Proposed Housing Development at Kilboderry Carrick-on-Shannon, Co Leitrim

Traffic Report

6th March 2023

Prepared for

Wynne Gormley Gilsenan Architects and Surveyors

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Contents

Non-technical summary

- TTRSA has been commissioned by Wynne Gormley Gilsenan Architects and Surveyors to prepare a traffic report and associated analysis for a proposed housing development at Kilboderry, Carrick-on-Shannon, Co. Leitrim, as part of a forthcoming Part VIII planning application by Leitrim County Council.
- The proposed development seeks to '*construct a housing development containing 18 no. fully serviced residential units consisting of 12 no. 2 bedroom dwellings (in 2 No. terraced blocks), 6 no. 1 bedroom apartments (in 2 No. blocks), connections to existing foul main, watermain and surface water discharge, landscaped open space and all ancillary and associated works*', accessed from the LT34132 (Semi Circular Road) at Kilboderry, Carrick-on-Shannon. As part of the development, the northern section of the LT34132 will be widened to facilitate two-way traffic between the development access junction and the northern LT34132/LP3413 junction.
- The site layout drawing of the proposed development, upon which the analysis contained within this report is based, has been prepared by Wynne Gormley Gilsenan Architects and Surveyors, entitled 'Site Layout, Site Survey, Site Boundary & Boundary Details'; Drawing Number: PL22-023-002; Dated: 01/11/2022.
- To assist in the preparation of this traffic report, TTRSA undertook video-based peak hour manual classified counts (MCC), at the junctions of the LP3413 and LT34132 (Semi Circular Road), for the peak periods of 08:00-09:29 hours and 16:15-17:45 hours on Tuesday 25th October 2022. These surveys determined the local traffic peak hours for assessment as an AM peak hour of 08:15-09:14 and a PM peak hour of 16:30-17:29.
- The predicted trip generation for the proposed development, based on a survey of the existing Drummagh residential estate in Carrick-on-Shannon, is three arrivals and nine departures in the AM peak hour and four arrivals and no departures in the PM peak hour. To ensure that the traffic modelling assessment is robust, nine arrivals and nine departures have been modelled in both the AM and PM peak hours.
- Local traffic has been growthed to this opening year, and future assessment years of 2029 and 2039 using TII Central Growth factors for link based growth in County Leitrim, taking account of 0.5% HCVs.
- The operation of the amended northern LP3413/LT34132 (Semi Circular Road) junction, and the southern LP3413/LT34132 (Semi Circular Road) junction/Drummagh junction have been assessed using the industry standard traffic modelling software package PICADY. The modelling covers the AM and PM peak hour scenarios in the opening and future assessment years, with and without the proposed development.
- The modelling output shows that the amended northern LP3413/LT34132 (Semi Circular Road) junction will operate with 98% spare capacity in both the AM and PM peak hours, whilst the existing southern LP3413/LT34132 (Semi Circular Road)/Drummagh residential estate junction will operate with 98% spare capacity in the AM peak hour and 100% spare capacity in the PM peak hour.
- The proposed development includes the provision of 26 car parking spaces including three designated disabled car parking spaces.
- Visibility splays of 2.4m x 45m are proposed exiting from the amended northern LP3413/LT34132 (Semi Circular Road) junction, complying with the requirements of DMURS. It should be ensured that clear 2.4m x 23m visibility splays are provided on both the horizontal and vertical plane from the proposed development onto the LT34132 (Semi Circular Road), setting back any boundary treatment or landscaping as necessary.
- The turning areas indicated on Wynne Gormley Gilsenan Architects and Surveyors 'Site Layout, Site Survey, Site Boundary & Boundary Details' drawing (Drawing Number: PL22-023-002; Dated: 01/11/2022), have been tested with Autotrack swept path software for both a typical 3-axle refuse vehicle and an 8.2m length fire tender.

1 Introduction

1.1 Traffic Transport and Road Safety Associates

Traffic Transport and Road Safety Associates Ltd. (TTRSA) is a specialist Traffic Engineering and Transport Planning practice, based in Ireland. The senior managers within TTRSA have extensive experience of developing traffic management schemes, assessing the transport related impacts of development and improving road safety both nationally and internationally.

TTRSA has been commissioned by Wynne Gormley Gilsenan Architects and Surveyors to prepare a traffic report and associated analysis for a proposed housing development at Kilboderry, Carrick-on-Shannon, Co. Leitrim, as part of a forthcoming Part VIII planning application by Leitrim County Council.

1.2 Proposed development

The proposed development seeks to '*construct a housing development containing 18 no. fully serviced residential units consisting of 12 no. 2 bedroom dwellings (in 2 No. terraced blocks), 6 no. 1 bedroom apartments (in 2 No. blocks), connections to existing foul main, watermain and surface water discharge, landscaped open space and all ancillary and associated works*', accessed from the LT34132 (Semi Circular Road) at Kilboderry, Carrick-on-Shannon. As part of the development, the northern section of the LT34132 will be widened to facilitate two-way traffic between the development access junction and the northern LT34132/LP3413 junction.

A scaled copy of the site layout drawing of the proposed development prepared by Wynne Gormley Gilsenan Architects and Surveyors, entitled 'Site Layout, Site Survey, Site Boundary & Boundary Details'; Drawing Number: PL22-023-002; Dated: 01/11/2022, is included for information within Appendix A, and provides the basis of the analysis contained within this report.

1.3 Format of this report

This traffic report has been prepared in accordance with the agreed design brief for the housing scheme, with cognisance of the Transport Infrastructure Ireland (TII) document 'Traffic and Transport Assessment Guidelines' (PE-PDV-02045) published in May 2014. The remaining sections of this traffic report are set out as follows:

- Chapter 2 describes the existing built environment into which the development meshes;
- Chapter 3 provides details of the analysis of the traffic impact of the proposed development, including trip generation, distribution, assignment and junction operation; and,
- Chapter 4 reviews compliance of the development with relevant design standards.

2 The local built environment

2.1 The local highway network

As noted in Section 1.2, the proposed development is to be accessed from the LT34132 (Semi Circular Road) at Kilboderry, Carrick-on-Shannon, with the LT34132 being widened over a short section, to 6m in width, to facilitate two-way traffic between the development access junction and the northern LT34132/LP3413 junction. The carriageway widening also incorporates the provision of a 2m wide footpath. It is anticipated that the section of the LT34132 not impacted directly by the proposed development will remain one-way in a southerly direction. The southern end of the LT34132 terminates at a staggered junction with the LP3413 and the Drummagh residential estate access. On-road cycle tracks are present on both sides of the LP3413 in proximity of the development, providing connectivity to and from the amenities within Carrick-on-Shannon town centre.

2.2 Existing traffic movements

To assist in the preparation of this traffic report, TTRSA undertook video-based peak hour manual classified count survey (MCC), at the junctions of the LP3413 and LT34132 (Semi Circular Road), for the peak periods of 08:00-09:29 hours and 16:15-17:45 hours on Tuesday 25th October 2022. These surveys determined the local traffic peak hours for assessment as an AM peak hour of 08:15-09:14 and a PM peak hour of 16:30-17:29.

The MCC survey also incorporates trip generation of the existing twenty dwelling Drummagh residential estate as detailed in Section 3.1.

The MCC survey data was coded into 15 minute periods, classified into bicycles; motorcycles; cars and light goods vehicles (LGV); and, heavy goods vehicles (HGV) and public service vehicles[1] (PSV). In addition, for the purpose of this analysis contained within Section 3 of this report, the traffic count data was converted into Passenger Car Units (PCUs), using factors of: 0.2 for bicycles; 0.4 for motorcycles; 1.0 for cars and LGVs (including those towing trailers); and 2.3 for buses and all types of rigid and articulated HGV and PSV.

The coded traffic survey count data, including PCU values, is included within Appendix B of this report.

2.3 Road Safety

Consultation of Health Atlas Ireland online collision data for the period 2005-2016, the latest for which information is publicly available to the initial issue date of this report (9th November 2022), indicates no collisions resulting in injury have been reported in the vicinity of the proposed development.

1 buses and coaches

3 Analysis of development impact

3.1 Predicted trip vehicular generation

Peak hour vehicular trip generation for the proposed development (Table 3.1) has been predicted based on the trip generation of the existing 20 dwelling Drummagh residential estate in Carrick-on-Shannon on Tuesday 25th October 2022. The average number of trips per residential unit is 0.65 in the AM peak hour and 0.2 in the PM peak hour.

Table 3.1 – Predicted vehicular trip generation (PCUs)

Peak Period	Arrivals	Departures
AM Peak	3	9
PM Peak	4	0

3.2 Modelled trip vehicular generation

To ensure that the analysis of the impact of the development on the amended northern LP3413/LT34132 (Semi Circular Road) junction, and the southern LP3413/LT34132 (Semi Circular Road) junction/ Drummagh junction is robust, the trip generation applied within the traffic modelling detailed in Section 3.6 has been based on the number and size of the proposed residential units: 0.5 arrivals and departures for each one-bed and two-bed dwelling, during each of the peak hours. The modelled vehicular trip generation for the proposed development is detailed in Table 3.2 and incorporated into Appendix C.

Table 3.2 – Modelled vehicular trip generation (PCUs)

Peak Period	Arrivals	Departures
AM Peak	9	9
PM Peak	9	9

3.3 Trip distribution and assignment

For the purpose of the traffic modelling detailed in Section 3.6 of this report, trips generated by the proposed development have been distributed and assigned taking account of the observed movements at the entrance to the Drummagh residential estate. This approach takes into account a number of factors including the distance to and availability of facilities and commuting based trips. The distribution and assignment of development related trips is detailed in Appendix C.

3.4 Modal split

No modal split targets have been set for the development. The 2016 Census modal split for journeys to work in Carrick-on-Shannon was reported as: Walk 20%; Cycle 2%; Public Transport 2%; Car/Van 76%; and, other <1%, and for journeys to school in Carrick-on-Shannon was reported as: Walk 28%; Cycle 1%; Public Transport 11%; and, Car 60%.

3.5 Opening and future year traffic

Subject to planning being granted, it is assumed for the purpose of this traffic report that the proposed development will be fully constructed during 2024. Local traffic has been growthed to this opening year, and future assessment years of 2029 and 2039 using TII Central Growth factors for link based growth in County Leitrim, taking account of 0.5% HCVs. The growth factors applied being:

- From 2022 to 2024 a factor of 1.012;
- From 2022 to 2029 a factor of 1.044; and,
- From 2022 to 2039 a factor of 1.034.

The impact of this traffic growth is detailed within Appendix C.

3.6 Assessment of junction operation

The operation of the amended northern LP3413/LT34132 (Semi Circular Road) junction, and the southern LP3413/LT34132 (Semi Circular Road) junction/Drummagh junction have been assessed using the industry standard traffic modelling software package PICADY. The modelling covers the AM and PM peak hour scenarios in the opening and future assessment years, with and without the proposed development. Traffic movements related to all scenarios are detailed within Appendix C.

The assessment has been undertaken using PCU values. The criteria used to assess the performance of a junction for a given traffic demand within the aforementioned traffic modelling software are:

- Ratio of Flow to Capacity (RFC) is a measure of junction performance in terms of saturation. A value of 1.00, which can also be considered as 100% saturation, represents an arm of the junction operating at maximum capacity, in that any increase in the rate of vehicles arriving on the link will result in significant additional queue lengths. Traditionally a figure of 0.85 or 85% is the maximum acceptable degree of saturation for priority junctions, with anything above this figure being considered to be congested.
- Queue lengths (measured in PCUs) are primarily used to check for blocking back through adjacent junctions.

The results of the assessment based on the robustness of trip generation highlighted in Section 3.2, are summarised in Tables 3.3 and 3.4, and the PICADY modelling output files are provided within Appendix D.

Table 3.3 shows that with the proposed development having been constructed, the amended northern LP3413/LT34132 (Semi Circular Road) junction will operate with 98% spare capacity in both the AM and PM peak hours, whilst Table 3.4 shows that the existing southern LP3413/LT34132 (Semi Circular Road)/Drummagh residential estate junction will operate with 98% spare capacity in the AM peak hour and 100% spare capacity in the PM peak hour.

Table 3.3 – Summary of PICADY output for the amended northern LP3413/LT34132 (Semi Circular Road) junction

	AM					PM				
	Set ID	Queue (PCU)	Delay (s)	RFC	LOS	Set ID	Queue (PCU)	Delay (s)	RFC	LOS
	2024 without Development									
Stream B-AC	D1	0.0	0.00	0.00	A	D7	0.0	0.00	0.00	A
Stream C-AB		0.0	0.00	0.00	A		0.0	0.00	0.00	A
	2029 without Development									
Stream B-AC	D2	0.0	0.00	0.00	A	D8	0.0	0.00	0.00	A
Stream C-AB		0.0	0.00	0.00	A		0.0	0.00	0.00	A
	2039 without Development									
Stream B-AC	D3	0.0	0.00	0.00	A	D9	0.0	0.00	0.00	A
Stream C-AB		0.0	0.00	0.00	A		0.0	0.00	0.00	A
	2024 with Development									
Stream B-AC	D4	0.0	7.08	0.02	A	D10	0.0	7.09	0.02	A
Stream C-AB		0.0	0.00	0.00	A		0.0	5.76	0.01	A
	2029 with Development									
Stream B-AC	D5	0.0	7.09	0.02	A	D11	0.0	7.10	0.02	A
Stream C-AB		0.0	0.00	0.00	A		0.0	5.76	0.01	A
	2039 with Development									
Stream B-AC	D6	0.0	7.09	0.02	A	**D12**	**0.0**	**7.09**	**0.02**	**A**
Stream C-AB		0.0	0.00	0.00	A		**0.0**	**5.76**	**0.01**	**A**

Table 3.4 – Summary of PICADY output for the existing southern LP3413/LT34132 (Semi Circular Road)/Drummagh residential estate junction

	AM					PM				
	Set ID	Queue (PCU)	Delay (s)	RFC	LOS	Set ID	Queue (PCU)	Delay (s)	RFC	LOS
	2024 without Development									
Stream B-ACD	D1	0.0	0.00	0.00	A	D7	0.0	0.00	0.00	A
Stream AB-CD		0.0	5.74	0.01	A		0.0	5.69	0.00	A
Stream D-ABC		0.0	6.86	0.02	A		0.0	0.00	0.00	A
Stream CD-AB		0.0	0.00	0.00	A		0.0	0.00	0.00	A
	2029 without Development									
Stream B-ACD	D2	0.0	0.00	0.00	A	D8	0.0	0.00	0.00	A
Stream AB-CD		0.0	5.74	0.01	A		0.0	5.68	0.00	A
Stream D-ABC		0.0	6.86	0.02	A		0.0	0.00	0.00	A
Stream CD-AB		0.0	0.00	0.00	A		0.0	0.00	0.00	A
	2039 without Development									
Stream B-ACD	D3	0.0	0.00	0.00	A	D9	0.0	0.00	0.00	A
Stream AB-CD		0.0	5.74	0.01	A		0.0	5.68	0.00	A
Stream D-ABC		0.0	6.86	0.02	A		0.0	0.00	0.00	A
Stream CD-AB		0.0	0.00	0.00	A		0.0	0.00	0.00	A
	2024 with Development									
Stream B-ACD	D4	0.0	0.00	0.00	A	D10	0.0	0.00	0.00	A
Stream AB-CD		0.0	5.72	0.01	A		0.0	5.66	0.00	A
Stream D-ABC		0.0	6.88	0.02	A		0.0	0.00	0.00	A
Stream CD-AB		0.0	0.00	0.00	A		0.0	0.00	0.00	A
	2029 with Development									
Stream B-ACD	D5	0.0	0.00	0.00	A	D11	0.0	0.00	0.00	A
Stream AB-CD		0.0	5.71	0.01	A		0.0	5.67	0.00	A
Stream D-ABC		0.0	6.89	0.02	A		0.0	0.00	0.00	A
Stream CD-AB		0.0	0.00	0.00	A		0.0	0.00	0.00	A
	2039 with Development									
Stream B-ACD	D6	0.0	0.00	0.00	A	**D12**	**0.0**	**0.00**	**0.00**	**A**
Stream AB-CD		0.0	5.71	0.01	A		**0.0**	**5.67**	**0.00**	**A**
Stream D-ABC		0.0	6.89	0.02	A		**0.0**	**0.00**	**0.00**	**A**
Stream CD-AB		0.0	0.00	0.00	A		**0.0**	**0.00**	**0.00**	**A**

4 Compliance with design standards

4.1 Relevant design standards and guidance

Proposed residential developments are required to comply with a range of relevant design standards and guidance incorporating elements of highway design. These design standards and guidance include the following documents**.**

- The development management standards contained within the Leitrim County Development Plan 2015-2021 (as varied and extended), and the Leitrim County Development Plan 2023-2029[2];
- The Carrick-on-Shannon Local Area Plan 2010-2019;
- The Design Manual for Urban Roads and Streets (DMURS);
- The DoELG publication Recommendations for Site Development Works for Housing Areas;
- The DoT Traffic Signs Manual; and,
- Elements of the DTO Traffic Management Guidelines (and supporting documents including the (UK) Guidance on the Use of Tactile Paving Surfaces.

