Proposed Residential Development at Slí an Choiste, Monksland, Co. Roscommon

Traffic and Transport Assessment

15th August 2024

Prepared for

Sweeney Architects Ltd.

Traffic Transport and Road Safety Associates Ltd.
Barran
Blacklion
Co. Cavan

t. +353(0)71 9853847
e. info@ttrsa.com

TTRSA
Traffic : Transport : Road Safety

Document Control Sheet

Project Title	Proposed Residential Development at Slí an Choiste, Monksland, County Roscommon
Report Title	Traffic and Transport Assessment
Project Number	T240513
Revision	1
Status	Final
Control Date	15th August 2024

Record of Issue

Revision : Issue	Status	Date
1 : 1	Draft	08/07/2024
1 : 2	Final	15/08/2024

Distribution

Organisation	Copies
Sweeney Architects Ltd.	1 Electronic

Contents

Non-technical summary

- TTRSA has been commissioned by Sweeney Architects Ltd. to prepare a Traffic and Transport Assessment of a proposed 51-dwelling housing development at Slí an Choiste, Monksland, Co. Roscommon, as part of a forthcoming Part VIII planning (application) process.
- Access to the proposed development is through the existing Slí an Choiste estate, which in turn is accessed from the L2047 local road (Old Tuam Road)/Slí an Choiste junction.
- The site layout drawing of the proposed development, upon which the analysis contained within this Traffic and Transport Assessment is based, has been prepared by Sweeney Architects Ltd., entitled '*Proposed Site Layout and Landscaping*'; reference 22571-PLA-100 Rev A, dated 21st June 2024.
- The scope of this Traffic and Transport Assessment was discussed with the relevant engineer within the Roscommon County Council Athlone Municipal District Office, and is consistent with this discussion.
- To assist in the preparation of this Traffic and Transport Assessment, traffic count surveys were undertaken at the existing L2047 local road (Old Tuam Road)/Slí an Choiste junction and at the access junction for the proposed development within the Slí an Choiste estate, during AM and PM peak periods on Thursday 20th June 2024. Based on this data the local peak traffic hours were established as an AM peak hour of 08:30-09:29 and a PM peak hour of 16:45-17:44.
- Local traffic has been growthed to an opening year of 2026 and future assessment years of 2031 and 2041 using the TII Central Growth assumptions for link based growth in County Roscommon.
- Sweeney Architects Ltd. have provided TTRSA with estimates of the maximum workforce on site, and anticipated number of daily Heavy Commercial Vehicle trips related to deliveries of plant and materials, during the construction phase of the proposed development.
- Trip generation for the proposed development following residential occupation, has been based on factoring the existing trip generation (traffic movements) associated with the constructed Slí an Choiste estate (including Mount William Count and Lus Na Greine).
- The operation of the proposed Slí an Choiste/site access junction and the existing L2047 local road (Old Tuam Road)/Slí an Choiste junction have been assessed using PICADY for the AM and PM peak hours in 2026, 2031 and 2041 for the committed development scenario and the committed plus proposed development scenario. The PICADY traffic modelling software package is recognised by TII as being appropriate for modelling the impact of development on priority junctions. In summary, the assessment shows that both junctions will operate with spare capacity and minimal queuing in all of the scenarios tested.
- Collision data is not currently publicly available due to ongoing issues in relation to GDPR and associated data-sharing agreements between An Garda Síochána and the Road Safety Authority.
- Internally within the proposed development, the road network will be formed from a 6m site access road and two cul-de sacs as shown on Sweeney Architects Ltd., '*Proposed Site Layout and Landscaping*'; reference 22571-PLA-100 Rev A, dated 21st June 2024. Segregated 1.5m wide cycle tracks and 2.0m wide footpaths are provided adjacent to the site access road and cul-de-sacs. Whilst Type (ii) turning areas have been provided in accordance with the '*Recommendations for Site Development Works for Housing Areas*' publication, no details of the swept path of servicing vehicle has been provided for review as part of this Traffic and Transport Assessment.
- Two car parking spaces per unit, and two universally accessible (disabled) car parking spaces are shown on Sweeney Architects Ltd., '*Proposed Site Layout and Landscaping*'; reference 22571-PLA-100 Rev A, dated 21st June 2024. No details are provided on the aforementioned drawing of the proposed development in relation to bicycle parking.

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 Sweeney Architects Ltd. to prepare a Traffic and Transport Assessment (TTA) of a proposed housing development at Slí an Choiste, Monksland, County Roscommon, as part of a forthcoming Part VIII planning (application) process.

1.2 Proposed development

The proposed development will consist of '*construction of 51 no. residential units which comprises of (a) Type A- 12 no. two storey 2 bed semi-detached houses (b.) Type B - 18 no. two storey 3 bed semi-detached houses. (c.) Type B1 - 2 no. two storey 3 bed semi-detached houses (d.) Type B2 - 4 no. two storey 3 bed semi-detached houses. (e.) Type C- 9 no. two storey 2 bed terraced houses, f.) Type D - 1 no. single storey 3 bed detached house g.) Type D1 - 1 no. single storey 3 bed detached house h.) Type E - 4 no. single storey 2 bed semi-detached houses. The proposed development will also consists of widening of existing site entrance, construction of access roads, footpaths and cycle paths, public & private open spaces, car parking spaces, electric car charging points, boundary wall/fence, pedestrian link, street lighting, ducting for utilities, hard & soft landscaped areas, removal of existing trees and planting of new native trees, hedges and shrubs, formation of new connections to existing foul services and to pumping station, attenuation tank for surface water drainage, ESB substation and all associated site works and services*'. Access to the proposed development is through the existing Slí an Choiste estate, which in turn is accessed from the L2047 local road (Old Tuam Road)/Slí an Choiste junction.

A scaled copy of the site layout drawing of the proposed development prepared by Sweeney Architects Ltd., entitled '*Proposed Site Layout and Landscaping*'; reference 22571-PLA-100 Rev A, dated 21st June 2024, provides the basis of the analysis contained within this Traffic and Transport Assessment, and is included for information within Appendix A.

1.3 Scoping

The scope of this Traffic and Transport Assessment was discussed with the relevant engineer within the Roscommon County Council Athlone Municipal District Office, and is consistent with this discussion.

1.4 Format of this Traffic and Transport Assessment

This Traffic and Transport Assessment has been prepared in accordance with the requirements of the guidance set out in the Transport Infrastructure Ireland (TII) document 'Traffic and Transport Assessment Guidelines' (PE-PDV-02045) published in May 2014. All highway recommendations conform to development management standards contained within the Roscommon County Development Plan 2022-2028, and/or the Design Manual for Urban Roads and Streets (DMURS). The remaining sections of the Traffic and Transport Assessment are set out as follows:

- Chapter 2 outlines the existing local conditions into which the proposed development meshes, including the nature of the road network and existing traffic levels;
- Chapter 3 assesses the traffic related impacts of the proposed development, including trip generation, distribution, assignment and junction operation;
- Chapter 4 discusses external access to, and the internal access within, the proposed development.

2 Existing conditions

2.1 The local highway network

As noted in Section 1.2, access to the proposed development is through the existing Slí an Choiste estate (Plate 2.1), which in turn is accessed from the L2047 local road (Old Tuam Road)/Slí an Choiste junction (Plate 2.2). In the vicinity of the proposed development, the Slí an Choiste estate road is formed from a 6m side carriageway, bounded on its western side by a 1m wide grass verge and a 2m wide footpath. The road falls vertically from north to south, whilst horizontally it has a straight alignment southwards of the proposed site access junction and formed from a series of bends to the north of this junction. The existing access to the site is currently formed from a surfaced route typically between 3.3m and 3.75m in width leading, at its western extent, to an existing way-leave and gated agricultural land. Formal surface water drainage and public lighting are present and the posted speed limit is currently 50km/h.

Plate 2.1 - Slí an Choiste with the location of the proposed development access on the left

Plate 2.2 – The existing L2047 local road (Old Tuam Road)/Slí an Choiste junction

2.2 Current traffic levels

To assist in the preparation of this Traffic and Transport Assessment, video-based manual classified traffic count surveys were undertaken at the existing L2047 local road (Old Tuam Road)/Slí an Choiste junction and at the access junction for the proposed development within the Slí an Choiste estate, during AM (08:00-09:44) and PM (16:15-17:44) peak periods on Thursday 20th June 2024. Based on the traffic count survey data the local peak traffic hours were established as an AM peak hour of 08:30-09:29 and a PM peak hour of 16:45-17:44.

For the purpose of this assessment, the traffic count survey data has been converted into Passenger Car Units (PCUs), using factors of: 0.2 for pedal cycles; 0.4 for motorcycles; 1.0 for cars and light goods vehicles (LGV) including those towing trailers; and 2.3 for buses and all types of rigid and articulated Medium and Heavy Commercial Vehicle (HCVs).

Traffic volumes recorded on Thursday 20th June 2024 by the permanent TII traffic counter site located between Junctions 11 and 12 on the N6 Athlone Bypass TMU N6 060.0W) was approximately 6.6% above average workday traffic recorded during the period July 2023 and June 2024 inclusive. Based on this information, the traffic count data collected for this assessment has not been adjusted for seasonality and is considered by TTRSA to be robust.

The traffic data including PCU values is included within Appendix B.

2.3 Planning context

The proposed development site was zoned for new residential development within the Monksland Bellanamullia Local Area Plan 2016–2022. Roscommon County Council and Westmeath County Council are currently developing a new Joint Urban Area Plan for Athlone including Monksland.

The traffic and transport policy objectives contained with Section 7.4-7.7 inclusive of the Roscommon County Development Plan 2022-2028, and development management standards contained within Section 12.24 of the Roscommon County Development Plan apply to the proposed development.

2.4 Road safety

Collision data is not currently publicly available due to ongoing issues in relation to GDPR and associated data-sharing agreements between An Garda Síochána and the Road Safety Authority.

2.5 Proposed transport schemes

As part of preparing this Traffic and Transport Assessment, a review has been undertaken of proposed transport schemes in the vicinity of the proposed development. The National Transport Authority (NTA) has consulted on a cycle network for Athlone as part of their CycleConnects project. This envisages the L2047 local road (Old Tuam Road) as being an "urban secondary" cycle route. No transport schemes have been identified that will impact on, or be impacted by, the proposed development.

2.6 Other planned developments

As part of the preparation of this Traffic and Transport Assessment, and in order to consider the potential cumulative impact of development, the Roscommon County Council Planning Register Map Search has been reviewed to 5th July 2024. The development of the Lus na Greine estate, accessed through the Slí an Choiste estate has been ongoing for many years, relevant planning application references being 19/348, 21/455, 22/660 and 23/220. As the number of currently constructed and occupied dwellings within the Lus na Greine estate is not definitively known, an allowance for 55 additional dwellings, the difference between the number of permitted dwellings and allocated eircodes, has been made as "committed development" within the calculations for the traffic assessment contained within Section 3.4 of this Traffic and Transport Assessment, as also shown in Appendix C.

3 Assessment of development impact

3.1 Trip generation

Construction trip generation

Based on a construction period of between 18 months and two years, TTRSA has been informed by Sweeney Architects Ltd. (based on their experience) that the maximum workforce on site would be: four permanent employees; two employees visiting the site daily; and between 14 and 17 sub-contractors. Deliveries of plant and materials are anticipated to require between five and six two-way HCV trips per day. Sweeney Architects Ltd. have also informed TTRSA that to minimise disruption during the construction phase of the development, construction related traffic would be '*managed and controlled such as not to affect peak hours*'. The stated maximum workforce and number of daily delivery related trips would not result in a measurable peak hour impact at the existing L2047 local road (Old Tuam Road)/Slí an Choiste junction within traffic modelling software. The construction phase of the development is therefore not analysed further in Section 3.4 of this report.

Residential trip generation

Trip generation for the proposed development following residential occupation has been based on factoring the existing trip generation (traffic movements) associated with the constructed Slí an Choiste estate (including Mount William Count and Lus Na Greine).

