	0.1	3.511	A
2 - R121 (S)	1124.62	281.16	239.19	2423.48	0.464	1126.56	1149.34	1.4	0.9	2.779	A
3 - The Boulevard (W)	568.16	142.04	887.92	1932.89	0.294	568.98	477.83	0.6	0.4	2.642	A
4 - R121 (N)	1168.67	292.17	470.89	2019.73	0.579	1173.84	986.01	2.7	1.4	4.281	A

Main results: (09:15-09:30)

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
1 - Cruiserath Drive (E)	78.30	19.57	1082.21	1228.26	0.064	78.39	292.54	0.1	0.1	3.132	A
2 - R121 (S)	941.82	235.45	199.88	2448.71	0.385	942.79	960.73	0.9	0.6	2.393	A
3 - The Boulevard (W)	475.80	118.95	743.08	2025.50	0.235	476.24	399.58	0.4	0.3	2.325	A
4 - R121 (N)	978.71	244.68	394.12	2064.75	0.474	980.63	825.20	1.4	0.9	3.328	A

Do-Nothing - DN 2038, PM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

ID	Name	Include in report	Use specific Demand Set (s)	Specific Demand Set (s)	Network flow scaling factor (%)	Network capacity scaling factor (%)
A1	Do-Nothing	✓	✓	D1,D2,D3,D4,D5,D6	100.000	100.000

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (s)	Junction LOS
1 - R121 - Boulevard -Cruiserath Drive Roundabout	R121 - Boulevard -Cruiserath Drive Roundabout	Standard Roundabout	1,2,3,4	3.00	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Name	Description
1	Cruiserath Drive (E)	
2	R121 (S)	
3	The Boulevard (W)	
4	R121 (N)	

Capacity Options

Arm	Minimum capacity (PCU/hr)	Maximum capacity (PCU/hr)	Assume flat start profile	Initial queue (PCU)
1 - Cruiserath Drive (E)	0.00	99999.00		0.00
2 - R121 (S)	0.00	99999.00		0.00
3 - The Boulevard (W)	0.00	99999.00		0.00
4 - R121 (N)	0.00	99999.00		0.00

Roundabout Geometry

Arm	V - Approach road half-width (m)	E - Entry width (m)	I' - Effective flare length (m)	R - Entry radius (m)	D - Inscribed circle diameter (m)	PHI - Conflict (entry) angle (deg)	Exit only
1 - Cruiserath Drive (E)	5.20	6.50	13.1	27.0	69.0	48.0	
2 - R121 (S)	7.00	10.20	12.8	35.0	69.0	45.0	
3 - The Boulevard (W)	7.00	8.70	12.1	45.0	69.0	35.0	
4 - R121 (N)	7.00	10.30	6.0	26.0	69.0	55.0	

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Arm	Final slope	Final intercept (PCU/hr)
1 - Cruiserath Drive (E)	0.511	1781.242
2 - R121 (S)	0.642	2576.970
3 - The Boulevard (W)	0.639	2500.652
4 - R121 (N)	0.586	2295.881

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

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Model start time (HH:mm)	Model finish time (HH:mm)	Time segment length (min)	Run automatically
D6	DN 2038	PM	ONE HOUR	17:00	18:30	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 (%)
1 - Cruiserath Drive (E)		ONE HOUR	✓	318.00	100.000
2 - R121 (S)		ONE HOUR	✓	950.00	100.000
3 - The Boulevard (W)		ONE HOUR	✓	411.00	100.000
4 - R121 (N)		ONE HOUR	✓	797.00	100.000

Origin-Destination Data

Demand (PCU/hr)

		To			
		1 - Cruiserath Drive (E)	2 - R121 (S)	3 - The Boulevard (W)	4 - R121 (N)
From	1 - Cruiserath Drive (E)	0.000	171.000	22.000	125.000
	2 - R121 (S)	36.000	0.000	307.000	607.000
	3 - The Boulevard (W)	22.000	221.000	0.000	168.000
	4 - R121 (N)	20.000	472.000	305.000	0.000

Proportions

		To			
		1 - Cruiserath Drive (E)	2 - R121 (S)	3 - The Boulevard (W)	4 - R121 (N)
From	1 - Cruiserath Drive (E)	0.00	0.54	0.07	0.39
	2 - R121 (S)	0.04	0.00	0.32	0.64
	3 - The Boulevard (W)	0.05	0.54	0.00	0.41
	4 - R121 (N)	0.03	0.59	0.38	0.00

Vehicle Mix

Heavy Vehicle proportion

		To			
		1 - Cruiserath Drive (E)	2 - R121 (S)	3 - The Boulevard (W)	4 - R121 (N)
From	1 - Cruiserath Drive (E)	0	0	0	0
	2 - R121 (S)	0	0	0	0
	3 - The Boulevard (W)	0	0	0	0
	4 - R121 (N)	0	0	0	0

Average PCU Per Veh

		To			
		1 - Cruiserath Drive (E)	2 - R121 (S)	3 - The Boulevard (W)	4 - R121 (N)
From	1 - Cruiserath Drive (E)	1.000	1.000	1.000	1.000
	2 - R121 (S)	1.000	1.000	1.000	1.000
	3 - The Boulevard (W)	1.000	1.000	1.000	1.000
	4 - R121 (N)	1.000	1.000	1.000	1.000

Detailed Demand Data

Demand for each time segment

Time Segment	Arm	Demand (PCU/hr)	Demand in PCU (PCU/hr)
17:00-17:15	1 - Cruiserath Drive (E)	239.41	239.41
	2 - R121 (S)	715.21	715.21
	3 - The Boulevard (W)	309.42	309.42
	4 - R121 (N)	600.02	600.02
17:15-17:30	1 - Cruiserath Drive (E)	285.88	285.88
	2 - R121 (S)	854.03	854.03
	3 - The Boulevard (W)	369.48	369.48
	4 - R121 (N)	716.49	716.49
17:30-17:45	1 - Cruiserath Drive (E)	350.12	350.12
	2 - R121 (S)	1045.97	1045.97
	3 - The Boulevard (W)	452.52	452.52
	4 - R121 (N)	877.51	877.51
17:45-18:00	1 - Cruiserath Drive (E)	350.12	350.12
	2 - R121 (S)	1045.97	1045.97
	3 - The Boulevard (W)	452.52	452.52
	4 - R121 (N)	877.51	877.51
18:00-18:15	1 - Cruiserath Drive (E)	285.88	285.88
	2 - R121 (S)	854.03	854.03
	3 - The Boulevard (W)	369.48	369.48
	4 - R121 (N)	716.49	716.49
18:15-18:30	1 - Cruiserath Drive (E)	239.41	239.41
	2 - R121 (S)	715.21	715.21
	3 - The Boulevard (W)	309.42	309.42
	4 - R121 (N)	600.02	600.02

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
1 - Cruiserath Drive (E)	0.29	4.14	0.4	A	291.80	437.70
2 - R121 (S)	0.46	2.97	0.9	A	871.74	1307.60
3 - The Boulevard (W)	0.23	2.39	0.3	A	377.14	565.71
4 - R121 (N)	0.41	2.91	0.7	A	731.34	1097.01

Main Results for each time segment

Main results: (17:00-17:15)

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
1 - Cruiserath Drive (E)	239.41	59.85	749.50	1398.27	0.171	238.58	58.58	0.0	0.2	3.103	A
2 - R121 (S)	715.21	178.80	339.33	2359.22	0.303	713.48	648.76	0.0	0.4	2.185	A
3 - The Boulevard (W)	309.42	77.36	576.69	2131.90	0.145	308.74	476.11	0.0	0.2	1.975	A
4 - R121 (N)	600.02	150.01	209.58	2172.97	0.276	598.50	675.86	0.0	0.4	2.284	A

Main results: (17:15-17:30)

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
1 - Cruiserath Drive (E)	285.88	71.47	896.62	1323.10	0.216	285.60	70.08	0.2	0.3	3.469	A
2 - R121 (S)	854.03	213.51	406.03	2316.42	0.369	853.44	776.19	0.4	0.6	2.459	A
3 - The Boulevard (W)	369.48	92.37	689.91	2059.50	0.179	369.29	569.56	0.2	0.2	2.129	A
4 - R121 (N)	716.49	179.12	250.68	2148.87	0.333	716.01	808.52	0.4	0.5	2.512	A

Main results: (17:30-17:45)

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
1 - Cruiserath Drive (E)	350.12	87.53	1097.84	1220.28	0.287	349.62	85.80	0.3	0.4	4.133	A
2 - R121 (S)	1045.97	261.49	497.11	2257.97	0.463	1044.86	950.35	0.6	0.9	2.965	A
3 - The Boulevard (W)	452.52	113.13	844.64	1960.56	0.231	452.20	697.34	0.2	0.3	2.386	A
4 - R121 (N)	877.51	219.38	306.95	2115.87	0.415	876.69	989.88	0.5	0.7	2.904	A

Main results: (17:45-18:00)

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
1 - Cruiserath Drive (E)	350.12	87.53	1098.81	1219.78	0.287	350.12	85.88	0.4	0.4	4.139	A
2 - R121 (S)	1045.97	261.49	497.66	2257.62	0.463	1045.96	951.27	0.9	0.9	2.970	A
3 - The Boulevard (W)	452.52	113.13	845.57	1959.97	0.231	452.52	698.04	0.3	0.3	2.387	A
4 - R121 (N)	877.51	219.38	307.18	2115.73	0.415	877.51	990.91	0.7	0.7	2.906	A

Main results: (18:00-18:15)

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
1 - Cruiserath Drive (E)	285.88	71.47	898.15	1322.31	0.216	286.37	70.20	0.4	0.3	3.478	A
2 - R121 (S)	854.03	213.51	406.88	2315.87	0.369	855.13	777.64	0.9	0.6	2.467	A
3 - The Boulevard (W)	369.48	92.37	691.35	2058.58	0.179	369.80	570.65	0.3	0.2	2.133	A
4 - R121 (N)	716.49	179.12	251.05	2148.65	0.333	717.30	810.11	0.7	0.5	2.516	A

Main results: (18:15-18:30)

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
1 - Cruiserath Drive (E)	239.41	59.85	751.92	1397.03	0.171	239.69	58.77	0.3	0.2	3.113	A
2 - R121 (S)	715.21	178.80	340.60	2358.40	0.303	715.81	651.00	0.6	0.4	2.193	A
3 - The Boulevard (W)	309.42	77.36	578.71	2130.61	0.145	309.62	477.70	0.2	0.2	1.976	A
4 - R121 (N)	600.02	150.01	210.18	2172.62	0.276	600.50	678.14	0.5	0.4	2.292	A

Do-Something - DS 2023, AM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

ID	Name	Include in report	Use specific Demand Set (s)	Specific Demand Set(s)	Network flow scaling factor (%)	Network capacity scaling factor (%)
A2	Do-Something	✓	✓	D7,D8,D9,D10,D11,D12	100.000	100.000

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (s)	Junction LOS
1 - R121 - Boulevard -Cruiserath Drive Roundabout	R121 - Boulevard -Cruiserath Drive Roundabout	Standard Roundabout	1,2,3,4	3.57	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Name	Description
1	Cruiserath Drive (E)	
2	R121 (S)	
3	The Boulevard (W)	
4	R121 (N)	

Capacity Options

Arm	Minimum capacity (PCU/hr)	Maximum capacity (PCU/hr)	Assume flat start profile	Initial queue (PCU)
1 - Cruiserath Drive (E)	0.00	99999.00		0.00
2 - R121 (S)	0.00	99999.00		0.00
3 - The Boulevard (W)	0.00	99999.00		0.00
4 - R121 (N)	0.00	99999.00		0.00

Roundabout Geometry

Arm	V - Approach road half-width (m)	E - Entry width (m)	I' - Effective flare length (m)	R - Entry radius (m)	D - Inscribed circle diameter (m)	PHI - Conflict (entry) angle (deg)	Exit only
1 - Cruiserath Drive (E)	5.20	6.50	13.1	27.0	69.0	48.0	
2 - R121 (S)	7.00	10.20	12.8	35.0	69.0	45.0	
3 - The Boulevard (W)	7.00	8.70	12.1	45.0	69.0	35.0	
4 - R121 (N)	7.00	10.30	6.0	26.0	69.0	55.0	

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Arm	Final slope	Final intercept (PCU/hr)
1 - Cruiserath Drive (E)	0.511	1781.242
2 - R121 (S)	0.642	2576.970
3 - The Boulevard (W)	0.639	2500.652
4 - R121 (N)	0.586	2295.881

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

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Model start time (HH:mm)	Model finish time (HH:mm)	Time segment length (min)	Run automatically
D7	DS 2023	AM	ONE HOUR	08:00	09:30	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 (%)
1 - Cruiserath Drive (E)		ONE HOUR	✓	90.00	100.000
2 - R121 (S)		ONE HOUR	✓	1023.00	100.000
3 - The Boulevard (W)		ONE HOUR	✓	540.00	100.000
4 - R121 (N)		ONE HOUR	✓	1124.00	100.000

Origin-Destination Data

Demand (PCU/hr)

		To			
		1 - Cruiserath Drive (E)	2 - R121 (S)	3 - The Boulevard (W)	4 - R121 (N)
From	1 - Cruiserath Drive (E)	0.000	57.000	12.000	21.000
	2 - R121 (S)	160.000	0.000	235.000	628.000
	3 - The Boulevard (W)	14.000	279.000	0.000	247.000
	4 - R121 (N)	163.000	771.000	190.000	0.000

Proportions

		To			
		1 - Cruiserath Drive (E)	2 - R121 (S)	3 - The Boulevard (W)	4 - R121 (N)
From	1 - Cruiserath Drive (E)	0.00	0.63	0.13	0.23
	2 - R121 (S)	0.16	0.00	0.23	0.61
	3 - The Boulevard (W)	0.03	0.52	0.00	0.46
	4 - R121 (N)	0.15	0.69	0.17	0.00

Vehicle Mix

Heavy Vehicle proportion

		To			
		1 - Cruiserath Drive (E)	2 - R121 (S)	3 - The Boulevard (W)	4 - R121 (N)
From	1 - Cruiserath Drive (E)	0	0	0	0
	2 - R121 (S)	0	0	0	0
	3 - The Boulevard (W)	0	0	0	0
	4 - R121 (N)	0	0	0	0

Average PCU Per Veh

		To			
		1 - Cruiserath Drive (E)	2 - R121 (S)	3 - The Boulevard (W)	4 - R121 (N)
From	1 - Cruiserath Drive (E)	1.000	1.000	1.000	1.000
	2 - R121 (S)	1.000	1.000	1.000	1.000
	3 - The Boulevard (W)	1.000	1.000	1.000	1.000
	4 - R121 (N)	1.000	1.000	1.000	1.000

Detailed Demand Data

Demand for each time segment

Time Segment	Arm	Demand (PCU/hr)	Demand in PCU (PCU/hr)
08:00-08:15	1 - Cruiserath Drive (E)	67.76	67.76
	2 - R121 (S)	770.17	770.17
	3 - The Boulevard (W)	406.54	406.54
	4 - R121 (N)	846.21	846.21
08:15-08:30	1 - Cruiserath Drive (E)	80.91	80.91
	2 - R121 (S)	919.66	919.66
	3 - The Boulevard (W)	485.45	485.45
	4 - R121 (N)	1010.45	1010.45
08:30-08:45	1 - Cruiserath Drive (E)	99.09	99.09
	2 - R121 (S)	1126.34	1126.34
	3 - The Boulevard (W)	594.55	594.55
	4 - R121 (N)	1237.55	1237.55
08:45-09:00	1 - Cruiserath Drive (E)	99.09	99.09
	2 - R121 (S)	1126.34	1126.34
	3 - The Boulevard (W)	594.55	594.55
	4 - R121 (N)	1237.55	1237.55
09:00-09:15	1 - Cruiserath Drive (E)	80.91	80.91
	2 - R121 (S)	919.66	919.66
	3 - The Boulevard (W)	485.45	485.45
	4 - R121 (N)	1010.45	1010.45
09:15-09:30	1 - Cruiserath Drive (E)	67.76	67.76
	2 - R121 (S)	770.17	770.17
	3 - The Boulevard (W)	406.54	406.54
	4 - R121 (N)	846.21	846.21

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
1 - Cruiserath Drive (E)	0.09	3.66	0.1	A	82.59	123.88
2 - R121 (S)	0.47	2.78	0.9	A	938.72	1408.08
3 - The Boulevard (W)	0.31	2.69	0.4	A	495.51	743.27
4 - R121 (N)	0.62	4.70	1.6	A	1031.40	1547.10

Main Results for each time segment

Main results: (08:00-08:15)

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
1 - Cruiserath Drive (E)	67.76	16.94	930.74	1305.66	0.052	67.54	253.01	0.0	0.1	2.907	A
2 - R121 (S)	770.17	192.54	167.35	2469.58	0.312	768.36	830.93	0.0	0.5	2.114	A
3 - The Boulevard (W)	406.54	101.64	607.62	2112.12	0.192	405.59	328.10	0.0	0.2	2.108	A
4 - R121 (N)	846.21	211.55	340.24	2096.34	0.404	843.51	672.96	0.0	0.7	2.867	A

Main results: (08:15-08:30)

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
1 - Cruiserath Drive (E)	80.91	20.23	1113.61	1212.22	0.067	80.84	302.69	0.1	0.1	3.181	A
2 - R121 (S)	919.66	229.91	200.26	2448.46	0.376	919.07	994.19	0.5	0.6	2.354	A
3 - The Boulevard (W)	485.45	121.36	726.80	2035.91	0.238	485.15	392.52	0.2	0.3	2.321	A
4 - R121 (N)	1010.45	252.61	406.98	2057.20	0.491	1009.31	804.97	0.7	1.0	3.432	A

Main results: (08:30-08:45)

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
1 - Cruiserath Drive (E)	99.09	24.77	1362.82	1084.88	0.091	98.98	370.49	0.1	0.1	3.650	A
2 - R121 (S)	1126.34	281.59	245.06	2419.72	0.465	1125.28	1216.74	0.6	0.9	2.778	A
3 - The Boulevard (W)	594.55	148.64	889.88	1931.64	0.308	594.03	480.46	0.3	0.4	2.689	A
4 - R121 (N)	1237.55	309.39	498.31	2003.65	0.618	1235.00	985.59	1.0	1.6	4.669	A

Main results: (08:45-09:00)

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
1 - Cruiserath Drive (E)	99.09	24.77	1365.23	1083.65	0.091	99.09	371.04	0.1	0.1	3.655	A
2 - R121 (S)	1126.34	281.59	245.52	2419.42	0.466	1126.33	1218.80	0.9	0.9	2.783	A
3 - The Boulevard (W)	594.55	148.64	890.72	1931.10	0.308	594.55	481.14	0.4	0.4	2.692	A
4 - R121 (N)	1237.55	309.39	498.76	2003.38	0.618	1237.50	986.51	1.6	1.6	4.700	A

Main results: (09:00-09:15)

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
1 - Cruiserath Drive (E)	80.91	20.23	1117.16	1210.41	0.067	81.02	303.50	0.1	0.1	3.187	A
2 - R121 (S)	919.66	229.91	200.94	2448.02	0.376	920.71	997.24	0.9	0.6	2.360	A
3 - The Boulevard (W)	485.45	121.36	728.12	2035.07	0.239	485.97	393.54	0.4	0.3	2.324	A
4 - R121 (N)	1010.45	252.61	407.68	2056.79	0.491	1012.98	806.40	1.6	1.0	3.456	A

Main results: (09:15-09:30)

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
1 - Cruiserath Drive (E)	67.76	16.94	934.69	1303.64	0.052	67.82	253.98	0.1	0.1	2.914	A
2 - R121 (S)	770.17	192.54	168.11	2469.09	0.312	770.77	834.41	0.6	0.5	2.121	A
3 - The Boulevard (W)	406.54	101.64	609.53	2110.90	0.193	406.84	329.34	0.3	0.2	2.112	A
4 - R121 (N)	846.21	211.55	341.30	2095.73	0.404	847.37	675.08	1.0	0.7	2.888	A

Do-Something - DS 2023, PM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

ID	Name	Include in report	Use specific Demand Set (s)	Specific Demand Set(s)	Network flow scaling factor (%)	Network capacity scaling factor (%)
A2	Do-Something	✓	✓	D7,D8,D9,D10,D11,D12	100.000	100.000

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (s)	Junction LOS
1 - R121 - Boulevard -Cruiserath Drive Roundabout	R121 - Boulevard -Cruiserath Drive Roundabout	Standard Roundabout	1,2,3,4	2.71	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Name	Description
1	Cruiserath Drive (E)	
2	R121 (S)	
3	The Boulevard (W)	
4	R121 (N)	

Capacity Options

Arm	Minimum capacity (PCU/hr)	Maximum capacity (PCU/hr)	Assume flat start profile	Initial queue (PCU)
1 - Cruiserath Drive (E)	0.00	99999.00		0.00
2 - R121 (S)	0.00	99999.00		0.00
3 - The Boulevard (W)	0.00	99999.00		0.00
4 - R121 (N)	0.00	99999.00		0.00

Roundabout Geometry

Arm	V - Approach road half-width (m)	E - Entry width (m)	I' - Effective flare length (m)	R - Entry radius (m)	D - Inscribed circle diameter (m)	PHI - Conflict (entry) angle (deg)	Exit only
1 - Cruiserath Drive (E)	5.20	6.50	13.1	27.0	69.0	48.0	
2 - R121 (S)	7.00	10.20	12.8	35.0	69.0	45.0	
3 - The Boulevard (W)	7.00	8.70	12.1	45.0	69.0	35.0	
4 - R121 (N)	7.00	10.30	6.0	26.0	69.0	55.0	

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Arm	Final slope	Final intercept (PCU/hr)
1 - Cruiserath Drive (E)	0.511	1781.242
2 - R121 (S)	0.642	2576.970
3 - The Boulevard (W)	0.639	2500.652
4 - R121 (N)	0.586	2295.881

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

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Model start time (HH:mm)	Model finish time (HH:mm)	Time segment length (min)	Run automatically
D8	DS 2023	PM	ONE HOUR	17:00	18:30	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 (%)
1 - Cruiserath Drive (E)		ONE HOUR	✓	276.00	100.000
2 - R121 (S)		ONE HOUR	✓	861.00	100.000
3 - The Boulevard (W)		ONE HOUR	✓	370.00	100.000
4 - R121 (N)		ONE HOUR	✓	693.00	100.000

Origin-Destination Data

Demand (PCU/hr)

		To			
		1 - Cruiserath Drive (E)	2 - R121 (S)	3 - The Boulevard (W)	4 - R121 (N)
From	1 - Cruiserath Drive (E)	0.000	148.000	19.000	109.000
	2 - R121 (S)	31.000	0.000	289.000	541.000
	3 - The Boulevard (W)	19.000	207.000	0.000	144.000
	4 - R121 (N)	17.000	412.000	264.000	0.000

Proportions

		To			
		1 - Cruiserath Drive (E)	2 - R121 (S)	3 - The Boulevard (W)	4 - R121 (N)
From	1 - Cruiserath Drive (E)	0.00	0.54	0.07	0.39
	2 - R121 (S)	0.04	0.00	0.34	0.63
	3 - The Boulevard (W)	0.05	0.56	0.00	0.39
	4 - R121 (N)	0.02	0.59	0.38	0.00

Vehicle Mix

Heavy Vehicle proportion

		To			
		1 - Cruiserath Drive (E)	2 - R121 (S)	3 - The Boulevard (W)	4 - R121 (N)
From	1 - Cruiserath Drive (E)	0	0	0	0
	2 - R121 (S)	0	0	0	0
	3 - The Boulevard (W)	0	0	0	0
	4 - R121 (N)	0	0	0	0

Average PCU Per Veh

		To			
		1 - Cruiserath Drive (E)	2 - R121 (S)	3 - The Boulevard (W)	4 - R121 (N)
From	1 - Cruiserath Drive (E)	1.000	1.000	1.000	1.000
	2 - R121 (S)	1.000	1.000	1.000	1.000
	3 - The Boulevard (W)	1.000	1.000	1.000	1.000
	4 - R121 (N)	1.000	1.000	1.000	1.000

Detailed Demand Data

Demand for each time segment

Time Segment	Arm	Demand (PCU/hr)	Demand in PCU (PCU/hr)
17:00-17:15	1 - Cruiserath Drive (E)	207.79	207.79
	2 - R121 (S)	648.21	648.21
	3 - The Boulevard (W)	278.56	278.56
	4 - R121 (N)	521.73	521.73
17:15-17:30	1 - Cruiserath Drive (E)	248.12	248.12
	2 - R121 (S)	774.02	774.02
	3 - The Boulevard (W)	332.62	332.62
	4 - R121 (N)	622.99	622.99
17:30-17:45	1 - Cruiserath Drive (E)	303.88	303.88
	2 - R121 (S)	947.98	947.98
	3 - The Boulevard (W)	407.38	407.38
	4 - R121 (N)	763.01	763.01
17:45-18:00	1 - Cruiserath Drive (E)	303.88	303.88
	2 - R121 (S)	947.98	947.98
	3 - The Boulevard (W)	407.38	407.38
	4 - R121 (N)	763.01	763.01
18:00-18:15	1 - Cruiserath Drive (E)	248.12	248.12
	2 - R121 (S)	774.02	774.02
	3 - The Boulevard (W)	332.62	332.62
	4 - R121 (N)	622.99	622.99
18:15-18:30	1 - Cruiserath Drive (E)	207.79	207.79
	2 - R121 (S)	648.21	648.21
	3 - The Boulevard (W)	278.56	278.56
	4 - R121 (N)	521.73	521.73

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
1 - Cruiserath Drive (E)	0.24	3.67	0.3	A	253.26	379.89
2 - R121 (S)	0.41	2.66	0.7	A	790.07	1185.10
3 - The Boulevard (W)	0.20	2.23	0.3	A	339.52	509.28
4 - R121 (N)	0.36	2.63	0.6	A	635.91	953.86

Main Results for each time segment

Main results: (17:00-17:15)

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
1 - Cruiserath Drive (E)	207.79	51.95	663.22	1442.36	0.144	207.12	50.33	0.0	0.2	2.913	A
2 - R121 (S)	648.21	162.05	294.33	2388.10	0.271	646.72	576.01	0.0	0.4	2.065	A
3 - The Boulevard (W)	278.56	69.64	511.44	2173.62	0.128	277.97	429.61	0.0	0.1	1.898	A
4 - R121 (N)	521.73	130.43	193.07	2182.65	0.239	520.47	596.34	0.0	0.3	2.165	A

Main results: (17:15-17:30)

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
1 - Cruiserath Drive (E)	248.12	62.03	793.36	1375.86	0.180	247.91	60.20	0.2	0.2	3.191	A
2 - R121 (S)	774.02	193.51	352.17	2350.98	0.329	773.55	689.10	0.4	0.5	2.282	A
3 - The Boulevard (W)	332.62	83.16	611.81	2109.44	0.158	332.46	513.91	0.1	0.2	2.025	A
4 - R121 (N)	622.99	155.75	230.92	2160.46	0.288	622.63	713.35	0.3	0.4	2.341	A

Main results: (17:30-17:45)

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
1 - Cruiserath Drive (E)	303.88	75.97	971.46	1284.85	0.237	303.53	73.71	0.2	0.3	3.668	A
2 - R121 (S)	947.98	236.99	431.20	2300.26	0.412	947.14	843.79	0.5	0.7	2.659	A
3 - The Boulevard (W)	407.38	101.84	749.10	2021.66	0.202	407.12	629.25	0.2	0.3	2.229	A
4 - R121 (N)	763.01	190.75	282.77	2130.05	0.358	762.40	873.44	0.4	0.6	2.630	A

Main results: (17:45-18:00)

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
1 - Cruiserath Drive (E)	303.88	75.97	972.20	1284.48	0.237	303.88	73.77	0.3	0.3	3.670	A
2 - R121 (S)	947.98	236.99	431.60	2300.01	0.412	947.97	844.48	0.7	0.7	2.662	A
3 - The Boulevard (W)	407.38	101.84	749.79	2021.21	0.202	407.38	629.78	0.3	0.3	2.230	A
4 - R121 (N)	763.01	190.75	282.96	2129.94	0.358	763.00	874.20	0.6	0.6	2.633	A

Main results: (18:00-18:15)

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
1 - Cruiserath Drive (E)	248.12	62.03	794.53	1375.26	0.180	248.47	60.29	0.3	0.2	3.195	A
2 - R121 (S)	774.02	193.51	352.79	2350.58	0.329	774.85	690.21	0.7	0.5	2.285	A
3 - The Boulevard (W)	332.62	83.16	612.89	2108.75	0.158	332.88	514.75	0.3	0.2	2.027	A
4 - R121 (N)	622.99	155.75	231.22	2160.28	0.288	623.59	714.55	0.6	0.4	2.343	A

Main results: (18:15-18:30)

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
1 - Cruiserath Drive (E)	207.79	51.95	665.22	1441.34	0.144	208.00	50.48	0.2	0.2	2.918	A
2 - R121 (S)	648.21	162.05	295.35	2387.44	0.272	648.68	577.86	0.5	0.4	2.072	A
3 - The Boulevard (W)	278.56	69.64	513.09	2172.57	0.128	278.72	430.95	0.2	0.1	1.900	A
4 - R121 (N)	521.73	130.43	193.60	2182.34	0.239	522.09	598.21	0.4	0.3	2.170	A

Do-Something - DS 2028, AM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

ID	Name	Include in report	Use specific Demand Set (s)	Specific Demand Set(s)	Network flow scaling factor (%)	Network capacity scaling factor (%)
A2	Do-Something	✓	✓	D7,D8,D9,D10,D11,D12	100.000	100.000

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (s)	Junction LOS
1 - R121 - Boulevard -Cruiserath Drive Roundabout	R121 - Boulevard -Cruiserath Drive Roundabout	Standard Roundabout	1,2,3,4	5.08	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Name	Description
1	Cruiserath Drive (E)	
2	R121 (S)	
3	The Boulevard (W)	
4	R121 (N)	

Capacity Options

Arm	Minimum capacity (PCU/hr)	Maximum capacity (PCU/hr)	Assume flat start profile	Initial queue (PCU)
1 - Cruiserath Drive (E)	0.00	99999.00		0.00
2 - R121 (S)	0.00	99999.00		0.00
3 - The Boulevard (W)	0.00	99999.00		0.00
4 - R121 (N)	0.00	99999.00		0.00

Roundabout Geometry

Arm	V - Approach road half-width (m)	E - Entry width (m)	I' - Effective flare length (m)	R - Entry radius (m)	D - Inscribed circle diameter (m)	PHI - Conflict (entry) angle (deg)	Exit only
1 - Cruiserath Drive (E)	5.20	6.50	13.1	27.0	69.0	48.0	
2 - R121 (S)	7.00	10.20	12.8	35.0	69.0	45.0	
3 - The Boulevard (W)	7.00	8.70	12.1	45.0	69.0	35.0	
4 - R121 (N)	7.00	10.30	6.0	26.0	69.0	55.0	

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Arm	Final slope	Final intercept (PCU/hr)
1 - Cruiserath Drive (E)	0.511	1781.242
2 - R121 (S)	0.642	2576.970
3 - The Boulevard (W)	0.639	2500.652
4 - R121 (N)	0.586	2295.881

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

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Model start time (HH:mm)	Model finish time (HH:mm)	Time segment length (min)	Run automatically
D9	DS 2028	AM	ONE HOUR	08:00	09:30	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 (%)
1 - Cruiserath Drive (E)		ONE HOUR	✓	97.00	100.000
2 - R121 (S)		ONE HOUR	✓	1232.00	100.000
3 - The Boulevard (W)		ONE HOUR	✓	631.00	100.000
4 - R121 (N)		ONE HOUR	✓	1342.00	100.000

Origin-Destination Data

Demand (PCU/hr)

	To				
		1 - Cruiserath Drive (E)	2 - R121 (S)	3 - The Boulevard (W)	4 - R121 (N)
From	1 - Cruiserath Drive (E)	0.000	61.000	13.000	23.000
	2 - R121 (S)	173.000	0.000	292.000	767.000
	3 - The Boulevard (W)	15.000	340.000	0.000	276.000
	4 - R121 (N)	177.000	952.000	213.000	0.000

Proportions

	To				
		1 - Cruiserath Drive (E)	2 - R121 (S)	3 - The Boulevard (W)	4 - R121 (N)
From	1 - Cruiserath Drive (E)	0.00	0.63	0.13	0.24
	2 - R121 (S)	0.14	0.00	0.24	0.62
	3 - The Boulevard (W)	0.02	0.54	0.00	0.44
	4 - R121 (N)	0.13	0.71	0.16	0.00

Vehicle Mix

Heavy Vehicle proportion

	To				
		1 - Cruiserath Drive (E)	2 - R121 (S)	3 - The Boulevard (W)	4 - R121 (N)
From	1 - Cruiserath Drive (E)	0	0	0	0
	2 - R121 (S)	0	0	0	0
	3 - The Boulevard (W)	0	0	0	0
	4 - R121 (N)	0	0	0	0

Average PCU Per Veh

	To				
		1 - Cruiserath Drive (E)	2 - R121 (S)	3 - The Boulevard (W)	4 - R121 (N)
From	1 - Cruiserath Drive (E)	1.000	1.000	1.000	1.000
	2 - R121 (S)	1.000	1.000	1.000	1.000
	3 - The Boulevard (W)	1.000	1.000	1.000	1.000
	4 - R121 (N)	1.000	1.000	1.000	1.000

Detailed Demand Data

Demand for each time segment

Time Segment	Arm	Demand (PCU/hr)	Demand in PCU (PCU/hr)
08:00-08:15	1 - Cruiserath Drive (E)	73.03	73.03
	2 - R121 (S)	927.51	927.51
	3 - The Boulevard (W)	475.05	475.05
	4 - R121 (N)	1010.33	1010.33
08:15-08:30	1 - Cruiserath Drive (E)	87.20	87.20
	2 - R121 (S)	1107.54	1107.54
	3 - The Boulevard (W)	567.26	567.26
	4 - R121 (N)	1206.43	1206.43
08:30-08:45	1 - Cruiserath Drive (E)	106.80	106.80
	2 - R121 (S)	1356.46	1356.46
	3 - The Boulevard (W)	694.74	694.74
	4 - R121 (N)	1477.57	1477.57
08:45-09:00	1 - Cruiserath Drive (E)	106.80	106.80
	2 - R121 (S)	1356.46	1356.46
	3 - The Boulevard (W)	694.74	694.74
	4 - R121 (N)	1477.57	1477.57
09:00-09:15	1 - Cruiserath Drive (E)	87.20	87.20
	2 - R121 (S)	1107.54	1107.54
	3 - The Boulevard (W)	567.26	567.26
	4 - R121 (N)	1206.43	1206.43
09:15-09:30	1 - Cruiserath Drive (E)	73.03	73.03
	2 - R121 (S)	927.51	927.51
	3 - The Boulevard (W)	475.05	475.05
	4 - R121 (N)	1010.33	1010.33

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
1 - Cruiserath Drive (E)	0.11	4.35	0.1	A	89.01	133.51
2 - R121 (S)	0.56	3.44	1.3	A	1130.50	1695.76
3 - The Boulevard (W)	0.38	3.19	0.6	A	579.02	868.52
4 - R121 (N)	0.76	7.53	3.0	A	1231.44	1847.16

Main Results for each time segment

Main results: (08:00-08:15)

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
1 - Cruiserath Drive (E)	73.03	18.26	1129.08	1204.31	0.061	72.77	273.92	0.0	0.1	3.181	A
2 - R121 (S)	927.51	231.88	186.76	2457.12	0.377	925.10	1015.09	0.0	0.6	2.343	A
3 - The Boulevard (W)	475.05	118.76	723.09	2038.28	0.233	473.84	388.77	0.0	0.3	2.300	A
4 - R121 (N)	1010.33	252.58	396.49	2063.36	0.490	1006.52	800.45	0.0	1.0	3.393	A

Main results: (08:15-08:30)

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
1 - Cruiserath Drive (E)	87.20	21.80	1350.94	1090.95	0.080	87.11	327.72	0.1	0.1	3.585	A
2 - R121 (S)	1107.54	276.89	223.48	2433.56	0.455	1106.64	1214.57	0.6	0.8	2.712	A
3 - The Boulevard (W)	567.26	141.81	865.00	1947.54	0.291	566.83	465.12	0.3	0.4	2.607	A
4 - R121 (N)	1206.43	301.61	474.29	2017.73	0.598	1204.36	957.54	1.0	1.5	4.414	A

Main results: (08:30-08:45)

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
1 - Cruiserath Drive (E)	106.80	26.70	1651.30	937.48	0.114	106.63	400.79	0.1	0.1	4.331	A
2 - R121 (S)	1356.46	339.11	273.12	2401.70	0.565	1354.63	1484.81	0.8	1.3	3.432	A
3 - The Boulevard (W)	694.74	173.69	1058.85	1823.59	0.381	693.93	568.91	0.4	0.6	3.185	A
4 - R121 (N)	1477.57	369.39	580.63	1955.37	0.756	1471.47	1172.16	1.5	3.0	7.348	A

Main results: (08:45-09:00)

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
1 - Cruiserath Drive (E)	106.80	26.70	1656.86	934.64	0.114	106.80	401.84	0.1	0.1	4.348	A
2 - R121 (S)	1356.46	339.11	274.12	2401.06	0.565	1356.43	1489.53	1.3	1.3	3.445	A
3 - The Boulevard (W)	694.74	173.69	1060.26	1822.69	0.381	694.74	570.29	0.6	0.6	3.190	A
4 - R121 (N)	1477.57	369.39	581.33	1954.96	0.756	1477.37	1173.67	3.0	3.0	7.528	A

Main results: (09:00-09:15)

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
1 - Cruiserath Drive (E)	87.20	21.80	1358.74	1086.97	0.080	87.36	329.21	0.1	0.1	3.603	A
2 - R121 (S)	1107.54	276.89	224.88	2432.66	0.455	1109.35	1221.22	1.3	0.8	2.725	A
3 - The Boulevard (W)	567.26	141.81	867.14	1946.18	0.291	568.06	467.10	0.6	0.4	2.615	A
4 - R121 (N)	1206.43	301.61	475.37	2017.10	0.598	1212.58	959.83	3.0	1.5	4.509	A

Main results: (09:15-09:30)

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
1 - Cruiserath Drive (E)	73.03	18.26	1135.15	1201.22	0.061	73.12	275.22	0.1	0.1	3.190	A
2 - R121 (S)	927.51	231.88	187.84	2456.43	0.378	928.44	1020.43	0.8	0.6	2.357	A
3 - The Boulevard (W)	475.05	118.76	725.72	2036.60	0.233	475.48	390.55	0.4	0.3	2.308	A
4 - R121 (N)	1010.33	252.58	397.88	2062.54	0.490	1012.48	803.33	1.5	1.0	3.437	A

Do-Something - DS 2028, PM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

ID	Name	Include in report	Use specific Demand Set (s)	Specific Demand Set(s)	Network flow scaling factor (%)	Network capacity scaling factor (%)
A2	Do-Something	✓	✓	D7,D8,D9,D10,D11,D12	100.000	100.000

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (s)	Junction LOS
1 - R121 - Boulevard -Cruiserath Drive Roundabout	R121 - Boulevard -Cruiserath Drive Roundabout	Standard Roundabout	1,2,3,4	3.07	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Name	Description
1	Cruiserath Drive (E)	
2	R121 (S)	
3	The Boulevard (W)	
4	R121 (N)	

Capacity Options

Arm	Minimum capacity (PCU/hr)	Maximum capacity (PCU/hr)	Assume flat start profile	Initial queue (PCU)
1 - Cruiserath Drive (E)	0.00	99999.00		0.00
2 - R121 (S)	0.00	99999.00		0.00
3 - The Boulevard (W)	0.00	99999.00		0.00
4 - R121 (N)	0.00	99999.00		0.00

Roundabout Geometry

Arm	V - Approach road half-width (m)	E - Entry width (m)	I' - Effective flare length (m)	R - Entry radius (m)	D - Inscribed circle diameter (m)	PHI - Conflict (entry) angle (deg)	Exit only
1 - Cruiserath Drive (E)	5.20	6.50	13.1	27.0	69.0	48.0	
2 - R121 (S)	7.00	10.20	12.8	35.0	69.0	45.0	
3 - The Boulevard (W)	7.00	8.70	12.1	45.0	69.0	35.0	
4 - R121 (N)	7.00	10.30	6.0	26.0	69.0	55.0	

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Arm	Final slope	Final intercept (PCU/hr)
1 - Cruiserath Drive (E)	0.511	1781.242
2 - R121 (S)	0.642	2576.970
3 - The Boulevard (W)	0.639	2500.652
4 - R121 (N)	0.586	2295.881

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

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Model start time (HH:mm)	Model finish time (HH:mm)	Time segment length (min)	Run automatically
D10	DS 2028	PM	ONE HOUR	17:00	18:30	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 (%)
1 - Cruiserath Drive (E)		ONE HOUR	✓	300.00	100.000
2 - R121 (S)		ONE HOUR	✓	1013.00	100.000
3 - The Boulevard (W)		ONE HOUR	✓	418.00	100.000
4 - R121 (N)		ONE HOUR	✓	814.00	100.000

Origin-Destination Data

Demand (PCU/hr)

		To			
		1 - Cruiserath Drive (E)	2 - R121 (S)	3 - The Boulevard (W)	4 - R121 (N)
From	1 - Cruiserath Drive (E)	0.000	161.000	21.000	118.000
	2 - R121 (S)	34.000	0.000	333.000	646.000
	3 - The Boulevard (W)	21.000	239.000	0.000	158.000
	4 - R121 (N)	18.000	509.000	287.000	0.000

Proportions

		To			
		1 - Cruiserath Drive (E)	2 - R121 (S)	3 - The Boulevard (W)	4 - R121 (N)
From	1 - Cruiserath Drive (E)	0.00	0.54	0.07	0.39
	2 - R121 (S)	0.03	0.00	0.33	0.64
	3 - The Boulevard (W)	0.05	0.57	0.00	0.38
	4 - R121 (N)	0.02	0.63	0.35	0.00

Vehicle Mix

Heavy Vehicle proportion

		To			
		1 - Cruiserath Drive (E)	2 - R121 (S)	3 - The Boulevard (W)	4 - R121 (N)
From	1 - Cruiserath Drive (E)	0	0	0	0
	2 - R121 (S)	0	0	0	0
	3 - The Boulevard (W)	0	0	0	0
	4 - R121 (N)	0	0	0	0

Average PCU Per Veh

		To			
		1 - Cruiserath Drive (E)	2 - R121 (S)	3 - The Boulevard (W)	4 - R121 (N)
From	1 - Cruiserath Drive (E)	1.000	1.000	1.000	1.000
	2 - R121 (S)	1.000	1.000	1.000	1.000
	3 - The Boulevard (W)	1.000	1.000	1.000	1.000
	4 - R121 (N)	1.000	1.000	1.000	1.000

Detailed Demand Data

Demand for each time segment

Time Segment	Arm	Demand (PCU/hr)	Demand in PCU (PCU/hr)
17:00-17:15	1 - Cruiserath Drive (E)	225.86	225.86
	2 - R121 (S)	762.64	762.64
	3 - The Boulevard (W)	314.69	314.69
	4 - R121 (N)	612.82	612.82
17:15-17:30	1 - Cruiserath Drive (E)	269.69	269.69
	2 - R121 (S)	910.67	910.67
	3 - The Boulevard (W)	375.77	375.77
	4 - R121 (N)	731.77	731.77
17:30-17:45	1 - Cruiserath Drive (E)	330.31	330.31
	2 - R121 (S)	1115.33	1115.33
	3 - The Boulevard (W)	460.23	460.23
	4 - R121 (N)	896.23	896.23
17:45-18:00	1 - Cruiserath Drive (E)	330.31	330.31
	2 - R121 (S)	1115.33	1115.33
	3 - The Boulevard (W)	460.23	460.23
	4 - R121 (N)	896.23	896.23
18:00-18:15	1 - Cruiserath Drive (E)	269.69	269.69
	2 - R121 (S)	910.67	910.67
	3 - The Boulevard (W)	375.77	375.77
	4 - R121 (N)	731.77	731.77
18:15-18:30	1 - Cruiserath Drive (E)	225.86	225.86
	2 - R121 (S)	762.64	762.64
	3 - The Boulevard (W)	314.69	314.69
	4 - R121 (N)	612.82	612.82