4.2 Car parking

Requirements for car parking within development are covered in Table 3.1 of the Carrick-on-Shannon Local Area Plan 2010-2019. Whilst this requires residential developments to provide two car parking spaces per dwelling, Leitrim County Council '*reserves the right to alter the requirements having regard to the circumstances of each particular development and the proper planning and sustainable development of the area*'. Twenty six car parking spaces include three designated disabled car park spaces are included within the proposed development. -

4.3 Sightlines

Development management standards for access onto public roads and sight lines are covered within Section 5.5.8 of the Leitrim County Development Plan 2015-2021 (as varied and extended) and Section 13.16.4 of the (Draft) Leitrim County Development Plan 2023-2029, the latter document allowing sight lines in accordance with DMURS in built up areas. Wynne Gormley Gilsenan Architects and Surveyors 'Site Layout, Site Survey, Site Boundary & Boundary Details' drawing (Drawing Number: PL22-023-002; Dated: 01/11/2022), included for information within Appendix A, shows 2.4m x 45m visibility splays exiting from the amended northern LP3413/LT34132 (Semi Circular Road) junction. These visibility splays are in compliance with the requirements of DMURS, but would require measures to prohibit pavement parking on the LP3413 in the immediate vicinity of this junction.

It should be ensured that clear 2.4m x 23m visibility splays are provided on both the horizontal and vertical plane from the proposed development onto the LT34132 (Semi Circular Road), setting back any boundary treatment or landscaping as necessary.

4.4 Surface water drainage

Section 5.5.9 of the Leitrim County Development Plan 2015-2021 (as varied and extended), requires that '*In addition an entrance must provide for a surface water disposal system so as to ensure that no surface water is discharged onto the public road*'. Whilst this requirement is not replicated within the (Draft) Leitrim County Development Plan 2023-2029, the latter includes policies '*To require that new developments are adequately serviced with surface water drainage infrastructure which meets the requirements of the Water Framework Directive, associated River Basin Management Plans and CFRAM Management Plans; and, to limit the rate of surface water run off to pre development levels for all green-field*

2 From 21st March 2023

developments'. Wynne Gormley Gilsenan Architects and Surveyors 'Site Layout, Site Survey, Site Boundary & Boundary Details' drawing (Drawing Number: PL22-023-002; Dated: 01/11/2022), included for information within Appendix A, shows the internal road within the proposed development falling at a gradient of '1:30' back from the LT34132 (Semi Circular Road).

4.5 Turning of service vehicles

Turning requirements for service vehicles are detailed in Section 2.6 of the Recommendations for Site Development Works for Housing Areas publication. This requires that turning bays are provided taking into account the '*maximum size of vehicle to be accommodated and on the frequency with which the turning bay would be used by that vehicle*'. The turning areas indicated on Wynne Gormley Gilsenan Architects and Surveyors 'Site Layout, Site Survey, Site Boundary & Boundary Details' drawing (Drawing Number: PL22-023-002; Dated: 01/11/2022), included for information within Appendix A, have been tested with Autotrack swept path software for both a typical 3-axle refuse vehicle and an 8.2m length fire tender.

4.6 Road signing

Whilst proposed road signing is indicated on Wynne Gormley Gilsenan Architects and Surveyors 'Site Layout, Site Survey, Site Boundary & Boundary Details' drawing (Drawing Number: PL22-023-002; Dated: 01/11/2022), included for information within Appendix A, it is recommended that road signing is reviewed and amended prior to construction. For example: a nearside stop sign is required (duplicated by the proposed off-site stop sign) at the junction from the development onto the LT34132; one-way and no-entry signing is required on the LT34132 to the west of the proposed development access junction; and, road signing is required to identify designated disabled car parking spaces. Whilst the Slow Zone signing proposed at the entrance to the proposed development duplicates signing that is already present at the entry into the LT34132 from the LP3143, this signing can assist in reinforcing road user awareness of the nature of the development.

4.7 Tactile paving and pedestrian access

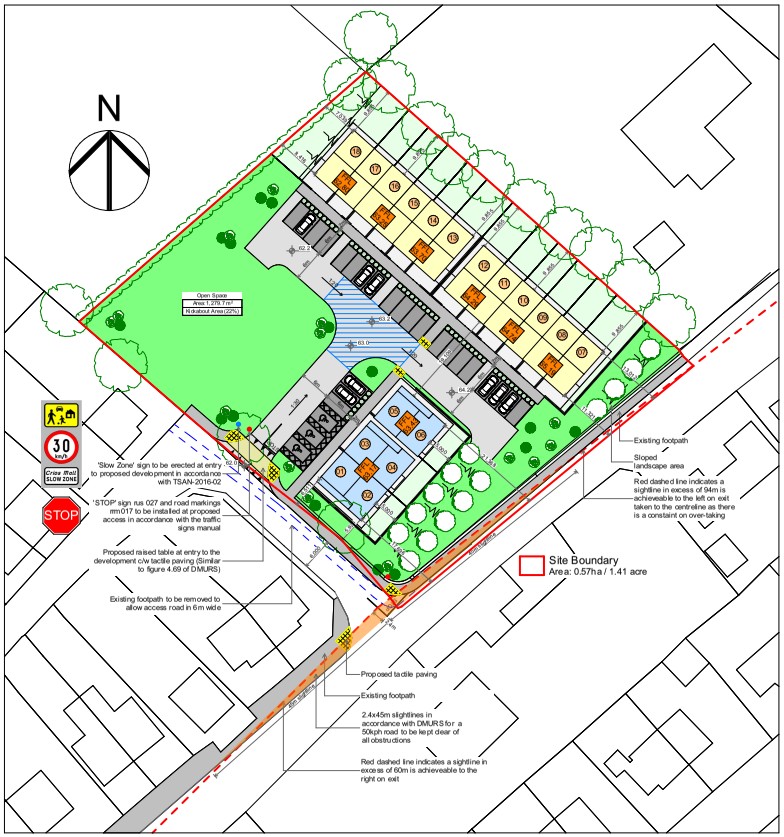
Whilst tactile paving is indicated on Wynne Gormley Gilsenan Architects and Surveyors 'Site Layout, Site Survey, Site Boundary & Boundary Details' drawing (Drawing Number: PL22-023-002; Dated: 01/11/2022), included for information within Appendix A, it is recommended that tactile paving provision is reviewed and amended prior to construction. For example, the proposed tactile guidance in the vicinity of unit 12 will guide visually impaired pedestrians between car parking spaces at a location where other road users would not have inter-visibility with these pedestrians. It is also unclear how the proposed footpath on the site frontage to the west of the proposed development access junction connects to the existing footpath on the western side of the LT34132 (Semi Circular Road) and it is therefore recommended to ensure that adequate and safe route connectivity is provided for pedestrian access.

Appendix A

Site Layout Drawing (prepared by Wynne Gormley Gilsenan Architects and Surveyors)

Drawing Title: Site Layout, Site Survey, Site Boundary & Boundary Details
Drawing Number: PL22-023-002
Drawing Dated: 01/11/2022

Scaled drawing for information only



1 Site Layout 1:500

2 Site Layout - Survey 1:500

House Type 'A' - Two Storey
2 Bed/4 Person - 89.6m²
12 Units (Area: 89.6m²)

House Type 'B' - Apartment
1 Bed/2 Person - GF
3 Units (Area: 57.6m²)

House Type 'B' - Apartment
1 Bed/2 Person - FF
3 Units (Area: 56.1m²)

18 Units Total

- 6m Access Road
- Pedestrain Path Along Access Road
- Driveways/ Parking Spaces
- Footpath
- Private Open Space (Lawn)
- Public Open Space
- Residential Turning Bay

Private Open Space	
Plot No.	Area
01	39.9
02	3.0
03	32.8
04	3.0
05	40.1
06	3.0
07	82.0
08	42.4
09	42.4
10	42.4
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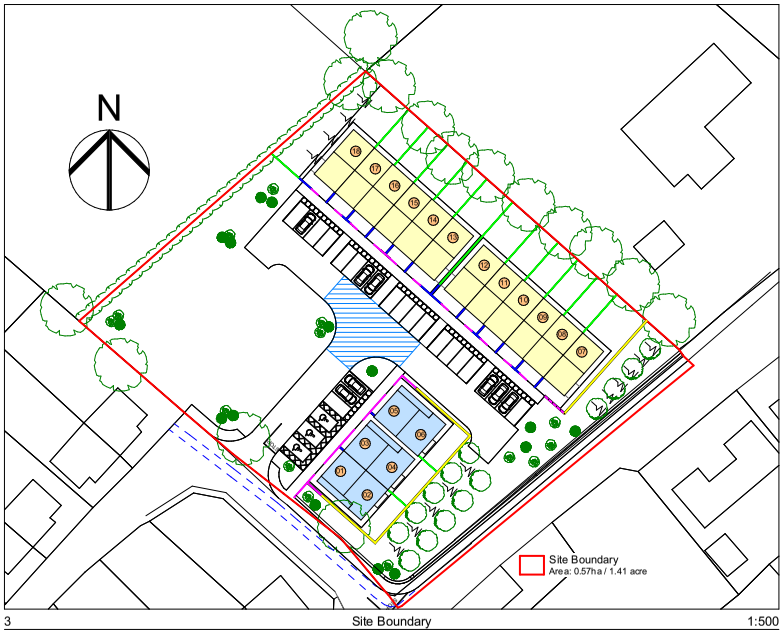
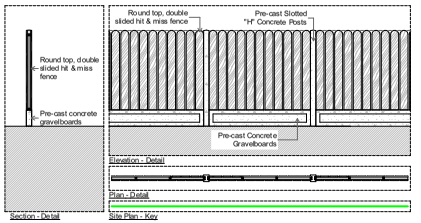
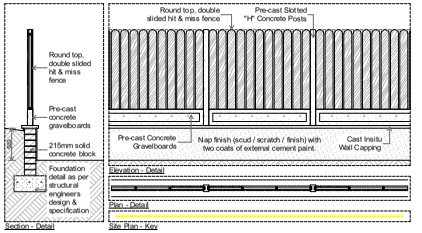
16	42.4
17	42.4
18	70.2



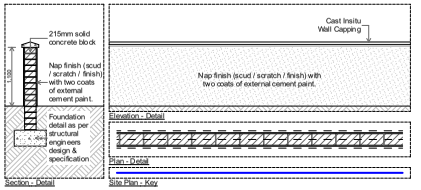
3 Site Boundary 1:500



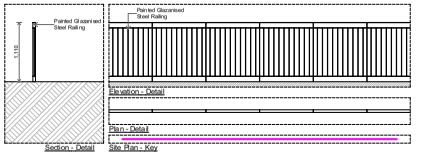
4 Boundary Wall 'A' 1:50



5 Boundary Wall 'B' 1:50



6 Boundary Wall 'C' 1:50



7 Boundary Wall 'D' 1:50

House Type	No. of Units	No. of Bedrooms	No. of Bed spaces	Floor Area (m2)		Total Floor Area (m2)	Aggreate Living Area (m2)		Living Room Width (m)		Main Bedroom				Double Bedroom				Single Bedroom Area				Aggregate bedroom Area (m2)		Storage Area (m2)	
				Reqd. Min	Provided		Reqd. Min	Provided	Reqd. Min	Provided	Reqd. Min Area (m2)	Provided (m2)	Reqd. Min Width (m)	Provided Width (m)	Reqd. Min Area (m2)	Provided (m2)	Reqd. Min Width (m)	Provided Width (m)	Reqd. Min Area (m2)	Provided (m2)	Reqd. Min Width (m)	Provided Width (m)	Reqd. Min	Provided	Reqd. Min	Provided
A	12	2	4	80.0	89.6	1075.2	30.0	30.9	3.6	3.600	13.0	13.2	2.8	3.020	11.4	11.8	2.8	3.020	7.1	N/A	2.1	N/A	25.0	25.0	4	4
B - GF	3	1	2	45.0	62.0	186.0	23.0	24.8	2.1	3.630	11.4	13.0	2.8	3.525	11.4	N/A	2.8	N/A	8.0	N/A	2.1	N/A	11.0	13.0	3	5.2
B - FF	3	1	2	45.0	61.0	183.0	23.0	24.2	2.1	3.630	11.4	20.3	2.8	3.700	11.4	N/A	2.8	N/A	7.1	N/A	2.1	N/A	11.0	20.3	3	3.2
Total	18					1444.2																				

Comhairle Chontae Liatroma
Leitrim County Council

Rev	Issue Date	Description	Approved by

Purpose of Issue

Planning - Part 8

Wynne Gormley Gilsenan Architects & Surveyors Ltd.

JOB DETAILS

Proposed Housing Development @ Kilboderry, Carrick-on-Shannon, Co. Leitrim for Leitrim County Council

Scale @ A1: 1:500, 1:50, 1:250, 1:1
Dwg no: PL22-023-002
Amend:
Date: 01/11/2022
Description: Site Layout, Site Survey, Site Boundary & Boundary Details
Drawn by: J. McDermott
Checked by: E. Gilsenan

21, Church View, Cavan
T +353 49 43 61096
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E info@wggarchitects.ie
W www.wggarchitects.ie

Appendix B

Traffic Count Data and PCU Conversion

Video-based Manual Classified Traffic Count – Tuesday 25th October 2022
Northern LP3413/LT34132 Junction, Carrick-on-Shannon, Co. Leitrim

Arm A = LP3413 to/from South (Town Centre)
Arm B = LT34132 (Semi-Circular Road)
Arm C = LP3413 to/from North

PCU Factors

Cycle	0.2
Motorcycle	0.4
Car/LGV	1
HGV/PSV	2.3

Cycle	A-B	A-C	B-A	B-C	C-A	C-B
08:00 – 08:14	0	0	0	0	0	0
08:15 – 08:29	0	0	0	0	0	0
08:30 – 08:44	0	0	0	0	0	0
08:45 – 08:59	0	0	0	0	0	0
09:00 – 09:14	0	0	0	0	0	0
09:15 – 09:29	0	0	0	0	0	0
16:15 – 16:29	0	0	0	0	0	0
16:30 – 16:44	0	0	0	0	0	0
16:45 – 16:59	0	0	0	0	0	0
17:00 – 17:14	0	0	0	0	0	0
17:15 – 17:29	0	0	0	0	0	0
17:30 – 17:44	0	0	0	0	0	0

Motorcycle	A-B	A-C	B-A	B-C	C-A	C-B
08:00 – 08:14	0	0	0	0	0	0
08:15 – 08:29	0	0	0	0	0	0
08:30 – 08:44	0	0	0	0	0	0
08:45 – 08:59	0	0	0	0	0	0
09:00 – 09:14	0	0	0	0	0	0
09:15 – 09:29	0	0	0	0	0	0
16:15 – 16:29	0	0	0	0	0	0
16:30 – 16:44	0	0	0	0	0	0
16:45 – 16:59	0	0	0	0	0	0
17:00 – 17:14	0	0	0	0	0	0
17:15 – 17:29	0	0	0	0	0	0
17:30 – 17:44	0	0	0	0	0	0

Car/LGV	A-B	A-C	B-A	B-C	C-A	C-B
08:00 – 08:14	0	2	0	0	0	0
08:15 – 08:29	0	3	0	0	5	0
08:30 – 08:44	0	15	0	0	5	0
08:45 – 08:59	0	10	0	0	22	0
09:00 – 09:14	0	6	0	0	5	0
09:15 – 09:29	2	0	0	0	4	0
16:15 – 16:29	0	7	0	0	10	0
16:30 – 16:44	2	12	0	0	7	0
16:45 – 16:59	0	5	0	0	11	0
17:00 – 17:14	0	6	0	0	6	0
17:15 – 17:29	1	12	0	0	6	0
17:30 – 17:44	1	7	0	0	4	0

HCV/PSV	A-B	A-C	B-A	B-C	C-A	C-B
08:00 – 08:14	0	0	0	0	0	0
08:15 – 08:29	0	0	0	0	0	0
08:30 – 08:44	0	0	0	0	0	0
08:45 – 08:59	0	0	0	0	0	0
09:00 – 09:14	0	0	0	0	1	0
09:15 – 09:29	0	0	0	0	0	0
16:15 – 16:29	0	0	0	0	0	0
16:30 – 16:44	0	0	0	0	0	0
16:45 – 16:59	0	0	0	0	0	0
17:00 – 17:14	0	0	0	0	0	0
17:15 – 17:29	0	0	0	0	0	0
17:30 – 17:44	0	0	0	0	0	0

Total Vehicles	A-B	A-C	B-A	B-C	C-A	C-B
08:00 – 08:14	0	2	0	0	0	0
08:15 – 08:29	0	3	0	0	5	0
08:30 – 08:44	0	15	0	0	5	0
08:45 – 08:59	0	10	0	0	22	0
09:00 – 09:14	0	6	0	0	6	0
09:15 – 09:29	2	0	0	0	4	0
16:15 – 16:29	0	7	0	0	10	0
16:30 – 16:44	2	12	0	0	7	0
16:45 – 16:59	0	5	0	0	11	0
17:00 – 17:14	0	6	0	0	6	0
17:15 – 17:29	1	12	0	0	6	0
17:30 – 17:44	1	7	0	0	4	0

PCUs	A-B	A-C	B-A	B-C	C-A	C-B
08:00 – 08:14	0	2	0	0	0	0
08:15 – 08:29	0	3	0	0	5	0
08:30 – 08:44	0	15	0	0	5	0
08:45 – 08:59	0	10	0	0	22	0
09:00 – 09:14	0	6	0	0	7	0
09:15 – 09:29	2	0	0	0	4	0
16:15 – 16:29	0	7	0	0	10	0
16:30 – 16:44	2	12	0	0	7	0
16:45 – 16:59	0	5	0	0	11	0
17:00 – 17:14	0	6	0	0	6	0
17:15 – 17:29	1	12	0	0	6	0
17:30 – 17:44	1	7	0	0	4	0