- At the time of the traffic survey detailed in Section 2.2 of this Traffic and Transport Assessment, eircode.ie reported 228 residential addresses and a crèche within the constructed estate.
- As detailed in Appendix C, the existing AM and PM peak hour traffic movements related to the Slí an Choiste estate at the existing L2047 local road (Old Tuam Road)/Slí an Choiste junction were divided by 228 to predict the number of AM and PM peak hour traffic movements (trip rate) per dwelling unit.
- The AM and PM peak hour traffic movements per dwelling unit were multiplied by 51 to provide the AM and PM peak hour traffic movements for the proposed development.

3.2 Trip distribution and assignment

For the purpose of this assessment, development related trips have been assigned from the site access junction to and from the existing L2047 local road (Old Tuam Road)/Slí an Choiste junction, and then proportionally based on existing traffic movements at this junction. The assignment of development related trips is detailed in Appendix C.

3.3 Opening and future year traffic

Subject to the development progressing, Sweeney Architects Ltd. have informed TTRSA that the proposed development will be completed in 2026. Local traffic has been growthed to this opening year and future assessment years of 2031 and 2041 using the TII Central Growth assumptions (with 3.0% heavy vehicles) for link based growth in County Roscommon (TII PE-PAG-02017 issued October 2021). The TII growth assumptions take account of changes in population, changes to the location of jobs, changes to the location where employed persons reside, changes to trip distribution, changes in car ownership and changes in the access to different types of transport. The growth factors applied are shown below and the impact of the traffic growth is detailed in Appendix C:

- From 2024 to 2026 a factor of 1.023;
- From 2024 to 2031 a factor of 1.065; and,
- From 2024 to 2041 a factor of 1.101.

3.4 Assessment of junction operation

The operation of the proposed Slí an Choiste/site access junction and the existing L2047 local road (Old Tuam Road)/Slí an Choiste junction have been assessed using PICADY for the AM and PM peak hours in 2026, 2031 and 2041 for the following scenarios: with committed development scenario; and, with committed plus proposed development scenario. The PICADY traffic modelling software package is recognised by TII as being appropriate for modelling the impact of development on priority junctions. The criteria used to assess the performance of a junction for a given traffic demand within PICADY are:

- Ratio of Flow to Capacity (RFC) is a measure of junction performance in terms of saturation. A RFC 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 RFC value of 0.85 is the maximum acceptable saturation at priority junctions, with RFC values above this level considered to be congested; and,
- Queue lengths (measured in PCUs) are primarily used to check for blocking back through adjacent junctions.

The output of the PICADY modelling is summarised in Tables 3.1 and 3.2, and the modelling output files is provided in Appendix D.

The modelling results depicted in Table 3.1 show that the proposed Slí an Choiste/site access junction will operate with considerable spare capacity and minimal queuing in all of the scenarios tested. In 2041 scenario of with committed plus proposed development there is 92% spare capacity in the AM peak hour and 96% spare capacity in the PM peak hour.

Table 3.1 – Summary PICADY output for the proposed Slí an Choiste/site access junction

	AM				PM			
	Set ID	**Queue (PCU)**	**Delay (s)**	**RFC**	**Set ID**	**Queue (PCU)**	**Delay (s)**	**RFC**
	2026 with committed and proposed development							
Stream B-AC	D1	0.1	8.02	0.08	D4	0.0	7.64	0.04
Stream C-AB		0.0	0.00	0.00		0.0	0.00	0.00
	2031 with committed and proposed development							
Stream B-AC	D2	0.1	8.03	0.08	D5	0.0	7.64	0.04
Stream C-AB		0.0	0.00	0.00		0.0	0.00	0.00
	2041 with committed and proposed development							
Stream B-AC	D3	0.1	8.03	0.08	**D6**	**0.0**	**7.60**	**0.04**
Stream C-AB		0.0	0.00	0.00		**0.0**	**0.00**	**0.00**

The modelling results depicted in Table 3.2 show that the existing L2047 local road (Old Tuam Road)/Slí an Choiste junction will operate with considerable spare capacity and minimal queuing in all of the scenarios tested. In 2041 with the proposed development there is 47% spare capacity in the AM peak hour and 72% spare capacity in the PM peak hour.

Table 3.2 – Summary PICADY output for the existing L2047 local road (Old Tuam Road)/Slí an Choiste junction

	AM				PM			
	Set ID	**Queue (PCU)**	**Delay (s)**	**RFC**	**Set ID**	**Queue (PCU)**	**Delay (s)**	**RFC**
	2026 with committed development							
Stream B-AC	D1	0.8	12.17	0.42	D7	0.3	9.42	0.23
Stream C-AB		0.2	6.25	0.12		0.3	5.78	0.17
	2031 with committed development							
Stream B-AC	D2	0.8	12.59	0.44	D8	0.3	9.58	0.23
Stream C-AB		0.2	6.27	0.12		0.3	5.78	0.18
	2041 with committed development							
Stream B-AC	D3	0.9	12.97	0.46	D9	0.3	9.74	0.24
Stream C-AB		0.2	6.29	0.12		0.3	5.78	0.18
	2026 with committed and proposed development							
Stream B-AC	D4	1.0	14.15	0.50	D10	0.4	10.04	0.27
Stream C-AB		0.2	6.42	0.14		0.4	6.01	0.20
	2031 with committed and proposed development							
Stream B-AC	D5	1.1	14.72	0.52	D11	0.4	10.22	0.27
Stream C-AB		0.2	6.43	0.14		0.4	6.02	0.21
	2041 with committed and proposed development							
Stream B-AC	D6	1.2	15.24	0.53	**D12**	**0.4**	**10.41**	**0.28**
Stream C-AB		0.2	6.46	0.15		**0.4**	**6.02**	**0.22**

4 External and internal access

4.1 External access to the proposed development

As noted in Section 1.2 of this Traffic and Transport Assessment, access to the proposed development is through the existing Slí an Choiste estate, which in turn is accessed from the L2047 local road (Old Tuam Road)/Slí an Choiste junction. No alterations are proposed to external access as part of the proposed development.

4.2 Public transport access to the proposed development

The nearest bus stop to the proposed development is located on the L2047 local road (Old Tuam Road) immediately to the west of the L2047 local road (Old Tuam Road)/Slí an Choiste junction. This bus stop is served by both Athlone town bus services (A1 and A2) with a combined service frequency of approximately 15 minutes.

4.3 Internal access and servicing

Internally within the proposed development, the road network is formed from a 6m site access road and two cul-de sacs as shown on Sweeney Architects Ltd., '*Proposed Site Layout and Landscaping*'; reference 22571-PLA-100 Rev A, dated 21st June 2024 (Appendix A). Segregated 1.5m wide cycle track and 2.0m wide footpath routes are provided adjacent to the site access road and cul-de-sacs. Whilst Type (ii) turning areas have been provided in accordance with the '*Recommendations for Site Development Works for Housing Areas*' publication, no details of the swept path of servicing vehicle has been provided for review as part of this Traffic and Transport Assessment. No details of the priority control of traffic, and associated visibility splays, within the proposed development, have been provided for review as part of this Traffic and Transport Assessment.

4.4 Car and bicycle parking provision

The requirements for car and bicycle parking within the proposed development are specified within Table 12.1 and 12.2 of the Roscommon County Development Plan 2022-2028, specifically:

- A minimum of 1.5 car parking spaces per unit and 1 visitor car parking space for every three units; and,
- A minimum of 1 bicycle parking space per unit.

Two car parking spaces per unit, and two universally accessible (disabled) car parking spaces are depicted within Sweeney Architects Ltd., '*Proposed Site Layout and Landscaping*'; reference 22571-PLA-100 Rev A, dated 21st June 2024 (Appendix A). No details are provided on the aforementioned drawing in relation to bicycle parking.

Appendix A

Site Layout Drawing (Sweeney Architects Ltd.)
Scaled drawing for information as issued to TTRSA on 21st June 2024.

Drawing Title: Proposed Site Layout and Landscaping
Drawing Reference: 22571-PLA-100 Rev A
Drawing Dated: 21st June 2024

DRAWING NO.: 21477-TEN-310

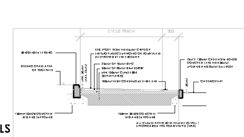
PROPOSED RESIDENTIAL DEVELOPMENT AT SLI AN CHOISTE, MONKSLAND, CO. ROSCOMMON

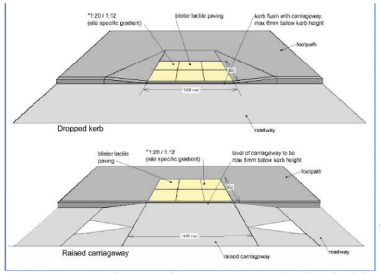
TOTAL HOUSES: 51
SITE AREA = 2.0 HECTARES

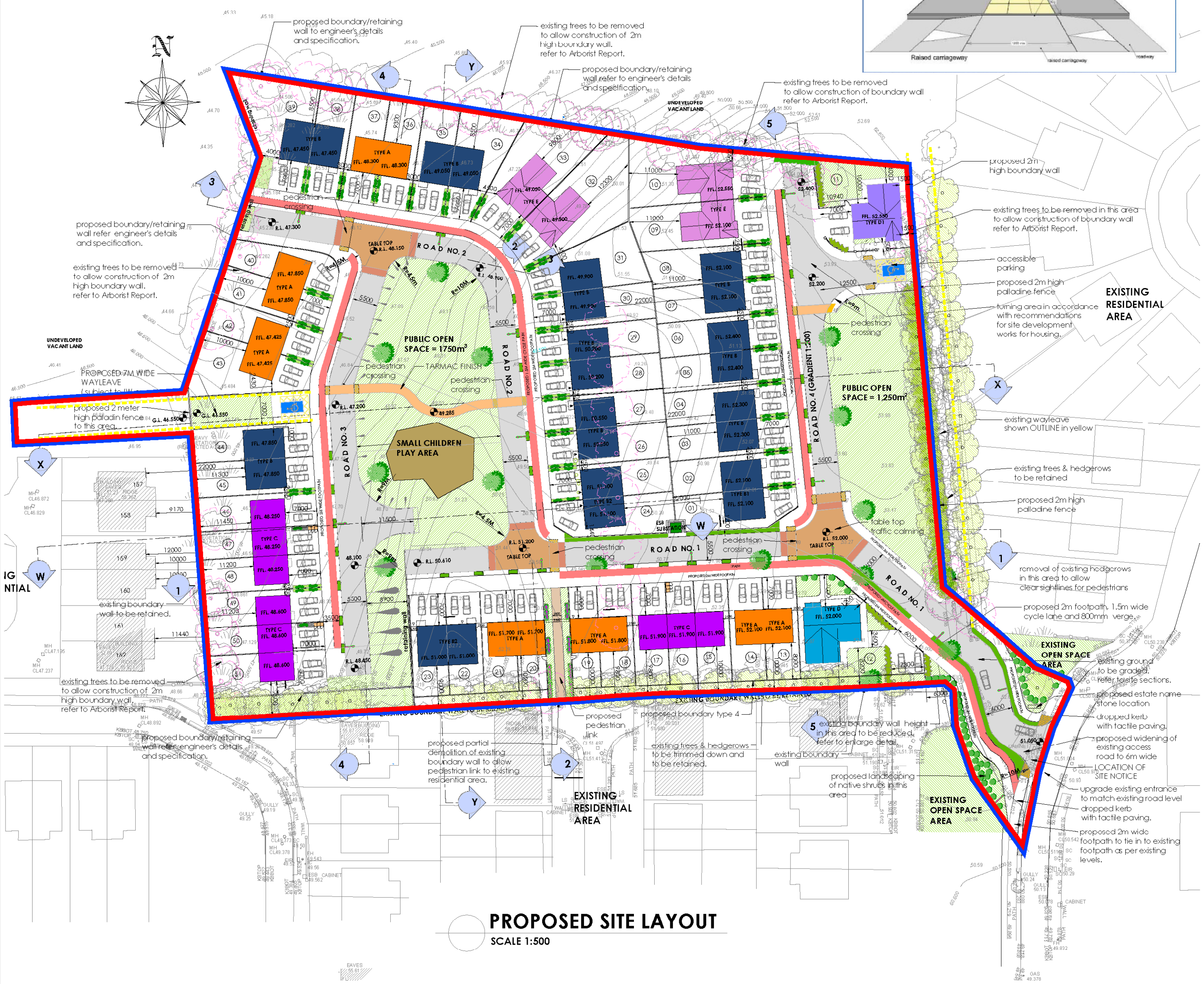
DENSITY = 25.5 HOUSES PER Ha.
PUBLIC OPEN SPACE 3,000 SQ.M.
PERCENTAGE = 15%

- PROPOSED SITE BOUNDARY
- RCC LAND OWNERSHIP
- PROPOSED CYCLE PATH
- TACTILE PAVING

NOTE: REFER TO DWG. NO. 22571-PLA-101-103 FOR BOUNDARY DETAILS
REFER TO ALAN TRAYNOR CONSULTING ENGINEERS FOR CIVIL & STRUCTURAL DETAILS


CYCLE LANE DETAIL





PROPOSED SITE LAYOUT
SCALE 1:500

CAR PARK SPECIFICATION

Sub-base foundation to car park

Foundations shall be constructed using hard, clean, crushed frost-resistant aggregates, laid on geotextile material. The grading of the sub-base material must be such as to provide stability. The material laid in layers not exceeding 150mm, each layer being compacted before the next is laid. The minimum compacted thickness of sub-base stone should be 200mm. Upon completion there should be no detectable movement under the roller. The sub-base material should be compacted to the requirements of BS 5835- 1:1980 - Recommendations for testing of aggregates. Compactibility test for graded aggregates The surface level tolerance should be within ±10mm of the design level, and, when checked with a 3000mm straight edge, there should be no deviation greater than 10mm.