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
1 - Cruiserath Drive (E)	0.28	4.14	0.4	A	275.29	412.93
2 - R121 (S)	0.49	3.10	1.0	A	929.55	1394.32
3 - The Boulevard (W)	0.24	2.43	0.3	A	383.56	575.35
4 - R121 (N)	0.43	2.97	0.7	A	746.94	1120.41

Main Results for each time segment

Main results: (17:00-17:15)

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
1 - Cruiserath Drive (E)	225.86	56.46	777.27	1384.08	0.163	225.08	54.83	0.0	0.2	3.105	A
2 - R121 (S)	762.64	190.66	319.80	2371.75	0.322	760.75	682.54	0.0	0.5	2.233	A
3 - The Boulevard (W)	314.69	78.67	599.20	2117.50	0.149	314.00	481.35	0.0	0.2	1.996	A
4 - R121 (N)	612.82	153.21	220.84	2166.37	0.283	611.25	692.36	0.0	0.4	2.313	A

Main results: (17:15-17:30)

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
1 - Cruiserath Drive (E)	269.69	67.42	929.84	1306.12	0.206	269.43	65.58	0.2	0.3	3.472	A
2 - R121 (S)	910.67	227.67	382.67	2331.41	0.391	910.00	816.61	0.5	0.6	2.531	A
3 - The Boulevard (W)	375.77	93.94	716.84	2042.28	0.184	375.57	575.83	0.2	0.2	2.159	A
4 - R121 (N)	731.77	182.94	264.15	2140.97	0.342	731.27	828.26	0.4	0.5	2.554	A

Main results: (17:30-17:45)

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
1 - Cruiserath Drive (E)	330.31	82.58	1138.50	1199.50	0.275	329.83	80.30	0.3	0.4	4.138	A
2 - R121 (S)	1115.33	278.83	468.51	2276.33	0.490	1114.07	999.83	0.6	1.0	3.095	A
3 - The Boulevard (W)	460.23	115.06	877.58	1939.50	0.237	459.89	705.00	0.2	0.3	2.433	A
4 - R121 (N)	896.23	224.06	323.45	2106.20	0.426	895.35	1014.02	0.5	0.7	2.972	A

Main results: (17:45-18:00)

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
1 - Cruiserath Drive (E)	330.31	82.58	1139.55	1198.97	0.275	330.30	80.37	0.4	0.4	4.143	A
2 - R121 (S)	1115.33	278.83	469.03	2275.99	0.490	1115.32	1000.82	1.0	1.0	3.100	A
3 - The Boulevard (W)	460.23	115.06	878.60	1938.85	0.237	460.22	705.75	0.3	0.3	2.434	A
4 - R121 (N)	896.23	224.06	323.70	2106.05	0.426	896.22	1015.13	0.7	0.7	2.974	A

Main results: (18:00-18:15)

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
1 - Cruiserath Drive (E)	269.69	67.42	931.49	1305.28	0.207	270.16	65.70	0.4	0.3	3.478	A
2 - R121 (S)	910.67	227.67	383.49	2330.88	0.391	911.92	818.16	1.0	0.6	2.538	A
3 - The Boulevard (W)	375.77	93.94	718.41	2041.28	0.184	376.11	577.00	0.3	0.2	2.163	A
4 - R121 (N)	731.77	182.94	264.55	2140.73	0.342	732.64	829.97	0.7	0.5	2.559	A

Main results: (18:15-18:30)

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
1 - Cruiserath Drive (E)	225.86	56.46	779.81	1382.78	0.163	226.12	55.00	0.3	0.2	3.114	A
2 - R121 (S)	762.64	190.66	321.01	2370.97	0.322	763.31	684.91	0.6	0.5	2.239	A
3 - The Boulevard (W)	314.69	78.67	601.33	2116.14	0.149	314.90	483.00	0.2	0.2	1.998	A
4 - R121 (N)	612.82	153.21	221.49	2165.99	0.283	613.32	694.74	0.5	0.4	2.318	A

Do-Something - DS 2038, AM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

ID	Name	Include in report	Use specific Demand Set (s)	Specific Demand Set(s)	Network flow scaling factor (%)	Network capacity scaling factor (%)
A2	Do-Something	✓	✓	D7,D8,D9,D10,D11,D12	100.000	100.000

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (s)	Junction LOS
1 - R121 - Boulevard -Cruiserath Drive Roundabout	R121 - Boulevard -Cruiserath Drive Roundabout	Standard Roundabout	1,2,3,4	6.00	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Name	Description
1	Cruiserath Drive (E)	
2	R121 (S)	
3	The Boulevard (W)	
4	R121 (N)	

Capacity Options

Arm	Minimum capacity (PCU/hr)	Maximum capacity (PCU/hr)	Assume flat start profile	Initial queue (PCU)
1 - Cruiserath Drive (E)	0.00	99999.00		0.00
2 - R121 (S)	0.00	99999.00		0.00
3 - The Boulevard (W)	0.00	99999.00		0.00
4 - R121 (N)	0.00	99999.00		0.00

Roundabout Geometry

Arm	V - Approach road half-width (m)	E - Entry width (m)	I' - Effective flare length (m)	R - Entry radius (m)	D - Inscribed circle diameter (m)	PHI - Conflict (entry) angle (deg)	Exit only
1 - Cruiserath Drive (E)	5.20	6.50	13.1	27.0	69.0	48.0	
2 - R121 (S)	7.00	10.20	12.8	35.0	69.0	45.0	
3 - The Boulevard (W)	7.00	8.70	12.1	45.0	69.0	35.0	
4 - R121 (N)	7.00	10.30	6.0	26.0	69.0	55.0	

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Arm	Final slope	Final intercept (PCU/hr)
1 - Cruiserath Drive (E)	0.511	1781.242
2 - R121 (S)	0.642	2576.970
3 - The Boulevard (W)	0.639	2500.652
4 - R121 (N)	0.586	2295.881

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

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Model start time (HH:mm)	Model finish time (HH:mm)	Time segment length (min)	Run automatically
D11	DS 2038	AM	ONE HOUR	08:00	09:30	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 (%)
1 - Cruiserath Drive (E)		ONE HOUR	✓	104.00	100.000
2 - R121 (S)		ONE HOUR	✓	1299.00	100.000
3 - The Boulevard (W)		ONE HOUR	✓	666.00	100.000
4 - R121 (N)		ONE HOUR	✓	1412.00	100.000

Origin-Destination Data

Demand (PCU/hr)

		To			
		1 - Cruiserath Drive (E)	2 - R121 (S)	3 - The Boulevard (W)	4 - R121 (N)
From	1 - Cruiserath Drive (E)	0.000	65.000	14.000	25.000
	2 - R121 (S)	184.000	0.000	307.000	808.000
	3 - The Boulevard (W)	16.000	357.000	0.000	293.000
	4 - R121 (N)	188.000	998.000	226.000	0.000

Proportions

		To			
		1 - Cruiserath Drive (E)	2 - R121 (S)	3 - The Boulevard (W)	4 - R121 (N)
From	1 - Cruiserath Drive (E)	0.00	0.63	0.13	0.24
	2 - R121 (S)	0.14	0.00	0.24	0.62
	3 - The Boulevard (W)	0.02	0.54	0.00	0.44
	4 - R121 (N)	0.13	0.71	0.16	0.00

Vehicle Mix

Heavy Vehicle proportion

		To			
		1 - Cruiserath Drive (E)	2 - R121 (S)	3 - The Boulevard (W)	4 - R121 (N)
From	1 - Cruiserath Drive (E)	0	0	0	0
	2 - R121 (S)	0	0	0	0
	3 - The Boulevard (W)	0	0	0	0
	4 - R121 (N)	0	0	0	0

Average PCU Per Veh

		To			
		1 - Cruiserath Drive (E)	2 - R121 (S)	3 - The Boulevard (W)	4 - R121 (N)
From	1 - Cruiserath Drive (E)	1.000	1.000	1.000	1.000
	2 - R121 (S)	1.000	1.000	1.000	1.000
	3 - The Boulevard (W)	1.000	1.000	1.000	1.000
	4 - R121 (N)	1.000	1.000	1.000	1.000

Detailed Demand Data

Demand for each time segment

Time Segment	Arm	Demand (PCU/hr)	Demand in PCU (PCU/hr)
08:00-08:15	1 - Cruiserath Drive (E)	78.30	78.30
	2 - R121 (S)	977.96	977.96
	3 - The Boulevard (W)	501.40	501.40
	4 - R121 (N)	1063.03	1063.03
08:15-08:30	1 - Cruiserath Drive (E)	93.49	93.49
	2 - R121 (S)	1167.77	1167.77
	3 - The Boulevard (W)	598.72	598.72
	4 - R121 (N)	1269.36	1269.36
08:30-08:45	1 - Cruiserath Drive (E)	114.51	114.51
	2 - R121 (S)	1430.23	1430.23
	3 - The Boulevard (W)	733.28	733.28
	4 - R121 (N)	1554.64	1554.64
08:45-09:00	1 - Cruiserath Drive (E)	114.51	114.51
	2 - R121 (S)	1430.23	1430.23
	3 - The Boulevard (W)	733.28	733.28
	4 - R121 (N)	1554.64	1554.64
09:00-09:15	1 - Cruiserath Drive (E)	93.49	93.49
	2 - R121 (S)	1167.77	1167.77
	3 - The Boulevard (W)	598.72	598.72
	4 - R121 (N)	1269.36	1269.36
09:15-09:30	1 - Cruiserath Drive (E)	78.30	78.30
	2 - R121 (S)	977.96	977.96
	3 - The Boulevard (W)	501.40	501.40
	4 - R121 (N)	1063.03	1063.03

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
1 - Cruiserath Drive (E)	0.13	4.63	0.1	A	95.43	143.15
2 - R121 (S)	0.60	3.75	1.5	A	1191.99	1787.98
3 - The Boulevard (W)	0.41	3.42	0.7	A	611.13	916.70
4 - R121 (N)	0.80	9.40	4.0	A	1295.68	1943.51

Main Results for each time segment

Main results: (08:00-08:15)

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
1 - Cruiserath Drive (E)	78.30	19.57	1185.85	1175.31	0.067	78.01	291.13	0.0	0.1	3.280	A
2 - R121 (S)	977.96	244.49	198.72	2449.45	0.399	975.31	1065.15	0.0	0.7	2.438	A
3 - The Boulevard (W)	501.40	125.35	763.56	2012.41	0.249	500.08	410.46	0.0	0.3	2.378	A
4 - R121 (N)	1063.03	265.76	418.22	2050.61	0.518	1058.76	845.42	0.0	1.1	3.615	A

Main results: (08:15-08:30)

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
1 - Cruiserath Drive (E)	93.49	23.37	1418.81	1056.27	0.089	93.39	348.30	0.1	0.1	3.738	A
2 - R121 (S)	1167.77	291.94	237.78	2424.38	0.482	1166.73	1274.42	0.7	0.9	2.859	A
3 - The Boulevard (W)	598.72	149.68	913.44	1916.57	0.312	598.23	491.07	0.3	0.5	2.731	A
4 - R121 (N)	1269.36	317.34	500.31	2002.47	0.634	1266.80	1011.36	1.1	1.7	4.877	A

Main results: (08:30-08:45)

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
1 - Cruiserath Drive (E)	114.51	28.63	1732.68	895.89	0.128	114.31	425.71	0.1	0.1	4.604	A
2 - R121 (S)	1430.23	357.56	290.31	2390.68	0.598	1428.02	1556.68	0.9	1.5	3.732	A
3 - The Boulevard (W)	733.28	183.32	1118.01	1785.76	0.411	732.32	600.32	0.5	0.7	3.414	A
4 - R121 (N)	1554.64	388.66	612.42	1936.73	0.803	1545.97	1237.91	1.7	3.9	9.021	A

Main results: (08:45-09:00)

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
1 - Cruiserath Drive (E)	114.51	28.63	1740.38	891.96	0.128	114.50	427.14	0.1	0.1	4.630	A
2 - R121 (S)	1430.23	357.56	291.71	2389.78	0.598	1430.19	1563.17	1.5	1.5	3.750	A
3 - The Boulevard (W)	733.28	183.32	1119.71	1784.68	0.411	733.27	602.19	0.7	0.7	3.423	A
4 - R121 (N)	1554.64	388.66	613.26	1936.24	0.803	1554.26	1239.72	3.9	4.0	9.398	A

Main results: (09:00-09:15)

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
1 - Cruiserath Drive (E)	93.49	23.37	1429.47	1050.83	0.089	93.69	350.31	0.1	0.1	3.761	A
2 - R121 (S)	1167.77	291.94	239.72	2423.14	0.482	1169.96	1283.44	1.5	0.9	2.879	A
3 - The Boulevard (W)	598.72	149.68	915.98	1914.95	0.313	599.67	493.70	0.7	0.5	2.740	A
4 - R121 (N)	1269.36	317.34	501.57	2001.73	0.634	1278.21	1014.08	4.0	1.8	5.036	A

Main results: (09:15-09:30)

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
1 - Cruiserath Drive (E)	78.30	19.57	1192.86	1171.73	0.067	78.40	292.63	0.1	0.1	3.292	A
2 - R121 (S)	977.96	244.49	199.98	2448.64	0.399	979.03	1071.28	0.9	0.7	2.450	A
3 - The Boulevard (W)	501.40	125.35	766.49	2010.53	0.249	501.89	412.51	0.5	0.3	2.386	A
4 - R121 (N)	1063.03	265.76	419.77	2049.71	0.519	1065.72	848.62	1.8	1.1	3.667	A

Do-Something - DS 2038, PM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

ID	Name	Include in report	Use specific Demand Set (s)	Specific Demand Set(s)	Network flow scaling factor (%)	Network capacity scaling factor (%)
A2	Do-Something	✓	✓	D7,D8,D9,D10,D11,D12	100.000	100.000

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (s)	Junction LOS
1 - R121 - Boulevard -Cruiserath Drive Roundabout	R121 - Boulevard -Cruiserath Drive Roundabout	Standard Roundabout	1,2,3,4	3.25	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Name	Description
1	Cruiserath Drive (E)	
2	R121 (S)	
3	The Boulevard (W)	
4	R121 (N)	

Capacity Options

Arm	Minimum capacity (PCU/hr)	Maximum capacity (PCU/hr)	Assume flat start profile	Initial queue (PCU)
1 - Cruiserath Drive (E)	0.00	99999.00		0.00
2 - R121 (S)	0.00	99999.00		0.00
3 - The Boulevard (W)	0.00	99999.00		0.00
4 - R121 (N)	0.00	99999.00		0.00

Roundabout Geometry

Arm	V - Approach road half-width (m)	E - Entry width (m)	I' - Effective flare length (m)	R - Entry radius (m)	D - Inscribed circle diameter (m)	PHI - Conflict (entry) angle (deg)	Exit only
1 - Cruiserath Drive (E)	5.20	6.50	13.1	27.0	69.0	48.0	
2 - R121 (S)	7.00	10.20	12.8	35.0	69.0	45.0	
3 - The Boulevard (W)	7.00	8.70	12.1	45.0	69.0	35.0	
4 - R121 (N)	7.00	10.30	6.0	26.0	69.0	55.0	

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Arm	Final slope	Final intercept (PCU/hr)
1 - Cruiserath Drive (E)	0.511	1781.242
2 - R121 (S)	0.642	2576.970
3 - The Boulevard (W)	0.639	2500.652
4 - R121 (N)	0.586	2295.881

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

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Model start time (HH:mm)	Model finish time (HH:mm)	Time segment length (min)	Run automatically
D12	DS 2038	PM	ONE HOUR	17:00	18:30	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 (%)
1 - Cruiserath Drive (E)		ONE HOUR	✓	318.00	100.000
2 - R121 (S)		ONE HOUR	✓	1064.00	100.000
3 - The Boulevard (W)		ONE HOUR	✓	442.00	100.000
4 - R121 (N)		ONE HOUR	✓	858.00	100.000

Origin-Destination Data

Demand (PCU/hr)

		To			
		1 - Cruiserath Drive (E)	2 - R121 (S)	3 - The Boulevard (W)	4 - R121 (N)
From	1 - Cruiserath Drive (E)	0.000	171.000	22.000	125.000
	2 - R121 (S)	36.000	0.000	351.000	677.000
	3 - The Boulevard (W)	22.000	252.000	0.000	168.000
	4 - R121 (N)	20.000	533.000	305.000	0.000

Proportions

		To			
		1 - Cruiserath Drive (E)	2 - R121 (S)	3 - The Boulevard (W)	4 - R121 (N)
From	1 - Cruiserath Drive (E)	0.00	0.54	0.07	0.39
	2 - R121 (S)	0.03	0.00	0.33	0.64
	3 - The Boulevard (W)	0.05	0.57	0.00	0.38
	4 - R121 (N)	0.02	0.62	0.36	0.00

Vehicle Mix

Heavy Vehicle proportion

		To			
		1 - Cruiserath Drive (E)	2 - R121 (S)	3 - The Boulevard (W)	4 - R121 (N)
From	1 - Cruiserath Drive (E)	0	0	0	0
	2 - R121 (S)	0	0	0	0
	3 - The Boulevard (W)	0	0	0	0
	4 - R121 (N)	0	0	0	0

Average PCU Per Veh

		To			
		1 - Cruiserath Drive (E)	2 - R121 (S)	3 - The Boulevard (W)	4 - R121 (N)
From	1 - Cruiserath Drive (E)	1.000	1.000	1.000	1.000
	2 - R121 (S)	1.000	1.000	1.000	1.000
	3 - The Boulevard (W)	1.000	1.000	1.000	1.000
	4 - R121 (N)	1.000	1.000	1.000	1.000

Detailed Demand Data

Demand for each time segment

Time Segment	Arm	Demand (PCU/hr)	Demand in PCU (PCU/hr)
17:00-17:15	1 - Cruiserath Drive (E)	239.41	239.41
	2 - R121 (S)	801.03	801.03
	3 - The Boulevard (W)	332.76	332.76
	4 - R121 (N)	645.95	645.95
17:15-17:30	1 - Cruiserath Drive (E)	285.88	285.88
	2 - R121 (S)	956.51	956.51
	3 - The Boulevard (W)	397.35	397.35
	4 - R121 (N)	771.32	771.32
17:30-17:45	1 - Cruiserath Drive (E)	350.12	350.12
	2 - R121 (S)	1171.49	1171.49
	3 - The Boulevard (W)	486.65	486.65
	4 - R121 (N)	944.68	944.68
17:45-18:00	1 - Cruiserath Drive (E)	350.12	350.12
	2 - R121 (S)	1171.49	1171.49
	3 - The Boulevard (W)	486.65	486.65
	4 - R121 (N)	944.68	944.68
18:00-18:15	1 - Cruiserath Drive (E)	285.88	285.88
	2 - R121 (S)	956.51	956.51
	3 - The Boulevard (W)	397.35	397.35
	4 - R121 (N)	771.32	771.32
18:15-18:30	1 - Cruiserath Drive (E)	239.41	239.41
	2 - R121 (S)	801.03	801.03
	3 - The Boulevard (W)	332.76	332.76
	4 - R121 (N)	645.95	645.95

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
1 - Cruiserath Drive (E)	0.30	4.40	0.4	A	291.80	437.70
2 - R121 (S)	0.52	3.31	1.1	A	976.34	1464.52
3 - The Boulevard (W)	0.25	2.53	0.3	A	405.59	608.38
4 - R121 (N)	0.45	3.13	0.8	A	787.32	1180.97

Main Results for each time segment

Main results: (17:00-17:15)

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
1 - Cruiserath Drive (E)	239.41	59.85	818.52	1363.00	0.176	238.56	58.58	0.0	0.2	3.200	A
2 - R121 (S)	801.03	200.26	339.29	2359.24	0.340	798.99	717.79	0.0	0.5	2.304	A
3 - The Boulevard (W)	332.76	83.19	629.18	2098.33	0.159	332.01	509.09	0.0	0.2	2.037	A
4 - R121 (N)	645.95	161.49	232.85	2159.33	0.299	644.25	728.34	0.0	0.4	2.374	A

Main results: (17:15-17:30)

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
1 - Cruiserath Drive (E)	285.88	71.47	979.22	1280.89	0.223	285.58	70.07	0.2	0.3	3.617	A
2 - R121 (S)	956.51	239.13	406.01	2316.43	0.413	955.76	858.79	0.5	0.7	2.644	A
3 - The Boulevard (W)	397.35	99.34	752.73	2019.34	0.197	397.12	609.04	0.2	0.2	2.219	A
4 - R121 (N)	771.32	192.83	278.52	2132.54	0.362	770.77	871.33	0.4	0.6	2.642	A

Main results: (17:30-17:45)

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
1 - Cruiserath Drive (E)	350.12	87.53	1198.91	1168.63	0.300	349.57	85.79	0.3	0.4	4.392	A
2 - R121 (S)	1171.49	292.87	497.05	2258.01	0.519	1170.00	1051.43	0.7	1.1	3.304	A
3 - The Boulevard (W)	486.65	121.66	921.44	1911.45	0.255	486.27	745.61	0.2	0.3	2.526	A
4 - R121 (N)	944.68	236.17	341.03	2095.88	0.451	943.67	1066.68	0.6	0.8	3.121	A

Main results: (17:45-18:00)

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
1 - Cruiserath Drive (E)	350.12	87.53	1200.10	1168.03	0.300	350.12	85.88	0.4	0.4	4.401	A
2 - R121 (S)	1171.49	292.87	497.65	2257.62	0.519	1171.47	1052.56	1.1	1.1	3.313	A
3 - The Boulevard (W)	486.65	121.66	922.64	1910.69	0.255	486.65	746.48	0.3	0.3	2.527	A
4 - R121 (N)	944.68	236.17	341.31	2095.72	0.451	944.67	1067.98	0.8	0.8	3.126	A

Main results: (18:00-18:15)

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
1 - Cruiserath Drive (E)	285.88	71.47	981.08	1279.94	0.223	286.43	70.21	0.4	0.3	3.627	A
2 - R121 (S)	956.51	239.13	406.95	2315.83	0.413	957.98	860.56	1.1	0.7	2.653	A
3 - The Boulevard (W)	397.35	99.34	754.55	2018.17	0.197	397.73	610.38	0.3	0.2	2.223	A
4 - R121 (N)	771.32	192.83	278.97	2132.28	0.362	772.32	873.31	0.8	0.6	2.648	A

Main results: (18:15-18:30)

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
1 - Cruiserath Drive (E)	239.41	59.85	821.29	1361.59	0.176	239.71	58.77	0.3	0.2	3.209	A
2 - R121 (S)	801.03	200.26	340.63	2358.39	0.340	801.80	720.37	0.7	0.5	2.313	A
3 - The Boulevard (W)	332.76	83.19	631.52	2096.84	0.159	332.99	510.91	0.2	0.2	2.040	A
4 - R121 (N)	645.95	161.49	233.55	2158.91	0.299	646.51	730.96	0.6	0.4	2.380	A

Junctions 9
ARCADY 9 - Roundabout Module
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Filename: The Avenue - R121 Roundabout.j9
 Path: G:\2017\p170182\calcs\arcady\October 2021 Update
 Report generation date: 04/11/2021 08:55:18

»Do-Nothing - DN 2023, AM
 »Do-Nothing - DN 2023, PM
 »Do-Nothing - DN 2028, AM
 »Do-Nothing - DN 2028, PM
 »Do-Nothing - DN 2038, AM
 »Do-Nothing - DN 2038, PM
 »Do-Something - DS 2023, AM
 »Do-Something - DS 2023, PM
 »Do-Something - DS 2028, AM
 »Do-Something - DS 2028, PM
 »Do-Something - DS 2038, AM
 »Do-Something - DS 2038, PM

Summary of junction performance

	AM				PM			
	Queue (PCU)	Delay (s)	RFC	LOS	Queue (PCU)	Delay (s)	RFC	LOS
Do-Nothing - DN 2023								
1 - Cherryhound Tyrrelstown Link (E)	0.4	2.58	0.29	A	0.3	2.14	0.24	A
2 - R121 (S)	0.8	2.91	0.44	A	0.6	2.62	0.38	A
3 - The Avenue (W)	0.3	6.21	0.26	A	0.1	5.10	0.07	A
4 - R121 (N)	1.8	11.48	0.65	B	0.3	4.52	0.25	A
Do-Nothing - DN 2028								
1 - Cherryhound Tyrrelstown Link (E)	0.5	2.87	0.34	A	0.4	2.23	0.26	A
2 - R121 (S)	1.1	3.46	0.52	A	0.7	2.80	0.42	A
3 - The Avenue (W)	0.6	7.81	0.36	A	0.1	5.44	0.08	A
4 - R121 (N)	3.6	19.95	0.79	C	0.4	4.83	0.29	A
Do-Nothing - DN 2038								
1 - Cherryhound Tyrrelstown Link (E)	0.6	3.02	0.36	A	0.4	2.29	0.28	A
2 - R121 (S)	1.2	3.70	0.55	A	0.8	2.93	0.44	A
3 - The Avenue (W)	0.6	8.39	0.39	A	0.1	5.64	0.09	A
4 - R121 (N)	5.3	28.28	0.85	D	0.4	5.01	0.31	A

	AM				PM			
	Queue (PCU)	Delay (s)	RFC	LOS	Queue (PCU)	Delay (s)	RFC	LOS
Do-Something - DS 2023								
1 - Cherryhound Tyrrelstown Link (E)	0.4	2.63	0.29	A	0.3	2.17	0.25	A
2 - R121 (S)	0.8	2.96	0.45	A	0.7	2.70	0.40	A
3 - The Avenue (W)	0.4	6.60	0.30	A	0.1	5.33	0.10	A
4 - R121 (N)	2.1	12.64	0.68	B	0.4	4.69	0.27	A
Do-Something - DS 2028								
1 - Cherryhound Tyrrelstown Link (E)	0.5	3.08	0.35	A	0.4	2.36	0.28	A
2 - R121 (S)	1.2	3.64	0.54	A	0.9	3.08	0.46	A
3 - The Avenue (W)	1.0	9.88	0.49	A	0.2	6.16	0.17	A
4 - R121 (N)	7.7	39.83	0.90	E	0.6	5.48	0.36	A
Do-Something - DS 2038								
1 - Cherryhound Tyrrelstown Link (E)	0.6	3.25	0.38	A	0.4	2.42	0.30	A
2 - R121 (S)	1.3	3.91	0.57	A	1.0	3.24	0.49	A
3 - The Avenue (W)	1.1	10.89	0.53	B	0.2	6.44	0.18	A
4 - R121 (N)	14.9	71.64	0.97	F	0.6	5.72	0.38	A

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

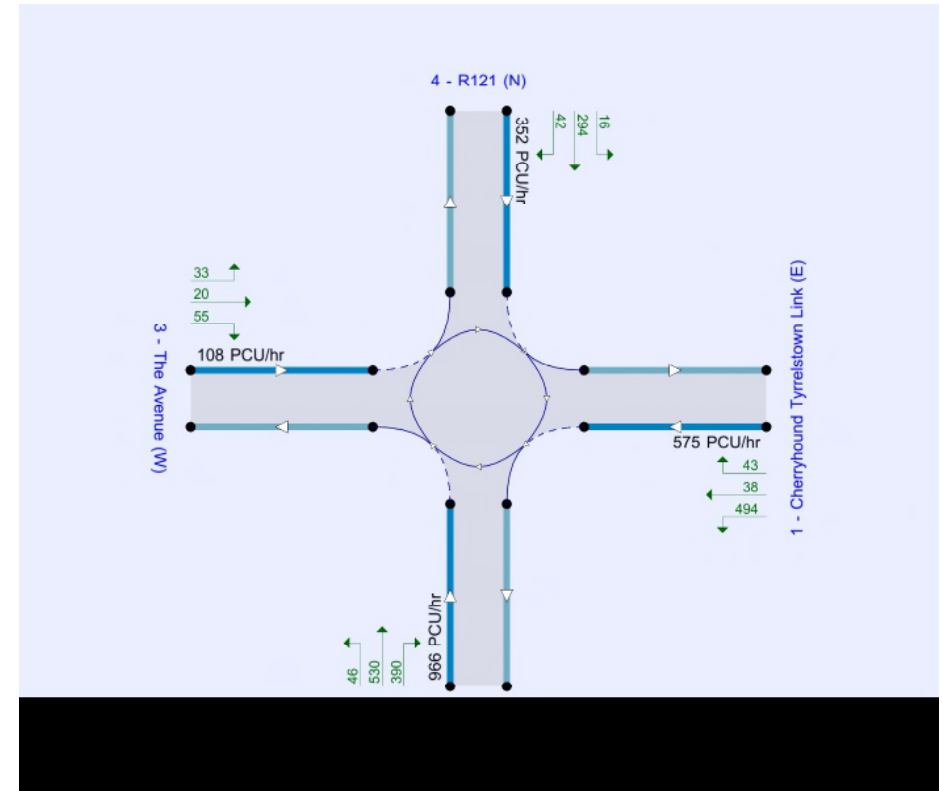
File summary

File Description

Title	Hollystown Phase 3B
Location	Hollystown, Dublin 15
Site number	
Date	17/08/2021
Version	
Status	Existing
Identifier	
Client	Glenveagh Homes Limited
Jobnumber	170182
Enumerator	HEADOFFICE'GillID
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

Scenario name	Time Period name	Traffic profile type	Model start time (HH:mm)	Model finish time (HH:mm)	Time segment length (min)	Run automatically
DN 2023	AM	ONE HOUR	08:00	09:30	15	✓
DN 2023	PM	ONE HOUR	17:00	18:30	15	✓
DN 2028	AM	ONE HOUR	08:00	09:30	15	✓
DN 2028	PM	ONE HOUR	17:00	18:30	15	✓
DN 2038	AM	ONE HOUR	08:00	09:30	15	✓
DN 2038	PM	ONE HOUR	17:00	18:30	15	✓
DS 2023	AM	ONE HOUR	08:00	09:30	15	✓
DS 2023	PM	ONE HOUR	17:00	18:30	15	✓
DS 2028	AM	ONE HOUR	08:00	09:30	15	✓
DS 2028	PM	ONE HOUR	17:00	18:30	15	✓
DS 2038	AM	ONE HOUR	08:00	09:30	15	✓
DS 2038	PM	ONE HOUR	17:00	18:30	15	✓

Do-Nothing - DN 2023, AM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

ID	Name	Include in report	Use specific Demand Set (s)	Specific Demand Set (s)	Network flow scaling factor (%)	Network capacity scaling factor (%)
A1	Do-Nothing	✓	✓	D1,D2,D3,D4,D5,D6	100.000	100.000

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (s)	Junction LOS
1 - The Avenue - R121 Roundabout	The Avenue - R121 Roundabout	Standard Roundabout	1,2,3,4	5.28	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Name	Description
1	Cherryhound Tyrrelstown Link (E)	
2	R121 (S)	
3	The Avenue (W)	
4	R121 (N)	

Capacity Options

Arm	Minimum capacity (PCU/hr)	Maximum capacity (PCU/hr)	Assume flat start profile	Initial queue (PCU)
1 - Cherryhound Tyrrelstown Link (E)	0.00	99999.00		0.00
2 - R121 (S)	0.00	99999.00		0.00
3 - The Avenue (W)	0.00	99999.00		0.00
4 - R121 (N)	0.00	99999.00		0.00

Roundabout Geometry

Arm	V - Approach road half-width (m)	E - Entry width (m)	I' - Effective flare length (m)	R - Entry radius (m)	D - Inscribed circle diameter (m)	PHI - Conflict (entry) angle (deg)	Exit only
1 - Cherryhound Tyrrelstown Link (E)	7.00	10.30	5.0	17.3	68.9	35.0	
2 - R121 (S)	7.50	10.30	4.1	19.4	68.9	62.0	
3 - The Avenue (W)	3.00	6.73	3.7	21.2	68.9	49.0	
4 - R121 (N)	3.20	6.50	5.2	19.3	68.9	44.0	

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Arm	Final slope	Final intercept (PCU/hr)
1 - Cherryhound Tyrrelstown Link (E)	0.613	2381.291
2 - R121 (S)	0.571	2253.090
3 - The Avenue (W)	0.400	1102.134
4 - R121 (N)	0.424	1234.081

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

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Model start time (HH:mm)	Model finish time (HH:mm)	Time segment length (min)	Run automatically
D1	DN 2023	AM	ONE HOUR	08:00	09:30	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 (%)
1 - Cherryhound Tyrrelstown Link (E)		ONE HOUR	✓	507.00	100.000
2 - R121 (S)		ONE HOUR	✓	880.00	100.000
3 - The Avenue (W)		ONE HOUR	✓	184.00	100.000
4 - R121 (N)		ONE HOUR	✓	530.00	100.000

Origin-Destination Data

Demand (PCU/hr)

	To				
		1 - Cherryhound Tyrrelstown Link (E)	2 - R121 (S)	3 - The Avenue (W)	4 - R121 (N)
From	1 - Cherryhound Tyrrelstown Link (E)	0.000	467.000	30.000	10.000
	2 - R121 (S)	546.000	0.000	164.000	170.000
	3 - The Avenue (W)	29.000	147.000	0.000	8.000
	4 - R121 (N)	46.000	448.000	36.000	0.000

Proportions

	To				
		1 - Cherryhound Tyrrelstown Link (E)	2 - R121 (S)	3 - The Avenue (W)	4 - R121 (N)
From	1 - Cherryhound Tyrrelstown Link (E)	0.00	0.92	0.06	0.02
	2 - R121 (S)	0.62	0.00	0.19	0.19
	3 - The Avenue (W)	0.16	0.80	0.00	0.04
	4 - R121 (N)	0.09	0.85	0.07	0.00

Vehicle Mix

Heavy Vehicle proportion

	To				
		1 - Cherryhound Tyrrelstown Link (E)	2 - R121 (S)	3 - The Avenue (W)	4 - R121 (N)
From	1 - Cherryhound Tyrrelstown Link (E)	0	0	0	0
	2 - R121 (S)	0	0	0	0
	3 - The Avenue (W)	0	0	0	0
	4 - R121 (N)	0	0	0	0

Average PCU Per Veh

	To				
		1 - Cherryhound Tyrrelstown Link (E)	2 - R121 (S)	3 - The Avenue (W)	4 - R121 (N)
From	1 - Cherryhound Tyrrelstown Link (E)	1.000	1.000	1.000	1.000
	2 - R121 (S)	1.000	1.000	1.000	1.000
	3 - The Avenue (W)	1.000	1.000	1.000	1.000
	4 - R121 (N)	1.000	1.000	1.000	1.000

Detailed Demand Data

Demand for each time segment

Time Segment	Arm	Demand (PCU/hr)	Demand in PCU (PCU/hr)
08:00-08:15	1 - Cherryhound Tyrrelstown Link (E)	381.70	381.70
	2 - R121 (S)	662.51	662.51
	3 - The Avenue (W)	138.52	138.52
	4 - R121 (N)	399.01	399.01
08:15-08:30	1 - Cherryhound Tyrrelstown Link (E)	455.78	455.78
	2 - R121 (S)	791.10	791.10
	3 - The Avenue (W)	165.41	165.41
	4 - R121 (N)	476.46	476.46
08:30-08:45	1 - Cherryhound Tyrrelstown Link (E)	558.22	558.22
	2 - R121 (S)	968.90	968.90
	3 - The Avenue (W)	202.59	202.59
	4 - R121 (N)	583.54	583.54
08:45-09:00	1 - Cherryhound Tyrrelstown Link (E)	558.22	558.22
	2 - R121 (S)	968.90	968.90
	3 - The Avenue (W)	202.59	202.59
	4 - R121 (N)	583.54	583.54
09:00-09:15	1 - Cherryhound Tyrrelstown Link (E)	455.78	455.78
	2 - R121 (S)	791.10	791.10
	3 - The Avenue (W)	165.41	165.41
	4 - R121 (N)	476.46	476.46
09:15-09:30	1 - Cherryhound Tyrrelstown Link (E)	381.70	381.70
	2 - R121 (S)	662.51	662.51
	3 - The Avenue (W)	138.52	138.52
	4 - R121 (N)	399.01	399.01

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
1 - Cherryhound Tyrrelstown Link (E)	0.29	2.58	0.4	A	465.23	697.85
2 - R121 (S)	0.44	2.91	0.8	A	807.50	1211.26
3 - The Avenue (W)	0.26	6.21	0.3	A	168.84	253.26
4 - R121 (N)	0.65	11.48	1.8	B	486.34	729.51

Main Results for each time segment

Main results: (08:00-08:15)

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
1 - Cherryhound Tyrrelstown Link (E)	381.70	95.42	472.08	2092.06	0.182	380.81	466.13	0.0	0.2	2.102	A
2 - R121 (S)	662.51	165.63	56.97	2220.55	0.298	660.82	795.91	0.0	0.4	2.306	A
3 - The Avenue (W)	138.52	34.63	545.17	883.86	0.157	137.79	172.61	0.0	0.2	4.820	A
4 - R121 (N)	399.01	99.75	541.80	1004.14	0.397	396.40	141.16	0.0	0.7	5.899	A

Main results: (08:15-08:30)

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
1 - Cherryhound Tyrrelstown Link (E)	455.78	113.95	565.90	2034.58	0.224	455.52	557.80	0.2	0.3	2.279	A
2 - R121 (S)	791.10	197.78	68.21	2214.12	0.357	790.58	953.21	0.4	0.6	2.529	A
3 - The Avenue (W)	165.41	41.35	652.23	840.99	0.197	165.18	206.57	0.2	0.2	5.326	A
4 - R121 (N)	476.46	119.11	648.52	958.84	0.497	475.18	168.89	0.7	1.0	7.424	A

Main results: (08:30-08:45)

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
1 - Cherryhound Tyrrelstown Link (E)	558.22	139.55	691.40	1957.69	0.285	557.78	682.82	0.3	0.4	2.571	A
2 - R121 (S)	968.90	242.22	83.42	2205.44	0.439	968.00	1165.76	0.6	0.8	2.908	A
3 - The Avenue (W)	202.59	50.65	798.60	782.39	0.259	202.18	252.82	0.2	0.3	6.201	A
4 - R121 (N)	583.54	145.89	793.98	897.11	0.650	580.24	206.79	1.0	1.8	11.242	B

Main results: (08:45-09:00)

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
1 - Cherryhound Tyrrelstown Link (E)	558.22	139.55	694.62	1955.71	0.285	558.21	683.72	0.4	0.4	2.575	A
2 - R121 (S)	968.90	242.22	83.67	2205.29	0.439	968.89	1169.17	0.8	0.8	2.911	A
3 - The Avenue (W)	202.59	50.65	799.33	782.10	0.259	202.58	253.22	0.3	0.3	6.211	A
4 - R121 (N)	583.54	145.89	794.92	896.71	0.651	583.41	206.99	1.8	1.8	11.479	B

Main results: (09:00-09:15)

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
1 - Cherryhound Tyrrelstown Link (E)	455.78	113.95	570.59	2031.70	0.224	456.22	559.17	0.4	0.3	2.285	A
2 - R121 (S)	791.10	197.78	68.58	2213.91	0.357	791.99	958.23	0.8	0.6	2.534	A
3 - The Avenue (W)	165.41	41.35	653.39	840.53	0.197	165.82	207.18	0.3	0.2	5.340	A
4 - R121 (N)	476.46	119.11	650.00	958.21	0.497	479.76	169.21	1.8	1.0	7.574	A

Main results: (09:15-09:30)

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
1 - Cherryhound Tyrrelstown Link (E)	381.70	95.42	476.47	2089.37	0.183	381.96	468.00	0.3	0.2	2.108	A
2 - R121 (S)	662.51	165.63	57.33	2220.34	0.298	663.04	801.10	0.6	0.4	2.312	A
3 - The Avenue (W)	138.52	34.63	547.00	883.12	0.157	138.76	173.36	0.2	0.2	4.837	A
4 - R121 (N)	399.01	99.75	544.11	1003.15	0.398	400.36	141.65	1.0	0.7	5.984	A

Do-Nothing - DN 2023, PM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

ID	Name	Include in report	Use specific Demand Set (s)	Specific Demand Set (s)	Network flow scaling factor (%)	Network capacity scaling factor (%)
A1	Do-Nothing	✓	✓	D1,D2,D3,D4,D5,D6	100.000	100.000

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (s)	Junction LOS
1 - The Avenue - R121 Roundabout	The Avenue - R121 Roundabout	Standard Roundabout	1,2,3,4	2.84	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Name	Description
1	Cherryhound Tyrrelstown Link (E)	
2	R121 (S)	
3	The Avenue (W)	
4	R121 (N)	

Capacity Options

Arm	Minimum capacity (PCU/hr)	Maximum capacity (PCU/hr)	Assume flat start profile	Initial queue (PCU)
1 - Cherryhound Tyrrelstown Link (E)	0.00	99999.00		0.00
2 - R121 (S)	0.00	99999.00		0.00
3 - The Avenue (W)	0.00	99999.00		0.00
4 - R121 (N)	0.00	99999.00		0.00

Roundabout Geometry

Arm	V - Approach road half-width (m)	E - Entry width (m)	I' - Effective flare length (m)	R - Entry radius (m)	D - Inscribed circle diameter (m)	PHI - Conflict (entry) angle (deg)	Exit only
1 - Cherryhound Tyrrelstown Link (E)	7.00	10.30	5.0	17.3	68.9	35.0	
2 - R121 (S)	7.50	10.30	4.1	19.4	68.9	62.0	
3 - The Avenue (W)	3.00	6.73	3.7	21.2	68.9	49.0	
4 - R121 (N)	3.20	6.50	5.2	19.3	68.9	44.0	

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Arm	Final slope	Final intercept (PCU/hr)
1 - Cherryhound Tyrrelstown Link (E)	0.613	2381.291
2 - R121 (S)	0.571	2253.090
3 - The Avenue (W)	0.400	1102.134
4 - R121 (N)	0.424	1234.081

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

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Model start time (HH:mm)	Model finish time (HH:mm)	Time segment length (min)	Run automatically
D2	DN 2023	PM	ONE HOUR	17:00	18:30	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 (%)
1 - Cherryhound Tyrrelstown Link (E)		ONE HOUR	✓	481.00	100.000
2 - R121 (S)		ONE HOUR	✓	767.00	100.000
3 - The Avenue (W)		ONE HOUR	✓	45.00	100.000
4 - R121 (N)		ONE HOUR	✓	243.00	100.000

Origin-Destination Data

Demand (PCU/hr)

	To				
		1 - Cherryhound Tyrrelstown Link (E)	2 - R121 (S)	3 - The Avenue (W)	4 - R121 (N)
From	1 - Cherryhound Tyrrelstown Link (E)	0.000	429.000	16.000	36.000
	2 - R121 (S)	338.000	0.000	17.000	412.000
	3 - The Avenue (W)	9.000	18.000	0.000	18.000
	4 - R121 (N)	14.000	222.000	7.000	0.000

Proportions

	To				
		1 - Cherryhound Tyrrelstown Link (E)	2 - R121 (S)	3 - The Avenue (W)	4 - R121 (N)
From	1 - Cherryhound Tyrrelstown Link (E)	0.00	0.89	0.03	0.07
	2 - R121 (S)	0.44	0.00	0.02	0.54
	3 - The Avenue (W)	0.20	0.40	0.00	0.40
	4 - R121 (N)	0.06	0.91	0.03	0.00

Vehicle Mix

Heavy Vehicle proportion

	To				
		1 - Cherryhound Tyrrelstown Link (E)	2 - R121 (S)	3 - The Avenue (W)	4 - R121 (N)
From	1 - Cherryhound Tyrrelstown Link (E)	0	0	0	0
	2 - R121 (S)	0	0	0	0
	3 - The Avenue (W)	0	0	0	0
	4 - R121 (N)	0	0	0	0

Average PCU Per Veh

	To				
		1 - Cherryhound Tyrrelstown Link (E)	2 - R121 (S)	3 - The Avenue (W)	4 - R121 (N)
From	1 - Cherryhound Tyrrelstown Link (E)	1.000	1.000	1.000	1.000
	2 - R121 (S)	1.000	1.000	1.000	1.000
	3 - The Avenue (W)	1.000	1.000	1.000	1.000
	4 - R121 (N)	1.000	1.000	1.000	1.000