PCUs	A-B	A-C	B-A	B-C	C-A	C-B
AM Peak Hour	0	34	0	0	39	0
PM Peak Hour	3	35	0	0	30	0

Data in PCUs rounded to the nearest whole number

Video-based Manual Classified Traffic Count – Tuesday 25th October 2022
Southern LP3413/LT34132 Junction, Carrick-on-Shannon, Co. Leitrim

TTRSA
Traffic : Transport : Road Safety

Arm A = LP3413 to/from South (Town Centre)
Arm B = LT34132 (Semi-Circular Road)
Arm C = LP3413 to/from North
Arm D = Drummagh Residential Estate

PCU Factors

Cycle	0.2
Motorcycle	0.4
Car/LGV	1
HGV/PSV	2.3

Cycle	A-C	A-D	B-A	B-C	B-D	C-A	C-D	D-A	D-C
08:00 – 08:14	0	0	0	0	0	0	0	0	0
08:15 – 08:29	0	0	0	0	0	0	0	0	0
08:30 – 08:44	0	0	0	0	0	0	0	0	0
08:45 – 08:59	0	0	0	0	0	0	0	0	0
09:00 – 09:14	0	0	0	0	0	0	0	0	0
09:15 – 09:29	0	0	0	0	0	0	0	0	0
16:15 – 16:29	0	0	0	0	0	0	0	0	0
16:30 – 16:44	0	0	0	0	0	0	0	0	0
16:45 – 16:59	0	0	0	0	0	0	0	0	0
17:00 – 17:14	0	0	0	0	0	0	0	0	0
17:15 – 17:29	0	0	0	0	0	0	0	0	0
17:30 – 17:44	0	0	0	0	0	0	0	0	0

Motorcycle	A-C	A-D	B-A	B-C	B-D	C-A	C-D	D-A	D-C
08:00 – 08:14	0	0	0	0	0	0	0	0	0
08:15 – 08:29	0	0	0	0	0	0	0	0	0
08:30 – 08:44	0	0	0	0	0	0	0	0	0
08:45 – 08:59	0	0	0	0	0	0	0	0	0
09:00 – 09:14	0	0	0	0	0	0	0	0	0
09:15 – 09:29	0	0	0	0	0	0	0	0	0
16:15 – 16:29	0	0	0	0	0	0	0	0	0
16:30 – 16:44	0	0	0	0	0	0	0	0	0
16:45 – 16:59	0	0	0	0	0	0	0	0	0
17:00 – 17:14	0	0	0	0	0	0	0	0	0
17:15 – 17:29	0	0	0	0	0	0	0	0	0
17:30 – 17:44	0	0	0	0	0	0	0	0	0

Car/LGV	A-C	A-D	B-A	B-C	B-D	C-A	C-D	D-A	D-C
08:00 – 08:14	2	1	0	0	0	0	0	2	0
08:15 – 08:29	3	0	0	0	0	6	0	1	0
08:30 – 08:44	8	1	0	1	1	8	0	2	2
08:45 – 08:59	11	1	0	0	0	25	0	2	1
09:00 – 09:14	6	1	0	0	0	5	0	1	0
09:15 – 09:29	2	0	0	0	1	4	0	1	0
16:15 – 16:29	6	0	0	0	0	10	0	0	0
16:30 – 16:44	14	1	1	0	0	8	0	0	0
16:45 – 16:59	5	0	0	0	0	10	1	0	0
17:00 – 17:14	7	0	0	0	0	9	0	0	0
17:15 – 17:29	12	1	1	1	0	5	1	0	0
17:30 – 17:44	7	2	0	0	0	4	0	1	0

HCV/PSV	A-C	A-D	B-A	B-C	B-D	C-A	C-D	D-A	D-C
08:00 – 08:14	0	0	0	0	0	0	0	0	0
08:15 – 08:29	0	0	0	0	0	0	0	0	0
08:30 – 08:44	0	0	0	0	0	0	0	0	0
08:45 – 08:59	0	0	0	0	0	0	0	0	0
09:00 – 09:14	1	0	0	0	0	0	0	0	0
09:15 – 09:29	0	0	0	0	0	0	0	0	0
16:15 – 16:29	0	0	0	0	0	0	0	0	0
16:30 – 16:44	0	0	0	0	0	0	0	0	0
16:45 – 16:59	0	0	0	0	0	0	0	0	0
17:00 – 17:14	0	0	0	0	0	0	0	0	0
17:15 – 17:29	0	0	0	0	0	0	0	0	0
17:30 – 17:44	0	0	0	0	0	0	0	0	0

Total Vehicles	A-C	A-D	B-A	B-C	B-D	C-A	C-D	D-A	D-C
08:00 – 08:14	2	1	0	0	0	0	0	2	0
08:15 – 08:29	3	0	0	0	0	6	0	1	0
08:30 – 08:44	8	1	0	1	1	8	0	2	2
08:45 – 08:59	11	1	0	0	0	25	0	2	1
09:00 – 09:14	7	1	0	0	0	5	0	1	0
09:15 – 09:29	2	0	0	0	1	4	0	1	0
16:15 – 16:29	6	0	0	0	0	10	0	0	0
16:30 – 16:44	14	1	1	0	0	8	0	0	0
16:45 – 16:59	5	0	0	0	0	10	1	0	0
17:00 – 17:14	7	0	0	0	0	9	0	0	0
17:15 – 17:29	12	1	1	1	0	5	1	0	0
17:30 – 17:44	7	2	0	0	0	4	0	1	0

PCUs	A-C	A-D	B-A	B-C	B-D	C-A	C-D	D-A	D-C
08:00 – 08:14	2	1	0	0	0	0	0	2	0
08:15 – 08:29	3	0	0	0	0	6	0	1	0
08:30 – 08:44	8	1	0	1	1	8	0	2	2
08:45 – 08:59	11	1	0	0	0	25	0	2	1
09:00 – 09:14	8	1	0	0	0	5	0	1	0
09:15 – 09:29	2	0	0	0	1	4	0	1	0
16:15 – 16:29	6	0	0	0	0	10	0	0	0
16:30 – 16:44	14	1	1	0	0	8	0	0	0
16:45 – 16:59	5	0	0	0	0	10	1	0	0
17:00 – 17:14	7	0	0	0	0	9	0	0	0
17:15 – 17:29	12	1	1	1	0	5	1	0	0
17:30 – 17:44	7	2	0	0	0	4	0	1	0

PCUs	A-C	A-D	B-A	B-C	B-D	C-A	C-D	D-A	D-C
AM Peak Hour	30	3	0	1	1	44	0	6	3
PM Peak Hour	38	2	2	1	0	32	2	0	0

Data in PCUs rounded to the nearest whole number

Appendix C

Traffic Calculations Summary

Traffic Calculations – Summary

Northern LP3413/LT34132 Junction, Carrick-on-Shannon, Co. Leitrim

Arm A = LP3413 to/from South (Town Centre)

Arm B = LT34132 (Semi-Circular Road)

Arm C = LP3413 to/from North

Scenario	A-B	A-C	B-A	B-C	C-A	C-B
2022 AM Peak Hour Traffic Count (08:15-09:14)	0	34	0	0	39	0
2024 AM Peak Hour (Factor = 1.012)	**0**	**34**	**0**	**0**	**40**	**0**
2029 AM Peak Hour (Factor = 1.044)	**0**	**35**	**0**	**0**	**41**	**0**
2039 AM Peak Hour (Factor = 1.034)	**0**	**35**	**0**	**0**	**41**	**0**
AM Peak Hour Generated Trips	9	0	6	3	0	0
2024 AM Peak with Development	**9**	**34**	**6**	**3**	**39**	**0**
2029 AM Peak with Development	**9**	**35**	**6**	**3**	**41**	**0**
2039 AM Peak with Development	**9**	**35**	**6**	**3**	**41**	**0**
2022 PM Peak Hour Traffic Count (16:30-17:29)	3	35	0	0	30	0
2024 PM Peak Hour (Factor = 1.012)	**3**	**35**	**0**	**0**	**30**	**0**
2029 PM Peak Hour (Factor = 1.044)	**3**	**37**	**0**	**0**	**31**	**0**
2039 PM Peak Hour (Factor = 1.034)	**3**	**36**	**0**	**0**	**31**	**0**
PM Peak Hour Generated Trips	5	0	6	3	0	5
2024 PM Peak with Development	**8**	**35**	**6**	**3**	**30**	**5**
2029 PM Peak with Development	**8**	**37**	**6**	**3**	**31**	**5**
2039 PM Peak with Development	**8**	**36**	**6**	**3**	**31**	**5**

Data in PCUs rounded to the nearest whole number

Traffic Calculations – Summary

Southern LP3413/LT34132 Junction, Carrick-on-Shannon, Co. Leitrim

Arm A = LP3413 to/from South (Town Centre)

Arm B = LT34132 (Semi-Circular Road)

Arm C = LP3413 to/from North

Arm D = Drummagh Residential Estate

Scenario	A-C	A-D	B-A	B-C	B-D	C-A	C-D	D-A	D-C
2022 AM Peak Hour Traffic Count (08:15-09:14)	30	3	0	1	1	44	0	6	3
2024 AM Peak Hour (Factor = 1.012)	**31**	**3**	**0**	**1**	**1**	**45**	**0**	**6**	**3**
2029 AM Peak Hour (Factor = 1.044)	**32**	**3**	**0**	**1**	**1**	**46**	**0**	**6**	**3**
2039 AM Peak Hour (Factor = 1.034)	**31**	**3**	**0**	**1**	**1**	**45**	**0**	**6**	**3**
AM Peak Hour Generated Trips	9	0	0	0	0	6	0	0	0
2024 AM Peak with Development	**39**	**3**	**0**	**1**	**1**	**50**	**0**	**6**	**3**
2029 AM Peak with Development	**41**	**3**	**0**	**1**	**1**	**52**	**0**	**6**	**3**
2039 AM Peak with Development	**40**	**3**	**0**	**1**	**1**	**52**	**0**	**6**	**3**
2022 PM Peak Hour Traffic Count (16:30-17:29)	38	2	2	1	0	32	2	0	0
2024 PM Peak Hour (Factor = 1.012)	**38**	**2**	**2**	**1**	**0**	**32**	**2**	**0**	**0**
2029 PM Peak Hour (Factor = 1.044)	**40**	**2**	**2**	**1**	**0**	**33**	**2**	**0**	**0**
2039 PM Peak Hour (Factor = 1.034)	**39**	**2**	**2**	**1**	**0**	**33**	**2**	**0**	**0**
PM Peak Hour Generated Trips	5	0	0	0	0	6	0	0	0
2024 PM Peak with Development	**43**	**2**	**2**	**1**	**0**	**38**	**2**	**0**	**0**
2029 PM Peak with Development	**44**	**2**	**2**	**1**	**0**	**40**	**2**	**0**	**0**
2039 PM Peak with Development	**44**	**2**	**2**	**1**	**0**	**39**	**2**	**0**	**0**

Data in PCUs rounded to the nearest whole number

Appendix D

PICADY Modelling Output File

Junctions 9

PICADY 9 - Priority Intersection Module

Version: 9.5.2.1013

For sales and distribution information, program advice and maintenance, contact TRL:
+44 (0)1344 379777 software@trl.co.uk www.trlsoftware.co.uk

Filename: northern_rev2.j9
Path: D:\live_projects_and_quotes\T221007_Kilboderry_Carrick_Resi_Traffic_Report\picady
Report generation date: 09/11/2022 10:43:27

Summary of junction performance

	AM					PM				
	Set ID	Queue (PCU)	Delay (s)	RFC	LOS	Set ID	Queue (PCU)	Delay (s)	RFC	LOS
	2024 without Development									
Stream B-AC	D1	0.0	0.00	0.00	A	D7	0.0	0.00	0.00	A
Stream C-AB		0.0	0.00	0.00	A		0.0	0.00	0.00	A
	2029 without Development									
Stream B-AC	D2	0.0	0.00	0.00	A	D8	0.0	0.00	0.00	A
Stream C-AB		0.0	0.00	0.00	A		0.0	0.00	0.00	A
	2039 without Development									
Stream B-AC	D3	0.0	0.00	0.00	A	D9	0.0	0.00	0.00	A
Stream C-AB		0.0	0.00	0.00	A		0.0	0.00	0.00	A
	2024 with Development									
Stream B-AC	D4	0.0	7.08	0.02	A	D10	0.0	7.09	0.02	A
Stream C-AB		0.0	0.00	0.00	A		0.0	5.76	0.01	A
	2029 with Development									
Stream B-AC	D5	0.0	7.09	0.02	A	D11	0.0	7.10	0.02	A
Stream C-AB		0.0	0.00	0.00	A		0.0	5.76	0.01	A
	2039 with Development									
Stream B-AC	D6	0.0	7.09	0.02	A	D12	0.0	7.09	0.02	A
Stream C-AB		0.0	0.00	0.00	A		0.0	5.76	0.01	A

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

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

File summary

File Description

Title	Northern LP3413/LT34132 Junction
Location	Kilboderry, Carrick-on-Shannon
Site number	
Date	08/11/2022
Version	TR Rev2
Status	Final
Identifier	
Client	WGG
Jobnumber	221007
Enumerator	TTRSA
Description	

Units

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

Analysis Options

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

Demand Set Summary

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D1	2024 without Development	AM	ONE HOUR	08:00	09:30	15	✓
D2	2029 without Development	AM	ONE HOUR	08:00	09:30	15	✓
D3	2039 without Development	AM	ONE HOUR	08:00	09:30	15	✓
D4	2024 with Development	AM	ONE HOUR	08:00	09:30	15	✓
D5	2029 with Development	AM	ONE HOUR	08:00	09:30	15	✓
D6	2039 with Development	AM	ONE HOUR	08:00	09:30	15	✓
D7	2024 without Development	PM	ONE HOUR	16:15	17:45	15	✓
D8	2029 without Development	PM	ONE HOUR	16:15	17:45	15	✓
D9	2039 without Development	PM	ONE HOUR	16:15	17:45	15	✓
D10	2024 with Development	PM	ONE HOUR	16:15	17:45	15	✓
D11	2029 with Development	PM	ONE HOUR	16:15	17:45	15	✓
D12	2039 with Development	PM	ONE HOUR	16:15	17:45	15	✓

Analysis Set Details

ID	Include in report	Network flow scaling factor (%)	Network capacity scaling factor (%)
A1	✓	100.000	100.000

2024 without Development, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Major arm width	Arm C - Major arm geometry	For two-way major roads, please interpret results with caution if the total major carriageway width is less than 6m.

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	Northern LP3413/LT34132 Junction	T-Junction	Two-way		0.00	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Name	Description	Arm type
A	LP3413 to/from South (Town Centre)		Major
B	LT34132 Semi Circular Road		Minor
C	LP3413 to/from North		Major

Major Arm Geometry

Arm	Width of carriageway (m)	Has kerbed central reserve	Has right turn bay	Visibility for right turn (m)	Blocks?	Blocking queue (PCU)
C	5.50			90.0	✓	0.00

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

Minor Arm Geometry

Arm	Minor arm type	Lane width (m)	Visibility to left (m)	Visibility to right (m)
B	One lane	3.00	18	26

Slope / Intercept / Capacity

Priority Intersection Slopes and Intercepts

Stream	Intercept (PCU/hr)	Slope for A-B	Slope for A-C	Slope for C-A	Slope for C-B
B-A	496	0.092	0.233	0.147	0.333
B-C	640	0.100	0.253	-	-
C-B	626	0.248	0.248	-	-

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

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

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

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D1	2024 without Development	AM	ONE HOUR	08:00	09:30	15	✓

Vehicle mix source	PCU Factor for a HV (PCU)
HV Percentages	2.30

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		ONE HOUR	✓	34	100.000
B		ONE HOUR	✓	0	100.000
C		ONE HOUR	✓	40	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		A	B	C
From	A	0	0	34
	B	0	0	0
	C	40	0	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A	B	C
From	A	1	1	1
	B	1	1	1
	C	1	1	1

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	0.00	0.00	0.0	A	0	0
C-AB	0.00	0.00	0.0	A	0	0
C-A					37	55
A-B					0	0
A-C					31	47

Main Results for each time segment

08:00 - 08:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	0	0	550	0.000	0	0.0	0.0	0.000	A
C-AB	0	0	620	0.000	0	0.0	0.0	0.000	A
C-A	30	8			30				
A-B	0	0			0				
A-C	26	6			26				

08:15 - 08:30

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	0	0	548	0.000	0	0.0	0.0	0.000	A
C-AB	0	0	619	0.000	0	0.0	0.0	0.000	A
C-A	36	9			36				
A-B	0	0			0				
A-C	31	8			31				

08:30 - 08:45

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	0	0	546	0.000	0	0.0	0.0	0.000	A
C-AB	0	0	617	0.000	0	0.0	0.0	0.000	A
C-A	44	11			44				
A-B	0	0			0				
A-C	37	9			37				

08:45 - 09:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	0	0	546	0.000	0	0.0	0.0	0.000	A
C-AB	0	0	617	0.000	0	0.0	0.0	0.000	A
C-A	44	11			44				
A-B	0	0			0				
A-C	37	9			37				

09:00 - 09:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	0	0	548	0.000	0	0.0	0.0	0.000	A
C-AB	0	0	619	0.000	0	0.0	0.0	0.000	A
C-A	36	9			36				
A-B	0	0			0				
A-C	31	8			31				

09:15 - 09:30

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	0	0	550	0.000	0	0.0	0.0	0.000	A
C-AB	0	0	620	0.000	0	0.0	0.0	0.000	A
C-A	30	8			30				
A-B	0	0			0				
A-C	26	6			26				

2029 without Development, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Major arm width	Arm C - Major arm geometry	For two-way major roads, please interpret results with caution if the total major carriageway width is less than 6m.