Sub-base foundation to footpaths

Footpath Foundations shall be constructed using hard, clean, crushed frost resistant aggregates, laid on geotextile material. The grading of the subbase material must be such as to provide stability. The minimum compacted thickness of sub-base stone should be 100mm. Upon completion there should be no detectable movement under the roller. The sub-base material should be compacted to the requirements of BS 5835-1:1980 – as above The surface level tolerance should be within ±10mm of the design level, and, when checked with a 3000mm straight edge, there should be no deviation greater than 10mm.

Perimeter Edging

Excavate for, supply and lay 125mm x 150mm bullnosed hydraulically pressed pre-cast concrete kerbs to outer edge of area, allowing for a 25mm upstand above wearing course. They shall be haunched in concrete. The maximum gap between the outer kerb face and any adjacent perimeter fencing shall be 10mm. The haunching shall incorporate movement joints at appropriate spacing. Tolerance on pre-cast concrete kerbs to be within +/- 3mm to design level and +/- 3mm to line, under a 3000mm straight edge, gaps not to exceed 3mm.

Base construction

Design the base of the Car Park to meet the following criteria:

- It should be capable of supporting – and transmitting to the existing ground – the loads of all vehicles, plant, machines and materials to be used in the construction, without causing deformation of the site.
- On completion, the base should be capable of supporting and transmitting all loads on the surface without permanent or long-term deformation of the surface.
- Ensure that water, whether rainwater or natural ground water, will drain away freely, either into the natural subsoil or into the drainage. Engineered bases are the traditional form of road construction consisting of a single course or two courses of open-textured bituminous macadam to BS EN 13108 .

Asphalt base construction

A base course consisting of 60mm nominal compacted thickness (minimum compacted thickness not less than 40mm at any point) of 14mm or 20mm nominal-sized aggregate plus a binder course consisting of 30mm nominal compacted thickness (minimum compacted thickness not less than 20mm at any point) of 6mm nominal sized aggregate, both to BS EN 13108 and PD 6691:2010 - Guidance on the use of BS EN 13108 Bituminous mixtures. Material specifications shall be laid to the whole of the car park, all to design levels and design tolerances of +/- 3mm under a 3000mm straight edge. Bitumen binder grade no softer than 300 penetration, preferably 200 penetration, is to be used. Laying in cold, wet or windy weather conditions should therefore be avoided and any double handling. The tolerance of the surface shall not exceed +/- 3mm under a 3000mm straight edge.

Wearing Course

Asphalt wearing course to be provided at a gradient of 3° towards storm water outlets. Wearing course to be min 25mm thick with a combined basecourse and wearing course depth of min 40mm. Bitumen content of 70% required

Line Marking

Allow for the marking of parking bays and any IN and OUT arrows and text, in WHITE thermoplastic paint in. VISITORS ONLY and DISABLED bays should be clearly marked in appropriate colours.

Reinstatement generally

The Contractor shall carry out the work while soil and weather conditions are suitable and leave the site in a clean and tidy condition. All damage caused to surrounding areas and surfaces shall be reinstated in full to the satisfaction of the Architect. All hard areas shall be reinstated using similar materials to the existing, and to the satisfaction of the Architect.

On grass areas the ground shall be prepared by ridge roller or other means, approved by the Architect. Difficulties can arise when topsoil stored is poor quality and has not been protected from heavy rainfall. Supervision of groundworks during the final very busy stages of a project is critical.

Seeding

- Break up compacted topsoil to full depth.
- Reduce top 100 mm of topsoil to a tilth suitable for blade grading, particle size 10 mm (maximum).
- For the reinstatement of disturbed ground allow for carrying out a thorough stone picking before seeding. Remove stones and clay balls larger than permissible maximum stone size of 50 mm in any dimension together with roots, tufts of grass, rubbish and debris

Following rolling, the ground shall be lightly harrowed in order to produce an acceptable tilth and a mixture of Chewing Fescue Highlight 20% or equivalent and Majestic Perennial Rye Grass 80% shall be sown at a rate of $28 g/m^2$ and worked into the soil by harrowing or raking as appropriate. Following seeding the ground shall be lightly flat rolled until the surface is firm and then watered. The Contractor shall retain responsibility for watering the ground, as required to establish the sward, until handover. Consideration needs to be given to the support of seeding by carrying out turfing at edges.

Turf edging to seeded areas

Before sowing lay turfs to BS 3969:1998 - Recommendations for turf for general purposes, with no perennial ryegrass and of a similar seed composition to the seeded area.

- Prepare and rake back a 750 mm wide margin around prepared seed beds
- Seed bed level to be married in with turf
- Place a Single row laid end to end and trimmed to a line
- Water on completion

Turfing on banks exceeding 30° slope

- Configuration of turfs to be Diagonal or horizontal
- Secure turfs with fixings of either:-

Pointed softwood pegs, 200 mm long x 25 mm square,
or
Galvanized wire pins, bent or hairpin pattern, 200 mm long x 4 mm diameter

- Fixings to be every fourth row, slopes greater than 1 in 3 to be secured every second row
- When turf is thoroughly self anchored by its roots, remove fixings and make good any damage to grass until area is accepted

LANDSCAPING SPECIFICATION

Contractor to strip topsoil from building footprint and surrounding areas and stockpile elsewhere on site. stored topsoil to be reused to level and landscape lawn areas prior to occupation of house. Selected brick paviers or concrete slabs to patio areas on 75mm levelled dry mix sand cement blinding on minimum 200mm compacted hardcore. All hard standing to be laid to fall away from building. External landscaping walls to be blockwork with nap plaster finish and pre-cast concrete capping to clients approval. Blockwork retaining walls to be max. 1.0m high to later design. External steps to be min 300mm going and 150mm max rise.

Seeded Grass Areas

All soft areas to be topsoiled, leveled and seeded prior to completion of contract.

Asphalt

Drives, parking and service areas to be finished in asphalt suitable for pedestrian and vehicle traffic on suitably compacted hardcore base. Allow for pre-cast concrete kerbing to all edges not finishing against vertical elements. Build up to be confirmed by engineer but to generally be geotextile mesh on subsoil followed by 225mm compacted grade 804 hardcore with 60mm asphalt wearing surface.

Water & Drainage

The contractor shall provide all necessary drainage to the building and external works as per drawings, planning permission and to BS 8301. Contractor to apply to the local authority for all road opening licences and services connections and pay all associated fees. Connect drainage to existing/proposed utilities or provide for on-site disposal in the form of treatment plant/soakpit. Connect to nominated water supply with 13mm dia. pe piping as per planning permission and requirements of local authority water services.

Services

Appropriate ducting to be provided for underground connection of all eircom/broadband and electrical supply from connection point to building as per utility providers specification. MEterbox to be provided max 2m back from front elevation of building as per ESB regulations. Electric and telecoms to be provided for connection of intercom and electric gates at main entrance.

General Site Works:

General

Site services including foul and storm water sewers, mains water, telecoms electricity and streetlighting are to be provided as per service providers specifications and to civil Engineers design. New temporary wheel wash facility to be constructed on site to prevent site water from encroaching on public roadways. Wearing course of tarmacadam to be laid to entirety of site roads prior to completion of works. Individual water meters to be provided to all houses.

Timber

All exposed timber to be treated with appropriate external grade wood preservative.

Roads

Proposed Tarmacadam to be 40mm macadam wearing course on 150mm wet mix macadam road base on compacted grade 804 sub-base on geotextile membrane on suitably compacted sub-grade/fill/sub-soil

Footpaths

Footpaths to be generally 100mm deep but increased to 150mm depth where vehicle traffic anticipated on suitable depth of grade 804 compacted sub-base . Seperation layer of 125micron polythene sheeting to be provided, without creases, between sub-base and concrete with all joints to overlap by 300mm. Footpath to be graded to road at 2.5% gradient and brush finished. Provide contraction joints in footpath at max 3M c/c. Joints to be straight and at right angles to footpath and to contain appropriate flexible joint or double layer roofing felt to full depth of joint.

Kerbing

250 x 125mm Pre-cast concrete kerb set on 300mm x 100mm concrete base & haunched to rear with concrete. Kerbs to show between 100mm and 150mm above road, except at vehicular accesses, where they shall be reduced to 25mm over the channel and at wheelchair and pram accesses where an upstand of 10mm shall be provided. The footway slope at dished kerbs not to exceed 7%

Public Lighting

Provide public lighting as per section 5 "recomendations for site development works for housing areas" as published byDOE. Lighting columns are to be manufactured of galvanised mild steel to BS 5649 and be octagonal profile columns 6 m long, gradually taperer to a diameter of 68mm. Luminares to be provided as per lighting schedule. Up to 6 lamps can be supplied per micro pillar. Cabling to the lamps is to be laid in 100mm dia PVC-U ducting with a min cover of 600mm in grassed areas and 750mm at road crossings. Cables are not to be jointed. Cables are to be looped from column to column on each circuit.

VEGETATION & PLANTING LEGEND

SELECT HEAVY STANDARD TREES
min. 10-12cm girth, proposed species:
11 numbers.
(Note- trees adjoing carraigeway to have close branch pattern to ensure does not overhang- canopy spread 2-6m as per DEMURS 4.2.2)

SUITABLE NATIVE TREES FOR OPEN SPACES:

a.) Ash	f.) Blackthorn,
b.) Crab Apple,	g.) Hazel
c.) Oak	h.) Wild Cherry
d.) Birch	
e.) scots pine	

SUITABLE NATIVE TREES FOR STREET:

a.) Birch	f.) Holly
b.) Rowan	h.) Bird Cherry
d.) Hawthorn	

SUITABLE NATIVE TREES FOR HEDGES
a.) Bird Cherry
b.) Spindle

Good native hedgerow species for pollinators:
(reference : Biodiversity Ireland)

Hazel (Feb-Apr)	Crab apple (May-Jun)
Willow (Mar-May)	Elder (May-Jun)
Blackthorn (Mar-May)	Whitebeam (May-Jun)
Hawthorn (Apr-Jun)	Rowan (May-Jun)
Broom (Apr-Jun)	Wild Rose (Jun-Jul)
Wild Cherry (Apr-May)	Honeysuckle (Jun-Oct)
Bramble (May-Sept)	Guelder Rose (Jun-Jul)
Wild Privet (May-Jul)	Raspberry (Jun-Aug)
	Ivy (Sept-Nov)
	Gorse (Jan-Dec)

SELECT SHRUB AND GRONDCOVER PLANTING
To be all containerised stock min. 2L, Typical species:

GROUNDCOVERS planted at 5-7/m.sq:
Crocosmia lucifer
Festuca spp.
Hedera 'Hibernica'
Iris spp.
Vinca minor
Luzula pilosa

SHRUBS, planted at 3-4/m.sq:
Corylus avellana
Corylus maxima 'Purpurea'
Hypericum calycinum
Lavandula stoechas
Magnolia x soulangeana
Mahonia x media 'Charity'
Philadelphus 'Belle Etoile'
Rosa meidiland 'Alba'
Viburnum davidii
Viburnum opulus

Public Lighting (OSLON SQUARE GIANT) or similar approved selected street lighting as per M & E engineer's specification.