Detailed Demand Data

Demand for each time segment

Time Segment	Arm	Demand (PCU/hr)	Demand in PCU (PCU/hr)
17:00-17:15	1 - Cherryhound Tyrrelstown Link (E)	362.12	362.12
	2 - R121 (S)	577.44	577.44
	3 - The Avenue (W)	33.88	33.88
	4 - R121 (N)	182.94	182.94
17:15-17:30	1 - Cherryhound Tyrrelstown Link (E)	432.41	432.41
	2 - R121 (S)	689.52	689.52
	3 - The Avenue (W)	40.45	40.45
	4 - R121 (N)	218.45	218.45
17:30-17:45	1 - Cherryhound Tyrrelstown Link (E)	529.59	529.59
	2 - R121 (S)	844.48	844.48
	3 - The Avenue (W)	49.55	49.55
	4 - R121 (N)	267.55	267.55
17:45-18:00	1 - Cherryhound Tyrrelstown Link (E)	529.59	529.59
	2 - R121 (S)	844.48	844.48
	3 - The Avenue (W)	49.55	49.55
	4 - R121 (N)	267.55	267.55
18:00-18:15	1 - Cherryhound Tyrrelstown Link (E)	432.41	432.41
	2 - R121 (S)	689.52	689.52
	3 - The Avenue (W)	40.45	40.45
	4 - R121 (N)	218.45	218.45
18:15-18:30	1 - Cherryhound Tyrrelstown Link (E)	362.12	362.12
	2 - R121 (S)	577.44	577.44
	3 - The Avenue (W)	33.88	33.88
	4 - R121 (N)	182.94	182.94

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
1 - Cherryhound Tyrrelstown Link (E)	0.24	2.14	0.3	A	441.37	662.06
2 - R121 (S)	0.38	2.62	0.6	A	703.81	1055.72
3 - The Avenue (W)	0.07	5.10	0.1	A	41.29	61.94
4 - R121 (N)	0.25	4.52	0.3	A	222.98	334.47

Main Results for each time segment

Main results: (17:00-17:15)

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
1 - Cherryhound Tyrrelstown Link (E)	362.12	90.53	185.16	2267.85	0.160	361.36	271.09	0.0	0.2	1.888	A
2 - R121 (S)	577.44	144.36	44.31	2227.78	0.259	576.04	502.21	0.0	0.3	2.177	A
3 - The Avenue (W)	33.88	8.47	590.32	865.78	0.039	33.72	30.04	0.0	0.0	4.327	A
4 - R121 (N)	182.94	45.74	274.08	1117.76	0.164	182.16	349.96	0.0	0.2	3.844	A

Main results: (17:15-17:30)

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
1 - Cherryhound Tyrrelstown Link (E)	432.41	108.10	221.83	2245.38	0.193	432.22	324.34	0.2	0.2	1.985	A
2 - R121 (S)	689.52	172.38	53.01	2222.81	0.310	689.12	601.03	0.3	0.4	2.347	A
3 - The Avenue (W)	40.45	10.11	706.20	819.39	0.049	40.41	35.94	0.0	0.1	4.621	A
4 - R121 (N)	218.45	54.61	327.93	1094.91	0.200	218.24	418.68	0.2	0.2	4.105	A

Main results: (17:30-17:45)

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
1 - Cherryhound Tyrrelstown Link (E)	529.59	132.40	271.60	2214.89	0.239	529.29	397.14	0.2	0.3	2.135	A
2 - R121 (S)	844.48	211.12	64.92	2216.01	0.381	843.82	735.97	0.4	0.6	2.622	A
3 - The Avenue (W)	49.55	12.39	864.73	755.91	0.066	49.47	44.01	0.1	0.1	5.096	A
4 - R121 (N)	267.55	66.89	401.54	1063.66	0.252	267.20	512.67	0.2	0.3	4.518	A

Main results: (17:45-18:00)

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
1 - Cherryhound Tyrrelstown Link (E)	529.59	132.40	271.95	2214.67	0.239	529.59	397.47	0.3	0.3	2.136	A
2 - R121 (S)	844.48	211.12	64.96	2215.98	0.381	844.48	736.58	0.6	0.6	2.624	A
3 - The Avenue (W)	49.55	12.39	865.40	755.65	0.066	49.55	44.04	0.1	0.1	5.097	A
4 - R121 (N)	267.55	66.89	401.87	1063.52	0.252	267.54	513.07	0.3	0.3	4.522	A

Main results: (18:00-18:15)

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
1 - Cherryhound Tyrrelstown Link (E)	432.41	108.10	222.39	2245.04	0.193	432.71	324.85	0.3	0.2	1.986	A
2 - R121 (S)	689.52	172.38	53.08	2222.77	0.310	690.17	602.02	0.6	0.5	2.351	A
3 - The Avenue (W)	40.45	10.11	707.26	818.96	0.049	40.52	35.99	0.1	0.1	4.624	A
4 - R121 (N)	218.45	54.61	328.46	1094.68	0.200	218.79	419.33	0.3	0.3	4.113	A

Main results: (18:15-18:30)

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
1 - Cherryhound Tyrrelstown Link (E)	362.12	90.53	186.18	2267.23	0.160	362.32	271.98	0.2	0.2	1.889	A
2 - R121 (S)	577.44	144.36	44.45	2227.70	0.259	577.84	504.05	0.5	0.4	2.182	A
3 - The Avenue (W)	33.88	8.47	592.15	865.05	0.039	33.92	30.14	0.1	0.0	4.331	A
4 - R121 (N)	182.94	45.74	275.00	1117.37	0.164	183.16	351.08	0.3	0.2	3.855	A

Do-Nothing - DN 2028, AM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

ID	Name	Include in report	Use specific Demand Set (s)	Specific Demand Set (s)	Network flow scaling factor (%)	Network capacity scaling factor (%)
A1	Do-Nothing	✓	✓	D1,D2,D3,D4,D5,D6	100.000	100.000

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (s)	Junction LOS
1 - The Avenue - R121 Roundabout	The Avenue - R121 Roundabout	Standard Roundabout	1,2,3,4	7.88	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Name	Description
1	Cherryhound Tyrrelstown Link (E)	
2	R121 (S)	
3	The Avenue (W)	
4	R121 (N)	

Capacity Options

Arm	Minimum capacity (PCU/hr)	Maximum capacity (PCU/hr)	Assume flat start profile	Initial queue (PCU)
1 - Cherryhound Tyrrelstown Link (E)	0.00	99999.00		0.00
2 - R121 (S)	0.00	99999.00		0.00
3 - The Avenue (W)	0.00	99999.00		0.00
4 - R121 (N)	0.00	99999.00		0.00

Roundabout Geometry

Arm	V - Approach road half-width (m)	E - Entry width (m)	I' - Effective flare length (m)	R - Entry radius (m)	D - Inscribed circle diameter (m)	PHI - Conflict (entry) angle (deg)	Exit only
1 - Cherryhound Tyrrelstown Link (E)	7.00	10.30	5.0	17.3	68.9	35.0	
2 - R121 (S)	7.50	10.30	4.1	19.4	68.9	62.0	
3 - The Avenue (W)	3.00	6.73	3.7	21.2	68.9	49.0	
4 - R121 (N)	3.20	6.50	5.2	19.3	68.9	44.0	

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Arm	Final slope	Final intercept (PCU/hr)
1 - Cherryhound Tyrrelstown Link (E)	0.613	2381.291
2 - R121 (S)	0.571	2253.090
3 - The Avenue (W)	0.400	1102.134
4 - R121 (N)	0.424	1234.081

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

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Model start time (HH:mm)	Model finish time (HH:mm)	Time segment length (min)	Run automatically
D3	DN 2028	AM	ONE HOUR	08:00	09:30	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 (%)
1 - Cherryhound Tyrrelstown Link (E)		ONE HOUR	✓	576.00	100.000
2 - R121 (S)		ONE HOUR	✓	1028.00	100.000
3 - The Avenue (W)		ONE HOUR	✓	240.00	100.000
4 - R121 (N)		ONE HOUR	✓	617.00	100.000

Origin-Destination Data

Demand (PCU/hr)

	To				
		1 - Cherryhound Tyrrelstown Link (E)	2 - R121 (S)	3 - The Avenue (W)	4 - R121 (N)
From	1 - Cherryhound Tyrrelstown Link (E)	0.000	506.000	59.000	11.000
	2 - R121 (S)	592.000	0.000	184.000	252.000
	3 - The Avenue (W)	50.000	164.000	0.000	26.000
	4 - R121 (N)	51.000	505.000	61.000	0.000

Proportions

	To				
		1 - Cherryhound Tyrrelstown Link (E)	2 - R121 (S)	3 - The Avenue (W)	4 - R121 (N)
From	1 - Cherryhound Tyrrelstown Link (E)	0.00	0.88	0.10	0.02
	2 - R121 (S)	0.58	0.00	0.18	0.25
	3 - The Avenue (W)	0.21	0.68	0.00	0.11
	4 - R121 (N)	0.08	0.82	0.10	0.00

Vehicle Mix

Heavy Vehicle proportion

	To				
		1 - Cherryhound Tyrrelstown Link (E)	2 - R121 (S)	3 - The Avenue (W)	4 - R121 (N)
From	1 - Cherryhound Tyrrelstown Link (E)	0	0	0	0
	2 - R121 (S)	0	0	0	0
	3 - The Avenue (W)	0	0	0	0
	4 - R121 (N)	0	0	0	0

Average PCU Per Veh

	To				
		1 - Cherryhound Tyrrelstown Link (E)	2 - R121 (S)	3 - The Avenue (W)	4 - R121 (N)
From	1 - Cherryhound Tyrrelstown Link (E)	1.000	1.000	1.000	1.000
	2 - R121 (S)	1.000	1.000	1.000	1.000
	3 - The Avenue (W)	1.000	1.000	1.000	1.000
	4 - R121 (N)	1.000	1.000	1.000	1.000

Detailed Demand Data

Demand for each time segment

Time Segment	Arm	Demand (PCU/hr)	Demand in PCU (PCU/hr)
08:00-08:15	1 - Cherryhound Tyrrelstown Link (E)	433.64	433.64
	2 - R121 (S)	773.93	773.93
	3 - The Avenue (W)	180.68	180.68
	4 - R121 (N)	464.51	464.51
08:15-08:30	1 - Cherryhound Tyrrelstown Link (E)	517.81	517.81
	2 - R121 (S)	924.15	924.15
	3 - The Avenue (W)	215.76	215.76
	4 - R121 (N)	554.67	554.67
08:30-08:45	1 - Cherryhound Tyrrelstown Link (E)	634.19	634.19
	2 - R121 (S)	1131.85	1131.85
	3 - The Avenue (W)	264.24	264.24
	4 - R121 (N)	679.33	679.33
08:45-09:00	1 - Cherryhound Tyrrelstown Link (E)	634.19	634.19
	2 - R121 (S)	1131.85	1131.85
	3 - The Avenue (W)	264.24	264.24
	4 - R121 (N)	679.33	679.33
09:00-09:15	1 - Cherryhound Tyrrelstown Link (E)	517.81	517.81
	2 - R121 (S)	924.15	924.15
	3 - The Avenue (W)	215.76	215.76
	4 - R121 (N)	554.67	554.67
09:15-09:30	1 - Cherryhound Tyrrelstown Link (E)	433.64	433.64
	2 - R121 (S)	773.93	773.93
	3 - The Avenue (W)	180.68	180.68
	4 - R121 (N)	464.51	464.51

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
1 - Cherryhound Tyrrelstown Link (E)	0.34	2.87	0.5	A	528.55	792.82
2 - R121 (S)	0.52	3.46	1.1	A	943.31	1414.97
3 - The Avenue (W)	0.36	7.81	0.6	A	220.23	330.34
4 - R121 (N)	0.79	19.95	3.6	C	566.17	849.25

Main Results for each time segment

Main results: (08:00-08:15)

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
1 - Cherryhound Tyrrelstown Link (E)	433.64	108.41	545.57	2047.03	0.212	432.57	519.96	0.0	0.3	2.229	A
2 - R121 (S)	773.93	193.48	98.14	2197.03	0.352	771.77	880.00	0.0	0.5	2.523	A
3 - The Avenue (W)	180.68	45.17	641.89	845.13	0.214	179.61	228.02	0.0	0.3	5.400	A
4 - R121 (N)	464.51	116.13	604.59	977.49	0.475	460.94	216.91	0.0	0.9	6.923	A

Main results: (08:15-08:30)

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
1 - Cherryhound Tyrrelstown Link (E)	517.81	129.45	653.93	1980.64	0.261	517.47	622.29	0.3	0.4	2.460	A
2 - R121 (S)	924.15	231.04	117.50	2185.97	0.423	923.40	1053.90	0.5	0.7	2.850	A
3 - The Avenue (W)	215.76	53.94	768.01	794.64	0.272	215.36	272.90	0.3	0.4	6.210	A
4 - R121 (N)	554.67	138.67	723.79	926.90	0.598	552.43	259.57	0.9	1.5	9.555	A

Main results: (08:30-08:45)

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
1 - Cherryhound Tyrrelstown Link (E)	634.19	158.55	795.83	1893.71	0.335	633.59	761.37	0.4	0.5	2.855	A
2 - R121 (S)	1131.85	282.96	143.37	2171.19	0.521	1130.44	1286.05	0.7	1.1	3.454	A
3 - The Avenue (W)	264.24	66.06	940.21	725.69	0.364	263.46	333.60	0.4	0.6	7.775	A
4 - R121 (N)	679.33	169.83	885.91	858.09	0.792	671.28	317.75	1.5	3.5	18.515	C

Main results: (08:45-09:00)

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
1 - Cherryhound Tyrrelstown Link (E)	634.19	158.55	803.15	1889.22	0.336	634.18	762.94	0.5	0.5	2.867	A
2 - R121 (S)	1131.85	282.96	144.17	2170.73	0.521	1131.83	1293.16	1.1	1.1	3.464	A
3 - The Avenue (W)	264.24	66.06	941.36	725.23	0.364	264.23	334.64	0.6	0.6	7.809	A
4 - R121 (N)	679.33	169.83	887.40	857.46	0.792	678.69	318.19	3.5	3.6	19.952	C

Main results: (09:00-09:15)

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
1 - Cherryhound Tyrrelstown Link (E)	517.81	129.45	664.46	1974.19	0.262	518.40	624.65	0.5	0.4	2.473	A
2 - R121 (S)	924.15	231.04	118.67	2185.30	0.423	925.54	1064.19	1.1	0.7	2.862	A
3 - The Avenue (W)	215.76	53.94	769.78	793.93	0.272	216.53	274.43	0.6	0.4	6.242	A
4 - R121 (N)	554.67	138.67	726.07	925.93	0.599	563.04	260.24	3.6	1.5	10.136	B

Main results: (09:15-09:30)

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
1 - Cherryhound Tyrrelstown Link (E)	433.64	108.41	552.11	2043.03	0.212	433.99	522.45	0.4	0.3	2.239	A
2 - R121 (S)	773.93	193.48	98.91	2196.59	0.352	774.69	887.19	0.7	0.5	2.532	A
3 - The Avenue (W)	180.68	45.17	644.32	844.16	0.214	181.09	229.28	0.4	0.3	5.432	A
4 - R121 (N)	464.51	116.13	607.60	976.21	0.476	466.96	217.81	1.5	0.9	7.101	A

Do-Nothing - DN 2028, PM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

ID	Name	Include in report	Use specific Demand Set (s)	Specific Demand Set (s)	Network flow scaling factor (%)	Network capacity scaling factor (%)
A1	Do-Nothing	✓	✓	D1,D2,D3,D4,D5,D6	100.000	100.000

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (s)	Junction LOS
1 - The Avenue - R121 Roundabout	The Avenue - R121 Roundabout	Standard Roundabout	1,2,3,4	3.04	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Name	Description
1	Cherryhound Tyrrelstown Link (E)	
2	R121 (S)	
3	The Avenue (W)	
4	R121 (N)	

Capacity Options

Arm	Minimum capacity (PCU/hr)	Maximum capacity (PCU/hr)	Assume flat start profile	Initial queue (PCU)
1 - Cherryhound Tyrrelstown Link (E)	0.00	99999.00		0.00
2 - R121 (S)	0.00	99999.00		0.00
3 - The Avenue (W)	0.00	99999.00		0.00
4 - R121 (N)	0.00	99999.00		0.00

Roundabout Geometry

Arm	V - Approach road half-width (m)	E - Entry width (m)	I' - Effective flare length (m)	R - Entry radius (m)	D - Inscribed circle diameter (m)	PHI - Conflict (entry) angle (deg)	Exit only
1 - Cherryhound Tyrrelstown Link (E)	7.00	10.30	5.0	17.3	68.9	35.0	
2 - R121 (S)	7.50	10.30	4.1	19.4	68.9	62.0	
3 - The Avenue (W)	3.00	6.73	3.7	21.2	68.9	49.0	
4 - R121 (N)	3.20	6.50	5.2	19.3	68.9	44.0	

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Arm	Final slope	Final intercept (PCU/hr)
1 - Cherryhound Tyrrelstown Link (E)	0.613	2381.291
2 - R121 (S)	0.571	2253.090
3 - The Avenue (W)	0.400	1102.134
4 - R121 (N)	0.424	1234.081

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

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Model start time (HH:mm)	Model finish time (HH:mm)	Time segment length (min)	Run automatically
D4	DN 2028	PM	ONE HOUR	17:00	18:30	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 (%)
1 - Cherryhound Tyrrelstown Link (E)		ONE HOUR	✓	523.00	100.000
2 - R121 (S)		ONE HOUR	✓	842.00	100.000
3 - The Avenue (W)		ONE HOUR	✓	55.00	100.000
4 - R121 (N)		ONE HOUR	✓	275.00	100.000

Origin-Destination Data

Demand (PCU/hr)

	To				
		1 - Cherryhound Tyrrelstown Link (E)	2 - R121 (S)	3 - The Avenue (W)	4 - R121 (N)
From	1 - Cherryhound Tyrrelstown Link (E)	0.000	465.000	20.000	38.000
	2 - R121 (S)	366.000	0.000	19.000	457.000
	3 - The Avenue (W)	13.000	20.000	0.000	22.000
	4 - R121 (N)	14.000	251.000	10.000	0.000

Proportions

	To				
		1 - Cherryhound Tyrrelstown Link (E)	2 - R121 (S)	3 - The Avenue (W)	4 - R121 (N)
From	1 - Cherryhound Tyrrelstown Link (E)	0.00	0.89	0.04	0.07
	2 - R121 (S)	0.43	0.00	0.02	0.54
	3 - The Avenue (W)	0.24	0.36	0.00	0.40
	4 - R121 (N)	0.05	0.91	0.04	0.00

Vehicle Mix

Heavy Vehicle proportion

	To				
		1 - Cherryhound Tyrrelstown Link (E)	2 - R121 (S)	3 - The Avenue (W)	4 - R121 (N)
From	1 - Cherryhound Tyrrelstown Link (E)	0	0	0	0
	2 - R121 (S)	0	0	0	0
	3 - The Avenue (W)	0	0	0	0
	4 - R121 (N)	0	0	0	0

Average PCU Per Veh

	To				
		1 - Cherryhound Tyrrelstown Link (E)	2 - R121 (S)	3 - The Avenue (W)	4 - R121 (N)
From	1 - Cherryhound Tyrrelstown Link (E)	1.000	1.000	1.000	1.000
	2 - R121 (S)	1.000	1.000	1.000	1.000
	3 - The Avenue (W)	1.000	1.000	1.000	1.000
	4 - R121 (N)	1.000	1.000	1.000	1.000

Detailed Demand Data

Demand for each time segment

Time Segment	Arm	Demand (PCU/hr)	Demand in PCU (PCU/hr)
17:00-17:15	1 - Cherryhound Tyrrelstown Link (E)	393.74	393.74
	2 - R121 (S)	633.90	633.90
	3 - The Avenue (W)	41.41	41.41
	4 - R121 (N)	207.03	207.03
17:15-17:30	1 - Cherryhound Tyrrelstown Link (E)	470.17	470.17
	2 - R121 (S)	756.94	756.94
	3 - The Avenue (W)	49.44	49.44
	4 - R121 (N)	247.22	247.22
17:30-17:45	1 - Cherryhound Tyrrelstown Link (E)	575.83	575.83
	2 - R121 (S)	927.06	927.06
	3 - The Avenue (W)	60.56	60.56
	4 - R121 (N)	302.78	302.78
17:45-18:00	1 - Cherryhound Tyrrelstown Link (E)	575.83	575.83
	2 - R121 (S)	927.06	927.06
	3 - The Avenue (W)	60.56	60.56
	4 - R121 (N)	302.78	302.78
18:00-18:15	1 - Cherryhound Tyrrelstown Link (E)	470.17	470.17
	2 - R121 (S)	756.94	756.94
	3 - The Avenue (W)	49.44	49.44
	4 - R121 (N)	247.22	247.22
18:15-18:30	1 - Cherryhound Tyrrelstown Link (E)	393.74	393.74
	2 - R121 (S)	633.90	633.90
	3 - The Avenue (W)	41.41	41.41
	4 - R121 (N)	207.03	207.03

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
1 - Cherryhound Tyrrelstown Link (E)	0.26	2.23	0.4	A	479.91	719.87
2 - R121 (S)	0.42	2.80	0.7	A	772.63	1158.95
3 - The Avenue (W)	0.08	5.44	0.1	A	50.47	75.70
4 - R121 (N)	0.29	4.83	0.4	A	252.34	378.52

Main Results for each time segment

Main results: (17:00-17:15)

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
1 - Cherryhound Tyrrelstown Link (E)	393.74	98.44	210.61	2252.26	0.175	392.90	295.09	0.0	0.2	1.935	A
2 - R121 (S)	633.90	158.48	51.07	2223.92	0.285	632.31	552.44	0.0	0.4	2.260	A
3 - The Avenue (W)	41.41	10.35	646.59	843.25	0.049	41.20	36.79	0.0	0.1	4.487	A
4 - R121 (N)	207.03	51.76	299.57	1106.94	0.187	206.12	388.22	0.0	0.2	3.992	A

Main results: (17:15-17:30)

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
1 - Cherryhound Tyrrelstown Link (E)	470.17	117.54	252.34	2226.69	0.211	469.94	353.07	0.2	0.3	2.049	A
2 - R121 (S)	756.94	189.24	61.10	2218.19	0.341	756.47	661.19	0.4	0.5	2.463	A
3 - The Avenue (W)	49.44	12.36	773.54	792.42	0.062	49.38	44.02	0.1	0.1	4.844	A
4 - R121 (N)	247.22	61.80	358.45	1081.95	0.228	246.96	464.48	0.2	0.3	4.310	A

Main results: (17:30-17:45)

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
1 - Cherryhound Tyrrelstown Link (E)	575.83	143.96	308.94	2192.01	0.263	575.48	432.30	0.3	0.4	2.227	A
2 - R121 (S)	927.06	231.76	74.81	2210.35	0.419	926.25	809.60	0.5	0.7	2.802	A
3 - The Avenue (W)	60.56	15.14	947.16	722.91	0.084	60.46	53.90	0.1	0.1	5.434	A
4 - R121 (N)	302.78	75.70	438.90	1047.81	0.289	302.34	568.72	0.3	0.4	4.825	A

Main results: (17:45-18:00)

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
1 - Cherryhound Tyrrelstown Link (E)	575.83	143.96	309.38	2191.74	0.263	575.83	432.70	0.4	0.4	2.227	A
2 - R121 (S)	927.06	231.76	74.87	2210.32	0.419	927.05	810.34	0.7	0.7	2.804	A
3 - The Avenue (W)	60.56	15.14	947.97	722.59	0.084	60.55	53.95	0.1	0.1	5.437	A
4 - R121 (N)	302.78	75.70	439.30	1047.64	0.289	302.77	569.22	0.4	0.4	4.832	A

Main results: (18:00-18:15)

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
1 - Cherryhound Tyrrelstown Link (E)	470.17	117.54	253.05	2226.25	0.211	470.52	353.69	0.4	0.3	2.050	A
2 - R121 (S)	756.94	189.24	61.18	2218.14	0.341	757.74	662.38	0.7	0.5	2.467	A
3 - The Avenue (W)	49.44	12.36	774.83	791.91	0.062	49.54	44.10	0.1	0.1	4.849	A
4 - R121 (N)	247.22	61.80	359.10	1081.68	0.229	247.65	465.27	0.4	0.3	4.318	A

Main results: (18:15-18:30)

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
1 - Cherryhound Tyrrelstown Link (E)	393.74	98.44	211.83	2251.51	0.175	393.97	296.11	0.3	0.2	1.939	A
2 - R121 (S)	633.90	158.48	51.23	2223.83	0.285	634.38	554.56	0.5	0.4	2.265	A
3 - The Avenue (W)	41.41	10.35	648.69	842.41	0.049	41.47	36.92	0.1	0.1	4.494	A
4 - R121 (N)	207.03	51.76	300.63	1106.49	0.187	207.30	389.53	0.3	0.2	4.004	A

Do-Nothing - DN 2038, AM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

ID	Name	Include in report	Use specific Demand Set (s)	Specific Demand Set (s)	Network flow scaling factor (%)	Network capacity scaling factor (%)
A1	Do-Nothing	✓	✓	D1,D2,D3,D4,D5,D6	100.000	100.000

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (s)	Junction LOS
1 - The Avenue - R121 Roundabout	The Avenue - R121 Roundabout	Standard Roundabout	1,2,3,4	10.13	B

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Name	Description
1	Cherryhound Tyrrelstown Link (E)	
2	R121 (S)	
3	The Avenue (W)	
4	R121 (N)	

Capacity Options

Arm	Minimum capacity (PCU/hr)	Maximum capacity (PCU/hr)	Assume flat start profile	Initial queue (PCU)
1 - Cherryhound Tyrrelstown Link (E)	0.00	99999.00		0.00
2 - R121 (S)	0.00	99999.00		0.00
3 - The Avenue (W)	0.00	99999.00		0.00
4 - R121 (N)	0.00	99999.00		0.00

Roundabout Geometry

Arm	V - Approach road half-width (m)	E - Entry width (m)	I' - Effective flare length (m)	R - Entry radius (m)	D - Inscribed circle diameter (m)	PHI - Conflict (entry) angle (deg)	Exit only
1 - Cherryhound Tyrrelstown Link (E)	7.00	10.30	5.0	17.3	68.9	35.0	
2 - R121 (S)	7.50	10.30	4.1	19.4	68.9	62.0	
3 - The Avenue (W)	3.00	6.73	3.7	21.2	68.9	49.0	
4 - R121 (N)	3.20	6.50	5.2	19.3	68.9	44.0	

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Arm	Final slope	Final intercept (PCU/hr)
1 - Cherryhound Tyrrelstown Link (E)	0.613	2381.291
2 - R121 (S)	0.571	2253.090
3 - The Avenue (W)	0.400	1102.134
4 - R121 (N)	0.424	1234.081

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

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Model start time (HH:mm)	Model finish time (HH:mm)	Time segment length (min)	Run automatically
D5	DN 2038	AM	ONE HOUR	08:00	09:30	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 (%)
1 - Cherryhound Tyrrelstown Link (E)		ONE HOUR	✓	610.00	100.000
2 - R121 (S)		ONE HOUR	✓	1087.00	100.000
3 - The Avenue (W)		ONE HOUR	✓	250.00	100.000
4 - R121 (N)		ONE HOUR	✓	648.00	100.000

Origin-Destination Data

Demand (PCU/hr)

	To				
		1 - Cherryhound Tyrrelstown Link (E)	2 - R121 (S)	3 - The Avenue (W)	4 - R121 (N)
From	1 - Cherryhound Tyrrelstown Link (E)	0.000	538.000	61.000	11.000
	2 - R121 (S)	629.000	0.000	195.000	263.000
	3 - The Avenue (W)	51.000	173.000	0.000	26.000
	4 - R121 (N)	53.000	532.000	63.000	0.000

Proportions

	To				
		1 - Cherryhound Tyrrelstown Link (E)	2 - R121 (S)	3 - The Avenue (W)	4 - R121 (N)
From	1 - Cherryhound Tyrrelstown Link (E)	0.00	0.88	0.10	0.02
	2 - R121 (S)	0.58	0.00	0.18	0.24
	3 - The Avenue (W)	0.20	0.69	0.00	0.10
	4 - R121 (N)	0.08	0.82	0.10	0.00

Vehicle Mix

Heavy Vehicle proportion

	To				
		1 - Cherryhound Tyrrelstown Link (E)	2 - R121 (S)	3 - The Avenue (W)	4 - R121 (N)
From	1 - Cherryhound Tyrrelstown Link (E)	0	0	0	0
	2 - R121 (S)	0	0	0	0
	3 - The Avenue (W)	0	0	0	0
	4 - R121 (N)	0	0	0	0

Average PCU Per Veh

	To				
		1 - Cherryhound Tyrrelstown Link (E)	2 - R121 (S)	3 - The Avenue (W)	4 - R121 (N)
From	1 - Cherryhound Tyrrelstown Link (E)	1.000	1.000	1.000	1.000
	2 - R121 (S)	1.000	1.000	1.000	1.000
	3 - The Avenue (W)	1.000	1.000	1.000	1.000
	4 - R121 (N)	1.000	1.000	1.000	1.000

Detailed Demand Data

Demand for each time segment

Time Segment	Arm	Demand (PCU/hr)	Demand in PCU (PCU/hr)
08:00-08:15	1 - Cherryhound Tyrrelstown Link (E)	459.24	459.24
	2 - R121 (S)	818.35	818.35
	3 - The Avenue (W)	188.21	188.21
	4 - R121 (N)	487.85	487.85
08:15-08:30	1 - Cherryhound Tyrrelstown Link (E)	548.38	548.38
	2 - R121 (S)	977.19	977.19
	3 - The Avenue (W)	224.74	224.74
	4 - R121 (N)	582.54	582.54
08:30-08:45	1 - Cherryhound Tyrrelstown Link (E)	671.62	671.62
	2 - R121 (S)	1196.81	1196.81
	3 - The Avenue (W)	275.26	275.26
	4 - R121 (N)	713.46	713.46
08:45-09:00	1 - Cherryhound Tyrrelstown Link (E)	671.62	671.62
	2 - R121 (S)	1196.81	1196.81
	3 - The Avenue (W)	275.26	275.26
	4 - R121 (N)	713.46	713.46
09:00-09:15	1 - Cherryhound Tyrrelstown Link (E)	548.38	548.38
	2 - R121 (S)	977.19	977.19
	3 - The Avenue (W)	224.74	224.74
	4 - R121 (N)	582.54	582.54
09:15-09:30	1 - Cherryhound Tyrrelstown Link (E)	459.24	459.24
	2 - R121 (S)	818.35	818.35
	3 - The Avenue (W)	188.21	188.21
	4 - R121 (N)	487.85	487.85

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
1 - Cherryhound Tyrrelstown Link (E)	0.36	3.02	0.6	A	559.75	839.62
2 - R121 (S)	0.55	3.70	1.2	A	997.45	1496.18
3 - The Avenue (W)	0.39	8.39	0.6	A	229.40	344.11
4 - R121 (N)	0.85	28.28	5.3	D	594.62	891.92

Main Results for each time segment

Main results: (08:00-08:15)

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
1 - Cherryhound Tyrrelstown Link (E)	459.24	114.81	573.67	2029.81	0.226	458.07	549.90	0.0	0.3	2.289	A
2 - R121 (S)	818.35	204.59	101.10	2195.33	0.373	815.98	930.64	0.0	0.6	2.605	A
3 - The Avenue (W)	188.21	47.05	677.86	830.73	0.227	187.05	239.23	0.0	0.3	5.582	A
4 - R121 (N)	487.85	121.96	639.77	962.56	0.507	483.81	225.14	0.0	1.0	7.458	A

Main results: (08:15-08:30)

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
1 - Cherryhound Tyrrelstown Link (E)	548.38	137.09	687.47	1960.09	0.280	548.00	658.13	0.3	0.4	2.549	A
2 - R121 (S)	977.19	244.30	121.04	2183.95	0.447	976.34	1114.43	0.6	0.8	2.980	A
3 - The Avenue (W)	224.74	56.19	811.07	777.40	0.289	224.30	286.30	0.3	0.4	6.503	A
4 - R121 (N)	582.54	145.63	765.93	909.01	0.641	579.67	269.43	1.0	1.7	10.834	B

Main results: (08:30-08:45)

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
1 - Cherryhound Tyrrelstown Link (E)	671.62	167.91	833.29	1870.75	0.359	670.94	804.86	0.4	0.6	2.999	A
2 - R121 (S)	1196.81	299.20	147.32	2168.93	0.552	1195.15	1356.91	0.8	1.2	3.690	A
3 - The Avenue (W)	275.26	68.81	992.85	704.62	0.391	274.34	349.63	0.4	0.6	8.350	A
4 - R121 (N)	713.46	178.37	937.39	836.24	0.853	700.77	329.80	1.7	4.9	24.557	C

Main results: (08:45-09:00)

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
1 - Cherryhound Tyrrelstown Link (E)	671.62	167.91	844.11	1864.12	0.360	671.61	806.90	0.6	0.6	3.018	A
2 - R121 (S)	1196.81	299.20	148.48	2168.27	0.552	1196.79	1367.23	1.2	1.2	3.704	A
3 - The Avenue (W)	275.26	68.81	994.20	704.08	0.391	275.23	351.06	0.6	0.6	8.394	A
4 - R121 (N)	713.46	178.37	939.14	835.50	0.854	711.87	330.30	4.9	5.3	28.276	D

Main results: (09:00-09:15)

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
1 - Cherryhound Tyrrelstown Link (E)	548.38	137.09	703.71	1950.14	0.281	549.05	661.22	0.6	0.4	2.572	A
2 - R121 (S)	977.19	244.30	122.78	2182.95	0.448	978.83	1129.98	1.2	0.8	2.995	A
3 - The Avenue (W)	224.74	56.19	813.14	776.57	0.289	225.65	288.48	0.6	0.4	6.544	A
4 - R121 (N)	582.54	145.63	768.59	907.88	0.642	596.34	270.20	5.3	1.9	12.033	B

Main results: (09:15-09:30)

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
1 - Cherryhound Tyrrelstown Link (E)	459.24	114.81	581.46	2025.04	0.227	459.63	552.70	0.4	0.3	2.299	A
2 - R121 (S)	818.35	204.59	101.99	2194.83	0.373	819.22	939.10	0.8	0.6	2.618	A
3 - The Avenue (W)	188.21	47.05	680.55	829.66	0.227	188.68	240.67	0.4	0.3	5.622	A
4 - R121 (N)	487.85	121.96	643.10	961.14	0.508	491.06	226.12	1.9	1.0	7.710	A

Do-Nothing - DN 2038, PM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

ID	Name	Include in report	Use specific Demand Set (s)	Specific Demand Set (s)	Network flow scaling factor (%)	Network capacity scaling factor (%)
A1	Do-Nothing	✓	✓	D1,D2,D3,D4,D5,D6	100.000	100.000

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (s)	Junction LOS
1 - The Avenue - R121 Roundabout	The Avenue - R121 Roundabout	Standard Roundabout	1,2,3,4	3.15	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Name	Description
1	Cherryhound Tyrrelstown Link (E)	
2	R121 (S)	
3	The Avenue (W)	
4	R121 (N)	

Capacity Options

Arm	Minimum capacity (PCU/hr)	Maximum capacity (PCU/hr)	Assume flat start profile	Initial queue (PCU)
1 - Cherryhound Tyrrelstown Link (E)	0.00	99999.00		0.00
2 - R121 (S)	0.00	99999.00		0.00
3 - The Avenue (W)	0.00	99999.00		0.00
4 - R121 (N)	0.00	99999.00		0.00

Roundabout Geometry

Arm	V - Approach road half-width (m)	E - Entry width (m)	I' - Effective flare length (m)	R - Entry radius (m)	D - Inscribed circle diameter (m)	PHI - Conflict (entry) angle (deg)	Exit only
1 - Cherryhound Tyrrelstown Link (E)	7.00	10.30	5.0	17.3	68.9	35.0	
2 - R121 (S)	7.50	10.30	4.1	19.4	68.9	62.0	
3 - The Avenue (W)	3.00	6.73	3.7	21.2	68.9	49.0	
4 - R121 (N)	3.20	6.50	5.2	19.3	68.9	44.0	

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Arm	Final slope	Final intercept (PCU/hr)
1 - Cherryhound Tyrrelstown Link (E)	0.613	2381.291
2 - R121 (S)	0.571	2253.090
3 - The Avenue (W)	0.400	1102.134
4 - R121 (N)	0.424	1234.081

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

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Model start time (HH:mm)	Model finish time (HH:mm)	Time segment length (min)	Run automatically
D6	DN 2038	PM	ONE HOUR	17:00	18:30	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 (%)
1 - Cherryhound Tyrrelstown Link (E)		ONE HOUR	✓	554.00	100.000
2 - R121 (S)		ONE HOUR	✓	891.00	100.000
3 - The Avenue (W)		ONE HOUR	✓	56.00	100.000
4 - R121 (N)		ONE HOUR	✓	288.00	100.000

Origin-Destination Data

Demand (PCU/hr)

	To				
		1 - Cherryhound Tyrrelstown Link (E)	2 - R121 (S)	3 - The Avenue (W)	4 - R121 (N)
From	1 - Cherryhound Tyrrelstown Link (E)	0.000	494.000	20.000	40.000
	2 - R121 (S)	390.000	0.000	19.000	482.000
	3 - The Avenue (W)	13.000	21.000	0.000	22.000
	4 - R121 (N)	15.000	263.000	10.000	0.000

Proportions

	To				
		1 - Cherryhound Tyrrelstown Link (E)	2 - R121 (S)	3 - The Avenue (W)	4 - R121 (N)
From	1 - Cherryhound Tyrrelstown Link (E)	0.00	0.89	0.04	0.07
	2 - R121 (S)	0.44	0.00	0.02	0.54
	3 - The Avenue (W)	0.23	0.38	0.00	0.39
	4 - R121 (N)	0.05	0.91	0.03	0.00

Vehicle Mix

Heavy Vehicle proportion

	To				
		1 - Cherryhound Tyrrelstown Link (E)	2 - R121 (S)	3 - The Avenue (W)	4 - R121 (N)
From	1 - Cherryhound Tyrrelstown Link (E)	0	0	0	0
	2 - R121 (S)	0	0	0	0
	3 - The Avenue (W)	0	0	0	0
	4 - R121 (N)	0	0	0	0

Average PCU Per Veh

	To				
		1 - Cherryhound Tyrrelstown Link (E)	2 - R121 (S)	3 - The Avenue (W)	4 - R121 (N)
From	1 - Cherryhound Tyrrelstown Link (E)	1.000	1.000	1.000	1.000
	2 - R121 (S)	1.000	1.000	1.000	1.000
	3 - The Avenue (W)	1.000	1.000	1.000	1.000
	4 - R121 (N)	1.000	1.000	1.000	1.000

Detailed Demand Data

Demand for each time segment

Time Segment	Arm	Demand (PCU/hr)	Demand in PCU (PCU/hr)
17:00-17:15	1 - Cherryhound Tyrrelstown Link (E)	417.08	417.08
	2 - R121 (S)	670.79	670.79
	3 - The Avenue (W)	42.16	42.16
	4 - R121 (N)	216.82	216.82
17:15-17:30	1 - Cherryhound Tyrrelstown Link (E)	498.03	498.03
	2 - R121 (S)	800.99	800.99
	3 - The Avenue (W)	50.34	50.34
	4 - R121 (N)	258.91	258.91
17:30-17:45	1 - Cherryhound Tyrrelstown Link (E)	609.97	609.97
	2 - R121 (S)	981.01	981.01
	3 - The Avenue (W)	61.66	61.66
	4 - R121 (N)	317.09	317.09
17:45-18:00	1 - Cherryhound Tyrrelstown Link (E)	609.97	609.97
	2 - R121 (S)	981.01	981.01
	3 - The Avenue (W)	61.66	61.66
	4 - R121 (N)	317.09	317.09
18:00-18:15	1 - Cherryhound Tyrrelstown Link (E)	498.03	498.03
	2 - R121 (S)	800.99	800.99
	3 - The Avenue (W)	50.34	50.34
	4 - R121 (N)	258.91	258.91
18:15-18:30	1 - Cherryhound Tyrrelstown Link (E)	417.08	417.08
	2 - R121 (S)	670.79	670.79
	3 - The Avenue (W)	42.16	42.16
	4 - R121 (N)	216.82	216.82

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
1 - Cherryhound Tyrrelstown Link (E)	0.28	2.29	0.4	A	508.36	762.54
2 - R121 (S)	0.44	2.93	0.8	A	817.60	1226.40
3 - The Avenue (W)	0.09	5.64	0.1	A	51.39	77.08
4 - R121 (N)	0.31	5.01	0.4	A	264.27	396.41

Main Results for each time segment

Main results: (17:00-17:15)

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
1 - Cherryhound Tyrrelstown Link (E)	417.08	104.27	220.33	2246.30	0.186	416.17	313.84	0.0	0.2	1.966	A
2 - R121 (S)	670.79	167.70	52.57	2223.06	0.302	669.07	583.94	0.0	0.4	2.315	A
3 - The Avenue (W)	42.16	10.54	684.85	827.93	0.051	41.95	36.79	0.0	0.1	4.579	A
4 - R121 (N)	216.82	54.21	318.33	1098.98	0.197	215.84	408.47	0.0	0.2	4.072	A

Main results: (17:15-17:30)

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
1 - Cherryhound Tyrrelstown Link (E)	498.03	124.51	264.00	2219.54	0.224	497.79	375.51	0.2	0.3	2.090	A
2 - R121 (S)	800.99	200.25	62.89	2217.16	0.361	800.46	698.90	0.4	0.6	2.541	A
3 - The Avenue (W)	50.34	12.59	819.33	774.09	0.065	50.28	44.02	0.1	0.1	4.973	A
4 - R121 (N)	258.91	64.73	380.90	1072.42	0.241	258.62	488.72	0.2	0.3	4.423	A

Main results: (17:30-17:45)

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
1 - Cherryhound Tyrrelstown Link (E)	609.97	152.49	323.20	2183.27	0.279	609.57	459.77	0.3	0.4	2.287	A
2 - R121 (S)	981.01	245.25	77.01	2209.10	0.444	980.08	855.76	0.6	0.8	2.928	A
3 - The Avenue (W)	61.66	15.41	1003.20	700.47	0.088	61.55	53.90	0.1	0.1	5.634	A
4 - R121 (N)	317.09	79.27	466.36	1036.15	0.306	316.61	598.38	0.3	0.4	5.000	A

Main results: (17:45-18:00)

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
1 - Cherryhound Tyrrelstown Link (E)	609.97	152.49	323.69	2182.97	0.279	609.96	460.22	0.4	0.4	2.288	A
2 - R121 (S)	981.01	245.25	77.07	2209.06	0.444	981.00	856.58	0.8	0.8	2.930	A
3 - The Avenue (W)	61.66	15.41	1004.12	700.10	0.088	61.66	53.95	0.1	0.1	5.638	A
4 - R121 (N)	317.09	79.27	466.83	1035.95	0.306	317.09	598.95	0.4	0.4	5.007	A

Main results: (18:00-18:15)

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
1 - Cherryhound Tyrrelstown Link (E)	498.03	124.51	264.79	2219.06	0.224	498.42	376.22	0.4	0.3	2.094	A
2 - R121 (S)	800.99	200.25	62.99	2217.11	0.361	801.90	700.23	0.8	0.6	2.544	A
3 - The Avenue (W)	50.34	12.59	820.79	773.51	0.065	50.45	44.10	0.1	0.1	4.981	A
4 - R121 (N)	258.91	64.73	381.63	1072.11	0.241	259.38	489.61	0.4	0.3	4.431	A

Main results: (18:15-18:30)

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
1 - Cherryhound Tyrrelstown Link (E)	417.08	104.27	221.64	2245.50	0.186	417.33	314.96	0.3	0.2	1.970	A
2 - R121 (S)	670.79	167.70	52.74	2222.96	0.302	671.33	586.23	0.6	0.4	2.322	A
3 - The Avenue (W)	42.16	10.54	687.15	827.02	0.051	42.22	36.92	0.1	0.1	4.587	A
4 - R121 (N)	216.82	54.21	319.48	1098.49	0.197	217.11	409.89	0.3	0.2	4.085	A

Do-Something - DS 2023, AM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

ID	Name	Include in report	Use specific Demand Set (s)	Specific Demand Set(s)	Network flow scaling factor (%)	Network capacity scaling factor (%)
A2	Do-Something	✓	✓	D7,D8,D9,D10,D11,D12	100.000	100.000