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	Northern LP3413/LT34132 Junction	T-Junction	Two-way		0.00	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D2	2029 without Development	AM	ONE HOUR	08:00	09:30	15	✓

Vehicle mix source	PCU Factor for a HV (PCU)
HV Percentages	2.30

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		ONE HOUR	✓	35	100.000
B		ONE HOUR	✓	0	100.000
C		ONE HOUR	✓	41	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		A	B	C
From	A	0	0	35
	B	0	0	0
	C	41	0	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A	B	C
From	A	1	1	1
	B	1	1	1
	C	1	1	1

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	0.00	0.00	0.0	A	0	0
C-AB	0.00	0.00	0.0	A	0	0
C-A					38	56
A-B					0	0
A-C					32	48

Main Results for each time segment

08:00 - 08:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	0	0	550	0.000	0	0.0	0.0	0.000	A
C-AB	0	0	620	0.000	0	0.0	0.0	0.000	A
C-A	31	8			31				
A-B	0	0			0				
A-C	26	7			26				

08:15 - 08:30

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	0	0	548	0.000	0	0.0	0.0	0.000	A
C-AB	0	0	618	0.000	0	0.0	0.0	0.000	A
C-A	37	9			37				
A-B	0	0			0				
A-C	31	8			31				

08:30 - 08:45

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	0	0	545	0.000	0	0.0	0.0	0.000	A
C-AB	0	0	617	0.000	0	0.0	0.0	0.000	A
C-A	45	11			45				
A-B	0	0			0				
A-C	39	10			39				

08:45 - 09:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	0	0	545	0.000	0	0.0	0.0	0.000	A
C-AB	0	0	617	0.000	0	0.0	0.0	0.000	A
C-A	45	11			45				
A-B	0	0			0				
A-C	39	10			39				

09:00 - 09:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	0	0	548	0.000	0	0.0	0.0	0.000	A
C-AB	0	0	618	0.000	0	0.0	0.0	0.000	A
C-A	37	9			37				
A-B	0	0			0				
A-C	31	8			31				

09:15 - 09:30

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	0	0	550	0.000	0	0.0	0.0	0.000	A
C-AB	0	0	620	0.000	0	0.0	0.0	0.000	A
C-A	31	8			31				
A-B	0	0			0				
A-C	26	7			26				

2039 without Development, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Major arm width	Arm C - Major arm geometry	For two-way major roads, please interpret results with caution if the total major carriageway width is less than 6m.

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	Northern LP3413/LT34132 Junction	T-Junction	Two-way		0.00	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D3	2039 without Development	AM	ONE HOUR	08:00	09:30	15	✓

Vehicle mix source	PCU Factor for a HV (PCU)
HV Percentages	2.30

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		ONE HOUR	✓	35	100.000
B		ONE HOUR	✓	0	100.000
C		ONE HOUR	✓	41	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		A	B	C
From	A	0	0	35
	B	0	0	0
	C	41	0	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A	B	C
From	A	1	1	1
	B	1	1	1
	C	1	1	1

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	0.00	0.00	0.0	A	0	0
C-AB	0.00	0.00	0.0	A	0	0
C-A					38	56
A-B					0	0
A-C					32	48

Main Results for each time segment

08:00 - 08:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	0	0	550	0.000	0	0.0	0.0	0.000	A
C-AB	0	0	620	0.000	0	0.0	0.0	0.000	A
C-A	31	8			31				
A-B	0	0			0				
A-C	26	7			26				

08:15 - 08:30

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	0	0	548	0.000	0	0.0	0.0	0.000	A
C-AB	0	0	618	0.000	0	0.0	0.0	0.000	A
C-A	37	9			37				
A-B	0	0			0				
A-C	31	8			31				

08:30 - 08:45

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	0	0	545	0.000	0	0.0	0.0	0.000	A
C-AB	0	0	617	0.000	0	0.0	0.0	0.000	A
C-A	45	11			45				
A-B	0	0			0				
A-C	39	10			39				

08:45 - 09:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	0	0	545	0.000	0	0.0	0.0	0.000	A
C-AB	0	0	617	0.000	0	0.0	0.0	0.000	A
C-A	45	11			45				
A-B	0	0			0				
A-C	39	10			39				

09:00 - 09:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	0	0	548	0.000	0	0.0	0.0	0.000	A
C-AB	0	0	618	0.000	0	0.0	0.0	0.000	A
C-A	37	9			37				
A-B	0	0			0				
A-C	31	8			31				

09:15 - 09:30

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	0	0	550	0.000	0	0.0	0.0	0.000	A
C-AB	0	0	620	0.000	0	0.0	0.0	0.000	A
C-A	31	8			31				
A-B	0	0			0				
A-C	26	7			26				

2024 with Development, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Major arm width	Arm C - Major arm geometry	For two-way major roads, please interpret results with caution if the total major carriageway width is less than 6m.

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	Northern LP3413/LT34132 Junction	T-Junction	Two-way		0.70	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D4	2024 with Development	AM	ONE HOUR	08:00	09:30	15	✓

Vehicle mix source	PCU Factor for a HV (PCU)
HV Percentages	2.30

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		ONE HOUR	✓	43	100.000
B		ONE HOUR	✓	9	100.000
C		ONE HOUR	✓	39	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		A	B	C
From	A	0	9	34
	B	6	0	3
	C	39	0	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A	B	C
From	A	1	1	1
	B	1	1	1
	C	1	1	1

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	0.02	7.08	0.0	A	8	12
C-AB	0.00	0.00	0.0	A	0	0
C-A					36	54
A-B					8	12
A-C					31	47

Main Results for each time segment

08:00 - 08:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	7	2	526	0.013	7	0.0	0.0	6.974	A
C-AB	0	0	618	0.000	0	0.0	0.0	0.000	A
C-A	29	7			29				
A-B	7	2			7				
A-C	26	6			26				

08:15 - 08:30

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	8	2	524	0.015	8	0.0	0.0	7.018	A
C-AB	0	0	617	0.000	0	0.0	0.0	0.000	A
C-A	35	9			35				
A-B	8	2			8				
A-C	31	8			31				

08:30 - 08:45

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	10	2	522	0.019	10	0.0	0.0	7.081	A
C-AB	0	0	614	0.000	0	0.0	0.0	0.000	A
C-A	43	11			43				
A-B	10	2			10				
A-C	37	9			37				

08:45 - 09:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	10	2	522	0.019	10	0.0	0.0	7.081	A
C-AB	0	0	614	0.000	0	0.0	0.0	0.000	A
C-A	43	11			43				
A-B	10	2			10				
A-C	37	9			37				

09:00 - 09:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	8	2	524	0.015	8	0.0	0.0	7.019	A
C-AB	0	0	617	0.000	0	0.0	0.0	0.000	A
C-A	35	9			35				
A-B	8	2			8				
A-C	31	8			31				

09:15 - 09:30

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	7	2	526	0.013	7	0.0	0.0	6.977	A
C-AB	0	0	618	0.000	0	0.0	0.0	0.000	A
C-A	29	7			29				
A-B	7	2			7				
A-C	26	6			26				

2029 with Development, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Major arm width	Arm C - Major arm geometry	For two-way major roads, please interpret results with caution if the total major carriageway width is less than 6m.

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	Northern LP3413/LT34132 Junction	T-Junction	Two-way		0.68	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D5	2029 with Development	AM	ONE HOUR	08:00	09:30	15	✓

Vehicle mix source	PCU Factor for a HV (PCU)
HV Percentages	2.30

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		ONE HOUR	✓	44	100.000
B		ONE HOUR	✓	9	100.000
C		ONE HOUR	✓	41	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		A	B	C
From	A	0	9	35
	B	6	0	3
	C	41	0	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A	B	C
From	A	1	1	1
	B	1	1	1
	C	1	1	1

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	0.02	7.09	0.0	A	8	12
C-AB	0.00	0.00	0.0	A	0	0
C-A					38	56
A-B					8	12
A-C					32	48

Main Results for each time segment

08:00 - 08:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	7	2	526	0.013	7	0.0	0.0	6.978	A
C-AB	0	0	618	0.000	0	0.0	0.0	0.000	A
C-A	31	8			31				
A-B	7	2			7				
A-C	26	7			26				

08:15 - 08:30

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	8	2	524	0.015	8	0.0	0.0	7.024	A
C-AB	0	0	616	0.000	0	0.0	0.0	0.000	A
C-A	37	9			37				
A-B	8	2			8				
A-C	31	8			31				

08:30 - 08:45

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	10	2	521	0.019	10	0.0	0.0	7.088	A
C-AB	0	0	614	0.000	0	0.0	0.0	0.000	A
C-A	45	11			45				
A-B	10	2			10				
A-C	39	10			39				

08:45 - 09:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	10	2	521	0.019	10	0.0	0.0	7.088	A
C-AB	0	0	614	0.000	0	0.0	0.0	0.000	A
C-A	45	11			45				
A-B	10	2			10				
A-C	39	10			39				

09:00 - 09:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	8	2	524	0.015	8	0.0	0.0	7.027	A
C-AB	0	0	616	0.000	0	0.0	0.0	0.000	A
C-A	37	9			37				
A-B	8	2			8				
A-C	31	8			31				

09:15 - 09:30

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	7	2	526	0.013	7	0.0	0.0	6.981	A
C-AB	0	0	618	0.000	0	0.0	0.0	0.000	A
C-A	31	8			31				
A-B	7	2			7				
A-C	26	7			26				

2039 with Development, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Major arm width	Arm C - Major arm geometry	For two-way major roads, please interpret results with caution if the total major carriageway width is less than 6m.

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	Northern LP3413/LT34132 Junction	T-Junction	Two-way		0.68	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D6	2039 with Development	AM	ONE HOUR	08:00	09:30	15	✓

Vehicle mix source	PCU Factor for a HV (PCU)
HV Percentages	2.30

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		ONE HOUR	✓	44	100.000
B		ONE HOUR	✓	9	100.000
C		ONE HOUR	✓	41	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		A	B	C
From	A	0	9	35
	B	6	0	3
	C	41	0	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A	B	C
From	A	1	1	1
	B	1	1	1
	C	1	1	1

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	0.02	7.09	0.0	A	8	12
C-AB	0.00	0.00	0.0	A	0	0
C-A					38	56
A-B					8	12
A-C					32	48

Main Results for each time segment

08:00 - 08:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	7	2	526	0.013	7	0.0	0.0	6.978	A
C-AB	0	0	618	0.000	0	0.0	0.0	0.000	A
C-A	31	8			31				
A-B	7	2			7				
A-C	26	7			26				

08:15 - 08:30

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	8	2	524	0.015	8	0.0	0.0	7.024	A
C-AB	0	0	616	0.000	0	0.0	0.0	0.000	A
C-A	37	9			37				
A-B	8	2			8				
A-C	31	8			31				

08:30 - 08:45

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	10	2	521	0.019	10	0.0	0.0	7.088	A
C-AB	0	0	614	0.000	0	0.0	0.0	0.000	A
C-A	45	11			45				
A-B	10	2			10				
A-C	39	10			39				

08:45 - 09:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	10	2	521	0.019	10	0.0	0.0	7.088	A
C-AB	0	0	614	0.000	0	0.0	0.0	0.000	A
C-A	45	11			45				
A-B	10	2			10				
A-C	39	10			39				

09:00 - 09:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	8	2	524	0.015	8	0.0	0.0	7.027	A
C-AB	0	0	616	0.000	0	0.0	0.0	0.000	A
C-A	37	9			37				
A-B	8	2			8				
A-C	31	8			31				

09:15 - 09:30

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	7	2	526	0.013	7	0.0	0.0	6.981	A
C-AB	0	0	618	0.000	0	0.0	0.0	0.000	A
C-A	31	8			31				
A-B	7	2			7				
A-C	26	7			26				

2024 without Development, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Major arm width	Arm C - Major arm geometry	For two-way major roads, please interpret results with caution if the total major carriageway width is less than 6m.

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	Northern LP3413/LT34132 Junction	T-Junction	Two-way		0.00	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D7	2024 without Development	PM	ONE HOUR	16:15	17:45	15	✓

Vehicle mix source	PCU Factor for a HV (PCU)
HV Percentages	2.30

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		ONE HOUR	✓	38	100.000
B		ONE HOUR	✓	0	100.000
C		ONE HOUR	✓	30	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		A	B	C
From	A	0	3	35
	B	0	0	0
	C	30	0	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A	B	C
From	A	1	1	1
	B	1	1	1
	C	1	1	1

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	0.00	0.00	0.0	A	0	0
C-AB	0.00	0.00	0.0	A	0	0
C-A					28	41
A-B					3	4
A-C					32	48

Main Results for each time segment

16:15 - 16:30

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	0	0	550	0.000	0	0.0	0.0	0.000	A
C-AB	0	0	619	0.000	0	0.0	0.0	0.000	A
C-A	23	6			23				
A-B	2	0.56			2				
A-C	26	7			26				

16:30 - 16:45

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	0	0	549	0.000	0	0.0	0.0	0.000	A
C-AB	0	0	618	0.000	0	0.0	0.0	0.000	A
C-A	27	7			27				
A-B	3	0.67			3				
A-C	31	8			31				

16:45 - 17:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	0	0	546	0.000	0	0.0	0.0	0.000	A
C-AB	0	0	616	0.000	0	0.0	0.0	0.000	A
C-A	33	8			33				
A-B	3	0.83			3				
A-C	39	10			39				

17:00 - 17:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	0	0	546	0.000	0	0.0	0.0	0.000	A
C-AB	0	0	616	0.000	0	0.0	0.0	0.000	A
C-A	33	8			33				
A-B	3	0.83			3				
A-C	39	10			39				

17:15 - 17:30

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	0	0	549	0.000	0	0.0	0.0	0.000	A
C-AB	0	0	618	0.000	0	0.0	0.0	0.000	A
C-A	27	7			27				
A-B	3	0.67			3				
A-C	31	8			31				

17:30 - 17:45

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	0	0	550	0.000	0	0.0	0.0	0.000	A
C-AB	0	0	619	0.000	0	0.0	0.0	0.000	A
C-A	23	6			23				
A-B	2	0.56			2				
A-C	26	7			26				

2029 without Development, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Major arm width	Arm C - Major arm geometry	For two-way major roads, please interpret results with caution if the total major carriageway width is less than 6m.

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	Northern LP3413/LT34132 Junction	T-Junction	Two-way		0.00	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D8	2029 without Development	PM	ONE HOUR	16:15	17:45	15	✓

Vehicle mix source	PCU Factor for a HV (PCU)
HV Percentages	2.30

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		ONE HOUR	✓	40	100.000
B		ONE HOUR	✓	0	100.000
C		ONE HOUR	✓	31	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		A	B	C
From	A	0	3	37
	B	0	0	0
	C	31	0	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A	B	C
From	A	1	1	1
	B	1	1	1
	C	1	1	1

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	0.00	0.00	0.0	A	0	0
C-AB	0.00	0.00	0.0	A	0	0
C-A					28	43
A-B					3	4
A-C					34	51

Main Results for each time segment

16:15 - 16:30

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	0	0	550	0.000	0	0.0	0.0	0.000	A
C-AB	0	0	619	0.000	0	0.0	0.0	0.000	A
C-A	23	6			23				
A-B	2	0.56			2				
A-C	28	7			28				

16:30 - 16:45

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	0	0	548	0.000	0	0.0	0.0	0.000	A
C-AB	0	0	617	0.000	0	0.0	0.0	0.000	A
C-A	28	7			28				
A-B	3	0.67			3				
A-C	33	8			33				

16:45 - 17:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	0	0	546	0.000	0	0.0	0.0	0.000	A
C-AB	0	0	615	0.000	0	0.0	0.0	0.000	A
C-A	34	9			34				
A-B	3	0.83			3				
A-C	41	10			41				

17:00 - 17:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	0	0	546	0.000	0	0.0	0.0	0.000	A
C-AB	0	0	615	0.000	0	0.0	0.0	0.000	A
C-A	34	9			34				
A-B	3	0.83			3				
A-C	41	10			41				

17:15 - 17:30

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	0	0	548	0.000	0	0.0	0.0	0.000	A
C-AB	0	0	617	0.000	0	0.0	0.0	0.000	A
C-A	28	7			28				
A-B	3	0.67			3				
A-C	33	8			33				

17:30 - 17:45

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	0	0	550	0.000	0	0.0	0.0	0.000	A
C-AB	0	0	619	0.000	0	0.0	0.0	0.000	A
C-A	23	6			23				
A-B	2	0.56			2				
A-C	28	7			28				

2039 without Development, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Major arm width	Arm C - Major arm geometry	For two-way major roads, please interpret results with caution if the total major carriageway width is less than 6m.