PROPOSED NATIVE TREES
EXISTING TREES TO BE RETAINED
EXISTING TREES TO BE REMOVED

HOUSE TYPES LEGEND:

Type	Description	No.
A	HOUSE TYPE A two storey (2 BEDS UNITS)	12 No
B	HOUSE TYPE B two storey (3 BEDS UNITS)	18 No
B1	HOUSE TYPE B two storey (3 BEDS UNITS)	2 No
B2	HOUSE TYPE B two storey (3 BEDS UNITS)	4 No
C	HOUSE TYPE C two storey (TERRACE 2 BEDS)	9 No
D	HOUSE TYPE D (OT) SINGLE STOREY 3 BEDS	1 No
D1	HOUSE TYPE D1 (OT) SINGLE STOREY 3 BEDS	1 No
E	HOUSE TYPE E (UD) SINGLE STOREY 2 BEDS	4 No

PLANNING PART 8

NOTES :
This drawing is copyright and may not be copied or altered without permission.
Use only figured dimensions. Do not scale this drawing.
The contractor is responsible for checking all dimensions on site prior to construction.
The Architects are to be notified of any discrepancies prior to work commencing.
Levels and contours, shown on drawings, are relative to local datum unless specified

REVISION	DATE	DESCRIPTION	INITIAL
A	24.6.21	UPDATED AS PER TRAFFIC ASSESSMENT QUERIES	NS

CLIENT :	ROSCOMMON COUNTY COUNCIL
PROJECT :	PROPOSED RESIDENTIAL DEVELOPMENT AT
ADDRESS :	SLI AN CHOISTE, MONKSLAND, CO. ROSCOMMON
DRAWING :	PROPOSED SITE LAYOUT & LANDSCAPING
CAD REF:	22571
SCALE :	1:500
DRAWN BY:	RN
DATE :	17.05.2024
REV:	
DWG. NO. :	22571-PLA-100

SWEENEY architects
SWEENEY architects
Block A Gem Park,
Athlone Rd. Longford
Ph: 043 334 2480
Em: info@sweeneyarchitects.ie
www.sweeneyarchitects.ie

Appendix B

Traffic Count Data including PCU Conversion

Video-based Manual Classified Count Thursday 20th June 2024
Existing L2047 local road (Old Tuam Road) / Slí an Choiste junction

Junction Arms
Arm A = L2047 to/from West
Arm B = Slí an Choiste Estate
Arm C = L2047 to/from East

PCU Factors

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

***Incidents**: None*
***Weather:** Dry*

Cycle	A-B	A-C	B-A	B-C	C-A	C-B
08:00 – 08:14	0	0	1	0	0	0
08:15 – 08:29	0	4	0	0	0	0
08:30 – 08:44	0	1	0	1	0	0
08:45 – 08:59	0	0	0	0	1	0
09:00 – 09:14	0	1	0	0	0	0
09:15 – 09:29	0	0	0	0	0	0
09:30 – 09:44	0	1	0	0	0	0
16:15 – 16:29	0	1	0	0	1	0
16:30 – 16:44	0	0	0	0	1	0
16:45 – 16:59	0	1	0	0	4	0
17:00 – 17:14	0	0	0	0	1	0
17:15 – 17:29	1	0	0	0	0	0
17:30 – 17:44	0	1	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	1	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
09:30 – 09:44	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	1	0
17:15 – 17:29	1	1	0	1	1	0
17:30 – 17:44	0	0	0	0	1	0

Car / LGV	A-B	A-C	B-A	B-C	C-A	C-B
08:00 – 08:14	8	11	7	10	10	10
08:15 – 08:29	4	10	16	11	16	7
08:30 – 08:44	5	15	14	11	16	10
08:45 – 08:59	6	30	26	21	35	8
09:00 – 09:14	10	28	31	19	33	14
09:15 – 09:29	8	28	8	9	38	15
09:30 – 09:44	6	24	10	9	16	12
16:15 – 16:29	6	16	10	12	38	24
16:30 – 16:44	2	21	7	9	46	20
16:45 – 16:59	9	14	19	13	61	15
17:00 – 17:14	9	19	16	10	82	13
17:15 – 17:29	9	18	10	10	90	30
17:30 – 17:44	6	22	23	9	57	18

HGV/PSV	A-B	A-C	B-A	B-C	C-A	C-B
08:00 – 08:14	0	1	1	0	1	0
08:15 – 08:29	1	2	0	1	1	0
08:30 – 08:44	1	3	0	0	1	1
08:45 – 08:59	1	1	1	2	1	2
09:00 – 09:14	0	1	1	1	1	0
09:15 – 09:29	0	2	0	0	1	0
09:30 – 09:44	0	1	0	0	1	0
16:15 – 16:29	0	2	0	0	0	0
16:30 – 16:44	0	1	0	0	1	2
16:45 – 16:59	0	0	1	0	0	0
17:00 – 17:14	0	1	1	1	0	1
17:15 – 17:29	0	1	0	0	1	0
17:30 – 17:44	0	0	0	0	1	0

Total Vehicles	A-B	A-C	B-A	B-C	C-A	C-B
08:00 – 08:14	8	12	9	10	11	10
08:15 – 08:29	5	17	16	12	17	7
08:30 – 08:44	6	19	14	12	17	11
08:45 – 08:59	7	31	27	23	37	10
09:00 – 09:14	10	30	32	20	34	14
09:15 – 09:29	8	30	8	9	39	15
09:30 – 09:44	6	26	10	9	17	12
16:15 – 16:29	6	19	10	12	39	24
16:30 – 16:44	2	22	7	9	48	22
16:45 – 16:59	9	15	20	13	65	15
17:00 – 17:14	9	20	17	11	84	14
17:15 – 17:29	11	20	10	11	92	30
17:30 – 17:44	6	23	23	9	59	18

PCUS	A-B	A-C	B-A	B-C	C-A	C-B
08:00 – 08:14	8	13	10	10	12	10
08:15 – 08:29	6	16	16	13	18	7
08:30 – 08:44	7	22	14	11	18	12
08:45 – 08:59	8	32	28	26	38	13
09:00 – 09:14	10	31	33	21	35	14
09:15 – 09:29	8	33	8	9	40	15
09:30 – 09:44	6	27	10	9	18	12
16:15 – 16:29	6	21	10	12	38	24
16:30 – 16:44	2	23	7	9	49	25
16:45 – 16:59	9	14	21	13	62	15
17:00 – 17:14	9	21	18	12	83	15
17:15 – 17:29	10	21	10	10	93	30
17:30 – 17:44	6	22	23	9	60	18

PCUS	A-B	A-C	B-A	B-C	C-A	C-B
08:30 – 09:29	32	101	92	71	109	46
16:45 – 17:44	25	64	51	32	235	63

PCUs are rounded to the nearest whole number

Video-based Manual Classified Count Thursday 20th June 2024
Existing Slí an Choiste / Development site access junction

Junction Arms
Arm A = Slí an Choiste Estate to/from South
Arm B = Site Access
Arm C = Slí an Choiste Estate to/from North

PCU Factors

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

***Incidents**: None*
***Weather:** Dry*

Cycle	A-B	A-C	B-A	B-C	C-A	C-B
08:00 – 08:14	0	0	0	0	1	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
09:30 – 09:44	0	0	0	0	0	0
16:15 – 16:29	0	0	0	0	0	0
16:30 – 16:44	0	0	0	0	1	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	1	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
09:30 – 09:44	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	3	0	0	1	0
08:15 – 08:29	0	3	0	0	8	0
08:30 – 08:44	0	3	0	0	6	0
08:45 – 08:59	0	3	0	0	15	0
09:00 – 09:14	0	7	0	0	8	0
09:15 – 09:29	0	3	1	0	3	1
09:30 – 09:44	0	4	0	0	4	0
16:15 – 16:29	0	4	0	0	6	0
16:30 – 16:44	0	4	0	0	1	0
16:45 – 16:59	0	5	1	0	6	1
17:00 – 17:14	0	2	0	0	8	0
17:15 – 17:29	0	6	0	0	2	0
17:30 – 17:44	0	8	0	0	4	0

HGV/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	1	0	0	1	0
09:00 – 09:14	0	0	0	0	0	0
09:15 – 09:29	0	0	0	0	0	0
09:30 – 09:44	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	3	0	0	2	0
08:15 – 08:29	0	3	0	0	8	0
08:30 – 08:44	0	3	0	0	6	0
08:45 – 08:59	0	4	0	0	16	0
09:00 – 09:14	0	7	0	0	8	0
09:15 – 09:29	0	3	1	0	3	1
09:30 – 09:44	0	4	0	0	4	0
16:15 – 16:29	0	4	0	0	6	0
16:30 – 16:44	0	4	0	0	2	0
16:45 – 16:59	0	5	1	0	6	1
17:00 – 17:14	0	2	0	0	8	0
17:15 – 17:29	0	7	0	0	2	0
17:30 – 17:44	0	8	0	0	4	0

PCUS	A-B	A-C	B-A	B-C	C-A	C-B
08:00 – 08:14	0	3	0	0	1	0
08:15 – 08:29	0	3	0	0	8	0
08:30 – 08:44	0	3	0	0	6	0
08:45 – 08:59	0	5	0	0	17	0
09:00 – 09:14	0	7	0	0	8	0
09:15 – 09:29	0	3	1	0	3	1
09:30 – 09:44	0	4	0	0	4	0
16:15 – 16:29	0	4	0	0	6	0
16:30 – 16:44	0	4	0	0	1	0
16:45 – 16:59	0	5	1	0	6	1
17:00 – 17:14	0	2	0	0	8	0
17:15 – 17:29	0	6	0	0	2	0
17:30 – 17:44	0	8	0	0	4	0

PCUS	A-B	A-C	B-A	B-C	C-A	C-B
08:30 – 09:29	0	18	0	0	39	0
16:45 – 17:44	0	16	0	0	14	0

PCUs are rounded to the nearest whole number

Appendix C

Trip Generation Calculations
Traffic Calculations Summary

Video-based Trip Generation Survey – Thursday 20th June 2024

Existing Slí an Choiste Estate – 228 Residential Dwelling Units + Creche

Time Period	Arrivals					Departures				
	Bicycle	Motorcycle	Car/LGV	HGV/Bus	PCUs	Bicycle	Motorcycle	Car/LGV	HGV/Bus	PCUs
08:00 – 08:14	0	0	18	0	18	1	0	17	1	20
08:15 – 08:29	0	0	11	1	13	0	0	27	1	29
08:30 – 08:44	0	0	15	2	20	1	0	25	0	25
08:45 – 08:59	0	0	14	3	21	0	0	47	3	54
09:00 – 09:14	0	0	24	0	24	0	0	50	2	55
09:15 – 09:29	0	0	23	0	23	0	0	17	0	17
09:30 – 09:44	0	0	18	0	18	0	0	19	0	19
16:15 – 16:29	0	0	30	0	30	0	0	22	0	22
16:30 – 16:44	0	0	22	2	27	0	0	16	0	16
16:45 – 16:59	0	0	24	0	24	0	0	32	1	34
17:00 – 17:14	0	0	22	1	24	0	0	26	2	31
17:15 – 17:29	1	1	39	0	40	0	1	20	0	20
17:30 – 17:44	0	0	24	0	24	0	0	32	0	32

PCU data rounded to the nearest whole number

Existing Slí an Choiste Estate – 228 Residential Dwelling Units + Creche

PCUS	A-B	A-C	B-A	B-C	C-A	C-B
08:30 – 09:29	32	0	92	71	0	46
16:45 – 17:44	25	0	51	32	0	63

Data in PCUs rounded to the nearest whole number

Junction Arms

Arm A = L2047 to/from West

Arm B = Slí an Choiste Estate

Arm C = L2047 to/from East

Traffic Movements Per Dwelling Unit

PCUS	A-B	A-C	B-A	B-C	C-A	C-B
08:30 – 09:29	0.140	0.000	0.402	0.313	0.000	0.201
16:45 – 17:44	0.108	0.000	0.225	0.139	0.000	0.278