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (s)	Junction LOS
1 - The Avenue - R121 Roundabout	The Avenue - R121 Roundabout	Standard Roundabout	1,2,3,4	5.68	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Name	Description
1	Cherryhound Tyrrelstown Link (E)	
2	R121 (S)	
3	The Avenue (W)	
4	R121 (N)	

Capacity Options

Arm	Minimum capacity (PCU/hr)	Maximum capacity (PCU/hr)	Assume flat start profile	Initial queue (PCU)
1 - Cherryhound Tyrrelstown Link (E)	0.00	99999.00		0.00
2 - R121 (S)	0.00	99999.00		0.00
3 - The Avenue (W)	0.00	99999.00		0.00
4 - R121 (N)	0.00	99999.00		0.00

Roundabout Geometry

Arm	V - Approach road half-width (m)	E - Entry width (m)	I' - Effective flare length (m)	R - Entry radius (m)	D - Inscribed circle diameter (m)	PHI - Conflict (entry) angle (deg)	Exit only
1 - Cherryhound Tyrrelstown Link (E)	7.00	10.30	5.0	17.3	68.9	35.0	
2 - R121 (S)	7.50	10.30	4.1	19.4	68.9	62.0	
3 - The Avenue (W)	3.00	6.73	3.7	21.2	68.9	49.0	
4 - R121 (N)	3.20	6.50	5.2	19.3	68.9	44.0	

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Arm	Final slope	Final intercept (PCU/hr)
1 - Cherryhound Tyrrelstown Link (E)	0.613	2381.291
2 - R121 (S)	0.571	2253.090
3 - The Avenue (W)	0.400	1102.134
4 - R121 (N)	0.424	1234.081

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

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Model start time (HH:mm)	Model finish time (HH:mm)	Time segment length (min)	Run automatically
D7	DS 2023	AM	ONE HOUR	08:00	09:30	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 (%)
1 - Cherryhound Tyrrelstown Link (E)		ONE HOUR	✓	509.00	100.000
2 - R121 (S)		ONE HOUR	✓	895.00	100.000
3 - The Avenue (W)		ONE HOUR	✓	214.00	100.000
4 - R121 (N)		ONE HOUR	✓	544.00	100.000

Origin-Destination Data

Demand (PCU/hr)

	To				
		1 - Cherryhound Tyrrelstown Link (E)	2 - R121 (S)	3 - The Avenue (W)	4 - R121 (N)
From	1 - Cherryhound Tyrrelstown Link (E)	0.000	467.000	32.000	10.000
	2 - R121 (S)	546.000	0.000	176.000	173.000
	3 - The Avenue (W)	32.000	173.000	0.000	9.000
	4 - R121 (N)	47.000	459.000	38.000	0.000

Proportions

	To				
		1 - Cherryhound Tyrrelstown Link (E)	2 - R121 (S)	3 - The Avenue (W)	4 - R121 (N)
From	1 - Cherryhound Tyrrelstown Link (E)	0.00	0.92	0.06	0.02
	2 - R121 (S)	0.61	0.00	0.20	0.19
	3 - The Avenue (W)	0.15	0.81	0.00	0.04
	4 - R121 (N)	0.09	0.84	0.07	0.00

Vehicle Mix

Heavy Vehicle proportion

	To				
		1 - Cherryhound Tyrrelstown Link (E)	2 - R121 (S)	3 - The Avenue (W)	4 - R121 (N)
From	1 - Cherryhound Tyrrelstown Link (E)	0	0	0	0
	2 - R121 (S)	0	0	0	0
	3 - The Avenue (W)	0	0	0	0
	4 - R121 (N)	0	0	0	0

Average PCU Per Veh

	To				
		1 - Cherryhound Tyrrelstown Link (E)	2 - R121 (S)	3 - The Avenue (W)	4 - R121 (N)
From	1 - Cherryhound Tyrrelstown Link (E)	1.000	1.000	1.000	1.000
	2 - R121 (S)	1.000	1.000	1.000	1.000
	3 - The Avenue (W)	1.000	1.000	1.000	1.000
	4 - R121 (N)	1.000	1.000	1.000	1.000

Detailed Demand Data

Demand for each time segment

Time Segment	Arm	Demand (PCU/hr)	Demand in PCU (PCU/hr)
08:00-08:15	1 - Cherryhound Tyrrelstown Link (E)	383.20	383.20
	2 - R121 (S)	673.80	673.80
	3 - The Avenue (W)	161.11	161.11
	4 - R121 (N)	409.55	409.55
08:15-08:30	1 - Cherryhound Tyrrelstown Link (E)	457.58	457.58
	2 - R121 (S)	804.59	804.59
	3 - The Avenue (W)	192.38	192.38
	4 - R121 (N)	489.04	489.04
08:30-08:45	1 - Cherryhound Tyrrelstown Link (E)	560.42	560.42
	2 - R121 (S)	985.41	985.41
	3 - The Avenue (W)	235.62	235.62
	4 - R121 (N)	598.96	598.96
08:45-09:00	1 - Cherryhound Tyrrelstown Link (E)	560.42	560.42
	2 - R121 (S)	985.41	985.41
	3 - The Avenue (W)	235.62	235.62
	4 - R121 (N)	598.96	598.96
09:00-09:15	1 - Cherryhound Tyrrelstown Link (E)	457.58	457.58
	2 - R121 (S)	804.59	804.59
	3 - The Avenue (W)	192.38	192.38
	4 - R121 (N)	489.04	489.04
09:15-09:30	1 - Cherryhound Tyrrelstown Link (E)	383.20	383.20
	2 - R121 (S)	673.80	673.80
	3 - The Avenue (W)	161.11	161.11
	4 - R121 (N)	409.55	409.55

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
1 - Cherryhound Tyrrelstown Link (E)	0.29	2.63	0.4	A	467.07	700.60
2 - R121 (S)	0.45	2.96	0.8	A	821.27	1231.90
3 - The Avenue (W)	0.30	6.60	0.4	A	196.37	294.56
4 - R121 (N)	0.68	12.64	2.1	B	499.18	748.78

Main Results for each time segment

Main results: (08:00-08:15)

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
1 - Cherryhound Tyrrelstown Link (E)	383.20	95.80	501.17	2074.24	0.185	382.30	469.10	0.0	0.2	2.126	A
2 - R121 (S)	673.80	168.45	59.96	2218.84	0.304	672.06	823.50	0.0	0.4	2.325	A
3 - The Avenue (W)	161.11	40.28	547.42	882.96	0.182	160.22	184.61	0.0	0.2	4.975	A
4 - R121 (N)	409.55	102.39	563.48	994.93	0.412	406.79	144.16	0.0	0.7	6.093	A

Main results: (08:15-08:30)

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
1 - Cherryhound Tyrrelstown Link (E)	457.58	114.40	600.78	2013.21	0.227	457.31	561.37	0.2	0.3	2.313	A
2 - R121 (S)	804.59	201.15	71.80	2212.08	0.364	804.05	986.29	0.4	0.6	2.557	A
3 - The Avenue (W)	192.38	48.10	654.92	839.92	0.229	192.09	220.93	0.2	0.3	5.554	A
4 - R121 (N)	489.04	122.26	674.52	947.81	0.516	487.62	172.48	0.7	1.0	7.797	A

Main results: (08:30-08:45)

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
1 - Cherryhound Tyrrelstown Link (E)	560.42	140.10	733.70	1931.77	0.290	559.96	687.15	0.3	0.4	2.624	A
2 - R121 (S)	985.41	246.35	87.77	2202.95	0.447	984.47	1205.89	0.6	0.8	2.954	A
3 - The Avenue (W)	235.62	58.90	801.88	781.08	0.302	235.09	270.37	0.3	0.4	6.586	A
4 - R121 (N)	598.96	149.74	825.78	883.61	0.678	595.06	211.18	1.0	2.0	12.310	B



Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
1 - Cherryhound Tyrrelstown Link (E)	560.42	140.10	737.52	1929.43	0.290	560.41	688.12	0.4	0.4	2.629	A
2 - R121 (S)	985.41	246.35	88.07	2202.78	0.447	985.40	1209.87	0.8	0.8	2.956	A
3 - The Avenue (W)	235.62	58.90	802.64	780.77	0.302	235.61	270.84	0.4	0.4	6.602	A
4 - R121 (N)	598.96	149.74	826.85	883.16	0.678	598.79	211.39	2.0	2.1	12.639	B

Main results: (09:00-09:15)

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
1 - Cherryhound Tyrrelstown Link (E)	457.58	114.40	606.31	2009.82	0.228	458.03	562.85	0.4	0.3	2.320	A
2 - R121 (S)	804.59	201.15	72.23	2211.83	0.364	805.52	992.11	0.8	0.6	2.561	A
3 - The Avenue (W)	192.38	48.10	656.11	839.44	0.229	192.90	221.63	0.4	0.3	5.572	A
4 - R121 (N)	489.04	122.26	676.20	947.09	0.516	492.95	172.81	2.1	1.1	7.994	A

Main results: (09:15-09:30)

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
1 - Cherryhound Tyrrelstown Link (E)	383.20	95.80	506.03	2071.26	0.185	383.47	471.04	0.3	0.2	2.134	A
2 - R121 (S)	673.80	168.45	60.36	2218.61	0.304	674.35	829.15	0.6	0.4	2.333	A
3 - The Avenue (W)	161.11	40.28	549.27	882.22	0.183	161.41	185.43	0.3	0.2	4.996	A
4 - R121 (N)	409.55	102.39	566.01	993.86	0.412	411.06	144.67	1.1	0.7	6.192	A

Do-Something - DS 2023, PM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

ID	Name	Include in report	Use specific Demand Set (s)	Specific Demand Set(s)	Network flow scaling factor (%)	Network capacity scaling factor (%)
A2	Do-Something	✓	✓	D7,D8,D9,D10,D11,D12	100.000	100.000

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (s)	Junction LOS
1 - The Avenue - R121 Roundabout	The Avenue - R121 Roundabout	Standard Roundabout	1,2,3,4	2.98	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Name	Description
1	Cherryhound Tyrrelstown Link (E)	
2	R121 (S)	
3	The Avenue (W)	
4	R121 (N)	

Capacity Options

Arm	Minimum capacity (PCU/hr)	Maximum capacity (PCU/hr)	Assume flat start profile	Initial queue (PCU)
1 - Cherryhound Tyrrelstown Link (E)	0.00	99999.00		0.00
2 - R121 (S)	0.00	99999.00		0.00
3 - The Avenue (W)	0.00	99999.00		0.00
4 - R121 (N)	0.00	99999.00		0.00

Roundabout Geometry

Arm	V - Approach road half-width (m)	E - Entry width (m)	I' - Effective flare length (m)	R - Entry radius (m)	D - Inscribed circle diameter (m)	PHI - Conflict (entry) angle (deg)	Exit only
1 - Cherryhound Tyrrelstown Link (E)	7.00	10.30	5.0	17.3	68.9	35.0	
2 - R121 (S)	7.50	10.30	4.1	19.4	68.9	62.0	
3 - The Avenue (W)	3.00	6.73	3.7	21.2	68.9	49.0	
4 - R121 (N)	3.20	6.50	5.2	19.3	68.9	44.0	

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Arm	Final slope	Final intercept (PCU/hr)
1 - Cherryhound Tyrrelstown Link (E)	0.613	2381.291
2 - R121 (S)	0.571	2253.090
3 - The Avenue (W)	0.400	1102.134
4 - R121 (N)	0.424	1234.081

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

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Model start time (HH:mm)	Model finish time (HH:mm)	Time segment length (min)	Run automatically
D8	DS 2023	PM	ONE HOUR	17:00	18:30	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 (%)
1 - Cherryhound Tyrrelstown Link (E)		ONE HOUR	✓	488.00	100.000
2 - R121 (S)		ONE HOUR	✓	794.00	100.000
3 - The Avenue (W)		ONE HOUR	✓	68.00	100.000
4 - R121 (N)		ONE HOUR	✓	261.00	100.000

Origin-Destination Data

Demand (PCU/hr)

	To				
		1 - Cherryhound Tyrrelstown Link (E)	2 - R121 (S)	3 - The Avenue (W)	4 - R121 (N)
From	1 - Cherryhound Tyrrelstown Link (E)	0.000	429.000	22.000	37.000
	2 - R121 (S)	338.000	0.000	33.000	423.000
	3 - The Avenue (W)	12.000	33.000	0.000	23.000
	4 - R121 (N)	14.000	230.000	17.000	0.000

Proportions

	To				
		1 - Cherryhound Tyrrelstown Link (E)	2 - R121 (S)	3 - The Avenue (W)	4 - R121 (N)
From	1 - Cherryhound Tyrrelstown Link (E)	0.00	0.88	0.05	0.08
	2 - R121 (S)	0.43	0.00	0.04	0.53
	3 - The Avenue (W)	0.18	0.49	0.00	0.34
	4 - R121 (N)	0.05	0.88	0.07	0.00

Vehicle Mix

Heavy Vehicle proportion

	To				
		1 - Cherryhound Tyrrelstown Link (E)	2 - R121 (S)	3 - The Avenue (W)	4 - R121 (N)
From	1 - Cherryhound Tyrrelstown Link (E)	0	0	0	0
	2 - R121 (S)	0	0	0	0
	3 - The Avenue (W)	0	0	0	0
	4 - R121 (N)	0	0	0	0

Average PCU Per Veh

	To				
		1 - Cherryhound Tyrrelstown Link (E)	2 - R121 (S)	3 - The Avenue (W)	4 - R121 (N)
From	1 - Cherryhound Tyrrelstown Link (E)	1.000	1.000	1.000	1.000
	2 - R121 (S)	1.000	1.000	1.000	1.000
	3 - The Avenue (W)	1.000	1.000	1.000	1.000
	4 - R121 (N)	1.000	1.000	1.000	1.000

Detailed Demand Data

Demand for each time segment

Time Segment	Arm	Demand (PCU/hr)	Demand in PCU (PCU/hr)
17:00-17:15	1 - Cherryhound Tyrrelstown Link (E)	367.39	367.39
	2 - R121 (S)	597.76	597.76
	3 - The Avenue (W)	51.19	51.19
	4 - R121 (N)	196.49	196.49
17:15-17:30	1 - Cherryhound Tyrrelstown Link (E)	438.70	438.70
	2 - R121 (S)	713.79	713.79
	3 - The Avenue (W)	61.13	61.13
	4 - R121 (N)	234.63	234.63
17:30-17:45	1 - Cherryhound Tyrrelstown Link (E)	537.30	537.30
	2 - R121 (S)	874.21	874.21
	3 - The Avenue (W)	74.87	74.87
	4 - R121 (N)	287.37	287.37
17:45-18:00	1 - Cherryhound Tyrrelstown Link (E)	537.30	537.30
	2 - R121 (S)	874.21	874.21
	3 - The Avenue (W)	74.87	74.87
	4 - R121 (N)	287.37	287.37
18:00-18:15	1 - Cherryhound Tyrrelstown Link (E)	438.70	438.70
	2 - R121 (S)	713.79	713.79
	3 - The Avenue (W)	61.13	61.13
	4 - R121 (N)	234.63	234.63
18:15-18:30	1 - Cherryhound Tyrrelstown Link (E)	367.39	367.39
	2 - R121 (S)	597.76	597.76
	3 - The Avenue (W)	51.19	51.19
	4 - R121 (N)	196.49	196.49

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
1 - Cherryhound Tyrrelstown Link (E)	0.25	2.17	0.3	A	447.80	671.70
2 - R121 (S)	0.40	2.70	0.7	A	728.59	1092.88
3 - The Avenue (W)	0.10	5.33	0.1	A	62.40	93.60
4 - R121 (N)	0.27	4.69	0.4	A	239.50	359.25

Main Results for each time segment

Main results: (17:00-17:15)

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
1 - Cherryhound Tyrrelstown Link (E)	367.39	91.85	209.87	2252.71	0.163	366.61	273.32	0.0	0.2	1.908	A
2 - R121 (S)	597.76	149.44	57.07	2220.49	0.269	596.30	519.42	0.0	0.4	2.214	A
3 - The Avenue (W)	51.19	12.80	599.31	862.18	0.059	50.94	54.05	0.0	0.1	4.436	A
4 - R121 (N)	196.49	49.12	287.55	1112.04	0.177	195.64	362.70	0.0	0.2	3.925	A

Main results: (17:15-17:30)

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
1 - Cherryhound Tyrrelstown Link (E)	438.70	109.68	251.45	2227.23	0.197	438.50	327.02	0.2	0.2	2.012	A
2 - R121 (S)	713.79	178.45	68.28	2214.08	0.322	713.36	621.67	0.4	0.5	2.399	A
3 - The Avenue (W)	61.13	15.28	716.96	815.08	0.075	61.06	64.68	0.1	0.1	4.774	A
4 - R121 (N)	234.63	58.66	344.08	1088.05	0.216	234.39	433.94	0.2	0.3	4.216	A

Main results: (17:30-17:45)

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
1 - Cherryhound Tyrrelstown Link (E)	537.30	134.32	307.86	2192.67	0.245	536.98	400.42	0.2	0.3	2.174	A
2 - R121 (S)	874.21	218.55	83.61	2205.33	0.396	873.49	761.23	0.5	0.7	2.701	A
3 - The Avenue (W)	74.87	18.72	877.90	750.64	0.100	74.75	79.20	0.1	0.1	5.326	A
4 - R121 (N)	287.37	71.84	421.31	1055.27	0.272	286.97	531.35	0.3	0.4	4.683	A

Main results: (17:45-18:00)

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
1 - Cherryhound Tyrrelstown Link (E)	537.30	134.32	308.28	2192.41	0.245	537.30	400.77	0.3	0.3	2.174	A
2 - R121 (S)	874.21	218.55	83.68	2205.29	0.396	874.20	761.90	0.7	0.7	2.704	A
3 - The Avenue (W)	74.87	18.72	878.61	750.36	0.100	74.87	79.27	0.1	0.1	5.328	A
4 - R121 (N)	287.37	71.84	421.69	1055.11	0.272	287.36	531.79	0.4	0.4	4.688	A

Main results: (18:00-18:15)

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
1 - Cherryhound Tyrrelstown Link (E)	438.70	109.68	252.13	2226.81	0.197	439.01	327.57	0.3	0.2	2.015	A
2 - R121 (S)	713.79	178.45	68.39	2214.02	0.322	714.50	622.76	0.7	0.5	2.403	A
3 - The Avenue (W)	61.13	15.28	718.09	814.63	0.075	61.25	64.80	0.1	0.1	4.780	A
4 - R121 (N)	234.63	58.66	344.69	1087.79	0.216	235.02	434.65	0.4	0.3	4.224	A

Main results: (18:15-18:30)

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
1 - Cherryhound Tyrrelstown Link (E)	367.39	91.85	211.06	2251.98	0.163	367.59	274.25	0.2	0.2	1.909	A
2 - R121 (S)	597.76	149.44	57.26	2220.38	0.269	598.20	521.40	0.5	0.4	2.219	A
3 - The Avenue (W)	51.19	12.80	601.21	861.42	0.059	51.27	54.25	0.1	0.1	4.443	A
4 - R121 (N)	196.49	49.12	288.57	1111.61	0.177	196.74	363.90	0.3	0.2	3.935	A

Do-Something - DS 2028, AM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

ID	Name	Include in report	Use specific Demand Set (s)	Specific Demand Set(s)	Network flow scaling factor (%)	Network capacity scaling factor (%)
A2	Do-Something	✓	✓	D7,D8,D9,D10,D11,D12	100.000	100.000

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (s)	Junction LOS
1 - The Avenue - R121 Roundabout	The Avenue - R121 Roundabout	Standard Roundabout	1,2,3,4	13.49	B

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Name	Description
1	Cherryhound Tyrrelstown Link (E)	
2	R121 (S)	
3	The Avenue (W)	
4	R121 (N)	

Capacity Options

Arm	Minimum capacity (PCU/hr)	Maximum capacity (PCU/hr)	Assume flat start profile	Initial queue (PCU)
1 - Cherryhound Tyrrelstown Link (E)	0.00	99999.00		0.00
2 - R121 (S)	0.00	99999.00		0.00
3 - The Avenue (W)	0.00	99999.00		0.00
4 - R121 (N)	0.00	99999.00		0.00

Roundabout Geometry

Arm	V - Approach road half-width (m)	E - Entry width (m)	I' - Effective flare length (m)	R - Entry radius (m)	D - Inscribed circle diameter (m)	PHI - Conflict (entry) angle (deg)	Exit only
1 - Cherryhound Tyrrelstown Link (E)	7.00	10.30	5.0	17.3	68.9	35.0	
2 - R121 (S)	7.50	10.30	4.1	19.4	68.9	62.0	
3 - The Avenue (W)	3.00	6.73	3.7	21.2	68.9	49.0	
4 - R121 (N)	3.20	6.50	5.2	19.3	68.9	44.0	

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Arm	Final slope	Final intercept (PCU/hr)
1 - Cherryhound Tyrrelstown Link (E)	0.613	2381.291
2 - R121 (S)	0.571	2253.090
3 - The Avenue (W)	0.400	1102.134
4 - R121 (N)	0.424	1234.081

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

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Model start time (HH:mm)	Model finish time (HH:mm)	Time segment length (min)	Run automatically
D8	DS 2028	AM	ONE HOUR	08:00	09:30	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 (%)
1 - Cherryhound Tyrrelstown Link (E)		ONE HOUR	✓	582.00	100.000
2 - R121 (S)		ONE HOUR	✓	1066.00	100.000
3 - The Avenue (W)		ONE HOUR	✓	322.00	100.000
4 - R121 (N)		ONE HOUR	✓	673.00	100.000

Origin-Destination Data

Demand (PCU/hr)

	To				
		1 - Cherryhound Tyrrelstown Link (E)	2 - R121 (S)	3 - The Avenue (W)	4 - R121 (N)
From	1 - Cherryhound Tyrrelstown Link (E)	0.000	506.000	65.000	11.000
	2 - R121 (S)	592.000	0.000	207.000	267.000
	3 - The Avenue (W)	59.000	234.000	0.000	29.000
	4 - R121 (N)	54.000	550.000	69.000	0.000

Proportions

	To				
		1 - Cherryhound Tyrrelstown Link (E)	2 - R121 (S)	3 - The Avenue (W)	4 - R121 (N)
From	1 - Cherryhound Tyrrelstown Link (E)	0.00	0.87	0.11	0.02
	2 - R121 (S)	0.56	0.00	0.19	0.25
	3 - The Avenue (W)	0.18	0.73	0.00	0.09
	4 - R121 (N)	0.08	0.82	0.10	0.00

Vehicle Mix

Heavy Vehicle proportion

	To				
		1 - Cherryhound Tyrrelstown Link (E)	2 - R121 (S)	3 - The Avenue (W)	4 - R121 (N)
From	1 - Cherryhound Tyrrelstown Link (E)	0	0	0	0
	2 - R121 (S)	0	0	0	0
	3 - The Avenue (W)	0	0	0	0
	4 - R121 (N)	0	0	0	0

Average PCU Per Veh

	To				
		1 - Cherryhound Tyrrelstown Link (E)	2 - R121 (S)	3 - The Avenue (W)	4 - R121 (N)
From	1 - Cherryhound Tyrrelstown Link (E)	1.000	1.000	1.000	1.000
	2 - R121 (S)	1.000	1.000	1.000	1.000
	3 - The Avenue (W)	1.000	1.000	1.000	1.000
	4 - R121 (N)	1.000	1.000	1.000	1.000

Detailed Demand Data

Demand for each time segment

Time Segment	Arm	Demand (PCU/hr)	Demand in PCU (PCU/hr)
08:00-08:15	1 - Cherryhound Tyrrelstown Link (E)	438.16	438.16
	2 - R121 (S)	802.54	802.54
	3 - The Avenue (W)	242.42	242.42
	4 - R121 (N)	506.67	506.67
08:15-08:30	1 - Cherryhound Tyrrelstown Link (E)	523.21	523.21
	2 - R121 (S)	958.31	958.31
	3 - The Avenue (W)	289.47	289.47
	4 - R121 (N)	605.01	605.01
08:30-08:45	1 - Cherryhound Tyrrelstown Link (E)	640.79	640.79
	2 - R121 (S)	1173.69	1173.69
	3 - The Avenue (W)	354.53	354.53
	4 - R121 (N)	740.99	740.99
08:45-09:00	1 - Cherryhound Tyrrelstown Link (E)	640.79	640.79
	2 - R121 (S)	1173.69	1173.69
	3 - The Avenue (W)	354.53	354.53
	4 - R121 (N)	740.99	740.99
09:00-09:15	1 - Cherryhound Tyrrelstown Link (E)	523.21	523.21
	2 - R121 (S)	958.31	958.31
	3 - The Avenue (W)	289.47	289.47
	4 - R121 (N)	605.01	605.01
09:15-09:30	1 - Cherryhound Tyrrelstown Link (E)	438.16	438.16
	2 - R121 (S)	802.54	802.54
	3 - The Avenue (W)	242.42	242.42
	4 - R121 (N)	506.67	506.67

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
1 - Cherryhound Tyrrelstown Link (E)	0.35	3.08	0.5	A	534.05	801.08
2 - R121 (S)	0.54	3.64	1.2	A	978.18	1467.27
3 - The Avenue (W)	0.49	9.88	1.0	A	295.47	443.21
4 - R121 (N)	0.90	39.83	7.7	E	617.56	926.33

Main Results for each time segment

Main results: (08:00-08:15)

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
1 - Cherryhound Tyrrelstown Link (E)	438.16	109.54	636.91	1991.07	0.220	437.04	528.83	0.0	0.3	2.316	A
2 - R121 (S)	802.54	200.64	108.56	2191.07	0.366	800.24	965.39	0.0	0.6	2.584	A
3 - The Avenue (W)	242.42	60.60	653.11	840.64	0.288	240.81	255.69	0.0	0.4	5.986	A
4 - R121 (N)	506.67	126.67	663.54	952.47	0.532	502.21	230.38	0.0	1.1	7.920	A

Main results: (08:15-08:30)

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
1 - Cherryhound Tyrrelstown Link (E)	523.21	130.80	763.10	1913.75	0.273	522.83	632.92	0.3	0.4	2.588	A
2 - R121 (S)	958.31	239.58	129.94	2178.86	0.440	957.49	1155.99	0.6	0.8	2.946	A
3 - The Avenue (W)	289.47	72.37	781.44	789.26	0.367	288.79	305.99	0.4	0.6	7.182	A
4 - R121 (N)	605.01	151.25	794.52	896.88	0.675	601.50	275.71	1.1	2.0	12.042	B

Main results: (08:30-08:45)

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
1 - Cherryhound Tyrrelstown Link (E)	640.79	160.20	920.66	1817.22	0.353	640.13	773.54	0.4	0.5	3.057	A
2 - R121 (S)	1173.69	293.42	157.62	2163.05	0.543	1172.11	1403.16	0.8	1.2	3.626	A
3 - The Avenue (W)	354.53	88.63	956.60	719.13	0.493	353.01	373.13	0.6	1.0	9.792	A
4 - R121 (N)	740.99	185.25	972.14	821.49	0.902	722.06	337.47	2.0	6.7	31.540	D

Main results: (08:45-09:00)

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
1 - Cherryhound Tyrrelstown Link (E)	640.79	160.20	935.72	1808.00	0.354	640.77	775.90	0.5	0.5	3.083	A
2 - R121 (S)	1173.69	293.42	159.26	2162.11	0.543	1173.66	1417.23	1.2	1.2	3.641	A
3 - The Avenue (W)	354.53	88.63	957.87	718.62	0.493	354.49	375.06	1.0	1.0	9.883	A
4 - R121 (N)	740.99	185.25	974.35	820.56	0.903	737.27	338.00	6.7	7.7	39.825	E

Main results: (09:00-09:15)

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
1 - Cherryhound Tyrrelstown Link (E)	523.21	130.80	788.09	1898.44	0.276	523.87	636.68	0.5	0.4	2.621	A
2 - R121 (S)	958.31	239.58	132.69	2177.29	0.440	959.88	1179.27	1.2	0.8	2.962	A
3 - The Avenue (W)	289.47	72.37	783.39	788.48	0.367	290.97	309.18	1.0	0.6	7.256	A
4 - R121 (N)	605.01	151.25	797.83	895.47	0.676	626.95	276.53	7.7	2.2	14.408	B

Main results: (09:15-09:30)

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
1 - Cherryhound Tyrrelstown Link (E)	438.16	109.54	646.41	1985.25	0.221	438.55	531.68	0.4	0.3	2.327	A
2 - R121 (S)	802.54	200.64	109.63	2190.46	0.366	803.38	975.34	0.8	0.6	2.598	A
3 - The Avenue (W)	242.42	60.60	655.67	839.62	0.289	243.13	257.34	0.6	0.4	6.044	A
4 - R121 (N)	506.67	126.67	667.39	950.84	0.533	510.71	231.41	2.2	1.2	8.252	A

Do-Something - DS 2028, PM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

ID	Name	Include in report	Use specific Demand Set (s)	Specific Demand Set(s)	Network flow scaling factor (%)	Network capacity scaling factor (%)
A2	Do-Something	✓	✓	D7,D8,D9,D10,D11,D12	100.000	100.000

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (s)	Junction LOS
1 - The Avenue - R121 Roundabout	The Avenue - R121 Roundabout	Standard Roundabout	1,2,3,4	3.47	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Name	Description
1	Cherryhound Tyrrelstown Link (E)	
2	R121 (S)	
3	The Avenue (W)	
4	R121 (N)	

Capacity Options

Arm	Minimum capacity (PCU/hr)	Maximum capacity (PCU/hr)	Assume flat start profile	Initial queue (PCU)
1 - Cherryhound Tyrrelstown Link (E)	0.00	99999.00		0.00
2 - R121 (S)	0.00	99999.00		0.00
3 - The Avenue (W)	0.00	99999.00		0.00
4 - R121 (N)	0.00	99999.00		0.00

Roundabout Geometry

Arm	V - Approach road half-width (m)	E - Entry width (m)	I' - Effective flare length (m)	R - Entry radius (m)	D - Inscribed circle diameter (m)	PHI - Conflict (entry) angle (deg)	Exit only
1 - Cherryhound Tyrrelstown Link (E)	7.00	10.30	5.0	17.3	68.9	35.0	
2 - R121 (S)	7.50	10.30	4.1	19.4	68.9	62.0	
3 - The Avenue (W)	3.00	6.73	3.7	21.2	68.9	49.0	
4 - R121 (N)	3.20	6.50	5.2	19.3	68.9	44.0	

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Arm	Final slope	Final intercept (PCU/hr)
1 - Cherryhound Tyrrelstown Link (E)	0.613	2381.291
2 - R121 (S)	0.571	2253.090
3 - The Avenue (W)	0.400	1102.134
4 - R121 (N)	0.424	1234.081

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

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Model start time (HH:mm)	Model finish time (HH:mm)	Time segment length (min)	Run automatically
D10	DS 2028	PM	ONE HOUR	17:00	18:30	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 (%)
1 - Cherryhound Tyrrelstown Link (E)		ONE HOUR	✓	544.00	100.000
2 - R121 (S)		ONE HOUR	✓	916.00	100.000
3 - The Avenue (W)		ONE HOUR	✓	106.00	100.000
4 - R121 (N)		ONE HOUR	✓	338.00	100.000

Origin-Destination Data

Demand (PCU/hr)

	To				
		1 - Cherryhound Tyrrelstown Link (E)	2 - R121 (S)	3 - The Avenue (W)	4 - R121 (N)
From	1 - Cherryhound Tyrrelstown Link (E)	0.000	465.000	38.000	41.000
	2 - R121 (S)	366.000	0.000	46.000	504.000
	3 - The Avenue (W)	19.000	54.000	0.000	33.000
	4 - R121 (N)	15.000	281.000	42.000	0.000

Proportions

	To				
		1 - Cherryhound Tyrrelstown Link (E)	2 - R121 (S)	3 - The Avenue (W)	4 - R121 (N)
From	1 - Cherryhound Tyrrelstown Link (E)	0.00	0.85	0.07	0.08
	2 - R121 (S)	0.40	0.00	0.05	0.55
	3 - The Avenue (W)	0.18	0.51	0.00	0.31
	4 - R121 (N)	0.04	0.83	0.12	0.00

Vehicle Mix

Heavy Vehicle proportion

	To				
		1 - Cherryhound Tyrrelstown Link (E)	2 - R121 (S)	3 - The Avenue (W)	4 - R121 (N)
From	1 - Cherryhound Tyrrelstown Link (E)	0	0	0	0
	2 - R121 (S)	0	0	0	0
	3 - The Avenue (W)	0	0	0	0
	4 - R121 (N)	0	0	0	0

Average PCU Per Veh

	To				
		1 - Cherryhound Tyrrelstown Link (E)	2 - R121 (S)	3 - The Avenue (W)	4 - R121 (N)
From	1 - Cherryhound Tyrrelstown Link (E)	1.000	1.000	1.000	1.000
	2 - R121 (S)	1.000	1.000	1.000	1.000
	3 - The Avenue (W)	1.000	1.000	1.000	1.000
	4 - R121 (N)	1.000	1.000	1.000	1.000

Detailed Demand Data

Demand for each time segment

Time Segment	Arm	Demand (PCU/hr)	Demand in PCU (PCU/hr)
17:00-17:15	1 - Cherryhound Tyrrelstown Link (E)	409.55	409.55
	2 - R121 (S)	689.61	689.61
	3 - The Avenue (W)	79.80	79.80
	4 - R121 (N)	254.46	254.46
17:15-17:30	1 - Cherryhound Tyrrelstown Link (E)	489.04	489.04
	2 - R121 (S)	823.47	823.47
	3 - The Avenue (W)	95.29	95.29
	4 - R121 (N)	303.86	303.86
17:30-17:45	1 - Cherryhound Tyrrelstown Link (E)	598.96	598.96
	2 - R121 (S)	1008.53	1008.53
	3 - The Avenue (W)	116.71	116.71
	4 - R121 (N)	372.14	372.14
17:45-18:00	1 - Cherryhound Tyrrelstown Link (E)	598.96	598.96
	2 - R121 (S)	1008.53	1008.53
	3 - The Avenue (W)	116.71	116.71
	4 - R121 (N)	372.14	372.14
18:00-18:15	1 - Cherryhound Tyrrelstown Link (E)	489.04	489.04
	2 - R121 (S)	823.47	823.47
	3 - The Avenue (W)	95.29	95.29
	4 - R121 (N)	303.86	303.86
18:15-18:30	1 - Cherryhound Tyrrelstown Link (E)	409.55	409.55
	2 - R121 (S)	689.61	689.61
	3 - The Avenue (W)	79.80	79.80
	4 - R121 (N)	254.46	254.46

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
1 - Cherryhound Tyrrelstown Link (E)	0.28	2.36	0.4	A	499.18	748.78
2 - R121 (S)	0.46	3.08	0.9	A	840.54	1260.81
3 - The Avenue (W)	0.17	6.16	0.2	A	97.27	145.90
4 - R121 (N)	0.36	5.48	0.6	A	310.15	465.23

Main Results for each time segment

Main results: (17:00-17:15)

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
1 - Cherryhound Tyrrelstown Link (E)	409.55	102.39	282.46	2208.23	0.185	408.64	300.29	0.0	0.2	1.999	A
2 - R121 (S)	689.61	172.40	90.81	2201.21	0.313	687.79	600.29	0.0	0.5	2.375	A
3 - The Avenue (W)	79.80	19.95	684.05	828.25	0.096	79.38	94.55	0.0	0.1	4.805	A
4 - R121 (N)	254.46	63.62	329.48	1094.24	0.233	253.26	433.95	0.0	0.3	4.274	A

Main results: (17:15-17:30)

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
1 - Cherryhound Tyrrelstown Link (E)	489.04	122.26	338.49	2173.91	0.225	488.80	359.32	0.2	0.3	2.136	A
2 - R121 (S)	823.47	205.87	108.69	2191.00	0.376	822.89	718.59	0.5	0.6	2.629	A
3 - The Avenue (W)	95.29	23.82	818.40	774.46	0.123	95.16	113.18	0.1	0.1	5.297	A
4 - R121 (N)	303.86	75.96	394.33	1066.72	0.285	303.48	519.23	0.3	0.4	4.714	A

Main results: (17:30-17:45)

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
1 - Cherryhound Tyrrelstown Link (E)	598.96	149.74	414.33	2127.44	0.282	598.55	439.92	0.3	0.4	2.354	A
2 - R121 (S)	1008.53	252.13	133.08	2177.07	0.463	1007.50	879.80	0.6	0.9	3.075	A
3 - The Avenue (W)	116.71	29.18	1002.02	700.95	0.167	116.47	138.57	0.1	0.2	6.156	A
4 - R121 (N)	372.14	93.04	482.77	1029.19	0.362	371.48	635.72	0.4	0.6	5.467	A

Main results: (17:45-18:00)

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
1 - Cherryhound Tyrrelstown Link (E)	598.96	149.74	415.07	2126.98	0.282	598.95	440.40	0.4	0.4	2.355	A
2 - R121 (S)	1008.53	252.13	133.22	2176.99	0.463	1008.52	880.80	0.9	0.9	3.080	A
3 - The Avenue (W)	116.71	29.18	1003.02	700.55	0.167	116.70	138.73	0.2	0.2	6.165	A
4 - R121 (N)	372.14	93.04	483.34	1028.95	0.362	372.13	636.38	0.6	0.6	5.480	A

Main results: (18:00-18:15)

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
1 - Cherryhound Tyrrelstown Link (E)	489.04	122.26	339.65	2173.19	0.225	489.44	360.07	0.4	0.3	2.138	A
2 - R121 (S)	823.47	205.87	108.92	2190.87	0.376	824.49	720.18	0.9	0.6	2.636	A
3 - The Avenue (W)	95.29	23.82	819.97	773.83	0.123	95.52	113.43	0.2	0.1	5.308	A
4 - R121 (N)	303.86	75.96	395.22	1066.35	0.285	304.51	520.27	0.6	0.4	4.729	A

Main results: (18:15-18:30)

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
1 - Cherryhound Tyrrelstown Link (E)	409.55	102.39	284.26	2207.13	0.186	409.80	301.42	0.3	0.2	2.002	A
2 - R121 (S)	689.61	172.40	91.18	2201.00	0.313	690.20	602.89	0.6	0.5	2.385	A
3 - The Avenue (W)	79.80	19.95	686.43	827.30	0.096	79.94	94.95	0.1	0.1	4.819	A
4 - R121 (N)	254.46	63.62	330.83	1093.67	0.233	254.85	435.53	0.4	0.3	4.293	A

Do-Something - DS 2038, AM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

ID	Name	Include in report	Use specific Demand Set (s)	Specific Demand Set(s)	Network flow scaling factor (%)	Network capacity scaling factor (%)
A2	Do-Something	✓	✓	D7,D8,D9,D10,D11,D12	100.000	100.000

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (s)	Junction LOS
1 - The Avenue - R121 Roundabout	The Avenue - R121 Roundabout	Standard Roundabout	1,2,3,4	21.80	C

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Name	Description
1	Cherryhound Tyrrelstown Link (E)	
2	R121 (S)	
3	The Avenue (W)	
4	R121 (N)	

Capacity Options

Arm	Minimum capacity (PCU/hr)	Maximum capacity (PCU/hr)	Assume flat start profile	Initial queue (PCU)
1 - Cherryhound Tyrrelstown Link (E)	0.00	99999.00		0.00
2 - R121 (S)	0.00	99999.00		0.00
3 - The Avenue (W)	0.00	99999.00		0.00
4 - R121 (N)	0.00	99999.00		0.00

Roundabout Geometry

Arm	V - Approach road half-width (m)	E - Entry width (m)	I' - Effective flare length (m)	R - Entry radius (m)	D - Inscribed circle diameter (m)	PHI - Conflict (entry) angle (deg)	Exit only
1 - Cherryhound Tyrrelstown Link (E)	7.00	10.30	5.0	17.3	68.9	35.0	
2 - R121 (S)	7.50	10.30	4.1	19.4	68.9	62.0	
3 - The Avenue (W)	3.00	6.73	3.7	21.2	68.9	49.0	
4 - R121 (N)	3.20	6.50	5.2	19.3	68.9	44.0	

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Arm	Final slope	Final intercept (PCU/hr)
1 - Cherryhound Tyrrelstown Link (E)	0.613	2381.291
2 - R121 (S)	0.571	2253.090
3 - The Avenue (W)	0.400	1102.134
4 - R121 (N)	0.424	1234.081

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

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Model start time (HH:mm)	Model finish time (HH:mm)	Time segment length (min)	Run automatically
D11	DS 2038	AM	ONE HOUR	08:00	09:30	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 (%)
1 - Cherryhound Tyrrelstown Link (E)		ONE HOUR	✓	616.00	100.000
2 - R121 (S)		ONE HOUR	✓	1125.00	100.000
3 - The Avenue (W)		ONE HOUR	✓	333.00	100.000
4 - R121 (N)		ONE HOUR	✓	706.00	100.000

Origin-Destination Data

Demand (PCU/hr)

	To				
		1 - Cherryhound Tyrrelstown Link (E)	2 - R121 (S)	3 - The Avenue (W)	4 - R121 (N)
From	1 - Cherryhound Tyrrelstown Link (E)	0.000	538.000	66.000	12.000
	2 - R121 (S)	629.000	0.000	218.000	278.000
	3 - The Avenue (W)	60.000	244.000	0.000	29.000
	4 - R121 (N)	57.000	577.000	72.000	0.000

Proportions

	To				
		1 - Cherryhound Tyrrelstown Link (E)	2 - R121 (S)	3 - The Avenue (W)	4 - R121 (N)
From	1 - Cherryhound Tyrrelstown Link (E)	0.00	0.87	0.11	0.02
	2 - R121 (S)	0.56	0.00	0.19	0.25
	3 - The Avenue (W)	0.18	0.73	0.00	0.09
	4 - R121 (N)	0.08	0.82	0.10	0.00

Vehicle Mix

Heavy Vehicle proportion

	To				
		1 - Cherryhound Tyrrelstown Link (E)	2 - R121 (S)	3 - The Avenue (W)	4 - R121 (N)
From	1 - Cherryhound Tyrrelstown Link (E)	0	0	0	0
	2 - R121 (S)	0	0	0	0
	3 - The Avenue (W)	0	0	0	0
	4 - R121 (N)	0	0	0	0

Average PCU Per Veh

	To				
		1 - Cherryhound Tyrrelstown Link (E)	2 - R121 (S)	3 - The Avenue (W)	4 - R121 (N)
From	1 - Cherryhound Tyrrelstown Link (E)	1.000	1.000	1.000	1.000
	2 - R121 (S)	1.000	1.000	1.000	1.000
	3 - The Avenue (W)	1.000	1.000	1.000	1.000
	4 - R121 (N)	1.000	1.000	1.000	1.000

Detailed Demand Data

Demand for each time segment

Time Segment	Arm	Demand (PCU/hr)	Demand in PCU (PCU/hr)
08:00-08:15	1 - Cherryhound Tyrrelstown Link (E)	463.76	463.76
	2 - R121 (S)	846.96	846.96
	3 - The Avenue (W)	250.70	250.70
	4 - R121 (N)	531.51	531.51
08:15-08:30	1 - Cherryhound Tyrrelstown Link (E)	553.77	553.77
	2 - R121 (S)	1011.35	1011.35
	3 - The Avenue (W)	299.36	299.36
	4 - R121 (N)	634.68	634.68
08:30-08:45	1 - Cherryhound Tyrrelstown Link (E)	678.23	678.23
	2 - R121 (S)	1238.65	1238.65
	3 - The Avenue (W)	366.64	366.64
	4 - R121 (N)	777.32	777.32
08:45-09:00	1 - Cherryhound Tyrrelstown Link (E)	678.23	678.23
	2 - R121 (S)	1238.65	1238.65
	3 - The Avenue (W)	366.64	366.64
	4 - R121 (N)	777.32	777.32
09:00-09:15	1 - Cherryhound Tyrrelstown Link (E)	553.77	553.77
	2 - R121 (S)	1011.35	1011.35
	3 - The Avenue (W)	299.36	299.36
	4 - R121 (N)	634.68	634.68
09:15-09:30	1 - Cherryhound Tyrrelstown Link (E)	463.76	463.76
	2 - R121 (S)	846.96	846.96
	3 - The Avenue (W)	250.70	250.70
	4 - R121 (N)	531.51	531.51