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	Northern LP3413/LT34132 Junction	T-Junction	Two-way		0.00	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D9	2039 without Development	PM	ONE HOUR	16:15	17:45	15	✓

Vehicle mix source	PCU Factor for a HV (PCU)
HV Percentages	2.30

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		ONE HOUR	✓	39	100.000
B		ONE HOUR	✓	0	100.000
C		ONE HOUR	✓	31	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		A	B	C
From	A	0	3	36
	B	0	0	0
	C	31	0	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A	B	C
From	A	1	1	1
	B	1	1	1
	C	1	1	1

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	0.00	0.00	0.0	A	0	0
C-AB	0.00	0.00	0.0	A	0	0
C-A					28	43
A-B					3	4
A-C					33	50

Main Results for each time segment

16:15 - 16:30

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	0	0	550	0.000	0	0.0	0.0	0.000	A
C-AB	0	0	619	0.000	0	0.0	0.0	0.000	A
C-A	23	6			23				
A-B	2	0.56			2				
A-C	27	7			27				

16:30 - 16:45

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	0	0	548	0.000	0	0.0	0.0	0.000	A
C-AB	0	0	617	0.000	0	0.0	0.0	0.000	A
C-A	28	7			28				
A-B	3	0.67			3				
A-C	32	8			32				

16:45 - 17:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	0	0	546	0.000	0	0.0	0.0	0.000	A
C-AB	0	0	615	0.000	0	0.0	0.0	0.000	A
C-A	34	9			34				
A-B	3	0.83			3				
A-C	40	10			40				

17:00 - 17:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	0	0	546	0.000	0	0.0	0.0	0.000	A
C-AB	0	0	615	0.000	0	0.0	0.0	0.000	A
C-A	34	9			34				
A-B	3	0.83			3				
A-C	40	10			40				

17:15 - 17:30

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	0	0	548	0.000	0	0.0	0.0	0.000	A
C-AB	0	0	617	0.000	0	0.0	0.0	0.000	A
C-A	28	7			28				
A-B	3	0.67			3				
A-C	32	8			32				

17:30 - 17:45

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	0	0	550	0.000	0	0.0	0.0	0.000	A
C-AB	0	0	619	0.000	0	0.0	0.0	0.000	A
C-A	23	6			23				
A-B	2	0.56			2				
A-C	27	7			27				

2024 with Development, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Major arm width	Arm C - Major arm geometry	For two-way major roads, please interpret results with caution if the total major carriageway width is less than 6m.

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	Northern LP3413/LT34132 Junction	T-Junction	Two-way		1.08	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D10	2024 with Development	PM	ONE HOUR	16:15	17:45	15	✓

Vehicle mix source	PCU Factor for a HV (PCU)
HV Percentages	2.30

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		ONE HOUR	✓	43	100.000
B		ONE HOUR	✓	9	100.000
C		ONE HOUR	✓	35	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		A	B	C
From	A	0	8	35
	B	6	0	3
	C	30	5	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A	B	C
From	A	1	1	1
	B	1	1	1
	C	1	1	1

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	0.02	7.09	0.0	A	8	12
C-AB	0.01	5.76	0.0	A	5	7
C-A					27	41
A-B					7	11
A-C					32	48

Main Results for each time segment

16:15 - 16:30

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	7	2	526	0.013	7	0.0	0.0	6.978	A
C-AB	4	0.98	633	0.006	4	0.0	0.0	5.760	A
C-A	22	6			22				
A-B	6	2			6				
A-C	26	7			26				

16:30 - 16:45

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	8	2	524	0.015	8	0.0	0.0	7.023	A
C-AB	5	1	634	0.007	5	0.0	0.0	5.755	A
C-A	27	7			27				
A-B	7	2			7				
A-C	31	8			31				

16:45 - 17:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	10	2	521	0.019	10	0.0	0.0	7.087	A
C-AB	6	1	636	0.009	6	0.0	0.0	5.748	A
C-A	33	8			33				
A-B	9	2			9				
A-C	39	10			39				

17:00 - 17:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	10	2	521	0.019	10	0.0	0.0	7.087	A
C-AB	6	1	636	0.009	6	0.0	0.0	5.750	A
C-A	33	8			33				
A-B	9	2			9				
A-C	39	10			39				

17:15 - 17:30

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	8	2	524	0.015	8	0.0	0.0	7.024	A
C-AB	5	1	634	0.007	5	0.0	0.0	5.755	A
C-A	27	7			27				
A-B	7	2			7				
A-C	31	8			31				

17:30 - 17:45

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	7	2	526	0.013	7	0.0	0.0	6.978	A
C-AB	4	0.98	633	0.006	4	0.0	0.0	5.760	A
C-A	22	6			22				
A-B	6	2			6				
A-C	26	7			26				

2029 with Development, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Major arm width	Arm C - Major arm geometry	For two-way major roads, please interpret results with caution if the total major carriageway width is less than 6m.

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	Northern LP3413/LT34132 Junction	T-Junction	Two-way		1.05	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D11	2029 with Development	PM	ONE HOUR	16:15	17:45	15	✓

Vehicle mix source	PCU Factor for a HV (PCU)
HV Percentages	2.30

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		ONE HOUR	✓	45	100.000
B		ONE HOUR	✓	9	100.000
C		ONE HOUR	✓	36	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		A	B	C
From	A	0	8	37
	B	6	0	3
	C	31	5	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A	B	C
From	A	1	1	1
	B	1	1	1
	C	1	1	1

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	0.02	7.10	0.0	A	8	12
C-AB	0.01	5.76	0.0	A	5	7
C-A					28	42
A-B					7	11
A-C					34	51

Main Results for each time segment

16:15 - 16:30

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	7	2	525	0.013	7	0.0	0.0	6.984	A
C-AB	4	0.98	633	0.006	4	0.0	0.0	5.758	A
C-A	23	6			23				
A-B	6	2			6				
A-C	28	7			28				

16:30 - 16:45

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	8	2	523	0.015	8	0.0	0.0	7.031	A
C-AB	5	1	634	0.007	5	0.0	0.0	5.753	A
C-A	28	7			28				
A-B	7	2			7				
A-C	33	8			33				

16:45 - 17:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	10	2	520	0.019	10	0.0	0.0	7.096	A
C-AB	6	1	636	0.009	6	0.0	0.0	5.746	A
C-A	34	8			34				
A-B	9	2			9				
A-C	41	10			41				

17:00 - 17:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	10	2	520	0.019	10	0.0	0.0	7.096	A
C-AB	6	1	636	0.009	6	0.0	0.0	5.748	A
C-A	34	8			34				
A-B	9	2			9				
A-C	41	10			41				

17:15 - 17:30

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	8	2	523	0.015	8	0.0	0.0	7.031	A
C-AB	5	1	634	0.007	5	0.0	0.0	5.753	A
C-A	28	7			28				
A-B	7	2			7				
A-C	33	8			33				

17:30 - 17:45

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	7	2	525	0.013	7	0.0	0.0	6.987	A
C-AB	4	0.98	633	0.006	4	0.0	0.0	5.759	A
C-A	23	6			23				
A-B	6	2			6				
A-C	28	7			28				

2039 with Development, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Major arm width	Arm C - Major arm geometry	For two-way major roads, please interpret results with caution if the total major carriageway width is less than 6m.

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	Northern LP3413/LT34132 Junction	T-Junction	Two-way		1.06	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D12	2039 with Development	PM	ONE HOUR	16:15	17:45	15	✓

Vehicle mix source	PCU Factor for a HV (PCU)
HV Percentages	2.30

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		ONE HOUR	✓	44	100.000
B		ONE HOUR	✓	9	100.000
C		ONE HOUR	✓	36	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		A	B	C
From	A	0	8	36
	B	6	0	3
	C	31	5	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A	B	C
From	A	1	1	1
	B	1	1	1
	C	1	1	1

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	0.02	7.09	0.0	A	8	12
C-AB	0.01	5.76	0.0	A	5	7
C-A					28	42
A-B					7	11
A-C					33	50

Main Results for each time segment

16:15 - 16:30

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	7	2	526	0.013	7	0.0	0.0	6.982	A
C-AB	4	0.98	633	0.006	4	0.0	0.0	5.757	A
C-A	23	6			23				
A-B	6	2			6				
A-C	27	7			27				

16:30 - 16:45

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	8	2	524	0.015	8	0.0	0.0	7.028	A
C-AB	5	1	635	0.007	5	0.0	0.0	5.751	A
C-A	28	7			28				
A-B	7	2			7				
A-C	32	8			32				

16:45 - 17:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	10	2	521	0.019	10	0.0	0.0	7.093	A
C-AB	6	1	637	0.009	6	0.0	0.0	5.744	A
C-A	34	8			34				
A-B	9	2			9				
A-C	40	10			40				

17:00 - 17:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	10	2	521	0.019	10	0.0	0.0	7.093	A
C-AB	6	1	637	0.009	6	0.0	0.0	5.744	A
C-A	34	8			34				
A-B	9	2			9				
A-C	40	10			40				

17:15 - 17:30

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	8	2	524	0.015	8	0.0	0.0	7.031	A
C-AB	5	1	635	0.007	5	0.0	0.0	5.754	A
C-A	28	7			28				
A-B	7	2			7				
A-C	32	8			32				

17:30 - 17:45

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	7	2	526	0.013	7	0.0	0.0	6.982	A
C-AB	4	0.98	633	0.006	4	0.0	0.0	5.759	A
C-A	23	6			23				
A-B	6	2			6				
A-C	27	7			27				

Junctions 9

PICADY 9 - Priority Intersection Module

Version: 9.5.2.1013

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Filename: southern_rev2.j9
Path: D:\live_projects_and_quotes\T221007_Kilboderry_Carrick_Resi_Traffic_Report\picady
Report generation date: 09/11/2022 12:05:14

Summary of junction performance

	AM					PM				
	Set ID	Queue (PCU)	Delay (s)	RFC	LOS	Set ID	Queue (PCU)	Delay (s)	RFC	LOS
	2024 without Development									
Stream B-ACD	D1	0.0	0.00	0.00	A	D7	0.0	0.00	0.00	A
Stream AB-CD		0.0	5.74	0.01	A		0.0	5.69	0.00	A
Stream D-ABC		0.0	6.86	0.02	A		0.0	0.00	0.00	A
Stream CD-AB		0.0	0.00	0.00	A		0.0	0.00	0.00	A
	2029 without Development									
Stream B-ACD	D2	0.0	0.00	0.00	A	D8	0.0	0.00	0.00	A
Stream AB-CD		0.0	5.74	0.01	A		0.0	5.68	0.00	A
Stream D-ABC		0.0	6.86	0.02	A		0.0	0.00	0.00	A
Stream CD-AB		0.0	0.00	0.00	A		0.0	0.00	0.00	A
	2039 without Development									
Stream B-ACD	D3	0.0	0.00	0.00	A	D9	0.0	0.00	0.00	A
Stream AB-CD		0.0	5.74	0.01	A		0.0	5.68	0.00	A
Stream D-ABC		0.0	6.86	0.02	A		0.0	0.00	0.00	A
Stream CD-AB		0.0	0.00	0.00	A		0.0	0.00	0.00	A
	2024 with Development									
Stream B-ACD	D4	0.0	0.00	0.00	A	D10	0.0	0.00	0.00	A
Stream AB-CD		0.0	5.72	0.01	A		0.0	5.66	0.00	A
Stream D-ABC		0.0	6.88	0.02	A		0.0	0.00	0.00	A
Stream CD-AB		0.0	0.00	0.00	A		0.0	0.00	0.00	A
	2029 with Development									
Stream B-ACD	D5	0.0	0.00	0.00	A	D11	0.0	0.00	0.00	A
Stream AB-CD		0.0	5.71	0.01	A		0.0	5.67	0.00	A
Stream D-ABC		0.0	6.89	0.02	A		0.0	0.00	0.00	A
Stream CD-AB		0.0	0.00	0.00	A		0.0	0.00	0.00	A
	2039 with Development									
Stream B-ACD	D6	0.0	0.00	0.00	A	D12	0.0	0.00	0.00	A
Stream AB-CD		0.0	5.71	0.01	A		0.0	5.67	0.00	A
Stream D-ABC		0.0	6.89	0.02	A		0.0	0.00	0.00	A
Stream CD-AB		0.0	0.00	0.00	A		0.0	0.00	0.00	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	Southern LP3413/LT34132 Junction
Location	Kilboderry, Carrick-on-Shannon
Site number	
Date	08/11/2022
Version	TR Rev2
Status	Final
Identifier	
Client	WGG
Jobnumber	221007
Enumerator	TTRSA
Description	

Units

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

Analysis Options

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

Demand Set Summary

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D1	2024 without Development	AM	ONE HOUR	08:00	09:30	15	✓
D2	2029 without Development	AM	ONE HOUR	08:00	09:30	15	✓
D3	2039 without Development	AM	ONE HOUR	08:00	09:30	15	✓
D4	2024 with Development	AM	ONE HOUR	08:00	09:30	15	✓
D5	2029 with Development	AM	ONE HOUR	08:00	09:30	15	✓
D6	2039 with Development	AM	ONE HOUR	08:00	09:30	15	✓
D7	2024 without Development	PM	ONE HOUR	16:15	17:45	15	✓
D8	2029 without Development	PM	ONE HOUR	16:15	17:45	15	✓
D9	2039 without Development	PM	ONE HOUR	16:15	17:45	15	✓
D10	2024 with Development	PM	ONE HOUR	16:15	17:45	15	✓
D11	2029 with Development	PM	ONE HOUR	16:15	17:45	15	✓
D12	2039 with Development	PM	ONE HOUR	16:15	17:45	15	✓

Analysis Set Details

ID	Include in report	Network flow scaling factor (%)	Network capacity scaling factor (%)
A1	✓	100.000	100.000

2024 without Development, AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	Southern LP3413/LT34132 Junction	Left-Right Stagger	Two-way		0.46	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Name	Description	Arm type
A	LP3413 to/from South (Town Centre)		Major
B	LT34132 Semi Circular Road	One-way Out	Minor
C	LP3413 to/from North		Major
D	Drummagh		Minor

Major Arm Geometry

Arm	Width of carriageway (m)	Has kerbed central reserve	Has right turn bay	Visibility for right turn (m)	Blocks?	Blocking queue (PCU)
A	6.50			90.0	✓	0.00
C	6.50			45.0	✓	0.00

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

Minor Arm Geometry

Arm	Minor arm type	Lane width (m)	Visibility to left (m)	Visibility to right (m)
B	One lane	3.00	14	15
D	One lane	2.55	16	16

Slope / Intercept / Capacity

Priority Intersection Slopes and Intercepts

Stream	Intercept (PCU/hr)	Slope for A-B	Slope for A-C	Slope for A-D	Slope for B-C	Slope for B-D	Slope for C-A	Slope for C-B	Slope for C-D	Slope for D-A	Slope for D-B
AB-D	626	-	-	-	-	-	0.237	0.237	0.237	-	-
B-A	490	0.087	0.220	0.220	-	-	0.139	0.315	-	0.139	0.315
B-CD	633	0.095	0.240	0.240	-	-	-	-	-	-	-
CD-B	600	0.227	0.227	0.227	-	-	-	-	-	-	-
D-AB	605	-	-	-	-	-	0.229	0.229	0.091	-	-
D-C	469	-	0.133	0.301	0.133	0.301	0.211	0.211	0.083	-	-

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

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

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

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D1	2024 without Development	AM	ONE HOUR	08:00	09:30	15	✓

Vehicle mix source	PCU Factor for a HV (PCU)
HV Percentages	2.30

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		ONE HOUR	✓	34	100.000
B		ONE HOUR	✓	2	100.000
C		ONE HOUR	✓	45	100.000
D		ONE HOUR	✓	9	100.000

Origin-Destination Data

Demand (PCU/hr)

		To			
		A	B	C	D
From	A	0	0	31	3
	B	0	0	1	1
	C	45	0	0	0
	D	6	0	3	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A	B	C	D
From	A	1	1	1	1
	B	1	1	1	1
	C	1	1	1	1
	D	1	1	1	1

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-ACD	0.00	0.00	0.0	A	0	0
A-B					0	0
A-C					28	43
A-D					3	4
AB-CD	0.01	5.74	0.0	A	3	4
AB-C					28	42
D-ABC	0.02	6.86	0.0	A	8	12
C-D					0	0
C-A					41	62
C-B					0	0
CD-AB	0.00	0.00	0.0	A	0	0
CD-A					47	70

Main Results for each time segment

08:00 - 08:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	0	0	543	0.000	0	0.0	0.0	0.000	A
A-B	0	0			0				
A-C	23	6			23				
A-D	2	0.56			2				
AB-CD	2	0.59	633	0.004	2	0.0	0.0	5.741	A
AB-C	23	6			23				
D-ABC	7	2	542	0.012	7	0.0	0.0	6.764	A
C-D	0	0			0				
C-A	34	8			34				
C-B	0	0			0				
CD-AB	0	0	594	0.000	0	0.0	0.0	0.000	A
CD-A	38	10			38				

08:15 - 08:30

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	0	0	541	0.000	0	0.0	0.0	0.000	A
A-B	0	0			0				
A-C	28	7			28				
A-D	3	0.67			3				
AB-CD	3	0.71	635	0.004	3	0.0	0.0	5.732	A
AB-C	28	7			28				
D-ABC	8	2	541	0.015	8	0.0	0.0	6.804	A
C-D	0	0			0				
C-A	40	10			40				
C-B	0	0			0				
CD-AB	0	0	593	0.000	0	0.0	0.0	0.000	A
CD-A	46	11			46				