Data in PCUs

Committed Development – 55 Dwellings

PCUS	A-B	A-C	B-A	B-C	C-A	C-B
08:30 – 09:29	8	0	22	17	0	11
16:45 – 17:44	6	0	12	8	0	15

Summary

PCUS	Arr.	Dep.
AM Peak	19	39
PM Peak	21	20

Proposed Development – 51 Dwellings

PCUS	A-B	A-C	B-A	B-C	C-A	C-B
08:30 – 09:29	7	0	20	16	0	10
16:45 – 17:44	6	0	11	7	0	14

Data in PCUs rounded to the nearest whole number

Summary

PCUS	Arr.	Dep.
AM Peak	17	36
PM Peak	20	19

Traffic Calculations – Summary
Existing L2047 local road (Old Tuam Road) / Slí an Choiste junction

Junction Arms
Arm A = L2047 to/from West
Arm B = Slí an Choiste Estate
Arm C = L2047 to/from East

Scenario	A-B	A-C	B-A	B-C	C-A	C-B
2024 AM Peak Hour (08:30-09:29)	32	101	92	71	109	46
2026 AM Peak Hour (Factor = 1.023)	33	103	94	73	112	47
2031 AM Peak Hour (Factor = 1.065)	34	107	98	76	117	49
2041 AM Peak Hour (Factor = 1.101)	35	111	101	79	120	51
AM Peak Committed Development Trips	8	0	22	17	0	11
2026 AM Peak Hour With Committed Development	**40**	**103**	**116**	**90**	**112**	**58**
2031 AM Peak Hour With Committed Development	**42**	**107**	**120**	**93**	**117**	**60**
2041 AM Peak Hour With Committed Development	**43**	**111**	**123**	**96**	**120**	**62**
AM Peak Generated Proposed Development Trips	7	0	20	16	0	10
2026 AM Peak Hour With Committed + Proposed Development	**47**	**103**	**136**	**106**	**112**	**68**
2031 AM Peak Hour With Committed + Proposed Development	**49**	**107**	**140**	**109**	**117**	**70**
2041 AM Peak Hour With Committed + Proposed Development	**50**	**111**	**143**	**112**	**120**	**72**
2024 PM Peak Hour (16:45-17:44)	25	64	51	32	235	63
2026 PM Peak Hour (Factor = 1.023)	25	66	52	32	240	65
2031 PM Peak Hour (Factor = 1.065)	26	68	55	34	250	67
2041 PM Peak Hour (Factor = 1.101)	27	71	56	35	259	70
PM Peak Committed Development Trips	6	0	12	8	0	15
2026 PM Peak Hour With Committed Development	**31**	**66**	**65**	**40**	**240**	**80**
2031 PM Peak Hour With Committed Development	**32**	**68**	**67**	**41**	**250**	**83**
2041 PM Peak Hour With Committed Development	**33**	**71**	**69**	**43**	**259**	**85**
PM Peak Generated Proposed Development Trips	6	0	11	7	0	14
2026 PM Peak Hour With Committed + Proposed Development	**37**	**66**	**76**	**47**	**240**	**94**
2031 PM Peak Hour With Committed + Proposed Development	**38**	**68**	**78**	**48**	**250**	**97**
2041 PM Peak Hour With Committed + Proposed Development	**39**	**71**	**80**	**50**	**259**	**99**

Data in PCUs rounded to the nearest whole number

Traffic Calculations – Summary
Proposed Slí an Choiste / Development site access junction

Junction Arms
Arm A = Slí an Choiste Estate to/from South
Arm B = Site Access
Arm C = Slí an Choiste Estate to/from North

Scenario	A-B	A-C	B-A	B-C	C-A	C-B
2024 AM Peak Hour (08:30-09:29)	0	18	0	0	39	0
2026 AM Peak Hour (Factor = 1.023)	0	19	0	0	40	0
2031 AM Peak Hour (Factor = 1.065)	0	19	0	0	42	0
2041 AM Peak Hour (Factor = 1.101)	0	20	0	0	43	0
AM Peak Committed Development Trips	*0*	*0*	*0*	*0*	*0*	*0*
2026 AM Peak Hour With Committed Development	*0*	*19*	*0*	*0*	*40*	*0*
2031 AM Peak Hour With Committed Development	*0*	*19*	*0*	*0*	*42*	*0*
2041 AM Peak Hour With Committed Development	*0*	*20*	*0*	*0*	*43*	*0*
AM Peak Generated Proposed Development Trips	17	0	36	0	0	0
2026 AM Peak Hour With Committed + Proposed Development	**17**	**19**	**36**	**0**	**40**	**0**
2031 AM Peak Hour With Committed + Proposed Development	**17**	**19**	**36**	**0**	**42**	**0**
2041 AM Peak Hour With Committed + Proposed Development	**17**	**20**	**36**	**0**	**43**	**0**
2024 PM Peak Hour (16:45-17:44)	0	16	0	0	14	0
2026 PM Peak Hour (Factor = 1.023)	0	17	0	0	14	0
2031 PM Peak Hour (Factor = 1.065)	0	17	0	0	15	0
2041 PM Peak Hour (Factor = 1.101)	0	18	0	0	15	0
PM Peak Committed Development Trips	*0*	*0*	*0*	*0*	*0*	*0*
2026 PM Peak Hour With Committed Development	*0*	*17*	*0*	*0*	*14*	*0*
2031 PM Peak Hour With Committed Development	*0*	*17*	*0*	*0*	*15*	*0*
2041 PM Peak Hour With Committed Development	*0*	*18*	*0*	*0*	*15*	*0*
PM Peak Generated Proposed Development Trips	20	0	19	0	0	0
2026 PM Peak Hour With Committed + Proposed Development	**20**	**17**	**19**	**0**	**14**	**0**
2031 PM Peak Hour With Committed + Proposed Development	**20**	**17**	**19**	**0**	**15**	**0**
2041 PM Peak Hour With Committed + Proposed Development	**20**	**18**	**19**	**0**	**15**	**0**

Data in PCUs rounded to the nearest whole number

Appendix D

PICADY Modelling Output Files

Junctions 9

PICADY 9 - Priority Intersection Module

Version: 9.5.1.7462

Filename: dvt_access.j9
Path: \\192.168.1.33\ttrsa\projects\T240513_Roscommon_Monksland_Residential_TTA_S1_RSA\tta\picady\dvt_access
Report generation date: 05/07/2024 15:40:04

Summary of junction performance

	AM				PM			
	Set ID	Queue (PCU)	Delay (s)	RFC	Set ID	Queue (PCU)	Delay (s)	RFC
	2026 with committed and proposed development							
Stream B-AC	D1	0.1	8.02	0.08	D4	0.0	7.64	0.04
Stream C-AB		0.0	0.00	0.00		0.0	0.00	0.00
	2031 with committed and proposed development							
Stream B-AC	D2	0.1	8.03	0.08	D5	0.0	7.64	0.04
Stream C-AB		0.0	0.00	0.00		0.0	0.00	0.00
	2041 with committed and proposed development							
Stream B-AC	D3	0.1	8.03	0.08	D6	0.0	7.60	0.04
Stream C-AB		0.0	0.00	0.00		0.0	0.00	0.00

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	Slí an Choiste/Development site access junction
Location	Monksland, Ballinasloe
Site number	
Date	05/07/2024
Version	TTA
Status	Final
Identifier	
Client	Sweeney Architects
Jobnumber	240513
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	2026 with committed and proposed development	AM	ONE HOUR	08:15	09:45	15	✓
D2	2031 with committed and proposed development	AM	ONE HOUR	08:15	09:45	15	✓
D3	2041 with committed and proposed development	AM	ONE HOUR	08:15	09:45	15	✓
D4	2026 with committed and proposed development	PM	ONE HOUR	16:30	18:00	15	✓
D5	2031 with committed and proposed development	PM	ONE HOUR	16:30	18:00	15	✓
D6	2041 with committed and proposed development	PM	ONE HOUR	16:30	18:00	15	✓

Analysis Set Details

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

2026 with committed and proposed 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	Slí an Choiste/Development site access junction	T-Junction	Two-way		2.58	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Name	Description	Arm type
A	Slí an Choiste to/from South		Major
B	Proposed Development		Minor
C	Slí an Choiste 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	6.00			160.0	✓	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	45	55

Slope / Intercept / Capacity

Priority Intersection Slopes and Intercepts

Stream	Intercept (PCU/hr)	Slope for A-B	Slope for A-C	Slope for C-A	Slope for C-B
B-A	519	0.095	0.239	0.150	0.342
B-C	659	0.101	0.255	-	-
C-B	667	0.258	0.258	-	-

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	2026 with committed and proposed development	AM	ONE HOUR	08:15	09:45	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	✓	36	100.000
B		ONE HOUR	✓	36	100.000
C		ONE HOUR	✓	40	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		A	B	C
From	A	0	17	19
	B	36	0	0
	C	40	0	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A	B	C
From	A	3	3	3
	B	3	3	3
	C	3	3	3

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
B-AC	0.08	8.02	0.1	A	33	50
C-AB	0.00	0.00	0.0	A	0	0
C-A					37	55
A-B					16	23
A-C					17	26

Main Results for each time segment

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	27	7	510	0.053	27	0.0	0.1	7.736	A
C-AB	0	0	660	0.000	0	0.0	0.0	0.000	A
C-A	30	8			30				
A-B	13	3			13				
A-C	14	4			14				

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	32	8	508	0.064	32	0.1	0.1	7.855	A
C-AB	0	0	658	0.000	0	0.0	0.0	0.000	A
C-A	36	9			36				
A-B	15	4			15				
A-C	17	4			17				

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	40	10	506	0.078	40	0.1	0.1	8.019	A
C-AB	0	0	656	0.000	0	0.0	0.0	0.000	A
C-A	44	11			44				
A-B	19	5			19				
A-C	21	5			21				

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	40	10	506	0.078	40	0.1	0.1	8.021	A
C-AB	0	0	656	0.000	0	0.0	0.0	0.000	A
C-A	44	11			44				
A-B	19	5			19				
A-C	21	5			21				

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	32	8	508	0.064	32	0.1	0.1	7.860	A
C-AB	0	0	658	0.000	0	0.0	0.0	0.000	A
C-A	36	9			36				
A-B	15	4			15				
A-C	17	4			17				

09:30 - 09:45

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	27	7	510	0.053	27	0.1	0.1	7.745	A
C-AB	0	0	660	0.000	0	0.0	0.0	0.000	A
C-A	30	8			30				
A-B	13	3			13				
A-C	14	4			14				

2031 with committed and proposed 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	Slí an Choiste/Development site access junction	T-Junction	Two-way		2.53	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	2031 with committed and proposed development	AM	ONE HOUR	08:15	09:45	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	✓	36	100.000
B		ONE HOUR	✓	36	100.000
C		ONE HOUR	✓	42	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		A	B	C
From	A	0	17	19
	B	36	0	0
	C	42	0	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A	B	C
From	A	3	3	3
	B	3	3	3
	C	3	3	3

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
B-AC	0.08	8.03	0.1	A	33	50
C-AB	0.00	0.00	0.0	A	0	0
C-A					39	58
A-B					16	23
A-C					17	26

Main Results for each time segment

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	27	7	510	0.053	27	0.0	0.1	7.740	A
C-AB	0	0	660	0.000	0	0.0	0.0	0.000	A
C-A	32	8			32				
A-B	13	3			13				
A-C	14	4			14				

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	32	8	508	0.064	32	0.1	0.1	7.860	A
C-AB	0	0	658	0.000	0	0.0	0.0	0.000	A
C-A	38	9			38				
A-B	15	4			15				
A-C	17	4			17				

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	40	10	506	0.078	40	0.1	0.1	8.025	A
C-AB	0	0	656	0.000	0	0.0	0.0	0.000	A
C-A	46	12			46				
A-B	19	5			19				
A-C	21	5			21				

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	40	10	506	0.078	40	0.1	0.1	8.026	A
C-AB	0	0	656	0.000	0	0.0	0.0	0.000	A
C-A	46	12			46				
A-B	19	5			19				
A-C	21	5			21				

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	32	8	508	0.064	32	0.1	0.1	7.865	A
C-AB	0	0	658	0.000	0	0.0	0.0	0.000	A
C-A	38	9			38				
A-B	15	4			15				
A-C	17	4			17				