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
1 - Cherryhound Tyrrelstown Link (E)	0.38	3.25	0.6	A	565.25	847.88
2 - R121 (S)	0.57	3.91	1.3	A	1032.32	1548.48
3 - The Avenue (W)	0.53	10.89	1.1	B	305.57	458.35
4 - R121 (N)	0.97	71.64	14.9	F	647.84	971.76

Main Results for each time segment

Main results: (08:00-08:15)

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
1 - Cherryhound Tyrrelstown Link (E)	463.76	115.94	666.32	1973.05	0.235	462.53	559.50	0.0	0.3	2.381	A
2 - R121 (S)	846.96	211.74	112.25	2188.97	0.387	844.45	1016.60	0.0	0.6	2.673	A
3 - The Avenue (W)	250.70	62.67	689.82	825.94	0.304	248.97	266.87	0.0	0.4	6.220	A
4 - R121 (N)	531.51	132.88	699.43	937.24	0.567	526.39	239.36	0.0	1.3	8.659	A

Main results: (08:15-08:30)

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
1 - Cherryhound Tyrrelstown Link (E)	553.77	138.44	797.86	1892.46	0.293	553.35	669.59	0.3	0.4	2.688	A
2 - R121 (S)	1011.35	252.84	134.31	2176.36	0.465	1010.41	1216.90	0.6	0.9	3.084	A
3 - The Avenue (W)	299.36	74.84	825.40	771.66	0.388	298.58	319.33	0.4	0.6	7.597	A
4 - R121 (N)	634.68	158.67	837.52	878.63	0.722	629.94	286.47	1.3	2.5	14.205	B

Main results: (08:30-08:45)

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
1 - Cherryhound Tyrrelstown Link (E)	678.23	169.56	949.44	1799.59	0.377	677.47	817.14	0.4	0.6	3.207	A
2 - R121 (S)	1238.65	309.66	161.46	2160.86	0.573	1236.78	1465.45	0.9	1.3	3.888	A
3 - The Avenue (W)	366.64	91.66	1010.32	697.62	0.526	364.82	387.92	0.6	1.1	10.757	B
4 - R121 (N)	777.32	194.33	1024.54	799.25	0.973	742.04	350.59	2.5	11.3	46.682	E

Main results: (08:45-09:00)

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
1 - Cherryhound Tyrrelstown Link (E)	678.23	169.56	969.94	1787.03	0.380	678.20	820.17	0.6	0.6	3.245	A
2 - R121 (S)	1238.65	309.66	163.68	2159.59	0.574	1238.62	1484.46	1.3	1.3	3.908	A
3 - The Avenue (W)	366.64	91.66	1011.81	697.03	0.526	366.58	390.49	1.1	1.1	10.889	B
4 - R121 (N)	777.32	194.33	1027.18	798.13	0.974	762.93	351.21	11.3	14.9	71.642	F

Main results: (09:00-09:15)

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
1 - Cherryhound Tyrrelstown Link (E)	553.77	138.44	848.57	1861.39	0.298	554.51	675.90	0.6	0.4	2.755	A
2 - R121 (S)	1011.35	252.84	139.87	2173.19	0.465	1013.20	1263.20	1.3	0.9	3.110	A
3 - The Avenue (W)	299.36	74.84	827.67	770.75	0.388	301.17	325.41	1.1	0.6	7.696	A
4 - R121 (N)	634.68	158.67	841.43	876.97	0.724	683.04	287.40	14.9	2.8	22.603	C

Main results: (09:15-09:30)

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
1 - Cherryhound Tyrrelstown Link (E)	463.76	115.94	678.22	1965.76	0.236	464.22	562.78	0.4	0.3	2.399	A
2 - R121 (S)	846.96	211.74	113.58	2188.21	0.387	847.93	1028.86	0.9	0.6	2.687	A
3 - The Avenue (W)	250.70	62.67	692.66	824.81	0.304	251.51	268.84	0.6	0.4	6.287	A
4 - R121 (N)	531.51	132.88	703.69	935.43	0.568	537.31	240.48	2.8	1.3	9.170	A

Do-Something - DS 2038, PM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

ID	Name	Include in report	Use specific Demand Set (s)	Specific Demand Set(s)	Network flow scaling factor (%)	Network capacity scaling factor (%)
A2	Do-Something	✓	✓	D7,D8,D9,D10,D11,D12	100.000	100.000

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (s)	Junction LOS
1 - The Avenue - R121 Roundabout	The Avenue - R121 Roundabout	Standard Roundabout	1,2,3,4	3.61	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Name	Description
1	Cherryhound Tyrrelstown Link (E)	
2	R121 (S)	
3	The Avenue (W)	
4	R121 (N)	

Capacity Options

Arm	Minimum capacity (PCU/hr)	Maximum capacity (PCU/hr)	Assume flat start profile	Initial queue (PCU)
1 - Cherryhound Tyrrelstown Link (E)	0.00	99999.00		0.00
2 - R121 (S)	0.00	99999.00		0.00
3 - The Avenue (W)	0.00	99999.00		0.00
4 - R121 (N)	0.00	99999.00		0.00

Roundabout Geometry

Arm	V - Approach road half-width (m)	E - Entry width (m)	I' - Effective flare length (m)	R - Entry radius (m)	D - Inscribed circle diameter (m)	PHI - Conflict (entry) angle (deg)	Exit only
1 - Cherryhound Tyrrelstown Link (E)	7.00	10.30	5.0	17.3	68.9	35.0	
2 - R121 (S)	7.50	10.30	4.1	19.4	68.9	62.0	
3 - The Avenue (W)	3.00	6.73	3.7	21.2	68.9	49.0	
4 - R121 (N)	3.20	6.50	5.2	19.3	68.9	44.0	

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Arm	Final slope	Final intercept (PCU/hr)
1 - Cherryhound Tyrrelstown Link (E)	0.613	2381.291
2 - R121 (S)	0.571	2253.090
3 - The Avenue (W)	0.400	1102.134
4 - R121 (N)	0.424	1234.081

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

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Model start time (HH:mm)	Model finish time (HH:mm)	Time segment length (min)	Run automatically
D12	DS 2038	PM	ONE HOUR	17:00	18:30	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 (%)
1 - Cherryhound Tyrrelstown Link (E)		ONE HOUR	✓	575.00	100.000
2 - R121 (S)		ONE HOUR	✓	966.00	100.000
3 - The Avenue (W)		ONE HOUR	✓	108.00	100.000
4 - R121 (N)		ONE HOUR	✓	352.00	100.000

Origin-Destination Data

Demand (PCU/hr)

	To				
		1 - Cherryhound Tyrrelstown Link (E)	2 - R121 (S)	3 - The Avenue (W)	4 - R121 (N)
From	1 - Cherryhound Tyrrelstown Link (E)	0.000	494.000	38.000	43.000
	2 - R121 (S)	390.000	0.000	46.000	530.000
	3 - The Avenue (W)	20.000	55.000	0.000	33.000
	4 - R121 (N)	16.000	294.000	42.000	0.000

Proportions

	To				
		1 - Cherryhound Tyrrelstown Link (E)	2 - R121 (S)	3 - The Avenue (W)	4 - R121 (N)
From	1 - Cherryhound Tyrrelstown Link (E)	0.00	0.86	0.07	0.07
	2 - R121 (S)	0.40	0.00	0.05	0.55
	3 - The Avenue (W)	0.19	0.51	0.00	0.31
	4 - R121 (N)	0.05	0.84	0.12	0.00

Vehicle Mix

Heavy Vehicle proportion

	To				
		1 - Cherryhound Tyrrelstown Link (E)	2 - R121 (S)	3 - The Avenue (W)	4 - R121 (N)
From	1 - Cherryhound Tyrrelstown Link (E)	0	0	0	0
	2 - R121 (S)	0	0	0	0
	3 - The Avenue (W)	0	0	0	0
	4 - R121 (N)	0	0	0	0

Average PCU Per Veh

	To				
		1 - Cherryhound Tyrrelstown Link (E)	2 - R121 (S)	3 - The Avenue (W)	4 - R121 (N)
From	1 - Cherryhound Tyrrelstown Link (E)	1.000	1.000	1.000	1.000
	2 - R121 (S)	1.000	1.000	1.000	1.000
	3 - The Avenue (W)	1.000	1.000	1.000	1.000
	4 - R121 (N)	1.000	1.000	1.000	1.000

Detailed Demand Data

Demand for each time segment

Time Segment	Arm	Demand (PCU/hr)	Demand in PCU (PCU/hr)
17:00-17:15	1 - Cherryhound Tyrrelstown Link (E)	432.89	432.89
	2 - R121 (S)	727.26	727.26
	3 - The Avenue (W)	81.31	81.31
	4 - R121 (N)	265.00	265.00
17:15-17:30	1 - Cherryhound Tyrrelstown Link (E)	516.91	516.91
	2 - R121 (S)	868.41	868.41
	3 - The Avenue (W)	97.09	97.09
	4 - R121 (N)	316.44	316.44
17:30-17:45	1 - Cherryhound Tyrrelstown Link (E)	633.09	633.09
	2 - R121 (S)	1063.59	1063.59
	3 - The Avenue (W)	118.91	118.91
	4 - R121 (N)	387.56	387.56
17:45-18:00	1 - Cherryhound Tyrrelstown Link (E)	633.09	633.09
	2 - R121 (S)	1063.59	1063.59
	3 - The Avenue (W)	118.91	118.91
	4 - R121 (N)	387.56	387.56
18:00-18:15	1 - Cherryhound Tyrrelstown Link (E)	516.91	516.91
	2 - R121 (S)	868.41	868.41
	3 - The Avenue (W)	97.09	97.09
	4 - R121 (N)	316.44	316.44
18:15-18:30	1 - Cherryhound Tyrrelstown Link (E)	432.89	432.89
	2 - R121 (S)	727.26	727.26
	3 - The Avenue (W)	81.31	81.31
	4 - R121 (N)	265.00	265.00

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
1 - Cherryhound Tyrrelstown Link (E)	0.30	2.42	0.4	A	527.63	791.45
2 - R121 (S)	0.49	3.24	1.0	A	886.42	1329.63
3 - The Avenue (W)	0.18	6.44	0.2	A	99.10	148.65
4 - R121 (N)	0.38	5.72	0.6	A	323.00	484.50

Main Results for each time segment

Main results: (17:00-17:15)

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
1 - Cherryhound Tyrrelstown Link (E)	432.89	108.22	292.92	2201.83	0.197	431.91	319.78	0.0	0.2	2.033	A
2 - R121 (S)	727.26	181.81	92.31	2200.36	0.331	725.29	632.52	0.0	0.5	2.437	A
3 - The Avenue (W)	81.31	20.33	723.05	812.64	0.100	80.87	94.55	0.0	0.1	4.916	A
4 - R121 (N)	265.00	66.25	348.98	1085.97	0.244	263.72	454.94	0.0	0.3	4.372	A

Main results: (17:15-17:30)

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
1 - Cherryhound Tyrrelstown Link (E)	516.91	129.23	351.03	2166.22	0.239	516.64	382.66	0.2	0.3	2.182	A
2 - R121 (S)	868.41	217.10	110.49	2189.97	0.397	867.77	757.19	0.5	0.7	2.721	A
3 - The Avenue (W)	97.09	24.27	865.08	755.77	0.128	96.95	113.17	0.1	0.1	5.462	A
4 - R121 (N)	316.44	79.11	417.66	1056.82	0.299	316.03	544.36	0.3	0.4	4.858	A

Main results: (17:30-17:45)

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
1 - Cherryhound Tyrrelstown Link (E)	633.09	158.27	429.66	2118.05	0.299	632.64	468.48	0.3	0.4	2.423	A
2 - R121 (S)	1063.59	265.90	135.27	2175.81	0.489	1062.40	927.02	0.7	0.9	3.230	A
3 - The Avenue (W)	118.91	29.73	1059.12	678.08	0.175	118.65	138.55	0.1	0.2	6.432	A
4 - R121 (N)	387.56	96.89	511.32	1017.07	0.381	386.82	666.46	0.4	0.6	5.704	A

Main results: (17:45-18:00)

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
1 - Cherryhound Tyrrelstown Link (E)	633.09	158.27	430.48	2117.54	0.299	633.08	469.03	0.4	0.4	2.424	A
2 - R121 (S)	1063.59	265.90	135.42	2175.73	0.489	1063.57	928.14	0.9	1.0	3.236	A
3 - The Avenue (W)	118.91	29.73	1060.27	677.62	0.175	118.91	138.73	0.2	0.2	6.442	A
4 - R121 (N)	387.56	96.89	511.97	1016.80	0.381	387.55	667.21	0.6	0.6	5.720	A

Main results: (18:00-18:15)

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
1 - Cherryhound Tyrrelstown Link (E)	516.91	129.23	352.32	2165.43	0.239	517.36	383.52	0.4	0.3	2.186	A
2 - R121 (S)	868.41	217.10	110.72	2189.84	0.397	869.58	758.96	1.0	0.7	2.730	A
3 - The Avenue (W)	97.09	24.27	866.86	755.06	0.129	97.34	113.44	0.2	0.1	5.475	A
4 - R121 (N)	316.44	79.11	418.67	1056.39	0.300	317.17	545.53	0.6	0.4	4.876	A

Main results: (18:15-18:30)

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
1 - Cherryhound Tyrrelstown Link (E)	432.89	108.22	294.84	2200.65	0.197	433.17	321.03	0.3	0.2	2.036	A
2 - R121 (S)	727.26	181.81	92.69	2200.14	0.331	727.91	635.32	0.7	0.5	2.447	A
3 - The Avenue (W)	81.31	20.33	725.64	811.60	0.100	81.45	94.96	0.1	0.1	4.932	A
4 - R121 (N)	265.00	66.25	350.44	1085.35	0.244	265.43	456.66	0.4	0.3	4.392	A

◀			▶

Summary of junction performance

	AM				PM			
	Queue (PCU)	Delay (s)	RFC	LOS	Queue (PCU)	Delay (s)	RFC	LOS
Do-Nothing - DN 2023								
1 - Tyrrelstown Plaza (E)	0.1	3.97	0.11	A	0.3	4.13	0.21	A
2 - The Boulevard (S)	0.5	3.90	0.34	A	0.9	5.18	0.47	A
3 - Park Boulevard (W)	0.4	5.34	0.26	A	0.2	5.09	0.15	A
4 - The Boulevard (N)	0.4	5.29	0.29	A	0.2	4.25	0.16	A
Do-Nothing - DN 2028								
1 - Tyrrelstown Plaza (E)	0.2	4.41	0.19	A	0.3	4.33	0.24	A
2 - The Boulevard (S)	0.7	4.42	0.40	A	1.1	5.78	0.52	A
3 - Park Boulevard (W)	0.5	6.35	0.34	A	0.2	5.44	0.17	A
4 - The Boulevard (N)	0.6	6.37	0.36	A	0.2	4.48	0.18	A
Do-Nothing - DN 2038								
1 - Tyrrelstown Plaza (E)	0.2	4.50	0.19	A	0.3	4.44	0.25	A
2 - The Boulevard (S)	0.7	4.62	0.43	A	1.3	6.28	0.56	A
3 - Park Boulevard (W)	0.6	6.73	0.37	A	0.2	5.70	0.19	A
4 - The Boulevard (N)	0.6	6.86	0.39	A	0.2	4.65	0.19	A

	AM				PM			
	Queue (PCU)	Delay (s)	RFC	LOS	Queue (PCU)	Delay (s)	RFC	LOS
Do-Something - DS 2023								
1 - Tyrrelstown Plaza (E)	0.1	4.05	0.13	A	0.3	4.23	0.22	A
2 - The Boulevard (S)	0.5	3.95	0.34	A	1.0	5.38	0.49	A
3 - Park Boulevard (W)	0.4	5.39	0.26	A	0.2	5.19	0.15	A
4 - The Boulevard (N)	0.4	5.35	0.29	A	0.2	4.32	0.16	A
Do-Something - DS 2028								
1 - Tyrrelstown Plaza (E)	0.3	4.62	0.22	A	0.4	4.51	0.27	A
2 - The Boulevard (S)	0.7	4.53	0.42	A	1.3	6.27	0.56	A
3 - Park Boulevard (W)	0.5	6.47	0.35	A	0.2	5.67	0.18	A
4 - The Boulevard (N)	0.6	6.49	0.37	A	0.2	4.64	0.18	A
Do-Something - DS 2038								
1 - Tyrrelstown Plaza (E)	0.3	4.73	0.23	A	0.4	4.63	0.28	A
2 - The Boulevard (S)	0.8	4.73	0.44	A	1.5	6.85	0.60	A
3 - Park Boulevard (W)	0.6	6.85	0.37	A	0.2	5.95	0.20	A
4 - The Boulevard (N)	0.7	7.01	0.40	A	0.2	4.82	0.20	A

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

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

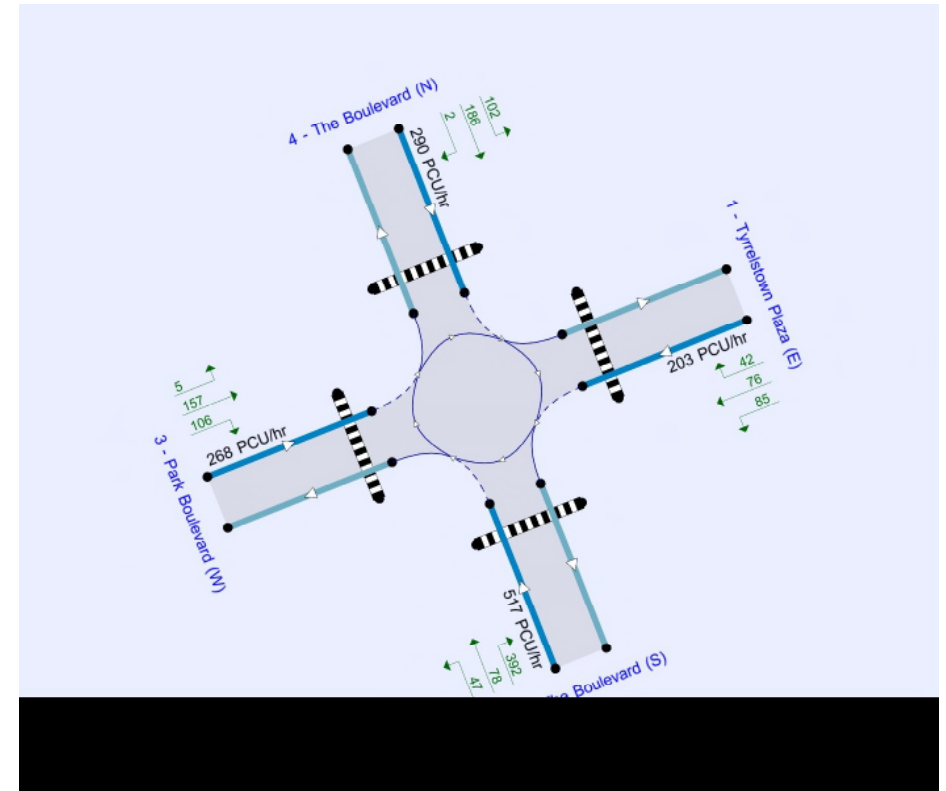
File summary

File Description

Title	Hollystown-Kilmartin
Location	Hollystown, Dublin 15
Site number	
Date	01/11/2021
Version	
Status	Existing
Identifier	
Client	Glenveagh Homes Limited
Jobnumber	170182
Enumerator	HEADOFFICE'GILLID
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

Scenario name	Time Period name	Traffic profile type	Model start time (HH:mm)	Model finish time (HH:mm)	Time segment length (min)	Run automatically
DN 2023	AM	ONE HOUR	08:00	09:30	15	✓
DN 2023	PM	ONE HOUR	17:00	18:30	15	✓
DN 2028	AM	ONE HOUR	08:00	09:30	15	✓
DN 2028	PM	ONE HOUR	17:00	18:30	15	✓
DN 2038	AM	ONE HOUR	08:00	09:30	15	✓
DN 2038	PM	ONE HOUR	17:00	18:30	15	✓
DS 2023	AM	ONE HOUR	08:00	09:30	15	✓
DS 2023	PM	ONE HOUR	17:00	18:30	15	✓
DS 2028	AM	ONE HOUR	08:00	09:30	15	✓
DS 2028	PM	ONE HOUR	17:00	18:30	15	✓
DS 2038	AM	ONE HOUR	08:00	09:30	15	✓
DS 2038	PM	ONE HOUR	17:00	18:30	15	✓

Do-Nothing - DN 2023, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Pedestrian Crossing	1 - Tyrrelstown Plaza (E) - Pedestrian crossing	Pedestrian crossing uses default settings only. Is this correct?
Warning	Pedestrian Crossing	1 - Tyrrelstown Plaza (E) - Pedestrian crossing	Pedestrian crossing uses default flow of 0. Is this correct?
Warning	Pedestrian Crossing	2 - The Boulevard (S) - Pedestrian crossing	Pedestrian crossing uses default settings only. Is this correct?
Warning	Pedestrian Crossing	2 - The Boulevard (S) - Pedestrian crossing	Pedestrian crossing uses default flow of 0. Is this correct?
Warning	Pedestrian Crossing	3 - Park Boulevard (W) - Pedestrian crossing	Pedestrian crossing uses default settings only. Is this correct?
Warning	Pedestrian Crossing	3 - Park Boulevard (W) - Pedestrian crossing	Pedestrian crossing uses default flow of 0. Is this correct?
Warning	Pedestrian Crossing	4 - The Boulevard (N) - Pedestrian crossing	Pedestrian crossing uses default settings only. Is this correct?
Warning	Pedestrian Crossing	4 - The Boulevard (N) - Pedestrian crossing	Pedestrian crossing uses default flow of 0. Is this correct?

Analysis Set Details

ID	Name	Include in report	Use specific Demand Set (s)	Specific Demand Set (s)	Network flow scaling factor (%)	Network capacity scaling factor (%)
A1	Do-Nothing	✓	✓	D1,D2,D3,D4,D5,D6	100.000	100.000

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (s)	Junction LOS
1 - Boulevard - Park Boulevard Roundabout	Boulevard - Park Boulevard Roundabout	Standard Roundabout	1,2,3,4	4.57	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Name	Description
1	Tyrrelstown Plaza (E)	
2	The Boulevard (S)	
3	Park Boulevard (W)	
4	The Boulevard (N)	

Capacity Options

Arm	Minimum capacity (PCU/hr)	Maximum capacity (PCU/hr)	Assume flat start profile	Initial queue (PCU)
1 - Tyrrelstown Plaza (E)	0.00	99999.00		0.00
2 - The Boulevard (S)	0.00	99999.00		0.00
3 - Park Boulevard (W)	0.00	99999.00		0.00
4 - The Boulevard (N)	0.00	99999.00		0.00

Roundabout Geometry

Arm	V - Approach road half-width (m)	E - Entry width (m)	I' - Effective flare length (m)	R - Entry radius (m)	D - Inscribed circle diameter (m)	PHI - Conflict (entry) angle (deg)	Exit only
1 - Tyrrelstown Plaza (E)	3.30	6.00	4.5	22.0	33.7	56.0	
2 - The Boulevard (S)	3.50	7.00	6.6	35.0	33.7	38.0	
3 - Park Boulevard (W)	3.00	5.30	4.8	15.0	33.7	33.0	
4 - The Boulevard (N)	3.50	4.80	5.6	19.0	33.7	30.0	

Pedestrian Crossings

Arm	Crossing type	Average pedestrian flow (Ped/hr)
1 - Tyrrelstown Plaza (E)	Zebra	0.00
2 - The Boulevard (S)	Zebra	0.00
3 - Park Boulevard (W)	Zebra	0.00
4 - The Boulevard (N)	Zebra	0.00

Zebra Crossings

Arm	Space between crossing and junction entry (Zebra) (PCU)	Vehicles queueing on exit (Zebra) (PCU)	Central Refuge	Crossing data type	Crossing length (m)	Crossing time (s)
1 - Tyrrelstown Plaza (E)	1.00	1.00		Distance	0.00	0.00
2 - The Boulevard (S)	1.00	1.00		Distance	0.00	0.00
3 - Park Boulevard (W)	1.00	1.00		Distance	0.00	0.00
4 - The Boulevard (N)	1.00	1.00		Distance	0.00	0.00

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Arm	Final slope	Final intercept (PCU/hr)
1 - Tyrrelstown Plaza (E)	0.519	1170.274
2 - The Boulevard (S)	0.599	1443.830
3 - Park Boulevard (W)	0.534	1152.465
4 - The Boulevard (N)	0.568	1283.197

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

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Model start time (HH:mm)	Model finish time (HH:mm)	Time segment length (min)	Run automatically
D1	DN 2023	AM	ONE HOUR	08:00	09:30	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 (%)
1 - Tyrrelstown Plaza (E)		ONE HOUR	✓	100.00	100.000
2 - The Boulevard (S)		ONE HOUR	✓	425.00	100.000
3 - Park Boulevard (W)		ONE HOUR	✓	216.00	100.000
4 - The Boulevard (N)		ONE HOUR	✓	250.00	100.000

Demand overview (Pedestrians)

Arm	Profile type	Average pedestrian flow (Ped/hr)
1 - Tyrrelstown Plaza (E)	Global	0.00
2 - The Boulevard (S)	Global	0.00
3 - Park Boulevard (W)	Global	0.00
4 - The Boulevard (N)	Global	0.00

Origin-Destination Data

Demand (PCU/hr)

		To			
		1 - Tyrrelstown Plaza (E)	2 - The Boulevard (S)	3 - Park Boulevard (W)	4 - The Boulevard (N)
From	1 - Tyrrelstown Plaza (E)	0.000	23.000	50.000	27.000
	2 - The Boulevard (S)	312.000	0.000	43.000	70.000
	3 - Park Boulevard (W)	116.000	96.000	0.000	4.000
	4 - The Boulevard (N)	78.000	170.000	2.000	0.000

Proportions

		To		
		1 - Tyrrelstown Plaza (E)	2 - The Boulevard (S)	3 - P Boule (W)
From	1 - Tyrrelstown Plaza (E)	0.00	0.23	0.5
	2 - The Boulevard (S)	0.73	0.00	0.1
	3 - Park Boulevard (W)	0.54	0.44	0.0
	4 - The Boulevard (N)	0.31	0.68	0.0

Detailed Demand Data

Demand for each time segment

Time Segment	Arm	Demand (PCU/hr)	Demand in PCU (PCU/hr)	Pedestrian Demand (Ped/hr)
08:00-08:15	1 - Tyrrelstown Plaza (E)	75.29	75.29	0.00
	2 - The Boulevard (S)	319.96	319.96	0.00
	3 - Park Boulevard (W)	162.62	162.62	0.00
	4 - The Boulevard (N)	188.21	188.21	0.00
08:15-08:30	1 - Tyrrelstown Plaza (E)	89.90	89.90	0.00
	2 - The Boulevard (S)	382.07	382.07	0.00
	3 - Park Boulevard (W)	194.18	194.18	0.00
	4 - The Boulevard (N)	224.74	224.74	0.00
08:30-08:45	1 - Tyrrelstown Plaza (E)	110.10	110.10	0.00
	2 - The Boulevard (S)	467.93	467.93	0.00
	3 - Park Boulevard (W)	237.82	237.82	0.00
	4 - The Boulevard (N)	275.26	275.26	0.00
08:45-09:00	1 - Tyrrelstown Plaza (E)	110.10	110.10	0.00
	2 - The Boulevard (S)	467.93	467.93	0.00
	3 - Park Boulevard (W)	237.82	237.82	0.00
	4 - The Boulevard (N)	275.26	275.26	0.00
09:00-09:15	1 - Tyrrelstown Plaza (E)	89.90	89.90	0.00
	2 - The Boulevard (S)	382.07	382.07	0.00
	3 - Park Boulevard (W)	194.18	194.18	0.00
	4 - The Boulevard (N)	224.74	224.74	0.00
09:15-09:30	1 - Tyrrelstown Plaza (E)	75.29	75.29	0.00
	2 - The Boulevard (S)	319.96	319.96	0.00
	3 - Park Boulevard (W)	162.62	162.62	0.00
	4 - The Boulevard (N)	188.21	188.21	0.00

Vehicle Mix

Heavy Vehicle proportion

		To			
		1 - Tyrrelstown Plaza (E)	2 - The Boulevard (S)	3 - Park Boulevard (W)	4 - The Boulevard (N)
From	1 - Tyrrelstown Plaza (E)	0	0	0	0
	2 - The Boulevard (S)	0	0	0	0
	3 - Park Boulevard (W)	0	0	0	0
	4 - The Boulevard (N)	0	0	0	0

Average PCU Per Veh

		To		
		1 - Tyrrelstown Plaza (E)	2 - The Boulevard (S)	3 - P Boule (W)
From	1 - Tyrrelstown Plaza (E)	1.000	1.000	1.0
	2 - The Boulevard (S)	1.000	1.000	1.0
	3 - Park Boulevard (W)	1.000	1.000	1.0
	4 - The Boulevard (N)	1.000	1.000	1.0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
1 - Tyrrelstown Plaza (E)	0.11	3.97	0.1	A	91.76	137.64
2 - The Boulevard (S)	0.34	3.90	0.5	A	389.99	584.98
3 - Park Boulevard (W)	0.26	5.34	0.4	A	198.21	297.31
4 - The Boulevard (N)	0.29	5.29	0.4	A	229.40	344.11

Main Results for each time segment

Main results: (08:00-08:15)

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
1 - Tyrrelstown Plaza (E)	75.29	18.82	200.83	0.00	1065.96	0.071	74.98	379.40	0.0	0.1	3.632	A
2 - The Boulevard (S)	319.96	79.99	59.24	0.00	1408.33	0.227	318.79	216.57	0.0	0.3	3.301	A
3 - Park Boulevard (W)	162.62	40.65	306.78	0.00	988.65	0.164	161.83	71.24	0.0	0.2	4.351	A
4 - The Boulevard (N)	188.21	47.05	392.87	0.00	1060.06	0.178	187.35	75.75	0.0	0.2	4.120	A

Main results: (08:15-08:30)

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
1 - Tyrrelstown Plaza (E)	89.90	22.47	240.64	0.00	1045.29	0.086	89.83	454.44	0.1	0.1	3.767	A
2 - The Boulevard (S)	382.07	95.52	70.96	0.00	1401.30	0.273	381.75	259.50	0.3	0.4	3.531	A
3 - Park Boulevard (W)	194.18	48.54	367.37	0.00	956.30	0.203	193.95	85.33	0.2	0.3	4.721	A
4 - The Boulevard (N)	224.74	56.19	470.60	0.00	1015.91	0.221	224.47	90.72	0.2	0.3	4.548	A

Main results: (08:30-08:45)

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
1 - Tyrrelstown Plaza (E)	110.10	27.53	294.57	0.00	1017.27	0.108	109.99	556.38	0.1	0.1	3.968	A
2 - The Boulevard (S)	467.93	116.98	86.89	0.00	1391.75	0.336	467.41	317.67	0.4	0.5	3.893	A
3 - Park Boulevard (W)	237.82	59.46	449.82	0.00	912.28	0.261	237.43	104.49	0.3	0.3	5.332	A
4 - The Boulevard (N)	275.26	68.81	576.17	0.00	955.95	0.288	274.78	111.08	0.3	0.4	5.281	A

Main results: (08:45-09:00)

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
1 - Tyrrelstown Plaza (E)	110.10	27.53	295.07	0.00	1017.02	0.108	110.10	557.11	0.1	0.1	3.969	A
2 - The Boulevard (S)	467.93	116.98	86.98	0.00	1391.70	0.336	467.93	318.19	0.5	0.5	3.896	A
3 - Park Boulevard (W)	237.82	59.46	450.31	0.00	912.01	0.261	237.81	104.60	0.3	0.4	5.339	A
4 - The Boulevard (N)	275.26	68.81	576.92	0.00	955.52	0.288	275.25	111.20	0.4	0.4	5.291	A

Main results: (09:00-09:15)

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
1 - Tyrrelstown Plaza (E)	89.90	22.47	241.42	0.00	1044.88	0.086	90.00	455.61	0.1	0.1	3.772	A
2 - The Boulevard (S)	382.07	95.52	71.10	0.00	1401.22	0.273	382.58	260.32	0.5	0.4	3.537	A
3 - Park Boulevard (W)	194.18	48.54	368.17	0.00	955.87	0.203	194.56	85.51	0.4	0.3	4.730	A
4 - The Boulevard (N)	224.74	56.19	471.81	0.00	1015.22	0.221	225.21	90.92	0.4	0.3	4.559	A

Main results: (09:15-09:30)

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
1 - Tyrrelstown Plaza (E)	75.29	18.82	202.06	0.00	1065.33	0.071	75.36	381.39	0.1	0.1	3.638	A
2 - The Boulevard (S)	319.96	79.99	59.53	0.00	1408.15	0.227	320.29	217.88	0.4	0.3	3.312	A
3 - Park Boulevard (W)	162.62	40.65	308.23	0.00	987.88	0.165	162.85	71.59	0.3	0.2	4.366	A
4 - The Boulevard (N)	188.21	47.05	394.96	0.00	1058.87	0.178	188.49	76.12	0.3	0.2	4.137	A

Do-Nothing - DN 2023, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Pedestrian Crossing	1 - Tyrrelstown Plaza (E) - Pedestrian crossing	Pedestrian crossing uses default settings only. Is this correct?
Warning	Pedestrian Crossing	1 - Tyrrelstown Plaza (E) - Pedestrian crossing	Pedestrian crossing uses default flow of 0. Is this correct?
Warning	Pedestrian Crossing	2 - The Boulevard (S) - Pedestrian crossing	Pedestrian crossing uses default settings only. Is this correct?
Warning	Pedestrian Crossing	2 - The Boulevard (S) - Pedestrian crossing	Pedestrian crossing uses default flow of 0. Is this correct?
Warning	Pedestrian Crossing	3 - Park Boulevard (W) - Pedestrian crossing	Pedestrian crossing uses default settings only. Is this correct?
Warning	Pedestrian Crossing	3 - Park Boulevard (W) - Pedestrian crossing	Pedestrian crossing uses default flow of 0. Is this correct?
Warning	Pedestrian Crossing	4 - The Boulevard (N) - Pedestrian crossing	Pedestrian crossing uses default settings only. Is this correct?
Warning	Pedestrian Crossing	4 - The Boulevard (N) - Pedestrian crossing	Pedestrian crossing uses default flow of 0. Is this correct?

Analysis Set Details

ID	Name	Include in report	Use specific Demand Set (s)	Specific Demand Set (s)	Network flow scaling factor (%)	Network capacity scaling factor (%)
A1	Do-Nothing	✓	✓	D1,D2,D3,D4,D5,D6	100.000	100.000

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (s)	Junction LOS
1 - Boulevard - Park Boulevard Roundabout	Boulevard - Park Boulevard Roundabout	Standard Roundabout	1,2,3,4	4.83	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Name	Description
1	Tyrrelstown Plaza (E)	
2	The Boulevard (S)	
3	Park Boulevard (W)	
4	The Boulevard (N)	

Capacity Options

Arm	Minimum capacity (PCU/hr)	Maximum capacity (PCU/hr)	Assume flat start profile	Initial queue (PCU)
1 - Tyrrelstown Plaza (E)	0.00	99999.00		0.00
2 - The Boulevard (S)	0.00	99999.00		0.00
3 - Park Boulevard (W)	0.00	99999.00		0.00
4 - The Boulevard (N)	0.00	99999.00		0.00

Roundabout Geometry

Arm	V - Approach road half-width (m)	E - Entry width (m)	I' - Effective flare length (m)	R - Entry radius (m)	D - Inscribed circle diameter (m)	PHI - Conflict (entry) angle (deg)	Exit only
1 - Tyrrelstown Plaza (E)	3.30	6.00	4.5	22.0	33.7	56.0	
2 - The Boulevard (S)	3.50	7.00	6.6	35.0	33.7	38.0	
3 - Park Boulevard (W)	3.00	5.30	4.8	15.0	33.7	33.0	
4 - The Boulevard (N)	3.50	4.80	5.6	19.0	33.7	30.0	

Pedestrian Crossings

Arm	Crossing type	Average pedestrian flow (Ped/hr)
1 - Tyrrelstown Plaza (E)	Zebra	0.00
2 - The Boulevard (S)	Zebra	0.00
3 - Park Boulevard (W)	Zebra	0.00
4 - The Boulevard (N)	Zebra	0.00

Zebra Crossings

Arm	Space between crossing and junction entry (Zebra) (PCU)	Vehicles queueing on exit (Zebra) (PCU)	Central Refuge	Crossing data type	Crossing length (m)	Crossing time (s)
1 - Tyrrelstown Plaza (E)	1.00	1.00		Distance	0.00	0.00
2 - The Boulevard (S)	1.00	1.00		Distance	0.00	0.00
3 - Park Boulevard (W)	1.00	1.00		Distance	0.00	0.00
4 - The Boulevard (N)	1.00	1.00		Distance	0.00	0.00

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Arm	Final slope	Final intercept (PCU/hr)
1 - Tyrrelstown Plaza (E)	0.519	1170.274
2 - The Boulevard (S)	0.599	1443.830
3 - Park Boulevard (W)	0.534	1152.465
4 - The Boulevard (N)	0.568	1283.197

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

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Model start time (HH:mm)	Model finish time (HH:mm)	Time segment length (min)	Run automatically
D2	DN 2023	PM	ONE HOUR	17:00	18:30	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 (%)
1 - Tyrrelstown Plaza (E)		ONE HOUR	✓	204.00	100.000
2 - The Boulevard (S)		ONE HOUR	✓	571.00	100.000
3 - Park Boulevard (W)		ONE HOUR	✓	112.00	100.000
4 - The Boulevard (N)		ONE HOUR	✓	142.00	100.000

Demand overview (Pedestrians)

Arm	Profile type	Average pedestrian flow (Ped/hr)
1 - Tyrrelstown Plaza (E)	Global	0.00
2 - The Boulevard (S)	Global	0.00
3 - Park Boulevard (W)	Global	0.00
4 - The Boulevard (N)	Global	0.00

Origin-Destination Data

Demand (PCU/hr)

		To			
		1 - Tyrrelstown Plaza (E)	2 - The Boulevard (S)	3 - Park Boulevard (W)	4 - The Boulevard (N)
From	1 - Tyrrelstown Plaza (E)	0.000	24.000	101.000	79.000
	2 - The Boulevard (S)	337.000	0.000	103.000	131.000
	3 - Park Boulevard (W)	71.000	39.000	0.000	2.000
	4 - The Boulevard (N)	50.000	90.000	2.000	0.000

Proportions

		To		
		1 - Tyrrelstown Plaza (E)	2 - The Boulevard (S)	3 - P Boule (W)
From	1 - Tyrrelstown Plaza (E)	0.00	0.12	0.5
	2 - The Boulevard (S)	0.59	0.00	0.1
	3 - Park Boulevard (W)	0.63	0.35	0.0
	4 - The Boulevard (N)	0.35	0.63	0.0

Vehicle Mix

Heavy Vehicle proportion

		To			
		1 - Tyrrelstown Plaza (E)	2 - The Boulevard (S)	3 - Park Boulevard (W)	4 - The Boulevard (N)
From	1 - Tyrrelstown Plaza (E)	0	0	0	0
	2 - The Boulevard (S)	0	0	0	0
	3 - Park Boulevard (W)	0	0	0	0
	4 - The Boulevard (N)	0	0	0	0

Average PCU Per Veh

		To		
		1 - Tyrrelstown Plaza (E)	2 - The Boulevard (S)	3 - P Boule (W)
From	1 - Tyrrelstown Plaza (E)	1.000	1.000	1.0
	2 - The Boulevard (S)	1.000	1.000	1.0
	3 - Park Boulevard (W)	1.000	1.000	1.0
	4 - The Boulevard (N)	1.000	1.000	1.0

Detailed Demand Data

Demand for each time segment

Time Segment	Arm	Demand (PCU/hr)	Demand in PCU (PCU/hr)	Pedestrian Demand (Ped/hr)
17:00-17:15	1 - Tyrrelstown Plaza (E)	153.58	153.58	0.00
	2 - The Boulevard (S)	429.88	429.88	0.00
	3 - Park Boulevard (W)	84.32	84.32	0.00
	4 - The Boulevard (N)	106.91	106.91	0.00
17:15-17:30	1 - Tyrrelstown Plaza (E)	183.39	183.39	0.00
	2 - The Boulevard (S)	513.32	513.32	0.00
	3 - Park Boulevard (W)	100.69	100.69	0.00
	4 - The Boulevard (N)	127.66	127.66	0.00
17:30-17:45	1 - Tyrrelstown Plaza (E)	224.61	224.61	0.00
	2 - The Boulevard (S)	628.68	628.68	0.00
	3 - Park Boulevard (W)	123.31	123.31	0.00
	4 - The Boulevard (N)	156.34	156.34	0.00
17:45-18:00	1 - Tyrrelstown Plaza (E)	224.61	224.61	0.00
	2 - The Boulevard (S)	628.68	628.68	0.00
	3 - Park Boulevard (W)	123.31	123.31	0.00
	4 - The Boulevard (N)	156.34	156.34	0.00
18:00-18:15	1 - Tyrrelstown Plaza (E)	183.39	183.39	0.00
	2 - The Boulevard (S)	513.32	513.32	0.00
	3 - Park Boulevard (W)	100.69	100.69	0.00
	4 - The Boulevard (N)	127.66	127.66	0.00
18:15-18:30	1 - Tyrrelstown Plaza (E)	153.58	153.58	0.00
	2 - The Boulevard (S)	429.88	429.88	0.00
	3 - Park Boulevard (W)	84.32	84.32	0.00
	4 - The Boulevard (N)	106.91	106.91	0.00

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
1 - Tyrrelstown Plaza (E)	0.21	4.13	0.3	A	187.19	280.79
2 - The Boulevard (S)	0.47	5.18	0.9	A	523.96	785.94
3 - Park Boulevard (W)	0.15	5.09	0.2	A	102.77	154.16
4 - The Boulevard (N)	0.16	4.25	0.2	A	130.30	195.45

Main Results for each time segment

Main results: (17:00-17:15)

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
1 - Tyrrelstown Plaza (E)	153.58	38.40	98.21	0.00	1119.27	0.137	152.95	343.32	0.0	0.2	3.724	A
2 - The Boulevard (S)	429.88	107.47	136.45	0.00	1362.05	0.316	428.05	114.70	0.0	0.5	3.848	A
3 - Park Boulevard (W)	84.32	21.08	410.06	0.00	933.50	0.090	83.92	154.44	0.0	0.1	4.235	A
4 - The Boulevard (N)	106.91	26.73	335.06	0.00	1092.90	0.098	106.47	158.93	0.0	0.1	3.647	A

Main results: (17:15-17:30)

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
1 - Tyrrelstown Plaza (E)	183.39	45.85	117.65	0.00	1109.17	0.165	183.24	411.26	0.2	0.2	3.888	A
2 - The Boulevard (S)	513.32	128.33	163.48	0.00	1345.86	0.381	512.70	137.41	0.5	0.6	4.318	A
3 - Park Boulevard (W)	100.69	25.17	491.18	0.00	890.19	0.113	100.57	185.00	0.1	0.1	4.559	A
4 - The Boulevard (N)	127.66	31.91	401.37	0.00	1055.23	0.121	127.54	190.38	0.1	0.1	3.880	A

Main results: (17:30-17:45)

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
1 - Tyrrelstown Plaza (E)	224.61	56.15	144.05	0.00	1095.45	0.205	224.37	503.42	0.2	0.3	4.131	A
2 - The Boulevard (S)	628.68	157.17	200.17	0.00	1323.86	0.475	627.55	168.25	0.6	0.9	5.161	A
3 - Park Boulevard (W)	123.31	30.83	601.24	0.00	831.42	0.148	123.13	226.49	0.1	0.2	5.081	A
4 - The Boulevard (N)	156.34	39.09	491.31	0.00	1004.15	0.156	156.16	233.06	0.1	0.2	4.244	A

Main results: (17:45-18:00)

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
1 - Tyrrelstown Plaza (E)	224.61	56.15	144.23	0.00	1095.36	0.205	224.61	504.25	0.3	0.3	4.134	A
2 - The Boulevard (S)	628.68	157.17	200.38	0.00	1323.74	0.475	628.66	168.45	0.9	0.9	5.178	A
3 - Park Boulevard (W)	123.31	30.83	602.24	0.00	830.89	0.148	123.31	226.81	0.2	0.2	5.087	A
4 - The Boulevard (N)	156.34	39.09	492.14	0.00	1003.68	0.156	156.34	233.41	0.2	0.2	4.248	A

Main results: (18:00-18:15)

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
1 - Tyrrelstown Plaza (E)	183.39	45.85	117.95	0.00	1109.01	0.165	183.62	412.57	0.3	0.2	3.892	A
2 - The Boulevard (S)	513.32	128.33	163.82	0.00	1345.65	0.381	514.43	137.75	0.9	0.6	4.338	A
3 - Park Boulevard (W)	100.69	25.17	492.74	0.00	889.35	0.113	100.87	185.51	0.2	0.1	4.566	A
4 - The Boulevard (N)	127.66	31.91	402.68	0.00	1054.49	0.121	127.84	190.93	0.2	0.1	3.886	A

Main results: (18:15-18:30)

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
1 - Tyrrelstown Plaza (E)	153.58	38.40	98.74	0.00	1118.99	0.137	153.74	345.29	0.2	0.2	3.729	A
2 - The Boulevard (S)	429.88	107.47	137.16	0.00	1361.63	0.316	430.51	115.32	0.6	0.5	3.870	A
3 - Park Boulevard (W)	84.32	21.08	412.39	0.00	932.26	0.090	84.43	155.28	0.1	0.1	4.246	A
4 - The Boulevard (N)	106.91	26.73	337.01	0.00	1091.79	0.098	107.02	159.81	0.1	0.1	3.655	A

Do-Nothing - DN 2028, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Pedestrian Crossing	1 - Tyrrelstown Plaza (E) - Pedestrian crossing	Pedestrian crossing uses default settings only. Is this correct?
Warning	Pedestrian Crossing	1 - Tyrrelstown Plaza (E) - Pedestrian crossing	Pedestrian crossing uses default flow of 0. Is this correct?
Warning	Pedestrian Crossing	2 - The Boulevard (S) - Pedestrian crossing	Pedestrian crossing uses default settings only. Is this correct?
Warning	Pedestrian Crossing	2 - The Boulevard (S) - Pedestrian crossing	Pedestrian crossing uses default flow of 0. Is this correct?
Warning	Pedestrian Crossing	3 - Park Boulevard (W) - Pedestrian crossing	Pedestrian crossing uses default settings only. Is this correct?
Warning	Pedestrian Crossing	3 - Park Boulevard (W) - Pedestrian crossing	Pedestrian crossing uses default flow of 0. Is this correct?
Warning	Pedestrian Crossing	4 - The Boulevard (N) - Pedestrian crossing	Pedestrian crossing uses default settings only. Is this correct?
Warning	Pedestrian Crossing	4 - The Boulevard (N) - Pedestrian crossing	Pedestrian crossing uses default flow of 0. Is this correct?