08:30 - 08:45

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	0	0	539	0.000	0	0.0	0.0	0.000	A
A-B	0	0			0				
A-C	34	9			34				
A-D	3	0.83			3				
AB-CD	3	0.87	637	0.005	3	0.0	0.0	5.720	A
AB-C	34	8			34				
D-ABC	10	2	538	0.018	10	0.0	0.0	6.860	A
C-D	0	0			0				
C-A	50	12			50				
C-B	0	0			0				
CD-AB	0	0	592	0.000	0	0.0	0.0	0.000	A
CD-A	56	14			56				

08:45 - 09:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	0	0	539	0.000	0	0.0	0.0	0.000	A
A-B	0	0			0				
A-C	34	9			34				
A-D	3	0.83			3				
AB-CD	3	0.87	637	0.005	3	0.0	0.0	5.722	A
AB-C	34	8			34				
D-ABC	10	2	538	0.018	10	0.0	0.0	6.860	A
C-D	0	0			0				
C-A	50	12			50				
C-B	0	0			0				
CD-AB	0	0	592	0.000	0	0.0	0.0	0.000	A
CD-A	56	14			56				

09:00 - 09:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	0	0	541	0.000	0	0.0	0.0	0.000	A
A-B	0	0			0				
A-C	28	7			28				
A-D	3	0.67			3				
AB-CD	3	0.71	635	0.004	3	0.0	0.0	5.732	A
AB-C	28	7			28				
D-ABC	8	2	541	0.015	8	0.0	0.0	6.804	A
C-D	0	0			0				
C-A	40	10			40				
C-B	0	0			0				
CD-AB	0	0	593	0.000	0	0.0	0.0	0.000	A
CD-A	46	11			46				

09:15 - 09:30

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	0	0	543	0.000	0	0.0	0.0	0.000	A
A-B	0	0			0				
A-C	23	6			23				
A-D	2	0.56			2				
AB-CD	2	0.59	633	0.004	2	0.0	0.0	5.743	A
AB-C	23	6			23				
D-ABC	7	2	542	0.012	7	0.0	0.0	6.767	A
C-D	0	0			0				
C-A	34	8			34				
C-B	0	0			0				
CD-AB	0	0	594	0.000	0	0.0	0.0	0.000	A
CD-A	38	10			38				

2029 without Development, AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	Southern LP3413/LT34132 Junction	Left-Right Stagger	Two-way		0.45	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D2	2029 without Development	AM	ONE HOUR	08:00	09:30	15	✓

Vehicle mix source	PCU Factor for a HV (PCU)
HV Percentages	2.30

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		ONE HOUR	✓	35	100.000
B		ONE HOUR	✓	2	100.000
C		ONE HOUR	✓	46	100.000
D		ONE HOUR	✓	9	100.000

Origin-Destination Data

Demand (PCU/hr)

		To			
		A	B	C	D
From	A	0	0	32	3
	B	0	0	1	1
	C	46	0	0	0
	D	6	0	3	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A	B	C	D
From	A	1	1	1	1
	B	1	1	1	1
	C	1	1	1	1
	D	1	1	1	1

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-ACD	0.00	0.00	0.0	A	0	0
A-B					0	0
A-C					29	44
A-D					3	4
AB-CD	0.01	5.74	0.0	A	3	4
AB-C					29	44
D-ABC	0.02	6.86	0.0	A	8	12
C-D					0	0
C-A					42	63
C-B					0	0
CD-AB	0.00	0.00	0.0	A	0	0
CD-A					48	72

Main Results for each time segment

08:00 - 08:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	0	0	543	0.000	0	0.0	0.0	0.000	A
A-B	0	0			0				
A-C	24	6			24				
A-D	2	0.56			2				
AB-CD	2	0.59	634	0.004	2	0.0	0.0	5.738	A
AB-C	24	6			24				
D-ABC	7	2	542	0.013	7	0.0	0.0	6.767	A
C-D	0	0			0				
C-A	35	9			35				
C-B	0	0			0				
CD-AB	0	0	594	0.000	0	0.0	0.0	0.000	A
CD-A	39	10			39				

08:15 - 08:30

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	0	0	541	0.000	0	0.0	0.0	0.000	A
A-B	0	0			0				
A-C	29	7			29				
A-D	3	0.67			3				
AB-CD	3	0.71	635	0.004	3	0.0	0.0	5.729	A
AB-C	29	7			29				
D-ABC	8	2	540	0.015	8	0.0	0.0	6.807	A
C-D	0	0			0				
C-A	41	10			41				
C-B	0	0			0				
CD-AB	0	0	593	0.000	0	0.0	0.0	0.000	A
CD-A	47	12			47				

08:30 - 08:45

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	0	0	538	0.000	0	0.0	0.0	0.000	A
A-B	0	0			0				
A-C	35	9			35				
A-D	3	0.83			3				
AB-CD	3	0.87	637	0.005	3	0.0	0.0	5.716	A
AB-C	35	9			35				
D-ABC	10	2	538	0.018	10	0.0	0.0	6.864	A
C-D	0	0			0				
C-A	51	13			51				
C-B	0	0			0				
CD-AB	0	0	591	0.000	0	0.0	0.0	0.000	A
CD-A	57	14			57				

08:45 - 09:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	0	0	538	0.000	0	0.0	0.0	0.000	A
A-B	0	0			0				
A-C	35	9			35				
A-D	3	0.83			3				
AB-CD	3	0.87	637	0.005	3	0.0	0.0	5.718	A
AB-C	35	9			35				
D-ABC	10	2	538	0.018	10	0.0	0.0	6.864	A
C-D	0	0			0				
C-A	51	13			51				
C-B	0	0			0				
CD-AB	0	0	591	0.000	0	0.0	0.0	0.000	A
CD-A	57	14			57				

09:00 - 09:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	0	0	541	0.000	0	0.0	0.0	0.000	A
A-B	0	0			0				
A-C	29	7			29				
A-D	3	0.67			3				
AB-CD	3	0.71	635	0.004	3	0.0	0.0	5.731	A
AB-C	29	7			29				
D-ABC	8	2	540	0.015	8	0.0	0.0	6.810	A
C-D	0	0			0				
C-A	41	10			41				
C-B	0	0			0				
CD-AB	0	0	593	0.000	0	0.0	0.0	0.000	A
CD-A	47	12			47				

09:15 - 09:30

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	0	0	543	0.000	0	0.0	0.0	0.000	A
A-B	0	0			0				
A-C	24	6			24				
A-D	2	0.56			2				
AB-CD	2	0.59	634	0.004	2	0.0	0.0	5.740	A
AB-C	24	6			24				
D-ABC	7	2	542	0.013	7	0.0	0.0	6.770	A
C-D	0	0			0				
C-A	35	9			35				
C-B	0	0			0				
CD-AB	0	0	594	0.000	0	0.0	0.0	0.000	A
CD-A	39	10			39				

2039 without Development, AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	Southern LP3413/LT34132 Junction	Left-Right Stagger	Two-way		0.46	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D3	2039 without Development	AM	ONE HOUR	08:00	09:30	15	✓

Vehicle mix source	PCU Factor for a HV (PCU)
HV Percentages	2.30

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		ONE HOUR	✓	34	100.000
B		ONE HOUR	✓	2	100.000
C		ONE HOUR	✓	45	100.000
D		ONE HOUR	✓	9	100.000

Origin-Destination Data

Demand (PCU/hr)

		To			
		A	B	C	D
From	A	0	0	31	3
	B	0	0	1	1
	C	45	0	0	0
	D	6	0	3	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A	B	C	D
From	A	1	1	1	1
	B	1	1	1	1
	C	1	1	1	1
	D	1	1	1	1

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-ACD	0.00	0.00	0.0	A	0	0
A-B					0	0
A-C					28	43
A-D					3	4
AB-CD	0.01	5.74	0.0	A	3	4
AB-C					28	42
D-ABC	0.02	6.86	0.0	A	8	12
C-D					0	0
C-A					41	62
C-B					0	0
CD-AB	0.00	0.00	0.0	A	0	0
CD-A					47	70

Main Results for each time segment

08:00 - 08:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	0	0	543	0.000	0	0.0	0.0	0.000	A
A-B	0	0			0				
A-C	23	6			23				
A-D	2	0.56			2				
AB-CD	2	0.59	633	0.004	2	0.0	0.0	5.741	A
AB-C	23	6			23				
D-ABC	7	2	542	0.012	7	0.0	0.0	6.764	A
C-D	0	0			0				
C-A	34	8			34				
C-B	0	0			0				
CD-AB	0	0	594	0.000	0	0.0	0.0	0.000	A
CD-A	38	10			38				

08:15 - 08:30

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	0	0	541	0.000	0	0.0	0.0	0.000	A
A-B	0	0			0				
A-C	28	7			28				
A-D	3	0.67			3				
AB-CD	3	0.71	635	0.004	3	0.0	0.0	5.732	A
AB-C	28	7			28				
D-ABC	8	2	541	0.015	8	0.0	0.0	6.804	A
C-D	0	0			0				
C-A	40	10			40				
C-B	0	0			0				
CD-AB	0	0	593	0.000	0	0.0	0.0	0.000	A
CD-A	46	11			46				

08:30 - 08:45

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	0	0	539	0.000	0	0.0	0.0	0.000	A
A-B	0	0			0				
A-C	34	9			34				
A-D	3	0.83			3				
AB-CD	3	0.87	637	0.005	3	0.0	0.0	5.720	A
AB-C	34	8			34				
D-ABC	10	2	538	0.018	10	0.0	0.0	6.860	A
C-D	0	0			0				
C-A	50	12			50				
C-B	0	0			0				
CD-AB	0	0	592	0.000	0	0.0	0.0	0.000	A
CD-A	56	14			56				

08:45 - 09:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	0	0	539	0.000	0	0.0	0.0	0.000	A
A-B	0	0			0				
A-C	34	9			34				
A-D	3	0.83			3				
AB-CD	3	0.87	637	0.005	3	0.0	0.0	5.722	A
AB-C	34	8			34				
D-ABC	10	2	538	0.018	10	0.0	0.0	6.860	A
C-D	0	0			0				
C-A	50	12			50				
C-B	0	0			0				
CD-AB	0	0	592	0.000	0	0.0	0.0	0.000	A
CD-A	56	14			56				

09:00 - 09:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	0	0	541	0.000	0	0.0	0.0	0.000	A
A-B	0	0			0				
A-C	28	7			28				
A-D	3	0.67			3				
AB-CD	3	0.71	635	0.004	3	0.0	0.0	5.732	A
AB-C	28	7			28				
D-ABC	8	2	541	0.015	8	0.0	0.0	6.804	A
C-D	0	0			0				
C-A	40	10			40				
C-B	0	0			0				
CD-AB	0	0	593	0.000	0	0.0	0.0	0.000	A
CD-A	46	11			46				

09:15 - 09:30

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	0	0	543	0.000	0	0.0	0.0	0.000	A
A-B	0	0			0				
A-C	23	6			23				
A-D	2	0.56			2				
AB-CD	2	0.59	633	0.004	2	0.0	0.0	5.743	A
AB-C	23	6			23				
D-ABC	7	2	542	0.012	7	0.0	0.0	6.767	A
C-D	0	0			0				
C-A	34	8			34				
C-B	0	0			0				
CD-AB	0	0	594	0.000	0	0.0	0.0	0.000	A
CD-A	38	10			38				

2024 with Development, AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	Southern LP3413/LT34132 Junction	Left-Right Stagger	Two-way		0.40	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D4	2024 with Development	AM	ONE HOUR	08:00	09:30	15	✓

Vehicle mix source	PCU Factor for a HV (PCU)
HV Percentages	2.30

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		ONE HOUR	✓	42	100.000
B		ONE HOUR	✓	2	100.000
C		ONE HOUR	✓	50	100.000
D		ONE HOUR	✓	9	100.000

Origin-Destination Data

Demand (PCU/hr)

		To			
		A	B	C	D
From	A	0	0	39	3
	B	0	0	1	1
	C	50	0	0	0
	D	6	0	3	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A	B	C	D
From	A	1	1	1	1
	B	1	1	1	1
	C	1	1	1	1
	D	1	1	1	1

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-ACD	0.00	0.00	0.0	A	0	0
A-B					0	0
A-C					36	54
A-D					3	4
AB-CD	0.01	5.72	0.0	A	3	4
AB-C					36	53
D-ABC	0.02	6.88	0.0	A	8	12
C-D					0	0
C-A					46	69
C-B					0	0
CD-AB	0.00	0.00	0.0	A	0	0
CD-A					51	77

Main Results for each time segment

08:00 - 08:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	0	0	541	0.000	0	0.0	0.0	0.000	A
A-B	0	0			0				
A-C	29	7			29				
A-D	2	0.56			2				
AB-CD	2	0.59	636	0.004	2	0.0	0.0	5.713	A
AB-C	29	7			29				
D-ABC	7	2	541	0.013	7	0.0	0.0	6.779	A
C-D	0	0			0				
C-A	38	9			38				
C-B	0	0			0				
CD-AB	0	0	593	0.000	0	0.0	0.0	0.000	A
CD-A	42	11			42				

08:15 - 08:30

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	0	0	539	0.000	0	0.0	0.0	0.000	A
A-B	0	0			0				
A-C	35	9			35				
A-D	3	0.67			3				
AB-CD	3	0.71	638	0.004	3	0.0	0.0	5.699	A
AB-C	35	9			35				
D-ABC	8	2	539	0.015	8	0.0	0.0	6.823	A
C-D	0	0			0				
C-A	45	11			45				
C-B	0	0			0				
CD-AB	0	0	591	0.000	0	0.0	0.0	0.000	A
CD-A	50	13			50				

08:30 - 08:45

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	0	0	536	0.000	0	0.0	0.0	0.000	A
A-B	0	0			0				
A-C	43	11			43				
A-D	3	0.83			3				
AB-CD	4	0.89	641	0.006	4	0.0	0.0	5.680	A
AB-C	43	11			43				
D-ABC	10	2	536	0.018	10	0.0	0.0	6.883	A
C-D	0	0			0				
C-A	55	14			55				
C-B	0	0			0				
CD-AB	0	0	590	0.000	0	0.0	0.0	0.000	A
CD-A	62	15			62				

08:45 - 09:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	0	0	536	0.000	0	0.0	0.0	0.000	A
A-B	0	0			0				
A-C	43	11			43				
A-D	3	0.83			3				
AB-CD	4	0.89	641	0.006	4	0.0	0.0	5.680	A
AB-C	43	11			43				
D-ABC	10	2	536	0.018	10	0.0	0.0	6.883	A
C-D	0	0			0				
C-A	55	14			55				
C-B	0	0			0				
CD-AB	0	0	590	0.000	0	0.0	0.0	0.000	A
CD-A	62	15			62				

09:00 - 09:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	0	0	539	0.000	0	0.0	0.0	0.000	A
A-B	0	0			0				
A-C	35	9			35				
A-D	3	0.67			3				
AB-CD	3	0.71	638	0.004	3	0.0	0.0	5.699	A
AB-C	35	9			35				
D-ABC	8	2	539	0.015	8	0.0	0.0	6.826	A
C-D	0	0			0				
C-A	45	11			45				
C-B	0	0			0				
CD-AB	0	0	591	0.000	0	0.0	0.0	0.000	A
CD-A	50	13			50				

09:15 - 09:30

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	0	0	541	0.000	0	0.0	0.0	0.000	A
A-B	0	0			0				
A-C	29	7			29				
A-D	2	0.56			2				
AB-CD	2	0.59	636	0.004	2	0.0	0.0	5.716	A
AB-C	29	7			29				
D-ABC	7	2	541	0.013	7	0.0	0.0	6.780	A
C-D	0	0			0				
C-A	38	9			38				
C-B	0	0			0				
CD-AB	0	0	593	0.000	0	0.0	0.0	0.000	A
CD-A	42	11			42				

2029 with Development, AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	Southern LP3413/LT34132 Junction	Left-Right Stagger	Two-way		0.39	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D5	2029 with Development	AM	ONE HOUR	08:00	09:30	15	✓

Vehicle mix source	PCU Factor for a HV (PCU)
HV Percentages	2.30

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		ONE HOUR	✓	44	100.000
B		ONE HOUR	✓	2	100.000
C		ONE HOUR	✓	52	100.000
D		ONE HOUR	✓	9	100.000

Origin-Destination Data

Demand (PCU/hr)

		To			
		A	B	C	D
From	A	0	0	41	3
	B	0	0	1	1
	C	52	0	0	0
	D	6	0	3	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A	B	C	D
From	A	1	1	1	1
	B	1	1	1	1
	C	1	1	1	1
	D	1	1	1	1

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-ACD	0.00	0.00	0.0	A	0	0
A-B					0	0
A-C					38	56
A-D					3	4
AB-CD	0.01	5.71	0.0	A	3	4
AB-C					37	56
D-ABC	0.02	6.89	0.0	A	8	12
C-D					0	0
C-A					48	72
C-B					0	0
CD-AB	0.00	0.00	0.0	A	0	0
CD-A					53	80

Main Results for each time segment

08:00 - 08:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	0	0	541	0.000	0	0.0	0.0	0.000	A
A-B	0	0			0				
A-C	31	8			31				
A-D	2	0.56			2				
AB-CD	2	0.59	637	0.004	2	0.0	0.0	5.708	A
AB-C	31	8			31				
D-ABC	7	2	541	0.013	7	0.0	0.0	6.785	A
C-D	0	0			0				
C-A	39	10			39				
C-B	0	0			0				
CD-AB	0	0	592	0.000	0	0.0	0.0	0.000	A
CD-A	44	11			44				