09:30 - 09:45

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	27	7	510	0.053	27	0.1	0.1	7.749	A
C-AB	0	0	660	0.000	0	0.0	0.0	0.000	A
C-A	32	8			32				
A-B	13	3			13				
A-C	14	4			14				

2041 with committed and proposed 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	Slí an Choiste/Development site access junction	T-Junction	Two-way		2.49	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	2041 with committed and proposed development	AM	ONE HOUR	08:15	09:45	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	✓	37	100.000
B		ONE HOUR	✓	36	100.000
C		ONE HOUR	✓	43	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		A	B	C
From	A	0	17	20
	B	36	0	0
	C	43	0	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A	B	C
From	A	3	3	3
	B	3	3	3
	C	3	3	3

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
B-AC	0.08	8.03	0.1	A	33	50
C-AB	0.00	0.00	0.0	A	0	0
C-A					39	59
A-B					16	23
A-C					18	28

Main Results for each time segment

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	27	7	510	0.053	27	0.0	0.1	7.744	A
C-AB	0	0	659	0.000	0	0.0	0.0	0.000	A
C-A	32	8			32				
A-B	13	3			13				
A-C	15	4			15				

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	32	8	508	0.064	32	0.1	0.1	7.865	A
C-AB	0	0	658	0.000	0	0.0	0.0	0.000	A
C-A	39	10			39				
A-B	15	4			15				
A-C	18	4			18				

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	40	10	505	0.078	40	0.1	0.1	8.032	A
C-AB	0	0	656	0.000	0	0.0	0.0	0.000	A
C-A	47	12			47				
A-B	19	5			19				
A-C	22	6			22				

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	40	10	505	0.078	40	0.1	0.1	8.034	A
C-AB	0	0	656	0.000	0	0.0	0.0	0.000	A
C-A	47	12			47				
A-B	19	5			19				
A-C	22	6			22				

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	32	8	508	0.064	32	0.1	0.1	7.871	A
C-AB	0	0	658	0.000	0	0.0	0.0	0.000	A
C-A	39	10			39				
A-B	15	4			15				
A-C	18	4			18				

09:30 - 09:45

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	27	7	510	0.053	27	0.1	0.1	7.752	A
C-AB	0	0	659	0.000	0	0.0	0.0	0.000	A
C-A	32	8			32				
A-B	13	3			13				
A-C	15	4			15				

2026 with committed and proposed 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	Slí an Choiste/Development site access junction	T-Junction	Two-way		2.07	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
D4	2026 with committed and proposed development	PM	ONE HOUR	16:30	18:00	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	✓	37	100.000
B		ONE HOUR	✓	19	100.000
C		ONE HOUR	✓	14	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		A	B	C
From	A	0	20	17
	B	19	0	0
	C	14	0	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A	B	C
From	A	3	3	3
	B	3	3	3
	C	3	3	3

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	0.04	7.64	0.0	A	17	26
C-AB	0.00	0.00	0.0	A	0	0
C-A					13	19
A-B					18	28
A-C					16	23

Main Results for each time segment

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	14	4	513	0.028	14	0.0	0.0	7.492	A
C-AB	0	0	659	0.000	0	0.0	0.0	0.000	A
C-A	11	3			11				
A-B	15	4			15				
A-C	13	3			13				

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	17	4	512	0.033	17	0.0	0.0	7.555	A
C-AB	0	0	658	0.000	0	0.0	0.0	0.000	A
C-A	13	3			13				
A-B	18	4			18				
A-C	15	4			15				

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	21	5	510	0.041	21	0.0	0.0	7.639	A
C-AB	0	0	656	0.000	0	0.0	0.0	0.000	A
C-A	15	4			15				
A-B	22	6			22				
A-C	19	5			19				

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	21	5	510	0.041	21	0.0	0.0	7.639	A
C-AB	0	0	656	0.000	0	0.0	0.0	0.000	A
C-A	15	4			15				
A-B	22	6			22				
A-C	19	5			19				

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	17	4	512	0.033	17	0.0	0.0	7.559	A
C-AB	0	0	658	0.000	0	0.0	0.0	0.000	A
C-A	13	3			13				
A-B	18	4			18				
A-C	15	4			15				

17:45 - 18:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	14	4	513	0.028	14	0.0	0.0	7.499	A
C-AB	0	0	659	0.000	0	0.0	0.0	0.000	A
C-A	11	3			11				
A-B	15	4			15				
A-C	13	3			13				

2031 with committed and proposed 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	Slí an Choiste/Development site access junction	T-Junction	Two-way		2.04	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	2031 with committed and proposed development	PM	ONE HOUR	16:30	18:00	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	✓	37	100.000
B		ONE HOUR	✓	19	100.000
C		ONE HOUR	✓	15	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		A	B	C
From	A	0	20	17
	B	19	0	0
	C	15	0	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A	B	C
From	A	3	3	3
	B	3	3	3
	C	3	3	3

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	0.04	7.64	0.0	A	17	26
C-AB	0.00	0.00	0.0	A	0	0
C-A					14	21
A-B					18	28
A-C					16	23

Main Results for each time segment

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	14	4	513	0.028	14	0.0	0.0	7.494	A
C-AB	0	0	659	0.000	0	0.0	0.0	0.000	A
C-A	11	3			11				
A-B	15	4			15				
A-C	13	3			13				

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	17	4	512	0.033	17	0.0	0.0	7.557	A
C-AB	0	0	658	0.000	0	0.0	0.0	0.000	A
C-A	13	3			13				
A-B	18	4			18				
A-C	15	4			15				

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	21	5	510	0.041	21	0.0	0.0	7.642	A
C-AB	0	0	656	0.000	0	0.0	0.0	0.000	A
C-A	17	4			17				
A-B	22	6			22				
A-C	19	5			19				

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	21	5	510	0.041	21	0.0	0.0	7.642	A
C-AB	0	0	656	0.000	0	0.0	0.0	0.000	A
C-A	17	4			17				
A-B	22	6			22				
A-C	19	5			19				

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	17	4	512	0.033	17	0.0	0.0	7.561	A
C-AB	0	0	658	0.000	0	0.0	0.0	0.000	A
C-A	13	3			13				
A-B	18	4			18				
A-C	15	4			15				

17:45 - 18:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	14	4	513	0.028	14	0.0	0.0	7.500	A
C-AB	0	0	659	0.000	0	0.0	0.0	0.000	A
C-A	11	3			11				
A-B	15	4			15				
A-C	13	3			13				

2041 with committed and proposed 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	Slí an Choiste/Development site access junction	T-Junction	Two-way		2.33	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	2041 with committed and proposed development	PM	ONE HOUR	16:30	18:00	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	✓	28	100.000
B		ONE HOUR	✓	19	100.000
C		ONE HOUR	✓	15	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		A	B	C
From	A	0	20	8
	B	19	0	0
	C	15	0	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A	B	C
From	A	3	3	3
	B	3	3	3
	C	3	3	3

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	0.04	7.60	0.0	A	17	26
C-AB	0.00	0.00	0.0	A	0	0
C-A					14	21
A-B					18	28
A-C					7	11

Main Results for each time segment

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	14	4	515	0.028	14	0.0	0.0	7.469	A
C-AB	0	0	661	0.000	0	0.0	0.0	0.000	A
C-A	11	3			11				
A-B	15	4			15				
A-C	6	2			6				

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	17	4	514	0.033	17	0.0	0.0	7.527	A
C-AB	0	0	660	0.000	0	0.0	0.0	0.000	A
C-A	13	3			13				
A-B	18	4			18				
A-C	7	2			7				

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	21	5	513	0.041	21	0.0	0.0	7.605	A
C-AB	0	0	659	0.000	0	0.0	0.0	0.000	A
C-A	17	4			17				
A-B	22	6			22				
A-C	9	2			9				

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	21	5	513	0.041	21	0.0	0.0	7.605	A
C-AB	0	0	659	0.000	0	0.0	0.0	0.000	A
C-A	17	4			17				
A-B	22	6			22				
A-C	9	2			9				

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	17	4	514	0.033	17	0.0	0.0	7.531	A
C-AB	0	0	660	0.000	0	0.0	0.0	0.000	A
C-A	13	3			13				
A-B	18	4			18				
A-C	7	2			7				

17:45 - 18:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	14	4	515	0.028	14	0.0	0.0	7.473	A
C-AB	0	0	661	0.000	0	0.0	0.0	0.000	A
C-A	11	3			11				
A-B	15	4			15				
A-C	6	2			6				

Junctions 9

PICADY 9 - Priority Intersection Module

Version: 9.5.1.7462

Filename: main.j9
Path: \\192.168.1.33\ttrsa\projects\T240513_Roscommon_Monksland_Residential_TTA_S1_RSA\tta\picady\main
Report generation date: 05/07/2024 15:29:42

Summary of junction performance

	AM				PM			
	Set ID	Queue (PCU)	Delay (s)	RFC	Set ID	Queue (PCU)	Delay (s)	RFC
	2026 with committed development							
Stream B-AC	D1	0.8	12.17	0.42	D7	0.3	9.42	0.23
Stream C-AB		0.2	6.25	0.12		0.3	5.78	0.17
	2031 with committed development							
Stream B-AC	D2	0.8	12.59	0.44	D8	0.3	9.58	0.23
Stream C-AB		0.2	6.27	0.12		0.3	5.78	0.18
	2041 with committed development							
Stream B-AC	D3	0.9	12.97	0.46	D9	0.3	9.74	0.24
Stream C-AB		0.2	6.29	0.12		0.3	5.78	0.18
	2026 with committed and proposed development							
Stream B-AC	D4	1.0	14.15	0.50	D10	0.4	10.04	0.27
Stream C-AB		0.2	6.42	0.14		0.4	6.01	0.20
	2031 with committed and proposed development							
Stream B-AC	D5	1.1	14.72	0.52	D11	0.4	10.22	0.27
Stream C-AB		0.2	6.43	0.14		0.4	6.02	0.21
	2041 with committed and proposed development							
Stream B-AC	D6	1.2	15.24	0.53	D12	0.4	10.41	0.28
Stream C-AB		0.2	6.46	0.15		0.4	6.02	0.22

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	L2047 (Old Tuam Road)/Slí an Choiste junction
Location	Monksland, Ballinasloe
Site number	
Date	05/07/2024
Version	TTA
Status	Final
Identifier	
Client	Sweeney Architects
Jobnumber	240513
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	2026 with committed development	AM	ONE HOUR	08:15	09:45	15	✓
D2	2031 with committed development	AM	ONE HOUR	08:15	09:45	15	✓
D3	2041 with committed development	AM	ONE HOUR	08:15	09:45	15	✓
D4	2026 with committed and proposed development	AM	ONE HOUR	08:15	09:45	15	✓
D5	2031 with committed and proposed development	AM	ONE HOUR	08:15	09:45	15	✓
D6	2041 with committed and proposed development	AM	ONE HOUR	08:15	09:45	15	✓
D7	2026 with committed development	PM	ONE HOUR	16:30	18:00	15	✓
D8	2031 with committed development	PM	ONE HOUR	16:30	18:00	15	✓
D9	2041 with committed development	PM	ONE HOUR	16:30	18:00	15	✓
D10	2026 with committed and proposed development	PM	ONE HOUR	16:30	18:00	15	✓
D11	2031 with committed and proposed development	PM	ONE HOUR	16:30	18:00	15	✓
D12	2041 with committed and proposed development	PM	ONE HOUR	16:30	18:00	15	✓

Analysis Set Details

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

2026 with committed 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	L2047 (Old Tuam Road)/Slí an Choiste junction	T-Junction	Two-way		5.66	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Name	Description	Arm type
A	L2047 (Old Tuam Road) to west		Major
B	Slí an Choiste		Minor
C	L2047 (Old Tuam Road) to east		Major

Major Arm Geometry

Arm	Width of carriageway (m)	Has kerbed central reserve	Has right turn bay	Visibility for right turn (m)	Blocks?	Blocking queue (PCU)
C	6.25			100.0	✓	0.00

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

Minor Arm Geometry

Arm	Minor arm type	Lane width (m)	Visibility to left (m)	Visibility to right (m)
B	One lane	3.20	90	60

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	548	0.099	0.249	0.157	0.356
B-C	675	0.102	0.259	-	-
C-B	632	0.242	0.242	-	-