Analysis Set Details

ID	Name	Include in report	Use specific Demand Set (s)	Specific Demand Set (s)	Network flow scaling factor (%)	Network capacity scaling factor (%)
A1	Do-Nothing	✓	✓	D1,D2,D3,D4,D5,D6	100.000	100.000

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (s)	Junction LOS
1 - Boulevard - Park Boulevard Roundabout	Boulevard - Park Boulevard Roundabout	Standard Roundabout	1,2,3,4	5.30	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Name	Description
1	Tyrrelstown Plaza (E)	
2	The Boulevard (S)	
3	Park Boulevard (W)	
4	The Boulevard (N)	

Capacity Options

Arm	Minimum capacity (PCU/hr)	Maximum capacity (PCU/hr)	Assume flat start profile	Initial queue (PCU)
1 - Tyrrelstown Plaza (E)	0.00	99999.00		0.00
2 - The Boulevard (S)	0.00	99999.00		0.00
3 - Park Boulevard (W)	0.00	99999.00		0.00
4 - The Boulevard (N)	0.00	99999.00		0.00

Roundabout Geometry

Arm	V - Approach road half-width (m)	E - Entry width (m)	I' - Effective flare length (m)	R - Entry radius (m)	D - Inscribed circle diameter (m)	PHI - Conflict (entry) angle (deg)	Exit only
1 - Tyrrelstown Plaza (E)	3.30	6.00	4.5	22.0	33.7	56.0	
2 - The Boulevard (S)	3.50	7.00	6.6	35.0	33.7	38.0	
3 - Park Boulevard (W)	3.00	5.30	4.8	15.0	33.7	33.0	
4 - The Boulevard (N)	3.50	4.80	5.6	19.0	33.7	30.0	

Pedestrian Crossings

Arm	Crossing type	Average pedestrian flow (Ped/hr)
1 - Tyrrelstown Plaza (E)	Zebra	0.00
2 - The Boulevard (S)	Zebra	0.00
3 - Park Boulevard (W)	Zebra	0.00
4 - The Boulevard (N)	Zebra	0.00

Zebra Crossings

Arm	Space between crossing and junction entry (Zebra) (PCU)	Vehicles queueing on exit (Zebra) (PCU)	Central Refuge	Crossing data type	Crossing length (m)	Crossing time (s)
1 - Tyrrelstown Plaza (E)	1.00	1.00		Distance	0.00	0.00
2 - The Boulevard (S)	1.00	1.00		Distance	0.00	0.00
3 - Park Boulevard (W)	1.00	1.00		Distance	0.00	0.00
4 - The Boulevard (N)	1.00	1.00		Distance	0.00	0.00

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Arm	Final slope	Final intercept (PCU/hr)
1 - Tyrrelstown Plaza (E)	0.519	1170.274
2 - The Boulevard (S)	0.599	1443.830
3 - Park Boulevard (W)	0.534	1152.465
4 - The Boulevard (N)	0.568	1283.197

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

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Model start time (HH:mm)	Model finish time (HH:mm)	Time segment length (min)	Run automatically
D3	DN 2028	AM	ONE HOUR	08:00	09:30	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 (%)
1 - Tyrrelstown Plaza (E)		ONE HOUR	✓	169.00	100.000
2 - The Boulevard (S)		ONE HOUR	✓	500.00	100.000
3 - Park Boulevard (W)		ONE HOUR	✓	268.00	100.000
4 - The Boulevard (N)		ONE HOUR	✓	290.00	100.000

Demand overview (Pedestrians)

Arm	Profile type	Average pedestrian flow (Ped/hr)
1 - Tyrrelstown Plaza (E)	Global	0.00
2 - The Boulevard (S)	Global	0.00
3 - Park Boulevard (W)	Global	0.00
4 - The Boulevard (N)	Global	0.00

Origin-Destination Data

Demand (PCU/hr)

	To				
		1 - Tyrrelstown Plaza (E)	2 - The Boulevard (S)	3 - Park Boulevard (W)	4 - The Boulevard (N)
From	1 - Tyrrelstown Plaza (E)	0.000	51.000	76.000	42.000
	2 - The Boulevard (S)	375.000	0.000	47.000	78.000
	3 - Park Boulevard (W)	157.000	106.000	0.000	5.000
	4 - The Boulevard (N)	102.000	186.000	2.000	0.000

Proportions

	To			
		1 - Tyrrelstown Plaza (E)	2 - The Boulevard (S)	3 - P Boule (W)
From	1 - Tyrrelstown Plaza (E)	0.00	0.30	0.4
	2 - The Boulevard (S)	0.75	0.00	0.0
	3 - Park Boulevard (W)	0.59	0.40	0.0
	4 - The Boulevard (N)	0.35	0.64	0.0

Vehicle Mix

Heavy Vehicle proportion

	To				
		1 - Tyrrelstown Plaza (E)	2 - The Boulevard (S)	3 - Park Boulevard (W)	4 - The Boulevard (N)
From	1 - Tyrrelstown Plaza (E)	0	0	0	0
	2 - The Boulevard (S)	0	0	0	0
	3 - Park Boulevard (W)	0	0	0	0
	4 - The Boulevard (N)	0	0	0	0

Average PCU Per Veh

	To			
		1 - Tyrrelstown Plaza (E)	2 - The Boulevard (S)	3 - P Boule (W)
From	1 - Tyrrelstown Plaza (E)	1.000	1.000	1.0
	2 - The Boulevard (S)	1.000	1.000	1.0
	3 - Park Boulevard (W)	1.000	1.000	1.0
	4 - The Boulevard (N)	1.000	1.000	1.0

Detailed Demand Data

Demand for each time segment

Time Segment	Arm	Demand (PCU/hr)	Demand in PCU (PCU/hr)	Pedestrian Demand (Ped/hr)
08:00-08:15	1 - Tyrrelstown Plaza (E)	127.23	127.23	0.00
	2 - The Boulevard (S)	376.43	376.43	0.00
	3 - Park Boulevard (W)	201.76	201.76	0.00
	4 - The Boulevard (N)	218.33	218.33	0.00
08:15-08:30	1 - Tyrrelstown Plaza (E)	151.93	151.93	0.00
	2 - The Boulevard (S)	449.49	449.49	0.00
	3 - Park Boulevard (W)	240.93	240.93	0.00
	4 - The Boulevard (N)	260.70	260.70	0.00
08:30-08:45	1 - Tyrrelstown Plaza (E)	186.07	186.07	0.00
	2 - The Boulevard (S)	550.51	550.51	0.00
	3 - Park Boulevard (W)	295.07	295.07	0.00
	4 - The Boulevard (N)	319.30	319.30	0.00
08:45-09:00	1 - Tyrrelstown Plaza (E)	186.07	186.07	0.00
	2 - The Boulevard (S)	550.51	550.51	0.00
	3 - Park Boulevard (W)	295.07	295.07	0.00
	4 - The Boulevard (N)	319.30	319.30	0.00
09:00-09:15	1 - Tyrrelstown Plaza (E)	151.93	151.93	0.00
	2 - The Boulevard (S)	449.49	449.49	0.00
	3 - Park Boulevard (W)	240.93	240.93	0.00
	4 - The Boulevard (N)	260.70	260.70	0.00
09:15-09:30	1 - Tyrrelstown Plaza (E)	127.23	127.23	0.00
	2 - The Boulevard (S)	376.43	376.43	0.00
	3 - Park Boulevard (W)	201.76	201.76	0.00
	4 - The Boulevard (N)	218.33	218.33	0.00

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
1 - Tyrrelstown Plaza (E)	0.19	4.41	0.2	A	155.08	232.62
2 - The Boulevard (S)	0.40	4.42	0.7	A	458.81	688.21
3 - Park Boulevard (W)	0.34	6.35	0.5	A	245.92	368.88
4 - The Boulevard (N)	0.36	6.37	0.6	A	266.11	399.16

Main Results for each time segment

Main results: (08:00-08:15)

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
1 - Tyrrelstown Plaza (E)	127.23	31.81	220.21	0.00	1055.90	0.121	126.69	475.19	0.0	0.1	3.873	A
2 - The Boulevard (S)	376.43	94.11	89.95	0.00	1389.92	0.271	374.95	256.94	0.0	0.4	3.542	A
3 - Park Boulevard (W)	201.76	50.44	371.19	0.00	954.26	0.211	200.70	93.71	0.0	0.3	4.770	A
4 - The Boulevard (N)	218.33	54.58	478.17	0.00	1011.61	0.216	217.23	93.72	0.0	0.3	4.527	A

Main results: (08:15-08:30)

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
1 - Tyrrelstown Plaza (E)	151.93	37.98	263.91	0.00	1033.20	0.147	151.79	569.28	0.1	0.2	4.084	A
2 - The Boulevard (S)	449.49	112.37	107.78	0.00	1379.24	0.326	449.05	307.92	0.4	0.5	3.868	A
3 - Park Boulevard (W)	240.93	60.23	444.56	0.00	915.08	0.263	240.57	112.26	0.3	0.4	5.335	A
4 - The Boulevard (N)	260.70	65.18	572.87	0.00	957.82	0.272	260.31	112.26	0.3	0.4	5.159	A

Main results: (08:30-08:45)

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
1 - Tyrrelstown Plaza (E)	186.07	46.52	322.96	0.00	1002.53	0.186	185.85	696.84	0.2	0.2	4.407	A
2 - The Boulevard (S)	550.51	137.63	131.96	0.00	1364.74	0.403	549.75	376.85	0.5	0.7	4.414	A
3 - Park Boulevard (W)	295.07	73.77	544.26	0.00	861.85	0.342	294.43	137.45	0.4	0.5	6.338	A
4 - The Boulevard (N)	319.30	79.82	701.25	0.00	884.91	0.361	318.55	137.44	0.4	0.6	6.349	A

Main results: (08:45-09:00)

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
1 - Tyrrelstown Plaza (E)	186.07	46.52	323.69	0.00	1002.15	0.186	186.07	698.03	0.2	0.2	4.410	A
2 - The Boulevard (S)	550.51	137.63	132.12	0.00	1364.65	0.403	550.50	377.64	0.7	0.7	4.421	A
3 - Park Boulevard (W)	295.07	73.77	544.99	0.00	861.45	0.343	295.06	137.63	0.5	0.5	6.355	A
4 - The Boulevard (N)	319.30	79.82	702.43	0.00	884.24	0.361	319.28	137.62	0.6	0.6	6.371	A

Main results: (09:00-09:15)

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
1 - Tyrrelstown Plaza (E)	151.93	37.98	265.03	0.00	1032.62	0.147	152.14	571.14	0.2	0.2	4.089	A
2 - The Boulevard (S)	449.49	112.37	108.03	0.00	1379.08	0.326	450.24	309.14	0.7	0.5	3.880	A
3 - Park Boulevard (W)	240.93	60.23	445.73	0.00	914.46	0.263	241.56	112.54	0.5	0.4	5.356	A
4 - The Boulevard (N)	260.70	65.18	574.73	0.00	956.77	0.272	261.44	112.55	0.6	0.4	5.184	A

Main results: (09:15-09:30)

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
1 - Tyrrelstown Plaza (E)	127.23	31.81	221.74	0.00	1055.10	0.121	127.37	478.00	0.2	0.1	3.882	A
2 - The Boulevard (S)	376.43	94.11	90.44	0.00	1389.62	0.271	376.88	258.67	0.5	0.4	3.558	A
3 - Park Boulevard (W)	201.76	50.44	373.11	0.00	953.24	0.212	202.13	94.22	0.4	0.3	4.796	A
4 - The Boulevard (N)	218.33	54.58	481.01	0.00	1010.00	0.216	218.73	94.22	0.4	0.3	4.553	A

Do-Nothing - DN 2028, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Pedestrian Crossing	1 - Tyrrelstown Plaza (E) - Pedestrian crossing	Pedestrian crossing uses default settings only. Is this correct?
Warning	Pedestrian Crossing	1 - Tyrrelstown Plaza (E) - Pedestrian crossing	Pedestrian crossing uses default flow of 0. Is this correct?
Warning	Pedestrian Crossing	2 - The Boulevard (S) - Pedestrian crossing	Pedestrian crossing uses default settings only. Is this correct?
Warning	Pedestrian Crossing	2 - The Boulevard (S) - Pedestrian crossing	Pedestrian crossing uses default flow of 0. Is this correct?
Warning	Pedestrian Crossing	3 - Park Boulevard (W) - Pedestrian crossing	Pedestrian crossing uses default settings only. Is this correct?
Warning	Pedestrian Crossing	3 - Park Boulevard (W) - Pedestrian crossing	Pedestrian crossing uses default flow of 0. Is this correct?
Warning	Pedestrian Crossing	4 - The Boulevard (N) - Pedestrian crossing	Pedestrian crossing uses default settings only. Is this correct?
Warning	Pedestrian Crossing	4 - The Boulevard (N) - Pedestrian crossing	Pedestrian crossing uses default flow of 0. Is this correct?

Analysis Set Details

ID	Name	Include in report	Use specific Demand Set (s)	Specific Demand Set (s)	Network flow scaling factor (%)	Network capacity scaling factor (%)
A1	Do-Nothing	✓	✓	D1,D2,D3,D4,D5,D6	100.000	100.000

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (s)	Junction LOS
1 - Boulevard - Park Boulevard Roundabout	Boulevard - Park Boulevard Roundabout	Standard Roundabout	1,2,3,4	5.27	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Name	Description
1	Tyrrelstown Plaza (E)	
2	The Boulevard (S)	
3	Park Boulevard (W)	
4	The Boulevard (N)	

Capacity Options

Arm	Minimum capacity (PCU/hr)	Maximum capacity (PCU/hr)	Assume flat start profile	Initial queue (PCU)
1 - Tyrrelstown Plaza (E)	0.00	99999.00		0.00
2 - The Boulevard (S)	0.00	99999.00		0.00
3 - Park Boulevard (W)	0.00	99999.00		0.00
4 - The Boulevard (N)	0.00	99999.00		0.00

Roundabout Geometry

Arm	V - Approach road half-width (m)	E - Entry width (m)	I' - Effective flare length (m)	R - Entry radius (m)	D - Inscribed circle diameter (m)	PHI - Conflict (entry) angle (deg)	Exit only
1 - Tyrrelstown Plaza (E)	3.30	6.00	4.5	22.0	33.7	56.0	
2 - The Boulevard (S)	3.50	7.00	6.6	35.0	33.7	38.0	
3 - Park Boulevard (W)	3.00	5.30	4.8	15.0	33.7	33.0	
4 - The Boulevard (N)	3.50	4.80	5.6	19.0	33.7	30.0	

Pedestrian Crossings

Arm	Crossing type	Average pedestrian flow (Ped/hr)
1 - Tyrrelstown Plaza (E)	Zebra	0.00
2 - The Boulevard (S)	Zebra	0.00
3 - Park Boulevard (W)	Zebra	0.00
4 - The Boulevard (N)	Zebra	0.00

Zebra Crossings

Arm	Space between crossing and junction entry (Zebra) (PCU)	Vehicles queueing on exit (Zebra) (PCU)	Central Refuge	Crossing data type	Crossing length (m)	Crossing time (s)
1 - Tyrrelstown Plaza (E)	1.00	1.00		Distance	0.00	0.00
2 - The Boulevard (S)	1.00	1.00		Distance	0.00	0.00
3 - Park Boulevard (W)	1.00	1.00		Distance	0.00	0.00
4 - The Boulevard (N)	1.00	1.00		Distance	0.00	0.00

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Arm	Final slope	Final intercept (PCU/hr)
1 - Tyrrelstown Plaza (E)	0.519	1170.274
2 - The Boulevard (S)	0.599	1443.830
3 - Park Boulevard (W)	0.534	1152.465
4 - The Boulevard (N)	0.568	1283.197

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

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Model start time (HH:mm)	Model finish time (HH:mm)	Time segment length (min)	Run automatically
D4	DN 2028	PM	ONE HOUR	17:00	18:30	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 (%)
1 - Tyrrelstown Plaza (E)		ONE HOUR	✓	233.00	100.000
2 - The Boulevard (S)		ONE HOUR	✓	623.00	100.000
3 - Park Boulevard (W)		ONE HOUR	✓	127.00	100.000
4 - The Boulevard (N)		ONE HOUR	✓	157.00	100.000

Demand overview (Pedestrians)

Arm	Profile type	Average pedestrian flow (Ped/hr)
1 - Tyrrelstown Plaza (E)	Global	0.00
2 - The Boulevard (S)	Global	0.00
3 - Park Boulevard (W)	Global	0.00
4 - The Boulevard (N)	Global	0.00

Origin-Destination Data

Demand (PCU/hr)

		To			
		1 - Tyrrelstown Plaza (E)	2 - The Boulevard (S)	3 - Park Boulevard (W)	4 - The Boulevard (N)
From	1 - Tyrrelstown Plaza (E)	0.000	30.000	115.000	88.000
	2 - The Boulevard (S)	367.000	0.000	113.000	143.000
	3 - Park Boulevard (W)	82.000	43.000	0.000	2.000
	4 - The Boulevard (N)	57.000	98.000	2.000	0.000

Proportions

		To		
		1 - Tyrrelstown Plaza (E)	2 - The Boulevard (S)	3 - P Boule (W)
From	1 - Tyrrelstown Plaza (E)	0.00	0.13	0.4
	2 - The Boulevard (S)	0.59	0.00	0.1
	3 - Park Boulevard (W)	0.65	0.34	0.0
	4 - The Boulevard (N)	0.36	0.62	0.0

Vehicle Mix

Heavy Vehicle proportion

		To			
		1 - Tyrrelstown Plaza (E)	2 - The Boulevard (S)	3 - Park Boulevard (W)	4 - The Boulevard (N)
From	1 - Tyrrelstown Plaza (E)	0	0	0	0
	2 - The Boulevard (S)	0	0	0	0
	3 - Park Boulevard (W)	0	0	0	0
	4 - The Boulevard (N)	0	0	0	0

Average PCU Per Veh

		To		
		1 - Tyrrelstown Plaza (E)	2 - The Boulevard (S)	3 - P Boule (W)
From	1 - Tyrrelstown Plaza (E)	1.000	1.000	1.0
	2 - The Boulevard (S)	1.000	1.000	1.0
	3 - Park Boulevard (W)	1.000	1.000	1.0
	4 - The Boulevard (N)	1.000	1.000	1.0

Detailed Demand Data

Demand for each time segment

Time Segment	Arm	Demand (PCU/hr)	Demand in PCU (PCU/hr)	Pedestrian Demand (Ped/hr)
17:00-17:15	1 - Tyrrelstown Plaza (E)	175.41	175.41	0.00
	2 - The Boulevard (S)	469.03	469.03	0.00
	3 - Park Boulevard (W)	95.61	95.61	0.00
	4 - The Boulevard (N)	118.20	118.20	0.00
17:15-17:30	1 - Tyrrelstown Plaza (E)	209.46	209.46	0.00
	2 - The Boulevard (S)	560.06	560.06	0.00
	3 - Park Boulevard (W)	114.17	114.17	0.00
	4 - The Boulevard (N)	141.14	141.14	0.00
17:30-17:45	1 - Tyrrelstown Plaza (E)	256.54	256.54	0.00
	2 - The Boulevard (S)	685.94	685.94	0.00
	3 - Park Boulevard (W)	139.83	139.83	0.00
	4 - The Boulevard (N)	172.86	172.86	0.00
17:45-18:00	1 - Tyrrelstown Plaza (E)	256.54	256.54	0.00
	2 - The Boulevard (S)	685.94	685.94	0.00
	3 - Park Boulevard (W)	139.83	139.83	0.00
	4 - The Boulevard (N)	172.86	172.86	0.00
18:00-18:15	1 - Tyrrelstown Plaza (E)	209.46	209.46	0.00
	2 - The Boulevard (S)	560.06	560.06	0.00
	3 - Park Boulevard (W)	114.17	114.17	0.00
	4 - The Boulevard (N)	141.14	141.14	0.00
18:15-18:30	1 - Tyrrelstown Plaza (E)	175.41	175.41	0.00
	2 - The Boulevard (S)	469.03	469.03	0.00
	3 - Park Boulevard (W)	95.61	95.61	0.00
	4 - The Boulevard (N)	118.20	118.20	0.00

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
1 - Tyrrelstown Plaza (E)	0.24	4.33	0.3	A	213.80	320.71
2 - The Boulevard (S)	0.52	5.78	1.1	A	571.68	857.51
3 - Park Boulevard (W)	0.17	5.44	0.2	A	116.54	174.81
4 - The Boulevard (N)	0.18	4.48	0.2	A	144.07	216.10

Main Results for each time segment

Main results: (17:00-17:15)

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
1 - Tyrrelstown Plaza (E)	175.41	43.85	107.19	0.00	1114.60	0.157	174.67	379.22	0.0	0.2	3.824	A
2 - The Boulevard (S)	469.03	117.26	153.68	0.00	1351.73	0.347	466.92	128.18	0.0	0.5	4.058	A
3 - Park Boulevard (W)	95.61	23.90	448.20	0.00	913.14	0.105	95.15	172.40	0.0	0.1	4.399	A
4 - The Boulevard (N)	118.20	29.55	368.70	0.00	1073.79	0.110	117.71	174.64	0.0	0.1	3.763	A

Main results: (17:15-17:30)

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
1 - Tyrrelstown Plaza (E)	209.46	52.37	128.42	0.00	1103.57	0.190	209.27	454.30	0.2	0.2	4.024	A
2 - The Boulevard (S)	560.06	140.02	184.12	0.00	1333.48	0.420	559.30	153.57	0.5	0.7	4.645	A
3 - Park Boulevard (W)	114.17	28.54	536.90	0.00	865.78	0.132	114.03	206.53	0.1	0.2	4.789	A
4 - The Boulevard (N)	141.14	35.28	441.71	0.00	1032.32	0.137	141.00	209.21	0.1	0.2	4.039	A

Main results: (17:30-17:45)

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
1 - Tyrrelstown Plaza (E)	256.54	64.13	157.22	0.00	1088.61	0.236	256.24	556.01	0.2	0.3	4.324	A
2 - The Boulevard (S)	685.94	171.48	225.45	0.00	1308.71	0.524	684.46	188.02	0.7	1.1	5.752	A
3 - Park Boulevard (W)	139.83	34.96	657.09	0.00	801.60	0.174	139.59	252.82	0.2	0.2	5.437	A
4 - The Boulevard (N)	172.86	43.22	540.60	0.00	976.15	0.177	172.63	256.08	0.2	0.2	4.479	A

Main results: (17:45-18:00)

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
1 - Tyrrelstown Plaza (E)	256.54	64.13	157.44	0.00	1088.50	0.236	256.53	557.10	0.3	0.3	4.326	A
2 - The Boulevard (S)	685.94	171.48	225.71	0.00	1308.56	0.524	685.91	188.27	1.1	1.1	5.781	A
3 - Park Boulevard (W)	139.83	34.96	658.39	0.00	800.91	0.175	139.83	253.23	0.2	0.2	5.445	A
4 - The Boulevard (N)	172.86	43.22	541.68	0.00	975.54	0.177	172.86	256.53	0.2	0.2	4.484	A

Main results: (18:00-18:15)

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
1 - Tyrrelstown Plaza (E)	209.46	52.37	128.77	0.00	1103.39	0.190	209.75	455.97	0.3	0.2	4.031	A
2 - The Boulevard (S)	560.06	140.02	184.54	0.00	1333.23	0.420	561.52	153.98	1.1	0.7	4.673	A
3 - Park Boulevard (W)	114.17	28.54	538.89	0.00	864.71	0.132	114.40	207.17	0.2	0.2	4.799	A
4 - The Boulevard (N)	141.14	35.28	443.38	0.00	1031.37	0.137	141.36	209.91	0.2	0.2	4.045	A

Main results: (18:15-18:30)

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
1 - Tyrrelstown Plaza (E)	175.41	43.85	107.79	0.00	1114.29	0.157	175.61	381.55	0.2	0.2	3.834	A
2 - The Boulevard (S)	469.03	117.26	154.50	0.00	1351.23	0.347	469.81	128.90	0.7	0.5	4.089	A
3 - Park Boulevard (W)	95.61	23.90	450.92	0.00	911.69	0.105	95.75	173.39	0.2	0.1	4.412	A
4 - The Boulevard (N)	118.20	29.55	371.00	0.00	1072.48	0.110	118.34	175.67	0.2	0.1	3.775	A

Do-Nothing - DN 2038, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Pedestrian Crossing	1 - Tyrrelstown Plaza (E) - Pedestrian crossing	Pedestrian crossing uses default settings only. Is this correct?
Warning	Pedestrian Crossing	1 - Tyrrelstown Plaza (E) - Pedestrian crossing	Pedestrian crossing uses default flow of 0. Is this correct?
Warning	Pedestrian Crossing	2 - The Boulevard (S) - Pedestrian crossing	Pedestrian crossing uses default settings only. Is this correct?
Warning	Pedestrian Crossing	2 - The Boulevard (S) - Pedestrian crossing	Pedestrian crossing uses default flow of 0. Is this correct?
Warning	Pedestrian Crossing	3 - Park Boulevard (W) - Pedestrian crossing	Pedestrian crossing uses default settings only. Is this correct?
Warning	Pedestrian Crossing	3 - Park Boulevard (W) - Pedestrian crossing	Pedestrian crossing uses default flow of 0. Is this correct?
Warning	Pedestrian Crossing	4 - The Boulevard (N) - Pedestrian crossing	Pedestrian crossing uses default settings only. Is this correct?
Warning	Pedestrian Crossing	4 - The Boulevard (N) - Pedestrian crossing	Pedestrian crossing uses default flow of 0. Is this correct?

Analysis Set Details

ID	Name	Include in report	Use specific Demand Set (s)	Specific Demand Set (s)	Network flow scaling factor (%)	Network capacity scaling factor (%)
A1	Do-Nothing	✓	✓	D1,D2,D3,D4,D5,D6	100.000	100.000

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (s)	Junction LOS
1 - Boulevard - Park Boulevard Roundabout	Boulevard - Park Boulevard Roundabout	Standard Roundabout	1,2,3,4	5.60	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Name	Description
1	Tyrrelstown Plaza (E)	
2	The Boulevard (S)	
3	Park Boulevard (W)	
4	The Boulevard (N)	

Capacity Options

Arm	Minimum capacity (PCU/hr)	Maximum capacity (PCU/hr)	Assume flat start profile	Initial queue (PCU)
1 - Tyrrelstown Plaza (E)	0.00	99999.00		0.00
2 - The Boulevard (S)	0.00	99999.00		0.00
3 - Park Boulevard (W)	0.00	99999.00		0.00
4 - The Boulevard (N)	0.00	99999.00		0.00

Roundabout Geometry

Arm	V - Approach road half-width (m)	E - Entry width (m)	I' - Effective flare length (m)	R - Entry radius (m)	D - Inscribed circle diameter (m)	PHI - Conflict (entry) angle (deg)	Exit only
1 - Tyrrelstown Plaza (E)	3.30	6.00	4.5	22.0	33.7	56.0	
2 - The Boulevard (S)	3.50	7.00	6.6	35.0	33.7	38.0	
3 - Park Boulevard (W)	3.00	5.30	4.8	15.0	33.7	33.0	
4 - The Boulevard (N)	3.50	4.80	5.6	19.0	33.7	30.0	

Pedestrian Crossings

Arm	Crossing type	Average pedestrian flow (Ped/hr)
1 - Tyrrelstown Plaza (E)	Zebra	0.00
2 - The Boulevard (S)	Zebra	0.00
3 - Park Boulevard (W)	Zebra	0.00
4 - The Boulevard (N)	Zebra	0.00

Zebra Crossings

Arm	Space between crossing and junction entry (Zebra) (PCU)	Vehicles queueing on exit (Zebra) (PCU)	Central Refuge	Crossing data type	Crossing length (m)	Crossing time (s)
1 - Tyrrelstown Plaza (E)	1.00	1.00		Distance	0.00	0.00
2 - The Boulevard (S)	1.00	1.00		Distance	0.00	0.00
3 - Park Boulevard (W)	1.00	1.00		Distance	0.00	0.00
4 - The Boulevard (N)	1.00	1.00		Distance	0.00	0.00

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Arm	Final slope	Final intercept (PCU/hr)
1 - Tyrrelstown Plaza (E)	0.519	1170.274
2 - The Boulevard (S)	0.599	1443.830
3 - Park Boulevard (W)	0.534	1152.465
4 - The Boulevard (N)	0.568	1283.197

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

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Model start time (HH:mm)	Model finish time (HH:mm)	Time segment length (min)	Run automatically
D5	DN 2038	AM	ONE HOUR	08:00	09:30	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 (%)
1 - Tyrrelstown Plaza (E)		ONE HOUR	✓	175.00	100.000
2 - The Boulevard (S)		ONE HOUR	✓	529.00	100.000
3 - Park Boulevard (W)		ONE HOUR	✓	282.00	100.000
4 - The Boulevard (N)		ONE HOUR	✓	307.00	100.000

Demand overview (Pedestrians)

Arm	Profile type	Average pedestrian flow (Ped/hr)
1 - Tyrrelstown Plaza (E)	Global	0.00
2 - The Boulevard (S)	Global	0.00
3 - Park Boulevard (W)	Global	0.00
4 - The Boulevard (N)	Global	0.00

Origin-Destination Data

Demand (PCU/hr)

	To				
		1 - Tyrrelstown Plaza (E)	2 - The Boulevard (S)	3 - Park Boulevard (W)	4 - The Boulevard (N)
From	1 - Tyrrelstown Plaza (E)	0.000	52.000	80.000	43.000
	2 - The Boulevard (S)	396.000	0.000	50.000	83.000
	3 - Park Boulevard (W)	165.000	112.000	0.000	5.000
	4 - The Boulevard (N)	107.000	198.000	2.000	0.000

Proportions

	To			
		1 - Tyrrelstown Plaza (E)	2 - The Boulevard (S)	3 - P Boule (W)
From	1 - Tyrrelstown Plaza (E)	0.00	0.30	0.4
	2 - The Boulevard (S)	0.75	0.00	0.0
	3 - Park Boulevard (W)	0.59	0.40	0.0
	4 - The Boulevard (N)	0.35	0.64	0.0

Vehicle Mix

Heavy Vehicle proportion

	To				
		1 - Tyrrelstown Plaza (E)	2 - The Boulevard (S)	3 - Park Boulevard (W)	4 - The Boulevard (N)
From	1 - Tyrrelstown Plaza (E)	0	0	0	0
	2 - The Boulevard (S)	0	0	0	0
	3 - Park Boulevard (W)	0	0	0	0
	4 - The Boulevard (N)	0	0	0	0

Average PCU Per Veh

	To			
		1 - Tyrrelstown Plaza (E)	2 - The Boulevard (S)	3 - P Boule (W)
From	1 - Tyrrelstown Plaza (E)	1.000	1.000	1.0
	2 - The Boulevard (S)	1.000	1.000	1.0
	3 - Park Boulevard (W)	1.000	1.000	1.0
	4 - The Boulevard (N)	1.000	1.000	1.0

Detailed Demand Data

Demand for each time segment

Time Segment	Arm	Demand (PCU/hr)	Demand in PCU (PCU/hr)	Pedestrian Demand (Ped/hr)
08:00-08:15	1 - Tyrrelstown Plaza (E)	131.75	131.75	0.00
	2 - The Boulevard (S)	398.26	398.26	0.00
	3 - Park Boulevard (W)	212.30	212.30	0.00
	4 - The Boulevard (N)	231.13	231.13	0.00
08:15-08:30	1 - Tyrrelstown Plaza (E)	157.32	157.32	0.00
	2 - The Boulevard (S)	475.56	475.56	0.00
	3 - Park Boulevard (W)	253.51	253.51	0.00
	4 - The Boulevard (N)	275.99	275.99	0.00
08:30-08:45	1 - Tyrrelstown Plaza (E)	192.68	192.68	0.00
	2 - The Boulevard (S)	582.44	582.44	0.00
	3 - Park Boulevard (W)	310.49	310.49	0.00
	4 - The Boulevard (N)	338.01	338.01	0.00
08:45-09:00	1 - Tyrrelstown Plaza (E)	192.68	192.68	0.00
	2 - The Boulevard (S)	582.44	582.44	0.00
	3 - Park Boulevard (W)	310.49	310.49	0.00
	4 - The Boulevard (N)	338.01	338.01	0.00
09:00-09:15	1 - Tyrrelstown Plaza (E)	157.32	157.32	0.00
	2 - The Boulevard (S)	475.56	475.56	0.00
	3 - Park Boulevard (W)	253.51	253.51	0.00
	4 - The Boulevard (N)	275.99	275.99	0.00
09:15-09:30	1 - Tyrrelstown Plaza (E)	131.75	131.75	0.00
	2 - The Boulevard (S)	398.26	398.26	0.00
	3 - Park Boulevard (W)	212.30	212.30	0.00
	4 - The Boulevard (N)	231.13	231.13	0.00

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
1 - Tyrrelstown Plaza (E)	0.19	4.50	0.2	A	160.58	240.87
2 - The Boulevard (S)	0.43	4.62	0.7	A	485.42	728.13
3 - Park Boulevard (W)	0.37	6.73	0.6	A	258.77	388.15
4 - The Boulevard (N)	0.39	6.86	0.6	A	281.71	422.56

Main Results for each time segment

Main results: (08:00-08:15)

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
1 - Tyrrelstown Plaza (E)	131.75	32.94	233.65	0.00	1048.92	0.126	131.18	500.61	0.0	0.1	3.920	A
2 - The Boulevard (S)	398.26	99.56	93.70	0.00	1387.68	0.287	396.66	271.13	0.0	0.4	3.626	A
3 - Park Boulevard (W)	212.30	53.08	391.40	0.00	943.47	0.225	211.15	98.96	0.0	0.3	4.916	A
4 - The Boulevard (N)	231.13	57.78	504.34	0.00	996.75	0.232	229.93	98.21	0.0	0.3	4.688	A

Main results: (08:15-08:30)

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
1 - Tyrrelstown Plaza (E)	157.32	39.33	280.03	0.00	1024.83	0.154	157.17	599.76	0.1	0.2	4.149	A
2 - The Boulevard (S)	475.56	118.89	112.26	0.00	1376.55	0.345	475.06	324.94	0.4	0.5	3.992	A
3 - Park Boulevard (W)	253.51	63.38	468.78	0.00	902.15	0.281	253.12	118.55	0.3	0.4	5.543	A
4 - The Boulevard (N)	275.99	69.00	604.25	0.00	940.00	0.294	275.54	117.64	0.3	0.4	5.414	A

Main results: (08:30-08:45)

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
1 - Tyrrelstown Plaza (E)	192.68	48.17	342.64	0.00	992.31	0.194	192.44	734.09	0.2	0.2	4.499	A
2 - The Boulevard (S)	582.44	145.61	137.46	0.00	1361.45	0.428	581.57	397.63	0.5	0.7	4.611	A
3 - Park Boulevard (W)	310.49	77.62	573.89	0.00	846.03	0.367	309.75	145.14	0.4	0.6	6.703	A
4 - The Boulevard (N)	338.01	84.50	739.61	0.00	863.12	0.392	337.12	144.03	0.4	0.6	6.833	A

Main results: (08:45-09:00)

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
1 - Tyrrelstown Plaza (E)	192.68	48.17	343.50	0.00	991.86	0.194	192.68	735.46	0.2	0.2	4.504	A
2 - The Boulevard (S)	582.44	145.61	137.63	0.00	1361.35	0.428	582.43	398.55	0.7	0.7	4.621	A
3 - Park Boulevard (W)	310.49	77.62	574.72	0.00	845.58	0.367	310.47	145.33	0.6	0.6	6.726	A
4 - The Boulevard (N)	338.01	84.50	740.96	0.00	862.35	0.392	338.00	144.23	0.6	0.6	6.864	A

Main results: (09:00-09:15)

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
1 - Tyrrelstown Plaza (E)	157.32	39.33	281.35	0.00	1024.14	0.154	157.55	601.89	0.2	0.2	4.156	A
2 - The Boulevard (S)	475.56	118.89	112.54	0.00	1376.38	0.346	476.41	326.36	0.7	0.5	4.005	A
3 - Park Boulevard (W)	253.51	63.38	470.10	0.00	901.45	0.281	254.24	118.86	0.6	0.4	5.570	A
4 - The Boulevard (N)	275.99	69.00	606.37	0.00	938.80	0.294	276.87	117.97	0.6	0.4	5.447	A

Main results: (09:15-09:30)

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
1 - Tyrrelstown Plaza (E)	131.75	32.94	235.35	0.00	1048.03	0.126	131.90	503.68	0.2	0.1	3.929	A
2 - The Boulevard (S)	398.26	99.56	94.22	0.00	1387.36	0.287	398.77	273.04	0.5	0.4	3.645	A
3 - Park Boulevard (W)	212.30	53.08	393.48	0.00	942.36	0.225	212.71	99.50	0.4	0.3	4.938	A
4 - The Boulevard (N)	231.13	57.78	507.45	0.00	994.98	0.232	231.59	98.75	0.4	0.3	4.718	A

Do-Nothing - DN 2038, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Pedestrian Crossing	1 - Tyrrelstown Plaza (E) - Pedestrian crossing	Pedestrian crossing uses default settings only. Is this correct?
Warning	Pedestrian Crossing	1 - Tyrrelstown Plaza (E) - Pedestrian crossing	Pedestrian crossing uses default flow of 0. Is this correct?
Warning	Pedestrian Crossing	2 - The Boulevard (S) - Pedestrian crossing	Pedestrian crossing uses default settings only. Is this correct?
Warning	Pedestrian Crossing	2 - The Boulevard (S) - Pedestrian crossing	Pedestrian crossing uses default flow of 0. Is this correct?
Warning	Pedestrian Crossing	3 - Park Boulevard (W) - Pedestrian crossing	Pedestrian crossing uses default settings only. Is this correct?
Warning	Pedestrian Crossing	3 - Park Boulevard (W) - Pedestrian crossing	Pedestrian crossing uses default flow of 0. Is this correct?
Warning	Pedestrian Crossing	4 - The Boulevard (N) - Pedestrian crossing	Pedestrian crossing uses default settings only. Is this correct?
Warning	Pedestrian Crossing	4 - The Boulevard (N) - Pedestrian crossing	Pedestrian crossing uses default flow of 0. Is this correct?