08:15 - 08:30

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	0	0	538	0.000	0	0.0	0.0	0.000	A
A-B	0	0			0				
A-C	37	9			37				
A-D	3	0.67			3				
AB-CD	3	0.72	639	0.004	3	0.0	0.0	5.693	A
AB-C	37	9			37				
D-ABC	8	2	539	0.015	8	0.0	0.0	6.829	A
C-D	0	0			0				
C-A	47	12			47				
C-B	0	0			0				
CD-AB	0	0	591	0.000	0	0.0	0.0	0.000	A
CD-A	52	13			52				

08:30 - 08:45

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	0	0	535	0.000	0	0.0	0.0	0.000	A
A-B	0	0			0				
A-C	45	11			45				
A-D	3	0.83			3				
AB-CD	4	0.89	642	0.006	4	0.0	0.0	5.672	A
AB-C	45	11			45				
D-ABC	10	2	536	0.019	10	0.0	0.0	6.891	A
C-D	0	0			0				
C-A	57	14			57				
C-B	0	0			0				
CD-AB	0	0	589	0.000	0	0.0	0.0	0.000	A
CD-A	64	16			64				

08:45 - 09:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	0	0	535	0.000	0	0.0	0.0	0.000	A
A-B	0	0			0				
A-C	45	11			45				
A-D	3	0.83			3				
AB-CD	4	0.89	642	0.006	4	0.0	0.0	5.674	A
AB-C	45	11			45				
D-ABC	10	2	536	0.019	10	0.0	0.0	6.891	A
C-D	0	0			0				
C-A	57	14			57				
C-B	0	0			0				
CD-AB	0	0	589	0.000	0	0.0	0.0	0.000	A
CD-A	64	16			64				

09:00 - 09:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	0	0	538	0.000	0	0.0	0.0	0.000	A
A-B	0	0			0				
A-C	37	9			37				
A-D	3	0.67			3				
AB-CD	3	0.72	639	0.004	3	0.0	0.0	5.695	A
AB-C	37	9			37				
D-ABC	8	2	539	0.015	8	0.0	0.0	6.832	A
C-D	0	0			0				
C-A	47	12			47				
C-B	0	0			0				
CD-AB	0	0	591	0.000	0	0.0	0.0	0.000	A
CD-A	52	13			52				

09:15 - 09:30

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	0	0	541	0.000	0	0.0	0.0	0.000	A
A-B	0	0			0				
A-C	31	8			31				
A-D	2	0.56			2				
AB-CD	2	0.59	637	0.004	2	0.0	0.0	5.710	A
AB-C	31	8			31				
D-ABC	7	2	541	0.013	7	0.0	0.0	6.785	A
C-D	0	0			0				
C-A	39	10			39				
C-B	0	0			0				
CD-AB	0	0	592	0.000	0	0.0	0.0	0.000	A
CD-A	44	11			44				

2039 with Development, AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	Southern LP3413/LT34132 Junction	Left-Right Stagger	Two-way		0.39	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D6	2039 with Development	AM	ONE HOUR	08:00	09:30	15	✓

Vehicle mix source	PCU Factor for a HV (PCU)
HV Percentages	2.30

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		ONE HOUR	✓	43	100.000
B		ONE HOUR	✓	2	100.000
C		ONE HOUR	✓	52	100.000
D		ONE HOUR	✓	9	100.000

Origin-Destination Data

Demand (PCU/hr)

		To			
		A	B	C	D
From	A	0	0	40	3
	B	0	0	1	1
	C	52	0	0	0
	D	6	0	3	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A	B	C	D
From	A	1	1	1	1
	B	1	1	1	1
	C	1	1	1	1
	D	1	1	1	1

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-ACD	0.00	0.00	0.0	A	0	0
A-B					0	0
A-C					37	55
A-D					3	4
AB-CD	0.01	5.71	0.0	A	3	4
AB-C					37	55
D-ABC	0.02	6.89	0.0	A	8	12
C-D					0	0
C-A					48	72
C-B					0	0
CD-AB	0.00	0.00	0.0	A	0	0
CD-A					53	80

Main Results for each time segment

08:00 - 08:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	0	0	541	0.000	0	0.0	0.0	0.000	A
A-B	0	0			0				
A-C	30	8			30				
A-D	2	0.56			2				
AB-CD	2	0.59	637	0.004	2	0.0	0.0	5.712	A
AB-C	30	8			30				
D-ABC	7	2	541	0.013	7	0.0	0.0	6.784	A
C-D	0	0			0				
C-A	39	10			39				
C-B	0	0			0				
CD-AB	0	0	593	0.000	0	0.0	0.0	0.000	A
CD-A	44	11			44				

08:15 - 08:30

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	0	0	539	0.000	0	0.0	0.0	0.000	A
A-B	0	0			0				
A-C	36	9			36				
A-D	3	0.67			3				
AB-CD	3	0.71	639	0.004	3	0.0	0.0	5.698	A
AB-C	36	9			36				
D-ABC	8	2	539	0.015	8	0.0	0.0	6.829	A
C-D	0	0			0				
C-A	47	12			47				
C-B	0	0			0				
CD-AB	0	0	591	0.000	0	0.0	0.0	0.000	A
CD-A	52	13			52				

08:30 - 08:45

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	0	0	536	0.000	0	0.0	0.0	0.000	A
A-B	0	0			0				
A-C	44	11			44				
A-D	3	0.83			3				
AB-CD	4	0.89	642	0.006	4	0.0	0.0	5.678	A
AB-C	44	11			44				
D-ABC	10	2	536	0.019	10	0.0	0.0	6.891	A
C-D	0	0			0				
C-A	57	14			57				
C-B	0	0			0				
CD-AB	0	0	589	0.000	0	0.0	0.0	0.000	A
CD-A	64	16			64				

08:45 - 09:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	0	0	536	0.000	0	0.0	0.0	0.000	A
A-B	0	0			0				
A-C	44	11			44				
A-D	3	0.83			3				
AB-CD	4	0.89	642	0.006	4	0.0	0.0	5.678	A
AB-C	44	11			44				
D-ABC	10	2	536	0.019	10	0.0	0.0	6.891	A
C-D	0	0			0				
C-A	57	14			57				
C-B	0	0			0				
CD-AB	0	0	589	0.000	0	0.0	0.0	0.000	A
CD-A	64	16			64				

09:00 - 09:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	0	0	539	0.000	0	0.0	0.0	0.000	A
A-B	0	0			0				
A-C	36	9			36				
A-D	3	0.67			3				
AB-CD	3	0.71	639	0.004	3	0.0	0.0	5.698	A
AB-C	36	9			36				
D-ABC	8	2	539	0.015	8	0.0	0.0	6.829	A
C-D	0	0			0				
C-A	47	12			47				
C-B	0	0			0				
CD-AB	0	0	591	0.000	0	0.0	0.0	0.000	A
CD-A	52	13			52				

09:15 - 09:30

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	0	0	541	0.000	0	0.0	0.0	0.000	A
A-B	0	0			0				
A-C	30	8			30				
A-D	2	0.56			2				
AB-CD	2	0.59	637	0.004	2	0.0	0.0	5.712	A
AB-C	30	8			30				
D-ABC	7	2	541	0.013	7	0.0	0.0	6.785	A
C-D	0	0			0				
C-A	39	10			39				
C-B	0	0			0				
CD-AB	0	0	593	0.000	0	0.0	0.0	0.000	A
CD-A	44	11			44				

2024 without Development, PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	Southern LP3413/LT34132 Junction	Left-Right Stagger	Two-way		0.08	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D7	2024 without Development	PM	ONE HOUR	16:15	17:45	15	✓

Vehicle mix source	PCU Factor for a HV (PCU)
HV Percentages	2.30

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		ONE HOUR	✓	40	100.000
B		ONE HOUR	✓	3	100.000
C		ONE HOUR	✓	34	100.000
D		ONE HOUR	✓	0	100.000

Origin-Destination Data

Demand (PCU/hr)

		To			
		A	B	C	D
From	A	0	0	38	2
	B	2	0	1	0
	C	32	0	0	2
	D	0	0	0	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A	B	C	D
From	A	1	1	1	1
	B	1	1	1	1
	C	1	1	1	1
	D	1	1	1	1

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-ACD	0.00	0.00	0.0	A	0	0
A-B					0	0
A-C					35	52
A-D					2	3
AB-CD	0.00	5.69	0.0	A	2	3
AB-C					35	52
D-ABC	0.00	0.00	0.0	A	0	0
C-D					2	3
C-A					29	44
C-B					0	0
CD-AB	0.00	0.00	0.0	A	0	0
CD-A					29	44

Main Results for each time segment

16:15 - 16:30

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	0	0	543	0.000	0	0.0	0.0	0.000	A
A-B	0	0			0				
A-C	29	7			29				
A-D	2	0.38			2				
AB-CD	2	0.39	639	0.002	2	0.0	0.0	5.685	A
AB-C	29	7			29				
D-ABC	0	0	520	0.000	0	0.0	0.0	0.000	A
C-D	2	0.38			2				
C-A	24	6			24				
C-B	0	0			0				
CD-AB	0	0	593	0.000	0	0.0	0.0	0.000	A
CD-A	24	6			24				

16:30 - 16:45

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	0	0	541	0.000	0	0.0	0.0	0.000	A
A-B	0	0			0				
A-C	34	9			34				
A-D	2	0.45			2				
AB-CD	2	0.47	641	0.003	2	0.0	0.0	5.666	A
AB-C	34	9			34				
D-ABC	0	0	519	0.000	0	0.0	0.0	0.000	A
C-D	2	0.45			2				
C-A	29	7			29				
C-B	0	0			0				
CD-AB	0	0	592	0.000	0	0.0	0.0	0.000	A
CD-A	29	7			29				

16:45 - 17:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	0	0	539	0.000	0	0.0	0.0	0.000	A
A-B	0	0			0				
A-C	42	10			42				
A-D	2	0.55			2				
AB-CD	2	0.59	645	0.004	2	0.0	0.0	5.640	A
AB-C	42	10			42				
D-ABC	0	0	516	0.000	0	0.0	0.0	0.000	A
C-D	2	0.55			2				
C-A	35	9			35				
C-B	0	0			0				
CD-AB	0	0	590	0.000	0	0.0	0.0	0.000	A
CD-A	35	9			35				

17:00 - 17:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	0	0	539	0.000	0	0.0	0.0	0.000	A
A-B	0	0			0				
A-C	42	10			42				
A-D	2	0.55			2				
AB-CD	2	0.59	645	0.004	2	0.0	0.0	5.642	A
AB-C	42	10			42				
D-ABC	0	0	516	0.000	0	0.0	0.0	0.000	A
C-D	2	0.55			2				
C-A	35	9			35				
C-B	0	0			0				
CD-AB	0	0	590	0.000	0	0.0	0.0	0.000	A
CD-A	35	9			35				

17:15 - 17:30

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	0	0	541	0.000	0	0.0	0.0	0.000	A
A-B	0	0			0				
A-C	34	9			34				
A-D	2	0.45			2				
AB-CD	2	0.47	641	0.003	2	0.0	0.0	5.666	A
AB-C	34	9			34				
D-ABC	0	0	519	0.000	0	0.0	0.0	0.000	A
C-D	2	0.45			2				
C-A	29	7			29				
C-B	0	0			0				
CD-AB	0	0	592	0.000	0	0.0	0.0	0.000	A
CD-A	29	7			29				

17:30 - 17:45

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	0	0	543	0.000	0	0.0	0.0	0.000	A
A-B	0	0			0				
A-C	29	7			29				
A-D	2	0.38			2				
AB-CD	2	0.39	639	0.002	2	0.0	0.0	5.685	A
AB-C	29	7			29				
D-ABC	0	0	520	0.000	0	0.0	0.0	0.000	A
C-D	2	0.38			2				
C-A	24	6			24				
C-B	0	0			0				
CD-AB	0	0	593	0.000	0	0.0	0.0	0.000	A
CD-A	24	6			24				

2029 without Development, PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	Southern LP3413/LT34132 Junction	Left-Right Stagger	Two-way		0.08	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D8	2029 without Development	PM	ONE HOUR	16:15	17:45	15	✓

Vehicle mix source	PCU Factor for a HV (PCU)
HV Percentages	2.30

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		ONE HOUR	✓	42	100.000
B		ONE HOUR	✓	3	100.000
C		ONE HOUR	✓	35	100.000
D		ONE HOUR	✓	0	100.000

Origin-Destination Data

Demand (PCU/hr)

		To			
		A	B	C	D
From	A	0	0	40	2
	B	2	0	1	0
	C	33	0	0	2
	D	0	0	0	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A	B	C	D
From	A	1	1	1	1
	B	1	1	1	1
	C	1	1	1	1
	D	1	1	1	1

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-ACD	0.00	0.00	0.0	A	0	0
A-B					0	0
A-C					37	55
A-D					2	3
AB-CD	0.00	5.68	0.0	A	2	3
AB-C					37	55
D-ABC	0.00	0.00	0.0	A	0	0
C-D					2	3
C-A					30	45
C-B					0	0
CD-AB	0.00	0.00	0.0	A	0	0
CD-A					30	45

Main Results for each time segment

16:15 - 16:30

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	0	0	543	0.000	0	0.0	0.0	0.000	A
A-B	0	0			0				
A-C	30	8			30				
A-D	2	0.38			2				
AB-CD	2	0.40	640	0.002	2	0.0	0.0	5.678	A
AB-C	30	8			30				
D-ABC	0	0	520	0.000	0	0.0	0.0	0.000	A
C-D	2	0.38			2				
C-A	25	6			25				
C-B	0	0			0				
CD-AB	0	0	593	0.000	0	0.0	0.0	0.000	A
CD-A	25	6			25				

16:30 - 16:45

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	0	0	541	0.000	0	0.0	0.0	0.000	A
A-B	0	0			0				
A-C	36	9			36				
A-D	2	0.45			2				
AB-CD	2	0.48	642	0.003	2	0.0	0.0	5.658	A
AB-C	36	9			36				
D-ABC	0	0	518	0.000	0	0.0	0.0	0.000	A
C-D	2	0.45			2				
C-A	30	7			30				
C-B	0	0			0				
CD-AB	0	0	591	0.000	0	0.0	0.0	0.000	A
CD-A	30	7			30				

16:45 - 17:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	0	0	538	0.000	0	0.0	0.0	0.000	A
A-B	0	0			0				
A-C	44	11			44				
A-D	2	0.55			2				
AB-CD	2	0.59	646	0.004	2	0.0	0.0	5.629	A
AB-C	44	11			44				
D-ABC	0	0	516	0.000	0	0.0	0.0	0.000	A
C-D	2	0.55			2				
C-A	36	9			36				
C-B	0	0			0				
CD-AB	0	0	590	0.000	0	0.0	0.0	0.000	A
CD-A	36	9			36				

17:00 - 17:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	0	0	538	0.000	0	0.0	0.0	0.000	A
A-B	0	0			0				
A-C	44	11			44				
A-D	2	0.55			2				
AB-CD	2	0.59	646	0.004	2	0.0	0.0	5.629	A
AB-C	44	11			44				
D-ABC	0	0	516	0.000	0	0.0	0.0	0.000	A
C-D	2	0.55			2				
C-A	36	9			36				
C-B	0	0			0				
CD-AB	0	0	590	0.000	0	0.0	0.0	0.000	A
CD-A	36	9			36				

17:15 - 17:30

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	0	0	541	0.000	0	0.0	0.0	0.000	A
A-B	0	0			0				
A-C	36	9			36				
A-D	2	0.45			2				
AB-CD	2	0.48	642	0.003	2	0.0	0.0	5.660	A
AB-C	36	9			36				
D-ABC	0	0	518	0.000	0	0.0	0.0	0.000	A
C-D	2	0.45			2				
C-A	30	7			30				
C-B	0	0			0				
CD-AB	0	0	591	0.000	0	0.0	0.0	0.000	A
CD-A	30	7			30				

17:30 - 17:45

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	0	0	543	0.000	0	0.0	0.0	0.000	A
A-B	0	0			0				
A-C	30	8			30				
A-D	2	0.38			2				
AB-CD	2	0.40	640	0.002	2	0.0	0.0	5.678	A
AB-C	30	8			30				
D-ABC	0	0	520	0.000	0	0.0	0.0	0.000	A
C-D	2	0.38			2				
C-A	25	6			25				
C-B	0	0			0				
CD-AB	0	0	593	0.000	0	0.0	0.0	0.000	A
CD-A	25	6			25				

2039 without Development, PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	Southern LP3413/LT34132 Junction	Left-Right Stagger	Two-way		0.08	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D9	2039 without Development	PM	ONE HOUR	16:15	17:45	15	✓

Vehicle mix source	PCU Factor for a HV (PCU)
HV Percentages	2.30

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		ONE HOUR	✓	41	100.000
B		ONE HOUR	✓	3	100.000
C		ONE HOUR	✓	35	100.000
D		ONE HOUR	✓	0	100.000

Origin-Destination Data

Demand (PCU/hr)

		To			
		A	B	C	D
From	A	0	0	39	2
	B	2	0	1	0
	C	33	0	0	2
	D	0	0	0	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A	B	C	D
From	A	1	1	1	1
	B	1	1	1	1
	C	1	1	1	1
	D	1	1	1	1