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	2026 with committed development	AM	ONE HOUR	08:15	09:45	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	✓	143	100.000
B		ONE HOUR	✓	206	100.000
C		ONE HOUR	✓	170	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		A	B	C
From	A	0	40	103
	B	116	0	90
	C	112	58	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A	B	C
From	A	3	3	3
	B	3	3	3
	C	3	3	3

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	0.42	12.17	0.8	B	189	284
C-AB	0.12	6.25	0.2	A	63	95
C-A					93	139
A-B					37	55
A-C					95	142

Main Results for each time segment

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	155	39	554	0.280	153	0.0	0.4	9.306	A
C-AB	50	13	662	0.076	50	0.0	0.1	6.109	A
C-A	78	19			78				
A-B	30	8			30				
A-C	78	19			78				

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	185	46	546	0.339	185	0.4	0.5	10.346	B
C-AB	61	15	668	0.092	61	0.1	0.1	6.167	A
C-A	91	23			91				
A-B	36	9			36				
A-C	93	23			93				

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	227	57	534	0.425	226	0.5	0.8	12.104	B
C-AB	78	20	676	0.116	78	0.1	0.2	6.251	A
C-A	109	27			109				
A-B	44	11			44				
A-C	113	28			113				

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	227	57	534	0.425	227	0.8	0.8	12.172	B
C-AB	78	20	676	0.116	78	0.2	0.2	6.254	A
C-A	109	27			109				
A-B	44	11			44				
A-C	113	28			113				

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	185	46	546	0.339	186	0.8	0.5	10.428	B
C-AB	61	15	668	0.092	62	0.2	0.1	6.172	A
C-A	91	23			91				
A-B	36	9			36				
A-C	93	23			93				

09:30 - 09:45

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	155	39	554	0.280	156	0.5	0.4	9.399	A
C-AB	50	13	662	0.076	50	0.1	0.1	6.117	A
C-A	78	19			78				
A-B	30	8			30				
A-C	78	19			78				

2031 with committed 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	L2047 (Old Tuam Road)/Slí an Choiste junction	T-Junction	Two-way		5.81	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	2031 with committed development	AM	ONE HOUR	08:15	09:45	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	✓	149	100.000
B		ONE HOUR	✓	213	100.000
C		ONE HOUR	✓	177	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		A	B	C
From	A	0	42	107
	B	120	0	93
	C	117	60	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A	B	C
From	A	3	3	3
	B	3	3	3
	C	3	3	3

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	0.44	12.59	0.8	B	195	293
C-AB	0.12	6.27	0.2	A	66	99
C-A					96	145
A-B					39	58
A-C					98	147

Main Results for each time segment

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	160	40	552	0.290	159	0.0	0.4	9.461	A
C-AB	52	13	663	0.079	52	0.0	0.1	6.115	A
C-A	81	20			81				
A-B	32	8			32				
A-C	81	20			81				

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	191	48	544	0.352	191	0.4	0.6	10.588	B
C-AB	64	16	670	0.096	64	0.1	0.1	6.175	A
C-A	95	24			95				
A-B	38	9			38				
A-C	96	24			96				

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	235	59	531	0.441	234	0.6	0.8	12.514	B
C-AB	82	20	679	0.120	81	0.1	0.2	6.264	A
C-A	113	28			113				
A-B	46	12			46				
A-C	118	29			118				

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	235	59	531	0.441	234	0.8	0.8	12.594	B
C-AB	82	20	679	0.120	82	0.2	0.2	6.267	A
C-A	113	28			113				
A-B	46	12			46				
A-C	118	29			118				

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	191	48	544	0.352	192	0.8	0.6	10.681	B
C-AB	64	16	670	0.096	64	0.2	0.1	6.181	A
C-A	95	24			95				
A-B	38	9			38				
A-C	96	24			96				

09:30 - 09:45

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	160	40	552	0.290	161	0.6	0.4	9.572	A
C-AB	52	13	663	0.079	52	0.1	0.1	6.126	A
C-A	81	20			81				
A-B	32	8			32				
A-C	81	20			81				

2041 with committed 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	L2047 (Old Tuam Road)/Slí an Choiste junction	T-Junction	Two-way		5.96	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	2041 with committed development	AM	ONE HOUR	08:15	09:45	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	✓	154	100.000
B		ONE HOUR	✓	219	100.000
C		ONE HOUR	✓	182	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		A	B	C
From	A	0	43	111
	B	123	0	96
	C	120	62	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A	B	C
From	A	3	3	3
	B	3	3	3
	C	3	3	3

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	0.46	12.97	0.9	B	201	301
C-AB	0.12	6.29	0.2	A	68	103
C-A					99	148
A-B					39	59
A-C					102	153

Main Results for each time segment

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	165	41	551	0.299	163	0.0	0.4	9.595	A
C-AB	54	14	664	0.081	54	0.0	0.1	6.125	A
C-A	83	21			83				
A-B	32	8			32				
A-C	84	21			84				

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	197	49	542	0.363	196	0.4	0.6	10.798	B
C-AB	66	17	670	0.099	66	0.1	0.1	6.192	A
C-A	97	24			97				
A-B	39	10			39				
A-C	100	25			100				

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	241	60	529	0.455	240	0.6	0.8	12.873	B
C-AB	85	21	680	0.125	85	0.1	0.2	6.287	A
C-A	116	29			116				
A-B	47	12			47				
A-C	122	31			122				

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	241	60	529	0.455	241	0.8	0.9	12.966	B
C-AB	85	21	680	0.125	85	0.2	0.2	6.293	A
C-A	116	29			116				
A-B	47	12			47				
A-C	122	31			122				

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	197	49	542	0.363	198	0.9	0.6	10.902	B
C-AB	67	17	670	0.099	67	0.2	0.1	6.200	A
C-A	97	24			97				
A-B	39	10			39				
A-C	100	25			100				

09:30 - 09:45

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	165	41	551	0.299	165	0.6	0.5	9.715	A
C-AB	54	14	664	0.082	54	0.1	0.1	6.139	A
C-A	83	21			83				
A-B	32	8			32				
A-C	84	21			84				

2026 with committed and proposed 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	L2047 (Old Tuam Road)/Slí an Choiste junction	T-Junction	Two-way		6.90	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	2026 with committed and proposed development	AM	ONE HOUR	08:15	09:45	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	✓	150	100.000
B		ONE HOUR	✓	242	100.000
C		ONE HOUR	✓	180	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		A	B	C
From	A	0	47	103
	B	136	0	106
	C	112	68	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A	B	C
From	A	3	3	3
	B	3	3	3
	C	3	3	3

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	0.50	14.15	1.0	B	222	333
C-AB	0.14	6.42	0.2	A	74	111
C-A					91	136
A-B					43	65
A-C					95	142

Main Results for each time segment

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	182	46	552	0.330	180	0.0	0.5	10.008	B
C-AB	59	15	661	0.089	58	0.0	0.1	6.206	A
C-A	77	19			77				
A-B	35	9			35				
A-C	78	19			78				

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	218	54	543	0.401	217	0.5	0.7	11.444	B
C-AB	72	18	666	0.108	72	0.1	0.1	6.292	A
C-A	90	22			90				
A-B	42	11			42				
A-C	93	23			93				

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	266	67	531	0.502	265	0.7	1.0	14.015	B
C-AB	92	23	675	0.136	92	0.1	0.2	6.415	A
C-A	106	27			106				
A-B	52	13			52				
A-C	113	28			113				

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	266	67	531	0.502	266	1.0	1.0	14.153	B
C-AB	92	23	675	0.136	92	0.2	0.2	6.420	A
C-A	106	27			106				
A-B	52	13			52				
A-C	113	28			113				

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	218	54	543	0.401	219	1.0	0.7	11.591	B
C-AB	72	18	666	0.108	72	0.2	0.2	6.301	A
C-A	90	22			90				
A-B	42	11			42				
A-C	93	23			93				

09:30 - 09:45

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	182	46	552	0.330	183	0.7	0.5	10.160	B
C-AB	59	15	661	0.089	59	0.2	0.1	6.220	A
C-A	77	19			77				
A-B	35	9			35				
A-C	78	19			78				

2031 with committed and proposed 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	L2047 (Old Tuam Road)/Slí an Choiste junction	T-Junction	Two-way		7.11	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	2031 with committed and proposed development	AM	ONE HOUR	08:15	09:45	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	✓	156	100.000
B		ONE HOUR	✓	249	100.000
C		ONE HOUR	✓	187	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		A	B	C
From	A	0	49	107
	B	140	0	109
	C	117	70	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A	B	C
From	A	3	3	3
	B	3	3	3
	C	3	3	3

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	0.52	14.72	1.1	B	228	343
C-AB	0.14	6.43	0.2	A	77	115
C-A					95	142
A-B					45	67
A-C					98	147

Main Results for each time segment

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	187	47	550	0.341	185	0.0	0.5	10.197	B
C-AB	61	15	662	0.092	60	0.0	0.1	6.213	A
C-A	80	20			80				
A-B	37	9			37				
A-C	81	20			81				

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	224	56	541	0.414	223	0.5	0.7	11.741	B
C-AB	75	19	668	0.112	75	0.1	0.2	6.302	A
C-A	93	23			93				
A-B	44	11			44				
A-C	96	24			96				

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	274	69	528	0.519	273	0.7	1.1	14.564	B
C-AB	95	24	677	0.141	95	0.2	0.2	6.430	A
C-A	111	28			111				
A-B	54	13			54				
A-C	118	29			118				

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	274	69	528	0.519	274	1.1	1.1	14.725	B
C-AB	95	24	677	0.141	95	0.2	0.2	6.433	A
C-A	111	28			111				
A-B	54	13			54				
A-C	118	29			118				

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	224	56	541	0.414	225	1.1	0.7	11.908	B
C-AB	75	19	668	0.112	75	0.2	0.2	6.311	A
C-A	93	23			93				
A-B	44	11			44				
A-C	96	24			96				

09:30 - 09:45

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	187	47	550	0.341	188	0.7	0.5	10.364	B
C-AB	61	15	662	0.092	61	0.2	0.1	6.227	A
C-A	80	20			80				
A-B	37	9			37				
A-C	81	20			81				

2041 with committed and proposed 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	L2047 (Old Tuam Road)/Slí an Choiste junction	T-Junction	Two-way		7.31	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D6	2041 with committed and proposed development	AM	ONE HOUR	08:15	09:45	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	✓	161	100.000
B		ONE HOUR	✓	255	100.000
C		ONE HOUR	✓	192	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		A	B	C
From	A	0	50	111
	B	143	0	112
	C	120	72	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A	B	C
From	A	3	3	3
	B	3	3	3
	C	3	3	3

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	0.53	15.24	1.2	C	234	351
C-AB	0.15	6.46	0.2	A	80	119
C-A					97	145
A-B					46	69
A-C					102	153

Main Results for each time segment

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	192	48	549	0.350	190	0.0	0.5	10.353	B
C-AB	63	16	663	0.095	62	0.0	0.1	6.227	A
C-A	82	20			82				
A-B	38	9			38				
A-C	84	21			84				

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	229	57	539	0.425	228	0.5	0.8	11.999	B
C-AB	77	19	669	0.115	77	0.1	0.2	6.320	A
C-A	95	24			95				
A-B	45	11			45				
A-C	100	25			100				

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	281	70	526	0.534	279	0.8	1.2	15.052	C
C-AB	99	25	678	0.145	98	0.2	0.2	6.455	A
C-A	113	28			113				
A-B	55	14			55				
A-C	122	31			122				

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	281	70	526	0.534	281	1.2	1.2	15.236	C
C-AB	99	25	678	0.145	99	0.2	0.2	6.459	A
C-A	113	28			113				
A-B	55	14			55				
A-C	122	31			122				

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	229	57	539	0.425	231	1.2	0.8	12.186	B
C-AB	77	19	669	0.116	78	0.2	0.2	6.329	A
C-A	95	24			95				
A-B	45	11			45				
A-C	100	25			100				

09:30 - 09:45

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	192	48	549	0.350	193	0.8	0.6	10.536	B
C-AB	63	16	663	0.095	63	0.2	0.1	6.241	A
C-A	82	20			82				
A-B	38	9			38				
A-C	84	21			84				