Analysis Set Details

ID	Name	Include in report	Use specific Demand Set (s)	Specific Demand Set (s)	Network flow scaling factor (%)	Network capacity scaling factor (%)
A1	Do-Nothing	✓	✓	D1,D2,D3,D4,D5,D6	100.000	100.000

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (s)	Junction LOS
1 - Boulevard - Park Boulevard Roundabout	Boulevard - Park Boulevard Roundabout	Standard Roundabout	1,2,3,4	5.61	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Name	Description
1	Tyrrelstown Plaza (E)	
2	The Boulevard (S)	
3	Park Boulevard (W)	
4	The Boulevard (N)	

Capacity Options

Arm	Minimum capacity (PCU/hr)	Maximum capacity (PCU/hr)	Assume flat start profile	Initial queue (PCU)
1 - Tyrrelstown Plaza (E)	0.00	99999.00		0.00
2 - The Boulevard (S)	0.00	99999.00		0.00
3 - Park Boulevard (W)	0.00	99999.00		0.00
4 - The Boulevard (N)	0.00	99999.00		0.00

Roundabout Geometry

Arm	V - Approach road half-width (m)	E - Entry width (m)	I' - Effective flare length (m)	R - Entry radius (m)	D - Inscribed circle diameter (m)	PHI - Conflict (entry) angle (deg)	Exit only
1 - Tyrrelstown Plaza (E)	3.30	6.00	4.5	22.0	33.7	56.0	
2 - The Boulevard (S)	3.50	7.00	6.6	35.0	33.7	38.0	
3 - Park Boulevard (W)	3.00	5.30	4.8	15.0	33.7	33.0	
4 - The Boulevard (N)	3.50	4.80	5.6	19.0	33.7	30.0	

Pedestrian Crossings

Arm	Crossing type	Average pedestrian flow (Ped/hr)
1 - Tyrrelstown Plaza (E)	Zebra	0.00
2 - The Boulevard (S)	Zebra	0.00
3 - Park Boulevard (W)	Zebra	0.00
4 - The Boulevard (N)	Zebra	0.00

Zebra Crossings

Arm	Space between crossing and junction entry (Zebra) (PCU)	Vehicles queueing on exit (Zebra) (PCU)	Central Refuge	Crossing data type	Crossing length (m)	Crossing time (s)
1 - Tyrrelstown Plaza (E)	1.00	1.00		Distance	0.00	0.00
2 - The Boulevard (S)	1.00	1.00		Distance	0.00	0.00
3 - Park Boulevard (W)	1.00	1.00		Distance	0.00	0.00
4 - The Boulevard (N)	1.00	1.00		Distance	0.00	0.00

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Arm	Final slope	Final intercept (PCU/hr)
1 - Tyrrelstown Plaza (E)	0.519	1170.274
2 - The Boulevard (S)	0.599	1443.830
3 - Park Boulevard (W)	0.534	1152.465
4 - The Boulevard (N)	0.568	1283.197

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

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Model start time (HH:mm)	Model finish time (HH:mm)	Time segment length (min)	Run automatically
D6	DN 2038	PM	ONE HOUR	17:00	18:30	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 (%)
1 - Tyrrelstown Plaza (E)		ONE HOUR	✓	248.00	100.000
2 - The Boulevard (S)		ONE HOUR	✓	660.00	100.000
3 - Park Boulevard (W)		ONE HOUR	✓	135.00	100.000
4 - The Boulevard (N)		ONE HOUR	✓	166.00	100.000

Demand overview (Pedestrians)

Arm	Profile type	Average pedestrian flow (Ped/hr)
1 - Tyrrelstown Plaza (E)	Global	0.00
2 - The Boulevard (S)	Global	0.00
3 - Park Boulevard (W)	Global	0.00
4 - The Boulevard (N)	Global	0.00

Origin-Destination Data

Demand (PCU/hr)

		To			
		1 - Tyrrelstown Plaza (E)	2 - The Boulevard (S)	3 - Park Boulevard (W)	4 - The Boulevard (N)
From	1 - Tyrrelstown Plaza (E)	0.000	32.000	122.000	94.000
	2 - The Boulevard (S)	388.000	0.000	120.000	152.000
	3 - Park Boulevard (W)	87.000	46.000	0.000	2.000
	4 - The Boulevard (N)	60.000	104.000	2.000	0.000

Proportions

		To		
		1 - Tyrrelstown Plaza (E)	2 - The Boulevard (S)	3 - P Boule (W)
From	1 - Tyrrelstown Plaza (E)	0.00	0.13	0.4
	2 - The Boulevard (S)	0.59	0.00	0.1
	3 - Park Boulevard (W)	0.64	0.34	0.0
	4 - The Boulevard (N)	0.36	0.63	0.0

Vehicle Mix

Heavy Vehicle proportion

		To			
		1 - Tyrrelstown Plaza (E)	2 - The Boulevard (S)	3 - Park Boulevard (W)	4 - The Boulevard (N)
From	1 - Tyrrelstown Plaza (E)	0	0	0	0
	2 - The Boulevard (S)	0	0	0	0
	3 - Park Boulevard (W)	0	0	0	0
	4 - The Boulevard (N)	0	0	0	0

Average PCU Per Veh

		To		
		1 - Tyrrelstown Plaza (E)	2 - The Boulevard (S)	3 - P Boule (W)
From	1 - Tyrrelstown Plaza (E)	1.000	1.000	1.0
	2 - The Boulevard (S)	1.000	1.000	1.0
	3 - Park Boulevard (W)	1.000	1.000	1.0
	4 - The Boulevard (N)	1.000	1.000	1.0

Detailed Demand Data

Demand for each time segment

Time Segment	Arm	Demand (PCU/hr)	Demand in PCU (PCU/hr)	Pedestrian Demand (Ped/hr)
17:00-17:15	1 - Tyrrelstown Plaza (E)	186.71	186.71	0.00
	2 - The Boulevard (S)	496.88	496.88	0.00
	3 - Park Boulevard (W)	101.64	101.64	0.00
	4 - The Boulevard (N)	124.97	124.97	0.00
17:15-17:30	1 - Tyrrelstown Plaza (E)	222.95	222.95	0.00
	2 - The Boulevard (S)	593.33	593.33	0.00
	3 - Park Boulevard (W)	121.36	121.36	0.00
	4 - The Boulevard (N)	149.23	149.23	0.00
17:30-17:45	1 - Tyrrelstown Plaza (E)	273.05	273.05	0.00
	2 - The Boulevard (S)	726.67	726.67	0.00
	3 - Park Boulevard (W)	148.64	148.64	0.00
	4 - The Boulevard (N)	182.77	182.77	0.00
17:45-18:00	1 - Tyrrelstown Plaza (E)	273.05	273.05	0.00
	2 - The Boulevard (S)	726.67	726.67	0.00
	3 - Park Boulevard (W)	148.64	148.64	0.00
	4 - The Boulevard (N)	182.77	182.77	0.00
18:00-18:15	1 - Tyrrelstown Plaza (E)	222.95	222.95	0.00
	2 - The Boulevard (S)	593.33	593.33	0.00
	3 - Park Boulevard (W)	121.36	121.36	0.00
	4 - The Boulevard (N)	149.23	149.23	0.00
18:15-18:30	1 - Tyrrelstown Plaza (E)	186.71	186.71	0.00
	2 - The Boulevard (S)	496.88	496.88	0.00
	3 - Park Boulevard (W)	101.64	101.64	0.00
	4 - The Boulevard (N)	124.97	124.97	0.00

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
1 - Tyrrelstown Plaza (E)	0.25	4.44	0.3	A	227.57	341.35
2 - The Boulevard (S)	0.56	6.28	1.3	A	605.63	908.44
3 - Park Boulevard (W)	0.19	5.70	0.2	A	123.88	185.82
4 - The Boulevard (N)	0.19	4.65	0.2	A	152.32	228.49

Main Results for each time segment

Main results: (17:00-17:15)

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
1 - Tyrrelstown Plaza (E)	186.71	46.68	113.92	0.00	1111.10	0.168	185.90	400.89	0.0	0.2	3.888	A
2 - The Boulevard (S)	496.88	124.22	163.42	0.00	1345.89	0.369	494.56	136.41	0.0	0.6	4.218	A
3 - Park Boulevard (W)	101.64	25.41	475.10	0.00	898.77	0.113	101.13	182.87	0.0	0.1	4.510	A
4 - The Boulevard (N)	124.97	31.24	390.37	0.00	1061.48	0.118	124.44	185.86	0.0	0.1	3.840	A

Main results: (17:15-17:30)

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
1 - Tyrrelstown Plaza (E)	222.95	55.74	136.49	0.00	1099.38	0.203	222.74	480.28	0.2	0.3	4.105	A
2 - The Boulevard (S)	593.33	148.33	195.79	0.00	1326.49	0.447	592.44	163.44	0.6	0.8	4.898	A
3 - Park Boulevard (W)	121.36	30.34	569.15	0.00	848.55	0.143	121.21	219.09	0.1	0.2	4.948	A
4 - The Boulevard (N)	149.23	37.31	467.70	0.00	1017.56	0.147	149.08	222.66	0.1	0.2	4.145	A

Main results: (17:30-17:45)

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
1 - Tyrrelstown Plaza (E)	273.05	68.26	167.10	0.00	1083.48	0.252	272.73	587.73	0.3	0.3	4.438	A
2 - The Boulevard (S)	726.67	181.67	239.73	0.00	1300.15	0.559	724.89	200.09	0.8	1.2	6.219	A
3 - Park Boulevard (W)	148.64	37.16	696.46	0.00	780.58	0.190	148.37	268.16	0.2	0.2	5.691	A
4 - The Boulevard (N)	182.77	45.69	572.32	0.00	958.14	0.191	182.52	272.51	0.2	0.2	4.640	A

Main results: (17:45-18:00)

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
1 - Tyrrelstown Plaza (E)	273.05	68.26	167.35	0.00	1083.35	0.252	273.05	589.02	0.3	0.3	4.442	A
2 - The Boulevard (S)	726.67	181.67	240.02	0.00	1299.98	0.559	726.63	200.38	1.2	1.3	6.278	A
3 - Park Boulevard (W)	148.64	37.16	698.01	0.00	779.75	0.191	148.63	268.64	0.2	0.2	5.703	A
4 - The Boulevard (N)	182.77	45.69	573.60	0.00	957.41	0.191	182.77	273.04	0.2	0.2	4.646	A

Main results: (18:00-18:15)

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
1 - Tyrrelstown Plaza (E)	222.95	55.74	136.89	0.00	1099.17	0.203	223.27	482.25	0.3	0.3	4.111	A
2 - The Boulevard (S)	593.33	148.33	196.26	0.00	1326.21	0.447	595.09	163.90	1.3	0.8	4.937	A
3 - Park Boulevard (W)	121.36	30.34	571.51	0.00	847.29	0.143	121.63	219.83	0.2	0.2	4.962	A
4 - The Boulevard (N)	149.23	37.31	469.66	0.00	1016.44	0.147	149.48	223.48	0.2	0.2	4.154	A

Main results: (18:15-18:30)

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
1 - Tyrrelstown Plaza (E)	186.71	46.68	114.59	0.00	1110.76	0.168	186.92	403.47	0.3	0.2	3.898	A
2 - The Boulevard (S)	496.88	124.22	164.31	0.00	1345.36	0.369	497.79	137.20	0.8	0.6	4.251	A
3 - Park Boulevard (W)	101.64	25.41	478.13	0.00	897.16	0.113	101.79	183.97	0.2	0.1	4.526	A
4 - The Boulevard (N)	124.97	31.24	392.93	0.00	1060.03	0.118	125.13	187.00	0.2	0.1	3.852	A

Do-Something - DS 2023, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Pedestrian Crossing	1 - Tyrrelstown Plaza (E) - Pedestrian crossing	Pedestrian crossing uses default settings only. Is this correct?
Warning	Pedestrian Crossing	1 - Tyrrelstown Plaza (E) - Pedestrian crossing	Pedestrian crossing uses default flow of 0. Is this correct?
Warning	Pedestrian Crossing	2 - The Boulevard (S) - Pedestrian crossing	Pedestrian crossing uses default settings only. Is this correct?
Warning	Pedestrian Crossing	2 - The Boulevard (S) - Pedestrian crossing	Pedestrian crossing uses default flow of 0. Is this correct?
Warning	Pedestrian Crossing	3 - Park Boulevard (W) - Pedestrian crossing	Pedestrian crossing uses default settings only. Is this correct?
Warning	Pedestrian Crossing	3 - Park Boulevard (W) - Pedestrian crossing	Pedestrian crossing uses default flow of 0. Is this correct?
Warning	Pedestrian Crossing	4 - The Boulevard (N) - Pedestrian crossing	Pedestrian crossing uses default settings only. Is this correct?
Warning	Pedestrian Crossing	4 - The Boulevard (N) - Pedestrian crossing	Pedestrian crossing uses default flow of 0. Is this correct?

Analysis Set Details

ID	Name	Include in report	Use specific Demand Set (s)	Specific Demand Set(s)	Network flow scaling factor (%)	Network capacity scaling factor (%)
A2	Do-Something	✓	✓	D7,D8,D9,D10,D11,D12	100.000	100.000

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (s)	Junction LOS
1 - Boulevard - Park Boulevard Roundabout	Boulevard - Park Boulevard Roundabout	Standard Roundabout	1,2,3,4	4.61	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Name	Description
1	Tyrrelstown Plaza (E)	
2	The Boulevard (S)	
3	Park Boulevard (W)	
4	The Boulevard (N)	

Capacity Options

Arm	Minimum capacity (PCU/hr)	Maximum capacity (PCU/hr)	Assume flat start profile	Initial queue (PCU)
1 - Tyrrelstown Plaza (E)	0.00	99999.00		0.00
2 - The Boulevard (S)	0.00	99999.00		0.00
3 - Park Boulevard (W)	0.00	99999.00		0.00
4 - The Boulevard (N)	0.00	99999.00		0.00

Roundabout Geometry

Arm	V - Approach road half-width (m)	E - Entry width (m)	I' - Effective flare length (m)	R - Entry radius (m)	D - Inscribed circle diameter (m)	PHI - Conflict (entry) angle (deg)	Exit only
1 - Tyrrelstown Plaza (E)	3.30	6.00	4.5	22.0	33.7	56.0	
2 - The Boulevard (S)	3.50	7.00	6.6	35.0	33.7	38.0	
3 - Park Boulevard (W)	3.00	5.30	4.8	15.0	33.7	33.0	
4 - The Boulevard (N)	3.50	4.80	5.6	19.0	33.7	30.0	

Pedestrian Crossings

Arm	Crossing type	Average pedestrian flow (Ped/hr)
1 - Tyrrelstown Plaza (E)	Zebra	0.00
2 - The Boulevard (S)	Zebra	0.00
3 - Park Boulevard (W)	Zebra	0.00
4 - The Boulevard (N)	Zebra	0.00

Zebra Crossings

Arm	Space between crossing and junction entry (Zebra) (PCU)	Vehicles queueing on exit (Zebra) (PCU)	Central Refuge	Crossing data type	Crossing length (m)	Crossing time (s)
1 - Tyrrelstown Plaza (E)	1.00	1.00		Distance	0.00	0.00
2 - The Boulevard (S)	1.00	1.00		Distance	0.00	0.00
3 - Park Boulevard (W)	1.00	1.00		Distance	0.00	0.00
4 - The Boulevard (N)	1.00	1.00		Distance	0.00	0.00

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Arm	Final slope	Final intercept (PCU/hr)
1 - Tyrrelstown Plaza (E)	0.519	1170.274
2 - The Boulevard (S)	0.599	1443.830
3 - Park Boulevard (W)	0.534	1152.465
4 - The Boulevard (N)	0.568	1283.197

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

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Model start time (HH:mm)	Model finish time (HH:mm)	Time segment length (min)	Run automatically
D7	DS 2023	AM	ONE HOUR	08:00	09:30	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 (%)
1 - Tyrrelstown Plaza (E)		ONE HOUR	✓	117.00	100.000
2 - The Boulevard (S)		ONE HOUR	✓	436.00	100.000
3 - Park Boulevard (W)		ONE HOUR	✓	216.00	100.000
4 - The Boulevard (N)		ONE HOUR	✓	250.00	100.000

Demand overview (Pedestrians)

Arm	Profile type	Average pedestrian flow (Ped/hr)
1 - Tyrrelstown Plaza (E)	Global	0.00
2 - The Boulevard (S)	Global	0.00
3 - Park Boulevard (W)	Global	0.00
4 - The Boulevard (N)	Global	0.00

Origin-Destination Data

Demand (PCU/hr)

	To				
		1 - Tyrrelstown Plaza (E)	2 - The Boulevard (S)	3 - Park Boulevard (W)	4 - The Boulevard (N)
From	1 - Tyrrelstown Plaza (E)	0.000	40.000	50.000	27.000
	2 - The Boulevard (S)	323.000	0.000	43.000	70.000
	3 - Park Boulevard (W)	116.000	96.000	0.000	4.000
	4 - The Boulevard (N)	78.000	170.000	2.000	0.000

Proportions

	To			
		1 - Tyrrelstown Plaza (E)	2 - The Boulevard (S)	3 - P Boule (W)
From	1 - Tyrrelstown Plaza (E)	0.00	0.34	0.4
	2 - The Boulevard (S)	0.74	0.00	0.1
	3 - Park Boulevard (W)	0.54	0.44	0.0
	4 - The Boulevard (N)	0.31	0.68	0.0

Vehicle Mix

Heavy Vehicle proportion

	To				
		1 - Tyrrelstown Plaza (E)	2 - The Boulevard (S)	3 - Park Boulevard (W)	4 - The Boulevard (N)
From	1 - Tyrrelstown Plaza (E)	0	0	0	0
	2 - The Boulevard (S)	0	0	0	0
	3 - Park Boulevard (W)	0	0	0	0
	4 - The Boulevard (N)	0	0	0	0

Average PCU Per Veh

	To			
		1 - Tyrrelstown Plaza (E)	2 - The Boulevard (S)	3 - P Boule (W)
From	1 - Tyrrelstown Plaza (E)	1.000	1.000	1.0
	2 - The Boulevard (S)	1.000	1.000	1.0
	3 - Park Boulevard (W)	1.000	1.000	1.0
	4 - The Boulevard (N)	1.000	1.000	1.0

Detailed Demand Data

Demand for each time segment

Time Segment	Arm	Demand (PCU/hr)	Demand in PCU (PCU/hr)	Pedestrian Demand (Ped/hr)
08:00-08:15	1 - Tyrrelstown Plaza (E)	88.08	88.08	0.00
	2 - The Boulevard (S)	328.24	328.24	0.00
	3 - Park Boulevard (W)	162.62	162.62	0.00
	4 - The Boulevard (N)	188.21	188.21	0.00
08:15-08:30	1 - Tyrrelstown Plaza (E)	105.18	105.18	0.00
	2 - The Boulevard (S)	391.96	391.96	0.00
	3 - Park Boulevard (W)	194.18	194.18	0.00
	4 - The Boulevard (N)	224.74	224.74	0.00
08:30-08:45	1 - Tyrrelstown Plaza (E)	128.82	128.82	0.00
	2 - The Boulevard (S)	480.04	480.04	0.00
	3 - Park Boulevard (W)	237.82	237.82	0.00
	4 - The Boulevard (N)	275.26	275.26	0.00
08:45-09:00	1 - Tyrrelstown Plaza (E)	128.82	128.82	0.00
	2 - The Boulevard (S)	480.04	480.04	0.00
	3 - Park Boulevard (W)	237.82	237.82	0.00
	4 - The Boulevard (N)	275.26	275.26	0.00
09:00-09:15	1 - Tyrrelstown Plaza (E)	105.18	105.18	0.00
	2 - The Boulevard (S)	391.96	391.96	0.00
	3 - Park Boulevard (W)	194.18	194.18	0.00
	4 - The Boulevard (N)	224.74	224.74	0.00
09:15-09:30	1 - Tyrrelstown Plaza (E)	88.08	88.08	0.00
	2 - The Boulevard (S)	328.24	328.24	0.00
	3 - Park Boulevard (W)	162.62	162.62	0.00
	4 - The Boulevard (N)	188.21	188.21	0.00

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
1 - Tyrrelstown Plaza (E)	0.13	4.05	0.1	A	107.36	161.04
2 - The Boulevard (S)	0.34	3.95	0.5	A	400.08	600.12
3 - Park Boulevard (W)	0.26	5.39	0.4	A	198.21	297.31
4 - The Boulevard (N)	0.29	5.35	0.4	A	229.40	344.11

Main Results for each time segment

Main results: (08:00-08:15)

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
1 - Tyrrelstown Plaza (E)	88.08	22.02	200.82	0.00	1065.97	0.083	87.73	387.64	0.0	0.1	3.680	A
2 - The Boulevard (S)	328.24	82.06	59.23	0.00	1408.33	0.233	327.03	229.31	0.0	0.3	3.327	A
3 - Park Boulevard (W)	162.62	40.65	315.02	0.00	984.25	0.165	161.83	71.24	0.0	0.2	4.374	A
4 - The Boulevard (N)	188.21	47.05	401.11	0.00	1055.38	0.178	187.35	75.75	0.0	0.2	4.143	A

Main results: (08:15-08:30)

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
1 - Tyrrelstown Plaza (E)	105.18	26.30	240.63	0.00	1045.29	0.101	105.09	464.31	0.1	0.1	3.828	A
2 - The Boulevard (S)	391.96	97.99	70.96	0.00	1401.30	0.280	391.62	274.77	0.3	0.4	3.565	A
3 - Park Boulevard (W)	194.18	48.54	377.25	0.00	951.03	0.204	193.95	85.33	0.2	0.3	4.754	A
4 - The Boulevard (N)	224.74	56.19	480.48	0.00	1010.30	0.222	224.47	90.72	0.2	0.3	4.580	A

Main results: (08:30-08:45)

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
1 - Tyrrelstown Plaza (E)	128.82	32.20	294.57	0.00	1017.28	0.127	128.69	568.46	0.1	0.1	4.051	A
2 - The Boulevard (S)	480.04	120.01	86.89	0.00	1391.75	0.345	479.50	336.36	0.4	0.5	3.943	A
3 - Park Boulevard (W)	237.82	59.46	461.90	0.00	905.82	0.263	237.43	104.48	0.3	0.4	5.382	A
4 - The Boulevard (N)	275.26	68.81	588.25	0.00	949.09	0.290	274.77	111.08	0.3	0.4	5.335	A

Main results: (08:45-09:00)

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
1 - Tyrrelstown Plaza (E)	128.82	32.20	295.07	0.00	1017.02	0.127	128.82	569.22	0.1	0.1	4.052	A
2 - The Boulevard (S)	480.04	120.01	86.98	0.00	1391.70	0.345	480.04	336.90	0.5	0.5	3.948	A
3 - Park Boulevard (W)	237.82	59.46	462.42	0.00	905.55	0.263	237.81	104.60	0.4	0.4	5.390	A
4 - The Boulevard (N)	275.26	68.81	589.04	0.00	948.64	0.290	275.25	111.20	0.4	0.4	5.345	A

Main results: (09:00-09:15)

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
1 - Tyrrelstown Plaza (E)	105.18	26.30	241.42	0.00	1044.88	0.101	105.31	465.53	0.1	0.1	3.831	A
2 - The Boulevard (S)	391.96	97.99	71.11	0.00	1401.21	0.280	392.49	275.63	0.5	0.4	3.572	A
3 - Park Boulevard (W)	194.18	48.54	378.09	0.00	950.58	0.204	194.56	85.51	0.4	0.3	4.765	A
4 - The Boulevard (N)	224.74	56.19	481.73	0.00	1009.59	0.223	225.22	90.92	0.4	0.3	4.592	A

Main results: (09:15-09:30)

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
1 - Tyrrelstown Plaza (E)	88.08	22.02	202.06	0.00	1065.32	0.083	88.17	389.69	0.1	0.1	3.683	A
2 - The Boulevard (S)	328.24	82.06	59.54	0.00	1408.15	0.233	328.58	230.70	0.4	0.3	3.334	A
3 - Park Boulevard (W)	162.62	40.65	316.52	0.00	983.45	0.165	162.85	71.59	0.3	0.2	4.387	A
4 - The Boulevard (N)	188.21	47.05	403.26	0.00	1054.16	0.179	188.49	76.12	0.3	0.2	4.159	A

Do-Something - DS 2023, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Pedestrian Crossing	1 - Tyrrelstown Plaza (E) - Pedestrian crossing	Pedestrian crossing uses default settings only. Is this correct?
Warning	Pedestrian Crossing	1 - Tyrrelstown Plaza (E) - Pedestrian crossing	Pedestrian crossing uses default flow of 0. Is this correct?
Warning	Pedestrian Crossing	2 - The Boulevard (S) - Pedestrian crossing	Pedestrian crossing uses default settings only. Is this correct?
Warning	Pedestrian Crossing	2 - The Boulevard (S) - Pedestrian crossing	Pedestrian crossing uses default flow of 0. Is this correct?
Warning	Pedestrian Crossing	3 - Park Boulevard (W) - Pedestrian crossing	Pedestrian crossing uses default settings only. Is this correct?
Warning	Pedestrian Crossing	3 - Park Boulevard (W) - Pedestrian crossing	Pedestrian crossing uses default flow of 0. Is this correct?
Warning	Pedestrian Crossing	4 - The Boulevard (N) - Pedestrian crossing	Pedestrian crossing uses default settings only. Is this correct?
Warning	Pedestrian Crossing	4 - The Boulevard (N) - Pedestrian crossing	Pedestrian crossing uses default flow of 0. Is this correct?

Analysis Set Details

ID	Name	Include in report	Use specific Demand Set (s)	Specific Demand Set(s)	Network flow scaling factor (%)	Network capacity scaling factor (%)
A2	Do-Something	✓	✓	D7,D8,D9,D10,D11,D12	100.000	100.000

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (s)	Junction LOS
1 - Boulevard - Park Boulevard Roundabout	Boulevard - Park Boulevard Roundabout	Standard Roundabout	1,2,3,4	4.98	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Name	Description
1	Tyrrelstown Plaza (E)	
2	The Boulevard (S)	
3	Park Boulevard (W)	
4	The Boulevard (N)	

Capacity Options

Arm	Minimum capacity (PCU/hr)	Maximum capacity (PCU/hr)	Assume flat start profile	Initial queue (PCU)
1 - Tyrrelstown Plaza (E)	0.00	99999.00		0.00
2 - The Boulevard (S)	0.00	99999.00		0.00
3 - Park Boulevard (W)	0.00	99999.00		0.00
4 - The Boulevard (N)	0.00	99999.00		0.00

Roundabout Geometry

Arm	V - Approach road half-width (m)	E - Entry width (m)	I' - Effective flare length (m)	R - Entry radius (m)	D - Inscribed circle diameter (m)	PHI - Conflict (entry) angle (deg)	Exit only
1 - Tyrrelstown Plaza (E)	3.30	6.00	4.5	22.0	33.7	56.0	
2 - The Boulevard (S)	3.50	7.00	6.6	35.0	33.7	38.0	
3 - Park Boulevard (W)	3.00	5.30	4.8	15.0	33.7	33.0	
4 - The Boulevard (N)	3.50	4.80	5.6	19.0	33.7	30.0	

Pedestrian Crossings

Arm	Crossing type	Average pedestrian flow (Ped/hr)
1 - Tyrrelstown Plaza (E)	Zebra	0.00
2 - The Boulevard (S)	Zebra	0.00
3 - Park Boulevard (W)	Zebra	0.00
4 - The Boulevard (N)	Zebra	0.00

Zebra Crossings

Arm	Space between crossing and junction entry (Zebra) (PCU)	Vehicles queueing on exit (Zebra) (PCU)	Central Refuge	Crossing data type	Crossing length (m)	Crossing time (s)
1 - Tyrrelstown Plaza (E)	1.00	1.00		Distance	0.00	0.00
2 - The Boulevard (S)	1.00	1.00		Distance	0.00	0.00
3 - Park Boulevard (W)	1.00	1.00		Distance	0.00	0.00
4 - The Boulevard (N)	1.00	1.00		Distance	0.00	0.00

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Arm	Final slope	Final intercept (PCU/hr)
1 - Tyrrelstown Plaza (E)	0.519	1170.274
2 - The Boulevard (S)	0.599	1443.830
3 - Park Boulevard (W)	0.534	1152.465
4 - The Boulevard (N)	0.568	1283.197

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

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Model start time (HH:mm)	Model finish time (HH:mm)	Time segment length (min)	Run automatically
D8	DS 2023	PM	ONE HOUR	17:00	18:30	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 (%)
1 - Tyrrelstown Plaza (E)		ONE HOUR	✓	222.00	100.000
2 - The Boulevard (S)		ONE HOUR	✓	595.00	100.000
3 - Park Boulevard (W)		ONE HOUR	✓	112.00	100.000
4 - The Boulevard (N)		ONE HOUR	✓	142.00	100.000

Demand overview (Pedestrians)

Arm	Profile type	Average pedestrian flow (Ped/hr)
1 - Tyrrelstown Plaza (E)	Global	0.00
2 - The Boulevard (S)	Global	0.00
3 - Park Boulevard (W)	Global	0.00
4 - The Boulevard (N)	Global	0.00

Origin-Destination Data

Demand (PCU/hr)

		To			
		1 - Tyrrelstown Plaza (E)	2 - The Boulevard (S)	3 - Park Boulevard (W)	4 - The Boulevard (N)
From	1 - Tyrrelstown Plaza (E)	0.000	42.000	101.000	79.000
	2 - The Boulevard (S)	361.000	0.000	103.000	131.000
	3 - Park Boulevard (W)	71.000	39.000	0.000	2.000
	4 - The Boulevard (N)	50.000	90.000	2.000	0.000

Proportions

		To		
		1 - Tyrrelstown Plaza (E)	2 - The Boulevard (S)	3 - P Boule (W)
From	1 - Tyrrelstown Plaza (E)	0.00	0.19	0.4
	2 - The Boulevard (S)	0.61	0.00	0.1
	3 - Park Boulevard (W)	0.63	0.35	0.0
	4 - The Boulevard (N)	0.35	0.63	0.0

Vehicle Mix

Heavy Vehicle proportion

		To			
		1 - Tyrrelstown Plaza (E)	2 - The Boulevard (S)	3 - Park Boulevard (W)	4 - The Boulevard (N)
From	1 - Tyrrelstown Plaza (E)	0	0	0	0
	2 - The Boulevard (S)	0	0	0	0
	3 - Park Boulevard (W)	0	0	0	0
	4 - The Boulevard (N)	0	0	0	0

Average PCU Per Veh

		To		
		1 - Tyrrelstown Plaza (E)	2 - The Boulevard (S)	3 - P Boule (W)
From	1 - Tyrrelstown Plaza (E)	1.000	1.000	1.0
	2 - The Boulevard (S)	1.000	1.000	1.0
	3 - Park Boulevard (W)	1.000	1.000	1.0
	4 - The Boulevard (N)	1.000	1.000	1.0

Detailed Demand Data

Demand for each time segment

Time Segment	Arm	Demand (PCU/hr)	Demand in PCU (PCU/hr)	Pedestrian Demand (Ped/hr)
17:00-17:15	1 - Tyrrelstown Plaza (E)	167.13	167.13	0.00
	2 - The Boulevard (S)	447.95	447.95	0.00
	3 - Park Boulevard (W)	84.32	84.32	0.00
	4 - The Boulevard (N)	106.91	106.91	0.00
17:15-17:30	1 - Tyrrelstown Plaza (E)	199.57	199.57	0.00
	2 - The Boulevard (S)	534.89	534.89	0.00
	3 - Park Boulevard (W)	100.69	100.69	0.00
	4 - The Boulevard (N)	127.66	127.66	0.00
17:30-17:45	1 - Tyrrelstown Plaza (E)	244.43	244.43	0.00
	2 - The Boulevard (S)	655.11	655.11	0.00
	3 - Park Boulevard (W)	123.31	123.31	0.00
	4 - The Boulevard (N)	156.34	156.34	0.00
17:45-18:00	1 - Tyrrelstown Plaza (E)	244.43	244.43	0.00
	2 - The Boulevard (S)	655.11	655.11	0.00
	3 - Park Boulevard (W)	123.31	123.31	0.00
	4 - The Boulevard (N)	156.34	156.34	0.00
18:00-18:15	1 - Tyrrelstown Plaza (E)	199.57	199.57	0.00
	2 - The Boulevard (S)	534.89	534.89	0.00
	3 - Park Boulevard (W)	100.69	100.69	0.00
	4 - The Boulevard (N)	127.66	127.66	0.00
18:15-18:30	1 - Tyrrelstown Plaza (E)	167.13	167.13	0.00
	2 - The Boulevard (S)	447.95	447.95	0.00
	3 - Park Boulevard (W)	84.32	84.32	0.00
	4 - The Boulevard (N)	106.91	106.91	0.00

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
1 - Tyrrelstown Plaza (E)	0.22	4.23	0.3	A	203.71	305.57
2 - The Boulevard (S)	0.49	5.38	1.0	A	545.98	818.97
3 - Park Boulevard (W)	0.15	5.19	0.2	A	102.77	154.16
4 - The Boulevard (N)	0.16	4.32	0.2	A	130.30	195.45

Main Results for each time segment

Main results: (17:00-17:15)

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
1 - Tyrrelstown Plaza (E)	167.13	41.78	98.20	0.00	1119.27	0.149	166.43	361.29	0.0	0.2	3.777	A
2 - The Boulevard (S)	447.95	111.99	136.45	0.00	1362.05	0.329	446.00	128.19	0.0	0.5	3.922	A
3 - Park Boulevard (W)	84.32	21.08	428.02	0.00	923.92	0.091	83.92	154.43	0.0	0.1	4.284	A
4 - The Boulevard (N)	106.91	26.73	353.02	0.00	1082.69	0.099	106.47	158.92	0.0	0.1	3.685	A

Main results: (17:15-17:30)

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
1 - Tyrrelstown Plaza (E)	199.57	49.89	117.65	0.00	1109.17	0.180	199.40	432.79	0.2	0.2	3.957	A
2 - The Boulevard (S)	534.89	133.72	163.47	0.00	1345.86	0.397	534.22	153.58	0.5	0.7	4.431	A
3 - Park Boulevard (W)	100.69	25.17	512.70	0.00	878.70	0.115	100.57	184.99	0.1	0.1	4.626	A
4 - The Boulevard (N)	127.66	31.91	422.90	0.00	1043.00	0.122	127.54	190.37	0.1	0.1	3.932	A

Main results: (17:30-17:45)

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
1 - Tyrrelstown Plaza (E)	244.43	61.11	144.04	0.00	1095.46	0.223	244.16	529.74	0.2	0.3	4.228	A
2 - The Boulevard (S)	655.11	163.78	200.16	0.00	1323.87	0.495	653.85	188.04	0.7	1.0	5.363	A
3 - Park Boulevard (W)	123.31	30.83	627.55	0.00	817.37	0.151	123.12	226.47	0.1	0.2	5.184	A
4 - The Boulevard (N)	156.34	39.09	517.63	0.00	989.20	0.158	156.15	233.04	0.1	0.2	4.320	A

Main results: (17:45-18:00)

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
1 - Tyrrelstown Plaza (E)	244.43	61.11	144.23	0.00	1095.36	0.223	244.42	530.68	0.3	0.3	4.230	A
2 - The Boulevard (S)	655.11	163.78	200.38	0.00	1323.74	0.495	655.08	188.27	1.0	1.0	5.383	A
3 - Park Boulevard (W)	123.31	30.83	628.66	0.00	816.78	0.151	123.31	226.80	0.2	0.2	5.190	A
4 - The Boulevard (N)	156.34	39.09	518.56	0.00	988.67	0.158	156.34	233.41	0.2	0.2	4.324	A

Main results: (18:00-18:15)

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
1 - Tyrrelstown Plaza (E)	199.57	49.89	117.95	0.00	1109.01	0.180	199.84	434.24	0.3	0.2	3.960	A
2 - The Boulevard (S)	534.89	133.72	163.83	0.00	1345.64	0.398	536.13	153.96	1.0	0.7	4.455	A
3 - Park Boulevard (W)	100.69	25.17	514.43	0.00	877.77	0.115	100.87	185.53	0.2	0.1	4.636	A
4 - The Boulevard (N)	127.66	31.91	424.35	0.00	1042.18	0.122	127.84	190.95	0.2	0.1	3.937	A

Main results: (18:15-18:30)

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
1 - Tyrrelstown Plaza (E)	167.13	41.78	98.74	0.00	1118.99	0.149	167.31	363.41	0.2	0.2	3.782	A
2 - The Boulevard (S)	447.95	111.99	137.16	0.00	1361.62	0.329	448.63	128.89	0.7	0.5	3.945	A
3 - Park Boulevard (W)	84.32	21.08	430.51	0.00	922.59	0.091	84.44	155.29	0.1	0.1	4.295	A
4 - The Boulevard (N)	106.91	26.73	355.12	0.00	1081.50	0.099	107.03	159.82	0.1	0.1	3.693	A

Do-Something - DS 2028, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Pedestrian Crossing	1 - Tyrrelstown Plaza (E) - Pedestrian crossing	Pedestrian crossing uses default settings only. Is this correct?
Warning	Pedestrian Crossing	1 - Tyrrelstown Plaza (E) - Pedestrian crossing	Pedestrian crossing uses default flow of 0. Is this correct?
Warning	Pedestrian Crossing	2 - The Boulevard (S) - Pedestrian crossing	Pedestrian crossing uses default settings only. Is this correct?
Warning	Pedestrian Crossing	2 - The Boulevard (S) - Pedestrian crossing	Pedestrian crossing uses default flow of 0. Is this correct?
Warning	Pedestrian Crossing	3 - Park Boulevard (W) - Pedestrian crossing	Pedestrian crossing uses default settings only. Is this correct?
Warning	Pedestrian Crossing	3 - Park Boulevard (W) - Pedestrian crossing	Pedestrian crossing uses default flow of 0. Is this correct?
Warning	Pedestrian Crossing	4 - The Boulevard (N) - Pedestrian crossing	Pedestrian crossing uses default settings only. Is this correct?
Warning	Pedestrian Crossing	4 - The Boulevard (N) - Pedestrian crossing	Pedestrian crossing uses default flow of 0. Is this correct?

Analysis Set Details

ID	Name	Include in report	Use specific Demand Set (s)	Specific Demand Set(s)	Network flow scaling factor (%)	Network capacity scaling factor (%)
A2	Do-Something	✓	✓	D7,D8,D9,D10,D11,D12	100.000	100.000

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (s)	Junction LOS
1 - Boulevard - Park Boulevard Roundabout	Boulevard - Park Boulevard Roundabout	Standard Roundabout	1,2,3,4	5.39	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Name	Description
1	Tyrrelstown Plaza (E)	
2	The Boulevard (S)	
3	Park Boulevard (W)	
4	The Boulevard (N)	

Capacity Options

Arm	Minimum capacity (PCU/hr)	Maximum capacity (PCU/hr)	Assume flat start profile	Initial queue (PCU)
1 - Tyrrelstown Plaza (E)	0.00	99999.00		0.00
2 - The Boulevard (S)	0.00	99999.00		0.00
3 - Park Boulevard (W)	0.00	99999.00		0.00
4 - The Boulevard (N)	0.00	99999.00		0.00

Roundabout Geometry

Arm	V - Approach road half-width (m)	E - Entry width (m)	I' - Effective flare length (m)	R - Entry radius (m)	D - Inscribed circle diameter (m)	PHI - Conflict (entry) angle (deg)	Exit only
1 - Tyrrelstown Plaza (E)	3.30	6.00	4.5	22.0	33.7	56.0	
2 - The Boulevard (S)	3.50	7.00	6.6	35.0	33.7	38.0	
3 - Park Boulevard (W)	3.00	5.30	4.8	15.0	33.7	33.0	
4 - The Boulevard (N)	3.50	4.80	5.6	19.0	33.7	30.0	

Pedestrian Crossings

Arm	Crossing type	Average pedestrian flow (Ped/hr)
1 - Tyrrelstown Plaza (E)	Zebra	0.00
2 - The Boulevard (S)	Zebra	0.00
3 - Park Boulevard (W)	Zebra	0.00
4 - The Boulevard (N)	Zebra	0.00

Zebra Crossings

Arm	Space between crossing and junction entry (Zebra) (PCU)	Vehicles queueing on exit (Zebra) (PCU)	Central Refuge	Crossing data type	Crossing length (m)	Crossing time (s)
1 - Tyrrelstown Plaza (E)	1.00	1.00		Distance	0.00	0.00
2 - The Boulevard (S)	1.00	1.00		Distance	0.00	0.00
3 - Park Boulevard (W)	1.00	1.00		Distance	0.00	0.00
4 - The Boulevard (N)	1.00	1.00		Distance	0.00	0.00

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Arm	Final slope	Final intercept (PCU/hr)
1 - Tyrrelstown Plaza (E)	0.519	1170.274
2 - The Boulevard (S)	0.599	1443.830
3 - Park Boulevard (W)	0.534	1152.465
4 - The Boulevard (N)	0.568	1283.197

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

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Model start time (HH:mm)	Model finish time (HH:mm)	Time segment length (min)	Run automatically
D9	DS 2028	AM	ONE HOUR	08:00	09:30	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 (%)
1 - Tyrrelstown Plaza (E)		ONE HOUR	✓	203.00	100.000
2 - The Boulevard (S)		ONE HOUR	✓	517.00	100.000
3 - Park Boulevard (W)		ONE HOUR	✓	268.00	100.000
4 - The Boulevard (N)		ONE HOUR	✓	290.00	100.000

Demand overview (Pedestrians)

Arm	Profile type	Average pedestrian flow (Ped/hr)
1 - Tyrrelstown Plaza (E)	Global	0.00
2 - The Boulevard (S)	Global	0.00
3 - Park Boulevard (W)	Global	0.00
4 - The Boulevard (N)	Global	0.00

Origin-Destination Data

Demand (PCU/hr)

	To				
		1 - Tyrrelstown Plaza (E)	2 - The Boulevard (S)	3 - Park Boulevard (W)	4 - The Boulevard (N)
From	1 - Tyrrelstown Plaza (E)	0.000	85.000	76.000	42.000
	2 - The Boulevard (S)	392.000	0.000	47.000	78.000
	3 - Park Boulevard (W)	157.000	106.000	0.000	5.000
	4 - The Boulevard (N)	102.000	186.000	2.000	0.000

Proportions

	To			
		1 - Tyrrelstown Plaza (E)	2 - The Boulevard (S)	3 - P Boule (W)
From	1 - Tyrrelstown Plaza (E)	0.00	0.42	0.3
	2 - The Boulevard (S)	0.76	0.00	0.0
	3 - Park Boulevard (W)	0.59	0.40	0.0
	4 - The Boulevard (N)	0.35	0.64	0.0

Vehicle Mix

Heavy Vehicle proportion

	To				
		1 - Tyrrelstown Plaza (E)	2 - The Boulevard (S)	3 - Park Boulevard (W)	4 - The Boulevard (N)
From	1 - Tyrrelstown Plaza (E)	0	0	0	0
	2 - The Boulevard (S)	0	0	0	0
	3 - Park Boulevard (W)	0	0	0	0
	4 - The Boulevard (N)	0	0	0	0

Average PCU Per Veh

	To			
		1 - Tyrrelstown Plaza (E)	2 - The Boulevard (S)	3 - P Boule (W)
From	1 - Tyrrelstown Plaza (E)	1.000	1.000	1.0
	2 - The Boulevard (S)	1.000	1.000	1.0
	3 - Park Boulevard (W)	1.000	1.000	1.0
	4 - The Boulevard (N)	1.000	1.000	1.0

Detailed Demand Data

Demand for each time segment

Time Segment	Arm	Demand (PCU/hr)	Demand in PCU (PCU/hr)	Pedestrian Demand (Ped/hr)
08:00-08:15	1 - Tyrrelstown Plaza (E)	152.83	152.83	0.00
	2 - The Boulevard (S)	389.22	389.22	0.00
	3 - Park Boulevard (W)	201.76	201.76	0.00
	4 - The Boulevard (N)	218.33	218.33	0.00
08:15-08:30	1 - Tyrrelstown Plaza (E)	182.49	182.49	0.00
	2 - The Boulevard (S)	464.77	464.77	0.00
	3 - Park Boulevard (W)	240.93	240.93	0.00
	4 - The Boulevard (N)	260.70	260.70	0.00
08:30-08:45	1 - Tyrrelstown Plaza (E)	223.51	223.51	0.00
	2 - The Boulevard (S)	569.23	569.23	0.00
	3 - Park Boulevard (W)	295.07	295.07	0.00
	4 - The Boulevard (N)	319.30	319.30	0.00
08:45-09:00	1 - Tyrrelstown Plaza (E)	223.51	223.51	0.00
	2 - The Boulevard (S)	569.23	569.23	0.00
	3 - Park Boulevard (W)	295.07	295.07	0.00
	4 - The Boulevard (N)	319.30	319.30	0.00
09:00-09:15	1 - Tyrrelstown Plaza (E)	182.49	182.49	0.00
	2 - The Boulevard (S)	464.77	464.77	0.00
	3 - Park Boulevard (W)	240.93	240.93	0.00
	4 - The Boulevard (N)	260.70	260.70	0.00
09:15-09:30	1 - Tyrrelstown Plaza (E)	152.83	152.83	0.00
	2 - The Boulevard (S)	389.22	389.22	0.00
	3 - Park Boulevard (W)	201.76	201.76	0.00
	4 - The Boulevard (N)	218.33	218.33	0.00

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
1 - Tyrrelstown Plaza (E)	0.22	4.62	0.3	A	186.28	279.41
2 - The Boulevard (S)	0.42	4.53	0.7	A	474.41	711.61
3 - Park Boulevard (W)	0.35	6.47	0.5	A	245.92	368.88
4 - The Boulevard (N)	0.37	6.49	0.6	A	266.11	399.16

Main Results for each time segment

Main results: (08:00-08:15)

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
1 - Tyrrelstown Plaza (E)	152.83	38.21	220.20	0.00	1055.90	0.145	152.16	487.92	0.0	0.2	3.981	A
2 - The Boulevard (S)	389.22	97.31	89.94	0.00	1389.92	0.280	387.68	282.41	0.0	0.4	3.588	A
3 - Park Boulevard (W)	201.76	50.44	383.91	0.00	947.47	0.213	200.69	93.71	0.0	0.3	4.814	A
4 - The Boulevard (N)	218.33	54.58	490.89	0.00	1004.39	0.217	217.22	93.71	0.0	0.3	4.566	A

Main results: (08:15-08:30)

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
1 - Tyrrelstown Plaza (E)	182.49	45.62	263.90	0.00	1033.20	0.177	182.31	584.53	0.2	0.2	4.229	A
2 - The Boulevard (S)	464.77	116.19	107.77	0.00	1379.24	0.337	464.30	338.44	0.4	0.5	3.933	A
3 - Park Boulevard (W)	240.93	60.23	459.81	0.00	906.94	0.266	240.57	112.26	0.3	0.4	5.400	A
4 - The Boulevard (N)	260.70	65.18	588.12	0.00	949.16	0.275	260.30	112.26	0.3	0.4	5.222	A

Main results: (08:30-08:45)

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
1 - Tyrrelstown Plaza (E)	223.51	55.88	322.94	0.00	1002.54	0.223	223.22	715.48	0.2	0.3	4.618	A
2 - The Boulevard (S)	569.23	142.31	131.95	0.00	1364.75	0.417	568.41	414.21	0.5	0.7	4.516	A
3 - Park Boulevard (W)	295.07	73.77	562.92	0.00	851.88	0.346	294.41	137.44	0.4	0.5	6.449	A
4 - The Boulevard (N)	319.30	79.82	719.90	0.00	874.32	0.365	318.52	137.43	0.4	0.6	6.467	A

Main results: (08:45-09:00)

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
1 - Tyrrelstown Plaza (E)	223.51	55.88	323.69	0.00	1002.15	0.223	223.50	716.74	0.3	0.3	4.623	A
2 - The Boulevard (S)	569.23	142.31	132.12	0.00	1364.65	0.417	569.22	415.07	0.7	0.7	4.525	A
3 - Park Boulevard (W)	295.07	73.77	563.71	0.00	851.46	0.347	295.06	137.62	0.5	0.5	6.469	A
4 - The Boulevard (N)	319.30	79.82	721.15	0.00	873.61	0.365	319.28	137.62	0.6	0.6	6.493	A

Main results: (09:00-09:15)

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
1 - Tyrrelstown Plaza (E)	182.49	45.62	265.05	0.00	1032.61	0.177	182.77	586.49	0.3	0.2	4.238	A
2 - The Boulevard (S)	464.77	116.19	108.05	0.00	1379.08	0.337	465.58	339.78	0.7	0.5	3.945	A
3 - Park Boulevard (W)	240.93	60.23	461.07	0.00	906.27	0.266	241.58	112.56	0.5	0.4	5.422	A
4 - The Boulevard (N)	260.70	65.18	590.08	0.00	948.05	0.275	261.47	112.56	0.6	0.4	5.250	A

Main results: (09:15-09:30)

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
1 - Tyrrelstown Plaza (E)	152.83	38.21	221.75	0.00	1055.10	0.145	153.01	490.83	0.2	0.2	3.991	A
2 - The Boulevard (S)	389.22	97.31	90.45	0.00	1389.62	0.280	389.71	284.31	0.5	0.4	3.603	A
3 - Park Boulevard (W)	201.76	50.44	385.94	0.00	946.39	0.213	202.13	94.22	0.4	0.3	4.840	A
4 - The Boulevard (N)	218.33	54.58	493.85	0.00	1002.71	0.218	218.74	94.22	0.4	0.3	4.595	A

Do-Something - DS 2028, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Pedestrian Crossing	1 - Tyrrelstown Plaza (E) - Pedestrian crossing	Pedestrian crossing uses default settings only. Is this correct?
Warning	Pedestrian Crossing	1 - Tyrrelstown Plaza (E) - Pedestrian crossing	Pedestrian crossing uses default flow of 0. Is this correct?
Warning	Pedestrian Crossing	2 - The Boulevard (S) - Pedestrian crossing	Pedestrian crossing uses default settings only. Is this correct?
Warning	Pedestrian Crossing	2 - The Boulevard (S) - Pedestrian crossing	Pedestrian crossing uses default flow of 0. Is this correct?
Warning	Pedestrian Crossing	3 - Park Boulevard (W) - Pedestrian crossing	Pedestrian crossing uses default settings only. Is this correct?
Warning	Pedestrian Crossing	3 - Park Boulevard (W) - Pedestrian crossing	Pedestrian crossing uses default flow of 0. Is this correct?
Warning	Pedestrian Crossing	4 - The Boulevard (N) - Pedestrian crossing	Pedestrian crossing uses default settings only. Is this correct?
Warning	Pedestrian Crossing	4 - The Boulevard (N) - Pedestrian crossing	Pedestrian crossing uses default flow of 0. Is this correct?