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-ACD	0.00	0.00	0.0	A	0	0
A-B					0	0
A-C					36	54
A-D					2	3
AB-CD	0.00	5.68	0.0	A	2	3
AB-C					36	54
D-ABC	0.00	0.00	0.0	A	0	0
C-D					2	3
C-A					30	45
C-B					0	0
CD-AB	0.00	0.00	0.0	A	0	0
CD-A					30	45

Main Results for each time segment

16:15 - 16:30

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	0	0	543	0.000	0	0.0	0.0	0.000	A
A-B	0	0			0				
A-C	29	7			29				
A-D	2	0.38			2				
AB-CD	2	0.39	639	0.002	2	0.0	0.0	5.683	A
AB-C	29	7			29				
D-ABC	0	0	520	0.000	0	0.0	0.0	0.000	A
C-D	2	0.38			2				
C-A	25	6			25				
C-B	0	0			0				
CD-AB	0	0	593	0.000	0	0.0	0.0	0.000	A
CD-A	25	6			25				

16:30 - 16:45

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	0	0	541	0.000	0	0.0	0.0	0.000	A
A-B	0	0			0				
A-C	35	9			35				
A-D	2	0.45			2				
AB-CD	2	0.48	642	0.003	2	0.0	0.0	5.663	A
AB-C	35	9			35				
D-ABC	0	0	518	0.000	0	0.0	0.0	0.000	A
C-D	2	0.45			2				
C-A	30	7			30				
C-B	0	0			0				
CD-AB	0	0	592	0.000	0	0.0	0.0	0.000	A
CD-A	30	7			30				

16:45 - 17:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	0	0	539	0.000	0	0.0	0.0	0.000	A
A-B	0	0			0				
A-C	43	11			43				
A-D	2	0.55			2				
AB-CD	2	0.59	645	0.004	2	0.0	0.0	5.636	A
AB-C	43	11			43				
D-ABC	0	0	516	0.000	0	0.0	0.0	0.000	A
C-D	2	0.55			2				
C-A	36	9			36				
C-B	0	0			0				
CD-AB	0	0	590	0.000	0	0.0	0.0	0.000	A
CD-A	36	9			36				

17:00 - 17:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	0	0	539	0.000	0	0.0	0.0	0.000	A
A-B	0	0			0				
A-C	43	11			43				
A-D	2	0.55			2				
AB-CD	2	0.59	645	0.004	2	0.0	0.0	5.636	A
AB-C	43	11			43				
D-ABC	0	0	516	0.000	0	0.0	0.0	0.000	A
C-D	2	0.55			2				
C-A	36	9			36				
C-B	0	0			0				
CD-AB	0	0	590	0.000	0	0.0	0.0	0.000	A
CD-A	36	9			36				

17:15 - 17:30

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	0	0	541	0.000	0	0.0	0.0	0.000	A
A-B	0	0			0				
A-C	35	9			35				
A-D	2	0.45			2				
AB-CD	2	0.48	642	0.003	2	0.0	0.0	5.663	A
AB-C	35	9			35				
D-ABC	0	0	518	0.000	0	0.0	0.0	0.000	A
C-D	2	0.45			2				
C-A	30	7			30				
C-B	0	0			0				
CD-AB	0	0	592	0.000	0	0.0	0.0	0.000	A
CD-A	30	7			30				

17:30 - 17:45

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	0	0	543	0.000	0	0.0	0.0	0.000	A
A-B	0	0			0				
A-C	29	7			29				
A-D	2	0.38			2				
AB-CD	2	0.39	639	0.002	2	0.0	0.0	5.683	A
AB-C	29	7			29				
D-ABC	0	0	520	0.000	0	0.0	0.0	0.000	A
C-D	2	0.38			2				
C-A	25	6			25				
C-B	0	0			0				
CD-AB	0	0	593	0.000	0	0.0	0.0	0.000	A
CD-A	25	6			25				

2024 with Development, PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	Southern LP3413/LT34132 Junction	Left-Right Stagger	Two-way		0.08	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D10	2024 with Development	PM	ONE HOUR	16:15	17:45	15	✓

Vehicle mix source	PCU Factor for a HV (PCU)
HV Percentages	2.30

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		ONE HOUR	✓	45	100.000
B		ONE HOUR	✓	3	100.000
C		ONE HOUR	✓	34	100.000
D		ONE HOUR	✓	0	100.000

Origin-Destination Data

Demand (PCU/hr)

		To			
		A	B	C	D
From	A	0	0	43	2
	B	2	0	1	0
	C	32	0	0	2
	D	0	0	0	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A	B	C	D
From	A	1	1	1	1
	B	1	1	1	1
	C	1	1	1	1
	D	1	1	1	1

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-ACD	0.00	0.00	0.0	A	0	0
A-B					0	0
A-C					39	59
A-D					2	3
AB-CD	0.00	5.66	0.0	A	2	3
AB-C					39	59
D-ABC	0.00	0.00	0.0	A	0	0
C-D					2	3
C-A					29	44
C-B					0	0
CD-AB	0.00	0.00	0.0	A	0	0
CD-A					29	44

Main Results for each time segment

16:15 - 16:30

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	0	0	542	0.000	0	0.0	0.0	0.000	A
A-B	0	0			0				
A-C	32	8			32				
A-D	2	0.38			2				
AB-CD	2	0.40	641	0.002	2	0.0	0.0	5.664	A
AB-C	32	8			32				
D-ABC	0	0	520	0.000	0	0.0	0.0	0.000	A
C-D	2	0.38			2				
C-A	24	6			24				
C-B	0	0			0				
CD-AB	0	0	592	0.000	0	0.0	0.0	0.000	A
CD-A	24	6			24				

16:30 - 16:45

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	0	0	540	0.000	0	0.0	0.0	0.000	A
A-B	0	0			0				
A-C	39	10			39				
A-D	2	0.45			2				
AB-CD	2	0.48	644	0.003	2	0.0	0.0	5.640	A
AB-C	39	10			39				
D-ABC	0	0	518	0.000	0	0.0	0.0	0.000	A
C-D	2	0.45			2				
C-A	29	7			29				
C-B	0	0			0				
CD-AB	0	0	591	0.000	0	0.0	0.0	0.000	A
CD-A	29	7			29				

16:45 - 17:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	0	0	538	0.000	0	0.0	0.0	0.000	A
A-B	0	0			0				
A-C	47	12			47				
A-D	2	0.55			2				
AB-CD	2	0.59	648	0.004	2	0.0	0.0	5.608	A
AB-C	47	12			47				
D-ABC	0	0	516	0.000	0	0.0	0.0	0.000	A
C-D	2	0.55			2				
C-A	35	9			35				
C-B	0	0			0				
CD-AB	0	0	589	0.000	0	0.0	0.0	0.000	A
CD-A	35	9			35				

17:00 - 17:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	0	0	538	0.000	0	0.0	0.0	0.000	A
A-B	0	0			0				
A-C	47	12			47				
A-D	2	0.55			2				
AB-CD	2	0.59	648	0.004	2	0.0	0.0	5.611	A
AB-C	47	12			47				
D-ABC	0	0	516	0.000	0	0.0	0.0	0.000	A
C-D	2	0.55			2				
C-A	35	9			35				
C-B	0	0			0				
CD-AB	0	0	589	0.000	0	0.0	0.0	0.000	A
CD-A	35	9			35				

17:15 - 17:30

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	0	0	540	0.000	0	0.0	0.0	0.000	A
A-B	0	0			0				
A-C	39	10			39				
A-D	2	0.45			2				
AB-CD	2	0.48	644	0.003	2	0.0	0.0	5.640	A
AB-C	39	10			39				
D-ABC	0	0	518	0.000	0	0.0	0.0	0.000	A
C-D	2	0.45			2				
C-A	29	7			29				
C-B	0	0			0				
CD-AB	0	0	591	0.000	0	0.0	0.0	0.000	A
CD-A	29	7			29				

17:30 - 17:45

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	0	0	542	0.000	0	0.0	0.0	0.000	A
A-B	0	0			0				
A-C	32	8			32				
A-D	2	0.38			2				
AB-CD	2	0.40	641	0.002	2	0.0	0.0	5.664	A
AB-C	32	8			32				
D-ABC	0	0	520	0.000	0	0.0	0.0	0.000	A
C-D	2	0.38			2				
C-A	24	6			24				
C-B	0	0			0				
CD-AB	0	0	592	0.000	0	0.0	0.0	0.000	A
CD-A	24	6			24				

2029 with Development, PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	Southern LP3413/LT34132 Junction	Left-Right Stagger	Two-way		0.07	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D11	2029 with Development	PM	ONE HOUR	16:15	17:45	15	✓

Vehicle mix source	PCU Factor for a HV (PCU)
HV Percentages	2.30

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		ONE HOUR	✓	46	100.000
B		ONE HOUR	✓	3	100.000
C		ONE HOUR	✓	42	100.000
D		ONE HOUR	✓	0	100.000

Origin-Destination Data

Demand (PCU/hr)

		To			
		A	B	C	D
From	A	0	0	44	2
	B	2	0	1	0
	C	40	0	0	2
	D	0	0	0	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A	B	C	D
From	A	1	1	1	1
	B	1	1	1	1
	C	1	1	1	1
	D	1	1	1	1

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-ACD	0.00	0.00	0.0	A	0	0
A-B					0	0
A-C					40	61
A-D					2	3
AB-CD	0.00	5.67	0.0	A	2	3
AB-C					40	60
D-ABC	0.00	0.00	0.0	A	0	0
C-D					2	3
C-A					37	55
C-B					0	0
CD-AB	0.00	0.00	0.0	A	0	0
CD-A					37	55

Main Results for each time segment

16:15 - 16:30

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	0	0	542	0.000	0	0.0	0.0	0.000	A
A-B	0	0			0				
A-C	33	8			33				
A-D	2	0.38			2				
AB-CD	2	0.40	640	0.002	2	0.0	0.0	5.672	A
AB-C	33	8			33				
D-ABC	0	0	518	0.000	0	0.0	0.0	0.000	A
C-D	2	0.38			2				
C-A	30	8			30				
C-B	0	0			0				
CD-AB	0	0	592	0.000	0	0.0	0.0	0.000	A
CD-A	30	8			30				

16:30 - 16:45

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	0	0	539	0.000	0	0.0	0.0	0.000	A
A-B	0	0			0				
A-C	40	10			40				
A-D	2	0.45			2				
AB-CD	2	0.48	643	0.003	2	0.0	0.0	5.650	A
AB-C	39	10			39				
D-ABC	0	0	516	0.000	0	0.0	0.0	0.000	A
C-D	2	0.45			2				
C-A	36	9			36				
C-B	0	0			0				
CD-AB	0	0	591	0.000	0	0.0	0.0	0.000	A
CD-A	36	9			36				

16:45 - 17:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	0	0	537	0.000	0	0.0	0.0	0.000	A
A-B	0	0			0				
A-C	48	12			48				
A-D	2	0.55			2				
AB-CD	2	0.60	647	0.004	2	0.0	0.0	5.620	A
AB-C	48	12			48				
D-ABC	0	0	514	0.000	0	0.0	0.0	0.000	A
C-D	2	0.55			2				
C-A	44	11			44				
C-B	0	0			0				
CD-AB	0	0	589	0.000	0	0.0	0.0	0.000	A
CD-A	44	11			44				

17:00 - 17:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	0	0	537	0.000	0	0.0	0.0	0.000	A
A-B	0	0			0				
A-C	48	12			48				
A-D	2	0.55			2				
AB-CD	2	0.60	647	0.004	2	0.0	0.0	5.622	A
AB-C	48	12			48				
D-ABC	0	0	514	0.000	0	0.0	0.0	0.000	A
C-D	2	0.55			2				
C-A	44	11			44				
C-B	0	0			0				
CD-AB	0	0	589	0.000	0	0.0	0.0	0.000	A
CD-A	44	11			44				

17:15 - 17:30

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	0	0	539	0.000	0	0.0	0.0	0.000	A
A-B	0	0			0				
A-C	40	10			40				
A-D	2	0.45			2				
AB-CD	2	0.48	643	0.003	2	0.0	0.0	5.652	A
AB-C	39	10			39				
D-ABC	0	0	516	0.000	0	0.0	0.0	0.000	A
C-D	2	0.45			2				
C-A	36	9			36				
C-B	0	0			0				
CD-AB	0	0	591	0.000	0	0.0	0.0	0.000	A
CD-A	36	9			36				

17:30 - 17:45

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	0	0	542	0.000	0	0.0	0.0	0.000	A
A-B	0	0			0				
A-C	33	8			33				
A-D	2	0.38			2				
AB-CD	2	0.40	640	0.002	2	0.0	0.0	5.672	A
AB-C	33	8			33				
D-ABC	0	0	518	0.000	0	0.0	0.0	0.000	A
C-D	2	0.38			2				
C-A	30	8			30				
C-B	0	0			0				
CD-AB	0	0	592	0.000	0	0.0	0.0	0.000	A
CD-A	30	8			30				

2039 with Development, PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Major road direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	Southern LP3413/LT34132 Junction	Left-Right Stagger	Two-way		0.07	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D12	2039 with Development	PM	ONE HOUR	16:15	17:45	15	✓

Vehicle mix source	PCU Factor for a HV (PCU)
HV Percentages	2.30

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		ONE HOUR	✓	46	100.000
B		ONE HOUR	✓	3	100.000
C		ONE HOUR	✓	42	100.000
D		ONE HOUR	✓	0	100.000

Origin-Destination Data

Demand (PCU/hr)

		To			
		A	B	C	D
From	A	0	0	44	2
	B	2	0	1	0
	C	40	0	0	2
	D	0	0	0	0

Vehicle Mix

Heavy Vehicle Percentages

		To			
		A	B	C	D
From	A	1	1	1	1
	B	1	1	1	1
	C	1	1	1	1
	D	1	1	1	1

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-ACD	0.00	0.00	0.0	A	0	0
A-B					0	0
A-C					40	61
A-D					2	3
AB-CD	0.00	5.67	0.0	A	2	3
AB-C					40	60
D-ABC	0.00	0.00	0.0	A	0	0
C-D					2	3
C-A					37	55
C-B					0	0
CD-AB	0.00	0.00	0.0	A	0	0
CD-A					37	55

Main Results for each time segment

16:15 - 16:30

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	0	0	542	0.000	0	0.0	0.0	0.000	A
A-B	0	0			0				
A-C	33	8			33				
A-D	2	0.38			2				
AB-CD	2	0.40	640	0.002	2	0.0	0.0	5.672	A
AB-C	33	8			33				
D-ABC	0	0	518	0.000	0	0.0	0.0	0.000	A
C-D	2	0.38			2				
C-A	30	8			30				
C-B	0	0			0				
CD-AB	0	0	592	0.000	0	0.0	0.0	0.000	A
CD-A	30	8			30				

16:30 - 16:45

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	0	0	539	0.000	0	0.0	0.0	0.000	A
A-B	0	0			0				
A-C	40	10			40				
A-D	2	0.45			2				
AB-CD	2	0.48	643	0.003	2	0.0	0.0	5.650	A
AB-C	39	10			39				
D-ABC	0	0	516	0.000	0	0.0	0.0	0.000	A
C-D	2	0.45			2				
C-A	36	9			36				
C-B	0	0			0				
CD-AB	0	0	591	0.000	0	0.0	0.0	0.000	A
CD-A	36	9			36				

16:45 - 17:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	0	0	537	0.000	0	0.0	0.0	0.000	A
A-B	0	0			0				
A-C	48	12			48				
A-D	2	0.55			2				
AB-CD	2	0.60	647	0.004	2	0.0	0.0	5.620	A
AB-C	48	12			48				
D-ABC	0	0	514	0.000	0	0.0	0.0	0.000	A
C-D	2	0.55			2				
C-A	44	11			44				
C-B	0	0			0				
CD-AB	0	0	589	0.000	0	0.0	0.0	0.000	A
CD-A	44	11			44				

17:00 - 17:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	0	0	537	0.000	0	0.0	0.0	0.000	A
A-B	0	0			0				
A-C	48	12			48				
A-D	2	0.55			2				
AB-CD	2	0.60	647	0.004	2	0.0	0.0	5.622	A
AB-C	48	12			48				
D-ABC	0	0	514	0.000	0	0.0	0.0	0.000	A
C-D	2	0.55			2				
C-A	44	11			44				
C-B	0	0			0				
CD-AB	0	0	589	0.000	0	0.0	0.0	0.000	A
CD-A	44	11			44				

17:15 - 17:30

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	0	0	539	0.000	0	0.0	0.0	0.000	A
A-B	0	0			0				
A-C	40	10			40				
A-D	2	0.45			2				
AB-CD	2	0.48	643	0.003	2	0.0	0.0	5.652	A
AB-C	39	10			39				
D-ABC	0	0	516	0.000	0	0.0	0.0	0.000	A
C-D	2	0.45			2				
C-A	36	9			36				
C-B	0	0			0				
CD-AB	0	0	591	0.000	0	0.0	0.0	0.000	A
CD-A	36	9			36				

17:30 - 17:45

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	0	0	542	0.000	0	0.0	0.0	0.000	A
A-B	0	0			0				
A-C	33	8			33				
A-D	2	0.38			2				
AB-CD	2	0.40	640	0.002	2	0.0	0.0	5.672	A
AB-C	33	8			33				
D-ABC	0	0	518	0.000	0	0.0	0.0	0.000	A
C-D	2	0.38			2				
C-A	30	8			30				
C-B	0	0			0				
CD-AB	0	0	592	0.000	0	0.0	0.0	0.000	A
CD-A	30	8			30				