2026 with committed 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	L2047 (Old Tuam Road)/Slí an Choiste junction	T-Junction	Two-way		3.16	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	2026 with committed development	PM	ONE HOUR	16:30	18:00	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	✓	97	100.000
B		ONE HOUR	✓	105	100.000
C		ONE HOUR	✓	320	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		A	B	C
From	A	0	31	66
	B	65	0	40
	C	240	80	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A	B	C
From	A	3	3	3
	B	3	3	3
	C	3	3	3

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	0.23	9.42	0.3	A	96	145
C-AB	0.17	5.78	0.3	A	105	157
C-A					189	283
A-B					28	43
A-C					61	91

Main Results for each time segment

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	79	20	538	0.147	78	0.0	0.2	8.126	A
C-AB	80	20	733	0.109	79	0.0	0.2	5.718	A
C-A	161	40			161				
A-B	23	6			23				
A-C	50	12			50				

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	94	24	527	0.179	94	0.2	0.2	8.631	A
C-AB	101	25	753	0.134	101	0.2	0.2	5.735	A
C-A	187	47			187				
A-B	28	7			28				
A-C	59	15			59				

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	116	29	513	0.225	115	0.2	0.3	9.404	A
C-AB	133	33	781	0.171	133	0.2	0.3	5.771	A
C-A	219	55			219				
A-B	34	9			34				
A-C	73	18			73				

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	116	29	513	0.225	116	0.3	0.3	9.418	A
C-AB	134	33	782	0.171	134	0.3	0.3	5.777	A
C-A	219	55			219				
A-B	34	9			34				
A-C	73	18			73				

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	94	24	527	0.179	95	0.3	0.2	8.651	A
C-AB	101	25	754	0.134	101	0.3	0.2	5.742	A
C-A	187	47			187				
A-B	28	7			28				
A-C	59	15			59				

17:45 - 18:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	79	20	538	0.147	79	0.2	0.2	8.160	A
C-AB	80	20	733	0.109	80	0.2	0.2	5.732	A
C-A	161	40			161				
A-B	23	6			23				
A-C	50	12			50				

2031 with committed 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	L2047 (Old Tuam Road)/Slí an Choiste junction	T-Junction	Two-way		3.20	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	2031 with committed development	PM	ONE HOUR	16:30	18:00	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	✓	100	100.000
B		ONE HOUR	✓	108	100.000
C		ONE HOUR	✓	333	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		A	B	C
From	A	0	32	68
	B	67	0	41
	C	250	83	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A	B	C
From	A	3	3	3
	B	3	3	3
	C	3	3	3

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	0.23	9.58	0.3	A	99	149
C-AB	0.18	5.78	0.3	A	110	166
C-A					195	293
A-B					29	44
A-C					62	94

Main Results for each time segment

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	81	20	536	0.152	81	0.0	0.2	8.204	A
C-AB	84	21	738	0.114	83	0.0	0.2	5.711	A
C-A	167	42			167				
A-B	24	6			24				
A-C	51	13			51				

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	97	24	525	0.185	97	0.2	0.2	8.738	A
C-AB	106	27	759	0.140	106	0.2	0.2	5.732	A
C-A	193	48			193				
A-B	29	7			29				
A-C	61	15			61				

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	119	30	510	0.233	119	0.2	0.3	9.560	A
C-AB	141	35	788	0.179	140	0.2	0.3	5.778	A
C-A	226	56			226				
A-B	35	9			35				
A-C	75	19			75				

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	119	30	509	0.233	119	0.3	0.3	9.576	A
C-AB	141	35	788	0.179	141	0.3	0.3	5.784	A
C-A	226	56			226				
A-B	35	9			35				
A-C	75	19			75				

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	97	24	525	0.185	97	0.3	0.2	8.760	A
C-AB	106	27	759	0.140	107	0.3	0.2	5.744	A
C-A	193	48			193				
A-B	29	7			29				
A-C	61	15			61				

17:45 - 18:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	81	20	536	0.152	82	0.2	0.2	8.243	A
C-AB	84	21	738	0.114	84	0.2	0.2	5.728	A
C-A	167	42			167				
A-B	24	6			24				
A-C	51	13			51				

2041 with committed 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	L2047 (Old Tuam Road)/Slí an Choiste junction	T-Junction	Two-way		3.24	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	2041 with committed development	PM	ONE HOUR	16:30	18:00	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	✓	104	100.000
B		ONE HOUR	✓	112	100.000
C		ONE HOUR	✓	344	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		A	B	C
From	A	0	33	71
	B	69	0	43
	C	259	85	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A	B	C
From	A	3	3	3
	B	3	3	3
	C	3	3	3

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	0.24	9.74	0.3	A	103	154
C-AB	0.18	5.78	0.3	A	115	172
C-A					201	302
A-B					30	45
A-C					65	98

Main Results for each time segment

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	84	21	535	0.158	84	0.0	0.2	8.279	A
C-AB	87	22	742	0.117	86	0.0	0.2	5.703	A
C-A	172	43			172				
A-B	25	6			25				
A-C	53	13			53				

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	101	25	523	0.192	100	0.2	0.2	8.843	A
C-AB	110	28	763	0.144	110	0.2	0.2	5.726	A
C-A	199	50			199				
A-B	30	7			30				
A-C	64	16			64				

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	123	31	507	0.243	123	0.2	0.3	9.719	A
C-AB	146	37	794	0.185	146	0.2	0.3	5.780	A
C-A	232	58			232				
A-B	36	9			36				
A-C	78	20			78				

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	123	31	507	0.243	123	0.3	0.3	9.738	A
C-AB	147	37	794	0.185	147	0.3	0.3	5.784	A
C-A	232	58			232				
A-B	36	9			36				
A-C	78	20			78				

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	101	25	523	0.192	101	0.3	0.3	8.870	A
C-AB	110	28	764	0.145	111	0.3	0.3	5.739	A
C-A	199	50			199				
A-B	30	7			30				
A-C	64	16			64				

17:45 - 18:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	84	21	534	0.158	85	0.3	0.2	8.319	A
C-AB	87	22	742	0.117	87	0.3	0.2	5.720	A
C-A	172	43			172				
A-B	25	6			25				
A-C	53	13			53				

2026 with committed and proposed 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	L2047 (Old Tuam Road)/Slí an Choiste junction	T-Junction	Two-way		3.65	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	2026 with committed and proposed development	PM	ONE HOUR	16:30	18:00	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	✓	103	100.000
B		ONE HOUR	✓	123	100.000
C		ONE HOUR	✓	334	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		A	B	C
From	A	0	37	66
	B	76	0	47
	C	240	94	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A	B	C
From	A	3	3	3
	B	3	3	3
	C	3	3	3

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	0.27	10.04	0.4	B	113	169
C-AB	0.20	6.01	0.4	A	123	185
C-A					183	275
A-B					34	51
A-C					61	91

Main Results for each time segment

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	93	23	535	0.173	92	0.0	0.2	8.426	A
C-AB	94	23	732	0.128	93	0.0	0.2	5.850	A
C-A	158	39			158				
A-B	28	7			28				
A-C	50	12			50				

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	111	28	524	0.211	110	0.2	0.3	9.046	A
C-AB	119	30	752	0.158	118	0.2	0.3	5.903	A
C-A	182	45			182				
A-B	33	8			33				
A-C	59	15			59				

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	135	34	508	0.267	135	0.3	0.4	10.022	B
C-AB	157	39	780	0.201	157	0.3	0.4	6.001	A
C-A	211	53			211				
A-B	41	10			41				
A-C	73	18			73				

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	135	34	508	0.267	135	0.4	0.4	10.043	B
C-AB	157	39	780	0.201	157	0.4	0.4	6.011	A
C-A	211	53			211				
A-B	41	10			41				
A-C	73	18			73				

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	111	28	523	0.211	111	0.4	0.3	9.077	A
C-AB	119	30	752	0.158	119	0.4	0.3	5.917	A
C-A	181	45			181				
A-B	33	8			33				
A-C	59	15			59				

17:45 - 18:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	93	23	535	0.173	93	0.3	0.2	8.472	A
C-AB	94	24	732	0.129	94	0.3	0.2	5.868	A
C-A	157	39			157				
A-B	28	7			28				
A-C	50	12			50				

2031 with committed and proposed 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	L2047 (Old Tuam Road)/Slí an Choiste junction	T-Junction	Two-way		3.69	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	2031 with committed and proposed development	PM	ONE HOUR	16:30	18:00	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	✓	106	100.000
B		ONE HOUR	✓	126	100.000
C		ONE HOUR	✓	347	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		A	B	C
From	A	0	38	68
	B	78	0	48
	C	250	97	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A	B	C
From	A	3	3	3
	B	3	3	3
	C	3	3	3

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	0.27	10.22	0.4	B	116	173
C-AB	0.21	6.02	0.4	A	129	194
C-A					189	284
A-B					35	52
A-C					62	94

Main Results for each time segment

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	95	24	533	0.178	94	0.0	0.2	8.510	A
C-AB	98	25	737	0.133	97	0.0	0.2	5.844	A
C-A	163	41			163				
A-B	29	7			29				
A-C	51	13			51				

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	113	28	521	0.217	113	0.2	0.3	9.164	A
C-AB	124	31	758	0.164	124	0.2	0.3	5.907	A
C-A	188	47			188				
A-B	34	9			34				
A-C	61	15			61				

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	139	35	505	0.275	138	0.3	0.4	10.198	B
C-AB	165	41	787	0.209	164	0.3	0.4	6.014	A
C-A	217	54			217				
A-B	42	10			42				
A-C	75	19			75				

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	139	35	505	0.275	139	0.4	0.4	10.223	B
C-AB	165	41	787	0.209	165	0.4	0.4	6.023	A
C-A	217	54			217				
A-B	42	10			42				
A-C	75	19			75				

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	113	28	521	0.218	114	0.4	0.3	9.198	A
C-AB	124	31	758	0.164	125	0.4	0.3	5.920	A
C-A	188	47			188				
A-B	34	9			34				
A-C	61	15			61				

17:45 - 18:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	95	24	532	0.178	95	0.3	0.2	8.559	A
C-AB	98	25	737	0.133	99	0.3	0.2	5.865	A
C-A	163	41			163				
A-B	29	7			29				
A-C	51	13			51				

2041 with committed and proposed 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	L2047 (Old Tuam Road)/Slí an Choiste junction	T-Junction	Two-way		3.73	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	2041 with committed and proposed development	PM	ONE HOUR	16:30	18:00	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	✓	110	100.000
B		ONE HOUR	✓	130	100.000
C		ONE HOUR	✓	358	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		A	B	C
From	A	0	39	71
	B	80	0	50
	C	259	99	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A	B	C
From	A	3	3	3
	B	3	3	3
	C	3	3	3

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	0.28	10.41	0.4	B	119	179
C-AB	0.22	6.02	0.4	A	134	200
C-A					195	292
A-B					36	54
A-C					65	98

Main Results for each time segment

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	98	24	531	0.184	97	0.0	0.2	8.593	A
C-AB	101	25	741	0.137	100	0.0	0.2	5.838	A
C-A	168	42			168				
A-B	29	7			29				
A-C	53	13			53				

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	117	29	519	0.225	117	0.2	0.3	9.284	A
C-AB	128	32	762	0.169	128	0.2	0.3	5.903	A
C-A	193	48			193				
A-B	35	9			35				
A-C	64	16			64				

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	143	36	502	0.285	143	0.3	0.4	10.383	B
C-AB	171	43	792	0.215	170	0.3	0.4	6.015	A
C-A	223	56			223				
A-B	43	11			43				
A-C	78	20			78				

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	143	36	502	0.285	143	0.4	0.4	10.411	B
C-AB	171	43	793	0.216	171	0.4	0.4	6.024	A
C-A	223	56			223				
A-B	43	11			43				
A-C	78	20			78				

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	117	29	519	0.225	117	0.4	0.3	9.318	A
C-AB	129	32	763	0.169	129	0.4	0.3	5.914	A
C-A	193	48			193				
A-B	35	9			35				
A-C	64	16			64				

17:45 - 18:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	98	24	531	0.184	98	0.3	0.2	8.645	A
C-AB	101	25	741	0.137	102	0.3	0.2	5.861	A
C-A	168	42			168				
A-B	29	7			29				
A-C	53	13			53				