Analysis Set Details

ID	Name	Include in report	Use specific Demand Set (s)	Specific Demand Set(s)	Network flow scaling factor (%)	Network capacity scaling factor (%)
A2	Do-Something	✓	✓	D7,D8,D9,D10,D11,D12	100.000	100.000

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (s)	Junction LOS
1 - Boulevard - Park Boulevard Roundabout	Boulevard - Park Boulevard Roundabout	Standard Roundabout	1,2,3,4	5.61	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Name	Description
1	Tyrrelstown Plaza (E)	
2	The Boulevard (S)	
3	Park Boulevard (W)	
4	The Boulevard (N)	

Capacity Options

Arm	Minimum capacity (PCU/hr)	Maximum capacity (PCU/hr)	Assume flat start profile	Initial queue (PCU)
1 - Tyrrelstown Plaza (E)	0.00	99999.00		0.00
2 - The Boulevard (S)	0.00	99999.00		0.00
3 - Park Boulevard (W)	0.00	99999.00		0.00
4 - The Boulevard (N)	0.00	99999.00		0.00

Roundabout Geometry

Arm	V - Approach road half-width (m)	E - Entry width (m)	I' - Effective flare length (m)	R - Entry radius (m)	D - Inscribed circle diameter (m)	PHI - Conflict (entry) angle (deg)	Exit only
1 - Tyrrelstown Plaza (E)	3.30	6.00	4.5	22.0	33.7	56.0	
2 - The Boulevard (S)	3.50	7.00	6.6	35.0	33.7	38.0	
3 - Park Boulevard (W)	3.00	5.30	4.8	15.0	33.7	33.0	
4 - The Boulevard (N)	3.50	4.80	5.6	19.0	33.7	30.0	

Pedestrian Crossings

Arm	Crossing type	Average pedestrian flow (Ped/hr)
1 - Tyrrelstown Plaza (E)	Zebra	0.00
2 - The Boulevard (S)	Zebra	0.00
3 - Park Boulevard (W)	Zebra	0.00
4 - The Boulevard (N)	Zebra	0.00

Zebra Crossings

Arm	Space between crossing and junction entry (Zebra) (PCU)	Vehicles queueing on exit (Zebra) (PCU)	Central Refuge	Crossing data type	Crossing length (m)	Crossing time (s)
1 - Tyrrelstown Plaza (E)	1.00	1.00		Distance	0.00	0.00
2 - The Boulevard (S)	1.00	1.00		Distance	0.00	0.00
3 - Park Boulevard (W)	1.00	1.00		Distance	0.00	0.00
4 - The Boulevard (N)	1.00	1.00		Distance	0.00	0.00

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Arm	Final slope	Final intercept (PCU/hr)
1 - Tyrrelstown Plaza (E)	0.519	1170.274
2 - The Boulevard (S)	0.599	1443.830
3 - Park Boulevard (W)	0.534	1152.465
4 - The Boulevard (N)	0.568	1283.197

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

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Model start time (HH:mm)	Model finish time (HH:mm)	Time segment length (min)	Run automatically
D10	DS 2028	PM	ONE HOUR	17:00	18:30	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 (%)
1 - Tyrrelstown Plaza (E)		ONE HOUR	✓	264.00	100.000
2 - The Boulevard (S)		ONE HOUR	✓	667.00	100.000
3 - Park Boulevard (W)		ONE HOUR	✓	127.00	100.000
4 - The Boulevard (N)		ONE HOUR	✓	157.00	100.000

Demand overview (Pedestrians)

Arm	Profile type	Average pedestrian flow (Ped/hr)
1 - Tyrrelstown Plaza (E)	Global	0.00
2 - The Boulevard (S)	Global	0.00
3 - Park Boulevard (W)	Global	0.00
4 - The Boulevard (N)	Global	0.00

Origin-Destination Data

Demand (PCU/hr)

		To			
		1 - Tyrrelstown Plaza (E)	2 - The Boulevard (S)	3 - Park Boulevard (W)	4 - The Boulevard (N)
From	1 - Tyrrelstown Plaza (E)	0.000	61.000	115.000	88.000
	2 - The Boulevard (S)	411.000	0.000	113.000	143.000
	3 - Park Boulevard (W)	82.000	43.000	0.000	2.000
	4 - The Boulevard (N)	57.000	98.000	2.000	0.000

Proportions

		To		
		1 - Tyrrelstown Plaza (E)	2 - The Boulevard (S)	3 - P Boule (W)
From	1 - Tyrrelstown Plaza (E)	0.00	0.23	0.4
	2 - The Boulevard (S)	0.62	0.00	0.1
	3 - Park Boulevard (W)	0.65	0.34	0.0
	4 - The Boulevard (N)	0.36	0.62	0.0

Vehicle Mix

Heavy Vehicle proportion

		To			
		1 - Tyrrelstown Plaza (E)	2 - The Boulevard (S)	3 - Park Boulevard (W)	4 - The Boulevard (N)
From	1 - Tyrrelstown Plaza (E)	0	0	0	0
	2 - The Boulevard (S)	0	0	0	0
	3 - Park Boulevard (W)	0	0	0	0
	4 - The Boulevard (N)	0	0	0	0

Average PCU Per Veh

		To		
		1 - Tyrrelstown Plaza (E)	2 - The Boulevard (S)	3 - P Boule (W)
From	1 - Tyrrelstown Plaza (E)	1.000	1.000	1.0
	2 - The Boulevard (S)	1.000	1.000	1.0
	3 - Park Boulevard (W)	1.000	1.000	1.0
	4 - The Boulevard (N)	1.000	1.000	1.0

Detailed Demand Data

Demand for each time segment

Time Segment	Arm	Demand (PCU/hr)	Demand in PCU (PCU/hr)	Pedestrian Demand (Ped/hr)
17:00-17:15	1 - Tyrrelstown Plaza (E)	198.75	198.75	0.00
	2 - The Boulevard (S)	502.15	502.15	0.00
	3 - Park Boulevard (W)	95.61	95.61	0.00
	4 - The Boulevard (N)	118.20	118.20	0.00
17:15-17:30	1 - Tyrrelstown Plaza (E)	237.33	237.33	0.00
	2 - The Boulevard (S)	599.62	599.62	0.00
	3 - Park Boulevard (W)	114.17	114.17	0.00
	4 - The Boulevard (N)	141.14	141.14	0.00
17:30-17:45	1 - Tyrrelstown Plaza (E)	290.67	290.67	0.00
	2 - The Boulevard (S)	734.38	734.38	0.00
	3 - Park Boulevard (W)	139.83	139.83	0.00
	4 - The Boulevard (N)	172.86	172.86	0.00
17:45-18:00	1 - Tyrrelstown Plaza (E)	290.67	290.67	0.00
	2 - The Boulevard (S)	734.38	734.38	0.00
	3 - Park Boulevard (W)	139.83	139.83	0.00
	4 - The Boulevard (N)	172.86	172.86	0.00
18:00-18:15	1 - Tyrrelstown Plaza (E)	237.33	237.33	0.00
	2 - The Boulevard (S)	599.62	599.62	0.00
	3 - Park Boulevard (W)	114.17	114.17	0.00
	4 - The Boulevard (N)	141.14	141.14	0.00
18:15-18:30	1 - Tyrrelstown Plaza (E)	198.75	198.75	0.00
	2 - The Boulevard (S)	502.15	502.15	0.00
	3 - Park Boulevard (W)	95.61	95.61	0.00
	4 - The Boulevard (N)	118.20	118.20	0.00

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
1 - Tyrrelstown Plaza (E)	0.27	4.51	0.4	A	242.25	363.38
2 - The Boulevard (S)	0.56	6.27	1.3	A	612.05	918.08
3 - Park Boulevard (W)	0.18	5.67	0.2	A	116.54	174.81
4 - The Boulevard (N)	0.18	4.64	0.2	A	144.07	216.10

Main Results for each time segment

Main results: (17:00-17:15)

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
1 - Tyrrelstown Plaza (E)	198.75	49.69	107.18	0.00	1114.61	0.178	197.89	412.13	0.0	0.2	3.924	A
2 - The Boulevard (S)	502.15	125.54	153.66	0.00	1351.74	0.371	499.81	151.40	0.0	0.6	4.215	A
3 - Park Boulevard (W)	95.61	23.90	481.09	0.00	895.58	0.107	95.14	172.38	0.0	0.1	4.494	A
4 - The Boulevard (N)	118.20	29.55	401.61	0.00	1055.09	0.112	117.70	174.62	0.0	0.1	3.839	A

Main results: (17:15-17:30)

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
1 - Tyrrelstown Plaza (E)	237.33	59.33	128.41	0.00	1103.58	0.215	237.10	493.74	0.2	0.3	4.153	A
2 - The Boulevard (S)	599.62	149.90	184.12	0.00	1333.49	0.450	598.73	181.40	0.6	0.8	4.893	A
3 - Park Boulevard (W)	114.17	28.54	576.33	0.00	844.72	0.135	114.02	206.51	0.1	0.2	4.925	A
4 - The Boulevard (N)	141.14	35.28	481.16	0.00	1009.91	0.140	141.00	209.19	0.1	0.2	4.143	A

Main results: (17:30-17:45)

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
1 - Tyrrelstown Plaza (E)	290.67	72.67	157.21	0.00	1088.62	0.267	290.31	604.20	0.3	0.4	4.507	A
2 - The Boulevard (S)	734.38	183.60	225.43	0.00	1308.72	0.561	732.58	222.09	0.8	1.3	6.228	A
3 - Park Boulevard (W)	139.83	34.96	705.24	0.00	775.89	0.180	139.58	252.77	0.2	0.2	5.653	A
4 - The Boulevard (N)	172.86	43.22	588.79	0.00	948.78	0.182	172.62	256.03	0.2	0.2	4.637	A

Main results: (17:45-18:00)

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
1 - Tyrrelstown Plaza (E)	290.67	72.67	157.44	0.00	1088.50	0.267	290.66	605.53	0.4	0.4	4.511	A
2 - The Boulevard (S)	734.38	183.60	225.71	0.00	1308.56	0.561	734.34	222.40	1.3	1.3	6.269	A
3 - Park Boulevard (W)	139.83	34.96	706.82	0.00	775.04	0.180	139.83	253.23	0.2	0.2	5.666	A
4 - The Boulevard (N)	172.86	43.22	590.12	0.00	948.03	0.182	172.86	256.53	0.2	0.2	4.643	A

Main results: (18:00-18:15)

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
1 - Tyrrelstown Plaza (E)	237.33	59.33	128.79	0.00	1103.38	0.215	237.68	495.78	0.4	0.3	4.159	A
2 - The Boulevard (S)	599.62	149.90	184.56	0.00	1333.22	0.450	601.39	181.90	1.3	0.8	4.932	A
3 - Park Boulevard (W)	114.17	28.54	578.74	0.00	843.44	0.135	114.42	207.22	0.2	0.2	4.939	A
4 - The Boulevard (N)	141.14	35.28	483.19	0.00	1008.76	0.140	141.37	209.96	0.2	0.2	4.151	A

Main results: (18:15-18:30)

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
1 - Tyrrelstown Plaza (E)	198.75	49.69	107.80	0.00	1114.28	0.178	198.98	414.78	0.3	0.2	3.933	A
2 - The Boulevard (S)	502.15	125.54	154.51	0.00	1351.23	0.372	503.07	152.27	0.8	0.6	4.248	A
3 - Park Boulevard (W)	95.61	23.90	484.17	0.00	893.93	0.107	95.76	173.41	0.2	0.1	4.512	A
4 - The Boulevard (N)	118.20	29.55	404.24	0.00	1053.60	0.112	118.34	175.69	0.2	0.1	3.849	A

Do-Something - DS 2038, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Pedestrian Crossing	1 - Tyrrelstown Plaza (E) - Pedestrian crossing	Pedestrian crossing uses default settings only. Is this correct?
Warning	Pedestrian Crossing	1 - Tyrrelstown Plaza (E) - Pedestrian crossing	Pedestrian crossing uses default flow of 0. Is this correct?
Warning	Pedestrian Crossing	2 - The Boulevard (S) - Pedestrian crossing	Pedestrian crossing uses default settings only. Is this correct?
Warning	Pedestrian Crossing	2 - The Boulevard (S) - Pedestrian crossing	Pedestrian crossing uses default flow of 0. Is this correct?
Warning	Pedestrian Crossing	3 - Park Boulevard (W) - Pedestrian crossing	Pedestrian crossing uses default settings only. Is this correct?
Warning	Pedestrian Crossing	3 - Park Boulevard (W) - Pedestrian crossing	Pedestrian crossing uses default flow of 0. Is this correct?
Warning	Pedestrian Crossing	4 - The Boulevard (N) - Pedestrian crossing	Pedestrian crossing uses default settings only. Is this correct?
Warning	Pedestrian Crossing	4 - The Boulevard (N) - Pedestrian crossing	Pedestrian crossing uses default flow of 0. Is this correct?

Analysis Set Details

ID	Name	Include in report	Use specific Demand Set (s)	Specific Demand Set(s)	Network flow scaling factor (%)	Network capacity scaling factor (%)
A2	Do-Something	✓	✓	D7,D8,D9,D10,D11,D12	100.000	100.000

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (s)	Junction LOS
1 - Boulevard - Park Boulevard Roundabout	Boulevard - Park Boulevard Roundabout	Standard Roundabout	1,2,3,4	5.70	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Name	Description
1	Tyrrelstown Plaza (E)	
2	The Boulevard (S)	
3	Park Boulevard (W)	
4	The Boulevard (N)	

Capacity Options

Arm	Minimum capacity (PCU/hr)	Maximum capacity (PCU/hr)	Assume flat start profile	Initial queue (PCU)
1 - Tyrrelstown Plaza (E)	0.00	99999.00		0.00
2 - The Boulevard (S)	0.00	99999.00		0.00
3 - Park Boulevard (W)	0.00	99999.00		0.00
4 - The Boulevard (N)	0.00	99999.00		0.00

Roundabout Geometry

Arm	V - Approach road half-width (m)	E - Entry width (m)	I' - Effective flare length (m)	R - Entry radius (m)	D - Inscribed circle diameter (m)	PHI - Conflict (entry) angle (deg)	Exit only
1 - Tyrrelstown Plaza (E)	3.30	6.00	4.5	22.0	33.7	56.0	
2 - The Boulevard (S)	3.50	7.00	6.6	35.0	33.7	38.0	
3 - Park Boulevard (W)	3.00	5.30	4.8	15.0	33.7	33.0	
4 - The Boulevard (N)	3.50	4.80	5.6	19.0	33.7	30.0	

Pedestrian Crossings

Arm	Crossing type	Average pedestrian flow (Ped/hr)
1 - Tyrrelstown Plaza (E)	Zebra	0.00
2 - The Boulevard (S)	Zebra	0.00
3 - Park Boulevard (W)	Zebra	0.00
4 - The Boulevard (N)	Zebra	0.00

Zebra Crossings

Arm	Space between crossing and junction entry (Zebra) (PCU)	Vehicles queueing on exit (Zebra) (PCU)	Central Refuge	Crossing data type	Crossing length (m)	Crossing time (s)
1 - Tyrrelstown Plaza (E)	1.00	1.00		Distance	0.00	0.00
2 - The Boulevard (S)	1.00	1.00		Distance	0.00	0.00
3 - Park Boulevard (W)	1.00	1.00		Distance	0.00	0.00
4 - The Boulevard (N)	1.00	1.00		Distance	0.00	0.00

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Arm	Final slope	Final intercept (PCU/hr)
1 - Tyrrelstown Plaza (E)	0.519	1170.274
2 - The Boulevard (S)	0.599	1443.830
3 - Park Boulevard (W)	0.534	1152.465
4 - The Boulevard (N)	0.568	1283.197

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

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Model start time (HH:mm)	Model finish time (HH:mm)	Time segment length (min)	Run automatically
D11	DS 2038	AM	ONE HOUR	08:00	09:30	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 (%)
1 - Tyrrelstown Plaza (E)		ONE HOUR	✓	209.00	100.000
2 - The Boulevard (S)		ONE HOUR	✓	546.00	100.000
3 - Park Boulevard (W)		ONE HOUR	✓	282.00	100.000
4 - The Boulevard (N)		ONE HOUR	✓	307.00	100.000

Demand overview (Pedestrians)

Arm	Profile type	Average pedestrian flow (Ped/hr)
1 - Tyrrelstown Plaza (E)	Global	0.00
2 - The Boulevard (S)	Global	0.00
3 - Park Boulevard (W)	Global	0.00
4 - The Boulevard (N)	Global	0.00

Origin-Destination Data

Demand (PCU/hr)

	To				
From		1 - Tyrrelstown Plaza (E)	2 - The Boulevard (S)	3 - Park Boulevard (W)	4 - The Boulevard (N)
	1 - Tyrrelstown Plaza (E)	0.000	86.000	80.000	43.000
	2 - The Boulevard (S)	413.000	0.000	50.000	83.000
	3 - Park Boulevard (W)	165.000	112.000	0.000	5.000
	4 - The Boulevard (N)	107.000	198.000	2.000	0.000

Proportions

	To			
		1 - Tyrrelstown Plaza (E)	2 - The Boulevard (S)	3 - P Boule (W)
From	1 - Tyrrelstown Plaza (E)	0.00	0.41	0.3
	2 - The Boulevard (S)	0.76	0.00	0.0
	3 - Park Boulevard (W)	0.59	0.40	0.0
	4 - The Boulevard (N)	0.35	0.64	0.0

Vehicle Mix

Heavy Vehicle proportion

	To				
From		1 - Tyrrelstown Plaza (E)	2 - The Boulevard (S)	3 - Park Boulevard (W)	4 - The Boulevard (N)
	1 - Tyrrelstown Plaza (E)	0	0	0	0
	2 - The Boulevard (S)	0	0	0	0
	3 - Park Boulevard (W)	0	0	0	0
	4 - The Boulevard (N)	0	0	0	0

Average PCU Per Veh

	To			
		1 - Tyrrelstown Plaza (E)	2 - The Boulevard (S)	3 - P Boule (W)
From	1 - Tyrrelstown Plaza (E)	1.000	1.000	1.0
	2 - The Boulevard (S)	1.000	1.000	1.0
	3 - Park Boulevard (W)	1.000	1.000	1.0
	4 - The Boulevard (N)	1.000	1.000	1.0

Detailed Demand Data

Demand for each time segment

Time Segment	Arm	Demand (PCU/hr)	Demand in PCU (PCU/hr)	Pedestrian Demand (Ped/hr)
08:00-08:15	1 - Tyrrelstown Plaza (E)	157.35	157.35	0.00
	2 - The Boulevard (S)	411.06	411.06	0.00
	3 - Park Boulevard (W)	212.30	212.30	0.00
	4 - The Boulevard (N)	231.13	231.13	0.00
08:15-08:30	1 - Tyrrelstown Plaza (E)	187.89	187.89	0.00
	2 - The Boulevard (S)	490.84	490.84	0.00
	3 - Park Boulevard (W)	253.51	253.51	0.00
	4 - The Boulevard (N)	275.99	275.99	0.00
08:30-08:45	1 - Tyrrelstown Plaza (E)	230.11	230.11	0.00
	2 - The Boulevard (S)	601.16	601.16	0.00
	3 - Park Boulevard (W)	310.49	310.49	0.00
	4 - The Boulevard (N)	338.01	338.01	0.00
08:45-09:00	1 - Tyrrelstown Plaza (E)	230.11	230.11	0.00
	2 - The Boulevard (S)	601.16	601.16	0.00
	3 - Park Boulevard (W)	310.49	310.49	0.00
	4 - The Boulevard (N)	338.01	338.01	0.00
09:00-09:15	1 - Tyrrelstown Plaza (E)	187.89	187.89	0.00
	2 - The Boulevard (S)	490.84	490.84	0.00
	3 - Park Boulevard (W)	253.51	253.51	0.00
	4 - The Boulevard (N)	275.99	275.99	0.00
09:15-09:30	1 - Tyrrelstown Plaza (E)	157.35	157.35	0.00
	2 - The Boulevard (S)	411.06	411.06	0.00
	3 - Park Boulevard (W)	212.30	212.30	0.00
	4 - The Boulevard (N)	231.13	231.13	0.00

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
1 - Tyrrelstown Plaza (E)	0.23	4.73	0.3	A	191.78	287.67
2 - The Boulevard (S)	0.44	4.73	0.8	A	501.02	751.53
3 - Park Boulevard (W)	0.37	6.85	0.6	A	258.77	388.15
4 - The Boulevard (N)	0.40	7.01	0.7	A	281.71	422.56

Main Results for each time segment

Main results: (08:00-08:15)

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
1 - Tyrrelstown Plaza (E)	157.35	39.34	233.64	0.00	1048.92	0.150	156.64	513.33	0.0	0.2	4.028	A
2 - The Boulevard (S)	411.06	102.76	93.69	0.00	1387.68	0.296	409.38	296.60	0.0	0.4	3.673	A
3 - Park Boulevard (W)	212.30	53.08	404.12	0.00	936.68	0.227	211.14	98.95	0.0	0.3	4.953	A
4 - The Boulevard (N)	231.13	57.78	517.06	0.00	989.52	0.234	229.91	98.20	0.0	0.3	4.731	A

Main results: (08:15-08:30)

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
1 - Tyrrelstown Plaza (E)	187.89	46.97	280.02	0.00	1024.83	0.183	187.70	615.00	0.2	0.2	4.299	A
2 - The Boulevard (S)	490.84	122.71	112.26	0.00	1376.55	0.357	490.32	355.46	0.4	0.6	4.059	A
3 - Park Boulevard (W)	253.51	63.38	484.03	0.00	894.01	0.284	253.11	118.54	0.3	0.4	5.613	A
4 - The Boulevard (N)	275.99	69.00	619.50	0.00	931.34	0.296	275.53	117.64	0.3	0.4	5.486	A

Main results: (08:30-08:45)

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
1 - Tyrrelstown Plaza (E)	230.11	57.53	342.61	0.00	992.32	0.232	229.81	752.72	0.2	0.3	4.719	A
2 - The Boulevard (S)	601.16	150.29	137.44	0.00	1361.46	0.442	600.22	434.98	0.6	0.8	4.723	A
3 - Park Boulevard (W)	310.49	77.62	592.54	0.00	836.07	0.371	309.72	145.13	0.4	0.6	6.830	A
4 - The Boulevard (N)	338.01	84.50	758.25	0.00	852.54	0.396	337.09	144.02	0.4	0.6	6.971	A

Main results: (08:45-09:00)

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
1 - Tyrrelstown Plaza (E)	230.11	57.53	343.50	0.00	991.86	0.232	230.11	754.17	0.3	0.3	4.725	A
2 - The Boulevard (S)	601.16	150.29	137.62	0.00	1361.35	0.442	601.14	435.98	0.8	0.8	4.735	A
3 - Park Boulevard (W)	310.49	77.62	593.44	0.00	835.59	0.372	310.47	145.33	0.6	0.6	6.854	A
4 - The Boulevard (N)	338.01	84.50	759.68	0.00	851.72	0.397	337.99	144.23	0.6	0.7	7.006	A

Main results: (09:00-09:15)

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
1 - Tyrrelstown Plaza (E)	187.89	46.97	281.37	0.00	1024.13	0.183	188.19	617.25	0.3	0.2	4.307	A
2 - The Boulevard (S)	490.84	122.71	112.56	0.00	1376.37	0.357	491.76	357.01	0.8	0.6	4.075	A
3 - Park Boulevard (W)	253.51	63.38	485.44	0.00	893.25	0.284	254.26	118.87	0.6	0.4	5.642	A
4 - The Boulevard (N)	275.99	69.00	621.73	0.00	930.07	0.297	276.90	117.98	0.7	0.4	5.518	A

Main results: (09:15-09:30)

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
1 - Tyrrelstown Plaza (E)	157.35	39.34	235.36	0.00	1048.03	0.150	157.54	516.52	0.2	0.2	4.043	A
2 - The Boulevard (S)	411.06	102.76	94.22	0.00	1387.36	0.296	411.60	298.68	0.6	0.4	3.693	A
3 - Park Boulevard (W)	212.30	53.08	406.32	0.00	935.50	0.227	212.72	99.50	0.4	0.3	4.985	A
4 - The Boulevard (N)	231.13	57.78	520.28	0.00	987.69	0.234	231.60	98.75	0.4	0.3	4.763	A

Do-Something - DS 2038, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Pedestrian Crossing	1 - Tyrrelstown Plaza (E) - Pedestrian crossing	Pedestrian crossing uses default settings only. Is this correct?
Warning	Pedestrian Crossing	1 - Tyrrelstown Plaza (E) - Pedestrian crossing	Pedestrian crossing uses default flow of 0. Is this correct?
Warning	Pedestrian Crossing	2 - The Boulevard (S) - Pedestrian crossing	Pedestrian crossing uses default settings only. Is this correct?
Warning	Pedestrian Crossing	2 - The Boulevard (S) - Pedestrian crossing	Pedestrian crossing uses default flow of 0. Is this correct?
Warning	Pedestrian Crossing	3 - Park Boulevard (W) - Pedestrian crossing	Pedestrian crossing uses default settings only. Is this correct?
Warning	Pedestrian Crossing	3 - Park Boulevard (W) - Pedestrian crossing	Pedestrian crossing uses default flow of 0. Is this correct?
Warning	Pedestrian Crossing	4 - The Boulevard (N) - Pedestrian crossing	Pedestrian crossing uses default settings only. Is this correct?
Warning	Pedestrian Crossing	4 - The Boulevard (N) - Pedestrian crossing	Pedestrian crossing uses default flow of 0. Is this correct?

Analysis Set Details

ID	Name	Include in report	Use specific Demand Set (s)	Specific Demand Set(s)	Network flow scaling factor (%)	Network capacity scaling factor (%)
A2	Do-Something	✓	✓	D7,D8,D9,D10,D11,D12	100.000	100.000

Junction Network

Junctions

Junction	Name	Junction Type	Arm order	Junction Delay (s)	Junction LOS
1 - Boulevard - Park Boulevard Roundabout	Boulevard - Park Boulevard Roundabout	Standard Roundabout	1,2,3,4	6.01	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Name	Description
1	Tyrrelstown Plaza (E)	
2	The Boulevard (S)	
3	Park Boulevard (W)	
4	The Boulevard (N)	

Capacity Options

Arm	Minimum capacity (PCU/hr)	Maximum capacity (PCU/hr)	Assume flat start profile	Initial queue (PCU)
1 - Tyrrelstown Plaza (E)	0.00	99999.00		0.00
2 - The Boulevard (S)	0.00	99999.00		0.00
3 - Park Boulevard (W)	0.00	99999.00		0.00
4 - The Boulevard (N)	0.00	99999.00		0.00

Roundabout Geometry

Arm	V - Approach road half-width (m)	E - Entry width (m)	I' - Effective flare length (m)	R - Entry radius (m)	D - Inscribed circle diameter (m)	PHI - Conflict (entry) angle (deg)	Exit only
1 - Tyrrelstown Plaza (E)	3.30	6.00	4.5	22.0	33.7	56.0	
2 - The Boulevard (S)	3.50	7.00	6.6	35.0	33.7	38.0	
3 - Park Boulevard (W)	3.00	5.30	4.8	15.0	33.7	33.0	
4 - The Boulevard (N)	3.50	4.80	5.6	19.0	33.7	30.0	

Pedestrian Crossings

Arm	Crossing type	Average pedestrian flow (Ped/hr)
1 - Tyrrelstown Plaza (E)	Zebra	0.00
2 - The Boulevard (S)	Zebra	0.00
3 - Park Boulevard (W)	Zebra	0.00
4 - The Boulevard (N)	Zebra	0.00

Zebra Crossings

Arm	Space between crossing and junction entry (Zebra) (PCU)	Vehicles queueing on exit (Zebra) (PCU)	Central Refuge	Crossing data type	Crossing length (m)	Crossing time (s)
1 - Tyrrelstown Plaza (E)	1.00	1.00		Distance	0.00	0.00
2 - The Boulevard (S)	1.00	1.00		Distance	0.00	0.00
3 - Park Boulevard (W)	1.00	1.00		Distance	0.00	0.00
4 - The Boulevard (N)	1.00	1.00		Distance	0.00	0.00

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Arm	Final slope	Final intercept (PCU/hr)
1 - Tyrrelstown Plaza (E)	0.519	1170.274
2 - The Boulevard (S)	0.599	1443.830
3 - Park Boulevard (W)	0.534	1152.465
4 - The Boulevard (N)	0.568	1283.197

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

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Model start time (HH:mm)	Model finish time (HH:mm)	Time segment length (min)	Run automatically
D12	DS 2038	PM	ONE HOUR	17:00	18:30	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 (%)
1 - Tyrrelstown Plaza (E)		ONE HOUR	✓	278.00	100.000
2 - The Boulevard (S)		ONE HOUR	✓	704.00	100.000
3 - Park Boulevard (W)		ONE HOUR	✓	135.00	100.000
4 - The Boulevard (N)		ONE HOUR	✓	166.00	100.000

Demand overview (Pedestrians)

Arm	Profile type	Average pedestrian flow (Ped/hr)
1 - Tyrrelstown Plaza (E)	Global	0.00
2 - The Boulevard (S)	Global	0.00
3 - Park Boulevard (W)	Global	0.00
4 - The Boulevard (N)	Global	0.00

Origin-Destination Data

Demand (PCU/hr)

		To			
		1 - Tyrrelstown Plaza (E)	2 - The Boulevard (S)	3 - Park Boulevard (W)	4 - The Boulevard (N)
From	1 - Tyrrelstown Plaza (E)	0.000	62.000	122.000	94.000
	2 - The Boulevard (S)	432.000	0.000	120.000	152.000
	3 - Park Boulevard (W)	87.000	46.000	0.000	2.000
	4 - The Boulevard (N)	60.000	104.000	2.000	0.000

Proportions

		To		
		1 - Tyrrelstown Plaza (E)	2 - The Boulevard (S)	3 - P Boule (W)
From	1 - Tyrrelstown Plaza (E)	0.00	0.22	0.4
	2 - The Boulevard (S)	0.61	0.00	0.1
	3 - Park Boulevard (W)	0.64	0.34	0.0
	4 - The Boulevard (N)	0.36	0.63	0.0

Vehicle Mix

Heavy Vehicle proportion

		To			
		1 - Tyrrelstown Plaza (E)	2 - The Boulevard (S)	3 - Park Boulevard (W)	4 - The Boulevard (N)
From	1 - Tyrrelstown Plaza (E)	0	0	0	0
	2 - The Boulevard (S)	0	0	0	0
	3 - Park Boulevard (W)	0	0	0	0
	4 - The Boulevard (N)	0	0	0	0

Average PCU Per Veh

		To		
		1 - Tyrrelstown Plaza (E)	2 - The Boulevard (S)	3 - P Boule (W)
From	1 - Tyrrelstown Plaza (E)	1.000	1.000	1.0
	2 - The Boulevard (S)	1.000	1.000	1.0
	3 - Park Boulevard (W)	1.000	1.000	1.0
	4 - The Boulevard (N)	1.000	1.000	1.0

Detailed Demand Data

Demand for each time segment

Time Segment	Arm	Demand (PCU/hr)	Demand in PCU (PCU/hr)	Pedestrian Demand (Ped/hr)
17:00-17:15	1 - Tyrrelstown Plaza (E)	209.29	209.29	0.00
	2 - The Boulevard (S)	530.01	530.01	0.00
	3 - Park Boulevard (W)	101.64	101.64	0.00
	4 - The Boulevard (N)	124.97	124.97	0.00
17:15-17:30	1 - Tyrrelstown Plaza (E)	249.92	249.92	0.00
	2 - The Boulevard (S)	632.88	632.88	0.00
	3 - Park Boulevard (W)	121.36	121.36	0.00
	4 - The Boulevard (N)	149.23	149.23	0.00
17:30-17:45	1 - Tyrrelstown Plaza (E)	306.08	306.08	0.00
	2 - The Boulevard (S)	775.12	775.12	0.00
	3 - Park Boulevard (W)	148.64	148.64	0.00
	4 - The Boulevard (N)	182.77	182.77	0.00
17:45-18:00	1 - Tyrrelstown Plaza (E)	306.08	306.08	0.00
	2 - The Boulevard (S)	775.12	775.12	0.00
	3 - Park Boulevard (W)	148.64	148.64	0.00
	4 - The Boulevard (N)	182.77	182.77	0.00
18:00-18:15	1 - Tyrrelstown Plaza (E)	249.92	249.92	0.00
	2 - The Boulevard (S)	632.88	632.88	0.00
	3 - Park Boulevard (W)	121.36	121.36	0.00
	4 - The Boulevard (N)	149.23	149.23	0.00
18:15-18:30	1 - Tyrrelstown Plaza (E)	209.29	209.29	0.00
	2 - The Boulevard (S)	530.01	530.01	0.00
	3 - Park Boulevard (W)	101.64	101.64	0.00
	4 - The Boulevard (N)	124.97	124.97	0.00

Results

Results Summary for whole modelled period

Arm	Max RFC	Max delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
1 - Tyrrelstown Plaza (E)	0.28	4.63	0.4	A	255.10	382.65
2 - The Boulevard (S)	0.60	6.85	1.5	A	646.00	969.00
3 - Park Boulevard (W)	0.20	5.95	0.2	A	123.88	185.82
4 - The Boulevard (N)	0.20	4.82	0.2	A	152.32	228.49

Main Results for each time segment

Main results: (17:00-17:15)

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
1 - Tyrrelstown Plaza (E)	209.29	52.32	113.91	0.00	1111.11	0.188	208.37	433.79	0.0	0.2	3.983	A
2 - The Boulevard (S)	530.01	132.50	163.40	0.00	1345.90	0.394	527.43	158.88	0.0	0.6	4.386	A
3 - Park Boulevard (W)	101.64	25.41	507.98	0.00	881.22	0.115	101.12	182.84	0.0	0.1	4.612	A
4 - The Boulevard (N)	124.97	31.24	423.27	0.00	1042.79	0.120	124.43	185.83	0.0	0.1	3.917	A

Main results: (17:15-17:30)

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
1 - Tyrrelstown Plaza (E)	249.92	62.48	136.49	0.00	1099.38	0.227	249.67	519.71	0.2	0.3	4.235	A
2 - The Boulevard (S)	632.88	158.22	195.78	0.00	1326.49	0.477	631.85	190.37	0.6	0.9	5.175	A
3 - Park Boulevard (W)	121.36	30.34	608.57	0.00	827.51	0.147	121.20	219.06	0.1	0.2	5.095	A
4 - The Boulevard (N)	149.23	37.31	507.13	0.00	995.16	0.150	149.07	222.64	0.1	0.2	4.255	A

Main results: (17:30-17:45)

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
1 - Tyrrelstown Plaza (E)	306.08	76.52	167.08	0.00	1083.49	0.283	305.69	635.86	0.3	0.4	4.626	A
2 - The Boulevard (S)	775.12	193.78	239.71	0.00	1300.16	0.596	772.93	233.06	0.9	1.4	6.799	A
3 - Park Boulevard (W)	148.64	37.16	744.54	0.00	754.90	0.197	148.35	268.10	0.2	0.2	5.932	A
4 - The Boulevard (N)	182.77	45.69	620.45	0.00	930.80	0.196	182.50	272.44	0.2	0.2	4.810	A

Main results: (17:45-18:00)

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
1 - Tyrrelstown Plaza (E)	306.08	76.52	167.35	0.00	1083.35	0.283	306.08	637.45	0.4	0.4	4.631	A
2 - The Boulevard (S)	775.12	193.78	240.02	0.00	1299.98	0.596	775.07	233.41	1.4	1.5	6.855	A
3 - Park Boulevard (W)	148.64	37.16	746.45	0.00	753.89	0.197	148.63	268.64	0.2	0.2	5.947	A
4 - The Boulevard (N)	182.77	45.69	622.04	0.00	929.90	0.197	182.77	273.04	0.2	0.2	4.818	A

Main results: (18:00-18:15)

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
1 - Tyrrelstown Plaza (E)	249.92	62.48	136.91	0.00	1099.16	0.227	250.30	522.11	0.4	0.3	4.244	A
2 - The Boulevard (S)	632.88	158.22	196.28	0.00	1326.20	0.477	635.04	190.93	1.5	0.9	5.226	A
3 - Park Boulevard (W)	121.36	30.34	611.43	0.00	825.98	0.147	121.65	219.89	0.2	0.2	5.112	A
4 - The Boulevard (N)	149.23	37.31	509.53	0.00	993.80	0.150	149.49	223.55	0.2	0.2	4.266	A

Main results: (18:15-18:30)

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
1 - Tyrrelstown Plaza (E)	209.29	52.32	114.59	0.00	1110.75	0.188	209.54	436.72	0.3	0.2	3.995	A
2 - The Boulevard (S)	530.01	132.50	164.32	0.00	1345.35	0.394	531.08	159.82	0.9	0.7	4.428	A
3 - Park Boulevard (W)	101.64	25.41	511.41	0.00	879.39	0.116	101.80	183.99	0.2	0.1	4.630	A
4 - The Boulevard (N)	124.97	31.24	426.18	0.00	1041.14	0.120	125.14	187.03	0.2	0.1	3.930	A

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APPENDIX E

BDS Two Tier Electric Bike Rack Specification



The BDS Electric Two Tier Bike Rack

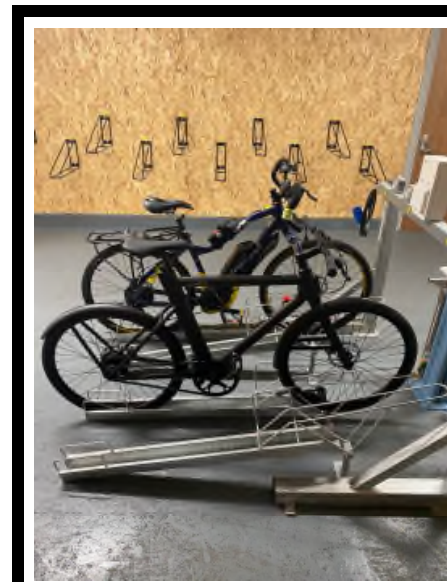
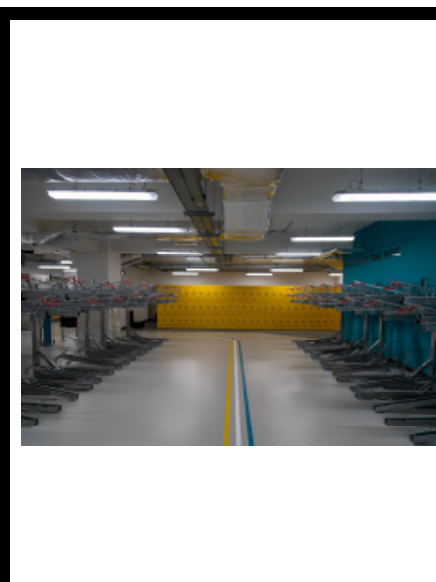
Ex. VAT: £2,000.00 **TOTAL**

Inc. VAT:

£2,400.00

*Base price, not including any custom options.

Product Images



Description

The BDS Electric Cycle Two Tier Bike Rack is a pioneering and user friendly cycle parking system for electric bikes, with excellent space saving bike storage, superb usability and high value.

It is a new avant-garde electric cycle charging unit to meet the burgeoning demand for electric bikes. The cycle stand conveniently and securely parks electric bike and provides the cyclist with a built-in twin gang UK plug socket.

Price: 8 Bike (4 up, 4 down)- £2000+VAT

Capacity Calculator*

Estimate how many bikes you can store:

Length mm units:

Calculate

Number of cycles stored:

*Minimum height of 2.4 metres required

Specification

- 4 up, 4 down Bike Frame as standard but other sizes available on request.
- Built-in twin gang UK plug socket
- Available in a galvanised or powder coated finish (please call us for a quote).
- Easy to use upper tier using stainless steel bearings for long life and minimum maintenance
- The bicycle is held stable in the wheel channels with locking bars for additional security
- Accommodates all cycle types (mountain bikes, town bikes etc)
- Bicycle frame and wheel can be chained for security
- Cycle is well supported when being stored
- Lower rack has a sloping wheel channel, so the user does not have to bend between the levels
- Can be extended indefinitely
- Double or single sided versions available
- Robust construction, hot dip galvanised to BS EN ISO 1461
- BDS Two Tier Bike Racks are the only "Cycling Score" approved two tier bike parking system
- This bike rack can help contribute towards gaining ENE8 Cycle storage credits when used in the appropriate situation, under the Code for Sustainable Homes.
- Cycle stands are compact with a centre to centre distance of 375mm
- Minimum height required is 2400mm x minimum depth 1950mm (plus a recommended minimum entrance space of 1500mm)
- Easy lift gas strut fitted so lifting the bike up on the rack requires minimal force from the user, as per health and safety standards
- Rack will require at least a 50 amp supply to a 240v single-phase commando socket with rotary isolation and FB Padlock.

Lead time: 10-12 weeks.

Product reference: TTBER001

Additional Information

Best Sellers M2

No

